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1. Introduction

Transaction Language 1 (TL1) is defined for OS/NE (machine-to-machine) interfaces. Operations functions such as surveillance, memory administration, and access and testing use short messages to cause specific actions at the NE. *Transactions* are the initiation, communication, and execution of these actions. Many, but not all, of these transactions require two-way interactive exchange of related messages. TL1 is defined by restricting the features used in the message definitions and the form transmitted by each side of the OS/NE interface. The scope of this section includes the specification of a general syntax and commonly applied semantics for the TL1 OS/NE interface. Each TL1 message is expressed in American Standard Code for Information Interchange (ASCII) characters.

Complete implementation-level requirements for TL1 are specified in GR-831-CORE, *Language for Operations Application Messages*.

2. TL1 Message Specification

This section defines the language structures used in the input and output messages that pass between the switch and an operations system. It also specifies syntax and semantics conventions.

2.1 TL1 General Message Syntax

The following table lists the specification characters, using the Backus-Naur Form (BNF), that define the syntax:

Symbol	Syntax Definition
< >	Encloses a symbol character (e.g., <int-num> can specify any integer number).
[]	Encloses an optional symbol or information unit (e.g., a[b]c represents abc or ac as b is optional).
' '	Encloses a literal character (e.g., 'a' really means literal character a, as opposed to a symbol representing a value).
()	Encloses a group of symbols for the following operators:
*	<i>Post-fix</i> operator meaning that the preceding symbol or group of symbols may occur <i>zero</i> or more times (e.g., a(bc)* represents a or abc or abcbc or ...).

^	Space (i.e., the literal blank character, used only in examples of messages).
+	<i>Post-fix</i> operator meaning that the preceding symbol or group of symbols may occur <i>one</i> or more times (e.g., <i>a(bc)+</i> represents <i>abc</i> or <i>abcbc</i> or ...).
	<i>Infix</i> operator meaning alternative; either the preceding or succeeding symbol may occur, but not both in succession (e.g., <i>a b c</i> represents <i>a</i> or <i>b</i> or <i>c</i>).
::=	Separates the left and right sides of a grammar rule (e.g., <i><digit> ::= (0 1 ... 9)</i> is a grammar rule representing <i>the symbol <digit> is 0 or 1 or ... or 9</i>).

The syntax for *input messages* and *output messages* is considerably different. Among the fundamental differences are the application of *format effectors*, particularly *spaces*, *linefeeds*, and *carriage returns*. Format effectors are meaningless when present in input messages and may or may not be ignored in output messages.

Input messages group parameters into *blocks* separated by *colons* and, within *parameter blocks*, separated by *commas*; *parameters* may be further modified with *compounding*, *ranging*, and *incrementing operators*.

2.2 Characters and Information Units

The legal ASCII character set specified by TL1 is shown in the following matrix. Each column of the matrix is labeled by the most significant hexadecimal digit of the character code and each row by the least significant hexadecimal digit.

	0	1	2	3	4	5	6	7
0			<sp>	0	@	P	`	p
1			!	1	A	Q	a	q
2			"	2	B	R	b	r
3			#	3	C	S	c	s
4			\$	4	D	T	d	t
5			%	5	E	U	e	u
6			&	6	F	V	f	v
7			'	7	G	W	g	w
8		<can>	(	8	H	X	h	x
9	<ht>		)	9	I	Y	i	y
A	<lf>		*	:	J	Z	j	z
B	<vt>		+	;	K	[	k	{

C		<ff>	,	<	L	\	l	
D		<cr>	-	=	M	]	m	}
E		.	.	>	N	^	n	~
F			/	?	O	_	o	

In the above matrix, the format effectors are defined thusly: <ht> = Horizontal Tab, <lf> = Line Feed, <vt> = Vertical Tab, <ff> = Form Feed, <cr> = Carriage Return, <can> = Cancel, and <sp> = Space. The cancel character <can> is legal for input messages (commands) only. The characters not used by TL1 are reserved for implementation-dependent use by lower layers of the communications protocol: PAD control, XON/XOFF stream control, etc.

Format effectors within input messages (i.e., spaces, tabs, carriage returns, etc.) are ignored, except within text strings, and thus do not terminate information units. For example, within a command, COMMAND CODE and COMMANDCODE are treated in exactly the same way. Within output messages, format effectors may or may not be ignored (see subsections 3.2, 3.3, and 3.4). The backslash (\) character is used for escape syntax within text strings; i.e., it causes the character following to be literally interpreted.

TL1 messages are built from basic entities called *information units* (analogous to English words) combined and delimited by punctuation characters. The types of information units are described in the following subsections.

2.2.1 Identifiers

An identifier starts with a letter and is followed by any number of letters or digits. For example, A, abc, and xy50 are valid identifiers. Identifiers are defined as follows:

<ident> ::= <let> (<let> | <dig>)*

2.2.2 Symbolic Names

A symbolic name must contain at least one *letter*, *plus-sign* (+), *pound-sign* (#), or *percent-sign* (%) and optionally any *digits*. For instance, #7SWS, 1A0, 10%, and abc are all valid symbolic names. Symbolic names are defined as follows:

**<sym name> ::= <dig>*
((<let> | '+' | '#' | '%') <dig>*)+**

2.2.3 Alphanumerics

An alphanumeric starts with a letter or digit and is followed by any number of letters or digits. Alphanumerics, like identifiers and symbolic names, are used for names or other non-numeric information. Although lowercase is allowed, uppercase is the norm for most implementations (including the Lucent switch). Alphanumerics are defined as follows:

`<alphanum> ::= (<let> | <dig>)+`

2.2.4 Decimal Numbers

A decimal number is a string of decimal digits with an optional non-trailing period (.). It does not permit a leading plus-sign (+) or hyphen (-), or have any provision for exponential notation. Some examples are 88, .005, and 004.100, but 12. is not valid because of the trailing period (.). Leading zeros are optional except for values constrained to a fixed format (e.g., date and time). The optional leading D' (D apostrophe), indicating a decimal number, is permitted only in a particular parameter if it is so stated in the semantics of the command involving that parameter. Decimal numbers are defined as follows:

`<dec num> ::= [D'] <dig>* [.] <dig>+`

2.2.5 Nondecimal Numbers

The nondecimal number types, *hexadecimal*, *octal*, *binary*, and *keyed*, are permitted in TL1 only in a particular parameter if it is so stated in the semantics of the command involving that parameter. The switch does not utilize these information units.

2.2.6 Text Strings

A text string is any string of ASCII (alphanumeric and/or punctuation) characters (see the matrix in subsection 2.2) enclosed in double-quotes ("). This allows a great deal of flexibility in defining values because the limitations of identifiers and symbolic names are overcome at the small cost of quoting the characters for message entry. To enter a double-quote (") character within a text string, use an escaped double-quote (\"). Text strings are defined as follows:

`<text str> ::= " (\\" | \\ | <any character
except " or \>)* "`

2.2.7 Arithmetic Expressions

In TL1, arithmetic expressions are used to represent explicitly signed, positive or negative decimal numbers. The syntax is an optional plus-sign (+) or minus-sign (-), followed by a string of decimal digits with an optional non-trailing period. The entire expression is contained in parentheses to prevent parsing ambiguities. Examples of legal arithmetic expressions are (12), (-15), (+137.038), and (67.23). Arithmetic expressions are defined as follows:

```
<arith exp> ::= '(' ['+' | '-'] <dig>* [.]  
               <dig>+ '')
```

2.2.8 Numeric Strings

A numeric string is a subtype of decimal numbers consisting of only decimal digits. Each digit in the string is an ASCII representation of a numeric digit. Numeric strings are defined as follows:

```
<num str> ::= <dig>+
```

2.2.9 Integers

An integer is either a numeric string or an arithmetic expression not containing a period (decimal point). Integers are defined as follows:

```
<integer> ::= <num str> |  
              '(' ['+' | '-'] <dig>+ '')
```

2.2.10 Inner Strings

An inner string is similar to a text string but is used only within quoted lines of output messages (see subsections 3.3 and 3.4). Because the double-quote character (") has already been used to enclose the line, another symbol is needed to bracket text containing punctuation or other special characters. The symbol used is the escaped double-quote (\"). Within an inner string, a literal double-quote (") is represented by double double-quote (""), and a literal backslash (\) by double backslash (\\); for example,

```
"<startTextString>\ "<startInnerString>""<and>  
  \\"<endInnerString>\ "<endTextString>"
```

2.3 Parameter Block Syntax

A parameter block always follows a colon and contains a (possibly empty) list of parameters, separated by commas. In TL1, trailing colon (:) block separators may be omitted if there are no parameters entered in those last blocks. The parameter syntax, in general, consists of an optional parameter name, equal-sign (=), and a parameter value. However, the precise use of these options depends on the type of parameters entered in that block. A block shall only contain all position-defined parameters or all name-defined parameters. These two formats are characterized in the following subsections.

2.3.1 Position-Defined Parameters

In a block of position-defined parameters, the individual parameters must be entered in a specific order without names unless specifically allowed by the message description. A parameter entry may be omitted provided the associated comma separator is retained to indicate the position of the parameter omitted. The parameter names are implicit and not necessary in a positional block, where it is the order of parameter entries that associates each value with the corresponding parameter. Some examples of valid position-defined parameter blocks follow:

```
: 5, 6, Yes:  
: , 6;
```

2.3.2 Name-Defined Parameters

For a block of name-defined parameters, every parameter entry must have a parameter name and value, with successive entries made in arbitrary order. Parameter names are always transmitted with name-defined parameters (and order is not significant nor required).

The use of void parameters, indicated by adjacent separators, is valid only for positional entry and not for name-defined entry. Parameter defaulting is done by omitting a parameter entry. Three equivalent examples of a block of name-defined parameters are shown in the following (assuming the default values are as in the first example):

```
: P1=1.0, P2=2.0, P3=off:  
-or-  
:P3=off, P1=1.0:  
-or-  
:P2=2.0:
```

2.3.3 Name/Position Syntax Conflicts

The syntax of an entered block of parameters must be consistent with either a name-defined or a position-defined syntax. The following rules characterize resolution of potential syntax conflicts:

In TL1, a parameter block must be position-defined if:

- Any parameter values appear without parameter names (i.e., without NAME=)
- Any void parameters (indicated by adjacent separators) appear.

Otherwise, the parameter block has valid syntax for both a position-defined and a name-defined block.

In the case of position-defined parameters, entered parameter names must match the defined parameter positions. If more parameters are entered than are defined, the block is in error. But, if fewer are entered, defaults are applied to the trailing parameter positions.

When names are attached to all parameter entries, the association of the entry with the parameter definition is clear. If a parameter name appears more than once, an error will be generated. If a parameter does not appear at all, the parameter defaults to the specific default action defined for that particular parameter of that particular command.

2.4 Boolean Flag Parameters

Some messages use Boolean parameters (e.g., on/off, yes/no). A possible implementation is to represent one state by the presence of a symbol and the other by its absence. To minimize the introduction of new symbols, the parameter value symbol chosen may be the parameter name. While this mechanism is perfectly legal under TL1, the parameter actually has two values: the parameter name value represents one state, while a null symbol represents the (default) other state.

2.5 Defining Parameter Values

A parameter value consists of one or more TL1 information units that may be compounded and/or grouped together. When a parameter is defined for a particular command, the valid range of parameter values is defined, along with its interpretation. This includes the implicit set of units associated with any numeric values.

Although there are exceptions, usually parameter values are interpreted as character strings that must match exactly or as numeric values that must satisfy a given range. When numeric values are specified, they must have a default base associated with them. This will normally be the decimal base, but it may be binary or any other semantic interpretation desired for

that parameter. For TL1, the use of non-decimal numbers is not supported in general. If it is necessary to allow a parameter to be entered in bases other than its default base, it must be specifically stated in that parameter's description.

For non-numeric parameter values, typically a list of character strings will specify their valid values. The parameter values, unlike parameter names, are case sensitive; e.g., the identifiers "A1" and "a1" do not match.

A particular parameter may have a valid range that includes both numeric and character values. For example, a parameter SETTING may take on values of 0 to 15, the identifier NONE or the text string "N/A". Note that the slash (/) in "N/A" requires that it be entered as a text string.

A parameter value containing a single information unit is called a simple parameter argument. The compound arguments and argument grouping are described in the next two subsections.

2.5.1 Compound Arguments

Closely related information can be compounded into one parameter value by joining the information units with the hyphen character (-). For example, it may be desirable to use one parameter, LOCATION, to represent two map components, one given by a letter and the other by a number. LOCATION = A-21 is an instance of this type of construct.

Compounding is equivalent to two separate positional parameters combined into one, but compound fields cannot be omitted the way positional parameters can. For example, A--C is invalid syntax but A-null-C (where null is a literal parameter value meaning the parameter is missing) or A-""-C could be specified for use in a particular command. It is also permissible to specify both simple and compound values for the same parameter.

2.5.2 Grouping of Arguments

Both simple and compound arguments may be grouped together so one parameter may actually convey several arguments. This is done by using the connectors *ampersand* (&) and *double-ampersand* (&&).

The ampersand (&) character is most useful when a parameter takes on any combination of arguments in a specified set. If there are three OPTIONS (e.g., x, y, and z) that can be selected in any combination, some possible entries could be OPTIONS = x&z or OPTIONS = x&y&z.

The use of double-ampersand (&&) is reserved for expressing ranges of values. An example of this usage is RANGE = 1&&10 to enter the values 1,2,3,...,10. Compound parameters may be also grouped, but note that *double-ampersand* (&&) can only be used to range over the last field of the compound parameter (e.g., 2-5-1 && -10 means 2-5-1 & 2-5-2 & ... & 2-5-10).

In TL1, the use of double-ampersand (&&) for ranges cannot be used for a particular parameter unless it is specifically stated in the semantics of the parameter. In such cases, the ordering of parameter values must be defined. Unless otherwise stated, numeric values have the usual ordering.

3. Types of TL1 Messages

The TL1 syntax divides into four basic areas that specify the following four types of operations application messages:

- Input Command Messages
- Acknowledgments
- Output Response Messages
- Autonomous Messages

3.1 Input Command Messages

An input command message is a message to a network element (NE). The message requests the NE to perform some operations-related action. The general structure of a TL1 input message is of the form:

```
<command_code>:<staging_parameter_blocks>:  
  <message_payload_block(s)>;
```

The *command code* determines the action (i.e., pragmatics) to be taken at the NE as a result of receiving the input message. The *staging parameter blocks* determine the target NE and the identity of the object to be acted upon by the input message. The *message payload block(s)* is the subject matter relating to the action to be performed by the input message. The *semi-colon* character (;) terminates a TL1 input message.

3.1.1 Command Code

Each command must begin with a command code consisting of a mandatory verb followed by up to two other optional modifiers, each separated by a hyphen.

```
<command code> ::= <verb>[-<modifier>  
  [-<modifier>]]
```

3.1.1.1 Verb

The verb identifies the action to be taken at the NE as a result of receiving a TL1 message from an OS. The semantic values of the verb are defined within the context of the functional application in which the message is intended to be used (e.g., ENT, ED, RTRV).

3.1.1.2 Modifiers

The command code modifiers are optional depending upon the specific command and the application domain. In normal TL1 command usage, the first modifier identifies the object of the verb where the action is to be applied in the NE. The second modifier further modifies the object of the verb and is interpreted differently for different operations domains. For example, a *<verb>-EQPT* can be used to indicate that an action, specified by the value of the *verb*, is to be taken on an equipment object; a *<verb>-T0* indicates an action is being taken on a DS0 circuit (where T0 indicates transmission hierarchy level 0).

As another example, for switching NEs, the command *<verb>-<administrative view>* indicates an action is to be taken on an object entity within the specified *administrative view* of the switching NE database. The information groupings within a switching NE are called administrative views, in which individual data elements are represented in the form of flat tables or matrices. Each row of an administrative view represents an object entity; each column represents an attribute (parameter) shared by all of the object entities in the view. An administrative view is similar in concept to relations in relational database theory.

The second modifier may be used to further define the identity of the object upon which the action is to be taken. For example, the command DLT-ROUTE-SS7 will disconnect (DLT) an SS7 route. That is, the modifier ROUTE is further defined to only identify SS7 routes.

3.1.2 Staging Parameter Blocks

The *staging parameter blocks* are a series of four data blocks following the *command code* that provide information necessary to establish (i.e., *stage*) and uniquely identify an object entity within an NE to be managed by a remote OS and to specify certain options as to how the input command is to be executed in the NE. The *staging parameter blocks* determine the target NE and the identity of the object to be acted upon by the input message. The structure of the staging parameter blocks is of the form:

:[<tid>]:[<aid(s)>]:<ctag>:[general block]:

The first three staging parameter blocks are discussed in the following subsections. The general block is required for all input commands but its value can be null (i.e., the general block is represented by two successive colons). This is the case for the Lucent switch.

3.1.2.1 Target Identifier (TID) Block

TID is the Target Identifier. It identifies the destination network element (NE) to which the input command is directed. The value of the TID can be up to 20 alphanumeric characters long. Spaces are not allowed. TIDs are not case-sensitive. Although the TID block is required for all input commands, its value can be null (i.e., the TID block is represented by two successive colons) if an NE is the only target possible for a message sent on a connection. This is the case for the Lucent switch.

3.1.2.2 Access Identifier (AID) Block

AID is the Access Identifier. This block contains one or more parameters that uniquely identify the entities within the target NE that are the object of the input message. Section 120-400-000 of this reference guide lists the Access Identifiers used by the Lucent switch.

3.1.2.3 Correlation Tag (CTAG) Block

CTAG is the Correlation Tag. It correlates an input command with its associated output response(s). The value of the CTAG is a non-zero integer of up to six characters.

3.1.2.4 General Block

The general block includes support parameters whose values affect the way in which the input command is to be executed in the NE. The general block is required for all input commands but its value can be null (i.e., the general block is represented by two successive colons that are optional when no message payload follows). This is the case for the Lucent switch.

3.1.3 Message Payload

The remaining part of any TL1 input command is the message payload; that is *subject matter* of the *message*. This section of the message may consist of zero (for instance, for RTRV messages) or more data blocks in the following general form:

$$(: <p_x> (, <p_x>)^*)^* ;$$

where “ p_x ” represents a parameter (i.e., data item). Each data block is delimited by colons (:) and the last is terminated by a semi-colon (;). Each data block may have an unlimited number of data items, each delimited by commas (,). For example, a payload consisting of three parameter blocks, each containing three parameters would be of the form

$$... : <p_1> , <p_2> , <p_3> : <p_4> , <p_5> , <p_6> : <p_7> , <p_8> , <p_9> ;$$

The data items within a data block may either be name-defined (of the form `<key_word>=<value>`) or position-defined where the values are specified and the keyword is implied by its position in the data block. All of the data items must be of the same type within a given data block. The semantics of the data items are operation domain-specific and vary according to the operation to be performed as a result of the input message.

Whenever an equal sign (=) is detected within a data block, the data block type is defined to be a name-defined data block. This implies the data block to be of the form:

```
...:Keyword1=<value>, Keyword2=<value>, ...  
KeywordN=<value>:...
```

If a position-defined parameter (i.e., a value with no “keyword =”) is included in a name-defined data block, an error will be generated indicating a data block error. That is according to the rule that data types cannot be intermixed in the same data block.

3.2 Acknowledgements

An *acknowledgment* is a short reply from the switch indicating that an input command message is being acted upon or has been immediately rejected. The essential purpose of an acknowledgment is to assure a human user that a command that takes a long time to execute has been received by the NE. An acknowledgement is sent if an output response message to the command cannot be transmitted within two seconds of receipt of the command. In general, an acknowledgment is later followed by an output response message to the command. However, in some circumstances, an acknowledgment is the only output message triggered by a command.

The *format* of an acknowledgment is as follows:

```
<acknowledgment code> ^ <ctag> <cr> <lf>
```

The acknowledgment code identifies the reason for the acknowledgment. The CTAG identifies the associated input command. The *less than* (<) character is the acknowledgment terminator. The following table shows the valid values for acknowledgment codes and their meanings.

Acknowledgement Code		Meaning
IP	In Progress	These acknowledgments imply that the command is being executed. They are used often for test and access messages requiring a long execution time, e.g., a 1-minute noise test. These acknowledgments may be followed by either completed or denied output response messages.
PF	Printout Follows	

OK	All Right	Command received and requested action initiated and completed.
NA	No Acknowledgement	Command received but control of the processing has been lost, making correct acknowledgement impossible. Initiation or execution of the command is uncertain. This acknowledgment can also be used to respond to a command that is garbled during transmission. If the CTAG value of the command could not be determined, then the single character <i>zero</i> (0) is used as the acknowledgment CTAG value.
NG	No Good	The command is valid, but the requested action conflicts with current system or equipment status. This acknowledgment is seldom used because specific error codes in output response messages can be employed to signify the same information.
RL	Repeat Later	Requested action cannot be executed due to unavailable system resources caused by system overload, excessive queue lengths, busy programs, etc. The command may be entered again later.

3.3 Output Response Messages

An *output response message* is a detailed reply (or set of replies) to an input command message. It contains information indicating whether the command was executed successfully and any data that needs to be returned to the OS/user. The general structure of a TL1 output response message is of the form:

```
<header> <response identification>
[<text block>] <terminator>
```

The required *header* represents information common to all output response messages; i.e., it is independent of the type of output response. The required *response identification* identifies the type of output response message. The optional *text block* represents information specific to the particular output response message. The *terminator* indicates the termination or continuation of the output response message.

3.3.1 Header

The form of the *header* is

```
<cr><lf><lf>^^^<sid>^<year>-<month>-<day>^
<hour>:<minute>:<second>
```

and is composed of a system identifier (<sid>) and date and time stamps.

The <sid> is restricted to 20 characters maximum and identifies the NE generating the message. The syntax of <sid> is any TL1 identifier (simple or compound) or text string. For the Lucent switch, the CLLI code is used for the source identifier. The <sid> value is checked by the NE against the <tid> parameter of the input command to verify that the NE's <sid> matches the command's intended target (i.e., <tid>).

The <year>-<month>-<day> construct generally represents the day on which the command is executed. This construct consists of three components separated by hyphens (-). Each component is specified by exactly two digits.

The <hour>:<minute>:<second> construct generally represents the time when the command is executed. This construct consists of three components separated by colons (:). Each component is specified by exactly two digits.

3.3.2 Response Identification

The form of the response identification is

<cr><lf>M^^<ctag>^<completion code>

and is composed of the character *M*, a *correlation tag* (<ctag>), and a *completion code*. The character *M* signifies that the message is the response to an input command message. The output response message has the same <ctag> value as the corresponding input command message, thus enabling the OS to associate the received output response message with a previously sent command. The following table shows the valid values for completion codes and their meanings.

Code	Meaning
COMPLD	represents total successful execution of the input command.
DENY	represents total denial of the input command.
PRTL	represents partial successful execution of the input command. This response code is returned for output response to input commands specifying multiple AIDs of which only a subset (but not an empty subset) have been successfully executed. If all AIDs have failed to be executed, the response code is DENY.
DELAY	represents successful queuing of the input command submitted for delayed activation.
RTRV	represents output response of an input retrieve command (i.e., command verb = RTRV) that retrieves extensive amount of information from the NE and thus causes lengthy processing in the NE for gathering all the requested information. For

	effective operation, the NE may start returning available information to the OS even before all the requested information is gathered. In this case, the RTRV completion code may be used. Multiple responses with RTRV completion codes are permitted for the same RTRV command, but the final response must have a COMPLD completion code.
--	--

When the *<ctag>* of an input command cannot be identified (e.g., during dial-up asynchronous connections with noise and errors prevalent), either the 2-letter acknowledgment NA may be returned or the DENY response containing the appropriate error message with the *<ctag>* set to the single character *zero* (0) may be returned.

3.3.3 Text Block

The optional *text block* is used to represent information specific to the particular output response. The form of the *response text* is

```
((<cr><lf>^^^<unquoted line>)|
  (<cr><lf>^^^<quoted line>)|
  (<cr><lf>^^^<comment>))*
```

It consists of three possible types of components, namely, *<unquoted line>*, *<quoted line>*, or *<comment>*. Both *<unquoted line>* and *<quoted line>* are machine parsable, while *<comment>* is not. Each type of component may appear zero or more times within the *text block* and interleave with other component types in any order.

The *<unquoted line>* consists of name- or position-defined parameters separated by required whitespace (*<ws>*) and optional commas. A whitespace is a space character, a horizontal tab, a vertical tab, or a form feed. The most popular usage of the unquoted line component is for representing error codes in some response messages, e.g., in a denial response (i.e., when the response code is DENY). The error code is specified by four characters that may contain numerals after the first character, if appropriate (e.g., SN4W for Status error, Not equipped 4-Wire circuit).

The *<quoted line>* consists of parsable text and is always preceded and followed by the *double-quote* character ("). The syntax of the parsable text is equivalent to that of an input command message, i.e., a series of colon-delimited parameter blocks. Parameters within each block are separated by required commas and optional format effectors. Format effectors are space, horizontal tab, vertical tab, form feed, carriage return, and line feed.

The comment component is used to allow free format (i.e., human readable, not machine parsable) text. The free form text shall always be preceded by the pair of characters *slash asterisk* (/*) and followed by the pair of characters *asterisk slash* (*). Note that either the *semicolon* (;) or the *greater than* (>) character does not terminate the output response message when they are present as part of a quoted line or within a text string.

3.3.4 Terminator

The form of the *terminator* is:

<cr> <lf> (; | >)

and is required as the termination block for all TL1 message types . The terminator is represented by either the *semicolon* (;) character or the *greater than* (>) character. The *semicolon* (;) character is used to indicate the termination of the output response message. The *greater than* (>) character is used to indicate that more output associated with this response will follow under another header.

The specified size of an output message may not exceed 4096 bytes. If the size of an output response message exceeds 4096 bytes, the output information is partitioned into multiple output response messages. A *continuation message* (i.e., subsequent message) must have another *header* and *response identification* with the same <ctag>, along with an additional <text block>. Each message is terminated by the *greater than* (>) character, except the last message, which is terminated by the *semicolon* (;) character to indicate the completion of the response. The (>) terminator is also used for intermediate responses in a timed measurement series.

3.4 Autonomous Messages

An *autonomous (automatic) message* is one generated by the switch either on a periodic timed basis or to report some unusual occurrence. It is sent without having an explicit input message associated with it. Typical scenarios where autonomous messages are used include:

- Reporting of alarmed and/or non-alarmed trouble events
- Reporting of scheduled diagnostic tests in the switch
- Reporting of Performance Monitoring Data
- Reporting of a change in the switch's database
- Periodic reporting of selected switch conditions.

The general structure of a TL1 autonomous message is:

`<header> <auto id> [<text block>] <terminator>`

The required *header* block represents information common to all output response and autonomous messages. The required *auto id* block identifies the severity and the nature of the autonomous message. This block contains the parameters *almcde* and *ATAG*, which are discussed in the following two subsections. The optional *text block* represents information specific to the particular autonomous message. The *terminator* indicates the completion or continuation of the autonomous message.

3.4.1 Header

The *header* is the standard response header defined in paragraph 3.3.1 above. It contains a system identifier (*<sid>*) and date and time stamps.

3.4.2 Autonomous Message Identification

The form of the *<auto id>* entry for an autonomous message is:

`<cr> <lf> <almcde>^<atag>^<verb>
[^<modifier>[^<modifier>]]`

and comprises an *alarm code* (*<almcde>*), an *autonomously-generated correlation tag* (*<atag>*), and a *<verb>* [*^<modifier>* [*^<modifier>*]] entry.

3.4.2.1 Alarm Code (*<almcde>*)

The alarm code indicates the severity of an autonomous message. Valid values for *<almcde>* in decreasing order of severity are as follows:

<i><almcde></i>	Description
*C	Critical alarm
**	Major alarm
*^	Minor alarm
A^	Non-alarm message

Critical, *Major*, and *Minor* correspond to the reporting of alarmed events. The *Non-alarm message* designation is used when the switch is reporting non-alarmed events, periodic measurements, or results of previously scheduled diagnostics or audits. If multiple alarms are reported in the same message, the alarm code is the highest severity of those being reported.

3.4.2.2 Autonomously-Generated Correlation Tag (<atag>)

ATAG (Autonomously-generated correlation Tag) is a numeric transaction identifier similar to CTAG (see subsection 3.1.2.3). It is sequentially assigned by the switch and must be included in all autonomous messages. The TL1 agent automatically generates the ATAG value, which is used exclusively as a sequence number for autonomous messages. The value is a number from 1 to 9999. The first ATAG used is "1" when the agent first initializes or is reset. It automatically wraps. OSSs can use the ATAG to spot if messages are being lost.

3.4.2.3 <verb>[^<modifier>[^<modifier>]]

The <verb>[^<modifier>[^<modifier>]] entry identifies the nature of the spontaneous output and allows for quick identification of the semantics of the information in the text block. It consists of up to three valid TL1 identifiers separated by the *space character*, represented by a *caret* (^). The first identifier (<verb>) is the autonomous message verb and is a required entry. In most cases, the verb in an autonomous message will be REPT (Report). The autonomous message verb can have up to two optional modifiers. The first identifier following the verb modifies the verb. The second identifier specifies the object generating the message. Certain modifiers mean that the <aid> parameter (if it exists) is addressing a particular type of entity in the switch.

3.4.3 Text Block

The optional *text block* is used to represent information specific to the particular output response. The form of the *response text* is

```
((<cr><lf>^^^<unquoted line>)|  
 (<cr><lf>^^^<quoted line>)|  
 (<cr><lf>^^^<comment>))*
```

It consists of three possible types of components, namely, <unquoted line>, <quoted line>, or <comment>. Both <unquoted line> and <quoted line> are machine parsable, while <comment> is not. Each type of component may appear zero or more times within the *text block* and interleave with other component types in any order. Refer back to paragraph 3.3.3 for a more complete description of the individual components.

3.4.4 Terminator

The form of the *terminator* is:

```
<cr> <lf> ( ; | > )
```

and is required as the termination block for all TL1 message types. See paragraph 3.3.4 for more information regarding terminator types, and message size and continuation.

4. User Access Privilege Levels

User access privilege levels for commands are defined below in descending order of security. Higher levels include lower levels.

AccessPrivilege Levels	Description
ADMIN	Administrative permits the user to perform all TL1 commands including managing user accounts or profiles and downloading new software.
SW	SoftWare, in addition to all commands with security levels SA, NSA, and VIEW, allows the user to issue commands to download software. This level of access security applies to the System command CPY-MEM.
SA	Service-Affecting, in addition to all commands with security levels NSA and VIEW, allows the user to issue service-affecting commands. This level applies to DSFacility, Equipment, Signalling, and Test commands, and System command ED-DAT.
NSA	Non-Service-Affecting, in addition to all commands with security level VIEW, allows the user to issue non-service-affecting commands. This level applies to Log commands, System commands (excepting CPY-MEM and ED-DAT), and DSFacility commands ALW/INH/SCHED-PMREPT, INIT-REG, and SET-TH.
VIEW	VIEW allows the user to issue RTRV commands (except RTRV-IPHOST-SECU and RTRV-USER-SECU, which are ADMIN level) to view the switch's status and statistics information. This lowest level of access security also applies to ACT-USER (to log on), CANC-USER (to log off), ED-PID (with which users can change their passwords), and to REPT autonomous messages.

ALW/INH/OPR/RLS-LPBK-E1

Commands:

ALW-LPBK-E1: Allow Loopback E1 Facility
INH-LPBK-E1: Inhibit Loopback E1 Facility
OPR-LPBK-E1: Operate Loopback E1 Facility
RLS-LPBK-E1: Release Loopback E1 Facility

Descriptions:

ALW-LPBK-E1 permits the switch to automatically operate loopbacks on a specified E1 port in the switch. This command controls whether the switch will respond to remote loopback requests.

INH-LPBK-E1 lets the user prevent remote automatic loopback on an E1 port.

OPR-LPBK-E1 lets the user operate a loopback on a specified E1 port associated with a test access session in the switch. The loop may be accomplished at either the near or the far end. The switch issues an error response if not in a state that allows a loopback to occur. A switch that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

RLS-LPBK-E1 lets the user release a loopback on a specified E1 port associated with a test access session in the switch. The loop may be released from either the near or the far end. The switch issues an error response if not in a state that allows a loopback to occur. A switch that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

Category: Facility

Security: SA for all commands

Input Formats:

```
ALW-LPBK-E1: [TID]:<src>:[CTAG];  
INH-LPBK-E1: [TID]:<src>:[CTAG];  
OPR-LPBK-E1: [TID]:<lpbk_id>:[CTAG]::[<locn>],[<orgn>],  
    [<intext>],[<lpbktype>];  
RLS-LPBK-E1: [TID]:<lpbk_id>:[CTAG]::[<locn>],[<orgn>],  
    [<intext>],[<lpbktype>];
```

Output Format: none

Parameters:

- src** Identifies the AID (for ALW/INH) as an E1 port on an I/O Module in the switch.
Type: PORT
Range: IOM-{1-17}-E1-{1-28}
Default value: none
- lpbk_id** Identifies the AID (for OPR/RLS) as the E1 port on an I/O module in the switch on which the loopback is performed or released.
Type: PORT
Range: IOM-{1-17}-E1-{1-28}
Default value: none
- locn** Identifies the location where the loopback occurs. The value “FEND” is not supported.
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- orgn** Identifies the office originating the looped-back signal. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.
Type: enum
Range: FEND = Far end office
NEND = Near end office
BOTH = Both offices
Default value: NULL
- intext** Directs the switch to provide or release a loopback that is with/without the benefit of signal processing, such as reshaping, recoding, scrambling, retiming, etc. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.
Type: enum
Range: EXT = External
INT = Internal
Default value: NULL

lpbktype Identifies the type of loopback signal to be operated or released. Depending on the transmission system, various parts of a signal may be looped back. For example, the LINE loopback may very well be a full metallic loopback, while a PAYLOAD loopback may result in a signal that has been recoded with new and different header and/or CRC information.

Type: enum

Range: LINE = 2.048 Mbps loopback signal
PAYLOAD = 2.048 Mbps loopback signal with framing
stripped and then regenerated

Default value: LINE

Input Examples:

```
ALW-LPBK-E1::IOM-1-E1-1;  
INH-LPBK-E1::IOM-1-E1-1;  
OPR-LPBK-E1::IOM-1-E1-1;  
RLS-LPBK-E1::IOM-1-E1-1;
```

Related Commands: none

ALW/INH/OPR/RLS-LPBK-OC3

Commands:

ALW-LPBK-OC3: Allow Loopback OC3 Facility
INH-LPBK-OC3: Inhibit Loopback OC3 Facility
OPR-LPBK-OC3: Operate Loopback OC3 Facility
RLS-LPBK-OC3: Release Loopback OC3 Facility

Descriptions:

ALW-LPBK-OC3 permits the switch to automatically operate loopbacks on a specified OC3 port in the switch. This command controls whether the switch will respond to remote loopback requests.

INH-LPBK-OC3 lets the user prevent remote automatic loopback on an OC3 port.

OPR-LPBK-OC3 lets the user operate a loopback on a specified OC3 port associated with a test access session in the switch. The loop may be accomplished at either the near or the far end. The switch issues an error response if not in a state that allows a loopback to occur. A switch that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

RLS-LPBK-OC3 lets the user release a loopback on a specified OC3 port associated with a test access session in the switch. The loop may be released from either the near or the far end. The switch issues an error response if not in a state that allows a loopback to occur. A switch that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

Category: Facility

Security: SA for all commands

Input Formats:

```
ALW-LPBK-OC3:[TID]:<src>:[CTAG];  
INH-LPBK-OC3:[TID]:<src>:[CTAG];  
OPR-LPBK-OC3:[TID]:<lpbk_id>:[CTAG]:[<locn>],  
[<orgn>],[<intext>],[<lpbktype>];  
RLS-LPBK-OC3:[TID]:<lpbk_id>:[CTAG]:[<locn>],  
[<orgn>],[<intext>],[<lpbktype>];
```

Output Format: none

Parameters:

- src** Identifies the AID (for ALW/INH) as an OC3 port on an I/O Module in the switch.
Type: OC
Range: IOM-{8,10}-OC3-{1-4}
Default value: none
- lpbk_id** Identifies the AID (for OPR/RLS) as the OC3 port on an I/O module in the switch on which the loopback is performed or released.
Type: OC
Range: IOM-{8,10}-OC3-{1-4}
Default value: none
- locn** Identifies the location where the loopback occurs. The value “FEND” is not supported.
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- orgn** Identifies the office originating the looped-back signal. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.
Type: enum
Range: FEND = Far end office
NEND = Near end office
BOTH = Both offices
Default value: null
- intext** Directs the switch to provide or release a loopback that is with/without the benefit of signal processing, such as reshaping, recoding, scrambling, retiming, etc. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.
Type: enum
Range: EXT = External
INT = Internal
Default value: null

lpbktype Identifies the type of loopback signal to be operated or released. Depending on the transmission system, various parts of a signal may be looped back. For example, the LINE loopback may very well be a full metallic loopback, while a PAYLOAD loopback may result in a signal that has been recoded with new and different header and/or CRC information. However, loopbacks on OC3 ports can only be the LINE type.

Type: enum

Range: LINE = 155.52 Mbps loopback signal

Default value: LINE

Input Examples:

ALW-LPBK-OC3::IOM-8-OC3-1;

INH-LPBK-OC3::IOM-8-OC3-1;

OPR-LPBK-OC3::IOM-8-OC3-1:::NEND,,LINE;

RLS-LPBK-OC3::IOM-8-OC3-1:::NEND,,LINE;

Related Commands: none

ALW/INH/OPR/RLS-LPBK-STS1

Commands:

ALW-LPBK-STS1: Allow Loopback STS1 Facility

INH-LPBK-STS1: Inhibit Loopback STS1 Facility

OPR-LPBK-STS1: Operate Loopback STS1 Facility

RLS-LPBK-STS1: Release Loopback STS1 Facility

Descriptions:

ALW-LPBK-STS1 permits the switch to automatically operate loopbacks on a specified STS1 port in the switch. This command controls whether the switch will respond to remote loopback requests.

INH-LPBK-STS1 lets the user prevent remote automatic loopback on an STS1 port.

OPR-LPBK-STS1 lets the user operate a loopback on a specified STS1 port associated with a test access session in the switch. The loop may be accomplished at either the near or the far end. The switch issues an error response if not in a state that allows a loopback to occur. A switch that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

RLS-LPBK-STS1 lets the user release a loopback on a specified STS1 port associated with a test access session in the switch. The loop may be released from either the near or the far end. The switch issues an error response if not in a state that allows a loopback to occur. A switch that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

Category: Facility

Security: SA for all commands

Input Formats:

ALW-LPBK-STS1: [TID]:<lpbk_id>: [CTAG];

INH-LPBK-STS1: [TID]:<lpbk_id>: [CTAG];

OPR-LPBK-STS1: [TID]:<lpbk_id>: [CTAG]: [<locn>],
[<orgn>], [<intext>], [<lpbktype>];

RLS-LPBK-STS1: [TID]:<lpbk_id>: [CTAG]: [<locn>],
[<orgn>], [<intext>], [<lpbktype>];

Output Format: none

Parameters:

- lpbk_id** Identifies the AID as an STS1 port on an I/O module in the switch.
Type: STS1
Range: IOM-{1-17}-STS1-{1-8}
Default value: none
- locn** Identifies the location where the loopback occurs. The value “FEND” is not supported.
Type: enum
Range: FEND = Far end
 NEND = Near end
Default value: NEND
- orgn** Identifies the office originating the looped-back signal. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.
Type: enum
Range: FEND = Far end office
 NEND = Near end office
 BOTH = Both offices
Default value: null
- intext** Directs the switch to provide or release a loopback that is with/without the benefit of signal processing, such as reshaping, recoding, scrambling, retiming, etc. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.
Type: enum
Range: EXT = External
 INT = Internal
Default value: null

lpbktype Identifies the type of loopback signal to be operated or released. Depending on the transmission system, various parts of a signal may be looped back. For example, the LINE loopback may very well be a full metallic loopback, while a PAYLOAD loopback may result in a signal that has been recoded with new and different header and/or CRC information. However, loopbacks on STS1 ports can only be the LINE type. A null value indicates that this parameter is not applicable.

Type: enum

Range: LINE = 51.84 Mbps loopback signal

Default value: null

Input Examples:

ALW-LPBK-STS1::IOM-1-STS-1;

INH-LPBK-STS1::IOM-1-STS-1;

OPR-LPBK-STS1::IOM-1-STS-1:::NEND,, ,LINE;

RLS-LPBK-STS1::IOM-1-STS-1:::NEND,, ,LINE;

Related Commands: none

ALW/INH/OPR/RLS-LPBK-T1

Commands:

ALW-LPBK-T1: Allow Loopback DS1 Facility
INH-LPBK-T1: Inhibit Loopback DS1 Facility
OPR-LPBK-T1: Operate Loopback DS1 Facility
RLS-LPBK-T1: Release Loopback DS1 Facility

Descriptions:

ALW-LPBK-T1 permits the switch to automatically operate loopbacks on a specified T1 port in the switch. This command controls whether the switch will respond to remote loopback requests.

INH-LPBK-T1 lets the user prevent remote automatic loopback on a T1 port.

OPR-LPBK-T1 lets the user operate a loopback on a specified T1 port associated with a test access session in the switch. The loop may be accomplished at either the near or the far end. The switch issues an error response if not in a state that allows a loopback to occur. A switch that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

RLS-LPBK-T1 lets the user release a loopback on a specified T1 port associated with a test access session in the switch. The loop may be released from either the near or the far end. The switch issues an error response if not in a state that allows a loopback to occur. A switch that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

Category: Facility

Security: SA for all commands

Input Formats:

ALW-LPBK-T1: [TID]:<src>:[CTAG];
INH-LPBK-T1: [TID]:<src>:[CTAG];
OPR-LPBK-T1: [TID]:<lpbk_id>:[CTAG]::[<locn>],[<orgn>],
[<intext>],[<lpbktype>;
RLS-LPBK-T1: [TID]:<lpbk_id>:[CTAG]::[<locn>],[<orgn>],
[<intext>],[<lpbktype>;

Output Format: none

Parameters:

- src** Identifies the AID (for ALW/INH) as a T1 port on an I/O Module in the switch.
Type: PORT
Range: IOM-{1-17}-PORT-{1-28}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}
Default value: none
- lpbk_id** Identifies the AID (for OPR/RLS) as the T1 port on an I/O module in the switch on which the loopback is performed or released.
Type: PORT
Range: IOM-{1-17}-PORT-{1-28}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}
Default value: none
- locn** Identifies the location where the loopback occurs. The value “FEND” is not supported.
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- orgn** Identifies the office originating the looped-back signal. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.
Type: enum
Range: FEND = Far end office
NEND = Near end office
BOTH = Both offices
Default value: null

intext Directs the switch to provide or release a loopback that is with/without the benefit of signal processing, such as reshaping, recoding, scrambling, retiming, etc. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.

Type: enum

Range: EXT = External
INT = Internal

Default value: null

lpbktype Identifies the type of loopback signal to be operated or released. Depending on the transmission system, various parts of a signal may be looped back. For example, the LINE loopback may very well be a full metallic loopback, while a PAYLOAD loopback may result in a signal that has been recoded with new and different header and/or CRC information.

Type: enum

Range: LINE = 1.544 Mbps loopback signal
PAYLOAD = 1.544 Mbps loopback signal with framing
stripped and then regenerated

Default value: LINE

Input Examples:

```
ALW-LPBK-T1::IOM-1-PORT-1;  
INH-LPBK-T1::IOM-1-PORT-1;  
OPR-LPBK-T1::IOM-1-PORT-1:::NEND,,LINE;  
RLS-LPBK-T1::IOM-1-PORT-1:::NEND,,LINE;
```

Related Commands: none

ALW/INH/OPR/RLS-LPBK-T3

Commands:

ALW-LPBK-T3: Allow Loopback DS3 Facility
INH-LPBK-T3: Inhibit Loopback DS3 Facility
OPR-LPBK-T3: Operate Loopback DS3 Facility
RLS-LPBK-T3: Release Loopback DS3 Facility

Descriptions:

ALW-LPBK-T3 permits the switch to automatically operate loopbacks on a specified T3 port in the switch. This command controls whether the switch will respond to remote loopback requests.

INH-LPBK-T3 lets the user prevent remote automatic loopback on a T3 port.

OPR-LPBK-T3 lets the user operate a loopback on a specified T3 port associated with a test access session in the switch. The loop may be accomplished at either the near or the far end. The switch issues an error response if not in a state that allows a loopback to occur. A switch that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

RLS-LPBK-T3 lets the user release a loopback on a specified T3 port associated with a test access session in the switch. The loop may be released from either the near or the far end. The switch issues an error response if not in a state that allows a loopback to occur. A switch that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

Category: Facility

Security: SA for all commands

Input Formats:

```
ALW-LPBK-T3:[TID]:<src>:[CTAG];  
INH-LPBK-T3:[TID]:<src>:[CTAG];  
OPR-LPBK-T3:[TID]:<lpbk_id>:[CTAG]::[<locn>],[<orgn>],  
[<intext>],[<lpbktype>];  
RLS-LPBK-T3:[TID]:<lpbk_id>:[CTAG]::[<locn>],[<orgn>],  
[<intext>],[<lpbktype>];
```

Output Format: none

Parameters:

src	Identifies the AID (for ALW/INH) as a T3 port on a DS3 I/O Module in the switch. Type: T3 Range: IOM-{1-17}-T3-{1-8} Default value: none
lpbk_id	Identifies the AID (for OPR/RLS) as the T3 port on an I/O module in the switch on which the loopback is performed or released. Type: T3 Range: IOM-{1-17}-T3-{1-8} Default value: none
locn	Identifies the location where the loopback occurs. The value “FEND” is not supported. Type: enum Range: FEND = Far end NEND = Near end Default value: NEND
orgn	Identifies the office originating the looped-back signal. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank. Type: enum Range: FEND = Far end office NEND = Near end office BOTH = Both offices Default value: null
intext	Directs the switch to provide or release a loopback that is with/without the benefit of signal processing, such as reshaping, recoding, scrambling, retiming, etc. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank. Type: enum Range: EXT = External INT = Internal Default value: null

lpbktype Identifies the type of loopback signal to be operated or released. Depending on the transmission system, various parts of a signal may be looped back. For example, the LINE loopback may very well be a full metallic loopback, while a PAYLOAD loopback may result in a signal that has been recoded with new and different header and/or CRC information. However, loopbacks on T3 ports can only be the LINE type.

Type: enum

Range: LINE = 44.736 Mbps loopback signal

Default value: LINE

Input Examples:

```
ALW-LPBK-T3::IOM-1-T3-1;  
INH-LPBK-T3::IOM-1-T3-1;  
OPR-LPBK-T3::IOM-1-T3-1:::NEND,, ,LINE;  
RLS-LPBK-T3::IOM-1-T3-1:::NEND,, ,LINE;
```

Related Commands: none

DLT/ED/ENT/RTRV-E1

Commands:

DLT-E1: Delete E1 Facility
ED-E1: Edit E1 Facility
ENT-E1: Enter E1 Facility
RTRV-E1: Retrieve E1 Facility

Descriptions:

DLT-E1 lets the user disconnect an E1 port from operation.

ED-E1 lets the user edit parameters associated with an E1 port on an I/O module, or a timing port, in the switch. These parameters include framing, line code, service mode, timing reference, primary state, and secondary state.

ENT-E1 lets the user establish the parameters associated with an E1 port on an I/O module in the switch. These parameters include framing, line code, service mode, timing reference, primary state, and secondary state. ENT-E1 is dependent on ENT-EQPT; that is, ENT-E1 will not work unless ENT-EQPT has already been issued.

RTRV-E1 lets the user retrieve parameters associated with an E1 port. These parameters include framing, line code, service mode, timing reference, primary state, and secondary state.

Category: Facility

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-E1:[TID]:<ds_id>:[CTAG];  
ED-E1:[TID]:<ds_id>:[CTAG]::[FMT=<fmt>],  
    [LINECDE=<linecde>],[OMODE=<omode>],  
    [TMGREF=<tmgref>],[IFTYPE=<iftype>]:[<pst>],  
    [<sst>];  
ENT-E1:[TID]:<ds_id>:[CTAG]::[FMT=<fmt>],  
    [LINECDE=<linecde>],[OMODE=<omode>],  
    [TMGREF=<tmgref>],[IFTYPE=<iftype>]:[<pst>],  
    [<sst>];  
RTRV-E1:[TID]:<ds_id>:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<ds_id>:FMT=<fmt>,LINECDE=<linecde>,OMODE=<omode>,
    TMGREF=<tmgref>,IFTYPE=<iftype>:<pst>,[<sst>]"
;
```

Parameters:

- ds_id** Identifies the AID as an E1 port on an I/O Module in the switch.
Type: PORT
Range: IOM-{1-17}-E1-{1-28}
Default value: none
- fmt** Identifies the E1 digital signal framing format.
Type: enum
Range: CRC = CRC4
CRCMF = CRC4 and MultiFrame
DF = Double Frame format
MF = MultiFrame format
SLC96 = AT&T TR008 (Subscriber Loop Carrier) format
(currently unsupported)
Default value: DF
- linecde** Identifies the signal inserted for zero code suppression on an E1.
Type: enum
Range: AMI = Alternate mark inversion ("bipolar")
HDB3 = High Density Bipolar 3 (no more than three
consecutive zeros can be transmitted.)
Default value: HDB3
- omode** Identifies what will be transmitted from the E1 output port when out of service.
Type: enum
Range: IDLE = Idle signal
AIS = Alarm Indication Signal
Default value: AIS

- tmgreg** Identifies whether the TMG-A or TMG-B is to be used as the primary or secondary timing source for the system. This parameter is used only for configuring the BITS interface, and is presently not supported; leave it blank.
- Type:** enum
Range: PRI = Primary timing source
SEC = Secondary timing source
NONE = Not a timing source
Default value: NONE
- iftype** Identifies whether the subject E1 port affects the network or user side. This parameter presently supports only the value "NETWORK"; leave it blank.
- Type:** enum
Range: NETWORK = network side
USER = user side
Default value: NETWORK
- pst** Identifies the primary state of the port. The value indicates the desired state of the port. A null value means no change to the current value.
- Type:** enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
Default value: IS
- pst** Identifies (in RTRV output) the primary state, and primary state qualifier, for the port.
- Type:** enum
Range: IS = In-Service
OOS-AU = Out-Of-Service, Autonomous (faulted)
OOS-AUMA = Out-Of-Service, Autonomous and Managed
OOS-MA = Out-Of-Service, Managed
Default value: none

sst Identifies (in RTRV output) the secondary state of the port. The value indicates the desired secondary state of the port. A null value means no change to the current value. This parameter is not supported presently; leave it blank.

Type: enum

Range: FAF = Facilities Failure
LPBK = Loopback
RAI = Remote Alarm Indication
SGEO = Supporting Entity Outage
UAS = Unassigned

Default value: none

Input Examples:

```
DLT-E1::IOM-1-E1-1;  
ED-E1::IOM-1-E1-1:::FMT=DF,LINECDE=HDB3,OMODE=AIS,  
  IFTYPE=NETWORK:IS;  
ENT-E1::IOM-1-E1-1:::FMT=DF,LINECDE=HDB3, OMODE=AIS,  
  IFTYPE=NETWORK:IS;  
RTRV-E1::IOM-1-E1-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
  "IOM-1-E1-1:FMT=DF,LINECDE=HDB3,OMODE=AIS,  
    TMGREF=NONE,IFTYPE=NETWORK:IS"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-ENET

Commands:

DLT-ENET: Delete ENET Facility

ED-ENET: Edit ENET Facility

ENT-ENET: Enter ENET Facility

RTRV-ENET: Retrieve ENET Facility

Descriptions:

DLT-ENET lets the user disconnect an ENET port from operation.

ED-ENET lets the user edit parameters associated with an Ethernet port on an I/O module in the switch. These parameters include the port's transmission mode, format, and primary state.

ENT-ENET lets the user establish the parameters associated with an Ethernet port on an I/O module in the switch. These parameters include the port's transmission mode, format, and primary state. ENT-ENET is dependent on ENT-EQPT; that is, ENT-ENET will not work unless ENT-EQPT has already been issued.

RTRV-ENET lets the user retrieve parameters associated with an Ethernet port. These parameters include the port's transmission mode, format, primary state, and secondary state.

Category: Facility

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-ENET: [TID]:<enetId>:[CTAG];

ED-ENET: [TID]:<enetId>:[CTAG]:[MODE=<mode>],
[FORMAT=<format>]:[<pst>];

ENT-ENET: [TID]:<enetId>:[CTAG]:[MODE=<mode>],
[FORMAT=<format>]:[<pst>];

RTRV-ENET: [TID]:<enetId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<enetId>:MODE=<mode>,FORMAT=<format>:<pst>,
    [<sst>]"
;
```

Parameters:

- enetId** Identifies the AID (for DLT, ED, and RTRV output) as an Ethernet port on an I/O Module in the switch.
- Type:** ENET
Range: IOM-{8,10}-ENET-{1-4}
Default value: none
- enetId** Identifies the AID (for ENT and RTRV input) as an I/O module or an Ethernet port on an I/O module in the switch. A null value for the second part of the AID is equivalent to “ALL”; that is, by leaving the field blank, parameters will be returned for all Ethernet ports configured on the specified I/O module.
- Type:** IOMorENET
Range: IOM-{8,10}[-ENET-{1-4}]
Default value: none
- mode** Identifies the transmission mode for the port; that is, whether communication on the port is in one direction at a time (half-duplex), both directions simultaneously (full-duplex), or whether the mode is determined automatically.
- Type:** enum
Range: AUTONEG = mode automatically negotiated
 FULLDUPLEX = full-duplex mode
 HALFDUPLEX = half-duplex mode
Default value: AUTONEG
- format** Identifies the Ethernet format. Reset the I/O module after changing the format, either by changing the state with the [ED-EQPT](#) command to OOS, then to IS, or by sequentially executing [RMV-EQPT](#) and [RST-EQPT](#).
- Type:** enum
Range: ENET_802_3 = 802.3 format
 ENET_DIX_II = Dix II format
Default value: ENET_DIX_II

- pst** Identifies the primary state of the port. The value indicates the desired state of the port. A null value means no change to the current value.
- Type:** enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
Default value: IS
- pst** Identifies (in RTRV output) the primary state, and primary state qualifier, for the port.
- Type:** enum
Range: IS = In-Service
OOS-AU = Out-Of-Service, Autonomous (faulted)
OOS-AUMA = Out-Of-Service, Autonomous and Managed
OOS-MA = Out-Of-Service, Managed
Default value: none
- sst** Identifies (in RTRV output) the secondary state of the port.
- Type:** enum
Range: ACT = Active
FAF = Facilities Failure
FEPO = Far End Processor Outage
FLT = Faulted
LPBK = Loopback
SGEO = Supporting Entity Outage
UAS = Unassigned
WRK = Working
Default value: none

Input Examples:

```
DLT-ENET::IOM-8-ENET-1;  
ED-ENET::IOM-8-ENET-1:::MODE=AUTONEG,  
  FORMAT=ENET_802_3:IS;  
ENT-ENET::IOM-8-ENET-1:::MODE=AUTONEG,  
  FORMAT=ENET_802_3:IS;  
RTRV-ENET::IOM-8-ENET-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "IOM-8-ENET-1:MODE=AUTONEG,FORMAT=ENET_DIX_II:IS,
    ACT"
  "IOM-8-ENET-2:MODE=AUTONEG,FORMAT=ENET_DIX_II:IS,
    ACT"
  "IOM-8-ENET-3:MODE=AUTONEG,FORMAT=ENET_802_3:00S,
    UAS"
  "IOM-8-ENET-4:MODE=AUTONEG,FORMAT=ENET_802_3:00S,
    UAS"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-ENET-ENDPTVOIP

Commands:

DLT-ENET-ENDPTVOIP: Delete ENET Facility Endpoint

ED-ENET-ENDPTVOIP: Edit ENET Facility Endpoint

ENT-ENET-ENDPTVOIP: Enter ENET Facility Endpoint

RTRV-ENET-ENDPTVOIP: Retrieve ENET Facility Endpoint

Descriptions:

DLT-ENET-ENDPTVOIP lets the user end the association of an Ethernet port with an Ethernet endpoint.

ED-ENET-ENDPTVOIP lets the user edit parameters of an Ethernet endpoint associated with an Ethernet port. These parameters include the subnet mask, the default gateway, whether to enable IP link monitoring, the heartbeat frequency, the maximum heartbeat timeouts allowed, the usable bandwidth percentage, the maximum number of packets per second allowed, and the primary state.

ENT-ENET-ENDPTVOIP lets the user establish the association of an Ethernet port with an Ethernet endpoint. Parameters include the subnet mask, the default gateway, whether to enable IP link monitoring, the heartbeat frequency, the maximum heartbeat timeouts allowed, the usable bandwidth percentage, the maximum number of packets per second allowed, and the primary state. ENT-ENET-ENDPTVOIP is dependent on ENT-EQPT; that is, ENT-ENET-ENDPTVOIP will not work unless ENT-EQPT has already been issued.

RTRV-ENET-ENDPTVOIP lets the user retrieve parameters associated with an Ethernet endpoint. These parameters include the primary and secondary IP addresses, the subnet mask, the default gateway, whether to enable IP link monitoring, the heartbeat frequency, the maximum heartbeat timeouts allowed, the usable bandwidth percentage, the maximum number of packets per second allowed, and the primary state.

Category: Facility

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-ENET-ENDPTVOIP:[TID]:<enetId>:[CTAG];
ED-ENET-ENDPTVOIP:[TID]:<enetId>:[CTAG]::
  [SUBNETMASK=<subnetmask>],
  [DEFAULTGATEWAY=<defaultgateway>],
  [IPLNKMON=<ipLnkMon>],[LNKMONPER=<lnkMonPer>],
  [LNKMAXTMOUTS=<lnkMaxTmouts>],[BWLMT=<bwLmt>],
  [PKTLMT<pktLmt>]:<pst>;
ENT-ENET-ENDPTVOIP:[TID]:<enetId>:[CTAG]::
  IPADDR=<ipaddr>,MATEIPADDR=<mateipaddr>,
  SUBNETMASK=<subnetmask>,
  DEFAULTGATEWAY=<defaultgateway>,
  [IPLNKMON=<ipLnkMon>],[LNKMONPER=<lnkMonPer>],
  [LNKMAXTMOUTS=<lnkMaxTmouts>],[BWLMT=<bwLmt>],
  [PKTLMT<pktLmt>]:<pst>;
RTRV-ENET-ENDPTVOIP:[TID]:[<enetId>]:[CTAG];
```

Output Format:

```
      SID DATE TIME
M    CTAG COMPLD
      "<enetId>:IPADDRESS=<ipaddress>,
      MATEIPADDR=<mateipaddr>,SUBNETMASK=<subnetmask>,
      DEFAULTGATEWAY=<defaultgateway>,
      IPLNKMON=<ipLnkMon>,LNKMONPER=<lnkMonPer>,
      LNKMAXTMOUTS=<lnkMaxTmouts>,BWLMT=<bwLmt>,
      PKTLMT<pktLmt>:<pst>"
      ;
```

Parameters:

enetId Identifies the AID (for DLT, ED, and RTRV output) as an Ethernet port on an I/O Module in the switch.

Type: ENET

Range: IOM-{8,10}-ENET-{1-4}

Default value: none

enetId Identifies the AID (for ENT and RTRV input) as an I/O module or an Ethernet port on an I/O module in the switch. A null value for the second part of the AID is equivalent to “ALL”; that is, by leaving the field blank, parameters will be entered or returned for all Ethernet ports configured on the specified I/O module.

Type: IOMorENET

Range: IOM-{8,10}[-ENET-{1-4}]

Default value: none

ipaddress Identifies the IP address for the Ethernet endpoint.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

mateipaddress Identifies the IP address for the standby Ethernet port on the protection IOM.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

subnetmask Identifies the subnet mask.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

defaultgateway Identifies the default gateway.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

ipLnkMon Identifies whether to enable IP link monitoring for a valid remote peer IP address.

Type: BoolYN

Range: N = do not enable IP link monitoring

Y = enable IP link monitoring

Default value: Y

lnkMonPer Identifies the frequency, in seconds, that IP ping heartbeat messages are sent by the VoIP IOM.

Type: integer

Range: {1-5}, in 0.5 increments

Default value: 1

lnkMaxTmouts Identifies the number of consecutive IP ping heartbeat time-outs allowed before loss of IP connectivity and subsequent ENA-IOM failover occurs. When the ENA-IOM is connected to a router through a series of switches that have 802.1D spanning tree protocol enabled (and the value of *lnkMonPer* is “1”), the number of consecutive timeouts must be greater than three times the configured forward delay timer configured in the Ethernet switches (default is 15 seconds).

Type: integer
Range: {10-65535}
Default value: 60

bwLmt Identifies the percentage of the bandwidth for the port that can be used.

Type: integer
Range: {0-100}
Default value: 100

pktLmt Identifies the maximum number of packets per second allowed for the PVC endpoint. A value of “0” signifies no limit.

Type: integer
Range: {0, 10000-500000}
Default value: 0

pst Identifies the primary state of the port. The value indicates the desired state of the port. A null value means no change to the current value.

Type: enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
Default value: none

Input Examples:

```
DLT-ENET-ENDPTVOIP::IOM-8-ENET-1;  
ED-ENET-ENDPTVOIP::IOM-8-ENET-1:::  
SUBNETMASK=255.255.255.0, DEFAULTGATEWAY=10.18.69.1,  
IPLNKMON=Y, LNKMONPER=1, LNKMAXTMOUTS=60, BWLMT=100,  
PKTLMT=0:PST=IS;  
ENT-ENET-ENDPTVOIP::IOM-8-ENET-1:::  
IPADDRESS=10.18.69.11, MATEIPADDRESS=10.18.69.111,  
SUBNETMASK=255.255.255.0, DEFAULTGATEWAY=10.18.69.1,  
IPLNKMON=Y, LNKMONPER=1, LNKMAXTMOUTS=60, BWLMT=100,  
PKTLMT=0:PST=IS;  
RTRV-ENET-ENDPTVOIP::IOM-8-ENET-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "IOM-8-ENET-1:IPADDR=10.18.69.11,
    MATEIPADDR=10.18.69.111,
    SUBNETMASK=255.255.255.0,
    DEFAULTGATEWAY=10.18.69.1, IPLNKMON=Y,
    LNKMONPER=1, LNKMAXTMOUTS=60, BWLMT=100, PKTLMT=0:
    IS"
  "IOM-8-ENET-2:IPADDR=10.18.69.12,
    MATEIPADDR=10.18.69.112,
    SUBNETMASK=255.255.255.0,
    DEFAULTGATEWAY=10.18.69.1, IPLNKMON=Y,
    LNKMONPER=1, LNKMAXTMOUTS=60, BWLMT=100, PKTLMT=0:
    IS"
;
```

Related Commands:

DLT/ED/ENT/RTRV-ENET

DLT/ED/ENT/RTRV-OC3

Commands:

DLT-OC3: Delete OC3 Facility
ED-OC3: Edit OC3 Facility
ENT-OC3: Enter OC3 Facility
RTRV-OC3: Retrieve OC3 Facility

Descriptions:

DLT-OC3 lets the user disconnect an OC3 port from operation.

ED-OC3 lets the user edit parameters associated with an OC3 port on an I/O module in the switch. These parameters include line code, whether the switch is revertive, the value for the wait to revert timer, the Bit Error Rate thresholds for declaring the Signal Degrade and Signal Fail conditions, and the primary and secondary states.

ENT-OC3 lets the user establish the parameters associated with an OC3 port on an I/O module in the switch. These parameters include line code, whether the switch is revertive, the value for the wait to revert timer, the Bit Error Rate thresholds for declaring the Signal Degrade and Signal Fail conditions, and the primary and secondary states. ENT-OC3 is dependent on ENT-EQPT; that is, ENT-OC3 will not work unless ENT-EQPT has already been issued.

RTRV-OC3 lets the user retrieve parameters associated with an OC3 port. These parameters include line code, whether the switch is revertive, the value for the wait to revert timer, the Bit Error Rate thresholds for declaring the Signal Degrade and Signal Fail conditions, and the primary and secondary states.

Category: Facility

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-OC3: [TID]:<oc_id>:[CTAG];
ED-OC3: [TID]:<oc_id>:[CTAG]::[LINECDE=<linecde>],
[SWMODE=<swMode>],[WTRTMR=<wtrTmr>],
[SDTHR=<sdThr>],[SFTHR=<sfThr>]: [<pst>],[<sst>];
ENT-OC3: [TID]:<oc_id>:[CTAG]::[LINECDE=<linecde>],
[SWMODE=<swMode>],[WTRTMR=<wtrTmr>],
[SDTHR=<sdThr>],[SFTHR=<sfThr>]: [<pst>],[<sst>];
RTRV-OC3: [TID]:<oc_id>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<oc_id>:LINECDE=<linecde>,SwMODE=<swMode>,
    WTRTMR=<wtrTmr>,SDTHR=<sdThr>,SFTHR=<sfThr>:
    <pst>,[<sst>]"
;
```

Parameters:

- oc_id** Identifies the AID (for DLT, ED, and RTRV output) as an OC3 port on an I/O Module in the switch.
Type: OC
Range: IOM-{8,10}-OC3-{1-4}
Default value: none
- oc_id** Identifies the AID (for ENT and RTRV input) as an OC3 I/O Module or an OC3 port on an I/O Module in the switch.
Type: IOMorOC
Range: IOM-{8,10}
IOM-{8,10}-OC3-{1-4}
Default value: none
- linecde** Identifies the signal inserted for zero code suppression on an OC3. This parameter is reserved for future use; leave it blank.
Type: enum
Range: NRZ = Non-Return to Zero
RZ = Return to Zero
Default value: NRZ
- swMode** Identifies the switch mode as revertive or non-revertive. Non-revertive eliminates the short disruption as the fiber fails back to the primary OC port.
Type: enum
Range: RVTV = revertive
NRVT = non-revertive
Default value: NRZ
- wtrTmr** Identifies the value for the wait to revert timer (when the value of *swMode* is "RVTV"); that is, the time in minutes the OC signal must be error free before reverting.
Type: integer
Range: {5-12}
Default value: 5

sdThr Identifies the Bit Error Rate (BER) threshold value for declaring the Signal Degrade (SD) condition as the exponent of one of the following BER values: 10^5 , 10^6 , 10^7 , 10^8 , 10^9 . The threshold value for clearing the condition is one-tenth of this BER threshold value.

Type: integer

Range: {5-9}

Default value: 7

sfThr Identifies the Bit Error Rate (BER) threshold value for declaring the Signal Fail (SF) condition as the exponent of one of the following BER values: 10^3 , 10^4 , 10^5 . The threshold value for clearing the condition is one-tenth of this BER threshold value.

Type: integer

Range: {3-5}

Default value: 3

pst Identifies (in ED and ENT) the primary state of the port. The value indicates the desired state of the port. A null value means no change to the current value.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)

Default value: IS

pst Identifies (in RTRV output) the primary state of the port.

Type: enum

Range: IS = In-Service

OOS-AU = Out-Of-Service, Autonomous

OOS-AUMA = Out-Of-Service, Autonomous and Managed

OOS-MA = Out-Of-Service, Managed

Default value: IS

sst Identifies the secondary state of the port. The value indicates the desired secondary state of the port. A null value means no change to the current value.

Type: enum

Range: FLT = Faulted
FRCD = Forced
MAN = Manual
PSI = Protection switch Inhibited
PRTN = Protection
SGEO = Supporting Entity Outage
WRK = Working
WTR = Wait To Restore

Default value: NULL

Input Examples:

```
DLT-OC3::IOM-8-OC3-1;  
ED-OC3::IOM-8-OC3-1::LINECDE=NRZ, SWMODE=NRVT,  
WTRTMR=5, SDTHR=7, SFTHR=3:IS;  
ENT-OC3::IOM-8-OC3-1::LINECDE=NRZ, SWMODE=NRVT,  
WTRTMR=5, SDTHR=7, SFTHR=3:IS;  
RTRV-OC3::IOM-8-OC3-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"IOM-8-OC3-1:LINECDE=NRZ, SWMODE=NRVT, WTRTMR=5,  
SDTHR=7, SFTHR=3:IS, WRK"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-STs1

Commands:

DLT-STs1: Delete STs1 Facility

ED-STs1: Edit STs1 Facility

ENT-STs1: Enter STs1 Facility

RTRV-STs1: Retrieve STs1 Facility

Descriptions:

DLT-STs1 lets the user disconnect an STs1port from operation.

ED-STs1 lets the user edit parameters associated with an STs1 port on an I/O module in the switch. These parameters include path trace and STS mapping information, line build-out, service mode, primary state, and secondary state.

ENT-STs1 lets the user establish the parameters associated with an STs1 port on an I/O module in the switch. These parameters include path trace and STS mapping information, line build-out, service mode, primary state, and secondary state. ENT-STs1 is dependent on ENT-EQPT; that is, ENT-STs1 will not work unless ENT-EQPT has already been issued.

RTRV-STs1 lets the user retrieve parameters associated with an STs1 port. These parameters include path trace and STS mapping information, line build-out, service mode, primary state, and secondary state.

Category: Facility

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-STs1:[TID]:<sts_id>:[CTAG];  
ED-STs1:[TID]:<sts_id>:[CTAG]:[EXPTRC=<exptrc>],  
[STSMAP=<stsmmap>],[TRC=<trc>],[LB0=<lbo>],  
[OMODE=<omode>],[TIMD=<timd>]:[<pst>],[<sst>];  
ENT-STs1:[TID]:<sts_id>:[CTAG]:[EXPTRC=<exptrc>],  
[STSMAP=<stsmmap>],[TRC=<trc>],[LB0=<lbo>],  
[OMODE=<omode>],[TIMD=<timd>]:[<pst>],[<sst>];  
RTRV-STs1:[TID]:<sts_id>:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<sts_id>:EXPTRC=<exptrc>,STSMAP=<stsmap>,
  TRC=<trc>,LBO=<lbo>,OMODE=<omode>,TIMD=<timd>:
  <pst>,<sst>"
;
```

Parameters:

- sts_id** Identifies the AID (for DLT, ED, and RTRV output) as an STS1 port on an I/O Module in the switch.
Type: STS1
Range: IOM-{1-17}-STS1-{1-8}
Default value: none
- sts_id** Identifies the AID (for ENT and RTRV input) as an I/O module or an STS1 port on an I/O module in the switch.
Type: IOMorSTS1
Range: IOM-{1-17}
IOM-{1-17}-STS1-{1-8}
Default value: none
- exptrc** Identifies the expected Path Trace (J1) content.
Type: string
Range: up to 62 ASCII characters
Default value: none
- stsmap** Identifies the type of mapping supported by the STS-1 SPE (Synchronous Payload Envelope).
Type: enum
Range: VTLOCK = Identifies locked VT (Virtual Tributary, a unit of sub-SONET bandwidth that can be combined, or concatenated, for transmission through the network) mode; can't transport asynchronously mapped VT SPEs.
VTFLOAT = Identifies floating VT mode.
Default value: VTFLOAT

- trc** Identifies the path trace message to be transmitted. Trace byte (J1) continuously transmits a 64-byte, fixed length ASCII string (the last two bytes of which are a CR and an LF), one byte at a time. A null value causes the switch to transmit 62 NULL chars (Hex 00), a CR, and an LF.
- Type:** string
Range: up to 62 ASCII characters
Default value: none
- lbo** Identifies the line build-out (in feet); that is, the attenuation distortion equalization setting to compensate for the length of the coaxial cable connecting to the port.
- Type:** integer
Range: {0-450}
Default value: not applicable
- omode** Specifies what will be transmitted from the STS1 output port when out of service.
- Type:** enum
Range: NORM = Normal (cross-connected data if mapped, idle signal as specified by the IDLE keyword if not mapped)
AIS = Alarm Indication Signal
Default value: AIS
- timd** Identifies whether Trace Identification Mismatch Detection is enabled. When enabled, the STS1 port specified by the AID is taken out of service when the Trace ID does not match.
- Type:** enum
Range: DISABLED
ENABLED
Default value: DISABLED
- pst** Identifies the primary state of the port. The value indicates the desired state of the port. A null value means no change to the current value.
- Type:** enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
Default value: IS

sst Identifies the secondary state of the port. The value indicates the desired secondary state of the port. A null value means no change to the current value.

Type: enum

Range: ACT = Active

AINS = Automatic, In-service

FAF = Facilities Failure

FLT = Faulted

INIT = Initializing

LPBK = Loopback

MEA = Mismatch of Equipment and Attributes

MON = Monitor

NBK = No Backup

PRI = Protection Release Inhibited

PSI = Protection switch Inhibited

RWT = Remove Wait state

SGEO = Supporting Entity Outage

STBYC = Standby Cold

STBYH = Standby Hot

UAS = Unassigned

UEQ = Unequipped

WRK = Working

Default value: AINS

Input Examples:

```
DLT-STS1::IOM-1-STS1-1;
```

```
ED-STS1::IOM-1-STS1-1::EXPTRC=EXPECTEDPATHTRACE,  
  STSMAP=VTFLOAT, LBO=10, OMODE=AIS, TIMD=DISABLED:IS,  
  AINS;
```

```
ENT-STS1::IOM-1-STS1-1::EXPTRC=EXPECTEDPATHTRACE,  
  STSMAP=VTFLOAT, LBO=10, OMODE=AIS, TIMD=DISABLED:IS,  
  AINS;
```

```
RTRV-STS1::IOM-1-STS1-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
  "IOM-1-STS-1:EXPTRC=EXPECTEDPATHTRACE,  
    STSMAP=VTFLOAT, TRC=PATHTRACEMESSAGE, LBO=0,  
    OMODE=AIS, TIMD=DISABLED:IS, ACT"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-T1

Commands:

DLT-T1: Delete DS1 Facility

ED-T1: Edit DS1 Facility

ENT-T1: Enter DS1 Facility

RTRV-T1: Retrieve DS1 Facility

Descriptions:

DLT-T1 lets the user disconnect a T1 port from operation.

ED-T1 lets the user edit parameters associated with a T1 port on an I/O module, or a timing port, in the switch. These parameters include equalization/build-out, framing, line code, service mode, timing reference, primary state, and secondary state.

ENT-T1 lets the user establish the parameters associated with a DS1 port on an I/O module in the switch. These parameters include equalization/build-out, framing, line code, service mode, timing reference, primary state, and secondary state. ENT-T1 is dependent on ENT-EQPT; that is, ENT-T1 will not work unless ENT-EQPT has already been issued.

RTRV-T1 lets the user retrieve parameters associated with a DS1 port. These parameters include equalization/build-out, framing, line code, service mode, timing reference, primary state, and secondary state.

Category: Facility

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-T1: [TID]:<ds_id>:[CTAG];

ED-T1: [TID]:<ds_id>:[CTAG]:[EQLZ=<eq1z>],[FMT=<fmt>],
[LINECDE=<linecde>],[OMODE=<omode>],
[TMGREF=<tmgref>],[IFTYPE=<iftype>]:[<pst>],
[<sst>];

ENT-T1: [TID]:<ds_id>:[CTAG]:[EQLZ=<eq1z>],
[FMT=<fmt>],[LINECDE=<linecde>],[OMODE=<omode>],
[TMGREF=<tmgref>],[IFTYPE=<iftype>]:[<pst>],
[<sst>];

RTRV-T1: [TID]:<ds_id>:[CTAG];

Output Format:

```

SID DATE TIME
M CTAG COMPLD
"<ds_id>:EQLZ=<eqlz>,FMT=<fmt>,LINECDE=<linecde>,
  OMODE=<omode>,TMGREF=<tmgref>,IFTYPE=<iftype>:
  <pst>,[<sst>]"
;
```

Parameters:

- ds_id** Identifies the AID (for DLT) as a T1 port on an I/O Module in the switch.
- Type:** PORT
- Range:** IOM-{1-17}-PORT-{1-28}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}
- Default value:** none
-
- ds_id** Identifies the AID (for ED and RTRV output) as a T1 port on an I/O module or a timing port in the switch.
- Type:** PORTorBITS
- Range:** IOM-{1-17}-PORT-{1-28}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}
TMG-{A,B}
- Default value:** none
-
- ds_id** Identifies the AID (for ENT) as an I/O module or a T1 port on an I/O module in the switch.
- Type:** IOMorT3orPORT
- Range:** IOM-{1-17}
IOM-{1-17}-PORT-{1-28}
IOM-{1-17}-STS1-{1-8}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
IOM-{1-17}-T3-{1-8}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}
- Default value:** none

- ds_id** Identifies the AID (for RTRV input) as an I/O module, a T1, STS1, or T3 port on an I/O module, or a timing port in the switch.
Type: IOMorT3orPORTorBITS
Range: IOM-{1-17}
IOM-{1-17}-PORT-{1-28}
IOM-{1-17}-STS1-{1-8}
IOM-{1-17}-STS1-{1-8}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
IOM-{1-17}-T3-{1-8}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}
TMG-{A,B}
Default value: none
- eqlz** Identifies the attenuation distortion equalization setting to compensate for the length of a 22-gauge cable in feet. This parameter is not used when provisioning a T1 port on a T3 or STS1 I/O module.
Type: integer
Range: {0-655}
Default value: 0
- fmt** Identifies the DS1 digital signal framing format; a null value defaults to SF or “not applicable”.
Type: enum
Range: SF = Superframe format
ESF = Extended Superframe format
ESF_NOFDL = Extended Superframe format – No Facilities Data Link
Default value: ESF
- linecde** Identifies the signal inserted for zero code suppression on a DS1.
Type: enum
Range: AMI = Alternate mark inversion (“bipolar”)
B8ZS = Bipolar with 8-zero substitution
Default value: B8ZS
- omode** Identifies what will be transmitted from the DS1 output port when out of service.
Type: enum
Range: NORM = Normal (cross-connected data if mapped, idle signal as specified by the IDLE keyword if not mapped)
AIS = Alarm Indication Signal
Default value: AIS

- tmgref** Identifies whether the TMG-A or TMG-B is to be used as the primary or secondary timing source for the system. This parameter is used only for configuring the BITS interface, and is presently not supported; leave it blank.
- Type:** enum
Range: PRI = Primary timing source
SEC = Secondary timing source
NONE = Not a timing source
Default value: NONE
- iftype** Identifies whether the subject T1 port affects the network or user side. This parameter presently supports only the value "NETWORK"; leave it blank.
- Type:** enum
Range: NETWORK = network side
USER = user side
Default value: NETWORK
- pst** Identifies the primary state of the port. The value indicates the desired state of the port. A null value means no change to the current value.
- Type:** enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
Default value: IS

sst Identifies the secondary state of the port. The value indicates the desired secondary state of the port. A null value means no change to the current value. This parameter is not supported presently; leave it blank.

Type: enum

Range: ACT = Active

AINS = Automatic, In-service

FAF = Facilities Failure

FLT = Faulted

INIT = Initializing

LPBK = Loopback

MEA = Mismatch of Equipment and Attributes

MON = Monitor

NBK = No Backup

PRI = Protection Release Inhibited

PSI = Protection switch Inhibited

RWT = Remove Wait state

SGEO = Supporting Entity Outage

STBYC = Standby Cold

STBYH = Standby Hot

UAS = Unassigned

UEQ = Unequipped

WRK = Working

Default value: AINS

Input Examples:

```
DLT-T1::IOM-1-PORT-1;
```

```
ED-T1::IOM-1-PORT-1:::EQLZ=10,FMT=ESF,LINECDE=B8ZS,  
OMODE=AIS:OOS;
```

```
ENT-T1::IOM-1-PORT-1:::EQLZ=10,FMT=ESF,LINECDE=B8ZS,  
OMODE=AIS:OOS;
```

```
RTRV-T1::IOM-1-PORT-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"IOM-1-PORT-1:EQLZ=10,FMT=ESF,LINECDE=B8ZS,  
OMODE=AIS,TMGREF=NONE,IFTYPE=NETWORK:IS,AINS"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-T3

Commands:

DLT-T3: Delete DS3 Facility

ED-T3: Edit DS3 Facility

ENT-T3: Enter DS3 Facility

RTRV-T3: Retrieve DS3 Facility

Descriptions:

DLT-T3 lets the user disconnect a T3 port from operation.

ED-T3 lets the user edit parameters associated with a T3 port on an I/O module, or a timing port, in the switch. These parameters include equalization/build-out, framing, line code, service mode, timing reference, primary state, and secondary state.

ENT-T3 lets the user establish the parameters associated with a DS3 port on an I/O module in the switch. These parameters include equalization/build-out, framing, line code, service mode, timing reference, primary state, and secondary state. ENT-T3 is dependent on ENT-EQPT; that is, ENT-T3 will not work unless ENT-EQPT has already been issued.

RTRV-T3 lets the user retrieve parameters associated with a DS3 port. These parameters include equalization/build-out, framing, line code, service mode, timing reference, primary state, and secondary state.

Category: Facility

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-T3:[TID]:<ds_id>:[CTAG];
ED-T3:[TID]:<ds_id>:[CTAG]:[AISC=<aisc>],
[AIST=<aist>],[FMT=<fmt>],[IDLE=<idle>],
[LB0=<lbo>],[LINECDE=<linecde>],[MAP=<map>],
[OMODE=<omode>],[PBIT=<pbit>],[XBIT=<xbit>],
[XBITRCV=<xbitrcv>],[XPOL=<xpol>]:[<pst>],[<sst>];
ENT-T3:[TID]:<ds_id>:[CTAG]:[AISC=<aisc>],
[AIST=<aist>],[FMT=<fmt>],[IDLE=<idle>],
[LB0=<lbo>],[LINECDE=<linecde>],[MAP=<map>],
[OMODE=<omode>],[PBIT=<pbit>],[XBIT=<xbit>],
[XBITRCV=<xbitrcv>],[XPOL=<xpol>]:[<pst>],[<sst>];
RTRV-T3:[TID]:<ds_id>:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<ds_id>:AISC=<aisc>,AIST=<aist>,FMT=<fmt>,
IDLE=<idle>,LB0=<lbo>,LINECDE=<linecde>,
MAP=<map>,OMODE=<omode>,PBIT=<pbit>,XBIT=<xbit>,
XBITRCV=<xbitrcv>,XPOL=<xpol>:<pst>,[<sst>]"
;
```

Parameters:

- | | |
|--------------|---|
| ds_id | Identifies the AID (for DLT, ED, and RTRV output) as a T3 port on a DS3 I/O Module in the switch.

Type: T3
Range: IOM-{1-17}-T3-{1-8}
Default value: none |
| ds_id | Identifies the AID (for ENT and RTRV input) as an I/O module or a T3 port on a DS3 I/O module in the switch.

Type: IOMorT3
Range: IOM-{1-17}
IOM-{1-17}-T3-{1-8}
Default value: none |

- aisc** Identifies the alarm indication signal cause (can be one or more values connected with a “&”). This parameter is presently not supported; leave it blank.
Type: enum
Range: LOF = Loss of frame
LOS = Loss of signal
NONE = AIS cause not identified
Default value: NONE
- aist** Identifies the type of alarm indication signal (AIS) to be sent on the outgoing cross-connected signal when an AIS is on the incoming signal. This parameter is presently not supported; leave it blank.
Type: enum
Range: FONES = Translate to framed all ones
NAS = North American Standard
ONES = Translate to unframed all ones
Default value: NAS
- fnt** Identifies the DS3 digital signal framing format.
Type: enum
Range: ASYNC = asynchronous format
CBIT = C-bit parity format
Default value: ASYNC
- idle** Identifies whether the T3 port is set to ON or OFF. This parameter is presently not supported; leave it blank.
Type: enum
Range: OFF
ON
Default value: OFF
- lbo** Identifies the line build-out (in feet); that is, the attenuation distortion equalization setting to compensate for the length of the coaxial cable connecting to the port.
Type: integer
Range: {0-450}
Default value: 0
- linecde** Identifies the signal inserted for zero code suppression on a DS3.
Type: enum
Range: B3ZS = Bipolar with 3-zero substitution
CCHAN = Clear channel
Default value: B3ZS

- map** Identifies the form of mapping for DS3 payloads in SONET add/drop applications. A null value defaults to “NA”. This parameter is presently not supported; leave it blank.
- Type:** enum (can be one or more values connected with an “&”)
Range: ASYNC = asynchronous mapping
DL = SYNTRAN datalink is transported; only applicable with SYNC map.
NA = Not applicable
SYNC = Observable SYNTRAN mapping
Default value: NA
- omode** Specifies what will be transmitted from the DS3 output port when out of service.
- Type:** enum
Range: AIS = Alarm Indication Signal
NORM = Normal (cross-connected data if mapped, idle signal as specified by the non-editable IDLE keyword if not mapped)
Default value: AIS
- pbit** Identifies whether the P-bits are corrected on output. This parameter is presently not supported; leave it blank.
- Type:** enum
Range: OFF = P-bits are not changed (transparent)
ON = P-bits are altered to correct parity
Default value: OFF
- xbit** Identifies how X-bits are handled for this particular channel. This parameter is presently not supported; leave it blank.
- Type:** enum
Range: PASS = Pass X-bits with no modification (default)
XLAT = Translate X-bits to match terminating equipment.
Default value: PASS
- xbitrcv** Identifies the usage of the incoming X-bits.
- Type:** enum
Range: ALM0 = All the X-bits equal to 0 for indicating incoming remote alarm
ALM1 = All the X-bits equal to 1 for indicating incoming remote alarm
IGNORE = Ignore the X-bits.
Default value: ALM0

- xpol** Identifies the value/polarity to which the outgoing X-bits are forced.
Type: enum
Range: 0 = Set X-bits to fixed zero.
1 = Set X-bits to fixed one.
ALM0 = Set X-bits to zero for indicating alarm.
ALM1 = Set X-bits to one for indicating alarm.
Default value: ALM0
- pst** Identifies the primary state of the port. The value indicates the desired state of the port. A null value means no change to the current value.
Type: enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
Default value: null
- sst** Identifies the secondary state of the port. The value indicates the desired secondary state of the port. A null value means no change to the current value. This parameter is presently not supported; leave it blank.
Type: enum
Range: AINS = Automatic, in service
Default value: null

Input Examples:

```
DLT-T3::IOM-1-T3-1;  
ED-T3::IOM-1-T3-1::AISC=LOS&LOF,AIST=NAS,  
  FMT=ASYNC,IDLE=OFF,LB0=0,LINECDE=B3ZS,MAP=NA,  
  OMODE=AIS,PBIT=OFF,XBIT=PASS,XBITRCV=ALM0,  
  XPOL=ALM0:OOS;  
ENT-T3::IOM-1-T3-1::AISC=LOS&LOF,AIST=NAS,  
  FMT=ASYNC,IDLE=OFF,LB0=0,LINECDE=B3ZS,MAP=NA,  
  OMODE=AIS,PBIT=OFF,XBIT=PASS,XBITRCV=ALM0,  
  XPOL=ALM0:OOS;  
RTRV-T3::IOM-1-T3-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "IOM-1-T3-1:AISC=LOS&LOF,AIST=NAS,FMT=ASync,
    IDLE=OFF,LB0=0,LINECDE=B3ZS,MAP=NA,OMODE=AIS,
    PBIT=OFF,XBIT=PASS,XBITRCV=ALM0,XPOL=ALM0:IS,
    AINS"
;
```

Related Commands: none

INIT-REG-E1 / RTRV-PM-E1

Commands:

INIT-REG-E1: Initialize Register E1 Facility

RTRV-PM-E1: Retrieve Performance Monitors E1 Facility

Descriptions:

INIT-REG-E1 instructs the switch to initialize one or more storage registers or event counters associated with specific E1 ports in the switch. In most cases, registers contain performance data.

RTRV-PM-E1 lets the user retrieve current and historical performance data for E1 ports on DS3 IOMs.

Category: Facility

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-E1: [TID]:<pm_id>:[CTAG]::<montype>,  
             [<monval>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
             [<montm>;
```

```
RTRV-PM-E1: [TID]:<pm_id>:[CTAG]::[<montype>],  
             [<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
             [<montm>;
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<aid>:MONTYPE=<montype>,MONVAL=<monval>,  
      VLDTY=<vldty>,LOCN=<locn>,DIRN=<dirn>,  
      TMPER=<tmper>,MONDAT=<mondatt>,MONTM=<montm>"  
;
```

Parameters:

pm_id Identifies the AID as an E1 port on a DS1 I/O module (by slot number and port number).
Type: PORT
Range: IOM-{1-17}-E1-{1-28}
Default value: none

aid Identifies the AID (for RTRV-PM output) as an E1 port on a DS1 I/O module (by slot number and port number).

Range: IOM-{1-17}-E1-{1-28}

montype Identifies a type of monitored parameter for E1 ports on DS3 IOMs.

Type: enum

Range: AISS = Alarm Indication Signal Seconds Count

ALL = All types

BBEC = Background Block Error Count

BBER1 = Background Block Error Ratio/Percentage

(Type 1)

CV = Coding Violation

ESC = Errored Seconds Count

ESR1 = Errored Seconds Ratio/Percentage (Type 1)

ESR2 = Errored Seconds Ratio/Percentage (Type 2)

ESR3 = Errored Seconds Percentage (Type 3)

OOFs = Out Of Frame Seconds

LOSS = Loss of Signal Second Count

RAI = Received RAI Second Count

SESC = Severely Errored Seconds Count

SESR1 = Severely Errored Seconds Ratio/Percentage

(Type 1)

SESR2 = Severely Errored Seconds Ratio/Percentage

(Type 2)

SESR3 = Severely Errored Seconds Ratio/Percentage

(Type 3)

SESR4 = Severely Errored Seconds Ratio/Percentage

(Type 4)

UASC = Unavailable Seconds Count

Default value: ALL

monval Identifies the monitored value as either the value to which the register identified by *montype* is to be initialized (for INIT-REG), or (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates. See ITU-T G.826, Series G, for the range applicable for each *montype*. This parameter is presently unused (for INIT-REG); leave it blank. Accordingly, ratio-type monitored parameters have values set to 100 (percent) and seconds-count monitored parameters have values set to 900 seconds per 15-minute period or 86400 seconds per 24-hour period.

Type: integer

Range: {0-9999}

Default value: 0

- monlev** Identifies (for RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it.
Type: enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: none
- locn** Identifies the location of the storage registers or event counters identified by *montype*. A null value defaults to both "FEND" and "NEND".
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: both FEND and NEND
- dirn** Identifies the direction of the data stored in statistics counters relative to the switch. A null value defaults to all applicable directions (currently only "BTH"). This parameter is presently unused; leave it blank. The switch currently returns only the value "BTH".
Type: enum
Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive
Default value: BTH

tmper The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods.

Type: enum

Range: {1}-DAY = Time interval is exactly one day

{1-24}-HR = Interval of one to 24 hours (one day)

{1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: both 15-MIN and 24-HR

mondatt Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is not supported presently; leave it blank.

Type: enum

Range: {1-12}-{1-31}

Default value: current date

montm Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is not supported presently; leave it blank.

Type: enum

Range: {0-23}-{0-59}

Default value: current time

Input Examples:

```
INIT-REG-E1::IOM-1-E1-1;
```

```
RTRV-PM-E1::IOM-1-E1-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"IOM-1-E1-1:MONTYPE=ALL,MONVAL=100,VLDTY=COMPL,
LOCN=NEND,DIRN=BTH,TMPER=15-MIN,MONDAT=06-24,
MONTM=14-37"
;
```

Related Commands: none

INIT-REG-OC3 / RTRV-PM-OC3

Commands:

INIT-REG-OC3: Initialize Register OC3 Facility

RTRV-PM-OC3: Retrieve Performance Monitors OC3 Facility

Descriptions:

INIT-REG-OC3 instructs the switch to initialize one or more storage registers or event counters associated with specific OC3 ports in the switch. In most cases, registers contain performance data.

RTRV-PM-OC3 lets the user retrieve current and historical performance data for OC3 ports on IOMs.

Category: Facility

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-OC3:[TID]:<pm_id>:[CTAG]::<montype>,  
[<monval>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];  
  
RTRV-PM-OC3:[TID]:<pm_id>:[CTAG]::<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<pm_id>:MONTYPE=<montype>,MONVAL=<monval>,  
      VLDTY=<vldty>,LOCN=<locn>,DIRN=<dirn>,  
      TMPER=<tmper>,MONDAT=<mondatt>,MONTM=<montm>"  
    ;
```

Parameters:

pm_id Identifies the AID as an OC3 port on an IOM (by slot number and port number).
Type: IOMorOC
Range: IOM-{1-17}-OC3-{1-4}
Default value: none

- montype** Identifies a type of monitored parameter for OC3 ports on IOMs.
Type: enum
Range: Specific monitored parameters for OC3 are listed in GR-253 and GR-199 Appendix C.8
Default value: ALL
- monval** Identifies the monitored value as either the value to which the register identified by *montype* is to be initialized (for INIT-REG), or (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates. See ITU-T G.826, Series G, for the range applicable for each *montype*. This parameter is presently unused (for INIT-REG); leave it blank. Accordingly, ratio-type monitored parameters have values set to 100 (percent) and seconds-count monitored parameters have values set to 900 seconds per 15-minute period or 86400 seconds per 24-hour period.
Type: integer
Range: {0-9999}
Default value: 0
- monlev** Identifies (for RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it. This parameter is not supported presently; its value will be "NULL".
Type: enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: none

- locn** Identifies the location of the storage registers or event counters identified by *montype*. This parameter is presently not supported; leave it blank.
Type: enum
Range: FEND = Far end
 NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters relative to the switch. A null value defaults to all applicable directions (currently only “BTH”). This parameter is presently unused; leave it blank. The switch currently returns only the value “BTH”.
Type: enum
Range: AZ = Transmit
 BTH = Both directions
 NA = Not applicable
 RCV = Receive direction only
 TDTN = Transmit direction toward network
 TRMT = Transmit direction only
 ZA = Receive
Default value: BTH
- tmper** The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods. This parameter is presently not supported; leave it blank.
Type: enum
Range: {1}-DAY = Time interval is exactly one day
 {1-24}-HR = Interval of one to 24 hours (one day)
 {1-1440}-MIN = Interval of one to 1440 minutes (one day)
Default value: 15-MIN
- mondatt** Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is not supported presently; leave it blank.
Type: enum
Range: {1-12}-{1-31}
Default value: current date

montm Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is not supported presently; leave it blank.

Type: enum

Range: {0-23}-{0-59}

Default value: current time

Input Examples:

```
INIT-REG-OC3::IOM-1-OC3-1;
```

```
RTRV-PM-OC3::IOM-1-OC3-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"IOM-1-OC3-1:MONTYPE=ALL,MONVAL=100,VLDTY=NULL,
  LOCN=NEND,DIRN=BTH,TMPER=15-MIN,MONDAT=06-24,
  MONTM=14-37"
;
```

Related Commands: none

INIT-REG-T1 / RTRV-PM-T1

Commands:

INIT-REG-T1: Initialize Register DS1 Facility

RTRV-PM-T1: Retrieve Performance Monitors DS1 Facility

Descriptions:

INIT-REG-T1 instructs the switch to initialize one or more storage registers or event counters associated with specific T1 ports in the switch. In most cases, registers contain performance data.

RTRV-PM-T1 lets the user retrieve current and historical performance data for T1 ports on DS3 IOMs.

Category: Facility

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-T1: [TID]:<pm_id>:[CTAG]::<montype>,  
             [<monval>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
             [<montm>];  
  
RTRV-PM-T1: [TID]:<pm_id>:[CTAG]::[<montype>],  
             [<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
             [<montm>];
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<aid>:MONTYPE=<montype>,MONVAL=<monval>,  
      VLDTY=<vldty>,LOCN=<locn>,DIRN=<dirn>,  
      TMPER=<tmper>,MONDAT=<mondatt>,MONTM=<montm>"  
    ;
```

Parameters:

pm_id Identifies the AID as a T1 port on an I/O module. A null value for the T1 port on a DS3 I/O module is equivalent to “ALL”; that is, by leaving the “PORT” field blank, information for all T1 ports on the specified T3/STS1 port will be returned.

Type: T3orPORT

Range: IOM-{1-17}-PORT-{1-28}
IOM-{1-17}-STS1-{1-8}[-PORT-{1-28}]
IOM-{1-17}-T3-{1-8}[-PORT-{1-28}]

Default value: none

aid Identifies the AID (for RTRV-PM output) as a T1 port on an I/O module (by slot number and port number).

Range: IOM-{1-17}-PORT-{1-28}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}

montype Identifies a type of monitored parameter for T1 ports on DS3 IOMs, as defined in ANSI T1.231-1997.

Type: enum

Range: AISS-P = Alarm Indication Signal Seconds Count – Path

ALL = All types

CSS-P = Controlled Slip Second – Path

CSS-PFE = Controlled Slip Second – Path, Far End

CV-L = Coding Violation – Line

CV-P = Coding Violation – Path

CV-PFE = Coding Violation – Path, Far End

ES-L = Errored Second – Line

ES-LFE = Errored Second – Line, Far End

ES-P = Errored Second – Path

ES-PFE = Errored Second – Path, Far End

ESA-P = Errored Second, type A – Path

ESA-PFE = Errored Second, type A – Path, Far End

ESB-P = Errored Second, type B – Path

ESB-PFE = Errored Second, type B – Path, Far End

FC = Failure Count

FC-FE = Failure Count – Far End

LOSS-L = Loss of Signal Seconds – Line

SAS-P = SEF/AIS (Severely Errored Frame / Alarm
Indication Signal) Second – Path

SEFS-PFE = Severely Errored Frame Second – Path, Far End

SES-L = Severely Errored Second – Line

SES-P = Severely Errored Second – Path

SES-PFE = Severely Errored Second – Path, Far End

UAS-P = Unavailable Second – Path

UAS-PFE = Unavailable Second – Path, Far End

Default value: none

monval Identifies the monitored value as either the value to which the register identified by *montype* is to be initialized (for INIT-REG), or (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates. See ANSI T1.231-1997 for the range applicable for each *montype*. This parameter is presently unused (for INIT-REG); leave it blank.

Type: integer

Range: {0-9999}

Default value: 0

- monlev** Identifies (for RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it.
Type: enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: none
- locn** Identifies the location of the storage registers or event counters identified by *montype*. A null value defaults to both "FEND" and "NEND".
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: both FEND and NEND
- dirn** Identifies the direction of the data stored in statistics counters relative to the switch. A null value defaults to all applicable directions (currently only "BTH"). This parameter is presently unused; leave it blank. The switch currently returns only the value "BTH".
Type: enum
Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive
Default value: BTH

tmper The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods.

Type: enum

Range: {1}-DAY = Time interval is exactly one day
 {1-24}-HR = Interval of one to 24 hours (one day)
 {1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: both 15-MIN and 24-HR

mondat Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is not supported presently; leave it blank.

Type: enum

Range: {1-12}-{1-31}

Default value: current date

montm Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is not supported presently; leave it blank.

Type: enum

Range: {0-23}-{0-59}

Default value: current time

Input Examples:

```
INIT-REG-T1::IOM-1-T3-1-PORT-1::ALL,,NEND,,24-HR;  
RTRV-PM-T1::IOM-1-T3-1-PORT-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"IOM-1-T3-1-PORT-1:MONTYPE=ALL,MONVAL=100,  
VLDTY=COMPL,LOCN=NEND,DIRN=BTH,TMPER=15-MIN,  
MONDAT=06-24,MONTM=14-37"  
;
```

Related Commands: none

INIT-REG-T3 / RTRV-PM-T3

Commands:

INIT-REG-T3: Initialize Register DS3 Facility

RTRV-PM-T3: Retrieve Performance Monitors DS3 Facility

Descriptions:

INIT-REG-T3 instructs the switch to initialize one or more storage registers or event counters associated with specific T3 ports in the switch. In most cases, registers contain performance data.

RTRV-PM-T3 lets the user retrieve current and historical performance data for DS3 ports.

Category: Facility

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-T3:[TID]:<pm_id>:[CTAG]::<montype>,  
[<monval>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];  
  
RTRV-PM-T3:[TID]:<pm_id>:[CTAG]::<montype>,  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<aid>:MONTYPE=<montype>,MONVAL=<monval>,  
      VLDTY=<vldty>,LOCN=<locn>,DIRN=<dirn>,  
      TMPER=<tmper>,MONDAT=<mondatt>,MONTM=<montm>"  
    ;
```

Parameters:

pm_id Identifies the AID either as a DS3 I/O module (by slot number), or as a T3 port on a DS3 I/O module (by slot number and port number).

Type: IOMorT3

Range: IOM- $\{1-17\}$
IOM- $\{1-17\}$ - T3- $\{1-8\}$

Default value: none

aid Identifies the AID (for RTRV-PM output) either as a DS3 I/O module (by slot number), or as a T3 port on a DS3 I/O module (by slot number and port number).

Range: IOM- $\{1-17\}$
IOM- $\{1-17\}$ -T3- $\{1-8\}$

montype Identifies a type of monitored parameter, as defined in ANSI T1.231-1997.

Type: enum

Range: AISS-P = Alarm Indication Signal Seconds – Path

ALL = All types

CVCP-P = Coding Violation – Path, DS3 CP-bit parity

CVCP-PFE = Coding Violation – Path, Far End, DS3 CP-bit parity

CVL = Coding Violation – Line

CVP-P = Coding Violation – Path, P-bit parity

ESA-L = Errored Second , type A – Line

ESACP-P = Errored Second , type A – Path, DS3 CP-bit parity

ESACP-PFE = Errored Second , type A – Path, DS3 CP-bit parity, Far End

ESAP-P = Errored Second , type A – Path, DS3 P-bit parity

ESB-L = Errored Second , type B – Line

ESBCP-P = Errored Second , type B – Path, DS3 CP-bit parity

ESBCP-PFE = Errored Second , type B – Path, DS3 CP-bit parity, Far End

ESBP-P = Errored Second , type B – Path, DS3 P-bit parity

ESCP-P = Errored Second – Path, DS3 CP-bit parity

ESCP-PFE = Errored Second – Path, DS3 CP-bit parity, Far End

ESL = Errored Second – Line

ESP-P = Errored Second – Path, P-bit parity

FCCP-PFE = Failure Count – Path, DS3 CP-bit parity, Far End

FCP = Failure Count – Path, Near End

LOSS-L = Loss of Signal Seconds count – Line

SAS-P = SEF/AIS Second count

SASCP-P = SEF/AIS Second – CP-bit parity

SES-P = Severely Errored Second – Path

SESCP-P = Severely Errored Second – Path, DS3 CP-bit parity

SESCP-PFE = Severely Errored Second – Path, DS3 CP-bit parity, Far End

ESL = Severely Errored Second – Line

UASCP-P = Unavailable Second – Path, DS3 CP-bit parity

UASCP-PFE = Unavailable Second – Path, DS3 CP-bit parity, Far End

UASP-P = Unavailable Second – Path, P-bit parity

Default value: none

- monval** Identifies the monitored value as either the value to which the register identified by *montype* is to be initialized (for INIT-REG), or (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates. See ANSI T1.231-1997 for the range applicable for each *montype*. This parameter is presently unused (for INIT-REG); leave it blank.
Type: integer
Range: {0-9999}
Default value: 0
- monlev** Identifies (for RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP". Do not set the value to "0-UP" when the value of *montype* is "ALL", as the large amount of data returned could overload the output buffer of the client application and cause the TL1 session to freeze.
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it.
Type: enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: none
- locn** Identifies the location of the storage registers or event counters identified by *montype*. A null value defaults to both "FEND" and "NEND". The value "FEND" applies only to T3 ports with C-bit parity format for DS3 digital signal framing (The value of *fnt* in ENT-T3 is "CBIT").
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: both FEND and NEND

dirn Identifies the direction of the data stored in statistics counters relative to the switch. A null value defaults to all applicable directions (currently only “BTH”). This parameter is presently unused; leave it blank. The switch currently returns only the value “BTH”.

Type: enum

Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive

Default value: BTH

tmper The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods.

Type: enum

Range: {1}-DAY = Time interval is exactly one day
{1-24}-HR = Interval of one to 24 hours (one day)
{1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: both 15-MIN and 24-HR

mondatt Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is not supported presently; leave it blank.

Type: enum

Range: {1-12}-{1-31}

Default value: current date

montm Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is not supported presently; leave it blank.

Type: enum

Range: {0-23}-{0-59}

Default value: current time

Input Examples:

```
INIT-REG-T3::IOM-1-T3-1:::ALL,,NEND,,24-HR;
```

```
RTRV-PM-T3::IOM-1-T3-1-PORT-1;
```

Output Example:

```
      lucent 2005-06-24 14:37:49
M    0 COMPLD
      "IOM-1-T3-1:MONTYPE=ALL,MONVAL=100,VLDTY=COMPL,
      LOCN=NEND,DIRN=BTH,TMPER=15-MIN,MONDAT=06-24,
      MONTM=14-37"
      ;
```

Related Commands: none

INIT-REG-VT1 / RTRV-PM-VT1

Commands:

INIT-REG-VT1: Initialize Register Virtual Tributary (Type 1.5)

RTRV-PM-VT1: Retrieve Performance Monitors Virtual Tributary (Type 1.5)

Descriptions:

INIT-REG-VT1 instructs the switch to initialize one or more storage registers or event counters associated with specific Type 1.5 virtual tributaries in the switch. Type 1.5 virtual tributaries are logical containers for T1 ports.

RTRV-PM-VT1 lets the user retrieve current and historical performance data for Type 1.5 virtual tributaries on OC3 or STS1 IOMs.

Category: Facility

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-VT1:[TID]:<pm_id>:[CTAG]::<montype>,  
[<monval>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];  
  
RTRV-PM-VT1:[TID]:<pm_id>:[CTAG]::[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<aid>:MONTYPE=<montype>,MONVAL=<monval>,  
      VLDTY=<vldty>,LOCN=<locn>,DIRN=<dirn>,  
      TMPER=<tmper>,MONDAT=<mondatt>,MONTM=<montm>"  
    ;
```

Parameters:

- pm_id** Identifies the AID as a Type 1.5 virtual tributary on an I/O module by specifying the T1 port. A null value for the T1 port is equivalent to “ALL”; that is, by leaving the “PORT” field blank, the system initializes the registers or returns information for all Type 1.5 virtual tributaries on the specified OC3/STS1 port.
- Type:** T3orPORT
Range: IOM-{1-17}-OC3-{1-8}[-PORT-{1-28}]
IOM-{1-17}-STS1-{1-8}[-PORT-{1-28}]
Default value: none
- aid** Identifies the AID (for RTRV-PM output) as a T1 port on an I/O module (by slot number and port number).
- Range:** IOM-{1-17}-OC3-{1-8}-PORT-{1-28}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
- montype** Identifies a type of monitored parameter for Type 1.5 virtual tributaries, as defined in ANSI T1.231-1997.
- Type:** enum
Range: AISS-LV = Alarm Indication Signal Seconds Count – Line, VT1.5
AISS-LVFE = Alarm Indication Signal Seconds Count – Line, Far End, VT1.5
ALL = All types
BBE-L = Background Block Error – Line
BBE-PVFE = Background Block Error – Path, VT1.5, Far End
CV-LV = Coding Violation – Line, VT1.5
CV-LVFE = Coding Violation – Line, VT1.5, Far End
CV-PV = Coding Violation – Path, VT1.5
CV-PVFE = Coding Violation – Path, VT1.5, Far End
ES-LV = Errored Second – Line, VT1.5
ES-LVFE = Errored Second – Line, VT1.5, Far End
ES-PV = Errored Second – Path, VT1.5
ES-PVFE = Errored Second – Path, VT1.5, Far End
ESA-LV = Errored Second, type A – Line, VT1.5
ESA-LVFE = Errored Second, type A – Line, VT1.5, Far End
ESA-PV = Errored Second, type A – Path, VT1.5
ESA-PVFE = Errored Second, type A – Path, VT1.5, Far End
ESB-LV = Errored Second, type B – Line, VT1.5
ESB-LVFE = Errored Second, type B – Line, VT1.5, Far End
ESB-PV = Errored Second, type B – Path, VT1.5
ESB-PVFE = Errored Second, type B – Path, VT1.5, Far End

FC-LV = Failure Count – Line, VT1.5
FC-LVFE = Failure Count – Line, VT1.5, Far End
FC-PV = Failure Count – Path, VT1.5
FC-PVFE = Failure Count – Path, VT1.5, Far End
LOSS-LV = Loss of Signal Seconds – Line, VT1.5
NPDET-PV = Negative Pointer Detected – Path, VT1.5
NPGEN-PV = Negative Pointer Generated – Path, VT1.5
PJDET-PV = Pointer Justification Detected – Path, VT1.5
PJDIF-PV = Pointer Justification Difference – Path, VT1.5
PJGEN-PV = Pointer Justification Generated – Path, VT1.5
PPDET-PV = Positive Pointer Detected – Path, VT1.5
PPGEN-PV = Positive Pointer Generated – Path, VT1.5
SEFS-LV = Severely Errored Frame Second – Line, VT1.5
SES-LV = Severely Errored Second – Line, VT1.5
SES-LVFE = Severely Errored Second – Line, VT1.5, Far End
End
SES-PV = Severely Errored Second – Path, VT1.5
SES-PVFE = Severely Errored Second – Path, VT1.5, Far End
End
UAS-LV = Unavailable Second – Line, VT1.5
UAS-LVFE = Unavailable Second – Line, VT1.5, Far End
UAS-PV = Unavailable Second – Path, VT1.5
UAS-PVFE = Unavailable Second – Path, VT1.5, Far End

Default value: none

monval Identifies the monitored value as either the value to which the register identified by *montype* is to be initialized (for INIT-REG), or (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates. See ANSI T1.231-1997 for the range applicable for each *montype*. This parameter is presently unused (for INIT-REG); leave it blank.

Type: integer

Range: {0-9999}

Default value: 0

monlev Identifies (for RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it.
- Type:** enum
- Range:** ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
- Default value:** none
- locn** Identifies the location of the storage registers or event counters identified by *montype*. A null value defaults to both “FEND” and “NEND”.
- Type:** enum
- Range:** FEND = Far end
NEND = Near end
- Default value:** both FEND and NEND
- dirn** Identifies the direction of the data stored in statistics counters relative to the switch. A null value defaults to all applicable directions (currently only “BTH”). This parameter is presently unused; leave it blank. The switch currently returns only the value “BTH”.
- Type:** enum
- Range:** AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive
- Default value:** BTH
- tmper** The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods.
- Type:** enum
- Range:** {1}-DAY = Time interval is exactly one day
{1-24}-HR = Interval of one to 24 hours (one day)
{1-1440}-MIN = Interval of one to 1440 minutes (one day)
- Default value:** both 15-MIN and 24-HR

mondatt Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is not supported presently; leave it blank.

Type: enum

Range: {1-12}-{1-31}

Default value: current date

montm Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is not supported presently; leave it blank.

Type: enum

Range: {0-23}-{0-59}

Default value: current time

Input Examples:

```
INIT-REG-VT1::IOM-1-STS1-1;
```

```
RTRV-PM-VT1::IOM-1-STS1-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"IOM-1-STS1-1-PORT-1:MONTYPE=AISS-LV,MONVAL=100,
VLDTY=COMPL,LOCN=NEND,DIRN=BTH,TMPER=15-MIN,
MONDAT=06-24,MONTM=14-37"
;
```

Related Commands:

```
RTRV/SET-TH-VT1
```

OPR/RLS-LPBK-ENET

Commands:

OPR-LPBK-ENET: Operate Loopback ENET Facility

RLS-LPBK-ENET: Release Loopback ENET Facility

Descriptions:

OPR-LPBK-ENET lets the user operate a loopback on a specified (out of service) Ethernet port associated with a test access session in the switch. The loop may be accomplished at either the near or the far end, or on the line. The switch issues an error response if not in a state that allows a loopback to occur. A switch that has a loopback in effect includes the appropriate condition type information in response to a RTRV-COND message.

RLS-LPBK-ENET lets the user release a loopback on a specified Ethernet port associated with a test access session in the switch. The loop may be released from either the near or the far end. The switch issues an error response if not in a state that allows a loopback to occur. A switch that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

Category: Facility

Security: SA for both commands

Input Formats:

OPR-LPBK-ENET:[TID]:<enetId>:[CTAG]::[<locn>],
[<orgn>],[<intext>],[<lpbktype>;

RLS-LPBK-ENET:[TID]:<enetId>:[CTAG]::[<locn>],
[<orgn>],[<intext>],[<lpbktype>;

Output Format: none

Parameters:

enetId Identifies the AID as the Ethernet port on an I/O module in the switch on which the loopback is performed or released.

Type: ENET

Range: IOM-{8,10}-ENET-{1-4}

Default value: none

- locn** Identifies the location where the loopback occurs. The value “FEND” is not supported.
Type: enum
Range: FEND = Far end
 NEND = Near end
Default value: NEND
- orgn** Identifies the office originating the looped-back signal. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.
Type: enum
Range: FEND = Far end office
 NEND = Near end office
 BOTH = Both offices
Default value: null
- intext** Directs the switch to provide or release a loopback that is with/without the benefit of signal processing, such as reshaping, recoding, scrambling, retiming, etc. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.
Type: enum
Range: EXT = External
 INT = Internal
Default value: null
- lpbktype** Identifies the type of loopback signal to be operated. Depending on the transmission system, various parts of a signal may be looped back. For example, the LINE loopback may very well be a full metallic loopback, while a PAYLOAD loopback may result in a signal that has been recoded with new and different header and/or CRC information. A null value indicates that this parameter is not applicable. This parameter is presently not supported; leave it blank.
Type: enum
Range: LINE = 44.736 Mbps loopback signal
 PAYLOAD = 44.512 Mbps loopback signal
Default value: null

Input Examples:

```
OPR-LPBK-ENET::IOM-8-ENET-1;  
RLS-LPBK-ENET::IOM-8-ENET-1;
```

Related Commands: none

OPR/RLS-PROTNSW-OC3

Commands:

OPR-PROTNSW-OC3: Operate Protection switch OC3 Facility

RLS-PROTNSW-OC3: Release Protection switch OC3 Facility

Descriptions:

OPR-PROTNSW-OC3 lets the user initiate an external SONET line protection request on an OC3 port. The request remains active until it is released via the RLS-PROTNSW-OC3 command or is overridden by a higher priority, externally initiated or automatic, protection switch request. The following switch commands are supported (in order of decreasing priority): LOCKOUT (Lockout), FRCD (Forced switch) and MAN (Manual switch).

- Manual switch of Protection Line (to Working Line): If the AID identifies the protection line, then service will be transferred from the protection line to the working line, unless a request of equal or higher priority is in effect.
- Manual switch of Working Line (to Protection Line): If the AID identifies a working line, then service will be switched from the working line to the protection line unless a request of equal or higher priority is in effect.
- Forced switch of Protection Line (to Working Line): If the AID identifies the protection line, then service will be transferred from the protection line to the working line unless a request of equal or higher priority is in effect.
- Forced switch of Working Line (to Protection Line): If the AID identifies a working line, then service will be transferred from the working line to the protection line unless a request of equal or higher priority is in effect. A lockout of protection and a signal fail of protection line have higher priority than this switch command.
- Lockout of Protection Line: If the AID identifies protection line, this switch command will prevent the working line from switching to protection line. If the working line is already on protection, then the working line will be switched back from protection line to its original working line.

RLS-PROTNSW-OC3 lets the user release an external SONET line protection request.

Category: Facility

Security: SA for both commands

Input Formats:

```
OPR-PROTNSW-OC3:[TID]:<oc_id>:[CTAG]::<sc>;  
RLS-PROTNSW-OC3:[TID]:<oc_id>:[CTAG];
```

Output Format: none

Parameters:

oc_id Identifies the AID as the OC3 port on an I/O module in the switch to switch to protection (for OPR) or switch back from protection (for RLS). Although the range of IOMs is {1-17}, you cannot use slots 5, 6, 9, 12, or 13.

Type: ENET

Range: IOM-{1-17}-OC3-{1-4}

Default value: none

sc Identifies the external APS request (switch command).

Type: enum

Range: FRCD = Forced switch of working to protection

LOCKOUT = Lockout of protection

MAN = Manual switch of working to protection

Default value: none

Input Examples:

```
OPR-PROTNSW-OC3::IOM-8-OC3-1:::FRCD;  
RLS-PROTNSW-OC3::IOM-8-OC3-1;
```

Related Commands: none

RTRV-INFO-STS1

Command:

RTRV-INFO-STS1: Retrieve Information STS1 Facility

Description:

RTRV-INFO-STS1 lets the user retrieve information about STS1 ports. Retrieved information includes the path trace message, the content of the STS SPE, the STS Path RDI, and the Signal Label portion of the V5 byte.

Category: Facility

Security: View

Input Format:

RTRV-INFO-STS1: [TID]:<sts_id>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<sts_id>:STSTRACE=<ststrace>,
  STSPAYLOAD=<stspayload>, PATHRDI=<pathrdi>,
  VTPAYLOAD=<vtpayload>"
;
```

Parameters:

sts_id Identifies the AID as an I/O module or an STS1 port on an I/O module in the switch.

Type: IOMorSTS1

Range: IOM-{1-17}
IOM-{1-17}-STS1-{1-8}

Default value: none

ststrace Identifies the path trace message to be received. Trace byte (J1) continuously transmits a 64-byte, fixed length ASCII string (the last two bytes of which are a CR and an LF), one byte at a time. A null value causes the switch to transmit 62 NULL chars (Hex 00), a CR, and an LF.

Type: string

Range: up to 62 ASCII characters

Default value: none

stspayload Identifies the STS Path Signal Label byte (C2), as defined in GR-253, to indicate the content of the STS SPE (Synchronous Payload Envelope).

Type: integer

Range: three digits representing a two-character hex code

Default value: none

pathrdi Identifies the STS Path RDI (Remote Defect Indicator) signal portion of the STS Path Status byte (G1), as defined in GR-253, to convey the Path terminating status and performance back to the originating STS PTE (Path Terminating Equipment).

Type: integer

Range: four digits representing a three-character hex code

Default value: none

vtpayload Identifies the Signal Label portion of the VT Path Overhead byte (V5) for the 28 possible virtual tributaries

Type: string

Range: up to 28 digits separated by commas

Default value: none

Input Example:

```
RTRV-INFO-STS1::IOM-1-STS1-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"IOM-1-STS1-1:STSTRACE=TRACE1, STSPAYLOAD=123,
  PATHRDI=1234, VTPAYLOAD=2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2"
;
```

Related Commands: none

RTRV-PM-C

Command:

RTRV-PM-C: Retrieve Performance Monitoring Compressed

Description:

RTRV-PM-C lets the user retrieve current and historical performance data for all ports on an IOM in a compressed format; that is, it returns performance data only for those montypes that exceed their specified thresholds, regardless of the type of port.

Category: Facility

Security: View

Input Format:

```
RTRV-PM-C:[TID]:<pm_id>:[CTAG]:[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>;
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<pm_id>:<montype>,<monval>,[<vldty>],[<locn>],  
    [<dirn>],[<tmper>],[<mondatt>],[<montm>]"  
;
```

Parameters:

pm_id Identifies the AID as a DS3 I/O module by slot number.

Type: IOMODULE

Range: IOM-{1-17}

Default value: none

montype Identifies the registers (for a type of monitored parameter) to initialize or from which to retrieve performance data. “ALL” is the only valid input value.

Type: enum

Range: AISS-P = Alarm Indication Signal Seconds – Path

ALL = All types

CVCP-P = Coding Violation – Path, DS3 CP-bit parity

CVCP-PFE = Coding Violation – Path, Far End, DS3 CP-bit parity

CVL = Coding Violation – Line

CVP-P = Coding Violation – Path, P-bit parity

ESA-L = Errored Second , type A – Line

ESACP-P = Errored Second , type A – Path, DS3 CP-bit parity

ESACP-PFE = Errored Second , type A – Path, DS3 CP-bit parity, Far End

ESAP-P = Errored Second , type A – Path, DS3 P-bit parity

ESB-L = Errored Second , type B – Line

ESBCP-P = Errored Second , type B – Path, DS3 CP-bit parity

ESBCP-PFE = Errored Second , type B – Path, DS3 CP-bit parity, Far End

ESBP-P = Errored Second , type B – Path, DS3 P-bit parity

ESCP-P = Errored Second – Path, DS3 CP-bit parity

ESCP-PFE = Errored Second – Path, DS3 CP-bit parity, Far End

ESL = Errored Second – Line

ESP-P = Errored Second – Path, P-bit parity

FCCP-PFE = Failure Count – Path, DS3 CP-bit parity, Far End

FCP = Failure Count – Path, Near End

LOSS-L = Loss of Signal Seconds count – Line

SAS-P = SEF/AIS Second count

SASCP-P = SEF/AIS Second – CP-bit parity

SASCP-PFE = Far End SEF/AIS Second – CP-bit parity

SES-P = Severely Errored Second – Path

SESCP-P = Severely Errored Second – Path, DS3 CP-bit parity

SESCP-PFE = Severely Errored Second – Path, DS3 CP-bit parity, Far End

SESL = Severely Errored Second – Line

UASCP-P = Unavailable Second – Path, DS3 CP-bit parity

UASCP-PFE = Unavailable Second – Path, DS3 CP-bit parity, Far End

UASP-P = Unavailable Second – Path, P-bit parity

Default value: ALL

- monlev** Identifies the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- monval** Identifies (in output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates.
Type: integer
Range: {1-9999}
Default value: none
- vldty** Identifies (in output) the validity of the monitored interval.
Type: enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: none
- locn** Identifies the location of the storage registers or event counters identified by *montype*.
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters relative to the switch. The switch currently returns only the value "BTH".
Type: enum
Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive
Default value: BTH

- tmper** The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”.
- Type:** enum
Range: {1}-DAY = Time interval is exactly one day
 {1-24}-HR = Interval of one to 24 hours (one day)
 {1-1440}-MIN = Interval of one to 1440 minutes (one day)
 NA = Not applicable (no value)
Default value: 15-MIN
- mondatt** Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD.
- Type:** enum
Range: {1-12}-{1-31}
Default value: current date
- montm** Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM.
- Type:** enum
Range: {0-23}-{0-59}
Default value: current time

Input Example:

```
RTRV-PM-C::IOM-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "IOM-1-T3-1:ALL,100,PRTL,FEND,RCV,24-HR,06-24,
    08-45"
;
```

Related Commands: None

RTRV-PM-RSRC

Command:

RTRV-PM-RSRC: Retrieve Performance Monitoring Resource

Description:

RTRV-PM-RSRC lets the user retrieve current and historical performance data for CPUs on a Compute Module (in an IOM slot) or on a System Processor module; that is, it returns performance data only for those montypes that exceed their specified thresholds, regardless of the type of CPU.

Category: Facility

Security: View

Input Format:

```
RTRV-PM-RSRC: [TID]:<pm_id>:[CTAG]::<montype>[,  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<pm_id>:<montype>,<monval>,[<vldty>],[<locn>],  
    [<dirn>],[<tmper>],[<mondatt>],[<montm>]"  
;
```

Parameters:

pm_id Identifies the AID as a CPU on a Compute Module (in an IOM slot) or on a System Processor module. If you do not specify a CPU, the returned data applies to CPU-A.

Type: IOMODULE

Range: IOM-{1-17}[-CPU-{A-D}]
SP-{A,B}[-CPU-{A,B}]

Default value: none

montype Identifies the registers (for a type of monitored parameter) to initialize or from which to retrieve performance data.

Type: enum

Range: ALL = All types

avgCpuUsage = average percent of the CPU used in the last time period

blkDevFree = The number of available block devices (1-999)

blkDevOpen = the number of block devices open (1-999)

bufsDenied = the number of mBuf/cluster requests that failed (1-999999)

charDevFree = The number of available character devices (1-999)

charDevOpen = the number of character devices open (1-999)

clustersFree = the number of IP memory clusters free (1-999999)

clustersUsed = the number of IP memory clusters used (1-999999)

cpuMemDisk = Return all CPU, memory, and disk monitored types

diskFree1 = Current amount of NV storage marked as free by the OS (1-1000000 KB)

diskFree2 = Current amount of NV storage marked as free by the OS (1-1000000 KB)

diskFree3 = Current amount of NV storage marked as free by the OS (1-1000000 KB)

diskFree4 = Current amount of NV storage marked as free by the OS (1-1000000 KB)

diskFree5 = Current amount of NV storage marked as free by the OS (1-1000000 KB)

diskUsed1 = Current amount of non-volatile storage (disk) marked as used by the OS (1-1000000 KB)

diskUsed2 = Current amount of non-volatile storage (disk) marked as used by the OS (1-1000000 KB)

diskUsed3 = Current amount of non-volatile storage (disk) marked as used by the OS (1-1000000 KB)

diskUsed4 = Current amount of non-volatile storage (disk) marked as used by the OS (1-1000000 KB)

diskUsed5 = Current amount of non-volatile storage (disk) marked as used by the OS (1-1000000 KB)

filesFree = The number of available files (1-999)

filesOpen = The total number of open files (1-999)

filesOpenDisk = the number of disk files open (1-999)

filesOpenNFS = the number of NFS files open (1-999)

mBufsFree = the number of IP memory buffers free (1-999999)

mBufsUsed = the number of IP memory buffers used
(1-999999)
memFree = Current amount of memory marked as free by the
OS (1-1000000 KB)
memUsed = Current amount of memory marked as used by
the OS (1-1000000 KB)
peakCpuUsage = Peak CPU usage during last time period in
percent
pipesFree = The number of available pipes (1-999)
pipesOpen = the number of pipes open (1-999)
procsActive = the number of processes launched (1-999)
procsFree = The number of process slots that are free (1-999)
procsReady = The number of processes in the ready state
(1-999)
procsRunning = The number of processes in the running state
(1-999)
procsStopped = The number of processes in the stopped state
(1-999)
procsSuspended = The number of processes in the suspended
state (1-999)
procsWaiting = The number of processes in the waiting state
(1-999)
procsZombie = The number of processes in the zombie state
(1-999)
socketsFree = The number of available sockets (1-999)
socketsOpen = the number of sockets open (1-999)
threadsActive = the number of threads launched (1-999)
threadsDead = Whats a dead thread? (1-999)
threadsFree = The number of thread slots that are free
(1-999)
threadsReady = The number of threads in the ready state
(1-999)
threadsRunning = The number of threads in the running state
(1-999)
threadsStopped = The number of threads in the stopped state
(1-999)
threadsSuspended = The number of threads in the suspended
state (1-999)
threadsWaiting = The number of threads in the waiting state
(1-999)
threadsZombie = The number of threads in the zombie state
(1-999)

Default value: ALL

- monlev** Identifies the discriminating level of the requested monitored parameter. A null value defaults to "1-UP". This parameter is not supported presently; leave it blank.
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- monval** Identifies (in output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates.
Type: integer
Range: {1-9999}
Default value: none
- vldty** Identifies (in output) the validity of the monitored interval.
Type: enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: none
- locn** Identifies the location of the storage registers or event counters identified by *montype*. This parameter is not supported presently; leave it blank.
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters relative to the switch. The switch currently returns only the value "BTH". This parameter is not supported presently; leave it blank.
Type: enum
Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive
Default value: BTH

- tmper** The accumulation period for performance counters. The only values currently allowed for *tmper* are "15-MIN" and "24-HR". This parameter is not supported presently; leave it blank.
- Type:** enum
Range: {1}-DAY = Time interval is exactly one day
 {1-24}-HR = Interval of one to 24 hours (one day)
 {1-1440}-MIN = Interval of one to 1440 minutes (one day)
 NA = Not applicable (no value)
Default value: 15-MIN
- mondatt** Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD.
- Type:** enum
Range: {1-12}-{1-31}
Default value: current date
- monttm** Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM.
- Type:** enum
Range: {0-23}-{0-59}
Default value: current time

Input Example:

```
RTRV-PM-RSRC: :SP-A;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"SP-A-CPU-A:PEAKCPUUSAGE,13,,,,60-SEC,1-28,14-27-0"
"SP-A-CPU-A:AVGCPUUSAGE,5,,,,60-SEC,1-28,14-27-0"
"SP-A-CPU-A:MEMUSED,561260,,,,60-SEC,1-28,14-27-0"
"SP-A-CPU-A:MEMFREE,216980,,,,60-SEC,1-28,14-27-0"
"SP-A-CPU-A:DISKUSED1,19615,,,,60-SEC,1-28,14-27-0"
"SP-A-CPU-A:DISKFREE1,13253,,,,60-SEC,1-28,14-27-0"
"SP-A-CPU-A:DISKUSED2,26366,,,,60-SEC,1-28,14-27-0"
"SP-A-CPU-A:DISKFREE2,18304,,,,60-SEC,1-28,14-27-0"
"SP-A-CPU-A:DISKUSED3,12458,,,,60-SEC,1-28,14-27-0"
"SP-A-CPU-A:DISKFREE3,43243,,,,60-SEC,1-28,14-27-0"
;
```

Related Commands: None

RTRV-STATE-PORTS

Command:

RTRV-STATE-PORTS: Retrieve State Ports

Description:

RTRV-STATE-PORTS lets the user retrieve the primary and secondary states for all ports on a specific IOM.

Category: Facility

Security: View

Input Format:

RTRV-STATE-PORTS:[TID]:<ioModule>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<port>:<pst>,<sst>"
;
```

Parameters:

ioModule Identifies the AID (in input) as an I/O module in the switch.

Type: IOMODULE

Range: IOM-{1-17}

Default value: none

port Identifies the AID (in output) as a T1 port on an I/O Module in the switch.

Type: PORT

Range: IOM-{1-17}-PORT-{1-28}

IOM-{1-17}-STS1-{1-8}-PORT-{1-28}

IOM-{1-17}-T3-{1-8}-PORT-{1-28}

Default value: none

- pst** Identifies the primary state of the port.
Type: enum
Range: IS = In-Service
IS-NR = In-Service, Normal
OOS = Out-Of-Service
OOS-AU = Out-Of-Service, Autonomous
OOS-MA = Out-Of-Service, Managed
OOS-AUMA = Out-Of-Service, Autonomous and Managed
Default value: none
- sst** Identifies the secondary state of the port.
Type: enum
Range: ACT = Active
FAF = Facilities Failure
FEPO = Far End Processor Outage
FLT = Faulted
LPBK = Loopback
SGEO = Supporting Entity Outage
UAS = Unassigned
WRK = Working
Default value: AINS

Input Example:

```
RTRV-STATE-PORTS::IOM-2;
```

Output Examples:

Example 1: DS1 IOM

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"IOM-2-PORT-1:OOS-AU, FAF"
"IOM-2-PORT-2:OOS-AU, FAF"
"IOM-2-PORT-3:OOS-AU, FAF"
"IOM-2-PORT-4:OOS-AU, FAF"
"IOM-2-PORT-5:OOS-AU, FAF"
"IOM-2-PORT-6:OOS-AU, FAF"
"IOM-2-PORT-7:OOS-AU, FAF"
"IOM-2-PORT-8:OOS-AU, FAF"
"IOM-2-PORT-9:OOS-AU, FAF"
"IOM-2-PORT-10:OOS-AU, FAF"
"IOM-2-PORT-11:OOS-AU, FAF"
"IOM-2-PORT-12:OOS-AU, FAF"
"IOM-2-PORT-13:OOS-AU, FAF"
"IOM-2-PORT-14:OOS-AU, FAF"
```

```
"IOM-2-PORT-15:00S-AU, FAF"  
"IOM-2-PORT-16:00S-AU, FAF"  
"IOM-2-PORT-17:00S-AU, FAF"  
"IOM-2-PORT-18:00S-AU, FAF"  
"IOM-2-PORT-19:00S-AU, FAF"  
"IOM-2-PORT-20:00S-AU, FAF"  
"IOM-2-PORT-21:00S-AU, FAF"  
"IOM-2-PORT-22:00S-AU, FAF"  
"IOM-2-PORT-23:00S-AU, FAF"  
"IOM-2-PORT-24:00S-AU, FAF"  
"IOM-2-PORT-25:00S-AU, FAF"  
"IOM-2-PORT-26:IS"  
"IOM-2-PORT-27:IS"  
"IOM-2-PORT-28:IS"  
;
```

Example 2: DS3 IOM

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"IOM-2-T3-1-PORT-1:00S-AU, FAF"  
[...]  
"IOM-2-T3-1-PORT-28:00S-AU, FAF"  
"IOM-2-T3-2-PORT-1:00S-AU, FAF"  
[...]  
"IOM-2-T3-2-PORT-28:00S-AU, FAF"  
[...]  
;
```

Related Commands: none

RTRV-STATS-ENET

Command:

RTRV-STATS-ENET: Retrieve Statistics ENET Facility

Description:

RTRV-STATS-ENET lets the user retrieve statistics for an Ethernet port. Use this command to retrieve the number of packets and bytes transmitted and received.

Category: Facility

Security: View

Input Format:

RTRV-STATS-ENET : [TID] : <enetId> : [CTAG] ;

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<enetId>:[MACADDR=<macaddr>],
    [SUCCESSFUL-PKT-TX=<successfulPktTx>],
    [SUCCESSFUL-PKT-RX=<successfulPktRx>],
    [ERROR-PKT-TX=<errorPktTx>],
    [ERROR-PKT-RX=<errorPktRx>],
    [NUM-PAUSE-FRM-TX=<numPauseFrmTx>],
    [NUM-PAUSE-FRM-RX=<numPauseFrmRx>],
    [TOTAL-BYTES-TX=<totalBytesTx>],
    [TOTAL-BYTES-RX=<totalBytesRx>],
    [TOTAL-ERR-BYTES-TX=<totalErrBytesTx>],
    [TOTAL-ERR-BYTES-RX=<totalErrBytesRx>]"
;
```

Parameters:

enetId Identifies the AID (for RTRV input) as an Ethernet port on an I/O module. A null value for the second part of the AID is equivalent to "ALL"; that is, by leaving the field blank, statistics will be returned for all Ethernet ports configured on the specified I/O module.

Type: IOMorENET
Range: IOM-{8}[-ENET-{1-4}]
Default value: none

- enetId** Identifies the AID (for RTRV output) as an Ethernet port on an I/O Module in the switch.
Type: ENET
Range: IOM-{8,10}-ENET-{1-4}
Default value: none
- macaddr** Identifies the MAC (Medium Access Control) address for the Ethernet port.
Type: string
Range: six hex bytes separated by spaces
Default value: none
- successfulPktTx** Identifies the total number of packets successfully transmitted.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- successfulPktRx** Identifies the total number of packets successfully received.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- errorPktTx** Identifies the total number of packets transmitted with errors.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- errorPktRx** Identifies the total number of packets received with errors.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- numPauseFrmTx** Identifies the total number of paused frames transmitted.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- numPauseFrmRx** Identifies the total number of paused frames received.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none

totalBytesTx Identifies the total number of bytes transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

totalBytesRx Identifies the total number of bytes received.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

totalErrBytesTx Identifies the total number of bytes transmitted with errors.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

totalErrBytesRx Identifies the total number of bytes received with errors.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

Input Example:

```
RTRV-STATS-ENET::IOM-8-ENET-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"IOM-8-ENET-1:MACADDR=0 30 fa 0 12 35,
  SUCCESSFUL-PKT-TX=0, SUCCESSFUL-PKT-RX=0,
  ERROR-PKT-TX=0, ERROR-PKT-RX=0,
  NUM-PAUSE-FRM-TX=0, NUM-PAUSE-FRM-RX=0,
  TOTAL-BYTES-TX=0, TOTAL-BYTES-RX=0,
  TOTAL-ERR-BYTES-TX=0, TOTAL-ERR-BYTES-RX=0"
;
```

Related Commands: none

RTRV/SET-TH-E1

Commands:

RTRV-TH-E1: Retrieve Threshold E1 Facility

SET-TH-E1: Set Threshold E1 Facility

Descriptions:

RTRV-TH-E1 lets the user retrieve the current threshold level of one or more monitored performance counts associated with specific E1 ports in the switch. The violation of these thresholds will trigger a condition. Provision thresholds with SET-TH.

SET-TH-E1 lets the user set the performance monitoring parameter threshold levels for E1 ports on DS3 IOMs. This command cannot be used to turn off threshold crossing alerts; that is, the threshold level cannot be set to some "non-applicable" value. The switch sends a REPT ALM or REPT EVT message when thresholds are exceeded, depending on the notification code associated with the threshold condition. Threshold setting for multiple monitored parameters requires multiple invocations of this command – wildcarding is not permitted.

Category: Facility

Security: NSA for SET-TH, View for RTRV-TH

Input Formats:

RTRV-TH-E1: [TID]:<pm_id>:[CTAG]::<montype>],[<locn>],
[<tmper>;

SET-TH-E1: [TID]:<pm_id>:[CTAG]::<montype>,<thlev>,
[<locn>],[<dirn>],[<tmper>;

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<pm_id>:<montype>,[<locn>],<thlev>,[<tmper>]"
;
```

Parameters:

- pm_id** Identifies the AID as an E1 port on an I/O module.
Type: PORT
Range: IOM-{1-17}-E1-{1-28}
Default value: none
- montype** Identifies a type of monitored parameter for E1 ports on DS3 IOMs, as defined in ITU-T G.826, Series G. A null value (in RTRV input) is equivalent to "ALL".
Type: enum
Range: AISS = Alarm Indication Signal Seconds Count
ALL = All types
BBEC = Background Block Error Count
BBER1 = Background Block Error Ratio/Percentage (Type 1)
CV = Coding Violation
ESC = Errored Seconds Count
ESR1 = Errored Seconds Ratio/Percentage (Type 1)
ESR2 = Errored Seconds Ratio/Percentage (Type 2)
ESR3 = Errored Seconds Percentage (Type 3)
LOSS = Loss of Signal Second Count
OOFs = Out Of Frame Seconds
RAI = Received RAI Second Count
SESC = Severely Errored Seconds Count
SESR1 = Severely Errored Seconds Ratio/Percentage (Type 1)
SESR2 = Severely Errored Seconds Ratio/Percentage (Type 2)
SESR3 = Severely Errored Seconds Ratio/Percentage (Type 3)
SESR4 = Severely Errored Seconds Ratio/Percentage (Type 4)
UASC = Unavailable Seconds Count
Default value: ALL

- thlev** Identifies (for SET-TH and RTRV-TH output) the current threshold level for the monitored parameter identified by *montype*.
Type: integer
Range: {0 – 536870911}
Default value: none
- locn** Identifies the location of the storage registers or event counters to be initialized. This parameter is not supported presently; leave it blank.
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- dirn** Identifies the direction in which to set the threshold relative to the entity identified by the AID. This parameter is not supported presently; leave it blank.
Type: enum
Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive
Default value: BTH
- tmper** The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”.
Type: enum
Range: {1}-DAY = Time interval is exactly one day
{1-24}-HR = Interval of one to 24 hours (one day)
{1-1440}-MIN = Interval of one to 1440 minutes (one day)
Default value: 15-MIN

Input Examples:

```
RTRV-TH-E1::IOM-1-E1-1:::LOSS,, , 15-MIN;  
SET-TH-E1::IOM-1-E1-1:::LOSS,900,, , 15-MIN;
```

Output Example:

```
      lucent 2005-06-24 14:37:49
M    0 COMPLD
      "IOM-1-E1-1:LOSS,NEND,BTH,900,15-MIN"
;
```

Related Commands: none

RTRV/SET-TH-T1

Commands:

RTRV-TH-T1: Retrieve Threshold DS1 Facility

SET-TH-T1: Set Threshold DS1 Facility

Descriptions:

RTRV-TH-T1 lets the user retrieve the current threshold level of one or more monitored performance counts associated with specific T1 ports in the switch. The violation of these thresholds will trigger a condition. Provision thresholds with SET-TH.

SET-TH-T1 lets the user set the performance monitoring parameter threshold levels for T1 ports on DS3 IOMs. This command cannot be used to turn off threshold crossing alerts; that is, the threshold level cannot be set to some "non-applicable" value. The switch sends a REPT ALM or REPT EVT message when thresholds are exceeded, depending on the notification code associated with the threshold condition. Threshold setting for multiple monitored parameters requires multiple invocations of this command – wildcarding is not permitted.

Category: Facility

Security: NSA for SET-TH, View for RTRV-TH

Input Formats:

RTRV-TH-T1: [TID]:<pm_id>:[CTAG]::<montype>,[<locn>],
[<tmper>;

SET-TH-T1: [TID]:<pm_id>:[CTAG]::<montype>,<thlev>,
[<locn>],[<dirn>],[<tmper>;

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<pm_id>,[<entitytype>]:<montype>,[<locn>],<thlev>,"
    [<tmper>]"
;
```

Parameters:

pm_id Identifies the AID (for SET and RTRV output) as a T1 port on an I/O module.

Type: T3orPORT

Range: IOM-**{1-17}**-PORT-**{1-28}**
IOM-**{1-17}**-STS1-**{1-8}**[-PORT-**{1-28}**]
IOM-**{1-17}**-T3-**{1-8}**[-PORT-**{1-28}**]

Default value: none

pm_id Identifies the AID (for RTRV input) as either a T1, T3, or STS1 port on an I/O module.

Type: T3orPORT

Range: IOM-**{1-17}**-PORT-**{1-28}**
IOM-**{1-17}**-STS1-**{1-8}**[-PORT-**{1-28}**]
IOM-**{1-17}**-T3-**{1-8}**[-PORT-**{1-28}**]

Default value: none

entitytype Identifies (for RTRV-TH output) the type of facility, link, or other addressable entity targeted by the message.

Type: enum

Range: ALL = Keyword for all entities in range.
COM = Common – designates the switch
EQPT = Equipment
LINE = Subscriber line
LINK = Link (except OS/NE link)
PLK = Packet link
SLK = Signaling link
T0 = DS0
T1 = DS1
T3 = DS3
TRK = Trunk

Default value: not applicable for output

montype Identifies a type of monitored parameter for T1 ports on DS3 IOMs, as defined in ANSI T1.231-1997. A null value (in RTRV input) is equivalent to "ALL".

Type: enum

Range: AISS-P = Alarm Indication Signal Seconds Count – Path
ALL = All types (RTRV input only – not valid for SET)
CSS-P = Controlled Slip Second – Path
CV-L = Coding Violation – Line
CV-P = Coding Violation – Path
CV-PFE = Coding Violation – Path, Far End
ES-L = Errored Second – Line
ES-LFE = Errored Second – Line, Far End
ES-P = Errored Second – Path
ES-PFE = Errored Second – Path, Far End
ESA-P = Errored Second, type A – Path
ESA-PFE = Errored Second, type A – Path, Far End
ESB-P = Errored Second, type B – Path
ESB-PFE = Errored Second, type B – Path, Far End
FC = Failure Count
FC-FE = Failure Count – Far End
LOSS-L = Loss of Signal Seconds – Line
SAS-P = SEF/AIS (Severely Errored Frame / Alarm Indication Signal) Second – Path
SEFS-PFE = Severely Errored Frame Second – Path, Far End
SES-L = Severely Errored Second – Line
SES-P = Severely Errored Second – Path
SES-PFE = Severely Errored Second – Path, Far End
UAS-P = Unavailable Second – Path
UAS-PFE = Unavailable Second – Path, Far End

Default value: ALL

thlev Identifies (for SET-TH and RTRV-TH output) the current threshold level for the monitored parameter identified by *montype*. The value for *thlev* (in SET-TH) must be within the range specified for the affected *montype* in Table 17 of ANSI T1.231-1997 (extracted below).

Type: integer

Range:

Parameter	Threshold range	
	15 minute	Day
CV	1-16383	1-1048575
CSS, ES, SAS, SES, UAS	1-900	1-65535
Notes: 1. For CVs, the upper end of the range is based on a 14-bit register for the 15-minute interval and a 20-bit register for the 1-day interval. 2. The 15-minute and 1-day ranges for the CSS, ES, SAS, SES, and UAS parameters correspond to 100% and 76% of possible seconds, respectively.		

Default value: none

locn Identifies the location of the storage registers or event counters to be initialized. A null value defaults to both “FEND” and “NEND”.

Type: enum

Range: FEND = Far end

NEND = Near end

Default value: both FEND and NEND

dirn Identifies the direction in which to set the threshold relative to the entity identified by the AID. A null value defaults to all applicable directions (currently only “BTH”). This parameter is not supported presently; leave it blank.

Type: enum

Range: AZ = Transmit

BTH = Both directions

NA = Not applicable

RCV = Receive direction only

TDTC = Transmit direction toward customer

TDTN = Transmit direction toward network

TRMT = Transmit direction only

ZA = Receive

Default value: BTH

tmper The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods.

Type: enum

Range: {1}-DAY = Time interval is exactly one day

{1-24}-HR = Interval of one to 24 hours (one day)

{1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: both 15-MIN and 24-HR

Input Examples:

```
RTRV-TH-T1::IOM-1-T3-1-PORT-1:::LOSS-L,NEND,15-MIN;
```

```
SET-TH-T1::IOM-1-T3-1-PORT-1:::LOSS-L,900,NEND,,  
15-MIN;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"IOM-1-T3-1-PORT-1,T1:LOSS-L,NEND,900,15-MIN"  
;
```

Related Commands: none

RTRV/SET-TH-T3

Commands:

RTRV-TH-T3: Retrieve Threshold DS3 Facility

SET-TH-T3: Set Threshold DS3 Facility

Descriptions:

RTRV-TH-T3 lets the user retrieve the current threshold level of one or more monitored performance counts associated with specific T3 ports in the switch. The violation of these thresholds will trigger a condition. Provision thresholds with SET-TH.

SET-TH-T3 lets the user set the performance monitoring parameter threshold levels for T3 ports. This command cannot be used to turn off threshold crossing alerts; that is, the threshold level cannot be set to some "non-applicable" value. The switch sends a REPT ALM or REPT EVT message when thresholds are exceeded, depending on the notification code associated with the threshold condition. Threshold setting for multiple monitored parameters requires multiple invocations of this command – wildcarding is not permitted.

Category: Facility

Security: NSA for SET-TH, View for RTRV-TH

Input Formats:

RTRV-TH-T3: [TID]:<pm_id>:[CTAG]:[:<montype>],[<locn>],
[<tmper>;

SET-TH-T3: [TID]:<pm_id>:[CTAG]:[:<montype>,<thlev>,
[<locn>],[<dirn>],[<tmper>;

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<pm_id>,[<entitytype>]:<montype>,[<locn>],<thlev>,"
  [<tmper>]"
;
```

Parameters:

pm_id Identifies the AID (for SET and RTRV input) either as a DS3 I/O module (by slot number), or as a T3 port on a DS3 I/O module (by slot number and port number).

Type: IOMorT3

Range: IOM-**{1-17}**
IOM-**{1-17}**- T3-**{1-8}**

Default value: none

pm_id Identifies the AID (for RTRV output) as a T3 port on a DS3 I/O Module in the switch.

Type: T3

Range: IOM-**{1-17}**-T3-**{1-8}**

Default value: none

entitytype Identifies (for RTRV-TH output) the type of facility, link, or other addressable entity targeted by the message.

Type: enum

Range: ALL = Keyword for all entities in range.
COM = Common – designates the switch
EQPT = Equipment
LINE = Subscriber line
LINK = Link (except OS/NE link)
PLK = Packet link
SLK = Signaling link
T0 = DS0
T1 = DS3
T3 = DS3
TRK = Trunk

Default value: not applicable for output

montype Identifies a type of monitored parameter for T1 ports on DS3 IOMs, as defined in ANSI T1.231-1997. A null value (in RTRV input) is equivalent to "ALL". Monitored parameters at the far end are valid only when the value of *fmt* in ENT-T3 is "CBIT".

Type: enum

Range: AISS-P = Alarm Indication Signal Seconds – Path
ALL = All types (RTRV input only – not valid for SET)
CVCP-P = Coding Violation – Path, DS3 CP-bit parity
CVL = Coding Violation – Line
CVP-P = Coding Violation – Path, P-bit parity
ESA-L = Errored Second , type A – Line
ESACP-P = Errored Second , type A – Path, DS3 CP-bit parity
ESACP-PFE = Errored Second , type A – Path, DS3 CP-bit parity, Far End
ESAP-P = Errored Second , type A – Path, DS3 P-bit parity
ESB-L = Errored Second , type B – Line
ESBCP-P = Errored Second , type B – Path, DS3 CP-bit parity
ESBCP-PFE = Errored Second , type B – Path, DS3 CP-bit parity, Far End
ESBP-P = Errored Second , type B – Path, DS3 P-bit parity
ESCP-P = Errored Second – Path, DS3 CP-bit parity
ESCP-PFE = Errored Second – Path, DS3 CP-bit parity, Far End
ESL = Errored Second – Line
ESP-P = Errored Second – Path, P-bit parity
FCCP-PFE = Failure Count – Path, DS3 CP-bit parity, Far End
FCP = Failure Count – Path, Near End
LOSS-L = Loss of Signal Seconds count – Line
SAS-P = SEF/AIS Second count
SES-P = Severely Errored Second – Path
SESCP-P = Severely Errored Second – Path, DS3 CP-bit parity
SESCP-PFE = Severely Errored Second – Path, DS3 CP-bit parity, Far End
SESL = Severely Errored Second – Line
UASCP-P = Unavailable Second – Path, DS3 CP-bit parity
UASCP-PFE = Unavailable Second – Path, DS3 CP-bit parity, Far End
UASP-P = Unavailable Second – Path, P-bit parity

Default value: ALL

thlev Identifies (for SET-TH and RTRV-TH output) the current threshold level for the monitored parameter identified by *montype*. The value for *thlev* (in SET-TH) must be within the range specified for the affected *montype* in Table 17 of ANSI T1.231-1997 (extracted below).

Type: integer

Range:

Parameter	Threshold range	
	15 minute	Day
CV	1-16383	1-1048575
CSS, ES, SAS, SES, UAS	1-900	1-65535
Notes: 1. For CVs, the upper end of the range is based on a 14-bit register for the 15-minute interval and a 20-bit register for the 1-day interval. 2. The 15-minute and 1-day ranges for the CSS, ES, SAS, SES, and UAS parameters correspond to 100% and 76% of possible seconds, respectively.		

Default value: none

locn Identifies the location of the storage registers or event counters to be initialized. A null value defaults to both “FEND” and “NEND”.

Type: enum

Range: FEND = Far end
NEND = Near end

Default value: both FEND and NEND

dirn Identifies the direction in which to set the threshold relative to the entity identified by the AID. A null value defaults to all applicable directions (currently only “BTH”). This parameter is not supported presently; leave it blank.

Type: enum

Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive

Default value: BTH

tmper The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods.

Type: enum

Range: {1}-DAY = Time interval is exactly one day
 {1-24}-HR = Interval of one to 24 hours (one day)
 {1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: both 15-MIN and 24-HR

Input Examples:

```
RTRV-TH-T3::IOM-1-T3-1:::LOSS-L,NEND,15-MIN;  
SET-TH-T3::IOM-1-T3-1:::LOSS-L,900,NEND,,15-MIN;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"IOM-1-T3,T3:LOSS-L,NEND,900,15-MIN"  
;
```

Related Commands: none

RTRV/SET-TH-VT1

Commands:

RTRV-TH-VT1: Retrieve Threshold DS1 Facility

SET-TH-VT1: Set Threshold DS1 Facility

Descriptions:

RTRV-TH-VT1 lets the user retrieve the current threshold level of one or more monitored performance counts associated with specific Type 1.5 virtual tributaries in the switch. The violation of these thresholds triggers a condition. Provision thresholds with SET-TH.

