



# Using BAMS Tag IDs

## Introduction

This chapter provides general reference information to help you understand how to update BAMS tables by using BAMS tag IDs.

For information about the MML commands that you use with the tag IDs, see [Chapter 3, “Using MML Commands.”](#)



**Note**

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MML commands, tag IDs and field names are differentiated from the surrounding text by being set in a Courier typeface. This makes them appear as they would on a computer screen. User input is shown in a bold font, and system responses are shown in a plain font. Text strings that you enter with MML commands are enclosed in quotes. Integers are shown without quotes.

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## Command Notation

The command notation follows the Backus-Naur conventions.

## Command Syntax

The command syntax follows the Bellcore TL1 conventions.

## Tag IDs and Field Names

Tag IDs are aliases for BAMS tables. You use them in conjunction with MML commands to modify or delete table records or data. Some tag IDs contain defined parameter sets used to provision the BAMS tables. The field default values are recommended values, unless noted otherwise.



**Note**

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Tag IDs and field names are not case sensitive. However, values are case sensitive.

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## Updating the Alarm Parameters Table

Use the ALM-PARMS tag ID to update the Alarm Parameters table. Use the `maxlines` field to set the size of the system log (syslog) file. The default value is 10,000 lines. When the `maxlines` threshold is surpassed, BAMS begins deleting lines from the syslog, starting with the oldest entries.



### Note

BAMS creates `oldlog` and `oldloga` as backup system logs by default. You can configure the number of backup logs for a higher value (a maximum of 26) in the `sym_defs` file. The number of logs you create affects the available disk space.

Use the `msgdisclvl` field to set the level (for example, minor, major, critical) of alarms written to the syslog. Use the `msgfwdlvl` field to set the level (for example, critical) of alarms forwarded to a network management platform.

Example:

```
mml:sys>prov-add:ALM-PARMS:maxlines=50000,msgdisclvl=1,msgfwdlvl=2
Billing and Measurements Server - BAMS-00 2002-01-08 15:11:49
B  COMPLD
   "ALM-PARMS"
   ;
```

In this example, the `maxlines` field was set to 50000, the `msgdisclvl` field was set to 1 (that is, major), and the `msgfwdlvl` field was set to 2 (that is, minor).

## ALM-PARMS Tag ID

Table 4-1 lists field names and values that can be specified with the ALM-PARMS tag ID.

**Table 4-1** Fields in the Alarm Parameters Table

Field Name	Description	Values	Range
<code>maxlines</code>	Maximum number of lines in the syslog file (numeric).	Any number, for example, 10000	1 through 99999

**Table 4-1** Fields in the Alarm Parameters Table (continued)

Field Name	Description	Values	Range
msgdisclvl	<p>Message discrimination level (numeric). Used to specify the messages that are written to the syslog file.</p> <p><b>Note</b> Any alarms at the selected value or lower are displayed (for example, a value of 2 displays all minor, major, and critical alarms).</p>	<p>Critical = 0</p> <p>Major = 1</p> <p>Minor = 2</p> <p>Warning = 3</p> <p>Informational = 5</p>	0, 1, 2, 3, or 5
msgfwdlvl	<p>Message forward level (numeric). Used to specify the messages that are trapped and forwarded to a network management platform.</p> <p><b>Note</b> Any alarms at the selected value or lower are forwarded (for example, a value of 1 forwards all major and critical alarms).</p>	<p>Critical = 0</p> <p>Major = 1</p> <p>Minor = 2</p> <p>Warning = 3</p> <p>Informational = 5</p>	0, 1, 2, 3, or 5

## Updating the Country Table

Use the COUNTRY tag ID to update the Country table. The Country table maintains country codes.

Example:

```
mm1:3>prov-add:COUNTRY:countrycode=001,countryname="USA"
Billing and Measurements Server - BAMS-00 2002-01-08 15:20:35
B  COMPLD
   "COUNTRY"
;
```

In this example, the countrycode field was set to 001, and the countryname field was set to USA.

## COUNTRY Tag ID

Table 4-2 lists field names and values that can be specified with the COUNTRY tag ID.

**Table 4-2** Fields in the Country Table

Field Name	Description	Values
countrycode	Country code (numeric)	The 5-digit country code
countryname	Country name (string)	The country name, a maximum of 40 letters

## Updating the Map Type Table

Use the MAPTYPE tag ID to update the Map Type table. The Map Type table defines which structure code to generate and which call type to assign for each call category.

Example:

```
mml:3>prov-add:MAPTYPE:matype="FLAT",calltype="1",answered="502",unanswered="20"
Billing and Measurements Server - BAMS-00 2002-01-08 15:25:50
B  COMPLD
   "MAPTYPE"
   ;
```

In this example, the matype field was set to flat, the calltype field was set to 1, the answered field was set to 502, and the unanswered field was set to 20.

## MAPTYPE Tag ID

Table 4-3 lists field names and values that can be specified with the MAPTYPE tag ID.



### Note

The Matype table should contain one record entry for each matype value. The default system contains the entries. The user should not add or delete any entries, only modify them by specifying different field values with the Rating Type tag ID. The values are case sensitive.



### Note

A value of -1 in the answered or unanswered field means that a BAF record is not generated for that case.

**Table 4-3** Fields in the Map Types Table

Field Name	Description	Values	Range
matype	Map type (string)	FLAT MESSAGE INTRALATA INTERLATAORIGINATING INTERLATATERMINATING INTERLATATANDEM TOLLFREE	A maximum of 24 characters
calltype	Call type (string)	1, 6, 110, 119, 141	A maximum of 3 digits
answered	Answered (string)	-1, 1, 2, 20, 21, 360, 500, 502, 625, 653 <b>Note</b> A value of -1 does not generate a record.	A maximum of 4 digits
unanswered	Unanswered (string)	-1, 1, 2, 20, 21, 360, 500, 502, 625, 653 <b>Note</b> A value of -1 does not generate a record.	A maximum of 4 digits

## Updating the Mass Storage Control Parameters Table

Use the MSC-PARMS tag ID to update the Mass Storage Control (MSC) Parameters table. This table maintains definitions of conditions that generate alarms or events, based on parameters such as file type, size, and age.

Example:

```
mml:sys>prov-add:MSC-PARMS:type="baf*",polled=0,alarm=5,agealarm=30,agelevel=2,delage=30,
delalarm=6
Billing and Measurements Server - BAMS-00 2002-01-08 15:30:20
B  COMPLD
   "MSC-PARMS"
;
```

In this example the type field was set to baf\*, the polled field was set to 0, the alarm field was set to 5, the agealarm field was set to 30, the agelevel field was set to 2, the delage field was set to 30, and the delalarm field was set to 6.

## MSC-PARMS Tag ID

Table 4-4 lists field names and values that can be specified with the MSC-PARMS tag ID.

**Table 4-4** Fields in the Mass Storage Control Parameters Table

Field Name	Description	Values	Range
active	Enables/disables cleanup task (string)	Y = Yes, N = No	Y or N
dir	Directory (string)	/opt/CiscoBAMs/data	
subdirs	Enables/disables cleanup of subdirectories (string)	Y = Yes, N = No	Y or N
type	File prefix to be monitored (string)	cdr* baf* acc* CDR*	A maximum of 23 characters
polled	Polled/unpolled flag (numeric)	Polled = 1 Unpolled = 2 Header = 3	1 through 3
alarm	Alarm level to generate when you are deleting files (numeric)	Critical = 0 Major = 1 Minor = 2 Warning = 3 Manual = 4 Informational = 5 Debug = 6	0 through 6
agelevel	Alarm level to generate when the file reaches its age limit (numeric)	Critical = 0 Major = 1 Minor = 2 Warning = 3 Reserved for future use = 4 Informational = 5 Debug = 6	0 through 6