SET-TH-VT1 lets the user set the performance monitoring parameter threshold levels for Type 1.5 virtual tributaries on OC3 and STS1 IOMs. This command cannot be used to turn off threshold crossing alerts; that is, the threshold level cannot be set to some "non-applicable" value. The switch sends a REPT ALM or REPT EVT message when thresholds are exceeded, depending on the notification code associated with the threshold condition. Threshold setting for multiple monitored parameters requires multiple invocations of this command – wildcarding is not permitted.

Category: Facility

Security: NSA for SET-TH, View for RTRV-TH

Input Formats:

```
RTRV-TH-VT1:[TID]:<pm_id>:[CTAG]::[<montype>],  
[<locn>],[<tmper>;
```

```
SET-TH-VT1:[TID]:<pm_id>:[CTAG]::[<montype>,<thlev>,  
[<locn>],[<dirn>],[<tmper>;
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
 "<pm_id>,[<entitytype>]:<montype>,[<locn>],<thlev>,  
[<tmper>]"  
;
```

Parameters:

pm_id Identifies the AID as a Type 1.5 virtual tributary on an I/O module by specifying the T1 port. A null value for the T1 port (for SET) is equivalent to "ALL"; that is, by leaving the "PORT" field blank, the system sets the threshold for the specified value of *montype* for all Type 1.5 virtual tributaries on the specified OC3/STS1 port.

Type: T3orPORT

Range: IOM-{1-17}-OC3-{1-8}[-PORT-{1-28}]
IOM-{1-17}-STS1-{1-8}[-PORT-{1-28}]

Default value: none

entitytype Identifies (for RTRV-TH output) the type of facility, link, or other addressable entity targeted by the message.

Type: enum

Range: ALL = Keyword for all entities in range.
COM = Common – designates the switch
EQPT = Equipment
LINE = Subscriber line
LINK = Link (except OS/NE link)
PLK = Packet link
SLK = Signaling link
T0 = DS0
T1 = DS1
T3 = DS3
TRK = Trunk

Default value: not applicable for output

montype Identifies a type of monitored parameter for Type 1.5 virtual tributaries, as defined in ANSI T1.231-1997. A null value (in RTRV input) is equivalent to "ALL".

Type: enum

Range: AISS-LV = Alarm Indication Signal Seconds Count – Line, VT1.5
AISS-LVFE = Alarm Indication Signal Seconds Count – Line, Far End, VT1.5
ALL = All types
BBE-L = Background Block Error – Line
BBE-PVFE = Background Block Error – Path, VT1.5, Far End
CV-LV = Coding Violation – Line, VT1.5
CV-LVFE = Coding Violation – Line, VT1.5, Far End
CV-PV = Coding Violation – Path, VT1.5
CV-PVFE = Coding Violation – Path, VT1.5, Far End
ES-LV = Errored Second – Line, VT1.5

ES-LVFE = Errored Second – Line, VT1.5, Far End
ES-PV = Errored Second – Path, VT1.5
ES-PVFE = Errored Second – Path, VT1.5, Far End
ESA-LV = Errored Second, type A – Line, VT1.5
ESA-LVFE = Errored Second, type A – Line, VT1.5, Far
End
ESA-PV = Errored Second, type A – Path, VT1.5
ESA-PVFE = Errored Second, type A – Path, VT1.5, Far End
ESB-LV = Errored Second, type B – Line, VT1.5
ESB-LVFE = Errored Second, type B – Line, VT1.5, Far End
ESB-PV = Errored Second, type B – Path, VT1.5
ESB-PVFE = Errored Second, type B – Path, VT1.5, Far End
FC-LV = Failure Count – Line, VT1.5
FC-LVFE = Failure Count – Line, VT1.5, Far End
FC-PV = Failure Count – Path, VT1.5
FC-PVFE = Failure Count – Path, VT1.5, Far End
LOSS-LV = Loss of Signal Seconds – Line, VT1.5
NPDET-PV = Negative Pointer Detected – Path, VT1.5
NPGEN-PV = Negative Pointer Generated – Path, VT1.5
PJDET-PV = Pointer Justification Detected – Path, VT1.5
PJDIFF-PV = Pointer Justification Difference – Path, VT1.5
PJGEN-PV = Pointer Justification Generated – Path, VT1.5
PPDET-PV = Positive Pointer Detected – Path, VT1.5
PPGEN-PV = Positive Pointer Generated – Path, VT1.5
SEFS-LV = Severely Errored Frame Second – Line, VT1.5
SES-LV = Severely Errored Second – Line, VT1.5
SES-LVFE = Severely Errored Second – Line, VT1.5, Far
End
SES-PV = Severely Errored Second – Path, VT1.5
SES-PVFE = Severely Errored Second – Path, VT1.5, Far
End
UAS-LV = Unavailable Second – Line, VT1.5
UAS-LVFE = Unavailable Second – Line, VT1.5, Far End
UAS-PV = Unavailable Second – Path, VT1.5
UAS-PVFE = Unavailable Second – Path, VT1.5, Far End

Default value: ALL

thlev Identifies (for SET-TH and RTRV-TH output) the current threshold level for the monitored parameter identified by *montype*. The value for *thlev* (in SET-TH) must be within the range specified for the affected *montype* in Table 17 of ANSI T1.231-1997 (extracted below).

Type: integer

Range:

Parameter	Threshold range	
	15 minute	Day
CV	1-16383	1-1048575
CSS, ES, SAS, SES, UAS	1-900	1-65535
Notes: 3. For CVs, the upper end of the range is based on a 14-bit register for the 15-minute interval and a 20-bit register for the 1-day interval. 4. The 15-minute and 1-day ranges for the CSS, ES, SAS, SES, and UAS parameters correspond to 100% and 76% of possible seconds, respectively.		

Default value: none

locn Identifies the location of the storage registers or event counters to be initialized. A null value defaults to both “FEND” and “NEND”.

Type: enum

Range: FEND = Far end

NEND = Near end

Default value: both FEND and NEND

dirn Identifies the direction in which to set the threshold relative to the entity identified by the AID. A null value defaults to all applicable directions (currently only “BTH”). This parameter is not supported presently; leave it blank.

Type: enum

Range: AZ = Transmit

BTH = Both directions

NA = Not applicable

RCV = Receive direction only

TDTC = Transmit direction toward customer

TDTN = Transmit direction toward network

TRMT = Transmit direction only

ZA = Receive

Default value: BTH

tmper The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods.

Type: enum

Range: {1}-DAY = Time interval is exactly one day

{1-24}-HR = Interval of one to 24 hours (one day)

{1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: both 15-MIN and 24-HR

Input Examples:

```
RTRV-TH-VT1::IOM-1-STS1-1-PORT-1;
```

```
SET-TH-VT1::IOM-1-T3-1-PORT-1:::LOSS-LV,900;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "IOM-1-STS1-1-PORT-1:LOSS-LV,,900"
;
```

Related Commands: none

NOTES

DLT/ENT/RTRV-IPROUTE

Commands:

DLT-IPROUTE: Delete IPROUTE

ENT-IPROUTE: Enter IPROUTE

RTRV-IPROUTE: Retrieve IPROUTE

Descriptions:

DLT-IPROUTE lets the user delete an established route.

ENT-IPROUTE lets the user establish an IP route from a gateway on the local subnet to a specified destination network.

RTRV-IPROUTE lets the user retrieve the IP address of the gateway on the local subnet used to reach a specified destination network.

Category: Equipment

Security: SA for all commands

Input Formats:

DLT-IPROUTE: [TID]:<srcid>:[CTAG];

ENT-IPROUTE: [TID]:<srcid>:[CTAG]::GATEWAY=<gateway>;

RTRV-IPROUTE: [TID]:<srcid>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<srcid>:GATEWAY=<gateway>"
;
```

Parameters:

srcid Identifies the AID as a configured route by defining the affected module, the destination IP address, and the subnet mask in CIDR (Classless Inter-Domain Routing) notation. You can add a default gateway to an SP by specifying destination IP address "0.0.0.0" with subnet mask "0" (and the mandatory subnet gateway parameter). The subnet mask must be "0" when the IP address is "0.0.0.0". You cannot use IP address "127.0.0.1" (reserved for loopback) or "255.255.255.255" (reserved for broadcast).

Type: string

Range: <spOrIom>-<destIpAddr>-<subnetMask>, where

spOrIom = IOM-{8,10}

SPMGT (results in a static route established over the management interface)

SPSIG (results in a static route established over either the ACCESS or CORE signaling interfaces)

destIpAddr = {0-255}.{0-255}.{0-255}.{0-255}

subnetMask = {0-32}

Default value: none

gateway Identifies the IP address of the gateway on the local subnet used to reach the specified destination network. You cannot use IP addresses "0.0.0.0" (reserved for loopback), "127.0.0.1" (reserved for loopback), and "255.255.255.255" (reserved for broadcast).

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

Input Examples:

```
DLT-IPROUTE::SPMGT-0.0.0.0-0;
```

```
ENT-IPROUTE::SPMGT-0.0.0.0-0:::GATEWAY=10.15.0.1;
```

```
RTRV-IPROUTE::SPMGT-0.0.0.0-0;
```

Output Example:

```
lucent 2004-10-29 14:37:49
M 0 COMPLD
"SPMGT-0.0.0.0-0:GATEWAY=10.15.0.1"
;
```

Related Commands: none

ED/RTRV-CHASSIS-EQPT

Commands:

ED-CHASSIS-EQPT: Edit Chassis Equipment

RTRV-CHASSIS-EQPT: Retrieve Chassis Equipment

Descriptions:

ED-CHASSIS-EQPT lets the user edit the properties of the switch chassis. Use ED-CHASSIS-EQPT to set the system's CLI code and IP addresses. The IP addresses for the element manager, craft, and signaling ports must be on different networks.

RTRV-CHASSIS-EQPT lets the user retrieve the properties of the switch chassis. Retrieved properties include the system's shelf number, gateway function, CLI code, location, and IP addresses.

Category: Equipment

Security: SA for ED, View for RTRV

Input Formats:

```
ED-CHASSIS-EQPT:[TID]:[<com>]:[CTAG]::
  [SHELFID=<shelfId>],[CHASSISTYPE=<chassisType>],
  [CLLI=<clli>],[LOC=<loc>],
  [CRAFTIPSPA=<craftIPSPA>],
  [CRAFTIPSPB=<craftIPSPB>],[EMIPSPA=<emIPSPA>],
  [EMIPSPB=<emIPSPB>],[EMIPCHASSIS=<emIPChassis>],
  [SIGACC0IPSPA=<sigAcc0IPSPA>],
  [SIGACC1IPSPA=<sigAcc1IPSPA>],
  [SIGACC0IPSPB=<sigAcc0IPSPB>],
  [SIGACC1IPSPB=<sigAcc1IPSPB>],
  [SIGACCIPSPA=<sigAccIPSPA>],
  [SIGACCIPSPB=<sigAccIPSPB>],
  [SIGACCCHASSIS=<sigAccChassis>],
  [SIGCORE0IPSPA=<sigCore0IPSPA>],
  [SIGCORE1IPSPA=<sigCore1IPSPA>],
  [SIGCORE0IPSPB=<sigCore0IPSPB>],
  [SIGCORE1IPSPB=<sigCore1IPSPB>],
  [SIGCOREIPSPA=<sigCoreIPSPA>],
  [SIGCOREIPSPB=<sigCoreIPSPB>],
  [SIGCORECHASSIS=<sigCoreChassis>],
  [CRAFTIPMASK=<craftIPMask>],[EMIPMASK=<emIPMask>],
  [SIGACCIPMASK=<sigAccIPMask>],
  [SIGCOREIPMASK=<sigCoreIPMask>],
  [DNSIP1=<dnsIP1>],[DNSIP2=<dnsIP2>],
  [NTPSERVIP1=<ntpserveIP1>],
  [NTPSERVIP2=<ntpserveIP2>],
  [ACCPORTRMODE=<accPortMode>],
  [COREPORTRMODE=<corePortMode>],
  [EMPORTRMODE=<emPortMode>],
  [ACCFILOVERTMR=<accFailOverTmr>],
  [COREFAILOVERTMR=<coreFailOverTmr>],
  [EMFAILOVERTMR=<emFailOverTmr>],
  [DNSNAME=<dnsName>];

RTRV-CHASSIS-EQPT:[TID]:[<com>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<com>:SHELFID=<shelfId>,CHASSISTYPE=<chassisType>,
  CLLI=<clli>,LOC=<loc>,CRAFTIPSPA=<craftIPSPA>,
  CRAFTIPSPB=<craftIPSPB>,EMIPSPA=<emIPSPA>,
  EMIPSPB=<emIPSPB>,EMIPCHASSIS=<emIPChassis>,
  SIGACC0IPSPA=<sigAcc0IPSPA>,
  SIGACC1IPSPA=<sigAcc1IPSPA>,
  SIGACC0IPSPB=<sigAcc0IPSPB>,
  SIGACC1IPSPB=<sigAcc1IPSPB>,
  SIGACCIPSPA=<sigAccIPSPA>,
  SIGACCIPSPB=<sigAccIPSPB>,
  SIGACCCHASSIS=<sigAccChassis>,
  SIGCORE0IPSPA=<sigCore0IPSPA>,
  SIGCORE1IPSPA=<sigCore1IPSPA>,
  SIGCORE0IPSPB=<sigCore0IPSPB>,
  SIGCORE1IPSPB=<sigCore1IPSPB>,
  SIGCOREIPSPA=<sigCoreIPSPA>,
  SIGCOREIPSPB=<sigCoreIPSPB>,
  SIGCORECHASSIS=<sigCoreChassis>,
  CRAFTIPMASK=<craftIPMask>,EMIPMASK=<emIPMask>,
  SIGACCIPMASK=<sigAccIPMask>,
  SIGCOREIPMASK=<sigCoreIPMask>,
  DNSIP1=<dnsIP1>,DNSIP2=<dnsIP2>,
  NTPSERVIP1=<ntpserveIP1>,
  NTPSERVIP2=<ntpserveIP2>,
  ACCPORTMODE=<accPortMode>,
  COREPORTMODE=<corePortMode>,
  EMPORTEMODE=<emPortMode>,
  ACCFAILOVERTMR=<accFailOverTmr>,
  COREFAILOVERTMR=<coreFailOverTmr>,
  EMFAILOVERTMR=<emFailOverTmr>,DNSNAME=<dnsName>"
;
```

Parameters:

com Identifies the AID as the switch.
Type: COM
Range: COM
Default value: COM

shelfId Identifies the shelf containing the switch; the factory default “NULL” indicates "not applicable." This parameter has meaning only for installations containing more than one Lucent switch.

Type: enum

Range: 1-64

Default value: not applicable

chassisType Identifies the gateway function for the switch. The factory default is “NULL”.

Type: enum

Range: MG = Media gateway

MGC = Media gateway controller

SG = Signaling gateway

SG_MGC = signaling gateway and media gateway controller

SG_MGC_MG = signaling gateway, media gateway
controller, and media gateway

Default value: not applicable

cli Identifies the CLI code for the switch. The factory default is “NULL”.

Type: string

Range: up to 20 alphanumeric characters

Default value: not applicable

loc Identifies the location of the switch. The factory default is “NULL”.

Type: string

Range: up to 63 alphanumeric characters

Default value: not applicable

craftIPSPA Identifies the IP address of the craft port on SP A. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

craftIPSPB Identifies the IP address of the craft port on SP B. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

emIPSPA Identifies the IP address of the element manager port on SP A. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

emIPSPB Identifies the IP address of the element manager port on SP B. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

emIPChassis Identifies the IP address of the management interface regardless of SP. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

sigAcc0IPSPA Identifies the IP address of access port 0 on SP A. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

sigAcc1IPSPA Identifies the IP address of access port 1 on SP A. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

sigAcc0IPSPB Identifies the IP address of access port 0 on SP B. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

sigAcc1IPSPB Identifies the IP address of access port 1 on SP B. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

sigAccIPSPA Identifies the alias IP address of the access interface on SP A regardless of port. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

sigAccIPSPB Identifies the alias IP address of the access interface on SP B regardless of port. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

sigAccChassis Identifies the IP address of the access signaling interface regardless of SP. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

sigCore0IPSPA Identifies the IP address of core port 0 on SP A. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

sigCore1IPSPA Identifies the IP address of core port 1 on SP A. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

sigCore0IPSPB Identifies the IP address of core port 0 on SP B. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

sigCore1IPSPB Identifies the IP address of core port 1 on SP B. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

sigCoreIPSPA Identifies the alias IP address of the core interface on SP A regardless of port. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

sigCoreIPSPB Identifies the alias IP address of the core interface on SP B regardless of port. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

sigCoreChassis Identifies the IP address of the core signaling interface regardless of SP. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

craftIPMask Identifies the craft interface subnet mask. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

emIPMask Identifies the element manager interface subnet mask. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

sigAccIPMask Identifies the access signaling interface subnet mask. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

sigCoreIPMask Identifies the core signaling interface subnet mask. The factory default is “NULL”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

- dnsIP1** Identifies the IP address of the primary Domain Name Server. The factory default is “NULL”.
- Type:** string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: not applicable
- dnsIP2** Identifies the IP address of the secondary Domain Name Server. The factory default is “NULL”.
- Type:** string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: not applicable
- ntpservIP1** Identifies the IP address of the primary Network Time Protocol server. If neither NTP server is provisioned, the internal clock in the switch derives the time from either the internal UNIX clock, the BITS interface, or an IOM. The factory default is “NULL”.
- Type:** string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: not applicable
- ntpservIP2** Identifies the IP address of the secondary Network Time Protocol server. The factory default is “NULL”.
- Type:** string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: not applicable
- accPortMode** Identifies the transmission mode and speed for the access signaling Ethernet interface on SP A; that is, whether communication on the port is in one direction at a time (half-duplex), both directions simultaneously (full-duplex), at 10 Mb/sec speed, at 100 Mb/sec speed, or whether the mode is determined automatically. The factory default is “AUTONEG”.
- Type:** enum
Range: AUTONEG = mode automatically negotiated
10FULLDUPLEX = 10 Mb/sec speed, full-duplex mode
10HALFDUPLEX = 10 Mb/sec speed, half-duplex mode
100FULLDUPLEX = 100 Mb/sec speed, full-duplex mode
100HALFDUPLEX = 100 Mb/sec speed, half-duplex mode
Default value: not applicable

corePortMode Identifies the transmission mode and speed for the core signaling Ethernet interface on SP A; that is, whether communication on the port is in one direction at a time (half-duplex), both directions simultaneously (full-duplex), at 10 Mb/sec speed, at 100 Mb/sec speed, or whether the mode is determined automatically. The factory default is “AUTONEG”.

Type: enum

Range: AUTONEG = mode automatically negotiated
10FULLDUPLEX = 10 Mb/sec speed, full-duplex mode
10HALFDUPLEX = 10 Mb/sec speed, half-duplex mode
100FULLDUPLEX = 100 Mb/sec speed, full-duplex mode
100HALFDUPLEX = 100 Mb/sec speed, half-duplex mode

Default value: not applicable

emPortMode Identifies the transmission mode and speed for the management signaling Ethernet interface; that is, whether communication on the port is in one direction at a time (half-duplex), both directions simultaneously (full-duplex), at 10 Mb/sec speed, at 100 Mb/sec speed, or whether the mode is determined automatically. The factory default is “AUTONEG”.

Type: enum

Range: AUTONEG = mode automatically negotiated
10FULLDUPLEX = 10 Mb/sec speed, full-duplex mode
10HALFDUPLEX = 10 Mb/sec speed, half-duplex mode
100FULLDUPLEX = 100 Mb/sec speed, full-duplex mode
100HALFDUPLEX = 100 Mb/sec speed, half-duplex mode

Default value: not applicable

accFailOverTmr Identifies the time, in seconds, the active access signaling interface is down before fault declaration and SP failover. The factory default is “30”.

Type: integer

Range: {1-65535}

Default value: none

coreFailOverTmr Identifies the time, in seconds, the active core signaling interface is down before fault declaration and SP failover. The factory default is “30”.

Type: integer

Range: {1-65535}

Default value: none

emFailOverTmr Identifies the time, in seconds, the active management signaling interface is down before fault declaration and SP failover. The factory default is “180”.

Type: integer

Range: {1-65535}

Default value: none

dnsName Identifies the domain name for the switch. The factory default is “NULL”.

Type: string

Range: up to 64 alphanumeric characters

Default value: not applicable

Input Examples:

```
ED-CHASSIS-EQPT::::SHELFID=1, CHASSISTYPE=MG,  
  CLI=NULL, LOC=NULL, CRAFTIPSPA=0.0.0.0,  
  CRAFTIPSPB=0.0.0.0, EMIPSPA=0.0.0.0,  
  EMIPSPB=0.0.0.0, EMIPCHASSIS=0.0.0.0,  
  SIGACC0IPSPA=0.0.0.0, SIGACC1IPSPA=0.0.0.0,  
  SIGACC0IPSPB=0.0.0.0, SIGACC1IPSPB=0.0.0.0,  
  SIGACCIPSPA=0.0.0.0, SIGACCIPSPB=0.0.0.0,  
  SIGACCCHASSIS=0.0.0.0, SIGCORE0IPSPA=0.0.0.0,  
  SIGCORE1IPSPA=0.0.0.0, SIGCORE0IPSPB=0.0.0.0,  
  SIGCORE1IPSPB=0.0.0.0, SIGCOREIPSPA=10.17.35.26,  
  SIGCOREIPSPB=10.17.35.27,  
  SIGCORECHASSIS=10.17.35.28,  
  CRAFTIPMASK=0.0.0.0, EMIPMASK=0.0.0.0,  
  SIGACCIPMASK=0.0.0.0, SIGCOREIPMASK=255.255.0.0,  
  DNSIP1=0.0.0.0, DNSIP2=0.0.0.0, NTPSERVIP1=0.0.0.0,  
  NTPSERVIP2=0.0.0.0, ACCPORTMODE=AUTONEG,  
  COREPORTMODE=AUTONEG, EMPORTMODE=AUTONEG,  
  ACCFAILOVERTMR=30, COREFAILOVERTMR=30,  
  EMFAILOVERTMR=180, DNSNAME=NULL;  
RTRV-CHASSIS-EQPT;
```

Output Example:

```
lucent 2004-10-29 14:37:49
M 0 COMPLD
"COM:SHELFID=1, CHASSISTYPE=MG, CLLI=NULL, LOC=NULL,
  CRAFTIPSPA=0.0.0.0, CRAFTIPSPB=0.0.0.0,
  EMIPSPA=0.0.0.0, EMIPSPB=0.0.0.0,
  EMIPCHASSIS=0.0.0.0, SIGACC0IPSPA=0.0.0.0,
  SIGACC1IPSPA=0.0.0.0, SIGACC0IPSPB=0.0.0.0,
  SIGACC1IPSPB=0.0.0.0, SIGACCIPSPA=0.0.0.0,
  SIGACCIPSPB=0.0.0.0, SIGACCCHASSIS=0.0.0.0,
  SIGCORE0IPSPA=0.0.0.0, SIGCORE1IPSPA=0.0.0.0,
  SIGCORE0IPSPB=0.0.0.0, SIGCORE1IPSPB=0.0.0.0,
  SIGCOREIPSPA=10.17.35.26,
  SIGCOREIPSPB=10.17.35.27,
  SIGCORECHASSIS=10.17.35.28, CRAFTIPMASK=0.0.0.0,
  EMIPMASK=0.0.0.0, SIGACCIPMASK=0.0.0.0,
  SIGCOREIPMASK=255.255.0.0, DNSIP1=0.0.0.0,
  DNSIP2=0.0.0.0, NTPSERVIP1=0.0.0.0,
  NTPSERVIP2=0.0.0.0, ACCPORTMODE=AUTONEG,
  COREPORTMODE=AUTONEG, EMPORTMODE=AUTONEG,
  ACCFAILOVERTMR=30, COREFAILOVERTMR=30,
  EMFAILOVERTMR=180, DNSNAME=NULL "
;
```

Related Commands:

RTRV-INFO-CHASSIS

ED/RTRV-TMGREF

Commands:

ED-TMGREF: Edit Timing Reference

RTRV-TMGREF: Retrieve Timing Reference

Descriptions:

ED-TMGREF lets the user change the port to use for the timing reference on the switch.

RTRV-TMGREF lets the user retrieve the properties associated with the timing reference source(s) on the switch.

Category: Equipment

Security: NSA for ED, View for RTRV

Input Formats:

ED-TMGREF: [TID]: [<src>]: [CTAG]::<primarySrcType>;

RTRV-TMGREF: [TID]: [<src>]: [CTAG]::<prisrc>;

Output Format:

```
SID DATE TIME
M  CTAG COMPLD
   "<src>:<prisrc>,<ref>,<lockState>"
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

primarySrcType Identifies (for ED) the primary source for the timing reference.

If the primary source is an IOM from one of the IOM sets in the range, the other IOM in that set is the secondary source. IOM-{1,2} are used if the timing reference is on a T1 port, and IOM-{8,10} are used if the timing reference is on an optical port. If the timing reference is from the BITS interface (TMG-E1/T1), select the primary source with the [ENT-T1](#) command.

Type: enum

Range: IOM-{1,2}
IOM-{8,10}
TMG-E1
TMG-T1

Default value: none

prisrc Identifies (for RTRV) the primary source for the timing reference. If the primary source is an IOM from one of the IOM sets in the range, the other IOM in that set is the secondary source. IOM-{1,2} are used if the timing reference is on a T1 port, and IOM-{8,10} are used if the timing reference is on an optical port. If the timing reference is from the BITS interface (TMG), primary source selection is accomplished with the [ENT-T1](#) command. A null value is equivalent to "ALL"; that is, by leaving the field blank, the properties of both the primary and secondary sources will be returned.

Type: enum

Range: IOM-{1,2}
IOM-{8,10}
TMG

Default value: none

ref Identifies the state of the timing reference source. If the timing reference is from the BITS interface (TMG), *ref* indicates whether the source is primary or secondary. If the timing reference is from an IOM, *ref* indicates whether the source is in service and active, in service and on standby, or out of service.

Type: enum

Range: ACTIVE
OOS
PRIMARY
SECONDARY
STANDBY

Default value: none

lockState Identifies whether the timing reference source is locked; that is, whether the source is enabled to provide the timing reference.

Type: enum

Range: FLT
FREERUN
HOLDOVER
IS
LOCKED
LOCKED_IOM1
LOCKED_IOM10
LOCKED_IOM2
LOCKED_IOM8
LOCKED_TMGA
LOCKED_TMGB
OOS
UNLOCKED

Default value: none

Input Examples:

```
ED-TMGREF:::::IOM-1;  
RTRV-TMGREF;
```

Output Example:

```
lucent 2004-10-29 14:37:49  
M 0 COMPLD  
"COM:TMG-A, PRIMARY, IS"  
"COM:TMG-B, SECONDARY, OOS"  
"COM:SP-A-TMGMODULE, OOS, LOCKED_TMGA"  
"COM:SP-B-TMGMODULE, ACTIVE, LOCKED_TMGA"  
;
```

Related Commands: none

RTRV-INFO-CHASSIS

Command:

RTRV-INFO-CHASSIS: Retrieve INFO CHASSIS

Description:

RTRV-INFO-CHASSIS lets the user retrieve information about the switch chassis. Retrieved properties include the chassis' serial number, hardware version, CLEI code, network element type, number of slots in the chassis, and number of faults.

Category: Equipment

Security: View

Input Format:

RTRV-INFO-CHASSIS: [TID]: [<com>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<com>:SERIALNUMBER=<serialNumber>,
    HWVERSION=<hwVersion>,CLEI=<clei>,
    NETYPE=<neType>,SLOTCOUNT=<slotCount>,
    CRITICALFAULTS=<criticalFaults>,
    MAJORFAULTS=<majorFaults>,
    MINORFAULTS=<minorFaults>,TEMPFAULT=<tempFault>,
    TEMPFAULTCOUNT=<tempFaultCount>,
    POWERA=<powerA>,POWERB=<powerB>"
;
```

Parameters:

com Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

serialNumber Identifies the serial number for the switch.

Type: string

Range: ANSI characters

Default value: none

hwVersion Identifies the hardware version for the switch.

Type: string
Range: ANSI characters
Default value: none

clei Identifies the CLEI code for the switch.

Type: string
Range: 10 alphanumeric characters
Default value: none

neType Identifies the switch as a specific type of network element.

Type: enum
Range: ADM = Add drop multiplexer.
ADTS = Automated digital timing system.
APS = Automatic protection switching equipment.
CS = Circuit switch.
DCS = Digital cross-connect switch.
DLC = Digital loop carrier system.
EDSX = Electronic digital signal cross-connect.
EM = Environment monitors.
ISDN = Integrated services digital network switch.
LBRV = Low bit rate voice terminal.
LDS = Local digital switch.
LTE = Line terminating equipment.
MUX = Multiplexer.
PS = Packet switch.
REP = Repeater.
SCP = Service control point.
SS = Supervisory system.
STP = Signal transfer point.
TSG = Timing signal generator.
Default value: none

slotCount Identifies the number of slots in the chassis. The value is 21 for the Lucent switch.

Type: integer
Range: {1-21}
Default value: none

criticalFaults Identifies the number of critical faults in the switch.

Type: integer
Range: {1-9999}
Default value: none

majorFaults Identifies the number of major faults in the switch.

Type: integer
Range: {1-9999}
Default value: none

minorFaults Identifies the number of minor faults in the switch.

Type: integer
Range: {1-9999}
Default value: none

tempFault Indicates whether there is currently an outstanding temperature fault against the chassis.

Type: enum
Range: OKAY = no outstanding temperature fault
FAIL = outstanding temperature fault exists
Default value: none

tempFaultCount Identifies the number of temperature faults that have occurred in the switch since initialization.

Type: integer
Range: {1-9999}
Default value: none

powerA Identifies the state of power feed A.

Type: enum
Range: OKAY = power is present at power feed A
FAIL = power not present at power feed A
Default value: none

powerB Identifies the state of power feed B.

Type: enum
Range: OKAY = power is present at power feed B
FAIL = power not present at power feed B
Default value: none

Input Example:

RTRV-INFO-CHASSIS;

Output Example:

```
lucent 2004-10-29 14:37:49
M 0 COMPLD
"COM:SERIALNUMBER=001001,HWVERSION=0.2,
  CLEI=BA9IAA0AAA,NETYPE=ISDN,SLOTCOUNT=21,
  CRITICALFAULTS=0,MAJORFAULTS=0,MINORFAULTS=0,
  TEMPFAULT=OKAY,TEMPFAULTCOUNT=0,POWERA=OKAY,
  POWERB=OKAY"
;
```

Related Commands:

ED/RTRV-CHASSIS-EQPT

ALW/INH-EX-EQPT / RTRV-EXSCHED-EQPT / SCHED-EX-EQPT

Commands:

ALW-EX-EQPT: Allow Exercise Equipment
INH-EX-EQPT: Inhibit Exercise Equipment
RTRV-EXSCHED-EQPT: Retrieve Exercise Schedule Equipment
SCHED-EX-EQPT: Schedule Exercise Equipment

Descriptions:

ALW-EX-EQPT instructs the switch to allow scheduled periodic exercises for an IOM or SP card in the switch.

INH-EX-EQPT instructs the switch to inhibit scheduled periodic exercises for an IOM or SP card in the switch.

RTRV-EXSCHED-EQPT retrieves parameters associated with scheduled periodic exercises for an IOM or SP card in the switch.

SCHED-EX-EQPT lets the user schedule periodic exercises for an IOM or SP card in the switch. When SCHED-EX-EQPT is issued against an IOM that is not provisioned, the command will return a DENY “entity does not exist”. You cannot schedule periodic exercises for a protection IOM. Deleting an IOM deletes its scheduling information.

Category: Equipment

Security: NSA for ALW/INH/SCHED,
View for RTRV

Input Formats:

ALW-EX-EQPT: [TID]:<iomOrSp>:[CTAG];
INH-EX-EQPT: [TID]:<iomOrSp>:[CTAG];
RTRV-EXSCHED-EQPT: [TID]: [<iomOrSp>]: [CTAG];
SCHED-EX-EQPT: [TID]:<iomOrSp>:[CTAG]: :::[<invl>],
[<statm>], [<numinvl>], [<reptmode>];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<iomOrSp>:<invl>,<statm>,<numinvl>,<reptmode>,<inhmode>"
;
```

Parameters:

iomOrSp Identifies the AID as the SP/TMG or I/O module for which to allow or inhibit scheduled periodic exercises (for ALW/INH), the module for which scheduled periodic exercises exist (for RTRV), or the module for which to schedule periodic exercises (for SCHED). A null value (in RTRV) is equivalent to “ALL”; that is, by leaving the field blank, parameters associated with scheduled periodic exercises will be returned for all configured modules.

Type: IOMorSP

Range: IOM-{1-17}
SP-{A-B}

Default value: none

invl Identifies the interval; that is, the frequency at which the exercise runs. The switch returns a value of “0-HR” for *invl* when you run RTRV-EXSCHED-EQPT the first time (that is, before you’ve ever run SCHED-EX-EQPT).

Type: enum

Range: {1-31}-DAY
{1-24}-HR

Default value: 24-HR

statm Identifies the start time; that is, the time to begin the scheduled exercise. The format for *statm* is HOD-MOH (hour-of-day, minute-of-hour). Default is the current time of day.

Type: enum

Range: {0-23}-{0-59}

Default value: current time of day

numinvl Identifies the number of intervals; that is, it specifies the number of times to run a particular scheduled exercise. The default value of “0” indicates that the exercise is to be stopped, or is stopped. A value of “1000” indicates that the scheduled exercise will run until *numinvl* is changed.

Type: integer

Range: {0-1000}

Default value: 0

reptmode Identifies the report mode, which indicates how to report the results of an executed scheduled event.

Type: enum

Range: ALL = Report results of all exercises
FAIL = Report results of failed exercises
NULL = On input, defaults to FAIL

Default value: FAIL

inhmode Identifies (in RTRV output) whether periodic exercises are currently allowed or inhibited on the IOM.

Type: enum

Range: ALW = periodic exercises are allowed
INH = periodic exercises are inhibited

Default value: none

Input Examples:

```
ALW-EX-EQPT::IOM-4;
```

```
INH-EX-EQPT::IOM-4;
```

```
RTRV-EXSCHED-EQPT::IOM-4;
```

```
SCHED-EX-EQPT::IOM-4:::2-0,1000;
```

The above example schedules an IOM protection switch once a day at 2 AM until the schedule is changed.

```
SCHED-EX-EQPT::SP-A:::7-DAY,4-30,8;
```

The above example schedules an SP protection switch once a week for eight weeks. An SP switch includes a SF protection switch.

```
SCHED-EX-EQPT::IOM-41;
```

The above example turns off a protection exercise, as *numinvl* is zero.

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "IOM-1:24-HR,2-0,1000,FAIL,ALW"
;
```

Related Commands: none

ALW/INH-SWTOPROTN-EQPT / SW-TOPROTN-EQPT

Commands:

ALW-SWTOPROTN-EQPT: Allow Switch To Protection Equipment

INH-SWTOPROTN-EQPT: Inhibit Switch To Protection Equipment

SW-TOPROTN-EQPT: Switch To Protection Equipment

Descriptions:

ALW-SWTOPROTN-EQPT instructs the switch to allow automatic or manual switching to protection of a previously-inhibited I/O Module. ALW-SWTOPROTN-EQPT applies only to I/O Modules configured as primary (working, protected). The AID parameter specifies the working I/O Module being allowed. This function is sometimes called release lockon or release lockout.

INH-SWTOPROTN-EQPT instructs the switch to inhibit automatic or manual switching to protection of an I/O Module. INH-SWTOPROTN-EQPT applies only to I/O Modules configured as primary. The AID parameter specifies the working I/O Module being inhibited. This function is sometimes called release lockon or release lockout.

SW-TOPROTN-EQPT instructs the switch to perform a protection switch; that is, to switch the traffic from a specified working module to the protection module. SW-TOPROTN-EQPT cannot be issued to a module for which an INH-SWTOPROTN-EQPT command has been issued, unless an ALW-SWTOPROTN-EQPT command is issued first.

Category: Equipment

Security: SA for all commands

Input Formats:

```
ALW-SWTOPROTN-EQPT:[TID]:<sw_id>:[CTAG];  
INH-SWTOPROTN-EQPT:[TID]:<sw_id>:[CTAG]::[<dirn>];  
SW-TOPROTN-EQPT:[TID]:<iom0rSp>:[CTAG]::[<mode>],  
[<protid>],[<dirn>];
```

Output Formats: none

Parameters:

- sw_id** Identifies the AID (for ALW/INH) as an I/O module in the switch.
Type: IOMODULE
Range: IOM-{1-17}
Default value: none
- iomOrSp** Identifies the AID (for SW-TOPROTN-EQPT) as an SP/TMG or I/O module in the switch.
Type: IOMorSP
Range: IOM-{1-17}
SP-{A-B}
Default value: none
- mode** Identifies how the module specified by the AID will be removed from service. This parameter is not supported presently; leave it blank.
Type: string
Range: ASCII characters
Default value: none
- protid** Identifies the protection unit to be switched when there is more than one protection unit. This parameter is not supported, as there is only one protection unit; leave it blank.
Type: string
Range: ASCII characters
Default value: none
- dirn** The direction relative to the I/O module in the switch to which the command pertains. This parameter is not supported; leave it blank.
Type: enum
Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive
Default value: NA

Input Examples:

ALW-SWTOPROTN-EQPT::IOM-4;

INH-SWTOPROTN-EQPT::IOM-4;

SW-TOPROTN-EQPT::IOM-4;

Related Commands:

ALW/INH-SWTOWKG-EQPT

SW-TOWKG-EQPT

ALW/INH-SWTOWKG-EQPT / SW-TOWKG-EQPT

Commands:

ALW-SWTOWKG-EQPT: Allow Switch To Working Equipment

INH-SWTOWKG-EQPT: Inhibit Switch To Working Equipment

SW-TOWKG-EQPT: Switch To Working Equipment

Descriptions:

ALW-SWTOWKG-EQPT instructs the switch to allow automatic or manual switching to working of a previously-inhibited I/O Module.

INH-SWTOWKG-EQPT instructs the switch to inhibit automatic or manual switching back to working of an I/O Module.

SW-TOWKG-EQPT instructs the switch to switch a protected working unit back to working; that is, to switch traffic from the protection module back to a specified working module. SW-TOWKG-EQPT cannot be issued to a module for which an INH-SWTOWKG-EQPT command has been issued, unless an ALW-SWTOWKG-EQPT command is issued first.

Category: Equipment

Security: SA for all commands

Input Formats:

ALW-SWTOWKG-EQPT: [TID]:<src>:[CTAG];

INH-SWTOWKG-EQPT: [TID]:<src>:[CTAG]::[<dirn>];

SW-TOWKG-EQPT: [TID]:<sw_id>:[CTAG]::[<mode>],[<dirn>];

Output Formats: none

Parameters:

src Identifies the AID (for ALW/INH) as an I/O module in the switch.

Type: IOMODULE

Range: IOM-{1-17}

Default value: none

- sw_id** Identifies the AID (for SW-TOWKG-EQPT) as an SP/TMG or I/O module in the switch.
Type: IOMorSP
Range: IOM-{1-17}
SP-{A-B}
Default value: none
- mode** Identifies how the module specified by the AID will be restored to service. This parameter is not supported presently; leave it blank.
Type: string
Range: ASCII characters
Default value: none
- dirn** The direction relative to the I/O module in the switch to which the command pertains. This parameter is not supported; leave it blank.
Type: enum
Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive
Default value: NA

Input Examples:

ALW-SWTOWKG-EQPT::IOM-4;
INH-SWTOWKG-EQPT::IOM-4;
SW-TOWKG-EQPT::IOM-4;

Input Example:

ALW-SWTOWKG-EQPT::IOM-4;

Related Commands:

ALW/INH-SWTOPROT-EQPT SW-TOPROTN-EQPT

CPY-MEM

Command:

CPY-MEM: Copy Memory

Description:

CPY-MEM instructs the switch to copy data from a specified memory storage device (internal or external) to another. This command is used to upgrade the firmware on I/O and System Processor Modules.

Category: Equipment

Security: SW

Input Format:

CPY-MEM: [TID] : <src> : [CTAG] ;

Output Format: none

Parameters:

src Identifies the AID as an SP/TMG or I/O module in the switch.

Type: IOMorSP

Range: IOM-{1-17}

SP-{A-B}

Default value: none

Input Example:

CPY-MEM : : IOM-4 ;

Related Commands: None

DLT/ED/ENT/RTRV-EQPT

Commands:

DLT-EQPT: Delete Equipment
ED-EQPT: Edit Equipment
ENT-EQPT: Enter Equipment
RTRV-EQPT: Retrieve Equipment

Descriptions:

DLT-EQPT lets the user disconnect an I/O Module; that is, it allows removing an IOM from the recognized system configuration.

ED-EQPT lets the user edit the properties of the switch module. Use ED-EQPT to change a module's type, redundancy, memory and processor utilization thresholds, software version, and desired state.

ENT-EQPT lets the user initialize the properties of an I/O Module. Use ENT-EQPT to set a module's redundancy, memory and processor utilization thresholds, software version, and desired state.

RTRV-EQPT lets the user retrieve the properties of the switch module. Retrieved properties include the module's type, redundancy, memory and processor utilization thresholds, software version, and primary and secondary states.

Category: Equipment

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-EQPT:[TID]:<iomModule>:[CTAG];  
ED-EQPT:[TID]:<iomOrSp>:[CTAG]::  
    [IOMODULETYPE=<iomModuleType>],[REDUNDANCY=<rn>],  
    [SPMEMTHRESHOLD=<spMemThreshold>],  
    [SPNVMEMTHRESHOLD=<spNVMemThreshold>],  
    [SPBUSYTHRESHOLD=<spBusyThreshold>],  
    [SWVERSION=<swVersion>]:<pst>;  
ENT-EQPT:[TID]:<iomModule>:[CTAG]:<iomModuleType>,<rn>,  
    <spMemThreshold>,<spNVMemThreshold>,  
    <spBusyThreshold>,<swVersion>:<pst>;  
RTRV-EQPT:[TID]:<iomOrSp>:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<iomOrSp>:: [<moduleType>], [<rn>], <spMemThreshold>,
    <spNVMemThreshold>, <spBusyThreshold>,
    [<swVersion>]:<primaryState>, [<secondaryState>]"
;
```

Parameters:

ioModule Identifies the AID (for DLT and ENT) as an I/O module in the switch.

Type: IOMODULE

Range: IOM-{1-17}

Default value: none

iomOrSp Identifies the AID (for ED and RTRV) as an SP/TMG or I/O module in the switch.

Type: IOMorSP

Range: IOM-{1-17}
SP-{A-B}

Default value: none

ioModuleType Identifies (for ED and ENT) the type of I/O module by its CLEI code.

Type: string

Range: 10 alphanumeric characters

Default value: none

moduleType Identifies (for RTRV output) the type of module by its CLEI code.

Type: string

Range: 10 alphanumeric characters

Default value: none

rn Identifies the redundancy of the module.

Type: enum

Range: PRI = Primary unit of a pair of units. This is the protected unit.

SEC = Secondary unit in a pair of units. This is the protecting unit.

SX = This is a simplex entity.

Default value: none

spMemThreshold Identifies the memory utilization threshold percentage.

Type: integer
Range: {0-100}
Default value: none

spNVMemThreshold Identifies the disk space utilization threshold percentage.

Type: integer
Range: {0-100}
Default value: none

spBusyThreshold Identifies the CPU utilization threshold percentage.

Type: integer
Range: {0-100}
Default value: none

swVersion Identifies the software version for the IOM.

Type: string
Range: ASCII characters, typically four integers separated by periods
Default value: none

pst Identifies (for ED and ENT) the primary state of the IOM. The value indicates the desired state of the IOM.

Type: enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
Default value: none

primaryState Identifies (for RTRV output) the primary state of the module. Although this parameter is a string, its values are restricted to IS (In-Service) and OOS (Out-Of-Service), with OOS having possible qualifiers of AU (Autonomous) and MA (Management).

Type: string
Range: alphanumeric characters
Default value: none

secondaryState Identifies (for RTRV output) the secondary state of the module. Although this parameter is a string, its values are restricted to the following:

- ACT = Active
- FLT = Faulted
- INIT = Waiting for initialization
- MEA = Provisioned mismatch
- NBK = No backup
- PRI = Protection release inhibited
- PSI = Protection switch inhibited
- STBYC = Standby cold
- STBYH = Standby hot
- UAS = Unassigned
- UEQ = Unequipped
- UPDT = Update (CPY-MEM currently being performed)
- WRK = Working

Type: string

Range: alphanumeric characters

Default value: none

Input Examples:

```
DLT-EQPT::IOM-4;  
ED-EQPT::IOM-4::IOMODULETYPE=BA9IX72AAA,  
REDUNDANCY=PRI,SPMEMTHRESHOLD=90,  
SPNVMEMTHRESHOLD=90,SPBUSYTHRESHOLD=90,  
SWVERSION=5.0.1.0:IS;  
ENT-EQPT::IOM-4::BA9IX72AAA,SX,90,90,90,5.0.1.0:IS;  
RTRV-EQPT::IOM-4;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"IOM-4:BA9IX72AAA,SX,90,90,90,5.0.1.0:IS,ACT"  
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-EQPT-ALL  
RMV/RST-EQPT
```

DLT/ED/ENT/RTRV-EQPT-ALL

Commands:

DLT-EQPT-ALL: Delete Equipment
ED-EQPT-ALL: Edit Equipment
ENT-EQPT-ALL: Enter Equipment
RTRV-EQPT-ALL: Retrieve Equipment

Descriptions:

DLT-EQPT-ALL lets the user disconnect an I/O Module; that is, it allows removing an IOM from the recognized system configuration.

ED-EQPT-ALL lets the user edit the properties of the switch module. Use ED-EQPT-ALL to change a module's type, redundancy, memory and processor utilization thresholds, software version, rear module type, and desired state.

ENT-EQPT-ALL lets the user initialize the properties of an I/O Module. Use ENT-EQPT-ALL to identify a module and set its redundancy, memory and processor utilization thresholds, software version, rear module type, and desired state.

RTRV-EQPT-ALL lets the user retrieve the properties of the switch module. Retrieved properties include the module's type, redundancy, memory and processor utilization thresholds, software version, and primary and secondary states.

Category: Equipment

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-EQPT-ALL:[TID]:<ioModule>:[CTAG];  
ED-EQPT-ALL:[TID]:<iomOrSp>:[CTAG]::  
  [IOMODULETYPE=<ioModuleType>],[REDUNDANCY=<rn>],  
  [SPMEMTHRESHOLD=<spMemThreshold>],  
  [SPNVMEMTHRESHOLD=<spNVMemThreshold>],  
  [SPBUSYTHRESHOLD=<spBusyThreshold>],  
  [SWVERSION=<swVersion>],  
  [REARMODULETYPE=<rearModuleType>]:<pst>;
```

```
ENT-EQPT-ALL:[TID]:<ioModule>:[CTAG]::
    IOMODULETYPE=<ioModuleType>,REDUNDANCY=<rn>,
    MEMTHRESHOLD=<spMemThreshold>,
    NVMEMTHRESHOLD=<spNVMemThreshold>,
    BUSYTHRESHOLD=<spBusyThreshold>,
    SWVERSION=<swVersion>,
    [REARMODULETYPE=<rearModuleType>]:<pst>;
RTRV-EQPT-ALL:[TID]:[<iomOrSp>]:[CTAG];
```

Output Format:

```
      SID DATE TIME
M  CTAG COMPLD
    "<iomOrSp>:[IOMODULETYPE=<moduleType>],
      [REDUNDANCY=<rn>],MEMTHRESHOLD=<spMemThreshold>,
      NVMEMTHRESHOLD=<spNVMemThreshold>,
      BUSYTHRESHOLD=<spBusyThreshold>,
      [SWVERSION=<swVersion>],
      [REARMODULETYPE=<rearModuleType>]:
      <primaryState>,[<secondaryState>]"
;
```

Parameters:

ioModule Identifies the AID (for DLT and ENT) as an I/O module in the switch.

Type: IOMODULE
Range: IOM-{1-17}
Default value: none

iomOrSp Identifies the AID (for ED and RTRV) as an SP/TMG or I/O module in the switch.

Type: IOMorSP
Range: IOM-{1-17}
 SP-{A-B}
Default value: none

ioModuleType Identifies (for ED and ENT) the type of I/O module by its CLEI code.

Type: string
Range: 10 alphanumeric characters
Default value: none

moduleType Identifies (for RTRV output) the type of module by its CLEI code.

Type: string
Range: 10 alphanumeric characters
Default value: none

rn Identifies the redundancy of the module.

Type: enum
Range: PRI = Primary unit of a pair of units. This is the protected unit.
SEC = Secondary unit in a pair of units. This is the protecting unit.
SX = This is a simplex entity.
Default value: none

spMemThreshold Identifies the memory utilization threshold percentage.

Type: integer
Range: {0-100}
Default value: none

spNVMemThreshold Identifies the disk space utilization threshold percentage.

Type: integer
Range: {0-100}
Default value: none

spBusyThreshold Identifies the CPU utilization threshold percentage.

Type: integer
Range: {0-100}
Default value: none

swVersion Identifies the software version for the IOM.

Type: string
Range: ASCII characters, typically four integers separated by periods
Default value: none

rearModuleType Identifies the type of rear module by its CLEI code.

Type: string
Range: 10 alphanumeric characters
Default value: none

pst Identifies (for ED and ENT) the primary state of the module. The value indicates the desired state of the module.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)

Default value: none

primaryState Identifies (for RTRV output) the primary state of the module. Although this parameter is a string, its values are restricted to IS (In-Service) and OOS (Out-Of-Service), with OOS having possible qualifiers of AU (Autonomous) and MA (Management).

Type: string

Range: alphanumeric characters

Default value: none

secondaryState Identifies (for RTRV output) the secondary state of the module. Although this parameter is a string, its values are restricted to the following:

- ACT = Active
- FLT = Faulted
- INIT = Waiting for initialization
- MEA = Provisioned mismatch
- NBK = No backup
- PRI = Protection release inhibited
- PSI = Protection switch inhibited
- STBYC = Standby cold
- STBYH = Standby hot
- UAS = Unassigned
- UEQ = Unequipped
- UPDT = Update (CPY-MEM currently being performed)
- WRK = Working

Type: string

Range: alphanumeric characters

Default value: none

Input Examples:

```
DLT-EQPT-ALL::IOM-4;  
ED-EQPT-ALL::IOM-4::IOMODULETYPE=BA9IX72AAA,  
  REDUNDANCY=PRI,SPMEMTHRESHOLD=90,  
  SPNVMEMTHRESHOLD=90,SPBUSYTHRESHOLD=90,  
  SWVERSION=5.0.1.0:IS;  
ENT-EQPT-ALL::IOM-4::IOMODULETYPE=BA9IX72AAA,  
  REDUNDANCY=SX, MEMTHRESHOLD=90, NVMEMTHRESHOLD=90,  
  BUSYTHRESHOLD=90, SWVERSION=5.0.1.0:IS;  
RTRV-EQPT-ALL::IOM-4;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
  "IOM-4:IOMODULETYPE=BA9IX72AAA,REDUNDANCY=SX,  
    MEMTHRESHOLD=90,NVMEMTHRESHOLD=90,  
    BUSYTHRESHOLD=90,SWVERSION=5.0.1.0:IS,ACT"  
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-EQPT  
RMV/RST-EQPT
```

INIT-T0

Command:

INIT-T0: Initialize T0

Description:

INIT-T0 lets the user initialize a DS0 channel; that is, it resets robbed-bit signaling for CAS applications.

Category: Equipment

Security: ADMIN

Input Format:

INIT-T0: [<TID>]:<t0Id>:[CTAG];

Output Format: none

Parameters:

t0Id Identifies the AID as a DS0 channel on an IOM.
Type: T0
Range: IOM-{1-17}-PORT-{1-28}-T0-{1-24}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}-T0-{1-31}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}-T0-{1-31}
Default value: None

Input Example:

INIT-T0::IOM-1-T3-2-PORT-3-T0-24;

Related Commands: None

RMV/RST-EQPT

Commands:

RMV-EQPT: Remove Equipment

RST-EQPT: Restore Equipment

Descriptions:

RMV-EQPT lets the user remove from service an I/O module or the standby SP module. The command takes the module from an in-service state and places it in a maintenance state. You can initiate service-affecting diagnostic routines or replacement after removing a module from service. You also can remove a module from service with ED-EQPT or ED-EQPT-ALL.

RST-EQPT lets the user restore a module to service. RST-EQPT takes the entity from a maintenance state to an in-service state for which the unit is ready to provide its service functions.

Category: Equipment

Security: SA for both commands

Input Formats:

RMV-EQPT:[TID]:<iomOrSp>:[CTAG]::[<mode>],
[<state>;

RST-EQPT:[TID]:<iomOrSp>:[CTAG]::[<mode>;

Output Format: none

Parameters:

iomOrSp Identifies the AID as an SP/TMG or I/O module in the switch.

Type: IOMorSP

Range: IOM-{1-17}
SP-{A-B}

Default value: none

mode Identifies (for RMV) how the module specified by the AID will be removed from service, or (for RST) whether the switch performs automatic testing of the module being restored to service to verify good working condition. This parameter is not supported presently as the switch always performs automatic testing of the equipment being restored to service; leave the field blank.

Type: string

Range: ASCII characters

Default value: none

state Identifies (for RMV) the state into which the specified entity will be moved. This parameter is not supported presently; leave it blank.

Type: string

Range: ASCII characters

Default value: none

Input Examples:

RMV-EQPT::IOM-4;

RST-EQPT::IOM-4;

Input Example:

RMV-EQPT::IOM-4;

Related Commands:

DLT/ED/ENT/RTRV-EQPT

DLT/ED/ENT/RTRV-EQPT-ALL

RTRV-FAN-EQPT

Command:

RTRV-FAN-EQPT: Retrieve FAN Equipment

Description:

RTRV-FAN-EQPT lets the user retrieve parameters associated with the fan assembly in the switch.

Category: Equipment

Security: View

Input Format:

RTRV-FAN-EQPT:[TID]:<fan>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<fan>:<status>,<failures>"
;
```

Parameters:

- | | |
|-----------------|--|
| fan | Identifies the AID as the fan assembly in the switch.
Type: FAN
Range: FAN
Default value: none |
| status | Indicates whether the fan assembly is operating normally.
Type: enum
Range: OKAY
FAIL
Default value: none |
| failures | Indicates the number of fan failures since initialization.
Type: integer
Range: {1-9999}
Default value: none |

Input Example:

```
RTRV-FAN-EQPT::FAN;
```

Output Example:

```
          lucent 2005-06-24 14:37:49  
M  0  COMPLD  
    "FAN:OKAY, 0"  
;
```

Related Commands: None

RTRV-INFO-EQPT

Command:

RTRV-INFO-EQPT: Retrieve Information Equipment

Description:

RTRV-INFO-EQPT lets the user retrieve information about a module in the switch. Retrieved information include the module's CLEI code, description, software and hardware versions, serial number, self-test status, type and number of ports, number of faults, operating status, amount of available and used memory and disk space, and processor utilization.

Category: Equipment

Security: View

Input Format:

RTRV-INFO-EQPT:[TID]:[<src>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<iomOrSp>:[<clei>],[<desc>],[<swVersion>],
  [<hwVersion>],[<serialNumber>],
  [<selfTestStatus>],[<portType>],[<portCount>],
  [<externalFaults>],[<internalFaults>],[<inService>]:
  [<memFree>],[<memUsed>],[<nvMemFree>],[<nvMemUsed>],
  [<spAveBusy>]:[<rearClei>],[<rearDesc>],
  [<rearHwVersion>],[<rearSerialNumber>],[<prtg>]"
;
```

Parameters:

iomOrSp Identifies the AID either as a front I/O module (by slot number), as a front SW/FAB A or B module, or as a front SP/TMG A or B module. A null value is equivalent to "ALL"; that is, by leaving the field blank, information will be returned for all configured modules.

Type: IOMorSPorSF

Range: IOM-{1-17}

SF-{A-B}

SP-{A-B}

Default value: none

- clei** Identifies the CLEI code for the front module specified by *src*.
Type: string
Range: 10 alphanumeric characters
Default value: none
- desc** Identifies a text description of the module specified by *src*.
Type: string
Range: alphanumeric characters
Default value: none
- swVersion** Identifies the software version for the module specified by *src*.
Type: string
Range: ASCII characters, typically four integers separated by periods
Default value: none
- hwVersion** Identifies the hardware version for the module specified by *src*.
Type: string
Range: ASCII characters, typically four integers separated by periods
Default value: none
- serialNumber** Identifies the serial number for the module specified by *src*.
Type: string
Range: alphanumeric characters
Default value: none
- selfTestStatus** Identifies whether the module passed or failed its self-test.
Type: enum
Range: FAIL
PASS
Default value: none
- portType** Identifies the type of port.
Type: enum
Range: T1
T3
UNKNOWN
Default value: none
- portCount** Identifies the number of ports.
Type: integer
Range: {1-9999}
Default value: none

externalFaults Identifies the number of module faults whose cause is external to the module; for example, a loss of signal fault on an IOM.

Type: integer
Range: {1-9999}
Default value: none

internalFaults Identifies the number of module faults whose cause is internal to the module; for example, a loss of heartbeat fault on an IOM.

Type: integer
Range: {1-9999}
Default value: none

inService Identifies whether the equipment is in service.

Type: enum
Range: N = Equipment is not in service
Y = Equipment is in service
Default value: none

memFree Identifies the amount of free memory as a percentage.

Type: integer
Range: {0-100}
Default value: none

memUsed Identifies the amount of memory used as a percentage.

Type: integer
Range: {0-100}
Default value: none

nvMemFree Identifies the amount of free disk space as a percentage.

Type: integer
Range: {0-100}
Default value: none

nvMemUsed Identifies the amount of disk space used as a percentage.

Type: integer
Range: {0-100}
Default value: none

spAveBusy Identifies CPU utilization as a percentage.

Type: integer
Range: {0-100}
Default value: none

rearClei Identifies the CLEI code for the rear module corresponding to the front module specified by *src*.

Type: string

Range: 10 alphanumeric characters

Default value: none

rearDesc Identifies a text description of the rear module corresponding to the front module specified by *src*.

Type: string

Range: alphanumeric characters

Default value: none

rearHwVersion Identifies the hardware version for the rear module corresponding to the front module specified by *src*.

Type: string

Range: ASCII characters, typically four integers separated by periods

Default value: none

rearSerialNumber Identifies the serial number for the rear module corresponding to the front module specified by *src*.

Type: string

Range: alphanumeric characters

Default value: none

prtg Identifies the faulted IOM being protected by the protection IOM.

Type: IOMODULE

Range: IOM-{1-17}

Default value: none

Input Example:

```
RTRV-INFO-EQPT::IOM-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "IOM-1:BA9IAA0AAA,\"Lucent 28-port DS1 Front
    Module\",5.0.1.0,A-M,0000000235000134,PASS,,
    0,1,0,N:0,0,0,0,0:BA9IBC0AAA,\"Lucent 28-port
    DS1 Rear Module\",,0000000000000066,\"
;
```

Related Commands: None

NOTES

OPR/SET-ACO

Commands:

OPR-ACO: Operate Alarm Cutoff
SET-ACO: Set Alarm Cutoff

Descriptions:

OPR-ACO instructs the switch to cut off the office audible alarm indications without changing the local alarm indications

SET-ACO instructs the switch to set the alarm cutoff mode for an entity. The various modes describe the degree to which the switch is permitted to provide an automatic ACO function.

Category: Fault

Security: SA for both commands

Input Formats:

OPR-ACO: [TID] : [<aco_id>] : [CTAG] ;
SET-ACO: [TID] : <aco_id> : [CTAG] : : <aco> ;

Output Formats: none

Parameters:

aco_id Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

aco Identifies the mode of alarm cutoff operation provided by the switch.

Type: enum

Range: DELD = ACO is delayed to allow announcement

IMED = ACO introduced automatically and immediately at the switch

MAN = ACO introduced by OS command or manual operation

Default value: none

Input Examples:

OPR-ACO;

SET-ACO::COM:::DELD;

Related Commands: none

RTRV-ALM-<AidType>

Command:

RTRV-ALM-<AidType>: Retrieve Alarm (ALL, COM, E1, ENET, EQPT, OC, STS1, T1, T3)

Description:

RTRV-ALM generates a report on the current state of alarm conditions within the switch. The RTRV-COND command generates a report on both alarms and conditions.

Category: Fault

Security: View

Input Format:

```
RTRV-ALM-<AidType>:[TID]:[<alm_id>]:[CTAG]::  
[NTFCNCDE=<ntfcncde>],[CONDTYPE=<condtype>],  
[SRVEFF=<srveff>],[OCRDAT=<ocrdat>],  
[OCRTM=<ocrtm>],[DESC=<desc>];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
"<alm_id>,[<entitytype>]:<ntfcncde>,<condtype>,  
<srveff>,<ocrdat>,<ocrtm>,<desc>,<tblisltid>"  
;
```

Parameters:

AidType Identifies the type of entity within the switch from which to retrieve alarms.

Type: ReptAid

Range: ALL = Designates the switch and all entities within it
COM = Common – designates the switch as a discreet entity
E1 = E1 ports
ENET = Ethernet ports
EQPT = Equipment – designates major assemblies
OC = OC3 ports
STS1 = STS1 ports
T1 = T1 ports
T3 = T3 ports

Default value: none

- alm_id** Identifies the AID as the switch.
Type: COM
Range: COM
Default value: COM
- ntfcncde** Identifies the notification code of the event that caused the condition to be reported. This indicates the alarm level. A null value is equivalent to "ALL"; that is, by leaving the field blank, all event notification codes configured in the system will be returned.
Type: enum
Range: CL = Cleared. Never used in provisioning requests or returned in RTRVs - only active conditions are available through the RTRV-EVT/COND/ALM messages and by definition their notification codes are never CL/CLEAR.
CR = Critical
MJ = Major
MN = Minor
NA = Not Alarmed
Default value: none
- condtype** Indicates the condition type for an alarm or a reported event.
Type: string
Range: alphanumeric characters
Default value: NULL
- srveff** Identifies the effect on service caused by the alarm condition.
Type: enum
Range: SA = Service-affecting condition.
NSA = Non-service-affecting condition
Default value: NULL
- ocrdat** Identifies the date when the specific event or violation occurred.
Type: enum
Range: <YYYY>-{1-12}-{1-31} = <year>-{month}-{day of month}
Default value: NULL
- ocrtm** Identifies the time when the specific event or violation occurred.
Type: enum
Range: {0-23}-{0-59}-{0-59} = {hour}-{minute}-{second}
{0-23}-{0-59} = {hour}-{minute}
Default value: NULL

desc Describes the alarm condition.

Type: string

Range: alphanumeric characters

Default value: NULL

tblisltid Identifies (in output) an integer representing the alarm.

Type: integer

Range: up to four digits

Default value: NULL

Input Example:

```
RTRV-ALM-EQPT::::NTFCNCDE=MN;
```

Output Example:

```
lucent 2004-10-29 14:37:49
M 0 COMPLD
"IOM-14,EQPT:MN,PRCDRERR,NSA,2004-10-29,04-34-27,
  \"Module in Slot 14 present but not
  provisioned\",79"
"IOM-15,EQPT:MN,PROTNA,NSA,2004-10-29,04-47-52,
  \"Module in slot 15 is unprotected\",839"
"IOM-1,EQPT:MN,PROTNA,NSA,2004-10-29,04-56-20,
  \"Module in slot 1 is unprotected\",839"
"IOM-4,EQPT:MN,PROTNA,NSA,2004-10-29,05-00-15,
  \"Module in slot 4 is unprotected\",839"
;
```

Related Commands:

```
RTRV-COND-<ReptAid>
```

RTRV-COND-<ReptAid>

Command:

RTRV-COND-<ReptAid>: Retrieve Condition (ALL, COM, E1, ENET, EQPT, OC, STS1, T1, T3)

Description:

RTRV-COND instructs the switch to return the current standing condition and/or state associated with one or more specified facilities or equipment units in the switch. The RTRV-ALM command generates a report on just alarms.

Category: Fault

Security: View

Input Format:

RTRV-COND-<ReptAid>:[TID]:[<src>]:[CTAG]:[<typereq>],
[<locn>],[<dirn>],[<tmper>];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<aid>,<aidtype>:CONDTYPE=<condtype>,
    SRVEFF=<srveff>,MONDAT=<mondatt>,OCRTM=<ocrtm>,
    LOCN=<locn>,CONTSTATE=<contstate>,INVL=<invl>,
    DESC=<desc>"
;
```

Parameters:

- ReptAid** Identifies the type of entity within the switch from which to retrieve alarms and conditions.
Type: ReptAid
Range: ALL = Designates the switch and all entities within it
COM = Common – designates the switch as a discreet entity
E1 = E1 ports
ENET = Ethernet ports
EQPT = Equipment – designates major assemblies
OC = OC3 ports
STS1 = STS1 ports
T1 = T1 ports
T3 = T3 ports
Default value: none
- src** Identifies the input AID as the switch.
Type: COM
Range: COM
Default value: COM
- aid** Identifies the output AID as a specific entity within the switch.
Range: alphanumeric characters
- aidtype** Identifies, in the output AID block, the type of entity within the switch from which to retrieve alarms.
Range: ALL = Designates the switch and all entities within it
COM = Common – designates the switch as a discreet entity
ENET = Ethernet ports
EQPT = Equipment – designates major assemblies
STS1 = STS1 ports
T1 = T1 ports
T3 = T3 ports
- typereq** Identifies, in input, the type of condition to be retrieved. A null value defaults to all applicable condition types.
Type: string
Range: alphanumeric characters
Default value: none

- condtype** Identifies, in output, the current standing condition and/or state associated with the equipment specified in the AID block.
Range: alphanumeric characters
- srveff** Identifies, in output, the effect on service caused by the condition.
Range: SA = Service-affecting condition.
NSA = Non-service-affecting condition
- mondat** Identifies, in output, the monitored date. The value indicates the beginning date for the period defined by *tmper*. The format is MM-DD.
Range: {1-12}-{1-31}
- ocrtm** Identifies, in output, the time when the specific event or violation occurred.
Range: {0-23}-{0-59}-{0-59} = {hour}-{minute}-{second}
{0-23}-{0-59} = {hour}-{minute}
- locn** Identifies, in both input and output, the location of the switch. A null value defaults to all applicable locations.
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: none
- dirn** Identifies, in input, the direction relative to the entity in the switch. A null value defaults to all applicable directions (currently, RCV is the only valid value).
Type: enum
Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive
Default value: RCV

tmper Identifies, in input, the period of time for which to retrieve standing conditions. This parameter is presently not used.; leave it blank

Type: enum

Range: {1}-DAY = Time interval is exactly one day
 {1-24}-HR = Interval of one to 24 hours (one day)
 {1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: none

contstate Identifies, in output, the control state of the external control.

Range: NA = Not applicable (duration is momentary)
 OPER = Operated
 RLS = Released

invl Identifies, in output, the interval between the next scheduled test or exercise to be executed by the switch.

Range: {1-31}-DAY = Interval in days (up to one month)
 {1-24}-HR = Interval in hours (up to one day)
 {1-1440}-MIN = Interval in minutes (up to one day)
 NA = Not applicable (duration is momentary)

desc Describes, in output, the alarm condition.

Range: alphanumeric characters

Input Example:

```
RTRV-COND-COM: : : : LOS, FEND, RCV;
```

Output Example:

```
lucent 2004-10-29 14:37:49
M 0 COMPLD
"COM, T1: CONDTYPE=LOS, SRVEFF=NSA, MONDAT=10-29,
OCRTM=08-45-40, LOCN=FEND, CONTSTATE=NA,
INVL=1-HR, DESC=LOSS OF SIGNAL"
;
```

Related Commands:

```
RTRV-ALM-<ReptAid>
```

NOTES

DLT/ED/ENT/RTRV-ISDN-BCHAN

Commands:

DLT-ISDN-BCHAN: Delete ISDN B-Channel

ED-ISDN-BCHAN: Edit ISDN B-Channel

ENT-ISDN-BCHAN: Enter ISDN B-Channel

RTRV-ISDN-BCHAN: Retrieve ISDN B-Channel

Descriptions:

DLT-ISDN-BCHAN lets the user delete an ISDN B channel.

ED-ISDN-BCHAN lets the user change the properties of an ISDN B channel. Use ED-ISDN-BCHAN to change the comments field or the state of an ISDN B channel.

ENT-ISDN-BCHAN lets the user initialize the properties of an ISDN B channel. Use ENT-ISDN-BCHAN to set the TDM termination and state for the channel, and to enter user comments for the channel. ENT-ISDN-BCHAN will not work unless ENT-MGC-MGASSOC, ENT-MGC-MGIUA, and ENT-ISDN-IF have already been issued.

RTRV-ISDN-BCHAN lets the user retrieve the properties of an ISDN B channel. Use RTRV-ISDN-BCHAN to retrieve the channel's TDM termination and state, and user comments for the channel.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-ISDN-BCHAN: [TID]:<bChanId>:[CTAG];

ED-ISDN-BCHAN: [TID]:<bChanId>:[CTAG]::
[REMARK=<remark>]: [<pst>];

ENT-ISDN-BCHAN: [TID]:<bChanId>:[CTAG]::
[TERMID=<termId>],[REMARK=<remark>]: [<pst>];

RTRV-ISDN-BCHAN: [TID]:<bChanId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<bChanId>:TERMID=<termId>,REMARK=<remark>:<pst>,
    [<sst>]"
;
```

Parameters:

bChanId Identifies the AID as an ISDN bearer channel. The pattern is a combination of the ISDN interface and the channel number(s). A range of channels is shown by the beginning and ending numbers separated by two ampersands and a hyphen ("&&-"). A null value (in RTRV input) for the second part of the AID is equivalent to "ALL"; that is, by leaving the field blank, the system returns information for all ISDN B channels configured for the interface specified by the first part of the AID.

Type: string

Range: <ifNum>[-<memberID>[&&-<memberId>]], where
ifNum = {1-2147483647}
memberId = {1-840}

Default value: none

termId Identifies the TDM termination for the channel in MEGACO format.

Type: string

Range: up to 32 alphanumeric characters in the form:
TDM termination type / slot / port / channel =
T/{1-17}/{1-224}/{1-31}, where
channel = {1-24} for T1, {1-31} for E1

Default value: NULL

remark Identifies optional notes or remarks for use by the carrier.

Type: string

Range: up to eight characters

Default value: NULL

pst Identifies (for ED and ENT) the desired primary state of the channel.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service (does not clear call)

RESET = Reset channel (clears call and restores state to IS)

Default value: none

- pst** Identifies (for RTRV output) the primary state of the channel.
- Type:** enum
- Range:** IS = In-Service
OOS = Out-Of-Service
OOS-AU = Out-Of-Service, Autonomous
OOS-AUMA = Out-Of-Service, Autonomous and Managed
OOS-MA = Out-Of-Service, Managed
- Default value:** none
-
- sst** Identifies (for RTRV output) the secondary state of the channel.
- Type:** enum
- Range:** BLKD = Blocked. In combination with OOS-AU, identifies that the B channel is out of service at the far end. In combination with OOS-MA, identifies that the B channel is OOS at the near end, but the termination is IS
BUSY = Bearer channel currently carrying traffic
DCHL = D-channel. In combination with OOS-AU, identifies that the B channel is OOS because the D channel is OOS
DSBLD = Disabled. In combination with OOS-MA, identifies that the B channel has been disabled by management.
IDLE = Bearer channel available to carry traffic.
RSTRQD = Reset Required. In combination with OOS, identifies an inconsistent or unexpected state that may require resetting the channel at either end, or locally resetting the termination.
SGEO = Supporting Entity Outage. In combination with OOS-AU, identifies that the channel is OOS because the termination is OOS.
- Default value:** none

Input Examples:

```
DLT- ISDN-BCHAN::1-1;  
ED- ISDN-BCHAN::1-1:::REMARK=NULL:IS;  
ENT- ISDN-BCHAN::1-1:::TERMID=T/1/1/1,REMARK=NULL:  
IS;  
RTRV- ISDN-BCHAN::1-1;
```

Output Example:

```
      lucent 2005-06-24 14:37:49
M    0 COMPLD
      "1-1:TERMID=T/1/1/1,REMARK=NULL:IS"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-ISDN-IF

Commands:

DLT-ISDN-IF: Delete ISDN Interface
ED-ISDN-IF: Edit ISDN Interface
ENT-ISDN-IF: Enter ISDN Interface
RTRV-ISDN-IF: Retrieve ISDN Interface

Descriptions:

DLT-ISDN-IF lets the user delete an ISDN interface.

ED-ISDN-IF lets the user change the properties of an ISDN interface. Use ED-ISDN-IF to change the interface's resource allocation method, the type of remote switch, restart option, maximum frame length, LAPD retransmission counter value, timer values, the digits prefixed to the called party number, whether B-channel availability signaling is enabled, the amount of echo cancellation, whether echo cancellation processing is required due to long delay, the audio indicator, up to five general-purpose variables for custom functionality, and the primary state of the interface.

ENT-ISDN-IF lets the user initialize the properties of an ISDN interface. Use ENT-ISDN-IF to set the type of interface and the resource allocation method (hunting type). Additionally, the command can define the type of remote switch, the restart option, the maximum frame length, the LAPD retransmission counter value, timer values, the digits to attach to the beginning of incoming calls on the interface, whether to enable B-channel availability signaling, the amount of echo cancellation, whether echo cancellation processing is required due to long delay, the audio indicator, up to five general-purpose variables for custom functionality, and the primary state of the interface. ENT-ISDN-IF will not work unless the following commands have already been issued in the listed order: ENT-MG and ENT-IUA-MG.

RTRV-ISDN-IF lets the user retrieve the properties of an ISDN interface. Use RTRV-ISDN-IF to retrieve the interface's number, type, resource allocation method (hunting type), type of remote switch, restart option, maximum frame length, LAPD retransmission counter value, timer values, prefix for incoming calls, whether to enable B-channel availability signaling, the amount of echo cancellation, whether echo cancellation processing is required due to long delay, the audio indicator, the uses and values for up to five general-purpose variables for custom functionality, the NFAS signaling links, and the primary state of the interface.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-ISDN-IF:[TID]:<ifNum>:[CTAG];

ED-ISDN-IF:[TID]:<ifNum>:[CTAG]::[ALLOC=<alloc>],
[<ISDNVARIANT>=<isdnvariant>],[RSTOPT=<rstop>],
[T301=<t301>],[T302=<t302>],[T303=<t303>],
[T305=<t305>],[T306=<t306>],
[T308=<t308>],[T309=<t309>],[T310=<t310>],
[T316=<t316>],[T322=<t322>],
[PROGRESSTMR=<progresstmr>],
[<BCHANAVAIL=<bchanAvail>],[ECHOCTRL=<echoCtrl>],
[LONGDELAY=<longDelay>],[REMARK=<remark>],
[AUDIOIND=<audioInd>]:[<pst>];

ENT-ISDN-IF:[TID]:<ifNum>:[CTAG]::IFTYPE=<ifType>,
MGNAME=<mgName>,[ALLOC=<alloc>],
[<ISDNVARIANT>=<isdnvariant>],[RSTOPT=<rstop>],
[T301=<t301>],[T302=<t302>],[T303=<t303>],
[T305=<t305>],[T306=<t306>],[T308=<t308>],
[T309=<t309>],[T310=<t310>],[T316=<t316>],
[T322=<t322>],[PROGRESSTMR=<progresstmr>],
[BCHANAVAIL=<bchanAvail>],[ECHOCTRL=<echoCtrl>],
[LONGDELAY=<longDelay>],[REMARK=<remark>],
[AUDIOIND=<audioInd>]:[<pst>];

RTRV-ISDN-IF:[TID]:[<ifNum>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<ifNum>:IFTYPE=<ifType>,MGNAME=<mgName>,
  ALLOC=<alloc>,ISDNVARIANT=<isdnvariant>,
  RSTOPT=<rstop>,T301=<t301>,T302=<t302>,
  T303=<t303>,T305=<t305>,T306=<t306>,T308=<t308>,
  T309=<t309>,T310=<t310>,T316=<t316>,T322=<t322>,
  PROGRESSTMR=<progresstmr>,
  BCHANAVAIL=<bchanAvail>,ECHOCTRL=<echoCtrl>,
  LONGDELAY=<longDelay>,REMARK=<remark>,
  AUDIOIND=<audioInd>,NFASLNK=<nfaslnk>,
  NFASBACKUPLNK=<nfasbackuplnk>:<pst>,<sst>]"
;
```

Parameters:

ifNum Identifies the AID as an ISDN interface. A null value (in RTRV input) is equivalent to "ALL"; that is, by leaving the field blank, information for all ISDN interfaces configured in the system will be returned. A range of interfaces (in RTRV input) is shown by the beginning and ending numbers separated by two ampersands and a hyphen ("&&-").

Type: IsdnIfNum

Range: {1-2147483647}

Default value: none

ifType Identifies the type of interface.

Type: enum

Range: NFAS = Non-facility-associated signaling.

NFASBACKUP = Non-facility-associated signaling with a backup D channel on a different T1.

PRI = Primary rate ISDN.

Default value: none

mgName Identifies the media gateway containing the links associated with the interface.

Type: string

Range: up to 30 characters

Default value: NULL

alloc Identifies the resource allocation method (hunting type) for selecting channels within links on the interface.

Type: enum

Range: ASCENDING = Allocates the lowest numbered available channel in a numbered list of channels on the lowest numbered available link in a numbered list of links.

CIRCULAR = Allocates the next free channel, in ascending order, following the last channel selected.

DESCENDING = Allocates the highest numbered available channel in a numbered list of channels on the highest numbered available link in a numbered list of links.

RANDOM = Allocates the next free channel, in ascending order, based on a random entry into a numbered list of resources. After the first allocation from that numbered list of resources, subsequent attempts to find a free resource use the circular method.

Default value: CIRCULAR

isdnvariant Identifies the type of switch at the remote end of the interface.

Type: enum

Range: 4ESS = Lucent 4ESS switch (currently not supported)

5ESS = Lucent 5ESS switch

DMS100 = Nortel DMS100 switch

ETSI = ETSI ETS 300 102 1990-compliant switch (not yet implemented)

ITU = ITU Q.931 1998-compliant switch (not yet implemented)

NI2 = National ISDN 2-compliant generic switch

Default value: NI2

rstop Identifies the restart option; that is, whether a restart message is issued on a link start up.

Type: enum

Range: ALL = restart enabled for all channels

BCHANONLY = restart enabled for B-channel only

NONE = restart not enabled

Default value: BCHANONLY

t301 Identifies the T301 timer value (in minutes), which specifies the maximum time from switch receipt of an ALERTing message from the called party until CONNect message is received from the called party.

Type: integer

Range: {0-600}

Default value: 300

t302 Identifies the T302 timer value (in seconds), used as an inter-digit timer in case of overlap digit collection. It specifies the maximum time the switch waits from receipt of an initial SETUP message containing incomplete called party information until receipt of more information (digits). Each receipt of an additional INFORMATION message restarts the timer. Timer expiry indicates completion of dialing (digit collection). This parameter applies only when the value of *isdnvariant* is "ETSI" or "ITU" (international variants).

Type: integer

Range: {1-30}

Default value: 15

- t303** Identifies the T303 timer value (in seconds), which specifies the maximum time from switch transmission of an initial SETUP message to the called party until receipt of the CALL PROCEEDING message from the called party.
- Type:** integer
Range: {1-4}
Default value: 4
- t305** Identifies the T305 timer value (in seconds), which specifies the maximum time from transmittal of a DISCONNECT message to the calling or called party until a DISCONNECT, RELEASE, or RELEASE COMPLETE message is received from that party.
- Type:** integer
Range: {2-60}
Default value: 30
- t306** Identifies the T306 timer value (in seconds), which, for national variants (the value of *isdnvariant* is "4ESS", 5ESS, DMS100, or "NI2"), specifies the maximum time from transmittal of a PROGRESS message to the calling party until a DISCONNECT message is received from the calling party. For international variants (the value of *isdnvariant* is "ETSI" or "ITU"), *t306* specifies the maximum time from transmittal of a DISCONNECT message, when in-band play of a tone or announcement is required, until receipt of a DISCONNECT, RELEASE, or RELEASE COMPLETE message.
- Type:** integer
Range: {30-150}
Default value: 60
- t308** Identifies the T308 timer value (in seconds), which specifies the maximum time from transmittal of a RELEASE message to the calling or called party until a RELEASE or RELEASE COMPLETE message is received from that party.
- Type:** integer
Range: {2-10}
Default value: 4
- t309** Identifies the T309 timer value (in seconds), which specifies the time from switch detection of a data link malfunction during an active call until receipt of a STATUS, DISCONNECT, RELEASE, or RELEASE COMPLETE message from the customer equipment.
- Type:** integer
Range: {6-90}
Default value: 90

- t310** Identifies the T310 timer value (in seconds), which specifies the maximum time from transmittal of a PROceeding message from the called party until ALERTing, PROGress, CONNect message, or DISConnect is received from the called party.
Type: integer
Range: {3-120}
Default value: 10
- t316** Identifies the T316 timer value (in seconds), which specifies the maximum time from switch transmittal of a REStart message to the calling or called party until a REStart ACKnowledge message is received from that party.
Type: integer
Range: {10-120}
Default value: 30
- t322** Identifies the T322 timer value (in seconds), which specifies the maximum time from transmittal of a STATus ENquiry message to the calling or called party until a STATus, DISConnect, RELease, or RELease COMplete message is received from that party.
Type: integer
Range: {2-10}
Default value: 4
- progresstmr** Identifies, for national variants, the progress timer value in minutes.
Type: integer
Range: {0-600}
Default value: 300
- bchanAvail** Identifies whether B-channel availability signaling is enabled for National ISDN 2-compliant generic switches (*isdnvariant* = NI2). B-channel availability signaling lets an NI2 switch notify and negotiate B-channel status changes with the far end.
Type: BoolYN
Range: N = B-channel availability signaling is disabled
Y = B-channel availability signaling is enabled
Default value: N
- echoCtrl** Identifies the amount, in milliseconds, of echo cancellation for outgoing calls.
Type: integer
Range: {0-128}
Default value: 0

longDelay Identifies whether echo cancellation processing is required because of a long delay (echo tail).

Type: BoolYN

Range: N = echo processing is off (for short-haul; that is, less than 15 msec propagation delay)

Y = echo processing is on (for long-haul)

Default value: N

remark Identifies optional notes or remarks for use by the carrier.

Type: string

Range: up to eight characters

Default value: NULL

audioInd Identifies the value sent in the infotransfer indicator of the User Service Information parameter in the IAM for calls on ISUP trunks.

Type: enum

Range: 3.1KHZ = infotransfer default value is overridden to indicate 3.1KHz audio in BearerCap/UserServiceInformation of IAM message

DEFAULT = infotransfer indicator is determined by the ISDN interworking functionality and is not overridden by provisioning

SPEECH = infotransfer default value is overridden to indicate speech in the BearerCap/UserServiceInformation of IAM message

Default value: DEFAULT

nfaslnk Identifies (in RTRV output) the signaling link used for an NFAS interface, which uses the D-channel of this link for signaling.

Type: integer

Range: {0-32767}

Default value: none

nfasbackuplnk Identifies (in RTRV output) the backup signaling link used for an NFAS interface.

Type: integer

Range: {0-32767}

Default value: none

pst Identifies (for ED and ENT) the desired primary state of the interface.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service
for Management)

Default value: none

pst Identifies (for RTRV output) the primary state of the interface.

Type: enum

Range: IS-NR = In-Service, Normal

OOS = Out-Of-Service

OOS-AU = Out-Of-Service, Autonomous

OOS-MA = Out-Of-Service, Managed

OOS-AUMA = Out-Of-Service, Autonomous and Managed

Default value: none

sst Identifies (for RTRV output) the secondary state of the interface.

Type: enum

Range: ACT = Active, D channel is in service. In combination with IS, it's used only for interface type PRI or NFAS without backup D channel

DCHL = D-channel. In combination with OOS-AU, Identifies that the interface is OOS because the D-channel is OOS

DSBLD = Disabled. In combination with OOS-MA, Identifies that the interface has had maintenance blocked by management, although the IOM is IS.

SGEO = Supporting Entity Outage. In combination with OOS-AU, Identifies that the interface is OOS because the IOM port is OOS. In combination with OOS-AUMA, Identifies that the interface has been put OOS and the IOM port is OOS.

RSTRQD = Reset Required. In combination with OOS, Identifies an inconsistent or unexpected state that may require resetting the interface at either end, or locally resetting the IOM ports.

PRIACT = Primary D-channel Active. In combination with IS, Identifies that both D channels are up, with the primary D-channel (D1) in service and D2 in a standby state. This state is valid only when the value of *ifType* is "NFASBACKUP".

SECACT = Secondary D-channel Active. In combination with IS, Identifies that both D channels are up, with the backup D-channel (D2) in service and D1 in a standby state. This state is valid only when the value of *ifType* is "NFASBACKUP".

PRIOOS = Primary D-channel Out-Of-Service. In combination with IS, Identifies D1 is OOS, D2 is IS. This state is valid only when the value of *ifType* is "NFASBACKUP".

SECOOS = Secondary D-channel Out-Of-Service. In combination with IS, Identifies D1 is IS, D2 is OOS. This state is valid only when the value of *ifType* is "NFASBACKUP".

Default value: none

Input Examples:

```
DLT-ISDN-IF::14;
```

```
ED-ISDN-IF::14:::ALLOC=CIRCULAR, ISDNVARIANT=NI2,  
  RSTOPT=BCHANONLY, T301=5, T302=15, T303=4, T305=30,  
  T306=60, T308=4, T309=90, T310=10, T316=30, T322=4,  
  PROGRESSTMR=5, BCHANAVAIL=N, ECHOCTRL=32,  
  LONGDELAY=N, REMARK=NULL, AUDIOIND=DEFAULT:IS;
```

ENT-ISDN-IF examples interrelated with input examples given in
[ENT-ISDN-LNK](#):

(Without NFAS)

```
ENT-ISDN-IF::1:::IFTYPE=PRI, MGNAME=LUCENT,  
  ALLOC=CIRCULAR;
```

```
ENT-ISDN-IF::2:::IFTYPE=PRI, MGNAME=LUCENT,  
  ALLOC=CIRCULAR;
```

```
ENT-ISDN-IF::3:::IFTYPE=PRI, MGNAME=LUCENT,  
  ALLOC=CIRCULAR;
```

```
ENT-ISDN-IF::4:::IFTYPE=PRI, MGNAME=LUCENT,  
  ALLOC=CIRCULAR;
```

(With NFAS, no backup)

```
ENT-ISDN-IF::1:::IFTYPE=NFAS, IFTYPE=PRI,  
  MGNAME=LUCENT, ALLOC=CIRCULAR;
```

```
ENT-ISDN-IF::2:::IFTYPE=PRI, IFTYPE=PRI,  
  MGNAME=LUCENT, ALLOC=CIRCULAR;
```

(With NFAS Backup)

```
ENT-ISDN-IF::1:::IFTYPE=NFASBACKUP, IFTYPE=PRI,  
  MGNAME=LUCENT, ALLOC=CIRCULAR;
```

```
ENT-ISDN-IF::2:::IFTYPE=PRI, IFTYPE=PRI,  
  MGNAME=LUCENT, ALLOC=CIRCULAR;
```

```
RTRV-ISDN-IF::14&&-16;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"14: IFTYPE=PRI, MGNAME=LUCENT, ALLOC=CIRCULAR,
    ISDNVARIANT=NI2, RSTOPT=BCHANONLY, T301=5, T302=15,
    T303=4, T305=30, T306=60, T308=4, T309=90, T310=10,
    T316=30, T322=4, PROGRESSTMR=5, BCHANAVAIL=N,
    ECHOCTRL=32, LONGDELAY=N, REMARK=NULL,
    AUDIOIND=DEFAULT, NFASLNK=0, NFASBACKUPLNK=0:
    IS-NR, ACT"

"15: IFTYPE=PRI, MGNAME=LUCENT, ALLOC=CIRCULAR,
    ISDNVARIANT=NI2, RSTOPT=BCHANONLY, T301=5, T302=15,
    T303=4, T305=30, T306=60, T308=4, T309=90, T310=10,
    T316=30, T322=4, PROGRESSTMR=5, BCHANAVAIL=N,
    ECHOCTRL=32, LONGDELAY=N, REMARK=NULL,
    AUDIOIND=DEFAULT, NFASLNK=0, NFASBACKUPLNK=0:
    IS-NR, ACT"

"16: IFTYPE=PRI, MGNAME=LUCENT, ALLOC=CIRCULAR,
    ISDNVARIANT=NI2, RSTOPT=BCHANONLY, T301=5, T302=15,
    T303=4, T305=30, T306=60, T308=4, T309=90, T310=10,
    T316=30, T322=4, PROGRESSTMR=5, BCHANAVAIL=N,
    ECHOCTRL=32, LONGDELAY=N, REMARK=NULL,
    AUDIOIND=DEFAULT, NFASLNK=0, NFASBACKUPLNK=0:
    IS-NR, ACT"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-ISDN-LNK

Commands:

DLT-ISDN-LNK: Delete ISDN Link
ED-ISDN-LNK: Edit ISDN Link
ENT-ISDN-LNK: Enter ISDN Link
RTRV-ISDN-LNK: Retrieve ISDN Link

Descriptions:

DLT-ISDN-LNK lets the user delete an ISDN link.

ED-ISDN-LNK lets the user change the carrier's remarks for an ISDN link.

ENT-ISDN-LNK lets the user initialize the properties of an ISDN link. Use ENT-ISDN-LNK to set the link's D-channel termination, the D-channel between the media gateway controller and media gateway, the link's type, and the link ID within an NFAS interface. The command assigns an interface number to a T1 or E1 link, identifies the D-channel and its TDM termination, assigns the D-channel between the media gateway controller and media gateway, configures PRI B-channel usage, and assigns an NFAS group ID if the interface is part of an NFAS group. ENT-ISDN-LNK will not work correctly unless the following commands have already been issued in the listed order: ENT-MGC-MGASSOC, ENT-MGC-MGIUA, and ENT-ISDN-IF.

RTRV-ISDN-LNK lets the user retrieve the properties of an ISDN link. Use RTRV-ISDN-LNK to retrieve the link's D-channel termination, the D-channel between the media gateway controller and media gateway, the link's type, and the link ID within an NFAS interface.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-ISDN-LNK: [TID]:<isdnLnkId>:[CTAG];  
ED-ISDN-LNK: [TID]:<isdnLnkId>:[CTAG]::REMARK=<remark>;  
ENT-ISDN-LNK: [TID]:<isdnLnkId>:[CTAG]::  
    TERMID=<termId>,LNKTYPE=<lnkType>,[IUAID=<iuaId>],  
    [PORTTYPE=<portType>],[NFASLNKID=<nfasLnkId>],  
    [REMARK=<remark>];  
RTRV-ISDN-LNK: [TID]:<isdnLnkId>:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<isdnLnkId>:TERMID=<termId>,LNKTYPE=<lnkType>,
    IUAID=<iuaId>,PORTTYPE=<portType>,
    NFASLNKID=<nfasLnkId>,REMARK=<remark>"
;
```

Parameters:

isdnLnkId Identifies the AID as an ISDN link on an interface. The first number in the range identifies the interface; the second identifies the link. The interface ID has global significance in comparison to the link number. A null value for the second field in the AID (in RTRV input) is equivalent to "ALL"; that is, by leaving the field blank, information for all ISDN links on the specified interface will be returned. Show a range of links on an interface by separating the beginning and ending link numbers with two ampersands and a hyphen ("&&-"). Show a range of links spanning interfaces by separating the beginning and ending interface numbers (each followed by a link) with two ampersands ("&&").

Type: IsdnLink

Range: {1-2147483647}-{1-32767}

Default value: none

termId Identifies the TDM termination of the D-channel in MEGACO format. The channel is implicitly specified by the port type (channel 16 for E1, channel 24 for T1)

Type: string

Range: up to 32 alphanumeric characters in the form:

TDM termination type / slot / port =

T/{1-17}/{1-224}

Default value: NULL

lnkType Identifies the type of link.

Type: enum

Range: B_LNK = B-link

D_LNK= D-link for PRI ISDN

D_PRI = Primary NFAS D-Link

D_SEC = Secondary NFAS D-Link

Default value: none

luaId Identifies the D-channel between the media gateway controller and the media gateway with a unique 32-bit unsigned integer. Set the value to “0” when the value of **lnkType** is “B_LNK”. The value cannot be “0” when the value of **lnkType** is “D_LNK”, “D_PRI”, or “D_SEC”.

Type: luaId

Range: {0 – 4294967295}

Default value: 0

portType Identifies the type of port for the D-link.

Type: enum

Range: E1

T1

Default value: T1

nfasLnkId Identifies a particular link within an NFAS interface and must be unique for every link in an NFAS interface. The range is one less than the number of links in the NFAS group.

Type: integer

Range: {0-27}

Default value: 0

remark Identifies optional notes or remarks for use by the carrier.

Type: string

Range: up to 16 characters

Default value: NULL

Input Examples:

DLT-ISDN-LNK::14-3;

ED-ISDN-LNK::4-4::REMARK=8202MB;

ENT-ISDN-LNK examples interrelated with input examples given in

[ENT-ISDN-IF](#):

(Without NFAS)

ENT-ISDN-LNK::1-1:::TERMID=T/6/1, LNKTYPE=D_LNK,
IUAID=6001, PORTTYPE=T1, NFASLNKID=0;

ENT-ISDN-LNK::2-2:::TERMID=T/6/2, LNKTYPE=D_LNK,
IUAID=6201, PORTTYPE=T1, NFASLNKID=0;

ENT-ISDN-LNK::3-3:::TERMID=T/6/3, LNKTYPE=D_LNK,
IUAID=6301, PORTTYPE=T1, NFASLNKID=0;

ENT-ISDN-LNK::4-4:::TERMID=T/6/4, LNKTYPE=D_LNK,
IUAID=6401, PORTTYPE=T1, NFASLNKID=0;

(With NFAS, no backup)

```
ENT- ISDN- LNK::1-1:::TERMID=T/6/1, LNKTYPE=D_LNK,  
IUAID=6001, PORTTYPE=T1, NFASLNKID=0;  
ENT- ISDN- LNK::1-2:::TERMID=T/6/2, LNKTYPE=B_LNK,  
IUAID=6002, PORTTYPE=T1, NFASLNKID=1;  
ENT- ISDN- LNK::1-3:::TERMID=T/6/3, LNKTYPE=B_LNK,  
IUAID=6003, PORTTYPE=T1, NFASLNKID=2;  
ENT- ISDN- LNK::2-4:::TERMID=T/6/4, LNKTYPE=B_LNK,  
IUAID=6004, PORTTYPE=T1, NFASLNKID=0;
```

(With NFAS Backup)

```
ENT- ISDN- LNK::1-1:::TERMID=T/6/1, LNKTYPE=D_PRI,  
IUAID=6001, PORTTYPE=T1, NFASLNKID=0;  
ENT- ISDN- LNK::1-2:::TERMID=T/6/2, LNKTYPE=B_LNK,  
IUAID=6002, PORTTYPE=T1, NFASLNKID=1;  
ENT- ISDN- LNK::1-3:::TERMID=T/6/3, LNKTYPE=B_LNK,  
IUAID=6003, PORTTYPE=T1, NFASLNKID=2;  
ENT- ISDN- LNK::2-4:::TERMID=T/6/4, LNKTYPE=D_SEC,  
IUAID=6004, PORTTYPE=T1, NFASLNKID=0;
```

```
RTRV- ISDN- LNK::1-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"1-1:TERMID=T/6/1, LNKTYPE=D_LNK, IUAID=6001,  
PORTTYPE=T1, NFASLNKID=0, REMARK=NULL"  
;
```

Related Commands: none

SW-TOPROTN-ISDN

Command:

SW-TOPROTN-ISDN: Switch To Protection ISDN

Description:

SW-TOPROTN-ISDN instructs the switch to perform a protection switch; that is, to initiate a fail-over of the D-channel on an NFAS interface to the backup signaling link used for the NFAS interface. This command is only valid for NFAS interfaces with backup D-channels, and will succeed if both the primary and secondary D-channels on the specified interface are in the “UP” state (that is, the command is valid only when the value of *sst* in the RTRV-ISDN-IF output is either “PRIACT” or “SECACT”).

Category: Signaling

Security: SA

Input Format:

SW-TOPROTN-ISDN:[TID]:<ifNum>:[CTAG];

Output Format: none

Parameters:

ifNum Identifies the AID as an ISDN interface.

Type: IsdnIfNum

Range: {1-2147483647}

Default value: none

Input Example:

SW-TOPROTN-ISDN::1;

Related Commands: none

RTRV-ATTR-LOG / SET-ATTR-LOG

Commands:

RTRV-ATTR-LOG: Retrieve Attribute Log

SET-ATTR-LOG: Set Attribute Log

Descriptions:

RTRV-ATTR-LOG lets the user retrieve the current attributes for an existing log in the switch. Use it to review these attributes prior to making changes with the SET-ATTR-LOG command. These attributes govern how many, how long, and what kinds of messages are logged.

SET-ATTR-LOG lets the user set the attributes associated with a message log in the switch. If an associated log already exists, the new values specified by the command replace the previous values. The switch also logs execution of this command.

Category: Log

Security: NSA for SET, View for RTRV

Input Formats:

```
RTRV-ATTR-LOG:[TID]:[<log_id>]:[CTAG]:[<lognm>];  
SET-ATTR-LOG:[TID]:[<log_id>]:[CTAG]:[<lognm>],  
[<clrlog>],[<maxmsg>];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
 "<lognm>,[<maxmsg>]"  
;
```

Parameters:

log_id Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

lognm Identifies the name of a log for which to set or retrieve log attributes. The call capture (CALLCAPT) and call capture verbose (CALLCAPTV) logs are not included in the set of values for RTRV as they have no retrievable attributes. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the maximum number of messages for all logs will be returned.

Type: enum

Range: AO = autonomous output log – All autonomous message output (a subset of the system log)
BKUP = backup log – All output from running backup scripts (success/failure messages, error messages, etc.)
BULK = bulk download log – All output from EXEC-BULK-DOWNLOAD (currently disabled)
CALLCAPT = call capture log – All records of in-progress calls for which capture sessions have been initiated with the ENT-CALL-CAPT command (currently disabled)
CALLCAPTV = call capture verbose log – All records of in-progress calls for which capture sessions have been initiated with the ENT-CALL-CAPTVERBOSE command
FRAUD = fraud calls log – All records of calls designated as fraudulent
MSG = messages log – All TL1 commands entered into the system
SEC = security log – All logins, logouts, failed login attempt messages, etc.
SECBKUP = security backup log – All logins, logouts, failed login attempt messages, etc.
SYS = system log – All system messages (processes started, alarms, events, informational messages, etc.)

Default value: none

clrlog Controls the clearing of the log. There is no implementation difference between the values "CLR" and "DLT" to the TL1 user; both values delete the entire log file.

Type: enum

Range: CLR = Clear log
DLT = Delete log
NOCLR = Don't clear log

Default value: NOCLR

maxmsg Identifies the maximum number of messages to be logged. The patch (PATCH), bulk download (BULK), and call capture (CALLCAPT) logs can each have only a single message that contains the contents of the log file for the most recent patch install attempt or capture session.

Type: integer

Range: {1-9999}

Default value: 1000 for autonomous output log (AO)
1000 for messages log (MSG)
400 for security log (SEC)
1000 for system log (SYS)

Input Examples:

```
RTRV-ATTR-LOG;  
SET-ATTR-LOG::COM::MSG,NOCLR,1000;
```

Output Example:

```
      LUCENT 2005-06-24 14:37:49  
M    0  COMPLD  
      "SYS,500"  
      "MSG,1000"  
      "AO,1000"  
      "SEC,400"  
      ;
```

Related Commands:

RTRV-LOG

RTRV-LOG

Command:

RTRV-LOG: Retrieve Log

Description:

RTRV-LOG lets the user retrieve the contents of one of the logs.

Category: Log

Security: View

Input Format:

RTRV-LOG:[TID]:[<log_id>]:[CTAG]::<lognm>;

Output Format:

```
      SID DATE TIME
M  CTAG COMPLD
/*
  "<free-format-text log message 1>"
  "<free-format-text log message 2>"
  "<free-format-text log message 3>"
  .
  .
  .
  "<free-format-text log message n>"
  */
;
```

Parameters:

log_id Identifies the AID as the switch.
 Type: COM
 Range: COM
 Default value: COM

lognm Identifies the name of a log for which to retrieve the contents.

Type: enum

Range: AO = autonomous output log – All autonomous message output (a subset of the system log)
BKUP = backup log – All output from running backup scripts (success/failure messages, error messages, etc.)
BULK = bulk download log – All output from EXEC-BULK-DOWNLOAD (currently disabled)
CALLCAPT = call capture log – All records of in-progress calls for which capture sessions have been initiated with the ENT-CALL-CAPT command (currently disabled)
CALLCAPTV = call capture verbose log – All records of in-progress calls for which capture sessions have been initiated with the ENT-CALL-CAPTVERBOSE command
FRAUD = fraud calls log – All records of calls designated as fraudulent
MSG = messages log – All TL1 commands entered into the system
SEC = security log – All logins, logouts, failed login attempt messages, etc.
SECBKUP = security backup log – All logins, logouts, failed login attempt messages, etc.
SYS = system log – All system messages (processes started, alarms, events, informational messages, etc.)

Default value: none

Note: There are no output parameters – The normal response is the standard response block and the contents of the specified log.

Input Example:

```
RTRV-LOG::::MSG;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
/*
"2005-06-24 11:49:01:lucent:rtrv-eqpt"
"2005-06-24 11:49:28:lucent:rtrv-ss7-trk::1"
"2005-06-24 11:54:22::act-user::lucent::*****"
"2005-06-24 11:54:35:lucent:rtrv-log::::sec"
*/
;
```

Related Commands:

RTRV/SET-ATTR-LOG

CANC/DLT/ED/ENT/RTRV-USER-SECU

Commands:

CANC-USER-SECU: Cancel User Security

DLT-USER-SECU: Delete User Security

ED-USER-SECU: Edit User Security

ENT-USER-SECU: Enter User Security

RTRV-USER-SECU: Retrieve User Security

Descriptions:

CANC-USER-SECU lets an administrator terminate a user's existing TL1 session. The AID block contains the user identifier.

DLT-USER-SECU lets an administrator remove a user. The AID block contains the user identifier.

ED-USER-SECU allows an administrator to edit a user's access privileges, password, or password properties. The AID block contains the user identifier. Use this command to change the user's password, access privilege, password aging interval, password update grace period, time out interval, and whether the user is allowed to execute commands related to CALEA.

ENT-USER-SECU allows an administrator to add a user account. The AID block contains the user identifier. Use this command to set the user's password, access privilege, password aging interval, password update grace period, time out interval, and whether the user is allowed to execute commands related to CALEA.

RTRV-USER-SECU lets an administrator retrieve the privilege/security parameters of one or more users. It does not return users' passwords. Only an administrator may invoke the general version of this command.

Category: Security

Security: ADMIN for all commands

Input Formats:

```
CANC-USER-SECU: [TID]:<uid>:[CTAG];  
DLT-USER-SECU: [TID]:<uid>:[CTAG];  
ED-USER-SECU: [TID]:<uid>:[CTAG]: [<pid>], [<cid>],  
    [<uap>]: [PAGE=<page>], [PCND=<pcnd>],  
    [TMOUT=<tmout>], [CALEA=<calea>];  
ENT-USER-SECU: [TID]:<uid>:[CTAG]:<pid>,<cid>,<uap>:  
    [PAGE=<page>], [PCND=<pcnd>], [TMOUT=<tmout>],  
    [CALEA=<calea>];  
RTRV-USER-SECU: [TID]: [<uid>]: [CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
  "<uid>:<uap>:[PAGE=<page>], [PCND=<pcnd>],  
    [TMOUT=<tmout>], [CALEA=<calea>]"  
;
```

Parameters:

- | | |
|------------|--|
| uid | Identifies the user. The UID is the user ID or login name.
Type: string
Range: 8 – 16 alphanumeric characters
Default value: none |
| pid | Identifies the user's initial password, which should contain at least one number and one letter.
Type: string
Range: 8 – 16 alphanumeric characters
Default value: none |
| cid | Identifies the channel. This parameter is presently not supported; leave it blank for ED. For ENT, however, you must enter a value of any alphanumeric string up to 20 characters or the command will fail.
Type: string
Range: up to 20 alphanumeric characters
Default value: none |

uap Identifies the user's access privilege. The values in the range are defined in descending order of security. Higher levels include lower levels.

Type: enum

Range: ADMIN = Administrative permits the user to perform all TL1 commands including managing user accounts or profiles and downloading new software.

SW = SoftWare, in addition to all commands with security levels SA, NSA, and VIEW, allows the user to issue commands to download software. This level of access security applies to the System command CPY-MEM and all OS Access System commands.

SA = Service-Affecting, in addition to all commands with security levels NSA and VIEW, allows the user to issue service-affecting commands. This level applies to DSFacility, Equipment, Signalling, and Test commands, and System command ED-DAT.

NSA = Non-Service-Affecting, in addition to all commands with security level VIEW, allows the user to issue non-service-affecting commands. This level applies to Log commands, System commands (excepting CPY-MEM and ED-DAT), and Facility commands INIT-REG, ALW/INH/SCHED-PMREPT, and SET-TH.

VIEW = VIEW allows the user to issue RTRV commands (except RTRV-IPHOST-SECU and RTRV-USER-SECU, which are ADMIN level) to view the switch's status and statistics information. This lowest level of access security also applies to ACT-USER (to log on), CANC-USER (to log off), ED-PID (with which users can change their passwords), and to REPT autonomous messages.

Default value: none

page Indicates the password aging interval, in days. At the end of the interval the password expires and the user receives a prompt to replace the existing password. When greater than zero, *page* forces users to change their passwords. This limits the time in which an intruder who has learned a username/password pair can use that account. Setting the value of *page* to "0" makes the password perpetual. For typical long-term users, *page* is generally set to a value much greater than *passwdChgFreq* (set in ED-SYS-SECU). However, temporary users, who will have access for a period less than the value of *passwdChgFreq* and who must change passwords only on first use, can have values of *page* smaller than that set for *passwdChgFreq*.

Type: enum

Range: {0-999}, typically 45 to 60

Default value: 90

- pcnd** Indicates the number of days that a user can use the existing password after the password aging interval has elapsed before an update is mandatory.
Type: enum
Range: {0-999}, typically 7
Default value: 7
- tmout** Identifies the time out interval in minutes. If there are no messages between the user and the switch over the *tmout* interval, the session is logged off.
Type: enum
Range: {0-99}
Default value: 30
- calea** Identifies whether the user is allowed to execute commands related to CALEA (Communications Assistance to Law Enforcement Act). The user must already have an access privilege level of "SA" or higher.
Type: BoolYN
Range: Y = Enabled
N = Disabled
Default value: N

Input Examples:

```
CANC-USER-SECU: : JOHNUSER;  
DLT-USER-SECU: : JOHNUSER;  
ED-USER-SECU: : JOHNUSER: : : LUCENT, , VIEW:PAGE=90, PCND=7,  
    TMOUT=30, CALEA=N;  
ENT-USER-SECU: : JOHNUSER: : : LUCENT, NULL, VIEW:PAGE=90,  
    PCND=7, TMOUT=30, CALEA=N;  
RTRV-USER-SECU: : JOHNUSER;
```

Output Example:

```
    lucent 2005-06-24 14:37:49  
M    0  COMPLD  
    "JOHNUSER:VIEW:PAGE=45, PCND=7, TMOUT=30, CALEA=N"  
;
```

Related Commands:

ED-PID

DLT/ENT/RTRV-IPHOST-SECU

Commands:

DLT-IPHOST-SECU: Delete IPHOST Security

ENT-IPHOST-SECU: Enter IPHOST Security

RTRV-IPHOST-SECU: Retrieve IPHOST Security

Descriptions:

DLT-IPHOST-SECU allows an administrator to remove IP addresses from the list of addresses representing trusted hosts; that is, hosts that may connect to the switch.

ENT-IPHOST-SECU allows an administrator to create a list of IP addresses representing trusted hosts; that is, hosts that may connect to the switch.

RTRV-IPHOST-SECU allows an administrator to retrieve a list of IP addresses representing trusted hosts; that is, hosts that may connect to the switch.

Category: Security

Security: ADMIN for all commands

Input Formats:

DLT-IPHOST-SECU:[TID]:[<com>]:[CTAG]::<ipHosts>;

ENT-IPHOST-SECU:[TID]:[<com>]:[CTAG]::<ipHosts>;

RTRV-IPHOST-SECU:[TID]:[<com>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<com>:[<ipHosts>]"
;
```

Parameters:

com Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

iphhosts Identifies the trusted hosts (up to 250) to connect to or disconnect from the switch. Multiple trusted host addresses are separated by ampersands.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}&
{0-255}.{0-255}.{0-255}.{0-255}&...&
{0-255}.{0-255}.{0-255}.{0-255}

Default value: none

Input Examples:

```
DLT-IPHOST-SECU:::::  
192.168.0.204&192.168.0.207&192.168.0.208;  
  
ENT-IPHOST-SECU:::::  
192.168.0.204&192.168.0.207&192.168.0.208;  
  
RTRV-IPHOST-SECU;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"COM:192.168.0.204&192.168.0.207&192.168.0.208"  
;
```

Related Commands:

ED/RTRV-SYS-SECU

ED-PID

Command:

ED-PID: Edit Password

Description:

ED-PID allows users to change their passwords. Users must issue ED-PID after their initial log-ins to create encrypted passwords known only to them. Only users with Admin privilege can enter another user's identification and access changes.

Category: Security

Security: View

Input Format:

ED-PID: [TID]:<uid>:[CTAG]:<oldpid>,<newpid>;

Output Format: none

Parameters:

- | | |
|---------------|---|
| uid | Identifies the user. The UID is the user ID or login name.
Type: string
Range: 8 – 16 characters
Default value: none |
| oldpid | Identifies the user's old password, which should contain at least one number and one letter.
Type: string
Range: 8 – 16 characters
Default value: none |
| newpid | Identifies the user's new password, which should contain at least one number and one letter. The system prevents the user from reusing the most recently used five passwords (or the current password) when selecting a new password.
Type: string
Range: 8 – 16 characters
Default value: none |

Input Example:

```
ED-PID::JOHNUSER:::10LDPASSWORD,1NEWPASSWORD;
```

Related Commands:

```
DLT/ED/ENT/RTRV-USER-SECU
```

ED/RTRV-SYS-SECU

Commands:

ED-SYS-SECU: Edit System Security

RTRV-SYS-SECU: Retrieve System Security

Descriptions:

ED-SYS-SECU allows an administrator to edit security parameters associated with a Lucent switch. Use this command to set the maximum allowable number of invalid session setup attempts, the alert condition duration, the time out intervals, the period in which to generate a password expiration alert message, the lower limit for the password aging interval, the heartbeat interval, whether the TCP connection and trusted hosts are enabled, the assigned ports for alarm queue sessions and the Element Manager, the maximum elapsed time for a user to reconnect to the TL1 agent after an alarm queue session disconnect, the IP address for the Element Manager, whether secure shell is enabled, and the allowed interval between reported TL1 events or alarms.

RTRV-SYS-SECU allows a user to retrieve security parameters associated with a Lucent switch. Use this command to retrieve the maximum allowable number of invalid session setup attempts, the alert condition duration, the time out intervals, the period in which to generate a password expiration alert message, the lower limit for the password aging interval, whether the TCP connection and trusted hosts are enabled, the assigned port for alarm queue sessions and the Element Manager, the maximum elapsed time for a user to reconnect to the TL1 agent after an alarm queue session disconnect, the IP address for the Element Manager, whether secure shell is enabled, and the allowed interval between reported TL1 events or alarms.

Category: Security

Security: ADMIN for all commands

Input Formats:

```
ED-SYS-SECU:[TID]:[<src>]:[CTAG]::[MAXINV=<maxInv>],  
[DURAL=<dural>],[TMOUT=<tmout>],  
[PRELOGINTIMEOUT=<preLoginTimeOut>],  
[PASSWDEXPALERT=<passwdExpAlert>],  
[PASSWDCHGFREQ=<passwdChgFreq>],  
[HEARTBEAT=<heartbeat>],  
[TCPCONNENABLED=<tcpConnEnabled>],  
[TRUSTEDHOSTENABLED=<trustedHostEnabled>],  
[ALMQPORT=<almqPort>],[ALMQTMO=<almqTmo>],  
[EMPORT=<emPort>],[EM1IP=<em1Ip>],[EM2IP=<em2Ip>],  
[SSHENABLED=<sshEnabled>],  
[EVENTINTERVAL=<eventInterval>];  
RTRV-SYS-SECU:[TID]:[<src>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
" <src>:MAXINV=<maxInv>,DURAL=<dural>,  
TMOUT=<tmout>,PRELOGINTIMEOUT=<preLoginTimeOut>,  
PASSWDEXPALERT=<passwdExpAlert>,  
PASSWDCHGFREQ=<passwdChgFreq>,  
HEARTBEAT=<heartbeat>,  
TCPCONNENABLED=<tcpConnEnabled>,  
TRUSTEDHOSTENABLED=<trustedHostEnabled>,  
ALMQPORT=<almqPort>,ALMQTMO=<almqTmo>  
EMPORT=<emPort>,EM1IP=<em1Ip>,EM2IP=<em2Ip>,  
SSHENABLED=<sshEnabled>,  
EVENTINTERVAL=<eventInterval>"  
;
```

Parameters:

src Identifies the AID as the switch.
Type: COM
Range: COM
Default value: COM

- maxInv** Identifies the maximum number of invalid session setup attempts allowed (such as illegal user IDs or passwords) before an intrusion attempt is suspected and alert messages are generated. The factory default is “3”.
- Type:** enum
Range: {0-9}
Default value: not applicable
- dural** Identifies the duration of an alert condition in hours, minutes, and seconds during which the channel suspected of an intrusion attempt is locked out. This impedes the efficiency of an automated password cracker. It is not longer than one minute typically, because a longer duration could cause service deterioration. The factory default is “0-0-30”.
- Type:** enum
Range: {0-99}-{0-59}-{0-59}
Default value: not applicable
- tmout** Identifies the time out interval in minutes. If there are no messages between the user and the switch over the *tmout* interval, the session is logged off. The factory default is “30”.
- Type:** enum
Range: {0-99}
Default value: not applicable
- preLoginTimeOut** Identifies the time out interval in minutes for the period between the initialization of the login process and the first entry by the user. If there are no messages between the user and the switch over the *preLoginTimeOut* interval, the session is logged off. Setting the value to 0 allows a user to receive autonomous messages from the switch without logging on (ACT-USER) and without being disconnected automatically. The factory default is “2”.
- Type:** enum
Range: {0-99}
Default value: not applicable
- passwdExpAlert** Indicates the number of days, after the password aging interval has elapsed, that a password expiration alert message is generated for the user before the existing password can no longer be used. The factory default is “2”.
- Type:** enum
Range: {0-30}
Default value: not applicable

passwdChgFreq Indicates the minimum number of days a password exists before a user can change it. Generally, *passwdChgFreq* is the lower limit for the password aging interval, for which *page* (in ED/ENT-USER-SECU) is the upper limit. When greater than zero, *passwdChgFreq* prohibits frequent password changing. The system stores the most recently used five passwords and prevents the user from reusing them (or the current password) when selecting a new password. Restricting password "flipping" and reuse makes the system more secure against intruders. A *passwdChgFreq* value of 20 days (the default) ideally prevents reuse of a password for a minimum of 120 days. In reality, this waiting period may not be achieved; for instance, when an Administrator using ENT-USER-SECU or ED-USER-SECU sets a password, the user must change the password immediately. Passwords assigned by the Administrator are remembered in the user's recent password list; but as they do not have a *passwdChgFreq* waiting period, they can be reused in less than (6 * *passwdChgFreq*) days. (Note: the Administrator may reuse recent passwords in ED-USER-SECU.) Set *passwdChgFreq* to be considerably less than the smallest value of *page* assigned to typical long-term users. Temporary users, who will have access for a period less than the value of *passwdChgFreq* and who must change passwords only on first use, can have values of *page* smaller than that set for *passwdChgFreq*. The factory default is "20".

Type: enum

Range: {0-99}

Default value: not applicable

heartbeat Indicates the number of minutes that can pass without a REPT-COND automatic message being sent to the system administrators indicating the standing conditions on the switch. The REPT-COND automatic message is generated when no activity occurs within the heartbeat timeframe. Setting the value to the default of 0 deactivates the function. The factory default is "0".

Type: enum

Range: {0-120}

Default value: not applicable

tcpConnEnabled Indicates whether the TCP connection is enabled. The factory default is "Y".

Type: BoolYN

Range: Y = Enabled

N = Disabled (serial connections only)

Default value: not applicable

trustedHostEnabled Indicates whether the trusted host function is enabled; that is, whether the system can connect only to trusted hosts or is open to any connection. The factory default is “N”.

Type: BoolYN

Range: Y = Enabled (only trusted hosts can connect)
N = Disabled

Default value: not applicable

almqPort Identifies the port used for alarm queue sessions. The allowed range for *almqPort* precludes the use of any well-known TCP ports or ports already used by the switch. At present, the only value allowed is the factory default of “2363”.

Type: enum

Range: {1025-1109}
{1111-1198}
{1200-1982}
{1986-2048}
{2050-2359}
{2362-5999}
{6010-6666}
{6668-6999}
{7001-65535}

Default value: not applicable

almqTmo Identifies the maximum elapsed time, in minutes, for a user to reconnect to the TL1 agent after a session disconnect or anomalous condition is detected; that is, the maximum elapsed time during which alarm queuing can occur. If reconnection doesn’t occur within the time specified by *almqTmo*, the alarm queue session is removed from the list of active alarm queue sessions and the alarms in the affected queue are discarded. Setting *almqTmo* to “0” globally disables alarm queuing and flushes queued events. The factory default is 0 (alarm queuing disabled).

Type: enum

Range: {0-4320}

Default value: not applicable

emPort Identifies the port used to connect to the Element Manager. At present, the only value allowed is the factory default of “2362”.

Type: integer

Range: {1025-65535}

Default value: not applicable

em1Ip Identifies the IP address for the primary Element Manager. This address is required for interaction between the Element Manager and the switch running in secure mode; that is, when secure shell (SSH) is enabled. The factory default is “0.0.0.0”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

em2Ip Identifies the IP address for an optional secondary Element Manager. This address is required for interaction between the Element Manager and the switch running in secure mode; that is, when secure shell (SSH) is enabled. The factory default is “0.0.0.0”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

sshEnabled Identifies whether secure shell (SSH) is enabled. Setting the value to “Y” enables IP filtering, thus placing the box in secure mode by requiring the use of SSH for network access in place of common facilities such as telnet, rlogin and FTP. The factory default is “N”.

Type: BoolYN

Range: Y = SSH enabled

N = SSH disabled

Default value: not applicable

eventInterval Identifies the interval between TL1 events or alarms in milliseconds. The factory default is “150”.

Type: integer

Range: {50-500}

Default value: not applicable

Input Examples:

```
ED-SYS-SECU::COM:::MAXINV=3,DURAL=0-0-30,  
  TMOUT=30,PRELOGINTIMEOUT=2,PASSWDEXPALERT=7,  
  PASSWDCHGFREQ=20,HEARTBEAT=0,TCPCONNENABLED=Y,  
  TRUSTEDHOSTENABLED=N,ALMQPORT=2363,ALMQTMO=0,  
  EMPORT=2362,EM1IP=10.2.11.86,EM21P=0.0.0.0,  
  SSHENABLED=N,EVENTINTERVAL=150;  
RTRV-SYS-SECU;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"COM:MAXINV=3,DURAL=0-0-30,TMOUT=30,
  PRELOGINTIMEOUT=2,PASSWDEXPALERT=7,
  PASSWDCHGFREQ=20,HEARTBEAT=0,TCPCONNENABLED=Y,
  TRUSTEDHOSTENABLED=N,ALMQPORT=2363,ALMQTMO=0,
  EMPORT=2362,EM1IP=10.2.11.86,EM2IP=0.0.0.0,
  SSHENABLED=N,EVENTINTERVAL=150"
;
```

Related Commands:

ENT/RTRV-IPHOST-SECU RTRV-STATUS-ALMQ

RTRV/SET-ATTR-SECULOG

Commands:

RTRV-ATTR-SECULOG: Retrieve Attributes Security Log

SET-ATTR-SECULOG: Set Attributes Security Log

Descriptions:

RTRV-ATTR-SECULOG lets the user retrieve the security banner (that is, the free-format text warning, before access is granted, regarding unauthorized entry/use and possible consequences) for the switch.

SET-ATTR-SECULOG lets the user generate the security banner for the switch; that is, the free-format text warning, before access is granted, regarding unauthorized entry/use and possible consequences.

Description: RTRV-ATTR-SECULOG lets the user retrieve the security banner (that is, the free-format text warning, before access is granted, regarding unauthorized entry/use and possible consequences) for the switch.

Category: Security

Security: ADMIN for SET, View for RTRV

Input Formats:

```
RTRV-ATTR-SECULOG:[TID]:[<src>]:[CTAG]::  
[WRNLN=<wrnLn>];
```

```
SET-ATTR-SECULOG:[TID]:[<src>]:[CTAG]::WRNLN=<wrnLn>,  
[WRNTX=<wrnTx>];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
"<src>:WRNLN=<wrnLn>,WRNTX=<wrnTx>"  
;
```

Input Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

wrnLn Identifies, within the warning message, the line number that receives the new text specified by *wrnTx*. The switch supports up to 20 lines of text. A null value (in RTRV) is equivalent to “ALL”; that is, by leaving the field blank, the entire security banner will be returned.

Type: integer

Range: {1-20}

Default value: none

wrnTx Identifies the free-format text warning on the line identified by *wrnLn*. A null value (not entering a value) results in a blank line.

Type: string

Range: up to 61 ASCII characters

Default value: none

Input Examples:

```
RTRV-ATTR-SECULOG;
```

```
SET-ATTR-SECULOG:::::WRNLN=1,WRNTX=This is a private  
computer system. Unauthorized access or use ;
```

```
SET-ATTR-SECULOG:::::WRNLN=2,WRNTX= may lead to prosec  
ution.;
```

```
SET-ATTR-SECULOG:::::WRNLN=3;
```

Output Example:

```
LUCENT 2005-06-24 14:37:49
M 0 COMPLD
"COM:WRNLN=1,WRNTX=This is a private computer sys
    tem. Unauthorized access or use "
"COM:WRNLN=2,WRNTX= may lead to prosecution."
"COM:WRNLN=3,WRNTX="
"COM:WRNLN=4,WRNTX="
"COM:WRNLN=5,WRNTX="
"COM:WRNLN=6,WRNTX="
"COM:WRNLN=7,WRNTX="
"COM:WRNLN=8,WRNTX="
"COM:WRNLN=9,WRNTX="
"COM:WRNLN=10,WRNTX="
"COM:WRNLN=11,WRNTX="
"COM:WRNLN=12,WRNTX="
"COM:WRNLN=13,WRNTX="
"COM:WRNLN=14,WRNTX="
"COM:WRNLN=15,WRNTX="
"COM:WRNLN=16,WRNTX="
"COM:WRNLN=17,WRNTX="
"COM:WRNLN=18,WRNTX="
"COM:WRNLN=19,WRNTX="
"COM:WRNLN=20,WRNTX="
;
```

Related Commands: none

RTRV-STATUS-ALMQ

Command:

RTRV-STATUS-ALMQ: Retrieve Status Alarm Queue

Description:

RTRV-STATUS-ALMQ allows a user to retrieve parameters associated with alarm queuing sessions established for alarm queuing TCP ports defined with ED-SYS-SECU. Use this command to retrieve the affected alarm queuing session(s), the IP address for the switch, the date and time the session was established, the date and time alarm queuing began, the date and time of reconnection to the TL1 agent, and the current state of the alarm queue.

Category: Security

Security: View

Input Format:

RTRV-STATUS-ALMQ: [TID]: [<almqSessionId>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<almqSessionId>:SRCIPADDR=<srcIpAddr>,
    CONNECTTIMESTAMP=<connectTimestamp>,
    QUEUEINGTIMESTAMP=<queueingTimestamp>,
    REPLAYTIMESTAMP=<replayTimestamp>,
    ALMQSTATE=<almqState>"
;
```

Parameters:

almqSessionId Identifies the alarm queuing session for which to return status from the list of active alarm queuing sessions. *almqSessionID* is the hexadecimal representation of the IP address of the machine connecting to the alarm queue port. A null value is equivalent to "ALL"; that is, if the optional AID is omitted, the switch returns status for all sessions having alarm queuing enabled.

Type: AlmqSessionId

Range: up to eight hexadecimal characters

Default value: none

srcIpAddr Identifies the IP address for the client (that is, the user's computer) used to access the alarm queue session port on the switch (defined by the parameter *almqPort* in the command ED-SYS-SECU).

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

connectTimestamp Identifies the date and time that the alarm queuing session was established.

Type: string

Range: {MM-DD-YYYY-HH-MM-SS}

Default value: none

queueingTimestamp Identifies the date and time alarm queuing began due to an anomalous or error condition.

Type: string

Range: {MM-DD-YYYY-HH-MM-SS}

Default value: none

replayTimestamp Identifies the date and time the user reconnects to the TL1 agent after a session disconnect or anomalous condition is detected, and replay of queued alarms begins.

Type: string

Range: {MM-DD-YYYY-HH-MM-SS}

Default value: none

almqState Identifies the current state of an alarm queue established on disconnection with the switch of a specific session on a client.

Type: enum

Range: CONNECTED = the client session is not disconnected from the switch; alarms do not queue.

QUEUEING = the client session is disconnected from the switch; alarms queue for subsequent replay.

REPLAYING = the client session has reconnected to the switch, which outputs the queued autonomous messages to the client.

Default value: none

Input Example:

RTRV-STATUS-ALMQ;

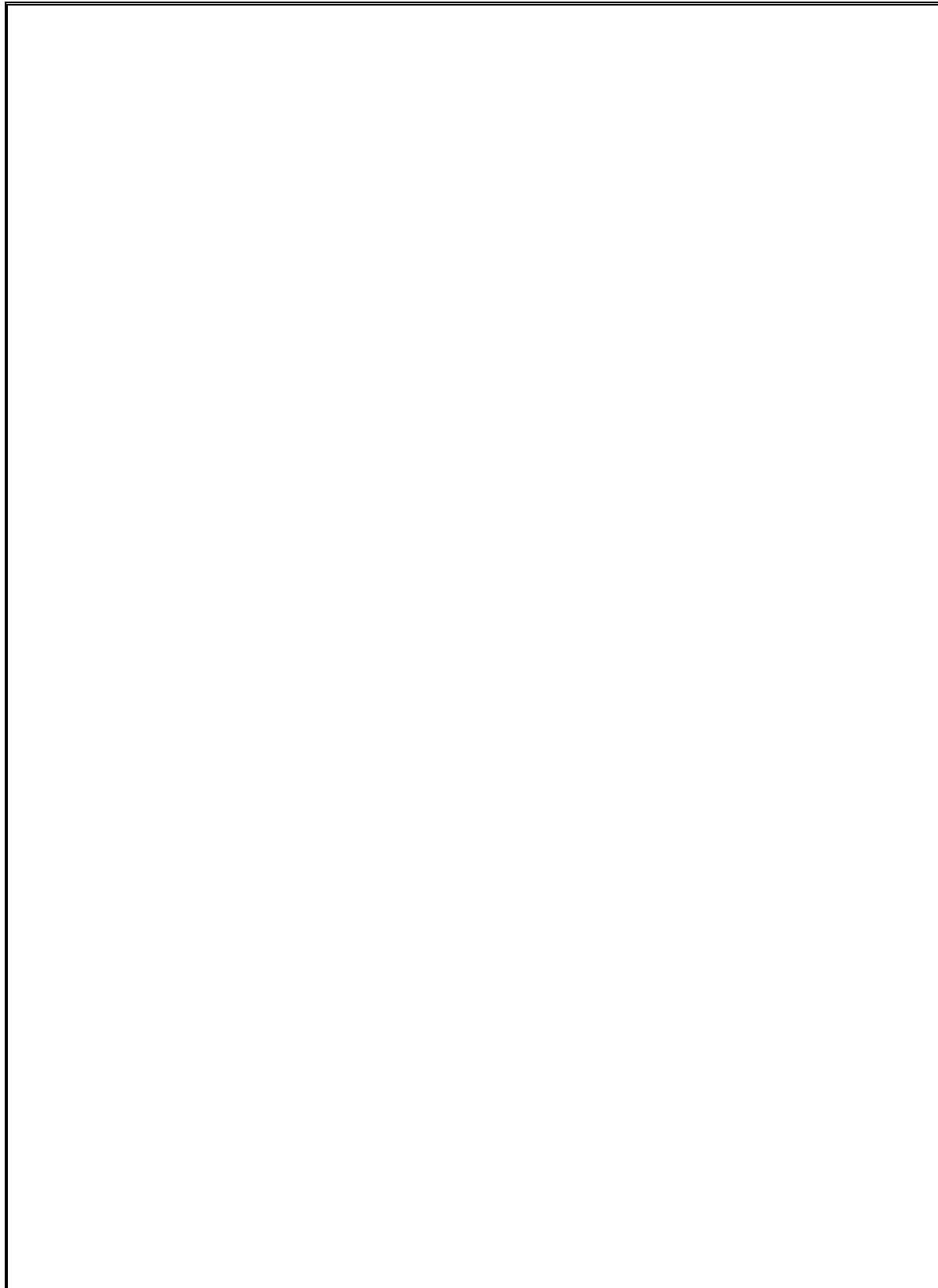
Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "a0a0002:SRCIPADDR=199.190.180.1,
    CONNECTTIMESTAMP=07-29-2004-08-35-00,
    QUEUEINGTIMESTAMP=07-29-2004-16-42-55,
    REPLAYTIMESTAMP=07-29-2004-16-55-27,
    ALMQSTATE=CONNECTED"
;
```

Related Commands:

ED/RTRV-SYS-SECU

NOTES

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DLT/ED/ENT/RTRV-LSET

Commands:

DLT-LSET: Delete Link Set

ED-LSET: Edit Link Set

ENT-LSET: Enter Link Set

RTRV-LSET: Retrieve Link Set

Descriptions:

DLT-LSET lets the user delete an SS7 link set.

ED-LSET lets the user change the maximum number of links that can be active for an SS7 link set.

ENT-LSET lets the user add an SS7 link set. ENT-LSET will not work correctly unless the following commands have already been issued in the listed order: ENT-PRFL-SGPC, ENT-SG-PCOWN, ENT-SG-PC.

RTRV-LSET lets the user retrieve parameters associated with an SS7 link set.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-LSET:[TID]:<lsetId>:[CTAG];  
ED-LSET:[TID]:<lsetId>:[CTAG]::  
    ACTLNKREQD=<actLnkReqd>;  
ENT-LSET:[TID]:<lsetId>:[CTAG]::OPC=<opc>,  
    ADJDPC=<adjDpc>,[ACTLNKREQD=<actLnkReqd>];  
RTRV-LSET:[TID]:[<lsetId>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
    "<lsetAid>:OPC=<opc>,ADJDPC=<adjDpc>,  
    ACTLNKREQD=<actLnkReqd>"  
;
```

Parameters:

- lsetId** Identifies the AID as an SS7 link set. A null value (in RTRV input) is equivalent to "ALL"; that is, by leaving the field blank, parameters for all SS7 link sets configured in the system will be returned.
Type: LsetAid
Range: {1-64}
Default value: none
- opc** Identifies the own point code associated with the link set. *opc* must be the same format as *adjDpc*; additionally, both point codes must use the same MTP variant and have the same sub-service field (*mtpVariant* and *pcSsf* in SG-PCOWN and SG-PC).
Type: string
Range: {0-255}-{0-255}-{0-255} for NANP (national) point codes
{0-16383} for international point codes
Default value: none
- adjDpc** Identifies the adjacent DPC to which the link set connects. *adjDpc* must be the same format as *opc*; additionally, both point codes must use the same MTP variant and have the same sub-service field (*mtpVariant* and *pcSsf* in SG-PCOWN and SG-PC).
Type: string
Range: {0-255}-{0-255}-{0-255} for NANP (national) point codes
{0-16383} for international point codes
Default value: none
- actLnkReqd** Identifies the maximum number of links that can be active at any given time.
Type: integer
Range: {1-16}
Default value: 16

Input Examples:

```
DLT-LSET::1;  
ED-LSET::1:::ACTLNKREQD=16;  
ENT-LSET::1:::OPC=23-186-5,ADJDPC=192-43-156,  
    ACTLNKREQD=16;  
RTRV-LSET::1;
```

Output Example:

```
          lucent 2005-06-24 14:37:49
M 0 COMPLD
    "1:OPC=23-186-5,ADJDPC=192-43-156,ACTLNKREQD=16"
;
```

Related Commands:

ED-STATE-LSET
RTRV-PM-LSET

INIT-REG-LSET
RTRV-STATUS-LSET

DLT/ED/ENT/RTRV-PRFL-SGPC

Commands:

DLT-PRFL-SGPC: Delete Profile Signaling Gateway Point Code

ED-PRFL-SGPC: Edit Profile Signaling Gateway Point Code

ENT-PRFL-SGPC: Enter Profile Signaling Gateway Point Code

RTRV-PRFL-SGPC: Retrieve Profile Signaling Gateway Point Code

Descriptions:

DLT-PRFL-SGPC lets the user delete a profile for a destination point code on a signaling gateway.

ED-PRFL-SGPC lets the user edit a profile for a destination point code on a signaling gateway. Use this command to change the values of MTP3 timers for a point code.

ENT-PRFL-SGPC lets the user add a profile for a destination point code on a signaling gateway.

RTRV-PRFL-SGPC lets the user retrieve a profile for a destination point code on a signaling gateway.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-PRFL-SGPC: [TID]:<pcPrflId>:[CTAG];

ED-PRFL-SGPC: [TID]:<pcPrflId>:[CTAG]::
[MTP3T6=<mtp3T6>],[MTP3T8=<mtp3T8>],
[MTP3T10=<mtp3T10>],[MTP3T11=<mtp3T11>],
[MTP3T18=<mtp3T18>],[MTP3ITUT19=<mtp3ITUT19>],
[MTP3ITUT21=<mtp3ITUT21>],[MTP3T25=<mtp3T25>],
[MTP3T28=<mtp3T28>],[MTP3T29=<mtp3T29>];

ENT-PRFL-SGPC: [TID]:<pcPrflId>:[CTAG]::
[MTP3T6=<mtp3T6>],[MTP3T8=<mtp3T8>],
[MTP3T10=<mtp3T10>],[MTP3T11=<mtp3T11>],
[MTP3T18=<mtp3T18>],[MTP3ITUT19=<mtp3ITUT19>],
[MTP3ITUT21=<mtp3ITUT21>],[MTP3T25=<mtp3T25>],
[MTP3T28=<mtp3T28>],[MTP3T29=<mtp3T29>];

RTRV-PRFL-SGPC: [TID]: [<pcPrflId>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<pcPrflId>:MTP3T6=<mtp3T6>,MTP3T8=<mtp3T8>,
MTP3T10=<mtp3T10>,MTP3T11=<mtp3T11>,
MTP3T18=<mtp3T18>,MTP3ITUT19=<mtp3ITUT19>],
MTP3ITUT21=<mtp3ITUT21>,MTP3T25=<mtp3T25>,
MTP3T28=<mtp3T28>,MTP3T29=<mtp3T29>"
;
```

Parameters:

pcPrflId Identifies the AID as a destination point code profile on a signaling gateway.

Type: PcPrflId
Range: {1-128}
Default value: none

mtp3T6 Identifies the Timer T6 value (in seconds) for the MTP3 layer. Timer T6 specifies the delay to avoid mis-sequencing on rerouting.

Type: decinum
Range: {0-200}
Default value: 0.5

mtp3T8 Identifies the Timer T8 value (in seconds) for the MTP3 layer. Timer T8 is the transfer prohibited inhibition timer.

Type: decinum
Range: {0-500}
Default value: 0.8

mtp3T10 Identifies the Timer T10 value (in seconds) for the MTP3 layer. Timer T10 is the route set test timer.

Type: decinum
Range: {0-100}
Default value: 30

mtp3T11 Identifies the Timer T11 value (in seconds) for the MTP3 layer. Timer T11 is the transfer restrict timer.

Type: decinum
Range: {0-100}
Default value: 65

mtp3T18 Identifies the Timer T18 value (in seconds) for the MTP3 layer. Timer T18 is the transfer restricted inhibition timer.

Type: decinum

Range: {0-100}

Default value: 10

mtp3ITUT19 Identifies the Timer T19 value (in seconds) for the MTP3 layer. Timer T19 is the MTP restart supervision timer for variant ITU-1992.

Type: decinum

Range: {0-100}

Default value: 68

mtp3ITUT21 Identifies the Timer T21 value (in seconds) for the MTP3 layer. Timer T21 is the remote MTP restart timer for variant ITU-1992.

Type: decinum

Range: {0-100}

Default value: 65

mtp3T25 Identifies the Timer T25 value (in seconds) for the MTP3 layer. Timer T25 specifies the period to wait for a TRAFFIC RESTART ALLOWED message.

Type: decinum

Range: {0-100}

Default value: 10

mtp3T28 Identifies the Timer T28 value (in seconds) for the MTP3 layer. Timer T28 specifies the period to wait for a TRAFFIC RESTART WAITING message from an adjacent restarting signaling point.

Type: decinum

Range: {0-100}

Default value: 5

mtp3T29 Identifies the Timer T29 value (in seconds) for the MTP3 layer. Timer T29 is started when a TRA is sent in response to an unexpected TRA or TRW.

Type: decinum

Range: {0-100}

Default value: 60

Input Examples:

```
DLT-PRFL-SGPC::1;  
ED-PRFL-SGPC::1::MTP3T6=0.5,MTP3T8=0.8,MTP3T10=30,  
MTP3T11=65,MTP3T18=10,MTP3ITUT19=68,MTP3ITUT21=65,  
MTP3T25=10,MTP3T28=5,MTP3T29=60;  
ENT-PRFL-SGPC::1::MTP3T6=0.5,MTP3T8=0.8,MTP3T10=30,  
MTP3T11=65,MTP3T18=10,MTP3ITUT19=68,MTP3ITUT21=65,  
MTP3T25=10,MTP3T28=5,MTP3T29=60;  
RTRV-PRFL-SGPC::1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"1:MTP3T6=0.5,MTP3T8=0.8,MTP3T10=30,MTP3T11=65,  
MTP3T18=10,MTP3ITUT19=68,MTP3ITUT21=65,  
MTP3T25=10,MTP3T28=5,MTP3T29=60"  
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-SG-PC    INIT-REG-SGPC  
RTRV-PM-SGPC
```

DLT/ED/ENT/RTRV-PRFL-SLKL2

Commands:

DLT-PRFL-SLKL2: Delete Profile Signaling Link Layer 2

ED-PRFL-SLKL2: Edit Profile Signaling Link Layer 2

ENT-PRFL-SLKL2: Enter Profile Signaling Link Layer 2

RTRV-PRFL-SLKL2: Retrieve Profile Signaling Link Layer 2

Descriptions:

DLT-PRFL-SLKL2 lets the user delete a signaling link MTP layer 2 profile.

ED-PRFL-SLKL2 lets the user edit a signaling link MTP layer 2 profile.

ENT-PRFL-SLKL2 lets the user add a signaling link MTP layer 2 profile.

RTRV-PRFL-SLKL2 lets the user retrieve a signaling link MTP layer 2 profile.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-PRFL-SLKL2: [TID]:<mtp2PrflId>:[CTAG];

ED-PRFL-SLKL2: [TID]:<mtp2PrflId>:[CTAG]::
[MTP2T1=<mtp2T1>],[MTP2T2=<mtp2T2>],
[MTP2T3=<mtp2T3>],[MTP2T5=<mtp2T5>],
[MTP2T6=<mtp2T6>],[MTP2T7=<mtp2T7>],
[MTP2PROVEMRGCY=<mtp2ProvEmrgcy>],
[MTP2PROVNORMAL=<mtp2ProvNormal>],
[MTP2AA=<mtp2AA>];

ENT-PRFL-SLKL2: [TID]:<mtp2PrflId>:[CTAG]::
[MTP2T1=<mtp2T1>],[MTP2T2=<mtp2T2>],
[MTP2T3=<mtp2T3>],[MTP2T5=<mtp2T5>],
[MTP2T6=<mtp2T6>],[MTP2T7=<mtp2T7>],
[MTP2PROVEMRGCY=<mtp2ProvEmrgcy>],
[MTP2PROVNORMAL=<mtp2ProvNormal>],
[MTP2AA=<mtp2AA>];

RTRV-PRFL-SLKL2: [TID]: [<mtp2PrflId>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<mtp2PrflId>:MTP2T1=<mtp2T1>,MTP2T2=<mtp2T2>,
    MTP2T3=<mtp2T3>,MTP2T5=<mtp2T5>,MTP2T6=<mtp2T6>,
    MTP2T7=<mtp2T7>,MTP2PROVEMRGCY=<mtp2ProvEmrgcy>,
    MTP2PROVNORMAL=<mtp2ProvNormal>,MTP2AA=<mtp2AA>"
;
```

Parameters:

mtp2PrflId Identifies the AID as an MTP layer 2 profile. A null value (in RTRV input) is equivalent to "ALL"; that is, by leaving the field blank, parameters for all MTP2 signaling link profiles configured in the system will be returned.

Type: Mtp2PrflId
Range: {1-128}
Default value: none

mtp2T1 Identifies the Timer T1 value (in seconds) for the MTP2 layer. This is the ALIGNMENT READY timer.

Type: integer
Range: {0-50}
Default value: 13

mtp2T2 Identifies the Timer T2 value (in seconds) for the MTP2 layer. This is the NOT ALIGNED timer.

Type: integer
Range: {0-150}
Default value: 11.5

mtp2T3 Identifies the Timer T3 value (in seconds) for the MTP2 layer. This is the ALIGNED timer.

Type: integer
Range: {0-15}
Default value: 11.5

mtp2T5 Identifies the Timer T5 value (in seconds) for the MTP2 layer. This is the SENDING SIB timer.

Type: integer
Range: {0-0.3}
Default value: 0.1

mtp2T6 Identifies the Timer T6 value (in seconds) for the MTP2 layer. This is the remote congestion timer.

Type: integer

Range: {0-6}

Default value: 3

mtp2T7 Identifies the Timer T7 value (in seconds) for the MTP2 layer. This is the excessive delay of acknowledgement timer.

Type: integer

Range: {0-2}

Default value: 0.5

mtp2ProvEmrgcy Identifies the emergency proving period timer value in seconds.

Type: integer

Range: {0-2}

Default value: 0.6

mtp2ProvNormal Identifies the normal proving period timer value in seconds.

Type: integer

Range: {0-10}

Default value: 2.3

mtp2AA Identifies the maximum number of alignment attempts allowed.

Type: integer

Range: {0-15}

Default value: 5

Input Examples:

```
DLT-PRFL-SLKL2::1;
```

```
ED-PRFL-SLKL2::1::MTP2T1=13,MTP2T2=11.5,  
MTP2T3=11.5,MTP2T5=0.1,MTP2T6=3,MTP2T7=0.5,  
MTP2PROVEMRGY=0.6,MTP2PROVNORMAL=2.3,MTP2AA=5;
```

```
ENT-PRFL-SLKL2::1::MTP2T1=13,MTP2T2=11.5,  
MTP2T3=11.5,MTP2T5=0.1,MTP2T6=3,MTP2T7=0.5,  
MTP2PROVEMRGY=0.6,MTP2PROVNORMAL=2.3,MTP2AA=5;
```

```
RTRV-PRFL-SLKL2::1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"1:MTP2T1=13,MTP2T2=11.5,MTP2T3=11.5,MTP2T5=0.1,
  MTP2T6=3,MTP2T7=0.5,MTP2PROVEMRGCY=0.6,
  MTP2PROVNORMAL=2.3,MTP2AA=5"
;
```

Related Commands:

INIT-REG-SLKL2

RTRV-PM-SLKL2

DLT/ED/ENT/RTRV-PRFL-SLKL3

Commands:

DLT-PRFL-SLKL3: Delete Profile Signaling Link Layer 3

ED-PRFL-SLKL3: Edit Profile Signaling Link Layer 3

ENT-PRFL-SLKL3: Enter Profile Signaling Link Layer 3

RTRV-PRFL-SLKL3: Retrieve Profile Signaling Link Layer 3

Descriptions:

DLT-PRFL-SLKL3 lets the user delete a signaling link MTP layer 3 profile.

ED-PRFL-SLKL3 lets the user edit a signaling link MTP layer 3 profile.

ENT-PRFL-SLKL3 lets the user add a signaling link MTP layer 3 profile.

RTRV-PRFL-SLKL3 lets the user retrieve a signaling link MTP layer 3 profile.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-PRFL-SLKL3: [TID]:<mtp3PrflId>:[CTAG];

ED-PRFL-SLKL3: [TID]:<mtp3PrflId>:[CTAG]::
[MTP3T1=<mtp3T1>],[MTP3T2=<mtp3T2>],
[MTP3T3=<mtp3T3>],[MTP3T4=<mtp3T4>],
[MTP3T5=<mtp3T5>],[MTP3T7=<mtp3T7>],
[MTP3T12=<mtp3T12>],[MTP3T13=<mtp3T13>],
[MTP3T14=<mtp3T14>],[MTP3T19=<mtp3T19>],
[MTP3T17=<mtp3T17>],[MTP3T20=<mtp3T20>],
[MTP3T21=<mtp3T21>],[MTP3ITUT22=<mtp3ITUT22>],
[MTP3ITUT23=<mtp3ITUT23>],[MTP3TSTT1=<mtp3TstT1>],
[MTP3TSTT2=<mtp3TstT2>],[MTP3T31=<mtp3T31>],
[MTP3T33=<mtp3T33>],[MTP3T34=<mtp3T34>];

```
ENT-PRFL-SLKL3:[TID]:<mtp3PrflId>:[CTAG]::
[MTP3T1=<mtp3T1>],[MTP3T2=<mtp3T2>],
[MTP3T3=<mtp3T3>],[MTP3T4=<mtp3T4>],
[MTP3T5=<mtp3T5>],[MTP3T7=<mtp3T7>],
[MTP3T12=<mtp3T12>],[MTP3T13=<mtp3T13>],
[MTP3T14=<mtp3T14>],[MTP3T19=<mtp3T19>],
[MTP3T17=<mtp3T17>],[MTP3T20=<mtp3T20>],
[MTP3T21=<mtp3T21>],[MTP3ITUT22=<mtp3ITUT22>],
[MTP3ITUT23=<mtp3ITUT23>],[MTP3TSTT1=<mtp3TstT1>],
[MTP3TSTT2=<mtp3TstT2>],[MTP3T31=<mtp3T31>],
[MTP3T33=<mtp3T33>],[MTP3T34=<mtp3T34>];

RTRV-PRFL-SLKL3:[TID]:[<mtp3PrflId>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<mtp3PrflId>:MTP3T1=<mtp3T1>,MTP3T2=<mtp3T2>,
MTP3T3=<mtp3T3>,MTP3T4=<mtp3T4>,MTP3T5=<mtp3T5>,
MTP3T7=<mtp3T7>,MTP3T12=<mtp3T12>,
MTP3T13=<mtp3T13>,MTP3T14=<mtp3T14>,
MTP3T19=<mtp3T19>,MTP3T17=<mtp3T17>,
MTP3T20=<mtp3T20>,MTP3T21=<mtp3T21>,
MTP3ITUT22=<mtp3ITUT22>,MTP3ITUT23=<mtp3ITUT23>,
MTP3TSTT1=<mtp3TstT1>,MTP3TSTT2=<mtp3TstT2>,
MTP3T31=<mtp3T31>,MTP3T33=<mtp3T33>,
MTP3T34=<mtp3T34>"
;
```

Parameters:

mtp3PrflId Identifies the AID as an MTP layer 3 profile. A null value (in RTRV input) is equivalent to "ALL"; that is, by leaving the field blank, parameters for all MTP3 signaling link profiles configured in the system will be returned.

Type: Mtp3PrflId

Range: {1-20}

Default value: none

mtp3T1 Identifies the Timer T1 value (in seconds) for the MTP3 layer. Timer T1 (for all variants) specifies the delay to avoid mis-sequencing on changeover.

Type: integer

Range: {0-150}

Default value: 0.8

- mtp3T2** Identifies the Timer T2 value (in seconds) for the MTP3 layer. Timer T2 (for all variants) specifies the period to wait for changeover acknowledgement.
- Type:** integer
Range: {0-500}
Default value: 1.4
- mtp3T3** Identifies the Timer T3 value (in seconds) for the MTP3 layer. Timer T3 (for all variants) specifies the delay to avoid mis-sequencing on changeback.
- Type:** integer
Range: {0-200}
Default value: 0.8
- mtp3T4** Identifies the Timer T4 value (in seconds) for the MTP3 layer. Timer T4 (for all variants) specifies the period to wait for the first changeback acknowledgement.
- Type:** integer
Range: {0-200}
Default value: 0.8
- mtp3T5** Identifies the Timer T5 value (in seconds) for the MTP3 layer. Timer T5 (for all variants) specifies the period to wait for the second changeback acknowledgement.
- Type:** integer
Range: {0-200}
Default value: 0.8
- mtp3T7** Identifies the Timer T7 value (in seconds) for the MTP3 layer. Timer T7 (for all variants) specifies the period to wait for a link connection acknowledgement.
- Type:** integer
Range: {0-5}
Default value: 1
- mtp3T12** Identifies the Timer T12 value (in seconds) for the MTP3 layer. Timer T12 (for all variants) specifies the period to wait for an uninhibit acknowledgement.
- Type:** integer
Range: {0-200}
Default value: 1

mtp3T13 Identifies the Timer T13 value (in seconds) for the MTP3 layer. Timer T13 (for all variants) specifies the period to wait for a force uninhibit message.

Type: integer
Range: {0-200}
Default value: 0.8

mtp3T14 Identifies the Timer T14 value (in seconds) for the MTP3 layer. Timer T14 (for all variants) specifies the period to wait for an inhibition acknowledgement.

Type: integer
Range: {0-5}
Default value: 2

mtp3T17 Identifies the Timer T17 value (in seconds) for the MTP3 layer. Timer T17 (for all variants) specifies the delay to avoid oscillation of initial alignment failure and link restart.

Type: integer
Range: {0-200}
Default value: 1.5

mtp3T19 Identifies the Timer T19 value (in seconds) for the MTP3 layer. Timer T19 (for the ANSI variant) specifies how long to attempt restoring a failed link.

Type: integer
Range: {480-600}
Default value: 480

mtp3T20 Identifies the Timer T20 value (in seconds) for the MTP3 layer. Timer T20 is the local inhibit test timer for the ANSI variant.

Type: integer
Range: {0-200}
Default value: 90

mtp3T21 Identifies the Timer T21 value (in seconds) for the MTP3 layer. Timer T21 is the remote inhibit test timer for the ANSI variant.

Type: integer
Range: {0-200}
Default value: 90

- mtp3ITUT22** Identifies the Timer T22 value (in seconds) for the MTP3 layer. Timer T22 is the local inhibit test timer for variants ITU-1988 and ITU-1992.
- Type:** integer
Range: {0-600}
Default value: 180
- mtp3ITUT23** Identifies the Timer T23 value (in seconds) for the MTP3 layer. Timer T23 is the remote inhibit test timer for variants ITU-1988 and ITU-1992.
- Type:** integer
Range: {0-600}
Default value: 180
- mtp3TstT1** Identifies the Test Timer T1 value (in seconds) for the MTP3 layer. Test Timer T1 (for all variants) is the Signaling Link Test message Acknowledgement (SLTA) timer described in GR-246-CORE, chapter T1.111.7.
- Type:** integer
Range: {0-100}
Default value: 8
- mtp3TstT2** Identifies the Test Timer T2 value (in seconds) for the MTP3 layer. Test Timer T2 (for all variants) is the periodic Signaling Link Test Message (SLTM) timer described in GR-246-CORE, chapter T1.111.7.
- Type:** integer
Range: {0-100}
Default value: 60
- mtp3T31** Identifies the Timer T31 value (in seconds) for the MTP3 layer. Timer T31 is the false link congestion detection timer for the ANSI variant.
- Type:** integer
Range: {0-200}
Default value: 30
- mtp3T33** Identifies the Timer T33 value (in seconds) for the MTP3 layer. Timer T33 is the probation timer for link oscillation for the ANSI variant.
- Type:** integer
Range: {0-600}
Default value: 100

mtp3T34 Identifies the Timer T34 value (in seconds) for the MTP3 layer. Timer T34 is the suspension timer for link oscillation for the ANSI variant.

Type: integer

Range: {0-200}

Default value: 10

Input Examples:

```
DLT-PRFL-SLKL3::1;
```

```
ED-PRFL-SLKL3::1::MTP3T1=0.8,MTP3T2=1.4,MTP3T3=0.8,  
MTP3T4=0.8,MTP3T5=0.8,MTP3T7=1,MTP3T12=1,  
MTP3T13=0.8,MTP3T14=2,MTP3T17=1.5,MTP3T19=480,  
MTP3T20=90,MTP3T21=90,MTP3ITUT22=180,  
MTP3ITUT23=180,MTP3TSTT1=8,MTP3TSTT2=60,MTP3T31=30,  
MTP3T33=100,MTP3T34=10;
```

```
ENT-PRFL-SLKL3::1::MTP3T1=0.8,MTP3T2=1.4,MTP3T3=0.8,  
MTP3T4=0.8,MTP3T5=0.8,MTP3T7=1,MTP3T12=1,  
MTP3T13=0.8,MTP3T14=2,MTP3T17=1.5,MTP3T19=480,  
MTP3T20=90,MTP3T21=90,MTP3ITUT22=180,  
MTP3ITUT23=180,MTP3TSTT1=8,MTP3TSTT2=60,MTP3T31=30,  
MTP3T33=100,MTP3T34=10;
```

```
RTRV-PRFL-SLKL3::1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"1:MTP3T1=0.8,MTP3T2=1.4,MTP3T3=0.8,MTP3T4=0.8,  
MTP3T5=0.8,MTP3T7=1,MTP3T12=1,MTP3T13=0.8,  
MTP3T14=2,MTP3T17=1.5,MTP3T19=480,MTP3T20=90,  
MTP3T21=90,MTP3ITUT22=180,MTP3ITUT23=180,  
MTP3TSTT1=8,MTP3TSTT2=60,MTP3T31=30,MTP3T33=100,  
MTP3T34=10"  
;
```

Related Commands:

INIT-REG-SLKL3

RTRV-PM-SLKL3

DLT/ENT/RTRV-ROUTE-SS7

Commands:

DLT-ROUTE-SS7: Delete SS7 Route

ENT-ROUTE-SS7: Enter SS7 Route

RTRV-ROUTE-SS7: Retrieve SS7 Route

Descriptions:

DLT-ROUTE-SS7 lets the user delete an SS7 route.

ENT-ROUTE-SS7 lets the user establish an SS7 route. Use ENT-ROUTE-SS7 to establish the point code, the link set identity, and the link set priority. You can establish no more than four routes for each point code. ENT-ROUTE-SS7 will not work correctly unless the following commands have already been issued in the listed order: ENT-PRFL-SGPC, ENT-SG-PCOWN, ENT-SG-PC, and ENT-LSET.

RTRV-ROUTE-SS7 lets the user retrieve the link set priority associated with a link set in an SS7 route.

Category: Signaling

Security: SA for DLT and ENT, View for RTRV

Input Formats:

DLT-ROUTE-SS7:[TID]:<routeSs7>:[CTAG];

ENT-ROUTE-SS7:[TID]:<routeSs7>:[CTAG]::
[LSETPRIORITY=<lsetPriority>];

RTRV-ROUTE-SS7:[TID]:[<routeSs7>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<routeSs7>:LSETPRIORITY=<lsetPriority>"
;
```

Parameters:

routeSs7 Identifies the AID as an SS7 route. The pattern is a combination of the destination point code and the link set connecting to it. You can establish no more than four routes for each point code. A null value (in RTRV input) is equivalent to "ALL"; that is, by leaving the field blank, parameters for all SS7 routes configured in the system will be returned.