**Table 4-4** Fields in the Mass Storage Control Parameters Table (continued)

Field Name	Description	Values	Range
agealarm	Number of days to wait before file is considered aged (numeric)	Any appropriate number	0 through 99
delage	Number of days to wait before the system deletes the file (numeric)	Any appropriate number	0 through 99
delalarm	Alarm level to generate when deleting aged files (numeric)	Critical = 0 Major = 1 Minor = 2 Warning = 3 Reserved for future use = 4 Informational = 5 Debug = 6	0 through 6

## Updating the Mass Storage Control Thresholds Table

Use the MSC-THRES tag ID to update the Mass Storage Control Thresholds table. This table maintains the system-level MSC thresholds that determine when the MSC task generates alarms based on disk-capacity thresholds, and when it begins and stops deleting specific types of files to free up disk space.

Example:

```
mm1:sys>prov-add:MSC-THRES:interval=15,put=80,plt=60,uut=95,iut=50000,mil=80,mal
=85,crl=90
Billing and Measurements Server - BAMS-00 2002-01-08 15:34:02
B  COMPLD
   "MSC-THRES"
   ;
```

In this example the interval field was set to 15, the put field was set to 80, the plt field was set to 60, the uut field was set to 95, the iut field was set to 50000, the mil field was set to 80, the mal field was set to 85, the crl field was set to 90, and the key field was set to 1.

## MSC-THRES Tag ID

Table 4-5 lists field names and values that can be specified with the MSC-THRES tag ID.

**Table 4-5** Fields in the Mass Storage Control Thresholds Table

Field Name	Description	Value	Range
interval	The run interval (in minutes). Identifies when the Mass Storage Control (MSC) task operates in the background and deletes available eligible files in the specified directories. This field requires a numeric value. A typical value is 30 minutes.	30	1 through 9999
put	The polled upper threshold (put) value. Identifies the disk capacity level (percent) at which the MSC task begins to delete polled files.  <b>Note</b> Polled files are files that have been polled from BAMS by a polling computer and renamed to identify them as such. Unpolled files are files that have not been polled yet.  This field requires a numeric value. A typical value is 60 percent.	60	1 through 100
plt	The polled lower threshold (plt) value. Identifies the disk capacity level (percent) at which the MSC task stops deleting polled files. This field requires a numeric value. A typical value is 40 percent.	40	1 through 100
uut	The unpolled upper threshold (uut) value. Identifies the disk capacity level (percent) at which the MSC task begins to delete unpolled data files. The MSC continues to delete these files until the disk capacity level drops below the threshold value.  <b>Note</b> This value should be set high. For example, a value of 100% ensures that no unpolled files are deleted.  This field requires a numeric value. A typical value is 80 percent.	80	1 through 100
iut	The inode upper threshold (iut). Defines an upper limit expressed by the maximum number of inodes, which is roughly equivalent to the number of files. When the maximum number is exceeded, the MSC task begins to delete files until the disk capacity level drops below the threshold value. This field requires a numeric value.	50000	1000 through 60000
mil	The minor alarm level value (a percentage of the disk). Indicates when the MSC task will generate a minor alarm. If the disk is still occupied by files (up to the threshold disk level) after the MSC task background cleanup routine is run, a minor alarm, such as MSC032, is generated. This field requires a numeric value. A typical value is 60 percent.	60	1 through 100

**Table 4-5** Fields in the Mass Storage Control Thresholds Table (continued)

Field Name	Description	Value	Range
mal	The major alarm level value (a percentage of the disk). Indicates when the MSC task will generate a major alarm. If the disk is still occupied by files (up to the threshold disk level) after the MSC task background cleanup routine is run, a major alarm, such as MSC031, is generated. This field requires a numeric value. A typical value is 70 percent.	70	1 through 100
cr1	The critical alarm level value (a percentage of the disk). Indicates when the MSC task will generate a minor alarm. If the disk is still occupied by files (up to the threshold disk level) after the MSC task background cleanup routine is run, a minor alarm, such as MSC030, is generated. This field requires a numeric value. A typical value is 80 percent.	80	1 through 100

## Updating the Node Parameters Table

Use the NODEPARMS tag ID to update the Node Parameters table. This table maintains node configuration information such as output types (for example, ASCII, BAF, NICS, P01) and measurements.

Example:

```
mml:1:node1>prov-add:NODEPARMS:activate=1,statoutput=1,bafoutput=1,asciibafoutput=1,
asciioutput=2,lookupinfo=1,bafinfo=1,dynamicaccumes=0,sup-zero-counts=0,interval-minutes=
15,nailed-cfg=0,p01output=0,p01prefix="p01_",enable-h323=0,extasciioutput=0,nicsoutput=0
Billing and Measurements Server - BAMS-00 2002-04-29 15:51:44
B  COMPLD
  "NODEPARMS"
;
```

In this example, the activate field was set to 1, the statoutput field was set to 1, the bafoutput field was set to 1, the asciibafoutput field was set to 1, the asciioutput field was set to 2, the lookupinfo field was set to 1, the bafinfo field was set to 1, the dynamicaccumes field was set to 0, the sup-zero-counts field was set to 0, the interval-minutes field was set to 15, the nailed-cfg field was set to 0, the p01output field was set to 0, the p01prefix field was set to p01\_, the enable-h323 field was set to 0, the extasciioutput field was set to 0, and the nicsoutput field was set to 0.



### Caution

Modifying the interval-minutes or nailed-cfg parameters automatically triggers a restart of the node-level processing tasks, resulting in measurement anomalies and the generating of associated traps.



## NODEPARMS Tag ID

Table 4-6 lists field names and values that can be specified with the NODEPARMS tag ID.

**Table 4-6 Fields in the Node Parameters Table**

Field Name	Description	Value	Range
activate	This numeric parameter activates polling for a node. If the parameter is enabled, BAMS actively attempts to poll data files from the switch. After polling, BAMS processes all data. If this parameter is disabled, the BAMS polling function is turned off, and BAMS does not poll any data from the switch.	Enabled = 1 (default for node 1) Disabled = 0 (default for nodes 2 to 8)	0 or 1
statoutput	Statistics output mode (numeric). This parameter enables or disables the generation of the measurement files.	Enabled = 1 (default) Disabled = 0	0 or 1
bafoutput	BAF output mode (numeric). This parameter enables or disables the generation of the BAF output files. When the parameter is enabled, BAMS converts the CDR records from the switch to BAF format, and places these files in the BAF subdirectory under each node's data directory (for example, opt/CiscoBAMS/data/s0x/BAF).	Enabled = 1 Disabled = 0 (default)	0 or 1
asciibafoutput	This parameter enables or disables the generation of the BAF output files in readable ASCII format. When enabled, BAMS converts the CDR records from the switch to ASCII BAF format, and places these files in the ASCIIBAF subdirectory under each node's data directory (for example, opt/CiscoBAMS/data/s0x/ASCIIBAF).	Disabled = 0 (default) Enabled = 1	0 through 1
asciioutput	ASCII output mode (numeric). This parameter enables or disables the generation of the ASCII output files. When the parameter is enabled, BAMS converts the CDR records from the switch to ASCII format, and places these files in the ASCII subdirectory under each node's data directory (for example, opt/CiscoBAMS/data/s0x/ASCII).	Disabled = 0 Enabled = 1 (ANSI output) Enabled = 2 (ITU output) (default)	0 through 2

Table 4-6 Fields in the Node Parameters Table (continued)