Type: RouteSs7Aid

Range: <pcId>-<lsetId>, where

pcId = {0-255}-{0-255}-{0-255} for NANP point codes
 {0-16383} for international point codes
 DEF_ANSI = Default NANP point code
 DEF_ITU = Default international point code
lsetId = {1-64}

Default value: none

lsetPriority Identifies the priority for the link set, with lower numbers indicating higher priority. Priorities must be assigned contiguously for a given point code; for example, for a single point code, you cannot have multiple link sets, some with priority "1" and the rest with priority "3".

Type: enum

Range: {0-3}

Default value: 0

Input Examples:

```
DLT-ROUTE-SS7::3-4-5-16;  
ENT-ROUTE-SS7::3-4-5-16::LSETPRIORITY=0;  
RTRV-ROUTE-SS7::3-4-5-16;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"3-4-5-16:LSETPRIORITY=0"  
;
```

Related Commands:

```
INIT-REG-ROUTESS7          RTRV-PM-ROUTESS7  
RTRV-STATUS-ROUTESS7
```

DLT/ED/ENT/RTRV-SLK

Commands:

DLT-SLK: Delete Signaling Link

ED-SLK: Edit Signaling Link

ENT-SLK: Enter Signaling Link

RTRV-SLK: Retrieve Signaling Link

Descriptions:

DLT-SLK lets the user delete a signaling link.

ED-SLK lets the user edit a signaling link. Use this command to assign profiles to signaling links.

ENT-SLK lets the user add a signaling link. You can have up to four signaling links on any I/O module. Use ENT-SLK to assign profiles to signaling links. The three *congestionThreshold* parameters define the onset thresholds for the three congestion levels. Each onset threshold (*congestionThreshold*) is the discard threshold for the immediately preceding congestion level; that is, once the congestion level reaches *n*, MTP3 discards the congestion level *n-1* messages. The abatement threshold for each congestion level is the average of the onset thresholds for the concerned congestion level and the immediately preceding congestion level; for example, the abatement threshold for congestion level 2 is the average of *congestionThreshold1* and *congestionThreshold2*. ENT-SLK will not work correctly unless the following commands have already been issued: ENT-T1, ENT-PRFL-SLKL2, ENT-PRFL-SLKL3, and ENT-LSET.

RTRV-SLK lets the user retrieve parameters associated with a signaling link. Use RTRV-SLK to retrieve the link's location (slot/port/channel), MTP2 profile, link set identity, link selection code, MTP3 profile, speed, priority level, and congestion thresholds.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-SLK: [TID]:<ss7LnkId>: [CTAG];  
ED-SLK: [TID]:<ss7LnkId>: [CTAG]:: [SLC=<slc>],  
    [MTP2PRFLID=<mtp2PrflId>],  
    [MTP3PRFLID=<mtp3PrflId>], [CONGLVL1=<congLv11>],  
    [CONGLVL2=<congLv12>], [CONGLVL3=<congLv13>],  
    [ENABLEMTP3T31=<enableMtp3T31>],  
    [RESETMTP3T31=<resetMtp3T31>];  
ENT-SLK: [TID]:<ss7LnkId>: [CTAG]:: IOMPORT=<iomPort>,  
    CHAN=<chan>, LSETID=<lsetId>, SLC=<slc>,  
    MTP2PRFLID=<mtp2PrflId>, MTP3PRFLID=<mtp3PrflId>,  
    [LNKSPEED=<lnkSpeed>], [LNKPRIORITY=<lnkPriority>],  
    [CONGLVL1=<congLv11>], [CONGLVL2=<congLv12>],  
    [CONGLVL3=<congLv13>],  
    [ENABLEMTP3T31=<enableMtp3T31>],  
    [RESETMTP3T31=<resetMtp3T31>];  
RTRV-SLK: [TID]: [<ss7LnkId>]: [CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
    "<ss7LnkId>: IOMPORT=<iomPort>, CHAN=<chan>,  
    LSETID=<lsetId>, SLC=<slc>,  
    MTP2PRFLID=<mtp2PrflId>, MTP3PRFLID=<mtp3PrflId>,  
    LNKSPEED=<lnkSpeed>, LNKPRIORITY=<lnkPriority>,  
    CONGLVL1=<congLv11>, CONGLVL2=<congLv12>,  
    CONGLVL3=<congLv13>,  
    ENABLEMTP3T31=<enableMtp3T31>,  
    RESETMTP3T31=<resetMtp3T31>"  
;
```

Parameters:

ss7LnkId Identifies the AID as a signaling link. There can be no more than 16 signaling links in a link set. A null value (in RTRV input) is equivalent to "ALL"; that is, by leaving the field blank, parameters for all signaling links configured in the system will be returned.

Type: Ss7LnkAid

Range: {1-64}

Default value: none

- iomPort** Identifies the DS1 port on the I/O module.
Type: enum
Range: IOM-{1-17}-E1-{1-28}
IOM-{1-17}-PORT-{1-28}
IOM-{1-17}- T3-{1-8}-PORT-{1-28}
IOM-{1-17}- STS1-{1-8}-PORT-{1-28}
Default value: none
- chan** Identifies the DS0 channel on the port.
Type: integer
Range: {1-31}
Default value: none
- lsetId** Identifies the link set.
Type: enum
Range: {1-64}
Default value: none
- slc** Identifies the link selection code, which represents a single link in a specific link set.
Type: integer
Range: {0-15}
Default value: none
- mtp2PrflId** Identifies the MTP layer 2 profile.
Type: enum
Range: {1-128}
Default value: none
- mtp3PrflId** Identifies the MTP layer 3 profile.
Type: enum
Range: {1-128}
Default value: none
- lnkSpeed** Identifies the link speed.
Type: enum
Range: 56K
64K
Default value: 64K

lnkPriority Identifies the link priority level for the link within its link set, with lower numbers indicating higher priority. At least one link in a link set must have priority 0 to enable call routing over the link set. Multiple priorities within a link set must be contiguous.

Type: enum
Range: {0-3}
Default value: 0

congLvl1 Identifies the onset threshold for congestion level 1 in MTP3. It is not activated until the number of messages queued at MTP2 reaches 250.

Type: integer
Range: {1-65536}
Default value: 250

congLvl2 Identifies the onset threshold for congestion level 2 in MTP3. It is not activated until the number of messages queued at MTP2 reaches 250 and the number of messages queued at MTP3 reaches the value specified for *congestionThreshold1*.

Type: integer
Range: {1-65536}
Default value: 500

congLvl3 Identifies the onset threshold for congestion level 3 in MTP3. It is not activated until the number of messages queued at MTP2 reaches 250 and the number of messages queued at MTP3 reaches the value specified for *congestionThreshold2*.

Type: integer
Range: {1-65536}
Default value: 750

enableMtp3T31 Identifies whether congestion timer T31 is enabled for congestion level 1.

Type: BoolYN
Range: N = T31 not enabled
Y = T31 enabled
Default value: Y

resetMtp3T31 Identifies whether congestion timer T31 is reset when the congestion level increases.

Type: BoolYN
Range: N = T31 not reset
Y = T31 reset
Default value: N

Input Examples:

```
DLT-SLK::1;  
ED-SLK::1:::SLC=1,MTP2PRFLID=1,MTP3PRFLID=1,  
    CONGLVL1=250,CONGLVL2=500,CONGLVL3=750,  
    ENABLEMTP31=Y,RESETMTP31=N;  
ENT-SLK::1:::IOMPORT=IOM-1-PORT-1,CHAN=24,LSETID=1,  
    SLC=0,MTP2PRFLID=1,MTP3PRFLID=1,LNKSPEED=64K,  
    LNKPRIORITY=0,CONGLVL1=250,CONGLVL2=500,  
    CONGLVL3=750,ENABLEMTP31=Y,RESETMTP31=N;  
RTRV-SLK::1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"1:IOMPORT=IOM-1-PORT-1,CHAN=24,LSETID=1,SLC=0,  
    MTP2PRFLID=1,MTP3PRFLID=1,LNKSPEED=64K,  
    LNKPRIORITY=0,CONGLVL1=250,CONGLVL2=500,  
    CONGLVL3=750,ENABLEMTP31=Y,RESETMTP31=N"  
;
```

Related Commands:

ED-STATE-SLK
RTRV-PM-SLK

INIT-REG-SLK
RTRV-STATUS-SLK

ED-STATE-LSET

Command:

ED-STATE-LSET: Edit State Link Set

Description:

ED-STATE-LSET lets the user change the state of a link set.

Category: Signaling

Security: SA

Input Format:

ED-STATE-LSET:[TID]:<lsetId>:[CTAG]::<pst>;

Output Format: none

Parameters:

lsetId Identifies the link set.

Type: LsetAid

Range: {1-64}

Default value: none

pst Identifies the primary state of a signaling link.

Type: enum

Range: IS = In-service

OOS = Out-of-service

Default value: none

Input Example:

ED-STATE-LSET::1::IS;

Related Messages:

RTRV-STATUS-LSET

ED-STATE-SLK

Command:

ED-STATE-SLK: Edit State Signaling Link

Description:

ED-STATE-SLK lets the user change the state of a signaling link.

Category: Signaling

Security: SA

Input Format:

ED-STATE-SLK: [TID]:<ss7LnkId>:[CTAG]::<pst>;

Output Format: none

Input Parameters:

ss7LnkId Identifies the signaling link.

Type: LsetAid

Range: {1-64}

Default value: none

pst Identifies the state of the signaling link.

Type: enum

Range: INH = Inhibited

IS = In service

OOS = Out of service

UNINH = Uninhibited

Default value: none

Input Example:

ED-STATE-SLK::1:::IS;

Related Messages:

RTRV-STATUS-SLK

INIT-REG-LSET / RTRV-PM-LSET

Commands:

INIT-REG-LSET: Initialize Register Link Set

RTRV-PM-LSET: Retrieve Performance Monitors Link Set

Descriptions:

INIT-REG-LSET lets the user clear the counters for statistics gathered from a link set.

RTRV-PM-LSET lets the user retrieve current and historical performance data gathered from a link set.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

INIT-REG-LSET:[TID]:<lsetId>:[CTAG]::[<montype>],
[<monval>],[<locn>],[<dirn>;

RTRV-PM-LSET:[TID]:<lsetId>:[CTAG]::[<montype>],
[<monlev>],[<locn>],[<dirn>;

Output Format:

```
          SID DATE TIME
M  CTAG COMPLD
    "<lsetId>:<montype>,<monval>,<monlev>,<locn>,<dirn>"
;
```

Parameters:

lsetId Identifies the AID as a link set.

Type: LsetId

Range: {1-64}

Default value: none

- montype** Identifies the registers (for a type of monitored parameter) to initialize or from which to retrieve performance data. "ALL" is the only valid input value.
- Type:** enum
- Range:** ALL = All types
DURLSETUNAV = Duration in minutes of link set unavailability
LASTINITNA = Number of minutes since initialization of all counters for which there is no direction (neither RCV nor TRMT)
STARTLSETFAIL = Number of times the link set has failed since initialization of all counters
STOPLSETFAIL = Number of times the link set has become active (after failure) since initialization of all counters
- Default value:** ALL
-
- monval** Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized. The value is in the form of numeric counts or rates. The value "0" is currently the only acceptable input value.
- Type:** integer
- Range:** {0 – 4294967295}
- Default value:** 0
-
- monlev** Identifies the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
- Type:** enum
- Range:** {0-255}-{UP,DOWN}
- Default value:** 1-UP
-
- locn** Identifies the location of the storage counters to initialize or from which to retrieve performance data. Currently only NEND is supported.
- Type:** enum
- Range:** NEND = near end
- Default value:** NEND

dirn Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.

Type: enum

Range: ALL = All directions

NA = Direction not applicable

RCV = Receive direction only

TRMT = Transmit direction only

Default value: ALL

Input Examples:

```
INIT-REG-LSET::1:::ALL;
```

```
RTRV-PM-LSET;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"1:STARTLSETFAIL,1,1-UP,NEND,ALL"
"1:STOPLSETFAIL,2,1-UP,NEND,ALL"
"1:LASTINITNA,101,1-UP,NEND,ALL"
"1:DURLSETUNAV,7,1-UP,NEND,ALL"
;
```

Related Commands:

```
RTRV-STATUS-LSET
```

INIT-REG-MTP3 / RTRV-PM-MTP3

Commands:

INIT-REG-MTP3: Initialize Register MTP3

RTRV-PM-MTP3: Retrieve Performance Monitors MTP3

Descriptions:

INIT-REG-MTP3 lets the user clear the counters for statistics concerning MTP3 signaling links.

RTRV-PM-MTP3 lets the user retrieve current and historical performance data gathered from MTP3 signaling links.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

INIT-REG-MTP3:[TID]:[<src>]:[CTAG]::[<montype>],
[<monval>],[<locn>],[<dirn>;

RTRV-PM-MTP3:[TID]:[<src>]:[CTAG]::[<montype>],
[<monlev>],[<locn>],[<dirn>;

Output Format:

```
          SID DATE TIME
M  CTAG COMPLD
   "<src>:<montype>,<monval>,<monlev>,<locn>,<dirn>"
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

montype Identifies the registers (for a type of monitored parameter) to initialize or from which to retrieve performance data. "ALL" is the only valid input value.

Type: enum

Range: ALL = All types

LASTINITNA = Number of minutes since initialization of all counters for which there is no direction (neither RCV nor TRMT)

LASTINITRCV = Number of minutes since initialization of all RCV (receive) counters

LASTINITTRMT = Number of minutes since initialization of all TRMT (transmit) counters

MSUDROPRTEERR = Number of message signaling units dropped due to a routing data error

MTPRESTARTS = Number of MTP3 restarts

TRARSTRTALLWRX = Number of traffic restart allowed messages received

TRARSTRTALLWTX = Number of traffic restart allowed messages transmitted

TRARSTRTWAITRX = Number of traffic restart waiting messages received

TRARSTRTWAITTX = Number of traffic restart waiting messages transmitted

USRUNAVRX = Number of user part unavailable messages received

USRUNAVTX = Number of user part unavailable messages transmitted

Default value: ALL

monval Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized. The value is in the form of numeric counts or rates. The value "0" is currently the only acceptable input value.

Type: integer

Range: {0 – 4294967295}

Default value: 0

monlev Identifies the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

- locn** Identifies the location of the storage counters to initialize or from which to retrieve performance data. Currently only NEND is supported.
Type: enum
Range: NEND = near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.
Type: enum
Range: ALL = All directions
NA = Direction not applicable
RCV = Receive direction only
TRMT = Transmit direction only
Default value: ALL

Input Examples:

```
INIT-REG-MTP3::::ALL;  
RTRV-PM-MTP3;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"COM:USRUNAVTX,0,1-UP,NEND,ALL"  
"COM:TRARSTRALLWTX,0,1-UP,NEND,ALL"  
"COM:TRARSTRWAITTX,0,1-UP,NEND,ALL"  
"COM:LASTINITTRMT,16,1-UP,NEND,ALL"  
"COM:USRUNAVRX,0,1-UP,NEND,ALL"  
"COM:TRARSTRALLWRX,0,1-UP,NEND,ALL"  
"COM:TRARSTRWAITRX,0,1-UP,NEND,ALL"  
"COM:LASTINITRCV,16,1-UP,NEND,ALL"  
"COM:MSUDROPRTERR,0,1-UP,NEND,ALL"  
"COM:MTPPRESTARTS,0,1-UP,NEND,ALL"  
"COM:LASTINITNA,16,1-UP,NEND,ALL"  
;
```

Related Commands: none

INIT-REG-ROUTE^{SS7} / RTRV-PM-ROUTE^{SS7}

Commands:

INIT-REG-ROUTE^{SS7}: Initialize Register SS7 Route

RTRV-PM-ROUTE^{SS7}: Retrieve Performance Monitors SS7 Route

Descriptions:

INIT-REG-ROUTE^{SS7} lets the user clear the counters for statistics concerning an SS7 route.

RTRV-PM-ROUTE^{SS7} lets the user retrieve current and historical performance data gathered from an SS7 route.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-ROUTESS7: [TID]:<routeSs7>:[CTAG]::  
    [<montype>], [<monval>], [<locn>], [<dirn>];  
RTRV-PM-ROUTESS7: [TID]:<routeSs7>:[CTAG]:: [<montype>],  
    [<monlev>], [<locn>], [<dirn>];
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<routeSs7>:<montype>,<monval>,<monlev>,<locn>,  
      <dirn>"  
;
```

Parameters:

routeSs7 Identifies the AID as an SS7 Route. The pattern is a combination of the destination point code and the link set connecting to it.

Type: RouteSs7Aid

Range: <PCAID>-<LSETAID>, where

PCAID = {0-255}-{0-255}-{0-255} and

LSETAID = {1-20}

Default value: none

- montype** Identifies the registers (for a type of monitored parameter) to initialize or from which to retrieve performance data. “ALL” is the only valid input value.
- Type:** enum
Range: ALL = All types
DURLSETDIVER = Duration in minutes that traffic on the link set is diverted on low priority route
LASTINITNA = Number of minutes since initialization of all counters for which there is no direction (neither RCV nor TRMT)
TRFDIVER = Number of times traffic on the link set has been diverted on low priority route
Default value: ALL
- monval** Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized. The value is in the form of numeric counts or rates. The value “0” is currently the only acceptable input value.
- Type:** integer
Range: {0 – 4294967295}
Default value: 0
- monlev** Identifies the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
- Type:** enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- locn** Identifies the location of the storage counters to initialize or from which to retrieve performance data. Currently only NEND is supported.
- Type:** enum
Range: NEND = near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: ALL = All directions
NA = Direction not applicable
RCV = Receive direction only
TRMT = Transmit direction only
Default value: ALL

Input Examples:

```
INIT-REG-ROUTE SS7::3-4-5-16:::ALL;  
RTRV-PM-ROUTE SS7::3-4-5-16;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"3-4-5-16:DURLSETDIVER,1,1-UP,NEND,ALL"  
"3-4-5-16:LASTINITNA,101,1-UP,NEND,ALL"  
"3-4-5-16:TRFDIVER,2,1-UP,NEND,ALL"  
;
```

Related Commands: none

INIT-REG-SGPC / RTRV-PM-SGPC

Commands:

INIT-REG-SGPC: Initialize Register Signaling Gateway Point Code

RTRV-PM-SGPC: Retrieve Performance Monitors Signaling Gateway Point Code

Descriptions:

INIT-REG-SGPC lets the user clear the counters for statistics gathered from a destination point code for a signaling gateway.

RTRV-PM-SGPC lets the user retrieve current and historical performance data gathered from a destination point code for a signaling gateway.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

INIT-REG-SGPC: [TID]:<ss7Pc>:[CTAG]::[<montype>],
[<monval>],[<locn>],[<dirn>;

RTRV-PM-SGPC: [TID]:<ss7Pc>:[CTAG]::[<montype>],
[<monlev>],[<locn>],[<dirn>;

Output Format:

```
      SID DATE TIME
M  CTAG COMPLD
  "<ss7Pc>:<montype>,<monval>,<monlev>,<locn>,<dirn>"
;
```

Parameters:

ss7Pc Identifies the AID as a destination point code for a signaling gateway.

Type: Ss7PcAid

Range: {0-255}-{0-255}-{0-255}

Default value: none

montype Identifies the registers (for a type of monitored parameter) to initialize or from which to retrieve performance data. “ALL” is the only valid input value.

Type: enum

Range: ALL = All types

DURRTEUNAV = Duration in minutes of route unavailability

LASTINITNA = Number of minutes since initialization of all counters for which there is no direction (neither RCV nor TRMT)

LASTINITRCV = Number of minutes since initialization of all RCV (receive) counters

LASTINITTRMT = Number of minutes since initialization of all TRMT (transmit) counters

RTECONGTSTRX = Number of route set congestion test messages received

RTECONGTSTTX = Number of route set congestion test messages transmitted

RTETSTRX = Number of route set test messages received

RTETSTTX = Number of route set test messages transmitted

RTEUNAV = Number of times route became unavailable

SIFOCTPRTEX = Number of SIF (Service Information Field) octets transmitted per route

SIOOCTPRTEX = Number of SIO (Service Indicator Octet) octets transmitted per route

TXALLWRX = Number of transfer allowed messages received

TXALLWTX = Number of transfer allowed messages transmitted

TXPROHIBRX = Number of transfer prohibited messages received

TXPROHIBTX = Number of transfer prohibited messages transmitted

TXRESTRICRX = Number of transfer restricted messages received

TXRESTRICCTX = Number of transfer restricted messages transmitted

Default value: ALL

monval Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized. The value is in the form of numeric counts or rates. The value “0” is currently the only acceptable input value.

Type: integer

Range: {0 – 4294967295}

Default value: 0

- monlev** Identifies the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- locn** Identifies the location of the storage counters to initialize or from which to retrieve performance data. Currently only NEND is supported.
Type: enum
Range: NEND = near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.
Type: enum
Range: ALL = All directions
NA = Direction not applicable
RCV = Receive direction only
TRMT = Transmit direction only
Default value: ALL

Input Examples:

```
INIT-REG-SGPC::3-4-5:::ALL;  
RTRV-PM-SGPC;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"001-001-001:RTETSTTX,0,1-UP,NEND,ALL"  
"001-001-001:RTECONGTSTTX,0,1-UP,NEND,ALL"  
"001-001-001:TXPROHIBTX,0,1-UP,NEND,ALL"  
"001-001-001:TXRESTRICTTX,0,1-UP,NEND,ALL"  
"001-001-001:TXALLWTX,0,1-UP,NEND,ALL"  
"001-001-001:SIFOCTPRTEX,0,1-UP,NEND,ALL"  
"001-001-001:SIOOCTPRTEX,0,1-UP,NEND,ALL"  
"001-001-001:LASTINITTRMT,33,1-UP,NEND,ALL"  
"001-001-001:RTETSTRX,0,1-UP,NEND,ALL"  
"001-001-001:RTECONGTSTRX,0,1-UP,NEND,ALL"  
;
```

Related Commands: none

INIT-REG-SLK / RTRV-PM-SLK

Commands:

INIT-REG-SLK: Initialize Register Signaling Link

RTRV-PM-SLK: Retrieve Performance Monitors Signaling Link

Descriptions:

INIT-REG-SLK lets the user clear the counters for statistics gathered from a signaling link.

RTRV-PM-SLK lets the user retrieve current and historical performance data gathered from a signaling link. MTP Layer 3 packet traffic statistics are captured and stored based on the maximum value reached (High Water Mark or HWM) for 100 one-minute, 50 five-minute and 20 15-minute periods.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

INIT-REG-SLK: [TID]:<ss7LnkId>:[CTAG]::<montype>,
<monval>;

RTRV-PM-SLK: [TID]:<ss7LnkId>:[CTAG]::[<montype>];

Output Format:

```
          SID DATE TIME
M  CTAG COMPLD
    "<ss7LnkId>:<montype>,<monval>"
;
```

Parameters:

ss7LnkId Identifies the AID as a signaling link.

Type: Ss7LnkAid

Range: {1-40}

Default value: none

montype Identifies (in INIT-REG) the registers (for a type of monitored parameter) to initialize for the specified signaling link.

Type: enum

Range: HWM15MINCFG = Identifies whether maximum-value-reached (HWM) calculations for 15-minute periods are done. A value of “0” means “no” and a value of “1” means “yes”.

HWM1MINCFG = Identifies whether maximum-value-reached (HWM) calculations for one-minute periods are done. A value of “0” means “no” and a value of “1” means “yes”.

HWM5MINCFG = Identifies whether maximum-value-reached (HWM) calculations for five-minute periods are done. A value of “0” means “no” and a value of “1” means “yes”.

Default value: none

montype Identifies (in RTRV-PM) the registers (for a type of monitored parameter) from which to retrieve performance data for the specified signaling link.

Type: enum

Range: HWM = All high water marks

HWM15MINCFG = Identifies whether HWM calculations for 15-minute periods are done. A value of “0” means “no” and a value of “1” means “yes”.

HWM15MINLINKUTIL = HWM for link utilization reached in 20 15-minute periods (calculated as a percentage using total MSU octets received and transmitted)

HWM15MINLINKUTILAGE = The 15-minute period in which the HWM for link utilization occurred (“1” indicates the most recent period, “20” the least).

HWM15MINMSURX = Maximum number of message signal units received for 15-minute periods.

HWM15MINMSURXAGE = The 15-minute period in which the HWM for message signal units received occurred (“1” indicates the most recent period, “20” the least).

HWM15MINMSUTX = Maximum number of message signal units transmitted for 15-minute periods.

HWM15MINMSUTXAGE = The 15-minute period in which the HWM for message signal units transmitted occurred (“1” indicates the most recent period, “20” the least).

HWM15MINOCTRX = Maximum number of octets received for 15-minute periods.

HWM15MINOCTRXAGE = The 15-minute period in which the HWM for octets received occurred (“1” indicates the most recent period, “20” the least).

HWM15MINOCTTX = Maximum number of octets transmitted for 15-minute periods.

HWM15MINOCTTXAGE = The 15-minute period in which the HWM for octets transmitted occurred (“1” indicates the most recent period, “20” the least).

HWM1MINCFG = Identifies whether HWM calculations for one-minute periods are done. A value of “0” means “no” and a value of “1” means “yes”.

HWM1MINLINKUTIL = HWM for link utilization reached in 100 one-minute periods (calculated as a percentage using total MSU octets received and transmitted)

HWM1MINLINKUTILAGE = The one-minute period in which the HWM for link utilization occurred (“1” indicates the most recent period, “100” the least).

HWM1MINMSURX = Maximum number of message signal units received for one-minute periods.

HWM1MINMSURXAGE = The one-minute period in which the HWM for message signal units received occurred (“1” indicates the most recent period, “100” the least).

HWM1MINMSUTX = Maximum number of message signal units transmitted for one-minute periods.

HWM1MINMSUTXAGE = The one-minute period in which the HWM for message signal units transmitted occurred (“1” indicates the most recent period, “100” the least).

HWM1MINOCTRX = Maximum number of octets received for one-minute periods.

HWM1MINOCTRXAGE = The one-minute period in which the HWM for octets received occurred (“1” indicates the most recent period, “100” the least).

HWM1MINOCTTX = Maximum number of octets transmitted for one-minute periods.

HWM1MINOCTTXAGE = The one-minute period in which the HWM for octets transmitted occurred (“1” indicates the most recent period, “100” the least).

HWM5MINCFG = Identifies whether HWM calculations for five-minute periods are done. A value of “0” means “no” and a value of “1” means “yes”.

HWM5MINLINKUTIL = HWM for link utilization reached in 50 five-minute periods (calculated as a percentage using total MSU octets received and transmitted).

HWM5MINLINKUTILAGE = The five-minute period in which the HWM for link utilization occurred (“1” indicates the most recent period, “50” the least).

HWM5MINMSURX = Maximum number of message signal units received for five-minute periods.

HWM5MINMSURXAGE = The five-minute period in which the HWM for message signal units received occurred ("1" indicates the most recent period, "50" the least).

HWM5MINMSUTX = Maximum number of message signal units transmitted for five-minute periods.

HWM5MINMSUTXAGE = The five-minute period in which the HWM for message signal units transmitted occurred ("1" indicates the most recent period, "50" the least).

HWM5MINOCTRX = Maximum number of octets received for five-minute periods.

HWM5MINOCTRXAGE = The five-minute period in which the HWM for octets received occurred ("1" indicates the most recent period, "50" the least).

HWM5MINOCTTX = Maximum number of octets transmitted for five-minute periods.

HWM5MINOCTTXAGE = The five-minute period in which the HWM for octets transmitted occurred ("1" indicates the most recent period, "50" the least).

Default value: HWM

monval Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized.

Type: enum

Range: {0,1}

Default value: none

Input Examples:

```
INIT-REG-SLK::1:::HWM15MIN,0;  
RTRV-PM-SLK::1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"1:HWM15MINCFG,0"  
"1:HWM1MINCFG,0"  
"1:HWM5MINCFG,0"  
;
```

Related Commands: none

INIT-REG-SLKL2 / RTRV-PM-SLKL2

Commands:

INIT-REG-SLKL2: Initialize Register SLKL2

RTRV-PM-SLKL2: Retrieve Performance Monitors SLKL2

Descriptions:

INIT-REG-SLKL2 lets the user clear the counters for statistics gathered from a MTP2 signaling link.

RTRV-PM-SLKL2 lets the user retrieve current and historical performance data gathered from an MTP2 signaling link.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

INIT-REG-SLKL2: [TID]:<ss7LnkId>:[CTAG]::<montype>,
[<monval>],[<locn>],[<dirn>;

RTRV-PM-SLKL2: [TID]:<ss7LnkId>:[CTAG]::[<montype>],
[<monlev>],[<locn>],[<dirn>;

Output Format:

```
          SID DATE TIME
M  CTAG COMPLD
    "<ss7LnkId>:<montype>,<monval>,<monlev>,<locn>,<dirn>"
;
```

Parameters:

ss7LnkId Identifies the AID as an MTP Layer 2 signaling link.

Type: Ss7LnkAid

Range: {1-40}

Default value: none

montype Identifies the registers (for a type of monitored parameter) to initialize or from which to retrieve performance data. “ALL” is the only valid input value.

Type: enum

Range: ALL = All types

DURLNKINSRV = Number of minutes the link has been in-service

DURLNKLOCCONG = Number of minutes the link has been locally congested

FISURX = Number of FISUs received on the link

FISUTX = Number of FISUs transmitted on the link

LASTINITNA = Number of minutes since initialization of all counters for which there is no direction (RCV or TRMT)

LASTINITRCV = Number of minutes since initialization of all RCV (receive) counters

LASTINITTRMT = Number of minutes since initialization of all TRMT (transmit) counters

LNKFAILABNRML = Number of times link has failed due to abnormal FIBR/BSNR

LNKFAILALIGN = Number of times link has failed due to inability to complete alignment procedure

LNKFAILCONG = Number of times link has failed due to excessive congestion

LNKFAILDLYACK = Number of times link has failed due to delay of acknowledgement messages

LNKFAILERR = Number of times link has failed due to excessive error rate

LNKFAILFORALL = Number of times link has failed for any reason

LSSURX = Number of LSSUs received on the link

LSSUTX = Number of LSSUs transmitted on the link

MSURX = Number of message signal units received on the link

MSUTX = Number of message signal units transmitted on the link

NEGACKRX = Number of times negative acknowledgment messages received on the link

OCTRETX = Number of octets retransmitted on the link

SIFSIOOCTR = Number of SIF/SIO (Service Information Field / Service Indicator Octet) octets received on the link

SIFSIOOCTTX = Number of SIF/SIO (Service Information Field / Service Indicator Octet) octets transmitted on the link

SIGUNITRXERR = Number of signaling units received in error on the link

Default value: none

monval Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized. The value is in the form of numeric counts or rates. The value "0" is currently the only acceptable input value.

Type: integer

Range: {0 – 4294967295}

Default value: 0

monlev Identifies the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

locn Identifies the location of the storage counters to initialize or from which to retrieve performance data. Currently only NEND is supported.

Type: enum

Range: NEND = near end

Default value: NEND

dirn Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.

Type: enum

Range: ALL = All directions

NA = Direction not applicable

RCV = Receive direction only

TRMT = Transmit direction only

Default value: ALL

Input Examples:

INIT-REG-SLKL2::1::ALL;

RTRV-PM-SLKL2::1;

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"1:IFSI00CTTX,1,1-UP,NEND,ALL"
"1:OCTRETX,0,1-UP,NEND,ALL"
"1:MSUTX,130,1-UP,NEND,ALL"
"1:LSSUTX,3,1-UP,NEND,ALL"
"1:FISUTX,130,1-UP,NEND,ALL"
"1:LASTINITRMT,71,1-UP,NEND,ALL"
"1:SIGUNITRXERR,0,1-UP,NEND,ALL"
"1:NEGACKRX,0,1-UP,NEND,ALL"
"1:SIFSI00CTRX,3,1-UP,NEND,ALL"
"1:MSURX,129,1-UP,NEND,ALL"

lucent 2005-06-24 14:37:49
M 0 COMPLD
"1:LSSURX,7,1-UP,NEND,ALL"
"1:FISURX,516,1-UP,NEND,ALL"
"1:LASTINITTRCV,71,1-UP,NEND,ALL"
"1:LNKFAILFORALL,0,1-UP,NEND,ALL"
"1:LNKFAILABNRML,0,1-UP,NEND,ALL"
"1:LNKFAILDLYACK,0,1-UP,NEND,ALL"
"1:LNKFAILERR,0,1-UP,NEND,ALL"
"1:LNKFAILCONG,0,1-UP,NEND,ALL"
"1:LNKFAILALIGN,0,1-UP,NEND,ALL"
"1:LASTINITNA,71,1-UP,NEND,ALL"

lucent 2005-06-24 14:37:49
M 0 COMPLD
"1:DURLNKINSRV,42,1-UP,NEND,ALL"
"1:DURLNKLOCCONG,0,1-UP,NEND,ALL"
;
```

Related Commands: none

INIT-REG-SLKL3 / RTRV-PM-SLKL3

Commands:

INIT-REG-SLKL3: Initialize Register SLKL3

RTRV-PM-SLKL3: Retrieve Performance Monitors SLKL3

Name: INIT-REG-SLKL3: Initialize Register Call Control

Descriptions:

INIT-REG-SLKL3 lets the user clear the counters for statistics gathered from a MTP3 signaling link.

RTRV-PM-SLKL3 lets the user retrieve current and historical performance data gathered from an MTP3 signaling link.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-SLKL3:[TID]:<ss7LnkId>:[CTAG]::<montype>,  
[<monval>],[<locn>],[<dirn>];  
RTRV-PM-SLKL3:[TID]:<ss7LnkId>:[CTAG]::[<montype>],  
[<monlev>],[<locn>],[<dirn>];
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<ss7LnkId>:<montype>,<monval>,<monlev>,<locn>,  
    <dirn>"  
;
```

Parameters:

ss7LnkId Identifies the AID as an MTP 3 signaling link.

Type: Ss7LnkAid

Range: {1-40}

Default value: none

montype Identifies the registers (for a type of monitored parameter) to initialize or from which to retrieve performance data. “ALL” is the only valid input value.

Type: enum

Range: ALL = All types

CHNGBCKACKRX = Number of changeback
acknowledgement messages received

CHNGBCKACKTX = Number of changeback
acknowledgement messages transmitted

CHNGBCKRX = Number of changeback messages received

CHNGBCKTX = Number of changeback messages
transmitted

CHNGOVERACKRX = Number of changeover
acknowledgement messages received

CHNGOVERACKTX = Number of changeover
acknowledgement messages transmitted

CHNGOVERRX = Number of changeover messages
received

CHNGOVERTX = Number of changeover messages
transmitted

DUROFLNKCONG = Duration of last link congestion in
minutes

DUROFLNKUNAV = Duration of last link unavailability in
minutes

EMERGCHNGOVERACKRX = Number of emergency
changeover acknowledgement messages received

EMERGCHNGOVERACKTX = Number of emergency
changeover acknowledgement messages transmitted

EMERGCHNGOVERRX = Number of emergency
changeover messages received

EMERGCHNGOVERTX = Number of emergency
changeover messages transmitted

INVPDURX = Number of invalid protocol data units
(protocol messages) received

LASTINITNA = Number of minutes since initialization of all
counters for which there is no direction (neither RCV nor
TRMT)

LASTINITRCV = Number of minutes since initialization of
all RCV (receive) counters

LASTINITTRMT = Number of minutes since initialization
of all TRMT (transmit) counters

LNKCONACKRX = Number of link connection
acknowledgement messages received

LNKCONACKTX = Number of link connection
acknowledgement messages transmitted

LNKCONGATTHRSHLD0 = Number of links at congestion level 0
LNKCONGATTHRSHLD1 = Number of links at congestion level 1
LNKCONGATTHRSHLD2 = Number of links at congestion level 2
LNKCONGATTHRSHLD3 = Number of links at congestion level 3
LNKCONORDRX = Number of link connection order messages received
LNKCONORDTX = Number of link connection order messages transmitted
LNKFORCEUNINHRX = Number of link forced uninhibit messages received
LNKFORCEUNINHTX = Number of link forced uninhibit acknowledgement messages transmitted
LNKINHACKRX = Number of link inhibit acknowledgement messages received
LNKINHACKTX = Number of link inhibit acknowledgement messages transmitted
LNKINHDENYRX = Number of link inhibit denied messages received
LNKINHDENYTX = Number of link inhibit denied messages transmitted
LNKINHRX = Number of link inhibit messages received
LNKINHTX = Number of link inhibit messages transmitted
LNKLOCINHTSTRX = Number of link locally inhibited test messages received
LNKLOCINHTSTTX = Number of link locally inhibited test messages transmitted
LNKRMTINHTSTRX = Number of link remotely inhibited test messages received
LNKRMTINHTSTTX = Number of link remotely inhibited test messages transmitted
LNKTSTACKRX = Number of link test acknowledgement messages received
LNKTSTACKTX = Number of link test acknowledgement messages transmitted
LNKTSTRX = Number of link test messages received
LNKTSTTX = Number of link test messages transmitted
LNKUNINHACKRX = Number of link uninhibit acknowledgement messages received
LNKUNINHACKTX = Number of link uninhibit acknowledgement messages transmitted
LNKUNINHRX = Number of link uninhibit messages received

LNKUNINHTX = Number of link uninhibit messages transmitted
MSURX = Number of message signal units received on the link
MSUTX = Number of message signal units transmitted on the link
PRI0DROP = Number of messages with priority 0 dropped
PRI1DROP = Number of messages with priority 1 dropped
PRI2DROP = Number of messages with priority 2 dropped
PRI3DROP = Number of messages with priority 3 dropped
SIFOCTRX = Number of SIF (Service Information Field) octets received on the link
SIFOCTTX = Number of SIF (Service Information Field) octets transmitted on the link
SIOOCTRX = Number of SIO (Service Indicator Octet) octets received on the link
SIOOCTTX = Number of SIO (Service Indicator Octet) octets transmitted on the link
TXCONGDROP = Number of message signal units dropped due to link congestion
TXCTRLRX = Number of transfer controlled messages received
TXCTRLTX = Number of transfer controlled messages transmitted
TXMSGDROP = Number of transmit messages dropped

Default value: none

monval Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized. The value is in the form of numeric counts or rates. The value "0" is currently the only acceptable input value.

Type: integer

Range: {0 – 4294967295}

Default value: 0

monlev Identifies the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

- locn** Identifies the location of the storage counters to initialize or from which to retrieve performance data. Currently only NEND is supported.
Type: enum
Range: NEND = near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.
Type: enum
Range: ALL = All directions
NA = Direction not applicable
RCV = Receive direction only
TRMT = Transmit direction only
Default value: ALL

Input Examples:

```
INIT-REG-SLKL3::1::ALL;  
RTRV-PM-SLKL3::1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"1:CHNGOVERTX,0,1-UP,NEND,ALL"  
"1:CHNGOVERACKTX,0,1-UP,NEND,ALL"  
"1:CHNGBCKTX,0,1-UP,NEND,ALL"  
"1:CHNGBCKACKTX,0,1-UP,NEND,ALL"  
"1:EMERGCHNGOVERTX,0,1-UP,NEND,ALL"  
"1:EMERGCHNGOVERACKTX,0,1-UP,NEND,ALL"  
"1:LNKINHTX,0,1-UP,NEND,ALL"  
"1:LNKUNINHTX,0,1-UP,NEND,ALL"  
"1:LNKINHACKTX,0,1-UP,NEND,ALL"  
"1:LNKUNINHACKTX,0,1-UP,NEND,ALL"  
  
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"1:LNKINHDENYTX,0,1-UP,NEND,ALL"  
"1:LNKFORCEUNINHTX,0,1-UP,NEND,ALL"  
"1:LNKLOCINHTSTTX,0,1-UP,NEND,ALL"  
"1:LNKRMTINHTSTTX,0,1-UP,NEND,ALL"  
"1:LNKCONORDTX,0,1-UP,NEND,ALL"  
"1:LNKCONACKTX,0,1-UP,NEND,ALL"  
"1:LNKTSTTX,76,1-UP,NEND,ALL"  
"1:LNKTSTACKTX,154,1-UP,NEND,ALL"
```

"1:TXMSGDROP,0,1-UP,NEND,ALL"
"1:TXCONGDROP,0,1-UP,NEND,ALL"

lucent 2005-06-24 14:37:49
M 0 COMPLD
"1:SIFOCTTX,4456,1-UP,NEND,ALL"
"1:SIOOCTTX,230,1-UP,NEND,ALL"
"1:MSUTX,230,1-UP,NEND,ALL"
"1:LASTINITRMT,74,1-UP,NEND,ALL"
"1:CHNGOVERRX,0,1-UP,NEND,ALL"
"1:CHNGOVERACKRX,0,1-UP,NEND,ALL"
"1:CHNGBCKRX,0,1-UP,NEND,ALL"
"1:CHNGBCKACKRX,0,1-UP,NEND,ALL"
"1:EMERGCHNGOVERRX,0,1-UP,NEND,ALL"
"1:EMERGCHNGOVERACKRX,0,1-UP,NEND,ALL"

lucent 2005-06-24 14:37:49
M 0 COMPLD
"1:LNKINHRX,0,1-UP,NEND,ALL"
"1:LNKUNINHRX,0,1-UP,NEND,ALL"
"1:LNKINHACKRX,0,1-UP,NEND,ALL"
"1:LNKUNINHACKRX,0,1-UP,NEND,ALL"
"1:LNKINHDENYRX,0,1-UP,NEND,ALL"
"1:LNKFORCEUNINHRX,0,1-UP,NEND,ALL"
"1:LNKLOCINHTSTRX,0,1-UP,NEND,ALL"
"1:LNKRMTINHTSTRX,0,1-UP,NEND,ALL"
"1:LNKCONORDRX,0,1-UP,NEND,ALL"
"1:LNKCONACKRX,0,1-UP,NEND,ALL"

lucent 2005-06-24 14:37:49
M 0 COMPLD
"1:LNKTSTRX,154,1-UP,NEND,ALL"
"1:LNKTSTACKRX,76,1-UP,NEND,ALL"
"1:INVPDURX,0,1-UP,NEND,ALL"
"1:SIFOCTRX,4456,1-UP,NEND,ALL"
"1:SIOOCTRX,230,1-UP,NEND,ALL"
"1:MSURX,230,1-UP,NEND,ALL"
"1:LASTINITRCV,74,1-UP,NEND,ALL"
"1:LNKCONGATTHRSHLD1,0,1-UP,NEND,ALL"
"1:LNKCONGATTHRSHLD2,0,1-UP,NEND,ALL"
"1:LNKCONGATTHRSHLD3,0,1-UP,NEND,ALL"

lucent 2005-06-24 14:37:49
M 0 COMPLD
"1:PRI0DROP,0,1-UP,NEND,ALL"
"1:PRI1DROP,0,1-UP,NEND,ALL"
"1:PRI2DROP,0,1-UP,NEND,ALL"

```
"1:PRI3DROP,0,1-UP,NEND,ALL"  
"1:LASTINITNA,74,1-UP,NEND,ALL"  
"1:DUROFLNKUNAV,0,1-UP,NEND,ALL"  
"1:DUROFLNKCONG,0,1-UP,NEND,ALL"  
;
```

Related Commands: none

RTRV-STATUS-LSET

Command:

RTRV-STATUS-LSET: Retrieve Status Link Set

Description:

RTRV-STATUS-LSET lets the user retrieve information indicating the status of a link set.

Category: Signaling

Security: View

Input Format:

RTRV-STATUS-LSET:[TID]:<LsetId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<LsetId>:LSETSTARSLT=<lsetStaRslt>,
    SS7LSETSTANMBACTLNKS=<ss7LsetStaNmbActLnks>,
    SS7LSETSTASTATE=<ss7LsetStaState>"
;
```

Parameters:

LsetId Identifies the AID as a link set.

Type: LsetAid

Range: {1-64}

Default value: none

lsetStaRslt Identifies the result of MTP layer 3 test on the link set.

Type: enum

Range: FAILINGLYR3 = Failed

SUCCESS = Passed

Default value: none

ss7LsetStaNmbActLnks Identifies the total number of active links in the link set.

Type: integer

Range: {1-128}

Default value: none

ss7LsetStaState Identifies the current state of a link set.

Type: enum

Range: ACTIVE = Link set is active

INACTIVE = Link set is inactive

Default value: none

Input Example:

```
RTRV-STATUS-LSET::1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"12:LSETSTARSLT=SUCCESS,SS7LSETSTANMBACTLNKS=2,
SS7LSETSTASTATE=ACTIVE"
;
```

Related Commands:

```
ED-STATE-LSET
```

RTRV-STATUS-ROUTESS7

Command:

RTRV-STATUS-ROUTESS7: Retrieve Status Route SS7

Description:

RTRV-STATUS-ROUTESS7 lets the user retrieve information indicating the status of an SS7 route.

Category: Signaling

Security: View

Input Format:

RTRV-STATUS-ROUTESS7:[TID]:<routeSs7Aid>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<routeSs7Aid>:ROUTESTARSLT=<routeStaRsLtl>,
    SS7ROUTESTASTATE=<ss7RouteStaState>"
;
```

Parameters:

routeSs7Aid Identifies the AID as an SS7 Route. The pattern is a combination of the destination point code and the link set connecting to it. A null value for the second part of the AID lets the user retrieve information for all link sets (and, thus, all SS7 routes) associated with a specific point code.

Type: RouteSs7Aid

Range: <pcId>-<lsetId>, where

pcId = {0-255}-{0-255}-{0-255} for NANP point codes

{0-16383} for international point codes

lsetId = {1-64}

Default value: none

routeStaRsLtl Identifies the result of MTP layer 3 test on the SS7 route.

Type: enum

Range: FAILINGLYR3 = Failed

SUCCESS = Passed

Default value: none

ss7RouteStaState Identifies the current state of an SS7 route.

Type: enum

Range: ALLOWED = signaling route available

PROHIBITED = signaling route unavailable

RESTRICTED = signaling traffic towards a particular
destination is being transferred with some difficulty via
the signaling transfer point sending the concerned
message

Default value: none

Input Example:

```
RTRV-STATUS-ROUTESS7::3-4-5-16;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"3-4-5-16:ROUTESTARSLT=SUCCESS,
SS7ROUTESTASTATE=ALLOWED"
;
```

Related Commands:

```
DLT/ENT/RTRV-ROUTE-SS7
```

RTRV-STATUS-SLK

Command:

RTRV-STATUS-SLK: Retrieve Status Signaling Link

Description:

RTRV-STATUS-SLK lets the user retrieve information indicating the status of a signaling link.

Category: Signaling

Security: View

Input Format:

RTRV-STATUS-SLK: [TID]:<ss7LnkId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<ss7LnkId>:SS7LNKSTARSLT=<ss7LnkStaRs1t>,
  LOCALBUSY=<localBusy>,REMOTEBUSY=<remoteBusy>,
  SS7LNKSTASTATE=<ss7LnkStaState>,
  SS7LNKSTALOCBLKD=<ss7LnkStaLocBlkd>,
  SS7LNKSTAREMBLKD=<ss7LnkStaRemBlkd>,
  SS7LNKSTALOCINHBT=<ss7LnkStaLocInhbt>,
  SS7LNKSTARM TINHBT=<ss7LnkStaRmtInhbt>,
  SS7LNKSTAUNINHBT=<ss7LnkStaUninhbt>,
  SS7LNKSTACONG=<ss7LnkStaCong>,
  SS7LNKSTAEMRG=<ss7LnkStaEmrg>"
;
```

Parameters:

ss7LnkId Identifies the AID as a signaling link.

Type: Ss7LnkAid

Range: {1-64}

Default value: none

ss7LnkStaRslt Identifies the result of the status request operation.

Type: enum

Range: FAILCFGLYR2 = Status request failed: configuration not
done at layer 2
FAILINVCFLYR2 = Status request failed: invalid
configuration at layer 2
FAILINVLNKLYR3 = Status request failed: invalid
configuration at layer 3
SUCCESS = Status request successful

Default value: none

localBusy Identifies whether the signaling link is busy at the local end.

Type: enum

Range: BUSY
NOTBUSY

Default value: none

remoteBusy Identifies whether the signaling link is busy at the remote end.

Type: enum

Range: BUSY
NOTBUSY

Default value: none

ss7LnkStaState Identifies the current state of a signaling link at MTP layer 3.

Type: enum

Range: ACTIVE = Link is active
CON = Link is connecting
FAILED = Link has failed
INACTIVE = Link is inactive
SUSPEND = Link is suspended
WAITCON = Link is waiting to connect

Default value: none

ss7LnkStaLocBlkd Identifies whether the signaling link is blocked at the local end.

Type: BoolYN

Range: N = Link not blocked at local end
Y = Link blocked at local end

Default value: none

ss7LnkStaRemBlkd Identifies whether the signaling link is blocked at the remote end.

Type: BoolYN

Range: N = Link not blocked at remote end
Y = Link blocked at remote end

Default value: none

ss7LnkStaLocInhbt Identifies whether the signaling link is inhibited at the local end.

Type: BoolYN

Range: N = Link not inhibited at local end
Y = Link inhibited at local end

Default value: none

ss7LnkStaRmtInhbt Identifies whether the signaling link is inhibited at the remote end.

Type: BoolYN

Range: N = Link not inhibited at remote end
Y = Link inhibited at remote end

Default value: none

ss7LnkStaUninhbt Identifies whether the signaling link is uninhibited.

Type: BoolYN

Range: N = Link not uninhibited
Y = Link uninhibited

Default value: none

ss7LnkStaCong Identifies the priority assigned to a signaling link, depending on the congestion level. A value of "PRIORITY0" indicates that the signaling link is not congested.

Type: enum

Range: PRIORITY0
PRIORITY1
PRIORITY2
PRIORITY3

Default value: none

ss7LnkStaEmrg Specifies the signaling link's emergency alignment indication.

Type: BoolYN

Range: N = no emergency alignment indicated
Y = emergency alignment indicated

Default value: none

Input Example:

```
RTRV-STATUS-SLK::1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"1:SS7LNKSTARSLT=SUCCESS, LOCALBUSY=NOTBUSY,
  REMOTEBUSY=NOTBUSY, SS7LNKSTASTATE=ACTIVE,
  SS7LNKSTALOCBLKD=N, SS7LNKSTAREMBLKD=N,
  SS7LNKSTALOCINHBT=N, SS7LNKSTARM TINHBT=N,
  SS7LNKSTAUNINHBT=N, SS7LNKSTACONG=PRIORITY0,
  SS7LNKSTAEMRG=N"
;
```

Related Commands:

```
ED-STATE-SLK
```

RTRV-TH-SLK / SET-TH-SLK

Commands:

RTRV-TH-SLK: Retrieve Threshold Signaling Link

SET-TH-SLK: Set Threshold Signaling Link

Descriptions:

RTRV-TH-SLK lets the user retrieve the current threshold level of one or more monitored performance counts associated with a specific signaling link in the switch. The violation of these thresholds will trigger a condition. Provision thresholds with SET-TH.

SET-TH-SLK lets the user set the performance monitoring parameter threshold levels for a specific signaling link in the switch. This command cannot be used to turn off threshold crossing alerts; that is, the threshold level may not be set to some "non-applicable" value. Retrieve thresholds with RTRV-TH. The switch sends a REPT ALM or REPT EVT message when thresholds are exceeded, depending on the notification code associated with the threshold condition. Threshold setting for multiple monitored parameters requires multiple invocations of this command – wildcarding is not permitted.

Category: Signaling

Security: NSA for SET-TH, View for RTRV-TH

Category: Signaling

Security: View

Input Formats:

RTRV-TH-SLK: [TID]:<ss7LnkId>:[CTAG]:[:<montype>];

SET-TH-SLK: [TID]:<ss7LnkId>:[CTAG]:[:<montype>,<thlev>;

Input Format:

RTRV-TH-SLK: [TID]:<ss7LnkId>:[CTAG]:[:<montype>];

Output Format:

```
          SID DATE TIME
M  CTAG COMPLD
  "<ss7LnkId>:<montype>,<thlev>"
;
```

Parameters:

ss7LnkId Identifies the AID as a signaling link.

Type: Ss7LnkAid

Range: {1-40}

Default value: none

montype Identifies the type of monitored parameter for which to set, or from which to retrieve, the current threshold level for the specified signaling link.

Type: enum

Range: ALL = All types

UTIL-HT = Alarm Threshold Level (link UTILization-High
Threshold: the percentage of link utilization that, when
exceeded, generates an alarm for the link)

UTIL-LT = Alarm Clear Level (link UTILization-Low
Threshold: the percentage of link utilization that, when
reached, clears any standing alarm for the link)

Default value: ALL

thlev Identifies the threshold level, as a percentage of link utilization, for the monitored parameter identified by *montype*.

Type: integer

Range: {0-100}

Default value: none

Input Examples:

RTRV-TH-SLK::1;

SET-TH-SLK::1::UTIL-HT,90;

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"1:UTIL-HT,90 "
"1:UTIL-LT,80"
;
```

Related Commands:

INIT-REG-SLK

RTRV-PM-SLK

NOTES

ACT/CANC-USER

Commands:

ACT-USER: Activate User (Log in)

CANC-USER: Cancel User (Log out)

Descriptions:

ACT-USER lets the user initiate (log on) a session with the switch by entering a user name and password.

CANC-USER lets the user terminate (log off) a session with the switch.

Category: System

Security: View for both commands

Input Formats:

ACT-USER: [TID]:<uid>:[CTAG]::<pid>;

CANC-USER: [TID]: [<uid>]: [CTAG];

Output Format: none

Parameters:

uid Identifies the user. The UID is the user ID or login name. The factory default is “lucent”.

Type: string

Range: 8 – 16 characters

Default value: None

pid Specifies the user's password, which must contain at least one number and one letter. The entered password displays as a series of asterisks. The factory default is “lucent”.

Type: string

Range: 8 – 16 characters

Default value: None

Input Examples:

ACT-USER::lucent:::*****;

CANC-USER;

Related Commands: none

ALW/INH/RTRV-MSG-USER

Commands:

ALW-MSG-USER: Allow Message User

INH-MSG-USER: Inhibit Message User

RTRV-MSG-USER: Retrieve Message User

Descriptions:

ALW-MSG-USER lets the user resume receipt of inhibited automatic messages. Unreported alarms in existence at the time of restoration are transmitted with the REPT ALM message.

INH-MSG-USER allows a user to inhibit receipt of autonomous messages, but only for the user issuing the command. During the entire period of message inhibition, the switch continues to respond fully to RTRV-ALM and RTRV-COND commands. Restore receipt of autonomous messages with the ALW-MSG-USER command.

RTRV-MSG-USER instructs the switch to retrieve the status of automatic messaging for the user issuing the command.

Category: System

Security: NSA for ALW and INH, View for RTRV

Input Formats:

ALW-MSG-USER:[TID]:<uid>:[CTAG]:[:<ntfcncde>],
[:<condtype>],[:<tmper>];

INH-MSG-USER:[TID]:<uid>:[CTAG];

RTRV-MSG-USER:[TID]:[:<uid>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<uid>:<status>"
;
```

Parameters:

uid Identifies the user. The UID is the user ID or login name. The factory default is "lucent". A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns the status of automatic messaging for all current users.

Type: string

Range: 8 – 16 characters

Default value: none (Factory default is "lucent")

ntfcncde Identifies the condition notification code for which receipt of autonomous messages will be allowed. A null value is equivalent to "ALL"; that is, by leaving the field blank, receipt of autonomous messages will be allowed for all notification codes. This parameter is presently not supported; leave it blank.

Type: enum

Range: CL = Cleared. Never used in provisioning requests or returned in RTRVs - only active conditions are available through the RTRV-EVT/COND/ALM messages and by definition their notification codes are never CL/CLEAR.

CR = Critical

MJ = Major

MN = Minor

NA = Not Alarmed

Default value: none

condtype Indicates the condition type for an alarm or a reported event as defined in GR-833-CORE, Appendix C. A null value is equivalent to "ALL"; that is, by leaving the field blank, receipt of autonomous messages will be allowed for all condition types. This parameter is presently not supported; leave it blank.

Type: enum

Range: alphanumeric characters

Default value: none

tmper Identifies the period of time for which receipt of autonomous messages is allowed. A null value is equivalent to "ALL"; that is, by leaving the field blank, receipt of autonomous messages will be allowed until subsequently inhibited. This parameter is presently not supported; leave it blank.

Type: string

Range: {1}-DAY = Time interval is exactly one day

{1-24}-HR = Interval of one to 24 hours (one day)

{1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: none

status Identifies (in RTRV output) whether messages are allowed or inhibited.

Type: enum

Range: ALW = Allowed

INH = Inhibited

Default value: none

Input Examples:

```
ALW-MSG-USER::lucent;
```

```
INH-MSG-USER::lucent;
```

```
RTRV-MSG-USER::lucent;
```

Output Example:

```
    lucent 2005-06-24 14:37:49
M  0 COMPLD
    "lucent:ALW"
;
```

Related Commands: none

ALW/INH-TL1-CMD / RTRV-TL1-INH

Commands:

ALW-TL1-CMD: Allow TL1 Command
INH-TL1-CMD: Inhibit TL1 Command
RTRV-TL1-INH: Retrieve TL1 Inhibited

Descriptions:

ALW-TL1-CMD lets the user allow the execution of an inhibited TL1 command.
INH-TL1-CMD lets a user inhibit the execution of a TL1 command.
RTRV-TL1-INH lets the user retrieve the list of inhibited TL1 commands.

Category: System

Security: ADMIN for ALW/INH, View for RTRV

Input Formats:

ALW-TL1-CMD: [TID]:<tl1cmd>:[CTAG];
INH-TL1-CMD: [TID]:<tl1cmd>:[CTAG];
RTRV-TL1-INH: [TID]: [<tl1cmd>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<tl1cmd>"
;
```

Parameters:

tl1cmd Identifies the AID (in ALW and INH) as the TL1 command for which execution is allowed or inhibited. Certain commands cannot be inhibited (for example, ACT-USER, ALW-TL1-CMD, CANCEL-USER).

Type: string

Range: 1 – 32 alphanumeric characters

Default value: None

Input Examples:

```
ALW-TL1-CMD : OPR-CQM;  
INH-TL1-CMD : OPR-CQM;  
RTRV-TL1-INH;
```

Output Example:

```
      lucent 2005-06-24 14:37:49  
M    0 COMPLD  
      "OPR-CQM"  
      "OPR-CVT"  
      ;
```

Related Commands: none

DLT/ENT/RTRV-BACKUP-SYS

Commands:

DLT-BACKUP-SYS: Delete Backup System

ENT-BACKUP-SYS: Enter Backup System

RTRV-BACKUP-SYS: Retrieve Backup System

Descriptions:

DLT-BACKUP-SYS lets the user delete the destination host and directory for copying the configuration data for the switch, including the TimesTen database.

ENT-BACKUP-SYS lets the user establish a destination host and directory for copying the configuration data for the switch, including the TimesTen database in the switch, to another location in the network.

RTRV-BACKUP-SYS lets the user retrieve the destination host and directory, as well as the user's name and password, used for copying the configuration data for the switch, including the TimesTen database in the switch, to another location in the network.

Category: System

Security: NSA for DLT and ENT, View for RTRV

Input Formats:

DLT-BACKUP-SYS: [TID]: [<src>]: [CTAG];

ENT-BACKUP-SYS: [TID]: [<src>]: [CTAG]::<desthost>,
<username>,<password>,<destdir>;

RTRV-BACKUP-SYS: [TID]: [<src>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<src>:<desthost>,<username>,<password>,<destdir>"
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

desthost Identifies the remote host, containing the destination directory identified by *destdir*, for backing up the switch configuration data.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

username Identifies a valid user name for the host identified by *desthost*.

Type: string

Range: alphanumeric characters

Default value: none

password Identifies a valid password for the host identified by *desthost*.

Type: string

Range: alphanumeric characters

Default value: none

destdir Identifies the destination directory for the switch configuration data. The value of *destdir* starts with a "/" unless the destination directory is within the current working directory.

Type: string

Range: ANSI characters

Default value: none

Input Examples:

```
DLT-BACKUP-SYS;
```

```
ENT-BACKUP-SYS:::::192.2.24.234, USERNAME, PASSWORD,  
DESTDIR;
```

```
RTRV-BACKUP-SYS;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"COM:192.2.24.234, USERNAME, PASSWORD, DESTDIR"  
;
```

Related Commands:

```
EXEC-BACKUP-PLEXUS  
SCHED-BKUP-EQPT
```

```
RTRV-BKUPSCHEDEQPT
```

ED-DAT

Command:

ED-DAT: Edit date and time

Description:

ED-DAT lets the user set the system date and/or time in the switch.

Category: System

Security: SA

Input Format:

ED-DAT: [TID]::[CTAG]::[<date>],[<time>;

Output Format: none

Parameters:

date DATE is the current date in a format of: YY-MM-DD, where YY is the last two digits of the year, MM is the month of the year, and DD is the day of the month.

Type: enum

Range: {00-37}-{01-12}-{01-31}

Default value: not applicable

time TIME is the current time in a format of: HH-MM-SS, where HH is the hour in a 24-hour format, MM is the minute, and SS is the second.

Type: enum

Range: {00-23}-{00-59}-{00-59}

Default value: not applicable

Input Example:

ED-DAT:::::04-10-29,08-45-40;

Related Commands: none

ED/RTRV-SYS-TL1

Commands:

ED-SYS-TL1: Edit System TL1

RTRV-SYS-TL1: Retrieve System TL1

Descriptions:

ED-SYS-TL1 lets the user set the behavior of telnet connections; that is, whether to send telnet control options and how to invoke the system prompt. The TL1 agent supports both line mode and character mode telnet connections. In character mode the telnet client sends one character at a time to the TL1 agent. In line mode the client (for example, the serial TL1 Craft port on the rear of the switch) sends data to the TL1 agent a line at a time. The two parameters in ED-SYS-TL1 control the interface between telnet clients and the TL1 agent.

RTRV-SYS-TL1 instructs the switch to retrieve the settings for telnet connections.

Category: System

Security: NSA for ED, View for RTRV

Input Formats:

```
ED-SYS-TL1:[TID]:[<src>]:[CTAG]::  
[TLNLCNTRLOPT=<tlntcntrlopt>],  
[PROMPTMODE=<promptmode>];  
RTRV-SYS-TL1:[TID]:[<src>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
"<com>:TLNLCNTRLOPT=<tlntcntrlopt>,  
PROMPTMODE=<promptmode>"  
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

com Identifies the AID (in RTRV output) as the switch.

Type: COM

Range: COM

Default value: COM

tlntcntrlopt Indicates whether to send telnet control options. When the value of the parameter is the factory default of "Y" (Yes), the TL1 agent sends two commands to a telnet client when the client establishes a connection with the TL1 agent. The first command puts the client into character mode. The second command tells the client that the TL1 agent will echo characters back to the client (Many telnet clients support a mode where user input is echoed locally from the keyboard to the console output.).

Type: BoolYN

Range: Y = send telnet control options

N = don't send telnet control options

Default value: not applicable

promptmode Indicates whether pressing the "Escape" key is required to invoke the telnet session system prompt. When the value of the parameter is the factory default of "Y" (Yes), the user must press the "Escape" key for the TL1 agent to go into prompt mode (in which the TL1 agent displays the Lucent prompt and echoes characters back to telnet clients). If the value of *promptmode* is "Y" and the user does not press the "Escape" key, then the prompt will not be displayed and characters will not be echoed to the client. When the value is "N" (No), the TL1 agent automatically enters local echo mode and displays the Lucent prompt when a connection is established with a telnet client.

Type: BoolYN

Range: Y = entering "Escape" required to invoke system prompt

N = prompt invoked automatically on connect

Default value: not applicable

Input Examples:

```
ED-SYS-TL1:::::TLNtcntrlopt=Y,PROMPTMODE=Y;  
RTRV-SYS-TL1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"COM:TLNtcntrlopt=Y,PROMPTMODE=Y"  
;
```

Related Commands: none

INIT-SYS

Command:

INIT-SYS: Initialize System

Description:

INIT-SYS lets the user initialize the switch as a whole either to its TL1 interface default values or to the existing values in the TimesTen database. It also initializes general parameters like Date and Time. As a security feature, the TID (target identifier; that is, the network name of the switch) is mandatory – use RTRV-HDR to obtain the name if unknown. The AID block is not included so that the command cannot be used to reset subsystems.

Category: System

Security: ADMIN

Input Format:

INIT-SYS:<TID>:::[CTAG]:::<ph>;

Output Format: none

Parameters:

ph Identifies the degree of thoroughness of the system initialization.

Type: enum

Range: 10 = Normal shutdown and reboot

20 = Shutdown and halt (no reboot)

30 = Shutdown and clean persistent databases (factory default)

Default value: None

Input Example:

INIT-SYS:lucent:::10;

Related Commands: none

RTRV-BKUPSCHEDEQPT / SCHED-BKUP-EQPT

Commands:

RTRV-BKUPSCHEDEQPT: Retrieve Backup Schedule Equipment

SCHED-BKUP-EQPT: Schedule Backup Equipment

Descriptions:

RTRV-BKUPSCHEDEQPT lets the user retrieve the scheduling interval, starting date, and starting time for autonomous backups of the configuration data for the switch, including the TimesTen database in the switch, to another location in the network.

SCHED-BKUP-EQPT lets the user schedule autonomous backups of the configuration data for the switch, including the TimesTen database in the switch, to another location in the network. SCHED-BKUP-EQPT is dependent on ENT-BACKUP-SYS; that is, the user cannot schedule a backup unless the backup system is configured first.

Category: System

Security: NSA for SCHED, View for RTRV

Input Formats:

RTRV-BKUPSCHEDEQPT:[TID]:[<src>]:[CTAG];

SCHED-BKUP-EQPT:[TID]:[<src>]:[CTAG]::::<invl>,
<stadat>,<statm>,<tmout>;

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<src>:<invl>,<stadat>,<statm>,<tmout>"
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

- invl** Identifies the interval; that is, the frequency at which the backup runs. The format for interval is VAL-UN, where VAL is a numeric value and UN stands for a unit of time.
Type: ScheduleInterval
Range: {1-31}-DAY
 {1-24}-HR
Default value: None
- stadat** Identifies the start date; that is, the date to begin the scheduled backup. The format for *stadat* is MOY-DOM (month-of-year, day-of-month). Setting the month to “0” turns off backup scheduling so no scheduled backups will be performed.
Type: StartDate
Range: {0-12}-{1-31}
Default value: None
- statm** Identifies the start time; that is, the time to begin the scheduled backup. The format for *statm* is H HOD-MOH (hour-of-day, minute-of-hour). Valid values are 0-24 and 0-59 respectively. Default is the current time of day.
Type: StartTime
Range: {0-23}-{0-59}
Default value: None
- tmout** Identifies the time out interval in minutes. The command execution terminates if the command has not executed within the *tmout* interval (due to a stalled FTP process).
Type: Tmout
Range: {1-120}
Default value: 30

Input Examples:

```
RTRV-BKUPSCHEDEQPT;  
SCHED-BKUP-EQPT:::24-HR,10-29,22-30,30;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"COM:24-HR,10-29,22-30,30"  
;
```

Related Commands:

DLT/ENT/RTRV-BACKUP-SYS

EXEC-BACKUP-PLEXUS

RTRV-HDR

Command:

RTRV-HDR: Retrieve header

Description:

RTRV-HDR returns the current date, time, and TID of the switch. If you do not specify a TID then you can find out the TID in the response to RTRV-HDR. This is the most basic message.

Category: System

Security: View

Input Format:

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

Output Format:

```
      SID DATE TIME
M    CTAG COMPLD
;
```

Parameters: none

Input Example:

RTRV-HDR;

Output Example:

```
      lucent 2005-06-24 14:37:49
M    0 COMPLD
;
```

Related Commands: none

RTRV-NETYPE

Command:

RTRV-NETYPE: Retrieve Network Element Type

Description:

RTRV-NETYPE lets the user retrieve the vendor, model, network role, and software release for the switch.

Category: System

Security: View

Input Format:

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

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<vendor>,<model>,<neType>,<swIssue>"
;
```

Parameters:

vendor Identifies the name of the equipment vendor.

Type: string

Range: up to 40 alphanumeric characters

Default value: none

model Identifies the name of the equipment model.

Type: string

Range: up to 40 alphanumeric characters

Default value: none

neType Identifies the equipment as a specific type of network element.

Type: enum

Range: ADM = Add drop multiplexer

ADTS = Automated digital timing system

APS = Automatic protection switching equipment

CS = Circuit switch

DCS = Digital cross-connect switch

DLC = Digital loop carrier system

EDSX = Electronic digital signal cross-connect

EM = Environment monitors

ISDN = Integrated services digital network switch

LBRV = Low bit rate voice terminal

LDS = Local digital switch

LTE = Line terminating equipment

MUX = Multiplexer

PS = Packet switch

REP = Repeater

SCP = Service control point

SS = Supervisory system

STP = Signal transfer point

TSG = Timing signal generator

Default value: none

swIssue Identifies the software release issue.

Type: string

Range: alphanumeric characters

Default value: none

Input Example:

```
RTRV-NETTYPE;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"Lucent,Lucent Network Controller 3000,ISDN,5.0.1"
;
```

Related Commands: none

RTRV/SET-PMDAY

Commands:

RTRV-PMDAY: Retrieve Performance Monitoring Day

SET-PMDAY: Set Performance Monitoring Day

Descriptions:

RTRV-PMDAY allows retrieval of the start time for the daily performance monitoring data collection period for the switch. Use the SET-PMDAY command to set the current start time of the daily data collection.

SET-PMDAY allows the user to set the current start time of the daily performance monitoring data collection period for the switch. Use the RTRV-PMDAY command to retrieve the start time.

Category: System

Security: NSA for SET, View for RTRV

Input Formats:

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

SET-PMDAY: [TID]::[CTAG]::<HourOfDay>;

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<HourOfDay>"
;
```

Parameters:

HourOfDay Identifies the start time of the daily data collection period.

Type: integer

Range: {0-23}

Default value: None

Input Examples:

RTRV-PMDAY;

SET-PMDAY:::::0;

Output Example:

```
          lucent 2005-06-24 14:37:49  
M      0 COMPLD  
        "0"  
      ;
```

Related Commands: none

RTRV-SESSIONS

Command:

RTRV-SESSIONS: Retrieve Sessions

Description:

RTRV-SESSIONS lets the user retrieve the identification and associated parameters for currently connected users of the switch.

Category: System

Security: View

Input Format:

RTRV-SESSIONS: [TID]: [<UID>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<UID>: SLOT=<slot>, PORT=<port>,
    IPADDRESS=<IpAddress>, IDLEMIN=<IdleMin>,
    CONNECTTIME=<connect time>, HANDLE=<Handle>,
    INH=<Inh>"
;
```

Parameters:

UID Identifies the AID as a user. The UID is the user ID or login name. A null value is equivalent to "ALL"; that is, by leaving the field blank, all values configured in the system for the command will be returned.

Type: string

Range: 8 – 16 characters

Default value: none

slot Identifies whether the user is logged into the switch through the active or standby System Processor module.

Type: enum

Range: SP-{A-B}

Default value: none

port Identifies whether the user is connected to the switch through the Ethernet or a craft port.

Type: enum

Range: LAN = Ethernet port
SERIAL = Craft port

Default value: none

IpAddress Identifies the IP address for the port through which the user connects.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

IdleMin Identifies the time in minutes the connection has been idle.

Type: integer

Range: {0-32767}

Default value: none

connecttime Identifies the date and time the user connected to the system.

Type: string

Range: {Day MM DD YYYY} {HH.MM.DD}

Default value: none

Handle Identifies a TL1 session internally to the TL1 agent.

Type: integer

Range: {0-32767}

Default value: none

Inh Identifies whether the session is inhibited.

Type: BoolYN

Range: N = session is not inhibited
Y = session is inhibited

Default value: none

Input Example:

RTRV-SESSIONS;

Output Example:

```
    lucent 2005-06-24 14:37:49
M  0 COMPLD
    "lucent:SLOT=SP-B,PORT=LAN,IP=10.0.100.108,
      IDLEMIN=0,CONNECTTIME=Fri 06 24 2005 11.12.44,
      HANDLE=13,INH=Y"
;
```

Related Commands: none

SET-SID

Command:

SET-SID: Set System ID

Description:

SET-SID lets the user set the system identification code for the switch. Lucent recommends setting the value of the SID parameter to the CLLI code for the system.

Category: System

Security: NSA

Input Format:

SET-SID: [TID] :: [CTAG] :: <sid>;

Output Format: none

Parameters:

sid Identifies the system identification code assigned to the switch. The value of SID may be any text string. The recommended value for this parameter is the CLLI code.

Type: string

Range: limited to 20 characters

Default value: none

Input Example:

SET-SID: :: :: CLLI_CODE;

Related Commands: none

NOTES

EXEC-BACKUP/RESTORE-PLEXUS

Commands:

EXEC-BACKUP-PLEXUS: Execute Backup Switch

EXEC-RESTORE-PLEXUS: Execute Restore Switch

Descriptions:

EXEC-BACKUP-PLEXUS allows the user to copy the configuration data for the switch, including the TimesTen database in the switch, to both another location in the network as well as locally to SP-A and SP-B. The command first copies the configuration data to a file in the *dbCurrent* directory. It then changes the working directory to *dbCurrent*, backs up the content of *dbCurrent* locally to a compressed tar file (the tar file name is the host's <TID>_<date>_<time>), sends the tar file to the specified destination host and directory (via ftp), and lastly saves the tar file to */localbackup* on SP-A and SP-B.

EXEC-RESTORE-PLEXUS allows the user to copy the configuration data for the switch, including the TimesTen database, to the switch either from another location in the network, or from SP-A and SP-B. The command first creates the directory */Lucent/backups* when restoring from another location in the network; it deletes the contents if the directory already exists. It then copies the backup configuration data tar file (via ftp for a remote source) from the specified source host and directory to */Lucent/backups*. The configuration data for the switch is restored at the next system initialization (re-boot). Note that the TID (target identifier; that is, the network name of the switch) is mandatory – use RTRV-HDR to obtain the name if unknown.

Category: System

Security: SW for both commands

Input Formats:

EXEC-BACKUP-PLEXUS: [TID]: [<src>]: [CTAG]::<desthost>,
 <username>,<password>,<destdir>,<suppressoutput>],
 [<tmout>];

EXEC-RESTORE-PLEXUS:<TID>: [<src>]: [CTAG]::<srchost>,
 <username>,<password>,<srcpath>,<suppressoutput>],
 [<tmout>];

Output Formats (both commands):

```
SID DATE TIME
M CTAG COMPLD
<text>
;
```

Parameters:

- src** Identifies the AID as the switch.
Type: COM
Range: COM
Default value: COM
- desthost** Identifies (for BACKUP) the remote host, containing the destination directory identified by *destdir*, for backing up the switch configuration data .
Type: string
Range: ANSI characters
Default value: none
- srchost** Identifies (for RESTORE) the remote host (or the local host or IP address), containing the source file identified in *srcpath*, for retrieving the switch configuration data. Entering the value “0.0.0.0” designates the local host.
Type: string
Range: ANSI characters
Default value: none
- username** Identifies a valid user name for the host identified by *desthost*.
Type: string
Range: alphanumeric characters
Default value: none
- password** Identifies a valid password for the host identified by *desthost*.
Type: string
Range: alphanumeric characters
Default value: none

- destdir** Identifies (for BACKUP) the destination directory for the switch configuration data. The value of *destdir* must start with a “/” unless the destination directory is relative to (within) the current working directory (set with the EXEC-CD command).
- Type:** string
Range: ANSI characters
Default value: none
- srcpath** Identifies (for RESTORE) the path to the source file for the switch configuration data on the remote host specified by *srchost*.
- Type:** string
Range: ANSI characters
Default value: none
- suppressoutput** Identifies whether to suppress the output for the command.
- Type:** BoolYN
Range: N = do not suppress output
Y = suppress output
Default value: N
- tmout** Identifies the time out interval in minutes. The command execution terminates if the command has not executed within the *tmout* interval (due to a stalled FTP process).
- Type:** integer
Range: {1-120}
Default value: 30
- text** Identifies (in output) the shell commands as they execute, as well as any error messages.
- Type:** string
Range: ANSI characters
Default value: none

Input Examples:

```
EXEC-BACKUP-PLEXUS:::::remote_host,johnuser,*****,  
/remote_server/backup_dir;
```

(Restore from a remote host)

```
EXEC-RESTORE-PLEXUS:::::remote_host,johnuser,*****,  
/remote_server/backup_dir/backup_rel_date_time;
```

(Restore from the local host)

```
EXEC-RESTORE-PLEXUS:::::0.0.0.0,johnuser,*****,  
/localbackup;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
Shell command 1  
Shell command 2  
.  
.  
.  
Shell command n  
;
```

Related Commands:

DLT/ENT/RTRV-BACKUP-SYS
SCHED-BKUP-EQPT

RTRV-BKUPSCHED-EQPT

EXEC-CAT

Command:

EXEC-CAT: Execute CAT

Description:

EXEC-CAT lets the user retrieve the contents of a file.

Category: System

Security: View

Input Format:

```
EXEC-CAT:[TID]:[<src>]:[CTAG]::<file>,  
[<suppressoutput>;
```

Output Format:

```
      SID DATE TIME  
M    CTAG COMPLD  
      <text>  
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

file Identifies a single file from which to retrieve text. The value of *file* must start with a “/” unless the file is relative to (within) the current working directory (set with the EXEC-CD command).

Type: string

Range: ANSI characters

Default value: none

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output

Y = suppress output

Default value: N

text Identifies (in output) the shell commands as they execute, as well as any error messages.

Type: string

Range: ANSI characters

Default value: none

Input Example:

```
EXEC-CAT:::::/tmp/shopping.txt;
```

Output Example:

```
      lucent 2005-06-24 14:37:49
M    0 COMPLD
      milk
      bread
      fruit
      cat food
      ;
```

Related Commands: none

EXEC-CD

Command:

EXEC-CD: Execute Current Directory

Description:

EXEC-CD lets the user, for the current session, set the working directory used for subsequent “EXEC” commands.

Category: System

Security: View

Input Format:

```
EXEC-CD:[TID]:[<src>]:[CTAG]::[<dir>],  
[<suppressoutput>;
```

Output Format:

```
      SID DATE TIME  
M    CTAG COMPLD  
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

dir Identifies the new current directory. This parameter defaults to the root directory, identified by a slash (“/”). The new current directory is a subdirectory of the old current directory if the value of *dir* does not start with “/”.

Type: string

Range: ANSI characters

Default value: /

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output

Y = suppress output

Default value: N

Input Example:

```
EXEC-CD:::::/tmp;
```

Output Example:

```
      lucent 2005-06-24 14:37:49  
M    0 COMPLD  
;
```

Related Commands: none

EXEC-CP / EXEC-CP-FROMSTBY/TOSTBY

Commands:

EXEC-CP: Execute Copy

EXEC-CP-FROMSTBY: Execute Copy From Standby

EXEC-CP-TOSTBY: Execute Copy To Standby

Descriptions:

EXEC-CP lets the user copy and/or rename files or directories.

EXEC-CP-FROMSTBY lets the user copy files or directories from the standby processor to the active. If *source* represents a single file, *dest* can be a directory or a file (which allows renaming the file). If *source* represents a directory, *dest* must be a directory and the “-r” switch is mandatory.

EXEC-CP-TOSTBY lets the user copy files or directories from the active processor to the standby. If *source* represents a single file, *dest* can be a directory or a file (which allows renaming the file). If *source* represents a directory, *dest* must be a directory and the “-r” switch must be used.

Category: System

Security: SW for all commands

Input Formats:

```
EXEC-CP: [TID]: [<src>]: [CTAG]: [<switches>], <source>,
        [<dest>], [<suppressoutput>];
EXEC-CP-FROMSTBY: [TID]: [<src>]: [CTAG]: [<switches>],
        <source>, [<dest>], [<suppressoutput>];
EXEC-CP-TOSTBY: [TID]: [<src>]: [CTAG]: [<switches>],
        <source>, <dest>, [<suppressoutput>];
```

Output Formats (all commands):

```
SID DATE TIME
M CTAG COMPLD
<text>
;
```

Parameters:

- src** Identifies the AID as the switch.
Type: COM
Range: COM
Default value: COM
- switches** Identifies (for EXEX-CP) options affecting the copying process (can be one or more values separated by a space).
Type: string
Range: -p = Preserve (preserve file attributes if possible)
-r = copy recursively, non-directories as files
-v = Verbose (explain what is being done)
Default value: null
- switches** Identifies (for EXEX-CP-FROMSTBY/TOSTBY) options affecting the copying process (can be one or more values separated by a space).
Type: string
Range: -p = Preserve (preserve file attributes if possible)
-r = Copy recursively, non-directories as files
Default value: null
- source** Identifies a file specification to copy; by using wildcards (for example, "*"), it can represent one or more files or directories. Wildcard characters cannot be used in EXEC-CP-TOSTBY. The value of *source* must start with a "/" unless the source file/directory is relative to (within) the current working directory (set with the EXEC-CD command).
Type: string
Range: ANSI characters
Default value: none
- dest** Identifies the destination file/directory for the copied file/directory. For EXEC-CP-TOSTBY, it identifies the destination file/directory on the standby processor for the copied file/directory. The value of *dest* must start with a "/" unless the destination file/directory is relative to (within) the current working directory (set with the EXEC-CD command). For EXEC-CP and EXEC-CP-FROMSTBY, *dest* defaults to the current working directory.
Type: string
Range: ANSI characters
Default value: null

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output
Y = suppress output

Default value: N

text Identifies (in output) the shell commands as they execute, as well as any error messages.

Type: string

Range: ANSI characters

Default value: none

Input Examples:

```
EXEC-CP:::::-r,emf.log,emf.log2;  
EXEC-CP-FROMSTBY:::::-r,/tmp/f*,/tmp/foo;  
EXEC-CP-TOSTBY:::::-p,/tmp/myfiles.tar,/tmp/testdir;
```

Output Examples:

(For EXEC-CP)

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
/bin/cp -r emf.log emf.log2  
;
```

(For EXEC-CP-FROMSTBY)

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
cd /tmp/foo; /bin/rcp -r 192.168.253.27:tmp/f* /tmp/foo  
;
```

(For EXEC-CP-TOSTBY)

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
/bin/rcp -p /tmp/myfiles.tar 192.168.253.26:/tmp/testdir  
;
```

Related Commands: none

EXEC-FTP-GET/PUT

Commands:

EXEC-FTP-GET: Execute FTP Get

EXEC-FTP-PUT: Execute FTP Put

Descriptions:

EXEC-FTP-GET lets the user get a file from a remote host and copy it to a destination directory on the active processor via binary-mode file transfer protocol.

EXEC-FTP-PUT lets the user copy a local file to a destination directory on a remote host via binary-mode file transfer protocol.

Category: System

Security: SW for both commands

Input Formats:

EXEC-FTP-GET:[TID]:[<src>]:[CTAG]::<srchost>,
<username>,<password>,<srcfile>,[<destdir>],
[<suppressoutput>],[<tmout>];

EXEC-FTP-PUT:[TID]:[<src>]:[CTAG]::<desthost>,
<username>,<password>,<srcfile>,<destdir>,
[<suppressoutput>],[<tmout>];

Output Formats (both commands):

SID DATE TIME
M CTAG COMPLD
<text>
;

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

- srchost** Identifies (in FTP-GET) the host for the source file identified by *srcfile*.
Type: string
Range: ANSI characters
Default value: none
- desthost** Identifies (in FTP-PUT) the remote host containing the destination directory identified by *destdir*.
Type: string
Range: ANSI characters
Default value: none
- username** Identifies a valid user name for the host identified by *srchost* or *desthost*.
Type: string
Range: alphanumeric characters
Default value: none
- password** Identifies a valid password for the host identified by *srchost* or *desthost*. The password will not display when entered.
Type: string
Range: alphanumeric characters
Default value: none
- srcfile** Identifies a file (or, by using wildcards, files) to get and copy, or to copy to the destination directory. The value of *srcfile* must start with a “/” unless the source file(s)/directory(ies) is relative to (within) the current working directory (set with the EXEC-CD command).
Type: string
Range: ANSI characters
Default value: none
- destdir** Identifies the destination directory for the copied file. The value of *destdir* must start with a “/” unless the destination directory is relative to (within) the current working directory (set with the EXEC-CD command). For FTP-GET, *destdir* defaults to the current working directory.
Type: string
Range: ANSI characters
Default value: null

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output
Y = suppress output

Default value: N

tmout Identifies the time out interval in minutes. The command execution terminates if the command has not executed within the *tmout* interval (due to a stalled FTP process).

Type: integer

Range: {1-120}

Default value: 30

text Identifies (in output) the shell commands as they execute, as well as any error messages.

Type: string

Range: ANSI characters

Default value: none

Input Examples:

```
EXEC-FTP-GET:::::192.168.253.27,JOHNUSER,*****,  
/tmp/myfiles.tar,/tmp;  
EXEC-FTP-PUT:::::192.168.253.27,JOHNUSER,*****,  
/tmp/myfiles.tar,/tmp;
```

Output Examples:

(For EXEC-FTP-GET)

Note: Ignore the warning in lines 12 and 13 of the following example; it is due to a bug in the LYNX operating system that generates it when getting multiple files.

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
/bin/ftp -inv
Connected to 192.168.253.27.
220 malt FTP server (Version 4.162 Mon Nov 10 9:50:37 PST 1988) ready.
331 Password required for root.
230 User root logged in.
200 Type set to I.
Local directory now /tmp
250 CWD command successful.
257 "/tmp" is current directory.
WARNING! 536934952 bare linefeeds received in ASCII mode
File may not have transferred correctly.
local: myfiles.tar remote: myfiles.tar
200 PORT command successful.
150 Opening BINARY mode data connection for myfiles.tar (1264 bytes).
226 Transfer complete.
1264 bytes received in 0.023 seconds (53 Kbytes/s)
221 Goodbye.
/* EXEC-FTP-GET */
;
```

(For EXEC-FTP-PUT)

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
/bin/ftp -inv
Connected to 192.168.253.27.
220 malt FTP server (Version 4.162 Mon Nov 10 9:50:37 PST 1988) ready.
331 Password required for root.
230 User root logged in.
200 Type set to I.
Local directory now /tmp
250 CWD command successful.
257 "/tmp" is current directory.
local: myfiles.tar remote: myfiles.tar
200 PORT command successful.
150 Opening BINARY mode data connection for myfiles.tar.
226 Transfer complete.
1264 bytes sent in 0.02 seconds (62 Kbytes/s)
221 Goodbye.
/* EXEC-FTP-PUT */
;
```

Related Commands: none

EXEC-LS

Command:

EXEC-LS: Execute List

Description:

EXEC-LS lets the user list directory contents and file information.

Category: System

Security: View

Input Format:

```
EXEC-LS: [TID]: [<src>]: [CTAG]: [<switches>], [<files>],  
[<suppressoutput>];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
<text>  
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

switches Identifies options affecting the listing process (can be one or more values separated by a space).

Type: string

Range: -1 = One line of output is generated for each file. This option is assumed when standard output is not to a terminal.

-A = When listing directory contents, all files are included, including those whose names begin with "." but excluding "." and "..".

-C = ls will list as many files per output line as possible. This option is assumed when standard output is a terminal.

-F = ls appends markers to file names in the listing to indicate file type, as follows:

- / = Directory.
 - & = Named pipe (FIFO).
 - = = Socket (not implemented in LynxOS).
 - @ = Symbolic link.
 - * = Executable regular file.
 - | = IPC special file.
- L = For each argument or directory element which is a symbolic link, information about the file or directory referenced by the link (instead of the link itself) is used for printing, sorting, and / or marking the output.
 - R = Each subdirectory encountered while scanning a directory is itself examined.
 - T types = Only files whose type is one of those specified by types will be shown. The types list should be a string of one or more of -, b, c, d, f, l, p, r, s, i, I, and +, as described below.
 - a = When listing directory contents, all files are printed, including files which begin with ".".
 - c = The time value examined for printing (-l) and sorting (-u) will be the inode change time instead of the modification time.
 - d = Instructs ls to give information about directory arguments themselves instead of listing the contents of the directories.
 - f = Each argument is interpreted as a directory, and contents are listed in the order encountered (no sort is performed). The -f option disables -l, -t, -s, and -r, and enables -a.
 - g = Group ID of each file is printed (only effective when -l is also given).
 - i = The inode number of each file is printed.
 - l = Extended information is given for each file, including file mode, number of links, owner, size in bytes, and time (usually modification time, but optionally access or inode change time). If a file is a special file, the major and minor numbers are given in place of file size. If a file is a symbolic link, then the target of the link is given after the file name.
 - n = Restricts listing to files created on the current system date.
 - q = Forces non-printable characters in file names to be printed as "?". This option is assumed when standard output is a terminal.
 - r = Reverses sort order.

- s = Lists size of each file, in 512-byte blocks.
- t = Sorts by time rather than by name.
- u = Uses time of last access rather than modification time for printing (-l) and sorting (-t).

Default value: null

files Identifies the target directory or file for the command. The value of *files* must start with a "/" unless the target directory/file is relative to (within) the current working directory (set with the EXEC-CD command). *files* defaults to the current working directory and can contain wildcard characters (for example, "*").

Type: string

Range: ANSI characters

Default value: null

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output

Y = suppress output

Default value: N

text Identifies (in output) the directories and files within the present working directory.

Type: string

Range: ANSI characters

Default value: none

Input Example:

```
EXEC-LS:::::/TMP;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
cd /tmp; /bin/ls
emf.log
pmiFileList
telnetlog
;
```

Related Commands: none

EXEC-MKDIR

Command:

EXEC-MKDIR: Execute Make Directory

Description:

EXEC-MKDIR lets the user create a new directory.

Category: System

Security: SW

Input Format:

```
EXEC-MKDIR:[TID]:[<src>]:[CTAG]::<dir>,  
[<suppressoutput>;
```

Output Format:

```
      SID DATE TIME  
M    CTAG COMPLD  
      <text>  
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

dir Identifies the new directory. The new directory is a subdirectory of the current working directory if the value of *dir* does not start with “/” or “./”.

Type: string

Range: ANSI characters

Default value: none

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output

Y = suppress output

Default value: N

text Echoes the entered command in output.
Type: string
Range: ANSI characters
Default value: none

Input Example:

```
EXEC-MKDIR:::::newdir;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
cd /; /bin/mkdir newdir  
;
```

Related Commands: none

EXEC-MV

Command:

EXEC-MV: Execute Move

Description:

EXEC-MV lets the user move a single file or directory.

Category: System

Security: SW

Input Format:

```
EXEC-MV: [TID]: [<src>]: [CTAG]:: [<switches>], <source>,  
        <dest>, [<suppressoutput>];
```

Output Format:

```
        SID DATE TIME  
M      CTAG COMPLD  
        <text>  
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

switches Identifies options affecting the copying process (can be one or more values separated by a space).

Type: string

Range: -f = Force writing over existing files without prompting

Default value: null

source Identifies a single file/directory to move. The value of *source* must start with a "/" unless the source file/directory is relative to (within) the current working directory (set with the EXEC-CD command). *source* can contain wildcard characters (for example, "*").

Type: string

Range: ANSI characters

Default value: none

dest Identifies the destination file/directory for the moved file/directory. The value of *dest* must start with a “/” unless the destination file/directory is relative to (within) the current working directory (set with the EXEC-CD command). If *dest* is a file, then the command changes the name (value) of *source* to that of *dest*. If *dest* is a directory, then the command moves the file/directory identified by *source* to *dest*.

Type: string

Range: ANSI characters

Default value: none

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output

Y = suppress output

Default value: N

text Echoes the entered command in output.

Type: string

Range: ANSI characters

Default value: none

Input Example:

```
EXEC-MV:::::-f,emf.log2,/TMP;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
/bin/mv -f emf.log2 /tmp/emf.log2
;
```

Related Commands: none

EXEC-NETSTAT

Command:

EXEC- NETSTAT: Execute Network Status

Description:

EXEC-NETSTAT lets the user check the status of Ethernet interfaces and routing tables. It symbolically displays the contents of various network-related data structures. There are a number of output formats, depending on the options for the information presented. The first form of the command displays a list of active sockets for each protocol. The second form presents the contents of one of the other network data structures according to the option selected. Using the third form, with a wait interval specified, netstat will continuously display the information regarding packet traffic on the configured network interfaces. The fourth form displays statistics about the named protocol.

Category: System

Security: SW

Output Format:

```
      SID DATE TIME
M    CTAG COMPLD
      <text>
;
```

Input Format:

```
EXEC-NETSTAT:[TID]:[<spOrIom>]:[CTAG]::[<switches>],
[<suppressoutput>];
```

Parameters:

spOrIom Identifies the AID as a module in the switch. A null value is equivalent to "ALL"; that is, by leaving the field blank, the status of Ethernet interfaces and routing tables for all system modules will be returned.

Type: SPorIOM

Range: IOM-{8,10}
SP-{A-B}

Default value: none

switches Identifies options affecting the listing process (can be one or more values separated by a space). This parameter is not supported presently; switches are ignored.

Type: string

Range:

- A = With the default display, show the address of any protocol control blocks associated with sockets; used for debugging.
- a = With the default display, show the state of all sockets; normally sockets used by server processes are not shown.
- d = With either interface display (option -i or an interval, as described below), show the number of dropped packets
- f = Limit statistics or address control block reports to those of the specified address family (currently INET only).
- g = Show information related to multicast (group address) routing. By default, show the IP Multicast virtual-interface and routing tables. If the -s option is also present, show multicast routing statistics.
- I = Show information about the specified interface; used with a wait interval as described below.
- i = Show the state of interfaces which have been auto-configured (interfaces statically configured into a system, but not located at boot time are not shown). If the -a option is also present, multicast addresses currently in use are shown for each Ethernet interface and for each IP interface address. Multicast addresses are shown on separate lines following the interface address with which they are associated.
- N = Extract the name list from the specified system instead of the default /vmunix.
- n = Show network addresses as numbers (normally netstat interprets addresses and attempts to display them symbolically). This option may be used with any of the display formats.
- p = Show statistics about protocol, which is either a well-known name for a protocol or an alias for it. Some protocol names and aliases are listed in the file /etc/protocols. A null response typically means that there are no interesting numbers to report. The program will complain if protocol is unknown or if there is no statistics routine for it.
- r = Show the routing tables. When -s is also present, show routing statistics instead.
- s = Show per-protocol statistics. If this option is repeated, counters with a value of zero are suppressed.

-w = Show network interface statistics at intervals of wait seconds.

Default value: NULL

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output
Y = suppress output

Default value: N

text Identifies the output for the command. The default display, for active sockets, shows the local and remote addresses, send and receive queue sizes (in bytes), protocol, and the internal state of the protocol. Address formats are of the form "host.port" or "network.port" if a socket's address specifies a network but no specific host address. When known the host and network addresses are displayed symbolically according to the data bases /etc/hosts and /etc/networks, respectively. If a symbolic name for an address is unknown, or if the -n option is specified, the address is printed numerically, according to the address family. Unspecified, or "wildcard", addresses and ports appear as "*".

The interface display provides a table of cumulative statistics regarding packets transferred, errors, and collisions. The network addresses of the interface and the maximum transmission unit ("mtu") are also displayed.

The routing table display indicates the available routes and their status. Each route consists of a destination host or network and a gateway to use in forwarding packets. The flags field shows a collection of information about the route stored as binary choices.

Direct routes are created for each interface attached to the local host; the gateway field for such entries shows the address of the outgoing interface. The refcnt field gives the current number of active uses of the route. Connection oriented protocols normally hold on to a single route for the duration of a connection while connectionless protocols obtain a route while sending to the same destination. The use field provides a count of the number of packets sent using that route. The interface entry indicates the network interface utilized for the route.

Type: string

Range: ANSI characters

Default value: none

Input Example:

EXEC-NETSTAT;

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
```

```
Internet:
Destination      Gateway          Flags           Refs      Use
Interface
default          10.7.0.1        UGS             4         66700    mgt0
10.7             link#12         UC              0          0        mgt0
10.7.0.1         0:d0:bc:f5:2:f8 UHL             1          0        mgt0
10.7.48.26       0:30:fa:0:2:94  UHL             1          4        lo0
10.7.48.27       0:30:fa:0:3:60  UHL             1         1049    mgt0
10.7.206.206     link#12         UHL             1        178613    mgt0
127.0.0.1        127.0.0.1      UH             105       9171348   lo0
192.168.251      link#15         UC              0          0        dbg0
192.168.252      192.168.252.26 U              16       4614526   sar0
192.168.253      link#13         UC              0          0        rep0
192.168.253.27  0:30:fa:0:3:61 UHL             7       2703922   rep0
;
```

Related Commands: none

EXEC-PWD

Command:

EXEC-PWD: Execute Present Working Directory

Description:

EXEC-PWD lets the user retrieve the path name of the current working directory. The user's current working directory is the default directory for other EXEC commands.

Category: System

Security: View

Input Format:

EXEC-PWD: [TID]: [<src>]: [CTAG]: : [<suppressoutput>];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<com>:<dir>"
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

com Identifies the AID (in output) as the switch.

Type: COM

Range: COM

Default value: COM

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output

Y = suppress output

Default value: N

dir Identifies (in output) the path name for current working directory.
Type: string
Range: ANSI characters
Default value: none

Input Example:

EXEC-PWD;

Output Example:

```
      lucent 2005-06-24 14:37:49
M    0 COMPLD
      COM:/tmp
;
```

Related Commands: none

EXEC-RM/RMDIR

Commands:

EXEC-RM: Execute Remove

EXEC-RMDIR: Execute Remove Directory

Descriptions:

EXEC-RM lets the user remove (delete) a single file or, by using wildcards, files

EXEC-RMDIR lets the user remove (delete) a single directory or, by using wildcards, directories.

Category: System

Security: SW for both commands

Input Formats:

EXEC-RM: [TID]: [<src>]: [CTAG]:: [<switches>], <file>,
[<suppressoutput>];

EXEC-RMDIR: [TID]: [<src>]: [CTAG]:: <dir>,
[<suppressoutput>];

Output Formats (both commands):

```
SID DATE TIME
M CTAG COMPLD
<text>
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

switches Identifies (for EXEC-RM) options affecting the file removal process (can be one or more values separated by a space).

Type: string

Range: -f = Force removal of unwritable files without prompting

-r = Recursively remove a directory subtree

-v = Generates verbose output

Default value: null

- file** Identifies (for EXEC-RM) the file(s) to remove. The value of *file* must start with a "/" unless the source file/directory is relative to (within) the current working directory (set with the EXEC-CD command). *file* can contain wildcard characters (for example, "*").
Type: string
Range: ANSI characters
Default value: none
- dir** Identifies (for EXEC-RMDIR) the directories to remove. The value of *dir* must start with a "/" unless the affected directory is relative to (within) the current working directory (set with the EXEC-CD command). *dir* can contain wildcard characters (for example, "*").
Type: string
Range: ANSI characters
Default value: none
- suppressoutput** Identifies whether to suppress the output for the command.
Type: BoolYN
Range: N = do not suppress output
Y = suppress output
Default value: N
- text** Identifies (in output) the shell commands as they execute, as well as any error messages.
Type: string
Range: ANSI characters
Default value: none

Input Examples:

EXEC-RM:::::-f,emf.log2;

EXEC-RMDIR:::::/TMP;

Output Examples:

(For EXEC-RM)

```
    lucent 2005-06-24 14:37:49
M   0 COMPLD
    /bin/rm -f emf.log2
;
```

(For EXEC-RMDIR)

```
    lucent 2005-06-24 14:37:49
M   0 COMPLD
    /bin/rmdir tmp
;
```

Related Commands: none

EXEC-RUN-UPGRADE

Command:

EXEC-RUN-UPGRADE: Execute Run Upgrade

Description:

EXEC-RUN-UPGRADE lets the user run a script on an active or standby System Processor module to install the TimesTen database. Note that, as a security feature, the TID (target identifier; that is, the network name of the switch) is mandatory – use RTRV-HDR to obtain the name if unknown.

Category: System

Security: SW

Input Format:

```
EXEC-RUN-UPGRADE:<TID>:<sp>:[CTAG]::  
[<suppressoutput>];
```

Output Format:

```
      SID DATE TIME  
M    CTAG COMPLD  
    <text>  
;
```

Parameters:

sp Identifies the AID as an active or standby System Processor module in the switch.

Type: SP

Range: SP-{A-B}

Default value: none

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output

Y = suppress output

Default value: N

text Echoes the entered command in output.
Type: string
Range: ANSI characters
Default value: none

Input Example:

```
EXEC-RUN-UPGRADE:lucent:SP-A;
```

Output Example:

```
    lucent 2005-06-24 14:37:49
M  0  COMPLD
    /bin/rsh 192.168.253.26 "cd /Lucent/swCPU/CurrRel/
        system/scripts/;" ./uprev
    .sh -justinstall
    ;
```

Related Commands: none

EXEC-TAR-CREATE/EXTRACT/EXTRACTSTBY

Commands:

EXEC-TAR-CREATE: Execute Tar Create

EXEC-TAR-EXTRACT: Execute Tar Extract

EXEC-TAR-EXTRACTSTBY: Execute Tar Extract Standby

Descriptions:

EXEC-TAR-CREATE lets the user create an archive file (compressed tarfile).

EXEC-TAR-EXTRACT lets the user extract files from an archive file (compressed tarfile) into the current working directory.

EXEC-TAR-EXTRACTSTBY lets the user extract files from an archive file (tarfile) on the standby System Processor module into the current working directory.

Category: System

Security: SW for all commands

Input Formats:

EXEC-TAR-CREATE:[TID]:[<src>]:[CTAG]::<tarfile>,
<files>,[<suppressoutput>];

EXEC-TAR-EXTRACT:[TID]:[<src>]:[CTAG]::<tarfile>,
[<suppressoutput>];

EXEC-TAR-EXTRACTSTBY:[TID]:[<src>]:[CTAG]::<tarfile>,
<path>,[<suppressoutput>];

Output Formats (all commands):

SID DATE TIME
M CTAG COMPLD
<text>
;

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

- tarfile** Identifies the complete file path to the tarfile to either create, or from which to extract files (the tarfile must be on the standby System Processor for EXEC-TAR-EXTRACTSTBY). The value of *tarfile* must start with a “/” unless the affected file/directory is relative to (within) the current working directory (set with the EXEC-CD command). *tarfile* cannot contain wildcard characters (for example, “*”).
- Type:** string
Range: ANSI characters
Default value: null
- files** Identifies (for EXEC-TAR-CREATE) the file or directory to archive. The value of *files* must start with a “/” unless the affected file/directory is relative to (within) the current working directory (set with the EXEC-CD command). *files* can contain wildcard characters (for example, “*”).
- Type:** string
Range: ANSI characters
Default value: none
- path** Identifies (for EXEC-TAR-EXTRACTSTBY) the directory on the standby System Processor module into which the files are extracted.
- Type:** string
Range: ANSI characters
Default value: none
- suppressoutput** Identifies whether to suppress the output for the command.
- Type:** BoolYN
Range: N = do not suppress output
Y = suppress output
Default value: N
- text** Echoes the entered command in output.
- Type:** string
Range: ANSI characters
Default value: none

Input Examples:

```
EXEC-TAR-CREATE:::::/tmp/myfiles.tar,file*;
EXEC-TAR-EXTRACT:::::/tmp/myfiles.tar;
EXEC-TAR-EXTRACTSTBY:::::/tmp/testdir/myfiles.tar,
/tmp/newfiledir;
```

Output Examples:

(For EXEC-TAR-CREATE)

```
    lucent 2005-06-24 14:37:49
M   0 COMPLD
    /bin/tar -czvf /tmp/myfiles.tar file*
    file1
    file2
    file3
;
```

(For EXEC-TAR-EXTRACT)

```
    lucent 2005-06-24 14:37:49
M   0 COMPLD
    /bin/tar -xzvf /tmp/myfiles.tar
    file1
    file2
    file3
;
```

(For EXEC-TAR-EXTRACTSTBY)

```
    lucent 2005-06-24 14:37:49
M   0 COMPLD
    /bin/tar -xzvf /tmp/testdir/myfiles.tar
    file1
    file2
    file3
;
```

Related Commands: none

DLT/ENT/RTRV-CALL-CAPTVERBOSE

Commands:

DLT-CALL-CAPTVERBOSE: Delete Call Capture Verbose

ENT-CALL-CAPTVERBOSE: Enter Call Capture Verbose

RTRV-CALL-CAPTVERBOSE: Retrieve Call Capture Verbose

Descriptions:

DLT-CALL-CAPTVERBOSE let the user turn off a call trace observation (capture) session for a specific calling party and/or called party number.

ENT-CALL-CAPTVERBOSE lets the user establish a call trace observation (capture) session for a specific calling party and/or called party number, whether autonomous messages are displayed during the session, and the duration for the session. At least one number must be entered, even though both the calling party and called party numbers are optional parameters.

RTRV-CALL-CAPTVERBOSE lets the user retrieve the calling party and/or called party number(s) for (a) call trace observation (capture) session(s), whether autonomous messages are displayed during the session(s), and the duration for the session(s). At least one number will be returned, even though both the calling party and called party numbers are optional parameters in the response.

Category: Diagnosis

Security: NSA for all commands

Input Formats:

DLT-CALL-CAPTVERBOSE: [TID]:<trcId>:[CTAG];

ENT-CALL-CAPTVERBOSE: [TID]:<trcId>:[CTAG]::
[CGPN=<cgpn>],[CDPN=<cdpn>],[SENDTL1=<sendTl1>];

RTRV-CALL-CAPTVERBOSE: [TID]:[<trcId>]:[CTAG];

Output Formats:

```
SID DATE TIME
M CTAG COMPLD
  "<trcId>:[CGPN=<cgpn>],[CDPN=<cdpn>],
    SENDTL1=<sendTl1>"
;
```

Parameters:

trcId	Identifies the AID as the call trace observation session to establish. Type: integer Range: {1-20} Default value: none
cgpn	Identifies the affected calling party number for the call trace observation session. Type: string Range: up to 21 digits Default value: none
cdpn	Identifies the affected called party number for the call trace observation session. Type: string Range: up to 21 digits Default value: none
sendTl1	Identifies whether to display autonomous messages received during the call trace observation session, in addition to recording them in the CALLCAPT log. Type: BoolYN Range: N = only log autonomous messages, no display Y = log and display autonomous messages Default value: N

Input Examples:

```
DLT-CALL-CAPTVERBOSE::1;  
ENT-CALL-CAPTVERBOSE::1:::CGPN=5088048202,  
CDPN=6177273600,SENDTL1=N;  
RTRV-CALL-CAPTVERBOSE::1;
```

Output Examples:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"1:CGPN=5088048202,CDPN=6177273600,SENDTL1=N"  
;
```

Related Commands: none

DLT/ENT/RTRV-CAPT-SYS

Commands:

DLT-CAPT-SYS: Delete Capture System

ENT-CAPT-SYS: Enter Capture System

RTRV-CAPT-SYS: [TID] : [<captSysId>] : [CTAG] ;

Descriptions:

DLT-CAPT-SYS lets the user delete a server from the list of systems that can receive protocol capture session records.

ENT-CAPT-SYS lets the user add a server to the list of systems that can receive protocol capture session records.

RTRV-CAPT-SYS lets the user retrieve the IP address and receiving port number for a server that can receive protocol capture session records.

Category: Diagnosis

Security: NSA for all commands

Input Formats:

DLT-CAPT-SYS: [TID] :<captSysId>: [CTAG] ;

ENT-CAPT-SYS: [TID] :<captSysId>: [CTAG] : :<IPAddr>,
[<port>] ;

RTRV-CAPT-SYS: [TID] : [<captSysId>] : [CTAG] ;

Output Format:

```
      SID DATE TIME
M    CTAG COMPLD
      "<captSysId>:<IPAddr>,<port>"
      ;
```

Parameters:

captSysId Identifies the server to delete from or to add to the list of systems that can receive protocol capture session records, or (for RTRV) a server that receives protocol capture session records. The value of *captSysId* must be set to "1" as there currently can be only one server that can receive protocol capture session records.

Type: CaptSysId

Range: {1}

Default value: none

IPAddr Identifies the IP address of the capture system.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

port Identifies the port used for receiving protocol capture session records.

Type: integer

Range: {1025-65535}

Default value: 9004

Input Examples:

```
DLT-CAPT-SYS::1;
```

```
ENT-CAPT-SYS::1::192.2.24.234,9004;
```

```
RTRV-CAPT-SYS;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "1:192.2.24.234,9004"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-CRS-T0

Commands:

DLT-CRS-T0: Delete Cross Connect DS0 Facility

ED-CRS-T0: Edit Cross Connect DS0 Facility

ENT-CRS-T0: Enter Cross Connect DS0 Facility

RTRV-CRS-T0: Retrieve Cross Connect DS0 Facility

Descriptions:

DLT-CRS-T0 lets the user remove “nailed-up” DS0 cross connections. It does not apply to cross connections between a DS0 and the test port. Ranges for multiple deletions cannot span multiple IOMs or T3 ports and must be contiguous on both sides of the cross connect. The number of channels in a range must be the same for *t0From* and *t0To*.

ED-CRS-T0 lets the user configure the T0 cross-connect for the test port. The command establishes the effected DS0 channel for both the IOM (specified in ED-TESTPORT) and the test port, and can specify the connection type and state. ED-CRS-T0 will not work unless you have already issued ED-TESTPORT. Setting the test port out of service with ED-TESTPORT deletes the configuration of the T0 cross-connect.

ENT-CRS-T0 lets the user establish the T0 cross connections associated with the AID or AID range. It applies only to “nailed-up” cross connections between DS0s; use ED-CRS-T0 to configure the T0 cross-connect for the test port. Ranges for multiple cross connections cannot span multiple IOMs or T3 ports (Therefore, you can configure a maximum of 672 “nailed-up” DS0s at a time.) and must be contiguous on both sides of the cross connect. The number of channels in a range must be the same for *t0From* and *t0To*. The command establishes the effected DS0 channel for both IOMs, and can specify the connection type and state. ENT-CRS-T0 will not work unless the following commands have already been issued in the listed order: ENT-EQPT, ENT-T3/STS1 (if needed), and ENT-T1.

RTRV-CRS-T0 lets the user retrieve the configuration for cross connections in the switch. It applies to both “nailed-up” DS0s and cross connections to the test port. Specify either or both AIDs to return information about the “nailed-up” DS0 cross connections. Leave the AID block blank to return information about the test port cross connection.

Category: Diagnosis

Security: NSA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-CRS-T0:[TID]:<t0From>,[<t0To>]:[CTAG];  
ED-CRS-T0:[TID]:<t0From>,<t0To>:[CTAG]:[<crsBlk>]:  
[<specBlk>]:[<pst>];  
ENT-CRS-T0:[TID]:<t0From>,<t0To>:[CTAG]:[<crsBlk>]:  
[<specBlk>]:[<pst>];  
RTRV-CRS-T0:[TID]:[<t0From>],[<t0To>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
 "<t0From>,<t0To>:<pst>"  
;
```

Parameters:

- t0From** Identifies the first AID in the AID block as a DS0 channel on an IOM which connects to another channel (in ED, the test port). A range of channels (only applies to DLT, ENT, and RTRV) is shown by the beginning and ending fully-specified (IOM + port + channel) channel numbers separated by two ampersands and a hyphen (“&&-”).
- Type:** T0
- Range:** IOM-{1-17}-PORT-{1-28}-T0-{1-24}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}-T0-{1-24}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}-T0-{1-24}
- Default value:** none
- t0To** Identifies (for DLT, ENT, and RTRV) the second AID in the AID block as a DS0 channel on an IOM which connects to another channel. A range of channels is shown by the beginning and ending fully-specified (IOM + port + channel) channel numbers separated by two ampersands and a hyphen (“&&-”).
- Type:** T0
- Range:** IOM-{1-17}-PORT-{1-28}-T0-{1-24}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}-T0-{1-24}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}-T0-{1-24}
- Default value:** none

- t0To** Identifies (for ED) the second AID in the AID block as the number of the DS0 channel on the test port.
Type: TestPortNum
Range: TP-{1-24}
Default value: none
- crsBlk** Identifies the type of connection to the cross-connect. This parameter is not supported presently; leave it blank.
Type: enum
Range: ONE-WAY = cross-connect allows transmission in one direction only
TWO-WAY = cross-connect allows transmission in both directions
Default value: none
- specBlk** Identifies the Specific Block, per Section 4 of Telcordia GR-199-CORE. This parameter is not supported presently; leave it blank.
Type: string
Range: alphanumeric characters
Default value: none
- pst** Identifies (for ENT) the primary state, per Section 4 of Telcordia GR-199-CORE. However, the concept “state” does not apply as ENT-CRS-T0 only establishes connections between DS0s; leave it blank.
Type: enum
Range: IS = In-service
OOS = Out-of-service
Default value: none
- pst** Identifies (for ED) the primary state for the connection through the test port. Setting the state to OOS disables the connection for the channel. The factory default is “IS”.
Type: enum
Range: IS = In-service
OOS = Out-of-service
Default value: not applicable

pst Identifies (for RTRV output) the primary state for the cross connection. For “nailed-up” DS0 cross connections the state reflects the states of the channels comprising the connection; that is, the state is “OOS” when either or both of the connected DS0s is out of service.

Type: enum

Range: IS = In-service

OOS = Out-of-service

Default value: none

Input Examples:

```
DLT-CRS-T0::  
    IOM-1-T3-2-PORT-3-T0-1&&-IOM-1-T3-2-PORT-3-T0-3;  
ED-CRS-T0::IOM-1-T3-2-PORT-3-T0-24,TP-1::::IS;  
ENT-CRS-T0::  
    IOM-1-T3-2-PORT-3-T0-1&&-IOM-1-T3-2-PORT-3-T0-3,  
    IOM-1-T3-3-PORT-3-T0-1&&-IOM-1-T3-3-PORT-3-T0-3;
```

(for “nailed-up” DS0 cross connections)

```
RTRV-CRS-T0::  
    IOM-1-T3-2-PORT-3-T0-1&&-IOM-1-T3-2-PORT-3-T0-3;
```

(for the test port cross connection)

```
RTRV-CRS-T0;
```

Output Examples:

(for “nailed-up” DS0 cross connections)

```
lucent 2005-05-15 14:37:49  
M 0 COMPLD  
    "IOM-1-T3-2-PORT-3-T0-1,IOM-1-T3-3-PORT-1-T0-1:IS"  
    "IOM-1-T3-2-PORT-3-T0-2,IOM-1-T3-3-PORT-1-T0-2:IS"  
    "IOM-1-T3-2-PORT-3-T0-3,IOM-1-T3-3-PORT-1-T0-3:IS"  
    ;
```

(for the test port cross connection)

```
lucent 2005-05-15 14:37:49  
M 0 COMPLD  
    "IOM-1-T3-2-PORT-3-T0-24,TP-1:IS"  
    ;
```

Related Commands:

ED/RTRV-TESTPORT

ED/RTRV-TESTPORT

Commands:

ED-TESTPORT: Edit Testport

RTRV-TESTPORT: Retrieve Testport

Descriptions:

ED-TESTPORT configures the mode of operation for the test port, which provides a non-invasive method of connecting test equipment to diagnose system and network problems.

RTRV-TESTPORT lets the user retrieve the configuration information for the test port.

Category: Test

Security: NSA for ED, View for RTRV

Input Formats:

ED-TESTPORT:[TID]:[<src>]:[CTAG]::<iom>,<tpmonitor>:
[<pst>];

RTRV-TESTPORT:[TID]:[<src>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<src>:<iom>,<tpMonitor>:<pst>"
;
```

Parameters:

src Identifies the AID as the switch as a whole.

Type: COM

Range: COM

Default value: COM

iom Identifies the sole IOM to which the test equipment connects through the test port.

Type: enum

Range: IOM-{1-17}

Default value: none

tpmonitor Identifies the function of the test port.

Type: enum

Range: INSERT = test equipment transmits signals through the test port to the IOM
MONITOR = test equipment receives signals through the test port from the IOM

Default value: none

pst Identifies the primary state of the test port. Setting the state to OOS disables alarming for the test port and deletes the configuration of the T0 cross-connect established with ED-CRS-T0.

Type: enum

Range: IS = In-service
OOS = Out-of-service

Default value: none

Input Examples:

```
ED-TESTPORT::COM::IOM-1,MONITOR:IS;  
RTRV-TESTPORT;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"COM:IOM-1,MONITOR:IS"  
;
```

Related Commands:

ED/RTRV-CRS-T0

INIT-REG-CC / RTRV-PM-CC

Commands:

INIT-REG-CC: Initialize Register Call Control

RTRV-PM-CC: Retrieve Performance Monitors Call Control

Descriptions:

INIT-REG-CC lets the user clear the counters for call control statistics.

RTRV-PM-CC lets the user retrieve current and historical performance data for call control in either the switch (MGC) on which the command is executed, or a media gateway controlled by the MGC.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-CC: [TID]: [<mgName>]: [CTAG]: <montype>,  
             [<monval>], [<locn>], [<dirn>];  
RTRV-PM-CC: [TID]: [<mgName>]: [CTAG]: [<montype>],  
             [<monlev>], [<locn>], [<dirn>];
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<mgName>:<montype>,<monval>,<monlev>,<locn>,  
      <dirn>"  
;
```

Parameters:

mgName Identifies the AID as either the switch (MGC) on which the command is executed, or a media gateway controlled by the MGC. In RTRV-PM, using the default "COM" returns the cumulative statistics for the MGC. In INIT-REG, using the default "COM" clears all of the call control statistics counters.

Type: string

Range: up to 30 characters

Default value: COM

montype Identifies the type of monitored call control parameter. “ALL” is the only valid input value.

Type: enum

Range: ALL = All types

ANSCALL = Number of answered calls

FDP CPAUSED = Number of call failures due to paused DPC

FRES = Number of calls processed since initiation that failed
due to resource unavailability

FROUTE = Number of calls processed since initiation that
failed due to route unavailability

INCAS = Number of incoming CAS calls

ININTERNAL = Number of incoming internal circuits

INISDN = Number of incoming ISDN calls (all variants)

INISUP = Number of incoming ISUP calls (all variants)

INSIP = Number of incoming SIP calls

LASTINITNA = Number of minutes since initialization of all
counters for which there is no direction (neither RCV nor
TRMT)

LASTINITRCV = Number of minutes since initialization of
all RCV (receive) counters

LASTINITTRMT = Number of minutes since initialization
of all TRMT (transmit) counters

LNP_CALLS_REL_BY_DONSWTCH = Number of calls
released by other switch

LNP_CALLS_REL_BY_THISSWTCH = Number of calls
released by the Lucent Gateway Platform

LNPFILURES = Number of LNP failures

LNPMISRTDCALLS = Number of misrouted calls

LNPQUERIES = Number of LNP queries

LNPVALID_RESP = Number of valid LNP responses

OUTCAS = Number of outgoing CAS calls

OUTINTERNAL = Number of outgoing internal circuits

OUTISDN = Number of outgoing ISDN calls (all variants)

OUTISUP = Number of outgoing ISUP calls (all variants)

OUTSIP = Number of outgoing SIP calls

OUTSS7 = Number of outgoing SS7 calls

STNDGCALL = Number of established (standing) calls

TOTCALL = Number of processed calls

UNANSCALL = Number of unanswered calls

Default value: none

monval Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized. The value is in the form of numeric counts or rates. The value "0" is currently the only acceptable input value.

Type: integer

Range: {0 – 4294967295}

Default value: 0

monlev Identifies the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

locn Identifies the location of the storage counters to initialize or from which to retrieve performance data. Currently only NEND is supported.

Type: enum

Range: FEND = Far end
NEND = Near end

Default value: NEND

dirn Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.

Type: enum

Range: ALL = All directions
NA = Direction not applicable
RCV = Receive direction only
TRMT = Transmit direction only

Default value: ALL

Input Examples:

INIT-REG-CC;

RTRV-PM-CC;

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"COM:ANSCALL,0"
"COM:STNDGCALL,0"
"COM:TOTCALL,0"
"COM:FROUTE,0"
"COM:FDPCPAUSED,0"
"COM:FRES,0"
"COM:UNANSCALL,0"
"COM:INCAS,0"
"COM:INISDN,0"
"COM:ININTERNAL,0"
"COM:INISUP,0"
"COM:INSIP,0"
"COM:LNPQUERIES,0"
"COM:LNPFAILURES,0"
"COM:LNPVALID_RESP,0"
"COM:LNPMISRTDCALLS,0"
"COM:LNP_CALLS_REL_BY_DONSWTCH,0"
"COM:LNP_CALLS_REL_BY_THISSWTCH,0"
"COM:LASTINITNA,5774"
"COM:LASTINITRCV,5774"
"COM:LASTINITTRMT,5774"
"COM:OUTCAS,0"
"COM:OUTISDN,0"
"COM:OUTINTERNAL,0"
"COM:OUTISUP,0"
"COM:OUTSIP,0"
"COM:ALL,0"
"COM:ALL,16777222"
;
```

Related Commands: none

INIT-REG-RC / RTRV-PM-RC

Commands:

INIT-REG-RC: Initialize Register Release Cause

RTRV-PM-RC: Retrieve Performance Monitors Release Cause

Descriptions:

INIT-REG-RC lets the user reset the counters for transmitted or received release cause types.

RTRV-PM-RC lets the user retrieve the number of times release cause types have been transmitted or received since the counters were last initialized.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-RC:[TID]:[<mgName>]:[CTAG]:[<montype>],  
[<monval>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];
```

```
RTRV-PM-RC:[TID]:[<mgName>]:[CTAG]:[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<mgName>:<montype>,<monval>,[<vldty>],[<locn>],  
    [<dirn>],[<tmper>],[<mondatt>],[<montm>]"  
;
```

Parameters:

mgName Identifies the AID as either the switch (MGC) on which the command is executed, or a media gateway controlled by the MGC. In RTRV-PM, using the default "COM" returns the cumulative statistics for the MGC. In INIT-REG, using the default "COM" clears all of the call control statistics counters.

Type: string

Range: up to 30 characters

Default value: COM

montype Identifies the registers (for a type of monitored parameter) to initialize or from which to retrieve performance data. “ALL” is the only valid input value.

Type: enum

Range: ALL = All types

ANS_SUPER_REL = Answer supervision timer expiry
(FRAUD)

AUTH_FAILURE = Authentication Failure

BCAPNOTIMPL = Bearer capability not implemented

CALL_BLOCK = Call blocked

CALLEDADDR_INCOMPLETE = Called address
incomplete; T35 timeout - overlap support

CASTG_RELIND = CAS trunk group release indicator
(protocol errors)

CGPTRY_DIS_OOS_CHG = calling party disconnected, out
of service, or number changed

CKTCONG = Circuit/channel congestion

CODEC_NEG_FAIL = Codec negotiation failed

DB_ACCESS = Database access (Internal error: system
operation failed}

DSTOUTORD = Destination out of order

EQUIPMENT_TROUBLE = Equipment trouble

EXCG_RT_ERROR = Exchange routing error

HAVE1PREFIX = Prefix 1 not dialed when required

INFO_MISSING = Internal error: parameter missing

INTERNAL = Internal error: hash list operation failed

INTFC_UNAVAIL = Interface unavailable

INTFC_UNAVAIL_BCAP = Interface unavailable BCAP

INTFC_UNAVAIL_COST = Interface unavailable COST

INV0PREFIX = Invalid 0 prefix

INV1PREFIX = Invalid 1 prefix

INVALID_CARRIER = Invalid carrier specified

INVALID_MSG = Invalid message, unspecified

INVALID_PARAM = Internal error: invalid parameter
received

INVALID_TID_INFO = Internal error: TID information not
valid

INVNMBFORM = Invalid number format

LM_INITIATED_REL = Layer manager initiated release

LNP_MISROUTE = LNP misrouted call

MEMORY_ALLOC = Internal error: memory allocation
failed

MSG_UNSUPPORTED = Message type non-existent

NMBCHNG = Number changed

NO_DSP_RSC = Internal error: no DSP resources

NOCKTAVAIL = No circuit available

NOPARAMDISCMMSG = Parameter. non-existent
NORMAL_CLRG = Normal clearing
NOROUTDST = No route to destination
NOROUTTRANSNET = No route to transit network
NOT_APPLICABLE = Internal error: invalid failure condition (proprietary)
PROTERR = Protocol error used by all protocols
REQ_CHAN_NAVAIL = Requested channel not available
RESUNAVAIL = Resources unavailable, unspecified
RT_FAILED = Routing failed
SCP_OPR_FAILED = All SCP-related operations failed
SCR_FRAUD_REL = Screen digit timer expiry (FRAUD)
SRVC_TRAN_FAILURE = Internal Error: Couldn't transmit message to service
SUBIF_NOT_PROV = Subscriber interface not provisioned
TMRRCVRY = Recovery on timer expiry
UNALLOC_NUMBER = Unallocated numbers
UNEXPECTED_MSG = Message not expected by the layer
USRBUSY = User busy
VACANT_CODE = Invalid carrier access code
WFS_UNALLOCNMB = wireless number unassigned
WFS_USR_UNAVAIL = wireless subscriber unavailable

Default value: ALL

monval Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized. The value is in the form of numeric counts or rates. The value "0" is currently the only acceptable input value.

Type: integer

Range: {0 – 2147483647}

Default value: 0

monlev Identifies (in RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

- vldty** Identifies (in RTRV-PM output) the validity of the monitored interval. This parameter is not supported presently; its value will always be “NULL”.
- Type:** enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: NULL
- locn** Identifies the location of the storage counters to initialize or from which to retrieve performance data. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: BTH = Both directions
RCV = Receive direction only
TRMT = Transmit direction only
Default value: BTH
- tmper** The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: {1}-DAY = Time interval is exactly one day
{1-24}-HR = Interval of one to 24 hours (one day)
{1-1440}-MIN = Interval of one to 1440 minutes (one day)
Default value: 15-MIN
- mondatt** Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: {1-12}-{1-31}
Default value: current date

montm Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is not supported presently; leave it blank.

Type: enum

Range: {0-23}-{0-59}

Default value: current time

Input Examples:

```
INIT-REG-RC;
```

```
RTRV-PM-RC;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 RTRV
"COM:NOT_APPLICABLE,0"
"COM:MEMORY_ALLOC,0"
"COM:INVALID_TID_INFO,0"
"COM:INFO_MISSING,0"
"COM:DB_ACCESS,0"
"COM:SRVC_TRAN_FAILURE,0"
"COM:INVALID_PARAM,0"
"COM:INTERNAL,0"
"COM:UNEXPECTED_MSG,0"
"COM:SCP_OPR_FAILED,0"
```

```
lucent 2005-06-24 14:37:49
M 0 RTRV
"COM:PROTERR,0"
"COM:RESUNAVAIL,0"
"COM:CKTCONG,0"
"COM:TMRRCVRY,0"
"COM:USRBUSY,0"
"COM:CALL_BLOCK,0"
"COM:BCAPNOTIMPL,0"
"COM:SUBIF_NOT_PROV,0"
"COM:NOCKTAVAIL,0"
"COM:LM_INITIATED_REL,0"
```

```
lucent 2005-06-24 14:37:49
M 0 RTRV
"COM:INV1PREFIX,0"
"COM:AUTH_FAILURE,0"
```

```
"COM:SCR_FRAUD_REL,0"
"COM:NO_DSP_RSC,0"
"COM:CODEC_NEG_FAIL,0"
"COM:UNALLOC_NUMBER,0"
"COM:NOROUTTRANSNET,0"
"COM:VACANT_CODE,0"
"COM:INV0PREFIX,0"
"COM:INV1PREFIX,0"

lucent 2005-06-24 14:37:49
M 0 RTRV
"COM:HAVE1PREFIX,0"
"COM:INVALID_CARRIER,0"
"COM:NMBCHNG,0"
"COM:DSTOUTORD,0"
"COM:INVNMBFORM,0"
"COM:CGPTRY_DIS_OOS_CHG,0"
"COM:CALLEDADDR_INCOMPLETE,0"
"COM:EQUIPMENT_TROUBLE,0"
"COM:RT_FAILED,0"
"COM:INTFC_UNAVAIL,0"

lucent 2005-06-24 14:37:49
M 0 RTRV
"COM:INTFC_UNAVAIL_COST,0"
"COM:INTFC_UNAVAIL_BCAP,0"
"COM:NOROUTDST,0"
"COM:EXCG_RT_ERROR,0"
"COM:REQ_CHAN_NAVAIL,0"
"COM:WFS_USR_UNAVAIL,0"
"COM:WFS_UNALLOCNMB,0"
"COM:INVALID_MSG,0"
"COM:MSG_UNSUPPORTED,0"
"COM:NOPARAMDISCMMSG,0"

lucent 2005-06-24 14:37:49
M 0 COMPLD
"COM:NORMAL_CLRG,0"
"COM:LNP_MISROUTE,0"
"COM:CASTG_RELIND,0"
;
```

Related Commands: none

RTRV-STATUS-CAPT

Command:

RTRV-STATUS-CAPT: Retrieve Status Capture

Description:

RTRV-STATUS-CAPT lets the user retrieve the status of (a) protocol capture session(s).

Category: Diagnosis

Security: NSA

Input Format:

RTRV-STATUS-CAPT:[TID]:<captAid>:[CTAG]:[:<pcsn>];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<captAid>:<pcsn>:<sigCaptStatus>"
;
```

Parameters:

captAid Identifies the access line; that is, the CAS channel, ISDN interface, or SS7 link set for which to retrieve capture session status. Not specifying a particular ISDN interface, SS7 link set, or CAS channel returns the status of the capture sessions for all ISDN interfaces, SS7 link sets, or CAS channels (on a specific port) configured in the switch. Not specifying a particular CAS IOM and port returns the status of all CAS capture sessions configured in the switch. A range of CAS channels on a specific port is shown by the beginning and ending channel numbers separated by two ampersands and a hyphen (“&&-”).

Type: CaptAid

Range: CAS-IOM-{1-17}-PORT-{1-28}[-T0-{1-24}]
CAS-IOM-{1-17}-T3-{1-8}-PORT-{1-28}[-T0-{1-24}]
ISDNIF[-{1-32767}] = ISDN interface
LSET[-{1-20}] = SS7 link set

Default value: none

pcsn Identifies the protocol capture session number. The value of *pcsn* is always “1” as the switch does not currently support multiple sessions per interface.

Type: integer

Range: {1}

Default value: 1

sigCaptStatus Identifies (in RTRV output) whether a signaling trace capture session for an access line currently exists.

Type: enum

Range: SIGCAPTOFF = no current signaling trace capture session
SIGCAPTON = signaling trace capture session started

Default value: none

Input Example:

```
RTRV-STATUS-CAPT::CAS;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"IOM-16-T3-1-PORT-2-T0-1:1:SIGCAPTON"
"IOM-16-T3-1-PORT-2-T0-2:1:SIGCAPTON"
"IOM-16-T3-1-PORT-3-T0-1:1:SIGCAPTON"
"IOM-16-T3-1-PORT-3-T0-2:1:SIGCAPTON"
;
```

Related Commands:

STA-CAPT

STP-CAPT

STA/STP-CAPT

Commands:

STA-CAPT: Start Capture

STP-CAPT: Stop Capture

Descriptions:

STA-CAPT lets the user selectively capture and store protocol activity concerning an access line. STA-CAPT is dependent on ENT-CAPT-SYS; that is, if the captured data will be sent to a server, that server first must be configured with ENT-CAPT-SYS. Do not configure the server if you want the captured data to be logged locally on the switch.

STP-CAPT lets the user stop the selective capture and store of a protocol activity concerning an access line.

Category: Diagnosis

Security: NSA for both commands

Input Formats:

STA-CAPT: [TID]:<captAid>:[CTAG]::[<chn>],<lyr>,[<md>],
[<bc>],[<sapi>],[<tei>],[<lcn>],[<dn>]:[<prcaptm>],
[<trig>],[<mot>],[<stp>];

STP-CAPT: [TID]:<captAid>:[CTAG]::[<pcsn>;

Output Format: none

Parameters:

captAid Identifies the AID as an access line; that is, the CAS channel, ISDN interface, or SS7 link set on which to start a capture session. Not specifying a particular CAS channel starts or stops the capture sessions on all CAS channels (on a specific port) configured in the switch. A range of CAS channels on a specific port is shown by the beginning and ending channel numbers separated by two ampersands and a hyphen (“&&-”).

Type: CaptAid

Range: CAS-IOM-{1-17}-PORT-{1-28}[-T0-{1-24}]
CAS-IOM-{1-17}-T3-{1-8}-PORT-{1-28}[-T0-{1-24}]
ISDNIF-{1-32767} = ISDN interface
LSET-{1-20} = SS7 link set

Default value: none

chn Identifies the particular ISDN channel of an access line (D or B) for which the protocol activity will be monitored for the duration of the session. This parameter is not currently used by the switch and should be left blank.

Type: enum

Range: null

Default value: null

lyr Identifies the protocol layer for which activity is captured.

Type: enum

Range: L3 = MTP layer 3 for SS7, Q.931 for ISDN

Default value: none

md Identifies the entity for which protocol activity will be monitored for the duration of the protocol capture session. This parameter is used when differentiating the capture entity as either packet data or signaling data; currently only signaling is supported. A null value is equivalent to “SIG” and is the only value presently selectable.

Type: enum

Range: SIG = protocol capture of Signaling Data on the D channel

Default value: null

bc Identifies the bearer capability, such as speech or audio. This parameter is not currently used by the switch and should be left blank.

Type: integer

Range: null

Default value: null

sapi	Identifies the service access point in MTP layer 2. This parameter is not currently used by the switch and should be left blank. Type: enum Range: null Default value: null
tei	Identifies the terminal endpoint ID in MTP layer 2. This parameter is not currently used by the switch and should be left blank. Type: enum Range: null Default value: null
lcn	Identifies the logical channel number. This parameter is not currently used by the switch and should be left blank. Type: integer Range: null Default value: null
dn	Identifies the directory number. This parameter is not currently used by the switch and should be left blank. Type: string Range: null Default value: null
prcaptm	Identifies the date and time to start the protocol capture session. A null value is equivalent to the current date and time, and is the only value currently supported. Type: string Range: YY-MM-DD-HH-MM-SS Default value: null
trig	Identifies the triggering event that starts the protocol capture session. This parameter is not currently used by the switch and should be left blank. Type: enum Range: null Default value: null

- mot** Identifies the maximum time, in hours, that the protocol capture session will look for the first occurrence of the defined trigger event before automatically terminating the protocol capture session. This parameter is not currently used by the switch and should be left blank.
- Type:** integer
Range: {1-72}
Default value: 4
- stp** Identifies the condition after the trigger is observed that signals stopping the protocol capture session. This parameter is not currently used by the switch and should be left blank.
- Type:** enum
Range: {0-40}-{0-40}
Default value: null
- pcsn** Identifies (in RTRV) the protocol capture session number. The value of *pcsn* is always “1” as the switch does not currently support multiple sessions per interface.
- Type:** integer
Range: {1}
Default value: 1

Input Examples:

```
STA-CAPT::ISDNIF-96:::,L3;  
STP-CAPT::ISDNIF-96:::1;
```

Related Commands:

ENT-CAPT-SYS

RTRV-STATUS-CAPT

STA/STP-DGN-IPPING

Commands:

STA-DGN-IPPING: Start Diagnostic IP Ping

STA-DGN-IPPING: Stop Diagnostic IP Ping

Descriptions:

STA-DGN-IPPING lets the user execute an Internet Control Message Protocol (ICMP) echo request (ping) command to determine network connectivity for either an SP or a network IOM.

STP-DGN-IPPING lets the user stop an in-process Internet Control Message Protocol (ICMP) echo request (ping) command.

Category: Diagnosis

Security: NSA for both commands

Input Formats:

STA-DGN-IPPING: [TID]:<aid>:CTAG::[COUNT=<count>],
[SIZE=<size>],[WAITTIME=<waittime>;

STP-DGN-IPPING: [TID]:<aid>:CTAG;

Output Format: none

Parameters:

aid Identifies the AID as either a network IOM or an SP, both with an associated address.

Type: string

Range: IOM-{8, 10}-ADDRESS, where

ADDRESS is either an IP address in dot format ({0-255}.{0-255}.{0-255}.{0-255}) or a fully-qualified domain (host) name

SP-{A, B}-ADDRESS, where

ADDRESS is either an IP address in dot format ({0-255}.{0-255}.{0-255}.{0-255}) or a fully-qualified domain (host) name

Default value: none

- count** Identifies the number of times to issue an echo request.
Type: integer
Range: {1-20}
Default value: 1
- size** Identifies the number of bytes in the echo request.
Type: integer
Range: {56-8192}
Default value: 56
- waittime** Identifies the interval, in seconds, between each echo request.
Type: integer
Range: {1-20}
Default value: 1

Input Examples:

```
STA-DGN-IPING::IOM-10-192.2.24.234;  
STP-DGN-IPING::IOM-10-192.2.24.234;
```

Related Commands: none

STA/STP-DGN-IPTRACEROUTE

Commands:

STA-DGN-IPTRACEROUTE: Start Diagnostic IP Traceroute

STA-DGN-IPTRACEROUTE: Stop Diagnostic IP Traceroute

Descriptions:

STA-DGN-IPTRACEROUTE lets the user execute an Internet Control Message Protocol (ICMP) traceroute command to determine the number of hops taken in achieving network connectivity for either an SP or a network IOM.

STP-DGN-IPTRACEROUTE lets the user stop an in-process Internet Control Message Protocol (ICMP) traceroute command.

Category: Diagnosis

Security: NSA for both commands

Input Formats:

```
STA-DGN-IPTRACEROUTE:[TID]:<aid>:CTAG::[SIZE=<size>],  
[MAXTTL=<maxttl>],[WAITTIME=<waittime>],  
[TOS=<tos>],[PORT=<port>];  
STP-DGN-IPTRACEROUTE:[TID]:<aid>:CTAG;
```

Output Format: none

Parameters:

aid Identifies the AID as either a network IOM or an SP, both with an associated address.

Type: string

Range: IOM-{8, 10}-ADDRESS, where

ADDRESS is either an IP address in dot format ({0-255}.{0-255}.{0-255}.{0-255}) or a fully-qualified domain (host) name

SP-{A, B}-ADDRESS, where

ADDRESS is either an IP address in dot format ({0-255}.{0-255}.{0-255}.{0-255}) or a fully-qualified domain (host) name

Default value: none

size	Identifies the number of bytes in the traceroute packet. Type: integer Range: {40-32767} Default value: 40
maxttl	Identifies the maximum time-to-live (number of hops) in the outgoing traceroute packet. Type: integer Range: {1-255} Default value: 30
waittime	Identifies the interval, in seconds, allowed between each hop before the command times out. Type: integer Range: {5-20} Default value: 5
tos	Identifies the type of service designated in the IP header for the traceroute packet. Type: integer Range: {0-255} Default value: 0
port	Identifies the UDP port for the traceroute packet. Type: string Range: {33434-33689} Default value: NONE

Input Examples:

STA-DGN-IPTRACEROUTE::IOM-10-192.2.24.234;

STP-DGN-IPTRACEROUTE::IOM-10-192.2.24.234;

Related Commands: none

DLT/ED/ENT/RTRV-CAS-TRK

Commands:

DLT-CAS-TRK: Delete CAS trunk
ED-CAS-TRK: Edit CAS trunk
ENT-CAS-TRK: Enter CAS trunk
RTRV-CAS-TRK: Retrieve CAS trunk

Descriptions:

DLT-CAS-TRK lets the user delete a CAS (Channel-Associated Signaling) trunk.

ED-CAS-TRK lets the user change the name and state associated with a CAS (Channel-Associated Signaling) trunk.

ENT-CAS-TRK lets the user establish a CAS (Channel-Associated Signaling) trunk to a local media gateway. ENT-CAS-TRK will not work correctly unless the following commands have already been issued in the listed order: ENT-EQPT, ENT-SS7SYS, ENT-T3/STS1 (if needed), and ENT-T1.

RTRV-CAS-TRK lets the user retrieve the trunk group, trunk name, and states for a CAS (Channel-Associated Signaling) trunk.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-CAS-TRK: [TID]:<casTrkId>:[CTAG];
ED-CAS-TRK: [TID]:<casTrkId>:[CTAG]:[NAME=<name>]:
[<pst>];
ENT-CAS-TRK: [TID]:<casTrkId>:[CTAG]:MGNAME=<mgName>,
TERMID=<termId>,[NAME=<name>]:[<pst>];
RTRV-CAS-TRK: [TID]:[<casTrkId>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<casTrkAid>:MGNAME=<mgName>,TERMID=<termId>,
    NAME=<name>:<pst>[,<sst>]"
;
```

Parameters:

casTrkId Identifies the AID as a unique CAS trunk or range of trunks associated with a trunk group number. The first number in the range identifies the trunk group number and the second number identifies the trunk(s). You can delete, edit, or retrieve a range of up to 4000 trunks (the range need not be contiguous) by separating the beginning and ending numbers with two ampersands and a hyphen (“&&-”). In the RTRV input, specifying only the trunk group number, but not the trunk, returns parameters for the first 4000 configured trunks in the trunk group. To return information for successive groups of 4000 configured trunks, re-invoke the command with a range starting with the trunk after the last trunk displayed and ending with 16383 (for ANSI) or 4096 (for ITU).

Type: casTrkId

Range: <tn>[-<cic>[&&-<cic>]], where
tn = {1-9999}
cic = {1-16383} for ANSI ISUP
{1-4096} for ITU

Default value: none

mgName Identifies the local media gateway associated with a media gateway controller.

Type: string

Range: up to 30 ASCII characters

Default value: none

termId Identifies the TDM termination on the local media gateway in MEGACO format.

Type: string

Range: up to 32 alphanumeric characters in the form:
TDM termination type / slot / port / channel =
T/{1-17}/{1-224}/{1-31}, where
channel = {1-24} for T1, {1-31} for E1

Default value: NULL

name Identifies the name of the CAS trunk.

Type: string

Range: up to eight ASCII characters

Default value: null

- pst** Identifies the desired primary state of the CAS trunk.
Type: enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
Default value: IS
- sst** Identifies (in RTRV output) the secondary state(s) for the CAS trunk, with ampersands (“&”) to separate multiple secondary states.
Type: enum
Range: ACT = Active
IDLE = Idle
INBUSY=Incoming Busy
LBLK = Locally Blocked
OUTBUSY=Outgoing Busy
RBLK = Remotely Blocked
RUEQ = Remote Unequipped
SGEO = Supporting Entity Outage
TRANS=Transient
Default value: none

Input Examples:

```
DLT-CAS-TRK::2-100;  
ED-CAS-TRK::2-100:::NAME=CASTRK1:IS;  
ENT-CAS-TRK::2-100:MGNAME=BOSTON,TERMID=T/5/3/1,  
NAME=CASTRK1:IS;  
RTRV-CAS-TRK::2-100;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"2-100:MGNAME=BOSTON,TERMID=T/5/3/1,NAME=CASTRK1:  
IS,ACT&IDLE"  
"2-101:MGNAME=BOSTON,TERMID=T/5/3/2,NAME=CASTRK2:  
IS,ACT&IDLE"  
"2-102:MGNAME=BOSTON,TERMID=T/5/3/3,NAME=CASTRK3  
:IS,ACT&IDLE"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-PRFL-ISUPANSI

Commands:

DLT-PRFL-ISUPANSI: Delete Profile ISUP ANSI

ED-PRFL-ISUPANSI: Edit Profile ISUP ANSI

ENT-PRFL-ISUPANSI: Enter Profile ISUP ANSI

RTRV-PRFL-ISUPANSI: Retrieve Profile ISUP ANSI

Descriptions:

DLT-PRFL-ISUPANSI lets the user delete a profile for a circuit identification code in the North American Numbering Plan.

ED-PRFL-ISUPANSI lets the user edit a profile for a circuit identification code in the North American Numbering Plan. Use this command to change the values of the ISUP timers for the CIC.

ENT-PRFL-ISUPANSI lets the user establish a profile for a circuit identification code in the North American Numbering Plan.

RTRV-PRFL-ISUPANSI lets the user retrieve the attributes of a profile for a circuit identification code in the North American Numbering Plan.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-PRFL-ISUPANSI:[TID]:<IsupAnsiPrflId>:[CTAG];  
ED-PRFL-ISUPANSI:[TID]:<IsupAnsiPrflId>:[CTAG]::  
  [T1=<T1>],[T5=<T5>],[T7=<T7>],[T8=<T8>],  
  [T12=<T12>],[T13=<T13>],[T14=<T14>],[T15=<T15>],  
  [T16=<T16>],[T17=<T17>],[T18=<T18>],[T19=<T19>],  
  [T20=<T20>],[T21=<T21>],[T22=<T22>],[T23=<T23>],  
  [T24=<T24>],[T25=<T25>],[T26=<T26>],[T27=<T27>],  
  [T28=<T28>],[T33=<T33>],[T34=<T34>],[T36=<T36>],  
  [TCCR=<TCCR>],[TCCRT=<TCCRT>],[TCONG=<TCONG>],  
  [TCOTD=<TCOTD>],[TCRA=<TCRA>],[TCRM=<TCRM>],  
  [TCVT=<TCVT>],[TFGR=<TFGR>],[TGRES=<TGRes>],  
  [TGUARD=<TGuard>],[TTBLO=<TTBLO>],  
  [HOPCNTR=<hopCntr>],[RELLOCATION=<relLocation>;
```

```
ENT-PRFL-ISUPANSI:[TID]:<IsupAnsiPrflId>:[CTAG]::
[T1=<T1>],[T5=<T5>],[T7=<T7>],[T8=<T8>],
[T12=<T12>],[T13=<T13>],[T14=<T14>],[T15=<T15>],
[T16=<T16>],[T17=<T17>],[T18=<T18>],[T19=<T19>],
[T20=<T20>],[T21=<T21>],[T22=<T22>],[T23=<T23>],
[T24=<T24>],[T25=<T25>],[T26=<T26>],[T27=<T27>],
[T28=<T28>],[T33=<T33>],[T34=<T34>],[T36=<T36>],
[TCCR=<TCCR>],[TCCRT=<TCCRT>],[TCONG=<TCONG>],
[TCOTD=<TCOTD>],[TCRA=<TCRA>],[TCRM=<TCRM>],
[TCVT=<TCVT>],[TFGR=<TFGR>],[TGRES=<TGRes>],
[TGUARD=<TGuard>],[TTBLO=<TTBLO>],
[HOPCNTR=<hopCntr>],[RELLOCATION=<relLocation>];
RTRV-PRFL-ISUPANSI:[TID]:[<IsupAnsiPrflId>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<IsupAnsiPrflId>:T1=<T1>,T5=<T5>,T7=<T7>,T8=<T8>,
T12=<T12>,T13=<T13>,T14=<T14>,T15=<T15>,
T16=<T16>,T17=<T17>,T18=<T18>,T19=<T19>,
T20=<T20>,T21=<T21>,T22=<T22>,T23=<T23>,
T24=<T24>,T25=<T25>,T26=<T26>,T27=<T27>,
T28=<T28>,T33=<T33>,T34=<T34>,T36=<T36>,
TCCR=<TCCR>,TCCRT=<TCCRT>,TCONG=<TCONG>,
TCOTD=<TCOTD>,TCRA=<TCRA>,TCRM=<TCRM>,
TCVT=<TCVT>,TFGR=<TFGR>,TGRES=<TGRes>,
TGUARD=<TGuard>,TTBLO=<TTBLO>,HOPCNTR=<hopCntr>,
RELLOCATION=<relLocation>"
;
```

Parameters:

IsupAnsiPrflId Identifies the AID as a profile for a circuit identification code in the North American Numbering Plan. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all circuit identification code profiles configured in the system for NANP will be returned.

Type: integer

Range: {1-128}

Default value: none

- T1** Identifies the Timer T1 value (in seconds) for the ISUP layer. Timer T1 starts when a T1-RELEASE message is sent. It stops on receipt of an RLC message.
- Type:** integer
Range: {0-20}
Default value: 10
- T5** Identifies the Timer T5 value (in seconds) for the ISUP layer. Timer T5 starts when a T5-INITIAL RELEASE message is sent. It stops on receipt of an RLC message.
- Type:** integer
Range: {0-300}
Default value: 60
- T7** Identifies the Timer T7 value (in seconds) for the ISUP layer. Timer T7 starts when a T7-LATEST ADDRESS message is sent. It stops when the condition for normal release of address and routing information is met.
- Type:** integer
Range: {0-100}
Default value: 25
- T8** Identifies the Timer T8 value (in seconds) for the ISUP layer. Timer T8 starts on receipt of a T8-INITIAL ADDRESS message from an incoming international exchange.
- Type:** decinum
Range: {0-100}
Default value: 13
- T12** Identifies the Timer T12 value (in seconds) for the ISUP layer. Timer T12 starts when a BLOCKING message is sent. It stops on receipt of a BLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {0-15}
Default value: 7
- T13** Identifies the Timer T13 value (in seconds) for the ISUP layer. Timer T13 starts when an INITIAL BLOCKING message is sent. It stops on receipt of a BLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {0-100}
Default value: 60

- T14** Identifies the Timer T14 value (in seconds) for the ISUP layer. Timer T14 starts when an UNBLOCKING message is sent. It stops on receipt of an UNBLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {0-15}
Default value: 7
- T15** Identifies the Timer T15 value (in seconds) for the ISUP layer. Timer T15 starts when an INITIAL UNBLOCKING message is sent. It stops on receipt of an UNBLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {0-100}
Default value: 60
- T16** Identifies the Timer T16 value (in seconds) for the ISUP layer. Timer T16 starts when a RESET CIRCUIT message is sent. It stops on receipt of a RELEASE COMPLETE message.
- Type:** integer
Range: {0-15}
Default value: 7
- T17** Identifies the Timer T17 value (in seconds) for the ISUP layer. Timer T17 starts when an INITIAL RESET message is sent. It stops on receipt of a RELEASE COMPLETE message.
- Type:** integer
Range: {0-100}
Default value: 60
- T18** Identifies the Timer T18 value (in seconds) for the ISUP layer. Timer T18 is started when a GROUP BLOCKING message is sent. This is terminated normally on receipt of a GROUP BLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {0-100}
Default value: 10
- T19** Identifies the Timer T19 value (in seconds) for the ISUP layer. Timer T19 is started when an INITIAL GROUP BLOCKING message is sent. It is terminated normally on receipt of a GROUP BLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {0-300}
Default value: 60

- T20** Identifies the Timer T20 value (in seconds) for the ISUP layer. Timer T20 is started when a GROUP UNBLOCKING message is sent. This is terminated normally on receipt of a GROUP UNBLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {0-100}
Default value: 10
- T21** Identifies the Timer T21 value (in seconds) for the ISUP layer. Timer T21 is started when an INITIAL GROUP UNBLOCKING message is sent. This is terminated normally on receipt of a GROUP UNBLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {0-300}
Default value: 60
- T22** Identifies the Timer T22 value (in seconds) for the ISUP layer. Timer T22 is started when a GROUP RESET message is sent. It is terminated normally on receipt of the acknowledgement.
- Type:** integer
Range: {0-100}
Default value: 10
- T23** Identifies the Timer T23 value (in seconds) for the ISUP layer. Timer T23 is started when a GROUP RESET message is sent. It is terminated normally on receipt of the acknowledgement.
- Type:** integer
Range: {0-300}
Default value: 60

- T24** Identifies the Timer T24 value (in seconds) for the ISUP layer. Timer T24 starts when a check tone is sent to the remote switch. This occurs (possibly after a short delay established by *TCOTD*) either when an IAM with a CONTINUITY CHECK message is sent to the remote switch, or after receiving a LOOPBACK ACKNOWLEDGEMENT (LPA) from the remote switch in response to a CONTINUITY CHECK REQUEST (CCR) message. T24 stops after detecting the 60-millisecond backward tone indicating continuity. If the timer expires without detecting the backward tone, a continuity message (COT) with failure is sent to the remote switch and Timer T25 (if an IAM was sent) or Timer T26 (if a CCR was sent) is started to repeat automatic attempts at detecting continuity.
- Type:** integer
Range: {0-2}
Default value: 1
- T25** Identifies the Timer T25 value (in seconds) for the ISUP layer. Timer T25 starts after an initial continuity failure on sending an IAM (that is, after expiry of T24), and, as with T24, stops when continuity is detected. If T25 expires without detecting continuity, it sends a CCR message.
- Type:** integer
Range: {0-10}
Default value: 5
- T26** Identifies the Timer T26 value (in seconds) for the ISUP layer. Timer T26 starts either after a subsequent continuity failure if the continuity test resulted from an IAM, or after an initial continuity failure if the continuity test resulted from a CCR. T26 runs until expiry, then sends a CCR message to the remote switch.
- Type:** integer
Range: {60-180}
Default value: 120
- T27** Identifies the Timer T27 value (in seconds) for the ISUP layer. Timer T27 starts when waiting for a continuity recheck. It is terminated normally on receipt of a CONTINUITY CHECK REQUEST message.
- Type:** decinum
Range: {0-500}
Default value: 240

- T28** Identifies the Timer T28 value (in seconds) for the ISUP layer. Timer T28 is started when a CIRCUIT GROUP QUERY message is sent. It is terminated normally on receipt of a CIRCUIT GROUP QUERY RESPONSE message.
- Type:** integer
Range: {0-300}
Default value: 10
- T33** Identifies the Timer T33 value (in seconds) for the ISUP layer. Timer T33 starts when a T33-INFORMATION REQUEST message is sent. It is terminated normally on receipt of an INFO message.
- Type:** integer
Range: {0-100}
Default value: 13
- T34** Identifies the Timer T34 value (in seconds) for the ISUP layer. Timer T34 starts when waiting for continuity after recheck. A typical value is 2-4 seconds.
- Type:** decinum
Range: {0-40}
Default value: 13
- T36** Identifies the Timer T36 value (in seconds) for the ISUP layer. Timer T36 specifies the period to wait for an SGM message.
- Type:** decinum
Range: {0-100}
Default value: 10
- TCCR** Identifies the timer value (in seconds) for the CONTINUITY CHECK REQUEST RECEIVED message in the ISUP layer. It is initiated on receipt of an initial continuity message indicating failure and is terminated normally on receipt of a CONTINUITY CHECK REQUEST message.
- Type:** decinum
Range: {0-100}
Default value: 20

TCCRT Identifies the timer value (in seconds) for the CONTINUITY CHECK REQUEST TRANSMITTED message in the ISUP layer. It is initiated when the CONTINUITY CHECK REQUEST message is sent and is terminated normally on receipt of a LOOPBACK ACKNOWLEDGEMENT message.

Type: decinum

Range: {0-20}

Default value: 2

TCONG Identifies the timer value (in seconds) for the CONGESTED message in the ISUP layer. The timer is set when an ACM cannot be sent because of congestion/isolation of the preceding switch and is used to prevent the call from ringing the called party after the originating SPCS would have released the call. It is terminated normally on receipt of a REL message for the incoming circuit or on receipt of answer supervision.

Type: decinum

Range: {22-32}

Default value: 22

TCOTD Identifies the check tone delay timer value (in milliseconds) for the ISUP layer. Timer TCOTD starts when an IAM with a CONTINUITY CHECK message is sent to the remote switch and runs until expiry, at which time the check tone is sent. A value of "0" indicates that the parameter is not applicable.

Type: integer

Range: {0, 50-500}

Default value: 0

TCRA Identifies the timer value (in seconds) for the CIRCUIT RESERVATION ACKNOWLEDGE SENT message in the ISUP layer. It is terminated normally on receipt of an IAM.

Type: decinum

Range: {0-100}

Default value: 20

TCRM Identifies the timer value (in seconds) for the CIRCUIT RESERVATION SENT message in the ISUP layer. It is terminated normally on receipt of a CIRCUIT RESERVATION ACKNOWLEDGE message.

Type: decinum

Range: {0-40}

Default value: 3

- TCVT** Identifies the ANSI circuit validation timer value (in seconds).
Type: integer
Range: {0-50}
Default value: 10
- TFGR** Identifies the value for the ANSI First Group Received timer.
Type: decinum
Range: {0-50}
Default value: 5
- TGRes** Identifies the value for the Group Reset timer.
Type: decinum
Range: {0-3276.8}
Default value: 5
- TGuard** Identifies the guard timer value T_a (in 100 millisecond increments). The switch sets the guard timer for a circuit on which it sends an RLC, and will not seize the circuit for subsequent calls until after guard timer expiry.
Type: integer
Range: {5-10}
Default value: 5
- TTBLO** Identifies the BLOCK (BLO) message timer value (in seconds) for the ISUP layer. Timer TTBLO starts on receipt from the remote switch of either a BLO or a BLOCK ACKNOWLEDGEMENT (BLA) (after the switch sends a BLO). Timer TTBLO runs until expiry, then reports (REPT COND) that the circuit has been blocked for the specified period.
Type: integer
Range: {0-600}
Default value: 300
- hopCntr** Identifies the number of hops allowed (that is, the number of switches traversed in the call route) before the call is released. A value of "0" indicates that the parameter is not applicable.
Type: enum
Range: {0, 10-20}
Default value: 15

relLocation Identifies the release location used in cause value when ISUP internally releases a call (for example, due to timer expiry).

Type: enum

Range: INTNET = International network
LOCALIF = Local interface
NETINTER = Network beyond interworking point
NOINFOAV = No information available
PRIVNETLU = Private network serving the local user
PRIVNETRU = Private network serving the remote user
PUBNETLU = Public network serving the local user
PUBNETRU = Public network serving the remote user
TRANNET = Transit network
USER = User

Default value: NETINTER

Input Examples:

```
DLT-PRFL-ISUPANSI::1;
```

```
ED-PRFL-ISUPANSI::1:::T1=10,T5=60,T7=25,T8=13,T12=7,  
T13=60,T14=7,T15=60,T16=7,T17=60,T18=10,T19=60,  
T20=10,T21=60,T22=10,T23=60,T24=1,T25=5,T26=120,  
T27=240,T28=10,T33=13,T34=13,T36=10,TCCR=20,  
TCCRT=2,TCONG=22,TCOTD=0,TCRA=20,TCRM=3,TCVT=10,  
TFGR=5,TGRES=5,TGUARD=5,TTBLO=300,HOPCNTR=15,  
RELLOCATION=NETINTER;
```

```
ENT-PRFL-ISUPANSI::1:::T1=10,T5=60,T7=25,T8=13,T12=7,  
T13=60,T14=7,T15=60,T16=7,T17=60,T18=10,T19=60,  
T20=10,T21=60,T22=10,T23=60,T24=1,T25=5,T26=120,  
T27=240,T28=10,T33=13,T34=13,T36=10,TCCR=20,  
TCCRT=2,TCONG=22,TCOTD=0,TCRA=20,TCRM=3,TCVT=10,  
TFGR=5,TGRES=5,TGUARD=5,TTBLO=300,HOPCNTR=15,  
RELLOCATION=NETINTER;
```

```
RTRV-PRFL-ISUPANSI::1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"1:T1=10,T5=60,T7=25,T8=13,T12=7,T13=60,T14=7,
  T15=60,T16=7,T17=60,T18=10,T19=60,T20=10,T21=60,
  T22=10,T23=60,T24=1,T25=5,T26=120,T27=240,
  T28=10,T33=13,T34=13,T36=10,TCCR=20,TC CRT=2,
  TCONG=22,TCOTD=0,TCRA=20,TCRM=3,TCVT=10,TFGR=5,
  TGRES=5,TGUARD=5,TTBLO=300,HOPCNTR=15,
  RELLOCATION=NETINTER"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-PRFL-ISUPITU

Commands:

DLT-PRFL-ISUPITU: Delete Profile ISUP ITU

ED-PRFL-ISUPITU: Edit Profile ISUP ITU

ENT-PRFL-ISUPITU: Enter Profile ISUP ITU

RTRV-PRFL-ISUPITU: Retrieve Profile ISUP ITU

Descriptions:

DLT-PRFL-ISUPITU lets the user delete a profile for a circuit identification code in the European or Australian numbering plans.

ED-PRFL-ISUPITU lets the user edit a profile for a circuit identification code in the European or Australian numbering plans. Use this command to change the values of the ISUP timers for the CIC.

ENT-PRFL-ISUPITU lets the user establish a profile for a circuit identification code in the European or Australian numbering plans.

RTRV-PRFL-ISUPITU lets the user retrieve the attributes of a profile for a circuit identification code in the European or Australian numbering plans.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-PRFL-ISUPITU:[TID]:<IsupItuPrflId>:[CTAG];  
ED-PRFL-ISUPITU:[TID]:<IsupItuPrflId>:[CTAG]::  
    [T1=<T1>],[T2=<T2>],[T5=<T5>],[T7=<T7>],[T8=<T8>],  
    [T12=<T12>],[T13=<T13>],[T14=<T14>],[T15=<T15>],  
    [T16=<T16>],[T17=<T17>],[T18=<T18>],[T19=<T19>],  
    [T20=<T20>],[T21=<T21>],[T22=<T22>],[T23=<T23>],  
    [T24=<T24>],[T25=<T25>],[T26=<T26>],[T27=<T27>],  
    [T28=<T28>],[T33=<T33>],[T34=<T34>],[T36=<T36>],  
    [TGUARD=<TGuard>],[HOPCNTR=<hopCntr>],  
    [RELLOCATION=<relLocation>];
```

```
ENT-PRFL-ISUPITU:[TID]:<IsupItuPrflId>:[CTAG]::
[T1=<T1>],[T2=<T2>],[T5=<T5>],[T7=<T7>],[T8=<T8>],
[T12=<T12>],[T13=<T13>],[T14=<T14>],[T15=<T15>],
[T16=<T16>],[T17=<T17>],[T18=<T18>],[T19=<T19>],
[T20=<T20>],[T21=<T21>],[T22=<T22>],[T23=<T23>],
[T24=<T24>],[T25=<T25>],[T26=<T26>],[T27=<T27>],
[T28=<T28>],[T33=<T33>],[T34=<T34>],[T36=<T36>],
[TGUARD=<TGuard>],[HOPCNTR=<hopCntr>],
[RELLOCATION=<relLocation>];

RTRV-PRFL-ISUPITU:[TID]:[<IsupItuPrflId>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<IsupItuPrflId>:T1=<T1>,T2=<T2>,T5=<T5>,T7=<T7>,
T8=<T8>,T12=<T12>,T13=<T13>,T14=<T14>,T15=<T15>,
T16=<T16>,T17=<T17>,T18=<T18>,T19=<T19>,
T20=<T20>,T21=<T21>,T22=<T22>,T23=<T23>,
T24=<T24>,T25=<T25>,T26=<T26>,T27=<T27>,
T28=<T28>,T33=<T33>,T34=<T34>,T36=<T36>,
TGUARD=<TGuard>,HOPCNTR=<hopCntr>,
RELLOCATION=<relLocation>"
;
```

Parameters:

IsupItuPrflId Identifies the AID as a profile for a circuit identification code in the European or Australian numbering plans. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all circuit identification code profiles configured in the system for ETSI or TELSTRA will be returned.

Type: integer
Range: {1-128}
Default value: none

T1 Identifies the Timer T1 value (in seconds) for the ISUP layer. Timer T1 starts when a T1-RELEASE message is sent. It stops on receipt of an RLC message.

Type: integer
Range: {1-60}
Default value: 15

- T2** Identifies the Timer T2 value (in seconds) for the ISUP layer. Timer T2 (user-initiated SUSPEND timer) starts when the incoming protocol is line side (CAS line, GR-303, MGCP, ISDN or SIP) and the switch has received a user-initiated SUSPEND indication from the SS7 network. Set the value to “0” to disable the timer.
- Type:** integer
Range: {0-300}
Default value: 180
- T5** Identifies the Timer T5 value (in seconds) for the ISUP layer. Timer T5 starts when a T5-INITIAL RELEASE message is sent. It stops on receipt of an RLC message.
- Type:** integer
Range: {60-900}
Default value: 300
- T7** Identifies the Timer T7 value (in seconds) for the ISUP layer. Timer T7 starts when a T7-LATEST ADDRESS message is sent. It stops when the condition for normal release of address and routing information is met.
- Type:** integer
Range: {1-100}
Default value: 25
- T8** Identifies the Timer T8 value (in seconds) for the ISUP layer. Timer T8 starts on receipt of a T8-INITIAL ADDRESS message from an incoming international exchange.
- Type:** decinum
Range: {1-100}
Default value: 13
- T12** Identifies the Timer T12 value (in seconds) for the ISUP layer. Timer T12 starts when a BLOCKING message is sent. It stops on receipt of a BLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-60}
Default value: 15
- T13** Identifies the Timer T13 value (in seconds) for the ISUP layer. Timer T13 starts when an INITIAL BLOCKING message is sent. It stops on receipt of a BLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-900}
Default value: 300

- T14** Identifies the Timer T14 value (in seconds) for the ISUP layer. Timer T14 starts when an UNBLOCKING message is sent. It stops on receipt of an UNBLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-60}
Default value: 15
- T15** Identifies the Timer T15 value (in seconds) for the ISUP layer. Timer T15 starts when an INITIAL UNBLOCKING message is sent. It stops on receipt of an UNBLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-900}
Default value: 300
- T16** Identifies the Timer T16 value (in seconds) for the ISUP layer. Timer T16 starts when a RESET CIRCUIT message is sent. It stops on receipt of a RELEASE COMPLETE message.
- Type:** integer
Range: {1-60}
Default value: 15
- T17** Identifies the Timer T17 value (in seconds) for the ISUP layer. Timer T17 starts when an INITIAL RESET message is sent. It stops on receipt of a RELEASE COMPLETE message.
- Type:** integer
Range: {1-900}
Default value: 300
- T18** Identifies the Timer T18 value (in seconds) for the ISUP layer. Timer T18 is started when a GROUP BLOCKING message is sent. This is terminated normally on receipt of a GROUP BLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-100}
Default value: 15
- T19** Identifies the Timer T19 value (in seconds) for the ISUP layer. Timer T19 is started when an INITIAL GROUP BLOCKING message is sent. It is terminated normally on receipt of a GROUP BLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-900}
Default value: 300

- T20** Identifies the Timer T20 value (in seconds) for the ISUP layer. Timer T20 is started when a GROUP UNBLOCKING message is sent. This is terminated normally on receipt of a GROUP UNBLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-100}
Default value: 15
- T21** Identifies the Timer T21 value (in seconds) for the ISUP layer. Timer T21 is started when an INITIAL GROUP UNBLOCKING message is sent. This is terminated normally on receipt of a GROUP UNBLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-900}
Default value: 300
- T22** Identifies the Timer T22 value (in seconds) for the ISUP layer. Timer T22 is started when a GROUP RESET message is sent. It is terminated normally on receipt of the acknowledgement.
- Type:** integer
Range: {1-100}
Default value: 15
- T23** Identifies the Timer T23 value (in seconds) for the ISUP layer. Timer T23 is started when a GROUP RESET message is sent. It is terminated normally on receipt of the acknowledgement.
- Type:** integer
Range: {1-900}
Default value: 300

- T24** Identifies the Timer T24 value (in seconds) for the ISUP layer. Timer T24 starts when a check tone is sent to the remote switch. This occurs (possibly after a short delay established by *TCOTD*) either when an IAM with a CONTINUITY CHECK message is sent to the remote switch, or after receiving a LOOPBACK ACKNOWLEDGEMENT (LPA) from the remote switch in response to a CONTINUITY CHECK REQUEST (CCR) message. T24 stops after detecting the 60-millisecond backward tone indicating continuity. If the timer expires without detecting the backward tone, a continuity message (COT) with failure is sent to the remote switch and Timer T25 (if an IAM was sent) or Timer T26 (if a CCR was sent) is started to repeat automatic attempts at detecting continuity.
- Type:** integer
Range: {1-2}
Default value: 1
- T25** Identifies the Timer T25 value (in seconds) for the ISUP layer. Timer T25 starts after an initial continuity failure on sending an IAM (that is, after expiry of T24), and, as with T24, stops when continuity is detected. If T25 expires without detecting continuity, it sends a CCR message.
- Type:** integer
Range: {1-10}
Default value: 5
- T26** Identifies the Timer T26 value (in seconds) for the ISUP layer. Timer T26 starts either after a subsequent continuity failure if the continuity test resulted from an IAM, or after an initial continuity failure if the continuity test resulted from a CCR. T26 runs until expiry, then sends a CCR message to the remote switch.
- Type:** integer
Range: {60-180}
Default value: 120
- T27** Identifies the Timer T27 value (in seconds) for the ISUP layer. Timer T27 starts when waiting for a continuity recheck. It is terminated normally on receipt of a CONTINUITY CHECK REQUEST message.
- Type:** decinum
Range: {1-500}
Default value: 240

- T28** Identifies the Timer T28 value (in seconds) for the ISUP layer. Timer T28 is started when a CIRCUIT GROUP QUERY message is sent. It is terminated normally on receipt of a CIRCUIT GROUP QUERY RESPONSE message.
- Type:** integer
Range: {1-300}
Default value: 10
- T33** Identifies the Timer T33 value (in seconds) for the ISUP layer. Timer T33 starts when a T33-INFORMATION REQUEST message is sent. It is terminated normally on receipt of an INFO message.
- Type:** integer
Range: {1-100}
Default value: 13
- T34** Identifies the Timer T34 value (in seconds) for the ISUP layer. Timer T34 starts when an indication of a segmented message is received on an IAM, ACM, CPG, ANM, or CON and is stopped on receipt of a segmentation (SGM) message. A typical value is 2-4 seconds.
- Type:** decinum
Range: {1-10}
Default value: 3
- T36** Identifies the Timer T36 value (in seconds) for the ISUP layer. Timer T36 starts when a transit or incoming international exchange receives a continuity check request message, and stops on receipt of a CONTINUITY or RELEASE message.
- Type:** decinum
Range: {1-100}
Default value: 12
- TGuard** Identifies the guard timer value T_a (in 100 millisecond increments). The switch sets the guard timer for a circuit on which it sends an RLC, and will not seize the circuit for subsequent calls until after guard timer expiry.
- Type:** integer
Range: {5-10}
Default value: 5

hopCntr Identifies the number of hops allowed (that is, the number of switches traversed in the call route) before the call is released. A value of “0” indicates that the parameter is not applicable.

Type: enum

Range: {0-31}

Default value: 15

relLocation Identifies the release location used in cause value when ISUP internally releases a call (for example, due to timer expiry).

Type: enum

Range: INTNET = International network

LOCALIF = Local interface

NETINTER = Network beyond interworking point

NOINFOAV = No information available

PRIVNETLU = Private network serving the local user

PRIVNETRU = Private network serving the remote user

PUBNETLU = Public network serving the local user

PUBNETRU = Public network serving the remote user

TRANNET = Transit network

USER = User

Default value: NETINTER

Input Examples:

```
DLT-PRFL-ISUPITU::1;
```

```
ED-PRFL-ISUPITU::1:::T1=15,T2=180,T5=300,T7=25,T8=13,  
T12=15,T13=300,T14=15,T15=300,T16=15,T17=300,  
T18=15,T19=300,T20=15,T21=300,T22=15,T23=300,T24=1,  
T25=5,T26=120,T27=240,T28=10,T33=13,T34=3,T36=12,  
TGUARD=5,HOPCNTR=15,RELLOCATION=NETINTER;
```

```
ENT-PRFL-ISUPITU::1:::T1=15,T2=180,T5=300,T7=25,T8=13,  
T12=15,T13=300,T14=15,T15=300,T16=15,T17=300,  
T18=15,T19=300,T20=15,T21=300,T22=15,T23=300,T24=1,  
T25=5,T26=120,T27=240,T28=10,T33=13,T34=3,T36=12,  
TGUARD=5,HOPCNTR=15,RELLOCATION=NETINTER;
```

```
RTRV-PRFL-ISUPITU::1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"1:T1=15,T2=180,T5=300,T7=25,T8=13,T12=15,T13=300,
  T14=15,T15=300,T16=15,T17=300,T18=15,T19=300,
  T20=15,T21=300,T22=15,T23=300,T24=1,T25=5,
  T26=120,T27=240,T28=10,T33=13,T34=3,T36=12,
  TGUARD=5,HOPCNTR=15,RELLOCATION=NETINTER"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-PRFL-ISUPITUQ767

Commands:

DLT-PRFL-ISUPITUQ767: Delete Profile ISUP ITU Q.737

ED-PRFL-ISUPITUQ767: Edit Profile ISUP ITU Q.737

ENT-PRFL-ISUPITUQ767: Enter Profile ISUP ITU Q.737

RTRV-PRFL-ISUPITUQ767: Retrieve Profile ISUP ITU Q.737

Descriptions:

DLT-PRFL-ISUPITUQ767 lets the user delete a profile for a circuit identification code in the European or Australian numbering plans defined by ITU Q.767.

ED-PRFL-ISUPITUQ767 lets the user edit a profile for a circuit identification code in the European or Australian numbering plans defined by ITU Q.767. Use this command to change the values of the ISUP timers for the CIC.

ENT-PRFL-ISUPITUQ767 lets the user establish a profile for a circuit identification code in the European or Australian numbering plans defined by ITU Q.767.

RTRV-PRFL-ISUPITUQ767 lets the user retrieve the attributes of a profile for a circuit identification code in the European or Australian numbering plans defined by ITU Q.767.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-PRFL-ISUPITUQ767:[TID]:<IsupItuQ767PrflId>:[CTAG];  
ED-PRFL-ISUPITUQ767:[TID]:<IsupItuQ767PrflId>:[CTAG]::  
    [T1=<T1>],[T2=<T2>],[T5=<T5>],[T7=<T7>],[T8=<T8>],  
    [T12=<T12>],[T13=<T13>],[T14=<T14>],[T15=<T15>],  
    [T16=<T16>],[T17=<T17>],[T18=<T18>],[T19=<T19>],  
    [T20=<T20>],[T21=<T21>],[T22=<T22>],[T23=<T23>],  
    [T24=<T24>],[T25=<T25>],[T26=<T26>],[T27=<T27>],  
    [T28=<T28>],[T33=<T33>],[T34=<T34>],[T36=<T36>],  
    [TGUARD=<TGuard>],[RELLOCATION=<relLocation>];
```

```
ENT-PRFL-ISUPITUQ767:[TID]:<IsupItuQ767PrflId>:
[CTAG]::[T1=<T1>],[T2=<T2>],[T5=<T5>],[T7=<T7>],
[T8=<T8>],[T12=<T12>],[T13=<T13>],[T14=<T14>],
[T15=<T15>],[T16=<T16>],[T17=<T17>],[T18=<T18>],
[T19=<T19>],[T20=<T20>],[T21=<T21>],[T22=<T22>],
[T23=<T23>],[T24=<T24>],[T25=<T25>],[T26=<T26>],
[T27=<T27>],[T28=<T28>],[T33=<T33>],[T34=<T34>],
[T36=<T36>],[TGUARD=<TGuard>],
[RELLOCATION=<relLocation>];

RTRV-PRFL-ISUPITUQ767:[TID]:[<IsupItuQ767PrflId>]:
[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<IsupItuQ767PrflId>:T1=<T1>,T2=<T2>,T5=<T5>,
T7=<T7>,T8=<T8>,T12=<T12>,T13=<T13>,T14=<T14>,
T15=<T15>,T16=<T16>,T17=<T17>,T18=<T18>,
T19=<T19>,T20=<T20>,T21=<T21>,T22=<T22>,
T23=<T23>,T24=<T24>,T25=<T25>,T26=<T26>,
T27=<T27>,T28=<T28>,T33=<T33>,T34=<T34>,
T36=<T36>,TGUARD=<TGuard>,
RELLOCATION=<relLocation>"
;
```

Parameters:

IsupItuQ767PrflId Identifies the AID as a profile for a circuit identification code in the European or Australian numbering plans defined by ITU Q.767. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all Q.767 circuit identification code profiles configured in the system for ETSI or TELSTRA will be returned.

Type: integer

Range: {1-128}

Default value: none

T1 Identifies the Timer T1 value (in seconds) for the ISUP layer. Timer T1 starts when a T1-RELEASE message is sent. It stops on receipt of an RLC message.

Type: integer

Range: {1-20}

Default value: 10

- T2** Identifies the Timer T2 value (in seconds) for the ISUP layer. Timer T2 (user-initiated SUSPEND timer) starts when the incoming protocol is line side (CAS line, GR-303, MGCP, ISDN or SIP) and the switch has received a user-initiated SUSPEND indication from the SS7 network. Set the value to "0" to disable the timer.
- Type:** integer
Range: {0-300}
Default value: 180
- T5** Identifies the Timer T5 value (in seconds) for the ISUP layer. Timer T5 starts when a T5-INITIAL RELEASE message is sent. It stops on receipt of an RLC message.
- Type:** integer
Range: {60-900}
Default value: 60
- T7** Identifies the Timer T7 value (in seconds) for the ISUP layer. Timer T7 starts when a T7-LATEST ADDRESS message is sent. It stops when the condition for normal release of address and routing information is met.
- Type:** integer
Range: {1-100}
Default value: 25
- T8** Identifies the Timer T8 value (in seconds) for the ISUP layer. Timer T8 starts on receipt of a T8-INITIAL ADDRESS message from an incoming international exchange.
- Type:** decinum
Range: {1-100}
Default value: 13
- T12** Identifies the Timer T12 value (in seconds) for the ISUP layer. Timer T12 starts when a BLOCKING message is sent. It stops on receipt of a BLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-15}
Default value: 7
- T13** Identifies the Timer T13 value (in seconds) for the ISUP layer. Timer T13 starts when an INITIAL BLOCKING message is sent. It stops on receipt of a BLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-100}
Default value: 60

- T14** Identifies the Timer T14 value (in seconds) for the ISUP layer. Timer T14 starts when an UNBLOCKING message is sent. It stops on receipt of an UNBLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-15}
Default value: 7
- T15** Identifies the Timer T15 value (in seconds) for the ISUP layer. Timer T15 starts when an INITIAL UNBLOCKING message is sent. It stops on receipt of an UNBLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-100}
Default value: 60
- T16** Identifies the Timer T16 value (in seconds) for the ISUP layer. Timer T16 starts when a RESET CIRCUIT message is sent. It stops on receipt of a RELEASE COMPLETE message.
- Type:** integer
Range: {1-15}
Default value: 7
- T17** Identifies the Timer T17 value (in seconds) for the ISUP layer. Timer T17 starts when an INITIAL RESET message is sent. It stops on receipt of a RELEASE COMPLETE message.
- Type:** integer
Range: {1-100}
Default value: 60
- T18** Identifies the Timer T18 value (in seconds) for the ISUP layer. Timer T18 is started when a GROUP BLOCKING message is sent. This is terminated normally on receipt of a GROUP BLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-100}
Default value: 10
- T19** Identifies the Timer T19 value (in seconds) for the ISUP layer. Timer T19 is started when an INITIAL GROUP BLOCKING message is sent. It is terminated normally on receipt of a GROUP BLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-300}
Default value: 60

- T20** Identifies the Timer T20 value (in seconds) for the ISUP layer. Timer T20 is started when a GROUP UNBLOCKING message is sent. This is terminated normally on receipt of a GROUP UNBLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-100}
Default value: 10
- T21** Identifies the Timer T21 value (in seconds) for the ISUP layer. Timer T21 is started when an INITIAL GROUP UNBLOCKING message is sent. This is terminated normally on receipt of a GROUP UNBLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-300}
Default value: 60
- T22** Identifies the Timer T22 value (in seconds) for the ISUP layer. Timer T22 is started when a GROUP RESET message is sent. It is terminated normally on receipt of the acknowledgement.
- Type:** integer
Range: {1-100}
Default value: 10
- T23** Identifies the Timer T23 value (in seconds) for the ISUP layer. Timer T23 is started when a GROUP RESET message is sent. It is terminated normally on receipt of the acknowledgement.
- Type:** integer
Range: {1-300}
Default value: 60

- T24** Identifies the Timer T24 value (in seconds) for the ISUP layer. Timer T24 starts when a check tone is sent to the remote switch. This occurs (possibly after a short delay established by *TCOTD*) either when an IAM with a CONTINUITY CHECK message is sent to the remote switch, or after receiving a LOOPBACK ACKNOWLEDGEMENT (LPA) from the remote switch in response to a CONTINUITY CHECK REQUEST (CCR) message. T24 stops after detecting the 60-millisecond backward tone indicating continuity. If the timer expires without detecting the backward tone, a continuity message (COT) with failure is sent to the remote switch and Timer T25 (if an IAM was sent) or Timer T26 (if a CCR was sent) is started to repeat automatic attempts at detecting continuity.
- Type:** integer
Range: {1-2}
Default value: 1
- T25** Identifies the Timer T25 value (in seconds) for the ISUP layer. Timer T25 starts after an initial continuity failure on sending an IAM (that is, after expiry of T24), and, as with T24, stops when continuity is detected. If T25 expires without detecting continuity, it sends a CCR message.
- Type:** integer
Range: {1-10}
Default value: 5
- T26** Identifies the Timer T26 value (in seconds) for the ISUP layer. Timer T26 starts either after a subsequent continuity failure if the continuity test resulted from an IAM, or after an initial continuity failure if the continuity test resulted from a CCR. T26 runs until expiry, then sends a CCR message to the remote switch.
- Type:** integer
Range: {60-180}
Default value: 120
- T27** Identifies the Timer T27 value (in seconds) for the ISUP layer. Timer T27 starts when waiting for a continuity recheck. It is terminated normally on receipt of a CONTINUITY CHECK REQUEST message.
- Type:** decinum
Range: {1-500}
Default value: 240

T36 Identifies the Timer T36 value (in seconds) for the ISUP layer. Timer T36 starts when a transit or incoming international exchange receives a continuity check request message, and stops on receipt of a CONTINUITY or RELEASE message.

Type: decinum

Range: {1-40}

Default value: 13

TGuard Identifies the guard timer value T_a (in 100 millisecond increments). The switch sets the guard timer for a circuit on which it sends an RLC, and will not seize the circuit for subsequent calls until after guard timer expiry.

Type: integer

Range: {5-10}

Default value: 5

relLocation Identifies the release location used in cause value when ISUP internally releases a call (for example, due to timer expiry).

Type: enum

Range: INTNET = International network

NETINTER = Network beyond interworking point

NOINFOAV = No information available

PRIVNETLU = Private network serving the local user

PRIVNETRU = Private network serving the remote user

PUBNETLU = Public network serving the local user

PUBNETRU = Public network serving the remote user

TRANNET = Transit network

USER = User

Default value: NETINTER

Input Examples:

```
DLT-PRFL-ISUPITUQ767::1;
```

```
ED-PRFL-ISUPITUQ767::1:::T1=10,T2=180,T5=60,T7=25,  
T8=13,T12=7,T13=60,T14=7,T15=60,T16=7,T17=60,  
T18=10,T19=60,T20=10,T21=60,T22=10,T23=60,T24=1,  
T25=5,T26=120,T27=240,T36=13,TGUARD=5,  
RELLOCATION=NETINTER;
```

```
ENT-PRFL-ISUPITUQ767::1:::T1=10,T2=180,T5=60,T7=25,  
T8=13,T12=7,T13=60,T14=7,T15=60,T16=7,T17=60,  
T18=10,T19=60,T20=10,T21=60,T22=10,T23=60,T24=1,  
T25=5,T26=120,T27=240,T36=13,TGUARD=5,  
RELLOCATION=NETINTER;
```

```
RTRV-PRFL-ISUPITUQ767::1;
```

Output Example:

```
      lucent 2005-06-24 14:37:49
M    0  COMPLD
      "1:T1=10,T2=180,T5=60,T7=25,T8=13,T12=7,T13=60,
      T14=7,T15=60,T16=7,T17=60,T18=10,T19=60,T20=10,
      T21=60,T22=10,T23=60,T24=1,T25=5,T26=120,
      T27=240,T36=13,TGUARD=5,RELLOCATION=NETINTER"
      ;
```

Related Commands: none

DLT/ED/ENT/RTRV-PRFL-ISUPMEXICO

Commands:

DLT-PRFL-ISUPMEXICO: Delete Profile ISUP MEXICO

ED-PRFL-ISUPMEXICO: Edit Profile ISUP MEXICO

ENT-PRFL-ISUPMEXICO: Enter Profile ISUP MEXICO

RTRV-PRFL-ISUPMEXICO: Retrieve Profile ISUP MEXICO

Descriptions:

DLT-PRFL-ISUPMEXICO lets the user delete a profile for a circuit identification code in the Mexican numbering plan.

ED-PRFL-ISUPMEXICO lets the user edit a profile for a circuit identification code in the Mexican numbering plan. Use this command to change the values of the ISUP timers for the CIC.

ENT-PRFL-ISUPMEXICO lets the user establish a profile for a circuit identification code in the Mexican numbering plan.

RTRV-PRFL-ISUPMEXICO lets the user retrieve the attributes of a profile for a circuit identification code in the Mexican numbering plan.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-PRFL-ISUPMEXICO:[TID]:<isupMexicoPrflId>:[CTAG];  
ED-PRFL-ISUPMEXICO:[TID]:<isupMexicoPrflId>:[CTAG]::  
[T1=<T1>],[T2=<T2>],[T5=<T5>],[T7=<T7>],[T8=<T8>],  
[T12=<T12>],[T13=<T13>],[T14=<T14>],[T15=<T15>],  
[T16=<T16>],[T17=<T17>],[T18=<T18>],[T19=<T19>],  
[T20=<T20>],[T21=<T21>],[T22=<T22>],[T23=<T23>],  
[T24=<T24>],[T25=<T25>],[T26=<T26>],[T27=<T27>],  
[T33=<T33>],[T36=<T36>],[T50=<T50>],  
[TGUARD=<TGuard>],[RELOCATION=<relLocation>];
```

```
ENT-PRFL-ISUPMEXICO:[TID]:<isupMexicoPrflId>:[CTAG]::
[T1=<T1>],[T2=<T2>],[T5=<T5>],[T7=<T7>],[T8=<T8>],
[T12=<T12>],[T13=<T13>],[T14=<T14>],[T15=<T15>],
[T16=<T16>],[T17=<T17>],[T18=<T18>],[T19=<T19>],
[T20=<T20>],[T21=<T21>],[T22=<T22>],[T23=<T23>],
[T24=<T24>],[T25=<T25>],[T26=<T26>],[T27=<T27>],
[T33=<T33>],[T36=<T36>],[T50=<T50>],
[TGUARD=<TGuard>],[RELLOCATION=<relLocation>];

RTRV-PRFL-ISUPMEXICO:[TID]:[<isupMexicoPrflId>]:
[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<isupMexicoPrflId>:T1=<T1>,T2=<T2>,T5=<T5>,
T7=<T7>,T8=<T8>,T12=<T12>,T13=<T13>,T14=<T14>,
T15=<T15>,T16=<T16>,T17=<T17>,T18=<T18>,
T19=<T19>,T20=<T20>,T21=<T21>,T22=<T22>,
T23=<T23>,T24=<T24>,T25=<T25>,T26=<T26>,
T27=<T27>,T33=<T33>,T36=<T36>,T50=<T50>,
TGUARD=<TGuard>,RELLOCATION=<relLocation>"
;
```

Parameters:

isupMexicoPrflId Identifies the AID as a profile for a circuit identification code in the Mexican numbering plan. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all circuit identification code profiles configured in the system for ISUP-Mexico will be returned.

Type: integer

Range: {1-128}

Default value: none

T1 Identifies the Timer T1 value (in seconds) for the ISUP layer. Timer T1 starts when a T1-RELEASE message is sent. It stops on receipt of an RLC message.

Type: integer

Range: {1-20}

Default value: 10

- T2** Identifies the Timer T2 value (in seconds) for the ISUP layer. Timer T2 (user-initiated SUSPEND timer) starts when the incoming protocol is line side (CAS line, GR-303, MGCP, ISDN or SIP) and the switch has received a user-initiated SUSPEND indication from the SS7 network. Set the value to “0” to disable the timer.
- Type:** integer
Range: {0-300}
Default value: 180
- T5** Identifies the Timer T5 value (in seconds) for the ISUP layer. Timer T5 starts when a T5-INITIAL RELEASE message is sent. It stops on receipt of an RLC message.
- Type:** integer
Range: {60-900}
Default value: 60
- T7** Identifies the Timer T7 value (in seconds) for the ISUP layer. Timer T7 starts when a T7-LATEST ADDRESS message is sent. It stops when the condition for normal release of address and routing information is met.
- Type:** integer
Range: {1-100}
Default value: 25
- T8** Identifies the Timer T8 value (in seconds) for the ISUP layer. Timer T8 starts on receipt of a T8-INITIAL ADDRESS message from an incoming international exchange.
- Type:** decinum
Range: {1-100}
Default value: 13
- T12** Identifies the Timer T12 value (in seconds) for the ISUP layer. Timer T12 starts when a BLOCKING message is sent. It stops on receipt of a BLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-15}
Default value: 7
- T13** Identifies the Timer T13 value (in seconds) for the ISUP layer. Timer T13 starts when an INITIAL BLOCKING message is sent. It stops on receipt of a BLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-100}
Default value: 60

- T14** Identifies the Timer T14 value (in seconds) for the ISUP layer. Timer T14 starts when an UNBLOCKING message is sent. It stops on receipt of an UNBLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-15}
Default value: 7
- T15** Identifies the Timer T15 value (in seconds) for the ISUP layer. Timer T15 starts when an INITIAL UNBLOCKING message is sent. It stops on receipt of an UNBLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-100}
Default value: 60
- T16** Identifies the Timer T16 value (in seconds) for the ISUP layer. Timer T16 starts when a RESET CIRCUIT message is sent. It stops on receipt of a RELEASE COMPLETE message.
- Type:** integer
Range: {1-15}
Default value: 7
- T17** Identifies the Timer T17 value (in seconds) for the ISUP layer. Timer T17 starts when an INITIAL RESET message is sent. It stops on receipt of a RELEASE COMPLETE message.
- Type:** integer
Range: {1-100}
Default value: 60
- T18** Identifies the Timer T18 value (in seconds) for the ISUP layer. Timer T18 is started when a GROUP BLOCKING message is sent. This is terminated normally on receipt of a GROUP BLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-100}
Default value: 10
- T19** Identifies the Timer T19 value (in seconds) for the ISUP layer. Timer T19 is started when an INITIAL GROUP BLOCKING message is sent. It is terminated normally on receipt of a GROUP BLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-300}
Default value: 60

- T20** Identifies the Timer T20 value (in seconds) for the ISUP layer. Timer T20 is started when a GROUP UNBLOCKING message is sent. This is terminated normally on receipt of a GROUP UNBLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-100}
Default value: 10
- T21** Identifies the Timer T21 value (in seconds) for the ISUP layer. Timer T21 is started when an INITIAL GROUP UNBLOCKING message is sent. This is terminated normally on receipt of a GROUP UNBLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {1-300}
Default value: 60
- T22** Identifies the Timer T22 value (in seconds) for the ISUP layer. Timer T22 is started when a GROUP RESET message is sent. It is terminated normally on receipt of the acknowledgement.
- Type:** integer
Range: {1-100}
Default value: 10
- T23** Identifies the Timer T23 value (in seconds) for the ISUP layer. Timer T23 is started when a GROUP RESET message is sent. It is terminated normally on receipt of the acknowledgement.
- Type:** integer
Range: {1-300}
Default value: 60

- T24** Identifies the Timer T24 value (in seconds) for the ISUP layer. Timer T24 starts when a check tone is sent to the remote switch. This occurs (possibly after a short delay established by *TCOTD*) either when an IAM with a CONTINUITY CHECK message is sent to the remote switch, or after receiving a LOOPBACK ACKNOWLEDGEMENT (LPA) from the remote switch in response to a CONTINUITY CHECK REQUEST (CCR) message. T24 stops after detecting the 60-millisecond backward tone indicating continuity. If the timer expires without detecting the backward tone, a continuity message (COT) with failure is sent to the remote switch and Timer T25 (if an IAM was sent) or Timer T26 (if a CCR was sent) is started to repeat automatic attempts at detecting continuity.
- Type:** integer
Range: {1-2}
Default value: 1
- T25** Identifies the Timer T25 value (in seconds) for the ISUP layer. Timer T25 starts after an initial continuity failure on sending an IAM (that is, after expiry of T24), and, as with T24, stops when continuity is detected. If T25 expires without detecting continuity, it sends a CCR message.
- Type:** integer
Range: {1-10}
Default value: 5
- T26** Identifies the Timer T26 value (in seconds) for the ISUP layer. Timer T26 starts either after a subsequent continuity failure if the continuity test resulted from an IAM, or after an initial continuity failure if the continuity test resulted from a CCR. T26 runs until expiry, then sends a CCR message to the remote switch.
- Type:** integer
Range: {60-180}
Default value: 120
- T27** Identifies the Timer T27 value (in seconds) for the ISUP layer. Timer T27 starts when waiting for a continuity recheck. It is terminated normally on receipt of a CONTINUITY CHECK REQUEST message.
- Type:** decinum
Range: {1-500}
Default value: 240

- T33** Identifies the Timer T33 value (in seconds) for the ISUP layer. Timer T33 starts when a T33-INFORMATION REQUEST message is sent. It is terminated normally on receipt of an INFO message. Timer expiry causes call release.
- Type:** decinum
Range: {12-15}
Default value: 13
- T36** Identifies the Timer T36 value (in seconds) for the ISUP layer. Timer T36 starts when a transit or incoming international exchange receives a continuity check request message, and stops on receipt of a CONTINUITY or RELEASE message.
- Type:** decinum
Range: {1-40}
Default value: 13
- T50** Identifies the Timer T50 value (in seconds) for the ISUP layer. Timer T50 starts when a CALL OFFERING message is sent, and stops on receipt of a FALSE ANSWER message. Timer expiry causes call cancellation and operator notification.
- Type:** decinum
Range: {180-360}
Default value: 180
- TGuard** Identifies the guard timer value T_a (in 100 millisecond increments). The switch sets the guard timer for a circuit on which it sends an RLC, and will not seize the circuit for subsequent calls until after guard timer expiry.
- Type:** integer
Range: {5-10}
Default value: 5

relLocation Identifies the release location used in cause value when ISUP internally releases a call (for example, due to timer expiry).

Type: enum

Range: INTNET = International network
NETINTER = Network beyond interworking point
NOINFOAV = No information available
PRIVNETLU = Private network serving the local user
PRIVNETRU = Private network serving the remote user
PUBNETLU = Public network serving the local user
PUBNETRU = Public network serving the remote user
TRANNET = Transit network
USER = User

Default value: NETINTER

Input Examples:

```
DLT-PRFL-ISUPMEXICO::1;  
ED-PRFL-ISUPMEXICO::1:::T1=10,T2=180,T5=60,T7=25,  
T8=13,T12=7,T13=60,T14=7,T15=60,T16=7,T17=60,  
T18=10,T19=60,T20=10,T21=60,T22=10,T23=60,T24=1,  
T25=5,T26=120,T27=240,T33=13,T36=13,T50=180,  
TGUARD=5,RELLOCATION=NETINTER;  
ENT-PRFL-ISUPMEXICO::1:::T1=10,T2=180,T5=60,T7=25,  
T8=13,T12=7,T13=60,T14=7,T15=60,T16=7,T17=60,  
T18=10,T19=60,T20=10,T21=60,T22=10,T23=60,T24=1,  
T25=5,T26=120,T27=240,T33=13,T36=13,T50=180,  
TGUARD=5,RELLOCATION=NETINTER;  
RTRV-PRFL-ISUPMEXICO::1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"1:T1=10,T2=180,T5=60,T7=25,T8=13,T12=7,T13=60,  
T14=7,T15=60,T16=7,T17=60,T18=10,T19=60,T20=10,  
T21=60,T22=10,T23=60,T24=1,T25=5,T26=120,  
T27=240,T33=13,T36=13,T50=180,TGUARD=5,  
RELLOCATION=NETINTER"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-PRFL-SDP

Commands:

DLT-PRFL-SDP: Delete Profile SDP

ED-PRFL-SDP: Edit Profile SDP

ENT-PRFL-SDP: Enter Profile SDP

RTRV-PRFL-SDP: Retrieve Profile SDP

Descriptions:

DLT-PRFL-SDP lets the user delete an SDP (Session Description Protocol) profile.

ED-PRFL-SDP lets the user edit an SDP (Session Description Protocol) profile applicable to a SIP (Session Initiated Protocol) trunk. An SDP profile must have at least one codec specified. Specified codecs must be contiguous and must start with *codec1*.

ENT-PRFL-SDP lets the user establish an SDP (Session Description Protocol) profile applicable to a SIP (Session Initiated Protocol) trunk. An SDP profile must have at least one codec specified. Specified codecs must be contiguous and must start with *codec1*.

RTRV-PRFL-SDP lets the user retrieve the attributes of an SDP (Session Description Protocol) profile applicable to SIP (Session Initiated Protocol) trunk.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-PRFL-SDP: [TID]:<sdpPrflId>:[CTAG];

ED-PRFL-SDP: [TID]:<sdpPrflId>:[CTAG]::
[CODEC1=<codec1>],[CODEC2=<codec2>],
[CODEC3=<codec3>],[CODEC4=<codec4>],
[CODEC5=<codec5>],[PTYPE1=<ptype1>],
[PTYPE2=<ptype2>],[PTYPE3=<ptype3>],
[PTYPE4=<ptype4>],[PTYPE5=<ptype5>],
[PTIME=<pTime>],[SILSUP=<silSup>],
[TONERELAY=<toneRelay>],[RELAYPTYPE=<relayPtype>],
[G726ENC=<g726enc>],[FAXPROTOCOL=<faxProtocol>],
[G723BITRATE=<g723Bitrate>];

```
ENT-PRFL-SDP:[TID]:<sdpPrflId>:[CTAG]::
CODEC1=<codec1>,[CODEC2=<codec2>],
[CODEC3=<codec3>],[CODEC4=<codec4>],
[CODEC5=<codec5>],[PTYPE1=<ptype1>],
[PTYPE2=<ptype2>],[PTYPE3=<ptype3>],
[PTYPE4=<ptype4>],[PTYPE5=<ptype5>],
[PTIME=<pTime>],[SILSUP=<silSup>],
[TONERELAY=<toneRelay>],[RELAYPTYPE=<relayPtype>],
[G726ENC=<g726enc>],[FAXPROTOCOL=<faxProtocol>],
[G723BITRATE=<g723Bitrate>];

RTRV-PRFL-SDP:[TID]:[<sdpPrflId>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<sdpPrflId>:CODEC1=<codec1>,CODEC2=<codec2>,
CODEC3=<codec3>,CODEC4=<codec4>,CODEC5=<codec5>,
PTYPE1=<ptype1>,PTYPE2=<ptype2>,PTYPE3=<ptype3>,
PTYPE4=<ptype4>,PTYPE5=<ptype5>,PTIME=<pTime>,
SILSUP=<silSup>,TONERELAY=<toneRelay>,
RELAYPTYPE=<relayPtype>,G726ENC=<g726enc>,
FAXPROTOCOL=<faxProtocol>,
G723BITRATE=<g723Bitrate>"
;
```

Parameters:

sdpPrflId Identifies the AID as an SDP profile. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all SDP profiles configured in the system will be returned.

Type: integer

Range: {1-255}

Default value: none

codec1 Identifies the first in a list of audio codecs (coding/decoding algorithm types) in SDP format, that apply to the profile.

Type: enum

Range: CISCO-CLEAR-CHANNEL = encoding algorithm for the transmission of clear channel data (unrestricted digital data; that is, ISDN HDLC traffic) in an RTP media stream
CLEARMODE = encoding algorithm for the transmission of clear channel data (unrestricted digital data; that is, ISDN HDLC traffic) in an RTP media stream
G723 = G.723 encoding
G726 = G.726 encoding
G729 = G.729 encoding
NULL = no value specified
PCMA = G.711 for a-law PCM encoding (Europe)
PCMU = G.711 for mu-law PCM encoding (North America)
X-CCD = encoding algorithm for the transmission of clear channel data (unrestricted digital data; that is, ISDN HDLC traffic) in an RTP media stream

Default value: none

codec2 Identifies the second in a list of audio codecs (coding/decoding algorithm types) in SDP format, that apply to the profile.

Type: enum

Range: CISCO-CLEAR-CHANNEL = encoding algorithm for the transmission of clear channel data (unrestricted digital data; that is, ISDN HDLC traffic) in an RTP media stream
CLEARMODE = encoding algorithm for the transmission of clear channel data (unrestricted digital data; that is, ISDN HDLC traffic) in an RTP media stream
G723 = G.723 encoding
G726 = G.726 encoding
G729 = G.729 encoding
NULL = no value specified
PCMA = G.711 for a-law PCM encoding (Europe)
PCMU = G.711 for mu-law PCM encoding (North America)
X-CCD = encoding algorithm for the transmission of clear channel data (unrestricted digital data; that is, ISDN HDLC traffic) in an RTP media stream

Default value: NULL

codec3 Identifies the third in a list of audio codecs (coding/decoding algorithm types) in SDP format, that apply to the profile.

Type: enum

Range: CISCO-CLEAR-CHANNEL = encoding algorithm for the transmission of clear channel data (unrestricted digital data; that is, ISDN HDLC traffic) in an RTP media stream
CLEARMODE = encoding algorithm for the transmission of clear channel data (unrestricted digital data; that is, ISDN HDLC traffic) in an RTP media stream
G723 = G.723 encoding
G726 = G.726 encoding
G729 = G.729 encoding
NULL = no value specified
PCMA = G.711 for a-law PCM encoding (Europe)
PCMU = G.711 for mu-law PCM encoding (North America)
X-CCD = encoding algorithm for the transmission of clear channel data (unrestricted digital data; that is, ISDN HDLC traffic) in an RTP media stream

Default value: NULL

codec4 Identifies the fourth in a list of audio codecs (coding/decoding algorithm types) in SDP format, that apply to the profile.

Type: enum

Range: CISCO-CLEAR-CHANNEL = encoding algorithm for the transmission of clear channel data (unrestricted digital data; that is, ISDN HDLC traffic) in an RTP media stream
CLEARMODE = encoding algorithm for the transmission of clear channel data (unrestricted digital data; that is, ISDN HDLC traffic) in an RTP media stream
G723 = G.723 encoding
G726 = G.726 encoding
G729 = G.729 encoding
NULL = no value specified
PCMA = G.711 for a-law PCM encoding (Europe)
PCMU = G.711 for mu-law PCM encoding (North America)
X-CCD = encoding algorithm for the transmission of clear channel data (unrestricted digital data; that is, ISDN HDLC traffic) in an RTP media stream

Default value: NULL

codec5 Identifies the fifth in a list of audio codecs (coding/decoding algorithm types) in SDP format, that apply to the profile.

Type: enum

Range: CISCO-CLEAR-CHANNEL = encoding algorithm for the transmission of clear channel data (unrestricted digital data; that is, ISDN HDLC traffic) in an RTP media stream
CLEARMODE = encoding algorithm for the transmission of clear channel data (unrestricted digital data; that is, ISDN HDLC traffic) in an RTP media stream
G723 = G.723 encoding
G726 = G.726 encoding
G729 = G.729 encoding
NULL = no value specified
PCMA = G.711 for a-law PCM encoding (Europe)
PCMU = G.711 for mu-law PCM encoding (North America)
X-CCD = encoding algorithm for the transmission of clear channel data (unrestricted digital data; that is, ISDN HDLC traffic) in an RTP media stream

Default value: NULL

ptype1 Identifies the dynamic range of the RTP payload type for *codec1* when the *codec1* value is “CISCO-CLEAR-CHANNEL”, “CLEARMODE”, or “X-CCD”. Payload types are not assigned for the other values of *codec1*. Each payload type is mapped to a single codec and cannot be co-assigned to another codec in the same SDP profile.

Type: integer

Range: {96-127}

Default value: NULL

ptype2 Identifies the dynamic range of the RTP payload type for *codec2* when the *codec2* value is “CISCO-CLEAR-CHANNEL”, “CLEARMODE”, or “X-CCD”. Payload types are not assigned for the other values of *codec2*. Each payload type is mapped to a single codec and cannot be co-assigned to another codec in the same SDP profile.

Type: integer

Range: {96-127}

Default value: NULL

ptype3 Identifies the dynamic range of the RTP payload type for *codec3* when the *codec3* value is “CISCO-CLEAR-CHANNEL”, “CLEARMODE”, or “X-CCD”. Payload types are not assigned for the other values of *codec3*. Each payload type is mapped to a single codec and cannot be co-assigned to another codec in the same SDP profile.

Type: integer

Range: {96-127}

Default value: NULL

ptype4 Identifies the dynamic range of the RTP payload type for *codec4* when the *codec4* value is “CISCO-CLEAR-CHANNEL”, “CLEARMODE”, or “X-CCD”. Payload types are not assigned for the other values of *codec4*. Each payload type is mapped to a single codec and cannot be co-assigned to another codec in the same SDP profile.

Type: integer

Range: {96-127}

Default value: NULL

ptype5 Identifies the dynamic range of the RTP payload type for *codec5* when the *codec5* value is “CISCO-CLEAR-CHANNEL”, “CLEARMODE”, or “X-CCD”. Payload types are not assigned for the other values of *codec5*. Each payload type is mapped to a single codec and cannot be co-assigned to another codec in the same SDP profile.

Type: integer

Range: {96-127}

Default value: NULL

pTime Identifies the size in milliseconds of the packet containing the audio sample; that is, the time over which data is accumulated before it is assembled into a packet. A value of “NULL” allows the media gateway to determine the packetization time.

Type: enum

Range: {10, 20, 30, 40}

NULL

Default value: 20

silSup Identifies whether silence suppression is enabled.

Type: BoolYN

Range: N = silence suppression is disabled

Y = silence suppression is enabled

Default value: N

toneRelay Identifies whether to carry tone signals in RTP packets.

Type: BoolYN

Range: DTMF = carry dual-tone multi-frequency signals

NULL = do not carry tone signals in RTP packets

Default value: NULL

relayPtype Identifies the dynamic range of the RTP payload type for tone-carrying packets. Each payload type is mapped to a single codec and cannot be co-assigned to another codec in the same SDP profile.

Type: integer

Range: {96-127}

Default value: 101

g726enc Identifies the encoding scheme for the G.726 protocol; that is, whether G.726 words are packed most or least significant bit first.

Type: enum

Range: LSB = least significant bit first; complies with RFC-3551

MSB = most significant bit first; complies with early deployments of G.726 over IP and follows ITU 366.2, conforming to transmission over ATM networks using AAL2

Default value: MSB

faxProtocol Identifies the protocol used to service fax streams. You cannot select "PASSTHRU" or "T38FALLBACK" unless at least one specified codec has a value of "PCMA" or "PCMU".

Type: enum

Range: NOFALLBACK = When the value of *codec{1-5}* is "NULL", the switch does not renegotiate with the far end to switch codecs (from G.711 to T.38) for the current call. The fax may or may not go through.

PASSTHRU = When the value of *codec{1-5}* is "PCMA" (G.711 a-law) or "PCMU" (G.711 mu-law), the switch renegotiates with the far end using only the PCM entries in the SDP profile and rejects attempts by the far end to negotiate a T.38 connection. When there are no PCM entries "PASSTHRU" = "NOFALLBACK".

T38FALLBACK = The switch attempts a T38 call to service the fax stream. If negotiation with the far end fails or if local T38 resources are not available, the switch tries to set up a PASSTHRU call.

T38STRICT = The switch attempts a T38 call to service the fax stream. If negotiation with the far end fails or if local T38 resources are not available, the call is terminated.

Default value: PASSTHRU

g723Bitrate Identifies the rate, in Kbps, at which the DSP encodes the G.723 audio stream.

Type: enum

Range: 5.3K = 5300 bits/second
6.3K = 6300 bits/second

Default value: 6.3K

Input Examples:

```
DLT-PRFL-SDP::1;

ED-PRFL-SDP::1::CODEC1=PCMU,
CODEC2=CISCO-CLEAR-CHANNEL, CODEC3=X-CCD,
CODEC4=CLEARMODE, CODEC5=NULL, PTYPE1=NULL, PTYPE2=96,
PTYPE3=97, PTYPE4=98, PTYPE5=NULL, PTIME=20, SILSUP=N,
TONERELAY=NULL, RELAYPTYPE=101, G726ENC=MSB,
FAXPROTOCOL=PASSTHRU, G723BITRATE=6.3K;

ENT-PRFL-SDP::1::CODEC1=PCMU,
CODEC2=CISCO-CLEAR-CHANNEL, CODEC3=X-CCD,
CODEC4=CLEARMODE, CODEC5=NULL, PTYPE1=NULL, PTYPE2=96,
PTYPE3=97, PTYPE4=98, PTYPE5=NULL, PTIME=20, SILSUP=N,
TONERELAY=NULL, RELAYPTYPE=101, G726ENC=MSB,
FAXPROTOCOL=PASSTHRU, G723BITRATE=6.3K;

RTRV-PRFL-SDP::1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"1:CODEC1=PCMU, CODEC2=CISCO-CLEAR-CHANNEL,
CODEC3=X-CCD, CODEC4=CLEARMODE, CODEC5=NULL,
PTYPE1=NULL, PTYPE2=96, PTYPE3=97, PTYPE4=98,
PTYPE5=NULL, PTIME=20, SILSUP=N, TONERELAY=NULL,
RELAYPTYPE=101, G726ENC=MSB, FAXPROTOCOL=PASSTHRU,
G723BITRATE=6.3K"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-PRFL-TGBILLING

Commands:

DLT-PRFL-TGBILLING: Delete Trunk Group Billing Profile

ED-PRFL-TGBILLING: Edit Trunk Group Billing Profile

ENT-PRFL-TGBILLING: Enter Trunk Group Billing Profile

RTRV-PRFL-TGBILLING: Retrieve Trunk Group Billing Profile

Descriptions:

DLT-PRFL-TGBILLING lets the user delete a trunk group profile established for billing purposes.

ED-PRFL-TGBILLING lets the user edit a trunk group profile used for billing purposes.

ENT-PRFL-TGBILLING lets the user establish a trunk group profile for billing purposes. ENT-PRFL-TGBILLING will not work unless ENT-TRKGRP has already been issued.

RTRV-PRFL-TGBILLING lets the user retrieve a trunk group profile used for billing purposes.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-PRFL-TGBILLING:[TID]:<billPrflId>:[CTAG];

ED-PRFL-TGBILLING:[TID]:<billPrflId>:[CTAG]::
[INCOMINGREC=<incomingRec>],
[OUTGOINGREC=<outgoingRec>],[CNAREC=<cnaRec>],
[ICNID=<icnId>],[BNREC=<bnRec>],
[APPEND164CN=<append164CHN>],
[APPEND164CPN=<append164CPN>],
[APPENDLNPTERM=<appendLNPTerm>],
[APPENDLNPPBX=<appendLNPPBX>],[VMAIL=<vMail>];

```
ENT-PRFL-TGBILLING:[TID]:<billPrflId>:[CTAG]::
[INCOMINGREC=<incomingRec>],
[OUTGOINGREC=<outgoingRec>],[CNAREC=<cnaRec>],
[ICNID=<icnId>],[BNREC=<bnRec>],
[APPEND164CN=<append164CHN>],
[APPEND164CPN=<append164CPN>],
[APPENDLNPTERM=<appendLNPTerm>],
[APPENDLNPPBX=<appendLNPPBX>],[VMAIL=<vMail>];

RTRV-PRFL-TGBILLING:[TID]:[<billPrflId>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<billPrflId>:INCOMINGREC=<incomingRec>,
  OUTGOINGREC=<outgoingRec>,CNAREC=<cnaRec>,
  ICNID=<icnId>,RECBN=<recBN>,
  APPEND164CN=<append164CHN>,
  APPEND164CPN=<append164CPN>,
  APPENDLNPTERM=<appendLNPTerm>,
  APPENDLNPPBX=<appendLNPPBX>,VMAIL=<vMail>"
;
```

Parameters:

billPrflId Identifies the AID as a billing profile for trunk groups. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all trunk group billing profiles configured in the system will be returned.

Type: integer
Range: {1-9999}
Default value: none

incomingRec Identifies whether to include billing records for calls terminating on the switch.

Type: BoolYN
Range: N = do not include billing records for incoming calls
Y = include billing records for incoming calls
Default value: Y

outgoingRec Identifies whether to include billing records for calls terminating on the switch.

Type: BoolYN

Range: N = do not include billing records for outgoing calls
Y = include billing records for outgoing calls

Default value: Y

cnaRec Identifies whether to enable Connecting Network Access (CNA) or Limited Connecting Network Access AMA recording, thus generating call type code 720 (CTC720) records based on the parameter value for calls terminating on the switch.

Type: enum

Range: LIMITED = enable Limited Connecting Network Access AMA recording, generating CTC720 records only when the switch does the LNP dip of a call. All other calls generate their normal record types.
OFF = disable Connecting Network Access AMA recording
ON = enable Connecting Network Access AMA recording. All terminating calls generate CTC720 records regardless of their normal terminating call types.

Default value: OFF

icnId Identifies the Interconnecting Network Code; that is, the default circuit identification code (CIC) applied to the trunk group. You must specify a value for *icnId* when the value of *cnaRec* is "ON" or "LIMITED".

Type: integer

Range: {0-9999}

Default value: 0

bnRec Identifies whether to record the trunk group billing number as the Special Billing Number identified by *sbln* in TRKGRP, and use it as the originating/charge number for all calls with this profile.

Type: BoolYN

Range: N = record the value of *sbln* in TRKGRP as the billing number only when signaling does not contain a charge/billing number
Y = record the value of *sbln* in TRKGRP as the billing number for all calls with this profile. The switch populates the originating and charge numbers with all zeroes when the value of *sbln* is "NULL".

Default value: N

append164CHN Identifies whether to append module 164 to the originating/charge number for all calls with this profile.

Type: BoolYN

Range: N = do not append module 164 to the originating/charge number for all calls with this profile
Y = append module 164 to the originating/charge number for all calls with this profile

Default value: N

append164CPN Identifies whether to append module 164 to the calling party number for all calls with this profile.

Type: BoolYN

Range: N = do not append module 164 to the calling party number for all calls with this profile
Y = append module 164 to the calling party number for all calls with this profile

Default value: N

appendLNPTerm Identifies whether to append an originating party LNP module to terminating access AMA records.

Type: BoolYN

Range: N = do not append an originating party LNP module to terminating access AMA records
Y = append an originating party LNP module to terminating access AMA records

Default value: N

appendLNPPBX Identifies whether to append an originating party LNP module to AMA records for calls originating from a PBX.

Type: BoolYN

Range: N = do not append an originating party LNP module to AMA records for calls originating from a PBX
Y = append an originating party LNP module to AMA records for calls originating from a PBX

Default value: N

vMail Identifies whether trunks with the specified profile go to a voice mail system.

Type: BoolYN

Range: N = trunks do not go to a voice mail system
Y = trunks go to a voice mail system

Default value: N

Input Examples:

```
DLT-PRFL-TGBILLING::1;
```

```
ED-PRFL-TGBILLING::1:::INCOMINGREC=Y, OUTGOINGREC=Y,  
  CNAREC=OFF, ICNID=0, RECBN=N, APPEND164CN=N,  
  APPEND164CPN=N, APPENDLNPTERM=N, APPENDLNPPBX=N,  
  VMAIL=N;
```

```
ENT-PRFL-TGBILLING::1:::INCOMINGREC=Y, OUTGOINGREC=Y,  
  CNAREC=OFF, ICNID=0, RECBN=N, APPEND164CN=N,  
  APPEND164CPN=N, APPENDLNPTERM=N, APPENDLNPPBX=N,  
  VMAIL=N;
```

```
RTRV-PRFL-TGBILLING::1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
  "1:INCOMINGREC=Y, OUTGOINGREC=Y, CNAREC=OFF, ICNID=0,  
    BNREC=N, APPEND164CN=N, APPEND164CPN=N,  
    APPENDLNPTERM=N, APPENDLNPPBX=N, VMAIL=N"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SS7-TRK

Commands:

DLT-SS7-TRK: Delete SS7 Trunk

ED-SS7-TRK: Edit SS7 Trunk

ENT-SS7-TRK: Enter SS7 Trunk

RTRV-SS7-TRK: Retrieve SS7 Trunk

Descriptions:

DLT-SS7-TRK lets the user delete a trunk (ISUP tcic) or range of trunks. The trunks in a range of trunks need not be contiguous.

ED-SS7-TRK lets the user change the name, availability, and primary state for a trunk (ISUP tcic) or range of trunks in a trunk group. The trunks in a range of trunks need not be contiguous.

ENT-SS7-TRK lets the user establish a trunk (ISUP tcic) or range of trunks in a trunk group, associate it with a termination on a local media gateway, and, optionally, name it, establish its availability, and assign it a primary state. ENT-SS7-TRK will not work unless the following commands have already been issued in the listed order: ENT-MGC-MGASSOC, ENT-PC, ENT-PRFL-ISUPANSI, and ENT-TRKGRP.

RTRV-SS7-TRK lets the user retrieve the associated termination on a local media gateway, the name, availability, and state information for a trunk (ISUP tcic) or range of trunks in a trunk group. The trunks in a range of trunks need not be contiguous.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SS7-TRK: [TID]:<ss7TrkAid>:[CTAG];

ED-SS7-TRK: [TID]:<ss7TrkAid>:[CTAG]:[NAME=<trkName>],
[PRECUT=<preCut>]:[<pst>];

ENT-SS7-TRK: [TID]:<ss7TrkAid>:[CTAG]::
MGNAME=<mgName>, TERMID=<termId>, [NAME=<trkName>],
[PRECUT=<preCut>]:[<pst>];

RTRV-SS7-TRK: [TID]:<ss7TrkAid>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<ss7TrkAid>:MGNAME=<mgName>, TERMID=<termId>,
    NAME=<trkName>, PRECUT=<preCut>:<pst>[,<sst>]"
;
```

Parameters:

ss7TrkAid Identifies the AID as a unique trunk (ISUP tcic) or range of trunks associated with a trunk group number. The first number in the range identifies the trunk group number and the second number identifies the trunk(s). You can specify a range of up to 4000 trunks by separating the beginning and ending numbers with two ampersands and a hyphen ("&&-"). In the RTRV input, specifying only the trunk group number, but not the trunk, returns parameters for the first 4000 configured trunks in the trunk group. To return information for successive groups of 4000 configured trunks, re-invoke the command with a range starting with the trunk after the last trunk displayed and ending with 16382 (for ANSI) or 4095 (for ITU).

Type: Ss7TrkAid

Range: <tgn>[-<cic>[&&-<cic>]], where

tgn = {1-9999}

cic = {0-16382} for ANSI ISUP

{0-4095} for ITU

Default value: none

mgName Identifies the local media gateway associated with a media gateway controller.

Type: string

Range: up to 30 ASCII characters

Default value: none

termId Identifies the TDM termination on the local media gateway in MEGACO format.

Type: string

Range: up to 32 alphanumeric characters in the form:

TDM termination type / slot / port / channel =

T/{1-17}/{1-224}/{1-31}, where

channel = {1-24} for T1, {1-31} for E1

Default value: NULL

- trkName** Identifies the name of the trunk.
Type: string
Range: up to eight alphanumeric characters
Default value: NULL
- preCut** Identifies whether the trunk has not yet been turned up for service (“pre-cut”), or is available (“cut” – regardless of whether trunk is in-service or out-of-service).
Type: BoolYN
Range: N = trunk is cut (available, regardless of service state)
Y = trunk is pre-cut (has not yet been turned up for service)
Default value: N
- pst** Identifies (in ED and ENT) the primary state of the trunk(s). The value “RESET” initializes the trunk(s); that is, it leaves a trunk in service, but drops all the calls on it.
Type: enum
Range: IS = In service
OOS = Out of service
RESET = Reset CIC
Default value: IS
- pst** Identifies (for RTRV output) the primary state of the trunk.
Type: enum
Range: IS = In-Service
IS-NR = In-Service, Normal
OOS = Out-Of-Service
OOS-AU = Out-Of-Service, Autonomous
OOS-AUMA = Out-Of-Service, Autonomous and Managed
OOS-MA = Out-Of-Service, Managed
Default value: none
- sst** Identifies (in RTRV output) the secondary state(s) for the trunk, with ampersands (“&”) to separate multiple secondary states.
Type: enum
Range: ACT = Active
IDLE = Idle
INBUSY=Incoming Busy
LBLK = Locally Blocked
OUTBUSY=Outgoing Busy
RBLK = Remotely Blocked
RUEQ = Remote Unequipped
TRANS=Transient
Default value: none

Input Examples:

```
DLT-SS7-TRK::1-100;  
DLT-SS7-TRK::1-100&&-102;  
  
ED-SS7-TRK::1-100:::NAME=SS7TRUNK1,PRECUT=N:PST=RESET;  
ED-SS7-TRK::1-100&&-102:::PST=IS;  
  
ENT-SS7-TRK::1-100:::MGNAME=BOSTON,TERMID=T/5/3/1,  
NAME=SS7TRUNK1,PRECUT=N:PST=IS;  
  
RTRV-SS7-TRK::1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"1-100:MGNAME=BOSTON,TERMID=T/5/3/1,NAME=SS7TRUNK1,  
PRECUT=N:IS,ACT&IDLE"  
"1-101:MGNAME=BOSTON,TERMID=T/5/3/2,NAME=SS7TRUNK2,  
PRECUT=N:IS,ACT&IDLE"  
"1-102:MGNAME=BOSTON,TERMID=T/5/3/3,NAME=SS7TRUNK3,  
PRECUT=N:IS,ACT&IDLE"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-TRKGRP

Commands:

DLT-TRKGRP: Delete Trunk Group

ED-TRKGRP: Edit Trunk Group

ENT-TRKGRP: Enter Trunk Group

RTRV-TRKGRP: Retrieve Trunk Group

Descriptions:

DLT-TRKGRP lets the user delete a trunk group.

ED-TRKGRP lets the user change the parameters associated with a trunk group. Use this command to change any of the parameters listed in the description for ENT-TRKGRP, with the exception of *sigType*.

ENT-TRKGRP lets the user establish a trunk group. Use ENT-TRKGRP to specify the trunk group and its signaling type and, optionally, the following attributes:

- the trunk group class (for both the remote and local switch)
- the trunk group name
- the endpoints for the trunk
- the method by which CICs are allocated
- the direction of call flow for the trunk group
- the initial state of the trunk group
- the frequency at which continuity tests are performed on outgoing calls
- the amount of echo cancellation for outgoing calls
- whether echo cancellation processing is required because of a long delay
- the far end CLLI code
- the secondary local routing number
- the CIC or CAS profile for the trunk group
- the billing profile
- whether to enable Generic Address Parameter validation
- the class of service for the trunk group
- the LATA used by the tollfree service
- the Special Billing Number for the trunk group
- the services to apply to the trunk group
- the maximum number of active calls allowed for SIP calling
- the SDP profile
- the remote port configuration for continuity testing
- whether to send ISUP confusion messages or the Access Transport Parameter

- the value sent in the infotransfer indicator of the User Service Information parameter in the IAM for calls on ISUP trunks
- the list of AIN subscriber triggers applied to the trunk group
- whether CNAM service is enabled for outgoing SIP trunk groups
- the translation plan
- the cost of the trunk group
- the outgoing trunk group screening table name
- the action to take after the trunk group has been chosen as an outgoing interface for the call
- the bearer capabilities
- the profiles with the incoming and outgoing parameter defaults
- the incoming and outgoing profiles defining which parameters to suppress as the call leaves the switch
- the fraud trap profile
- whether to enable DMS switch identification routing/transport
- whether to enable echo control non-linear processing
- the standard specifying how the echo canceller behaves
- whether to deliver incoming international calls in an overlap fashion and the required digits and associated digit timers for a calling party number
- two general-purpose variables for custom functionality
- the significance of a leading “+” character in a SIP address
- the heartbeat interval duration for SIP and SIP-T trunk groups
- the gain or loss applied to transmitted and received signals
- whether to include the P-Called-Party-ID header in the outgoing SIP INVITE
- the fully-qualified domain names for SIP message sources and destinations
- the destination port for SIP messages
- the proxy IP address and port for sending SIP messages
- whether the SIP URI contains the calling instead of called party number.

ENT-TRKGRP will not work unless the following commands have already been issued:

- for CAS trunks, ENT-PRFL-CAS
- for ISUP trunks, either ENT-PRFL-ISUPANSI, ENT-PRFL-ISUPITU, ENT-PRFL-ISUPITUQ767, or ENT-PRFL-ISUPMEXICO, and then ENT-MGC-PC.

Additionally, establish the affected billing profile for all trunks and the affected SDP profile for SIP trunks.

RTRV-TRKGRP lets the user retrieve the properties of a trunk group, as listed in the description for ENT-TRKGRP.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-TRKGRP:[TID]:<tgn>:[CTAG];

ED-TRKGRP:[TID]:<tgn>:[CTAG]::[CLASS=<trkGrpClass>],
[OWNCLASS=<ownClass>],[NAME=<trkGrpName>],
[HUNTING=<hunting>],[HUNTPRIORITY=<huntpriority>],
[DIRECTION=<direction>],[INITSTATE=<initState>],
[COTFREQ=<cotFreq>],[ECHOCTRL=<echoCntrl>],
[LONGDELAY=<longDelay>],[FARCLLI=<farEndClli>],
[SECONDARYLRN=<secondaryOwnLrn>],
[TGPROFILE=<tgPrfl>],[BILLPRFL=<billPrfl>],
[VALIDATEGAP=<validateGap>],
[CLASSOFSERVICE=<classOfSvc>],[LATAID=<lataId>],
[SBLN=<sbln>],[TGSERVICE=<tgService>],
[MAXIPCALLS=<maxIpCalls>],[SDPPRFL=<sdpPrfl>],
[REMOSECOTTYPE=<remoteCotType>],
[ISUPCONFUSIONMSG=<isupConfusionMsg>],[ATP=<atp>],
[AUDIOIND=<audioInd>],[AINTRIGLIST=<aintriglist>],
[CNAM=<cnam>],[TRANSPLAN=<transPlan>],
[ROUTECAST=<routeCost>],[DGTSCRN=<dgtScrn>],
[ACTNTERMATTMPT=<actnTermAttmpt>],
[BEARERCAP=<bearerCap>],
[ICPARAMDLFTPRFL=<icParamDlftPrfl>],
[OGPARAMDLFTPRFL=<ogParamDfltPrfl>],
[ICPARAMSUPPRESSPRFL=<icParamSuppressPrfl>],
[OGPARAMSUPPRESSPRFL=<ogParamSuppressPrfl>],
[FRAUDTRAPPRFL=<fraudTrapPrfl>],
[USESWITCHID=<useswitchId>],
[ECHOCTRLNLP=<echoCtrlNLP>],
[ECHOCTRLTYPE=<echoCtrlType>],
[ICOVERLAP=<icOverlap>],[MINDGTS=<minDgts>],
[MAXDGTS=<maxDgts>],[MINDGTTMR=<minDgtTmr>],
[MAXDGTMR=<maxDgtTmr>],[CUSTUSE1=<custUse1>],
[CUSTVAR1=<custVar1>],[CUSTUSE2=<custUse2>],
[CUSTVAR2=<custVar2>],[SIPPLUS=<sipPlus>],
[SIPHRTBTMR=<sipHrtBtTmr>],[TXPAD=<txPad>],
[RXPAD=<rxPad>],[PCDPID=<pCdpId>],
[SIPSRCFQDN=<sipSrcFqdn>],
[SIPDSTFQDN=<sipDstFqdn>],
[SIPDSTFQDNPORT=<sipDstFqdnPort>],
[SIPPROXYIP=<sipProxyIp>],
[SIPPROXYPORT=<sipProxyPort>],
[SIPCGPMAP=<sipCgpMap>];
```

```
ENT-TRKGRP:[TID]:<tn>:[CTAG]:<sigType>:  
[CLASS=<trkGrpClass>],[OWNCLASS=<ownClass>],  
[NAME=<trkGrpName>],[OPCDPC=<opcDpc>],  
[HUNTING=<hunting>],[HUNTPRIORITY=<huntpriority>],  
[DIRECTION=<direction>],[INITSTATE=<initState>],  
[COTFREQ=<cotFreq>],[ECHOCTRL=<echoCntrl>],  
[LONGDELAY=<longDelay>],[FARCLLI=<farEndClli>],  
[SECONDARYLRN=<secondaryOwnLrn>],  
[TGPROFILE=<tgPrfl>],[BILLPRFL=<billPrfl>],  
[VALIDATEGAP=<validateGap>],  
[CLASSOFSERVICE=<classOfSvc>],[LATAID=<lataId>],  
[SBLN=<sbln>],[TGSERVICE=<tgService>],  
[MAXIPCALLS=<maxIpCalls>],[SDPPRFL=<sdpPrfl>],  
[REMOTECONTTYPE=<remoteCotType>],  
[ISUPCONFUSIONMSG=<isupConfusionMsg>],[ATP=<atp>],  
[AUDIOIND=<audioInd>],[AINTRIGLIST=<aintriglist>],  
[CNAM=<cnam>],[TRANSPLAN=<transPlan>],  
[ROUTEOST=<routeCost>],[DGTSCRN=<dgtScrn>],  
[ACTNTERMATTMPT=<actnTermAttmpt>],  
[BEARERCAP=<bearerCap>],  
[ICPARAMDLFTPRFL=<icParamDlftPrfl>],  
[OGPARAMDLFTPRFL=<ogParamDfltPrfl>],  
[ICPARAMSUPRESSPRFL=<icParamSupressPrfl>],  
[OGPARAMSUPRESSPRFL=<ogParamSupressPrfl>],  
[FRAUDTRAPPRFL=<fraudTrapPrfl>],  
[USESITCHID=<useswitchId>],  
[ECHOCTRLNLP=<echoCtrlNLP>],  
[ECHOCTRLTYPE=<echoCtrlType>],  
[ICOVERLAP=<icOverlap>],[MINDGTS=<minDgts>],  
[MAXDGTS=<maxDgts>],[MINDGTTMR=<minDgtTmr>],  
[MAXDGTTMR=<maxDgtTmr>],[CUSTUSE1=<custUse1>],  
[CUSTVAR1=<custVar1>],[CUSTUSE2=<custUse2>],  
[CUSTVAR2=<custVar2>],[SIPPLUS=<sipPlus>],  
[SIPHRTBTMR=<sipHrtBtTmr>],[TXPAD=<txPad>],  
[RXPAD=<rxPad>],[PCDPID=<pCdpId>],  
[SIPSRCFQDN=<sipSrcFqdn>],  
[SIPDSTFQDN=<sipDstFqdn>],  
[SIPDSTFQDNPORT=<sipDstFqdnPort>],  
[SIPPROXYIP=<sipProxyIp>],  
[SIPPROXYPORT=<sipProxyPort>],  
[SIPCGPMAP=<sipCgpMap>];  
  
RTRV-TRKGRP:[TID]:<tn>:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<tn>:<sigType>:CLASS=<TrkGrpClass>,
  OWNCLASS=<ownClass>,NAME=<trkGrpName>,
  OPCDPC=<opcDpc>,HUNTING=<hunting>,
  HUNTPRIORITY=<huntpriority>,
  DIRECTION=<direction>,INITSTATE=<initState>,
  COTFREQ=<cotFreq>,ECHOCTRL=<echoCntrl>,
  LONGDELAY=<longDelay>,FARCLLI=<farEndClli>,
  SECONDARYLRN=<secondaryOwnLrn>,
  TGPROFILE=<tgPrfl>,BILLPRFL=<billPrfl>,
  VALIDATEGAP=<validateGap>,
  CLASSOFSERVICE=<classOfSvc>,[LATAID=<lataId>],
  SBLN=<sbln>,TGSERVICE=<tgService>,
  MAXIPCALLS=<maxIpCalls>,SDPPRFL=<sdpPrfl>,
  REMOTECOTTYPE=<remoteCotType>,
  ISUPCONFUSIONMSG=<isupConfusionMsg>,ATP=<atp>,
  AUDIOIND=<audioInd>,AINTRIGLIST=<aintriglist>,
  CNAM=<cnam>,TRANSPLAN=<transPlan>,
  ROUTECOST=<routeCost>,DGTSCRN=<dgtScrn>,
  ACTNTERMATTMPT=<actnTermAttmpt>,
  BEARERCAP=<bearerCap>,
  ICPARAMDLFTPRFL=<icParamDlftPrfl>,
  OGPARAMDLFT=<ogParamDflt>,
  ICPARAMSUPRESSPRFL=<icParamSupressPrfl>,
  OGSUPRESSPRFL=<ogSupressPrfl>,
  FRAUDTRAPPRFL=<fraudTrapPrfl>,
  USESWITCHID=<useswitchId>,
  ECHOCTRLNLP=<echoCtrlNLP>,
  ECHOCTRLTYPE=<echoCtrlType>,
  ICOVERLAP=<icOverlap>,MINDGTS=<minDgts>,
  MAXDGTS=<maxDgts>,MINDGTTMR=<minDgtTmr>,
  MAXDGTMMR=<maxDgtTmr>,CUSTUSE1=<custUse1>,
  CUSTVAR1=<custVar1>,CUSTUSE2=<custUse2>,
  CUSTVAR2=<custVar2>],SIPPLUS=<sipPlus>,
  SIPHRTBTMMR=<sipHrtBtTmr>,TXPAD=<txPad>,
  RXPAD=<rxPad>,PCDPID=<pCdpId>,
  SIPSRCFQDN=<sipSrcFqdn>,SIPDSTFQDN=<sipDstFqdn>,
  SIPDSTFQDNPORT=<sipDstFqdnPort>,
  SIPPROXYIP=<sipProxyIp>,
  SIPPROXYPORT=<sipProxyPort>,
  SIPCGPMAP=<sipCgpMap>"
;
```

Parameters:

- tn** Identifies the AID as a trunk group. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all trunk groups configured in the system will be returned.
- Type:** TgnAid
Range: {1-9999}
Default value: none
- sigType** Identifies the signaling type for the trunk group.
- Type:** enum
Range: CAS = Channel-Associated Signaling
ISUPANSI1992 = ISDN Services User Part – ANSI 1992
ISUPANSI1996 = ISDN Services User Part – ANSI 1996
ISUPETSI = ISDN Services User Part – European
Telecommunications Standards Institute
ISUPG500 = Australian Carrier Interconnect Specification
G500
ISUPITU = ISDN Services User Part – International
Telecommunication Union
ISUPITUQ767 = ISDN Services User Part – ITU
Recommendation Q.767
ISUPMEXICO = ISDN Services User Part – Mexico
ISUPTELSTRA = ISDN Services User Part – Australia
SIP = Session Initiated Protocol
SIPT = Session Initiation Protocol for Telephones
Default value: none
- trkGrpClass** Identifies the trunk group class for the remote switch on which the trunk group terminates. When the value of *classOfSvc* is "FGD", *trkGrpClass* and *ownClass* cannot have the same value.
- Type:** enum
Range: AT = Access Tandem
EO = End Office
INC = InterNational Carrier (applicable when the value of *sigType* is "CAS" and the value of *classOfSvc* is "FGD")
IXC = Inter-eXchange Carrier
LT = Local Tandem
TT = Toll Tandem
Default value: AT

ownClass Identifies the trunk group class for the local switch when the value of *sigType* is “CAS” and the value of *classOfSvc* is “FGD”. When the value of *classOfSvc* is “FGD”, *trkGrpClass* and *ownClass* cannot have the same value.

Type: enum

Range: AT = Access Tandem

EO = End Office

IXC = Inter-eXchange Carrier

Default value: EO

trkGrpName Identifies the name of the trunk group.

Type: string

Range: up to 20 characters

Default value: NULL

opcDpc Identifies the association of the own point code for the switch with the destination point code for a remote or adjacent switch, thus establishing the endpoints for the trunk.

Type: string

Range: OPC-{0-255}-{0-255}-{0-255}-DPC-{0-255}-{0-255}-
{0-255} for NANP (national) point codes

OPC-{0-16383}-DPC-{0-16383} for international point
codes

Default value: NULL

hunting Identifies the method by which CICs are allocated.

Type: enum

Range: CIRCULAR = Allocates the next free CIC, in ascending
order, following the last CIC selected.

HIGHEST_AVAIL = Selects the highest available CIC

LIDLHI = Selects the least idle and highest available CIC
(CAS and ISUP variant trunks only)

LIDLLO = Selects the least idle and lowest available CIC
(CAS and ISUP variant trunks only)

LOWEST_AVAIL = Selects the lowest available CIC

MIDLHI = Selects the most idle and highest available CIC
(CAS and ISUP variant trunks only)

MIDLLO = Selects the most idle and lowest available CIC
(CAS and ISUP variant trunks only)

RANDOM = Allocates the next free channel, in ascending
order, based on a random entry into a numbered list of
resources. After the first allocation from that numbered
list of resources, subsequent attempts to find a free
resource use the circular method.

Default value: CIRCULAR

huntPriority Identifies whether hunting searches even, odd, or both numbered channels (for CAS) or CICs (for ISUP variants), but only when the value of hunting is "LIDLHI", "LIDLLO", "MIDLHI", or "MIDLLO".

Type: enum

Range: BOTH
EVEN
ODD

Default value: BOTH

direction Identifies whether the switch originates outgoing calls and/or accepts incoming calls on a trunk group.

Type: enum

Range: CICBOTHWAY = On these circuits, the switch both accepts incoming calls from the adjacent switch and originates outgoing call legs. The switch with the larger point code controls glare on even-numbered trunks and the switch with the smaller point code controls glare on odd-numbered trunks.
CICCONTROLLED = On these circuits, the switch both accepts incoming calls from the adjacent switch and originates outgoing call legs. The adjacent switch controls glare and the switch has a glare setting of "NONE". Valid only when the value of *sigType* is one of the ISUP variants.
CICCONTROLLING = On these circuits, the switch both accepts incoming calls from the adjacent switch and originates outgoing call legs. The switch controls glare and has a glare setting of "ALL". Valid only when the value of *sigType* is one of the ISUP variants.
CICINCOMING = On these circuits, the switch accepts incoming calls from the adjacent switch but does not originate outgoing call legs. The adjacent switch controls glare and the switch has a glare setting of "NONE". Valid only when the value of *sigType* is one of the ISUP variants.
CICOUTGOING = On these circuits, the switch originates outgoing call legs but does not accept incoming calls from the adjacent switch. The switch controls glare and has a glare setting of "ALL". Valid only when the value of *sigType* is one of the ISUP variants.
Default value: CICBOTHWAY

initState Identifies the initial state of the trunk group.

Type: enum

Range: IDLE = Trunk group idle

Default value: IDLE

cotFreq Identifies the frequency at which continuity tests are performed on outgoing calls when the value of *sigType* is one of the ISUP variants. This parameter is not applicable for CAS and SIP trunk groups.

Type: integer

Range: {0-32}

Default value: 0

echoCntrl Identifies the amount, in milliseconds, of echo cancellation for outgoing calls (that is, the length of the echo tail). The value is “0” when the value of *sigType* is “SIP” or “SIPT”.

Type: integer

Range: {0, 8, 16, 32, 64, 128}

Default value: 0

longDelay Identifies whether echo cancellation processing is required because of a long delay (echo tail).

Type: BoolYN

Range: N = echo processing is off (for short-haul; that is, less than 15 msec propagation delay)

Y = echo processing is on (for long-haul)

Default value: N for ISUP/CAS

Y for SIP

farEndClli Identifies the Common Language Location Identification code at the far end. This parameter is used for circuit maintenance, to allow the remote switch operator to get the information configured for the trunk group. The parameter may be entered either as 15 characters, the first four being the trunk number and the next 11 being the far end CLLI, or as just the 11-character CLLI. The parameter may not be entered unless a value has already been assigned to the parameter *clli* in the command [ED-CHASSIS-EQPT](#).

Type: string

Range: 11 or 15 alphanumeric characters

Default value: NULL

secondaryOwnLrn Identifies a secondary local routing number associated with outgoing calls for the trunk group.

Type: string
Range: exactly 10 digits
Default value: NULL

tgPrfl Identifies the profile for the trunk group (not valid for SIP/SIPT; not editable for CAS). The value of *tgPrfl* must match the value for the AID established in the ENT-PRFL command for the signaling variant identified by *sigType*, as follows:

<u>sigType value</u>	<u>ENT-PRFL command</u>
CAS	ENT-PRFL-CAS
ISUPANSI1992	ENT-PRFL-ISUPANSI
ISUPANSI1996	ENT-PRFL-ISUPANSI
ISUPETSI	ENT-PRFL-ISUPITU
ISUPG500	ENT-PRFL-ISUPITU
ISUPITU	ENT-PRFL-ISUPITU
ISUPITUQ767	ENT-PRFL-ISUPITUQ767
ISUPMEXICO	ENT-PRFL-ISUPMEXICO
ISUPTELSTRA	ENT-PRFL-ISUPITU

Type: string
Range: {1-128}
Default value: NULL

billPrfl Identifies the billing profile for the trunk group, previously defined with [ENT-PRFL-TGBILLING](#). Billing profile “1” is pre-loaded on the system.

Type: integer
Range: {1-128}
Default value: 1

validateGap Identifies whether to enable Generic Address Parameter validation against the subscribers for the trunk group. Set the value of *validateGap* to “N” if the switch hosts local routing numbers (LRNs) but does not support Class 5 subscribers.

Type: BoolYN
Range: N = do not perform GAP validation
Y = perform GAP validation
Default value: Y

classOfSvc Identifies how to route incoming messages on the trunk group.
When the value of *classOfSvc* is “FGD” or “WTDM”, *trkGrpClass* and *ownClass* cannot have the same value.

Type: enum

Range: 911 = 911 CAS

AIS = Automatic Intercept Signal

BLV = Busy Line Verification (currently unimplemented)

FGD = Feature Group D (ISUP variants and CAS only)

MDP = Maintenance Dial Plan (CAS only)

NULL = no value

WTDM = Wireless Time Delay Multiplexing (ISUP variants and CAS only)

Default value: NULL

lataId Identifies the LATA used by the tollfree service for incoming calls on the trunk. LATA IDs are restricted to either three or five digits.

Type: enum

Range: {100-999, 10000-99999}

NULL = no value

Default value: NULL

sbln Identifies the Special Billing Number, to which incoming calls without a specific number are to be billed.

Type: string

Range: six, seven, or 10 digits

Default value: NULL

tgService Identifies a service to apply to the trunk group. Use an ampersand (“&”) to select both services.

Type: string

Range: PORTEDIN = Ported number service applied to outbound calls on an ISUP, SIP, or SIP-T trunk group or when the terminating switch can't handle pre-dipped LNP calls. When set to “PORTEDIN”, outbound calls associated with this trunk group that have been dipped for LNP (with the Called Party Number set to the LRN) will have the CDPN set to the original called number (in the GAP parameter), will remove the GAP parameter (containing the original called number), and will set the M-bit of the Forward Call Indicator to indicate a non-dipped call.

NOLNP = do not perform LNP queries for incoming calls on the trunk group, regardless of signal type

Default value: NULL

maxIpCalls Identifies the maximum number of active calls allowed on the trunk group when the value of *sigType* is “SIP” or “SIPT”.

Type: integer

Range: {0-32767}

Default value: 0 (21504 for SIP or SIPT calls)

sdpPrfl Identifies the SDP (Session Description Protocol) profile for the trunk group when the value of *sigType* is “SIP” or “SIPT”. An SDP profile defines the codec and packet interval applicable to a SIP trunk group, and whether silence suppression is enabled. SDP profile 1 is pre-loaded; establish other profiles with [ENT-PRFL-SDP](#).

Type: integer

Range: {1-255}

Default value: 1, when the value of *sigType* is “SIP” or “SIPT”
NULL, when the value of *sigType* is “CAS” or one of the ISUP variants

remoteCotType Identifies whether the remote switch port used for continuity testing with the switch is a two-wire or four-wire port.

Type: enum

Range: 2WIRE
4WIRE

Default value: 4WIRE

isupConfusionMsg Identifies whether to send an ISUP confusion message when ISUP receives an unrecognized message.

Type: BoolYN

Range: N = do not send ISUP confusion message
Y = send ISUP confusion message

Default value: Y (for ISUP variants)
N (for CAS or SIP)

atp Identifies whether to send the Access Transport Parameter (ATP).

Type: BoolYN

Range: N = do not send ATP
Y = send ATP

Default value: Y (for ISUP variants)
N (for CAS or SIP)

audioInd Identifies the value that overrides the default value sent in the infotransfer indicator of the User Service Information parameter in the IAM for calls on ISUP trunks.

Type: enum

Range: 3.1KHZ = infotransfer default value is overridden to indicate 3.1KHz audio in BearerCap/UserServiceInformation of IAM message
DEFAULT = infotransfer indicator is determined by the ISDN interworking functionality and is not overridden by provisioning
SPEECH = infotransfer default value is overridden to indicate speech in the BearerCap/UserServiceInformation of IAM message

Default value: DEFAULT

aintriglist Identifies a list of AIN triggers. This parameter is not supported presently; leave it blank.

Type: string

Range: up to 20 alphanumeric characters

Default value: NULL

cnam Identifies whether CNAM service is enabled for outgoing SIP or SIPT trunk groups. When enabled, the switch issues CNAM queries for SIP or SIPT trunk groups.

Type: BoolYN

Range: N = the switch does not issue CNAM queries
Y = the switch issues CNAM queries

Default value: N

transPlan Identifies the translation plan, previously defined with ENT-TRANS-PLAN or ENT-TRANS-SCHED.

Type: string

Range: up to 10 alphanumeric characters

Default value: DEFAULT

routeCost Identifies the cost of the trunk group. The value "101" indicates that the trunk group is not available for routing.

Type: integer

Range: {0-101}

Default value: 0

dgtScrn Identifies the outgoing trunk group screening table name, previously defined with ENT-DIGIT-SCREEN and which contains a list of restricted trunk groups. This parameter prevents incoming/outgoing trunk combinations.

Type: string

Range: up to 10 alphanumeric characters

Default value: NULL

actnTermAttmpt Identifies the action to take after the trunk group has been chosen as an outgoing interface for the call.

Type: string

Range: up to 10 alphanumeric characters for each part of either of the following forms:

DGTMODKEY-<dmLbl>-<primKey>, where

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

FCIMBIT = Forward Call Indicator M-bit

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG-{1-6} = Register index

TNS = Transit Network Selection

DGTSCRNKEY-<dgtScrnLbl>-<primKey>, where

dgtScrnLbl identifies the name of the applicable screening table with a string of 1-10 characters;

primKey identifies the primary key applicable to the specified screening table, with values of:

BGN = Bearer Group Number (interface type)

CALLTYPE = type of call (Class 5)

CDPN = called party number
CGPN = calling party number
CHRGN = charge number
CIP = Carrier Information Parameter (for
ISUP only)
CPC = Calling Party Category
CSI = Carrier Selection Information
GAP-{0-255} = Generic Address Parameter
GENDGTS-{0-31} = Generic Digits
JIP = Jurisdiction Information Parameter
(NPANXX)
LATA = Local Access & Transport Area
OLI = Originating Line Information
SUBSTATUS = Subscriber status (valid only
when the value "SUB" is the first listed for
the parameter *actnInfoAnlz* in TRANS-
PLAN)
TNS = Transit Network Selection

Default value: NULL

bearerCap Identifies the bearer capabilities for the trunk group, with ampersands ("&") to separate multiple bearer capabilities.

Type: string

Range: 3.1KHZ

DIGITALWITHTONES

RESDIGITAL (ANSI only – same as UNRESDIGITAL for
ITU values of *sigType*)

SPEECH

UNRESDIGITAL

VIDEO

Default values: SPEECH&UNRESDIGITAL& RESDIGITAL&
VIDEO&DIGITALWITHTONES

(for ISUP/SIP)

SPEECH&3.1KHZ (for CAS)

icParamDfltPrfl Identifies the incoming parameter default profile, previously
defined with ENT-PRFL-PARAMDEFAULTS.

Type: string

Range: up to 10 alphanumeric characters

Default value: NULL

ogParamDfltPrfl Identifies the outgoing parameter default profile, previously defined with ENT-PRFL-PARAMDEFAULTS.

Type: string

Range: up to 10 alphanumeric characters

Default value: NULL

icParamSuppressPrfl Identifies the profile defining which parameters to suppress as the call leaves the switch based on the incoming trunk group, previously defined with ENT-PRFL-PARAMSUPPRESS.

Type: string

Range: up to 10 alphanumeric characters

Default value: NULL

ogParamSuppressPrfl Identifies the profile defining which parameters to suppress as the call leaves the switch, previously defined with ENT-PRFL-PARAMSUPPRESS.

Type: string

Range: up to 10 alphanumeric characters

Default value: NULL

fraudTrapPrfl Identifies the fraud trap profile, previously defined with ENT-PRFL-FRAUDTRAP.

Type: string

Range: up to 10 alphanumeric characters

Default value: NULL

useswitchId Identifies whether to enable DMS switch identification routing/transport.

Type: BoolYN

Range: N = do not enable DMS switch identification
routing/transport

Y = enable DMS switch identification routing/transport

Default value: N

echoCtrlNLP Identifies whether to enable echo control non-linear processing.

Type: BoolYN

Range: N = do not enable echo control non-linear processing
Y = enable echo control non-linear processing

Default value: Y

echoCtrlType Identifies the standard specifying how the echo canceller behaves; that is, the conditions under which to disable echo cancellation when a modem/FAX call is received

Type: enum

Range: G164 = G.164: disable echo canceller only on receipt of a 2100 Hz answer tone without a phase reversal.

G165 = G.165: disable echo canceller only on receipt of a 2100 Hz answer tone with a phase reversal.

G168 = G.168: disable just the NLP (Non-linear Processor) portion of the echo canceller only on receipt of a 2100 Hz answer tone without a phase reversal. Disable the entire echo canceller on receipt of a 2100 Hz answer tone with a phase reversal.

NONE = do not disable echo cancellation regardless of tone

Default value: G168

icOverlap Identifies whether to deliver incoming calls on an international trunk group (the value of *sigType* is ISUPETSI, ISUPITU, ISUPITUQ767, ISUPMEXICO, or ISUPTTELSTRA) in an overlap fashion.

Type: BoolYN

Range: N = deliver incoming calls all together

Y = deliver incoming calls in an overlap fashion

Default value: N

minDgts Identifies the minimum number of digits required for a valid calling party number when the value of *icOverlap* is “Y”. *minDgts* must be less than *maxDgts*.

Type: integer

Range: {0-31}

Default value: 0

maxDgts Identifies the maximum number of digits expected for a valid calling party number when the value of *icOverlap* is “Y”. *maxDgts* must be greater than *minDgts*.

Type: integer

Range: {0-31}

Default value: 31

minDgtTmr Identifies the value (in seconds) of the inter-digits timer that detects the end of the minimum number of digits specified by *minDgts*. The call is released on timer expiry.

Type: integer

Range: {1-20}

Default value: 15

maxDgtTmr Identifies the value (in seconds) of the inter-digits timer that detects the end of the maximum number of digits specified by *maxDgts*. The timer starts on receipt of the minimum number of digits and terminates on receipt of the maximum number of digits. Dialing is deemed complete on timer expiry.

Type: integer

Range: {1-10}

Default value: 4

custUse1 Identifies the use of custom variable 1.

Type: string

Range: up to 32 alphanumeric characters

Default value: NULL

custVar1 Identifies custom variable 1.

Type: string

Range: up to 16 alphanumeric characters

Default value: NULL

custUse2 Identifies the use of custom variable 2.

Type: string

Range: up to 32 alphanumeric characters

Default value: NULL

custVar2 Identifies custom variable 2.

Type: string

Range: up to 16 alphanumeric characters

Default value: NULL

- sipPlus** Identifies, for SIP and SIP-T trunk groups, whether to interpret a leading “+” character in the address field of the “To”, “From”, “Remote-Party-ID” or “Request-URI” headers of a SIP request, as meaning that a fully-qualified E.164 address follows.
- Type:** BoolYN
- Range:** N = For incoming SIP requests, ignore the leading “+” character in all SIP address fields. For outgoing SIP requests, never insert a leading “+” character to an address field.
- Y = Follow RFC 3398 recommendations for treatment of a leading “+” character: For incoming SIP requests, treat a leading “+” character in a SIP address as an indication that a fully-qualified E.164 address follows. For outgoing SIP requests, add a leading “+” character to address fields when an E.164 address is included.
- Default value:** N
-
- sipHrtBtTmr** Identifies the duration, in seconds, of the heartbeat interval for SIP and SIP-T trunk groups. The value “0” disables the heartbeat for the trunk group.
- Type:** integer
- Range:** {0-3600}
- Default value:** 0
-
- txPad** Identifies, for CAS and ISUP trunk groups, the amount of gain or loss (in decibels) the switch applies to transmitted signals. Positive values amplify the signal; negative values attenuate the signal.
- Type:** enum
- Range:** -15DB, -12DB, -10DB, -9DB, -8 DB, -6DB, -4DB, -3DB, -2DB, [0DB], 2DB, 3DB, 4DB, 6DB
- Default value:** 0DB
-
- rxPad** Identifies, for CAS and ISUP trunk groups, the amount of gain or loss (in decibels) the switch applies to received signals. Positive values amplify the signal; negative values attenuate the signal.
- Type:** enum
- Range:** -15DB, -12DB, -10DB, -9DB, -8 DB, -6DB, -4DB, -3DB, -2DB, [0DB], 2DB, 3DB, 4DB, 6DB
- Default value:** 0DB

pCdpId Identifies, for SIP and SIP-T trunk groups, whether to include the SIP P-Called-Party-ID header (a 3GPP header specified in RFC3455), mapped from ISUP OCN, in the outgoing SIP INVITE. When configured, this header is in addition to the mapping of OCN to non-configurable SIP Diversion and TO headers.

Type: BoolYN

Range: N = do not include the SIP P-Called-Party-ID header in the outgoing SIP INVITE

Y = include the SIP P-Called-Party-ID header in the outgoing SIP INVITE

Default value: N

sipSrcFqdn Identifies, for SIP and SIP-T trunk groups, the fully-qualified domain name for the source URIs in SIP messages; for example, "FROM" and "Remote-Party-ID".

Type: string

Range: up to 64 characters

Default value: NULL

sipDstFqdn Identifies, for SIP and SIP-T trunk groups, the fully-qualified domain name for the destination URIs in SIP messages; for example, "Request-URI" and "TO". Note that since DNS (Domain Name Server) resolution is not supported, this parameter must be used in conjunction the sipProxyIP (and optional sipProxyPort) parameter to be able to route the call. For example, a sipDstFqdn of lucent.com and sipProxyIP of 100.1.1.1 will result in a SIP Request-URI of sip:508804800@lucent.com;maddr=100.1.1.1. The call will be send to the Proxy at 100.1.1.1.

Type: string

Range: up to 64 characters

Default value: NULL

sipDstFqdnPort Identifies, for SIP and SIP-T trunk groups, the port on the destination for SIP messages.

Type: integer

Range: {0-65535}

Default value: 0

sipProxyIp Identifies, for SIP and SIP-T trunk groups, the proxy IP address for sending SIP messages.

Type: string

Range: {0-254}.{0-254}.{0-255}.{1-255}

Default value: NULL

sipProxyPort Identifies, for SIP and SIP-T trunk groups, the port on the proxy IP address for sending SIP messages.

Type: integer
Range: {0-65535}
Default value: 0

sipCgpMap Identifies, for SIP and SIP-T trunk groups, whether the SIP URI contains the calling party number instead of the called party number.

Type: BoolYN
Range: N = SIP URI contains the called party number
Y = SIP URI contains the calling party number
Default value: 0DB

Input Examples:

```
DLT-TRKGRP::1;  
  
ED-TRKGRP::1:::CLASS=AT,OWNCLASS=E0,NAME=TRUNKGROUP1,  
HUNTING=CIRCULAR,DIRECTION=CICBOTHWAY,  
INITSTATE=IDLE,COTFREQ=8,ECHOCNTRL=0,LONGDELAY=N,  
FARCLLI=0005MARLBOROUGH,SECONDARYLRN=5084800909,  
TGPROFILE=1,BILLPRFL=1,VALIDATEGAP=Y,  
CLASSOFSERVICE=NULL,LATAID=1,SBLN=5084800909,  
TGSERVICE=NULL,MAXIPCALLS=0,SDPPRFL=NULL,  
REMOECOTTYPE=4WIRE,ISUPCONFUSIONMSG=Y,ATP=Y,  
AUDIOIND=DEFAULT,AINTRIGLIST=NULL,CNAM=N,  
TRANSPLAN=DEFAULT,ROUTECD=0,DGTSCRN=NULL,  
ACTNTERMATTMPT=NULL,BEARERCAP=SPEECH&UNRESDIGITAL&  
RESDIGITAL&VIDEO&DIGITALWITHTONES,  
ICPARAMDLFTPRFL=NULL,OGPARAMDLFTPRFL=NULL,  
ICPARAMSUPRESSPRFL=NULL,OGPARAMSUPRESSPRFL=NULL,  
FRAUDTRAPPRFL=NULL,USESWITCHID=N,ECHOCTRLNLP=Y,  
ECHOCTRLTYPE=G168,ICOVERLAP=N,MINDGTS=0,MAXDGTS=31,  
MINDGTTMR=15,MAXDGTTMR=4,CUSTUSE1=NULL,  
CUSTVAR1=NULL,CUSTUSE2=NULL,CUSTVAR2=NULL,  
SIPPLUS=N,SIPHRTBTMR=0,TXPAD=0DB,RXPAD=0DB,  
PCDPID=N,SIPSRCFQDN=NULL,SIPDSTFQDN=NULL,  
SIPDSTFQDNPORT=0,SIPPROXYIP=NULL,SIPPROXYPORT=0,  
SIPCGPMAP=N;
```

```
ENT-TRKGRP::1:::ISUP:CLASS=AT,OWNCLASS=E0,  
NAME=TRUNKGROUP1,OPCDPC=OPC-23-186-5-DPC-24-177-39,  
HUNTING=CIRCULAR,DIRECTION=CICBOTHWAY,  
INITSTATE=IDLE,COTFREQ=8,ECHOCNTRL=0, LONGDELAY=N,  
FARCLLI=0005MARLBOROUGH,SECONDARYLRN=5084800909,  
TGPROFILE=1,BILLPRFL=1,VALIDATEGAP=Y,  
CLASSOFSERVICE=NULL,LATAID=1,SBLN=5084800909,  
TGSERVICE=NULL,MAXIPCALLS=0,SDPPRFL=NULL,  
REMOTECOTTYPE=4WIRE,ISUPCONFUSIONMSG=Y,ATP=Y,  
AUDIOIND=DEFAULT,AINTRIGLIST=NULL,CNAM=N,  
TRANSPLAN=DEFAULT,ROUTECD=0,DGTSCRN=NULL,  
ACTNTERMATTMPT=NULL,BEARERCAP=SPEECH&UNRESDIGITAL&  
RESDIGITAL&VIDEO&DIGITALWITHTONES,  
ICPARAMDLFTPRFL=NULL,OGPARAMDLFTPRFL=NULL,  
ICPARAMSUPRESSPRFL=NULL,OGPARAMSUPRESSPRFL=NULL,  
FRAUDTRAPPRFL=NULL,USESWITCHID=N,ECHOCTRLNLP=Y,  
EHCRTLTTYPE=G168,ICOVERLAP=N,MINDGTS=0,MAXDGTS=31,  
MINDGTTMR=15,MAXDGTTMR=4,CUSTUSE1=NULL,  
CUSTVAR1=NULL,CUSTUSE2=NULL,CUSTVAR2=NULL,  
SIPPLUS=N,SIPHRTBTMR=0,TXPAD=0DB,RXPAD=0DB,  
PCDPID=N,SIPSRCFQDN=NULL,SIPDSTFQDN=NULL,  
SIPDSTFQDNPORT=0,SIPPROXYIP=NULL,SIPPROXYPORT=0,  
SIPCGPMAP=N;  
RTRV-TRKGRP::1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"1:ISUP:CLASS=AT,OWNCLASS=E0,NAME=TRUNKGROUP1,
  OPCDPC=OPC-23-186-5-DPC-24-177-39,
  HUNTING=CIRCULAR,HUNTPRIORITY=BOTH,
  DIRECTION=CICBOTHWAY,INITSTATE=IDLE,COTFREQ=0,
  ECHOCNTRL=0, LONGDELAY=N, FARCLLI=0005MARLBOROUGH,
  SECONDARYLRN=5084800909, TGPROFILE=1, BILLPRFL=1,
  VALIDATEGAP=Y, CLASSOFSERVICE=NULL, LATAID=1,
  SBLN=5084800909, TGSERVICE=NULL, MAXIPCALLS=0,
  SDPPRFL=NULL, REMOTECOTTYPE=4WIRE,
  ISUPCONFUSIONMSG=Y, ATP=Y, AUDIOIND=DEFAULT,
  AINTRIGLIST=NULL, CNAM=N, TRANSPLAN=DEFAULT,
  ROUTECOST=0, DGTSCRN=NULL, ACTNTERMATTMPT=NULL,
  BEARERCAP=SPEECH&UNRESDIGITAL&RESDIGITAL&VIDEO&
    DIGITALWITHTONES, ICPARAMDLFTPRFL=NULL,
  OGPARAMDLFTPRFL=NULL, ICPARAMSUPRESSPRFL=NULL,
  OGPARAMSUPRESSPRFL=NULL, FRAUDTRAPPRFL=NULL,
  USESWITCHID=N, ECHOCTRLNLP=Y, ECHOCRTLTYPE=G168,
  ICOVERLAP=N, MINDGTS=0, MAXDGTS=31, MINDGTTMR=15,
  MAXDGTTMR=4, CUSTUSE1=NULL, CUSTVAR1=NULL,
  CUSTUSE2=NULL, CUSTVAR2=NULL, SIPPLUS=N,
  SIPHRTBTTMR=0, TXPAD=0DB, RXPAD=0DB, PCDPID=N,
  SIPSRCFQDN=NULL, SIPDSTFQDN=NULL,
  SIPDSTFQDNPORT=0, SIPPROXYIP=NULL, SIPPROXYPORT=0,
  SIPCGPMPMAP=N"
;
```

Related Commands: none

OPR-CCR

Command:

OPR-CCR: Operate Continuity Check Request

Description:

OPR-CCR lets the user conduct an outgoing continuity test on a specified trunk (cic) in a trunk group; the command returns the test results and the cause if the test failed.

Category: Signaling

Security: NSA

Input Format:

OPR-CCR: [TID]:<ss7TrkAid>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<ss7TrkAid>:<status>,<statusInfo>,
    <testStatusEnum>"
;
```

Parameters:

ss7TrkAid Identifies the AID as a unique trunk or range of trunks associated with a trunk group number. The first number in the range identifies the trunk group number and the second number identifies the trunk. You can specify a range of up to 24 T1 or 31 E1 trunks by separating the beginning and ending numbers with two ampersands and a hyphen ("&&-").

Type: Ss7TrkAid

Range: <tgn>-<cic>[&&-<cic>], where

tgn = {1-9999}

cic = {0-16382} for ANSI ISUP

{0-4095} for ITU

Default value: none

status Identifies, in output, the result of the outgoing continuity test.
Type: enum
Range: FAILURE = continuity test failed for the reason defined by *statusInfo*.
SUCCESS = test was successful both locally and remotely.
Default value: none

statusInfo Identifies, in output, the reason for the success or failure of the continuity test.
Type: enum
Range: "CAN NOT SEND CCR TO REMOTE"
"CIRCUIT BUSY, CONTINUITY CAN'T BE CHECKED"
"CIRCUIT IS NOT LOCALLY BLOCKED"
"CONTINUITY DETECTED ON THE CIRCUIT"
"IOM DOES NOT SUPPORT COT"
"MEMORY UNAVAILABLE"
"NO LOOPBACK ACK.(LPA) RCVD FROM REMOTE"
"TONE DETECTOR NOT AVAILABLE"
"TONE NOT DETECTED"
"UNKNOWN ERROR OCCURRED"
Default value: none

testStatusEnum Identifies, in output, the reason for the success or failure of the continuity test as an integer representing the value of *statusInfo*.
Type: integer
Range: {0-9}
Default value: none

Input Example:

```
OPR-CCR: :1-4;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"1-4:SUCCESS,CONTINUITY DETECTED ON THE CIRCUIT,0"
;
```

Related Commands: none

OPR-CQM

Command:

OPR-CQM: Operate Circuit Query Message

Description:

OPR-CQM lets the user conduct a circuit query on a trunk group to show the state of the specified trunk(s) at both the near end (that is, the switch on which the command is executed) and the far end (that is, the remote switch).

Category: Signaling

Security: NSA

Input Format:

OPR-CQM: [TID]:<ss7TrkAid>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<ss7TrkAid>:<cmdStatus>,
  LOCALCALLSTATUS=<localCallStatus>,
  LOCALMNTSTATUS=<localMntStatus>,
  REMOTECALLSTATUS=<remoteCallStatus>,
  REMOTEMNTSTATUS=<remoteMntStatus>"
;
```

Parameters:

ss7TrkAid Identifies the AID as a unique trunk (or range of trunks) associated with a trunk group number. The first number in the range identifies the trunk group number and the second number identifies the trunk(s). You can specify a range of up to 24 T1 or 31 E1 trunks by separating the beginning and ending numbers with two ampersands and a hyphen ("&&-").

Type: Ss7TrkAid

Range: <tn>-<cic>[&&-<cic>], where

tn = {1-9999}

cic = {0-16382} for ANSI ISUP

{0-4095} for ITU

Default value: none

cmdStatus Identifies the result of the circuit query.

Type: enum

Range: FAILURE = command failed; no circuit query executed
SUCCESS = circuit query executed successfully

Default value: none

localCallStatus Identifies the call status of the trunk at the near end.

Type: enum

Range: IDLE = trunk idle; no calls on trunk
INCBUSY = trunk busy for incoming calls
OUTBUSY = trunk busy for outgoing calls

Default value: none

localMntStatus Identifies the call maintenance status of the trunk at the near end.

Type: enum

Range: ACT = Active; no maintenance procedure on the trunk
LBLK = Locally blocked
LBLK&RBLK = Locally blocked and remotely blocked
RBLK = Remotely blocked
TRANS = Transient state
UEQ = Unequipped

Default value: none

remoteCallStatus Identifies the call status of the trunk at the near end.

Type: enum

Range: IDLE = trunk idle; no calls on trunk
INCBUSY = trunk busy for incoming calls
OUTBUSY = trunk busy for outgoing calls

Default value: none

remoteMntStatus Identifies the call maintenance status of the trunk at the far end.

Type: enum

Range: ACT = Active; no maintenance procedure on the trunk
LBLK = Locally blocked
LBLK&RBLK = Locally blocked and remotely blocked
RBLK = Remotely blocked
TRANS = Transient state
UEQ = Unequipped

Default value: none

Input Example:

```
OPR-CQM: :1-2&&-4;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"1-2:SUCCESS, LOCALCALLSTATUS=IDLE,
  LOCALMNTSTATUS=ACT, REMOTECALLSTATUS=IDLE,
  REMOTEMNTSTATUS=ACT"
"1-3:SUCCESS, LOCALCALLSTATUS=IDLE,
  LOCALMNTSTATUS=ACT, REMOTECALLSTATUS=IDLE,
  REMOTEMNTSTATUS=ACT"
"1-4:FAILED, LOCALCALLSTATUS=IDLE,
  LOCALMNTSTATUS=LBLK, REMOTECALLSTATUS=IDLE,
  REMOTEMNTSTATUS=RBLK"
;
```

Related Commands: none

OPR-CVT

Command:

OPR-CVT: Operate Circuit Validation Test

Description:

OPR-CVT lets the user conduct an ISUP circuit validation test on a specified trunk (cic) in a trunk group to return the information contained in the response message (CVR) and validate the consistency of the returned information.

Category: Signaling

Security: NSA

Input Format:

OPR-CVT: [TID]:<ss7TrkAid>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<ss7TrkAid>:<status>,<cgCarrier>,<dblSeizeCtl>,
    <almCarrier>,<cotChkReq>,[<trunkNum>],
    [<CLLIoffA>],[<CLLIoffZ>],[<CLLI>],<cause>"
;
```

Parameters:

ss7TrkAid Identifies the AID as a unique trunk associated with a trunk group number. The first number in the range identifies the trunk group number and the second number identifies the trunk.

Type: Ss7TrkAid

Range: {1-9999}-{0-16382}

Default value: none

status Identifies the result of the circuit validation test, which may not be the same as the value returned in the Circuit Validation Response Indicator parameter in the CVR. The CVR can indicate a successful test on the remote switch, but the test can still fail locally if either the dual seizure indicator or the trunk number returned in the CVR are inconsistent with the information stored for the cic in the switch database.

Type: enum

Range: FAILURE = The validity test failed for the reason defined by the parameter *cause*.

SUCCESS = The test was successful both locally and remotely

Default value: none

cgCarrier Identifies the value returned in the circuit group carrier indicator field of the Circuit Group Characteristics Indicator parameter in the CVR message.

Type: enum

Range: ANALOG = analog carrier

ANA_DIG = analog and digital carrier

DIGITAL = digital carrier

UNKNOWN = unknown carrier

Default value: none

dblSeizeCtl Identifies the value returned in the double seizing control indicator field of the Circuit Group Characteristics Indicator parameter in the CVR message.

Type: enum

Range: ALL

EVEN

ODD

NONE

Default value: none

almCarrier Identifies the value returned in the alarm carrier indicator field of the Circuit Group Characteristics Indicator parameter in the CVR message.

Type: enum

Range: HARDWARE

SOFTWARE

UNKNOWN

Default value: none

cotChkReq Identifies the value returned in the continuity check requirements indicator field of the Circuit Group Characteristics Indicator parameter in the CVR message.

Type: enum

Range: NONE
PERCALL
STATISTICAL
UNKNOWN

Default value: none

trunkNum Identifies the value returned in the trunk number field of the Circuit Identification Name parameter in the CVR message, but only when the CVR indicates a successful test on the remote switch.

Type: enum

Range: exactly four digits

Default value: none

CLLIoffA Identifies the value returned in the “CLLI code – office A” field of the Circuit Identification Name parameter in the CVR message, but only when the CVR indicates a successful test on the remote switch.

Type: enum

Range: exactly 11 ASCII characters

Default value: none

CLLIoffZ Identifies the value returned in the “CLLI code – office Z” field of the Circuit Identification Name parameter in the CVR message, but only when the CVR indicates a successful test on the remote switch.

Type: enum

Range: exactly 11 ASCII characters

Default value: none

CLLI Identifies the value returned in the CLLI Code parameter in the CVR message, but only when the CVR indicates a failed test on the remote switch.

Type: enum

Range: exactly 11 ASCII characters

Default value: none

cause Identifies the reason that the CVT test failed when the value of *Status* is "FAILURE".

Type: enum

Range: "No response from remote switch."
"Failure status received from remote switch"
"Inconsistent dual seizure indicator"
"Inconsistent trunk number"

Default value: none

Input Example:

```
OPR-CVT: :1-4;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"1-4:SUCCESS,ALLOC=ASCENDING,ALL,UNKNOWN,UNKNOWN,
0001,0005MARLBOROUGH,0006MARLBOROUGH,, "
;
```

Related Commands: none

RTRV-PM-TRKGRP

Command:

RTRV-PM-TRKGRP: Retrieve Performance Monitors Trunk Group

Descriptions:

RTRV-PM-TRKGRP lets the user retrieve current and historical performance data for a trunk group.

Category: Signaling

Security: View

Input Format:

```
RTRV-PM-TRKGRP:[TID]:<tgId>:[CTAG]:[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>;
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<tgId>:<montype>,<monval>,[<vldty>],[<locn>],  
      [<dirn>],[<tmper>],[<mondatt>],[<montm>]"  
;
```

Parameters:

tgId Identifies the AID as a trunk group on a media gateway. As a trunk group can span multiple media gateways, a null value for the second part of the AID is equivalent to "ALL"; that is, by leaving the media gateway name field blank, performance data for the entire trunk group will be returned regardless of the media gateway. Specifying the media gateway returns performance data for that part of the trunk group on the specified media gateway.

Type: tgId

Range: tgn[<mgName>], where

tgn = {1-9999}

mgName = up to 30 characters

Default value: none

montype Identifies a type of monitored parameter for the specified trunk group.

Type: enum

Range: ALL = All monitored parameters
BUSY = total number of circuits with stable calls
IDLE = total number of idle circuits on the trunkgroup or tg-
mg
NXTCIC = total number of ANSI calls forwarded after
routing to a TLDN
OOS = total number of circuits that are out-of-service either
due to maintenance or supporting equipment service state
OVFCNT = total number of times this trunkgroup was
overflowed since the last update to the BTS system (<=
15 minutes)
PRECUT = total number of circuits configured but not
provisioned to accept calls
TOTAL = total number of circuits configured on the
trunkgroup or trunkgroup-mediaGateway
UPDCNT = total number of times this trunkgroup has
received updates from the MG(s)

Default value: ALL

monlev Identifies (for RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP". This parameter is presently not supported; leave it blank.

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

monval Identifies (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts.

Type: integer

Range: {0-2147483647}

Default value: none

- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it. This parameter is not supported presently; its value will be “NULL”.
- Type:** enum
- Range:** ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
- Default value:** NULL
- locn** Identifies the location of the storage counters to be initialized. This parameter is presently not supported; leave it blank.
- Type:** Location
- Range:** FEND = Far end
NEND = Near end
- Default value:** NEND
- dirn** Identifies the direction of the data stored in statistics counters relative to the switch. This parameter is presently not supported; leave it blank.
- Type:** Direction
- Range:** BTH = Both directions
RCV = Receive direction only
TRMT = Transmit direction only
- Default value:** BTH
- tmper** Identifies the accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods. This parameter is presently not supported; leave it blank.
- Type:** TimePeriod
- Range:** {1}-DAY = Time interval is exactly one day
{1-24}-HR = Interval of one to 24 hours (one day)
{1-1440}-MIN = Interval of one to 1440 minutes (one day)
- Default value:** both 15-MIN and 24-HR

mondatt Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is presently not supported; leave it blank.

Type: MonitoredDate

Range: {1-12}-{1-31}

Default value: current date

montm Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is presently not supported; leave it blank.

Type: MonitoredTime

Range: {0-23}-{0-59}

Default value: current time

Input Example:

```
RTRV-PM-TRKGRP: :1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"1:TOTAL,0,,,,,,,,,"
"1-0:IDLE,0,,,,,,,,,"
"1-0:BUSY,0,,,,,,,,,"
"1-0:OOS,0,,,,,,,,,"
"1-0:PRECUT,0,,,,,,,,,"
"1-0:OVFCNT,0,,,,,,,,,"
"1-0:NXTCIC,65535,,,,,,,,,"
"1-0:UPDCNT,0,,,,,,,,,"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-DEF-GENIE

Commands:

DLT-DEF-GENIE: Delete Definition Generic Information Element

ED-DEF-GENIE: Edit Definition Generic Information Element

ENT-DEF-GENIE: Enter Definition Generic Information Element

RTRV-DEF-GENIE: Retrieve Definition Generic Information Element

Descriptions:

DLT-DEF-GENIE lets the user delete a generic information element definition from the system.

ED-DEF-GENIE lets the user change the type of information required for user-specific or network-specific information elements, or for generic digits.

ENT-DEF-GENIE lets the user establish a definition (profile) for a generic information element (that is, a parameter created or used by routing, digit modification, or screening commands). It specifies the type of information required for user-specific or network-specific information elements, or for generic digits.

RTRV-DEF-GENIE lets the user retrieve the properties of a generic information element definition.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-DEF-GENIE: [TID]:<defGenieAid>:[CTAG];

ED-DEF-GENIE: [TID]:<defGenieAid>:[CTAG]::[ENC=<enc>],
[LENGTH=<length>],[BITSIGNORED=<bitsIgnored>],
[COMPFORMAT=<compFmt>];

ENT-DEF-GENIE: [TID]:<defGenieAid>:[CTAG]::[ENC=<enc>],
[LENGTH=<length>],[BITSIGNORED=<bitsIgnored>],
[COMPFORMAT=<compFmt>];

RTRV-DEF-GENIE: [TID]: [<defGenieAid>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<defGenieAid>:ENC=<enc>, LENGTH=<length>,
    BITSIGNORED=<bitsIgnored>, COMPFMT=<compFmt>"
;
```

Parameters:

defGenieAid Identifies the AID as a generic information element definition. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all generic information element definitions configured in the system will be returned. Specifying just the first part of the AID (in RTRV) is equivalent to "ALL"; that is, by leaving the subsequent fields blank, the system returns information for all generic information elements for the designated incoming protocol type.

Type: string

Range: <prtcl>[<type>[<subType>]], where

prtcl identifies the incoming protocol type for this parameter, currently restricted to "ISUP"

type identifies the type of generic information element, with values of:

GENDGTS = generic digits (for ISUP only)

GP = generic parameter (network-specific)

subType identifies the numeric value representing the type of generic digits or generic parameter. Values can be:

{0-31} for GENDGTS

{43-46, 49, 62-133, 141-224, 240-255} for GP

(denoting ISUP-defined keys such as CDPN, CGPN, and TNS)

Default value: none

enc Identifies the type of encoding used.

Type: enum

Range: ASCII

BCD

BINARY

Default value: ASCII

length Identifies the length of the generic information element in bytes. The value cannot be “0” when the value of *enc* is “BINARY”, but must be “0” when the value of *enc* is “ASCII” or “BCD”

Type: integer

Range: {0-32}

Default value: 0

bitsIgnored Identifies the bits ignored for each byte. You can specify up to 10 elements, separated by ampersands (&). The value must be “NULL” when the value of *enc* is “ASCII” or “BCD”.

Type: string

Range: up to 90 characters, in the form

<ignoredPerByte>[&<ignoredPerByte>]..., where

<ignoredPerByte> = <byte>-<ignoreMask>-<fillVal>,

and

byte identifies the byte for which bits are ignored with an integer from 1-32

ignoreMask identifies the mask that designates the bits (without routing/screening/modification data) to ignore with a hexadecimal string from 0-FF. Masks currently designate only contiguous bits from the left.

fillVal identifies the value that replaces the bits to ignore with a hexadecimal string from 0-FF. This value cannot be greater than the value of *ignoreMask*.

Default value: NULL

compFmt Identifies the format for each component of the generic information element. You can specify up to five components, separated by ampersands (&). The value must be “NULL” when the value of *enc* is “ASCII” or “BCD”, and cannot be “NULL” when the value of *enc* is “BINARY”.

Type: string

Range: up to 90 characters, in the form

<compFmtStr>[&<compFmtStr>]..., where

<compFmtStr> = <minVal>-<maxVal>-<positionFmt>,
and

minVal identifies the minimum value for the
component with an integer from 0-4294967295

maxVal identifies the maximum value for the
component with an integer from 1-4294967295
(must be greater than the value of *minVal*)

positionFmt identifies the order in which the nibbles
in the incoming parameter are used in the
component. The range is {1-32}{H,L}, where the
first part represents the byte and the second part
represents the nibble (High or Low). The position
of the nibble in the string specifies the ordering in
the component. You cannot re-use nibbles across
components; you cannot use ignored nibbles.

Default value: NULL

Input Examples:

```
DLT-DEF-GENIE::ISUP-GENDGTS-13;
```

```
ED-DEF-GENIE::ISUP-GENDGTS-13:::ENC=BINARY,LENGTH=4,  
BITSIGNORED=1-E0-60&3-F0-80,  
COMPFMT=0-31-1H2L&0-255-1L2H&0-4095-4H4L3L;
```

```
ENT-DEF-GENIE::ISUP-GENDGTS-13:::ENC=BINARY,LENGTH=4,  
BITSIGNORED=1-E0-60&3-F0-80,  
COMPFMT=0-31-1H2L&0-255-1L2H&0-4095-4H4L3L;
```

```
RTRV-DEF-GENIE::ISUP-GENDGTS-13;
```

In the previous examples:

- GENDGTS13 has a length of four bytes and three components,
- The 1st, 2nd and 3rd bits of byte 1 are ignored, the 3rd bit is set to 1, and the 1st and 2nd bits are set to 0 if the information element is generated.
- The high order nibble of byte 3 is ignored, and the 1st bit is set to 1 on generation.
- The 1st component is made of the high order nibble of the 1st byte, and the low order nibble of the 2nd byte.
- The 2nd component is made of the low order nibble of the 1st byte, and the high order nibble of the 2nd byte.
- The 3rd component is made of the high order nibble of the 4th byte, the low order nibble of the 4th byte, and the low order nibble of the 3rd byte.

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "ISUP-GENDGTS-13:ENC=BINARY,LENGTH=4,
    BITSIGNORED=1-E0-60&3-F0-80,
    COMPFMT=0-31-1H2L&0-255-1L2H&0-4095-4H4L3L"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-DIGIT-SCREEN

Commands:

DLT-DIGIT-SCREEN: Delete Digit Screen

ED-DIGIT-SCREEN: Edit Digit Screen

ENT-DIGIT-SCREEN: Enter Digit Screen

RTRV-DIGIT-SCREEN: Retrieve Digit Screen

Descriptions:

Use screening for the following:

- Selectively authorizing calls, depending on call parameters
- Choosing translation plans based on call parameters
- Blocking calls and allowing calls to proceed
- Marking calls as fraud calls, for fraud processing
- Applying treatments to calls, as a step in call processing.

Screening can be a part of any action – at the InfoCollected or InfoAnalyzed PICs as part of a translation plan, during routing from route digits, or at a termination attempt from a trunk group. You can also use screening to prevent or allow calls originating on certain trunk groups from terminating to other trunk groups by applying a digit screen to the terminating trunk group (via the parameter *dgtScrn* in TRKGRP).

DLT-DIGIT-SCREEN lets the user delete a screening method.

ED-DIGIT-SCREEN lets the user change a screening method. Use this command to change the name of the digit screening database table; the parameter (primary key) to which the digit screening applies; the primary, secondary, and tertiary values applicable to the specified parameter; the action taken as a result of screening; the fraud trap profile; the treatment; the next screening operation performed; the authorization code prompt; the authorization code mode of operation; the length of the account code; the list containing the authorization code; and the translation plan used on a screening match.

ENT-DIGIT-SCREEN lets the user establish a screening method. Use this command to define the name of the digit screening database table; the parameter (primary key) to which the digit screening applies; the primary, secondary, and tertiary values applicable to the specified parameter; the action taken as a result of screening; the fraud trap profile; the treatment; the next screening operation performed; the authorization code prompt; the authorization code mode of operation; the length of the account code; the list containing the authorization code; and the translation plan used on a screening match.

RTRV-DIGIT-SCREEN lets the user retrieve the attributes of a screening method.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-DIGIT-SCREEN:[TID]:<digitScrnAid>:[CTAG];
ED-DIGIT-SCREEN:[TID]:<digitScrnAid>:[CTAG]::
    [RESULTTYPE=<resultType>],
    [FRAUDTRAPPRFL=<fraudTrapPrfl>],
    [TREATMENT=<treatment>], [DGTSCRNKEY=<dgtScrnKey>],
    [AUTHPROMPT=<authPrompt>], [AUTHMODE=<authMode>],
    [ACNTCODELEN=<acctCodeLen>], [AUTHLIST=<authList>],
    [TRANSPLAN=<transPlan>];
ENT-DIGIT-SCREEN:[TID]:<digitScrnAid>:[CTAG]::
    [RESULTTYPE=<resultType>],
    [FRAUDTRAPPRFL=<fraudTrapPrfl>],
    [TREATMENT=<treatment>], [DGTSCRNKEY=<dgtScrnKey>],
    [AUTHPROMPT=<authPrompt>], [AUTHMODE=<authMode>],
    [ACNTCODELEN=<acctCodeLen>], [AUTHLIST=<authList>],
    [TRANSPLAN=<transPlan>];
RTRV-DIGIT-SCREEN:[TID]: [<digitScrnAid>]: [CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<digitScrnAid>:[CTAG]::RESULTTYPE=<resultType>,
    FRAUDTRAPPRFL=<fraudTrapPrfl>,
    TREATMENT=<treatment>,DGTSCRNKEY=<dgtScrnKey>,
    AUTHPROMPT=<authPrompt>,AUTHMODE=<authMode>,
    ACNTCODELEN=<acctCodeLen>,AUTHLIST=<authList>,
    TRANSPLAN=<transPlan>"
;
```

Parameters:

digitScrnAid Identifies the AID as a digit screening method. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all digit screening methods configured in the system will be returned.

Type: DgtScrnAid

Range: <dgtScrnLbl>[-<primKey>[-<primKeyValue>
[-<secKeyValue>[-<terKeyValue>]]]], where:

dgtScrnLbl identifies the name of the applicable screening table with a string of 1-10 alphanumeric characters;

primKey (optional only in RTRV) identifies the primary key applicable to the specified screening table, with values of:

ABGN = Anchor Bearer Group Number (For some SIP referred calls, with or without replace, involving analysis of referred-to-number and subsequent routing, ABGN captures the ingress trunkgroup of the referred call.)

BGN = Bearer Group Number (interface type)

CALLTYPE = Type of call (Class 5)

CDPN = Called party number

CGPN = Calling party number

CHRGN = Charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

FCIMBIT = Forward Call Indicator M-bit

GAP = Generic Address Parameter

GENDGTS = Generic Digits (you cannot select this value unless a generic information element of this type has been defined previously with ENT-DEF-GENIE)

GP = Generic Parameter (you cannot select this value unless a generic information element of this type has been defined previously with ENT-DEF-GENIE)

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

SUBSTATUS = Subscriber status (valid only when the value "SUB" is the first listed for the parameter *actnInfoAnlz* in TRANS-PLAN)

TNS = Transit Network Selection

primKeyValue identifies the primary value applicable to the specified primary key parameter, with values of:

ABGN (refer/replace type):

DEFAULT
LOCAL
NONE
NOTPRSNT
RMT

BGN:

CASIF
DEFAULT
GR303
ISDNIF
MGCP
TGN

CALLTYPE:

CUTTHRU
DEFAULT
DIR_ASSISTANCE
EMERGENCY
INTERLATA
INTERLATAOPREQ
INTNATNUM
INTNATOPREQ
INTRALATA
LOCAL_RATE
LOCALNUMBER
LOCALOPREQ
N11
NATNUM
NONUMOPREQ
NOTPRSNT
NOTSPEC
PREMIUM_RATE
TOLL_DIR_ASSIST
TOLLFREE

CDPN:

ABBREVPVT = abbreviated private
CAINVPN = Carrier AIN Virtual Private
Network
DEFAULT = matches all numbers
INTNATNUM = international number
INTNATOPREQ = international operator request
NATNUM = national significant number
NATOPREQ = national (long-distance) operator
request
NONUMCUTTHRU = no number provided, cut
through to carrier

NONUMOPREQ = no number provided, operator request

NOTPRSNT = matches calls without a CDPN

SUBOPREQ = subscriber (local) operator request

SUBSNUM = subscriber number

TESTLINE = test line test code

UNKNOWN = unknown (default value);

CGPN:

ABBREVPVT = abbreviated private

DEFAULT = matches all numbers

NOTPRSNT = matches calls without a CGPN

NUNIINTNATNUM = non-unique international number

NUNINATNUM = non-unique national number (only for CGPN)

NUNISUBSNUM = non-unique subscriber number

TESTLINE = test line test code

UNIINTNATNUM = unique international number

UNINATNUM = unique national number

UNISUBSNUM = unique subscriber number

CHRGN:

CDPNATNUM = ANI of the called party; national number

CDPSUBSNUM = ANI of the called party; subscriber number

CDPUNAVAIL = ANI of the called party; no number present

CGPNATNUM = ANI of the calling party; national number

CGPSUBSNUM = ANI of the calling party; subscriber number

DEFAULT = matches all numbers

NOTPRSNT = matches calls without a CHRGN

UNAVAIL = ANI not available or not provided

CIP: 0-9999, DEFAULT, NOTPRSNT

CPC: 00-FF (hexadecimal) , DEFAULT, NOTPRSNT

CSI:

DEFAULT = matches all numbers

NOTPRESUB = not presubscribed and input by calling party

NOTPRSNT = matches calls without CSI

PRESUBDIAL = presubscribed and input by calling party

PRESUBNOTDIAL = presubscribed and not
input by calling party
PRESUBUNKNOWN = presubscribed, input by
calling party undetermined
UNKNOWN = no indication

FCIMBIT:

0 = CDPN not translated
1 = CDPN translated
DEFAULT
NOTPRSNT

GAP: 0-255 (mandatory)

GENDGTS: 0-31 (mandatory)

GP: 0-255

JIP: 200000-999999, DEFAULT, NOTPRSNT

LATA: 200-99999, DEFAULT, NOTPRSNT

OLI: 00-FF (hexadecimal), DEFAULT, NOTPRSNT

SUBSTATUS:

ACTIVE = In Service (subscriber is present in the
CL4SUB table and active)
DEFAULT = matches all numbers
INACTIVE = Out Of Service (subscriber is
present in the CL4SUB table and inactive)
NOTINDB = Not in database (subscriber is not in
the CL4SUB table)
NOTPRSNT = matches calls without
SUBSTATUS

TNS: 0-9999 (the carrier ID), DEFAULT,
NOTPRSNT

secKeyValue identifies the secondary value applicable to the
specified primary key parameter, with values of:

ABGN (interface type):

CASIF
DEFAULT
GR303
ISDNIF
MGCP
TGN

BGN: 1-31 digits, DEFAULT

CALLTYPE: No secondary value

CDPN: 1-31 digits, DEFAULT (set *secKeyValue* to
DEFAULT if *primKeyValue* is DEFAULT or
NOTPRSNT)

CGPN: 1-31 digits, DEFAULT (set *secKeyValue* to DEFAULT if *primKeyValue* is DEFAULT or NOTPRSNT)

CHRGN: 1-31 digits, DEFAULT (set *secKeyValue* to DEFAULT if *primKeyValue* is DEFAULT or NOTPRSNT)

CIP: No secondary value

CPC: No secondary value

CSI: No secondary value

GAP: 1-31 digits, DEFAULT, NOTPRSNT

GENDGTS: 1-31 digits, DEFAULT, NOTPRSNT

GP: 1-31 digits, DEFAULT, NOTPRSNT

JIP: No secondary value

LATA: No secondary value

OLI: No secondary value

SUBSTATUS: No secondary value

TNS: 0-199 (the CAS 0ZZ/1NX code or the ISUP circuit code), DEFAULT (set *secKeyValue* to DEFAULT if *primKeyValue* is DEFAULT or NOTPRSNT)

terKeyValue identifies the tertiary value (representing the protocol type) applicable only when the value of *primKey* is AGBN or TNS, with values of:

ABGN (interface or trunk group number):

CASIF: 1-2147483647

DEFAULT

GR303: 1-32767

ISDNIF: 1-2147483647

MGCP: 1-100000

TGN: 1-9999

TNS:

CAS

ISUP (default – set *terKeyValue* to ISUP if *secKeyValue* is DEFAULT)

Default value: none

resultType Identifies the action taken as a result of screening.

Type: enum

Range: AUTHCODE = Call must be authorized – can only be used if called from InfoAnalyze

FAIL= Call failed screening, will be disconnected

PASS = Call passed screening

SCREEN = More screening required

TRANS = Change translation plans during a screening step – only valid if the screening is called as an InfoCollected action

TREAT = Specified treatment will be performed

Default value: FAIL

fraudTrapPrfl Identifies the fraud trap profile used when screening encounters a fraud scenario.

Type: string

Range: 1-10 alphanumeric characters

Default value: NULL

treatment Identifies the treatment performed when the value of *resultType* is “TREAT”.

Type: string

Range: 1-10 alphanumeric characters

Default value: NULL

dgtScrnKey Identifies the next screening operation performed by defining the applicable digit screening table and associated primary key. The parameter applies only when the value of *resultType* is “SCREEN”.

Type: string

Range: <dgtScrnLbl>-<primKey>, where:

dgtScrnLbl identifies the name of the applicable screening table with a string of 1-10 characters;

primKey identifies the primary key applicable to the specified screening table, with values of:

ABGN = Anchor Bearer Group Number (For some SIP referred calls, with or without replace, involving analysis of referred-to-number and subsequent routing, ABGN captures the ingress trunkgroup of the referred call.)

BGN = Bearer Group Number (interface type)

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)
CPC = Calling Party Category
CSI = Carrier Selection Information
FCIMBIT = Forward Call Indicator M-bit
GAP-{0-255} = Generic Address Parameter
GENDGTS-{0-31} = Generic Digits
GP-{0-255} = Generic Parameter
JIP = Jurisdiction Information Parameter (NPANXX)
LATA = Local Access & Transport Area
OLI = Originating Line Information
SUBSTATUS = Subscriber status (valid only when
the value "SUB" is the first listed for the
parameter *actnInfoAnlz* in TRANS-PLAN)
TNS = Transit Network Selection

Default value: NULL

authPrompt Identifies the tone or announcement that prompts the caller to enter an authorization code. This parameter is not implemented presently; leave it blank.

Type: enum

Range: 350

400

ANNC = Announcement

Default value: ANNC

authMode Identifies the mode of operation for an authorization code required as a result of screening. The parameter applies only when the value of *resultType* is "AUTH".

Type: enum

Range: ACNTAUTH = account codes and authorization codes

NONE = authorization code not required

ONEPIN = one PIN code per authorization code

ONLYACNT = only account codes

ONLYAUTH = only authorization codes

ONLYPIN = only PIN codes

Default value: NONE

acctCodeLen Identifies the account code length. The default value "0" disables the option; however, the value cannot be "0" when the value of *authMode* is "ACNTAUTH" or "ONLYACNT".

Type: integer

Range: {0-8}

Default value: 0

authList Identifies the name of the authorization list, previously established via ENT-LIST-AUTHCODE. The value cannot be “NULL” when the value of *authMode* is “ACNTAUTH”, “ONEPIN”, “ONLYACNT”, or “ONLYPIN”.

Type: string

Range: up to 20 characters

Default value: NULL

transPlan Identifies the name of the translation plan, previously established via ENT-TRANS-PLAN, used on a screening match. The parameter applies only when the value of *resultType* is “TRANS”.

Type: string

Range: up to 10 characters

Default value: NULL

Input Examples:

```
DLT-DIGIT-SCREEN::LucentPbx-CGPN;
```

```
ED-DIGIT-SCREEN::LucentPbx-CGPN-ABBREVPVT-DEFAULT:::  
RESULTTYPE=SCREEN, FRAUDTRAPPRFL=INTNL;
```

Authorization required on all international calls from LucentPbx except to country code 92, which is considered fraud:

Step 1:

```
ENT-DIGIT-SCREEN::LucentPbx-CGPN-DEFAULT-508804:::  
RESULTTYPE=SCREEN, DGTSCRNKEY=LucentPbx-CDPN;
```

Step 2:

```
ENT-DIGIT-SCREEN::LucentPbx-CGPN-DEFAULT-5088040909:::  
RESULTTYPE=SCREEN, DGTSCRNKEY=LucentPbx-CDPN;
```

Step 3:

```
ENT-DIGIT-SCREEN::LucentPbx-CDPN-INTNATNUM-DEFAULT:::  
RESULTTYPE=AUTHCODE, AUTHMODE=ONLYPIN,  
AUTHLIST=LucentAuth;
```

Or

```
ENT-DIGIT-SCREEN::LucentPbx-CDPN-INTNATNUM:::  
RESULTTYPE=AUTHCODE, AUTHMODE=ONLYPIN,  
AUTHLIST=LucentAuth;
```

Step 4:

```
ENT-DIGIT-SCREEN::LucentPbx-CDPN-INTNATNUM-92:::  
    RESULTTYPE=FAIL,FRAUDTRAPPRFL=intnl,  
    TREATMENT=CALLREJECT;
```

```
RTRV-DIGIT-SCREEN::LucentPbx-CGPN;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"LucentPbx-CGPN-DEFAULT-5088040909:  
    RESULTTYPE=FAIL,FRAUDTRAPPRFL=intnl,  
    TREATMENT=CALLREJECT,DGTSCRNKEY=LucentPbx-CDPN,  
    AUTHPROMPT=ANNC,AUTHMODE=ONLYPIN,ACNTCODELEN=0,  
    AUTHLIST=LucentAuth,TRANSPLAN=NULL"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-DIGITMOD-DN

Commands:

DLT-DIGITMOD-DN: Delete Digit Modification DN

ED-DIGITMOD-DN: Edit Digit Modification DN

ENT-DIGITMOD-DN: Enter Digit Modification DN

RTRV-DIGITMOD-DN: Retrieve Digit Modification DN

Descriptions:

DLT-DIGITMOD-DN lets the user delete a digit modification object keyed for any of the DNs (Directory Numbers) that are part of the call parameters (called party number, calling party number, charge number).

ED-DIGITMOD-DN lets the user change a digit modification object keyed for any of the DNs (Directory Numbers) that are part of the call parameters (called party number, calling party number, charge number). Use this command to change the digits to modify; the nature of address indicator applicable to the specified digit string; the type of modification; how to strip or insert digits, an alternate parameter to modify, and the digit modification to call next.

ENT-DIGITMOD-DN lets the user establish a digit modification object keyed for any of the DNs (Directory Numbers) that are part of the call parameters (called party number, calling party number, charge number). Use this command to define the name of the digit modification; whether the digit modification applies to called party, calling party or charge numbers; the digits to modify; the nature of address indicator applicable to the specified digit string; the type of modification; how to strip or insert digits, an alternate parameter to modify, and the digit modification to call next.

RTRV-DIGITMOD-DN lets the user retrieve the attributes of a digit modification object keyed for any of the DNs (Directory Numbers) that are part of the call parameters (called party number, calling party number, charge number).