Field Name	Description	Value	Range
lookupinfo	<p>Look up info mode (numeric). This parameter enables or disables messages to the node syslog of errors associated with table lookup failures. Lookup failures are always displayed in the files  /opt/CiscoBAMS/files/sxx/AUG_cor_a.c.log and  /opt/CiscoBAMS/files/sxx/AUG_cor_a.g.log.</p> <p>If the lookupinfo parameter is enabled, these messages are also logged to the node syslog so that the operator is readily notified. Normally the node syslog contains information on the total number of lookup errors per file. Enabling this parameter displays detailed information about each lookup error.</p>	<p>Trunk Group Enabled = 1 (default)  NPA-NXX Enabled = 2  Both Enabled = 3  Both Disabled = 0</p>	0 through 3
bafinfo	<p>BAF info mode (numeric). This parameter enables or disables messages to the node syslog concerning errors associated with the CDR-to-BAF (CTB) process. The CTB process outputs call records in BAF format. This parameter should normally be enabled.</p>	<p>Enabled = 1 (default)  Disabled = 0</p>	0 or 1
dynamicaccumes	<p>Dynamic accumulation mode (numeric). For more information, see the <a href="#">“Configured vs. Dynamic Trunk Group Output”</a> section on page 9-25.</p>	<p>Enabled = 1  Disabled = 0 (default)</p>	0 or 1
sup-zero-counts	<p>Zero count suppression (numeric). For more information, see the <a href="#">“Zero Counts”</a> section on page 9-24.</p>	<p>Enabled = 1  Disabled = 0 (default)</p>	0 or 1

Table 4-6 Fields in the Node Parameters Table (continued)

Field Name	Description	Value	Range
interval-minutes	<p>This numeric parameter sets the measurements file interval (in minutes). By default, BAMS always creates hourly and daily measurements files as long as the statoutput parameter is enabled. This parameter specifies the interval if files are to be created at less than 1-hour intervals.</p> <p><b>Note</b> Modifying this parameter while the system is running triggers an automatic restart of the processing tasks for the current node. Such a restart could affect the accuracy of the current measurements. A restart also creates alarms and traps that state that the processing tasks have been terminated and are being restarted (MGR801).</p>	5, 10, 15, 20, 30 (Default = 15)	5 through 30
nailed-cfg	<p>Enabling this numeric parameter specifies that the switch has been set to a nailed configuration. Disabling this parameter specifies that the switch has been set to a switched configuration.</p> <p><b>Note</b> Modifying the parameter nailed-cfg while the system is running triggers an automatic restart of the processing tasks for the current node. Such a restart could affect the accuracy of the current measurements. A restart also creates alarms and traps that state that the processing tasks have been terminated and are being restarted (MGR801).</p>	Enabled = 1 (default) Disabled = 0	0 or 1

Table 4-6 Fields in the Node Parameters Table (continued)

Field Name	Description	Value	Range
p01output	This parameter enables or disables the generation of the p01 output files by the P01 node task. These files are generated and stored in the directory /opt/CiscoBAMS/data/sxx/p001, where xx=node number. If you enable P01 output, you can filter out certain types of calls (that is, answered, noanswer, busy and other), based on the cause code from the MGC data record. For more information, see the <a href="#">“Updating the P01 Filter Table”</a> section on page 4-13.	Enabled = 1 Disabled = 0 (default)	0 or 1
p01prefix	This string parameter specifies the file prefix of the p01 output files stored in /opt/CiscoBAMS/data/sxx/p001.	p01_ (default) <b>Note</b> A value of NULL or empty means that the p01 output file will have the same name as the input file.	23 characters
enable-H323	This numeric parameter enables or disables the H.323 measurements. For a complete listing of H.323 measurements, see the <a href="#">“Noncarrier Measurements”</a> section on page 9-2.	Enabled = 1 Disabled = 0 (default)	0 or 1
extasciiooutput	This parameter enables or disables the generation of Extendable ASCII data.	Disabled = 0 (default) Enabled = 1 (ANSI output) Enabled = 2 (ITU output)	0 through 2
nicsoutput	This parameter enables or disables the generation of Non-Intercompany Settlement System (NICS) data.	Disabled = 0 (default) Enabled = 1 (ANSI output) Enabled = 2 (ITU output)	0 through 2

## Updating the NPANXX Table

Use the NPANXX tag ID to update the NPANXX table. This table allows you to assign a zone ID and a local access transport area (LATA) to each NPA-NXX.