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-DIGITMOD-DN:[TID]:<digitModDnAid>:[CTAG];

ED-DIGITMOD-DN:[TID]:<digitModDnAid>:[CTAG]::
[MODTYPE=<modtype>],[ALTMODTYPE=<altmodtype>],
[MAXDGTS=<maxdgts>],[STRIPDIRN=<stripdirn>],
[STRIPPOS=<strippos>],[STRIPDGTS=<stripdgts>],
[STRIPDEST=<stripdest>],[INSERTDIRN=<insertdirn>],
[INSERTPOS=<insertpos>],[INSERTDGTS=<insertdgts>],
[INSERTSRC=<insertsrc>],[NEWNAI=<newnai>],
[NEWNP=<newnp>],[ALTPARAMVALUE=<altparamvalue>],
[NEXTDGTMODKEY=<nextdgtmodkey>];

ENT-DIGITMOD-DN:[TID]:<digitModDnAid>:[CTAG]::
[MODTYPE=<modtype>],[ALTMODTYPE=<altmodtype>],
[MAXDGTS=<maxdgts>],[STRIPDIRN=<stripdirn>],
[STRIPPOS=<strippos>],[STRIPDGTS=<stripdgts>],
[STRIPDEST=<stripdest>],[INSERTDIRN=<insertdirn>],
[INSERTPOS=<insertpos>],[INSERTDGTS=<insertdgts>],
[INSERTSRC=<insertsrc>],[NEWNAI=<newnai>],
[NEWNP=<newnp>],[ALTPARAMVALUE=<altparamvalue>],
[NEXTDGTMODKEY=<nextdgtmodkey>];

RTRV-DIGITMOD-DN:[TID]:[<digitModDnAid>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<digitModDnAid>:MODTYPE=<modtype>,
  ALTMODTYPE=<altmodtype>,MAXDGTS=<maxdgts>,
  STRIPDIRN=<stripdirn>,STRIPPOS=<strippos>,
  STRIPDGTS=<stripdgts>,STRIPDEST=<stripdest>,
  INSERTDIRN=<insertdirn>,INSERTPOS=<insertpos>,
  INSERTDGTS=<insertdgts>,INSERTSRC=<insertsrc>,
  NEWNAI=<newnai>,NEWNP=<newnp>,
  ALTPARAMVALUE=<altparamvalue>,
  NEXTDGTMODKEY=<nextdgtmodkey>"
;
```

Parameters:

digitModDnAid Identifies the AID as a digit modification object keyed for a DN. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all DN-keyed digit modification objects configured in the system will be returned.

Type: DigitModDnAid

Range: <dmLbl>[-<dnType>[-<nai>[-<digits>[-<minDgts>[-<np>]]]]], where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

dnType (optional only in RTRV) identifies the primary key as the type of DN applicable to the specified digit modification table, with values of:

CDPN = called party number
CGPN = calling party number
CHRGN = charge number

nai identifies the nature of address indicator applicable to the specified type of DN, with a default of "DEFAULT" and values of:

ABBREVPVT = abbreviated private (only for CDPN and CGPN)
CAINVPN = Carrier AIN Virtual Private Network (only for CDPN)
CDPNATNUM = ANI of the called party; national number (only for CHRGN)
CDPSUBSNUM = ANI of the called party; subscriber number (only for CHRGN)
CDPUNAVAIL = ANI of the called party; no number present (only for CHRGN)
CGPNATNUM = ANI of the calling party; national number (only for CHRGN)
CGPSUBSNUM = ANI of the calling party; subscriber number (only for CHRGN)
DEFAULT = matches all numbers
INTNATNUM = international number (only for CDPN)
INTNATOPREQ = international operator request (only for CDPN)
NATNUM = national significant number (only for CDPN)
NATOPREQ = national (long-distance) operator request (only for CDPN)

NONUMCUTTHRU = no number provided, cut through to carrier (only for CDPN)
NONUMOPREQ = no number provided, operator request (only for CDPN)
NOTPRSNT = matches calls without a CGPN, CDPN, or CHRGN
NUNIINTNATNUM = non-unique international number (only for CGPN)
NUNINATNUM = non-unique national number (only for CGPN)
NUNISUBSNUM = non-unique subscriber number (only for CGPN)
SUBOPREQ = subscriber (local) operator request (only for CDPN)
SUBSNUM = subscriber number (only for CDPN)
TESTLINE = test line test code (only for CGPN and CDPN)
UNAVAIL = ANI not available or not provided (only for CHRGN)
UNIINTNATNUM = unique international number (only for CGPN)
UNINATNUM = unique national number (only for CGPN)
UNISUBSNUM = unique subscriber number (only for CGPN)
UNKNOWN = unknown (only for CDPN);

digits identifies the leading digits of the number to be matched as a string of up to 31 digits with a default of "DEFAULT";

minDgts identifies the minimum allowable length of the incoming addressing digits as an integer from 0-30 with a default of 0.

np identifies the numbering plan applicable to the specified type of DN. *np* defaults to "UNKNOWN" when the value of *nai* is "UNKNOWN", to "PRIVATE" when the value of *nai* is "ABBREVPVT", and to "ISDN" for other values of *nai*. Values can be:

DEFAULT
ISDN
PRIVATE
UNKNOWN

Default value: none

modtype Identifies the type of digit modification.

Type: enum

Range: DELETE = removes the parameter
INSERTDGTS = insert the digits specified by *insertDgts*
INSERTSRC = insert digits from the specified source
NOACTION = no action taken
REPLACEDGTS = replaces digits with those specified by the *insertDgts* parameter
REPLACENAINP = replaces the NAI (third part of AID) and/or the numbering plan (sixth part of AID) with that specified by the *newNai* and/or *newNp* parameters
STRIPINSERTDGTS = removes the number of digits specified by *stripDgts* and inserts the digits specified by *insertDgts*
STRIPINSERTSRC = removes the number of digits specified by *stripDgts* and inserts the digits from the specified source
STRIPONLY = removes the number of digits specified by the *stripDgts* parameter

Default value: NOACTION

altmodtype Identifies the type of digit modification for the alternate parameter.

Type: enum

Range: DELETE = removes the alternate parameter
NOACTION = no action taken
REPLACE = assigns a value, specified by *altParamValue*, to the alternate parameter

Default value: NOACTION

maxdgts Identifies the maximum allowable length of the incoming addressing digits.

Type: integer

Range: {1-31}

Default value: 31

stripdirn Identifies the direction, relative to the first or last digit in the string, of the position in the digit string where stripping begins.

Type: enum

Range: LEFT = starts at the first digit in the string, moves right
RIGHT = starts at the last digit in the string, moves left

Default value: LEFT

- strippos** Identifies the position in the digit string where stripping begins. The value cannot be “0” when the modification involves digit stripping.
Type: integer
Range: {0-31}
Default value: 1
- stripdgt** Identifies the number of digits to strip. The value cannot be “0” when the modification involves digit stripping.
Type: integer
Range: {0-31}
Default value: 0
- stripdest** Identifies a parameter or register for storing the stripped digits. REG-{1-6} are scratchpad registers for holding digits during a translation. These registers are only valid during one call translation; that is, they cannot be passed from one call to another.
Type: enum
Range: CPC = Calling Party Category parameter
 OLI = Originating Line Information parameter
 REG-1 = scratchpad register 1
 REG-2 = scratchpad register 2
 REG-3 = scratchpad register 3
 REG-4 = scratchpad register 4
 REG-5 = scratchpad register 5
 REG-6 = scratchpad register 6
Default value: NULL
- insertdirn** Identifies the direction, relative to the first or last digit in the string, of the position in the digit string where digit insertion begins.
Type: enum
Range: LEFT = starts at the first digit in the string, moves right
 RIGHT = starts at the last digit in the string, moves left
Default value: LEFT
- insertpos** Identifies the position in the digit string where digit insertion begins. The value cannot be “0” when the modification involves digit insertion.
Type: integer
Range: {0-31}
Default value: 1

insertdgt Identifies the digits to insert. The value cannot be “NULL” when the modification involves digit insertion.

Type: string

Range: 1-31 digits

Default value: NULL

insertsrc Identifies a parameter or register as the source of the inserted digits. REG-{1-6} are scratchpad registers for holding digits during a translation. These registers are only valid during one call translation; that is, they cannot be passed from one call to another.

Type: enum

Range: COUNTRY = Country code

CPC = Calling Party Category parameter

OLI = Originating Line Information parameter

REG-1 = scratchpad register 1

REG-2 = scratchpad register 2

REG-3 = scratchpad register 3

REG-4 = scratchpad register 4

REG-5 = scratchpad register 5

REG-6 = scratchpad register 6

Default value: NULL

newnai Identifies a new nature of address indicator replacing the nature of address indicator applicable to the digit string specified in the AID.

Type: enum

Range: ABBREVPVT = abbreviated private numbering plan (only for CDPN and CGPN)

CDPNATNUM = ANI of the called party; national number (only for CHRGN)

CDPSUBSNUM = ANI of the called party; subscriber number (only for CHRGN)

CDPUNAVAIL = ANI of the called party; no number present (only for CHRGN)

CGPNATNUM = ANI of the calling party; national number (only for CHRGN)

CGPSUBSNUM = ANI of the calling party; subscriber number (only for CHRGN)

DEFAULT = matches all numbers

INTNATNUM = international number (only for CDPN)

INTNATOPREQ = international operator request (only for CDPN)

NATNUM = national significant number (only for CDPN)

NATOPREQ = national (long-distance) operator request (only for CDPN)

NONUMCUTTHRU = no number provided, cut through to carrier (only for CDPN)
NONUMOPREQ = no number provided, operator request (only for CDPN)
NOTPRSNT = matches calls without a CGPN, CDPN, or CHRGN
NUNIINTNATNUM = non-unique international number (only for CGPN)
NUNINATNUM = non-unique national number (only for CGPN)
NUNISUBSNUM = non-unique subscriber number (only for CGPN)
SUBOPREQ = subscriber (local) operator request (only for CDPN)
SUBSNUM = subscriber number (only for CDPN)
TESTLINE = test line test code (only for CGPN and CDPN)
UNAVAIL = ANI not available or not provided (only for CHRGN)
UNIINTNATNUM = unique international number (only for CGPN)
UNINATNUM = unique national number (only for CGPN)
UNISUBSNUM = unique subscriber number (only for CGPN)
UNKNOWN = unknown numbering plan (only for CDPN)

Default value: NULL

newnp Identifies a new numbering plan replacing the numbering plan applicable to the digit string specified in the AID.

Type: enum

Range: ISDN = abbreviated private numbering plan (only for CDPN and CGPN)

PRIVATE = unique subscriber number (only for CGPN)

UNKNOWN = unknown numbering plan (only for CDPN)

Default value: NULL

altparamvalue Identifies a parameter and associated value that act as an alternate key. This is a way of changing a non-key parameter on a match on the key field (*dnType* in the AID).

Type: string

Range: <altParam>[-<altValue>], where:

altParam identifies the name of the applicable non-key parameter, with values of:

- CIP = Carrier Information Parameter
- CPC = Calling Party Category
- CSI = Carrier Selection Information
- FCIMBIT = Forward Call Indicator M-bit
- OLI = Originating Line Information
- TNS = Transit Network Selection

altValue identifies, when the value of *altModType* is “NOACTION” or “REPLACE” (leave blank when *altModType* is “DELETE”), the new value applicable to the specified non-key parameter, with values of:

CIP: 0-9999

CPC: 00-FF (hexadecimal)

CSI:

PRESUBDIAL = presubscribed and input by calling party

PRESUBNOTDIAL = presubscribed and not input by calling party

PRESUBUNKNOWN = presubscribed, input by calling party undetermined

NOTPRESUB = not presubscribed and input by calling party

UNKNOWN = no indication

FCIMBIT:

0 = CDPN not translated

1 = CDPN translated

DEFAULT

NOTPRSNT

OLI: 00-FF (hexadecimal)

TNS: {0-9999}-{0-255} (denotes a carrier and either a CAS 0ZZ/1NX code or an ISUP circuit code)

Default value: NULL

nextdgtmodkey Identifies the digit modification table and associated primary key to call next. This is a way of changing a non-key parameter on a match on the key field (*dnType* in the AID).

Type: string

Range: <dmLbl>-<primKey>, where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

FCIMBIT = Forward Call Indicator M-bit

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG-{1-6} = Register index

TNS = Transit Network Selection

Default value: NULL

Input Examples:

```
DLT-DIGITMOD-DN::LucentPbx-CGPN;
```

```
ED-DIGITMOD-DN::LucentPbx-CGPN-ABBREVPVT-DEFAULT:::  
MODTYPE=INSERTDGTS,ALTMODTYPE=REPLACE,  
INSERTDIRN=LEFT,INSERTPOS=1,INSERTDGTS=508804,  
NEWNAI=UNINATNUM,ALTPARAMVALUE=CPC-00;
```

Incoming DM, remove 011 and mark numbers international:

```
ENT-DIGITMOD-DN::MkIntnl-CDPN-unknown-011-10:::  
MODTYPE=STRIPONLY,STRIPDIRN=LEFT,STRIPPOS=1,  
STRIPDGTS=3,NEWNAI=INTNATNUM;
```

Incoming DM, add six digits to LUCENT calling numbers, set CPC:

```
ENT-DIGITMOD-DN::LucentPbx-CGPN-ABBREVPVT-DEFAULT:::  
MODTYPE=INSERTDGTS,ALTMODTYPE=REPLACE,  
INSERTDIRN=LEFT,INSERTPOS=1,INSERTDGTS=508804,  
NEWNAI=UNINATNUM,ALTPARAMVALUE=CPC-00;
```

```
RTRV-DIGITMOD-DN::MkIntnl-CDPN-unknown-011-10;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"MkIntnl-CDPN-unknown-011-10:MODTYPE=STRIPONLY,  
ALTMODTYPE=NOACTION,MAXDGTS=31,STRIPDIRN=LEFT,  
STRIPPOS=1,STRIPDGTS=3,STRIPDEST=NULL,  
INSERTDIRN=LEFT,INSERTPOS=0,INSERTDGTS=NULL,  
INSERTSRC=NULL,NEWNAI=INTNATNUM,NEWNP=NULL,  
ALTPARAMVALUE=NULL,NEXTDGTMODKEY=NULL"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-DIGITMOD-GEN

Commands:

DLT-DIGITMOD-GEN: Delete Digit Modification Generic

ED-DIGITMOD-GEN: Edit Digit Modification Generic

ENT-DIGITMOD-GEN: Enter Digit Modification Generic

RTRV-DIGITMOD-GEN: Retrieve Digit Modification Generic

Descriptions:

DLT-DIGITMOD-GEN lets the user delete a digit modification object keyed for generic digits or generic address parameters.

ED-DIGITMOD-GEN lets the user change a digit modification object keyed for generic digits or generic address parameters. Use this command to change the numeric value representing the type of generic digits or generic address parameters, the leading digits of the number to match, the type of modification, the type of modification for an alternate parameter, how to strip or insert digits, an alternate parameter to modify, and the digit modification to call next.

ENT-DIGITMOD-GEN lets the user establish a digit modification object keyed for generic digits or generic address parameters. Generic digits are digit strings that represent various Advanced Intelligent Network (AIN) functions; for example, the value "01" means "Authorization Code". Generic address parameters are digit strings that represent various network entities; for example, the value "00" means "Directory Number". Use this command to define the name of the digit modification, whether the digit modification applies to generic digits or generic address parameters, the numeric value representing the type of generic digits or generic address parameters, the leading digits of the number to match, the type of modification, the type of modification for an alternate parameter, how to strip or insert digits, an alternate parameter to modify, and the digit modification to call next.

RTRV-DIGITMOD-GEN lets the user retrieve the attributes of a digit modification object keyed for generic digits or generic address parameters.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-DIGITMOD-GEN:[TID]:<digitModGenAid>:[CTAG];  
ED-DIGITMOD-GEN:[TID]:<digitModGenAid>:[CTAG]::  
    [MODTYPE=<modtype>],[ALTMODTYPE=<altmodtype>],  
    [STRIPDIRN=<stripdirn>],[STRIPPOS=<strippos>],  
    [STRIPDGTS=<stripdgts>][STRIPDEST=<stripdest>],  
    [INSERTDIRN=<insertdirn>],[INSERTPOS=<insertpos>],  
    [INSERTDGTS=<insertdgts>],[INSERTSRC=<insertsrc>],  
    [ALTPARAMVALUE=<altparamvalue>],  
    [NEXTDGTMODKEY=<nextdgtmodkey>];  
ENT-DIGITMOD-GEN:[TID]:<digitModGenAid>:[CTAG]::  
    [MODTYPE=<modtype>],[ALTMODTYPE=<altmodtype>],  
    [STRIPDIRN=<stripdirn>],[STRIPPOS=<strippos>],  
    [STRIPDGTS=<stripdgts>][STRIPDEST=<stripdest>],  
    [INSERTDIRN=<insertdirn>],[INSERTPOS=<insertpos>],  
    [INSERTDGTS=<insertdgts>],[INSERTSRC=<insertsrc>],  
    [ALTPARAMVALUE=<altparamvalue>],  
    [NEXTDGTMODKEY=<nextdgtmodkey>];  
RTRV-DIGITMOD-GEN:[TID]:[<digitModGenAid>]:[CTAG];
```

Output Format:

```
    SID DATE TIME  
M   CTAG COMPLD  
    "<digitModGenAid>:MODTYPE=<modtype>,  
    ALTMODTYPE=<altmodtype>,STRIPDIRN=<stripdirn>,  
    STRIPPOS=<strippos>,STRIPDGTS=<stripdgts>,  
    STRIPDEST=<stripdest>,INSERTDIRN=<insertdirn>,  
    INSERTPOS=<insertpos>,INSERTDGTS=<insertdgts>,  
    INSERTSRC=<insertsrc>,  
    ALTPARAMVALUE=<altparamvalue>,  
    NEXTDGTMODKEY=<nextdgtmodkey>"  
;
```

Parameters:

digitModGenAid Identifies the AID as a digit modification object keyed for generic digits or generic address parameters. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all digit modification objects keyed to generic digits or generic address parameters will be returned.

Type: DigitModGenAid

Range: <dmLbl>[-<genType>[-<nbrType>[-<digits>]]],

where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 characters;

genType (optional only in RTRV) identifies the primary key that applies to the specified digit modification table as either a generic address parameter or generic digits or a (user-defined) generic parameter, with values of:

GAP = generic address parameter

GENDGTS = generic digits (you cannot select this value unless a generic information element of this type has been defined previously with ENT-DEF-GENIE)

GP = generic parameter (you cannot select this value unless a generic information element of this type has been defined previously with ENT-DEF-GENIE)

nbrType (optional only in RTRV) identifies the numeric value representing the type of generic digits or generic address parameters, with values of:

0-255 for GAP

0-31 for GENDGTS

0-255 for GP

digits identifies the leading digits of the number to be matched as a string of 1-31 digits with a default of "DEFAULT". When the value of *genType-nbrType* is "GENDGTS-9", the value of *digits* is a string of either three or eight digits. When the value is three digits, the range is {000-127}. When the value is eight digits, the range for the first three digits is {000-127} and the range for the last five digits is {00000-16383}. When the value of *genType-nbrType* is "GP-195", the value of *digits* is a string of eight digits.

Default value: none

modtype Identifies the type of digit modification.

Type: enum

Range: DELETE = removes the parameter
INSERTDGTS = insert the digits specified by *insertDgts*
INSERTSRC = insert digits from the specified source
NOACTION = no action taken
REPLACEDGTS = replaces digits with those specified by
the *insertDgts* parameter
STRIPINSERTDGTS = removes the number of digits
specified by *stripDgts* and inserts the digits specified by
insertDgts
STRIPINSERTSRC = removes the number of digits
specified by *stripDgts* and inserts the digits from the
specified source
STRIPONLY = removes the number of digits specified by
the *stripDgts* parameter

Default value: NOACTION

altmodtype Identifies the type of digit modification for the alternate parameter.

Type: enum

Range: DELETE = removes the alternate parameter
NOACTION = no action taken
REPLACE = assigns a value, specified by *altParamValue*, to
the alternate parameter

Default value: NOACTION

stripdirn Identifies the direction, relative to the first or last digit in the string, of
the position in the digit string where stripping begins.

Type: enum

Range: LEFT = starts at the first digit in the string, moves right
RIGHT = starts at the last digit in the string, moves left

Default value: LEFT

strippos Identifies the position in the digit string where stripping begins. The
value cannot be “0” when the modification involves digit stripping.

Type: integer

Range: {0-31}

Default value: 1

stripdgt Identifies the number of digits to strip. The value cannot be “0” when
the modification involves digit stripping.

Type: integer

Range: {0-31}

Default value: 0

stripdest Identifies a parameter or register for storing the stripped digits. REG-{1-6} are scratchpad registers for holding digits during a translation. These registers are only valid during one call translation; that is, they cannot be passed from one call to another.

Type: enum

Range: CPC = Calling Party Category parameter
OLI = Originating Line Information parameter
REG-1 = scratchpad register 1
REG-2 = scratchpad register 2
REG-3 = scratchpad register 3
REG-4 = scratchpad register 4
REG-5 = scratchpad register 5
REG-6 = scratchpad register 6

Default value: NULL

insertdirn Identifies the direction, relative to the first or last digit in the string, of the position in the digit string where digit insertion begins.

Type: enum

Range: LEFT = starts at the first digit in the string, moves right
RIGHT = starts at the last digit in the string, moves left

Default value: LEFT

insertpos Identifies the position in the digit string where digit insertion begins. The value cannot be "0" when the modification involves digit insertion.

Type: integer

Range: {0-31}

Default value: 1

insertdgts Identifies the digits to insert. The value cannot be "NULL" when the modification involves digit insertion.

Type: string

Range: 1-31 digits

Default value: NULL

insertsrc Identifies a parameter or register as the source of the inserted digits. REG-{1-6} are scratchpad registers for holding digits during a translation. These registers are only valid during one call translation; that is, they cannot be passed from one call to another.

Type: enum

Range: COUNTRY = country code
CPC = Calling Party Category parameter
OLI = Originating Line Information parameter
REG-1 = scratchpad register 1
REG-2 = scratchpad register 2
REG-3 = scratchpad register 3
REG-4 = scratchpad register 4
REG-5 = scratchpad register 5
REG-6 = scratchpad register 6

Default value: NULL

altparamvalue Identifies a parameter and associated value that act as an alternate key. This is a way of changing a non-key parameter on a match on the key field (*dnType* in the AID).

Type: string

Range: <altParam>-<altValue>, where:

altParam identifies the name of the applicable non-key parameter, with values of:

- CIP = Carrier Information Parameter
- CPC = Calling Party Category
- CSI = Carrier Selection Information
- FCIMBIT = Forward Call Indicator M-bit
- OLI = Originating Line Information
- TNS = Transit Network Selection

altValue identifies, when the value of *altModType* is “NOACTION” or “REPLACE” (leave blank when the value of *altModType* is “DELETE”), the new value applicable to the specified non-key parameter, with values of:

CIP: 0-9999

CPC: 00-FF (hexadecimal)

CSI:

PRESUBDIAL = presubscribed and input by calling party

PRESUBNOTDIAL = presubscribed and not input by calling party

PRESUBUNKNOWN = presubscribed, input by calling party undetermined

NOTPRESUB = not presubscribed and input by calling party

UNKNOWN = no indication

FCIMBIT:

0 = CDPN not translated

1 = CDPN translated

DEFAULT

NOTPRSNT

OLI: 00-FF (hexadecimal)

TNS: {0-9999}-{0-255} (denotes a carrier and either a CAS 0ZZ/1NX code or an ISUP circuit code)

Default value: NULL

nextdgtmodkey Identifies the digit modification table and associated primary key to call next. This is a way of changing a non-key parameter on a match on the key field (*genType* in the AID).

Type: string

Range: <dmLbl>-<primKey>, where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

FCIMBIT = Forward Call Indicator M-bit

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG-{1-6} = Register index

TNS = Transit Network Selection

Default value: NULL

Input Examples:

```
DLT-DIGITMOD-GEN::LucentPbx-GENDGTS-01-1234;
```

```
ED-DIGITMOD-GEN::LucentPbx-GENDGTS-01-1234:::  
  MODTYPE=INSERTDGTS,ALTMODTYPE=REPLACE,  
  INSERTDIRN=LEFT,INSERTPOS=1,INSERTDGTS=508804,  
  ALTPARAMVALUE=CPC-00;
```

```
ENT-DIGITMOD-GEN::LucentPbx-GENDGTS-01-1234:::  
  MODTYPE=INSERTDGTS,ALTMODTYPE=REPLACE,  
  INSERTDIRN=LEFT,INSERTPOS=1,INSERTDGTS=508804,  
  ALTPARAMVALUE=CPC-00;
```

```
RTRV-DIGITMOD-GEN::LucentPbx-GENDGTS-01-1234;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "LucentPbx-GENDGTS-01-1234:MODTYPE=INSERTDGTS,
    ALTMODTYPE=REPLACE,STRIPDIRN=LEFT,STRIPPOS=1,
    STRIPDGTS=3,STRIPDEST=NULL,INSERTDIRN=LEFT,
    INSERTPOS=0,INSERTDGTS=NULL,INSERTSRC=NULL,
    NEWNAI=INTNATNUM,ALTPARAMVALUE=NULL,
    NEXTDGTMODKEY=NULL"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-DIGITMOD-PARAM

Commands:

DLT-DIGITMOD-PARAM: Delete Digit Modification Parameter

ED-DIGITMOD-PARAM: Edit Digit Modification Parameter

ENT-DIGITMOD-PARAM: Enter Digit Modification Parameter

RTRV-DIGITMOD-PARAM: Retrieve Digit Modification Parameter

Descriptions:

DLT-DIGITMOD-PARAM lets the user delete a digit modification object keyed to a call parameter.

ED-DIGITMOD-PARAM lets the user change a digit modification object keyed to a call parameter. Use this command to change the value applicable to the specified parameter, the type of modification, the type of modification for an alternate parameter, the new value for the parameter, the alternate parameter to modify, and the digit modification to call next.

ENT-DIGITMOD-PARAM lets the user establish a digit modification object keyed to a call parameter. Use this command to define the digit modification name, the parameter to which the digit modification applies, the value applicable to the specified parameter, the type of modification, the type of modification for an alternate parameter, the new value for the parameter, an alternate parameter to modify, and the digit modification to call next.

RTRV-DIGITMOD-PARAM lets the user retrieve the attributes of a digit modification object keyed to a call parameter.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-DIGITMOD-PARAM:[TID]:<digitModParamAid>:[CTAG];  
ED-DIGITMOD-PARAM:[TID]:<digitModParamAid>:[CTAG]::  
[MODTYPE=<modtype>],[ALTMODTYPE=<altmodtype>],  
[NEWVALUE=<newvalue>],  
[ALTPARAMVALUE=<altparamvalue>],  
[NEXTDGTMODKEY=<nextdgtmodkey>];  
ENT-DIGITMOD-PARAM:[TID]:<digitModParamAid>:[CTAG]::  
[MODTYPE=<modtype>],[ALTMODTYPE=<altmodtype>],  
[NEWVALUE=<newvalue>],  
[ALTPARAMVALUE=<altparamvalue>],  
[NEXTDGTMODKEY=<nextdgtmodkey>];  
RTRV-DIGITMOD-PARAM:[TID]:[<digitModParamAid>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
  "<digitModParamAid>:MODTYPE=<modtype>,  
    ALTMODTYPE=<altmodtype>,NEWVALUE=<newvalue>,  
    ALTPARAMVALUE=<altparamvalue>,  
    NEXTDGTMODKEY=<nextdgtmodkey>"  
;
```

Parameters:

digitModParamAid Identifies the AID as a digit modification object keyed to a call parameter. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all digit modification objects keyed to a call parameter will be returned.

Type: DigitModParamAid

Range: <dmLbl>[-<primKey>[-<value>]],
where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

primKey (optional only in RTRV) identifies the primary key applicable to the specified digit modification table as a type of call parameter, with values of:

CALLTYPE = type of call (Class 5)
CIP = Carrier Information Parameter (for ISUP only)
CPC = Calling Party Category
CSI = Carrier Selection Information
FCIMBIT = Forward Call Indicator M-bit

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

value identifies the value applicable to the specified
parameter, with values of:

CALLTYPE:

CUTTHRU

DEFAULT

DIR_ASSISTANCE

EMERGENCY

INTERLATA

INTERLATAOPREQ

INTNATNUM

INTNATOPREQ

INTRALATA

LOCAL_RATE

LOCALNUMBER

LOCALOPREQ

N11

NATNUM

NONUMOPREQ

NOTPRSNT

NOTSPEC

PREMIUM_RATE

TOLL_DIR_ASSIST

TOLLFREE

CIP: 0-9999, DEFAULT, NOTPRSNT

CPC: 00-FF (hexadecimal) , DEFAULT,
NOTPRSNT

CSI:

DEFAULT = matches all numbers

NOTPRESUB = not presubscribed and input by
calling party

NOTPRSNT = matches calls without CSI

PRESUBDIAL = presubscribed and input by
calling party

PRESUBNOTDIAL = presubscribed and not
input by calling party

PRESUBUNKNOWN = presubscribed, input by
calling party undetermined

UNKNOWN = no indication

FCIMBIT:

0 = CDPN not translated

1 = CDPN translated

DEFAULT = matches all numbers

NOTPRSNT = matches calls without an FCI

JIP: 200000-999999, DEFAULT, NOTPRSNT
LATA: 200-99999, DEFAULT, NOTPRSNT
OLI: 00-FF (hexadecimal), DEFAULT, NOTPRSNT

Default value: none

modtype Identifies the type of digit modification.

Type: enum

Range: DELETE = removes the parameter

NOACTION = no action taken

REPLACE = assigns a value, specified by *altParamValue*, to
the parameter

Default value: NOACTION

altmodtype Identifies the type of digit modification for the alternate parameter.

Type: enum

Range: DELETE = removes the alternate parameter

NOACTION = no action taken

REPLACE = assigns a value, specified by *altParamValue*, to
the alternate parameter

Default value: NOACTION

newvalue Identifies the new value applicable to the specified parameter. The value cannot be specified when the value of *primKey* is CALLTYPE. The value cannot be NULL when the value of *modType* is REPLACE.

Type: string

Range: CIP: 0-9999, DEFAULT, NOTPRSNT

CPC: 00-FF (hexadecimal) , DEFAULT, NOTPRSNT

JIP: 200000-999999, DEFAULT, NOTPRSNT

LATA: 200-99999, DEFAULT, NOTPRSNT

OLI: 00-FF (hexadecimal), DEFAULT, NOTPRSNT

Default value: NULL

altparamvalue Identifies a parameter and associated value that act as an alternate key. This is a way of changing a non-key parameter (that is, the alternate key cannot be the same as the AID's primary key) on a match on the key field (*dnType* in the AID).

Type: string

Range: <altParam>-<altValue>, where:

altParam identifies the name of the applicable non-key parameter, with values of:

- CIP = Carrier Information Parameter
- CPC = Calling Party Category
- CSI = Carrier Selection Information
- FCIMBIT = Forward Call Indicator M-bit
- OLI = Originating Line Information
- TNS = Transit Network Selection

altValue identifies, when the value of *altModType* is "NOACTION" or "REPLACE" (leave blank when the value of *altModType* is "DELETE"), the new value applicable to the specified non-key parameter, with values of:

CIP: 0-9999

CPC: 00-FF (hexadecimal)

CSI:

PRESUBDIAL = presubscribed and input by calling party

PRESUBNOTDIAL = presubscribed and not input by calling party

PRESUBUNKNOWN = presubscribed, input by calling party undetermined

NOTPRESUB = not presubscribed and input by calling party

UNKNOWN = no indication

FCIMBIT:

0 = CDPN not translated

1 = CDPN translated

DEFAULT = matches all numbers

NOTPRSNT = matches calls without an FCI

OLI: 00-FF (hexadecimal)

TNS: {0-9999}-{0-255} (denotes a carrier and either a CAS 0ZZ/1NX code or an ISUP circuit code)

Default value: NULL

nextdgtmodkey Identifies the digit modification table and associated primary key to call next. This is a way of changing a non-key parameter on a match on the key field (*primKey* in the AID).

Type: string

Range: <dmLbl>-<primKey>, where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

FCIMBIT = Forward Call Indicator M-bit

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG-{1-6} = Register index

TNS = Transit Network Selection

Default value: NULL

Input Examples:

```
DLT-DIGITMOD-PARAM::LucentPbx-LATA-128;  
ED-DIGITMOD-PARAM::LucentPbx-LATA-128:::  
  MODTYPE=REPLACE,NEWVALUE=126;  
ENT-DIGITMOD-PARAM::LucentPbx-LATA-128:::  
  MODTYPE=REPLACE,NEWVALUE=126;  
RTRV-DIGITMOD-PARAM::LucentPbx-LATA-128;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"LucentPbx-LATA-128:MODTYPE=REPLACE,  
  ALTMODTYPE=NOACTION,NEWVALUE=126,  
  ALTPARAMVALUE=NULL,NEXTDGTMODKEY=NULL"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-DIGITMOD-TNS

Commands:

DLT-DIGITMOD-TNS: Delete Digit Modification TNS

ED-DIGITMOD-TNS: Edit Digit Modification TNS

ENT-DIGITMOD-TNS: Enter Digit Modification TNS

RTRV-DIGITMOD-TNS: Retrieve Digit Modification TNS

Descriptions:

DLT-DIGITMOD-TNS lets the user delete a digit modification object keyed for the transit network selection (TNS) parameter, which is the circuit code for ISUP calls, and the Carrier or 0ZZ codes for CAS Feature Group D.

ED-DIGITMOD-TNS lets the user change a digit modification object keyed for the transit network selection (TNS) parameter, which is the circuit code for ISUP calls, and the Carrier or 0ZZ codes for CAS Feature Group D. Use this command to change the carrier code, the ISUP circuit code or the CAS 0ZZ or 1NX codes, the incoming trunk group protocol, the type of modification, the type of modification for an alternate parameter, the new value for the carrier code, the new value for the ISUP circuit code or the CAS 0ZZ or 1NX codes, an alternate parameter to modify, and the digit modification to call next.

ENT-DIGITMOD-TNS lets the user establish a digit modification object keyed for the transit network selection (TNS) parameter, which is the circuit code for ISUP calls, or the Carrier or 0ZZ codes for CAS Feature group D. Use this command to define the name of the digit modification, the carrier code, the ISUP circuit code or the CAS 0ZZ or 1NX codes, the incoming trunk group protocol, the type of modification, the type of modification for an alternate parameter, the new value for the carrier code, the new value for the ISUP circuit code or the CAS 0ZZ or 1NX codes, an alternate parameter to modify, and the digit modification to call next.

RTRV-DIGITMOD-TNS lets the user retrieve the attributes of a digit modification object keyed for the transit network selection (TNS) parameter, which is the circuit code for ISUP calls, and the Carrier or 0ZZ codes for CAS Feature group D.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-DIGITMOD-TNS:[TID]:<digitModTnsAid>:[CTAG];  
ED-DIGITMOD-TNS:[TID]:<digitModTnsAid>:[CTAG]::  
    [MODTYPE=<modtype>],[ALTMODTYPE=<altmodtype>],  
    [NEWCARRIER=<newcarrier>],  
    [NEWCALLTYPECODE=<newcalltypecode>],  
    [ALTPARAMVALUE=<altparamvalue>],  
    [NEXTDGTMODKEY=<nextdgtmodkey>];  
ENT-DIGITMOD-TNS:[TID]:<digitModTnsAid>:[CTAG]::  
    [MODTYPE=<modtype>],[ALTMODTYPE=<altmodtype>],  
    [NEWCARRIER=<newcarrier>],  
    [NEWCALLTYPECODE=<newcalltypecode>],  
    [ALTPARAMVALUE=<altparamvalue>],  
    [NEXTDGTMODKEY=<nextdgtmodkey>];  
RTRV-DIGITMOD-TNS:[TID]:[<digitModTnsAid>]:[CTAG];
```

Output Format:

```
      SID DATE TIME  
M    CTAG COMPLD  
      "<digitModTnsAid>:MODTYPE=<modtype>,  
      ALTMODTYPE=<altmodtype>,NEWCARRIER=<newcarrier>,  
      NEWCALLTYPECODE=<newcalltypecode>,  
      ALTPARAMVALUE=<altparamvalue>,  
      NEXTDGTMODKEY=<nextdgtmodkey>"  
;
```

Parameters:

digitModTnsAid Identifies the AID as a digit modification object keyed for the transit network selection (TNS) parameter, which is the circuit code for ISUP calls, or the Carrier or 0ZZ codes for CAS Feature group D. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all TNS-keyed digit modification objects configured in the system will be returned.

Type: DigitModTnsAid

Range: <dmLbl>[-<TNS>[-<carrier>[-<callTypeCode >[-<prtcl>]]]],
where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

TNS (optional only in RTRV) identifies the primary key that applies to the specified digit modification table with "TNS" as the sole value;

carrier identifies the carrier code as a string of 1-4 digits, "NOTPRSNT", or the default value "DEFAULT";

callTypeCode identifies the ISUP circuit code or the CAS 0ZZ or 1NX codes as a string of 1-3 digits with a default of "DEFAULT" (set *callTypeCode* to DEFAULT if *carrier* is DEFAULT or NOTPRSNT);

prtcl identifies the incoming trunk group protocol with values of CAS or ISUP (the default value – set *prtcl* to ISUP if *callTypeCode* is DEFAULT).

Default value: none

modtype Identifies the type of digit modification.

Type: enum

Range: DELETE = removes the parameter
NOACTION = no action taken
REPLACECALLTYPE = replaces the call type code with that specified by the *newCallTypeCode* parameter
REPLACECARRIER = replaces the carrier with that specified by the *newCarrier* parameter
REPLACETNS= replaces both the carrier and the call type code with those specified by the *newCarrier* and *newCallTypeCode* parameters

Default value: NOACTION

altmodtype Identifies the type of digit modification for the alternate parameter.

Type: enum

Range: DELETE = removes the alternate parameter

NOACTION = no action taken

REPLACE = assigns a value, specified by *altParamValue*, to
the alternate parameter

Default value: NOACTION

newcarrier Identifies the new value for the carrier code. The value cannot be
“NULL” when the value of *modType* is “REPLACETNS” or
“REPLACECARRIER”

Type: string

Range: {0-9999}

Default value: NULL

newcalltypecode Identifies the new value for the call type code. The value
cannot be “NULL” when the value of *modType* is “REPLACETNS” or
“REPLACECALLTYPE”

Type: string

Range: {0-255}

Default value: NULL

altparamvalue Identifies a parameter and associated value that act as an alternate key. This is a way of changing a non-key parameter on a match on the key field (*dnType* in the AID).

Type: string

Range: <altParam>-<altValue>, where:

altParam identifies the name of the applicable non-key parameter, with values of:

CIP = Carrier Information Parameter

CPC = Calling Party Category

CSI = Carrier Selection Information

FCIMBIT = Forward Call Indicator M-bit

OLI = Originating Line Information

altValue identifies, when the value of *altModType* is “NOACTION” or “REPLACE” (leave blank when the value of *altModType* is “DELETE”), the new value applicable to the specified non-key parameter, with values of:

CIP: 0-9999

CPC: 00-FF (hexadecimal)

CSI:

PRESUBDIAL = presubscribed and input by calling party

PRESUBNOTDIAL = presubscribed and not input by calling party

PRESUBUNKNOWN = presubscribed, input by calling party undetermined

NOTPRESUB = not presubscribed and input by calling party

UNKNOWN = no indication

FCIMBIT:

0 = CDPN not translated

1 = CDPN translated

DEFAULT

NOTPRSNT

OLI: 00-FF (hexadecimal)

Default value: NULL

nextdgtmodkey Identifies the digit modification table and associated primary key to call next. This is a way of changing a non-key parameter on a match on the key field (*TNS* in the AID).

Type: string

Range: <dmLbl>-<primKey>, where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

FCIMBIT = Forward Call Indicator M-bit

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG-{1-6} = Register index

TNS = Transit Network Selection

Default value: NULL

Input Examples:

```
DLT-DIGITMOD-TNS::LucentPbx-TNS-1-DEFAULT-ISUP;  
ED-DIGITMOD-TNS::LucentPbx-TNS-1-DEFAULT-ISUP::  
  MODTYPE=REPLACECARRIER,NEWCARRIER=2;  
ENT-DIGITMOD-TNS::LucentPbx-TNS-1-DEFAULT-ISUP::  
  MODTYPE=REPLACECARRIER,NEWCARRIER=2;  
RTRV-DIGITMOD-TNS::LucentPbx-TNS-1-DEFAULT-ISUP;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"LucentPbx-TNS-1-DEFAULT-ISUP:  
  MODTYPE=REPLACECARRIER,ALTMODTYPE=NOACTION,  
  NEWCARRIER=2,NEWCALLTYPECODE=NULL,  
  ALTPARAMVALUE=NULL,NEXTDGTMODKEY=NULL"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-LIST-TOLLFREE

Commands:

DLT-LIST-TOLLFREE: Delete List Tollfree
ED-LIST-TOLLFREE: Edit List Tollfree
ENT-LIST-TOLLFREE: Enter List Tollfree
RTRV-LIST-TOLLFREE: Retrieve List Tollfree

Descriptions:

DLT-LIST-TOLLFREE lets the user delete from the system a toll-free number that substitutes for a local number on the switch.

ED-LIST-TOLLFREE lets the user change the local number (or its associated carrier) for which the designated toll-free number substitutes. However, a call to the toll-free number will fail if you change the carrier to one that is not the actual carrier for the local number. The local number and its associated carrier cannot both be "NULL".

ENT-LIST-TOLLFREE lets the user establish a toll-free number to substitute for a local number on the switch. When you specify a local number to substitute for the toll-free number, the CDPN (the toll-free number) is translated to the local number and the original CDPN becomes the Generic Address Parameter. When you specify a carrier, the carrier is used for routing the call according to the translation plan for the incoming interface; however, if the translation plan points to a partition that does not use the carrier as a key, the carrier will not be used as a routing key and the carrier becomes the TNS parameter for the call. You must specify a local number, a carrier, or both; allowing both parameters to default to "NULL" causes the command to fail. ENT-LIST-TOLLFREE will not work unless ENT-TOLLFREE-NPA, ENT-NATIONAL-NPA (when specifying *newDn*), and ENT-CARRIER (when specifying *carrier*) have already been issued.

RTRV-LIST-TOLLFREE lets the user retrieve the local numbers and associated carriers for which a toll-free number substitutes.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-LIST-TOLLFREE:[TID]:<tollFreeDn>:[CTAG];  
ED-LIST-TOLLFREE:[TID]:<tollFreeDn>:[CTAG]::  
[NEWDN=<newdn>],[CARRIER=<carrier>];  
ENT-LIST-TOLLFREE:[TID]:<tollFreeDn>:[CTAG]::  
[NEWDN=<newdn>],[CARRIER=<carrier>];  
RTRV-LIST-TOLLFREE:[TID]:[<tollFreeDn>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
  "<tollFreeDn>:NEWDN=<newdn>,CARRIER=<carrier>"  
;
```

Parameters:

- tollFreeDn** Identifies the AID as a toll-free number substituted for a local number on the switch.
Type: string
Range: exactly 10 digits
Default value: none
- newDn** Identifies an NANP number translated to the designated toll-free number. Leaving the value blank (NULL) lets you establish a toll-free number without a substituted local number associated with it.
Type: string
Range: exactly 10 digits
Default value: NULL
- carrier** Identifies the carrier for the local number for which the designated toll-free number is substituted.
Type: integer
Range: {0-9999}
Default value: NULL

Input Examples:

```
DLT-LIST-TOLLFREE::8003825968;  
ED-LIST-TOLLFREE::8003825968:::NEWDN=5088048202,  
    CARRIER=1;  
ENT-LIST-TOLLFREE::8003825968:::NEWDN=5088048202,  
    CARRIER=1;  
RTRV-LIST-TOLLFREE;
```

Output Example:

```
    lucent 2005-06-24 14:37:49  
M    0 COMPLD  
    "8003825968:NEWDN=5088048202,CARRIER=1"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-PRFL-FAILCND

Commands:

DLT-PRFL-FAILCND: Delete Profile Failure Condition

ED-PRFL-FAILCND: Edit Profile Failure Condition

ENT-PRFL-FAILCND: Enter Profile Failure Condition

RTRV-PRFL-FAILCND: Retrieve Profile Failure Condition

Descriptions:

DLT-PRFL-FAILCND lets the user delete a failure condition profile from the system.

ED-PRFL-FAILCND lets the user change a failure condition profile. Use ED-PRFL-FAILCND to change the action taken on encountering a specific failure condition, and either the treatment or the release cause identifier.

ENT-PRFL-FAILCND lets the user establish a failure condition profile that determines the action taken (release the call with an error message or provide some sort of treatment) on encountering a specific failure condition. The Switch supports up to 10 failure condition profiles.

RTRV-PRFL-FAILCND lets the user retrieve the properties of a failure condition profile.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-PRFL-FAILCND:[TID]:<failCndAid>:[CTAG];

ED-PRFL-FAILCND:[TID]:<failCndAid>:[CTAG]::
[FAILTYPE=<failtype>],[TREATMENT=<treatment>],
[RELEASE=<release>];

ENT-PRFL-FAILCND:[TID]:<failCndAid>:[CTAG]::
FAILTYPE=<failtype>,[TREATMENT=<treatment>],
[RELEASE=<release>];

RTRV-PRFL-FAILCND:[TID]:[<failCndAid>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<failCndAid>:FAILTYPE=<failtype>,
    TREATMENT=<treatment>,RELEASE=<release>"
;
```

Parameters:

failCndAid Identifies the AID as a failure condition profile. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all failure condition profiles configured in the system will be returned. Specifying just the first part of the AID (in RTRV) is equivalent to "ALL"; that is, by leaving the subsequent fields blank, the system returns all configured failure conditions and associated protocols for the designated profile.

Type: string

Range: <failCndPrfl>[-<cnd>[-<prtcl>]], where

failCndPrfl identifies the name of the failure condition profile with a string of up to 10 alphanumeric characters. The DEFAULT profile shows the factory default settings and cannot be edited or deleted.

cnd identifies the name of the failure condition with a string of up to 21 alphanumeric characters.

prtcl identifies the incoming protocol type, with values of:

CASIF = CAS interface
CASTRK = CAS trunk
GR303 = GR303 interface
ISDNIF = ISDN interface
ISUP = ISUP trunk
MGCP = MGCP interface
SIP = SIP trunk

Default value: none

failType Identifies whether the failure condition yields a release cause or a treatment.

Type: enum

Range: RELEASE
TREAT

Default value: RELEASE

treatment Identifies the name of the previously-defined treatment, but only when the value of *failType* is “TREAT”. The value cannot be “NULL” when the value of *failType* is “TREAT”.

Type: string

Range: up to 10 alphanumeric characters

Default value: NULL

release Identifies the name of the release cause, but only when the value of *failType* is “RELEASE”. The value cannot be “NULL” when the value of *failType* is “RELEASE”.

Type: string

Range: <rlsCause>-<rlsLoc>-<rlsStd>, where

rlsCause identifies the protocol-dependent release cause value with an integer from 1-127

rlsLoc identifies the location value to set in the cause value, with values of:

INTNET = International network

LOCALIF = Local interface

NETINTER = Network beyond interworking point

NOINFOAV = No information available

PRIVNETLU = Private network serving the local user

PRIVNETRU = Private network serving the remote user

PUBNETLU = Public network serving the local user

PUBNETRU = Public network serving the remote user

TRANNET = Transit network

USER = User

rlsStd identifies the reference standard to use when generating the release cause code. Refer to GR246 for definitions of these codes. Values are ANSI and CCITT.

Default value: NULL

Input Examples:

```
DLT-PRFL-FAILCND::DEFAULT-NORMAL_CLRG-ISUP;
```

```
ED-PRFL-FAILCND::DEFAULT-NORMAL_CLRG-ISUP:::  
  FAILTYPE=RELEASE, RELEASE=16-CCITT;
```

```
ENT-PRFL-FAILCND::DEFAULT-NORMAL_CLRG-ISUP:::  
  FAILTYPE=RELEASE, RELEASE=16-CCITT;
```

```
RTRV-PRFL-FAILCND::DEFAULT;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"DEFAULT-REQ_CHAN_NAVAIL-SIP:FAILTYPE=RELEASE,
  TREATMENT=NULL,RELEASE=44-CCITT"
"DEFAULT-REQ_CHAN_NAVAIL-ISDNIF:FAILTYPE=RELEASE,
  TREATMENT=NULL,RELEASE=44-CCITT"
"DEFAULT-NORMAL_CLRG-ISUP:FAILTYPE=RELEASE,
  TREATMENT=NULL,RELEASE=16-CCITT"
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-TREATMENT
RTRV-FAILCND
```

DLT/ED/ENT/RTRV-PRFL-FRAUDTRAP

Commands:

DLT-PRFL-FRAUDTRAP: Delete Profile Fraud Trap

ED-PRFL-FRAUDTRAP: Edit Profile Fraud Trap

ENT-PRFL-FRAUDTRAP: Enter Profile Fraud Trap

RTRV-PRFL-FRAUDTRAP: Retrieve Profile Fraud Trap

Descriptions:

DLT-PRFL-FRAUDTRAP lets the user delete a fraud trap profile from the system.

ED-PRFL-FRAUDTRAP lets the user change a fraud trap profile that defines how the Switch behaves when encountering a fraud scenario. Use ED-PRFL-FRAUDTRAP to change the action taken on encountering a specific failure condition, and either the treatment or the release cause identifier.

ENT-PRFL-FRAUDTRAP lets the user establish a fraud trap profile that defines how the Switch behaves when encountering a fraud scenario. The Switch can release the call and generate an informational log after a specified duration; it can also create a zero length CDR to track the existence of the call.

RTRV-PRFL-FRAUDTRAP lets the user retrieve the properties of a fraud trap profile.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-PRFL-FRAUDTRAP:[TID]:<fraudTrapPrfl>:[CTAG];  
ED-PRFL-FRAUDTRAP:[TID]:<fraudTrapPrfl>:[CTAG]::  
    [DURATION=<duration>],[LOG=<log>],  
    [ZERODURCDR=<zeroDurCdr>],[RLSCALL=<rlsCall>];  
ENT-PRFL-FRAUDTRAP:[TID]:<fraudTrapPrfl>:[CTAG]::  
    [DURATION=<duration>],[LOG=<log>],  
    [ZERODURCDR=<zeroDurCdr>],[RLSCALL=<rlsCall>];  
RTRV-PRFL-FRAUDTRAP:[TID]:[<fraudTrapPrfl>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<fraudTrapPrfl>:[CTAG]::DURATION=<duration>,
    LOG=<log>,ZERODURCDR=<zeroDurCdr>,
    RLSCALL=<rlsCall>"
;
```

Parameters:

fraudTrapPrfl Identifies the AID as a fraud trap profile. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all fraud trap profiles configured in the system will be returned.

Type: string

Range: up to 10 alphanumeric characters

Default value: none

duration Identifies the duration for the fraud trap.

Type: string

Range: <durationVal>-<units>, where

durationVal identifies the duration value for the fraud trap as an integer from 1-3600

units identifies unit of time for the duration value, with values of DAY, HR, MIN, or SEC

Default value: NULL

log Identifies whether to generate an informational log when the duration timer expires.

Type: BoolYN

Range: N = do not generate an informational log on timer expiry

Y = generate an informational log on timer expiry

Default value: N

zeroDurCdr Identifies whether to generate a zero duration CDR with appropriate flag when the duration timer expires.

Type: BoolYN

Range: N = do not generate a zero duration CDR with appropriate flag on timer expiry

Y = generate a zero duration CDR with appropriate flag on timer expiry

Default value: N

rlsCall Identifies whether to automatically release the call when the duration timer expires.

Type: BoolYN

Range: N = do not automatically release the call on timer expiry
Y = automatically release the call on timer expiry

Default value: N

Input Examples:

```
DLT-PRFL-FRAUDTRAP::TRAPPRFL1;  
ED-PRFL-FRAUDTRAP::TRAPPRFL1:::DURATION=30-MIN,  
LOG=N,ZERODURCDR=N,RLSCALL=N;  
ENT-PRFL-FRAUDTRAP::TRAPPRFL1:::DURATION=30-MIN,  
LOG=N,ZERODURCDR=N,RLSCALL=N;  
RTRV-PRFL-FRAUDTRAP::TRAPPRFL1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"TRAPPRFL1:DURATION=30-MIN,LOG=N,ZERODURCDR=N,  
RLSCALL=N"  
;
```

Related Commands:

RTRV-FRAUDCALLS

DLT/ED/ENT/RTRV-PRFL-PARAMDEFAULTS

Commands:

DLT-PRFL-PARAMDEFAULTS: Delete Profile Failure Condition

ED-PRFL-PARAMDEFAULTS: Edit Profile Parameter Defaults

ENT-PRFL-PARAMDEFAULTS: Enter Profile Parameter Defaults

RTRV-PRFL-PARAMDEFAULTS: Retrieve Profile Parameter Defaults

Descriptions:

DLT-PRFL-PARAMDEFAULTS lets the user delete a parameter defaults profile from the system.

ED-PRFL-PARAMDEFAULTS lets the user change a parameter defaults profile. Use ED-PRFL-PARAMDEFAULTS to change the default values for message blocks when different protocols affect a trunk group.

ENT-PRFL-PARAMDEFAULTS lets the user establish a parameter defaults profile that provides default values for all message blocks when different protocols affect a trunk group.

RTRV-PRFL-PARAMDEFAULTS lets the user retrieve the properties of a parameter defaults profile.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-PRFL-PARAMDEFAULTS: [TID]:<paramDefaultsAid>:
[CTAG];

ED-PRFL-PARAMDEFAULTS: [TID]:<paramDefaultsAid>:
[CTAG]: : [CHRGN=<chrgn>], [CDPN=<cdpn>],
[CGPN=<cgpn>], [OLI=<oli>], [TNS=<tns>], [CIP=<cip>],
[JIP=<jip>], [CALLTYPE=<calltype>], [CSI=<csi>];

ENT-PRFL-PARAMDEFAULTS: [TID]:<paramDefaultsAid>:
[CTAG]: : [CHRGN=<chrgn>], [CDPN=<cdpn>],
[CGPN=<cgpn>], [OLI=<oli>], [TNS=<tns>], [CIP=<cip>],
[JIP=<jip>], [CALLTYPE=<calltype>], [CSI=<csi>];

RTRV-PRFL-PARAMDEFAULTS: [TID]: [<paramDefaultsAid>]:
[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<paramDefaultsAid>:CHRGN=<chrgn>,CDPN=<cdpn>,
  CGPN=<cgpn>,OLI=<oli>,TNS=<tns>,CIP=<cip>,
  JIP=<jip>,CALLTYPE=<calltype>,CSI=<csi>"
;
```

Parameters:

paramDefaultsAid Identifies the AID as a parameter defaults profile. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all parameter defaults profiles configured in the system will be returned.

Type: string

Range: up to 10 alphanumeric characters

Default value: none

chrgn Identifies the default values for the charge number parameter.

Type: string

Range: <action>-<chrgnai>-<nمبر>, where

action identifies whether to use the value entered by this command, with values of:

DEFAULT = when the parameter is not present,
create it and use entered value

OVERRIDE = use entered value only when the
parameter is present

chrgnai identifies the charge number nature of address
indicator, with values of:

CDPNATNUM = ANI of the called party;
national number

CDPSUBSNUM = ANI of the called party;
subscriber number

CDPUNAVAIL = ANI of the called party; no
number present

CGPNATNUM = ANI of the calling party;
national number

CGPSUBSNUM = ANI of the calling party;
subscriber number

UNAVAIL = ANI not available or not provided

nمبر identifies the DN for the charge number with a string of
1-31 digits.

Default value: NULL

cdpn Identifies the default values for the called party number parameter.

Type: string

Range: <action>-<cdnai>-<nubr>, where

action identifies whether to use the value entered by this command, with values of:

DEFAULT = use entered value only when the parameter is not present

OVERRIDE = use entered value regardless of parameter presence

cdnai identifies the called party number nature of address indicator, with values of:

ABBREVPVT = abbreviated private

INTNATNUM = international number

INTNATOPREQ = international operator request

NATNUM = national significant number

NATOPREQ = national (long-distance) operator request

NONUMCUTTHRU = no number provided, cut through to carrier

NONUMOPREQ = no number provided, operator request

SUBOPREQ = subscriber (local) operator request

SUBSNUM = subscriber number

TESTLINE = test line test code

UNKNOWN = unknown

nubr identifies the DN for the called party number with a string of 1-31 digits.

Default value: NULL

- cgpn** Identifies the default values for the calling party number parameter.
- Type:** string
- Range:** <action>-<cgnai>-<pres>-<nubr>, where
- action* identifies whether to use the value entered by this command, with values of:
 - DEFAULT = use entered value only when the parameter is not present
 - OVERRIDE = use entered value regardless of parameter presence
 - cgnai* identifies the called party number nature of address indicator, with values of:
 - ABBREVPVT = abbreviated private
 - NUNIINTNATNUM = non-unique international number
 - NUNINATNUM = non-unique national number
 - NUNISUBSNUM = non-unique subscriber number
 - TESTLINE = test line test code
 - UNIINTNATNUM = unique international number
 - UNINATNUM = unique national number
 - UNISUBSNUM = unique subscriber number
 - pres* identifies whether address presentation is allowed, with values of:
 - ALLOWED = address presentation is allowed
 - RESTRICTED = address presentation is not allowed
 - nubr* identifies the DN for the calling party number with a string of 1-31 digits.
- Default value:** NULL
- oli** Identifies the default values for the Originating Line Information parameter.
- Type:** string
- Range:** <action>-<oliVal>, where
- action* identifies whether to use the value entered by this command, with values of:
 - DEFAULT = use entered value only when the parameter is not present
 - OVERRIDE = use entered value regardless of parameter presence
 - oliVal* identifies the value for the Originating Line Information parameter with a hexadecimal string from 00-FF
- Default value:** NULL

- tns** Identifies the default values for the Transit Network Selection parameter.
- Type:** string
- Range:** <action>-<carrierCode>-<callTypeCode>, where
- action* identifies whether to use the value entered by this command, with values of:
 - DEFAULT = use entered value only when the parameter is not present
 - OVERRIDE = use entered value regardless of parameter presence
 - carrierCode* identifies the value for the inserted carrier portion of the TNS parameter with an integer from 0-9999
 - callTypeCode* identifies the value for the inserted circuit code portion of the TNS parameter with an integer from 0-255
- Default value:** NULL
-
- cip** Identifies the default values for the Carrier Information Parameter.
- Type:** string
- Range:** <action>-<cipVal>, where
- action* identifies whether to use the value entered by this command, with values of:
 - DEFAULT = use entered value only when the parameter is not present
 - OVERRIDE = use entered value regardless of parameter presence
 - cipVal* identifies the value for the Carrier Information Parameter with an integer from 0-9999
- Default value:** NULL
-
- jip** Identifies the default values for the Jurisdiction Information Parameter.
- Type:** string
- Range:** <action>-<jipVal>, where
- action* identifies whether to use the value entered by this command, with values of:
 - DEFAULT = use entered value only when the parameter is not present
 - OVERRIDE = use entered value regardless of parameter presence
 - jipVal* identifies the value for the Jurisdiction Information Parameter with an integer from 200000-999999
- Default value:** NULL

callType Identifies the type of call (Class 5).

Type: enum

Range: CUTTHRU
DIR_ASSISTANCE
EMERGENCY
INTERLATA
INTERLATAOPREQ
INTNATNUM
INTNATOPREQ
INTRALATA
LOCALNUMBER
LOCALOPREQ
N11
NATNUM
NONUMOPREQ
TOLLFREE

Default value: NULL

csi Identifies the default values for the Carrier Selection Information parameter.

Type: string

Range: <action>-<csiVal>, where

action identifies whether to use the value entered by this command, with values of:

DEFAULT = use entered value only when the parameter is not present

OVERRIDE = use entered value regardless of parameter presence

csiVal identifies the value for the Carrier Selection Information parameter with values of:

PRESUBDIAL = presubscribed and input by calling party

PRESUBNOTDIAL = presubscribed and not input by calling party

PRESUBUNKNOWN = presubscribed, input by calling party undetermined

NOTPRESUB = not presubscribed and input by calling party

UNKNOWN = no indication

Default value: NULL

Input Examples:

```
DLT-PRFL-PARAMDEFAULTS::DFLTPRFL1;
```

```
ED-PRFL-PARAMDEFAULTS::DFLTPRFL1:::  
  CHRGN=DEFAULT-CDPNATNUM-5084800909,  
  CDPN=DEFAULT-NATNUM-5084800909,  
  CGPN=DEFAULT-NUNINATNUM-ALLOWED-5088048202,  
  OLI=DEFAULT-2F, TNS=DEFAULT-1-1, CIP=DEFAULT-1,  
  JIP=DEFAULT-508804, CALLTYPE=LOCALNUMBER,  
  CSI=DEFAULT-PRESUBDIAL;
```

```
ENT-PRFL-PARAMDEFAULTS::DFLTPRFL1:::  
  CHRGN=DEFAULT-CDPNATNUM-5084800909,  
  CDPN=DEFAULT-NATNUM-5084800909,  
  CGPN=DEFAULT-NUNINATNUM-ALLOWED-5088048202,  
  OLI=DEFAULT-2F, TNS=DEFAULT-1-1, CIP=DEFAULT-1,  
  JIP=DEFAULT-508804, CALLTYPE=LOCALNUMBER,  
  CSI=DEFAULT-PRESUBDIAL;
```

```
RTRV-PRFL-PARAMDEFAULTS::DFLTPRFL1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
  "DFLTPRFL1:CHRGN=DEFAULT-CDPNATNUM-5084800909,  
    CDPN=DEFAULT-NATNUM-5084800909,  
    CGPN=DEFAULT-NUNINATNUM-ALLOWED-5088048202,  
    OLI=DEFAULT-2F, TNS=DEFAULT-1-1, CIP=DEFAULT-1,  
    JIP=DEFAULT-508804, CALLTYPE=LOCALNUMBER,  
    CSI=DEFAULT-PRESUBDIAL, REG=NULL "  
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-PRFL-PARAMSUPPRESS
```

DLT/ED/ENT/RTRV-PRFL-PARAMSUPPRESS

Commands:

DLT-PRFL-PARAMSUPPRESS: Delete Profile Parameter Suppression

ED-PRFL-PARAMSUPPRESS: Edit Profile Parameter Suppression

ENT-PRFL-PARAMSUPPRESS: Enter Profile Parameter Suppression

RTRV-PRFL-PARAMSUPPRESS: Retrieve Profile Parameter Suppression

Descriptions:

DLT-PRFL-PARAMSUPPRESS lets the user delete a parameter suppression profile from the system. You cannot delete a parameter suppression profile specified as the value for *icParamSuppressPrfl* or *ogParamSuppressPrfl* in ENT-TRKGRP.

ED-PRFL-PARAMSUPPRESS lets the user change a parameter suppression profile. Use ED-PRFL-PARAMSUPPRESS to change which of the various call parameters are suppressed (that is, not sent) in an outgoing IAM.

ENT-PRFL-PARAMSUPPRESS lets the user establish a parameter suppression profile that determines the combination of parameters suppressed (that is, not sent) in an outgoing IAM. IAM parameters apply to signaling protocols as designated in the following table:

	ISUP	SIP	CAS
chrgn	X	X	X
cgpn	X	X	
oli	X	X	X
tns	X	X	X
cip	X	X	
jip	X	X	
gap	X		
gendgts	X		
hopCntr	X		
redirInfo	X	X	
redirNmbr	X	X	
ocn	X	X	

RTRV-PRFL-PARAMSUPPRESS lets the user retrieve the properties of a parameter suppression profile.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-PRFL-PARAMSUPPRESS:[TID]:<suppressPrflId>:[CTAG];  
ED-PRFL-PARAMSUPPRESS:[TID]:<suppressPrflId>:[CTAG]::  
    [CHRGN=<chrgn>],[CGPN=<cgpn>],[OLI=<oli>],  
    [TNS=<tns>],[CIP=<cip>],[JIP=<jip>],[GAP=<gap>],  
    [GENDGTS=<gendgts>],[HOPCNTR=<hopCntr>],  
    [REDIRINFO=<redirInfo>],[REDIRNMBR=<redirNmbr>],  
    [OCN=<ocn>];  
ENT-PRFL-PARAMSUPPRESS:[TID]:<suppressPrflId>:[CTAG]::  
    [CHRGN=<chrgn>],[CGPN=<cgpn>],[OLI=<oli>],  
    [TNS=<tns>],[CIP=<cip>],[JIP=<jip>],[GAP=<gap>],  
    [GENDGTS=<gendgts>],[HOPCNTR=<hopCntr>],  
    [REDIRINFO=<redirInfo>],[REDIRNMBR=<redirNmbr>],  
    [OCN=<ocn>];  
RTRV-PRFL-PARAMSUPPRESS:[TID]:[<suppressPrflId>]:  
    [CTAG];
```

Output Format:

```
    SID DATE TIME  
M    CTAG COMPLD  
    "<suppressPrflId>:CHRGN=<chrgn>,CGPN=<cgpn>,  
    OLI=<oli>,TNS=<tns>,CIP=<cip>,JIP=<jip>,  
    GAP=<gap>,GENDGTS=<gendgts>,HOPCNTR=<hopcntr>,  
    REDIRINFO=<redirinfo>,REDIRNMBR=<redirnmbr>,  
    OCN=<ocn>"  
    ;
```

Parameters:

suppressPrflId Identifies the AID as a parameter suppression profile. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all parameter suppression profiles configured in the system will be returned.

Type: string

Range: up to 10 alphanumeric characters

Default value: none

- chrgn** Identifies whether the charge number parameter is suppressed (not sent) in outgoing IAMs.
Type: BoolYN
Range: Y = suppress (do not send) parameter
N = do not suppress parameter
Default value: N
- cgpn** Identifies whether the calling party number parameter is suppressed (not sent) in outgoing IAMs.
Type: BoolYN
Range: Y = suppress (do not send) parameter
N = do not suppress parameter
Default value: N
- oli** Identifies whether the Originating Line Information parameter is suppressed (not sent) in outgoing IAMs.
Type: BoolYN
Range: Y = suppress (do not send) parameter
N = do not suppress parameter
Default value: N
- tns** Identifies whether the Transit Network Selection parameter is suppressed (not sent) in outgoing IAMs.
Type: BoolYN
Range: Y = suppress (do not send) parameter
N = do not suppress parameter
Default value: N
- cip** Identifies whether the Carrier Information Parameter is suppressed (not sent) in outgoing IAMs.
Type: BoolYN
Range: Y = suppress (do not send) parameter
N = do not suppress parameter
Default value: N
- jip** Identifies whether the Jurisdiction Information Parameter is suppressed (not sent) in outgoing IAMs.
Type: BoolYN
Range: Y = suppress (do not send) parameter
N = do not suppress parameter
Default value: N

- gap** Identifies the type of generic address parameter suppressed (not sent) in outgoing IAMs. You can specify up to 10 generic addresses, separated by ampersands (&). Use “DEFAULT” to specify all generic addresses.
- Type:** string
Range: {0-255}
 DEFAULT
 NULL
Default value: NULL
- genDgts** Identifies the type of generic digits parameter suppressed (not sent) in outgoing IAMs. You can specify up to 10 generic digits, separated by ampersands (&). Use “DEFAULT” to specify all generic addresses.
- Type:** string
Range: {0-31}
 DEFAULT
 NULL
Default value: NULL
- hopCntr** Identifies whether the hop counter value (that is, the allowable number of switches traversed in the call route is suppressed (not sent) in outgoing IAMs.
- Type:** BoolYN
Range: Y = suppress (do not send) value
 N = do not suppress value
Default value: N
- redirInfo** Identifies whether the redirecting information (the redirecting subaddress for ISDN interfaces) is suppressed (not sent) in outgoing IAMs.
- Type:** BoolYN
Range: Y = suppress (do not send) redirecting information
 N = do not suppress redirecting information
Default value: N
- redirNmbr** Identifies whether the redirecting number for ISDN interfaces is suppressed (not sent) in outgoing IAMs.
- Type:** BoolYN
Range: Y = suppress (do not send) redirecting number
 N = do not suppress redirecting number
Default value: N

ocn Identifies whether the Originating Called party Number parameter is suppressed (not sent) in outgoing IAMs.

Type: BoolYN

Range: Y = suppress (do not send) parameter
N = do not suppress parameter

Default value: N

Input Examples:

```
DLT-PRFL-PARAMSUPPRESS::PRFL1;
```

```
ED-PRFL-PARAMSUPPRESS::PRFL1:::CHRG=N,CGPN=N,OLI=N,  
TNS=N,CIP=N,JIP=N,GAP=NULL,GENDGTS=NULL,HOPCNTR=N,  
REDIRINFO=N,REDIRNMBR=N,OCN=N;
```

```
ENT-PRFL-PARAMSUPPRESS::PRFL1:::CHRG=N,CGPN=N,OLI=N,  
TNS=N,CIP=N,JIP=N,GAP=NULL,GENDGTS=NULL,HOPCNTR=N,  
REDIRINFO=N,REDIRNMBR=N,OCN=N;
```

```
RTRV-PRFL-PARAMSUPPRESS::PRFL1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"PRFL1:CHRG=N,CGPN=N,OLI=N,TNS=N,CIP=N,JIP=N,  
GAP=NULL,GENDGTS=NULL,HOPCNTR=N,REDIRINFO=N,  
REDIRNMBR=N,OCN=N"  
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-PRFL-PARAMDEFAULTS
```

DLT/ED/ENT/RTRV-PRFL-SCHED

Commands:

DLT-PRFL-SCHED: Delete Profile Schedule

ED-PRFL-SCHED: Edit Profile Schedule

ENT-PRFL-SCHED: Enter Profile Schedule

RTRV-PRFL-SCHED: Retrieve Profile Schedule

Descriptions:

DLT-PRFL-SCHED lets the user delete a profile for a routing schedule from the system.

ED-PRFL-SCHED lets the user change the days, dates, and times applicable to a profile for a routing schedule. The edit command fails when the edit results in two conflicting schedules for the same profile.

ENT-PRFL-SCHED lets the user establish the days, dates, and times for which a profile applies to a routing schedule.

RTRV-PRFL-SCHED lets the user retrieve the days, dates, and times applicable to a profile for a routing schedule.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-PRFL-SCHED: [TID]:<prflName>:[CTAG];

ED-PRFL-SCHED: [TID]:<prflName>:[CTAG]::[SUN=<sun>],
[MON=<mon>],[TUE=<tue>],[WED=<wed>],[THU=<thu>],
[FRI=<fri>],[SAT=<sat>],[DATE1=<date1>],
[DATE2=<date2>],[DATE3=<date3>],[DATE4=<date4>],
[DATE4=<date5>],[DATE5=<date6>],[DATE6=<date7>],
[DATE8=<date8>],[DATE9=<date9>],[DATE10=<date10>],
[DATE11=<date11>],[DATE12=<date12>],[TIME=<time>];

ENT-PRFL-SCHED: [TID]:<prflName>:[CTAG]::[SUN=<sun>],
[MON=<mon>],[TUE=<tue>],[WED=<wed>],[THU=<thu>],
[FRI=<fri>],[SAT=<sat>],[DATE1=<date1>],
[DATE2=<date2>],[DATE3=<date3>],[DATE4=<date4>],
[DATE4=<date5>],[DATE5=<date6>],[DATE6=<date7>],
[DATE8=<date8>],[DATE9=<date9>],[DATE10=<date10>],
[DATE11=<date11>],[DATE12=<date12>],[TIME=<time>];

RTRV-PRFL-SCHED:[TID]:[<prflName>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<prflName>:[SUN=<sun>],[MON=<mon>],[TUE=<tue>],
[WED=<wed>],[THU=<thu>],[FRI=<fri>],[SAT=<sat>],
[DATE1=<date1>],[DATE2=<date2>],[DATE3=<date3>],
[DATE4=<date4>],[DATE4=<date5>],[DATE5=<date6>],
[DATE6=<date7>],[DATE8=<date8>],[DATE9=<date9>],
[DATE10=<date10>],[DATE11=<date11>],
[DATE12=<date12>],[TIME=<time>]"
;
```

Parameters:

prflName Identifies the AID as a profile for a routing schedule. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all routing schedule profiles configured in the system will be returned.

Type: string

Range: up to 20 alphanumeric characters

Default value: none

sun Identifies the time period on Sundays during which the routing schedule is active. Multiple time periods are separated by ampersands ("&"). Time periods are currently represented by quarter hours only; the only valid numbers for minutes are "00", "15", "30", and "45". Enter the default "NULL" to remove the day from the profile.

Type: enum

Range: {00-23}{00-59}-{00-23}{00-59}

Default value: NULL

mon Identifies the time period on Mondays during which the routing schedule is active. Multiple time periods are separated by ampersands ("&"). Time periods are currently represented by quarter hours only; the only valid numbers for minutes are "00", "15", "30", and "45". Enter the default "NULL" to remove the day from the profile.

Type: enum

Range: {00-23}{00-59}-{00-23}{00-59}

Default value: NULL

- tue** Identifies the time period on Tuesdays during which the routing schedule is active. Multiple time periods are separated by ampersands (“&”). Time periods are currently represented by quarter hours only; the only valid numbers for minutes are “00”, “15”, “30”, and “45”. Enter the default “NULL” to remove the day from the profile.
- Type:** enum
Range: {00-23}{00-59}-{00-23}{00-59}
Default value: NULL
- wed** Identifies the time period on Wednesdays during which the routing schedule is active. Multiple time periods are separated by ampersands (“&”). Time periods are currently represented by quarter hours only; the only valid numbers for minutes are “00”, “15”, “30”, and “45”. Enter the default “NULL” to remove the day from the profile.
- Type:** enum
Range: {00-23}{00-59}-{00-23}{00-59}
Default value: NULL
- thu** Identifies the time period on Thursdays during which the routing schedule is active. Multiple time periods are separated by ampersands (“&”). Time periods are currently represented by quarter hours only; the only valid numbers for minutes are “00”, “15”, “30”, and “45”. Enter the default “NULL” to remove the day from the profile.
- Type:** enum
Range: {00-23}{00-59}-{00-23}{00-59}
Default value: NULL
- fri** Identifies the time period on Fridays during which the routing schedule is active. Multiple time periods are separated by ampersands (“&”). Time periods are currently represented by quarter hours only; the only valid numbers for minutes are “00”, “15”, “30”, and “45”. Enter the default “NULL” to remove the day from the profile.
- Type:** enum
Range: {00-23}{00-59}-{00-23}{00-59}
Default value: NULL
- sat** Identifies the time period on Saturdays during which the routing schedule is active. Multiple time periods are separated by ampersands (“&”). Time periods are currently represented by quarter hours only; the only valid numbers for minutes are “00”, “15”, “30”, and “45”. Enter the default “NULL” to remove the day from the profile.
- Type:** enum
Range: {00-23}{00-59}-{00-23}{00-59}
Default value: NULL

date1 Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.

Type: enum

Range: {01-12}-{01-31}

Default value: NULL

date2 Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.

Type: enum

Range: {01-12}-{01-31}

Default value: NULL

date3 Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.

Type: enum

Range: {01-12}-{01-31}

Default value: NULL

date4 Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.

Type: enum

Range: {01-12}-{01-31}

Default value: NULL

date5 Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.

Type: enum

Range: {01-12}-{01-31}

Default value: NULL

date6 Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.

Type: enum

Range: {01-12}-{01-31}

Default value: NULL

- date7** Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.
Type: enum
Range: {01-12}-{01-31}
Default value: NULL
- date8** Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.
Type: enum
Range: {01-12}-{01-31}
Default value: NULL
- date9** Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.
Type: enum
Range: {01-12}-{01-31}
Default value: NULL
- date10** Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.
Type: enum
Range: {01-12}-{01-31}
Default value: NULL
- date11** Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.
Type: enum
Range: {01-12}-{01-31}
Default value: NULL
- date12** Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.
Type: enum
Range: {01-12}-{01-31}
Default value: NULL

time Identifies a time period, on the dates represented by *date1* through *date12*, during which the routing schedule is active. Multiple time periods are separated by ampersands (“&”). Time periods are currently represented by whole hours only; the only valid number for minutes is “00”.

Type: enum

Range: {00-23}{00-59}-{00-23}{00-59}

Default value: NULL

Input Examples:

```
DLT-PRFL-SCHED::PROFILE1;
```

```
ED-PRFL-SCHED::PROFILE1::MON=0800-1900,TUE=0800-1900,  
WED=0800-1900,THU=0800-1900,FRI=0800-1900,  
SAT=0900-1200&1300-1700;
```

```
ED-PRFL-SCHED::PROFILE2::DATE1=01-01,DATE2=07-04,  
DATE3=10-31,TIME=0900-1200&1300-1700;
```

```
ENT-PRFL-SCHED::PROFILE1::MON=0800-1900,  
TUE=0800-1900,WED=0800-1900,THU=0800-1900,  
FRI=0800-1900,SAT=0900-1200&1300-1700;
```

```
ENT-PRFL-SCHED::PROFILE2::DATE1=01-01,DATE2=07-04,  
DATE3=10-31,TIME=0900-1200&1300-1700;
```

```
RTRV-PRFL-SCHED;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"PROFILE1:MON=0800-1900,TUE=0800-1900,  
WED=0800-1900,THU=0800-1900,FRI=0800-1900,  
SAT=0900-1200&1300-1700"  
"PROFILE2:DATE1=01-01,DATE2=07-04,DATE3=10-31,  
TIME=0900-1200&1300-1700"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-ROUTE

Commands:

DLT-ROUTE: Delete Route

ED-ROUTE: Edit Route

ENT-ROUTE: Enter Route

RTRV-ROUTE: Retrieve Route

Descriptions:

DLT-ROUTE lets the user delete a route from the system.

ED-ROUTE lets the user change the properties of a route; that is, a member of a named list of trunk groups or interfaces. Each route is a member of a route list, and this command enables adding trunk groups, line interfaces or other route lists to the parent route list. There is no limit on the number of times a trunk group can appear in different routes. Use ED-ROUTE to change either the interface type for the route or the route list to which the route points, the digit modification used to change parameters that reach this route, and the relative priority for the route.

ENT-ROUTE lets the user establish an outgoing route; that is, a member of a named list of trunk groups or interfaces. Each route is a member of a route list, and this command enables adding trunk groups, line interfaces or other route lists to the parent route list. There is no limit on the number of times a trunk group can appear in different routes. ENT-ROUTE will not work unless ENT-ROUTE-LIST has already been issued.

RTRV-ROUTE lets the user retrieve the properties of a route; that is, a member of a named list of trunk groups or interfaces.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-ROUTE: [TID]:<rtId>:[CTAG];

ED-ROUTE: [TID]:<rtId>:[CTAG]::[BGN=<bgn>],
[RTLST=<rtList>],[DGTMODKEY=<dgtModKey>],
[WEIGHT=<weight>];

ENT-ROUTE: [TID]:<rtId>:[CTAG]::[BGN=<bgn>],
[RTLST=<rtList>],[DGTMODKEY=<dgtModKey>],
[WEIGHT=<weight>];

RTRV-ROUTE: [TID]: [<rtId>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<rtId>:BGN=<bgn>,RTLIST=<rtList>,
    DGTMODKEY=<dgtModKey>,WEIGHT=<weight>"
;
```

Parameters:

rtId Identifies the AID as a route with a string of up to 20 characters indicating the name of a route list in which the route is listed, and an associated index. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all routes configured in the system will be returned. A null value for the associated index (in RTRV) will return all routes for the given route list name.

Type: RtId

Range: <rtList>[-<index>], where

rtList identifies the name of the applicable route list with a string of 1-20 characters;

index identifies the particular route in the applicable route list as an integer between zero and 32767.

Default value: none

bgn Identifies a previously defined bearer group, and its type, to associate with the route. You can enter a value for this parameter only when the value for the parameter *rtList* is "NULL". A bearer group can be entered more than once in a route list, and can exist in multiple route lists.

Type: string

Range: <bgnType>-<bgnNum>, where

bgnType identifies the type of bearer group, a previously provisioned interface, with values of:

CASIF = CAS interface

GR303 = GR303 interface

ISDNIF = ISDN interface

MGCP = MGCP interface

TGN = CAS, ISUP, or SIP trunk

bgnNum identifies the bearer group, with values of:

CASIF: 1-2147483645

GR303: 1-32767

ISDNIF: 1-2147483647

MGCP: 1-100000

TGN: 1-9999

Default value: NULL

rtList Identifies a previously defined route list (for which the value of the parameter *alloc* is not “TIMEOFDAY”) to associate with the route. You can enter a value for this parameter only when the value for the parameter *bgn* is “NULL”.

Type: string

Range: 1-20 alphanumeric characters

Default value: NULL

dgtModKey Identifies the previously defined digit modification table and associated primary key used to change parameters for the route. You can enter a value for this parameter only when the value for the parameter *rtList* is “NULL”.

Type: string

Range: <dmLbl>-<primKey>, where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

FCIMBIT = Forward Call Indicator M-bit

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG-{1-6} = Register index

TNS = Transit Network Selection

Default value: NULL

weight Identifies the relative priority for the route, with a higher number indicating a greater priority, when the hunting method assigned to the route list (through *alloc* in ROUTE-LIST) is “DISTRIBUTION”.

Type: integer

Range: {0-100}

Default value: 10

Input Examples:

```
DLT-ROUTE::RTL1ST1-1;  
ED-ROUTE::RTL1ST1-1:::BGN=TGN-1;  
ENT-ROUTE::RTL1ST1-1:::BGN=TGN-1;  
RTRV-ROUTE::RTL1ST1-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"RTL1ST1-1:BGN=TGN-1, RTL1ST=NULL, DGTMODKEY=NULL,  
WEIGHT=NULL"  
;
```

Related Commands:

DLT/ED/ENT/RTRV-ROUTE-LIST

DLT/ED/ENT/RTRV-ROUTE-DIGITS

Commands:

DLT-ROUTE-DIGITS: Delete Route Digits

ED-ROUTE-DIGITS: Edit Route Digits

ENT-ROUTE-DIGITS: Enter Route Digits

RTRV-ROUTE-DIGITS: Retrieve Route Digits

Descriptions:

ROUTE-DIGITS determined the method for routing. It specifies a matching criterion for routing and what actions or destinations to use once a match is found. The following terminations are supported:

- A route list, in which case the call is offered to the routes in the route list according to the allocation method specified on the route list
- A treatment
- A new partition and key (digit modification), in which case routing with the designated call parameters starts on the specified partition and key
- A new translation plan, in which case only the routing portions of the translation plan take effect

Multiple screening and digit modification operations can be specified as part of the ROUTE-DIGITS command. These can be used to either change the parameters on termination, or to change the parameters before going to a new partition or translation plan.

DLT-ROUTE-DIGITS lets the user delete a routing method.

ED-ROUTE-DIGITS lets the user change a routing method. Use ED-ROUTE-DIGITS to modify the primary, secondary, and tertiary values applicable to the specified parameter (primary key) in the routing database table to which the routing method applies; the routing destination, the action taken as a result of routing; the minimum and maximum costs of the outgoing trunk group; and whether calls getting to this route are re-routed on call setup failure on a downstream switch.

ENT-ROUTE-DIGITS lets the user establish a routing method. Use this command to define the name of the routing database table; the parameter (primary key) to which the routing method applies; the primary, secondary, and tertiary values applicable to the specified parameter; the routing destination, the action taken as a result of routing; the minimum and maximum costs of the outgoing trunk group; and whether calls getting to this route are re-routed on call setup failure on a downstream switch.

RTRV-ROUTE-DIGITS lets the user retrieve the properties associated with a routing method. Use RTRV-ROUTE-DIGITS to retrieve the name of the routing database table; the parameter (primary key) to which the routing method applies; the primary, secondary, and tertiary values applicable to the specified parameter; the routing destination, the action taken as a result of routing; the minimum and maximum costs of the outgoing trunk group; and whether calls getting to this route are re-routed on call setup failure on a downstream switch.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-ROUTE-DIGITS:[TID]:<rtDigitsAid>:[CTAG];
ED-ROUTE-DIGITS:[TID]:<rtDigitsAid>:[CTAG]::
    [RTDEST=<rtDest>],[ACTN=<actn>],
    [MINCOST=<mincost>],[MAXCOST=<maxcost>],
    [REROUTE=<reRoute>];
ENT-ROUTE-DIGITS:[TID]:<rtDigitsAid>:[CTAG]::
    RTDEST=<rtDest>,[ACTN=<actn>],[MINCOST=<mincost>],
    [MAXCOST=<maxcost>],[REROUTE=<reRoute>];
RTRV-ROUTE-DIGITS:[TID]:[<rtDigitsAid>]:[CTAG];
```

Output Format:

```
      SID DATE TIME
M  CTAG COMPLD
    "<rtDigitsAid>:RTDEST=<rtDest>,ACTN=<actn>,
      MINCOST=<minCost>,MAXCOST=<maxcost>,
      REROUTE=<reroute>"
;
```

Parameters:

rtDigitsAid Identifies the AID as a routing method. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all routing methods configured in the system will be returned.

Type: DgtScrnAid

Range: <rtLbl>[-<primKey>[-<primKeyValue>
[-<secKeyValue>[-<terKeyValue>]]]], where:

rtLbl identifies the name of the applicable routing table with a string of 1-10 alphanumeric characters;

primKey (optional only in RTRV) identifies the primary key applicable to the specified routing table, with values of:

ABGN = Anchor Bearer Group Number (For some SIP referred calls, with or without replace, involving analysis of referred-to-number and subsequent routing, ABGN captures the ingress trunkgroup of the referred call.)

BGN = Bearer Group Number (interface type)

CALLTYPE = Type of call (Class 5)

CDPN = Called party number

CGPN = Calling party number

CHRGN = Charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

FCIMBIT = Forward Call Indicator M-bit

GAP = Generic Address Parameter

GENDGTS = Generic Digits (you cannot select this value unless a generic information element of this type has been defined previously with ENT-DEF-GENIE)

GP = generic parameter (you cannot select this value unless a generic information element of this type has been defined previously with ENT-DEF-GENIE)

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG = Register index

SUBSTATUS = Subscriber status (valid only when the value "SUB" is the first listed for *actnInfoAnlz* in TRANS-PLAN)

TNS = Transit Network Selection

primKeyValue identifies the primary value applicable to the specified primary key parameter, with values of:

ABGN (refer/replace type):

DEFAULT
LOCAL
NONE
NOTPRSNT
RMT

BGN:

CASIF
GR303
ISDNIF
MGCP
TGN

CALLTYPE:

CUTTHRU
DEFAULT
DIR_ASSISTANCE
EMERGENCY
INTERLATA
INTERLATAOPREQ
INTNATNUM
INTNATOPREQ
INTRALATA
LOCAL_RATE
LOCALNUMBER
LOCALOPREQ
N11
NATNUM
NONUMOPREQ
NOTPRSNT
NOTSPEC
PREMIUM_RATE
TOLL_DIR_ASSIST
TOLLFREE

CDPN:

ABBREVPVT = abbreviated private
CAINVPN = Carrier AIN Virtual Private
Network
DEFAULT = matches all numbers
INTNATNUM = international number
INTNATOPREQ = international operator request
NATNUM = national significant number
NATOPREQ = national (long-distance) operator
request
NONUMCUTTHRU = no number provided, cut
through to carrier

NONUMOPREQ = no number provided, operator request

NOTPRSNT = matches calls without a CDPN

SUBOPREQ = subscriber (local) operator request

SUBSNUM = subscriber number

TESTLINE = test line test code

UNKNOWN = unknown (default value);

CGPN:

ABBREVPVT = abbreviated private

DEFAULT = matches all numbers

NOTPRSNT = matches calls without a CGPN

NUNIINTNATNUM = non-unique international number

NUNINATNUM = non-unique national number (only for CGPN)

NUNISUBSNUM = non-unique subscriber number

TESTLINE = test line test code

UNIINTNATNUM = unique international number

UNINATNUM = unique national number

UNISUBSNUM = unique subscriber number

CHRGN:

CDPNATNUM = ANI of the called party; national number

CDPSUBSNUM = ANI of the called party; subscriber number

CDPUNAVAIL = ANI of the called party; no number present

CGPNATNUM = ANI of the calling party; national number

CGPSUBSNUM = ANI of the calling party; subscriber number

DEFAULT = matches all numbers

NOTPRSNT = matches calls without a CHRGN

UNAVAIL = ANI not available or not provided

CIP: 0-9999, DEFAULT, NOTPRSNT

CPC: 00-FF (hexadecimal) , DEFAULT, NOTPRSNT

CSI:

PRESUBDIAL = presubscribed and input by calling party

PRESUBNOTDIAL = presubscribed and not input by calling party

PRESUBUNKNOWN = presubscribed, input by calling party undetermined

NOTPRESUB = not presubscribed and input by
calling party

UNKNOWN = no indication

FCIMBIT:

0 = CDPN not translated

1 = CDPN translated

DEFAULT

NOTPRSNT

GAP: 0-255

GENDGTS: 0-31

GP: 0-255

JIP: 200000-999999, DEFAULT, NOTPRSNT

LATA: 200-99999, DEFAULT, NOTPRSNT

OLI: 00-FF (hexadecimal), DEFAULT, NOTPRSNT

REG: 1-6

SUBSTATUS:

ACTIVE = In Service (subscriber is present in the
CL4SUB table and active)

DEFAULT = matches all numbers

INACTIVE = Out Of Service (subscriber is
present in the CL4SUB table and inactive)

NOTINDB = Not in database (subscriber is not in
the CL4SUB table)

NOTPRSNT = matches calls without
SUBSTATUS

TNS: 0-9999 (the carrier ID), DEFAULT,
NOTPRSNT

secKeyValue identifies the secondary value applicable to the
specified primary key parameter, with values of:

ABGN (interface type):

CASIF

DEFAULT

GR303

ISDNIF

MGCP

TGN

BGN: 1-31 digits, DEFAULT

CALLTYPE: No secondary value

CDPN: 1-31 digits, DEFAULT (set *secKeyValue* to
DEFAULT if *primKeyValue* is DEFAULT or
NOTPRSNT)

CGPN: 1-31 digits, DEFAULT (set *secKey*Value to DEFAULT if *primKey*Value is DEFAULT or NOTPRSNT)

CHRGN: 1-31 digits, DEFAULT (set *secKey*Value to DEFAULT if *primKey*Value is DEFAULT or NOTPRSNT)

CIP: No secondary value

CPC: No secondary value

CSI: No secondary value

GAP: 1-31 digits, DEFAULT, NOTPRSNT

GENDGTS: 1-31 digits, DEFAULT, NOTPRSNT

GP: 1-31 digits, DEFAULT, NOTPRSNT

JIP: No secondary value

LATA: No secondary value

OLI: No secondary value

REG: 1-31 digits, DEFAULT, NOTPRSNT

TNS: 0-255 (the CAS 0ZZ/1NX code or the ISUP circuit code), DEFAULT (set *secKey*Value to DEFAULT if *primKey*Value is DEFAULT or NOTPRSNT)

*terKey*Value identifies the tertiary value (representing the protocol type) applicable only when the value of *primKey* is AGBN or TNS, with values of:

ABGN (interface or trunk group number):

CASIF: 1-2147483647

DEFAULT

GR303: 1-32767

ISDNIF: 1-2147483647

MGCP: 1-100000

TGN: 1-9999

TNS:

CAS

ISUP (default – set *terKey*Value to ISUP if *secKey*Value is DEFAULT)

Default value: none

rtDest Identifies the destination for routes using the routing method specified by the AID. The parameter is a combination of the type of destination and its name.

Type: string

Range: RTLIST-<rtList>, where *rtList* identifies the name of a route list with a string of 1-20 characters

RTKEY-<rtKey>, where *rtKey* has the form <rtLbl>-
<primKey>, which identifies the name of the next
partition with a string of 1-10 alphanumeric characters
and the primary key applicable to it, as listed in the AID
TRANS-<transPlan>, where *transPlan* identifies the name of
a translation plan with a string of 1-10 characters
TREAT-<treatment>, where *treatment* identifies the name of
a treatment with a string of 1-10 characters

Default value: none

actn Identifies the actions performed that define the various manipulations on values that match this route. You can specify up to six actions, separated by ampersands (&).

Type: string

Range: <actn>[&<actn>[&<actn>[&<actn>[&<actn>[&<actn>]]]], where *actn* can have one of the following forms:

DGTMODKEY-<dmLbl>-<primKey>, where

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

FCIMBIT = Forward Call Indicator M-bit

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG-{1-6} = Register index

TNS = Transit Network Selection

DGTSCRNKEY-<dgtScrnLbl>-<primKey>, where

dgtScrnLbl identifies the name of the applicable screening table with a string of 1-10 characters;

primKey identifies the primary key applicable to the specified screening table, with values of:

BGN = Bearer Group Number (interface type)

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

GAP-{0-255} = Generic Address Parameter
GENDGTS-{0-31} = Generic Digits
GP-{0-255} = Generic Parameter
JIP = Jurisdiction Information Parameter
(NPANXX)
LATA = Local Access & Transport Area
OLI = Originating Line Information
SUBSTATUS = Subscriber status (valid only
when the value "SUB" is the first listed for
the parameter *actnInfoAnlz* in TRANS-
PLAN)
TNS = Transit Network Selection

Default value: NULL

minCost Identifies the minimum cost of the outgoing trunk group.

Type: integer

Range: {0-100}

Default value: 0

maxCost Identifies the maximum cost of the outgoing trunk group.

Type: integer

Range: {0-100}

Default value: 100

reRoute Identifies whether calls getting to this route are re-routed on call setup failure on a downstream switch.

Type: BoolYN

Range: N = calls are not rerouted
Y = calls are rerouted

Default value: N

Input Examples:

```
DLT-ROUTE-DIGITS::321RtTable-CSI;
```

```
ED-ROUTE-DIGITS::321RtTable-CSI:::  
RTDEST=RTLST-IntNatRouteList;
```

In the following example for ENT-ROUTE-DIGITS:

1. Calls with CPC of Emergency are routed to the 911RouteList. Carrier is inspected for other calls.

```
ENT-ROUTE-DIGITS::Global-CPC-06:::  
RtDest=RTLST-911RouteList;
```

```
ENT-ROUTE-DIGITS::Global-CPC:::  
RtDest=RTKEY-Carrier-TNS;
```

```
ENT-ROUTE-DIGITS::Global-CPC-NOTPRSNT::  
  RtDest=RTKEY-Carrier-TNS;
```

2. Calls to carrier 0321 are routed to 0321RouteList

```
ENT-ROUTE-DIGITS::Carrier-TNS-0321::  
  RouteList=0321RouteList;
```

```
ENT-ROUTE-DIGITS::Carrier-TNS-9898::  
  RtDest=RTKEY-321RtTable-CDPN;
```

3. Domestic calls to carrier 9898 are routed according to Called Party Number.

```
ENT-ROUTE-DIGITS::321RtTable-TNS-9898-1-ISUP::  
  RtDest=RTKEY-321RtTable-CSI;
```

```
ENT-ROUTE-DIGITS::321RtTable-TNS-9898-0-ISUP::  
  RtDest=RTKEY-321RtTable-CSI;
```

```
ENT-ROUTE-DIGITS::321RtTable-TNS-9898-138-CAS::  
  RtDest=RTKEY-321RtTable-CSI;
```

```
ENT-ROUTE-DIGITS::321RtTable-TNS-9898-158-CAS::  
  RtDest=RTKEY-321RtTable-CSI;
```

4. Casually dialed calls to 9898 are given treatment 666.

```
ENT-ROUTE-DIGITS::321RtTable-CSI-NOTPRESUBDIAL::  
  RtDest=TREAT-Treat666;
```

5. International calls to carrier 9898 are routed to IntNatRouteList, except if it is casually dialed.

```
ENT-ROUTE-DIGITS::321RtTable-CSI::  
  RtDest=RTLIST-IntNatRouteList;
```

```
RTRV-ROUTE-DIGITS::321RtTable-CSI;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
  "321RtTable-CSI:RTDEST=RTLIST-IntNatRouteList,  
    ACTN=NULL,MINCOST=0,MAXCOST=0,REROUTE=N"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-ROUTE-LIST

Commands:

DLT-ROUTE-LIST: Delete Route List
ED-ROUTE-LIST: Edit Route List
ENT-ROUTE-LIST: Enter Route List
RTRV-ROUTE-LIST: Retrieve Route List

Descriptions:

DLT-ROUTE-LIST lets the user delete a route list.

ED-ROUTE-LIST lets the user change the properties associated with a route list. Use ED-ROUTE-LIST to modify the route list's allocation algorithm used when hunting for a route in this route list, and the treatment to use if the call setup on this route fails because no bearers are available.

ENT-ROUTE-LIST lets the user establish a list of routes with the hunting method for selecting a route on the list and the treatment to use if the call setup on this route fails because no bearers are available. Use ENT-ROUTE-LIST to define the route list's name, allocation algorithm used when hunting for a route in this route list, and the treatment to use if the call setup on this route fails because no bearers are available.

RTRV-ROUTE-LIST lets the user retrieve the properties associated with a route list. Use RTRV-ROUTE-LIST to retrieve the route list's allocation algorithm used when hunting for a route in this route list, and the treatment to use if the call setup on this route fails because no bearers are available.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-ROUTE-LIST:[TID]:<rtListAid>:[CTAG];  
ED-ROUTE-LIST:[TID]:<rtListAid>:[CTAG]::  
    [ALLOC=<alloc>],[OVRFLOWTREAT=<ovrFlowTreat>];  
ENT-ROUTE-LIST:[TID]:<rtListAid>:[CTAG]::  
    [ALLOC=<alloc>],[OVRFLOWTREAT=<ovrFlowTreat>];  
RTRV-ROUTE-LIST:[TID]:[<rtListAid>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<rtListAid>:ALLOC=<alloc>,
    OVRFLOWTREAT=<ovrFlowTreat>"
;
```

Parameters:

rtListAid Identifies the AID as a route list. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all route lists configured in the system will be returned.

Type: string

Range: 1-20 alphanumeric characters

Default value: none

alloc Identifies the resource allocation method (hunting type) used when hunting for a route in this route list.

Type: enum

Range: ASCENDING = Allocates the lowest numbered available route in the route list

CIRCULAR = Allocates the next free route, in ascending order, following the last route selected

DESCENDING = Allocates the highest numbered available route in the route list

DISTRIBUTION = Allocates routes based on the value of the parameter *weight* for each route in the route list

LEASTCOST = Allocates the least cost route available, based on parameters configured against the trunk group

RANDOM = Allocates the next free route, in ascending order, based on a random entry into the list of resources. After the first allocation from that numbered list of resources, subsequent attempts to find a free resource use the circular method.

TIMEOFDAY = This hunting type lets you enter route schedules, rather than routes, into the route list

Default value: CIRCULAR

ovrFlowTreat Identifies the treatment to use if the call setup on a route on this route list fails because no bearers are available.

Type: string

Range: up to 10 alphanumeric characters

Default value: NULL

Input Examples:

```
DLT-ROUTE-LIST::S7tgrp1Bt1s;  
ED-ROUTE-LIST::S7tgrp1Bt1s:::HUNTING=CIRCULAR,  
OVRFLOWTREAT=NULL;  
ENT-ROUTE-LIST::S7tgrp1Bt1s:::HUNTING=CIRCULAR,  
OVRFLOWTREAT=NULL;  
RTRV-ROUTE-LIST::S7tgrp1Bt1s;
```

Output Example:

```
      lucent 2005-06-24 14:37:49  
M    0 COMPLD  
      "S7tgrp1Bt1s:ALLOC=CIRCULAR,OVRFLOWTREAT=NULL"  
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-ROUTE  
DLT/ED/ENT/RTRV-ROUTE-SCHED
```

DLT/ED/ENT/RTRV-ROUTE-SCHED

Commands:

DLT-ROUTE-SCHED: Delete Route Schedule

ED-ROUTE-SCHED: Edit Route Schedule

ENT-ROUTE-SCHED: Enter Route Schedule

RTRV-ROUTE-SCHED: Retrieve Route Schedule

Descriptions:

The Route Schedule command lets you add a schedule to a route. The route will be in a particular schedule only after you've enabled the schedule profile. Date-specific profiles are applied to a schedule first, day specific profiles second, weekend weekday profiles third, and lastly the default profile that is enabled at all times.

DLT-ROUTE-SCHED lets the user delete a route schedule from the system.

ED-ROUTE-SCHED lets the user change the route list associated with a route schedule.

ENT-ROUTE-SCHED lets the user establish a route schedule associated with a schedule profile, and apply it to a route list. ENT-ROUTE-SCHED will not work unless ENT-PRFL-SCHED and ENT-ROUTE-LIST have already been issued.

RTRV-ROUTE-SCHED lets the user retrieve the name of the route list associated with a route schedule.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-ROUTE-SCHED: [TID]:<rtSchedAid>:[CTAG];

ED-ROUTE-SCHED: [TID]:<rtSchedAid>:[CTAG]::
RTLIST=<rtListName>;

ENT-ROUTE-SCHED: [TID]:<rtSchedAid>:[CTAG]::
RTLIST=<rtListName>;

RTRV-ROUTE-SCHED: [TID]: [<rtSchedAid>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<rtSchedAid>:RTLIST=<rtListName>"
;
```

Parameters:

rtSchedAid Identifies the AID as the name of the route schedule (previously defined by ROUTE-LIST and in which the value of *alloc* is TIMEOFDAY), and the name of the schedule profile applied to it. The schedule profile, previously defined by PRFL-SCHED, specifies the dates and times to use the route list. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all route schedules configured in the system, their associated schedule profiles and the route lists to which they belong, will be returned.

Type: RouteSchedAid

Range: <schedNameString>-<prflNameString>, where
schedNameString = up to 20 alphanumeric characters,
and
prflNameString = up to 20 alphanumeric characters,
including "DEFAULT" (which must be entered prior
to any user-defined schedule profile names).

Default value: none

rtListName Identifies the name of the route list, previously defined by ROUTE-LIST and in which the value of *alloc* cannot be TIMEOFDAY, to which the schedule applies.

Type: string

Range: up to 20 alphanumeric characters

Default value: none

Input Examples:

```
DLT-ROUTE-SCHED::schedlist-MON_PRFL;  
ED-ROUTE-SCHED::schedlist-MON_PRFL::  
    RTLIST=rtlist_mon;  
  
ENT-PRFL-SCHED::MON_PRFL::MON=1200-2400;  
ENT-ROUTE-LIST::rtlist_def::ALLOC=ascending;  
ENT-ROUTE-LIST::rtlist_mon::ALLOC=ascending;  
ENT-ROUTE-LIST::schedlist::ALLOC=TIMEOFDAY;  
ENT-ROUTE-SCHED::schedlist-DEFAULT::  
    RTLIST=rtlist_def;  
ENT-ROUTE-SCHED::schedlist-MON_PRFL::  
    RTLIST=rtlist_mon;  
  
RTRV-ROUTE-SCHED::schedlist-MON_PRFL;
```

Output Example:

```
    lucent 2005-06-24 14:37:49  
M   0  COMPLD  
    "schedlist-MON_PRFL:RTLIST=rtlist_mon "  
    ;
```

Related Commands:

```
DLT/ED/ENT/RTRV-PRFL-SCHED  
DLT/ED/ENT/RTRV-ROUTE-LIST
```

DLT/ED/ENT/RTRV-SUBSCRIBER-CL4

Commands:

DLT-SUBSCRIBER-CL4: Delete Subscriber Class 4

ED-SUBSCRIBER-CL4: Edit Subscriber Class 4

ENT-SUBSCRIBER-CL4: Enter Subscriber Class 4

RTRV-SUBSCRIBER-CL4: Retrieve Subscriber Class 4

Descriptions:

DLT-SUBSCRIBER-CL4 lets the user delete an association between a subscriber and a carrier or a call type.

ED-SUBSCRIBER-CL4 lets the user change the association between a subscriber and a carrier or a call type. Use this command to change the new or pseudo carrier assigned for the subscriber's call type, an alternative number for billing records, the authorization code mode of operation, the length of the account code, the authorization code or the list containing the authorization code, the minimum and maximum trunk group costs allowed for routing a call from the subscriber, the screening operation to perform, and the status of the subscriber.

ENT-SUBSCRIBER-CL4 lets the user establish an association between a subscriber and a carrier or a call type. Use this command to define the subscriber and the call type or carrier to which the subscriber assignment parameters apply, the new or pseudo carrier assigned for the subscriber's call type, an alternative number for billing records, the authorization code mode of operation, the length of the account code, the authorization code or the list containing the authorization code, the minimum and maximum trunk group costs allowed for routing a call from the subscriber, the screening operation to perform, and the status of the subscriber.

RTRV-SUBSCRIBER-CL4 lets the user retrieve the attributes of an association between a subscriber and a carrier or a call type.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-SUBSCRIBER-CL4:[TID]:<cl4SubId>:[CTAG];  
ED-SUBSCRIBER-CL4:[TID]:<cl4SubId>:[CTAG]::  
    [DFLTCAR=<dfltCar>],[BILLINGNUM=<billingNum>],  
    [AUTHMODE=<authMode>],[ACNTCODELEN=<acctCodeLen>],  
    [AUTHCODE=<authCode>],[AUTHLIST=<authList>],  
    [MINCOST=<minCost>],[MAXCOST=<maxCost>],  
    [DGTSCRNKEY=<dgtScrnKey>],[SUBSTATUS=<subStatus>];  
ENT-SUBSCRIBER-CL4:[TID]:<cl4SubId>:[CTAG]::  
    [DFLTCAR=<dfltCar>],[BILLINGNUM=<billingNum>],  
    [AUTHMODE=<authMode>],[ACNTCODELEN=<acctCodeLen>],  
    [AUTHCODE=<authCode>],[AUTHLIST=<authList>],  
    [MINCOST=<minCost>],[MAXCOST=<maxCost>],  
    [DGTSCRNKEY=<dgtScrnKey>],[SUBSTATUS=<subStatus>];  
RTRV-SUBSCRIBER-CL4:[TID]:[<cl4SubId>]:[CTAG]::;
```

Output Format:

```
      SID DATE TIME  
M     CTAG COMPLD  
      "<cl4SubId>:DFLTCAR=<dfltcAR>,  
        BILLINGNUM=<billingNum>,AUTHMODE=<authMode>,  
        ACNTCODELEN=<acctCodeLen>,AUTHCODE=<authCode>,  
        AUTHLIST=<authList>,MINCOST=<minCost>,  
        MAXCOST=<maxCost>,DGTSCRNKEY=<dgtScrnKey>,  
        SUBSTATUS=<subStatus>"  
      ;
```

Parameters:

cl4SubId Identifies the AID as the association between a subscriber and a carrier or a call type. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all such associations configured in the system will be returned.

Type: cl4SubId

Range: <subscriberId>[-<callType>] or <subscriberId>[-<carrier>],
where:

subscriberId identifies the subscriber with a string of exactly 10 digits;

callType (optional only in RTRV) identifies the call type for which the subscriber assignment parameters apply, with values of:

DEFAULT = all call types (default value)

INTERLATA

INTERNATIONAL

INTRALATA

carrier identifies the carrier for which the subscriber assignment parameters apply as a string of 1-4 digits with a default of "DEFAULT"

Default value: none

dfltCar Identifies the new (or pseudo) carrier assigned when a call type is associated with the subscriber.

Type: string

Range: {0-9999}

Default value: NULL

billingNum Identifies an alternative telephone number for billing records, optionally provided when the subscriber prefers charges to be applied to another number.

Type: string

Range: exactly 10 digits

Default value: value of *subscriberid*

authMode Identifies the mode of operation for an authorization code.

Type: enum

Range: ACNTAUTH = account codes and authorization codes
NONE = authorization code not required
ONEPIN = one PIN code per authorization code
ONLYACNT = only account codes
ONLYAUTH = only authorization codes
ONLYPIN = only PIN codes

Default value: NONE

acctCodeLen Identifies the account code length. The default value “0” disables the option; however, the value cannot be “0” when the value of *authMode* is “ACNTAUTH” or “ONLYACNT”.

Type: integer

Range: {0-8}

Default value: 0

authCode Identifies the name of the authorization code when there is only one valid code. The value must be “NULL” when *authList* has a valid non-null value.

Type: string

Range: up to eight digits (including “*”, but not as the first digit)

Default value: NULL

authList Identifies the name of the authorization list, previously established via ENT-LIST-AUTHCODE. The value must be “NULL” when *authCode* has a valid non-null value.

Type: string

Range: up to 20 characters

Default value: NULL

minCost Identifies the minimum cost of the outgoing trunk group for routing a call from the subscriber.

Type: integer

Range: {0-100}

Default value: 0

maxCost Identifies the maximum cost of the outgoing trunk group for routing a call from the subscriber.

Type: integer

Range: {0-100}

Default value: 100

dgtScrnKey Identifies the screening operation to apply to the subscriber by defining the applicable digit screening table and associated primary key. You must refer to a valid screening table (established with ENT-DIGIT-SCREEN) with the applicable primary key “SUBSTATUS” when the value of the parameter *subStatus* requires an action (for example, providing a treatment when the value of *subStatus* is “INACTIVE”). The parameter *resultType* in DIGIT-SCREEN defines the possible actions resulting from screening.

Type: string

Range: <dgtScrnLbl>-<primKey>, where:

dgtScrnLbl identifies the name of the applicable screening table with a string of 1-10 characters;

primKey identifies the primary key applicable to the specified screening table, with values of:

BGN = Bearer Group Number (interface type)

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

SUBSTATUS = Subscriber status (valid only when the value “SUB” is the first listed for the parameter *actnInfoAnlz* in TRANS-PLAN)

TNS = Transit Network Selection

Default value: NULL

subStatus Identifies the status of the telephone number representing the subscriber.

Type: string

Range: ACTIVE = In Service (subscriber is present in the CL4SUB table and active)

INACTIVE = Out Of Service (subscriber is present in the CL4SUB table and inactive)

Default value: NULL

Input Examples:

```
DLT-SUBSCRIBER-CL4::5088048202-INTERNATIONAL;  
  
ED-SUBSCRIBER-CL4::5088048202-INTERNATIONAL:::  
  DFLTCAR=2, SUBSTATUS=INACTIVE;  
  
ENT-SUBSCRIBER-CL4::5088048202-INTERNATIONAL:::  
  DFLTCAR=1, BILLINGNUM=5084800909;  
  
RTRV-SUBSCRIBER-CL4::5088048202-INTERNATIONAL;
```

Output Example:

```
      lucent 2005-06-24 14:37:49  
M 0 COMPLD  
    "5088048202-INTERNATIONAL:DFLTCAR=1,  
      BILLINGNUM=5084800909, AUTHMODE=NONE,  
      ACNTCODELEN=0, AUTHCODE=NULL, AUTHLIST=AUTHLIST4,  
      MINCOST=0, MAXCOST=100, DGTSCRNKEY=NULL,  
      SUBSTATUS=ACTIVE"  
    ;
```

Related Commands: none

DLT/ED/ENT/RTRV-TRANS-PLAN

Commands:

DLT-TRANS-PLAN: Delete Translation Plan

ED-TRANS-PLAN: Edit Translation Plan

ENT-TRANS-PLAN: Enter Translation Plan

RTRV-TRANS-PLAN: Retrieve Translation Plan

Descriptions:

A translation plan specifies the following:

- A set of routing partitions or labels used for calls using this translation plan. If routing fails on the first <routing label>-<routing key> combination, the next <routing label>-<routing key> combination is used.
- The dial plan used for calls using this translation plan. The dial plan specifies the valid called party numbers. Having a NULL dial plan allows all calls to pass validation.
- Various screening and digit modification operations to perform at the InfoCollected PIC and the InfoAnalyzed PIC. The actions at the InfoCollected PIC allow the processing of authorization codes, call screening, and normalizing parameters before dial plan analysis is done. These actions also allow for changing the translation plan depending on incoming call parameters. Actions at the InfoAnalyzed PIC allow for screening out and normalizing parameters before doing SCP lookups or routing.
- The failure condition table to use for treating far side release of calls.

Translation plans can be attached to trunk groups. Line interfaces currently always use the DEFAULT translation plan. Trunk groups that have similar translation requirements can use the same translation plan.

DLT-TRANS-PLAN lets the user delete a translation plan that associates a list of route tables with a dial (numbering) plan.

ED-TRANS-PLAN lets the user change a translation plan that associates a list of route tables with a dial (numbering) plan. Use this command to change the list(s) of route tables, the dialing plan applied before call is set up, the actions performed at the InfoCollected and InfoAnalyzed PICs, the release failure condition profile name, and the alternate translation plan to use for emergency procedures.

ENT-TRANS-PLAN lets the user establish a translation plan that associates a list of route tables with a dial (numbering) plan. Use this command to define the translation plan name, the list(s) of route tables, the dialing plan applied before call is set up, the actions performed at the InfoCollected and InfoAnalyzed PICs, the release failure condition profile name, and the alternate translation plan to use for emergency procedures.

RTRV-TRANS-PLAN lets the user retrieve the attributes of a translation plan that associates a list of route tables with a dial (numbering) plan.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-TRANS-PLAN:[TID]:<transPlan>:[CTAG];
ED-TRANS-PLAN:[TID]:<transPlan>:[CTAG]::
    [RTKEYLIST=<rtKeyList>],[DIALPLAN=<dialPlan>],
    [ACTNINFOCOL=<actninfocol>],
    [ACTNINFOANLZ=<actninfoanlz>],
    [RLSFAILCNDPRFL=<rlsFailCndPrfl>],
    [ALTPLAN=<altPlan>];
ENT-TRANS-PLAN:[TID]:<transPlan>:[CTAG]::
    RTKEYLIST=<rtKeyList>,[DIALPLAN=<dialPlan>],
    [ACTNINFOCOL=<actnInfoCol>],
    [ACTNINFOANLZ=<actnInfoAnlz>],
    [RLSFAILCNDPRFL=<rlsFailCndPrfl>],
    [ALTPLAN=<altPlan>];
RTRV-TRANS-PLAN:[TID]:[<transPlan>]:[CTAG];
```

Output Format:

```
    SID DATE TIME
M   CTAG COMPLD
    "<transPlan>:RTKEYLIST=<rtKeyList>,
      DIALPLAN=<dialPlan>,ACTNINFOCOL=<actninfocol>,
      ACTNINFOANLZ=<actninfoanlz>,
      RLSFAILCNDPRFL=<rlsFailCndPrfl>,
      ALTPLAN=<altPlan>"
;
```

Parameters:

transPlan Identifies the AID as a translation plan. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all translation plans configured in the system will be returned.

Type: string

Range: 1-10 alphanumeric characters

Default value: none

rtKeyList Identifies the list of route tables applicable to the translation plan. You can specify up to three route tables, separated by ampersands (&), which are accessed in the order listed until the given key is matched.

Type: TransPlanAid

Range: <rtKey>[&<rtKey>[&<rtKey>]], where *rtKey* has the form <rtLbl>-<primKey>):

rtLbl identifies the name of the applicable route table with a string of 1-10 alphanumeric characters;

primKey identifies the primary key applicable to the specified route table as a type of call parameter, with values of:

ABGN = Anchor Bearer Group Number (For some SIP referred calls, with or without replace, involving analysis of referred-to-number and subsequent routing, ABGN captures the ingress trunkgroup of the referred call.)

BGN = Bearer Group Number (interface type)

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

TNS = Transit Network Selection

Default value: none

dialPlan Identifies whether to use the dial plan specified by ED-SWITCH-CFG for number analysis.

Type: BoolYN

Range: N = do not use the dial plan for number analysis
Y = use the dial plan for number analysis

Default value: Y

actnInfoCol Identifies the actions performed at the InfoCollected PIC prior to number or dial plan analysis, and which define the various manipulations to perform on this partition. You can specify up to six actions, separated by ampersands (&).

Type: string

Range: <actn>[&<actn>[&<actn>[&<actn>[&<actn>[&<actn>]]]]],
where *actn* can have one of the following forms:

DGTMODKEY-<dmLbl>-<primKey>, where

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

FCIMBIT = Forward Call Indicator M-bit

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG-{1-6} = Register index

TNS = Transit Network Selection

DGTSCRNKEY-<dgtScrnLbl>-<primKey>, where

dgtScrnLbl identifies the name of the applicable screening table with a string of 1-10 characters;

primKey identifies the primary key applicable to the specified screening table, with values of:

BGN = Bearer Group Number (interface type)

CALLTYPE = type of call (Class 5)
CDPN = called party number
CGPN = calling party number
CHRGN = charge number
CIP = Carrier Information Parameter (for
ISUP only)
CPC = Calling Party Category
CSI = Carrier Selection Information
GAP-{0-255} = Generic Address Parameter
GENDGTS-{0-31} = Generic Digits
GP-{0-255} = Generic Parameter
JIP = Jurisdiction Information Parameter
(NPANXX)
LATA = Local Access & Transport Area
OLI = Originating Line Information
SUBSTATUS = Subscriber status (valid only
when the value "SUB" is the first listed for
the parameter *actnInfoAnlz* in TRANS-
PLAN)
TNS = Transit Network Selection

Default value: NULL

actnInfoAnlz Identifies the actions performed at the InfoAnalyzed PIC prior to AIN trigger analysis, and which define the various manipulations to perform on this partition. You can specify up to six actions, separated by ampersands (&).

Type: string

Range: <actn>[&<actn>[&<actn>[&<actn>[&<actn>]]]],
where *actn* has the form
[SUB] & [DGTSCRNKEY-<dgtScrnLbl>-<primKey>]
[&][DGTMODKEY-<dgtModLbl>-<primKey>],
where:

SUB causes the collection of subscriber information for subsequent screening or routing

DGTSCRNKEY-<dgtScrnLbl>-<primKey>, in which

dgtScrnLbl identifies the name of the applicable screening table with a string of 1-10 characters;

primKey identifies the primary key applicable to the specified screening table, with values of:

BGN = Bearer Group Number (interface type)
CALLTYPE = type of call (Class 5)
CDPN = called party number
CGPN = calling party number
CHRGN = charge number

CIP = Carrier Information Parameter (for
ISUP only)
CPC = Calling Party Category
CSI = Carrier Selection Information
GAP-{0-255} = Generic Address Parameter
GENDGTS-{0-31} = Generic Digits
GP-{0-255} = Generic Parameter
JIP = Jurisdiction Information Parameter
(NPANXX)
LATA = Local Access & Transport Area
OLI = Originating Line Information
SUBSTATUS = Subscriber status (valid only
when the value "SUB" is the first listed for
actnInfoAnlz in TRANS-PLAN)
TNS = Transit Network Selection

DGTMODKEY-<dmLbl>-<primKey>, in which

dmLbl identifies the name of the applicable digit
modification table with a string of 1-10
alphanumeric characters;

primKey identifies the primary key applicable to the
specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)
CDPN = called party number
CGPN = calling party number
CHRGN = charge number
CIP = Carrier Information Parameter (for
ISUP only)
CPC = Calling Party Category
CSI = Carrier Selection Information
FCIMBIT = Forward Call Indicator M-bit
GAP-{0-255} = Generic Address Parameter
GENDGTS-{0-31} = Generic Digits
GP-{0-255} = Generic Parameter
JIP = Jurisdiction Information Parameter
(NPANXX)
LATA = Local Access & Transport Area
OLI = Originating Line Information
REG-{1-6} = Register index
TNS = Transit Network Selection

Default value: NULL

rlsFailCndPrfl Identifies the release failure condition profile, which overrides the default failure condition profile for this translation plan.

Type: string

Range: 1-10 alphanumeric characters

Default value: NULL

altPlan Identifies the alternate translation plan to use for emergency procedures, the parameters for which override those for the translation plan defined by the AID.

Type: string

Range: 1-10 alphanumeric characters

Default value: NULL

Input Examples:

```
DLT-TRANS-PLAN: :TRANSPLAN1;  
ED-TRANS-PLAN: :TRANSPLAN1:::  
    RTKEYLIST=CDPNRT-CDPN&NEWRT-OLI, DIALPLAN=Y;  
ENT-TRANS-PLAN: :TRANSPLAN1:::  
    RTKEYLIST=CDPNRT-CDPN&NEWRT-OLI, DIALPLAN=Y;  
RTRV-TRANS-PLAN: :TRANSPLAN1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"TRANSPLAN1:RTKEYLIST=CDPNRT-CDPN&NEWRT-OLI,  
    DIALPLAN=Y,ACTINFOCOL=NULL,ACTINFOANLZ=NULL,  
    RLSFAILCNDPRFL=NULL,ALTPLAN=NULL"  
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-ROUTE-DIGITS  
TEST-TRANS
```

DLT/ED/ENT/RTRV-TRANS-SCHED

Commands:

DLT-TRANS-SCHED: Delete Translation Schedule

ED-TRANS-SCHED: Edit Translation Schedule

ENT-TRANS-SCHED: Enter Translation Schedule

RTRV-TRANS-SCHED: Retrieve Translation Schedule

Descriptions:

A translation schedule, through its associated schedule profile, determines the dates and times to use a translation plan. Like translation plans, you can attach translation schedules to trunk groups.

DLT-TRANS-SCHED lets the user delete a translation plan schedule that chooses translations based on the time of day.

ED-TRANS-SCHED lets the user change a translation plan schedule that chooses translations based on the time of day. Use this command to change the schedule profile applied to the translation plan schedule, and the translation plan to which the schedule applies.

ENT-TRANS-SCHED lets the user establish a translation plan schedule that chooses translations based on the time of day. Use this command to define the translation plan schedule name, the schedule profile applied to the translation plan schedule, and the translation plan to which the schedule applies.

RTRV-TRANS-SCHED lets the user retrieve the attributes of a translation plan schedule that chooses translations based on the time of day.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-TRANS-SCHED: [TID]:<transSchedAid>:[CTAG];

ED-TRANS-SCHED: [TID]:<transSchedAid>:[CTAG]::
TRANSPLAN=<transPlan>;

ENT-TRANS-SCHED: [TID]:<transSchedAid>:[CTAG]::
TRANSPLAN=<transPlan>;

RTRV-TRANS-SCHED: [TID]: [<transSchedAid>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<transSchedAid>:TRANSPLAN=<transPlan>"
;
```

Parameters:

transSchedAid Identifies the AID as a translation plan schedule that chooses translations based on the time of day. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all translation plan schedules configured in the system will be returned.

Type: TransSchedAid

Range: <transSched>[-<prflName>], where:

transSched identifies the name of the translation plan schedule with a string of 1-10 alphanumeric characters (Translation plan schedules and translation plans cannot have the same names.);

prflName (optional only in RTRV) identifies, with a string of 1-20 alphanumeric characters or the value "DEFAULT", the name of the routing schedule profile, previously defined by PRFL-SCHED, that determines the times and dates to use the listed translation plan.

Default value: none

transPlan Identifies the translation plan to which the schedule applies.

Type: string

Range: 1-10 alphanumeric characters

Default value: none

Input Examples:

```
DLT-TRANS-SCHED::XSCHED1-PROFILE1;
ED-TRANS-SCHED:XSCHED1-PROFILE1:::
  TRANSPLAN=TRANSPLAN1;
ENT-TRANS-SCHED::XSCHED1-PROFILE1:::
  TRANSPLAN=TRANSPLAN1;
RTRV-TRANS-SCHED::XSCHED1-PROFILE1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "XSCHED1-PROFILE1:TRANSPLAN=TRANSPLAN1;"
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-PRFL-SCHED
DLT/ED/ENT/RTRV-ROUTE-SCHED
```

DLT/ED/ENT/RTRV-TREATMENT

Commands:

DLT-TREATMENT: Delete Treatment

ED-TREATMENT: Edit Treatment

ENT-TREATMENT: Enter Treatment

RTRV-TREATMENT: Retrieve Treatment

Descriptions:

Treatments allow special handling, including exception handling. For example, a treatment can play the time of day announcement, which is special handling, or it can release a call with a specific release cause, which is exception handling.

Lucent supports three types of treatments:

- **Announcement:** This type of treatment requires the announcement be configured using the ENT-AUDIO-ANNC command, can provide answer indication to a preceding switch, and allows associating a set of arguments with the announcement.
- **Release:** This type of treatment either maps an internal condition to another treatment, or it releases the call with a specific cause code.
- **Reroute:** This type of treatment uses digit modifications to change parameters of the call, and optionally, can restart routing from another partition with another key.

There are currently three supported sources from which a call may go to a treatment:

- **From ROUTE-DIGITS:** Any specified combination of call parameters can be routed to a treatment; for example, if a specified number is for the time of day service, the number can be routed to a treatment.
- **From DIGIT-SCREEN:** Screening can point to a treatment. The advantage of doing treatment from screening, as opposed to treatment from routing, is that from screening, you can execute a treatment with the next treatment being "CONTINUE", which then terminates the call normally.
- **From PRFL-FAILCND:** You can use a treatment to provide special handling on call failure. Use this feature to tailor customer-specific announcements and tones.

DLT-TREATMENT lets the user delete a treatment.

ED-TREATMENT lets the user change the attributes of a treatment. Use this command to change the type of treatment, the announcement to play (when required) and its associated arguments, whether to send an ansInd message to the originating switch when the announcement starts, the failure condition that triggers the treatment, the digit modification table name and primary key used to change parameters for a reroute, the routing table name and primary key used for rerouting, and the treatment to call next.

ENT-TREATMENT lets the user establish a treatment. Use this command to define the treatment name, the type of treatment, the announcement to play (when required) and its associated arguments, whether to send an ansInd message to the originating switch when the announcement starts, the failure condition that triggers the treatment, the digit modification table name and primary key used to change parameters for a reroute, the routing table name and primary key used for rerouting, and the treatment to call next.

RTRV-TREATMENT lets the user retrieve the attributes of a treatment.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-TREATMENT:[TID]:<treatmentId>:[CTAG];  
ED-TREATMENT:[TID]:<treatmentId>:[CTAG]::  
    [TREATTYPE=<treatType>],[ANNCID=<anncId>],  
    [ANNCARGS=<anncArgs>],[ANSIND=<ansInd>],  
    [FAILCND=<failCnd>],[DGTMODKEY=<dgtModKey>],  
    [RTKEY=<rtKey>],[NEXTTREAT=<nextTreat>];  
ENT-TREATMENT:[TID]:<treatmentId>:[CTAG]::  
    TREATTYPE=<treatType>,[ANNCID=<anncId>],  
    [ANNCARGS=<anncArgs>],[ANSIND=<ansInd>],  
    [FAILCND=<failCnd>],[DGTMODKEY=<dgtModKey>],  
    [RTKEY=<rtKey>],[NEXTTREAT=<nextTreat>];  
RTRV-TREATMENT:[TID]:[<treatmentId>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<treatmentId>:TREATTYPE=<treatType>,
  ANNCID=<anncId>, [ANNCARGS=<anncArgs>],
  [ANSIND=<ansInd>], [FAILCND=<failCnd>],
  [DGTMODKEY=<dgtModKey>], [RTKEY=<rtKey>],
  [NEXTTREAT=<nextTreat>]"
;
```

Parameters:

treatmentId Identifies the AID as a treatment. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all treatments configured in the system will be returned.

Type: string

Range: 1-10 alphanumeric characters

Default value: none

treatType Identifies the type of treatment.

Type: enum

Range: ANNC = play an announcement

FAILCND = provide special handling on call failure

REROUTE = use digit modifications to change parameters of
the call to restart routing

Default value: none

anncId Identifies the internal designator for an audio announcement. Use RTRV-AUDIO-ANNC to determine the configured audio announcements. If an audio announcement requires variable arguments (determined with RTRV-AUDIO-VMSG) such as TIME (TME_12) or PhoneNumber (DIG_NDN), provide the source of the variable fields in *anncArgs*.

Type: integer

Range: {1-32766}

Default value: NULL

anncArgs Identifies a list of arguments applicable to the announcement. You can specify up to six arguments, separated by ampersands (&).

Type: string

Range: <arg>[&<arg>[&<arg>[&<arg>[&<arg>[&<arg>]]]]], where *arg* has the form <argKey>-<argValue>):

argKey identifies the primary key applicable to the specified announcement, with values of:

- CDPN = called party number
- CGPN = calling party number
- CHRGN = charge number
- DATE = date
- DIG = digits
- DUR = duration
- MTH = month
- NUMCARD = cardinal number
- NUMORD = ordinal number
- TIME = time

argValue identifies the value applicable to the specified primary key, with values of:

- CDPN (optional): digit modification table name (1-10 alphanumeric characters), previously defined by ENT-DIGITMOD-DN
- CGPN (optional): digit modification table name (1-10 alphanumeric characters), previously defined by ENT-DIGITMOD-DN
- CHRGN (optional): digit modification table name (1-10 alphanumeric characters), previously defined by ENT-DIGITMOD-DN
- DATE (mandatory): YYYYMMDD, MMDD, or "CURRDATE"
- DIG (mandatory): string of 1-10 digits (presently not implemented)
- DUR (mandatory): 0-35999999 seconds (played as hours, minutes, and seconds)
- MTH (mandatory): {1-12}
- NUMCARD (mandatory): {0-9999}
- NUMORD (mandatory): {1-31} (played as 1st through 31st)
- TIME (mandatory): HHMM or "CURRTIME"

Default value: NULL

ansInd Identifies, when the value of *treatType* is “ANNC”, whether to send an ansInd message to the previous switch when the announcement starts.

Type: BoolYN

Range: Y = send ansInd message
N = do not send ansInd message

Default value: N

failCnd Identifies, when the value of *treatType* is “FAILCND”, the previously defined failure condition that triggers the treatment. Use RTRV-FAILCND to determine the existing conditions. This parameter usually applies to routing to a treatment, which then uses a condition.

Type: string

Range: 1-21 alphanumeric characters

Default value: NULL

dgtModKey Identifies, when the value of *treatType* is “REROUTE”, the digit modification table and associated primary key used to change parameters for a reroute.

Type: string

Range: <dmLbl>-<primKey>, where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

FCIMBIT = Forward Call Indicator M-bit

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG-{1-6} = Register index

TNS = Transit Network Selection

Default value: NULL

rtKey Identifies, when the value of *treatType* is “REROUTE”, the routing table and associated primary key used to change parameters for a reroute.

Type: string

Range: <rtLbl>-<primKey>, where:

rtLbl identifies the name of the applicable routing table with a string of 1-10 alphanumeric characters (or “NULL” to reroute in the current partition);

primKey identifies the primary key applicable to the specified routing table, with values of:

BGN = Bearer Group Number (interface type)

CALLTYPE = type of call (Class 5)

CDPN = called party number (Default value)

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

TNS = Transit Network Selection

Default value: NULL

nextTreat Identifies, when the value of *treatType* is “ANNC”, the digit modification table and associated primary key used to change parameters for a reroute.

Type: string

Range: 1-10 alphanumeric characters, CONTINUE

Default value: NULL

Input Examples:

```
DLT-TREATMENT::TREATMENT1;
```

```
ED-TREATMENT::TREATMENT1::TREATTYPE=ANNC, ANNCID=3002,  
NEWVALUE=126;
```

```
ENT-TREATMENT::TREATMENT1::TREATTYPE=ANNC,  
ANNCID=3002, NEWVALUE=126;
```

```
RTRV-TREATMENT::TREATMENT1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "TREATMENT1:TREATTYPE=ANNC,ANNCID=3002,
    ANNCARGS=NULL,ANSIND=N,FAICND=NULL,
    DGTMODKEY=NULL,RTKEY=NULL,
    NEXTTREAT=NULL"
;
```

Related Commands: none

RLS-CALL

Command:

RLS-CALL: Release Call

Description:

RLS-CALL lets you manually force the release of a call. It is usually used to release fraudulent calls. The call is identified by the AID retrieved from the fraud CDR generated for calls that meet the fraud screening parameters or from the RTRV-FRAUDCALLS command.

Category: Call Control

Security: NSA

Input Format:

RLS-CALL : [TID] : <callAid> : CTAG ;

Output Format: none

Parameters:

callAid Identifies the AID as the name of a fraud call record in the CDR.

Type: string

Range: 1-FFFFFF (hexadecimal)

Default value: none

Input Example:

RLS-CALL : : 3F ;

Related Commands:

RTRV-FRAUDCALLS

RTRV-FAILCND

Command:

RTRV-FAILCND: Retrieve Failure Condition

Description:

RTRV-FAILCND lets you retrieve the failure condition enumerations and descriptions available in the Times10 database for use by PRFL-FAILCND.

Category: Call Control

Security: View

Input Format:

RTRV-FAILCND: [TID]: [<cnd>]:CTAG;

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<cnd>:DESC=<desc>"
;
```

Parameters:

cnd Identifies the AID as the name of a failure condition. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, descriptions for all failure conditions configured in the system will be returned.

Type: string

Range: up to 21 alphanumeric characters

Default value: none

desc Identifies the description of the failure condition.

Type: string

Range: up to 100 alphanumeric characters

Default value: none

Input Example:

RTRV-FAILCND;

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"SCP_OPR_FAILED:DESC=\"All SCP related operations \""
"PROTERR:DESC=\"Protocol Error used by all protocol \""
"RESUNAVAIL:DESC=\"resources unavailable, unspecified \""
"CKTCONG:DESC=\"Circuit/channel congestion \""
"TMRRCVRY:DESC=\"recovery on timer expiry \""
"USRBUSY:DESC=\"user busy \""
"CALL_BLOCK:DESC=\"call blocked \""
"BCAPNOTIMPL:DESC=\"bearer capability not implemented \""
"SUBIF_NOT_PROV:DESC=\"sub if not provisioned \""
"NOCKTAVAIL:DESC=\"NoCircuit available\""
"LM_INITIATED_REL:DESC=\"Layer Mgr initiated release\""
"ANS_SUPER_REL:DESC=\"Answer supervision timer expiry\""
"AUTH_FAILURE:DESC=\"Auth/Account code entry failure\""
"FC_SCR_FRAUD_REL:DESC=\"call screened to be fraud\""
"NODSPRESOURCES:DESC=\"DSP resources are not available\""
"CODECFAILURE:DESC=\"Codec not acceptable\""
"UNALLOC_NUMBER:DESC=\"unallocated numbers \""
"NOROUTTRANSNET:DESC=\"no route to transit network \""
"VACANT_CODE:DESC=\"Invalid Carrier Access Code \""
"INV0PREFIX:DESC=\"Invalid 0 Prefix \""
"INV1PREFIX:DESC=\"Invalid 1 Prefix \""
"HAVE1PREFIX:DESC=\"Prefix 1 not Dialed when Required\""
"INVALID_CARRIER:DESC=\"invalid carrier specified \""
"NMBCHNG:DESC=\"number changed \""
"DSTOUTORD:DESC=\"destination out of order \""
"INVNMBFORM:DESC=\"invalid number format \""
"CGOOS:DESC=\"cgprty oos unallocatedi changed\""
"EQUIPMENT_TROUBLE:DESC=\"equipment trouble \""
"RT_FAILED:DESC=\"routing failed \""
"INTFC_UNAVAIL:DESC=\"interface unavailable \""
"INTFC_UNAVAIL_COST:DESC=\"no circuit/channel available \""
"INTFC_UNAVAIL_BCAP:DESC=\"bearer cap not presently avail\""
"NOROUTDST:DESC=\"no route to destination \""
"EXCG_RT_ERROR:DESC=\"Exchange Routing error \""
"REQ_CHAN_NAVAIL:DESC=\"Requested Channel not available \""
```

Related Commands:

DLT/ED/ENT/RTRV-PRFL-FAILCND

RTRV-FRAUDCALLS

Command:

RTRV-FRAUDCALLS: Retrieve Fraud Calls

Description:

RTRV-FRAUDCALLS lets you retrieve details about calls that have been marked as potentially fraudulent by a fraud trap profile.

Category: Call Control

Security: View

Input Format:

```
RTRV-FRAUDCALLS:[TID]:[<callAid>]:CTAG:::  
[COUNT=<count>];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
"<com>:FRAUDCALLINFO=<fraudCallInfo>,  
CFINFO=<cfinfo>,ASSOCCALLINFO=<assocCallInfo>,  
NMBRREC=<nmbrRec>"  
;
```

Parameters:

callAid Identifies the AID as the name of a fraud call record in the CDR. A null value is equivalent to "ALL"; that is, by leaving the field blank, information for all fraud calls will be returned.

Type: string

Range: 1-FFFFFF (hexadecimal)

Default value: none

com Identifies the AID (in output) as the switch.

Type: COM

Range: COM

Default value: none

count Identifies the number of entries to display in output.

Type: integer

Range: {1-100}

Default value: 1

fraudCallInfo Identifies the fraud call detail information (the recorded call leg details).

Type: string

Range: <callAid>-<icIfType>-<icIfId>-<ogIfType>-<ogIfId>-<cgpn>-<cdpn>, where:

callAid identifies the name of a fraud call record in the CDR with a hexadecimal string from 2-FFFFFF

icIfType identifies the incoming interface type, with values of:

CASIF = CAS interface

CASTRK = CAS trunk

GR303 = GR303 interface

ISDNIF = ISDN interface

ISUP = ISUP trunk

MGCP = MGCP interface

SIP = SIP trunk

icIfId identifies the incoming interface with an integer from 0-65535

ogIfType identifies the outgoing interface type, with values of:

CASIF = CAS interface

CASTRK = CAS trunk

GR303 = GR303 interface

ISDNIF = ISDN interface

ISUP = ISUP trunk

MGCP = MGCP interface

SIP = SIP trunk

ogIfId identifies the outgoing interface with an integer from 0-65535

cgpn identifies the calling party number to be matched as a string of 1-31 digits;

cdpn identifies the called party number to be matched as a string of 1-31 digits;

Default value: none

cfInfo Identifies the call forwarding detail associated with the fraud call record.

Type: string

Range: <OCN>-<ORR>-<RN>-<RR>-<RC>, where:

- OCN* identifies the Originating Called party Number in the CDR with a string of 1-31 digits and a default of “NULL”
- ORR* identifies the Originating Redirecting Reason in the CDR with a string of alphanumeric characters and a default of “NULL”
- RN* identifies the Redirecting Number in the CDR with a string of 1-31 digits and a default of “NULL”
- RR* identifies the Redirecting Reason in the CDR with a string of alphanumeric characters and a default of “NULL”
- RC* identifies the Redirecting Counter in the CDR with an integer from 0-65535

Default value: none

assocCallInfo Identifies the fraud call detail information (the recorded call leg details) for third party involvement in the call .

Type: string

Range: <callAid>-<icIfType>-<icIfId>-<ogIfType>-<ogIfId>-<cgpn>-<cdpn>, where:

- callAid* identifies the name of a fraud call record in the CDR with a hexadecimal string from 2-FFFFFF
- icIfType* identifies the incoming interface type, with values of:
 - CASIF = CAS interface
 - CASTRK = CAS trunk
 - GR303 = GR303 interface
 - ISDNIF = ISDN interface
 - ISUP = ISUP trunk
 - MGCP = MGCP interface
 - SIP = SIP trunk
- icIfId* identifies the incoming interface with an integer from 0-65535
- ogIfType* identifies the outgoing interface type with values of:
 - CASIF = CAS interface
 - CASTRK = CAS trunk
 - GR303 = GR303 interface
 - ISDNIF = ISDN interface
 - ISUP = ISUP trunk
 - MGCP = MGCP interface
 - SIP = SIP trunk

ogIfId identifies the outgoing interface with an integer from 0-65535

cgpn identifies the calling party number to be matched as a string of 1-31 digits with a default of "NULL";

cdpn identifies the called party number to be matched as a string of 1-31 digits with a default of "NULL";

Default value: none

nmbrRec Identifies the total number of fraud call records in the database..

Type: integer

Range: {1-65535}

Default value: none

Input Example:

```
RTRV-FRAUDCALLS;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"com:FRAUDCALLINFO=3F-ISUP-1-ISUP-2-5088048202-
5084900909,CFINFO=5088048202-1,
ASSOCCALLINFO=NULL,NMBREC=1"
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-PRFL-FRAUDCALLS
```

TEST-TRANS

Command:

TEST-TRANS: Test Translation

Description:

TEST-TRANS lets you verify translation plans in the call router and check the routing decision and modifications to the keys. You must first configure the router to run this command. TEST-TRANS has the following limitations:

- SCP interactions (tollfree, LNP, other general AIN triggers) are not validated (or even detected).
- No simulation occurs when the value of the first part of *actnInfoAnlz* in TRANS-PLAN is “SUB”; that is, the primary digit-screening key “SUBSTATUS” for an action performed at the InfoAnalyzed PIC prior to AIN trigger analysis is not validated.
- Limited support for the digit-modification/screening primary key CALLTYPE in DIGIT-SCREEN, DIGITMOD-DN/GEN/PARAM/TNS, and ROUTE, unless a call type associated with a trunk group is specified in PRFL-PARAMDEFAULTS or is specified by the parameter *callType* in this command. The actual call type associated with the simulated call based on number analysis of calling and called party number is not available to this feature.
- Announcements resulting from a treatment specified in a failure condition profile required by a translation plan are denoted in the TEST-TRANS output solely by their ID numbers, without reporting their applicable arguments.

Category: Call Control

Security: NSA

Input Format:

```
TEST-TRANS:[TID]:[<src>]:CTAG:[BGN=<bgn>],  
[CDPN=<cdpn>],[CGPN=<cgpn>],[CHRGN=<chrgn>],  
[GAP=<gap>],[GENDGTS=<gendgts>],[TNS=<tns>],  
[LATAID=<lataId>],[OLI=<oli>],[CPC=<cpc>],  
[CIP=<cip>],[JIP=<jip>],[CSI=<csi>],  
[CALLTYPE=<callType>],[AUTHCODE=<authCode>],  
[TOD=<tod>],[ABGN=<abgn>],[SUBSTATUS=<substatus>],  
[FMTOPT=<fmtopt>];
```

Output Format:

```
      SID DATE TIME
M    CTAG COMPLD
      "<COM>:<text>"
      ;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

bgn Identifies the bearer group.

Type: string

Range: <intfcType>-<idx>, where

intfcType identifies the type of interface applicable to the bearer group, with values of:

CASIF = CAS interface

GR303 = GR303 interface

ISDNIF = ISDN interface

MGCP = MGCP interface

TGN = CAS, ISUP, or SIP trunk

idx identifies the trunk group or interface index (except for GR303 where it identifies the subscriber interface number), with values of:

CASIF: 1-2147483647

GR303: 1-32767

ISDNIF: 1-2147483647

MGCP: 1-100000

TGN: 1-9999

Default value: NULL

cdpn Identifies the called party number.

Type: string

Range: <cdnai>-<np>-<nmb>, where

cdnai identifies the called party number nature of address indicator, with values of:

ABBREVPVT = abbreviated private

INTNATNUM = international number

INTNATOPREQ = international operator request

NATNUM = national significant number

NATOPREQ = national (long-distance) operator request

NONUMCUTTHRU = no number provided, cut through to carrier

NONUMOPREQ = no number provided, operator request

SUBOPREQ = subscriber (local) operator request

SUBSNUM = subscriber number

TESTLINE = test line test code

UNKNOWN = unknown number;

np identifies the numbering plan, with values of:

ISDN = abbreviated private numbering plan

PRIVATE = unique subscriber number

UNKNOWN = unknown numbering plan

nmb identifies the called party number with a numeric string of up to 31 digits

Default value: NULL

cgpn Identifies the calling party number.

Type: string

Range: <cgnai>-<np>-<nmb>, where

cgnai identifies the calling party number nature of address indicator, with values of:

ABBREVPVT = abbreviated private

NUNIINTNATNUM = non-unique international number

NUNINATNUM = non-unique national number (only for CGPN)

NUNISUBSNUM = non-unique subscriber number

TESTLINE = test line test code

UNIINTNATNUM = unique international number

UNINATNUM = unique national number

UNISUBSNUM = unique subscriber number

np identifies the numbering plan, with values of:

ISDN = abbreviated private numbering plan

PRIVATE = unique subscriber number

UNKNOWN = unknown numbering plan

nmb identifies the calling party number with a numeric string of up to 31 digits

Default value: NULL

- chrgn** Identifies the charge number.
- Type:** string
- Range:** <chrgnnai>-<np>-<nmb>, where
- chrgnai* identifies the charge number nature of address indicator, with values of:
 - CDPNATNUM = ANI of the called party; national number
 - CDPSUBSNUM = ANI of the called party; subscriber number
 - CDPUNAVAIL = ANI of the called party; no number present
 - CGPNATNUM = ANI of the calling party; national number
 - CGPSUBSNUM = ANI of the calling party; subscriber number
 - UNAVAIL = ANI not available or not provided
 - np* identifies the numbering plan, with values of:
 - ISDN = abbreviated private numbering plan
 - PRIVATE = unique subscriber number
 - UNKNOWN = unknown numbering plan
 - nmb* identifies the charge number with a numeric string of up to 31 digits
- Default value:** NULL
- gap** Identifies up to five Generic Address Parameters, separated by ampersands (&).
- Type:** string
- Range:** <gap>[&<gap>[&<gap>[&<gap>[&<gap>]]]], where *gap* has the form <primKey>-<secKey>, *primKey* identifying the type of generic address parameter with an integer from 0-255, and *secKey* identifying the starting digits with a string of one to 31 digits or "DEFAULT" or "NOTPRSNT"
- Default value:** NULL
- gendgts** Identifies up to five Generic Digits Parameters, separated by ampersands (&).
- Type:** string
- Range:** <genDgts>[&<genDgts>[&<genDgts>[&<genDgts>[&<genDgts>]]]], where *genDgts* has the form <primKey>-<secKey>, *primKey* identifying the type of generic digits with an integer from 1-31, and *secKey* identifying the starting digits with a string of up to 31 digits or "DEFAULT" or "NOTPRSNT"
- Default value:** NULL

tns	Identifies the Transit Network Selection (TNS) parameter. Type: string Range: <tnsVal>-<0ZZcode>, where <i>tnsVal</i> identifies the carrier code as a string of 1-4 digits (Range = {0-9999}) <i>0ZZcode</i> identifies the ISUP circuit code or the CAS 0ZZ or 1NX codes as a string of 1-3 digits (Range = {0-255}) Default value: NULL
lataId	Identifies the Local Access & Transport Area. Type: integer Range: {200-99999} Default value: NULL
oli	Identifies the Originating Line Information parameter. Type: string Range: {00-FF} (hexadecimal) Default value: NULL
cpc	Identifies the Calling Party Category parameter. Type: string Range: {00-FF} (hexadecimal) Default value: NULL
cip	Identifies the Carrier Information Parameter (for ISUP only). Type: integer Range: {0-9999} Default value: NULL
jip	Identifies the Jurisdiction Information Parameter (NPANXX). Type: integer Range: {200000-999999} Default value: NULL

- csi** Identifies the Carrier Selection Information parameter.
- Type:** enum
- Range:** PRESUBDIAL = presubscribed and input by calling party
PRESUBNOTDIAL = presubscribed and not input by calling party
PRESUBUNKNOWN = presubscribed, input by calling party undetermined
NOTPRESUB = not presubscribed and input by calling party
UNKNOWN = no indication
- Default value:** NULL
- callType** Identifies the type of call (Class 5).
- Type:** enum
- Range:** CUTTHRU
DIR_ASSISTANCE
EMERGENCY
INTERLATA
INTERLATAOPREQ
INTNATNUM
INTNATOPREQ
INTRALATA
INTRALATAOPREQ
LOCALNUMBER
LOCALOPREQ
N11
NATNUM
NONUMOPREQ
TOLLFREE
- Default value:** NULL
- authCode** Identifies the authorization code provided by the caller.
- Type:** string
- Range:** up to eight digits (including “*”, but not as the first digit)
- Default value:** NULL
- tod** Identifies the time of day in month-day-hour format.
- Type:** integer
- Range:** MM-DD-HH
- Default value:** NULL

abgn Identifies the anchor bearer group for SIP and SIP-T. ABGN is an internal translation key for handling certain SIP "referred" calls. For some SIP referred calls, with or without replace, involving analysis of referred-to-number and subsequent routing, ABGN captures the ingress trunk group of the referred call. In all other calls, this key is set to NOTPRSNT. Not all SIP call refers need to utilize the ABGN key. Typically, the translation plan and routing keys associated with the trunk group over which the "refer" is received provide enough flexibility to route the call properly. You can use the ABGN key to differentiate between two trunk groups, when routing refers over a different trunk group than new call requests.

Type: string

Range: <rrType>-<intfcType>-<idx>, where

rrType identifies the refer/replace type, with values of:

LOCAL = CAS interface

NONE = GR303 interface

RMT = ISDN interface

intfcType identifies the type of interface applicable to the anchor bearer group, with values of:

CASIF = CAS interface

GR303 = GR303 interface

ISDNIF = ISDN interface

MGCP = MGCP interface

TGN = CAS, ISUP, or SIP trunk

idx identifies the trunk group or interface index (except for GR303 where it identifies the subscriber interface number), with values of:

CASIF: 1-2147483647

GR303: 1-32767

ISDNIF: 1-2147483647

MGCP: 1-100000

TGN: 1-9999

Default value: NULL

substatus Identifies the status of the subscriber.

Type: enum

Range: ACTIVE = In Service (subscriber is present in the CL4SUB table and active)

INACTIVE = Out Of Service (subscriber is present in the CL4SUB table and inactive)

NOTINDB = Not in database (subscriber is not in the CL4SUB table)

Default value: NULL

- fntopt** Identifies whether to use alternate output formatting for decoding in the Plexview® EMS. This parameter is for use by Lucent personnel; leave it blank.
- Type:** BoolYN
Range: N = In Service (subscriber is present in the CL4SUB table and active)
Y = Out Of Service (subscriber is present in the CL4SUB table and inactive)
Default value: N
- text** Identifies, as the output, descriptions of translation plans, routing decisions, and key modifications in the call router,.
- Type:** string
Range: ASCII characters
Default value: none

Input Example:

```
TEST-TRANS::::BGN=TGN-1,CDPN=NATNUM-908,TNS=111;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"COM:0:TrkGrp-1::TransPlan-TP1"
"COM:1:type=Transplan,label=TP1,type=Normal,
  action=infoColl,type=Screen,label=DS1"
"COM:2:type=Screen,label=DS1,key=TNS,rule=TNS-0111,
  match=0111,action=Pass"
"COM:3:type=Transplan,label=TP1,type=Normal,
  type=Router,label=RD1"
"COM:4:type=Router,label=RD1,key=CDPN,
  rule=CDPN-NATIONAL-DEFAULT,match=NATIONAL-908,
  action=RtList,label=RL1"
"COM:5:type=Routelist,label=RL1,hunt=Circ,index=1,
  intf=TrkGrp-1001"
"COM:6:type=Intfc,label=TrkGrp-1001"
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-TRANS-PLAN
```

DLT/ENT/RTRV-GMSC-LAESDN

Commands:

DLT-GMSC-LAESDN: Delete GMSC Lawfully Authorized Electronic Surveillance DN

ENT-GMSC-LAESDN: Enter GMSC Lawfully Authorized Electronic Surveillance DN

RTRV-GMSC-LAESDN: Retrieve GMSC Lawfully Authorized Electronic Surveillance DN

Descriptions:

DLT-GMSC-LAESDN lets the user designate a wireless subscriber as no longer being under CALEA surveillance.

ENT-GMSC-LAESDN lets the user designate a wireless subscriber as being under CALEA surveillance. ENT-GMSC-LAESDN will not work unless ENT-SUBSCRIBER has already been issued.

RTRV-GMSC-LAESDN lets the user determine the wireless subscribers under CALEA surveillance.

Category: Call Control

Security: SA (and CALEA-enabled via ED/ENT-USER-SECU) for all commands

Input Formats:

DLT-GMSC-LAESDN: [TID]:<subscriberDn>:[CTAG];

ENT-GMSC-LAESDN: [TID]:<subscriberDn>:[CTAG];

RTRV-GMSC-LAESDN: [TID]: [<subscriberDn>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<subscriberDn>"
;
```

Parameters:

subscriberDn Identifies the AID as a wireless subscriber under CALEA surveillance at the home MSC (Mobile Switching Center). A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all wireless subscribers under CALEA surveillance in the system will be returned. You can use the key word "ALL" (in DLT) to remove from the system all wireless subscribers under CALEA surveillance.

Type: string

Range: up to 21 digits, including over-decadic digits A-F

Default value: none

Input Examples:

DLT-GMSC-LAESDN : 5088048202 ;

ENT-GMSC-LAESDN : 5088048202 ;

RTRV-GMSC-LAESDN ;

Output Example:

```
telica 2005-06-24 14:37:49
M 0 COMPLD
  "5088048202"
  "5084900909"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-LNPSCREEN-DIGITS

Commands:

DLT-LNPSCREEN-DIGITS: Delete LNPSCREEN Digits

ED-LNPSCREEN-DIGITS: Edit LNPSCREEN Digits

ENT-LNPSCREEN-DIGITS: Enter LNPSCREEN Digits

RTRV-LNPSCREEN-DIGITS: Retrieve LNPSCREEN Digits

Descriptions:

DLT-LNPSCREEN-DIGITS lets the user delete a telephone number from the list of called numbers for which LNP queries can be issued. Entries can be either three digits to represent an entire NPA, six digits to represent an NXX within an NPA, or ten digits for an individual telephone number.

ED-LNPSCREEN-DIGITS lets the user change the escape (exception) list for the specified NPA, NPA-NXX, or individual telephone number.

ENT-LNPSCREEN-DIGITS lets the user add telephone numbers to the list of called numbers for which LNP queries can be issued. Entries can be either three digits to represent an entire NPA, six digits to represent an NXX within an NPA, or ten digits for an individual telephone number.

RTRV-LNPSCREEN-DIGITS lets the user either retrieve the list of called numbers for which LNP queries can be issued, or determine if a specific number is listed.

Category: Call Control

Security: SA for DLT/ENT, View for RTRV

Input Formats:

DLT-LNPSCREEN-DIGITS:[TID]:<screenDigits>:[CTAG];

ED-LNPSCREEN-DIGITS:[TID]:<screenDigits>:[CTAG]::
TRIGESCLIST=<trigEsclist>;

ENT-LNPSCREEN-DIGITS:[TID]:<screenDigits>:[CTAG]::
[TRIGESCLIST=<trigEsclist>;]

RTRV-LNPSCREEN-DIGITS:[TID]:[<screenDigits>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<screenDigits>:TRIGESCLIST=<trigEscList>"
;
```

Parameters:

screenDigits Identifies the AID as an NPA, an NXX within an NPA, or an individual telephone number. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all telephone numbers in the system for which LNP queries can be issued will be returned.

Type: string

Range: 3 or 6-10 digits

Default value: none

trigEscList Identifies the escape (exception) list for the specified LNP screening digits..

Type: string

Range: up to 10 characters

Default value: NULL

Input Examples:

```
DLT-LNPSCREEN-DIGITS::508480;
ED-LNPSCREEN-DIGITS::508480:::TRIGESCLIST=NULL;
ENT-LNPSCREEN-DIGITS::508480:::TRIGESCLIST=NULL;
RTRV-LNPSCREEN-DIGITS;
```

Output Example:

```
Lucent 2005-06-24 14:37:49
M 0 COMPLD
"508480:TRIGESCLIST=NULL"
"508804:TRIGESCLIST=NULL"
"978:TRIGESCLIST=NULL"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-MGC-MGASSOC

Commands:

DLT-MGC-MGASSOC: Delete Media Gateway Controller Media Gateway Association

ED-MGC-MGASSOC: Edit Media Gateway Controller Media Gateway Association

ENT-MGC-MGASSOC: Enter Media Gateway Controller Media Gateway Association

RTRV-MGC-MGASSOC: Retrieve Media Gateway Controller Media Gateway Association

Descriptions:

DLT-MGC-MGASSOC lets the user delete an association between a Lucent Network Controller (NC) and a media gateway. Executing DLT-MGC-MGASSOC requires the state to be "OOS".

ED-MGC-MGASSOC lets the user change the primary state of the association between a Lucent Network Controller and a media gateway.

ENT-MGC-MGASSOC lets the user establish an association between a Lucent Network Controller and a media gateway. Use this command to define the media gateway's IP address, the port on the media gateway used by the NC, the MEGACO profile, the security option, the authentication keys for screening incoming and outgoing transaction messages, the maximum calls per second allowed, the type of action taken when transitioning from IS to OOS, and the media gateway's state

RTRV-MGC-MGASSOC lets the user retrieve the attributes of the association between a Lucent Network Controller and a media gateway.

Category: Call Control

Platform: Lucent Network Controller

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-MGC-MGASSOC:[TID]:<mgName>:[CTAG];  
ED-MGC-MGASSOC:[TID]:<mgName>:[CTAG]:[:<pst>];  
ENT-MGC-MGASSOC:[TID]:<mgName>:[CTAG]::NAME=<name>,  
[PORT=<port>],[MEGACOPRFLID=<megacoPrflId>],  
[SECURITYTYPE=<securityType>],  
[INCAUTHKEY=<incAuthKey>],  
[OUTGAUTHKEY=<outgAuthKey>],[MAXCPS=<maxCps>],  
[CMDMODE=<cmdMode>]:[:<pst>];  
RTRV-MGC-MGASSOC:[TID]:[:<mgName>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
  "<mgName>:NAME=<name>,PORT=<port>,  
    MEGACOPRFLID=<megacoPrflId>,  
    SECURITYTYPE=<securityType>,  
    INCAUTHKEY=<incAuthKey>,  
    OUTGAUTHKEY=<outgAuthKey>,MAXCPS=<maxCps>,  
    CMDMODE=<cmdMode>:<pst>"  
;
```

Parameters:

mgName Identifies the AID as the media gateway associated with a Lucent Network Controller. Set the value of *mgName* to the SID (System Identifier – from the header for TL1 messages) for the media gateway. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns information for all media gateways associated with the Lucent Network Controller.

Type: string

Range: up to 30 ASCII characters

Default value: none

- name** Identifies the IP address for the media gateway with a range of {0-254}.{0-254}.{0-255}.{1-255}. A value of “127.0.0.1” puts the module in loopback and is the only valid value for the Lucent Compact Switch (when the media gateway is in the same chassis as the media gateway controller).
- Type:** string
Range: up to 32 characters
Default value: none
- port** Identifies the UDP/TCP port on the Lucent Network Controller that transmits MEGACO transaction requests to, and receives responses from, the media gateway.
- Type:** integer
Range: {1-65535}
Default value: 2905
- megacoPrflId** Identifies the MEGACO profile specifying the values for timers and other provisionable objects.
- Type:** integer
Range: {1-8}
Default value: 1
- securityType** Identifies the security option supported by the destination.
- Type:** enum
Range: INTERIM-MD5 = specifies interim authentication algorithm MD5 per RFC-3015, used by MEGACO compliant devices when IPSEC is not supported, to calculate the Integrity Check Value (ICV) specified in RFC-2402
INTERIM-SHA1 = specifies interim authentication algorithm SHA1 per RFC-3015, used by MEGACO compliant devices when IPSEC is not supported, to calculate the Integrity Check Value (ICV) specified in RFC-2402
IPSEC = Standard IP security employed to secure MEGACO transactions (currently not supported)
NONE = authentication not used
Default value: NONE

incAuthKey Identifies the manual authentication key for screening transaction messages from the destination. This parameter applies only when the value of *securityType* is “INTERIM-MD5” or “INTERIM-SHA1”.

Type: string

Range: exactly 32 hexadecimal digits when the value of *securityType* is “INTERIM-MD5”
exactly 40 hexadecimal digits when the value of *securityType* is “INTERIM-SHA1”

Default value: NULL

outgAuthKey Identifies the manual authentication key for ensuring security of transaction messages to the destination. This parameter applies only when the value of *securityType* is “INTERIM-MD5” or “INTERIM-SHA1”.

Type: string

Range: exactly 32 hexadecimal digits when the value of *securityType* is “INTERIM-MD5”
exactly 40 hexadecimal digits when the value of *securityType* is “INTERIM-SHA1”

Default value: NULL

maxCps Identifies the maximum number of calls per second allowed for the media gateway.

Type: integer

Range: {0-300}

Default value: 100

cmdMode Identifies the type of action taken when transitioning from IS to OOS.

Type: enum

Range: FRCD = Forced mode – tears down connections
NORM = Normal mode

Default value: NORM

pst Identifies (in ED and ENT) the primary state of the media gateway. Calls are disconnected on transition from IS to OOS.

Type: enum

Range: IS = In-service
OOS = Out-of-service

Default value: IS

pst Identifies (in RTRV output) the primary state of the media gateway.

Type: enum

Range: IS = In-service
OOS = Out-of-service
OOS-AU = Out-Of-Service, Autonomous
OOS-MA = Out-Of-Service, Managed

Default value: none

Input Examples:

```
DLT-MGC-MGASSOC::MG1;  
ED-MGC-MGASSOC::MG1::OOS;  
ENT-MGC-MGASSOC::MG1::NAME=127.0.0.1,PORT=2944,  
    MEGACOPRFLID=1,SECURITYTYPE=NONE,INCAUTHKEY=NULL,  
    OUTGAUTHKEY=NULL,MAXCPS=100,CMDMODE=NORM:IS;  
RTRV-MGC-MGASSOC;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"MG1:NAME=127.0.0.1,PORT=2944,MEGACOPRFLID=1,  
    SECURITYTYPE=NONE,INCAUTHKEY=NULL,  
    OUTGAUTHKEY=NULL,MAXCPS=100,CMDMODE=NORM:IS"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-MGC-MGIUA

Commands:

DLT-MGC-MGIUA: Delete Media Gateway Controller Media Gateway IUA
ED-MGC-MGIUA: Edit Media Gateway Controller Media Gateway IUA
ENT-MGC-MGIUA: Enter Media Gateway Controller Media Gateway IUA
RTRV-MGC-MGIUA: Retrieve Media Gateway Controller Media Gateway IUA

Descriptions:

DLT-MGC-MGIUA lets the user delete an association between the IUA subsystem in a Lucent Network Controller (NC) and a remote media gateway. Executing DLT-MGC-MGIUA requires the state to be “OOS”.

ED-MGC-MGIUA lets the user change the properties of the association between the IUA subsystem in a Lucent Network Controller and a remote media gateway.

ENT-MGC-MGIUA lets the user establish an association between the IUA subsystem in a Lucent Network Controller and a remote media gateway, thus initializing the IUA subsystem. Use this command to define the media gateway directed by the NC, its IP addresses and IUA ports, the NC’s IUA ports, various parameters controlling SCTP (Simple Control Transport Protocol), and the association’s state. Although this command concerns the Lucent Network Controller, RFC 3057 considers the IUA subsystem as part of the signaling gateway. The Lucent Signaling Gateway communicates over a standard ISDN interface, with the IUA subsystem residing on the NC.

RTRV-MGC-MGIUA lets the user retrieve the properties of the association between the IUA subsystem in a Lucent Network Controller and a remote media gateway.

Category: Call Control

Platform: Lucent Network Controller

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-MGC-MGIUA: [TID]: <mgName>: [CTAG];

ED-MGC-MGIUA: [TID]: <mgName>: [CTAG]: :
    [TFLCPOLL=<tflcPoll>], [TASPENDING=<tAsPending>],
    [TASPACKINIT=<tAspAckInit>],
    [NMBASPRETRY=<nmbAspRetry>],
    [TASPACKSTDY=<tAspAckstdy>], [TASPMACK=<tAspmAck>],
    [NMBASPMRETRY=<nmbAspmRetry>], [TDLEST=<tDlEst>],
    [TDLREL=<tDlRel>], [MAXDLESTRETRY=<maxDlEstRetry>],
    [MAXDLRELRETRY=<maxDlRelRetry>],
    [RTOINITIAL=<rtoInitial>], [RTOMIN=<rtoMin>],
    [RTOMAX=<rtoMax>], [INTERVALTM=<intervalTm>]:
    [<pst>];

ENT-MGC-MGIUA: [TID]: <mgName>: [CTAG]: : MGIPA=<mgIPA>,
    MGIUAPORTA=<mgIuaPortA>, [MGIPB=<mgIPB>],
    [MGIUAPORTB=<mgIuaPortb>],
    [MGCIUAPORTA=<mgcIuaPortA>],
    [MGCIUAPORTB=<mgcIuaPortB>], [TFLCPOLL=<tFlcPoll>],
    [FLCQSIZE=<flcQSize>], [TASPENDING=<tAsPending>],
    [TASPACKINIT=<tAspAckInit>],
    [NMBASPRETRY=<nmbAspRetry>],
    [TASPACKSTDY=<tAspAckstdy>], [TASPMACK=<tAspmAck>],
    [NMBASPMRETRY=<nmbAspmRetry>], [TDLEST=<tDlEst>],
    [TDLREL=<tDlRel>], [MAXDLESTRETRY=<maxDlEstRetry>],
    [MAXDLRELRETRY=<maxDlRelRetry>],
    [RTOINITIAL=<rtoInitial>], [RTOMIN=<rtoMin>],
    [RTOMAX=<rtoMax>], [INTERVALTM=<intervalTm>]:
    [<pst>];

RTRV-MGC-MGIUA: [TID]: [<mgName>]: [CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<mgName>:MGIPA=<mgIPA>,MGIUAPORTA=<mgIuaPortA>,
    MGIPB=<mgIPB>,MGIUAPORTB=<mgIuaPortb>,
    MGCIUAPORTA=<mgcIuaPortA>,
    MGCIUAPORTB=<mgcIuaPortB>,TFLCPOLL=<tFlcPoll>,
    FLCQSIZE=<flcQSize>,TASPENDING=<tAsPending>,
    TSPACKINIT=<tAspAckInit>,
    NMBASPRETRY=<nmbAspRetry>,
    TSPACKSTDY=<tAspAckstdy>,TASPMACK=<tAspmAck>,
    NMBASPMRETRY=<nmbAspmRetry>,TDLEST=<tDlEst>,
    TDLREL=<tDlRel>,MAXDLESTRETRY=<maxDlEstRetry>,
    MAXDLRELRETRY=<maxDlRelRetry>,
    RTOINITIAL=<rtoInitial>,RTOMIN=<rtoMin>,
    RTOMAX=<rtoMax>,INTERVALTM=<intervalTm>:<pst>,
    [<sst>]"
;
```

Parameters:

mgName Identifies the AID as the media gateway directed by the IUA subsystem in a Lucent Network Controller. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns information for all media gateways associated with the NC.

Type: string

Range: up to 30 ASCII characters

Default value: none

mgIPA Identifies the IP address for the media gateway, either as a fully qualified domain name, or as an IP address with a range of {0-254}.{0-254}.{0-255}.{1-255}. A fully qualified domain name must be unique and the same on the switch, the media gateway (the Internet access device, or IAD) and the domain name server (DNS). A value of "127.0.0.1" puts the module in loopback. Use the Chassis IP address for the Lucent Compact Switch.

Type: string

Range: up to 32 characters

Default value: none

mgIuaPortA Identifies the IUA port for the media gateway.

Type: integer

Range: {1-65535}

Default value: none

mgIPB Identifies an optional secondary IP address for the media gateway, if it has one, either as a fully qualified domain name, or as an IP address with a range of {0-254}.{0-254}.{0-255}.{1-255}. A fully qualified domain name must be unique and the same on the switch, the media gateway (the Internet access device, or IAD) and the domain name server (DNS). A value of “127.0.0.1” puts the module in loopback. Use the Chassis IP address for the Lucent Compact Switch.

Type: string
Range: up to 32 characters
Default value: NULL

mgIuaPortB Identifies the IUA port for the optional secondary IP address on the media gateway.

Type: integer
Range: {1-65535}
Default value: NULL

mgcIuaPortA Identifies the port for the IUA subsystem on the active processor in the Lucent Network Controller. This parameter lets the user change the local IUA SCTP (Simple Control Transport Protocol) listening port, for this association, from the IANA-assigned IUA port 9900 or the port number assigned with *iomPort* in IUA-SYS.

Type: integer
Range: {1-65535}
Default value: the value of *iomPort* in IUA-SYS

mgcIuaPortB Identifies the port for the IUA subsystem on the standby processor in the Lucent Network Controller. This parameter lets the user change the local IUA SCTP (Simple Control Transport Protocol) listening port, for this association, from the IANA-assigned IUA port 9900 or the port number assigned with *iomPort* in IUA-SYS.

Type: integer
Range: {1-65535}
Default value: the value of *iomPort* in IUA-SYS

tFlcPoll Identifies the time, in seconds, between periodic checks for a change in flow control status.

Type: integer
Range: {1-10}
Default value: 1

flcQSize Identifies the number of messages (not bytes) per interface that the IUA subsystem queues while SCTP (Simple Control Transport Protocol) is experiencing flow control, or the cluster is in AS_PENDING state. Take into consideration the number of interfaces configured for the AS.

Type: integer
Range: {1-400}
Default value: 100

tAsPending Identifies the recovery time, in seconds, for the state transition in AS_PENDING. An ASP transitions to INACTIVE or DOWN. The AS transitions to state AS_PENDING. If an ASP becomes active before the recovery timer expires then the AS becomes AS_ACTIVE. If the timer expires then the AS becomes AS_DOWN or AS_INACTIVE (if an ASP is ASP_INACTIVE).

Type: integer
Range: {1-10}
Default value: 2

tAspAckInit Identifies the time, in seconds, between ASP_UP or ASP_DOWN messages while waiting to receive an ACK. This timer applies for the first *nmbAspRetry* messages, after which *tAspAckStdy* timer applies.

Type: integer
Range: {1-10}
Default value: 2

nmbAspRetry Identifies the number of times ASP_UP or ASP_DOWN is sent at timer interval *tAspAckInit*, after which the timer is changed to *tAspAckStdy*.

Type: integer
Range: {1-10}
Default value: 3

tAspAckStdy Identifies the time, in seconds, between sending ASP_UP or ASP_DOWN without receiving an ACK.

Type: integer
Range: {1-10}
Default value: 4

tAspmAck Identifies the time, in seconds, between ASP_ACTIVE or ASP_INACTIVE messages.

Type: integer
Range: {1-10}
Default value: 2

- nmbAspmRetry** Identifies the number of times ASP_ACTIVE or ASP_INACTIVE is sent at timer interval *tAspmAck*.
Type: integer
Range: {1-10}
Default value: 3
- tDIEst** Identifies the time, in seconds, between DL_ESTABLISH request retries.
Type: integer
Range: {1-100}
Default value: 30
- tDIRel** Identifies the time, in seconds, between DL_RELEASE request retries.
Type: integer
Range: {1-100}
Default value: 30
- maxDIEstRetry** Identifies the number of times for DL_ESTABLISH request retries.
Type: integer
Range: {1-10}
Default value: 3
- maxDIRelRetry** Identifies the number of times for DL_RELEASE request retries.
Type: integer
Range: {1-10}
Default value: 3
- rtoInitial** Identifies the initial value, in seconds, for the SCTP (Simple Control Transport Protocol) retransmission timer after recalculating RTO (Retransmission Time Out).
Type: decinum
Range: {3-10}
Default value: 3
- rtoMin** Identifies the minimum value, in seconds, for the SCTP (Simple Control Transport Protocol) retransmission timer after recalculating RTO (Retransmission Time Out). SCTP RFC 2960 recommends the default value of one second.
Type: decinum
Range: {1-3}
Default value: 1

- rtoMax** Identifies the maximum value, in seconds, for the SCTP (Simple Control Transport Protocol) retransmission timer after recalculating RTO (Retransmission Time Out). SCTP RFC 2960 recommends the default value of 60 seconds.
- Type:** decinum
Range: {3-100}
Default value: 60
- intervalTm** Identifies the value, in seconds, for the SCTP (Simple Control Transport Protocol) interval timer for all heartbeat datagrams.
- Type:** decinum
Range: {1-1200}
Default value: 3
- pst** Identifies (in ED and ENT) the primary state of the association between the NC's IUA subsystem and a remote media gateway.
- Type:** enum
Range: IS = In-service
OOS = Out-of-service
Default value: IS
- pst** Identifies (in RTRV output) the primary state of the association between the NC's IUA subsystem and a remote media gateway.
- Type:** enum
Range: IS = In-service
OOS = Out-of-service
OOS-AU = Out-Of-Service, Autonomous
OOS-MA = Out-Of-Service, Managed
Default value: none
- sst** Identifies (in RTRV output) the secondary state of the association between the NC's IUA subsystem and a remote media gateway.
- Type:** enum
Range: ACT = Active
FAF = Facilities Failure (association failed)
SGEO = Supporting Entity Outage (the Compute Module or ENET port is out of service)
Default value: none

Input Examples:

```
DLT-MGC-MGIUA::MG1;  
  
ED-MGC-MGIUA::MG1:::TFLCPOLL=1,TASPENDING=2,  
    TASPACKINIT=2,NMBASPRETRY=3,TASPACKSTDY=4,  
    TASPMACK=2,NMBASPMRETRY=3,TDLEST=30,TDLREL=30,  
    MAXDLESTRETRY=3,MAXDLRELRETRY=3,RTOINITIAL=3,  
    RTOMIN=1,RTOMAX=60,INTERVALTM=3:IS;  
  
ENT-MGC-MGIUA::MG1:::MGIPA=192.168.252.4,  
    MGIUAPORTA=9999,MGIPB=NULL,MGIUAPORTB=NULL,  
    MGCIUAPORTA=9900,MGCIUAPORTB=9900,TFLCPOLL=1,  
    FLCQSIZE=100,TASPENDING=2,TASPACKINIT=2,  
    NMBASPRETRY=3,TASPACKSTDY=4,TASPMACK=2,  
    NMBASPMRETRY=3,TDLEST=30,TDLREL=30,MAXDLESTRETRY=3,  
    MAXDLRELRETRY=3,RTOINITIAL=3,RTOMIN=1,RTOMAX=60,  
    INTERVALTM=3:IS;  
  
RTRV-MGC-MGIUA;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"MG1:MGIPA=192.168.252.4,  
    MGIUAPORTA=9999,MGIPB=NULL,MGIUAPORTB=NULL,  
    MGCIUAPORTA=9900,MGCIUAPORTB=9900,TFLCPOLL=1,  
    FLCQSIZE=100,TASPENDING=2,TASPACKINIT=2,  
    NMBASPRETRY=3,TASPACKSTDY=4,TASPMACK=2,  
    NMBASPMRETRY=3,TDLEST=30,TDLREL=30,  
    MAXDLESTRETRY=3,MAXDLRELRETRY=3,RTOINITIAL=3,  
    RTOMIN=1,RTOMAX=60,INTERVALTM=3:IS,ACT"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-MGC-PC

Commands:

DLT-MGC-PC: Delete Media Gateway Controller Point Code

ED-MGC-PC: Edit Media Gateway Controller Point Code

ENT-MGC-PC: Enter Media Gateway Controller Point Code

RTRV-MGC-PC: Retrieve Media Gateway Controller Point Code

Descriptions:

DLT-MGC-PC lets the user delete the association of an own point code for the Lucent Network Controller (NC) with the destination point code for a remote media gateway controller.

ED-MGC-PC lets the user change the attributes of a trunk between the NC and a remote media gateway controller. These attributes include the protocol variant for the trunk, the action the switch takes on startup for all circuit groups towards the remote MGC, the value for the Pause Validation timer, the action the switch takes when the remote MGC is unavailable, whether to enable ISUP congestion control, the values for the short and long congestion timers, and the ISUP call throttling levels.

ENT-MGC-PC lets the user establish a trunk between the NC and a remote media gateway controller by defining both point codes and the attributes applied to the trunk. ENT-MGC-PC is dependent on ENT-MGC-PCOWN; that is, ENT-MGC-PC will not work unless ENT-MGC-PCOWN has already been issued.

RTRV-MGC-PC lets the user retrieve the attributes of a trunk between the NC and a remote media gateway controller.

Category: Call Control

Platform: Lucent Network Controller

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-MGC-PC:[TID]:<mgcPcId>:[CTAG];  
ED-MGC-PC:[TID]:<mgcPcId>:[CTAG]::  
    [PCSTARTMODE=<pcstartmode>],  
    [ISUPTPAUSE=<isuptpause>],[T4=<t4>],  
    [PCPAUSEACTN=<pcpauseactn>],  
    [ISUPCONGCTRL=<isupcongctrl>],[T29=<t29>],  
    [T30=<t30>],[CONGLVL1=<conglvl1>],  
    [CONGLVL2=<conglvl2>],[CONGLVL3=<conglvl3>];  
ENT-MGC-PC:[TID]:<mgcPcId>:[CTAG]::  
    ISUPVARIANT=<isupVariant>,  
    [PCSTARTMODE=<pcStartMode>],  
    [ISUPTPAUSE=<isupTPause>],[T4=<t4>],  
    [PCPAUSEACTN=<pcpauseactn>],  
    [ISUPCONGCTRL=<isupcongctrl>],[T29=<t29>],  
    [T30=<t30>],[CONGLVL1=<conglvl1>],  
    [CONGLVL2=<conglvl2>],[CONGLVL3=<conglvl3>];  
RTRV-MGC-PC:[TID]:[<mgcPcId>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
    "<mgcPcId>:ISUPVARIANT=<isupVariant>,  
    PCSTARTMODE=<pcStartMode>,  
    ISUPTPAUSE=<isupTPause>,T4=<t4>,  
    PCPAUSEACTN=<pcpauseactn>,  
    ISUPCONGCTRL=<isupcongctrl>,T29=<t29>,T30=<t30>,  
    CONGLVL1=<conglvl1>,CONGLVL2=<conglvl2>,  
    CONGLVL3=<conglvl3>"  
;
```

Parameters:

mgcPcId Identifies the AID as the association of an own point code for the Lucent Network Controller with the destination point code for a remote media gateway controller, thus establishing a trunk between the two MGCs. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all media gateway controller trunks configured in the system will be returned.

Type: string

Range: OPC-{0-255}-{0-255}-{0-255}-DPC-{0-255}-{0-255}-{0-255} for NANP (national) point codes
OPC-{0-16383}-DPC-{0-16383} for international point codes

Default value: none

isupVariant Identifies the protocol variant for the OPC-DPC pair. This variant determines the set of messages requiring action, the actions to take on receipt of these messages and/or timeouts, the timers used and their values. "ISUPETSI", "ISUPG500", "ISUPITU", "ISUPITUQ767", "ISUPMEXICO" and "ISUPTELSTRA" apply to international point codes; "ISUPANSI1992" applies to NANP (national) point codes.

Type: enum

Range: ISUPANSI1992 = 1992 ANSI format
ISUPETSI = European Telecommunications Standards Institute
ISUPG500 = Australian Carrier Interconnect Specification G500
ISUPITU = International Telecommunication Union
ISUPITUQ767 = ITU Recommendation Q.767
ISUPMEXICO = Mexican ISUP variant
ISUPTELSTRA = Telecom Australia

Default value: none

pcStartMode Identifies the action the switch takes on startup for all circuit groups towards the DPC to ensure a known state for the circuits.

Type: enum

Range: STARTNOACTION = no action on startup
STARTRESET = reset point code on startup
STARTUNBLOCK = unblock point code on startup

Default value: STARTNOACTION

isupTPause Identifies the value (in seconds) for the Pause Validation timer. Typical values are 15 to 20 seconds. A value of zero means the timer never expires and no action will be taken on a Point Code pause.

Type: integer
Range: {0-3267}
Default value: 0

t4 Identifies the Timer T4 value (in seconds) for international variants. Timer T4 supervises the receipt of an answer to the user part test message. It starts on receipt of an MTP-STATUS primitive with the cause "inaccessible remote user". On expiry T4 terminates normally, the user part test message is resent, and T4 restarts. On receipt of a user part available message or any other message, timer T4 is stopped, the user part is marked available again and traffic is restarted.

Type: integer
Range: {1-1000}
Default value: 300

pcPauseActn Identifies the action the switch takes when MTP level 3 sends a pause status primitive to indicate that the DPC is unavailable.

Type: enum
Range: CLRDFLT = (Clear: Default) clear all calls on receipt of the pause status primitive
CLRTMOUT = (Clear: Timeout) clear calls only when the pause timer (tPAUSE) expires
CLRTRAN = (Clear: Transient) clear transient calls on receipt of the pause status primitive, start the pause timer
Default value: CLRTMOUT

isupCongCtrl Identifies whether to enable ISUP congestion control. Set the value of *isupCongCtrl* to "Y" when the values of *multiCongLvl* and *dmPriority* in [SG-PC](#) are "N".

Type: BoolYN
Range: Y = enable ISUP congestion control
N = do not enable ISUP congestion control
Default value: N

t29 Identifies the Timer T29 value (in seconds) for the ISUP layer. Timer T29 denotes the short timer; that is, the period during which congestion indications are ignored.

Type: decinum
Range: {0.1-1.0}
Default value: 0.5

- t30** Identifies the Timer T30 value (in seconds) for the ISUP layer. Timer T30 denotes the long timer; that is, the period during which congestion indications are acknowledged and the congestion level is incremented.
Type: decinum
Range: {1-60}
Default value: 10
- congLvl1** Identifies the percentage of originated calls to reject at the first level of call throttling by the ISUP layer. The value of *congLvl1* cannot be greater than the value of *congLvl2*.
Type: integer
Range: {1-100}
Default value: 25
- congLvl2** Identifies the percentage of originated calls to reject at the second level of call throttling by the ISUP layer. The value of *congLvl2* cannot be greater than the value of *congLvl3*.
Type: integer
Range: {1-100}
Default value: 50
- congLvl3** Identifies the percentage of originated calls to reject at the third level of call throttling by the ISUP layer.
Type: integer
Range: {1-100}
Default value: 100

Input Examples:

```
DLT-MGC-PC:::0PC-23-186-5-DPC-24-177-39;  
ED-MGC-PC:::0PC-23-186-5-DPC-24-177-39:::  
  PCSTARTMODE=STARTNOACTION,ISUPTPAUSE=0,T4=300,  
  PCPAUSEACTN=CLRTMOUT,ISUPCONGCTRL=N,T29=0.5,T30=10,  
  CONGLVL1=25,CONGLVL2=50,CONGLVL3=100;  
ENT-MGC-PC:::0PC-23-186-5-DPC-24-177-39:::  
  ISUPVARIANT=ISUPANSI1992,PCSTARTMODE=STARTNOACTION,  
  ISUPTPAUSE=0,T4=300,PCPAUSEACTN=CLRTMOUT,  
  ISUPCONGCTRL=N,T29=0.5,T30=10,CONGLVL1=25,  
  CONGLVL2=50,CONGLVL3=100;  
RTRV-MGC-PC;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"OPC-23-186-5-DPC-24-177-39:
  ISUPVARIANT=ISUPANSI1992,
  PCSTARTMODE=STARTNOACTION, ISUPTPAUSE=0, T4=300,
  PCPAUSEACTN=CLRTMOUT, ISUPCONGCTRL=N, T29=0.5,
  T30=10, CONGLVL1=25, CONGLVL2=50, CONGLVL3=100;
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-MGC-PCOWN
ED/ENT/RTRV-SG-PC
```

DLT/ED/ENT/RTRV-MGC-PCOWN

Commands:

DLT-MGC-PCOWN: Delete Media Gateway Controller Own Point Code

ED-MGC-PCOWN: Edit Media Gateway Controller Own Point Code

ENT-MGC-PCOWN: Enter Media Gateway Controller Own Point Code

RTRV-MGC-PCOWN: Retrieve Media Gateway Controller Own Point Code

Descriptions:

DLT-MGC-PCOWN lets the user delete an own point code for a Lucent Network Controller (NC). You cannot delete an OPC with the ability to be used by IN services if you've established a route to an SCP or STP at a remote point code (via ENT-SCCP-ROUTE).

ED-MGC-PCOWN lets the user change whether the own point code for an NC can be used by IN services. You cannot negate the ability of the own point code to be used by IN services if the point code is in use by an IN service.

ENT-MGC-PCOWN lets the user establish an own point code for an NC. An NC can support up to four own point codes, of which only one can support IN services.

RTRV-MGC-PCOWN lets the user retrieve the own point code for an NC.

Category: Call Control

Platform: Lucent Network Controller

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-MGC-PCOWN: [TID]:<pcId>:[CTAG];

ED-MGC-PCOWN: [TID]:<pcId>:[CTAG]::
[INSERVICES=<inServices>];

ENT-MGC-PCOWN: [TID]:<pcId>:[CTAG]::
[INSERVICES=<inServices>];

RTRV-MGC-PCOWN: [TID]: [<pcId>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<pcId>:INSERVICES=<inServices>"
;
```

Parameters:

pcId Identifies the AID as an own point code for the NC. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns all own point codes for the NC.

Type: string

Range: {0-255}-{0-255}-{0-255} for NANP (national) point codes
 {0-16383} for international point codes

Default value: none

inServices Identifies whether the own point code can be used by IN services. Although a switch acting as an NC can support up to four own point codes, only one can use IN services. You cannot change the value to "N" if the point code is in use by an IN service.

Type: BoolYN

Range: N = own point code cannot be used by IN services
 Y = own point code can be used by IN services

Default value: N

Input Examples:

```
DLT-MGC-PCOWN::23-186-5;
ED-MGC-PCOWN::23-186-5:::INSERVICES=Y;
ENT-MGC-PCOWN::23-186-5:::INSERVICES=N;
RTRV-MGC-PCOWN;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "23-186-5:INSERVICES=N"
;
```

Related Commands:

DLT/ED/ENT/RTRV-MGC-PC

DLT/ED/ENT/RTRV-MGC-PRFLMEGACO

Commands:

DLT-MGC-PRFLMEGACO: Delete Media Gateway Controller Profile
MEGACO

ED-MGC-PRFLMEGACO: Edit Media Gateway Controller Profile MEGACO

ENT-MGC-PRFLMEGACO: Enter Media Gateway Controller Profile
MEGACO

RTRV-MGC-PRFLMEGACO: Retrieve Media Gateway Controller Profile
MEGACO

Descriptions:

DLT-MGC-PRFLMEGACO lets the user delete a profile for configuring MEGACO protocol parameters used by a Lucent Network Controller (NC) when communicating with MEGACO-controlled media gateways.

ED-MGC-PRFLMEGACO lets the user change a profile for configuring MEGACO protocol parameters used by an NC when communicating with MEGACO-controlled media gateways. You must first put any media gateways using the profile in an Out-Of-Service state before making edits. Changes take effect after failing over the active Compute Module in the MGC to the standby Compute Module.

ENT-MGC-PRFLMEGACO lets the user establish a profile for configuring MEGACO protocol parameters used by an NC when communicating with MEGACO-controlled media gateways. Use this command to define the type of media gateway, the IP transport protocol, the maximum retry delay, the retry when response pending time, and the encoding for MEGACO transactions sent by the NC.

RTRV-MGC-PRFLMEGACO lets the user retrieve the attributes of a profile for configuring MEGACO protocol parameters used by an NC when communicating with MEGACO-controlled media gateways.

Category: Call Control

Platform: Lucent Network Controller

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-MGC-PRFLMEGACO:[TID]:<megacoPrflId>:[CTAG];  
ED-MGC-PRFLMEGACO:[TID]:<megacoPrflId>:[CTAG]::  
    [MGVARIANT=<mgVariant>],[TRANSPROT=<transpProt>],  
    [LONGTMR=<longTmr>],[PENDTMOUT=<pendTmout>],  
    [MGCTOKEN=<mgcToken>];  
ENT-MGC-PRFLMEGACO:[TID]:<megacoPrflId>:[CTAG]::  
    [MGVARIANT=<mgVariant>],[TRANSPROT=<transpProt>],  
    [LONGTMR=<longTmr>],[PENDTMOUT=<pendTmout>],  
    [MGCTOKEN=<mgcToken>];  
RTRV-MGC-PRFLMEGACO:[TID]:[<megacoPrflId>]:[CTAG];
```

Output Format:

```
    SID DATE TIME  
M   CTAG COMPLD  
    "<megacoPrflId>:MGVARIANT=<mgVariant>,  
    TRANSPROT=<transpProt>,LONGTMR=<longTmr>,  
    PENDTMOUT=<pendTmout>,MGCTOKEN=<mgcToken>"  
    ;
```

Parameters:

megacoPrflId Identifies the profile used to control the operation of the MEGACO stack for a media gateway provisioned on an NC. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns information for all MEGACO profiles configured in the system.

Type: integer

Range: {1-8}

Default value: none

mgVariant Identifies the type of media gateway provisioned on the NC.

Type: enum

Range: PLEX9K = Lucent Network Gateway

Default value: PLEX9K

transpProt Identifies the IP transport protocol used for MEGACO transactions.

Type: enum

Range: UDP = User Datagram Protocol

TCP = Transport Control Protocol (not yet supported)

Default value: UDP

longTmr Identifies the maximum retry delay in seconds. The NC retransmits MEGACO transaction requests that remain outstanding (no corresponding MG transaction reply has been received) until timer expiry.

Type: integer

Range: {3-30}

Default value: 6

pendTmout Identifies the time, in seconds, to wait for a response before retrying a transaction when a pending response has been received.

Type: decinum

Range: {0.5-2.0}

Default value: 1

mgcToken Identifies how to encode the MEGACO transactions sent by the NC.

Type: enum

Range: BINARY = ASN.1 MEGACO message encoding (currently unsupported)

LONG = Verbose ASCII text encoding per RFC-3015

SHORT = Compressed ASCII text encoding per RFC-3015

Default value: LONG

Input Examples:

```
DLT-MGC-PRFLMEGACO::1;
```

```
ED-MGC-PRFLMEGACO::1::MGVARIANT=PLEX9K,  
  TRANSPROT=UDP, LONGTMR=6, PENDTMOUT=1, MGCTOKEN=LONG;
```

```
ENT-MGC-PRFLMEGACO::1::MGVARIANT=PLEX9K,  
  TRANSPROT=UDP, LONGTMR=6, PENDTMOUT=1, MGCTOKEN=LONG;
```

```
RTRV-MGC-PRFLMEGACO;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"1:MGVARIANT=PLEX9K, TRANSPROT=UDP, LONGTMR=6,
  PENDTMOUT=1, MGCTOKEN=LONG"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-MGC-SGASSOC

Commands:

DLT-MGC-SGASSOC: Delete Media Gateway Controller Signaling Gateway Association

ED-MGC-SGASSOC: Edit Media Gateway Controller Signaling Gateway Association

ENT-MGC-SGASSOC: Enter Media Gateway Controller Signaling Gateway Association

RTRV-MGC-SGASSOC: Retrieve Media Gateway Controller Signaling Gateway Association

Descriptions:

DLT-MGC-SGASSOC lets the user delete an association between a signaling gateway and a Lucent Network Controller (NC).

ED-MGC-SGASSOC lets the user change the port on the NC that transmits M3UA data to the signaling gateway and the primary state of the signaling gateway associated with an NC.

ENT-MGC-SGASSOC lets the user establish an association between a signaling gateway and an NC by defining the signaling gateway's IP addresses and state, the port on the NC that transmits M3UA data to the signaling gateway over SCTP (Simple Control Transport Protocol), and the default network type.

RTRV-MGC-SGASSOC lets the user retrieve a signaling gateway's IP addresses and state, the port on the NC that transmits M3UA data to the signaling gateway over SCTP (Simple Control Transport Protocol), and the default network type.

Category: Call Control

Platform: Lucent Network Controller

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-MGC-SGASSOC: [TID]:<sgId>:[CTAG];
ED-MGC-SGASSOC: [TID]:<sgId>:[CTAG]::
    [SGDESTPORT=<sgDestPort>]: [<pst>];
ENT-MGC-SGASSOC: [TID]:<sgId>:[CTAG]::
    SGSPAIP=<sgSPAIP>, SGSPBIP=<sgSPBIP>,
    [SGDESTPORT=<sgDestPort>],
    [NETTYPEDFLT=<netTypeDflt>]: [<pst>];
RTRV-MGC-SGASSOC: [TID]: [<sgId>]: [CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
    "<sgId>:SGSPAIP=<sgSPAIP>, SGSPBIP=<sgSPBIP>,
    SGDESTPORT=<sgDestPort>,
    NETTYPEDFLT=<netTypeDflt>:<pst>[,<sst>]"
;
```

Parameters:

sgId Identifies the AID as a signaling gateway associated with an NC. Set the value of *sgId* to the SID (System Identifier – from the header for TL1 messages) for the media gateway. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns information for all signaling gateways associated with the NC.

Type: integer

Range: {1-32}

Default value: none

sgSPAIP Identifies the IP address for the SP-A Module of the signaling gateway, either as a fully qualified domain name, or as an IP address with a range of {0-254}.{0-254}.{0-255}.{1-255}. A fully qualified domain name must be unique and the same on the switch, the media gateway (the Internet access device, or IAD) and the domain name server (DNS). A value of "127.0.0.1" puts the module in loopback and is the only valid value for the Lucent Compact Switch (when the signaling gateway is in the same chassis as the media gateway controller).

Type: string

Range: up to 32 characters

Default value: none

sgSPBIp Identifies the IP address for the SP-B Module of the signaling gateway, either as a fully qualified domain name, or as an IP address with a range of {0-254}.{0-254}.{0-255}.{1-255}. A fully qualified domain name must be unique and the same on the switch, the media gateway (the Internet access device, or IAD) and the domain name server (DNS). A value of “127.0.0.1” puts the module in loopback and is the only valid value for the Lucent Compact Switch (when the signaling gateway is in the same chassis as the NC).

Type: string

Range: up to 32 characters

Default value: none

sgDestPort Identifies the IP port on the NC that transmits M3UA data to the signaling gateway over SCTP (Simple Control Transport Protocol). The NC receives data on the range of ports identified with RTRV-MGC-SYS.

Type: integer

Range: {1-65000}

Default value: 2905

netTypeDflt Identifies the default network type when the Network Appearance parameter is not present in the M3UA message from the signaling gateway .

Type: integer

Range: ANSI
ITU

Default value: ITU

pst Identifies the primary state of the signaling gateway. Call processing stops on the signaling gateway when the state is “OOS”.

Type: enum

Range: IS = In-service

OOS = Out-of-service

OOS-AU = Out-of-service, autonomous (RTRV output)

OOS-MA = Out-of-service, managed (RTRV output)

Default value: IS

sst Identifies, in RTRV output, the secondary state of the signaling gateway when the value of *pst* is “OOS-AU”.

Type: enum

Range: FAF = Facility failure

Default value: none

Input Examples:

```
DLT-MGC-SGASSOC::1;  
ED-MGC-SGASSOC::1::SGDESTPORT=2905:00S;  
ENT-MGC-SGASSOC::1::SGSPAIP=192.168.252.4,  
    SGSPBIP=192.168.254.22,SGDESTPORT=2905,  
    NETTYPEDFLT=ITU:IS;  
RTRV-MGC-SGASSOC;
```

Output Example:

```
    lucent 2005-06-24 14:37:49  
M    0 COMPLD  
    "1:SGSPAIP=192.168.252.4,SGSPBIP=192.168.254.22,  
    SGDESTPORT=2905,NETTYPEDFLT=ITU:IS"  
;
```

Related Commands: none

DLT/ENT/RTRV-SG-ISUPPROXY

Commands:

DLT-SG-ISUPPROXY: Delete Signaling Gateway ISUP Proxy

ENT-SG-ISUPPROXY: Enter Signaling Gateway ISUP Proxy

RTRV-SG-ISUPPROXY: Retrieve Signaling Gateway ISUP Proxy

Descriptions:

DLT-SG-ISUPPROXY lets the user delete the association between a Lucent Signaling Gateway (SG) and a remote or adjacent switch.

ENT-SG-ISUPPROXY lets the user establish the ISUP variant to use for communications between an SG and a remote or adjacent switch. ENT-SG-ISUPPROXY will not work unless ENT-SG-PCOWN and ENT-SG-PC have already been issued.

RTRV-SG-ISUPPROXY lets the user retrieve the ISUP variant used for communications between an SG and a remote or adjacent switch.

Category: Signaling

Platform: Lucent Signaling Gateway

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SG-ISUPPROXY:[TID]:<pcPair>:[CTAG];

ENT-SG-ISUPPROXY:[TID]:<pcPair>:[CTAG]::
ISUPVARIANT=<isupVariant>;

RTRV-SG-ISUPPROXY:[TID]: [<pcPair>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<pcPair>:ISUPVARIANT=<isupVariant>"
;
```

Parameters:

pcPair Identifies the AID as the association between an SG and a remote or adjacent switch. The first part of the AID is the own point code for the SG; the second part is the point code for the destination switch. Both point codes must have the same format. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns all point code pairs for the SG. A null value (in RTRV) for the second part of the AID is equivalent to "ALL"; that is, by leaving the field blank, the system returns all point code pairs for the specified own point code.

Type: string

Range: OPC-<pcId>-DPC-<pcId> (for DLT and ENT)
OPC-<pcId>[-DPC-<pcId>] (for RTRV), where
pcId = {0-255}-{0-255}-{0-255} for NANP point codes
{0-16383} for international point codes

Default value: none

isupVariant Identifies the variant for MTP2 and MTP3. "ISUPANSI1992" applies only to NANP (national) point codes; "ISUPETSI", "ISUPG500", "ISUPITU", "ISUPITUQ767", "ISUPMEXICO" and "ISUPTELSTRA" apply only to international point codes.

Type: enum

Range: ISUPANSI1992 = 1992 ANSI format
ISUPETSI = European Telecommunications Standards
Institute
ISUPG500 = Australian Carrier Interconnect Specification
G500
ISUPITU = International Telecommunication Union
ISUPITUQ767 = ITU Recommendation Q.767
ISUPMEXICO = Mexican ISUP variant
ISUPTELSTRA = Telecom Australia

Default value: none

Input Examples:

```
DLT-SG-ISUPPROXY::OPC-123-186-5-DPC-77-219-100;  
ENT-SG-ISUPPROXY::OPC-123-186-5-DPC-77-219-100:::  
ISUPVARIANT=ISUPANSI1992;  
RTRV-SG-ISUPPROXY;
```

Output Example:

```
      lucent 2005-06-24 14:37:49
M    0 COMPLD
      "OPC-123-186-5-DPC-77-219-100:
        ISUPVARIANT=ISUPANSI1992"
      ;
```

Related Commands:

```
DLT/ED/ENT/RTRV-SG-PC
DLT/ED/ENT/RTRV-SG-PCOWN
```

DLT/ED/ENT/RTRV-SG-MGCASSOC

Commands:

DLT-SG-MGCASSOC: Delete Signaling Gateway Media Gateway Controller Association

ED-SG-MGCASSOC: Edit Signaling Gateway Media Gateway Controller Association

ENT-SG-MGCASSOC: Enter Signaling Gateway Media Gateway Controller Association

RTRV-SG-MGCASSOC: Retrieve Signaling Gateway Media Gateway Controller Association

Descriptions:

DLT-SG-MGCASSOC lets the user delete an association between a Lucent Network Controller (NC) and a Lucent Signaling Gateway (SG).

ED-SG-MGCASSOC lets the user change the primary state of an NC associated with an SG.

ENT-SG-MGCASSOC lets the user establish an association between an NC and an SG by defining the own point codes for the NC, its SP-A IP address, the starting port number for the range of 512 ports used for Connection Control and Signaling (CCS) processes, and the NC's primary state.

RTRV-SG-MGCASSOC lets the user retrieve an NC's own point codes, SP-A IP address, starting port number for the range of 512 ports used for Connection Control and Signaling (CCS) processes, and state.

Category: Call Control

Platform: Lucent Signaling Gateway

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SG-MGCASSOC: [TID]:<mgcId>:[CTAG];

ED-SG-MGCASSOC: [TID]:<mgcId>:[CTAG]:[:<pst>];

ENT-SG-MGCASSOC: [TID]:<mgcId>:[CTAG]::
OWNPCLST=<ownPcLst>, IPADDR=<ipAddr>,
[STAPORTRANGE=<staPortRange>]:[:<pst>];

RTRV-SG-MGCASSOC: [TID]:[:<mgcId>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<mgcId>:OWNPCLST=<ownPcLst>, IPADDR=<ipAddr>,
    STAPORTRANGE=<staPortRange>:<pst>"
;
```

Parameters:

- mgcId** Identifies the AID as an NC associated with an SG. Set the value of *mgcId* to the SID (System Identifier – from the header for TL1 messages) for the NC. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns information for all NCs associated with the SG.
- Type:** integer
Range: {1-32}
Default value: none
- ownPcLst** Identifies the own point codes for the NC. An NC can support up to four own point codes separated by ampersands (&).
- Type:** string
Range: <pcId>[&<pcId>[&<pcId>[&<pcId>]]], where
pcId = {0-255}-{0-255}-{0-255} for NANP (national) point codes, or
{0-16383} for international point codes
Default value: none
- ipAddr** Identifies the IP address for the SP-A Module in the NC. A value of "127.0.0.1" puts the module in loopback and is the only valid value for the Lucent Compact Switch (when the signaling gateway is in the same chassis as the media gateway controller).
- Type:** string
Range: {0-254}.{0-254}.{0-255}.{1-255}
Default value: none
- staPortRange** Identifies the starting port number for the range of 512 ports used for Connection Control and Signaling (CCS) processes.
- Type:** integer
Range: {1-65000}
Default value: value of *m3uaStaPortRange* in MGC-SYS, for which the default is 50000

pst Identifies the primary state of the NC.
Type: enum
Range: IS = In-service
OOS = Out-of-service
Default value: none

Input Examples:

```
DLT-SG-MGCASSOC::1;  
ED-SG-MGCASSOC::1::IS;  
ENT-SG-MGCASSOC::1::OWNPCLIST=23-156-78&23-156-90,  
    IPADDR=192.168.253.22, STAPORTRANGE=5000:IS;  
RTRV-SG-MGCASSOC;
```

Output Example:

```
    lucent 2005-06-24 14:37:49  
M    0 COMPLD  
    "1:OWNPCLIST=23-156-78&23-156-90,  
      IPADDR=192.168.253.22, STAPORTRANGE=5000:IS"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SG-PC

Commands:

DLT-SG-PC: Delete Signaling Gateway Point Code

ED-SG-PC: Edit Signaling Gateway Point Code

ENT-SG-PC: Enter Signaling Gateway Point Code

RTRV-SG-PC: Retrieve Signaling Gateway Point Code

Descriptions:

DLT-SG-PC lets the user delete an adjacent or remote point code for a signaling gateway. You cannot delete a point code without first deleting any association with the switch established with ENT-SG-ISUPPROXY.

ED-SG-PC lets the user change the attributes of an adjacent or remote point code for a signaling gateway.

ENT-SG-PC lets the user establish an adjacent or remote point code for a signaling gateway. ENT-SG-PC will not work unless ENT-SG-PCOWN and ENT-PRFL-PC have already been issued.

RTRV-SG-PC lets the user retrieve the attributes of an adjacent or remote point code for a signaling gateway.

Category: Signaling

Platform: Lucent Signaling Gateway

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-SG-PC: [TID]:<pcId>:[CTAG];
ED-SG-PC: [TID]:<pcId>:[CTAG]::[PCPRFLID=<pcPrflId>],
[MTPVARIANT=<mtpVariant>],[PCSSF=<pcSsf>],
[RSTREQ=<rstReq>],[MULTICONGLVL=<multiCongLvl>],
[DMPRIORITY=<dmPriority>];
ENT-SG-PC: [TID]:<pcId>:[CTAG]::PCDIR=<pcDir>,
PCPRFLID=<pcPrflId>,MTPVARIANT=<mtpVariant>,
[PCSSF=<pcSsf>],[RSTREQ=<rstReq>],
[MULTICONGLVL=<multiCongLvl>],
[DMPRIORITY=<dmPriority>];
RTRV-SG-PC: [TID]: [<pcId>]: [CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<pcId>:PCDIR=<pcdir>,PCPRFLID=<pcPrflId>,
MTPVARIANT=<mtpVariant>,PCSSF=<pcSsf>,
RSTREQ=<rstReq>,MULTICONGLVL=<multiCongLvl>,
DMPRIORITY=<dmPriority>"
;
```

Parameters:

pcId Identifies the AID as an adjacent or remote point code for a signaling gateway. Adjacent and remote point codes cannot be the same as own point codes (established via ENT-SG-PCOWN). A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns all adjacent and remote signaling gateway point codes.

Type: string

Range: {0-255}-{0-255}-{0-255} for NANP (national) point codes
{0-16383} for international point codes
DEF_ANSI = Default NANP point code
DEF_ITU = Default international point code

Default value: none

pcDir Identifies the type of point code. The value of *pcDir* cannot be "ADJ" when the value of *pcId* is "DEF_ANSI" or "DEF_ITU".

Type: enum

Range: ADJ = adjacent point code
REM = remote point code

Default value: none

- pcPrflId** Identifies the point code profile.
Type: enum
Range: {1-128}
Default value: none
- mtpVariant** Identifies the variant for MTP2 and MTP3. “ANSI” applies only to NANP (national) point codes; “ITU1988” and “ITU1992” apply only to international point codes.
Type: enum
Range: ANSI
ITU1988
ITU1992
Default value: none
- pcSsf** Identifies the sub-service field to be used.
Type: enum
Range: SSFINTL= international sub-service field
SSFNAT= national sub-service field
SSFRES = reserved sub-service field
SSFSPARE = spare sub-service field
Default value: SSFNAT
- rstReq** Identifies whether restart is required for the adjacent node. If this field is not 0, MTP Level 3 starts the MTP Level 3 restart procedure as soon as the first link becomes in-service.
Type: BoolYN
Range: Y = restart required
N = restart not required
Default value: N
- multiCongLvl** Identifies whether to enable multiple congestion level thresholds.
Type: BoolYN
Range: Y = enable multiple congestion level thresholds
N = do not enable multiple congestion level thresholds
Default value: Y
- dmPriority** Identifies whether to discard message priorities. This is usually true for national networks and false in international networks.
Type: BoolYN
Range: Y = discard message priorities
N = do not discard message priorities
Default value: Y

Input Examples:

```
DLT-SG-PC::24-177-39;  
ED-SG-PC::24-177-39:::PCPRFLID=1,MTPVARIANT=ANSI,  
    PCSSF=SSFNAT,RSTREQ=N,MULTICONGLVL=Y,DMPRIORITY=Y;  
ENT-SG-PC::24-177-39:::PCDIR=ADJ,PCPRFLID=1,  
    MTPVARIANT=ANSI,PCSSF=SSFNAT,RSTREQ=N,  
    MULTICONGLVL=Y,DMPRIORITY=Y;  
RTRV-SG-PC;
```

Output Example:

```
    lucent 2005-06-24 14:37:49  
M  0 COMPLD  
    "24-177-39:PCDIR=ADJ,PCPRFLID=1,MTPVARIANT=ANSI,  
    PCSSF=SSFNAT,RSTREQ=N,MULTICONGLVL=Y,  
    DMPRIORITY=Y;  
    ;
```

Related Commands:

DLT/ED/ENT/RTRV-SG-PCOWN

DLT/ED/ENT/RTRV-SG-PCOWN

Commands:

DLT-SG-PCOWN: Delete Signaling Gateway Own Point Code

ED-SG-PCOWN: Edit Signaling Gateway Own Point Code

ENT-SG-PCOWN: Enter Signaling Gateway Own Point Code

RTRV-SG-PCOWN: Retrieve Signaling Gateway Own Point Code

Descriptions:

DLT-SG-PCOWN lets the user delete an own point code for a Lucent Signaling Gateway (SG). You cannot delete the own point code without first deleting any association with a remote switch established with ENT-SG-ISUPPROXY.

ED-SG-PCOWN lets the user change an own point code for an SG.

ENT-SG-PCOWN lets the user establish an own point code for an SG. An SG can support up to eight own point codes.

RTRV-SG-PCOWN lets the user retrieve the own point code for an SG.

Category: Signaling

Platform: Lucent Signaling Gateway

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SG-PCOWN: [TID]:<pcId>:[CTAG];

ED-SG-PCOWN: [TID]:<pcId>:[CTAG]::
[MTPVARIANT=<mtpVariant>],[PCSSF=<pcSsf>],
[SSFVALID=<ssfValid>],[MTP3RSTREQ=<mtp3RstReq>];

ENT-SG-PCOWN: [TID]:<pcId>:[CTAG]::
MTPVARIANT=<mtpVariant>,[PCSSF=<pcSsf>],
[SSFVALID=<ssfValid>],[MTP3RSTREQ=<mtp3RstReq>];

RTRV-SG-PCOWN: [TID]: [<pcId>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<pcId>"
;
```

Parameters:

pcId Identifies the AID as an own point code for the SG. Own point codes cannot be the same as adjacent or remote point codes (established via ENT-SG-PC). A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns all own point codes for the SG.

Type: string

Range: {0-255}-{0-255}-{0-255} for NANP (national) point codes
{0-16383} for international point codes

Default value: none

mtpVariant Identifies the variant for MTP2 and MTP3. "ANSI" applies only to NANP (national) point codes; "ITU1988" and "ITU1992" apply only to international point codes.

Type: enum

Range: ANSI

ITU1988

ITU1992

Default value: none

pcSsf Identifies the sub-service field to be used.

Type: enum

Range: SSFINTL= international sub-service field

SSFNAT= national sub-service field

SSFRES = reserved sub-service field

SSFSPARE = spare sub-service field

Default value: SSFNAT

ssfValid Identifies the sub-service field (SSF) validity in MTP level 3. If true, the SSF of any message received on a link by MTP Level 3 is checked against the SSF configured for that link.

Type: BoolYN

Range: Y = valid

N = not valid

Default value: Y

mtp3RstReq Identifies whether restart is required. If this field is not 0, MTP Level 3 starts the MTP Level 3 restart procedure as soon as the first link becomes in-service.

Type: BoolYN

Range: Y = restart required
N = restart not required

Default value: N

Input Examples:

```
DLT-SG-PCOWN::23-186-5;  
ED-SG-PCOWN::23-186-5:::MTPVARIANT=ANSI,PCSSF=SSFNAT,  
SSFVALID=Y,MTP3RSTREQ=N;  
ENT-SG-PCOWN::23-186-5:::MTPVARIANT=ANSI,PCSSF=SSFNAT,  
SSFVALID=Y,MTP3RSTREQ=N;  
RTRV-SG-PCOWN;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"23-186-5:MTPVARIANT=ANSI,PCSSF=SSFNAT,SSFVALID=Y,  
MTP3RSTREQ=N"  
;
```

Related Commands:

DLT/ED/ENT/RTRV-SG-PC

DLT/ENT/RTRV-TOLLFREE-NPA

Commands:

DLT-TOLLFREE-NPA: Delete Tollfree NPA

ENT-TOLLFREE-NPA: Enter Tollfree NPA

RTRV-TOLLFREE-NPA: Retrieve Tollfree NPA

Descriptions:

DLT-TOLLFREE-NPA lets the user delete a tollfree NPA (Numbering Plan Area) within a country from the system.

ENT-TOLLFREE-NPA lets the user add a tollfree NPA (Numbering Plan Area) within a country to the system. ENT-TOLLFREE-NPA will not work unless ENT-COUNTRY has already been issued.

RTRV-TOLLFREE-NPA lets the user retrieve all tollfree NPAs (Numbering Plan Areas) within a country from the system. The command also can be used to determine the existence of a specific tollfree NPA.

Category: Call Control

Platform: Lucent Network Controller

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-TOLLFREE-NPA: [TID]:<CcNpa>:[CTAG];

ENT-TOLLFREE-NPA: [TID]:<CcNpa>:[CTAG];

RTRV-TOLLFREE-NPA: [TID]:<CcNpa>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<CcNpa>"
;
```

Parameters:

CcNpa Identifies the AID as a tollfree NPA within a country. The first number in the range identifies the country code; the second identifies the tollfree NPA and is optional in DLT and RTRV. A null value for the second number in the range (in DLT and RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system deletes or returns all tollfree NPAs for the country specified by the first number in the range. If you specify a nonexistent tollfree NPA for the second number in the range, the system will return a "DENY – SROF" message.

Type: ccNpa

Range: {1-999999}-{200-999}

Default value: none

Input Examples:

DLT-TOLLFREE-NPA: :01-888;

ENT-TOLLFREE-NPA: :01-888;

RTRV-TOLLFREE-NPA: :01;

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "01-800"
  "01-877"
  "01-888"
;
```

Related Commands: none

ED/RTRV-BILLSYS

Commands:

ED-BILLSYS: Edit BILLSYS

RTRV-BILLSYS: Retrieve BILLSYS

Descriptions:

ED-BILLSYS lets the user enable writing Call Detail Records (CDRs), and define the cutoff time for calls longer than 24 hours. Note that the TID (target identifier; that is, the network name of the switch) is mandatory – use RTRV-HDR to obtain the name if unknown.

RTRV-BILLSYS lets the user retrieve whether CDR writing is enabled, and the cutoff time for long-duration calls.

Category: Call Control

Platform: Lucent Network Controller

Security: NSA for ED, View for RTRV

Input Formats:

```
ED-BILLSYS:<TID>:[<src>]:[CTAG]::
    [AMAGEN=<amaGeneration>],
    [LONGDURTIME=<longDurationCallTime>];
RTRV-BILLSYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```
      SID DATE TIME
M CTAG COMPLD
    "<src>:AMAGEN=<amaGeneration>,
      LONGDURTIME=<longDurationCallTime>"
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

amaGeneration Indicates whether call detail record processing is set to be in service or out of service. The factory default is “OFF”.

Type: enum

Range: OFF = Out of service
ON = In service

Default value: not applicable

longDurationCallTime Identifies when to start the timing for the long duration call interval. The factory default is 12 midnight (00-00-00).

Type: string

Range: {HH-MM-SS}

Default value: not applicable

Input Examples:

```
ED-BILLSYS:LUCENT:::AMAGEN=OFF, LONGDURTIME=00-00-00;  
RTRV-BILLSYS;
```

Output Example:

```
    lucent 2005-06-24 14:37:49  
M    0 COMPLD  
    "COM:AMAGEN=OFF, LONGDURTIME=00-00-00"  
;
```

Related Commands: none

ED/RTRV-GMSC-ANSISYS

Commands:

ED-GMSC-ANSISYS: Edit GMSC ANSI System

RTRV-GMSC-ANSISYS: Retrieve GMSC ANSI System

Descriptions:

ED-GMSC-ANSISYS lets the user configure the system wide ANSI IS41 network parameters for the Gateway Mobile Switching Center (GMSC) functionality.

RTRV-GMSC-ANSISYS lets the user retrieve the system wide ANSI network parameters for the GMSC functionality.

Category: Call Control

Platform: Lucent Network Controller

Security: SA for ED, View for RTRV

Input Formats:

```
ED-GMSC-ANSISYS:[TID]:[<src>]:[CTAG]::
[MRKTID=<marketId>],[SWITCHNUM=<switchNum>],
[SMTC=<smtc>],[SLHRID=<slhrId>],
[GSMPREFIX=<gsmPrefix>],[CFOVERRIDE=<cfOverride>],
[VMAILPREFIX=<vmailPrefix>],[OPRTMOUT=<oprTmout>],
[WINPHASE=<winPhase>],
[BYPASSPREFIX=<bypassPrefix>],[NPTMOUT=<npTmout>],
[MULTIGTT=<multiGtt>],[BILLINGTYPE=<billingType>]:
[<pst>];

RTRV-GMSC-ANSISYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<src>:MRKTID=<marketId>,SWITCHNUM=<switchNum>,
SMTC=<smtc>,SLHRID=<slhrId>,
GSMPREFIX=<gsmPrefix>,CFOVERRIDE=<cfOverride>,
VMAILPREFIX=<vmailPrefix>,OPRTMOUT=<oprTmout>,
WINPHASE=<winPhase>,BYPASSPREFIX=<bypassPrefix>,
NPTMOUT=<npTmout>,MULTIGTT=<multiGtt>,
BILLINGTYPE=<billingType>:<pst>"
;
```

Parameters:

- src** Identifies the AID as the switch.
Type: COM
Range: COM
Default value: COM
- marketId** Identifies a unique market (an area of coverage; for instance, a greater metropolitan area) specified by the service provider. The factory default is “NULL”.
Type: integer
Range: {0-32767}
Default value: not applicable
- switchNum** Identifies a particular group of cell sites and switch resources associated with the specified *marketId*. The factory default is “NULL”.
Type: integer
Range: {0-255}
Default value: not applicable
- smtc** Identifies the SystemMyTypeCode that designates Lucent as the vendor of the switch. The factory default is “NULL”.
Type: integer
Range: {0-255}
Default value: not applicable
- slhrId** Identifies the ANSI Home Location Register (HLR) as a service logic host route to a Service Control Point (established by [ENT-SLHR-SCP](#), with the value of *tcapUser* set to “IS41”). The factory default is “NULL”.
Type: integer
Range: {0-31}
Default value: not applicable
- gsmPrefix** Identifies the prefix used by the ANSI HLR to signify the Global System for Mobile Communication (GSM) number. The factory default is “NULL”.
Type: string
Range: up to 10 hexadecimal digits (0-E)
Default value: not applicable

cfOverride Identifies whether the switch overrides the forwarding information received from the ANSI HLR with the original called party information. The factory default is “N”. This parameter is not supported presently; leave it blank.

Type: BoolYN

Range: N = do not override the forwarding information received from the ANSI HLR

Y = override the forwarding information received from the ANSI HLR

Default value: not applicable

vmailPrefix Identifies the prefix used by the ANSI HLR for routing to the voicemail system, and which increments the ANSIVMAILFWDED value for *montype* in [RTRV-PM-GMSC](#). The factory default is “NULL”.

Type: string

Range: up to 21 hexadecimal digits (0-E)

Default value: not applicable

oprTmout Identifies the time (in seconds) before ANSI HLR query response expiry. The factory default is “16”.

Type: integer

Range: {12-32}

Default value: not applicable

winPhase Identifies the phase of WIN (Wireless Intelligent Networking) supported, where “0” indicates no WIN support and “1” indicates WIN support compliant to IS-771 and IS-826. The factory default is “0”.

Type: integer

Range: {0-1}

Default value: not applicable

bypassPrefix Identifies the prefix applied to CDPN, if GMSC logic is bypassed and call is tandemed through. The factory default is “NULL”.

Type: string

Range: up to 21 hexadecimal digits (0-E)

Default value: not applicable

npTmout Identifies the time (in seconds) before ANSI HLR NP query response expiry. The factory default is “6”.

Type: integer

Range: {4-12}

Default value: not applicable

multiGtt Identifies whether the switch stores and populates the incoming Calling Address received from ANSI HLR to avoid multiple Global Title Translations. The factory default is “N”.

Type: BoolYN

Range: N = allow multiple Global Title Translations

Y = do not allow multiple Global Title Translations

Default value: not applicable

billingType Identifies the billing mechanism for recording calls requiring HLR dips. The factory default is “WIRELESS”.

Type: enum

Range: AIN = AIN service with generic AIN AMA billing

WIRELESS = use AMA extensions for cellular calls

Default value: not applicable

pst Identifies the primary state of the switch configured as an ANSI IS41 GMSC. The factory default is “OOS”. You cannot change the value to “IS” if the value of *marketId*, *switchNum*, *smtc*, or *slhrId* is “NULL”.

Type: enum

Range: IS = In Service – the switch is configured as an ANSI GMSC

OOS = Out Of Service – the switch is not configured as an ANSI GMSC

Default value: not applicable

Input Examples:

```
ED-GMSC-ANSISYS:::MARKETID=4, SWITCHNUM=4, SMTC=254,  
  SLHRID=2, GSMPREFIX=NULL, CFOVERRIDE=N, VMAILPREFIX=3,  
  OPRTMOUT=10, WINPHASE=0, BYPASSPREFIX=NULL,  
  NPTMOUT=10, MULTIGTT=N, BILLINGTYPE=WIRELESS:OOS;  
RTRV-GMSC-ANSISYS;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"COM:MRKTID=4, SWITCHNUM=4, SMTC=254, SLHRID=2,  
  GSMPREFIX=NULL, CFOVERRIDE=N, VMAILPREFIX=3,  
  OPRTMOUT=10, WINPHASE=0, BYPASSPREFIX=NULL,  
  NPTMOUT=10, MULTIGTT=N, BILLINGTYPE=WIRELESS:OOS"  
;
```

Related Commands:

ED/RTRV-GMSC-GSMSYS

ED/RTRV-GMSC-GSMSYS

Commands:

ED-GMSC-GSMSYS: Edit GMSC GSM System

RTRV-GMSC-GSMSYS: Retrieve GMSC GSM System

Descriptions:

ED-GMSC-GSMSYS lets the user configure the system wide Global System for Mobile Communication (GSM) network parameters for the Gateway Mobile switching Center (GMSC) functionality.

RTRV-GMSC-GSMSYS lets the user retrieve the system wide GSM network parameters for the GMSC functionality.

Category: Call Control

Platform: Lucent Network Controller

Security: SA for ED, View for RTRV

Input Formats:

```
ED-GMSC-GSMSYS:[TID]:[<src>]:[CTAG]::  
[GMSCADDR=<gsmAddr>],[SLHRID=<slhrId>],  
[GSMCACHE=<gsmCache>],[CACHESIZE=<cacheSize>],  
[CFOVERRIDE=<cfOverride>],  
[VMAILPREFIX=<vmailPrefix>],[OPRTMOUT=<oprTmout>],  
[SRIACN=<sriAcn>],[RCHACN=<rchAcn>],  
[OPTROUTING=<optRouting>],  
[BYPASSPREFIX=<bypassPrefix>],[NPTMOUT=<npTmout>],  
[MULTIGTT=<multiGtt>],[BILLINGTYPE=<billingType>]:  
[<pst>];
```

```
RTRV-GMSC-GSMSYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<src>:GMSCADDR=<gsmcAddr>,SLHRID=<slhrId>,
  GSMCACHE=<gsmCache>,CACHESIZE=<cacheSize>,
  CFOVERRIDE=<cfOverride>,
  VMAILPREFIX=<vmailPrefix>,OPRTMOUT=<oprTmout>,
  SRIACN=<sriAcn>,RCHACN=<rchAcn>,
  OPTROUTING=<optRouting>,
  BYPASSPREFIX=<bypassPrefix>,NPTMOUT=<npTmout>,
  MULTIGTT=<multiGtt>,BILLINGTYPE=<billingType>:
  <pst>"
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

gsmcAddr Identifies the ITU-T Rec. E.164 address assigned to the switch GSM GMSC. The factory default is "NULL".

Type: string

Range: up to 21 digits

Default value: not applicable

slhrId Identifies the ANSI Home Location Register (HLR) as a service logic host route to a Service Control Point (established by [ENT-SLHR-SCP](#), with the value of *tcapUser* set to "MAP"). The factory default is "NULL".

Type: integer

Range: {0-31}

Default value: not applicable

gsmCache Identifies whether to enter mobile subscribers into the GSM cache (an internal listing of GSM subscribers). The factory default is "N".

Type: BoolYN

Range: N = do not enter mobile subscribers into the GSM cache

Y = enter mobile subscribers into the GSM cache

Default value: not applicable

cacheSize Identifies the maximum number of entries allowed in the GSM cache. The factory default is “500000”.

Type: integer

Range: {1-1000000}

Default value: not applicable

cfOverride Identifies whether the switch overrides the forwarding information received from the GSM HLR with the original called party information. The factory default is “N”. This parameter is not supported presently; leave it blank.

Type: BoolYN

Range: N = do not override the forwarding information received from the GSM HLR

Y = override the forwarding information received from the GSM HLR

Default value: not applicable

vmailPrefix Identifies the prefix used by the GSM HLR for routing to the voicemail system, and which increments the GSMVMAILFWDED value for *montype* in [RTRV-PM-GMSC](#). The factory default is “NULL”.

Type: string

Range: up to 21 hexadecimal digits (0-E)

Default value: not applicable

oprTmout Identifies the time (in seconds) before GSM HLR query response expiry. The factory default is “10”.

Type: integer

Range: {1-15}

Default value: not applicable

sriAcn Identifies the Application Context Name for the Send Routing Information (SRI) GSM MAP operation. The factory default is “3” for GSM Phase 2+.

Type: integer

Range: {1-5}

Default value: not applicable

rchAcn Identifies the Application Context Name for the Resume Call Handling (RCH) GSM MAP operation. The factory default is “3” for GSM Phase 2+.

Type: integer

Range: {1-5}

Default value: not applicable

optRouting Identifies whether to enable Optimal Routing. The factory default is “N”.

Type: BoolYN

Range: N = do not enable Optimal Routing

Y = enable Optimal Routing

Default value: not applicable

bypassPrefix Identifies the prefix applied to CDPN, if GMSC logic is bypassed and call is tandemed through. The factory default is “NULL”.

Type: string

Range: up to 21 hexadecimal digits (0-E)

Default value: not applicable

npTmout Identifies the time (in seconds) before ANSI HLR NP query response expiry. The factory default is “10”.

Type: integer

Range: {1-15}

Default value: not applicable

multiGtt Identifies whether the switch stores and populates the incoming Calling Address received from ANSI HLR to avoid multiple Global Title Translations. The factory default is “N”.

Type: BoolYN

Range: N = allow multiple Global Title Translations

Y = do not allow multiple Global Title Translations

Default value: not applicable

billingType Identifies the billing mechanism for recording calls requiring HLR dips. The factory default is “WIRELESS”.

Type: enum

Range: AIN = AIN service with generic AIN AMA billing

WIRELESS = use AMA extensions for cellular calls

Default value: not applicable

pst Identifies the primary state of the switch configured as a GSM GMSC. The factory default is “OOS”. You cannot change the value to “IS” if the value of *gmscAddr* or *slhrId* is “NULL”.

Type: enum

Range: IS = In Service – the switch is configured as a GSM GMSC

OOS = Out Of Service – the switch is not configured as a GSM GMSC

Default value: not applicable

Input Examples:

```
ED-GMSC-GSMSYS: : : : :GMSCADDR=3334445556,SLHRID=3,  
    GSMCACHE=N,CACHESIZE=500000,CFOVERRIDE=N,  
    VMAILPREFIX=NULL,OPRTMOUT=10,SRIACN=3,RCHACN=3,  
    OPTROUTING=N,BYPASSPREFIX=NULL,NPTMOUT=10,  
    MULTIGTT=N,BILLINGTYPE=WIRELESS:00S;  
RTRV-GMSC-GSMSYS;
```

Output Example:

```
    lucent 2005-06-24 14:37:49  
M    0 COMPLD  
    "COM:GMSCADDR=3334445556,SLHRID=3,GSMCACHE=N,  
    CACHESIZE=500000,CFOVERRIDE=N,VMAILPREFIX=NULL,  
    OPRTMOUT=10,SRIACN=3,RCHACN=3,OPTROUTING=N,  
    BYPASSPREFIX=NULL,NPTMOUT=10,MULTIGTT=N,  
    BILLINGTYPE=WIRELESS:IS"  
    ;
```

Related Commands:

ED/RTRV-GMSC-ANSISYS

ED/RTRV-MGC-SYS

Commands:

ED-MGC-SYS: Edit Media Gateway Controller System

RTRV-MGC-SYS: Retrieve Media Gateway Controller System

Descriptions:

ED-MGC-SYS lets the user assign a port range for CALEA and configure the M3UA-SCTP (Simple Control Transport Protocol) subsystem on the Lucent Network Controller (Lucent NC).

RTRV-MGC-SYS lets the user retrieve the port range for CALEA and the attributes of the M3UA-SCTP (Simple Control Transport Protocol) subsystem on the Lucent NC.

Category: Call Control

Platform: Lucent Network Controller

Security: SA for ED, View for RTRV

Input Formats:

```
ED-MGC-SYS:[TID]:[<src>]:[CTAG]::
  [CDRSTAPORTRANGE=<cdrStaPortRange>],
  [IUASTAPORTRANGE=<iuaStaPortRange>],
  [M3UASTAPORTRANGE=<m3uaStaPortRange>],
  [MEGACOSTAPORTRANGE=<megacoStaPortRange>],
  [MGCPSTAPORTRANGE=<mgcpStaPortRange>],
  [SIPSTAPORTRANGE=<sipStaPortRange>],
  [M3UAQSIZE=<m3uaQSize>],
  [M3UACONGLVL1=<m3uaCongLv1>],
  [M3UACONGLVL2=<m3uaCongLv2>],
  [M3UACONGLVL3=<m3uaCongLv3>],
  [M3UATMRRESTART=<m3uaTmrRestart>],
  [M3UATMRDAUD=<m3uaTmrDaud>],
  [M3UARTOINITIAL=<m3uaRtoInitial>],
  [M3UARTOMAX=<m3uaRtoMax>],
  [M3UAINTERVALTM=<m3uaIntervalTm>],
  [TSUSPCAS=<tSuspCas>],[TSUSPISUP=<tSuspIsup>],
  [TSUSPORIG=<tSuspOrig>],[TAWAITANS=<tAwaitAns>],
  [SGTYPE=<sgType>];

RTRV-MGC-SYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```

SID DATE TIME
M CTAG COMPLD
"<src>:CDRSTAPORTRANGE=<cdrStaPortRange>,
  IUASTAPORTRANGE=<iuaStaPortRange>,
  M3UASTAPORTRANGE=<m3uaStaPortRange>,
  MEGACOSTAPORTRANGE=<megacoStaPortRange>,
  MGCPSTAPORTRANGE=<mgcpStaPortRange>,
  SIPSTAPORTRANGE=<sipStaPortRange>,
  M3UAQSIZE=<m3uaQSize>,
  M3UACONGLVL1=<m3uaCongLvl1>,
  M3UACONGLVL2=<m3uaCongLvl2>,
  M3UACONGLVL3=<m3uaCongLvl3>,
  M3UATMRRESTART=<m3uaTmrRestart>,
  M3UATMRDAUD=<m3uaTmrDaud>,
  M3UARTOINITIAL=<m3uaRtoInitial>,
  M3UARTOMAX=<m3uaRtoMax>,
  M3UAINTERVALTM=<m3uaIntervalTm>,
  TSUSPCAS=<tSuspCas>, TSUSPISUP=<tSuspIsup>,
  TSUSPORIG=<tSuspOrig>, TAWAITANS=<tAwaitAns>,
  SGTYPE=<sgType>"
;

```

Parameters:

src Identifies the AID as the NC.

Type: COM

Range: COM

Default value: COM

cdrStaPortRange Identifies the starting port number for the range of ports used to transport call detail records between the NC and the billing server. The factory default is "56000". This parameter is currently uneditable; leave it blank.

Type: integer

Range: {1-65000}

Default value: not applicable

iuaStaPortRange Identifies the starting port number for the range of ports used to transport IUA messages between the NC and the ISDN signaling gateway, typically the media gateway. The factory default is "53000". This parameter is currently uneditable; leave it blank.

Type: integer

Range: {1-65000}

Default value: not applicable

m3uaStaPortRange Identifies the starting port number for the range of 450 ports used to transport M3UA messages via SCTP between the NC and the signaling gateway. Ports are allocated to a Connection Control and Signaling (CCS) process when configuring an MG; each CCS gets a unique port number. An identical range needs to be provisioned on the Lucent Signaling Gateway (refer to ENT-SG-MGCASSOC) for its own source port. Changing the value of *m3uaStaPortRange* resets all the M3UA connections between the NC and the signaling gateway. The factory default is “50000”. This parameter is currently uneditable; leave it blank.

Type: integer

Range: {1-65000}

Default value: not applicable

megacoStaPortRange Identifies the starting port number for the range of ports used to transport MEGACO messages between the NC and the media gateway. The factory default is “52000”. This parameter is currently uneditable; leave it blank.

Type: integer

Range: {1-65000}

Default value: not applicable

mgcpStaPortRange Identifies the starting port number for the range of ports used to transport MGCP messages between the NC and the signaling gateway. The factory default is “54000”. This parameter is currently uneditable; leave it blank.

Type: integer

Range: {1-65000}

Default value: not applicable

sipStaPortRange Identifies the starting port number for the range of ports used to transport SIP messages between the NC and the signaling gateway. The factory default is “51000”. This parameter is currently uneditable; leave it blank.

Type: integer

Range: {1-65000}

Default value: not applicable

m3uaQSize Identifies the size in bytes of the congestion queue for M3UA that is maintained for each association, after which subsequent messages are dropped. The factory default is “1000”.

Type: integer

Range: {1-1500}

Default value: not applicable

m3uaCongLvl1 Identifies the M3UA level 1 congestion threshold (in bytes). SS7 congestion level 1 is declared when the congestion queue size reaches this level. The factory default is “250”.

Type: integer

Range: {1-1500}

Default value: not applicable

m3uaCongLvl2 Identifies the M3UA level 2 congestion threshold (in bytes). SS7 congestion level 2 is declared when the congestion queue size reaches this level. The factory default is “500”.

Type: integer

Range: {1-1500}

Default value: not applicable

m3uaCongLvl3 Identifies the M3UA level 3 congestion threshold (in bytes). SS7 congestion level 3 is declared when the congestion queue size reaches this level. The factory default is “750”.

Type: integer

Range: {1-1500}

Default value: not applicable

m3uaTmrRestart Identifies the restart hold-off timer in seconds. At the signaling gateway, this is the period that the M3UA waits to gather remote point code status information from the co-resident MTP3 after a restart. During this time, no user data passes across the interworking SAP in either direction. All user data is dropped. A value of “0” is permissible for this timer, in which case no hold-off is applied on restart. The factory default is “5”.

Type: integer

Range: {0-10}

Default value: not applicable

m3uaTmrDaud Identifies the time, in seconds, between Destination Audit (DAUD) messages when auditing a destination state. The factory default is “5”.

Type: integer

Range: {1-10}

Default value: not applicable

m3uaRtoInitial Identifies the minimum value (in seconds) of the SCTP (Simple Control Transport Protocol) retransmission timer after recalculating RTO. The factory default is “3”.

Type: integer

Range: {3-10}

Default value: not applicable

m3uaRtoMax Identifies the maximum value (in seconds) of the SCTP (Simple Control Transport Protocol) retransmission timer after recalculating RTO. The factory default is “5”.

Type: integer

Range: {3-60}

Default value: not applicable

m3uaIntervalTm Identifies the value (in seconds) of the SCTP (Simple Control Transport Protocol) interval timer for all heartbeat datagrams. A value of “0” disables heartbeat. The factory default is “5”.

Type: decinum

Range: {0-1000}

Default value: not applicable

tSuspCas Identifies the SUSPEND-CAS-TRUNK timer value in seconds. The timer starts when the incoming protocol is CAS-Trunk and the NC receives a SUSPEND message from the outgoing line or trunk side. A value of “0” disables the timer. The factory default is “14”.

Type: integer

Range: {0-180}

Default value: not applicable

tSuspIsup Identifies the SUSPEND-ISUP timer value in seconds. The timer starts when the incoming protocol is ISUP and the NC receives a SUSPEND message from the outgoing line or trunk side. A value of “0” disables the timer. The factory default is “12”.

Type: integer

Range: {0-180}

Default value: not applicable

tSuspOrig Identifies the SUSPEND-ORIGINATING timer value in seconds. The timer starts when the incoming protocol is line side (CAS line, GR-303, MGCP, ISDN or SIP) and the NC receives a SUSPEND message from the outgoing line or trunk side. A value of “0” disables the timer. The factory default is “10”.

Type: integer

Range: {0-180}

Default value: not applicable

tAwaitAns Identifies the AWAIT-ANSWER timer value in seconds. The timer starts on receipt of an ACM and terminates normally on receipt of an answer. A value of "0" disables the timer. The factory default is "120".

Type: integer

Range: {90-180}

Default value: not applicable

sgType Identifies the type of signaling gateway with which the Lucent NC communicates. The factory default is "GEN".

Type: enum

Range: GEN = generic signaling gateway

PLUS = Lucent Signaling Gateway (Lucent SG)

Default value: not applicable

Input Examples:

```
ED-MGC-SYS:::::CDRSTAPORTRANGE=56000,  
IUASTAPORTRANGE=53000,M3UASTAPORTRANGE=50000,  
MEGACOSTAPORTRANGE=52000,MGCPSTAPORTRANGE=54000,  
SIPSTAPORTRANGE=51000,M3UAQSIZE=1000,  
M3UACONGLVL1=250,M3UACONGLVL2=500,M3UACONGLVL3=750,  
M3UATMRRESTART=5,M3UATMRDAUD=5,M3UARTOINITIAL=3,  
M3UARTOMAX=5,M3UAINTERVALTM=5,TSUSPCAS=14,  
TSUSPISUP=12,TSUSPORIG=10,TAWAITANS=120,SGTYPE=GEN;  
RTRV-MGC-SYS;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"COM:CDRSTAPORTRANGE=56000,IUASTAPORTRANGE=53000,  
M3UASTAPORTRANGE=50000,MEGACOSTAPORTRANGE=52000,  
MGCPSTAPORTRANGE=54000,SIPSTAPORTRANGE=51000,  
M3UAQSIZE=1000,M3UACONGLVL1=250,  
M3UACONGLVL2=500,M3UACONGLVL3=750,  
M3UATMRRESTART=5,M3UATMRDAUD=5,M3UARTOINITIAL=3,  
M3UARTOMAX=5,M3UAINTERVALTM=5,TSUSPCAS=14,  
TSUSPISUP=12,TSUSPORIG=10,TAWAITANS=120,  
SGTYPE=GEN"  
;
```

Related Commands: none

ED/RTRV-SG-SYS

Commands:

ED-SG-SYS: Edit Signaling Gateway System

RTRV-SG-SYS: Retrieve Signaling Gateway System

Descriptions:

ED-SG-SYS lets the user configure the MTP3 and M3UA-SCTP (Simple Control Transport Protocol) subsystems on the Lucent Signaling Gateway (SG).

RTRV-SG-SYS lets the user retrieve the attributes of the MTP3 and M3UA-SCTP (Simple Control Transport Protocol) subsystems on the SG.

Category: Signaling

Platform: Lucent Signaling Gateway

Security: SA for ED, View for RTRV

Input Formats:

```
ED-SG-SYS: [TID]: [<src>]: [CTAG]: [MTP3T15=<mtp3T15>],  
           [MTP3T16=<mtp3T16>], [MTP3ITUT20=<mtp3itut20>],  
           [MTP3T22=<mtp3T22>], [MTP3T23=<mtp3T23>],  
           [MTP3T26=<mtp3T26>], [QSIZE=<m3uaQSize>],  
           [CONGLVL1=<m3uaCongLevel1>],  
           [CONGLVL2=<m3uaCongLevel2>],  
           [CONGLVL3=<m3uaCongLevel3>],  
           [TMRREST=<m3uaTmrRestart>], [TMRDAUD=<mtp3TmrDaud>],  
           [RTOINITIAL=<sctprtoInitial>],  
           [RTOMAX=<sctprtoMax>],  
           [INTERVALTM=<sctpIntervalTM>];  
RTRV-SG-SYS: [TID]: [<src>]: [CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<src>:MTP3T15=<mtp3T15>,MTP3T16=<mtp3T16>,
  MTP3ITUT20=<mtp3itut20>,MTP3T22=<mtp3T22>,
  MTP3T23=<mtp3T23>,MTP3T26=<mtp3T26>,
  QSIZE=<m3uaQSize>,CONGLVL1=<m3uaCongLevel1>,
  CONGLVL2=<m3uaCongLevel2>,
  CONGLVL3=<m3uaCongLevel3>,
  TMRREST=<m3uaTmrRestart>,TMRDAUD=<mtp3TmrDaud>,
  RTOINITIAL=<sctprtoInitial>,RTOMAX=<sctprtoMax>,
  INTERVALTM=<sctpIntervalTM>"
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

mtp3T15 Identifies the Timer T15 value (in seconds) for the MTP3 layer. Timer T15 identifies the period to wait before starting the route set congestion test. The factory default is “3”.

Type: decinum

Range: {0-10}

Default value: not applicable

mtp3T16 Identifies the Timer T16 value (in seconds) for the MTP3 layer. Timer T16 identifies the period to wait between route set congestion status updates. The factory default is “1.4”.

Type: decinum

Range: {0-10}

Default value: not applicable

mtp3ItuT20 Identifies, in seconds, either the ITU1992 Timer T20 value or the ITU1988 Timer T21 value for the MTP3 layer. The factory default is “60”.

Type: decinum

Range: {0-100}

Default value: not applicable

mtp3T22 Identifies the Timer T22 value (in seconds) for the MTP3 layer. Timer T22 identifies the period after restart to wait for signaling links to become available before generating a link unavailable alarm message. The factory default is “40”.

Type: decinum

Range: {0-100}

Default value: not applicable

mtp3T23 Identifies the Timer T23 value (in seconds) for the MTP3 layer. Timer T23 identifies the period to wait after T22 to receive all traffic restart allowed messages. The factory default is “10”.

Type: decinum

Range: {0-100}

Default value: not applicable

mtp3T26 Identifies the Timer T26 value (in seconds) for the MTP3 layer. Timer T26 identifies the period to wait before repeating a traffic restart waiting message. The factory default is “13”.

Type: decinum

Range: {0-50}

Default value: not applicable

m3uaQSize Identifies the size in bytes of the congestion queue for M3UA that is maintained for each association, after which subsequent messages are dropped. The factory default is “1000”.

Type: integer

Range: {1-1500}

Default value: not applicable

m3uaCongLvl1 Identifies the M3UA level 1 congestion threshold (in bytes). SS7 congestion level 1 is declared when the congestion queue size reaches this level. The factory default is “250”.

Type: integer

Range: {1-1500}

Default value: not applicable

m3uaCongLvl2 Identifies the M3UA level 2 congestion threshold (in bytes). SS7 congestion level 2 is declared when the congestion queue size reaches this level. The factory default is “500”.

Type: integer

Range: {1-1500}

Default value: not applicable

m3uaCongLvl3 Identifies the M3UA level 3 congestion threshold (in bytes). SS7 congestion level 3 is declared when the congestion queue size reaches this level. The factory default is “750”.

Type: integer

Range: {1-1500}

Default value: not applicable

m3uaTmrRestart Identifies the restart hold-off timer in seconds. At the SG, this is the period that the M3UA waits to gather remote point code status information from the co-resident MTP3 after a restart. During this time, no user data is passed across the interworking SAP in either direction; all user data is dropped. A value of 0 is permissible for this timer, in which case no hold-off is applied on restart. The factory default is “5”.

Type: integer

Range: {0-10}

Default value: not applicable

mtp3TmrDaud Identifies the time, in seconds, between Destination Audit (DAUD) messages when auditing a destination state. The factory default is “5”.

Type: integer

Range: {0-10}

Default value: not applicable

sctpRtoInitial Identifies the minimum value (in seconds) of the SCTP (Simple Control Transport Protocol) retransmission timer after recalculating RTO. This parameter is not used in a system in which the NC and the SG are integrated on a single chassis. The factory default is “3”.

Type: integer

Range: {1-10}

Default value: not applicable

sctpRtoMax Identifies the maximum value (in seconds) of the SCTP (Simple Control Transport Protocol) retransmission timer after recalculating RTO. This parameter is not used in a system in which the MGC and the signaling gateway are integrated on a single chassis. The factory default is “3”.

Type: integer

Range: {1-60}

Default value: not applicable

sctpIntervalTm Identifies the value (in seconds) of the SCTP (Simple Control Transport Protocol) interval timer for all heartbeat datagrams. A value of "0" disables heartbeat. This parameter is not used in a system in which the NC and the SG are integrated on a single chassis. The factory default is "5".

Type: integer

Range: {0-1000}

Default value: not applicable

Input Examples:

```
ED-SG-SYS:::::MTP3T15=3,MTP3T16=1.4,MTP3ITUT20=60,
MTP3T22=40,MTP3T23=10,MTP3T26=13,QSIZE=1000,
CONGLVL1=250,CONGLVL2=500,CONGLVL3=750,TMRRST=5,
TMRDAUD=5,RTOINITIAL=3,RTOMAX=3,INTERVALTM=5;

RTRV-SG-SYS;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"COM:MTP3T15=3,MTP3T16=1.4,MTP3ITUT20=60,
MTP3T22=40,MTP3T23=10,MTP3T26=13,QSIZE=1000,
CONGLVL1=250,CONGLVL2=500,CONGLVL3=750,TMRRST=5,
TMRDAUD=5,RTOINITIAL=3,RTOMAX=3,INTERVALTM=5"
;
```

Related Commands: none

ED/RTRV-SWITCH-CFG

Commands:

ED-SWITCH-CFG: Edit switch Configuration

RTRV-SWITCH-CFG: Retrieve switch Configuration

Descriptions:

ED-SWITCH-CFG lets the user modify configuration data for the switch. This data includes the carrier ID and name, the number for the TRS relay center, whether to send or use the subscriber name in the IAM, whether to use the subscriber name if it is available in the IAM, whether to use the charge number for caller number display in ISDN-PRI calls, whether to allow ten-digit long-distance dialing, whether to block CNAM queries for private numbers or SCP queries for operator-assisted tollfree dialed numbers, the default LATA for the switch, whether to enable on-switch CNAM service, the fraud trap profile that defines how the switch behaves when encountering a fraud scenario, the terminating switch for use by CAIN, whether to restrict LNP queries to the homed LATA, and the numbering plan.

RTRV-SWITCH-CFG lets the user retrieve configuration data for the switch.

Category: Call Control

Platform: All

Security: SA for ED, View for RTRV

Input Formats:

```
ED-SWITCH-CFG:[TID]:[<src>]:[CTAG]::[<OWNCID=owncid>],
[<OWNCNAM=owncnam>],[<DN711=dn>],
[SENDIAMNAME=<sendiamname>],
[USEIAMNAME=<useiamname>],[UCNCNDPRI=<ucncndpri>],
[ALWTENDGTLDIAL=<alwtendgtldial>],
[BLOCKCNAMP=<blockcnamp>],
[OPRTOLLFREE=<oprtoollfree>],
[OWNLATAID=<ownlataid>],[LOCCNAM=<locCNAM>],
[FRAUDTRAPPRFL=<fraudtrapprfl>],
[SWITCHID=<switchid>],
[IGNORESAMELATALNPRSTRN=<ignoresamelatalnprstrn>],
[NMBPLAN=<nmbplan>];

RTRV-SWITCH-CFG:[TID]:[<src>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<src>:OWNCID=<owncid>,OWNCNAM=<owncnam>,
    DN711=<dn>,SENDIAMNAME=<sendiamname>,
    USEIAMNAME=<useiamname>,UCNCNDPRI=<ucncndpri>,
    ALWTENDGTLLDDIAL=<alwtendgtlddial>,
    BLOCKCNAMP=<blockcnamp>,
    OPRTOLLFREE=<opr tollfree>,OWNLATAID=<ownlataid>,
    LOCCNAM=<locCNAM>,FRAUDTRAPPRFL=<fraudtrapprfl>,
    SWITCHID=<switchid>,
    IGNORESAMELATALNPRSTRN=<ignoreSameLataLnpRstrn>,
    NMBPLAN=<nmbplan>"
;
```

Input Parameters:

- src** Identifies the AID as the switch (COM).
Type: COM
Range: COM
Default value: COM
- ownCid** Identifies the carrier for the switch. The factory default is "NULL".
Type: integer
Range: {0-9999}
Default value: not applicable
- ownCnam** Identifies the name of the carrier for the switch. The factory default is "NULL".
Type: string
Range: up to 20 alphanumeric characters
Default value: not applicable
- dn** Identifies the number of a Telecommunication Relay Services (TRS) relay center to which "711" calls from subscribers with hearing or speech disabilities are routed. The factory default is "NULL".
Type: string
Range: exactly 10 digits
Default value: not applicable

sendIAMName Identifies whether to send the available subscriber name in the outgoing IAM. The factory default is “N”.

Type: BoolYN

Range: N = do not send subscriber name
Y = send subscriber name

Default value: not applicable

useIAMName Identifies whether to use the subscriber name if it is available in the IAM. The factory default is “N”.

Type: BoolYN

Range: N = do not use the subscriber name
Y = use subscriber name

Default value: not applicable

ucnCndPri Identifies whether to use the charge number for caller number display in ISDN-PRI calls. The factory default is “N”.

Type: BoolYN

Range: N = do not use charge number for caller number display
Y = use charge number for caller number display

Default value: not applicable

alwtendgtldial Identifies whether to allow ten-digit long-distance dialing. The factory default is “N”.

Type: BoolYN

Range: N = do not allow ten-digit long-distance dialing
Y = allow ten-digit long-distance dialing

Default value: not applicable

blockcnamp Identifies whether to block CNAM queries for private numbers. The factory default is “N”.

Type: BoolYN

Range: N = do not block CNAM queries for private numbers
Y = block CNAM queries for private numbers

Default value: not applicable

oprtollfree Identifies whether to block SCP queries for operator-assisted tollfree dialed numbers. The factory default is “Y”.

Type: BoolYN

Range: N = do not block SCP queries for operator-assisted tollfree dialed numbers
Y = block SCP queries for operator-assisted tollfree dialed numbers

Default value: not applicable

ownlataid Identifies the default LATA for the switch – used for tollfree SCP queries when incoming tollfree calls on an ISDN trunk don't have Calling Party ID. LATA IDs are restricted to either three or five digits. The factory default is "NULL".

Type: enum

Range: {100-999, 10000-99999}

NULL = no value

Default value: not applicable

locCNAM Identifies whether to enable on-switch CNAM service. When enabled, CNAM delivery (when both parties are homed on the switch) uses the on-switch database – the switch does not query an SCP. The factory default is "N".

Type: BoolYN

Range: N = do not enable on-switch CNAM service

Y = enable on-switch CNAM service

Default value: not applicable

fraudTrapPrfl Identifies the fraud trap profile that defines how the switch behaves when encountering a fraud scenario. The factory default is "NULL".

Type: string

Range: up to 10 alphanumeric characters

Default value: not applicable

switchid Identifies the terminating switch for use by Carrier Advanced Intelligent Networks (CAIN). The factory default is "0".

Type: integer

Range: {0-65535}

Default value: not applicable

ignoreSameLataLnpRstrn Identifies whether to ignore the restriction on LNP queries requiring the called party number for line-originated calls to be in the same LATA as the switch. The factory default is "N".

Type: BoolYN

Range: N = perform LNP queries only for calls in the same LATA

Y = perform LNP queries for all calls

Default value: not applicable

nmbPlan Identifies the numbering plan for the switch. Currently supported values are “AUS”, “MEX”, and “NANP”. The factory default is “NANP”. You cannot change the value of *nmbPlan* without first deleting all previously defined area codes and country codes.

Type: string

Range: up to 16 characters

Default value: not applicable

Input Examples:

```
ED-SWITCH-CFG:::OWNCID=1,OWNCNAM=NULL,DN711=NULL,
SENDIAMNAME=N,USEIAMNAME=N,UCNCNDPRI=N,
ALWTENDGTLDIAL=N,BLOCKCNAMP=N,OPRTOLLFREE=Y,
OWNLATAID=NULL,LOCCNAM=N,FRAUDTRAPPRFL=NULL,
SWITCHID=0,IGNORESAMELATALNPRSTRN=N,NMBPLAN=NANP;
RTRV-SWITCH-CFG;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"COM:OWNCID=1,OWNCNAM=VERIZON,DN711=NULL,
SENDIAMNAME=N,USEIAMNAME=N,UCNCNDPRI=N,
ALWTENDGTLDIAL=N,BLOCKCNAMP=N,OPRTOLLFREE=Y,
OWNLATAID=NULL,LOCCNAM=N,FRAUDTRAPPRFL=NULL,
SWITCHID=0,IGNORESAMELATALNPRSTRN=N,
NMBPLAN=NANP"
;
```

Related Commands: none

ED/RTRV-T0

Commands:

ED-T0: Edit T0

RTRV-T0: Retrieve T0

Descriptions:

ED-T0 lets the user provision CAS trunks by changing the default behavior for DS0s on T1 or E1 ports in a Lucent Network Gateway (NG).

RTRV-T0 lets the user retrieve the attributes for a DS0 on a T1 or E1 port in an NG.

Category: Call Control

Platform: Lucent Network Gateway

Security: SA for ED, View for RTRV

Input Formats:

```
ED-T0:[TID]:<t0Id>:[CTAG]::  
    [MGCASPRFLID=<mgCasPrflId>],[COT=<cot>],  
    [OWNER=<owner>]:<pst>;  
RTRV-T0:[TID]:<t0Id>:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
    "<t0Id>:MGCASPRFLID=<mgCasPrflId>,COT=<cot>,  
    OWNER=<owner>:<pst>,<sst>]"  
;
```

Parameters:

- t0Id** Identifies the AID as a DS0 channel (or all channels on a single T1/E1 port or on all T1/E1 ports on a T3) on an IOM. Ranging is not supported.
- Type:** T0
- Range:** IOM-**{1-17}**-T3-**{1-8}**[-PORT-**{1-28}**[-T0-**{1-24}**]]
IOM-**{1-17}**-OC3-**{1-3}**[-STS1-**{1-3}**[-PORT-**{1-28}**[-T0-**{1-24}**]]]
IOM-**{1-17}**[-E1-**{1-28}**[-T0-**{1-31}**]]
- Default value:** None
- mgCasPrflId** Identifies the CAS profile for the channel. Set the value to the factory default of “NULL” when CAS is not used. The NG rejects CAS package requests when the value is “NULL”.
- Type:** string
- Range:** **{1-128}**
- Default value:** not applicable
- cot** Identifies whether the switch port used for continuity testing on the switch is a two-wire or four-wire port. The type of port determines the type of Continuity Test (COT) tones to issue in response to a COT request. The factory default is “4WIRE”.
- Type:** enum
- Range:** 2WIRE = two-wire port
4WIRE = four-wire port
- Default value:** not applicable
- owner** Identifies whether the NG or the media gateway controller manages the channel. Changing the value of *owner* from “MGC” to “MG” identifies the channel as a nailed-up cross-connect on the NG, and sends a service change notification to the MGC. From the MGC, you cannot add or modify a context with the subject channel when the value of *owner* is “MG”. The factory default is “MGC”.
- Type:** enum
- Range:** MG = media gateway (NG)
MGC = media gateway controller
- Default value:** not applicable

- pst** Identifies the primary state of the channel. Out-of service channels cannot be referenced by a context. Changing the state to “OOS” sends a service change notification to the MGC. The factory default is “IS”.
Type: enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
Default value: IS
- pst** Identifies (in RTRV output) the primary state, and primary state qualifier, for the channel.
Type: enum
Range: IS = In-Service
OOS-AU = Out-Of-Service, Autonomous (faulted)
OOS-AUMA = Out-Of-Service, Autonomous and Managed
OOS-MA = Out-Of-Service, Managed
Default value: none
- sst** Identifies (in RTRV output) the secondary state for the channel when the value of *pst* is “OOS-AU”.
Type: enum
Range: SGEO = Supporting Entity Outage (the T1 port containing the channel is out of service)
Default value: none

Input Examples:

```
ED-T0::IOM-1-T3-2-PORT-3-T0-24::MGCASPRFLID=1,COT=4,
  OWNER=MGC:IS;
RTRV-T0::IOM-1-T3-2-PORT-3-T0-24;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "IOM-1-T3-2-PORT-3-T0-24:MGCASPRFLID=1,COT=4,
    OWNER=MGC:IS"
;
```

Related Commands: none

ED/RTRV-TRAFFICSTATS

Commands:

ED-TRAFFICSTATS: Edit Traffic Statistics

RTRV-TRAFFICSTATS: Retrieve Traffic Statistics

Descriptions:

ED-TRAFFICSTATS lets the user determine the time the switch takes to generate the first statistics CDR after a call is established, and set a system-wide flag that enables or disables sending call traffic statistics from the switch to a statistics data server.

RTRV-TRAFFICSTATS lets the user retrieve the time the switch takes to generate the first statistics CDR after a call is established, and the value of a system-wide flag that enables or disables sending call traffic statistics from the switch to a statistics data server.

Category: Call Control

Platform: Lucent Network Controller

Security: NSA for ED, View for RTRV

Input Formats:

ED-TRAFFICSTATS:[TID]:[<src>]:[CTAG]:[<InitCdrGen>]:
[<is00s>;

RTRV-TRAFFICSTATS:[TID]:[<src>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<com>:<InitCdrGen>:<is00s>"
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

InitCdrGen Identifies the amount of time, in seconds, the switch takes to generate the first statistics CDR after a call is established. The switch then generates subsequent CDRs every 15 minutes the call remains standing, with the last CDR generated on release. The factory default is "900".

Type: integer

Range: {1-900}

Default value: not applicable

isOos Indicates whether call traffic statistics processing is set to be in service or out of service. The factory default is "OOS".

Type: enum

Range: IS = In service

OOS = Out of service

Default value: not applicable

Input Examples:

```
ED-TRAFFICSTATS::900:::IS;  
RTRV-TRAFFICSTATS;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"COM:900:IS"  
;
```

Related Commands: none

INIT-REG-GMSC / RTRV-PM-GMSC

Commands:

INIT-REG-GMSC: Initialize Register GMSC

RTRV-PM-GMSC: Retrieve Performance Monitors GMSC

Descriptions:

INIT-REG-GMSC lets the user initialize one or more storage registers or event counters for GMSC (Gateway Mobile switching Center) message statistics for a Connection Control and Signaling (CCS) process. The AID *mgName* uniquely identifies each CCS.

RTRV-PM-GMSC lets the user retrieve current and historical performance data related to GMSC (Gateway Mobile switching Center) messages for a Connection Control and Signaling (CCS) process.

Category: Call Control

Platform: Lucent Network Controller

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-GMSC:[TID]:[<mgName>]:[CTAG]:[<montype>],  
[<monval>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];  
  
RTRV-PM-GMSC:[TID]:[<mgName>]:[CTAG]:[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<mgName>:<montype>,<monval>,[<vldty>],[<locn>],  
      [<dirn>],[<tmper>],[<mondatt>],[<montm>]"  
;
```

Parameters:

mgName Identifies the AID as a media gateway associated with the Lucent Network Controller (NC). Set the value of *mgName* to the SID (System Identifier – from the header for TL1 messages) for the media gateway. A null value is equivalent to "ALL"; that is, by leaving the field blank, the system initializes, or returns values for, GMSC registers and counters for all media gateways associated with the NC.

Type: string

Range: up to 30 characters

Default value: NULL

montype Identifies a type of monitored parameter for GMSC messages.

Type: enum

Range: ALL = All monitored parameters

ANSICALLSFWDED = total number of calls forwarded by ANSI HLR

ANSICALLSREDIRECTED = total number of ANSI calls redirected by the serving MSC

ANSICALLSTRANSFERED = total number of ANSI calls forwarded after routing to a TLDN

ANSIVMAILFWDED = total number of ANSI calls forwarded to voicemail

ANSISCPRELCALLS = total number of WIN (Wireless Intelligent Network) calls released by ANSI SCP

CACHEDCALLS = total number of calls subjected to successful GSM cache lookup

DUALDIPCALLS = total number of calls subjected to dual dips; that is, both an ANSI IS41 and a GSM HLR query

FAILEDMTCALLS = total number of mobile terminating calls failed due to unknown subscriber at HLR

GSMCALLSFWDED = total number of calls forwarded by GSM HLR

GSMCALLSREDIRECTED = total number of GSM calls redirected by the visiting MSC

GSMSCPRELCALLS = total number of CAMEL (Customized Applications for Mobile network Enhanced Logic) calls released by GSM SCP

GSMVMAILFWDED = total number of GSM calls forwarded to voicemail

MSRNCALLS = total number of calls routed using a GSM Mobile Subscriber Roaming Number (MSRN)

SUCCESSCAMELCALLS = total number of CAMEL mobile terminating calls successfully handled

SUCCESSMTCALLS = total number of mobile terminating calls successfully handled

SUCCESSWINCALLS = total number of WIN mobile terminating calls successfully handled
TLDNCALLS = total number of calls routed using an ANSI Temporary Local Directory Number (TLDN)
TOTALCAMELCALLS = total number of CAMEL mobile terminating calls handled
TOTALMTCALLS = total number of mobile terminating calls handled
TOTALWINCALLS = total number of WIN mobile terminating calls handled

Default value: ALL

monval Identifies the monitored value as either the value to which the register identified by *montype* is to be initialized (for INIT-REG), or (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates. This parameter is presently not supported; leave it blank.

Type: integer

Range: {0-2147483647}

Default value: 0

monlev Identifies (for RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

vldty Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it. This parameter is not supported presently; its value will be "NULL".

Type: enum

Range: ADJ = Data manually adjusted or initialized

COMPL = Data accumulated over the entire time period

LONG = Data accumulated over greater than the entire time period

NA = Data not available

PRTL = Data accumulated over a portion of the time period

Default value: not applicable for output

- locn** Identifies the location of the storage counters to be initialized. This parameter is presently not supported; leave it blank.
Type: Location
Range: FEND = Far end
 NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters relative to the switch. This parameter is presently not supported; leave it blank.
Type: Direction
Range: BTH = Both directions
 RCV = Receive direction only
 TRMT = Transmit direction only
Default value: BTH
- tmper** Identifies the accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods. This parameter is presently not supported; leave it blank.
Type: TimePeriod
Range: {1}-DAY = Time interval is exactly one day
 {1-24}-HR = Interval of one to 24 hours (one day)
 {1-1440}-MIN = Interval of one to 1440 minutes (one day)
Default value: both 15-MIN and 24-HR
- mondatt** Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is presently not supported; leave it blank.
Type: MonitoredDate
Range: {1-12}-{1-31}
Default value: current date
- montm** Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is presently not supported; leave it blank.
Type: MonitoredTime
Range: {0-23}-{0-59}
Default value: current time

Input Examples:

```
INIT-REG-GMSC;  
RTRV-PM-GMSC;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"COM:TOTALMTCALLS,0,,,,,"  
"COM:SUCCESSMTCALLS,0,,,,,"  
"COM:FAILEDMTCALLS,0,,,,,"  
"COM:DUALDIPCALLS,0,,,,,"  
"COM:TLDNCALLS,0,,,,,"  
"COM:MSRNCALLS,0,,,,,"  
"COM:ANSICALLSFWDDED,0,,,,,"  
"COM:GSMCALLSFWDDED,0,,,,,"  
"COM:CACHEDCALLS,0,,,,,"  
"COM:ANSICALLSREDIRECTED,0,,,,,"  
"COM:GSMCALLSREDIRECTED,0,,,,,"  
"COM:ANSIVMAILFWDDED,0,,,,,"  
"COM:GSMVMAILFWDDED,0,,,,,"  
"COM:ANSICALLSTRANSFERED,0,,,,,"  
;
```

Related Commands: none

INIT-REG-MGCM3UA / RTRV-PM-MGCM3UA

Commands:

INIT-REG-MGCM3UA: Initialize Register Media Gateway Controller M3UA

RTRV-PM-MGCM3UA: Retrieve Performance Monitors Media Gateway
Controller M3UA

Descriptions:

INIT-REG-MGCM3UA lets the user initialize one or more storage registers or event counters for a Connection Control and Signaling (CCS) process. The AID *mgName* uniquely identifies each CCS.

RTRV-PM-MGCM3UA lets the user retrieve current and historical performance data for a Connection Control and Signaling (CCS) process.

Category: Signaling

Platform: Lucent Network Controller

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-MGCM3UA: [TID]: [<mgName>]: [CTAG]: [<montype>],  
[<monval>], [<locn>], [<dirn>], [<tmper>], [<mondat>],  
[<montm>];
```

```
RTRV-PM-MGCM3UA: [TID]: <mgName>: [CTAG]: [<montype>],  
[<monlev>], [<locn>], [<dirn>], [<tmper>], [<mondat>],  
[<montm>];
```

Output Format:

```
          SID DATE TIME  
M CTAG COMPLD  
  "<mgName>:<montype>,<monval>,[<vldty>],[<locn>],  
    [<dirn>],[<tmper>],[<mondat>],[<montm>]"  
;
```

Parameters:

mgName Identifies the AID as a media gateway associated with the Lucent Network Controller (NC). Set the value of *mgName* to the SID (System Identifier – from the header for TL1 messages) for the media gateway. A null value (in INIT-REG) is equivalent to "ALL"; that is, by leaving the field blank, the system initializes M3UA registers and counters for all media gateways associated with the NC.

Type: string

Range: up to 30 characters

Default value: none

montype Identifies the type of monitored parameters to initialize or retrieve. RTRV-PM output lists the parameters that apply to the statistical grouping specified in the input.

Type: enum

Range: GEN = Overall M3UA statistics

PRI = M3UA statistics for connection towards SP-A

SEC = M3UA statistics for connection towards SP-B

Default value: GEN

monval Identifies the monitored value as either the value to which the register identified by *montype* is to be initialized (for INIT-REG), or (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates. This parameter is presently not supported (for INIT-REG); leave it blank.

Type: integer

Range: {0-4294967295}

Default value: 0

monlev Identifies (for RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP". This parameter is presently not supported; leave it blank.

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it. This parameter is not supported presently; its value will be “NULL”.
- Type:** enum
- Range:** ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
- Default value:** not applicable for output
- locn** Identifies the location of the storage counters to be initialized. This parameter is presently not supported; leave it blank.
- Type:** Location
- Range:** FEND = Far end
NEND = Near end
- Default value:** NEND
- dirn** Identifies the direction of the data stored in statistics counters relative to the switch. This parameter is presently not supported; leave it blank.
- Type:** Direction
- Range:** BTH = Both directions
RCV = Receive direction only
TRMT = Transmit direction only
- Default value:** BTH
- tmper** Identifies the accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods. This parameter is presently not supported; leave it blank.
- Type:** TimePeriod
- Range:** {1}-DAY = Time interval is exactly one day
{1-24}-HR = Interval of one to 24 hours (one day)
{1-1440}-MIN = Interval of one to 1440 minutes (one day)
- Default value:** both 15-MIN and 24-HR

mondatt Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is presently not supported; leave it blank.

Type: MonitoredDate

Range: {1-12}-{1-31}

Default value: current date

montm Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is presently not supported; leave it blank.

Type: MonitoredTime

Range: {0-23}-{0-59}

Default value: current time

Input Examples:

```
INIT-REG-MGCM3UA::lucent;
```

```
RTRV-PM-MGCM3UA::lucent;
```

Output Example:

```
    lucent 2005-06-24 14:37:49
M    0 COMPLD
    "lucent:GEN"
;
```

Related Commands: none

INIT-REG-MGCMEGACOMSG / RTRV-PM-MGCMEGACOMSG

Commands:

INIT-REG-MGCMEGACOMSG: Initialize Register Media Gateway Controller
MEGACO Message

RTRV-PM-MGCMEGACOMSG: Retrieve Performance Monitors Media
Gateway Controller MEGACO Message

Descriptions:

INIT-REG-MGCMEGACOMSG lets the user initialize one or more storage registers or event counters for a MEGACO association between the Lucent Network Controller (NC) and a specific media gateway.

RTRV-PM-MGCMEGACOMSG lets the user retrieve current and historical performance data for a MEGACO association between the NC and a specific media gateway.

Category: Signaling

Platform: Lucent Network Controller

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

INIT-REG-MGCMEGACOMSG: [TID]: [<mgName>]: [CTAG]::
[<montype>], [<monval>], [<locn>], [<dirn>], [<tmper>],
[<mondatt>], [<montm>];

RTRV-PM-MGCMEGACOMSG: [TID]: [<mgName>]: [CTAG]::
[<montype>], [<monlev>], [<locn>], [<dirn>], [<tmper>],
[<mondatt>], [<montm>];

Output Format:

```
      SID DATE TIME
M  CTAG COMPLD
    "<mgName>:<montype>,<monval>,<vldty>,<locn>,<dirn>,<tmper>,<mondatt>,<montm>"
;
```

Parameters:

mgName Identifies the AID as a media gateway associated with the NC. Set the value of *mgName* to the SID (System Identifier – from the header for TL1 messages) for the media gateway. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns information for all media gateways associated with the NC.

Type: string

Range: up to 30 ASCII characters

Default value: none

montype Identifies a type of monitored parameter.

Type: enum

Range: ALL = All monitored parameters

ADDREPRCV = Number of ADD replies received on this MEGACO association

ADDREQXMT = Number of ADD transaction requests sent on this association

AVGRRESPTM = Average response time to MEGACO transactions from the media gateway

DUPREQRCV = Duplicate transaction request received from the media gateway

ERROR411RCV = Number of transaction replies received containing Error – 411, “transaction refers to an unknown ContextId”

ERROR430RCV = Number of transaction replies received containing Error – 430, “Unknown TerminationID”

ERROR432RCV = Number of transaction replies received containing Error – 432, “Out of TerminationIDs or No TerminationID available”

ERROR433RCV = Number of transaction replies received containing Error – 433, “TerminationID is already in a Context”

ERROR434RCV = Number of transaction replies received containing Error – 434, “Max number of Terminations in a Context exceeded”

ERROR435RCV = Number of transaction replies received containing Error – 435, “Termination ID is not in specified Context”

ERROR440RCV = Number of transaction replies received containing Error – 440, “Unsupported or unknown Package”

ERROR451RCV = Number of transaction replies received containing Error – 451, “No such event in this package”

ERROR452RCV = Number of transaction replies received containing Error – 452, “No such signal in this package”

ERROR500RCV = Number of transaction replies received containing Error – 500, “Internal software failure in the MG”
ERROR510RCV = Number of transaction replies received containing Error – 510, “Insufficient resources”
ERROR514RCV = Number of transaction replies received containing Error – 514, “Media Gateway cannot send the specified announcement”
ERROR520RCV = Number of transaction replies received containing Error – 520, “Digit Map undefined in the MG”
ERROROTHRRCV = Number of transaction replies received containing an Error Descriptor not covered by the other monitored parameters
MODREPRCV = Number of MODIFY replies received on this MEGACO association
MODREQXMT = Number of MODIFY transaction requests sent on this association
NOTREPXMT = Number of NOTIFY replies sent on this association
NOTREQRCV = Number of NOTIFY Requests received on this MEGACO association
PENDINGRCV = Number of PENDING messages received from the media gateway
PENDINGXMT = Number of PENDING messages transmitted to the media gateway
SUBTREPRCV = Number of SUBTRACT replies received on this MEGACO association.
SUBTREQXMT = Number of SUBTRACT transaction requests sent on this association.
SVCREPRCV = Number of Service Change replies received on this MEGACO association.
SVCREPXMT = Number of Service Change replies sent on this association.
SVCREQRCV = Number of Service Change requests received on this MEGACO association.
SVCREQXMT = Number of Service Change Requests sent on this transaction.
TRANSREPRXMT = Number of transaction replies that have been retransmitted by the MGC on this association.
TRANSREQFAIL = Number of transaction requests sent on this association for which the MGC has failed to receive a reply from the MG.
TRANSREQRXMT = Number of transaction requests that have been retransmitted by the MGC on this association.

Default value: ALL

monval Identifies the monitored value as either the value to which the register identified by *montype* is to be initialized (for INIT-REG), or (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates. This parameter is presently not supported (for INIT-REG); leave it blank.

Type: integer

Range: {0-4294967295}

Default value: 0

monlev Identifies (for RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

vldty Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it. This parameter is not supported presently; its value will be "NULL".

Type: enum

Range: ADJ = Data manually adjusted or initialized

COMPL = Data accumulated over the entire time period

LONG = Data accumulated over greater than the entire time period

NA = Data not available

PRTL = Data accumulated over a portion of the time period

Default value: not applicable for output

locn Identifies the location of the storage counters to be initialized. This parameter is presently not supported; leave it blank.

Type: Location

Range: FEND = Far end

NEND = Near end

Default value: NEND

dirn Identifies the direction of the data stored in statistics counters relative to the switch. This parameter is presently not supported; leave it blank.

Type: Direction

Range: BTH = Both directions

RCV = Receive direction only

TRMT = Transmit direction only

Default value: BTH

tmper Identifies the accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods. This parameter is presently not supported; leave it blank.

Type: TimePeriod

Range: {1}-DAY = Time interval is exactly one day

{1-24}-HR = Interval of one to 24 hours (one day)

{1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: both 15-MIN and 24-HR

mondat Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is presently not supported; leave it blank.

Type: MonitoredDate

Range: {1-12}-{1-31}

Default value: current date

montm Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is presently not supported; leave it blank.

Type: MonitoredTime

Range: {0-23}-{0-59}

Default value: current time

Input Examples:

```
INIT-REG-MGCMEGACOMSG;
```

```
RTRV-PM-MGCMEGACOMSG::lucentmg;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"lucentmg:ADDREQXMT,10,,,,,"
"lucentmg:MODREQXMT, 20,,,,,"
"lucentmg:SUBTREXMT,0,,,,,"
"lucentmg:SVCREQXMT,0,,,,,"
"lucentmg:SVCREPXMT,0,,,,,"
"lucentmg:NOTREPXMT,0,,,,,"
"lucentmg:ADDREPRCV,0,,,,,"
"lucentmg:MODREPRCV,0,,,,,"
"lucentmg:SUBTREPRCV,0,,,,,"
"lucentmg:NOTREQRCV,0,,,,,"
"lucentmg:SVCREQRCV,0,,,,,"
"lucentmg:SVCREPRCV,0,,,,,"
"lucentmg:TRANSREQFAIL,0,,,,,"
"lucentmg:DUPREQRCV,0,,,,,"
"lucentmg:PENDINGXMT,0,,,,,"
"lucentmg:PENDINGRCV,0,,,,,"
"lucentmg:ERROR411RCV,0,,,,,"
"lucentmg:ERROR430RCV,0,,,,,"
;
```

Related Commands: none

RTRV/SET-DATASERVER-HOSTCFG

Commands:

RTRV-DATASERVER-HOSTCFG: Retrieve DATASERVER HOSTCFG

SET-DATASERVER-HOSTCFG: Set DATASERVER HOSTCFG

Descriptions:

RTRV-DATASERVER-HOSTCFG lets the user retrieve the IP addresses and retry timer values for the UNIX systems running the billing application.

SET-DATASERVER-HOSTCFG lets the user define the IP addresses and retry timer values for the UNIX systems running the billing application.

Category: Call Control

Platform: Lucent Network Controller

Security: ADMIN for SET, View for RTRV

Input Formats:

```
RTRV-DATASERVER-HOSTCFG: [TID]: [<COM>]: [CTAG];  
SET-DATASERVER-HOSTCFG: [TID]: [<COM>]: [CTAG]: :  
[DATASERVERANET1=<billing_dataserver_a1>],  
[DATASERVERBNET1=<billing_dataserver_b1>],  
[DATASERVERANET2=<billing_dataserver_a2>],  
[DATASERVERBNET2=<billing_dataserver_b2>],  
[INITRETRYTMRANET1=<initRetryTmrAnet1>],  
[FAILRETRYTMRANET1=<failRetryTmrAnet1>],  
[INITRETRYTMRBNET1=<initRetryTmrBnet1>],  
[FAILRETRYTMRBNET1=<failRetryTmrBnet1>],  
[INITRETRYTMRANET2=<initRetryTmrAnet2>],  
[FAILRETRYTMRANET2=<failRetryTmrAnet2>],  
[INITRETRYTMRBNET2=<initRetryTmrBnet2>],  
[FAILRETRYTMRBNET2=<failRetryTmrBnet2>];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<COM>:DATASERVERANET1=<billing_dataserver_a1>,
    DATASERVERBNET1=<billing_dataserver_b1>,
    DATASERVERANET2=<billing_dataserver_a2>,
    DATASERVERBNET2=<billing_dataserver_b2>,
    DATASERVERCONN=<billing_dataserver_conn>,
    INITRETRYTMRANET1=<initRetryTmrAnet1>,
    FAILRETRYTMRANET1=<failRetryTmrAnet1>,
    INITRETRYTMRBNET1=<initRetryTmrBnet1>,
    FAILRETRYTMRBNET1=<failRetryTmrBnet1>,
    INITRETRYTMRANET2=<initRetryTmrAnet2>,
    FAILRETRYTMRANET2=<failRetryTmrAnet2>,
    INITRETRYTMRBNET2=<initRetryTmrBnet2>,
    FAILRETRYTMRBNET2=<failRetryTmrBnet2>,
    DATASERVERCONN=<dataServerConn>"
;
```

Parameters:

COM Identifies the AID as the switch.

Type: COM
Range: COM
Default: COM

billing_dataserver_a1 Identifies the IP address of the primary billing data server.

Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default: NULL

billing_dataserver_b1 Identifies the IP address of the first alternate billing data server.

Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default: NULL

billing_dataserver_a2 Identifies the IP address of the second alternate billing data server.

Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default: NULL

billing_datsaerver_b2 Identifies the IP address of the third alternate billing data server.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default: NULL

initRetryTmrAnet1 Identifies the time, in seconds, that the switch attempts to connect to the primary data server during the initial connection process before attempting to connect to the first alternate data server.

Type: integer

Range: {0-18000}

Default: 1

failRetryTmrAnet1 Identifies the time, in seconds, that the switch attempts to reconnect to the primary data server after a communication failure before attempting to connect to the first alternate data server.

Type: integer

Range: {0-18000}

Default: 5

initRetryTmrBnet1 Identifies the time, in seconds, that the switch attempts to connect to the first alternate data server during the initial connection process before attempting to connect to the second alternate data server.

Type: integer

Range: {0-18000}

Default: 0

failRetryTmrBnet1 Identifies the time, in seconds, that the switch attempts to reconnect to the first alternate data server after a communication failure before attempting to connect to the second alternate data server.

Type: integer

Range: {0-18000}

Default: 1

initRetryTmrAnet2 Identifies the time, in seconds, that the switch attempts to connect to the second alternate data server during the initial connection process before attempting to connect to the third alternate data server.

Type: integer

Range: {0-18000}

Default: 0

failRetryTmrAnet2 Identifies the time, in seconds, that the switch attempts to reconnect to the second alternate data server after a communication failure before attempting to connect to the third alternate data server.

Type: integer
Range: {0-18000}
Default: 1

initRetryTmrBnet2 Identifies the time, in seconds, that the switch attempts to connect to the third alternate data server during the initial connection process before attempting to connect to the primary data server.

Type: integer
Range: {0-18000}
Default: 0

failRetryTmrBnet2 Identifies the time, in seconds, that the switch attempts to reconnect to the third alternate data server after a communication failure before attempting to connect to the primary data server.

Type: integer
Range: {0-18000}
Default: 1

billing_dataserver_conn Identifies the IP address of the currently connected billing dataserver.

Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: none

Input Examples:

```
RTRV-DATASERVER-HOSTCFG;  
SET-DATASERVER-HOSTCFG::::DATASERVEANET1=10.5.0.98,  
    DATASERVEBNET1=NULL, DATASERVEANET2=10.5.0.99  
    DATASERVEANET1=NULL, INITRETRYTMRANET1=1,  
    FAILRETRYTMRANET1=5, INITRETRYTMRBNET1=0,  
    FAILRETRYTMRBNET1=1, INITRETRYTMRANET2=0,  
    FAILRETRYTMRANET2=1, INITRETRYTMRBNET2=0,  
    FAILRETRYTMRBNET2=1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"COM:DATASERVERANET1=10.5.0.98,
  DATASERVERBNET1=NULL,DATASERVERANET2=10.5.0.99,
  DATASERVERBNET2=NULL,INITRETRYTMANET1=1,
  FAILRETRYTMANET1=5,INITRETRYTMRBNET1=0,
  FAILRETRYTMRBNET1=1,INITRETRYTMANET2=0,
  FAILRETRYTMANET2=1,INITRETRYTMRBNET2=0,
  FAILRETRYTMRBNET2=1,DATASERVERCONN=10.5.0.98"
;
```

Related Commands: none

RTRV-STATE-MGCM3UA

Command:

RTRV-STATE-MGCM3UA: Retrieve State MGC M3UA

Description:

RTRV-STATE-MGCM3UA lets the user retrieve the routing context identifier, source port, and state for the M3UA link between the Lucent Network Controller (NC) and the signaling gateway for the specified media gateway.

Category: Facility

Platform: Lucent Network Controller

Security: View

Input Format:

RTRV-STATE-MGCM3UA: [TID]: [<mgName>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<mgName>:ROUTECTX=<routeCtxt>,PORT=<port>:<pst>"
;
```

Parameters:

mgName Identifies the AID as the media gateway for which you want to retrieve M3UA-related information. Set the value of *mgName* to the SID (System Identifier – from the header for TL1 messages) for the media gateway. A null value (in input) is equivalent to "ALL"; that is, by leaving the field blank, the system returns information for all media gateways associated with the NC.

Type: string

Range: up to 30 alphanumeric characters

Default value: none

routeCtxt Identifies the routing context for the M3UA link between the NC and the signaling gateway for the specified media gateway.

Type: integer

Range: {1-2048}

Default value: none

- port** Identifies the SCTP source port for the M3UA link between the NC and the signaling gateway for the specified media gateway.
Type: integer
Range: {1-65000}
Default value: none
- pst** Identifies the state of the M3UA link between the NC and the signaling gateway for the specified media gateway.
Type: enum
Range: IS = In-Service
OOS-AU = Out-Of-Service, Autonomous
OOS-MA = Out-Of-Service, Managed
Default value: none

Input Example:

```
RTRV-STATE-MGCM3UA::BOSTON;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"BOSTON:ROUTECTX=1,PORT=2876:IS"
;
```

Related Commands: none

RTRV-STATUS-SGPC

Command:

RTRV-STATUS-SGPC: Retrieve Status Point Code

Description:

RTRV-STATUS-SGPC lets the user retrieve information indicating the status of a destination point code for a signaling gateway.

Category: Signaling

Platform: Lucent Signaling Gateway

Security: View

Input Format:

RTRV-STATUS-SGPC: [TID]: [<pcId>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<pcId>:SGPCSTARSLT=<sgPcStaRsIt>,
    SGPCSTANMBACTVLNKSETS=<sgPcStaNmbActvLnkSets>,
    SGPCSTAMTPSTATE=<sgPcStaMtpState>,
    SGPCSTACONG=<sgPcStaCong>,
    SGPCSTARSTFLG=<sgPcStaRstFlg>"
;
```

Parameters:

pcId Identifies the AID as an adjacent or remote point code for a signaling gateway.

Type: string

Range: {0-255}-{0-255}-{0-255} for NANP (national) point codes
{0-16383} for international point codes

Default value: none

sgPcStaRsIt Identifies the result of MTP layer 3 test on the point code.

Type: enum

Range: FAILINGLYR3 = Failed
SUCCESS = Passed

Default value: none

sgPcStaNmbActvLnkSets Identifies the total number of active link sets in the point code.

Type: integer

Range: {1-20}

Default value: none

sgPcStaMtpState Identifies whether the point code is active.

Type: BoolYN

Range: Y = Point code is active

N = Point code is inactive

Default value: none

sgPcStaCong Identifies the priority assigned to a point code, depending on the congestion level. A value of "PRIORITY0" indicates that the point code is uncongested.

Type: enum

Range: PRIORITY0

PRIORITY1

PRIORITY2

PRIORITY3

Default value: none

sgPcStaRstFlg Specifies the signaling point restart indication.

Type: BoolYN

Range: N = signaling point not restarted

Y = signaling point restarted

Default value: none

Input Example:

```
RTRV-STATUS-SGPC::24-177-39;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"24-177-39:SGPCSTARSLT=SUCCESS,
SGPCSTANMBACTVLNKSETS=2,SGPCSTAMTPSTATE=Y,
SGPCSTACONG=PRIORITY0,SGPCSTARSTFLG=N"
;
```

Related Commands: None

DLT/ED/ENT/RTRV-AREACODE

Commands:

DLT-AREACODE: Delete Area Code
ED-AREACODE: Edit Area Code
ENT-AREACODE: Enter Area Code
RTRV-AREACODE: Retrieve Area Code

Descriptions:

DLT-AREACODE lets the user delete an area code from the system.

ED-AREACODE lets the user change the attributes of an area code.

ENT-AREACODE lets the user establish an area code, particularly in a country that is not part of the North American Numbering Plan. Use this command in place of ENT-NATIONAL-NPA when the value of *nmbPlan* in SWITCH-CFG is not “NANP”; however, you can use AREACODE instead of NATIONAL-NPA when the value of *nmbPlan* in SWITCH-CFG is “NANP”.

RTRV-AREACODE lets the user retrieve the attributes of an area code.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-AREACODE: [TID]:<areaCode>:[CTAG];  
ED-AREACODE: [TID]:<areaCode>:[CTAG]::[PLMN=<plmn>],  
    [SUBNMBSTART=<subNmbStart>],  
    [SUBMINDGTS=<subMinDgts>],  
    [SUBMAXDGTS=<subMaxDgts>],  
    [XCHGMINDGTS=<xchgMinDgts>],  
    [XCHGMAXDGTS=<xchgMaxDgts>];  
ENT-AREACODE: [TID]:<areaCode>:[CTAG]::[PLMN=<plmn>],  
    [SUBNMBSTART=<subNmbStart>],  
    [SUBMINDGTS=<subMinDgts>],  
    [SUBMAXDGTS=<subMaxDgts>],  
    [XCHGMINDGTS=<xchgMinDgts>],  
    [XCHGMAXDGTS=<xchgMaxDgts>];  
RTRV-AREACODE: [TID]: [<areaCode>]: [CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<areaCode>:PLMN=<plmn>, SUBNMBSTART=<subNmbStart>,
  SUBMINDGTS=<subMinDgts>, SUBMAXDGTS=<subMaxDgts>,
  XCHGMINDGTS=<xchgMinDgts>,
  XCHGMAXDGTS=<xchgMaxDgts>"
;
```

Parameters:

areaCode Identifies the AID as an area code in a country that is not part of the North American Numbering Plan. When the value of *nmbPlan* in SWITCH-CFG is "NANP", the value of *areaCode* comprises exactly three digits, and cannot start with "0" or "1" nor end with "11". When the value of *nmbPlan* in SWITCH-CFG is "MEX", the value of *areaCode* can be two or three digits, and cannot start with "0" or "1" but can end with "11". When the value of *nmbPlan* in SWITCH-CFG is "AUS", the value of *areaCode* is limited to the single digits "2", "3", "7", or "8".

Type: AreaCodeAid

Range: {1-9999}

Default value: none

plmn Identifies whether the selected area code is specifically designated for public land mobile network (cellular) numbers.

Type: BoolYn

Range: N = area code is not designated solely for cellular numbers

Y = area code is designated solely for cellular numbers

Default value: N

subNmbStart Identifies the set of valid starting digits, separated by ampersands (&) and with a maximum of 10 elements, for subscriber numbers in the designated area code. The set of values must conform to the range established for the numbering plan with ENT-DIALPLAN (The default numbering plan, cited by SWITCH-CFG, is "NANP"). The value of *subNmbStart* currently cannot include "0", and can include "1" only when the value of *nmbPlan* in SWITCH-CFG is "MEX".

Type: string

Range: up to 20 characters

Default value: 2&3&4&5&6&7&8&9

subMinDgts Identifies the minimum number of digits for subscriber numbers in the designated area code. The value must conform to that established for the numbering plan with ENT-DIALPLAN (The default numbering plan, cited by SWITCH-CFG, is “NANP”). The value of *subMinDgts* is exactly “8”, unless the value of *nmbPlan* in SWITCH-CFG is “MEX”, in which case the value cannot be less than “7”.

Type: integer
Range: {0-15}
Default value: 7

subMaxDgts Identifies the maximum number of digits for subscriber numbers in the designated area code. The value must conform to that established for the numbering plan with ENT-DIALPLAN (The factory default numbering plan, cited by SWITCH-CFG, is “NANP”). The value of *subMaxDgts* is exactly “8”, unless the value of *nmbPlan* in SWITCH-CFG is “MEX”, in which case the value cannot be greater than “8”.

Type: integer
Range: {0-15}
Default value: 7

xchgMinDgts Identifies the minimum number of digits for an exchange code in the designated area code. The value of *xchgMinDgts* is “3” when the value of *nmbPlan* in SWITCH-CFG is “NANP”.

Type: integer
Range: {0-5}
Default value: 3

xchgMaxDgts Identifies the maximum number of digits for an exchange code in the designated area code. The value must be greater than, or equal to, the value for *xchgMinDgts*. The value of *xchgMaxDgts* is “3” when the value of *nmbPlan* in SWITCH-CFG is “NANP”.

Type: integer
Range: {0-5}
Default value: 3

Input Examples:

```
DLT-AREACODE::716;  
ED-AREACODE::716:::PLMN=N,SUBNMBSTART=2&3&4&5&6&7&8&9,  
SUBMINDGTS=7,SUBMAXDGTS=7,XCHGMINDGTS=3,  
XCHGMAXDGTS=3;  
ENT-AREACODE::716:::PLMN=N,  
SUBNMBSTART=2&3&4&5&6&7&8&9,SUBMINDGTS=7,  
SUBMAXDGTS=7,XCHGMINDGTS=3,XCHGMAXDGTS=3;  
RTRV-AREACODE::716;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"716:::PLMN=N,SUBNMBSTART=2&3&4&5&6&7&8&9,  
SUBMINDGTS=7,SUBMAXDGTS=7,XCHGMINDGTS=3,  
XCHGMAXDGTS=3"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-COUNTRY

Commands:

DLT-COUNTRY: Delete Country

ED-COUNTRY: Edit Country

ENT-COUNTRY: Enter Country

RTRV COUNTRY: Retrieve Country

Descriptions:

DLT-COUNTRY lets the user delete a country code from the system.

ED-COUNTRY lets the user change the number of digits allowed in called party numbers for the designated country code.

ENT-COUNTRY lets the user add a country code to the system.

RTRV COUNTRY lets the user retrieve all of the country codes in the system.

Category: Call Control

Security: SA for DLT and ENT, View for RTRV

Input Formats:

```
DLT-COUNTRY:[TID]:<countryCode>:[CTAG];  
ED-COUNTRY:[TID]:<src>:[CTAG]::[MINDGTS=<minDgts>],  
[MAXDGTS=<maxDgts>];  
ENT-COUNTRY:[TID]:<countryCode>:[CTAG]::  
[MINDGTS=<minDgts>],[MAXDGTS=<maxDgts>];  
RTRV-COUNTRY:[TID]:[<countryCode>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
 "<countryCode>:MINDGTS=<minDgts>,MAXDGTS=<maxDgts>"  
;
```

Parameters:

countryCode Identifies the AID as a country code. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all country codes configured in the system will be returned.

Type: CCAid

Range: {1-999999}

Default value: none

minDgts Identifies the minimum number of digits, including the country code, allowed in called party numbers for the designated country.

Type: integer

Range: {7-24}

Default value: 7

maxDgts Identifies the maximum number of digits, including the country code, allowed in called party numbers for the designated country.

Type: integer

Range: {7-24}

Default value: 15

Input Examples:

DLT-COUNTRY::52;

ED-COUNTRY::52:::MINDGTS=7,MAXDGTS=15;

ENT-COUNTRY::52;

RTRV-COUNTRY;

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "1:MINDGTS=7,MAXDGTS=15"
  "52:MINDGTS=7,MAXDGTS=15"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-LRN

Commands:

DLT-LRN: Delete Location Routing Number
ED-LRN: Edit Location Routing Number
ENT-LRN: Enter Location Routing Number
RTRV-LRN: Retrieve Location Routing Number

Descriptions:

DLT-LRN lets the user delete a location routing number supporting the service-provider type of location number portability (LNP).

ED-LRN lets the user change the type of location routing number and whether to replace the called party number with the generic address parameter (GAP) number when the LRN is matched after an LNP dip.

ENT-LRN lets the user establish a location routing number to support the service-provider type of location number portability (LNP). Service-provider LNP allows a phone number "homed" on one service provider's switch (typically the ILEC) to be "ported" to the switch of another service provider (a CLEC) without changing the phone number. To achieve this, a phone number ported to another service provider's switch is associated in a database with the switch to which it is ported (identified by its LRN). ENT-LRN identifies that switch either as the Lucent switch or as a switch to which the Lucent switch routes.

RTRV-LRN lets the user retrieve parameters associated with a switch identified by a location routing number.

Category: Call Control

Security: ADMIN for DLT/ENT, View for RTRV

Input Formats:

DLT-LRN: [TID]:<lrn>:[CTAG];
ED-LRN: [TID]:<lrn>:[CTAG]::[LRNTYPE=<lrntype>],
[REPLACECDPN=<replaceCDPN>];
ENT-LRN: [TID]:<lrn>:[CTAG]::[LRNTYPE=<lrntype>],
[REPLACECDPN=<replaceCDPN>];
RTRV-LRN: [TID]: [<lrn>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<lrn>:LRNTYPE=<lrnType>,REPLACECDPN=<replaceCDPN>"
;
```

Parameters:

- lrn** Identifies the location routing number for the switch to which phone numbers are ported.
Type: string
Range: exactly 10 digits
Default value: none
- lrnType** Identifies the type of location routing number. You can define only a single LRN as primary.
Type: enum
Range: PRI = Primary – identifies the location routing number as associated with the Lucent switch
SEC = Secondary – identifies the location routing number as associated with a switch that routes to the Lucent switch
Default value: SEC
- replaceCDPN** Identifies whether to replace the called party number with the generic address parameter (GAP) number when the LRN is matched after an LNP dip and the GAP type in the IAM is “ported”.
Type: BoolYN
Range: N = do not replace the CDPN with the GAP number
Y = replace the CDPN with the GAP number
Default value: Y

Input Examples:

```
DLT-LRN::5084800000;
ED-LRN::5084800000:::LRNTYPE=SEC,REPLACECDPN=Y;
ENT-LRN::5084800000:::LRNTYPE=SEC,REPLACECDPN=Y;
RTRV-LRN::5084800000;
```

Output Example:

```
          lucent 2005-06-24 14:37:49  
M      0 COMPLD  
          "5084800000:LRNTYPE=SEC,REPLACECDPN=Y"  
      ;
```

Related Commands: none

DLT/ENT/RTRV-NATIONAL-NPA

Commands:

DLT-NATIONAL-NPA: Delete National NPA

ENT-NATIONAL-NPA: Enter National NPA

RTRV-NATIONAL-NPA: Retrieve National NPA

Descriptions:

DLT-NATIONAL-NPA lets the user delete from the system an NPA (Numbering Plan Area) within a country that is part of the North American Numbering Plan.

ENT-NATIONAL-NPA lets the user add to the system an NPA (Numbering Plan Area) within a country that is part of the North American Numbering Plan. ENT-NATIONAL-NPA will not work unless ENT-COUNTRY has already been issued.

RTRV-NATIONAL-NPA lets the user retrieve from the system all NPAs (Numbering Plan Areas) within a country that is part of the North American Numbering Plan. The command also can be used to determine the existence of a specific NPA within a country.

Category: Call Control

Security: SA for DLT and ENT, View for RTRV

Input Formats:

DLT-NATIONAL-NPA: [TID]:<CcNpa>:[CTAG];

ENT-NATIONAL-NPA: [TID]:<CcNpa>:[CTAG];

RTRV-NATIONAL-NPA: [TID]:<CcNpa>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<Cc>"
;
```

Parameters:

CcNpa Identifies the AID as an NPA within a country that is part of the North American Numbering Plan. The first number in the range identifies the country code; the second identifies the NPA and is optional in DLT and RTRV. A null value for the second number in the range (in DLT and RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system deletes or retrieves all NPAs for the country specified by the first number in the range.

Type: NNPAid

Range: {1-99999}[-{200-999}]

Default value: none

Input Examples:

DLT-NATIONAL-NPA::01-508;

ENT-NATIONAL-NPA::01-508;

RTRV-NATIONAL-NPA::01;

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "01-508"
  "01-617"
  "01-978"
;
```

Related Commands:

DLT/ED/ENT/RTRV-AREACODE

DLT/ENT/RTRV-RATE-CENTER

Commands:

DLT-RATE-CENTER: Delete Rate Center

ENT-RATE-CENTER: Enter Rate Center

RTRV-RATE-CENTER: Retrieve Rate Center

Descriptions:

DLT-RATE-CENTER lets the user delete a rate center specified by an NXX in an NPA.

ENT-RATE-CENTER lets the user establish a rate center in a specific NXX in an NPA. ENT-RATE-CENTER will not work unless ENT-NATIONAL-NPA or ENT-AREACODE has already been issued.

RTRV-RATE-CENTER lets the user retrieve all rate centers in the system that are associated with specific NXXs in NPAs in LATAs. The command also can be used to determine the existence of a specific rate center association.

Category: Call Control

Security: SA for DLT and ENT, View for RTRV

Input Formats:

DLT-RATE-CENTER: [TID]:<ratecenteraid>:[CTAG];

ENT-RATE-CENTER: [TID]:<ratecenteraid>:[CTAG]::
LATAID=<lata>,RATECENTER=<ratecenter>,
[LATANAME=<lataname>];

RTRV-RATE-CENTER: [TID]: [<ratecenteraid>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<ratecenteraid>:LATAID=<lata>,
[RATECENTER=<ratecenter>],[LATANAME=<lataname>]"
;
```

Parameters:

ratecenterAid Identifies the rate center with the homed NXX (exchange) in a specific NPA hosted by the Plexus 9000. The first number in the range identifies the NPA, and the second identifies the NXX. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system retrieves all rate centers configured in the system. A null value for the second number in the range (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system retrieves all NXXs for the NPA specified by the first number in the range.

Type: NpaNxx

Range: {200-999}[-{200-999}]

Default value: none

lata Identifies the LATA for the associated NPA and NXX.

Type: enum

Range: {100-999, 10000-99999}

Default value: none

ratecenter Identifies the name of the rate center.

Type: string

Range: up to 31 alphanumeric characters

Default value: none

lataname Identifies the name of the LATA.

Type: string

Range: up to 20 alphanumeric characters

Default value: none

Input Examples:

```
DLT-RATE-CENTER : 508-480 ;  
ENT-RATE-CENTER : 508-480 : : LATAID=128,  
    RATECENTER=MARLBORO, LATANAME=EMASS ;  
RTRV-RATE-CENTER : 508-480 ;
```

Output Example:

```
telica 2005-06-24 14:37:49  
M 0 COMPLD  
    "508-480:LATAID=128,RATECENTER=MARLBORO,  
    LATANAME=EMASS"  
;
```

Related Commands: none

NOTES

DLT/ED/ENT/RTRV-CARRIER

Commands:

DLT-CARRIER: Delete Carrier
ED-CARRIER: Edit Carrier
ENT-CARRIER: Enter Carrier
RTRV-CARRIER: Retrieve Carrier

Descriptions:

DLT-CARRIER lets the user remove a carrier code from the system.

ED-CARRIER lets the user change parameters affecting a carrier. Use ED-CARRIER to change the type of call accepted, the carrier class, whether the carrier has operator support, the carrier name, and the call type circuit codes.

ENT-CARRIER lets the user add a carrier to the system and define the type of call accepted, the carrier class, whether the carrier has operator support, the carrier name, and the call type circuit codes.

RTRV-CARRIER lets the user retrieve all the carriers in the system and their associated properties.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-CARRIER:[TID]:<CarrierCode>:[CTAG];  
ED-CARRIER:[TID]:<CarrierCode>:[CTAG]::  
[CALLTYPE=<CallType>],[CLASS=<CarrierClass>],  
[OPERATOR=<Operator>],[NAME=<Name>],  
[INTERLATACODE=<InterLataCode>],  
[INTERLATAOPERATORCODE=<InterLataOpCode>],  
[TOLLFREECODE=<TollfreeCode>],  
[CASINTERLATA=<CasInterLata>],  
[CASINTERLATAOP=<CasInterLataOp>],  
[CASTOLLFREE=<CasTollFree>],  
[CASINTERNATIONAL=<CasInternational>],  
[CASINTERNATIONALOP=<CasInternationalOp>];
```

```
ENT-CARRIER:[TID]:<CarrierCode>:[CTAG]::
[CALLTYPE=<CallType>],[CLASS=<CarrierClass>],
[OPERATOR=<Operator>],[NAME=<Name>],
[INTERLATA CODE=<InterLataCode>],
[INTERLATA OPERATOR CODE=<InterLataOpCode>],
[TOLLFREE CODE=<TollfreeCode>],
[CASINTERLATA=<CasInterLata>],
[CASINTERLATA OP=<CasInterLataOp>],
[CASTOLLFREE=<CasTollFree>],
[CASINTERNATIONAL=<CasInternational>],
[CASINTERNATIONAL OP=<CasInternationalOp>];

RTRV-CARRIER:[TID]:[<CarrierCode>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<CarrierCode>:CALLTYPE=<CallType>,
CLASS=<CarrierClass>,OPERATOR=<Operator>,
[NAME=<Name>],INTERLATA CODE=<InterLataCode>,
INTERLATA OPERATOR CODE=<InterLataOpCode>,
TOLLFREE CODE=<TollfreeCode>,
CASINTERLATA=<CasInterLata>,
CASINTERLATA OP=<CasInterLataOp>,
CASTOLLFREE=<CasTollFree>,
CASINTERNATIONAL=<CasInternational>,
CASINTERNATIONAL OP=<CasInternationalOp>"
;
```

Parameters:

CarrierCode Identifies the AID as a specific carrier. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all carriers configured in the system will be returned.

Type: CarrierCode

Range: {0-9999}

Default value: none

CallType Identifies the type of calls accepted.

Type: enum

Range: PRESUBSCRIBED = the carrier accepts calls from subscribers only

CASUALDIAL = the carrier provides service on a per-use basis only

BOTH = the carrier provides service both on a subscription and a per-use basis

Default value: BOTH

CarrierClass Identifies the class of carrier

Type: enum

Range: INTERLATA = the carrier only allows calls between LATAs

INTRALATA = the carrier only allows calls within a LATA

BOTH = the carrier allows calls both within one LATA and between LATAs

Default value: BOTH

Operator Identifies whether the carrier has operator support.

Type: BoolYN

Range: Y = the carrier has operator support

N = the carrier does not have operator support

Default value: Y

Name Identifies the name of the carrier.

Type: string

Range: up to 80 ASCII characters

Default value: NULL

InterLataCode Identifies the circuit code (per GR394 B.16) associated with a direct-dial (1+) or casual-dial (10-10-xxx) long distance call.

Type: integer

Range: {0,3-15}

Default value: 0

InterLataOpCode Identifies the circuit code (per GR394 B.16) associated with an operator-assisted (0+) long distance call.

Type: integer

Range: {0,3-15}

Default value: 0

TollfreeCode Identifies the circuit code (per GR394 B.16) associated with a toll-free (800, 888, 877) long distance call.

Type: integer

Range: {0,3-15}

Default value: 0

CasInterLata Identifies the circuit code (per GR394 B.16) associated with a direct-dial (1+) or casual-dial (10-10-xxx) CAS long distance call.

Type: integer

Range: {0-199}

Default value: 0

CasInterLataOp Identifies the circuit code (per GR394 B.16) associated with an operator-assisted (0+) CAS long distance call.

Type: integer

Range: {0-199}

Default value: 0

CasTollFree Identifies the circuit code (per GR394 B.16) associated with a toll-free (800, 888, 877) CAS long distance call.

Type: integer

Range: {0-199}

Default value: 0

CasInternational Identifies the circuit code (per GR394 B.16) associated with a direct-dial (1+) or casual-dial (10-10-xxx) CAS international call.

Type: integer

Range: {0-199}

Default value: 138

CasInternationalOp Identifies the circuit code (per GR394 B.16) associated with an operator-assisted (0+) CAS international call.

Type: integer

Range: {0-199}

Default value: 158

Input Examples:

```
DLT-CARRIER::1;

ED-CARRIER::1:::CALLTYPE=BOTH, CLASS=BOTH, OPERATOR=Y,
NAME=LUCENT, INTERLATA CODE=8,
INTERLATA OPERATOR CODE=9, TOLLFREE CODE=10,
CASINTERLATA=0, CASINTERLATAOP=0, CASTOLLFREE=0,
CASINTERNATIONAL=138, CASINTERNATIONALOP=158;

ENT-CARRIER::1:::CALLTYPE=BOTH, CLASS=BOTH, OPERATOR=Y,
NAME=LUCENT, INTERLATA CODE=8,
INTERLATA OPERATOR CODE=9, TOLLFREE CODE=10,
CASINTERLATA=0, CASINTERLATAOP=0, CASTOLLFREE=0,
CASINTERNATIONAL=138, CASINTERNATIONALOP=158;

RTRV-CARRIER::1;
```

Output Example:

```
lucent 2005-04-08 14:37:49
M 0 COMPLD
"1:CALLTYPE=BOTH, CLASS=BOTH, OPERATOR=Y, NAME=LUCENT,
INTERLATA CODE=8, INTERLATA OPERATOR CODE=9,
TOLLFREE CODE=10, CASINTERLATA=0, CASINTERLATAOP=0,
CASTOLLFREE=0, CASINTERNATIONAL=138,
CASINTERNATIONALOP=158"
;
```

Related Commands: none

ED/RTRV-INSYS

Commands:

ED-INSYS: Edit IN System

RTRV-INSYS: Retrieve IN System

Descriptions:

ED-INSYS lets the user change the frequency on which the switch sends the SST (Subsystem Status Test) message for prohibited SSNs.

RTRV-INSYS lets the user retrieve the value of the subsystem status test message timer.

Category: Call Control

Security: SA for ED, View for RTRV

Input Formats:

```
ED-INSYS:[TID]:[<src>]:[CTAG]::  
[SCPSSTTMR=<scpSstTmr>],  
[SCPREASSYTMR=<scpReassyTmr>];  
RTRV-INSYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
"<src>:SCPSSTTMR=<scpSstTmr>,  
SCPREASSYTMR=<scpReassyTmr>"  
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

scpSstTmr Identifies the value (in seconds) for the subsystem status test message timer. The factory default is "60".

Type: integer

Range: {1-32767}

Default value: not applicable

scpReassyTmr Identifies the reassembly timer value (in seconds). The timer starts on receipt of a segmented XUDT (eXtended UDT) message and terminates normally on receipt of the last segment. An F-bit set to one and a non-zero value for the “remaining segment” field identifies the first segment of a segmented XUDT. The last segment has both the F-bit and the “remaining segment” field set to zero. The switch discards the message and stops the reassembly process when the reassembly timer expires before receipt and reassembly of all segments. The factory default is “10”.

Type: integer

Range: {1-60}

Default value: not applicable

Input Examples:

```
ED-INSYS:::SCPSSTTMR=60, SCPREASSYTMR=10;  
RTRV-INSYS;
```

Output Example:

```
lucent 2005-04-08 14:37:49  
M 0 COMPLD  
"COM:SCPSSTTMR=60, SCPREASSYTMR=10"  
;
```

Related Commands: none

ED/RTRV-SERVICE-ACCESSCODE

Commands:

ED-SERVICE-ACCESSCODE: Edit Service ACCESSCODE

RTRV-SERVICE-ACCESSCODE: Retrieve Service ACCESSCODE

Descriptions:

ED-SERVICE-ACCESSCODE lets the user change the description, activation/deactivation codes, executing platform, and state for individual IN (Intelligent Network) services.

RTRV-SERVICE-ACCESSCODE lets the user retrieve the description, activation/deactivation codes, executing platform, and state associated with IN (Intelligent Network) services.

Category: Call Control

Security: SA for ED, View for RTRV

Input Formats:

```
ED-SERVICE-ACCESSCODE:[TID]:<serviceId>:[CTAG]::
    [DESC=<descr>],[ACTIVATIONCODE=<activationCode>],
    [DEACTIVATIONCODE=<deactivationCode>],
    [SLHRID=<slhrid>]:<pst>;

RTRV-SERVICE-ACCESSCODE:[TID]:<serviceId>:[CTAG];
```

Output Format:

```
      SID DATE TIME
M    CTAG COMPLD
      "<serviceId>:DESC=<descr>,
      ACTIVATIONCODE=<activationCode>,
      DEACTIVATIONCODE=<deactivationCode>,
      SLHRID=<slhrid>:<pst>"
      ;
```

Parameters:

serviceId Identifies the AID as a type of IN service. Standard (factory default) activation and deactivation codes are shown parenthetically. A null value (in RTRV) is equivalent to “ALL”; that is, by leaving the field blank, all services configured in the system will be returned.

Type: ServiceId

Range: ACB = Automatic Call Back (Activation Code = 66, Deactivation Code = 86)
ACR = Anonymous Call Rejection (Activation Code = 77, Deactivation Code = 87)
AIN_TOLLFREE = Advanced Intelligent Network tollfree – tollfree calls resolved in the INAP layer of SS7 (Activation Code = NULL, Deactivation Code = NULL)
AR = Automatic Recall (Activation Code = 69, Deactivation Code = 89)
AUTHCODE = outgoing calls require Authorization Code (Activation Code = NULL, Deactivation Code = NULL)
CFBL = Call Forwarding on Busy Line (Activation Code = NULL, Deactivation Code = NULL)
CFDA = Call Forwarding on No Answer (Activation Code = NULL, Deactivation Code = NULL)
CFV = Call Forwarding Variable (Activation Code = 72, Deactivation Code = 73)
CID = Calling Identity Delivery (Activation Code = 61, Deactivation Code = NULL)
CIDCW = Call ID on Call Waiting (Activation Code = NULL, Deactivation Code = NULL)
CIS = Calling Identity Suppression (Activation Code = NULL, Deactivation Code = NULL)
CNAB = Calling Name delivery Blocking (Activation Code = NULL, Deactivation Code = NULL)
CNAM = Caller Name display – Caller ID (Activation Code = NULL, Deactivation Code = NULL)
CND = Calling Number Delivery (Activation Code = NULL, Deactivation Code = NULL)
CNDB = Calling Number Delivery Blocking (Activation Code = 67, Deactivation Code = NULL)
COT = Customer Originated Trace (Activation Code = 57, Deactivation Code = NULL)
CRDPCL = Code Restriction/Diversion Prohibited Code List – block originating calls to specified screen digits (Activation Code = NULL, Deactivation Code = NULL)
CWC = Cancel Call Waiting (Activation Code = 70, Deactivation Code = NULL)

CWT = Call Waiting (Activation Code = NULL,
Deactivation Code = NULL)
GMSC_IS41 = Gateway MSC, ANSI IS41 based (Activation
Code = NULL, Deactivation Code = NULL)
GMSC_MAP = Gateway MSC, GSM MAP based
(Activation Code = NULL, Deactivation Code = NULL)
LNP = Local Number Portability (Activation Code = NULL,
Deactivation Code = NULL)
MWC = Multi-Way Calling – Call Transfer (Activation Code
= NULL, Deactivation Code = NULL)
RAF = Remote Access to Features (Activation Code =
NULL, Deactivation Code = NULL)
RDAS = Residence Distinctive Alerting Service (Activation
Code = NULL, Deactivation Code = NULL)
SC1 = Speed-dialing with one-digit speedcode (Activation
Code = 74, Deactivation Code = NULL)
SC2 = Speed-dialing with two-digit speedcode (Activation
Code = 75, Deactivation Code = NULL)
TOLLFREE = Tollfree (Activation Code = NULL,
Deactivation Code = NULL)
TWC = Three-Way Calling (Activation Code = NULL,
Deactivation Code = NULL)
VMS = Voice Mail System (Activation Code = NULL,
Deactivation Code = NULL)

Default value: none

descr Identifies the description of the service. The factory default is
“NULL”.

Type: string

Range: up to 50 ASCII characters

Default value: not applicable

activationCode Identifies the code to dial to activate the service. The codes to
activate and deactivate a service must differ and cannot be the same as
codes for other services. The factory default is “NULL”.

Type: string

Range: {02-99, 200-399}

Default value: not applicable

deactivationCode Identifies the code to dial to deactivate the service. The codes
to activate and deactivate a service must differ and cannot be the same
as codes for other services. The factory default is “NULL”.

Type: string

Range: {02-99, 200-999}

Default value: not applicable

slhrId Identifies the service logic host route to the Service Control Point (SCP) providing the service. The specified service logic host route cannot be the same as one specified by ACBAR-SYS, GMSC-ANSISYS, GMSC-GSMSYS, LIST-AINTRIGGER, or VMS-SYS. When *slhrId* is specified and the value of *serviceId* is "LNP", the value of *tcapUser* in SLHR-SCP must be either "AIN1992" or "IS41". When *slhrId* is specified and the value of *serviceId* is "TOLLFREE", the value of *tcapUser* in SLHR-SCP must be "NONE". When *slhrId* is specified and the value of *serviceId* is "AIN_TOLLFREE", the value of *tcapUser* in SLHR-SCP must be "AIN1992". When *slhrId* is specified and the value of *serviceId* is "CNAM", the value of *tcapUser* in SLHR-SCP must be "NONE". The value of *slhrId* is "NULL" when the value of *serviceId* is "GMSC_MAP" or "GMSC_IS41". The factory default is "NULL".

Type: integer

Range: {0-31}

Default value: not applicable

pst Indicates whether the service is available at the switch level. A null value means no change to the current value. The factory default is "OOS".

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)

Default value: not applicable

Input Examples:

```
ED-SERVICE-ACCESSCODE::CFV:::DESC=CFV_SERVICE,  
  ACTIVATIONCODE=72, DEACTIVATIONCODE=73:OOS;  
RTRV-SERVICE-ACCESSCODE::CFV;
```

Output Example:

```
lucent 2005-04-08 14:37:49  
M 0 COMPLD  
  "CFV:DESC=CFV_SERVICE,ACTIVATIONCODE=72,  
    DEACTIVATIONCODE=73,SLHRID=NULL:OOS"  
;
```

Related Commands: none

NOTES

DLT/ENT/RTRV-ANNC-MAP

Commands:

DLT-ANNC-MAP: Delete Announcement Map

ENT-ANNC-MAP: Enter Announcement Map

RTRV-ANNC-MAP: Retrieve Announcement Map

Descriptions:

DLT-ANNC-MAP lets the user delete the mapping of an internal identification for an audio announcement to an announcement identification specified by an SCP.

ENT-ANNC-MAP lets the user map an internal identification for an audio announcement to an announcement identification specified by an SCP.

RTRV-ANNC-MAP lets the user retrieve the internal audio announcement that is mapped to an announcement identification specified by an SCP.

Category: Call Control

Security: NSA for DLT and ENT, View for RTRV

Input Formats:

DLT-ANNC-MAP: [TID]:<scpAnncMapAid>:[CTAG];

ENT-ANNC-MAP: [TID]:<scpAnncMapAid>:[CTAG]::
ANNCID=<anncId>;

RTRV-ANNC-MAP: [TID]: [<scpAnncMapAid>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<scpAnncMapAid>:ANNCID=<anncId>"
;
```

Parameters:

scpAnncMapAid Identifies the AID as an announcement specified by an SCP. The first part of the AID is a string of up to 20 characters that labels the announcement mapping; the second part is an integer identifying the announcement specified by the SCP. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all announcement mappings configured in the system will be returned. A null value for the second part of the AID (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all announcement mappings with the specified announcement mapping label will be returned.

Type: ScpAnncMap

Range: <ANNCMAPLBL>-{1-65535}

Default value: none

anncId Identifies the internal designator for an audio announcement that is mapped to the announcement identification specified by the SCP. Identifiers 1-2999 are reserved for already-configured standard announcements, identifiers 3000-32766 are for user-supplied custom announcements, and identifiers 32767-65535 are reserved for future external announcements.

Type: integer

Range: {1-65535}

Default value: none

Input Examples:

```
DLT-ANNC-MAP::SCP1-1;
```

```
ENT-ANNC-MAP::SCP1-1::ANNCID=32766;
```

```
RTRV-ANNC-MAP::SCP1-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"SCP-1:ANNCID=32766"
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-AUDIO-ANNC
```

DLT/ED/ENT/RTRV-LIST-AINTRIGGER

Commands:

DLT-LIST-AINTRIGGER: Delete List AIN Trigger

ED-LIST-AINTRIGGER: Edit List AIN Trigger

ENT-LIST-AINTRIGGER: Enter List AIN Trigger

RTRV-LIST-AINTRIGGER: Retrieve List AIN Trigger

Descriptions:

DLT-LIST-AINTRIGGER lets the user remove a trigger from a list of AIN triggers. Removing all triggers from a list deletes the list name from the database.

ED-LIST-AINTRIGGER lets the user change a list of AIN triggers. Use this command to change the trigger type and category, the string of digits that activates the trigger, the service logic host route to an SCP, the new nature of address indicator for the triggering digits, the digits to prefix and strip before querying an SCP, whether changes to the attributes of the trigger are permanent or apply only for the single query, and whether the trigger is active.

ENT-LIST-AINTRIGGER lets the user establish a list of AIN triggers. Use this command to define the AIN trigger(s) on the list, the trigger type and category, the string of digits that activates the trigger, the service logic host route to an SCP, the nature of address indicator for the triggering digits, the digits to prefix and strip before querying an SCP, whether changes to the attributes of the trigger are permanent or apply only for the single query, and whether the trigger is active. ENT-LIST-AINTRIGGER is dependent on ENT-SLHR-SCP; that is, ENT-LIST-AINTRIGGER will not work unless ENT-SLHR-SCP has already been issued.

RTRV-LIST-AINTRIGGER lets the user retrieve a list of AIN triggers and the attributes for the triggers in the list.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-LIST-AINTRIGGER:[TID]:<triggerAid>:[CTAG];  
ED-LIST-AINTRIGGER:[TID]:<triggerAid>:[CTAG]::  
    [TRIGESCLIST=<trigEscList>],[SLHRID=<slhrId>],  
    [PREFIXDGTS=<prefixDgts>],[STRIPDGTS=<stripDgts>],  
    [NEWNAI=<newNAI>],[MODTYPE=<modType>]:[<pst>];  
ENT-LIST-AINTRIGGER:[TID]:<triggerAid>:[CTAG]::  
    TRIGTYPE=<trigType>,[CATEGORY=<category>],  
    [TRIGESCLIST=<trigEscList>],  
    [SCREENDGTS=<screenDgts>],[SLHRID=<slhrId>],  
    [NAI=<nai>],[PREFIXDGTS=<prefixDgts>],  
    [STRIPDGTS=<stripDgts>],[NEWNAI=<newNAI>],  
    [MODTYPE=<modType>]:[<pst>];  
RTRV-LIST-AINTRIGGER:[TID]:[<triggerAid>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
    "<triggerAid>:TRIGTYPE=<trigType>,  
    CATEGORY=<category>,TRIGESCLIST=<trigEscList>,  
    SCREENDGTS=<screenDgts>,SLHRID=<slhrId>,  
    NAI=<nai>,PREFIXDGTS=<prefixDgts>,  
    STRIPDGTS=<stripDgts>,NEWNAI=<newNAI>,  
    MODTYPE=<modType>:<pst>;  
    ;
```

Parameters:

triggerAid Identifies the AID as either a list of AIN triggers or a particular trigger in a list. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all lists of AIN triggers configured in the system will be returned. A null value for the second part of the AID (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all AIN triggers associated with the specified list of AIN triggers will be returned.

Type: TriggerAid

Range: <ainTrigListName>[-<index>], where:

ainTrigListName identifies the name of the list of AIN triggers with a string of up to 21 alphanumeric characters (including underscores and periods);

index identifies the particular trigger associated with the list as an integer with range 1-255. Each trigger has a unique combination of *trigType* and *screenDgts*.

Default value: none

trigType Identifies the triggering event; that is, an SSP User Resource-related call processing event that is of potential interest to an AIN service.

Type: enum

Range: INTERNATIONAL = trigger encountered on receipt of a digit string that matches the criteria for an international call. Note that there can only be one INTERNATIONAL trigger configured in the system.

MOBILE_TERMINATION = trigger encountered when the called party number is either an ANSI IS41 or a GSM mobile directory number. To select this value, first use ED-GMSC-ANSISYS/GSMSYS to set the primary state of the switch configured as a GMSC to "IS".

MOBILE_TERMINATION_ANSI = trigger encountered when the called party number is an ANSI IS41 mobile directory number. To select this value, first use ED-GMSC-ANSISYS to set the primary state of the switch configured as an ANSI IS41 GMSC to "IS"; set the value of *category* to "OFFICE" and set the value of *tcapUser* in SLHR-SCP to "IS41".

MOBILE_TERMINATION_GSM = trigger encountered when the called party number is a GSM mobile directory number. To select this value, first use ED-GMSC-GSMSYS to set the primary state of the switch configured as a GSM GMSC to "IS"; set the value of

category to “OFFICE” and set the value of *tcapUser* in SLHR-SCP to “MAP”.

ONE_PLUS_PREFIX = trigger encountered on receipt of one of the following digit strings:

- 1+NPA-NXX-XXXX
- 101XXXX 1+ NPA-NXX-XXXX

OPERATOR_SERVICES = trigger encountered on receipt of one of the following digit strings (a “-“ means “no following digits”, a “+” means “has following digits”):

- 0-
- 00-
- 101xxxx 0-
- 101xxxx 00-
- 0+
- 01+
- 101xxxx 0+
- 101xxxx 01+

SPECIFIC_DIGIT_STRING = trigger encountered on receipt of an appropriate sequence of dialed digits (other than escape codes) in the *CalledPartyID* of an SCP/Adjunct Response message, or in the IAM Called Party Number or (Ported Number) GAP

Default value: none

category Identifies whether the triggering event specified by *trigType* applies to office-based or to subscribed-based traffic. Office-based triggers are global; they apply to all traffic through the switch. Subscribed-based triggers apply to a specific subscriber line.

Type: enum

Range: OFFICE

SUBSCRIBED

Default value: SUBSCRIBED

trigEscList Identifies the escape (exception) list, previously defined by ENT-LIST-TRIGESC, for the specified trigger.

Type: string

Range: up to 10 characters

Default value: NULL

screenDgts Identifies the triggering digits, based on the triggering event.

Type: string

Range: one to 20 digits, for the following triggers:

- INTERNATIONAL: one to 15 digits
- ONE_PLUS_PREFIX: 11 or 18 digits
- OPERATOR_SERVICES: one to 20 digits
- SPECIFIC_DIGIT_STRING: three to 10 digits

Default value: NULL

slhrId Identifies the service logic host route to a Service Control Point (established by [ENT-SLHR-SCP](#), with the value of *tcapUser* set to “AIN1992”) for the AIN trigger. Set the value to “NULL” when the value of *trigType* is “MOBILE_TERMINATION”.

Type: enum

Range: {0-31}

Default value: NULL

nai Identifies the nature of address indicator for the triggering digits. This parameter is not used when the value of *screenDgts* is “NULL”.

Type: enum

Range: INTNATNUM = international number

NATNUM = national significant number

UNKNOWN = unknown numbering plan

Default value: NATNUM

prefixDgts Identifies the digits to prefix to the called party number before sending a query to an SCP when a trigger is matched.

Type: string

Range: 1-20 digits

Default value: NULL

stripDgts Identifies the number of digits to strip from the called party number before sending a query to a SCP. When both *stripDgts* and *prefixDgts* are present, the switch strips digits before prefixing additional digits.

Type: integer

Range: {0-20}

Default value: 0

newnai Identifies a new nature of address indicator replacing the nature of address indicator for the called party number before sending a query to an SCP.

Type: enum

Range: INTNATNUM = international number
NATNUM = national significant number
UNKNOWN = unknown numbering plan

Default value: NULL

modType Identifies whether changes to the attributes of the trigger are permanent or apply only for the single query.

Type: enum

Range: PERMANENT
QUERY

Default value: QUERY

pst Identifies the primary state of the AIN trigger; that is, whether the trigger is active.

Type: enum

Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)

Default value: IS

Input Examples:

```
DLT-LIST-AINTRIGGER::TRIGLIST1-1;
```

```
ED-LIST-AINTRIGGER::TRIGLIST1-1:::TRIGESCLIST=NULL,  
SLHR=1,NAI=NULL,PREFIXDGTS=NULL,STRIPDGTS=0,  
NEWNAI=NULL,MODTYPE=QUERY:IS;
```

```
ENT-LIST-AINTRIGGER::TRIGLIST1-1:::  
TRIGTYPE=SPECIFIC_DIGIT_STRING,CATEGORY=SUBSCRIBER,  
TRIGESCLIST=NULL,SCREENDGTS=508,SLHR=1,NAI=NULL,  
PREFIXDGTS=NULL,STRIPDGTS=0,NEWNAI=NULL,  
MODTYPE=QUERY:IS;
```

```
RTRV-LIST-AINTRIGGER::TRIGLIST1-1;
```

Output Example:

```
telica 2005-06-24 14:37:49
M 0 COMPLD
  "TRIGLIST1-1:TRIGTYPE=SPECIFIC_DIGIT_STRING,
    CATEGORY=SUBSCRIBER, TRIGESCLIST=NULL,
    SCREENDGTS=508, SLHR=1, NAI=NULL, PREFIXDGTS=NULL,
    STRIPDGTS=0, NEWNAI=NULL, MODTYPE=QUERY:IS"
;
```

Related Commands:

DLT/ED/ENT/RTRV-LIST-TRIGESC

DLT/ED/ENT/RTRV-LIST-AUTHCODE

Commands:

DLT-LIST-AUTHCODE: Delete List Authorization Code

ED-LIST-AUTHCODE: Edit List Authorization Code

ENT-LIST-AUTHCODE: Enter List Authorization Code

RTRV-LIST-AUTHCODE: Retrieve List Authorization Code

Descriptions:

DLT-LIST-AUTHCODE lets the user delete an authorization list containing either an authorization code, a personal identification number (PIN) code, or an authorization code with an associated PIN code.

ED-LIST-AUTHCODE lets the user change the authorization code, the personal identification number (PIN) code, or the authorization code with associated PIN code in an authorization list. Authorization lists have unique names, are limited to 10,000 entries, and contain only a single type of code (authorization, PIN, or authorization with associated PIN).

ENT-LIST-AUTHCODE lets the user establish an indexed list containing an authorization code, a personal identification number (PIN) code, or an authorization code with an associated PIN code. Authorization lists have unique names, are limited to 10,000 entries, and contain only a single type of code (authorization, PIN, or authorization with associated PIN).

RTRV-LIST-AUTHCODE lets the user retrieve an indexed list containing either an authorization code, a personal identification number (PIN) code, or an authorization code with an associated PIN code.

Category: Facility

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-LIST-AUTHCODE: [TID]:<idindex>:[CTAG];

ED-LIST-AUTHCODE: [TID]:<idindex>:[CTAG]::
[AUTHCODE=<authcode>], [PINCODE=<pincode>];

ENT-LIST-AUTHCODE: [TID]:<idindex>:[CTAG]::
[AUTHCODE=<authcode>], [PINCODE=<pincode>];

RTRV-LIST-AUTHCODE: [TID]: [<idindex>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<idindex>:[AUTHCODE=<authcode>],
    [PINCODE=<pincode>]"
;
```

Parameters:

idindex Identifies the AID as either an authorization code, a PIN code, or an authorization code with an associated PIN code in an authorization list. The first part of the AID is a string identifying the list name; the second part is an integer representing the specific code in the list. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all authorization lists in the system will be returned. A null value for the second part of the AID (in RTRV) is equivalent to "ALL"; that is, by leaving the INDEX field blank, all codes assigned to the specified authorization list will be returned.

Type: ListCodeAid

Range: <LISTID>-{INDEX}, where
LISTID = up to 20 characters, and
INDEX = {1-10000}

Default value: none

authcode Identifies the specific authorization code associated with INDEX in *listCodeId* when *listCodeId* represents either a list of authorization codes or a list of authorization codes with associated PIN codes.

Type: string

Range: up to 16 digits (including "*", but not as the first digit)

Default value: NULL

pincode Identifies the specific PIN code associated with INDEX in *listCodeId* when *listCodeId* represents either a list of PIN codes or a list of authorization codes with associated PIN codes.

Type: string

Range: four to eight digits (including "#" and "*")

Default value: NULL

Input Examples:

```
DLT-LIST-AUTHCODE::COMBOLIST1-1;  
ED-LIST-AUTHCODE::COMBOLIST1-1:::AUTHCODE=78025,  
    PINCODE=6275;  
ENT-LIST-AUTHCODE::COMBOLIST1-1:::AUTHCODE=78025,  
    PINCODE=6275;  
RTRV-LIST-AUTHCODE::COMBOLIST1-1;
```

Output Example:

```
    lucent 2005-06-24 14:37:49  
M    0 COMPLD  
    "COMBOLIST1-1:AUTHCODE=78025,PINCODE=6275"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-LIST-TRIGESC

Commands:

DLT-LIST-TRIGESC: Delete List Trigger Escape

ED-LIST-TRIGESC: Edit List Trigger Escape

ENT-LIST-TRIGESC: Enter List Trigger Escape

RTRV-LIST-TRIGESC: Retrieve List Trigger Escape

Descriptions:

DLT-LIST-TRIGESC lets the user remove a trigger escape list from the database.

ED-LIST-TRIGESC lets the user change the ending number for the range of DNs associated with a specified trigger escape list.

ENT-LIST-TRIGESC lets the user establish an escape (exception) list for a particular trigger type. Use this command to name the trigger escape list and associate it with a range of directory numbers.

RTRV-LIST-TRIGESC lets the user retrieve the range of DNs associated with a specified trigger escape list.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-LIST-TRIGESC:[TID]:<trigEscListAID>:[CTAG];

ED-LIST-TRIGESC:[TID]:<trigEscListAID>:[CTAG]::
[ENDRANGE=<endRange>];

ENT-LIST-TRIGESC:[TID]:<trigEscListAID>:[CTAG]::
[ENDRANGE=<endRange>];

RTRV-LIST-TRIGESC:[TID]:[<trigEscListAID>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<trigEscListAID>:ENDRANGE=<endRange>"
;
```

Parameters:

trigEscListAID Identifies the AID as an escape (exception) list for a particular trigger type. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all trigger type escape lists configured in the system will be returned. A null value for the second part of the AID (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the range of directory numbers associated with the specified escape list will be returned.

Type: TrigEscListAID

Range: <trigEscList>[-<startRange>], where:

trigEscList identifies the name of the trigger type escape list with a string of up to 10 alphanumeric characters;

startRange identifies the first number in the range of DNs associated with the escape list with a string of exactly 10 digits.

Default value: none

endRange Identifies the last number in the range of DNs associated with the escape list with just the last four digits. The value must be greater than the value of *startRange*.

Type: string

Range: {0000-9999}

Default value: the value for *startRange*

Input Examples:

```
DLT-LIST-TRIGESC::ESCLIST1-5088041000;  
ED-LIST-TRIGESC::ESCLIST1-5088041000:::ENDRANGE=5000;  
ENT-LIST-TRIGESC::ESCLIST1-5088041000:::ENDRANGE=5000;  
RTRV-LIST-TRIGESC::ESCLIST1-5088041000;
```

Output Example:

```
telica 2005-06-24 14:37:49  
M 0 COMPLD  
"ESCLIST1-5088041000:ENDRANGE=5000"  
;
```

Related Commands:

DLT/ED/ENT/RTRV-LIST-AINTRIGGER

DLT/ENT/RTRV-SCCP-ROUTE

Commands:

DLT-SCCP-ROUTE: Delete SCCP Route

ENT-SCCP-ROUTE: Enter SCCP Route

RTRV-SCCP-ROUTE: Retrieve SCCP Route

Descriptions:

DLT-SCCP-ROUTE lets the user delete an SCCP (Signaling Connection Control Part) route to a remote point code.

ENT-SCCP-ROUTE lets the user establish an SCCP (Signaling Connection Control Part) route to an SCP or STP at a remote point code. ENT-SCCP-ROUTE is dependent on ENT-MGC-PCOWN; that is, ENT-SCCP-ROUTE will not work unless ENT-MGC-PCOWN has already been issued with the same AID format (ANSI or ITU) and with the value of *inServices* set to "Y".

RTRV-SCCP-ROUTE lets the user retrieve the remote point code(s) to which an SCCP (Signaling Connection Control Part) route exists.

Category: Call Control

Security: SA for DLT and ENT, View for RTRV

Input Formats:

DLT-SCCP-ROUTE: [TID]:<pcId>:[CTAG];

ENT-SCCP-ROUTE: [TID]:<pcId>:[CTAG];

RTRV-SCCP-ROUTE: [TID]: [<pcId>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<pcId>"
;
```

Parameters:

pcId Identifies the remote point code for the route. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all point codes configured in the system will be returned.

Type: string

Range: {0-255}-{0-255}-{0-255} for NANP (national) point codes
{0-16383} for international point codes
DEF_ANSI = Default NANP point code
DEF_ITU = Default international point code

Default value: none

Input Examples:

```
DLT-SCCP-ROUTE : :35-222-123;  
ENT-SCCP-ROUTE : :35-222-123;  
RTRV-SCCP-ROUTE ;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"35-222-123"  
"35-223-181"  
"42-156-93"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SCCP-SSN

Commands:

DLT-SCCP-SSN: Delete SCCP SSN

ED-SCCP-SSN: Edit SCCP SSN

ENT-SCCP-SSN: Enter SCCP SSN

RTRV-SCCP-SSN: Retrieve SCCP SSN

Descriptions:

DLT-SCCP-SSN lets the user delete an SCCP (Signaling Connection Control Part) route to an SSN (sub-system number) on a remote point code.

ED-SCCP-SSN lets the user change the parameters affecting an SCCP (Signaling Connection Control Part) route to an SSN (sub-system number) on a remote point code.

ENT-SCCP-SSN lets the user establish an SCCP (Signaling Connection Control Part) route to an SSN (sub-system number) on a remote point code. ENT-SCCP-SSN is dependent on ENT-MGC-PC and ENT-SCCP-ROUTE; that is, ENT-SCCP-SSN will not work unless ENT-MGC-PC and ENT-SCCP-ROUTE have already been issued.

RTRV-SCCP-SSN lets the user retrieve the remote point code(s) to which an SCCP (Signaling Connection Control Part) route to an SSN (sub-system number) exists.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SCCP-SSN: [TID]:<sccpSsnAid>:[CTAG];

ED-SCCP-SSN: [TID]:<sccpSsnAid>:[CTAG]::
STARTMODE=<startMode>;

ENT-SCCP-SSN: [TID]:<sccpSsnAid>:[CTAG]::
[STARTMODE=<startMode>;]

RTRV-SCCP-SSN: [TID]: [<sccpSsnAid>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<sccpSsnAid>:STARTMODE=<startMode>"
;
```

Parameters:

sccpSsnAid Identifies the AID as a combination of the remote point code that receives the query and the subsystem number of the providing service. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns all configured SCCP routes to SSNs.

Type: SccpSsnAid

Range: <pcId>-<ssn>, where

pcID = {0-255}-{0-255}-{0-255} for NANP (national)
point codes
{0-16383} for international point codes
ssn = {1-255}

Default value: none

startMode Identifies the startup state of the route to the SSN.

Type: enum

Range: OFFLINE
ONLINE

Default value: ONLINE

Input Examples:

```
DLT-SCCP-SSN::35-222-123-18;
ED-SCCP-SSN::35-222-123-18:::STARTMODE=ONLINE;
ENT-SCCP-SSN::35-222-123-18:::STARTMODE=ONLINE;
RTRV-SCCP-SSN;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"35-222-123-18:STARTMODE=ONLINE"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SLHR-SCP

Commands:

DLT-SLHR-SCP: Delete SLHR SCP

ED-SLHR-SCP: Edit SLHR SCP

ENT-SLHR-SCP: Enter SLHR SCP

RTRV-SLHR-SCP: Retrieve SLHR SCP

Descriptions:

DLT-SLHR-SCP lets the user delete a service logic host route to a Service Control Point.

ED-SLHR-SCP lets the user change the attributes of a service logic host route to a Service Control Point.

ENT-SLHR-SCP lets the user establish a service logic host route to a Service Control Point. ENT-SLHR-SCP is dependent on ENT-SCCP-ROUTE and (when the value of *routeType* is "RTE_SSN") ENT-SCCP-SSN; that is ENT-SLHR-SCP will not work unless ENT-SCCP-ROUTE and ENT-SCCP-SSN have already been issued.

RTRV-SLHR-SCP lets the user retrieve the attributes of a service logic host route to a Service Control Point.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SLHR-SCP: [TID]:<slhrId>:[CTAG];

ED-SLHR-SCP: [TID]:<slhrId>:[CTAG]::[DESC=<descr>],
[ROUTETYPE=<routeType>],[DPC=<dpc>],
[SVCREQSSN=<svcReqSsn>],[SVCPROVSSN=<svcProvSsn>],
[GTFORMATIND=<gtFormatInd>],
[GTTRANSTYPE=<gtTransType>],[TMOUT=<tmout>],
[BPC=<bpc>],[ANNCMAP=<anncMap>],
[ORIGNOANSTMR=<origNoAnsTmr>];

```
ENT-SLHR-SCP:[TID]:<slhrId>:[CTAG]::DESC=<descr>,  
ROUTETYPE=<routeType>,DPC=<dpc>,  
SVCREQSSN=<svcReqSsn>,[TCAPUSER=<tcapUser>],  
[TCAPVARIANT=<tcapVariant>],  
[SCCPVARIANT=<sccpVariant>],  
[SVCPROVSSN=<svcProvSsn>],  
[GTFORMATIND=<gtFormatInd>],  
[GTTRANSTYPE=<gtTransType>],[TMOUT=<tmout>],  
[BPC=<bpc>],[ANNCMAP=<anncMap>],  
[ORIGNOANSTMR=<origNoAnsTmr>];  
  
RTRV-SLHR-SCP:[TID]:[<slhrId>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
"<slhrId>:DESC=<descr>,ROUTETYPE=<routeType>,  
DPC=<dpc>,SVCREQSSN=<svcReqSsn>,  
SVCPROVSSN=<svcProvSsn>,TCAPUSER=<tcapUser>,  
TCAPVARIANT=<tcapVariant>,  
SCCPVARIANT=<sccpVariant>,  
GTFORMATIND=<gtFormatInd>,  
GTTRANSTYPE=<gtTransType>,TMOUT=<tmout>,  
BPC=<bpc>,ANNCMAP=<anncMap>,  
ORIGNOANSTMR=<origNoAnsTmr>"  
  
;
```

Parameters:

- slhrId** Identifies the AID as a service logic host route to a Service Control Point. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all service logic host routes configured in the system will be returned.
- Type:** SlhrId
Range: {0-31}
Default value: none
- descr** Identifies the description of the AIN service.
- Type:** string
Range: up to 50 ASCII characters
Default value: none

routeType Identifies the type of routing used for services.

Type: enum

Range: RTE_GT = routing to an SCP via an STP by using global title translation

RTE_SSN = routing directly to an SCP using a point code and an SSN (Sub-Service Number)

Default value: none

dpc Identifies the point code that processes the TCAP query to the SCP that provides the AIN service. The point code represents the SCP that provides the AIN service when routing the request by using an SSN. The point code represents the STP that routes the query to the appropriate SCP when routing the request by using global title translation.

Type: string

Range: {0-255}-{0-255}-{0-255} for NANP (national) point codes
{0-16383} for international point codes

Default value: none

svcReqSsn Identifies the requesting SSN; that is, the SSN for the service on the switch. It is usually the same as the providing SSN. You can specify up to five SSNs separated by ampersands (&).

Type: string

Range: {1-255}

Default value: none

tcapUser Identifies the user of the TCAP layer for the requesting SSN. When the value of *tcapUser* is "AIN1992", "IS41", or "NONE", the value of *tcapVariant* and *sccpVariant* is "ANSI1992". When the value of *tcapUser* is "MAP", the value of *tcapVariant* is "ITU1992" or "ITU1996"; the value of *sccpVariant* is "ANSI1992" or "ITU1992".

Type: enum

Range: AIN1992 = wireline network

IS41 = IS41 (ANSI) wireless network

MAP = GSM wireless network

NONE = no user

Default value: AIN1992

tcapVariant Identifies the TCAP layer variant for the requesting SSN.

Type: enum

Range: ANSI1992

ITU1992

ITU1996

Default value: ANSI1992

sccpVariant Identifies the SCCP layer variant for the requesting SSN.

Type: enum

Range: ANSI1992
ITU1992

Default value: ANSI1992

svcProvSsn Identifies the providing SSN; that is, the SSN for the service on the SCP. It is usually the same as the requesting SSN. The value of *svcProvSsn* cannot be “0” when the value of *routeType* is “RTE_SSN”.

Type: integer

Range: {0-255}

Default value: the value of *svcReqSsn* (when the value of *routeType* is “RTE_SSN”)
0 (when the value of *routeType* is “RTE_GT”)

gtFormatInd Identifies the format of the global title and is mandatory (but cannot be “0”) when the value of *routeType* is “RTE_GT”. A value of “0” indicates no global title used (Use direct addressing.). A value of “1” indicates that global title includes translation type, numbering plan and encoding scheme. A value of “2” indicates that global title includes translation type only.

Type: integer

Range: {0-2}

Default value: 0

gtTransType Identifies the translation type of the global title. This parameter is mandatory (cannot be “0”) when the value of *routeType* is “RTE_GT”.

Type: integer

Range: {0-255}

Default value: 0

tmout Identifies the time in seconds before LNP or TOLLFREE query expiry.

Type: integer

Range: {1-10}

Default value: 3

bpc Identifies the backup point code that processes the TCAP query to the SCP that provides the IN service when the point code represented by *dpc* is unavailable. *bpc* must have the same format as *dpc*.

Type: string

Range: {0-255}-{0-255}-{0-255} for NANP (national) point codes
{0-16383} for international point codes

Default value: NULL

anncMap Identifies an SCP-specified announcement, previously established with ENT-ANNC-MAP, applicable to the AIN service.

Type: string

Range: up to 20 characters

Default value: NULL

origNoAnsTmr Identifies the time (in seconds) before the switch reports to the SCP that the called party has not answered.

Type: integer

Range: {1-120}

Default value: 18

Input Examples:

```
DLT-SLHR-SCP::1;
```

```
ED-SLHR-SCP::1:::DESC=CFV_SERVICE,ROUTETYPE=RTE_SSN,  
DPC=3-4-5,SVCREQSSN=1,SVCPROVSSN=1,GTFORMATIND=0,  
GTTRANSTYPE=0,TMOUT=3,BPC=NULL,ANNCMAP=NULL,  
ORIGNOANSTMR=18;
```

```
ENT-SLHR-SCP::1:::DESC=CFV_SERVICE,ROUTETYPE=RTE_SSN,  
DPC=3-4-5,SVCREQSSN=1,TCAPUSER=AIN1992,  
TCAPVARIANT=ANSI1992,SCCPVARIANT=ANSI1992,  
SVCPROVSSN=1,GTFORMATIND=0,GTTRANSTYPE=0,TMOUT=3,  
BPC=NULL,ANNCMAP=NULL,ORIGNOANSTMR=18;
```

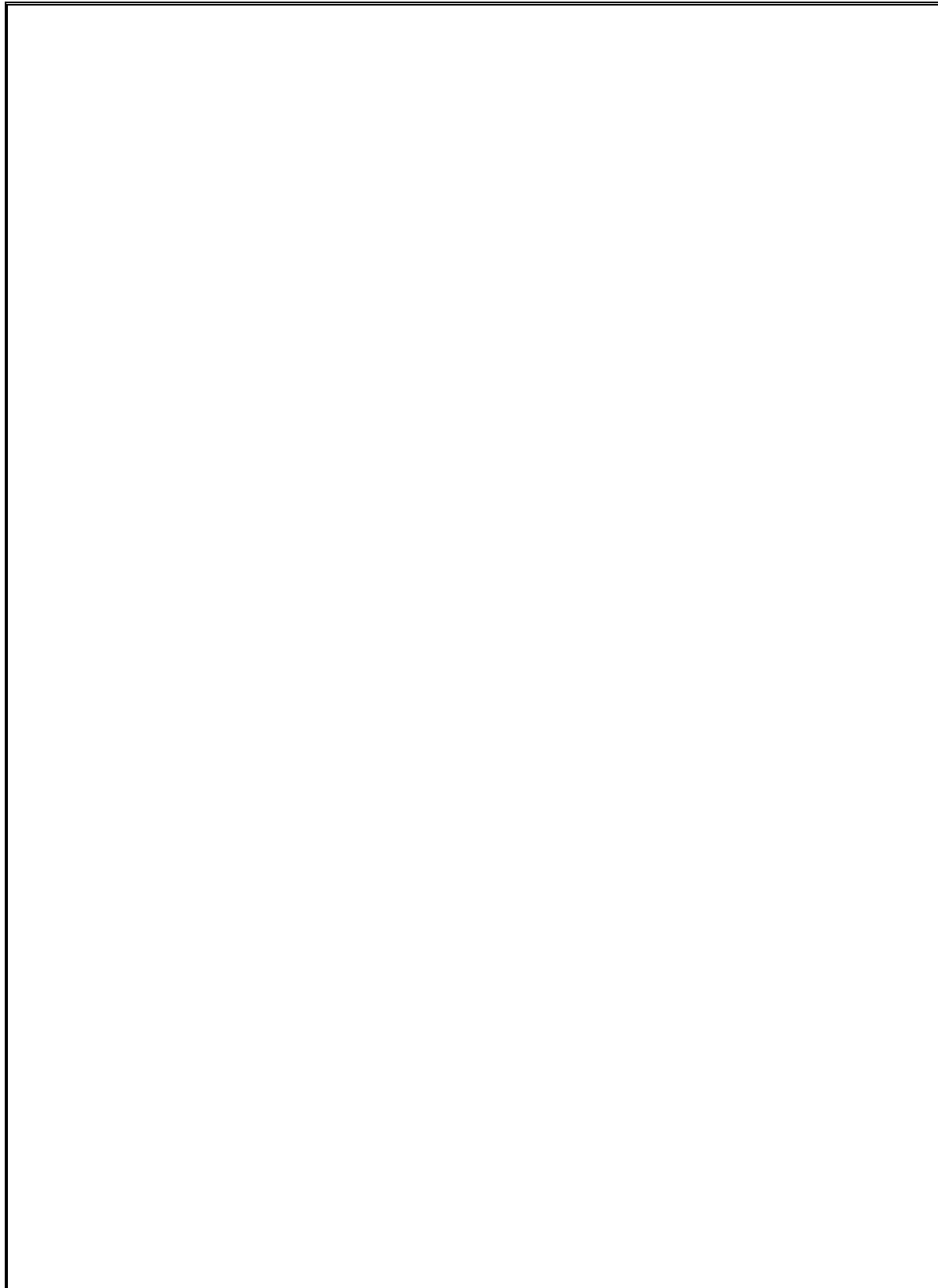
```
RTRV-SLHR-SCP::1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"1:DESC=CFV_SERVICE,ROUTETYPE=RTE_SSN,DPC=3-4-5,  
SVCREQSSN=1,TCAPUSER=AIN1992,  
TCAPVARIANT=ANSI1992,SCCPVARIANT=ANSI1992,  
SVCPROVSSN=1,GTFORMATIND=0,GTTRANSTYPE=0,  
TMOUT=3,BPC=NULL,ANNCMAP=NULL,ORIGNOANSTMR=18;  
;
```

Related Commands: none

NOTES

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DLT/ED/ENT/RTRV-MG-PRFLCAS

Commands:

DLT-MG-PRFLCAS: Delete Media Gateway Profile CAS

ED-MG-PRFLCAS: Edit Media Gateway Profile CAS

ENT-MG-PRFLCAS: Enter Media Gateway Profile CAS

RTRV-MG-PRFLCAS: Retrieve Media Gateway Profile CAS

Descriptions:

DLT-MG-PRFLCAS lets the user delete a CAS (Channel-Associated Signaling) profile for the switch acting as a media gateway.

ED-MG-PRFLCAS lets the user change the parameters associated with a CAS (Channel-Associated Signaling) profile for the switch acting as a media gateway.

ENT-MG-PRFLCAS lets the user establish a CAS (Channel-Associated Signaling) profile for the switch acting as a media gateway.

RTRV-MG-PRFLCAS lets the user retrieve a CAS (Channel-Associated Signaling) profile for the switch acting as a media gateway.

Category: Signaling

Platform: MG

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-MG-PRFLCAS: [TID]:<casPrflId>:[CTAG];

ED-MG-PRFLCAS: [TID]:<casPrflId>:[CTAG]::
[SIGMODEL=<sigModel>],[CNTRLNG=<cntrlng>],
[DIALPULSE=<dialPulse>],
[TONEDURATION=<toneDuration>],
[PAUSEDURATION=<pauseDuration>],
[SEIZEWINKDELAY=<seizeWinkDelay>],
[OUTPUTSEDELAY=<outputseDelay>],
[CONFONHOOK=<confOnHook>],
[CONFOFFHOOK=<confOffHook>],
[WINKDURATION=<winkDuration>],
[FWDDISCTIME=<fwdDiscTime>];

```
ENT-MG-PRFLCAS:[TID]:<casPrflId>:[CTAG]::  
[SIGMODEL=<sigModel>],[CNTRLNG=<cntrlng>],  
[DIALPULSE=<dialPulse>],  
[TONEDURATION=<toneDuration>],  
[PAUSEDURATION=<pauseDuration>],  
[SEIZEWINKDELAY=<seizeWinkDelay>],  
[OUTPUTSEDELAY=<outPulseDelay>],  
[CONFONHOOK=<confOnHook>],  
[CONFOFFHOOK=<confOffHook>],  
[WINKDURATION=<winkDuration>],  
[FWDDISCTIME=<fwdDiscTime>];  
  
RTRV-MG-PRFLCAS:[TID]:[<casPrflId>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
  "<casPrflId>:SIGMODEL=<sigModel>,CNTRLNG=<cntrlng>,  
    DIALPULSE=<dialPulse>,  
    TONEDURATION=<toneDuration>,  
    PAUSEDURATION=<pauseDuration>,  
    SEIZEWINKDELAY=<seizeWinkDelay>,  
    OUTPUTSEDELAY=<outPulseDelay>,  
    CONFONHOOK=<confOnHook>,  
    CONFOFFHOOK=<confOffHook>,  
    WINKDURATION=<winkDuration>,  
    FWDDISCTIME=<fwdDiscTime>"  
;
```

Parameters:

casPrflId Identifies the AID as a CAS profile.

Type: casPrflId

Range: {1-128}

Default value: none

sigModel Identifies the format for robbed-bit CAS signaling.

Type: enum

Range: E_M = Receive and Transmit (E & M derives from the Latin phrase “Excipere and Mittere”, or, colloquially, “Ear and Mouth”)

E_M_IMM_DIAL = Receive and Transmit – Immediate Dial address control signaling on CAS trunks

GR303_GROUND_START = GR303 ground start

GROUND_START = ground start

GR303_LOOP_START = GR303 loop start

GS_FWD_DISC = ground start when connected to a PBX

LOOP_START = loop start

LS_FWD_DISC = loop start when connected to a PBX

Default value: E_M

cntrlng Identifies whether controlling GLARE resolution for release is enabled.

Type: BoolYN

Range: N = non-controlling
Y = controlling

Default value: N

dialPulse Identifies the type of dial pulse support for the profile.

Type: enum

Range: BOTH = MG collects both dial pulse and dual-tone multi-frequency digits when the MGC requests DTMF digit collection

DPONLY = MG collects only dial pulse digits when the MGC requests DTMF digit collection

TONEONLY = MG collects only dual-tone multi-frequency or Multi-Frequency R1 digits (as used on PBXs) when the MGC requests DTMF digit collection

Default value: TONEONLY

toneDuration Identifies the duration, in milliseconds, for an out-pulsed digit.

Type: integer

Range: {0-120}

Default value: 65

pauseDuration Identifies the duration, in milliseconds, for the time allowed between dialed digits for outgoing interfaces.

Type: integer

Range: {0-120}

Default value: 65

seizeWinkDelay Identifies the duration, in milliseconds, that the switch waits for a WINK signal after seizing an outbound trunk. If the WINK signal is not received, the switch releases the trunk and selects, for the next call, the next trunk according to the hunting algorithm for the trunk group.

Type: integer
Range: {0-6000}
Default value: 4000

outPulseDelay Identifies the delay, in milliseconds, before out-pulsing digits (MF/DTMF) after seizing an outbound trunk. When the switch expects a WINK signal (for all signaling models except “E_M_IMM_DIAL”), *outPulseDelay* identifies the delay before out-pulsing digits after receipt of the WINK. When the value of *sigModel* is “E_M_IMM_DIAL”, set *outPulseDelay* higher than the default value so that the far end switch has time to enable its digit-collecting process.

Type: integer
Range: {0-6000}
Default value: 500

confOnHook Identifies the duration, in milliseconds, that a trunk with this profile must be on-hook before it can be declared on-hook.

Type: integer
Range: {0-6000}
Default value: 1100

confOffHook Identifies the duration, in milliseconds, that a trunk with this profile must be off-hook before it can be declared as answered.

Type: integer
Range: {210-6000}
Default value: 350

winkDuration Identifies the duration, in milliseconds, for a WINK signal. This parameter only applies when the value for *sigModel* is “E_M”. WINK duration is usually between 140 msec and 290 msec.

Type: integer
Range: {0-300}
Default value: 100

fwddiscTime Identifies the duration, in milliseconds, that the switch maintains LCFO (Loop Current Feed Open) on a disconnecting line/trunk. This parameter only applies when the value for *sigModel* is "LS_FWD_DISC".

Type: integer

Range: {0-6000}

Default value: 1500

Input Examples:

```
DLT-MG-PRFLCAS::1;
```

```
ED-MG-PRFLCAS::1::SIGMODEL=E_M,CNTRLNG=N,  
DIALPULSE=TONEONLY,TONEDURATION=65,  
PAUSEDURATION=65,SEIZEWINKDELAY=4000,  
OUTPULSEDELAY=500,CONFONHOOK=1100,CONF OFFHOOK=350,  
WINKDURATION=200,FWDDISCTIME=1500;
```

```
ENT-MG-PRFLCAS::1::SIGMODEL=E_M,CNTRLNG=N,  
DIALPULSE=TONEONLY,TONEDURATION=65,  
PAUSEDURATION=65,SEIZEWINKDELAY=4000,  
OUTPULSEDELAY=500,CONFONHOOK=1100,CONF OFFHOOK=350,  
WINKDURATION=200,FWDDISCTIME=1500;
```

```
RTRV-MG-PRFLCAS::1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"1:SIGMODEL=E_M,CNTRLNG=N,DIALPULSE=TONEONLY,  
TONEDURATION=65,PAUSEDURATION=65,  
SEIZEWINKDELAY=4000,OUTPULSEDELAY=500,  
CONFONHOOK=1100,CONF OFFHOOK=350,  
WINKDURATION=200,FWDDISCTIME=1500"  
;
```

Related Commands:

DLT/ED/ENT/RTRV-MGC-PRFLCAS

DLT/ED/ENT/RTRV-MGC-PRFLCAS

Commands:

DLT-MGC-PRFLCAS: Delete Media Gateway Controller Profile CAS

ED-MGC-PRFLCAS: Edit Media Gateway Controller Profile CAS

ENT-MGC-PRFLCAS: Enter Media Gateway Controller Profile CAS

RTRV-MGC-PRFLCAS: Retrieve Media Gateway Controller Profile CAS

Descriptions:

DLT-MGC-PRFLCAS lets the user delete a CAS (Channel-Associated Signaling) profile for the switch acting as a media gateway controller.

ED-MGC-PRFLCAS lets the user change the parameters associated with a CAS (Channel-Associated Signaling) profile for the switch acting as a media gateway controller.

ENT-MGC-PRFLCAS lets the user establish a CAS (Channel-Associated Signaling) profile for the switch acting as a media gateway controller. CAS profile parameter values conform to the following matrix of allowable combinations:

<i>callModel</i>	<i>sigModel</i>	<i>txAddrInfo</i>	<i>rxAddrInfo</i>	<i>dialTone</i>	<i>toneType</i>	Delimiters
911	E_M	NONE	N/A	OFF	MFR1	NONE
EO_OPS	E_M	NONE	N/A	OFF	MFR1	NONE
EO_OPS_V2	E_M	NONE	N/A	OFF	MFR1	NONE
FGD	E_M	NONE	N/A	OFF	MFR1	NONE
TXRX	LOOP_START GROUND_START LS_FWD_DISC GS_FWD_DISC GR303_LOOP_START GR303_GROUND_START	CD	NONE	ON	DTMF DP	NONE
TXRX	E_M E_M_IMM_DIAL	CGCD CDCG CD	CGCD CDCG CD	ON OFF	DTMF	ASTERISK FIRST_ASTERISK NONE POUND All leading and trailing delimiters are valid
TXRX	E_M E_M_IMM_DIAL	CGCD CDCG CD	CGCD CDCG CD	ON OFF	MFR1	NONE Assuming KP is leading delimiter and ST is trailing delimiter

RTRV-MGC-PRFLCAS lets the user retrieve a CAS (Channel-Associated Signaling) profile for the switch acting as a media gateway controller.

Category: Signaling

Platform: MGC

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-MGC-PRFLCAS:[TID]:<casPrflId>:[CTAG];
ED-MGC-PRFLCAS:[TID]:<casPrflId>:[CTAG]::
    [DIALTONE=<dialTone>],[TONETYPE=<toneType>],
    [TXADDRINFO=<txAddrInfo>],
    [RXADDRINFO=<rxAddrInfo>],[TXLEADDLM=<txLeadDlm>],
    [TXTRAILDLM=<txTrailDlm>],[RXLEADDLM=<rxLeadDlm>],
    [RXTRAILDLM=<rxTrailDlm>],[TGUARD=<tGuard>],
    [TDGTFIRST=<tDgtFirst>],[TDGTSHORT=<tDgtShort>],
    [TDGTLONG=<tDgtLong>];
ENT-MGC-PRFLCAS:[TID]:<casPrflId>:[CTAG]::
    [CALLMODEL=<callModel>],[SIGMODEL=<sigModel>],
    [DIALTONE=<dialTone>],[TONETYPE=<toneType>],
    [TXADDRINFO=<txAddrInfo>],
    [RXADDRINFO=<rxAddrInfo>],[TXLEADDLM=<txLeadDlm>],
    [TXTRAILDLM=<txtTailDlm>],[RXLEADDLM=<rxLeadDlm>],
    [RXTRAILDLM=<rxTrailDlm>],[TGUARD=<tGuard>],
    [TDGTFIRST=<tDgtFirst>],[TDGTSHORT=<tDgtShort>],
    [TDGTLONG=<tDgtLong>];
RTRV-MGC-PRFLCAS:[TID]:[<casPrflId>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
    "<casPrflId>:CALLMODEL=<callModel>,
    SIGMODEL=<sigModel>,DIALTONE=<dialTone>,
    TONETYPE=<toneType>,TXADDRINFO=<txAddrInfo>,
    RXADDRINFO=<rxAddrInfo>,TXLEADDLM=<txLeadDlm>,
    TXTRAILDLM=<txtTailDlm>,RXLEADDLM=<rxLeadDlm>,
    RXTRAILDLM=<rxTrailDlm>,TGUARD=<tGuard>,
    TDGTFIRST=<tDgtFirst>,TDGTSHORT=<tDgtShort>,
    TDGTLONG=<tDgtLong>"
;
```

Parameters:

casPrflId Identifies the AID as a CAS profile.

Type: casPrflId

Range: {1-128}

Default value: none

callModel Identifies the robbed-bit CAS call model.

Type: enum

Range: 911 = trunk model, 911 calls

EO_OPS = trunk model, End Office to Operator Services
Position Trunk (N11 calls)

EO_OPS_V2 = trunk model, End Office to Operator Services
Position Trunk (N11 calls), Version 2

FGD = Feature Group D

TXRX = trunk model, addressing information (the values of
txAddrInfo and *rxAddrInfo* determine the data sent)

Default value: TXRX

sigModel Identifies the format for robbed-bit CAS signaling.

Type: enum

Range: E_M = Receive and Transmit (E & M derives from the Latin
phrase “Excipere and Mittere”, or, colloquially, “Ear and
Mouth”)

E_M_IMM_DIAL = Receive and Transmit – Immediate Dial
address control signaling on CAS trunks

GR303_GROUND_START = GR303 ground start

GROUND_START = ground start

GR303_LOOP_START = GR303 loop start

GS_FWD_DISC = ground start when connected to a PBX

LOOP_START = loop start

LS_FWD_DISC = loop start when connected to a PBX

Default value: E_M

dialTone Identifies whether a dial tone is transmitted to, and digits are collected from, a POTS line (either direct or through a PBX). Set the value to “OFF” for Class 4 applications.

Type: enum

Range: OFF = do not transmit dial tone
ON = transmit dial tone

Default value: ON

toneType Identifies the type of in-band tone used for communicating digits in channel-associated signaling.

Type: enum

Range: DP = Dial Pulse

DTMF = dual-tone multi-frequency (as used on PBXs)

MFR1 = Multi-Frequency R1 for North America

Default value: DTMF

txAddrInfo Identifies the transmitted address information; that is, the order and type of addressing information to be transmitted on an outgoing trunk when the value for *callModel* is “TXRX”.

Type: enum

Range: CD = called party

CDCG = called party to calling party; that is, the CDPN is transmitted before the CGPN

CGCD = calling party to called party; that is, the CGPN is transmitted before the CDPN

Default value: NONE

rxAddrInfo Identifies the received address information; that is, the order and type of addressing information to be received on an incoming trunk when the value for *callModel* is “TXRX”. Primarily used with PBXs that expect to receive one set of information but send different information. PBXs need not use delimiters when the value of *rxAddrInfo* is “CD”.

Type: enum

Range: CD = called party

CDCG = called party to calling party; that is, the CDPN is received before the CGPN

CGCD = calling party to called party; that is, the CGPN is received before the CDPN

Default value: CD

txLeadDlm Identifies the transmitted leading DTMF delimiter, which indicates the beginning of each digit (or the entire set of digits) in the called or calling number sent. Although the default value is “NONE”, you must specify a value of “ASTERISK”, “FIRST_ASTERISK”, or “POUND” when the value of *callModel* is “TXRX”, and the value of *toneType* is “DTMF”.

Type: enum

Range: ASTERISK = the asterisk (*) key precedes each digit
FIRST_ASTERISK = the asterisk (*) key precedes the entire called or calling number sent
NONE = no delimiter
POUND = the pound (#) key precedes each digit

Default value: NONE

txTrailDlm Identifies the transmitted trailing DTMF delimiter, which indicates the end of the called or calling number sent. Although the default value is “NONE”, you must specify a value of “ASTERISK” or “POUND” when the value of *callModel* is “TXRX”, and the value of *toneType* is “DTMF”. You must specify a value of “ASTERISK” when the value of *txLeadDlm* is “FIRST_ASTERISK”.

Type: enum

Range: ASTERISK = the asterisk (*) key
NONE = no delimiter
POUND = the pound (#) key

Default value: NONE

rxLeadDlm Identifies the received leading DTMF delimiter, which indicates the beginning of each digit (or the entire set of digits) in the called or calling number received. Although the default value is “NONE”, you must specify a value of “ASTERISK”, “FIRST_ASTERISK”, or “POUND” when the value of *callModel* is “TXRX”, and the value of *toneType* is “DTMF”. You must specify a value of “FIRST_ASTERISK” when the value of *txLeadDlm* is “FIRST_ASTERISK”.

Type: enum

Range: ASTERISK = the asterisk (*) key precedes each digit
FIRST_ASTERISK = the asterisk (*) key precedes the entire called or calling number received
NONE = no delimiter
POUND = the pound (#) key precedes each digit

Default value: NONE

rxTrailDlm Identifies the received trailing DTMF delimiter, which indicates the end of the called or calling number received. Although the default value is “NONE”, you must specify a value of “ASTERISK” or “POUND” when the value of *callModel* is “TXRX”, and the value of *toneType* is “DTMF”. You must specify a value of “ASTERISK” when the value of *rxLeadDlm* is “FIRST_ASTERISK”.

Type: enum

Range: ASTERISK = the asterisk (*) key

NONE = no delimiter

POUND = the pound (#) key

Default value: NONE

tGuard Identifies the guard timer value in milliseconds; that is, the duration after a disconnect or on-hook before the trunk is available for next use.

Type: decinum

Range: {1000-6000}

Default value: 1000

tDgtFirst Identifies the first digit timer value in milliseconds (1000 msec increments); that is, the amount of time the switch waits for the first digit to be dialed before playing an announcement.

Type: integer

Range: {5000-40000}

Default value: 9000

tDgtShort Identifies the short digit timer value in milliseconds (1000 msec increments); that is, the amount of time the switch waits after finding a partial match between the digits dialed and the requested digit-map, before ending digit collection and acting upon the partially-matched dialed digits.

Type: integer

Range: {1000-2000}

Default value: 2000

tDgtLong Identifies the long digit timer value in milliseconds (1000 msec increments); that is, the amount of time the switch waits after a digit has been collected, before ending digit collection, regardless of whether there is a match between the digits dialed and the requested digit-map.

Type: decinum

Range: {1000-9000}

Default value: 2000

Input Examples:

```
DLT-MGC-PRFLCAS::1;  
  
ED-MGC-PRFLCAS::1:::DIALTONE=ON, TONETYPE=DTMF,  
TXADDRINFO=NONE, RXADDRINFO=CD, TXLEADDLM=NONE,  
TXTRAILDLM=NONE, RXLEADDLM=NONE, RXTRAILDLM=NONE,  
TGUARD=1000, TDGTFIRST=9000, TDGTSHORT=2000,  
TDGTLONG=2000;  
  
ENT-MGC-PRFLCAS::1:::CALLMODEL=TXRX, SIGMODEL=E_M,  
DIALTONE=ON, TONETYPE=DTMF, TXADDRINFO=NONE,  
RXADDRINFO=CD, TXLEADDLM=NONE, TXTRAILDLM=NONE,  
RXLEADDLM=NONE, RXTRAILDLM=NONE, TGUARD=1000,  
TDGTFIRST=9000, TDGTSHORT=2000, TDGTLONG=2000;  
  
RTRV-MGC-PRFLCAS::1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"1:CALLMODEL=TXRX, SIGMODEL=E_M, DIALTONE=ON,  
TONETYPE=DTMF, TXADDRINFO=NONE, RXADDRINFO=CD,  
TXLEADDLM=NONE, TXTRAILDLM=NONE, RXLEADDLM=NONE,  
RXTRAILDLM=NONE, TGUARD=1000, TDGTFIRST=9000,  
TDGTSHORT=2000, TDGTLONG=9000"  
;
```

Related Commands:

DLT/ED/ENT/RTRV-MG-PRFLCAS

DLT/ED/ENT/RTRV-SIP-IPADDR

Commands:

DLT-SIP-IPADDR: Delete SIP IP Address

ED-SIP-IPADDR: Edit SIP IP Address

ENT-SIP-IPADDR: Enter SIP IP Address

RTRV-SIP-IPADDR: Retrieve SIP IP Address

Descriptions:

DLT-SIP-IPADDR lets the user delete a SIP (Session Initiation Protocol) IP address.

ED-SIP-IPADDR lets the user change the primary and (optional) secondary IP addresses, and the description for a trunk group unique to a specific SIP (Session Initiation Protocol) Session Access Node.

ENT-SIP-IPADDR lets the user establish the primary and (optional) secondary IP addresses, and the description for a trunk group unique to a specific SIP (Session Initiation Protocol) Session Access Node. ENT-SIP-IPADDR will not work unless ENT-TRKGRP (with the value for *sigType* set to “SIP” or “SIPT”) has already been issued.

RTRV-SIP-IPADDR lets the user retrieve the primary and (optional) secondary IP addresses, and the description for a trunk group unique to a specific SIP (Session Initiation Protocol) Session Access Node.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SIP-IPADDR: [TID]:<tnSipId>:[CTAG];

ED-SIP-IPADDR: [TID]:<tnSipId>:[CTAG]::
[PRIMIPADDR=<primIPAddr>],[SECIPADDR=<secIPAddr>],
[DESC=<description>];

ENT-SIP-IPADDR: [TID]:<tnSipId>:[CTAG]::
PRIMIPADDR=<primIPAddr>,[SECIPADDR=<secIPAddr>],
[DESC=<description>];

RTRV-SIP-IPADDR: [TID]:<tnSipId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<tnSipId>:PRIMIPADDR=<primIPAddr>,
    SECIPADDR=<secIPAddr>,DESC=<description>"
;
```

Parameters:

tnSipId Identifies the AID as a trunk group unique to a specific Session Access Node. The first part of the AID is the trunk group number and the second part is the Session Access Node. A null value (in RTRV) for the second part of the AID is equivalent to "ALL"; that is, by leaving the field blank the systems returns information for all Session Access Nodes on the specified trunk.

Type: TgnSipId
Range: {1-9999}[-{1-16}]
Default value: none

primIPAddr Identifies the primary IP address for the trunk group to access the feature server. You cannot use IP addresses "0.0.0.0" (reserved for loopback), "127.0.0.1" (reserved for loopback), and "255.255.255.255" (reserved for broadcast).

Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: none

secIPAddr Identifies the optional secondary IP address for the trunk group to access the feature server. You cannot use IP addresses "0.0.0.0" (reserved for loopback), "127.0.0.1" (reserved for loopback), and "255.255.255.255" (reserved for broadcast).

Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: NULL

description Identifies the description of the interface.

Type: string
Range: up to 32 ASCII characters
Default value: NULL

Input Examples:

```
DLT-SIP-IPADDR::1-1;  
ED-SIP-IPADDR::1-1:::PRIMIPADDR=192.168.254.0;  
ENT-SIP-IPADDR::1-1:::PRIMIPADDR=192.168.254.0;  
RTRV-SIP-IPADDR::1-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"1-1:PRIMIPADDR=192.168.254.0, SECIPADDR=NULL,  
DESC=NULL"  
;
```

Related Commands: none

ED/RTRV-SIP-SYS

Commands:

ED-SIP-SYS: Edit SIP System

RTRV-SIP-SYS: Retrieve SIP System

Descriptions:

ED-SIP-SYS lets the user change the configuration for SIP (Session Initiation Protocol) within the switch; that is, it configures the SIP stack for various timers and the listening port, whether to send Provisional Response Acknowledgements, how many times to retry INVITEs while waiting for a response, and the state.

RTRV-SIP-SYS lets the user retrieve the configuration for SIP (Session Initiation Protocol) within the switch; that is, it retrieves from the SIP stack the values for various timers and the listening port, whether to send Provisional Response Acknowledgements, how many times to retry INVITEs while waiting for a response, and the state.

Category: Signaling

Security: SA for ED, View for RTRV

Input Formats:

```
ED-SIP-SYS:[TID]:[<src>]:[CTAG]::
  [INVITETMOUT=<invitetmout>],[T1=<t1>],[T2=<t2>],
  [SENDPRACK=<sendPrack>],[SESTMR=<sesTmr>],
  [INVITERETRY=<inviteRetry>],[SIPPORT=<sipPort>]:
  [<pst>];

RTRV-SIP-SYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```
      SID DATE TIME
M    CTAG COMPLD
      "<src>:INVITETMOUT=<invitetmout>,T1=<t1>,T2=<t2>,
      SENDPRACK=<sendPrack>,SESTMR=<sesTmr>,
      INVITERETRY=<inviteRetry>,SIPPORT=<sipPort>:
      <pst>"
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

invitetmout Identifies the duration, in seconds, that a SIP client will wait for a response to an INVITE request. A value of 0 indicates that the INVITE request will never expire and must therefore be explicitly cancelled. The factory default is “45”.

Type: decinum

Range: {0-3600}

Default value: not applicable

t1 Identifies the duration, in seconds, before the first retransmission of a request over UDP, or an INVITE response over any transport protocol. Subsequent retransmission intervals are calculated by doubling this initial value, up to a maximum limited to the value of *t2tmr*. The factory default is “0.5”.

Type: decinum

Range: {0.2-60}

Default value: not applicable

t2 Identifies the maximum time, in seconds, before a request is retransmitted over UDP or an INVITE response is retransmitted over any transport protocol. The value of *t2tmr* cannot be less than the value of *t1tmr*. The factory default is “4”.

Type: decinum

Range: {4-180}

Default value: not applicable

sendPrack Identifies whether to send Provisional Response Acknowledgements to 101-199 provisional responses received. When the value of sendPrack is “Y”, all outgoing INVITEs contain the Supported header set with “100rel”. The switch always supports receiving PRACKs regardless of this parameter’s setting. The factory default is “N”.

Type: BoolYN

Range: N = do not send PRACKs

Y = send PRACKs

Default value: not applicable

sesTmr Identifies the value, in seconds, included with the SESSION-EXPIRES and MIN-SE headers in the outgoing INVITE. Both headers use the same value. Sessions are normally refreshed at half of the value of the EXPIRES timer. The recommended value for this timer when enabled is 1800 (30 minutes). The factory default is “0”.

Type: integer

Range: {0, 60-86400}

Default value: not applicable

inviteRetry Identifies the number of times to retry an INVITE while waiting for a response. The factory default is “6”.

Type: integer

Range: {0-6}

Default value: not applicable

sipPort Identifies the port on which to listen for inbound data. The factory default is “5060”.

Type: integer

Range: {1025-65535}

Default value: not applicable

pst Identifies (for ED and ENT) the desired primary state of the SIP system. The switch ignores all SIP calls when the value of *pst* is “OOS”. A null value means no change to the current value. The factory default is “IS”. This parameter is not yet implemented; leave it blank.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)

Default value: none

pst Identifies (for RTRV output) the primary state of the SIP system.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service

OOS-AU = Out-Of-Service, Autonomous

OOS-MA = Out-Of-Service, Managed

OOS-AUMA = Out-Of-Service, Autonomous and Managed

Default value: none

pst Indicates the desired primary state of the SIP system. The switch ignores all SIP calls when the value of *pst* is "OOS". A null value means no change to the current value. The factory default is "IS". This parameter is not yet implemented; leave it blank.

Type: enum

Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
OOS-AU = Out-Of-Service, Autonomous (output only)
OOS-AUMA = Out-Of-Service, Autonomous and Managed (output only)
OOS-MA = Out-Of-Service for Management (output only)

Default value: not applicable

Input Examples:

```
ED-SIP-SYS:::::INVITETMOUT=180,T1=0.5,T2=4,
SENDPRACK=N,SESTMR=0,INVITERETRY=6,SIPPORT=5060:
IS;
RTRV-SIP-SYS;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"COM:INVITETMOUT=180,T1=0.5,T2=4,SENDPRACK=N,
SESTMR=0,INVITERETRY=6,SIPPORT=5060:IS"
;
```

Related Commands: none

INIT-REG-SIPMSG / RTRV-PM-SIPMSG

Commands:

INIT-REG-SIPMSG: Initialize Register SIP Message

RTRV-PM-SIPMSG: Retrieve Performance SIP Message

Descriptions:

INIT-REG-SIPMSG lets the user initialize one or more storage registers or event counters for SIP (Session Initiation Protocol) message statistics.

RTRV-PM-SIPMSG lets the user retrieve current and historical performance data related to SIP (Session Initiation Protocol) messages.

Category: Signaling

Security: NSA for ED, View for RTRV

Input Formats:

```
INIT-REG-SIPMSG: [TID]: [<mgName>]: [CTAG]: [<montype>],  
                [<monval>], [<locn>], [<dirn>], [<tmper>], [<mondatt>],  
                [<montm>];
```

```
RTRV-PM-SIPMSG: [TID]: [<mgName>]: [CTAG]: [<montype>],  
                [<monlev>], [<locn>], [<dirn>], [<tmper>], [<mondatt>],  
                [<montm>];
```

Output Format:

```
                SID DATE TIME  
M   CTAG COMPLD  
    "<mgName>:<montype>,<monval>,[<vldty>],[<locn>],  
    [<dirn>],[<tmper>],[<mondatt>],[<montm>]"  
;
```

Parameters:

mgName Identifies the AID as either the switch (MGC) on which the command is executed, or a media gateway controlled by the MGC. In RTRV-PM, using the default "COM" returns the cumulative statistics for the MGC. In INIT-REG, using the default "COM" clears all of the call control statistics counters.

Type: string

Range: up to 30 characters

Default value: COM

montype Identifies a type of monitored parameter for SIP messages.

Type: enum

Range: 301_MOVEDP = Moved Permanently: the number of times one or more network address formats contained in the session description were not available; that is, the number of times the user could not be found at the address in the Request-URI (Uniform Resource Identifier).
302_MOVEDT = Moved Temporarily: the number of times one or more transport protocols described in the session description were not available
401_UNAUTH = Unauthorized: the number of times responses that the request requires user authentication are received from user agent servers (UAS) and registrars
402_PAYUPH = Payment required: this value is not used currently
403_FORBID = Forbidden: the number of times the server understood the request, but refused to fulfill it.
404_NOTFND = Not Found: the number of times either the user did not exist at the domain specified in the Request-URI, or the domain in the Request-URI did not match any of the domains handled by the recipient of the request
405_METHD = Method Not Allowed: the number of times the method specified in the Request-Line is not allowed for the address identified by the Request-URI
406_NOTACC1 = Not Acceptable: the number of times the resource identified by the request can only generate response entities with unacceptable content characteristics according to the Accept header field sent in the request
407_PROXY = Proxy Authentication Required: the number of times proxy servers send a response that the request requires user authentication
408_TIMEOUT0 = Request Timeout: the number of times servers could not produce a response within a suitable amount of time
409_CONFLCT = Conflict: the number of times the request could not be completed due to a conflict with the current state of the resource.
410_GONE = Gone: the number of times the requested resource is no longer available at the server and no forwarding address is known
411_LENREQ = Length Required: the number of times the server refuses to accept the request without a defined Content-Length header field containing the length of the message-body in the request message.

- 413_ENTLEN = Request Entity Too Large: the number of times the server refuses to process a request because the request entity-body is larger than the server is willing or able to process
- 414_URIEN = Request-URI Too Long: the number of times the server refuses to process a request because the Request-URI is longer than the server can interpret
- 415_MEDIA = Unsupported Media Type: the number of times the server refuses to process a request because the message body of the request is in a format not supported by the server for the requested method
- 420_BADEXT = Bad Extension: the number of times the server did not understand the protocol extension specified in a Proxy-Require or Require header field
- 480_TEMPUNV = Temporarily Unavailable: the number of times the called party's end system was contacted successfully but the called party is currently unavailable (for example, is not logged in, logged in but in a state that precludes communication, or has activated the "do not disturb" feature)
- 483_HOPCNT = Too Many Hops: the number of times the server received a request that contains a Max-Forwards header field (which limits the number of hops a request can transit on the way to its destination) with the value zero (that is, no further forwarding allowed)
- 484_ADDRINC = Address Incomplete: the number of times the server received a request with an incomplete Request-URI
- 485_AMBIGUO = Ambiguous: the number of times the Request-URI was ambiguous
- 486_BUSYHR = Busy Here: the number of times the called party's end system was contacted successfully but the called party is currently not willing or able to take additional calls
- 487_REQTERM = Request Terminated: the number of times the request was terminated by a BYE or CANCEL request
- 488_NOTACCH = Not Acceptable Here: the number of times the user's agent was contacted successfully by the specific resource addressed by the Request-URI, but some aspects of the session description such as the requested media, bandwidth, or addressing style were not acceptable.
- 500_INTERR = Server Internal Error: the number of times the server encountered an unexpected condition that prevented it from fulfilling the request

501_NOTIMPL = Not Implemented: the number of times the server does not support the functionality required to fulfill the request

502_BADGTWY = Bad Gateway: the number of times the server, while acting as a gateway or proxy, received an invalid response from the downstream server it accessed in attempting to fulfill the request

503_SERVUNV = Service Unavailable: the number of times the server is temporarily unable to process the request due to temporary server overloading or maintenance

504_GTWYTO = Server Time-out: the number of times the server did not receive a timely response from an external server it accessed in attempting to process the request

600_BUSYEV = Busy Everywhere: the number of times the called party's end system was contacted successfully but the called party was busy and did not wish to take the call at that time

603_DECLINE = Decline: the number of times the called party was successfully contacted but the user explicitly did not wish to or could not participate

604_NOEXIST = Does Not Exist Anywhere: the number of times the server has authoritative information that the user shown in the Request-URI does not exist anywhere

606_NOTACC2 = Not Acceptable: the number of times the user's agent was contacted successfully but some aspects of the session description such as the requested media, bandwidth, or addressing style were not acceptable; that is, the user wishes to communicate, but cannot adequately support the session described

ALL = all monitored parameters

ANNC_RCV = number of ANNC messages received by the switch

ANNC_SENT = number of ANNC messages sent by the switch

BYE_RCV = number of RELEASE messages received for established calls terminated due to normal release

BYE_SENT = number of established calls terminated due to normal release

BYE_TOUT = number of timeouts received by the switch in response to BYE (hangup) messages; that is, the number of completed call terminations for which a BYE message was sent but no OK message received in response

BYEFINL_RCV = number of 200 (OK) messages received by the switch in response to BYE (hangup) messages; that is, the total number of completed call terminations

CANC_RCV = number of CANCEL messages received due to termination of calls for reasons other than normal release

CANC_SENT = number of CANCEL messages sent due to termination of established calls for reasons other than normal release

CANCINV_SENT = number of calls pending cancellation when INVITE acknowledgement received

INFO_RCV = number of INFO messages received by the switch

INFO_SENT = number of INFO messages sent by the switch

INV_RCV = number of INVITE messages received by the switch

INV_SENT = number of INVITE messages sent by the switch

INV_TOUT = number of INVITE messages which timeout because no response is received

NOTIFY_RCV = number of NOTIFY messages received by the switch

NOTIFY_SENT = number of NOTIFY messages sent by the switch

OTHER = number of terminated calls due to undefined release conditions

REDIRINV_SENT = number of INVITE messages sent by the switch due to a REDIRECT request

REFER_RCV = number of REFER messages received by the switch

REFER_SENT = number of REFER messages sent by the switch

REINV_RCV = number of re-transmitted INVITE messages received by the switch

SCALLS = number of standing SIP calls

SUBSCRIBE_RCV = number of SUBSCRIBE messages received by the switch

SUBSCRIBE_SENT = number of SUBSCRIBE messages sent by the switch

Default value: ALL

monval Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* is to be initialized. The value is in the form of numeric counts or rates. This parameter is presently unused (for INIT-REG); leave it blank.

Type: integer

Range: {0-9999}

Default value: 0

- monlev** Identifies (for RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it.
Type: enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over more than the entire period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: not applicable for output
- locn** Indicates the location of the storage registers or event counters to be initialized. Thus, "NEND" refers to PM values obtained at the identified entity, and "FEND" refers to PM values obtained at a distant entity. Currently only "NEND" is supported.
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters relative to the switch. A null value defaults to all applicable directions (currently only "BTH"). This parameter is presently unused; leave it blank. The switch currently returns only the value "BTH".
Type: enum
Range: BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TRMT = Transmit direction only
Default value: BTH

- tmper** The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods. This parameter is presently not supported; leave it blank.
- Type:** enum
Range: {1}-DAY = Time interval is exactly one day
 {1-24}-HR = Interval of one to 24 hours (one day)
 {1-1440}-MIN = Interval of one to 1440 minutes (one day)
Default value: both 15-MIN and 24-HR
- mondat** Indicates the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is presently not supported; leave it blank.
- Type:** enum
Range: {1-12}-{1-31}
Default value: current date
- montm** Indicates the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is presently not supported; leave it blank.
- Type:** enum
Range: {0-23}-{0-59}
Default value: current time

Input Examples:

INIT-REG-SIPMSG;
RTRV-PM-SIPMSG;

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"COM:SCALLS,0"
"COM:INV_SENT,0"
"COM:REDIRINV_SENT,0"
"COM:BYE_SENT,0"
"COM:CANC_SENT,0"
"COM:CANCINV_SENT,0"
"COM:INV_RCV,0"
"COM:REINV_RCV,0"
"COM:BYE_RCV,0"
"COM:301_MOVEDP,0"
"COM:BYEFNL_RCV,0"
"COM:INV_TOUT,0"
"COM:BYE_TOUT,0"
"COM:301_MOVEDP,0"
"COM:302_MOVEDT,0"
"COM:401_UNAUTH,0"
"COM:402_PAYUPH,0"
"COM:403_FORBID,0"
"COM:404_NOTFND,0"
"COM:405_METHD,0"
"COM:406_NOTACC1,0"
"COM:407_PROXY,0"
"COM:408_TIMEOUT0,0"
"COM:409_CONFLCT,0"
"COM:410_GONE,0"
/* RTRV-PM-SIPMSG */
>
Lucent>
```

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"COM:411_LENREQ,0"
"COM:413_ENTLEN,0"
"COM:414_URIEN,0"
"COM:415_MEDIA,0"
"COM:420_BADEXT,0"
"COM:480_TEMPUNV,0"
"COM:483_HOPCNT,0"
"COM:484_ADDRINC,0"
"COM:485_AMBIGUO,0"
"COM:486_BUSYHR,0"
"COM:487_REQTERM,0"
"COM:488_NOTACCH,0"
"COM:500_INTERR,0"
```

```
"COM:501_NOTIMPL,0"  
"COM:502_BADGTWY,0"  
"COM:503_SERVUNV,0"  
"COM:504_GTWYTO,0"  
"COM:600_BUSYEV,0"  
"COM:603_DECLINE,0"  
"COM:604_NOEXIST,0"  
"COM:606_NOTACC2,0"  
"COM:OTHER,0"  
"COM:REFER_SENT,0"  
"COM:REFER_RCV,0"  
"COM:NOTIFY_SENT,0"  
/* RTRV-PM-SIPMSG */  
>  
Lucent>  
  
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"COM:NOTIFY_RCV,0"  
"COM:SUBSCRIBE_SENT,0"  
"COM:SUBSCRIBE_RCV,0"  
"COM:INFO_SENT,0"  
"COM:INFO_RCV,0"  
"COM:ANNC_SENT,0"  
"COM:ANNC_RCV,0"  
/* RTRV-PM-SIPMSG */  
;
```

Related Commands: none

DLT/ENT/RTRV-IUA-AS

Commands:

DLT-IUA-AS: Delete IUA Application Server

ENT-IUA-AS: Enter IUA Application Server

RTRV-IUA-AS: Retrieve IUA Application Server

Descriptions:

DLT-IUA-AS lets the user delete an AS (Application Server) from the IUA (ISDN User Adaptation) system in the switch. You must issue DLT-IUA-AS for each AS/ASP combination in the AS to delete the AS.

ENT-IUA-AS lets the user establish an AS (Application Server – a logical grouping of remote peer ASP nodes) in the IUA (ISDN User Adaptation) system in the switch. Issue this command for each ASP included in the AS. ENT-IUA-AS will not work unless ENT-IUA-ASP has already been issued.

RTRV-IUA-AS lets the user retrieve the priority currently assigned to an AS (Application Server – a logical grouping of remote peer ASP nodes) in the IUA (ISDN User Adaptation) system in the switch.

Category: Signaling

Security: SA for DLT/ENT, View for RTRV

Input Formats:

DLT-IUA-AS:[TID]:<asidaspid>:[CTAG];

ENT-IUA-AS:[TID]:<asidaspid>:[CTAG]::
PRIORITY=<priority>;

RTRV-IUA-AS:[TID]:[<asidaspid>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<asidaspid>:PRIORITY=<priority>"
;
```

Parameters:

asidaspid Identifies the AID as an AS and an associated ASP (Application Server Process). The first part of the AID identifies the AS and the second part identifies the ASP. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all AS/ASP combinations configured in the system and their assigned priorities will be returned. A null value (in RTRV) for the second part of the AID is equivalent to "ALL"; that is, by leaving the field blank, all ASPs configured for the specified AS and their assigned priorities will be returned.

Type: AspAid

Range: {1-32}[-{1-32}]

Default value: none

priority Identifies the priority level for the ASP in fail-over and fail-back procedures within the AS. Lower priority numbers indicate higher priority. Lucent recommends non-contiguous priority levels so that new nodes can be inserted between existing nodes.

Type: integer

Range: {0-65535}

Default value: none

Input Examples:

```
DLT-IUA-AS::1-1;  
ENT-IUA-AS::1-1:::PRIORITY=10;  
ENT-IUA-AS::1-2:::PRIORITY=30;  
ENT-IUA-AS::1-3:::PRIORITY=20;  
RTRV-IUA-AS;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"1-1:PRIORITY=10"  
"1-2:PRIORITY=30"  
"1-3:PRIORITY=20"  
;
```

Related Commands: none

DLT/ENT/RTRV-IUA-ASP

Commands:

DLT-IUA-ASP: Delete IUA Application Server Process

ENT-IUA-ASP: Enter IUA Application Server Process

RTRV-IUA-ASP: Retrieve IUA Application Server Process

Descriptions:

DLT-IUA-ASP lets the user delete an ASP (Application Server Process; that is, a remote media gateway controller) node in the IUA (ISDN User Adaptation) system in the switch. You must issue DLT-IUA-ASP for each IP address list in the ASP to delete the ASP.

ENT-IUA-ASP lets the user establish an ASP (Application Server Process; that is, a remote media gateway controller) node in the IUA (ISDN User Adaptation) system in the switch. ENT-IUA-ASP will not work unless ENT-IUA-SYS and ENT-IUA-ENDPTASP have already been issued.

RTRV-IUA-ASP lets the user retrieve the description for an ASP (Application Server Process; that is, a remote media gateway controller) in the IUA (ISDN User Adaptation) system in the switch.

Category: Signaling

Security: SA for DLT/ENT, View for RTRV

Input Formats:

DLT-IUA-ASP:[TID]:<aspdiplistid>:[CTAG];

ENT-IUA-ASP:[TID]:<aspdiplistid>:[CTAG]::
[DESC=<descr>];

RTRV-IUA-ASP:[TID]:[<aspdiplistid>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<aspdiplistid>:DESC=<descr>"
;
```

Parameters:

aspidiplistid Identifies the AID as an ASP and its associated list of up to eight IP addresses. The first part of the AID identifies the ASP and the second part identifies the list of IP addresses. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all Application Server Processes configured in the system and their assigned descriptions will be returned. A null value (in RTRV) for the second part of the AID is equivalent to "ALL"; that is, by leaving the field blank, all IP address lists configured for the specified ASP and their assigned descriptions will be returned.

Type: AspAid

Range: {1-32}[-{1-65535}]

Default value: none

descr Identifies the description for the ASP.

Type: string

Range: up to 20 alphanumeric characters

Default value: NULL

Input Examples:

```
DLT-IUA-ASP::1-1;  
ENT-IUA-ASP::1-1::DESC=ASP1_MARLBOROUGHMASS;  
ENT-IUA-ASP::1-2::DESC=ASP2_MARLBOROUGHMASS;  
RTRV-IUA-ASP;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"1-1:DESC=ASP1_MARLBOROUGHMASS"  
"1-2:DESC=ASP2_MARLBOROUGHMASS"  
;
```

Related Commands: none

DLT/ENT/RTRV-IUA-ENDPTASP

Commands:

DLT-IUA-ENDPTASP: Delete IUA Endpoint Application Server Process

ENT-IUA-ENDPTASP: Enter IUA Endpoint Application Server Process

RTRV-IUA-ENDPTASP: Retrieve IUA Endpoint Application Server Process

Descriptions:

DLT-IUA-ENDPTASP lets the user delete a list of remote IP addresses (endpoints) with their associated switch ports, for ASPs (Application Server Processes; that is, remote media gateway controllers).

ENT-IUA-ENDPTASP lets the user establish a list of remote IP addresses (endpoints) with their associated switch ports, for ASPs (Application Server Processes; that is, remote media gateway controllers). ENT-IUA-ASPENDPT will not work unless ENT-IUA-SYS has already been issued.

RTRV-IUA-ENDPTASP lets the user retrieve the lists of remote IP addresses (endpoints) with their associated switch ports, established for ASPs (Application Server Processes; that is, remote media gateway controllers) in the IUA (ISDN User Adaptation) system in the switch.

Category: Signaling

Security: SA for DLT/ENT, View for RTRV

Input Formats:

DLT-IUA-ENDPTASP:[TID]:<iplistid>:[CTAG];

ENT-IUA-ENDPTASP:[TID]:<iplistid>:[CTAG]::

IPADDR1=<ipaddr1>,[PORT1=<port1>],
[IPADDR2=<ipaddr2>],[PORT2=<port2>],
[IPADDR3=<ipaddr3>],[PORT3=<port3>],
[IPADDR4=<ipaddr4>],[PORT4=<port4>],
[IPADDR5=<ipaddr5>],[PORT5=<port5>],
[IPADDR6=<ipaddr6>],[PORT6=<port6>],
[IPADDR7=<ipaddr7>],[PORT7=<port7>],
[IPADDR8=<ipaddr8>],[PORT8=<port8>];

RTRV-IUA-ENDPTASP:[TID]:[<iplistid>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<iplistid>: IPADDR1=<ipaddr1>,PORT1=<port1>,
  IPADDR2=<ipaddr2>,PORT2=<port2>,
  IPADDR3=<ipaddr3>,PORT3=<port3>,
  IPADDR4=<ipaddr4>,PORT4=<port4>,
  IPADDR5=<ipaddr5>,PORT5=<port5>,
  IPADDR6=<ipaddr6>,PORT6=<port6>,
  IPADDR7=<ipaddr7>,PORT7=<port7>,
  IPADDR8=<ipaddr8>,PORT8=<port8>"
;
```

Parameters:

- iplistid** Identifies the AID as a list of IP addresses for remote peer machines. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the IP addresses and associated ports for all IP address lists configured in the system will be returned.
Type: integer
Range: {1-32767}
Default value: none
- ipaddr1** Identifies the primary destination IP address for the remote ASP.
Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: none
- port1** Identifies the port on the switch for communication with the primary destination IP address.
Type: integer
Range: {1-65535}
Default value: 9900
- ipaddr2** Identifies the second destination IP address for the ASP.
Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: NULL
- port2** Identifies the port on the switch for communication with the second destination IP address.
Type: integer
Range: {1-65535}
Default value: 9900

- ipaddr3** Identifies the third destination IP address for the ASP.
Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: NULL
- port3** Identifies the port on the switch for communication with the third destination IP address.
Type: integer
Range: {1-65535}
Default value: 9900
- ipaddr4** Identifies the fourth destination IP address for the ASP.
Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: NULL
- port4** Identifies the port on the switch for communication with the fourth destination IP address.
Type: integer
Range: {1-65535}
Default value: 9900
- ipaddr5** Identifies the fifth destination IP address for the ASP.
Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: NULL
- port5** Identifies the port on the switch for communication with the fifth destination IP address.
Type: integer
Range: {1-65535}
Default value: 9900
- ipaddr6** Identifies the sixth destination IP address for the ASP.
Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: NULL
- port6** Identifies the port on the switch for communication with the sixth destination IP address.
Type: integer
Range: {1-65535}
Default value: 9900

- ipaddr7** Identifies the seventh destination IP address for the ASP.
Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: NULL
- port7** Identifies the port on the switch for communication with the seventh destination IP address.
Type: integer
Range: {1-65535}
Default value: 9900
- ipaddr8** Identifies the eighth destination IP address for the ASP.
Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: NULL
- port8** Identifies the port on the switch for communication with the eighth destination IP address.
Type: integer
Range: {1-65535}
Default value: 9900

Input Examples:

```
DLT-IUA-ENDPTASP::1;  
ENT-IUA-ENDPTASP::1:::IPADDR1=192.13.66.23;  
RTRV-IUA-ENDPTASP;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"1:IPADDR1=192.13.66.23,PORT1=9900,IPADDR2=NULL,  
PORT2=9900,IPADDR3=NULL,PORT3=9900,IPADDR4=NULL,  
PORT4=9900,IPADDR5=NULL,PORT5=9900,IPADDR6=NULL,  
PORT6=9900,IPADDR7=NULL,PORT7=9900,IPADDR8=NULL,  
PORT8=9900"  
;
```

Related Commands: none

DLT/ENT/RTRV-IUA-LNK

Commands:

DLT-IUA-LNK: Delete IUA Link

ENT-IUA-LNK: Enter IUA Link

RTRV-IUA-LNK: Retrieve IUA Link

Descriptions:

DLT-IUA-LNK lets the user delete an IUA Interface Identifier that associates the physical interface for signaling messages on the switch (that is, the ISDN D-channel on a specific port) with an Application Server (containing one or more Application Server Processes).

ENT-IUA-LNK lets the user establish an IUA Interface Identifier to represent the association of the physical interface for signaling messages on the switch (that is, the ISDN D-channel on a specific port) with an Application Server (containing one or more Application Server Processes). ENT-IUA-LNK will not work unless ENT-IUA-AS has already been issued.

RTRV-IUA-LNK lets the user retrieve the properties of an IUA Interface Identifier that represents the association of the physical interface for signaling messages on the switch (that is, the ISDN D-channel on a specific port) with an Application Server (containing one or more Application Server Processes).

Category: Signaling

Security: SA for DLT/ENT, View for RTRV

Input Formats:

DLT-IUA-LNK: [TID]:<iuaiid>:[CTAG];

ENT-IUA-LNK: [TID]:<iuaiid>:[CTAG]::ASID=<asid>,
IIMPORT=<iomport>,[ISDNVARIANT=<isdnvariant>],
[N200=<n200>],[N201=<n201>],[T200=<t200>],
[T203=<t203>],[LNKTYPE=<lnktype>;

RTRV-IUA-LNK: [TID]: [<iuaiid>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<iuaiid>:ASID=<asid>, IOMPORT=<iomport>,
  ISDNVARIANT=<isdnvariant>, N200=<n200>,
  N201=<n201>, T200=<t200>, T203=<t203>,
  LNKTYPE=<lnktype>:<pst>, <sst>"
;
```

Parameters:

- iuaiid** Identifies the AID, with a unique 32-bit integer, as an IUA Interface Identifier that represents the association of an ISDN interface on the switch with an Application Server. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns all associations of ISDN interfaces on the switch with Application Servers.
- Type:** Iualid
Range: {0 – 4,294,967,295}
Default value: none
- asid** Identifies the Application Server.
- Type:** integer
Range: {1-32}
Default value: none
- iomport** Identifies the port containing the ISDN D-channel.
- Type:** enum
Range: IOM-{1-17}-PORT-{1-28}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}
Default value: none
- isdnvariant** Identifies the ISDN variant for the switch at the remote end of the interface.
- Type:** enum
Range: ETSI = for international-variant switches (default for E1)
GENERIC = for generic switches
NI2 = for National ISDN 2-compliant generic switches; for example, DMS100, 4ESS, 5ESS (default for T1)
Default value: NI2

- n200** Identifies the LAPD retransmission counter value.
Type: integer
Range: {0-1023}
Default value: 3
- n201** Indicates the maximum frame length. Q.931 messages that do not fit into one LAPD frame are fragmented.
Type: integer
Range: {0-4095}
Default value: 260
- t200** Identifies the LAPD T200 acknowledgement timer value (in increments of 0.1 second), which represents the maximum time allowed to receive an acknowledge message after transmission of a command frame.
Type: decinum
Range: {0.5-5}
Default value: 1
- t203** Identifies the T203 idle link timer value (in increments of 10 seconds), which represents the maximum time allowed for periods of inactivity on a link during multiple frame operations. For D-channel backup, it relates to the time it takes to declare a D-channel as failed.
Type: decinum
Range: {10-300}
Default value: 30
- lnktype** Identifies the logical interface for the link; that is, whether the switch is represented in the network as an ISDN provider (a network switch or subscriber line terminator) or as an ISDN user.
Type: enum
Range: NETWORK = ISDN network side
USER = ISDN user side
Default value: NETWORK
- pst** Identifies (in RTRV output) the primary state, and primary state qualifier, for the interface.
Type: enum
Range: IS = In-Service
OOS-AU = Out-Of-Service, Autonomous (faulted)
OOS-AUMA = Out-Of-Service, Autonomous and Managed
OOS-MA = Out-Of-Service, Managed
Default value: none

sst Identifies (in RTRV output) the secondary state for the interface when the value of *pst* is "OOS-AU".

Type: enum

Range: SGEO = Supporting Entity Outage (the T1 port containing the link is out of service)

Default value: none

Input Examples:

```
DLT-IUA-LNK::1;
```

```
ENT-IUA-LNK::1:::ASID=1,PORT=IOM-1-T3-1-PORT-1,  
ISDNVARIANT=NI2,N200=3,N201=260,T200=1,T203=30,  
LNKTYPE=NETWORK;
```

```
RTRV-IUA-LNK;
```

Output Example:

```
lucent 2005-06-24 14:37:49  
M 0 COMPLD  
"1:ASID=1,PORT=IOM-1-T3-1-PORT-1,ISDNVARIANT=NI2,  
N200=3,N201=260,T200=1,T203=30,LNKTYPE=NETWORK:  
IS"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-IUA-SYS

Commands:

DLT-IUA-SYS: Delete IUA System

ED-IUA-SYS: Edit IUA System

ENT-IUA-SYS: Enter IUA System

RTRV-IUA-SYS: Retrieve IUA System

Descriptions:

DLT-IUA-SYS lets the user delete the IUA (ISDN User Adaptation) system and free the resources allocated to the IUA layer. You must first delete all other IUA entities; that is, AS, ASP, ASP endpoints, and interfaces.

ED-IUA-SYS lets the user change the properties of the IUA (ISDN User Adaptation) system in the switch.

ENT-IUA-SYS lets the user establish the properties of the IUA (ISDN User Adaptation) system in the switch. These properties include the local port used by SCTP (Simple Control Transport Protocol) for local SCTP endpoints, the initial, minimum, and maximum values for the SCTP retransmission timer, and the value for the SCTP heartbeat interval timer.

RTRV-IUA-SYS lets the user retrieve the properties of the IUA (ISDN User Adaptation) system in the switch.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-IUA-SYS: [TID]: [<src>]: [CTAG];

ED-IUA-SYS: [TID]: [<src>]: [CTAG]: [IUAPORT=<iuaport>],
[RTOINITIAL=<rtoinitial>], [RTOMIN=<rtomin>],
[RTOMAX=<rtomax>], [INTERVALTM=<intervaltm>];

ENT-IUA-SYS: [TID]: [<src>]: [CTAG]: [IUAPORT=<iuaport>],
[RTOINITIAL=<rtoinitial>], [RTOMIN=<rtomin>],
[RTOMAX=<rtomax>], [INTERVALTM=<intervaltm>];

RTRV-IUA-SYS: [TID]: [<src>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<src>:IUAPORT=<iuaport>,RTOINITIAL=<rtoinitial>,
    RTOMIN=<rtomin>,RTOMAX=<rtomax>,
    INTERVALTM=<intervaltm>"
;
```

Parameters:

- | | |
|-------------------|--|
| src | Identifies the AID as the switch.
Type: COM
Range: COM
Default value: COM |
| iuaPort | Identifies the local port to be used by SCTP (Simple Control Transport Protocol) for local SCTP endpoints. This parameter is currently unused; leave it blank.
Type: integer
Range: {4000-65535}
Default value: 9900 |
| rtoinitial | Identifies the initial value of the Simple Control Transmission Protocol retransmission timer (in seconds).
Type: decinum
Range: {3-10}
Default value: 3 |
| rtomin | Identifies the minimum value of the Simple Control Transmission Protocol retransmission timer (in seconds).
Type: decinum
Range: {1-3}
Default value: 1 |
| rtomax | Identifies the maximum value of the Simple Control Transmission Protocol retransmission timer (in seconds).
Type: decinum
Range: {3-60}
Default value: 3 |

intervaltm Identifies the value of the Simple Control Transmission Protocol heartbeat interval timer (in seconds).

Type: decinum

Range: {1-1000}

Default value: 5

Input Examples:

```
DLT-IUA-SYS;
```

```
ED-IUA-SYS::::IUAPORT=9900,RTOINITIAL=1,RTOMIN=1,  
RTOMAX=3,INTERVALTM=5;
```

```
ENT-IUA-SYS::::IUAPORT=9900,RTOINITIAL=1,RTOMIN=1,  
RTOMAX=3,INTERVALTM=5;
```

```
RTRV-IUA-SYS;
```

Output Example:

```
lucent 2004-07-30 14:37:49  
M 0 COMPLD  
"COM:IUAPORT=9900,RTOINITIAL=1,RTOMIN=1,RTOMAX=3,  
INTERVALTM=5;  
;
```

Related Commands: none

INIT-REG-LAPD / RTRV-PM-LAPD

Commands:

INIT-REG-LAPD: Initialize Register LAPD

RTRV-PM-LAPD: Retrieve Performance Monitors LAPD

Descriptions:

INIT-REG-LAPD lets the user clear the counters for LAPD (Link Access Protocol – D channel) message statistics.

RTRV-PM-LAPD lets the user retrieve the number of times LAPD (Link Access Protocol – D channel) message types have been transmitted or received since the counters were last initialized.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-LAPD:[TID]:<lapdAid>:[CTAG]::[<montype>],  
[<monval>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];
```

```
RTRV-PM-LAPD:[TID]:<lapdAid>:[CTAG]::[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<lapdAid>:<montype>,<monval>,[<vldty>],[<locn>],  
      [<dirn>],[<tmper>],[<mondatt>],[<montm>]"  
;
```

Parameters:

lapdAid Identifies the AID as an LAPD interface and link.

Type: lapdAid

Range: IUA-IOM-{1-17}-PORT-{1-28}
IUA-IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
IUA-IOM-{1-17}-T3-{1-8}-PORT-{1-28}

Default value: none

montype Identifies the type of monitored LAPD parameter.

Type: enum

Range: ALL = All types

DISCRX = Number of disconnect frames received

DISCTX = Number of disconnect frames transmitted

DMRX = Number of disconnect mode frames received

DMTX = Number of disconnect mode frames transmitted

FRMR = Number of frame reject errors

FRMRRX = Number of frame reject errors received

FRMRTX = Number of frame reject frames transmitted

INVRX = Number of invalid frames received

IRX = Number of information frames received

ITX = Number of information frames transmitted

REJRX = Number of reject frames received

REJTX = Number of reject frames transmitted

RNRRX = Number of receive not ready frames received

RNRTX = Number of receive not ready frames transmitted

RRRX = Number of receive ready frames received

RRTX = Number of receive ready frames transmitted

SABMERR = Number of set asynchronous balanced mode
errors

SABMRX = Number of set asynchronous balanced mode
frames received

SABMTX = Number of set asynch balanced mode frames
transmitted

UARX = Number of unnumbered acknowledge frames
received

UATX = Number of unnumbered acknowledge frames
transmitted

UIRX = Number of unnumbered information frames received

UITX = Number of unnumbered information frames
transmitted

XIDRX = Number of exchange ID frames received

XIDTX = Number of exchange ID frames transmitted

Default value: ALL

- monnval** Identifies the value to which the counters identified by *montype* are to be initialized or the measured value of the monitored parameter. The value is in the form of numeric counts or rates. The value is "0" if the value of *montype* is "ALL". This parameter is presently not supported; leave it blank.
- Type:** integer
Range: {0-2147483647}
Default value: 0
- monlev** Identifies (in RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
- Type:** enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- vldty** Identifies (in RTRV-PM output) the validity of the monitored interval. This parameter is presently not supported; its value will always be "NULL".
- Type:** enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: NULL
- locn** Identifies the location of the storage counters to be initialized or from which to retrieve performance data. Currently only NEND is supported.
- Type:** enum
Range: NEND = near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is presently not supported; leave it blank.
- Type:** enum
Range: BTH = Both directions
RCV = Receive direction only
TRMT = Transmit direction only
Default value: BTH

tmper The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. This parameter is presently not supported; leave it blank.

Type: enum

Range: {1}-DAY = Time interval is exactly one day

{1-24}-HR = Interval of one to 24 hours (one day)

{1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: 15-MIN

mondatt Identifies the monitored date. The value Identifies the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is presently not supported; leave it blank.

Type: enum

Range: {1-12}-{1-31}

Default value: current date

montm Identifies the monitored time. The value Identifies the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is presently not supported; leave it blank.

Type: enum

Range: {0-23}-{0-59}

Default value: current time

Input Examples:

INIT-REG-LAPD: : IUA-IOM-1-T3-1-PORT-1;

RTRV-PM-LAPD: : IUA-IOM-1-T3-1-PORT-1;

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"IUA-IOM-1-T3-1-PORT-1:ITX,187363"
"IUA-IOM-1-T3-1-PORT-1:RRTX,140547"
"IUA-IOM-1-T3-1-PORT-1:RNRTX,0"
"IUA-IOM-1-T3-1-PORT-1:REJTX,23"
"IUA-IOM-1-T3-1-PORT-1:SABMTX,2"
"IUA-IOM-1-T3-1-PORT-1:DISCTX,0"
"IUA-IOM-1-T3-1-PORT-1:UATX,1"
"IUA-IOM-1-T3-1-PORT-1:DMTX,0"
"IUA-IOM-1-T3-1-PORT-1:FRMRTX,0"
"IUA-IOM-1-T3-1-PORT-1:XIDTX,0"
"IUA-IOM-1-T3-1-PORT-1:UITX,0"
"IUA-IOM-1-T3-1-PORT-1:IRX,140554"
"IUA-IOM-1-T3-1-PORT-1:RRRX,187357"
"IUA-IOM-1-T3-1-PORT-1:RNRRX,0"
"IUA-IOM-1-T3-1-PORT-1:REJRX,6"
"IUA-IOM-1-T3-1-PORT-1:SABMRX,1"
"IUA-IOM-1-T3-1-PORT-1:DISCRX,0"
"IUA-IOM-1-T3-1-PORT-1:UARX,1"
"IUA-IOM-1-T3-1-PORT-1:DMRX,0"
"IUA-IOM-1-T3-1-PORT-1:FRMRRX,0"
"IUA-IOM-1-T3-1-PORT-1:XIDRX,0"
"IUA-IOM-1-T3-1-PORT-1:UIRX,0"
"IUA-IOM-1-T3-1-PORT-1:INVRX,0"
"IUA-IOM-1-T3-1-PORT-1:SABMERR,0"
"IUA-IOM-1-T3-1-PORT-1:FRMRERR,0"
;
```

Related Commands: none

INIT-REG-MGCMGIUA / RTRV-PM-MGCMGIUA

Commands:

INIT-REG-MGCMGIUA: Initialize Register Media Gateway Controller Media Gateway IUA

RTRV-PM-MGCMGIUA: Retrieve Performance Monitors Media Gateway Controller Media Gateway IUA

Descriptions:

INIT-REG-MGCMGIUA lets the user initialize one or more storage registers or event counters for the IUA protocol layer, or an individual IUA interface for the D-channel.

RTRV-PM-MGCMGIUA lets the user retrieve current and historical performance data for the IUA protocol layer, or an individual IUA interface for the D-channel. The data comprises:

- Statistics related to Q.921 management and data primitives transmitted and received by the IUA layer
- IUA management and data primitives transmitted to and received from remote nodes
- Data transmitted to and received from the remote nodes

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-MGCMGIUA:[TID]:<iuaId>:[CTAG]::[<montype>],  
[<monval>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];
```

```
RTRV-PM-MGCMGIUA:[TID]:<iuaId>:[CTAG]::[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];
```

Output Format:

```
          SID DATE TIME  
M CTAG COMPLD  
  "<iuaId>:<montype>,<monval>,[<vldty>],[<locn>],  
    [<dirn>],[<tmper>],[<mondatt>],[<montm>]"  
;
```

Parameters:

iaId Identifies the AID as either the IUA protocol layer, or an individual IUA interface (D-Channel). The first part of the AID specifies the media gateway, associated with the Lucent Network Controller, running IUA Connection Control and Signaling (CCS) processes. Set the value of first part of the AID to the SID (System Identifier – from the header for TL1 messages) for the media gateway. The optional second part of the AID specifies, with a unique 32-bit integer, an IUA Interface Identifier that represents an IUA interface for the D-channel. Specifying only the first part of the AID retrieves performance data from, or initializes, the registers and counters for all IUA interfaces on the media gateway.

Type: string

Range: <mgName>[-<iid>], where

mgName is a string of up to 30 alphanumeric characters, and

iid = {0 – 4,294,967,295}

Default value: none

montype Identifies the type of monitored parameters to initialize or retrieve.

Type: enum

Range: ALL = All monitored parameters

LIRXNMBPDUS = Number of Protocol Data Units sent to the peer

LIRXPDUBYTES = Total byte count for the Protocol Data Units received from the peer

LITXNMBPDUS = Number of Protocol Data Units sent to the peer

LITXPDUBYTES = Total byte count for the Protocol Data Units sent to the peer

RXASPAC = Number of IUA ASP ACTIVE messages received from the peer

RXASPDN = Number of IUA ASP DOWN messages received from the peer

RXASPIA = Number of IUA ASP INACTIVE messages received from the peer

RXASPUP = Number of IUA ASP UP messages received from the peer

RXDATA = Number of IUA data messages received from the peer

RXERR = Number of IUA error messages received from the peer

RXHBEAT = Number of IUA heartbeat messages received from the peer

RXNOTIFY = Number of IUA NOTIFY messages received from the peer
RXQ921CON = Number of received Q.921 connect primitives
RXQ921DATA = Number of received Q.921 data primitives
RXQ921DISC = Number of received Q.921 disconnect primitives
RXQ921UDATA = Number of received Q.921 unit data primitives
RXTEIST = Number of IUA TEI STATUS messages received from the peer
TXASPAC = Number of IUA ASP ACTIVE messages sent to the peer
TXASPDN = Number of IUA ASP DOWN messages sent to the peer
TXASPPIA = Number of IUA ASP INACTIVE messages sent to the peer
TXASPUP = Number of IUA ASP UP messages sent to the peer
TXDATA = Number of IUA data messages sent to the peer
TXERR = Number of IUA error messages sent to the peer
TXHBEAT = Number of IUA heartbeat messages sent to the peer
TXNOTIFY = Number of IUA NOTIFY messages sent to the peer
TXQ921CON = Number of transmitted Q.921 connect primitives
TXQ921DATA = Number of transmitted Q.921 data primitives
TXQ921DISC = Number of transmitted Q.921 disconnect primitives
TXQ921UDATA = Number of transmitted Q.921 unit data primitives
TXTEIST = Number of IUA TEI STATUS messages sent to the peer
UIRXNMBPDUS = Number of Protocol Data Units received from the peer
UIRXPDUBYTES = Total byte count for the Protocol Data Units received from the peer
UITXNMBPDUS = Number of Protocol Data Units sent to the peer
UITXPDUBYTES = Total byte count for the Protocol Data Units sent to the peer

Default value: ALL

- monval** Identifies the monitored value as either the value to which the register identified by *montype* is to be initialized (for INIT-REG), or (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates. This parameter is presently not supported; leave it blank.
- Type:** integer
Range: {0-2147483647}
Default value: 0
- monlev** Identifies (for RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
- Type:** enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it. This parameter is not supported presently; its value will be "NULL".
- Type:** enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: not applicable for output
- locn** Identifies the location of the storage counters to be initialized. This parameter is presently not supported; leave it blank.
- Type:** Location
Range: FEND = Far end
NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters relative to the switch. This parameter is presently not supported; leave it blank.
- Type:** Direction
Range: BTH = Both directions
RCV = Receive direction only
TRMT = Transmit direction only
Default value: BTH

tmper Identifies the accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods. This parameter is presently not supported; leave it blank.

Type: TimePeriod

Range: {1}-DAY = Time interval is exactly one day

{1-24}-HR = Interval of one to 24 hours (one day)

{1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: both 15-MIN and 24-HR

mondatt Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is presently not supported; leave it blank.

Type: MonitoredDate

Range: {1-12}-{1-31}

Default value: current date

montm Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is presently not supported; leave it blank.

Type: MonitoredTime

Range: {0-23}-{0-59}

Default value: current time

Input Examples:

INIT-REG-MGCMGIUA::lucent;

RTRV-PM-MGCMGIUA::lucent;

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"lucent:TXQ921DATA,0"
"lucent:TXQ921UDATA,0"
"lucent:TXQ921CON,0"
"lucent:TXQ921DISC,0"
"lucent:RXQ921DATA,0"
"lucent:RXQ921UDATA,0"
"lucent:RXQ921CON,0"
"lucent:RXQ921DISC,0"
"lucent:TXDATA,0"
"lucent:TXTEIST,0"
"lucent:TXASPUP,0"
"lucent:TXASPDN,0"
"lucent:TXASPAC,0"
"lucent:TXASPIA,0"
"lucent:TXHBEAT,0"
"lucent:TXERR,0"
"lucent:TXNOTIFY,0"
"lucent:RXDATA,0"
"lucent:RXTEIST,0"
"lucent:RXASPUP,0"
"lucent:RXASPDN,0"
"lucent:RXASPAC,0"
"lucent:RXASPIA,0"
"lucent:RXHBEAT,0"
"lucent:RXERR,0"
"lucent:RXNOTIFY,0"
"lucent:UITXNMBPDUS,0"
"lucent:UITXPDUBYTES,0"
"lucent:UIRXNMBPDUS,0"
"lucent:UIRXPDUBYTES,0"
"lucent:LITXNMBPDUS,0"
"lucent:LITXPDUBYTES,0"
"lucent:LIRXNMBPDUS,0"
"lucent:LIRXPDUBYTES,0"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-AUDIO-ANNC

Commands:

DLT-AUDIO-ANNC: Delete Audio Announcement
ED-AUDIO-ANNC: Edit Audio Announcement
ENT-AUDIO-ANNC: Enter Audio Announcement
RTRV-AUDIO-ANNC: Retrieve Audio Announcement

Descriptions:

DLT-AUDIO-ANNC lets the user delete an audio announcement.

ED-AUDIO-ANNC lets the user edit the parameters associated with an audio announcement.

ENT-AUDIO-ANNC lets the user establish an audio announcement.

RTRV-AUDIO-ANNC lets the user retrieve parameters associated with an audio announcement.

Category: Resource Provisioning **Security:** NSA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-AUDIO-ANNC: [TID]:<AnnouncementId>:[CTAG];  
ED-AUDIO-ANNC: [TID]:<AnnouncementId>:[CTAG]::  
    [NAME=<Name>],[DESC=<Description>],  
    [MSGLIST=<MsgList>],[RPTCNT=<RepeatCnt>];  
ENT-AUDIO-ANNC: [TID]:<AnnouncementId>:[CTAG]::  
    NAME=<Name>,DESC=<Description>,MSGLIST=<MsgList>,  
    [RPTCNT=<RepeatCnt>];  
RTRV-AUDIO-ANNC: [TID]: [<AnnouncementId>]: [CTAG];
```

Output Format:

```
    SID DATE TIME  
M   CTAG COMPLD  
    "<AnnouncementId>:[NAME=<Name>],  
    [DESCR=<Description>],[MSGLIST=<MsgList>],  
    RPTCNT=<RepeatCnt>"  
    ;
```

Parameters:

AnnouncementId Identifies the AID as an audio announcement. You cannot establish, change, or delete announcements 1-2999; they are already-configured standard announcements. Identifiers 3000-32766 are for user-supplied custom announcements. A null value (in RTRV) is equivalent to “ALL”; that is, by leaving the field blank, attributes for all audio announcements configured in the system will be returned.

Type: AnnouncementId

Range: {1-32766}

Default value: none

Name Identifies the name of the audio announcement.

Type: string

Range: up to 40 alphanumeric characters (including underscores “_”)

Default value: none

Description Identifies the description of the audio announcement.

Type: string

Range: up to 80 alphanumeric characters (including underscores “_”)

Default value: none

MsgList Identifies the messages comprising the announcement in play order. Messages are identified by instances of *AudioMsgAid*, as established by ENT-AUDIO-MSG, separated by dashes (“-”).

Type: string

Range: up to 80 alphanumeric characters (including underscores “_”)

Default value: none

RepeatCnt Identifies the number of times to repeat the audio announcement. A value of “0” indicates continuous repetition. This parameter is not supported presently; leave it blank

Type: integer

Range: {0-999}

Default value: 1

Input Examples:

```
DLT-AUDIO-ANNC::3001;  
ED-AUDIO-ANNC::3001:::NAME=AUDIO1,DESC=AUDIOFILE1,  
    MSGLIST=100-110;  
ENT-AUDIO-ANNC::3001:::NAME=AUDIO1,DESC=AUDIOFILE1,  
    MSGLIST=100-110;  
RTRV-AUDIO-ANNC::3001;
```

Output Example:

```
    lucent 2004-10-29 14:37:49  
M    0 COMPLD  
    "3001:NAME=AUDIO1,DESC=AUDIOFILE1,MSGLIST=100-110,  
    RPTCNT=1"  
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-ANNC-MAP  
DLT/ED/ENT/RTRV-AUDIO-MSG
```

DLT/ED/ENT/RTRV-AUDIO-MSG

Commands:

DLT-AUDIO-MSG: Delete Audio Message
ED-AUDIO-MSG: Edit Audio Message
ENT-AUDIO-MSG: Enter Audio Message
RTRV-AUDIO-MSG: Retrieve Audio Message

Descriptions:

DLT-AUDIO-MSG lets the user delete an audio message, provided the audio message is not used in an existing audio announcement

ED-AUDIO-MSG lets the user change the parameters associated with an audio message.

ENT-AUDIO-MSG lets the user establish an audio message.

RTRV-AUDIO-MSG lets the user retrieve parameters associated with an audio message.

Category: Resource Provisioning **Security:** NSA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-AUDIO-MSG:[TID]:<AudioMsgAid>:[CTAG];  
ED-AUDIO-MSG:[TID]:<AudioMsgAid>:[CTAG]::  
    [NAME=<Name>],[DESC=<Description>],  
    [FILE=<FilePath>];  
ENT-AUDIO-MSG:[TID]:<AudioMsgAid>:[CTAG]::NAME=<Name>,  
    DESC=<Description>,FILE=<FilePath>;  
RTRV-AUDIO-MSG:[TID]:[<AudioMsgAid>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
    "<AudioMsgAid>:[NAME=<Name>],[DESCR=<Description>],  
    FILESIZE=<FileSize>"  
;
```

Parameters:

AudioMsgAid Identifies the AID as an audio message. The first part of the AID is an integer representing the message identifier; the second part is an optional string representing the language variant of the message. You cannot establish, change, or delete audio messages 1-2999; they are already-configured standard messages. Identifiers 3000-63487 are for custom messages; message identifiers 63488-65535 are reserved for future use. A null value for the language variant defaults to the value of *DefVariant*, if any, specified in ED/RTRV-AUDIO-SYS. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, attributes for all audio messages configured in the system will be returned.

Type: AudioMsgAid

Range: {1-65535}[-<VARIANT>]

Default value: none

Name Identifies the name of the audio message.

Type: string

Range: up to 40 alphanumeric characters (excluding spaces, but including underscores "_")

Default value: none

Description Identifies the description of the audio message.

Type: string

Range: up to 80 alphanumeric characters (excluding spaces, but including underscores "_")

Default value: none

FilePath Identifies (in ED and ENT) the complete path to the file on an external FTP server that contains the audio data for the message.

Type: string

Range: up to 80 alphanumeric characters (excluding spaces, but including underscores "_")

Default value: none

FileSize Identifies (in RTRV output) the size of the audio message file in bytes. Although the range is given as {0-8,388,607}, there is currently a maximum of six MB (value = 6000000). 8000 bytes are approximately one second of audio.

Type: integer

Range: {0-8,388,607}

Default value: none

Input Examples:

```
DLT-AUDIO-MSG::3001;  
ED-AUDIO-MSG::3001:::NAME=MSG1,DESC=This_is_a_test,  
    FILE=/audioData/MSG1.wav;  
ENT-AUDIO-MSG::3001:::NAME=MSG1,DESC=This_is_a_test,  
    FILE=/audioData/MSG1.wav;  
RTRV-AUDIO-MSG::3001;
```

Output Example:

```
    lucent 2004-10-29 14:37:49  
M    0 COMPLD  
    "3001:NAME=MSG1,DESC=This_is_a_test,FILESIZE=12000"  
;
```

Related Commands:

DLT/ED/ENT/RTRV-AUDIO-ANNC

ED/RTRV-AUDIO-SYS

Commands:

ED-AUDIO-SYS: Edit Audio System

RTRV-AUDIO-SYS: Retrieve Audio System

Descriptions:

ED-AUDIO-SYS lets the user change the parameters associated with the audio announcement/message system.

RTRV-AUDIO-SYS lets the user retrieve parameters associated with the audio announcement/message system.

Category: Resource Provisioning

Security: NSA for ED, View for RTRV

Input Formats:

```
ED-AUDIO-SYS: [TID]: [<src>]: [CTAG]: :  
    [FTPIPADDR=<FtpIpAddr>], [USERNAME=<UserName>],  
    [DISKLIMIT=<DiskLimit>], [DEFVARIANT=<DefVariant>],  
    [ANNCPLAN=<anncPlan>]: [<Password>];  
RTRV-AUDIO-SYS: [TID]: [<src>]: [CTAG];
```

Output Format:

```
    SID DATE TIME  
M    CTAG COMPLD  
    "<src>:FTPIPADDR=<FtpIpAddr>, USERNAME=<UserName>,  
    DISKLIMIT=<DiskLimit>, DEFWARIANT=<DefVariant>,  
    ANNCPLAN=<anncPlan>"  
    ;
```

Parameters:

src Identifies the AID as the switch. The factory default is "COM".

Type: COM

Range: COM

Default value: not applicable

FtpIpAddr Identifies, in dotted decimal notation, the IP address of the external FTP server containing the audio message files. The factory default for an invalid IP address is “0.0.0.0”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

UserName Identifies the FTP username used to log in to the FTP server containing the audio message files. The factory default is anonymous FTP login.

Type: string

Range: up to 63 alphanumeric characters (including underscores “_”)

Default value: not applicable

DiskLimit Identifies the amount of disk space in kilobytes to allow for use by audio files. This parameter is reserved for future use and, as such, is fixed at its maximum (default) value of 32768.

Type: integer

Range: {0-32768}

Default value: not applicable

DefVariant Identifies the default language variant used when the language variant is not specified by *AudioMsgAid* in ED/ENT-AUDIO-MSG. The factory default is “default” (lower case).

Type: string

Range: up to 63 alphanumeric characters (including underscores “_”)

Default value: not applicable

anncPlan Identifies the country where the switch is installed. The country of installation affects the voice encoding type used (a-law or mu-law) and the modification of certain tones based on in-country requirements (for example, the ring-back tone for Australia). The factory default is “US”.

Type: enum

Range: AU = Australia

CA = Canada (not yet implemented)

MX = Mexico (not yet implemented)

US = United States

Default value: not applicable

Password Identifies the FTP password used to log in to the FTP server containing the audio message files. The entered password displays as a series of asterisks. There is no factory default.

Type: string

Range: up to 63 alphanumeric characters (including underscores “_”)

Default value: not applicable

Input Examples:

```
ED-AUDIO-SYS::::FTPIPADDR=10.0.0.9,USERNAME=LUCENT,  
    DEFVARIANT=default,ANNCPLAN=US:*****;  
RTRV-AUDIO-SYS;
```

Output Example:

```
    lucent 2004-10-29 14:37:49  
M    0 COMPLD  
    "COM:FTPIPADDR=10.0.0.9,USERNAME=LUCENT,  
    DISKLIMIT=32786,DEFVARIANT=default,ANNCPLAN=US"  
    ;
```

Related Commands: none

RTRV-AUDIO-VMSG

Command:

RTRV-AUDIO-VMSG: Retrieve Audio Variable Message

Description:

RTRV-AUDIO-VMSG lets the user retrieve the description of a variable audio message.

Category: Resource Provisioning

Security: View

Input Format:

RTRV-AUDIO-VMSG: [TID]: [<vmsgname>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<vmsgname>: [DESC=<Descr>]"
;
```

Parameters:

vmsgname Identifies the AID as a variable audio message. A null value is equivalent to “ALL”; that is, by leaving the field blank, descriptions of all variable audio messages configured in the system will be returned.

Type: string

Range: up to 40 alphanumeric characters (including underscores “_”)

Default value: none

descr Identifies the description of the variable audio message.

Type: string

Range: up to 80 alphanumeric characters (including underscores “_”)

Default value: NULL

Input Example:

RTRV-AUDIO-VMSG: :DISCON;

Output Example:

```
          lucent 2004-10-29 14:37:49  
M      0 COMPLD  
          "DISCON:DESC=has been disconnected"  
      ;
```

Related Commands: none

NOTES

DLT/ED/ENT/RTRV-MGC-ASSOC

Commands:

DLT-MGC-ASSOC: Delete Media Gateway Controller Association

ED-MGC-ASSOC: Edit Media Gateway Controller Association

ENT-MGC-ASSOC: Enter Media Gateway Controller Association

RTRV-MGC-ASSOC: Retrieve Media Gateway Controller Association

Descriptions:

DLT-MGC-ASSOC lets the user delete the association between a media gateway and a media gateway controller.

ED-MGC-ASSOC lets the user change the attributes of an association between a media gateway and a media gateway controller.

ENT-MGC-ASSOC lets the user establish an association between a media gateway and a media gateway controller. Use this command to define the media gateway controller's name, hierarchical position in a cluster of MGCs, IP address, UDP port for receiving MEGACO messages, security option, authentication protocol and keys, values for various timers, and state.

RTRV-MGC-ASSOC lets the user retrieve the attributes of an association between a media gateway and a media gateway controller.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-MGC-ASSOC : [TID] : <MgcName> : [CTAG] ;

ED-MGC-ASSOC : [TID] : <MgcName> : [CTAG] : :
[MGCTYPE=<MgcType>], [IPADDR=<IpAddr>],
[RXPORT=<RxPort>], [SECURITYTYPE=<SecurityType>],
[AUTHTYPE=<AuthType>], [INCAUTHKEY=<IncAuthKey>],
[OUTGAUTHKEY=<OutgAuthKey>],
[INITRESPTMR=<InitRespTmr>],
[BNDRTTRYTMR=<BndRtryTmr>],
[PROVRESPTMR=<ProvRespTmr>] : [<Pst>] ;

```
ENT-MGC-ASSOC:[TID]:<MgcName>:[CTAG]::
  MGCTYPE=<MgcType>, IPADDR=<IpAddr>,
  [RXPORT=<RxPort>], [SECURITYTYPE=<SecurityType>],
  [AUTHTYPE=<AuthType>], [INCAUTHKEY=<IncAuthKey>],
  [OUTGAUTHKEY=<OutgAuthKey>],
  [INITRESPTMR=<InitRespTmr>],
  [BNDRTTRYTMR=<BndRtryTmr>],
  [PROVRESPTMR=<ProvRespTmr>]: [<Pst>];

RTRV-MGC-ASSOC:[TID]: [<MgcName>]: [CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<MgcName>:MGCTYPE=<MgcType>, IPADDR=<IpAddr>,
  RXPORT=<RxPort>, SECURITYTYPE=<SecurityType>,
  AUTHTYPE=<AuthType>, INCAUTHKEY=<IncAuthKey>,
  OUTGAUTHKEY=<OutgAuthKey>,
  INITRESPTMR=<InitRespTmr>,
  BNDRTTRYTMR=<BndRtryTmr>,
  PROVRESPTMR=<ProvRespTmr>:<Pst>"
;
```

Parameters:

MgcName Identifies the AID as the media gateway controller associated with the media gateway. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns information for all MGCs associated with the media gateway.

Type: string

Range: up to 64 ASCII characters

Default value: none

MgcType Identifies the type of media gateway controller; that is, the hierarchical position of the specified MGC in a cluster of MGCs.

Type: enum

Range: PRIMARY

SECONDARY

TERTIARY

Default value: none

IpAddr Identifies the IP address for the subject media gateway controller.

Type: string

Range: {0-254}.{0-254}.{0-255}.{1-255}

Default value: none

RxPort Identifies the UDP port on the MGC that receives MEGACO messages from the media gateway. The MEGACO session terminates unless you reinitialize the media gateway after changing the UDP port.

Type: integer

Range: {2000-10000}

Default value: 2944

SecurityType Identifies the security option supported by the MGC.

Type: enum

Range: INTERIM = specifies interim authentication algorithm MD5 or SHA1 per RFC-3015, used by MEGACO compliant devices to calculate the Integrity Check Value (ICV) specified in RFC-2402

NOSEC = no security option supported

Default value: NOSEC

AuthType Identifies the authentication protocol for the security option supported by the MGC.

Type: enum

Range: MD5 = authentication protocol HMAC-MD5-96 (when the value of *securityType* is "INTERIM")

NONE = no authentication (when the value of *securityType* is "NOSEC")

SHA1 = authentication protocol HMAC-SHA-96 (when the value of *securityType* is "INTERIM")

Default value: NONE

incAuthKey Identifies the manual authentication key for screening transaction messages from the destination. This parameter applies only when the value of *securityType* is "INTERIM".

Type: string

Range: exactly 32 hexadecimal digits when the value of *AuthType* is "MD5"

exactly 40 hexadecimal digits when the value of *AuthType* is "SHA1"

Default value: NULL

outgAuthKey Identifies the manual authentication key for ensuring security of transaction messages to the destination. This parameter applies only when the value of *securityType* is “INTERIM”.

Type: string

Range: exactly 32 hexadecimal digits when the value of *AuthType* is “MD5”
exactly 40 hexadecimal digits when the value of *AuthType* is “SHA1”

Default value: NULL

InitRespTmr Identifies the Initial Response Timer value, in seconds, which specifies the amount of time the media gateway waits for the MGC to respond to a transaction request before retransmitting the request. The value of *InitRespTmr* must not exceed the value of *ProvRespTmr*.

Type: integer

Range: {1-60}

Default value: 4

BndRtryTmr Identifies the Boundary Retry Timer value, in seconds, which specifies the upper limit of the Initial Response Timer (Initial response time can vary based on network congestion.). The value of *BndRtryTmr* must not exceed the value of *ProvRespTmr*.

Type: integer

Range: {1-60}

Default value: 5

ProvRespTmr Identifies the Provisional Response Timer value, in seconds, which specifies the amount of time the media gateway waits for the MGC to respond to a transaction request before sending a PENDING message indicating that the MGC is still processing the request.

Type: integer

Range: {1-60}

Default value: 4

Pst Identifies the primary state of the association; that is, whether the association is active.

Type: enum

Range: IS = In-service
OOS = Out-of-service

Default value: IS

Input Examples:

```
DLT-MGC-ASSOC::MG1;  
ED-MGC-ASSOC::MG1::MGCTYPE=PRIMARY, IPADDR=10.6.0.12,  
  RXPORT=2944, SECURITYTYPE=NOSEC, AUTHTYPE=NONE,  
  INCAUTHKEY=NULL, OUTGAUTHKEY=NULL, INITRESPTMR=4,  
  BNDRTTRYTMR=5, PROVRESPTMR=4:IS;  
ENT-MGC-ASSOC::MG1::MGCTYPE=PRIMARY, IPADDR=10.6.0.12,  
  RXPORT=2944, SECURITYTYPE=NOSEC, AUTHTYPE=NONE,  
  INCAUTHKEY=NULL, OUTGAUTHKEY=NULL, INITRESPTMR=4,  
  BNDRTTRYTMR=5, PROVRESPTMR=4:IS;  
RTRV-MGC-ASSOC;
```

Output Example:

```
lucent 2005-01-28 14:37:49  
M 0 COMPLD  
  "MG1:MGCTYPE=PRIMARY, IPADDR=10.6.0.12, RXPORT=2944,  
    SECURITYTYPE=NOSEC, AUTHTYPE=NONE,  
    INCAUTHKEY=NULL, OUTGAUTHKEY=NULL, INITRESPTMR=4,  
    BNDRTTRYTMR=5, PROVRESPTMR=4:IS"  
;
```

Related Commands: none

ED/RTRV-MEGACO-SYS

Commands:

ED-MEGACO-SYS: Edit MEGACO System

RTRV-MEGACO-SYS: Retrieve MEGACO System

Descriptions:

ED-MEGACO-SYS lets the user modify the various thresholds, timers, and other parameters related to provisioning a MEGACO stack.

RTRV MEGACO-SYS lets the user retrieve the various thresholds, timers, and other parameters related to provisioning a MEGACO stack.

Category: VoIP

Security: SA for ED, View for RTRV

Input Formats:

```
ED-MEGACO-SYS:[TID]:[<src>]:[CTAG]::  
[MGENTYPE=<MgEncType>],[SUSPTHRESH=<SuspThresh>],  
[DISCTHRESH=<DiscThresh>],  
[MAJEVTHRESH=<MajEvThresh>],  
[LNGTMRTHRESH=<LngTmrThresh>],  
[MAXWTDEL=<MaxWtDel>],[PINGTMR=<PingTmr>],  
[PINGMAXRETRY=<PingMaxRetry>],  
[TRANSPROT=<TranspProt>],  
[RCNNTATTMPT=<RcnntAttmpt>],[TXPORT=<TxPort>],  
[INTFTYPE=<IntfType>],[SERVCHNGTMR=<ServChngTmr>],  
[MGCIDLETMR=<MgcIdleTmr>],[MGTOKEN=<MgToken>];  
  
RTRV-MEGACO-SYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
"<src>:MGENTYPE=<MgEncType>,  
SUSPTHRESH=<SuspThresh>,DISCTHRESH=<DiscThresh>,  
MAJEVTHRESH=<MajEvThresh>,  
LNGTMRTHRESH=<LngTmrThresh>,MAXWTDEL=<MaxWtDel>,  
PINGTMR=<PingTmr>,PINGMAXRETRY=<PingMaxRetry>,  
TRANSPROT=<TranspProt>,  
RCNNTATTMPT=<RcnntAttmpt>,TXPORT=<TxPort>,  
INTFTYPE=<IntfType>,SERVCHNGTMR=<ServChngTmr>,  
MGCIDLETMR=<MgcIdleTmr>,MGTOKEN=<MgToken>"  
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

MgEncType Identifies the encoding for the media gateway protocol. The factory default is "TEXT".

Type: MgencType

Range: BIN = Binary encoding (currently unsupported)

TEXT = Text encoding

Default value: not applicable

SuspThresh Identifies the suspicion threshold for the media gateway; that is, the number of times a transaction can repeat before an error report is sent. The factory default is "5".

Type: integer

Range: {0-65535}

Default value: not applicable

DiscThresh Identifies the disconnection threshold for the media gateway; that is, the number of times a transaction can repeat, after which it will not be repeated again and an error report is sent. The factory default is "10".

Type: integer

Range: {0-65535}

Default value: not applicable

MajEvThresh Identifies the successive number of times a disconnect threshold is reached or a transaction remains active for its maximum time, after which connection to the remote media gateway controller (MGC) is disconnected, the media gateway tries its list of secondary MGCs, and an error report is sent. The factory default is "0", which disables the feature.

Type: integer

Range: {0-255}

Default value: not applicable

LngTmrThresh Identifies the maximum time, in seconds, that a transaction can remain active. The factory default is "6".

Type: integer

Range: {0-65535}

Default value: not applicable

MaxWtDel Identifies the maximum waiting delay, in seconds, for the media gateway. To prevent a restart avalanche at the MGC, the MEGACO stack waits (for a random time less than the maximum) when the MEGACO Manager sends the first Service Change (with Restart option), before sending the Service Change to the MGC. The factory default is "1".

Type: integer

Range: {0-120}

Default value: not applicable

PingTmr Identifies the time interval, in milliseconds, for executing the ping echo request to the remote end. A value of "0" (the factory default) disables ping.

Type: integer

Range: {0-60}

Default value: not applicable

PingMaxRetry Identifies the number of times ping is attempted before the MEGACO stack reports to the MEGACO Manager. This parameter does not apply if the value of *PingTmr* is "0". The factory default is "5".

Type: integer

Range: {0-60}

Default value: not applicable

TranspProt Identifies the transport protocol for communicating to the MGC. The factory default is "UDP".

Type: TransportType

Range: TCP = Transmission Control Protocol (currently unsupported)

UDP = User Datagram Protocol

Default value: not applicable

RcnntAttmpt Identifies the maximum number of reconnect attempts made by the Plexus MG to an MGC (before sending the registration ServiceChange) when an established connection is found broken (this is transparent to the MEGACO Manager). This field is applicable only when the value of the parameter *TranspProt* is "TCP". The factory default is "0".

Type: integer

Range: {0-50}

Default value: not applicable

TxPort Identifies the transmit port if the value of *TranspProt* is “UDP”. The factory default is “2944”.

Type: integer

Range: {2900-10000}

Default value: not applicable

IntfType Identifies on which of the two external Ethernet interfaces the MEGACO protocol communicates. The factory default is “SIGINTF”.

Type: IntfType

Range: MGMTINTF = management interface

SIGINTF = signaling interface

Default value: not applicable

ServChngTmr Identifies the time the system waits, in seconds, before sending a service change message to the MGC. The factory default is “600”.

Type: integer

Range: {1-900}

Default value: not applicable

MgcIdleTmr Identifies the MEGACO inactivity timer, in seconds. If a MEGACO transaction is not received from the MGC within this period, the media gateway issues a ServiceChange to the MGC to ensure MEGACO connectivity to the MGC. The factory default is “5”.

Type: integer

Range: {0-3600}

Default value: not applicable

MgToken Identifies the token format for (that is, how to encode) MEGACO messages generated by the media gateway. The factory default is “LONG”.

Type: TokenType

Range: LONG = Verbose ASCII text encoding per RFC-3015

SHORT = Compressed ASCII text encoding per RFC-3015

Default value: not applicable

Input Examples:

```
ED-MEGACO-SYS:::MGENTYPE=TEXT,SUSPTHRESH=5,  
DISCTHRESH=10,MAJEVTHRESH=0,LNGTMRTHRESH=6,  
MAXWTDEL=1,PINGTMR=0,PINGMAXRETRY=5,TRANSPROT=UDP,  
RCNNTATTMPT=0,TXPORT=2944,INTFTYPE=SIGINTF,  
SERVCHNGTMR=600,MGCIDLETMR=0,MGTOKEN=LONG;
```

```
RTRV-MEGACO-SYS;
```

Output Example:

```
lucent 2005-01-28 14:37:49
M 0 COMPLD
"COM:MGENCTYPE=TEXT,SUSPTHRESH=5,DISCTHRESH=10,
  MAJEVTHRESH=0,LNGTMRTHRESH=6,MAXWTDEL=1,
  PINGTMR=0,PINGMAXRETRY=5,TRANSPPROT=UDP,
  RCNNTATTMPT=0,TXPORT=2944,INTFTYPE=SIGINTF,
  SERVCHNGTMR=600,MGCIDLETMR=0,MGTOKEN=LONG"
;
```

Related Commands: none

ED/RTRV-MG-SYS

Commands:

ED-MG-SYS: Edit Media Gateway System

RTRV-MG-SYS: Retrieve Media Gateway System

Descriptions:

ED-MG-SYS lets the user change the primary state of the media gateway and the amount of time until it shuts down.

RTRV-MG-SYS lets the user retrieve the state of the media gateway and the amount of time until it shuts down.

Category: VoIP

Security: SA for ED, View for RTRV

Input Formats:

```
ED-MG-SYS: [TID]: [<src>]: [CTAG]: :  
           [SHUTDOWN_TMR=<ShutDownTmr>]: [<pst>];  
RTRV-MG-SYS: [TID]: [<src>]: [CTAG];
```

Output Format:

```
      SID DATE TIME  
M    CTAG COMPLD  
      "<src>: SHUTDOWN_TMR=<ShutDownTmr>: <pst>, <sst>"  
      ;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

ShutDownTmr Identifies the amount of time until the media gateway shuts down. The factory default is "0".

Type: integer

Range: {0-65535}

Default value: not applicable

pst Identifies the primary state of the MG. The factory default is "IS".

Type: enum

Range: IS = In-service

OOS = Out-of-service

Default value: not applicable

sst Identifies (in RTRV output) the secondary state of the MG.

Type: enum

Range: ACT = Active

AINS = Automatic, In-service

FAF = Facilities Failure

FLT = Faulted

Default value: not applicable

Input Examples:

```
ED-MG-SYS::::SHUTDOWNTMR=0:IS;
```

```
RTRV-MG-SYS;
```

Output Example:

```
lucent 2005-01-28 14:37:49
M 0 COMPLD
"COM:SHUTDOWNTMR=0:IS,ACT"
;
```

Related Commands: none

RESTART-MG

Command:

RESTART-MG: Restart Media Gateway

Description:

RESTART-MG lets the user re-initialize (reset) a media gateway, which returns all terminations to the NULL context and frees all ephemeral terminations. The media gateway initiates a ServiceChange Request indicating cold boot on the ROOT context. The MEGACO stack will reject this command unless the MG has completed rewind of the configuration data and the switch considers all available ports to be in service.

Category: VoIP

Security: SA

Input Format:

RESTART-MG : [TID] : [<src>] : [CTAG] ;

Output Format: none

Parameters:

src Identifies the AID as the switch configured as a media gateway.

Type: COM

Range: COM

Default value: COM

Input Example:

RESTART-MG ;

Related Commands: none

NOTES

ED/RTRV-VOIP-NETSYS

Commands:

ED-VOIP-NETSYS: Edit VoIP NETSYS

RTRV-VOIP-NETSYS: Retrieve VoIP NETSYS

Descriptions:

ED-VOIP-NETSYS lets the user edit general system-wide parameters, on the IP network side, for the DSP resources in the switch. Edits affect only new circuit setups after a VPS module has been removed and restored to service.

RTRV-VOIP-NETSYS lets the user retrieve general system-wide parameters, on the IP network side, for the DSP resources in the switch.

Category: VoIP

Security: SA for ED, View for RTRV

Input Formats:

```
ED-VOIP-NETSYS:[TID]:[<src>]:[CTAG]::
[ECHOTAIL=<EchoTail>],[TDMCOMPAND=<TdmCompand>],
[DEFGAIN=<DefGain>],[NOMJITBUFSZ=<nomJitBufSz>];
RTRV-VOIP-NETSYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```
      SID DATE TIME
M    CTAG COMPLD
      "<src>:ECHOTAIL=<EchoTail>,TDMCOMPAND=<TdmCompand>,
      DEFGAIN=<DefGain>,NOMJITBUFSZ=<nomJitBufSz>"
;
```

Parameters:

src Identifies the AID as the switch (COM).

Type: COM

Range: COM

Default value: COM

EchoTail Identifies the number of milliseconds after a transmission during which echoes are cancelled (if *EchoCanc* is set to “ON”). The factory default is “32”.

Type: enum

Range: 0
8
16
32
64
128

Default value: not applicable

TdmComband Identifies the companding type; that is, the PCM encoding method used in the analog-to-digital network conversion. The wide dynamic range of speech does not lend itself well to efficient linear digital encoding. A-law and Mu-law encoding effectively reduce the dynamic range of the signal, thereby increasing the coding efficiency and resulting in a signal-to-distortion ratio that is greater than that obtained by linear encoding for a given number of bits. The factory default is “MULAW”.

Type: enum

Range: ALAW = a-law algorithm: A standard compression algorithm, used in digital communications systems of the European digital hierarchy to optimize the dynamic range of an analog signal for digitizing.
LINEAR = linear encoding
MULAW = mu-law (μ -law) algorithm: A standard compression algorithm, used in digital communications systems of the North American digital hierarchy to optimize the dynamic range of an analog signal for digitizing.

Default value: not applicable

DefGain Identifies the default gain in negative decibels (actually, attenuation in decibels; that is, the average attenuation for a packet in the network). The factory default is “0”.

Type: integer

Range: {0-20}

Default value: not applicable

nomJitBufSz Identifies the nominal jitter buffer size in milliseconds. The factory default is “10”.

Type: integer

Range: {10-200}

Default value: not applicable

Input Examples:

```
ED-VOIP-NETSYS:::::ECHOTAIL=32,TDMCOMPAND=MULAW,  
    DEFGAIN=0,NOMJITBUFSZ=10;  
RTRV-VOIP-NETSYS;
```

Output Example:

```
    lucent 2005-06-24 14:37:49  
M    0 COMPLD  
    "COM:ECHOTAIL=32,TDMCOMPAND=MULAW,DEFGAIN=0,  
    NOMJITBUFSZ=10"  
;
```

Related Commands: none

ED/RTRV-VOIP-SYS

Commands:

ED-VOIP-SYS: Edit VoIP System

RTRV-VOIP-SYS: Retrieve VoIP System

Descriptions:

ED-VOIP-SYS lets the user edit general system-wide parameters for the DSP resources in the switch. Edits affect only new circuit setups after a VPS module has been removed and restored to service.

RTRV-VOIP-SYS lets the user retrieve general system-wide parameters for the DSP resources in the switch.

Category: VoIP

Security: SA for ED, View for RTRV

Input Formats:

```
ED-VOIP-SYS:[TID]:[<src>]:[CTAG]::
[DIFFSERV=<diffServ>],[AAL5ENC=<aal5Enc>],
[VADTHRESH=<vadThresh>],
[JITBUFPLMOD=<jitBufPlMod>],
[JITBUFLOWTHRESH=<jitBufLowThresh>],
[JITBUFHIGHTHRESH=<jitBufHighThresh>],
[JITBUFRSPRT=<jitBufRspRt>],
[ECDISABLE=<ecDisable>],
[PINGHRTBTMR=<pingHrtBtTmr>],
[SIDTXINTERVAL=<sidTxInterval>],
[PKTFILTER=<pktFilter>],[UDPCHKSUM=<udpChksum>],
[XTALKPERIOD=<xtalkPeriod>],
[XTALKTHRESH=<xtalkThresh>],
[IDLEPATTERN=<idlePattern>],[CNG=<cng>];

RTRV-VOIP-SYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```

SID DATE TIME
M CTAG COMPLD
"<src>:[DIFFSERV=<diffServ>],AAL5ENC=<aal5Enc>,
  VADTHRESH=<vadThresh>,JITBUFPLMOD=<jitBufPlMod>,
  JITBUFLOWTHRESH=<jitBufLowThresh>,
  JITBUFHIGHTHRESH=<jitBufHighThresh>,
  JITBUFRSPRT=<jitBufRspRt>,ECDISABLE=<ecDisable>,
  PINGHRTBTMR=<pingHrtBtTmr>,
  SIDTXINTERVAL=<sidTxInterval>,
  PKTFILTER=<pktFilter>,UDPCCHKSUM=<udpChksum>,
  XTALKPERIOD=<xtalkPeriod>,
  XTALKTHRESH=<xtalkThresh>,
  IDLEPATTERN=<idlePattern>,CNG=<cng>"
;
    
```

Parameters:

- | | |
|-----------------|---|
| src | <p>Identifies the AID as the switch.</p> <p>Type: COM</p> <p>Range: COM</p> <p>Default value: COM</p> |
| diffServ | <p>Identifies the six-bit wide DSCP bit mask, representing differentiated services for RTP ports, that follows the two-bit wide CU bit mask (always zero – cannot be changed) to form the TOS (Type of Service) octet. The factory default is “000101”.</p> <p>Type: string</p> <p>Range: six-digit string of “1”s and “0”s</p> <p>Default value: not applicable</p> |
| aal5Enc | <p>Identifies the encoding type for ATM (Asynchronous Transfer Mode) Adaptation Layer 5. The factory default is “VCMUX”. Reset the VPS module after changing the encoding type, either by changing the state with the ED-EQPT command to OOS, then to IS, or by sequentially executing RMV-EQPT and RST-EQPT.</p> <p>Type: enum</p> <p>Range: LLCSNAP = Logical Link Control SubNetwork Attachment Point
 VCMUX = Virtual Connection Multiplexing</p> <p>Default value: not applicable</p> |

vadThresh Identifies the voice activity detection threshold, which specifies lower and upper threshold settings used by the voice server modules when silence suppression is active on a VoIP call. The voice codec treats a maintained power level below the lower threshold as silence and triggers the generation of SID (Silence Insertion Descriptor) packets. The codec treats a maintained power level above the upper threshold as an active voice conversation and begins transmission of RTP VoIP packets. The generation of RTP versus SID packets when the power level fluctuates between the upper and lower thresholds is indeterminate. The factory default is “6”.

Type: integer

Range: {1-10}, where:

Value	Upper (dB)	Lower (dB)
1	-27	-39
2	-30	-42
3	-33	-45
4	-36	-48
5	-39	-51
6	-42	-54
7	-45	-57
8	-48	-60
9	-51	-63
10	-54	-66

Default value: not applicable

jitBufPlMod Identifies the jitter buffer playout mode. The factory default is “FIXED”.

Type: enum

Range: ADAPTIVE = proprietary voice buffer management
FIXED = fixed buffer management

Default value: not applicable

jitBufLowThresh Identifies the jitter buffer low threshold in milliseconds. The factory default is “10”.

Type: integer

Range: {0-315}

Default value: not applicable

jitBufHighThresh Identifies the jitter buffer high threshold in milliseconds. The value of *jitBufHighThresh* must be greater than the value of *jitBufLowThresh*. The factory default is “320”.

Type: integer

Range: {0-320}

Default value: not applicable

jitBufRspRt Identifies the jitter buffer response rate (time constant). The time constant determines the speed of adaptation with the following trade-off: a longer time constant slows adaptation but results in a more stable jitter buffer nominal threshold variable. A shorter time constant causes faster adaptation but at the same time may result in frequent changes in the jitter buffer nominal threshold variable. For jitters in bursts one can expect a better trade off by using a smaller time constant; for random jitter a longer time constant is more appropriate. The choice of optimal parameters is system dependent and should be selected based on the measure of jitter in the network. However, assuming random jitter and desire for small changes in delay over short instances, setting the value of *jitBufLowThresh* to “2”, *jitBufHighThresh* to “16”, and *jitBufRspRt* to “127” can be used as a start. The factory default is “127”.

Type: integer

Range: {1-127}

Default value: not applicable

ecDisable Identifies the echo canceller disable policy. The factory default is “G168”.

Type: enum

Range: G164

G165

G168

NONE

Default value: not applicable

pingHrtBtTmr Identifies the heartbeat timer in seconds; that is, how often the network access IOM pings the router. A value of “0” disables the ping test. The factory default is “1”.

Type: integer

Range: {0-10}

Default value: not applicable

sidTxInterval Identifies the frequency, in milliseconds, of SID packets generated in periods of silence during a conversation. The factory default is “100”.

Type: integer

Range: {10-1000}, in 10-millisecond increments

Default value: not applicable

pktFilter Identifies whether to enable RTP packet filtering for a call. If enabled, only RTP packets whose source IP/UDP address match the remote IP/UDP address specified when the circuit was created will be accepted by the system. For SIP installations and some feature servers this must be disabled. For non-SIP installations, this may prevent IP cross-talk from corrupting the voice bearer path. The factory default is “DISABLED”.

Type: enum

Range: DISABLED
ENABLED

Default value: not applicable

udpChksum Identifies whether to enable UDP checksum on RTP packets. The factory default is “DISABLED”.

Type: enum

Range: DISABLED
ENABLED

Default value: not applicable

xtalkPeriod Identifies the number of consecutive RTP packets with no change in any remote parameter (SSRC, UDP_PORT, IP_ADDRESS) to qualify the current RTP stream as valid. The factory default is “200”.

Type: integer

Range: {1-1000}

Default value: not applicable

xtalkThresh Identifies the number of packets with changes in the remote parameters (SSRC, UDP_PORT, IP_ADDRESS) required to generate an event indicating that IP XTALK may be present. The factory default is “100”.

Type: integer

Range: {0-1000}

Default value: not applicable

idlePattern Identifies the idle pattern generated (as a hex string) by the DSP when a clear channel data call is established over a VoIP circuit. When the jitter buffer under runs, the DSP generates the specified octet until the next RTP packet is received. In most situations, an HDLC protocol is transported over a clear channel VoIP RTP stream. If an underrun occurs, the transmission of an HDLC flag X.7e’ should be generated to force HDLC realignment. The factory default is “7E”.

Type: string

Range: {00-ff}

Default value: not applicable

cng Identifies the level, in negative decibels, at which to generate comfort noise during periods of silence. The factory default is "60".

Type: integer

Range: {30-77}

Default value: not applicable

Input Examples:

```
ED-VOIP-SYS::::DIFFSERV=000101,AAL5ENC=VCMUX,
VADTHRESH=6,JITBUFPLMOD=FIXED,JITBUFLOWTHRESH=10,
JITBUFHIGHTHRESH=320,JITBUFRSPRT=127,
ECDISABLE=G168,PINGHRTBTTMR=1,SIDTXINTERVAL=100,
PKTFILTER=DISABLED,UDPCHKSUM=DISABLED,
XTALKPERIOD=20,XTALKTHRESH=10,IDLEPATTERN=7E,
CNG=60;

RTRV-VOIP-SYS;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"COM:DIFFSERV=000101,AAL5ENC=VCMUX,VADTHRESH=6,
JITBUFPLMOD=FIXED,JITBUFLOWTHRESH=10,
JITBUFHIGHTHRESH=320,JITBUFRSPRT=127,
ECDISABLE=G168,PINGHRTBTTMR=1,SIDTXINTERVAL=100,
PKTFILTER=DISABLED,UDPCHKSUM=DISABLED,
XTALKPERIOD=20,XTALKTHRESH=10,IDLEPATTERN=7E,
CNG=60"

;
```

Related Commands: none

RTRV-PM-VPVOIP

Command:

RTRV-PM-VPVOIP: Retrieve Performance Monitors VPVOIP

Description:

RTRV-PM-VPVOIP lets the user retrieve current and historical performance data for a voice processor on a Voice over IP (VoIP) IOM.

Category: VoIP

Security: View

Input Format:

```
RTRV-PM-VPVOIP:[TID]:<vpId>:[CTAG]:[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>;
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
  "<vpId>:<montype>,<monval>,<vldty>,<locn>,<dirn>,<tmper>,<mondatt>,<montm>"  
;
```

Parameters:

vpId Identifies the AID as a voice processor on a VoIP IOM. A null value for the second field in the range is equivalent to "ALL"; that is, by leaving the field blank, the system returns information for all voice processors on the IOM specified by the first field in the range.

Type: vpId

Range: IOM-{1-17}[-VP-{1-8}]

Default value: none

montype Identifies the registers (for a type of monitored parameter) from which to retrieve performance data.

Type: enum

Range: ALL = All types

CINDROP = Number of incoming cells dropped

COUTDROP = Number of outgoing cells dropped

CR = Number of cells received

CT = Number of cells transmitted

CTDR = Number of control packets received

CTDT = Number of control packets transmitted

CTPRDROPIINVALIDSIZE = Number of control packets
dropped due to invalid size

CTPRDROPNONUDP = Number of control packets dropped
due to not being UDP

CTPRDROPNORSRC = Number of control packets dropped
due to lack of resources

HEC = Number of cells with header error count

IPR = Number of IP packets received

IPRBADHLEN = Number of IP packets received with bad
header length

IPRBADIP = Number of IP packets received with bad IP
address

IPRBADSUM = Number of IP packets received with bad
checksum

IPRBADUDP = Number of IP packets received with bad
UDP port

IPRVALID = Number of valid IP packets received

IPT = Number of IP packets transmitted

PR = Number of packets received

PT = Number of packets transmitted

UDPR = Number of UDP packets received

UDPT = Number of UDP packets transmitted

UNRECCELL = Number of unrecognized cells

Default value: ALL

monval Identifies (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates.

Type: integer

Range: {0-4294967295}

Default value: 0

monlev Indicates the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it. This parameter is not supported presently; its value will be “NULL”.
- Type:** enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: not applicable for output
- locn** Identifies the location of the storage counters from which to retrieve performance data. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: BTH = Both directions
RCV = Receive direction only
TRMT = Transmit direction only
Default value: BTH
- tmper** The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: {1}-DAY = Time interval is exactly one day
{1-24}-HR = Interval of one to 24 hours (one day)
{1-1440}-MIN = Interval of one to 1440 minutes (one day)
Default value: 15-MIN
- mondatt** Indicates the monitored date. The value indicates the beginning date for the performance-monitoring period defined by *tmper*. The format is MM-DD. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: {1-12}-{1-31}
Default value: current date

montm Indicates the monitored time. The value indicates the beginning time of day for the performance-monitoring period defined by *tmper*. The format is HH-MM. This parameter is not supported presently; leave it blank.

Type: enum

Range: {0-23}-{0-59}

Default value: current time

Input Example:

```
RTRV-PM-VPVOIP::IOM-1;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"IOM-11-VP-3:CT,0,COMPL,,,,,"
"IOM-11-VP-3:CR,0,COMPL,,,,,"
"IOM-11-VP-3:HEC,0,COMPL,,,,,"
"IOM-11-VP-3:UNRECELLS,0,COMPL,,,,,"
"IOM-11-VP-3:OUTDROP,0,COMPL,,,,,"
"IOM-11-VP-3:INDROP,0,COMPL,,,,,"
"IOM-11-VP-3:PT,0,COMPL,,,,,"
"IOM-11-VP-3:PR,0,COMPL,,,,,"
"IOM-11-VP-3:UDPT,0,COMPL,,,,,"
"IOM-11-VP-3:UDPR,0,COMPL,,,,,"
"IOM-11-VP-3:CTDT,0,COMPL,,,,,"
"IOM-11-VP-3:CTDR,0,COMPL,,,,,"
"IOM-11-VP-3:IPT,0,COMPL,,,,,"
"IOM-11-VP-3:IPR,0,COMPL,,,,,"
"IOM-11-VP-3:IPRVALID,0,COMPL,,,,,"
"IOM-11-VP-3:IPRBADSUM,0,COMPL,,,,,"
"IOM-11-VP-3:IPRBADHLEN,0,COMPL,,,,,"
"IOM-11-VP-3:IPRBADIP,0,COMPL,,,,,"
"IOM-11-VP-3:IPRBADUDP,0,COMPL,,,,,"
"IOM-11-VP-3:CTPDROPNORSRC,0,COMPL,,,,,"
"IOM-11-VP-3:CTPDROPINVALIDSIZE,0,COMPL,,,,,"
"IOM-11-VP-3:CTPDROPNONUDP,0,COMPL,,,,,"
;
```

Related Commands: none

RTRV-STATUS-CM

Command:

RTRV-STATUS-CM: Retrieve Status Compute Module

Description:

RTRV-STATUS-CM lets the user retrieve the location and state for the configured processes (centralized processes or instances on a media gateway) running on Compute Modules in a Lucent Network Controller.

Category: VoIP

Security: View

Input Format:

RTRV-STATUS-CM: [TID]: [<iomAid>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<aid>:[LOC=<loc>]:<pst>[,<sst>]"
;
```

Parameters:

iomAid Identifies the AID as an IOM slot containing a Compute Module. A null value is equivalent to "ALL"; that is, by leaving the field blank, the switch returns information for all of its Compute Modules.

Type: IomAid

Range: IOM-{1-17}

Default value: none

- aid** Identifies the AID (in output) as an IOM slot containing a Compute Module, and either a centralized process or a specific instance on a media gateway.
- Type:** string
- Range:** IOM-{1-17}-<name>[-<index>], where
name can be
 <mgName> = up to 30-character name of the media gateway (usually the SID)
 DIST = Distribution process on CCM
 RS = Router on CCM
 SIPR = SIP Redirect on CCM
index specifies an instance on the media gateway with an integer range of {0-16820}
- Default value:** none
-
- loc** Identifies, in output, the location of the application on the Compute Module used for an instance on the media gateway.
- Type:** string
- Range:** CM-<cm>-CPU-<cpu>-INST-<inst>, where
cm is the Compute Module slot number with a range of {1-17}
cpu is the processor on the Compute Module with a range of {A-D}
inst is the instance on the processor with a range of {1-8}
- Default value:** NULL
-
- pst** Identifies the primary state and qualifier for the configured process on the Compute Module.
- Type:** enum
- Range:** IS = In-service
 OOS-AU = Out-of-service, Autonomous
 OOS-MA = Out-of-service, Managed
 OOS-AUMA = Out-of-service, Autonomous and Managed
- Default value:** none

sst Identifies the secondary state for the configured process on the Compute Module.

Type: enum

Range: ACT-NP = Active, not protected
ACT-P = Active, protected
FLT = Faulted
INIT = Initializing
SEGO = Supporting Entity Outage
STBH = Standby Hot
STBYC = Standby Cold (synchronizing)

Default value: none

Input Example:

```
RTRV-STATUS-CM: : IOM-3;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"IOM-3-BOSTON-129:LOC=CM-3-CPU-A-INST-1:IS,ACT-P"
"IOM-3-BOSTON-130:LOC=CM-3-CPU-B-INST-1:OOS-MA"
"IOM-3-ATLANTA-131:LOC=CM-3-CPU-C-INST-1:IS,ACT-NP"
;
```

Related Commands: none

RTRV-STATUS-MG

Command:

RTRV-STATUS-MG: Retrieve Status Media Gateway

Description:

RTRV-STATUS-MG lets the user retrieve, for the switch configured as a media gateway, the number of active contexts, the number of TDM terminations available and used, the number of packet terminations used, and the number of resources available for various compression protocols and for TDM echo cancellation.

Category: VoIP

Security: View

Input Format:

RTRV-STATUS-MG: [TID]: [<src>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<src>:NUMCONTEXTS=<numContexts>,
    NUMTDMTERMUSED=<numTdmTermUsed>,
    NUMTDMTERMAVAIL=<numTdmTermAvail>,
    NUMVOIPTERMUSED=<numVoipTermUsed>,
    VOIPTDMECAVAIL=<voipTdmEcAvail>,
    RESPRFL1=<resPrfl1>,RESPRFL2=<resPrfl2>,
    RESPRFL3=<resPrfl3>,RESPRFL4=<resPrfl4>,
    RESPRFL5=<resPrfl5>,RESPRFL6=<resPrfl6>,
    RESPRFL7=<resPrfl7>,
    NOECAVAILCURRENT=<noEcAvailCurrent>,
    NOECAVAILTOTAL=<noEcAvailTotal>"
;
```

Parameters:

src Identifies the AID as the switch.

Type: COM

Range: COM

Default value: COM

numContexts Identifies the number of active contexts.

Type: integer
Range: {0-2147483648}
Default value: none

numTdmTermUsed Identifies the number of TDM terminations used.

Type: integer
Range: {0-2147483648}
Default value: none

numTdmTermAvail Identifies the number of TDM terminations available.

Type: integer
Range: {0-2147483648}
Default value: none

numVoipTermUsed Identifies the number of VoIP terminations used.

Type: integer
Range: {0-2147483648}
Default value: none

voipTdmEcAvail Identifies the number of resources available for TDM echo cancellation on a VoIP IOM.

Type: integer
Range: {0-2147483648}
Default value: none

resPrfl1 Identifies the number of resources available for G711/Clear Channel data calls.

Type: integer
Range: {0-128000}
Default value: none

resPrfl2 Identifies the number of resources available for G729 compression on a VoIP IOM.

Type: integer
Range: {0-128000}
Default value: none

resPrfl3 Identifies the number of resources available for G723 compression on a VoIP IOM.

Type: integer
Range: {0-128000}
Default value: none

resPrfl4 Identifies the number of resources available for G726 compression on a VoIP IOM.

Type: integer

Range: {0-128000}

Default value: none

resPrfl5 Identifies the number of resources available for a yet undetermined codec profile. This parameter is reserved for future use.

Type: integer

Range: {0-2147483648}

Default value: none

resPrfl6 Identifies the number of resources available for a yet undetermined codec profile. This parameter is reserved for future use.

Type: integer

Range: {0-2147483648}

Default value: none

resPrfl7 Identifies the number of resources available for a yet undetermined codec profile. This parameter is reserved for future use.

Type: integer

Range: {0-2147483648}

Default value: none

noEcAvailCurrent Identifies the number of requests for TDM echo cancellation that have failed due to resource unavailability since the last issuance of this command.

Type: integer

Range: {0-2147483648}

Default value: none

noEcAvailTotal Identifies the number of requests for TDM echo cancellation that have failed due to resource unavailability since the last switch reboot.

Type: integer

Range: {0-2147483648}

Default value: none

Input Example:

RTRV-STATUS-MG;

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"COM:NUMCONTEXTS=0,NUMTDMTERMUSED=0,
  NUMTDMTERMAVAIL=16368,NUMVOIPTERMUSED=0,
  VOIPTDMECAVAIL=65535,RESPRFL1=0,RESPRFL2=0,
  RESPRFL3=0,RESPRFL4=0,RESPRFL5=0,RESPRFL6=0,
  RESPRFL7=0,NOECAVAILCURRENT=0,NOECAVAILTOTAL=0"
;
```

Related Commands: none

RTRV-STATUS-MGCPROC

Command:

RTRV-STATUS-MGCPROC: Retrieve Status Media Gateway Control Process

Description:

RTRV-STATUS-MGCPROC lets the user retrieve state information for the configured media gateway control processes running on Compute Modules in a Lucent Network Controller.

Category: VoIP

Security: View

Input Format:

RTRV-STATUS-MGCPROC: [TID]: [<mgName>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<mgName>: :MGIPADDR=<mgIpAddr>, PROCALOC=<procALoc>,
    PROCAINDEX=<procAIndex>,
    PROCAM3UAPORT=<procAM3uaPort>,
    PROCAIUAPORT=<procAIuaPort>, PROCBLOC=<procBLoc>,
    PROCBINDEX=<procBIndex>,
    PROCBM3UAPORT=<procBM3uaPort>,
    PROCBIUAPORT=<procBIuaPort>, SIPPORT=<sipPort>,
    MEGACOPORT=<megacoPort>, CDRPORT=<cdrPort>,
    M3UASTATE=<m3uaState>, MEGACOSTATE=<megacoState>,
    IUASTATE=<iuaState>,
    PROTECTIONSTATE=<protectionState>"
;
```

Parameters:

mgName Identifies the AID as the media gateway affected by the control processes running on Compute Modules in a Lucent Network Controller. A null value is equivalent to "ALL"; that is, by leaving the field blank, the switch returns information for all controlled media gateways.

Type: IomAid

Range: IOM-{1-17}

Default value: none

mgIpAddr Identifies the IP address for the media gateway.

Type: string

Range: {0-254}.{0-254}.{0-255}.{1-255}

Default value: none

procALoc Identifies, in output, the location of the process on the lower Compute Module used for an instance on the media gateway.

Type: string

Range: CM-<cm>-CPU-<cpu>-INST-<inst>, where
cm is the Compute Module slot number with a range of {1-17}
cpu is the processor on the Compute Module with a range of {A-D}
inst is the instance on the processor with a range of {1-8}

Default value: none

procAIndex Identifies, in output, an assigned number representing a specific instance on the lower Compute Module.

Type: integer

Range: {0-1682}

Default value: none

procAM3uaPort Identifies, in output, the TCP port on the lower Compute Module used for M3UA messages from the signaling gateway.

Type: integer

Range: {1-64000}

Default value: none

procAIuaPort Identifies, in output, the TCP port on the lower Compute Module used for IUA messages from the media gateway.

Type: integer

Range: {1-64000}

Default value: none

procBLoc Identifies, in output, the location of the process on the upper Compute Module used for an instance on the media gateway.

Type: string

Range: CM-<cm>-CPU-<cpu>-INST-<inst>, where
cm is the Compute Module slot number with a range of {1-17}
cpu is the processor on the Compute Module with a range of {A-D}
inst is the instance on the processor with a range of {1-8}

Default value: none

procBIndex Identifies, in output, an assigned number representing a specific instance on the upper Compute Module.

Type: integer

Range: {0-1682}

Default value: none

procBM3uaPort Identifies, in output, the TCP port on the upper Compute Module used for M3UA messages from the signaling gateway.

Type: integer

Range: {1-64000}

Default value: none

procBIuaPort Identifies, in output, the TCP port on the upper Compute Module used for IUA messages from the media gateway.

Type: integer

Range: {1-64000}

Default value: none

sipPort Identifies, in output, the TCP port used for SIP signaling.

Type: integer

Range: {1-64000}

Default value: none

megacoPort Identifies, in output, the TCP port used for MEGACO signaling.

Type: integer

Range: {1-64000}

Default value: none

cdrPort Identifies, in output, the TCP port used for billing.

Type: integer

Range: {1-64000}

Default value: none

m3uaState Identifies the state of the M3UA signaling link.

Type: enum

Range: IS = link is up
OOS = link is down

Default value: none

megacoState Identifies the state of the MEGACO signaling link.

Type: enum

Range: IS = link is up
OOS = link is down

Default value: none

iuaState Identifies the state of the IUA signaling link.

Type: enum

Range: IS = link is up
OOS = link is down

Default value: none

protectionState Identifies the state for the protected (standby) Compute Module.

Type: enum

Range: NOBKUP = No backup (no protected Compute Module)
STBYH = Standby hot (protected CM in-service)
SYNCING = Protected Compute Module synchronizing

Default value: none

Input Example:

```
RTRV-STATUS-MGCPROC::boston;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
"boston:MGIPADDR=10.11.12.13,
  PROCALOC=CM-3-CPU-A-INST-1, PROCAINDEX=129,
  PROCAM3UAPORT=50000, PROCAIUAPORT=53000,
  PROCBLOC=CM-4-CPU-A-INST-1, PROCBINDEX=160,
  PROCBM3UAPORT=50001, PROCBIUAPORT=53001,
  SIPPORT=51000, MEGACOPORT=52000, CDRPORT=56000,
  M3UASTATE=IS, MEGACOSTATE=IS, IUASTATE=IS,
  PROTECTIONSTATE=STBYH"
;
```

Related Commands: none

RTRV-STATUS-VPS

Command:

RTRV-STATUS-VPS: Retrieve Status Voice Processor Server

Description:

RTRV-STATUS-VPS lets the user retrieve information for the Voice Processor Server (VPS) modules (including the protection module) in the switch configured as a media gateway. Note that when a VPS module fails over to the protection module, its call path state remains in service; that is, the switch continues to report calls on the failed VPS module as still being on the failed VPS module.

Category: VoIP

Security: View

Input Format:

RTRV-STATUS-VPS:[TID]:[<iomAid>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<iomAid>:TYPE=<type>, VPSSTATUS=<vpsStatus>,
    VOIPNETWORKCONN=<voipNetworkConn>,
    TDMECAVAIL=<tdmEcAvail>, RESPRFL1=<resPrfl1>,
    RESPRFL2=<resPrfl2>, RESPRFL3=<resPrfl3>,
    RESPRFL4=<resPrfl4>, RESPRFL5=<resPrfl5>,
    RESPRFL6=<resPrfl6>, RESPRFL7=<resPrfl7>"
;
```

Parameters:

iomAid Identifies the AID as an IOM slot containing a Voice Processor Server module. A null value is equivalent to "ALL"; that is, by leaving the field blank, information for all Voice Processor Server modules in the system will be returned.

Type: IomAid

Range: IOM-{1-17}

Default value: none

- type** Identifies the type of VPS module; that is, whether it supports VoIP or VoA calls.
Type: enum
Range: VOA = Voice over ATM (Asynchronous Transfer Mode)
VOIP = Voice over Internet Protocol
Default value: none
- vpsStatus** Identifies the current state of the Voice Processor Server module.
Type: enum
Range: FAILINGOVER = a brief state while the protection IOM is being initialized with the data about the failed IOM
IS = In-service
OOS = Out-of-service
PROTECTED = the state where the IOM is OOS and calls are handled by the protection IOM
TEST = VPS is under test
Default value: none
- voipNetworkConn** Identifies indicates whether the VPS module's connectivity to the network can support VOIP calls.
Type: enum
Range: IS = In-service
OOS = Out-of-service
Default value: none
- tdmEcAvail** Identifies the number of resources available for TDM echo cancellation on the VPS module.
Type: integer
Range: {0-65535}
Default value: none
- resPrfl1** Identifies the number of resources available for G711/Clear Channel data calls.
Type: integer
Range: {0-128000}
Default value: none
- resPrfl2** Identifies the number of resources available for G729 compression on a VoIP IOM.
Type: integer
Range: {0-128000}
Default value: none

- resPrfl3** Identifies the number of resources available for G723 compression on a VoIP IOM.
Type: integer
Range: {0-128000}
Default value: none
- resPrfl4** Identifies the number of resources available for G726 compression on a VoIP IOM.
Type: integer
Range: {0-128000}
Default value: none
- resPrfl5** Identifies the number of resources available for a yet undetermined codec profile. This parameter is reserved for future use.
Type: integer
Range: {0-2147483648}
Default value: none
- resPrfl6** Identifies the number of resources available for a yet undetermined codec profile. This parameter is reserved for future use.
Type: integer
Range: {0-2147483648}
Default value: none
- resPrfl7** Identifies the number of resources available for a yet undetermined codec profile. This parameter is reserved for future use.
Type: integer
Range: {0-2147483648}
Default value: none

Input Example:

```
RTRV-STATUS-VPS: : IOM-17;
```

Output Example:

```
lucent 2005-06-24 14:37:49
M 0 COMPLD
  "IOM-17:TYPE=VOIP,VPSSTATUS=IS,VOIPNETWORKCONN=OOS,
    TDMECAVAIL=65535,RESPRFL1=0,RESPRFL2=0,
    RESPRFL3=0,RESPRFL4=0,RESPRFL5=0,RESPRFL6=0,
    RESPRFL7=0"
;
```

Related Commands: none

NOTES

RTRV-PM-VCCVOIP

Command:

RTRV-PM-VCCVOIP: Retrieve Performance Monitors VCCVOIP

Description:

RTRV-PM-VCCVOIP lets the user retrieve current and historical performance data for a Voice over IP (VoIP) Virtual Circuit Connection (VCC).

Category: VoIP

Security: View

Input Format:

```
RTRV-PM-VCCVOIP:[TID]:<vpsId>:[CTAG]:[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondat>],  
[<montm>;
```

Output Format:

```
          SID DATE TIME  
M CTAG COMPLD  
  "<vpsId>:<montype>,<monval>,[<vldty>],[<locn>],  
    [<dirn>],[<tmper>],[<mondat>],[<montm>]"  
;
```

Parameters:

vpsId Identifies the AID as a VCC on a Voice Processor Server (VPS) module. A null value for the second field in the range is equivalent to "ALL"; that is, by leaving the field blank, the system returns information for all VCCs on the VPS specified by the first field in the range.

Type: vpsId

Range: IOM-{1-17}[-VCC-{0-799}]

Default value: none

montype Identifies a type of monitored parameter for the specified VCC.

Type: enum

Range: AAL5CRCERR = Number of AAL5 CRC errors

AAL5ENCAPERR = Number of AAL5 frame encapsulation errors

ALL = All types

CR = Number of cells received

CT = Number of cells transmitted

Default value: ALL

- monval** Identifies (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates.
Type: integer
Range: {0-4294967295}
Default value: 0
- monlev** Indicates the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it. This parameter is not supported presently; its value will be "NULL".
Type: enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: not applicable for output
- locn** Identifies the location of the storage counters from which to retrieve performance data. This parameter is not supported presently; leave it blank.
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.
Type: enum
Range: BTH = Both directions
RCV = Receive direction only
TRMT = Transmit direction only
Default value: BTH

- tmper** The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: {1}-DAY = Time interval is exactly one day
 {1-24}-HR = Interval of one to 24 hours (one day)
 {1-1440}-MIN = Interval of one to 1440 minutes (one day)
Default value: 15-MIN
- mondatt** Indicates the monitored date. The value indicates the beginning date for the performance-monitoring period defined by *tmper*. The format is MM-DD. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: {1-12}-{1-31}
Default value: current date
- montm** Indicates the monitored time. The value indicates the beginning time of day for the performance-monitoring period defined by *tmper*. The format is HH-MM. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: {0-23}-{0-59}
Default value: current time

Input Example:

```
RTRV-PM-VCCVOIP: :IOM-10-VCC-1;
```

Output Example:

```
lucent 2004-06-24 14:37:49
M 0 COMPLD
"IOM-10-VCC-1:CT,555555"
"IOM-10-VCC-1:CR,666666"
"IOM-10-VCC-1:AAL5CRCERR,0"
"IOM-10-VCC-1:AAL5ENCAPERR,0"
;
```

Related Commands: none

RTRV-PM-VOIPCKT

Command:

RTRV-PM-VOIPCKT: Retrieve Performance Monitors VoIP Circuit

Description:

RTRV-PM-VOIPCKT lets the user retrieve current and historical performance data for a Voice over IP (VoIP) termination (circuit).

Category: VoIP

Security: View

Input Format:

```
RTRV-PM-VOIPCKT:[TID]:<voipCktId>:[CTAG]:[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>;
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<voipCktId>:<montype>,<monval>,[<vldty>],[<locn>],  
    [<dirn>],[<tmper>],[<mondatt>],[<montm>]"  
;
```

Parameters:

voipCktId Identifies the AID as a VoIP termination (circuit), either as a MEGACO context or in MEGACO termination ID format.

Type: string

Range: CTXT-<ctxId>, where *ctxId* = {0-4294967295}

TERM-<voipTermId>, where *voipTermId* is a string of alphanumeric characters, in the form:

VoIP termination type / slot / physical network interface
port / numeric ID for the VoIP termination =

I/{1-17}/<ipNetIntfc>/<voipRscId>, where

ipNetIntfc = {1-4}, and

voipRscId = 32-bit field printed as hex (eight hex
digits)

Default value: none

montype Identifies a type of monitored parameter for the specified VCC.

Type: enum

Range: ALL = All types

JBCOUNT = Current jitter buffer count

JITTER = Average inter-arrival jitter

JITTERPEER = Peer's inter-arrival jitter

OCTRX = Octets received

OCTTX = Octets transmitted

PKTLOST = Packets lost

PKTLOSTPEER = Packets that didn't make it to the peer

PKTRX = Packets received

PKTSIDRX = SID (Silence Insertion Descriptor) packets received

PKTSIDTX = SID packets transmitted

PKTTX = Packets transmitted

RTCPPKTRX = RTCP packets received (presently unsupported)

RTCPPKTTX = RTCP packets transmitted (presently unsupported)

RTDELAY = Round trip delay (presently unsupported)

SDULOST = SDU (Service Data Units) lost

Default value: ALL

monval Identifies (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates.

Type: integer

Range: {0-4294967295}

Default value: 0

monlev Indicates the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it. This parameter is not supported presently; leave it blank – its value will be “NULL”.
- Type:** enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: not applicable for output
- locn** Identifies the location of the storage counters from which to retrieve performance data. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: BTH = Both directions
RCV = Receive direction only
TRMT = Transmit direction only
Default value: BTH
- tmper** The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: {1}-DAY = Time interval is exactly one day
{1-24}-HR = Interval of one to 24 hours (one day)
{1-1440}-MIN = Interval of one to 1440 minutes (one day)
Default value: 15-MIN

mondatt Indicates the monitored date. The value indicates the beginning date for the performance-monitoring period defined by *tmper*. The format is MM-DD. This parameter is not supported presently; leave it blank.

Type: enum

Range: {1-12}-{1-31}

Default value: current date

montm Indicates the monitored time. The value indicates the beginning time of day for the performance-monitoring period defined by *tmper*. The format is HH-MM. This parameter is not supported presently; leave it blank.

Type: enum

Range: {0-23}-{0-59}

Default value: current time

Input Example:

```
RTRV-PM-VOIPCKT::CTXT-1;
```

Output Example:

```
lucent 2004-06-24 14:37:49
M 0 COMPLD
"CTXT-1:OCTTX,555555"
"CTXT-1:PKTTX,111111"
"CTXT-1:PKTSIDTX,0"
"CTXT-1:JITTER,0"
"CTXT-1:OCTRX,0"
"CTXT-1:PKTRX,0"
"CTXT-1:PKTLOST,0"
"CTXT-1:PKTSIDRX,0"
"CTXT-1:PKTLOSTPEER,0"
"CTXT-1:JITTERPEER,0"
"CTXT-1:SDULOST,0"
"CTXT-1:JBCOUNT,0"
"CTXT-1:RTDELAY,0"
"CTXT-1:RTCPPKTTX,0"
"CTXT-1:RTCPPKTRX,0"
;
```

Related Commands: none

RTRV-STATUS-CTXT

Command:

RTRV-STATUS-CTXT: Retrieve Status Context

Description:

RTRV-STATUS-CTXT lets the user retrieve information on TDM and packet terminations used on a MEGACO call.

Category: VoIP

Security: View

Input Format:

```
RTRV-STATUS-CTXT:[TID]:[<ctxtId>]:[CTAG]::
[<ctxtsRqst>;
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"CTXTID=<ctxtId>, DURATION=<duration>,
  PRIORITY=<priority>, EMERGENCYIND=<emergencyInd>,
  TDMTERMIDLIST=<tdmTermIdList>,
  DS0IDLIST=<ds0IdList>,
  VOIPTERMIDLIST=<voipTermIdList>,
  TOPOLOGYLIST=<topologyList>, CONFRSC=<confRsc>,
  TOTALCTXTS=<totalCtxts>"
;
```

Parameters:

ctxtId Identifies the AID as a MEGACO context. A null value is equivalent to "ALL"; that is, by leaving the field blank, information for the number of VoIP contexts specified by *ctxtsRqst* will be returned.

Type: integer

Range: {0-4294967295}

Default value: none

- ctxtsRqst** Identifies (in input) the number of contexts for which to retrieve information.
Type: integer
Range: {1-32767}
Default value: 20
- duration** Identifies the duration, in seconds, since creation of the context.
Type: integer
Range: {0-4294967295}
Default value: none
- priority** Identifies the priority assigned to the context. This parameter is not supported presently; it will always be “0”.
Type: integer
Range: {0-65535}
Default value: none
- emergencyInd** Identifies whether to indicate if a context is an emergency (911) call. This parameter is not supported presently; it will always be “OFF”.
Type: enum
Range: OFF = emergency call indicator off
ON = emergency call indicator on
Default value: none
- tdmTermIdList** Identifies a list of TDM terminations for the context in MEGACO termination ID format, separated by ampersands (&).
Type: string
Range: <tdmTermId>[&<tdmTermId>][&...]], where
<tdmTermId> = up to 32 alphanumeric characters, in the form:
TDM termination type / slot / port / channel =
T/{1-17}/{1-224}/{1-31}, where
channel = {1-24} for T1, {1-31} for E1
Default value: NULL

ds0IdList Identifies a list of TDM terminations for the context in DS0 AID format, separated by ampersands (&).

Type: string

Range: alphanumeric characters, in one of the following forms:

IOM-{1-17}-E1-{1-28}-T0-{1-31}

IOM-{1-17}-OC3-{1-4}-STS1-{1-3}-PORT-{1-28}-T0-{1-24}

IOM-{1-17}-PORT-{1-28}-T0-{1-24}

IOM-{1-17}-STM1-{1-4}-E1-{1-63}-T0-{1-31}

IOM-{1-17}-STM4-1-E1-{1-252}-T0-{1-31}

IOM-{1-17}-STS1-{1-8}-PORT-{1-28}-T0-{1-24}

IOM-{1-17}-T3-{1-8}-PORT-{1-28}-T0-{1-24}

Default value: NULL

voipTermIdList Identifies a list of VoIP terminations for the context, separated by ampersands (&).

Type: string

Range: <voipTermId>[&<voipTermId>][&...]], where

<voipTermId> = up to 32 alphanumeric characters, in the form:

VoIP termination type/slot/physical network interface
port/numeric ID for the VoIP termination =

I/{1-17}/<ipNetIntfc>/<voipRscId>, where

ipNetIntfc = {1-4}, and

voipRscId = 32-bit field printed as hex (eight hex
digits)

Default value: NULL

topologyList Identifies a list of topology specifications, separated by ampersands (&), for the context.

Type: string

Range: alphanumeric characters, in the form:

Source termination – Destination termination – Relationship,
where the terminations can be in the formats shown by
tdmTermIdList and *voipTermIdList*, and the relationship
can be ONEWAY, BOTHWAYS, or ISOLATE. When
all source terminations relate (ONEWAY) to a single
destination termination (such as a Law Enforcement
Agency), the source terminations can be represented as a
group with a single asterisk (“*”).

Default value: NULL

confRsc Identifies a conference resource for the context.

Type: string

Range: alphanumeric characters, in the form:

Chassis/Termination type/numeric ID for the conference
resource =

<mgName>/CONF/<confRscId>, where

mgName = up to 30 characters

confRscId = 32-bit field printed as hex (eight hex digits)

Default value: NULL

totalCtxts Identifies the total number of active contexts.

Type: integer

Range: {0-65535}

Default value: none

Input Example:

```
RTRV-STATUS-CTXT;
```

Output Example:

```
lucent 2004-06-24 14:37:49
M 0 COMPLD
"CTXTID=50000003,DURATION=245015,PRIORITY=0,
  EMERGENCYIND=OFF,TDMTERMIDLIST=T/6/1/1&T/6/1/2,
  DS0IDLIST=IOM-6-T3-1-PORT-1-T0-1&IOM-6-T3-1-PORT
    -1-T0-2,
  VOIPTERMIDLIST=NULL,TOPOLOGYLIST=NULL,
  CONFRSC=NULL,TOTALCTXTS=200"
"CTXTID=50000004,DURATION=245015,PRIORITY=0,
  EMERGENCYIND=OFF,TDMTERMIDLIST=T/6/1/3&T/6/1/4,
  DS0IDLIST=IOM-6-T3-1-PORT-1-T0-3&IOM-6-T3-1-PORT
    -1-T0-4,
  VOIPTERMIDLIST=NULL,TOPOLOGYLIST=NULL,
  CONFRSC=NULL,TOTALCTXTS=200"
;
```

Related Commands: none

RTRV-STATUS-TDMTERMID

Command:

RTRV-STATUS-TDMTERMID: Retrieve Status TDMTERMID

Description:

RTRV-STATUS-TDMTERMID lets the user retrieve information on TDM terminations used on a MEGACO call.

Category: VoIP

Security: View

Input Format:

RTRV-STATUS-TDMTERMID: [TID]:<tdmTermId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<tdmTermId>,<ds0Id>:CTXTID=<ctxtId>,
    DURATION=<duration>,MODE=<mode>,
    ECHOCANCSTATE=<echocancstate>,
    ECHONLPSTATUS=<echonlpstatus>,
    ECHOTAIL=<echotail>,ECDISABLE=<ecDisable>,
    ECHOCANCRSC=<echoCancRsc>,TXGAIN=<txGain>,
    RXGAIN=<rxGain>,TDMCOMPAND=<tdmCompand>,
    TDMSTATUS=<tdmStatus>"
;
```

Parameters:

tdmTermId Identifies the AID as a TDM termination, either in MEGACO termination ID format or in DS0 AID format.

Type: string

Range: <tdmTermId>
<ds0Id>

Default value: none

tdmTermId Identifies the first possible value for the input AID and the first term in the output AID block as a TDM termination in MEGACO termination ID format.

Type: string

Range: alphanumeric characters in the form:
TDM termination type / slot / port / channel =
T/{1-17}/{1-224}/{1-31}, where
channel = {1-24} for T1, {1-31} for E1

Default value: none

ds0Id Identifies the second possible value for the input AID and the second term in the output AID block as a TDM termination in DS0 AID format.

Type: string

Range: alphanumeric characters in one of the following forms:
IOM-{1-17}-E1-{1-28}-T0-{1-31}
IOM-{1-17}-OC3-{1-4}-STS1-{1-3}-PORT-{1-28}-T0-
{1-24}
IOM-{1-17}-PORT-{1-28}-T0-{1-24}
IOM-{1-17}-STM1-{1-4}-E1-{1-63}-T0-{1-31}
IOM-{1-17}-STM4-1-E1-{1-252}-T0-{1-31}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}-T0-{1-24}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}-T0-{1-24}

Default value: none

ctxtId Identifies the MEGACO context.

Type: integer

Range: {0-4294967295}

Default value: none

duration Identifies the duration, in seconds, since the addition of the termination to the context.

Type: integer

Range: {0-4294967295}

Default value: none

- mode** Identifies the transmit mode for the termination.
Type: enum
Range: INACTIVE = termination not in use
LOOPBACK = termination in loopback
RECV_ONLY = receive only
SEND_ONLY = transmit only
SEND_RECV = transmit and receive
Default value: none
- echocancstate** Identifies whether echo cancellation can be enabled; that is, whether the termination has an associated DSP resource for echo cancellation.
Type: enum
Range: OFF = echo cancellation cannot be enabled
ON = echo cancellation can be enabled
Default value: none
- echonlpstatus** Identifies whether the non-linear part of echo cancellation is currently enabled.
Type: enum
Range: OFF = echo cancellation disabled
ON = echo cancellation enabled
Default value: none
- echotail** Identifies the number of milliseconds after a transmission during which echoes are cancelled (when the value of *echonlpstatus* is “ON”).
Type: integer
Range: {0-128}
Default value: none
- ecDisable** Identifies the echo canceller disable policy for the termination.
Type: enum
Range: G164
G165
G168
NONE
Default value: none
- echoCancRsc** Identifies the resource for echo cancellation. The value “0” indicates no echo cancellation resource.
Type: string
Range: up to eight hexadecimal characters
Default value: none

txGain Identifies the transmit gain for the termination in decibels.

Type: enum

Range: {6, 4, 3, 2, 0, -2, -3, -4, -6, -8, -9, -10, -12, -15}

Default value: none

rxGain Identifies the receive gain for the termination in decibels.

Type: enum

Range: {6, 4, 3, 2, 0, -2, -3, -4, -6, -8, -9, -10, -12, -15}

Default value: none

tdmCompand Identifies the companding type for the termination; that is, the PCM encoding method used in the analog-to-digital network conversion. The wide dynamic range of speech does not lend itself well to efficient linear digital encoding. A-law and Mu-law encoding effectively reduce the dynamic range of the signal, thereby increasing the coding efficiency and resulting in a signal-to-distortion ratio that is greater than that obtained by linear encoding for a given number of bits.

Type: enum

Range: ALAW = a-law algorithm: A standard compression algorithm, used in digital communications systems of the European digital hierarchy to optimize the dynamic range of an analog signal for digitizing.

LINEAR = linear encoding

MULAW = mu-law (μ -law) algorithm: A standard compression algorithm, used in digital communications systems of the North American digital hierarchy to optimize the dynamic range of an analog signal for digitizing.

Default value: none

tdmstatus Identifies the state of the TDM channel (DS0).

Type: enum

Range: IS = In-service

OOS = Out-of-service

OOS-MGC = DS0 provisioned out-of-service (via ED-T0)

Default value: none

Input Example:

```
RTRV-STATUS-TDMTERMID::T/6/1/1;
```

Output Example:

```
lucent 2004-06-24 14:37:49
M 0 COMPLD
  "T/6/1/1,IOM-6-T3-1-PORT-1-T0-1:CTXTID=2000003,
    DURATION=305,MODE=SEND_RECV,ECHOCANCSTATUS=ON,
    ECHONLPSTATUS=OFF,ECHOTAIL=32,
    ECHOCANCDISABLER=G164,ECHOCANCRSC=00040000,
    TXGAIN=0,RXGAIN=0,TDMCOMPAND=MULAW,TDMSTATUS=IS"
;
```

Related Commands: none

RTRV-STATUS-VOIPTERMID

Command:

RTRV-STATUS-VOIPTERMID: Retrieve Status VOIPTERMID

Description:

RTRV-STATUS-VOIPTERMID lets the user retrieve information on packet terminations.

Category: VoIP

Security: View

Input Format:

RTRV-STATUS-VOIPTERMID: [TID]:<voipTermId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<voipTermId>:CTXTID=<ctxtId>,DURATION=<duration>,
  MODE=<mode>,LOCALIP=<localIp>,
  LOCALUDPPORT=<localUdpPort>,REMOTEIP=<remoteIp>,
  REMOTEUDPPORT=<remoteUdpPort>,
  LOCALCODEC=<localCodec>,
  REMOTECODEC=<remoteCodec>"
;
```

Parameters:

voipTermId Identifies the AID as a packet termination.

Type: VoipTermId

Range: up to 32 alphanumeric characters, in the form:

VoIP termination type / slot / physical network interface port
/ numeric ID for the VoIP termination =

I/{1-17}/<ipNetIntfc>/<voipRscId>, where

ipNetIntfc = {1-4}, and

voipRscId = 32-bit field printed as hex (eight hex digits)

Default value: none

ctxtId Identifies the MEGACO context containing the termination.

Type: integer

Range: {0-4294967295}

Default value: none

duration Identifies the duration of the call in seconds.

Type: integer

Range: {0-65535}

Default value: none

mode Identifies the transmit mode.

Type: enum

Range: INACTIVE = termination inactive

LOOPBACK = termination in loopback

RECV_ONLY = receive

SEND_ONLY = transmit

SEND_RECV = transmit and receive

Default value: none

localIp Identifies the local IP address.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

localUdpPort Identifies the local UDP port.

Type: integer

Range: {1025-66535}

Default value: none

remoteIp Identifies the remote IP address.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

remoteUdpPort Identifies the remote UDP port.

Type: integer

Range: {1025-66535}

Default value: none

localCodec Identifies the audio codec (coding/decoding algorithm types) used at the near end.

Type: enum

Range: CISCOCLEARCHANNEL = encoding algorithm for the transmission of clear channel data (unrestricted digital data, that is, ISDN HDLC traffic) in an RTP media stream
CLEARMODE = encoding algorithm for the transmission of clear channel data (unrestricted digital data, that is, ISDN HDLC traffic) in an RTP media stream
G711 = G.711 for mu-law PCM encoding (North America)
G711ALAW = G.711 for a-law PCM encoding (Europe)
G723_53 = G.723 encoding at 5.3 Kbps
G723_63 = G.723 encoding at 6.3 Kbps
G726_16 = G.726 encoding at 16 Kbps (currently unsupported)
G726_24 = G.726 encoding at 24 Kbps (currently unsupported)
G726_32 = G.726 encoding at 32 Kbps
G726_40 = G.726 encoding at 40 Kbps (currently unsupported)
G729 = G.729A encoding
G729E = G.729E encoding (currently unsupported)
NULL = no value specified
X_CCD = encoding algorithm for the transmission of clear channel data (unrestricted digital data, that is, ISDN HDLC traffic) in an RTP media stream

Default value: none

remoteCodec Identifies the audio codec (coding/decoding algorithm types) used at the far end.

Type: enum

Range: CISCOCLEARCHANNEL = encoding algorithm for the transmission of clear channel data (unrestricted digital data, that is, ISDN HDLC traffic) in an RTP media stream
CLEARMODE = encoding algorithm for the transmission of clear channel data (unrestricted digital data, that is, ISDN HDLC traffic) in an RTP media stream
G711 = G.711 for mu-law PCM encoding (North America)
G711ALAW = G.711 for a-law PCM encoding (Europe)
G723_53 = G.723 encoding at 5.3 Kbps
G723_63 = G.723 encoding at 6.3 Kbps
G726_16 = G.726 encoding at 16 Kbps (currently unsupported)
G726_24 = G.726 encoding at 24 Kbps (currently unsupported)
G726_32 = G.726 encoding at 32 Kbps
G726_40 = G.726 encoding at 40 Kbps (currently unsupported)
G729 = G.729A encoding
G729E = G.729E encoding (currently unsupported)
NULL = no value specified
X_CCD = encoding algorithm for the transmission of clear channel data (unrestricted digital data, that is, ISDN HDLC traffic) in an RTP media stream

Default value: none

Input Example:

```
RTRV-STATUS-VOIPTERMID: :LUCENT/VOIP/I9/N1/900e49f;
```

Output Example:

```
lucent 2004-06-24 14:37:49
M 0 COMPLD
"LUCENT/VOIP/I9/N1/900e49f:CTXTID=30000004,
  DURATION=9,LOCALIP=70.0.1.11,LOCALUDPPORT=2000,
  REMOTEIP=70.0.1.11,REMOTEUDPPORT=2000,
  LOCALCODEC=G711,REMOTECODEC=G711"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SNMP-ACCESS

Commands:

DLT-SNMP-ACCESS: Delete SNMP Access

ED-SNMP-ACCESS: Edit SNMP Access

ENT-SNMP-ACCESS: Enter SNMP Access

RTRV-SNMP-ACCESS: Retrieve SNMP Access

Descriptions:

DLT-SNMP-ACCESS lets the user delete an SNMP access group.

ED-SNMP-ACCESS lets the user change the views associated with an SNMP access group.

ENT-SNMP-ACCESS lets the user establish an SNMP access group and its associated views.

RTRV-SNMP-ACCESS lets the user retrieve the views associated with an SNMP access group.

Category: VoIP

Security: NSA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-SNMP-ACCESS:[TID]:<SnpAccessAid>:[CTAG];  
ED-SNMP-ACCESS:[TID]:<SnpAccessAid>:[CTAG]::  
    [READVIEW=<ReadView>],[WRITEVIEW=<WriteView>],  
    [NOTIFYVIEW=<NotifyView>];  
ENT-SNMP-ACCESS:[TID]:<SnpAccessAid>:[CTAG]::  
    [READVIEW=<ReadView>],[WRITEVIEW=<WriteView>],  
    [NOTIFYVIEW=<NotifyView>];  
RTRV-SNMP-ACCESS:[TID]:[<SnpAccessAid>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
    "<SnpAccessAid>:READVIEW=<ReadView>,  
    WRITEVIEW=<WriteView>,NOTIFYVIEW=<NotifyView>"  
;
```

Parameters:

SnmAccessAid Identifies the AID as an SNMP access group. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all SNMP access groups in the system will be returned.

Type: SnmpAccessAid

Range: <GROUPNAME>[-{SECLEVEL}[-{SECMODEL}]], where

GROUPNAME = up to 32 alphanumeric characters
(including underscores “_”) used to identify a set of
views for access control

SECLEVEL = the minimum security level required by a
message to access the group. Allowed values are:

AUTHNOPRIV = authentication and no privacy
(default)

AUTHPRIV = authentication and privacy

NOAUTHNOPRIV = no authentication, no
privacy

SECMODEL = security model required for access to the
group. Allowed values are:

ANY = any security model

SNMPV1 = SNMP version 1 security

SNMPV2C = SNMP version 2c security

USM = User-Based Security (default)

Default value: none

ReadView Identifies the name of the read view for read access. If no view exists with this name then no access is authorized. A null value indicates no access.

Type: string

Range: up to 32 alphanumeric characters (including underscores “_”)

Default value: NULL

WriteView Identifies the name of the write view for write access. If no view exists with this name then no access is authorized. A null value indicates no access.

Type: string

Range: up to 32 alphanumeric characters (including underscores “_”)

Default value: NULL

NotifyView Identifies the name of the notify view for notify access. If no view exists with this name then no access is authorized. A null value indicates no access.

Type: string

Range: up to 32 alphanumeric characters (including underscores “_”)

Default value: NULL

Input Examples:

```
DLT-SNMP-ACCESS::LUCENT;  
ED-SNMP-ACCESS::LUCENT:::READVIEW=READ_VIEW,  
WRITEVIEW=WRITE_VIEW,NOTIFYVIEW=NOTIFY_VIEW;  
ENT-SNMP-ACCESS::LUCENT:::READVIEW=READ_VIEW,  
WRITEVIEW=WRITE_VIEW,NOTIFYVIEW=NOTIFY_VIEW;  
RTRV-SNMP-ACCESS::LUCENT;
```

Output Example:

```
lucent 2004-06-24 14:37:49  
M 0 COMPLD  
"LUCENT:READVIEW=READ_VIEW,WRITEVIEW=WRITE_VIEW,  
NOTIFYVIEW=NOTIFY_VIEW"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SNMP-COMM

Commands:

DLT-SNMP-COMM: Delete SNMP COMM

ED-SNMP-COMM: Edit SNMP COMM

ENT-SNMP-COMM: Enter SNMP COMM

RTRV-SNMP-COMM: Retrieve SNMP COMM

Descriptions:

DLT-SNMP-COMM lets the user delete a community string for SNMP requests.

ED-SNMP-COMM lets the user change the parameters associated with a community string for SNMP requests.

ENT-SNMP-COMM lets the user establish a community string for SNMP requests.

RTRV-SNMP-COMM lets the user retrieve the parameters associated with a community string for SNMP requests

Category: VoIP

Security: NSA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SNMP-COMM: [TID]:<CommStr>:[CTAG];

ED-SNMP-COMM: [TID]:<CommStr>:[CTAG]::
[IPADDR=<IpAddr>],[SUBNETMASK=<SubNetMask>],
[ACCESSTYPE=<AccessType>];

ENT-SNMP-COMM: [TID]:<CommStr>:[CTAG]::
[IPADDR=<IpAddr>],[SUBNETMASK=<SubNetMask>],
[ACCESSTYPE=<AccessType>];

RTRV-SNMP-COMM: [TID]: [<CommStr>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<CommStr>:IPADDRESS=<IpAddress>,
    SUBNETMASK=<SubNetMask>,ACCESS=<AccessType>"
;
```

Parameters:

CommStr Identifies the AID as a community string. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all community strings in the system will be returned.

Type: string

Range: up to 20 alphanumeric characters (including underscores “_”)

Default value: none

IpAddress Identifies the IP address of the Network Management Station for the community string. Use 0.0.0.0 for any host.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: 0.0.0.0

SubNetMask Identifies the subnet mask of the Network Management Station for the community string. Use 0.0.0.0 for any host and 255.255.255.255 for a single host.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: 0.0.0.0 for any host, 255.255.255.255 for a single host

AccessType Identifies the access privilege level allowed. READONLY is the only access level currently used.

Type: enum

Range: READONLY

READWRITE

Default value: READONLY

Input Examples:

```
DLT-SNMP-COMM: : COMMSTR1;
```

```
ED-SNMP-COMM: : COMMSTRING1::: IPADDR=192.0.24.57,  
SUBNETMASK=255.255.255.255, ACESSTYPE=READONLY;
```

```
ENT-SNMP-COMM: : COMMSTRING1::: IPADDR=192.0.24.57,  
SUBNETMASK=255.255.255.255, ACESSTYPE=READONLY;
```

```
RTRV-SNMP-COMM: : COMMSTR1;
```

Output Example:

```
lucent 2004-06-24 14:37:49
M 0 COMPLD
  "COMMSTRING1:IPADDRESS=192.0.24.57,
    SUBNETMASK=255.255.255.255,ACCESS=READONLY"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SNMP-TRAP

Commands:

DLT-SNMP-TRAP: Delete SNMP Trap
ED-SNMP-TRAP: Edit SNMP Trap
ENT-SNMP-TRAP: Enter SNMP Trap
RTRV-SNMP-TRAP: Retrieve SNMP Trap

Descriptions:

DLT-SNMP-TRAP lets the user delete an SNMP trap destination..

ED-SNMP-TRAP lets the user change the parameters for handling traps by the SNMP Agent.

ENT-SNMP-TRAP lets the user establish the parameters for handling traps by the SNMP Agent.

RTRV-SNMP-TRAP lets the user retrieve the parameters for handling traps by the SNMP Agent.

Category: VoIP

Security: NSA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-SNMP-TRAP:[TID]:<IpAddr>:[CTAG];  
ED-SNMP-TRAP:[TID]:<IpAddr>:[CTAG]::  
[COMMSTR=<CommStr>],[TRAPTYPE=<TrapType>],  
[ALLOWCRITICAL=<AllowCritical>],  
[ALLOWMAJOR=<AllowMajor>],  
[ALLOWMINOR=<AllowMinor>],  
[ALLOWEVENT=<AllowEvent>],[ALLOWT1=<AllowT1>],  
[ALLOWT3=<AllowT3>],[ALLOWSTS1=<AllowSTS1>],  
[ALLOWLINKUP=<AllowLinkUp>],  
[ALLOWLINKDOWN=<AllowLinkDown>],  
[ALLOWEQPT=<AllowEqpt>],[ALLOWOC=<AllowOC>],  
[ALLOWCOMM=<AllowComm>],[TRAPMODE=<TrapMode>];
```

```
ENT-SNMP-TRAP:[TID]:<IpAddr>:[CTAG]::  
[COMMSTR=<CommStr>],[TRAPTYPE=<TrapType>],  
[ALLOWCRITICAL=<AllowCritical>],  
[ALLOWMAJOR=<AllowMajor>],  
[ALLOWMINOR=<AllowMinor>],  
[ALLOWEVENT=<AllowEvent>],[ALLOWT1=<AllowT1>],  
[ALLOWT3=<AllowT3>],[ALLOWSTS1=<AllowSTS1>],  
[ALLOWLINKUP=<AllowLinkUp>],  
[ALLOWLINKDOWN=<AllowLinkDown>],  
[ALLOWEQPT=<AllowEqpt>],[ALLOWOC=<AllowOC>],  
[ALLOWCOMM=<AllowComm>],[TRAPMODE=<TrapMode>];  
  
RTRV-SNMP-TRAP:[TID]:[<IpAddr>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
"<IpAddress>:[COMMSTR=<CommStr>],  
 TRAPTYPE=<TrapType>,  
 ALLOWCRITICAL=<AllowCritical>,  
 ALLOWMAJOR=<AllowMajor>,ALLOWMINOR=<AllowMinor>,  
 ALLOWEVENT=<AllowEvent>,ALLOWT1=<AllowT1>,  
 ALLOWT3=<AllowT3>,ALLOWSTS1=<AllowSTS1>,  
 ALLOWLINKUP=<AllowLinkUp>,  
 ALLOWLINKDOWN=<AllowLinkDown>,  
 ALLOWEQPT=<AllowEqpt>,ALLOWOC=<AllowOC>,  
 ALLOWCOMM=<AllowComm>,TRAPMODE=<TrapMode>"  
;
```

Parameters:

IpAddr Identifies the IP address of a Network Management Station to which traps can be sent. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all Network Management Stations in the system will be returned.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

CommStr Identifies the community string for traps sent to the Network Management Station identified by *IpAddress*.

Type: string

Range: up to 20 alphanumeric characters (including underscores “_”)

Default value: TRAP

TrapType Identifies the type for traps sent to the Network Management Station identified by *IpAddress*.

Type: enum

Range: V1TRAP = send SNMPv1 trap

V2TRAP = send SNMPv2 trap

Default value: V1TRAP

AllowCritical Identifies whether the SNMP agent can send critical alarmed traps.

Type: BoolYN

Range: N = SNMP agent does not allow critical alarmed traps

Y = SNMP agent allows critical alarmed traps

Default value: Y

AllowMajor Identifies whether the SNMP agent can send major alarmed traps.

Type: BoolYN

Range: N = SNMP agent does not allow major alarmed traps

Y = SNMP agent allows major alarmed traps

Default value: Y

AllowMinor Identifies whether the SNMP agent can send minor alarmed traps.

Type: BoolYN

Range: N = SNMP agent does not allow minor alarmed traps

Y = SNMP agent allows minor alarmed traps

Default value: Y

AllowEvent Identifies whether the SNMP agent can send event traps.

Type: BoolYN

Range: N = SNMP agent does not allow event traps

Y = SNMP agent allows event traps

Default value: Y

AllowT1 Identifies whether the SNMP agent can send T1 traps.

Type: BoolYN

Range: N = SNMP agent does not allow T1 traps

Y = SNMP agent allows T1 traps

Default value: Y

AllowT3 Identifies whether the SNMP agent can send T3 traps.

Type: BoolYN

Range: N = SNMP agent does not allow T3 traps

Y = SNMP agent allows T3 traps

Default value: Y

AllowSTS1 Identifies whether the SNMP agent can send STS1 traps.

Type: BoolYN

Range: N = SNMP agent does not allow STS1 traps
Y = SNMP agent allows STS1 traps

Default value: Y

AllowLinkUp Identifies whether the SNMP agent can send traps when a link is “up”.

Type: BoolYN

Range: N = SNMP agent does not allow “link is up” traps
Y = SNMP agent allows “link is up” traps

Default value: Y

AllowLinkDown Identifies whether the SNMP agent can send traps when a link is “down”.

Type: BoolYN

Range: N = SNMP agent does not allow “link is down” traps
Y = SNMP agent allows “link is down” traps

Default value: Y

AllowEqpt Identifies whether the SNMP agent can send equipment traps.

Type: BoolYN

Range: N = SNMP agent does not allow equipment traps
Y = SNMP agent allows equipment traps

Default value: Y

AllowOC Identifies whether the SNMP agent can send OCn traps.

Type: BoolYN

Range: N = SNMP agent does not allow OCn traps
Y = SNMP agent allows OCn traps

Default value: Y

AllowComm Identifies whether the SNMP agent can send common traps; that is, all traps (signaling, billing, statistics, etc.) other than those in the previous parameters.

Type: BoolYN

Range: N = SNMP agent does not allow common traps
Y = SNMP agent allows common traps

Default value: Y

TrapMode Identifies whether to map all events into approximately 16 traps, or to have a one-to-one mapping between events and traps (that is, each event maps to a trap with a unique OID).

Type: BoolYN

Range: GENERIC = map all events into approximately 16 traps
SPECIFIC = one-to-one mapping between events and traps

Default value: GENERIC

Input Examples:

```
DLT-SNMP-TRAP::192.0.24.57;  
ED-SNMP-TRAP::192.0.24.57:::COMMSTR=TRAP,  
  TRAPTYPE=V1TRAP,ALLOWCRITICAL=Y,ALLOWMAJOR=Y,  
  ALLOWMINOR=Y,ALLOWEVENT=Y,ALLOWT1=Y,ALLOWT3=Y,  
  ALLOWSTS1=Y,ALLOWLINKUP=Y,ALLOWLINKDOWN=Y,  
  ALLOWEQPT=Y,ALLOWOC=Y,ALLOWCOMM=Y,TRAPMODE=GENERIC;  
ENT-SNMP-TRAP::192.0.24.57:::COMMSTR=TRAP,  
  TRAPTYPE=V1TRAP,ALLOWCRITICAL=Y,ALLOWMAJOR=Y,  
  ALLOWMINOR=Y,ALLOWEVENT=Y,ALLOWT1=Y,ALLOWT3=Y,  
  ALLOWSTS1=Y,ALLOWLINKUP=Y,ALLOWLINKDOWN=Y,  
  ALLOWEQPT=Y,ALLOWOC=Y,ALLOWCOMM=Y,TRAPMODE=GENERIC;  
RTRV-SNMP-TRAP::192.0.24.57;
```

Output Example:

```
lucent 2004-06-24 14:37:49  
M 0 COMPLD  
  "192.0.24.57:COMMSTR=TRAP,TRAPTYPE=V1TRAP,  
    ALLOWCRITICAL=Y,ALLOWMAJOR=Y,ALLOWMINOR=N,  
    ALLOWEVENT=Y,ALLOWT1=Y,ALLOWT3=Y,ALLOWSTS1=Y,  
    ALLOWLINKUP=Y,ALLOWLINKDOWN=Y,ALLOWEQPT=Y,  
    ALLOWOC=Y,ALLOWCOMM=Y,TRAPMODE=GENERIC"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SNMP-USER

Commands:

DLT-SNMP-USER: Delete SNMP User
ED-SNMP-USER: Edit SNMP User
ENT-SNMP-USER: Enter SNMP User
RTRV-SNMP-USER: Retrieve SNMP User

Descriptions:

DLT-SNMP-USER lets the user delete an SNMPv3 user for SNMPv3 access.

ED-SNMP-USER lets the user change the group name, authentication password, and privacy password for an SNMPv3 user for SNMPv3 access.

ENT-SNMP-USER lets the user establish an SNMPv3 user for SNMPv3 access.

RTRV-SNMP-USER lets the user retrieve the authentication protocol, privacy protocol, and group name for an SNMPv3 user.

Category: VoIP

Security: NSA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-SNMP-USER: [TID]:<UserName>:[CTAG];  
ED-SNMP-USER: [TID]:<UserName>:[CTAG]::  
    [GRPNAME=<GrpName>]:<AuthPasswd>,<PrivPasswd>];  
ENT-SNMP-USER: [TID]:<UserName>:[CTAG]::  
    AUTHTYPE=<AuthType>, PRIVTYPE=<PrivType>,  
    GRPNAME=<GrpName>:[<AuthPasswd>],[<PrivPasswd>];  
RTRV-SNMP-USER: [TID]: [<UserName>]: [CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
    "<UserName>:AUTHTYPE=<AuthType>,  
    PRIVTYPE=<PrivType>,GRPNAME=<GrpName>"  
;
```

Parameters:

UserName Identifies the AID as an SNMPv3 user name. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all SNMPv3 users in the system will be returned.

Type: string

Range: up to 32 alphanumeric characters (including underscores "_")

Default value: none

AuthType Identifies the authentication protocol for the user.

Type: enum

Range: MD5 = authentication protocol HMAC-MD5-96

NONE = no authentication

SHA = authentication protocol HMAC-SHA-96

Default value: none

PrivType Identifies the privacy protocol for the user. The value of *PrivType* must be "NONE" when the value of *SnmpAuth* is "NONE".

Type: enum

Range: DES = privacy protocol CBC-DES

NONE = no privacy

Default value: none

GrpName Identifies the name of the group that the user belongs to for access control. The group does not have to be created in order to assign the group name for a user but until the group is created the user effectively is not enabled to access any information in the SNMP entity (agent).

Type: string

Range: up to 32 alphanumeric characters (including underscores "_")

Default value: none

AuthPasswd Identifies the password used to generate the authentication key. The entered password displays as a series of asterisks.

Type: string

Range: 8 to 63 alphanumeric characters (including underscores "_")

Default value: none

PrivPasswd Identifies the password used to generate the privacy key. It cannot be the same value as the authentication password. The entered password displays as a series of asterisks.

Type: string

Range: 8 to 63 alphanumeric characters (including underscores "_")

Default value: none

Input Examples:

```
DLT-SNMP-USER::SNMPUSER1;  
ED-SNMP-USER::SNMPUSER1::GRPNAME=LUCENT:*****,  
*****;  
ENT-SNMP-USER::SNMPUSER1::AUTHTYPE=NONE,  
PRIVTYPE=NONE,GRPNAME=LUCENT:*****,*;  
RTRV-SNMP-USER::SNMPUSER1;
```

Output Example:

```
lucent 2004-06-24 14:37:49  
M 0 COMPLD  
"SNMPUSER1:AUTHTYPE=NONE,PRIVTYPE=NONE,  
GRPNAME=LUCENT"  
;
```

Related Commands: none

DLT/ENT/RTRV-SNMP-VIEW

Commands:

DLT-SNMP-VIEW: Delete SNMP View

ENT-SNMP-VIEW: Enter SNMP View

RTRV-SNMP-VIEW: Retrieve SNMP View

Descriptions:

DLT-SNMP-VIEW lets the user delete a view associated with SNMP access groups.

ENT-SNMP-VIEW lets the user establish a view associated with SNMP access groups.

RTRV-SNMP-VIEW lets the user retrieve the view types and masks associated with SNMP access groups.

Category: VoIP

Security: NSA for DLT and ENT, View for RTRV

Input Formats:

DLT-SNMP-VIEW: [TID]:<SnmViewAid>:[CTAG];

ENT-SNMP-VIEW: [TID]:<SnmViewAid>:[CTAG]::
[VIEWTYPE=<ViewType>],[VIEWMASK=<ViewMask>];

RTRV-SNMP-VIEW: [TID]: [<SnmViewAid>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<SnmViewAid>:VIEWTYPE=<ViewType>,
    VIEWMASK=<ViewMask>"
;
```

Parameters:

SnmViewAid Identifies the AID as an SNMP access group view. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all SNMP access group views in the system will be returned. A null value for the second part of the AID (in DLT and RTRV) lets the user delete or retrieve the types and masks for an entire set of view trees.

Type: SnmpViewAid

Range: <VIEWNAME>[-<VIEWTREE>], where

VIEWNAME = up to 32 alphanumeric characters
(including underscores “_”) used to identify a set of
view trees

VIEWTREE = up to 63 digits (0-9) and periods (“.”) that
identify the view subtree in numerical dotted notation.
For example, the object identifier (OID) for the
Internet is “1.3.6.1”.

Default value: none

ViewType Identifies whether the view is included in the MIB view.

Type: enum

Range: EXCLUDED = view is not included in the MIB view
INCLUDED = view is included in the MIB view

Default value: INCLUDED

ViewMask Identifies the view tree bit mask (an octet string of 0 to 16 octets) where each bit represents whether to wildcard the corresponding object sub-identifier in the view tree. If the bit value is “0” then the sub-identifier is wildcarded and any value matches. The viewmask is extended with “1”s to match the number of sub-identifiers in the view tree.

Type: string

Range: 0 to 16 octets (hex bytes)
NULL

Default value: NULL

Input Examples:

DLT-SNMP-VIEW::INTERNET-1.3.6.1;

ENT-SNMP-VIEW::INTERNET-1.3.6.1:VIEWTYPE=INCLUDED,
VIEWMASK=NULL;

RTRV-SNMP-VIEW::INTERNET-1.3.6.1;

Output Example:

```
      lucent 2004-06-24 14:37:49  
M    0 COMPLD  
      "INTERNET-1.3.6.1:VIEWTYPE=INCLUDED,VIEWMASK=NULL"  
      ;
```

Related Commands: none

ED/RTRV-SNMP-SYS

Commands:

ED-SNMP-SYS: Edit SNMP System

RTRV-SNMP-SYS: Retrieve SNMP System

Descriptions:

ED-SNMP-SYS lets the user configure SNMP Agent parameters and Trap Rate Limiting.

RTRV-SNMP-SYS lets the user retrieve Trap Rate Limiting and SNMP Agent parameters.

Category: VoIP

Security: NSA for ED, View for RTRV

Input Formats:

```
ED-SNMP-SYS:[TID]:[<src>]:[CTAG]::
[TRAPLIMITCNT=<TrapLimitCnt>],
[TRAPLIMITPERIOD=<TrapLimitPeriod>],
[SNMPENB=<SnpEnb>],[AUTHTRAPENB=<AuthTrapEnb>],
[SYSNAME=<SysName>],[SYSCONTACT=<SysContact>];

RTRV-SNMP-SYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<src>:TRAPLIMITCNT=<TrapLimitCnt>,
TRAPLIMITPERIOD=<TrapLimitPeriod>,
SNMPENB=<SnpEnb>,[AUTHTRAPENB=<AuthTrapEnb>],
[SYSNAME=<SysName>],[SYSCONTACT=<SysContact>]"
;
```

Parameters:

src Identifies the AID as the switch media gateway.

Type: COM

Range: COM

Default value: COM

TrapLimitCnt Identifies the trap rate limit count – the maximum number of traps that can be sent by the SNMP agent during the time period defined by *TrapLimitPeriod*. Setting the value to “0” prevents the SNMP agent sending any traps. The factory default is 65535.

Type: integer

Range: {0-65535}

Default value: not applicable

TrapLimitPeriod Identifies the time period, in seconds, during which the SNMP agent can send traps. The factory default is 60 seconds.

Type: integer

Range: {0-65535}

Default value: not applicable

SnmplibEnb Identifies whether the SNMP agent can process incoming messages and send traps. The factory default is “Y”.

Type: BoolYN

Range: N = SNMP agent not enabled
Y = SNMP agent enabled

Default value: not applicable

AuthTrapEnb Identifies whether the SNMP agent can send “authentication failure” traps. The factory default is “Y”.

Type: BoolYN

Range: N = SNMP agent not enabled to send “authentication failure” traps
Y = SNMP agent enabled to send “authentication failure” traps

Default value: not applicable

SysName Identifies the system name for the SNMP agent. The factory default is the fully qualified domain name.

Type: string

Range: up to 63 alphanumeric characters (including underscores “_”)

Default value: not applicable

SysContact Identifies the name of the system administrator for the SNMP agent. The factory default is “NULL”.

Type: string

Range: up to 63 alphanumeric characters (including underscores “_”)

Default value: not applicable

Input Examples:

```
ED-SNMP-SYS::COM:::TRAPLIMITCNT=10,TRAPLIMITPERIOD=10,  
  SNMPENB=Y,AUTHTRAPENB=Y,SYSNAME=LUCENT.LUCENT.COM,  
  SYSCONTACT=JOHN_STAMAND;  
  
RTRV-SNMP-SYS;
```

Output Example:

```
    lucent 2004-06-24 14:37:49  
M    0 COMPLD  
    "COM:TRAPLIMITCNT=65535,TRAPLIMITPERIOD=60,  
      SNMPENB=Y,AUTHTRAPENB=Y,  
      SYSNAME=LUCENT.LUCENT.COM,  
      SYSCONTACT=JOHN_STAMAND"  
    ;
```

Related Commands: none

CANC

Message:

CANC: Cancel

Description:

CANC is an automatic message transmitted by the switch to an administrator when a session established by a user is terminated because of "timeout"; i.e., no messages were exchanged during a given interval.

Category: Automatic Messages

Security: ADMIN

Input Format: none

Output Format:

```
      SID DATE TIME
A  ATAG  CANC
    "<uid>"
;
```

Parameters:

uid Identifies the user. The UID is the user ID or login name.

Range: 8 – 16 characters

Output Example:

```
      lucent 2005-06-24 14:37:49
A  1  CANC
    "JOHNUSER"
    /*  CANC  */
;
```

REPT ALM <ReptAid>

Message:

REPT ALM <ReptAid>: Report Alarm (ALL, COM, ENET, EQPT, STS1, T1, T3)

Description:

REPT ALM messages are generated automatically by the switch to report the onset or clearing of an alarm condition that requires immediate attention. Non-alarmed conditions are reported with REPT EVT. REPT ALM does not signal environmental alarms.

Category: Automatic Messages

Security: View

Input Format: none

Output Format:

```
SID DATE TIME
** ATAG REPT ALM <ReptAid>
  "<alm_id>:<ntfcncde>,<condtype>,<srveff>,<ocrdat>,<ocrtm>,<locn>,<dirn>,<monval>,<thlev>,<tmper>]:<conddescr>,<aiddet>,<obsdbhvr>,<exptdbhvr>]:<termination>,<tblislt>]"
;
```

Parameters:

ReptAid Identifies the type of entity within the switch from which to retrieve alarms.

Type: ReptAid

Range: ALL = Designates the switch and all entities within it
COM = Common – designates the switch as a discreet entity
ENET = Ethernet ports
EQPT = Equipment – designates major assemblies
STS1 = STS1 ports
T1 = T1 ports
T3 = T3 ports

Default value: none

- alm_id** Identifies the specific entity within the switch to which the message pertains.
Range: ASCII characters
- ntfcncde** The notification code of the event that caused the condition to be reported. This indicates the alarm level.
Range: CL = Cleared. Never used in provisioning requests or returned in RTRVs - only active conditions are available through the RTRV-EVT/COND/ALM messages and by definition their notification codes are never CL/CLEAR.
CR = Critical
MJ = Major
MN = Minor
NA = Not Alarmed
- condtype** Indicates the condition type for an alarm or a reported event.
Range: alphanumeric characters
- srveff** The effect on service caused by the alarm condition.
Range: SA = Service-affecting condition.
NSA = Non-service-affecting condition
- ocrdat** Date when the specific event or violation occurred.
Range: {1-12}-{1-31} = {month}-{day of month}
- ocrtm** Time when the specific event or violation occurred.
Range: {0-23}-{0-59}-{0-59} = {hour}-{minute}-{second}
{0-23}-{0-59} = {hour}-{minute}
- locn** Indicates the location of the storage registers or event counters where the specific event or violation occurred. A null value defaults to all applicable locations.
Range: FEND = Far end
NEND = Near end

- dirn** The direction relative to the IOM or port on an IOM in the switch to which the command pertains. A null value defaults to all applicable directions.
- Range:** AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive
- monval** Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* is to be initialized. The value is in the form of numeric counts or rates. A null value indicates that there is no measured value associated with this trouble or event, or it is not accessible for remote reporting.
- Range:** {1-9999}
- thlev** Identifies the threshold level. *thlev* is reported if the alarm report has resulted from a degradation that has exceeded the defined or specified threshold level. A null value indicates that there is no threshold level associated with this event, or it is not accessible for remote reporting.
- Range:** {1-9999}
- tmper** The accumulation period for performance counters. A null value defaults to “not applicable”.
- Range:** {1}-DAY = Time interval is exactly one day
{1-24}-HR = Interval of one to 24 hours (one day)
{1-1440}-MIN = Interval of one to 1440 minutes (one day)
- conddescr** Describes the alarm condition. A null value in this parameter means there is no information to report.
- Range:** alphanumeric characters
- aiddet** Specifies additional details about the entity being managed. Identifies the supplementary equipment used to identify the location of the reported trouble. A null value in this parameter means there is no information to report.
- Range:** COM
ENTITYID

obsdbhvr Identifies the observed behavior that resulted in the reported trouble. A null value in this parameter means there is no information to report.

Range: alphanumeric characters

exptdbhvr Identifies the expected behavior whose deviation is described in *obsdbhvr*. A null value in this parameter means there is no information to report.

Range: alphanumeric characters

termination Indicates how the diagnostic routine terminated in the event of a failure. A null value in this parameter means there is no information to report.

Range: IMED = Procedure stopped testing a unit when failure was received, and proceeded to any remaining equipment units.

NORM = The diagnostic terminated normally. The switch completed the entire set of phases and iterations of the procedure regardless of failed phases.

tblisltid Identifies the type of event with an integer. A null value defaults to "not applicable".

Range: {1-9999}

Output Example:

```
lucent 2005-06-24 14:37:49
A 2 REPT ALM EQPT
  "IOM-7:CL,PRCDRERR,NSA,06-24,18-35-03:\"Module in
    Slot 7 present but not provisioned\":79"
;
```

REPT ALM SECU

Message:

REPT ALM SECU: Report Alarm Security

Description:

REPT ALM SECU messages are generated autonomously by the switch to report the onset or clearing of a security alarm condition that requires immediate attention. Non-alarmed conditions are reported with REPT EVT.

Category: Automatic Messages

Security: View

Input Format: none

Output Format:

```
SID DATE TIME
** ATAG REPT ALM SECU
"<SecRepAid>:<ntfncnde>,<securityAlarmType>"
;
```

Parameters:

SecRepAid Identifies the entity to which the alarm pertains. For example, in the case of a buffer overflow, it identifies the security log (SECULOG). For a security alarm of type "INTRUSION", the AID is the CID where the intrusion occurred.

Range: alphanumeric characters

ntfncnde The notification code of the event that caused the condition to be reported. This indicates the alarm level.

Range: CL = Cleared. Never used in provisioning requests or returned in RTRVs - only active conditions are available through the RTRV-EVT/COND/ALM messages and by definition their notification codes are never CL/CLEAR.

CR = Critical

MJ = Major

MN = Minor

NA = Not Alarmed

securityAlarmType Identifies the type of security alarm.

Range: INTRUSION = Intrusion
LOGBUFR90 = Log buffer 90% full

Output Example:

```
lucent 2005-06-24 14:37:49
** 1 REPT ALM SECU
"SECULOG:NA, LOGBUFR90"
;
```

REPT BKUP

Message:

REPT BKUP: Report Backup

Description:

REPT BKUP messages are generated autonomously by the switch to report the completion (or non-completion) of a scheduled backup of the configuration data for the switch, including the TimesTen database. Use SCHED-BKUP-EQPT to schedule database backups; use RTRV-BKUPSCHEDEQPT to verify them.

Category: Automatic Messages

Security: View

Input Format: none

Output Format:

```
SID DATE TIME
** ATAG REPT BKUP
"[<frommem>],[<fromdev>],[<tomem>],[<todev>]:
  [<memclass>],[<opt>]:[<status>]"
;
```

Parameters:

frommem Identifies the functional memory, file, or data area from which the data was to be copied.

Range: alphanumeric characters

fromdev Identifies the memory storage device in the switch from which the data was to be copied.

Range: alphanumeric characters

tomem Identifies the functional memory, file, or data area to which the data was to be copied.

Range: alphanumeric characters

todev Identifies the memory storage device in the switch to which the data was to be copied.

Range: alphanumeric characters

memclass Provides finer delimiting of the memory to be copied.

Range: alphanumeric characters

opt Identifies the option to be used for the copy.

Range: alphanumeric characters

status Identifies the pass/fail status of the scheduled backup operation. The switch returns an optional free-form text description of the failure when the value of *status* is "FAIL".

Range: PASS = Backup occurred as scheduled.
FAIL = Backup operation has failed.

Output Example:

```
lucent 2005-06-24 14:37:49
** 1 REPT BKUP
"FROMMEM, , TOMEM: :PASS"
;
```

REPT COND <ReptAid>

Message:

REPT COND <ReptAid>: Report Condition (ALL, COM, ENET, EQPT, STS1, T1, T3)

Description:

REPT COND provides a periodic report of standing conditions on the switch. The length of the interval between reports is determined by the value of the parameter *heartbeat* in the command ED-SYS-SECU. REPT-COND is generated when no activity occurs within the heartbeat timeframe. The schedule for these messages summarizes what already has been signaled by REPT EVT or by REPT ALM. It may not include threshold crossing conditions and may include conditions that are not reported at all in REPT ALM or REPT EVT messages. Unlike REPT ALM or REPT EVT, it supports multiple rows/conditions per message.

Category: Automatic Messages

Security: View

Input Format: none

Output Format:

```
SID DATE TIME
A ATAG REPT COND <ReptAid>
  "[<cond_id>]: [<ntfcncde>], <condtype>, [<srveff>],
    [<ocrdat>], [<ocrtm>], [<locn>], [<dirn>],
    [<tmper>]"
;
```

Parameters:

AIDType Identifies the type of entity within the switch from which to report conditions.

Range: ALL = Designates the switch and all entities within it
COM = Common – designates the switch as a discreet entity
ENET = Ethernet ports
EQPT = Equipment – designates major assemblies
STS1 = STS1 ports
T1 = T1 ports
T3 = T3 ports

- cond_id** Identifies the specific entity within the switch to which the message pertains.
Range: ASCII characters
- ntfcncde** The notification code of the event that caused the condition to be reported. This indicates the alarm level. A null value defaults to "NA".
Range: CL = Cleared. Never used in provisioning requests or returned in RTRVs - only active conditions are available through the RTRV-EVT/COND/ALM messages and by definition their notification codes are never CL/CLEAR.
CR = Critical
MJ = Major
MN = Minor
NA = Not Alarmed
- condtype** Indicates the condition type for an alarm or a reported event.
Range: alphanumeric characters
- srveff** The effect on service caused by the alarm condition. A null value indicates that the effect on service is unknown or that the parameter is not used.
Range: SA = Service-affecting condition.
NSA = Non-service-affecting condition
- ocrdat** Date when the specific event or violation occurred. A null value defaults to the date in the message header.
Range: {1-12}-{1-31} = {month}-{day of month}
- ocrtm** Time when the specific event or violation occurred. A null value defaults to the time in the message header.
Range: {0-23}-{0-59}-{0-59} = {hour}-{minute}-{second}
{0-23}-{0-59} = {hour}-{minute}
- locn** Indicates the location of the storage registers or event counters to be initialized. A null defaults to either NEND or implies that there is no location associated with the response or automatic message.
Range: FEND = Far end
NEND = Near end

dirn The direction relative to the IOM or port on an IOM in the switch to which the command pertains. A null value defaults to "NA".

Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive

tmper The accumulation period for performance counters. A null value defaults to "15-MIN".

Range: {1-31}-DAY = Time interval is exactly one day
{1-24}-HR = Interval of one to 24 hours (one day)
{1-1440}-MIN = Interval of one to 1440 minutes (one day)

Output Example:

```
lucent 2005-06-24 14:37:49
A 1 REPT COND
"COM:MN, CONDTYPE, NSA, 06-24, 08-45-40, FEND, NA, 15-MIN"
;
```

REPT DBCHG

Message:

REPT DBCHG: Report Database Change

Description:

REPT DBCHG messages are generated automatically by the switch to report database changes that have occurred as a result of commands entered to change equipment provisioning or configuration. Database changes include changes to the value of the TID or SID, the values of the keywords defined in the common block and specific block, the transition into and out of OOS-MA state, and RDL (redlined) secondary state changes.

Category: Automatic Messages

Security: View

Input Format: none

Output Format:

```
SID DATE TIME
A  ATAG REPT DBCHG
  "<free-format text messages>"
;
```

Parameters: None – The response includes one line of data in double quotes, followed by a carriage return line feed, for each external update that has occurred. Within the quotes, the format resembles the block structure of input commands. In fact, the blocks defined here resemble an input command that would achieve a database change equivalent to the external update.

Output Example:

```
lucent 2005-06-24 14:37:49
A  1 REPT DBCHG
  "DATE=2005-06-24, TIME=10-44-46, USERID=lucent,
    DBCHGSEQ=0:ent-eqpt::iom-7:BAA9UV0GAA, PRI, 90, 90,
    90, 1.1.3.0.0.76:IS"
;
```

REPT EVT <ReptAid>

Message:

REPT EVT <ReptAid>: Report Event

Description:

REPT EVT <ReptAid> is generated by the switch to report the occurrence of non-alarmed events. An example is the crossing of a performance threshold.

Category: Automatic Messages

Security: View

Input Format: none

Description: REPT EVT <ReptAid> is generated by the switch to report the occurrence of non-alarmed events. An example is the crossing of a performance threshold.

Output Format:

```
SID DATE TIME
A  ATAG REPT EVT <ReptAid>
   "<evt_id>:<condtype>,[<condeff>],[<ocrdat>],
   [<ocrtm>],[<locn>],[<dirn>],[<monval>],
   [<thlev>],[<timper>]:<desc>:[<tblisltd>]"
;
```

Parameters:

AIDType Identifies the type of entity within the switch from which to report conditions.

Range: ALL = Designates the switch and all entities within it
COM = Common – designates the switch as a discreet entity
ENET = Ethernet ports
EQPT = Equipment – designates major assemblies
STS1 = STS1 ports
T1 = T1 ports
T3 = T3 ports

- evt_id** Identifies the entity in the switch to which the message pertains. *evt_id* is the AID ALL and is optional. A null value is equivalent to "ALL" and avoids redundancy when the message code modifier is COM.
Range: ALL
- condtype** Indicates the condition type for an alarm or a reported event.
Range: alphanumeric characters
- condeff** Identifies the effect of the event on the condition of the switch. A null value defaults to "TC".
Range: CL = A standing condition has cleared.
SC = A condition is active for an extended period of time.
TC = A condition does not change the basic condition of the switch for an extended period of time.
- ocrdat** Date when the specific event or violation occurred. A null value defaults to the date in the message header.
Range: {1-12}-{1-31} = {month}-{day of month}
- ocrtm** Date when the specific event or violation occurred. A null value defaults to the time in the message header.
Range: {0-23}-{0-59}-{0-59} = {hour}-{minute}-{second}
{0-23}-{0-59} = {hour}-{minute}
- locn** Indicates the location of the storage registers or event counters to be initialized. A null defaults to either NEND or implies that there is no location associated with the response or automatic message.
Range: FEND = Far end
NEND = Near end
- dirn** The direction relative to the IOM or port on an IOM in the switch to which the command pertains. A null value defaults to "NA".
Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive

- monval** Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* is to be initialized. The value is in the form of numeric counts or rates. A null value indicates that there is no measured value associated with this trouble or event, or it is not accessible for remote reporting.
Range: {1-9999}
- thlev** Identifies the threshold level. *thlev* is reported if the alarm report has resulted from a degradation that has exceeded the defined or specified threshold level. A null value indicates that there is no threshold level associated with this event, or it is not accessible for remote reporting.
Range: {1-9999}
- tmper** The accumulation period for performance counters. A null value defaults to "not applicable".
Range: {1-31}-DAY = Time interval is exactly one day
 {1-24}-HR = Interval of one to 24 hours (one day)
 {1-1440}-MIN = Interval of one to 1440 minutes (one day)
- desc** Describes the alarm condition.
Range: alphanumeric characters
- tblisltid** Identifies the type of event with an integer. A null value defaults to "not applicable".
Range: {1-9999}

Output Example:

```
lucent 2005-06-24 14:37:49
A 5 REPT EVT EQPT
  "IOM-7:INIT-50,TC,06-24,10-46-25:\"Module in slot 7
    has been restored to service\":25"
;
```

REPT EVT SESSION

Message:

REPT EVT SESSION: Report Event SESSION

Description:

REPT EVT SESSION is generated by the switch to report (to the user) the occurrence of a non-alarmed event related to establishing a session with the switch (i.e., a login for the switch). The following events are included in this category:

- The user's password is about to expire, or has expired. The user receives additional information if the password has expired but the "grace period" during which the existing password can still be used has not expired. Upon receiving this message, the user must update the password with the command ED-PID.
- When a request is made to establish a session with the switch (i.e., when a logon is attempted), the switch transmits a warning, before access is granted, regarding unauthorized entry/use and possible consequences.

Category: Automatic Messages

Security: View

Input Format: none

Output Format:

```
SID DATE TIME
A  ATAG REPT EVT SESSION
   "<ne_id>:<exp>, [<pcn>], <warn>"
;
```

Parameters:

ne_id Identifies the switch with which a session is attempted.

Range: alphanumeric characters

exp Indicates whether the password is currently valid (i.e., no password update is currently required), has expired, or is about to expire (i.e., updating is required or imminent).

Range: N = password updating unnecessary

Y = password updating required immediately or soon

pcn Indicates the number of days still remaining during which the existing password is allowed. No further logon will be allowed if the user has not updated the password when this number becomes zero. A null value defaults to "7".

Range: {1-999}-DAY

warn Represents the free-format text warning, before access is granted, regarding unauthorized entry/use and possible consequences.

Range: alphanumeric characters

Output Example:

```
lucent 2005-06-24 14:37:49
*
0 REPT EVT SESSION
"lucent:N,,/* NOTICE: This us a private computer
  system. Unauthorized access or use may lead to
  prosecution. Last login: Fri Jun 24 2005
  13:07:26 */"

;
```

Access Identifiers

1.	ALL	4
2.	AlmqSessionId	10
3.	AltDnAid	10
4.	AnncId	10
5.	AnnouncementId	10
6.	AudioMsgAid	11
7.	BiccTrkAid	11
8.	BlockListAid	11
9.	CALLINGAREAAID	12
10.	CaptAid	12
11.	CaptSysId	13
12.	CarrierCode	13
13.	CasIfId	13
14.	CasPrflId	13
15.	CcAid	13
16.	CccListAid	14
17.	CcNpa	14
18.	CcNpaNxx	14
19.	CcNpaNxxStart	14
20.	cgpnRouteAid	15
21.	ChanIdGrp	15
22.	CicPrflId	15
23.	cl4SubId	16
24.	COM	16
25.	Cpc	16
26.	CrvAidGrp	17
27.	DgtModPrflAid	17
28.	DgtScrnAid	18
29.	DialPlanAid	22
30.	DialPlanTrigAid	23
31.	DigitModDnAid	23
32.	DigitModGenAid	25
33.	DigitModParamAid	26
34.	DigitModTnsAid	27
35.	ENET	28
36.	FAN	28
37.	IfGrpDs1Id	28
38.	IfGrpNum	28
39.	IomAid	29
40.	IOMODULE	29
41.	IOMorENET	29
42.	IOMorOC	29

43.	IOMorSP	30
44.	IOMorSPorSF	30
45.	IOMorSTS1	30
46.	IOMorT3	30
47.	IOMorT3orPORT	31
48.	IOMorT3orPORTorBITS	31
49.	isdnBcStaChannelStateAid	32
50.	IsdnChanAid	32
51.	IsdnIfNum	32
52.	IsdnLink	32
53.	IsdnRtAid	33
54.	lapdAid	33
55.	LinkId	34
56.	ListCodeAid	34
57.	LsetAid	34
58.	MgcpLineAid	34
59.	Mtp2PrflId	35
60.	Mtp3PrflId	35
61.	NNPAAid	35
62.	NpaNxx	35
63.	OC	35
64.	PcAid	36
65.	PcPrflId	36
66.	PORT	36
67.	PORTorBITS	36
68.	PvcId	37
69.	PvcPrflId	37
70.	RelCauseAid	37
71.	RouteAddrAid	37
72.	RouteN11Aid	38
73.	RouteSchedAid	39
74.	RouteSs7Aid	39
75.	RtId	39
76.	RtIntfcAid	40
77.	RtpTermId	40
78.	SccpSsnAid	40
79.	ScpAnncMap	41
80.	ScreenDigitsAid	41
81.	ScreenListAid	42
82.	ServiceId	42
83.	SlhrId	44
84.	SnmpAccessAid	44
85.	SnmpViewAid	45
86.	SP	45
87.	SPorIOM	45
88.	Ss7LnkAid	45

89.	Ss7PcAid	46
90.	Ss7TrkAid	46
91.	STS1	46
92.	SubIfAid	46
93.	SubSpeedAid	47
94.	T0	47
95.	T3	47
96.	T3orPORT	48
97.	T3PORT	48
98.	TdmTermId	48
99.	TestPortNum	48
100.	TgnAid	49
101.	TgnSipId	49
102.	TransSchedAid	49
103.	TrigEscListAID	50
104.	TriggerAid	50
105.	TrkAid	50
106.	VMS	51
107.	VoipPrfl	51
108.	VpId	51
109.	VpsId	51

The Access IDentification code (AID) directs an input command to its intended physical or data entity inside the NE. Equipment modules and facilities are typical examples of entities addressed by the access code.

1. ALL

Identifies the AID as all possible AIDs. This AID occurs only in autonomous messages returned by the switch.

AID	Patterns
AlmqSessionId	Up to eight hexadecimal characters
AltDnAid	<SUBSCRIBERID>-SUBSCRIBERID>
AnncId	{32767-65535}
AnnouncementId	{1-65535}
AudioMsgAid	{1-65535}-<VARIANT>
BiccTrkAid	{1-9999}-{0-16382}
BlockListAid	<BLOCKNAME>-<SCREENTYPE> [-<SCREENSTRING>]
CALLINGAREAAID	CALLINGAREASTRING- CENTERNAMESTRING
CaptAid	BICC CAS-IOM-{1-17}-PORT-{1-28} CAS-IOM-{1-17}-PORT-{1-28}-T0 - {1-24} CAS-IOM-{1-17}-T3-{1-8}-PORT - {1-28} CAS-IOM-{1-17}-T3-{1-8}-PORT - {1-28}-T0-{1-24} ISDNIF-{1-32767} LSET-{1-20}
CaptSysId	{1}
CarrierCode	{0-9999}
CasIfId	{1-2147483645}
CasPrflId	{1-128}
CcAid	{1-99999}
CccListAid	{1-32767}-{up to 21 digits}
CcNpa	{1-99999}-{200-999}
CcNpaNxx	{1-99999}-{200-999}-{200-999}
CcNpaNxxStart	{1-99999}-{1-99999}-{1-99999}- {0-9999}
cgpnRouteAid	<RTADDR>-{ROUTEIDENT}

ChanIdGrp	IfGrpNum[-T0]
CicPrflId	{1-128}
cl4SubId	<subscriberId>-<callType> <subscriberId>-<carrier>
COM	COM
Cpc	{0-255}
CrvAidGrp	<ifGrpNum>-<crv>-<subIfId>
DgtModPrflAid	<dgtModName>[-<dgtString>[-<key> [-<nai>[-<minLen>]]]]
DgtScrnAid	<dgtScrnLbl>[-<primKey> [-<primKeyValue>[-<secKeyValue> [-<terKeyValue>]]]]
DialPlanAid	<dialPlanName>[-<nai>[-<digits> [-<minDgts>]]]
DialPlanTrigAid	<dialPlanName>-<ainTrigList>
DigitModDnAid	<dmLbl>[-<dnType>[-<nai>[-<digits> [-<minDgts>]]]]
DigitModGenAid	<dmLbl>[-<genType>[-<nmbrType> [-<digits>]]]
DigitModParamAid	<dmLbl>[-<primKey>[-<Value>]]
DigitModTnsAid	<dmLbl>[-<TNS>[-<carrier> [-<callTypeCode>[-<prtcl>]]]]
ENET	IOM-{8,10}-ENET-{1-4}
FAN	FAN
IfGrpDs1Id	{1-32767}-{1-28}
IfGrpNum	{1-32767}
IomAid	IOM-{1-17}
IOMODULE	IOM-{1-17}
IOMorENET	IOM-{8,10} IOM-{8,10}-ENET-{1-4}
IOMorOC	IOM-{8,10} IOM-{8,10}-OC12-{1-4} IOM-{8,10}-OC3-{1-4}
IOMorPORT	IOM-{1-17} IOM-{1-17}-PORT-{1-28} IOM-{1-17}-SST1-{1-8}-PORT-{1-28} IOM-{1-17}-T3-{1-8}-PORT-{1-28}
IOMorSP	IOM-{1-17} SP-{A-B}

IOMorSPorSF	IOM- $\{1-17\}$ SF- $\{A-B\}$ SP- $\{A-B\}$
IOMorSTS1	IOM- $\{1-17\}$ IOM- $\{1-17\}$ -STS1- $\{1-8\}$
IOMorT3	IOM- $\{1-17\}$ IOM- $\{1-17\}$ -T3- $\{1-8\}$
IOMorT3orPORT	IOM- $\{1-17\}$ IOM- $\{1-17\}$ -PORT- $\{1-28\}$ IOM- $\{1-17\}$ -STS1- $\{1-8\}$ IOM- $\{1-17\}$ -STS1- $\{1-8\}$ -PORT- $\{1-28\}$ IOM- $\{1-17\}$ -T3- $\{1-8\}$ IOM- $\{1-17\}$ -T3- $\{1-8\}$ -PORT- $\{1-28\}$
IOMorT3orPORTorBITS	IOM- $\{1-17\}$ IOM- $\{1-17\}$ -PORT- $\{1-28\}$ IOM- $\{1-17\}$ -STS1- $\{1-8\}$ IOM- $\{1-17\}$ -STS1- $\{1-8\}$ -PORT- $\{1-28\}$ IOM- $\{1-17\}$ -T3- $\{1-8\}$ IOM- $\{1-17\}$ -T3- $\{1-8\}$ -PORT- $\{1-28\}$ TMG- $\{A,B\}$
IsdnBcStaChannelStateAid	$\{1-32767\}$ - $\{1-32767\}$ - $\{1-24\}$
IsdnChanAid	$\{1-32767\}$ - $\{1-32767\}$ - $\{1-24\}$
IsdnIfNum	$\{1-32767\}$
IsdnLink	$\{1-32767\}$ - $\{1-32767\}$
IsdnRtAid	<RTNAME>- $\{0-32767\}$
lapdAid	GR303EOC- $\{1-32767\}$ - $\{1-28\}$ GR303TMC- $\{1-32767\}$ - $\{1-32767\}$ ISDN- $\{1-32767\}$ - $\{1-32767\}$ IUA-IOM- $\{1-17\}$ -PORT- $\{1-28\}$ IUA-IOM- $\{1-17\}$ -STS1- $\{1-8\}$ -PORT- $\{1-28\}$ IUA-IOM- $\{1-17\}$ -T3- $\{1-8\}$ -PORT- $\{1-28\}$
LinkId	$\{1-32767\}$ - $\{1-32767\}$
ListCodeAid	<LISTID>- $\{INDEX\}$
LsetAid	$\{1-20\}$
MgcpLineAid	<gatewayId>-<lineId>
Mtp2PrfId	$\{1-40\}$
Mtp3PrfId	$\{1-20\}$
NNPAAid	$\{1-99999\}$ - $\{200-999\}$

NpaNxx	{200-999}-{200-999}
OC	IOM-{8,10}-OC12-{1-4} IOM-{8,10}-OC3-{1-4}
PcAid	{0-255}-{0-255}-{0-255}
PcPrflId	{1-128}
PORT	IOM-{1-17}-PORT-{1-28} IOM-{1-17}-STS1-{1-8}-PORT-{1-28} IOM-{1-17}-T3-{1-8}-PORT-{1-28}
PORTorBITS	IOM-{1-17}-PORT-{1-28} IOM-{1-17}-STS1-{1-8}-PORT-{1-28} IOM-{1-17}-T3-{1-8}-PORT-{1-28} TMG-{A,B}
PvcId	{1-4}
PvcPrflId	{2-8}
RelCauseAid	{0-32767}-PROTOCOLTYPE- CODINGTYPE
RouteAddrAid	<RTADDR>-{ROUTEIDENT}
RouteN11Aid	<N11STRING>-<DSTRING>
RouteSchedAid	<SCHEDNAMESTRING>- <PRFLNAMESTRING>
RouteSs7Aid	<PCAIID>-<LSETAID>
RtId	<rtList>-<index>
RtIntfcAid	<RTNAME>-{0-32767}
RtpTermId	Alphanumeric characters in the form: Chassis/RTP/IOM{1-17}/ P{1025- 65535}
SccpSsnAid	<PCAIID>-{1-255}
ScpAnncMap	<ANNCMAPLBL>-{1-65535}
ScreenDigitsAid	<SUBSCRIBERID>-<SCREENTYPE>- <SCREENSTRING>
ScreenListAid	{LISTID}-{STARTRANGE}

ServiceId	ACB ACR AIN_TOLLFREE AR AUTHCODE CFBL CFDA CFV CID CIDCW CIS CNAB CNAM CND CNDB COT CRDPCL CWC CWT GMSC_IS41 GMSC_MAP LNP MWC RAF RDAS SC1 SC2 TOLLFREE TWC VMS
SlhrId	{0-31}
SnmpAccessAid	<GROUPNAME>-{SECLEVEL}- {SECMODEL}
SnmpViewAid	<VIEWNAME>-<VIEWTREE>
SP	SP-{A-B}
SPorIOM	IOM-{8,10} SP-{A-B}
Ss7LnkAid	{1-40}
Ss7PcAid	{0-255}-{0-255}-{0-255}
Ss7TrkAid	{1-9999}-{0-16382}
STS1	IOM-{1-17}-STS1-{1-8}
SubIfAid	{IFNUM}-{SUBIF}

SubSpeedAid	<SUBSCRIBERID>-{2-99}
T0	IOM-{1-17}-PORT-{1-28}-T0-{1-24} IOM-{1-17}-STS1-{1-8}-PORT-{1-28}- T0-{1-24} IOM-{1-17}-T3-{1-8}-PORT-{1-28}- T0-{1-24}
T3	IOM-{1-17}-T3-{1-8}
T3orPORT	IOM-{1-17}-STS1-{1-8} IOM-{1-17}-STS1-{1-8}-PORT-{1-28}- T0-{1-24} IOM-{1-17}-T3-{1-8} IOM-{1-17}-T3-{1-8}-PORT-{1-28}- T0-{1-24}
T3PORT	IOM-{1-17}-STS1-{1-8}-PORT-{1-28}- T0-{1-24} IOM-{1-17}-T3-{1-8}-PORT-{1-28}- T0-{1-24}
TdmTermId	Alphanumeric characters in the form: Chassis/TDM/IOM{1-17}/ T{1-8}/ P{1-28}/C{1-24}
TestPortNum	TP-{1-24}
TgnAid	{1-9999}
TgnSipId	{1-9999}-{1-16}
TransSchedAid	<transSched>-<prflName>
TrigEscListAID	<trigEscList>-<startRange>
TriggerAid	<ainTrigListName>-<index>
TrkAid	{1-9999}-{1-32767}
VMS	<msrId>-<smdiLnkId>
VoipPrfl	{1-65535}
VpId	IOM-{1-17}-VP-{1-8}
VpsId	IOM-{1-17}-VCC-{0-799}

2. AlmSessionId

Identifies the AID as an alarm queuing session in the list of active alarm queuing sessions.

Pattern	Description
Up to eight hexadecimal characters	Represents an IP address of a machine connecting to the alarm queue port

3. AltDnAid

Identifies the AID with a variable string indicating a subscriber and an alternate directory number associated with the subscriber.

Pattern	Description
<SUBSCRIBERID>- <SUBSCRIBERID>	Represents a subscriber and an alternate directory number with strings of exactly 10 digits

4. AnnId

Identifies the AID as an audio announcement residing on an external announcement server.

Pattern	Description
{32767-65535}	Represents an external audio announcement

5. AnnouncementId

Identifies the AID as an audio announcement.

Pattern	Description
{1-32766}	Represents an audio announcement

6. AudioMsgAid

Identifies the AID as an audio message. The first part of the AID is an integer representing the message identifier; the second part is an optional string representing the language variant of the message.

Pattern	Description
{1-65535}-{VARIANT}	Represents an audio message

7. BiccTrkAid

Identifies the AID as a unique trunk (or range of trunks) associated with a trunk group number. The first number in the range identifies the trunk group number and the second number identifies the trunk(s).

Pattern	Description
{1-9999}-{0-16382}	Represents a CIC

8. BlockListAid

Identifies the AID as a list containing strings of digits that a subscriber is blocked from calling.

Pattern	Description
<BLOCKNAME> -<SCREENTYPE> [-<SCREENSTRING>]	BLOCKNAME identifies the name of the list with a string of up to 21 characters representing the subscriber; <i>SCREENTYPE</i> identifies the type of screened number, with values of: • CUTTHRU = Casual calling carrier (any four-digit string specifying the cic on which calls are blocked – no default) • INTNATIONAL = Direct-dial international (any digit string up to 21 digits, but without 011 prefix) • NATIONAL = Any number in the NANP (1 or any NPA or any NPA-NXX or any complete NPA-NXX-xxxx or any digit string up to 21 digits) • OPERATOR = Local or long-distance operator request (0 or 00)

	• OPINTRN = Operator-assisted international (“DEFAULT” – blocks all calls prefixed by 01) • OPNAT = Operator-assisted national (0 and 411) SCREENSTRING identifies the digits to block with a string of up to 21 digits (shown parenthetically for each value of <i>SCREENTYPE</i>), or “DEFAULT”.
--	--

9. CALLINGAREAAID

Identifies the AID as an association between a local calling area and a rate center. The first 30-character string in the range identifies the name of the calling area, and the second 30-character string identifies the name of the rate center.

Pattern	Description
CALLINGAREASTRING-CENTERNAMESTRING	Represents the name of a calling area and the name of a rate center with strings of 30 characters each

10. CaptAid

Identifies the AID as (a) capture session access line(s).

Pattern	Description
BICC	All BICC trunks
CAS-IOM-{1-17}-PORT-{1-28}	All CAS channels on a specific T1 port on a DS1 IOM
CAS-IOM-{1-17}-PORT-{1-28}-T0-{1-24}	A CAS channel on a specific T1 port on a DS1 IOM
CAS-IOM-{1-17}-T3-{1-8}-PORT-{1-28}	All CAS channels on a specific T1 port on a DS3 IOM
CAS-IOM-{1-17}-T3-{1-8}-PORT-{1-28}-T0-{1-24}	A CAS channel on a specific T1 port on a DS3 IOM
ISDNIF-{1-32767}	An ISDN interface
LSET-{1-20}	An SS7 link set

11. CaptSysId

Identifies the AID as a server that can receive protocol capture session records. The range is restricted to {1} as there currently can be only one such server.

Pattern	Description
{1}	Represents a protocol capture session server

12. CarrierCode

Identifies the AID as a specific carrier.

Pattern	Description
{0-9999}	Represents a specific carrier

13. CasIfId

Identifies the AID as a Channel-Associated Signaling (CAS) interface.

Pattern	Description
{1-2147483645}	Represents a CAS interface

14. CasPrfId

Identifies the AID as a Channel-Associated Signaling (CAS) profile.

Pattern	Description
{1-128}	Represents a CAS profile

15. CcAid

Identifies the AID as a country code.

Pattern	Description
{1-99999}	Represents a country code

16. CccListAid

Identifies the AID as a call content channel (CCC) associated with a specific list of call content channels. The first part of the AID is the numerical identifier for the CCC list and the second part is the CCC.

Pattern	Description
{1-32767}-{up to 21 digits}	Represents a CCC associated with a specific list of call content channels

17. CcNpa

Identifies the AID as an NPA in a country. A null value for the second number in the range is equivalent to all NPAs in the system.

Pattern	Description
{1-99999}-{200-999}	Represents a country code and an NPA

18. CcNpaNxx

Identifies the AID as a specific exchange (NXX) in an NPA in a country. A null value for the third number in the range is equivalent to all exchanges in the system.

Pattern	Description
{1-99999}-{200-999}-{200-999}	Represents a country code, an NPA, and an NXX

19. CcNpaNxxStart

Identifies the AID as the starting number for a block of pooled numbers. The first set of numbers in the range represents the country code, the second set represents the area code, the third represents the local exchange, and the fourth (which must be exactly four digits) represents the starting number for the block.

Pattern	Description
{1-99999}-{1-99999}-{1-99999}-{0-9999}	Represents a country code, an NPA, an NXX, and the starting number for a block of pooled numbers

20. cgpnRouteAid

Identifies the AID as a route address. The pattern is a combination of the route address (the telephone number of a calling party associated with a route name) and the nature of address indicator for the route (defined by the parameter *ROUTEIDENT*).

Pattern	Description
<RTADDR>-{ROUTEIDENT}	<i>RTADDR</i> is a string of 1-21 digits. <i>ROUTEIDENT</i> can be: • INTNATNUM = international number • NATNUM = national significant number • SUBSNUM = subscriber number • UNKNOWN = Nature of Address unknown

21. ChanIdGrp

Identifies the AID as a DS0 channel on a port within a GR303 interface group. The pattern is a combination of the interface group number, and the physical channel on a port of the I/O module belonging to the GR303 interface group. A null value for the second part of the AID is equivalent to “ALL”; that is, by leaving the field blank, the state will be changed (in ED) or returned (in RTRV) for all configured channels for the specified GR303 interface group.

Pattern	Description
IfGrpNum[-T0]	IfGrpNum = {1-32767} T0 = IOM-{1-17}-STS1-{1-8}-PORT-{1-28}- T0-{1-24} IOM-{1-17}-T3-{1-8}-PORT-{1-28}- T0-{1-24}

22. CicPrfId

Identifies the AID as a CIC profile.

Pattern	Description
{1-128}	Represents a CIC profile

23. cl4SubId

Identifies the AID as the association between a subscriber and a carrier or a call type.

Pattern	Description
<subscriberId> -<callType> or <subscriberId> -<carrier>	<i>subscriberId</i> identifies the subscriber with a string of exactly 10 digits <i>callType</i> identifies the call type for which the subscriber assignment parameters apply, with values of: DEFAULT = all call types (default value) INTERLATA INTERNATIONAL INTRALATA <i>carrier</i> identifies the carrier for which the subscriber assignment parameters apply as a string of 1-4 digits with a default of "DEFAULT"

24. COM

Identifies the AID as the switch as a whole.

Pattern	Description
COM	Represents the switch as a whole

25. Cpc

Identifies the AID as a calling party category (one of the IAM parameters).

Pattern	Description
{0-255}	Represents a calling party category

26. CrvAidGrp

Identifies the AID as a GR303 call reference value. The pattern is a combination of the interface group number, the call reference value, and the subscriber interface number.

Pattern	Description
<ifGrpNum>- <crv>- <subIfId>	ifGrpNum = {1-32767} crv = {1-2048} subIfId = {1-32767}access to the group

27. DgtModPrflAid

Identifies the AID as a profile that identifies how to modify the digits distinguishing routed calls.

Pattern	Description
<dgtModName> [-<dgtString> [-<key> [-<nai> [-<minLen>]]]]	<i>dgtModName</i> identifies the name of the profile with a string of up to eight alphanumeric characters <i>dgtString</i> (optional only in RTRV) identifies the digits (distinguishing the routed calls) to modify with a string of 1-21 digits (default = "DEFAULT") <i>key</i> identifies the digits (distinguishing the routed calls) to modify with a string of 1-21 digits (default = "DEFAULT") <i>nai</i> identifies the nature of address indicator applicable to the specified digit string, with a default of "UNKNOWN" and values of: • INTNATNUM = international number • NATNUM = national significant number • NATOPREQ = national (long-distance) operator request • NONUMCUTTHRU = no number provided, cut through to carrier • NONUMOPREQ = no number provided, operator request • SUBOPREQ = subscriber (local) operator request • SUBSNUM = subscriber number • UNKNOWN = unknown

	<i>minLen</i> identifies the minimum length of the specified digit string as an integer from 7 to 21 with a default of 7
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28. DgtScrnAid

Identifies the AID as a digit screening method.

Pattern	Description
<dgtScrnLbl> [-<primKey> [-<primKeyValue> [-<secKeyValue> [-<terKeyValue]]]]	<i>dgtScrnLbl</i> identifies the name of the applicable screening table with a string of 1-10 alphanumeric characters; <i>primKey</i> (optional only in RTRV) identifies the primary key applicable to the specified screening table, with values of: • BGN = Bearer Group Number (interface type) • CALLTYPE = Type of call (Class 5) • CDPN = Called party number • CGPN = Calling party number • CHRGN = Charge number • CIP = Carrier Information Parameter (for ISUP only) • CPC = Calling Party Category • CSI = Carrier Selection Information • GAP = Generic Address Parameter • GENDGTS = Generic Digits • JIP = Jurisdiction Information Parameter (NPANXX) • LATA = Local Access & Transport Area • OLI = Originating Line Information • SUBSTATUS = Subscriber status (valid only when the value "SUB" is the first listed for the parameter <i>actnInfoAnlz</i> in TRANS-PLAN) • TNS = Transit Network Selection <i>primKeyValue</i> identifies the primary value applicable to the specified primary key parameter, with values of: BGN: • CASIF • DEFAULT • GR303

	• ISDNIF • MGCP • TGN CALLTYPE: • CUTTHRU • DEFAULT • DIR_ASSISTANCE • EMERGENCY • INTERLATA • INTERLATAOPREQ • INTNATNUM • INTNATOPREQ • INTRALATA • LOCALNUMBER • LOCALOPREQ • N11 • NATNUM • NONUMOPREQ • NOTPRSNT • TOLLFREE CDPN: • ABBREVPVT = abbreviated private • DEFAULT = matches all numbers • INTNATNUM = international number • INTNATOPREQ = international operator request • NATNUM = national significant number • NATOPREQ = national (long-distance) operator request • NONUMCUTTHRU = no number provided, cut through to carrier • NONUMOPREQ = no number provided, operator request • NOTPRSNT = matches calls without a CDPN • SUBOPREQ = subscriber (local) operator request • SUBSNUM = subscriber number • TESTLINE = test line test code • UNKNOWN = unknown (default value) CGPN: • ABBREVPVT = abbreviated private • DEFAULT = matches all numbers • NOTPRSNT = matches calls without a
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	CGPN • NUNIINTNATNUM = non-unique international number • NUNINATNUM = non-unique national number • NUNISUBSNUM = non-unique subscriber number • TESTLINE = test line test code • UNIINTNATNUM = unique international number • UNINATNUM = unique national number • UNISUBSNUM = unique subscriber number CHRGN: • CDPNATNUM = ANI of the called party; national number • CDPSUBSNUM = ANI of the called party; subscriber number • CDPUNAVAIL = ANI of the called party; no number present • CGPNATNUM = ANI of the calling party; national number • CGPSUBSNUM = ANI of the calling party; subscriber number • DEFAULT = matches all numbers • NOTPRSNT = matches calls without a CHRGN • UNAVAIL = ANI not available or not provided CIP: 0-9999, DEFAULT, NOTPRSNT CPC: 00-FF (hexadecimal) , DEFAULT, NOTPRSNT CSI: • DEFAULT = matches all numbers • NOTPRESUB = not presubscribed and input by calling party • NOTPRSNT = matches calls without CSI • PRESUBDIAL = presubscribed and input by calling party • PRESUBNOTDIAL = presubscribed and not input by calling party • PRESUBUNKNOWN = presubscribed, input by calling party undetermined • UNKNOWN = no indication GAP: 0-255 (mandatory)
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	GENDGTS: 0-31 (mandatory) JIP: 200000-999999, DEFAULT, NOTPRSNT LATA: 200-99999, DEFAULT, NOTPRSNT OLI: 00-FF (hexadecimal), DEFAULT, NOTPRSNT SUBSTATUS: • ACTIVE = In Service (subscriber is present in the CL4SUB table and active) • DEFAULT = matches all numbers • INACTIVE = Out Of Service (subscriber is present in the CL4SUB table and inactive) • NOTINDB = Not in database (subscriber is not in the CL4SUB table) • NOTPRSNT = matches calls without • SUBSTATUS TNS: 0-9999 (the carrier ID), DEFAULT, NOTPRSNT <i>secKeyValue</i> identifies the secondary value applicable to the specified primary key parameter, with values of: • BGN: 1-31 digits, DEFAULT • CALLTYPE: No secondary value • CDPN: 1-31 digits, DEFAULT (set <i>secKeyValue</i> to DEFAULT if <i>primKeyValue</i> is DEFAULT or NOTPRSNT) • CGPN: 1-31 digits, DEFAULT (set <i>secKeyValue</i> to DEFAULT if <i>primKeyValue</i> is DEFAULT or NOTPRSNT) • CHRGN: 1-31 digits, DEFAULT (set <i>secKeyValue</i> to DEFAULT if <i>primKeyValue</i> is DEFAULT or NOTPRSNT) • CIP: No secondary value • CPC: No secondary value • CSI: No secondary value • GAP: 1-31 digits, DEFAULT, NOTPRSNT • GENDGTS: 1-31 digits, DEFAULT, NOTPRSNT • JIP: No secondary value
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	• LATA: No secondary value • OLI: No secondary value • SUBSTATUS: No secondary value • TNS: 0-199 (the CAS 0ZZ/1NX code or the ISUP circuit code), DEFAULT (set <i>secKeyValue</i> to DEFAULT if <i>primKeyValue</i> is DEFAULT or NOTPRSNT) <i>terKeyValue</i> identifies the tertiary value (representing the protocol type) applicable only when the value of <i>primKey</i> is TNS, with values of: • CAS • ISUP (default – set <i>terKeyValue</i> to ISUP if <i>secKeyValue</i> is DEFAULT)
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29. DialPlanAid

Identifies the AID as a custom dial plan.

Pattern	Description
<dialPlanName> [-<nai> [-<digits> [-<minDgts>]]]	<i>dialPlanName</i> identifies the name of the custom dial plan with a string of up to 21 alphanumeric characters <i>nai</i> identifies the nature of address indicator applicable to the specified custom dial plan, with values of: • ABBREVPVT = abbreviated number in private dial plan • DEFAULT = any nature of address indicator • INTNATNUM = international number • INTNATOPREQ = international number, operator request • NATNUM = national significant number • NATOPREQ = national (long-distance) operator request • NONUMCUTTHRU = no number provided, cut through to carrier • NONUMOPREQ = no number provided, operator request • SUBOPREQ = subscriber (local) operator request • SUBSNUM = subscriber number

	• UNKNOWN = unknown (default value) <i>digits</i> identifies the leading digits of the number to be matched with a string of 1-31 digits (default = "DEFAULT"); <i>minDgts</i> identifies the minimum length of the specified digit string as an integer from four to six with a default of four.
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30. DialPlanTrigAid

Identifies the AID as the association of a custom dial plan with an AIN trigger list.

Pattern	Description
<dialPlanName> -<ainTrigList>	<i>dialPlanName</i> identifies the name of the custom dial plan with a string of up to 21 alphanumeric characters <i>ainTrigList</i> identifies the AIN Trigger List applicable to the specified custom dial plan with a string of up to 20 characters. "CUSTOM_DIALPLAN" is the only trigger type allowed for entries in the specified AIN Trigger List.

31. DigitModDnAid

Identifies the AID as a digit modification object keyed for a DN.

Pattern	Description
<dmLbl> [-<dnType> [-<nai> [-<digits> [-<minDgts]]]]	<i>dmLbl</i> identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters <i>dnType</i> (optional only in RTRV) identifies the primary key as the type of DN applicable to the specified digit modification table, with values of: • CDPN = Called party number • CGPN = Calling party number • CHRGN = Charge number <i>nai</i> identifies the nature of address indicator applicable to the specified type of DN, with a default of "DEFAULT" and values of:

	• ABBREVPVT = abbreviated private (only for CDPN and CGPN) • CDPNATNUM = ANI of the called party; national number (only for CHRGN) • CDPSUBSNUM = ANI of the called party; subscriber number (only for CHRGN) • CDPUNAVAIL = ANI of the called party; no number present (only for CHRGN) • CGPNATNUM = ANI of the calling party; national number (only for CHRGN) • CGPSUBSNUM = ANI of the calling party; subscriber number (only for CHRGN) • DEFAULT = matches all numbers • INTNATNUM = international number (only for CDPN) • INTNATOPREQ = international operator request (only for CDPN) • NATNUM = national significant number (only for CDPN) • NATOPREQ = national (long-distance) operator request (only for CDPN) • NONUMCUTTHRU = no number provided, cut through to carrier (only for CDPN) • NONUMOPREQ = no number provided, operator request (only for CDPN) • NOTPRSNT = matches calls without a CGPN, CDPN, or CHRGN • NUNIINTNATNUM = non-unique international number (only for CGPN) • NUNINATNUM = non-unique national number (only for CGPN) • NUNISUBSNUM = non-unique subscriber number (only for CGPN) • SUBOPREQ = subscriber (local) operator request (only for CDPN) • SUBSNUM = subscriber number (only for CDPN) • TESTLINE = test line test code (only for CGPN and CDPN) • UNAVAIL = ANI not available or not provided (only for CHRGN) • UNIINTNATNUM = unique international number (only for CGPN) • UNINATNUM = unique national number (only for CGPN)
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	• UNISUBSNUM = unique subscriber number (only for CGPN) • UNKNOWN = unknown (only for CDPN); <i>digits</i> identifies the leading digits of the number to be matched as a string of up to 31 digits with a default of “DEFAULT” <i>minDgts</i> identifies the minimum allowable length of the incoming addressing digits as an integer from 0-30 with a default of 0.
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32. DigitModGenAid

Identifies the AID as a digit modification object keyed for generic digits or generic address parameters.

Pattern	Description
<code><dmLbl></code> <code>[-<genType></code> <code>[-<nmbType></code> <code>[-<digits]]]</code>	<i>dmLbl</i> identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters <i>genType</i> (optional only in RTRV) identifies the primary key that applies to the specified digit modification table as either a generic address parameter or generic digits or a (user-defined) generic parameter, with values of: • GAP = Generic Address Parameter • GENDGTS = generic digits • GP = generic parameter <i>nmbType</i> (optional only in RTRV) identifies the numeric value representing the type of generic digits or generic address parameters, with values of: • 0-255 for GAP • 0-31 for GENDGTS • 0-255 for GP <i>digits</i> identifies the leading digits of the number to be matched as a string of up to 31 digits with a default of “DEFAULT”. When the value of <i>genType-nmbType</i> is “GENDGTS-9”, the value of <i>digits</i> is a string of either three or eight digits. When the value is three digits, the range is {000-127}. When the value is eight digits, the range for the first three digits is {000-127} and the range for the last five

	digits is {00000-16383}. When the value of <i>genType-nmbrType</i> is “GP-195”, the value of <i>digits</i> is a string of eight digits.
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33. DigitModParamAid

Identifies the AID as a digit screening method.

Pattern	Description
<code><dmLbl></code> <code>[-<primKey></code> <code>[-<Value>]</code>	<i>dmLbl</i> identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters <i>primKey</i> (optional only in RTRV) identifies the primary key applicable to the specified screening table as a type of call parameter, with values of: • CALLTYPE = Type of call (Class 5) • CIP = Carrier Information Parameter (for ISUP only) • CPC = Calling Party Category • CSI = Carrier Selection Information • JIP = Jurisdiction Information Parameter (NPANXX) • LATA = Local Access & Transport Area • OLI = Originating Line Information <i>Value</i> identifies the value applicable to the specified parameter, with values of: CALLTYPE: • CUTTHRU • DEFAULT • DIR_ASSISTANCE • EMERGENCY • INTERLATA • INTERLATAOPREQ • INTNATNUM • INTNATOPREQ • INTRALATA • LOCALNUMBER • LOCALOPREQ • N11 • NATNUM • NONUMOPREQ • NOTPRSNT

	• TOLLFREE CIP: 0-9999, DEFAULT, NOTPRSNT CPC: 00-FF (hexadecimal) , DEFAULT, NOTPRSNT CSI: • DEFAULT = matches all numbers • NOTPRESUB = not presubscribed and input by calling party • NOTPRSNT = matches calls without CSI • PRESUBDIAL = presubscribed and input by calling party • PRESUBNOTDIAL = presubscribed and not input by calling party • PRESUBUNKNOWN = presubscribed, input by calling party undetermined • UNKNOWN = no indication JIP: 200000-999999, DEFAULT, NOTPRSNT LATA: 200-99999, DEFAULT, NOTPRSNT OLI: 00-FF (hexadecimal), DEFAULT, NOTPRSNT
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34. DigitModTnsAid

Identifies the AID as a digit modification object keyed for the transit network selection (TNS) parameter, which is the circuit code for ISUP calls, or the Carrier or 0ZZ codes for CAS Feature group D.

Pattern	Description
<code><dmLbl></code> <code>[-<TNS></code> <code>[-<carrier></code> <code>[-<callTypeCode></code> <code>[-<prtcl]]]]</code>	<i>dmLbl</i> identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters <i>TNS</i> (optional only in RTRV) identifies the primary key that applies to the specified digit modification table with “TNS” as the sole value <i>carrier</i> identifies the carrier code as a string of 1-4 digits, “NOTPRSNT”, or the default value “DEFAULT” <i>callTypeCode</i> identifies the ISUP circuit code or the CAS 0ZZ or 1NX codes as a string of 1-3 digits with a default of “DEFAULT” (set <i>callTypeCode</i> to DEFAULT if <i>carrier</i> is

	DEFAULT or NOTPRSNT) <i>prtcl</i> identifies the incoming trunk group protocol with values of CAS or ISUP (the default value – set <i>prtcl</i> to ISUP if <i>callTypeCode</i> is DEFAULT)
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35. ENET

Identifies the AID as an Ethernet port on an IOM in the switch.

Pattern	Description
IOM-{8,10}-ENET-{1-4}	Represents an Ethernet port on an IOM

36. FAN

Identifies the AID as the fan assembly in the switch.

Pattern	Description
FAN	Represents the fan assembly

37. IfGrpDs1Id

Identifies the AID as an association of a DS1 port with a GR303 interface group. The first part of the AID is the interface group number and the second part is the DS1 port number.

Pattern	Description
{1-32767}-{1-28}	Represents an association of a DS1 port with a GR303 interface group

38. IfGrpNum

Identifies the AID as a GR303 interface group.

Pattern	Description
{1-32767}	Represents a GR303 interface group

39. IomAid

Identifies the AID as an IOM slot that contains a Voice Processor Server module.

Pattern	Description
IOM-{1-17}	Represents an IOM slot that contains a Voice Processor Server module

40. IOMODULE

Identifies the AID as an I/O module (IOM) by slot number.

Pattern	Description
IOM-{1-17}	Represents an IOM slot number

41. IOMorENET

Identifies the AID either as an IOM (by slot number), or as an Ethernet port on an IOM (by slot number and port number).

Pattern	Description
IOM-{8,10}	Represents an IOM slot number
IOM-{8,10}-ENET-{1-4}	Represents an Ethernet port on an IOM

42. IOMorOC

Identifies the AID either as an IOM (by slot number), or as an OC port on an IOM (by slot number and port number).

Pattern	Description
IOM-{8,10}	Represents an IOM slot number
IOM-{8,10}-OC12-{1-4}	Represents an OC12 port on an IOM
IOM-{8,10}-OC3-{1-4}	Represents an OC3 port on an IOM

43. IOMorSP

Identifies the AID either as an IOM (by slot number) or as a System Processor (SP) module.

Pattern	Description
IOM-{1-17}	An IOM slot number
SP-{A-B}	SP slot number A or B (System Processor functionality)

44. IOMorSPorSF

Identifies the AID either as an IOM (by slot number), as an SW/FAB A or B module, or as a SP A or B module.

Pattern	Description
IOM-{1-17}	An IOM slot number
SF-{A-B}	SW/FAB slot number A or B
SP-{A-B}	SP slot number A or B (System Processor functionality)

45. IOMorSTS1

Identifies the AID either as an STS1 IOM (by slot number), or as an STS1 port on a DS3 IOM (by slot number and port number).

Pattern	Description
IOM-{1-17}	A DS3 IOM slot number
IOM-{1-17}- STS1-{1-8}	An STS1 port on a DS3 IOM

46. IOMorT3

Identifies the AID either as a DS3 IOM (by slot number), or as a T3 port on a DS3 IOM (by slot number and port number).

Pattern	Description
IOM-{1-17}	A DS3 IOM slot number
IOM-{1-17}-T3-{1-8}	A T3 port on a DS3 IOM

47. IOMorT3orPORT

Identifies the AID either as an IOM (by slot number), or as a port on an IOM (by slot number and port number).

Pattern	Description
IOM-{1-17}	An IOM slot number
IOM-{1-17}-PORT-{1-28}	A T1 port on a DS1 IOM
IOM-{1-17}-STS1-{1-8}	An STS1 port on a DS3 IOM
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}	A T1 port on an STS1 port on a DS3 IOM
IOM-{1-17}-T3-{1-8}	A T3 port on a DS3 IOM
IOM-{1-17}-T3-{1-8}-PORT-{1-28}	A T1 port on a T3 port on a DS3 IOM

48. IOMorT3orPORTorBITS

Identifies the AID either as an IOM (by slot number), a port on an IOM (by slot number and port number), or a timing port in the switch.

Pattern	Description
IOM-{1-17}	An IOM slot number
IOM-{1-17}-PORT-{1-28}	A T1 port on a DS1 IOM
IOM-{1-17}-STS1-{1-8}	An STS1 port on a DS3 IOM
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}	A T1 port on an STS1 port on a DS3 IOM
IOM-{1-17}-T3-{1-8}	A T3 port on a DS3 IOM
IOM-{1-17}-T3-{1-8}-PORT-{1-28}	A T1 port on a T3 port on a DS3 IOM
TMG-{A,B}	The BITS interface on rear Switch Fabric card A or B

49. isdnBcStaChannelStateAid

Identifies the AID as an ISDN B channel in the RTRV-STATUS-IDSNBCHAN command. The first range in the pattern represents the interface, the second range represents the link on the interface, and the third range represents the channel on the link.

Pattern	Description
{1-32767}-{1-32767}-{1-24}	Represents an ISDN B channel

50. IsdnChanAid

Identifies the AID as an ISDN B channel in the ED-STATE-IDSNBCHAN command. The first range in the pattern represents the interface, the second range represents the link on the interface, and the third range represents the channel on the link.

Pattern	Description
{1-32767}-{1-32767}-{1-24}	Represents an ISDN channel

51. IsdnIfNum

Identifies the AID as an ISDN interface.

Pattern	Description
{1-32767}	Represents an ISDN interface

52. IsdnLink

Identifies the AID as an ISDN link. The first number in the range identifies the interface; the second identifies the link.

Pattern	Description
{1-32767}-{1-32767}	Represents an ISDN link on an interface

53. IsdnRtAid

Identifies the AID as an ISDN route.

Pattern	Description
<RTNAME>-{0-32767}	Represents an ISDN route with a variable string, of up to 21 alphanumeric characters, indicating the route name (established in the AID <i>isdnRtId</i> in the command ENT-ROUTE-IDSNIF), and an associated priority range. The range establishes the order in which interfaces are to be accessed (with lower numbers indicating higher priority) when there is more than one interface. The value of the priority range is set to zero when there is only one interface.

54. lapdAid

Identifies the AID as an LAPD (Link Access Protocol – D channel) interface and link.

Pattern	Description
GR303EOC-{1-32767}-{1-28}	An Embedded Operations Channel on a GR303 interface
GR303TMC-{1-32767}-{1-32767}	A Timeslot Management Channel on a GR303 interface
ISDN-{1-32767}-{1-32767}	A link on an ISDN interface
IUA-IOM-{1-17}-PORT-{1-28}	A T1 port on a DS1 IOM containing the D-channel for ISDN User Adaptation (IUA) applications
IUA-IOM-{1-17}-STS1-{1-8} -PORT-{1-28}	A T1 port on an STS1 port on a DS3 IOM containing the D-channel for ISDN User (IUA) Adaptation applications
IUA-IOM-{1-17}-T3-{1-8} -PORT-{1-28}	A T1 port on a T3 port on a DS3 IOM containing the D-channel for ISDN User Adaptation (IUA) applications

55. LinkId

Identifies the AID as an ISDN link on an interface.

Pattern	Description
{1-32767}-{1-32767}	Represents an ISDN link with the first number identifying the interface and the second number identifying the link

56. ListCodeAid

Identifies the AID as an authorization code, a PIN code, or an authorization code with an associated PIN code in an authorization list.

Pattern	Description
<LISTID>-{INDEX}	Represents an authorization code, a PIN code, or an authorization code with an associated PIN code in an authorization list, where: <i>LISTID</i> identifies the name of the applicable authorization list with a string of up to 20 alphanumeric characters <i>INDEX</i> identifies a specific code in the authorization list with an integer of 1-500

57. LsetAid

Identifies the AID as a linkset.

Pattern	Description
{1-20}	Represents an SS7 link set

58. MgcplLineAid

Identifies the AID as a line (i.e., endpoint) in an MGCP gateway. The pattern is a combination of a gateway controlled under the Call Management Server (CMS) and the affected endpoint.

Pattern	Description
<gatewayId>-<lineId>	gatewayId = {1-100000} lineId = {1-65536}

59. Mtp2PrflId

Identifies the AID as an MTP layer 2 profile.

Pattern	Description
{1-40}	Represents an MTP layer 2 profile

60. Mtp3PrflId

Identifies the AID as an MTP layer 3 profile.

Pattern	Description
{1-20}	Represents an MTP layer 3 profile

61. NNPAAd

Identifies the AID as a homed NPA in a country. The first number in the range identifies a country code; the second identifies a homed NPA. A null value for the second number in the range is equivalent to all NPAs in the system.

Pattern	Description
{1-99999}-{200-999}	Represents a country code and an NPA

62. NpaNxx

Identifies the AID as a homed NXX (exchange) in a specific NPA hosted by the switch.

Pattern	Description
{200-999}-{200-999}	Represents the NPA with the first number and the NXX with the second number

63. OC

Identifies the AID as an OC port on an IOM in the switch.

Pattern	Description
IOM-{8,10}-OC12-{1-4}	Represents an OC12 port on an IOM
IOM-{8,10}-OC3-{1-4}	Represents an OC3 port on an IOM

64. PcAid

Identifies the AID as a point code.

Pattern	Description
{0-255}-{0-255}-{0-255}	Represents a point code

65. PcPrflId

Identifies the AID as a point code profile.

Pattern	Description
{1-128}	Represents a point code profile

66. PORT

Identifies the AID as a T1 port on an IOM by slot number and port number.

Pattern	Description
IOM-{1-17}-PORT-{1-28}	A T1 port on a DS1 IOM
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}	A T1 port on an STS1 IOM
IOM-{1-17}-T3-{1-8}-PORT-{1-28}	A T1 port on a DS3 IOM

67. PORTorBITS

Identifies the AID either as a port on an IOM (by slot number and port number), or as the BITS interface on a Switch Fabric rear card.

Pattern	Description
IOM-{1-17}-PORT-{1-28}	A T1 port on a DS1 IOM
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}	A T1 port on an STS1 IOM
IOM-{1-17}-T3-{1-8}-PORT-{1-28}	A T1 port on a DS3 IOM
TMG-{A,B}	The BITS interface on rear Switch Fabric card A or B

68. PvcId

Identifies the AID as a PVC endpoint.

Pattern	Description
{1-4}	Represents a PVC endpoint

69. PvcPrflId

Identifies the AID as a PVC profile. The switch is shipped with Profile #1 already established as a factory default; you cannot delete it.

Pattern	Description
{2-8}	Represents a PVC profile

70. RelCauseAid

Identifies the AID as a release cause associated with a specific protocol and type of coding.

Pattern	Description
{0-32767}- PROTOCOLTYPE- CODINGTYPE	{0-32767} identifies the release cause <i>PROTOCOLTYPE</i> = ISDN, ISUP, or CAS <i>CODINGTYPE</i> = ANSI or CCITT

71. RouteAddrAid

Identifies the AID as a route address. The pattern is a combination of the route address (a telephone number associated with a route name) and the nature of address indicator (defined by the parameter *ROUTEIDENT*).

Pattern	Description
<RTADDR>-{ROUTEIDENT}	<i>RTADDR</i> is a string of 1-21 digits or characters a-e (or the word "DEFAULT" when the route identifier applies to all route addresses). <i>ROUTEIDENT</i> can be: • INTNATNUM = international number • NATNUM = national significant

	number • NATOPREQ = national (long-distance) operator request • NONUMCUTTHRU = no number provided, cut through to carrier • NONUMOPREQ = no number provided, operator request • RELINCCITT = Release cause value intended for ISDN with CCITT coding standard • RELINNAT = Release cause value intended for ISDN with National Specific coding standard • RELISCCITT = Release cause value intended for ISUP with CCITT coding standard • RELISNAT = Release cause value intended for ISUP with National Specific coding standard • SUBOPREQ = subscriber (local) operator request • SUBSNUM = subscriber number • TESTLINE = call is for testing purposes • UNKNOWN = Nature of Address unknown
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72. RouteN11Aid

Identifies the AID as an N11 number (such as 411, 911) and an associated calling party number.

Pattern	Description
<N11STRING>-<DNSTRING>	<i>N11STRING</i> represents an N11 number with a digit between 2 and 9 followed by "11" <i>DNSTRING</i> represents the associated calling party number with either a number from one to ten digits or the word "DEFAULT"

73. RouteSchedAid

Identifies the AID as the name of the route schedule, and the name of the schedule profile applied to it.

Pattern	Description
<SCHEDNAMESTRING>- <PRFLNAMESTRING>	<i>SCHEDNAMESTRING</i> = up to 20 alphanumeric characters <i>PRFLNAMESTRING</i> = up to 20 alphanumeric characters, including "DEFAULT" (which must be entered prior to any user-defined schedule profile names).

74. RouteSs7Aid

Identifies the AID as an SS7 Route. The pattern is a combination of the adjacent destination point code and the link set connecting to it.

Pattern	Description
<PCAIID>-<LSETAID>	Represents the destination point code (with pattern {0-255}-{0-255}-{0-255}) and the link set connecting to it (with pattern {1-20})

75. RtId

Identifies the AID as a route with a string of up to 20 characters indicating the name of a route list in which the route is listed, and an associated index.

Pattern	Description
<rtList>-<index>	<i>rtList</i> identifies the name of the applicable route list with a string of 1-20 characters <i>index</i> identifies the particular route in the applicable route list as an integer between zero and 32767.

76. RtIntfcAid

Identifies the AID as a route. The pattern is a combination of the route name (up to 20 characters) and an associated priority. The priority establishes the order in which interfaces are accessed (with lower numbers indicating higher priority) when there is more than one interface. The value of the priority range is set to zero when there is only one interface.

Pattern	Description
<RTNAME>-{0-32767}	Represents an SS7 route interface as the route name with an associated priority

77. RtpTermId

Identifies the AID as a packet termination on a MEGACO call.

Pattern	Description
Alphanumeric characters in the form: Chassis/RTP/IOM{1-17}/ P{1025-65535}	Represents a packet termination as a combination of the chassis name, RTP termination type, IOM, and numeric ID for a specific VoIP resource (port)

78. SccpSsnAid

Identifies the AID as a combination of the remote point code (with pattern {0-255}-{0-255}-{0-255}) that receives a query and the subsystem number of the providing service.

Pattern	Description
<PCAID>-{1-255}	Represents a remote point code and a subsystem number

79. ScpAnncMap

Identifies the AID as an announcement specified by an SCP. The first part of the AID is a string of up to 20 characters that labels the announcement mapping; the second part is an integer identifying the announcement specified by the SCP.

Pattern	Description
<ANNCMAPLBL>-{1-65535}	Represents an announcement specified by an SCP

80. ScreenDigitsAid

Identifies the AID with a variable string indicating the subscriber, the type of screened number, and the string of blocked digits.

Pattern	Description
<SUBSCRIBERID>- <SCREENTYPE>- <SCREENSTRING>	SUBSCRIBERID identifies the subscriber with a string of exactly 10 digits SCREENTYPE identifies the type of screened number and can be: • CUTTHRU = Casual calling carrier (101xxxx) • INTERNATIONAL = Direct-dial international (011) • NATIONAL = Any number in the NANP (1 or any NPA or any NPA-NXX or any complete NPA-NXX-xxxx) • OPERATOR = Local or long-distance operator request (0 or 00) • OPINTRN = Operator-assisted international (01) • OPNAT = Operator-assisted long-distance (0) • SUBSNUM = N11 calls (x11, except 911) SCREENSTRING identifies the digits to block with a string of up to 21 digits (shown parenthetically for each value of SCREENTYPE).

81. ScreenListAid

Identifies the AID as a list of calling or called party numbers associated with an interface. The first number in the range identifies the list, and the second identifies the first subscriber number on the list by NPA, NXX, and XXXX.

Pattern	Description
{LISTID}-{STARTRANGE}	Identifies a list with a number in the range {1-32767} and the first subscriber number on the list by NPA, NXX, and XXXX with exactly 10 digits.

82. ServiceId

Identifies the AID as a type of IN service.

Pattern	Description
<ServiceId>	<i>ServiceId</i> represents a type of IN service – services applicable to specific releases have those releases shown parenthetically after the value. Parentheses also enclose standard (factory default) activation and deactivation codes. Values can be: • ACB = Automatic Call Back (Activation Code = 66, Deactivation Code = 86) • ACR = Anonymous Call Rejection (Activation Code = 77, Deactivation Code = 87) • AIN_TOLLFREE = Advanced Intelligent Network tollfree – tollfree calls resolved in the INAP layer of SS7 (Activation Code = NULL, Deactivation Code = NULL) • AR = Automatic Recall (Activation Code = 69, Deactivation Code = 89) • AUTHCODE = Authorization Code required for outgoing calls (Activation Code = NULL, Deactivation Code = NULL) • CFBL = Call Forwarding on Busy Line (Activation Code = NULL, Deactivation Code = NULL) • CFDA = Call Forwarding on No Answer (Activation Code = NULL, Deactivation Code = NULL) • CFV = Call Forwarding Variable (Activation Code = 72, Deactivation Code = 73) • CID = Calling Identity Delivery (Activation Code =

	61, Deactivation Code = NULL) • CIDCW = Call ID on Call Waiting (Activation Code = NULL, Deactivation Code = NULL) • CIS = Calling Identity Suppression (Activation Code = NULL, Deactivation Code = NULL) • CNAB = Calling Name delivery Blocking (Activation Code = NULL, Deactivation Code = NULL) • CNAM = Caller Name display (Caller ID) (Activation Code = NULL, Deactivation Code = NULL) • CND = Calling Number Delivery (Activation Code = NULL, Deactivation Code = NULL) • CNDB = Calling Number Delivery Blocking (Activation Code = 67, Deactivation Code = NULL) • COT = Customer Originated Trace (Activation Code = 57, Deactivation Code = NULL) • CRDPCL = Code Restriction/Diversion Prohibited Code List – block originating calls to specified screen digits (Activation Code = NULL, Deactivation Code = NULL) • CWC = Cancel Call Waiting (Activation Code = 70, Deactivation Code = NULL) • CWT = Call Waiting (Activation Code = NULL, Deactivation Code = NULL) • GMSC_IS41 (3.8.2 & 3.8.3) = Gateway MSC, ANSI IS41 based (Activation Code = NULL, Deactivation Code = NULL) • GMSC_MAP (3.8.2 & 3.8.3) = Gateway MSC, GSM MAP based (Activation Code = NULL, Deactivation Code = NULL) • LNP = Local Number Portability • MWC = Multi-Way Calling – Call Transfer (Activation Code = NULL, Deactivation Code = NULL) • RAF = Remote Access to Features (Activation Code = NULL, Deactivation Code = NULL) • RDAS = Residence Distinctive Alerting Service (Activation Code = NULL, Deactivation Code = NULL) • SC1 = Speed-dialing with one-digit code (Activation Code = 74, Deactivation Code = NULL) • SC2 = Speed-dialing with two-digit code (Activation Code = 75, Deactivation Code = NULL)
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	• TOLLFREE = Tollfree (Activation Code = NULL, Deactivation Code = NULL) • TWC = Three-Way Calling (Activation Code = NULL, Deactivation Code = NULL) • VMS = Voice Mail System (Activation Code = NULL, Deactivation Code = NULL)
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83. SlhrId

Identifies the AID as a service logic host route to a Service Control Point.

Pattern	Description
{0-31}	Represents a service logic host route

84. SnmpAccessAid

Identifies the AID as an SNMP access group.

Pattern	Description
<GROUPNAME>- {SECLEVEL}- {SECMODEL}	GROUPNAME = up to 32 alphanumeric characters (including underscores “_”) used to identify a set of views for access control SECLEVEL = the minimum security level required by a message to access the group. Allowed values are: AUTHNOPRIV = authentication and no privacy (default) AUTHPRIV = authentication and privacy NOAUTHNOPRIV = no authentication, no privacy SECMODEL = security model required for access to the group. Allowed values are: ANY = any security model SNMPV1 = SNMP version 1 security SNMPV2C = SNMP version 2c security USM = User-Based Security (default)

85. SnmpViewAid

Identifies the AID as an SNMP access group view.

Pattern	Description
<VIEWNAME>-<VIEWTREE>	VIEWNAME = up to 32 alphanumeric characters (including underscores “_”) used to identify a set of view trees. VIEWTREE = up to 63 digits (0-9) and periods (“.”) that identify the view subtree in numerical dotted notation. For example, the object identifier (OID) for the Internet is “1.3.6.1”.

86. SP

Identifies the AID as an active or standby System Processor module in the switch.

Pattern	Description
SP-{A-B}	Represents either SP-A or SP-B

87. SPorIOM

Identifies the AID either as an IOM (by slot number) or as a System Processor (SP) module.

Pattern	Description
IOM-{8,10}	An IOM slot number
SP-{A-B}	SP slot number A or B (System Processor functionality)

88. Ss7LnkAid

Identifies the AID as an SS7 signaling link.

Pattern	Description
{1-40}	Represents an SS7 link

89. Ss7PcAid

Identifies the AID as a destination point code.

Pattern	Description
{0-255}-{0-255}-{0-255}	Represents a point code

90. Ss7TrkAid

Identifies the AID as a unique trunk (or range of trunks) associated with a trunk group number. The first number in the range identifies the trunk group number and the second number identifies the trunk(s). A range of trunks is shown by the beginning and ending numbers separated by two ampersands and a hyphen (“&&-”).

Pattern	Description
{1-9999}-{0-16382}	Represents a CIC in a trunk group

91. STS1

Identifies the AID as an STS1 port on an STS1 IOM in the switch.

Pattern	Description
IOM-{1-17}-STS1-{1-8}	Represents a port on an STS1 IOM

92. SubIfAid

Identifies the AID as a subscriber interface number and whether it is a CAS, GR303, ISDN, or MGCP interface.

Pattern	Description
{IFNUM}-<SUBIF>	Represents the subscriber interface, where IFNUM = {1-2147483647} for CAS, {1-32767} for GR303 or ISDN, {1-100000} for MGCP SUBIF = {CAS, GR303, ISDN, MGCP}

93. SubSpeedAid

Identifies the AID with a variable string indicating a subscriber with a string of exactly 10 digits, and an associated speed-dialing code.

Pattern	Description
<SUBCRIBERID>-{2-99}	Represents a subscriber ID and its associated speed-dialing code

94. T0

Identifies the AID as a DS0 channel on an IOM.

Pattern	Description
IOM-{1-17}-PORT-{1-28}-T0-{1-24}	A DS0 channel on a T1 port on a DS1 IOM
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}-T0-{1-24}	A DS0 channel on a T1 port on an STS1 IOM
IOM-{1-17}-T3-{1-8}-PORT-{1-28}-T0-{1-24}	A DS0 channel on a T1 port on a DS3 IOM

95. T3

Identifies the AID as a T3 port on a DS3 IOM in the switch.

Pattern	Description
IOM-{1-17}-T3-{1-8}	Represents a port on a DS3 IOM

96. T3orPORT

Identifies the AID as a port on a DS3 IOM (by slot and port numbers).

Pattern	Description
IOM-{1-17}-STS1-{1-8}	An STS1 port on a DS3 IOM
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}	A T1 port on an STS1 port on a DS3 IOM
IOM-{1-17}-T3-{1-8}	A T3 port on a DS3 IOM
IOM-{1-17}-T3-{1-8}-PORT-{1-28}	A T1 port on a T3 port on a DS3 IOM

97. T3PORT

Identifies the AID as a T1 port on a DS3 IOM (by slot and port numbers).

Pattern	Description
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}	A T1 port on an STS1 port on a DS3 IOM
IOM-{1-17}-T3-{1-8}-PORT-{1-28}	A T1 port on a T3 port on a DS3 IOM

98. TdmTermId

Identifies the AID as a TDM termination on a MEGACO call.

Pattern	Description
Alphanumeric characters in the form: Chassis/TDM/IOM{1-17}/ T{1-8}/ P{1-28}/C{1-24}	Represents a TDM termination as a combination of the chassis name, TDM termination type, IOM, DS3 port, DS1 port, and Channel {1-24}

99. TestPortNum

Identifies the AID as a number of a DS0 channel on a test port.

Pattern	Description
TP-{1-24}	Represents a DS0 channel

100. TgnAid

Identifies the AID as a unique trunk group number.

Pattern	Description
{1-9999}	Represents a unique trunk group number

101. TgnSipId

Identifies the AID as a trunk group unique to a specific Session Access Node. The first part of the AID is the trunk group number and the second part is the Session Access Node.

Pattern	Description
{1-9999}-{1-16}	Represents a trunk group unique to a specific Session Access Node

102. TransSchedAid

Identifies the AID as a translation plan schedule that chooses translations based on the time of day.

Pattern	Description
<transSched> -<prflName>	<i>transSched</i> identifies the name of the translation plan schedule with a string of 1-10 alphanumeric characters (Translation plan schedules and translation plans cannot have the same names.) <i>prflName</i> (optional only in RTRV) identifies, with a string of 1-20 alphanumeric characters or the value "DEFAULT", the name of the routing schedule profile, previously defined by PRFL-SCHED, that determines the times and dates to use the listed translation plan.

103. TrigEscListAID

Identifies the AID as an escape (exception) list for a particular trigger type.

Pattern	Description
<trigEscList> -<startRange>	<i>trigEscList</i> identifies the name of the trigger type escape list with a string of up to 10 alphanumeric characters; <i>startRange</i> identifies the first number in the range of DNs associated with the escape list with a string of exactly 10 digits.

104. TriggerAid

Identifies the AID as a list of AIN triggers.

Pattern	Description
<ainTrigListName> -<index>	<i>ainTrigListName</i> identifies the name of the list of AIN triggers with a string of up to 21 alphanumeric characters; <i>index</i> identifies the particular trigger associated with the list as an integer with range 1-255. Each trigger has a unique combination of <i>trigType</i> and <i>screenDgts</i> .

105. TrkAid

Identifies the AID as a unique trunk associated with a trunk group number.

Pattern	Description
{1-9999}-{1-32767}	Identifies the trunk group number and the trunk number

106. VMS

Identifies the AID as an SMDI (Simplified Message Desk Interface) data link between the switch and a Voice Mail System. The pattern is a combination of a generic Message Storage and Retrieval (MSR) system in a VMS and an SMDI data link between it and the switch. A value of "0" for *msrId* indicates that the link is a virtual VMS link.

Pattern	Description
<msrId>-<smdiLnkId>	msrId = {0-999} smdiLnkId = {1-8}

107. VoipPrfl

Identifies the AID as a VoIP call profile.

Pattern	Description
{1-65535}	Represents a VoIP call profile

108. VpId

Identifies the AID as a voice processor on a VoIP IOM. The pattern is a combination of the I/O Module and the voice processor.

Pattern	Description
IOM-{1-17}-VP-{1-8}	Represents a voice processor on a VoIP IOM

109. VpsId

Identifies the AID as a Virtual Circuit Connection (VCC).on a Voice Processor Server (VPS) module. The pattern is a combination of the VPS Module and the VCC.

Pattern	Description
IOM-{1-17}-VCC-{0-799}	Represents a VCC on a VPS Module

NOTES

Error Messages

Errors may be generated by any command or command response message. The format of an error message is as follows:

```

        sid date time
M   ctag DENY
    <errcde>
/* <errmsg> */
;
```

Error Code (errcde)	Error Type	Error Message (errmsg)
EATN	Equipage	Not Valid for Access Type
ENAC	Equipage	Not equipped with Alarm Cutoff
ENAD	Equipage	Not equipped with Audit capability
ENAR	Equipage	Not equipped with Automatic Reconfiguration
ENDG	Equipage	Not equipped with DiaGnostic capability
ENDS	Equipage	Not equipped with Duplex Switching
ENEA	Equipage	Not equipped with Error Analysis capability
ENEQ	Equipage	Not EQuipped
ENEX	Equipage	Not equipped with EXercise capability
ENFL	Equipage	Not equipped for Fault Locating
ENMD	Equipage	Not equipped with Memory Device
ENPM	Equipage	Not equipped for Performance Monitoring
ENPS	Equipage	Not equipped with Protection Switching
ENRI	Equipage	Not equipped for Retrieving specified Information
ENRS	Equipage	Not equipped for ReStoration
ENSA	Equipage	Not equipped for Scheduling Audit
ENSI	Equipage	Not equipped for Setting specified Information
ENSS	Equipage	Not equipped with Synchronization Switching
ICNV	Input	Command Not Valid
IDNV	Input	Data Not Valid
IDRG	Input	Data RanGe (range)
IIAC	Input	Invalid ACcess identifier
IICT	Input	Invalid Correlation Tag
IIFM	Input	Invalid data ForMat
IIPG	Input	Invalid Parameter Grouping
IISP	Input	Invalid Syntax or Punctuation
IITA	Input	Invalid TArget identifier
INUP	Input	Non-null Unimplemented Parameter
IPMS	Input	Parameter MiSsing
ISCH	Input	Syntax invalid CHaracter (new Jul95)
ISPC	Input	Syntax invalid PunCtuation (new Jul95)

Error Code (errcde)	Error Type	Error Message (errmsg)
PICC	Privilege	Invalid Command Code
PIMA	Privilege	Invalid Memory Address
PIMF	Privilege	Invalid Memory File
PLNA	Privilege	Login Not Active
SAAL	Status	Already ALlowed
SABT	Status	ABorTed
SAIN	Status	Already INhibited
SAIS	Status	Already In Service
SAMS	Status	Already in Maintenance State
SAOP	Status	Already OPERated
SAPR	Status	Already in Protection state
SARB	Status	All Resources Busy
SATF	Status	Automatic Test Failed
SCNA	Status	Command Not Abortable
SCNF	Status	Command Not Found
SDAS	Status	Diagnosis Already Started
SDFA	Status	Duplex unit FAiled
SDLD	Status	Duplex unit Locked
SDNA	Status	Duplex unit Not Available
SDNR	Status	Data Not Ready
SDNS	Status	Diagnosis Not Started yet
SFAS	Status	Fault locating Already Started
SFNS	Status	Fault locating Not Started yet
SLNS	Status	Log Not Started yet
SNOS	Status	Not currently Out of Service
SNPR	Status	Not in Protection state
SNRM	Status	system Not in Restoration Mode
SNSR	Status	No Switch Request outstanding
SNVS	Status	Not in Valid State
SPFA	Status	Protection unit FAiled
SPLD	Status	Protection unit Locked
SPNA	Status	Process Not Abortable
SPNF	Status	Process Not Found
SRCI	Status	Requested Command(s) Inhibited
SROF	Status	Requested Operation Failed
SRTO	Status	Reply Time-Out
SSRD	Status	Switch Request Denied
SSRE	Status	System Resources Exceeded
STAB	Status	Test ABorted
SWFA	Status	Working unit FAiled
SWLD	Status	Working unit Locked