Example:

```
mm1:1>prov-add:NPANXX:npnxxx=301829,lata=00001,zone=0000001
Billing and Measurements Server - BAMS-00 2002-01-08 15:52:29
B  COMPLD
   "NPANXX"
   ;
```

In this example, the npnxxx field was set to 301829, the lata field was set to 00001, and the zone field was set to 0000001.

## NPANXX Tag ID

Table 4-7 lists field names and values that can be specified with the NPANXX tag ID.

**Table 4-7** Fields in the NPANXX Table

Field Name	Description	Values
npanxx	NPA and NXX (numeric)	The 6-digit NPANXX number
lata	LATA (numeric)	The 5-digit LATA number to which this NPANXX belongs
zone	Zone ID (numeric)	The 1- through 8-digit zone ID for a given Cisco MGC

## Updating the P01 Filter Table

Use the P01FILTER tag ID to determine the type of calls that should be filtered from the P01 output, based on the cause code of the MGC data record. You enable P01 output with the NODEPARMS tag ID. For more information, see the “Updating the Node Parameters Table” section on page 4-8.

Example:

```
mm1:1:node1>prov-rtrv:p01filter:
Billing and Measurements Server - BAMS-00 2002-09-11 09:35:57
B  RTRV
   "P01FILTER:answered=1,noanswer=1,busy=1,other=1"
```

In this example, the answered field was set to 1, the noanswer field was set to 1, the busy field was set to 1, and the other field was set to 1.

For more information about P01 filtering, see the “P01 Output” section on page 7-1.

## P01FILTER Tag ID

Table 4-9 lists field names and values that can be specified with the P01FILTER tag ID.

**Table 4-8** Fields in the P01 Filtering Table

Field Name	Description	Values	Range
answered	Answered call filter (numeric). This parameter enables (1) or disables (0) the filtering of answered calls.	Enabled = 1 Disabled = 0 (default)	0 or 1
noanswer	Noanswer call filter (numeric). This parameter enables (1) or disables (0) the filtering of noanswer calls.	Enabled = 1 Disabled = 0 (default)	0 or 1
busy	Busy call filter (numeric). This parameter enables (1) or disables (0) the filtering of busy calls.	Enabled = 1 Disabled = 0 (default)	0 or 1
other	Other call filter (numeric). This parameter enables (1) or disables (0) the filtering of other calls.	Enabled = 1 Disabled = 0 (default)	0 or 1

## Updating the Poll Table

Use the POLL tag ID to update the Poll table. This table allows you to configure BAMS polling parameters such as hostname, remote directory and file prefix information.

Example:

```
mm1:1>prov-add:POLL:host-name1="newyork1",rem-dir1="/opt/CiscoMGC/var/bam",
file-prefix1="cdr*",file-suffix1=".bin",action="R",interval=1,timeout=1,maxtries=2
Billing and Measurements Server - BAMS-00 2002-01-08 15:56:05
B  COMPLD
  "POLL"
  ;
```

In this example, the host-name1 field was set to newyork1, the rem-dir1 field was set to /opt/CiscoMGC/var/bam, the file-prefix1 field was set to cdr\*, the file-suffix1 field was set to .bin, the action field was set to R, the interval field was set to 1, the timeout field was set to 1, and the maxtries field was set to 2.

## POLL Tag ID

Table 4-9 lists field names and values that can be specified with the POLL tag ID.

**Table 4-9** Fields in the Poll Table

Field Name	Description	Values	Range
host-name1	Host name for Cisco MGC1 (string)	Name of the host	A maximum of 15 characters
rem-dir1	Remote directory for Cisco MGC1 (string)	Full text path of the directory	A maximum of 42 characters

**Table 4-9** Fields in the Poll Table (continued)

Field Name	Description	Values	Range
file-prefix1	Prefix of data files on Cisco MGC1 (string)	cdr*	A maximum of 10 characters
file-suffix1	Suffix of files on Cisco MGC1 (string)	.bin	A maximum of 10 characters
host-name2	Host name for Cisco MGC2 (string) <b>Note</b> Required only if a second MGC is operational.	Name of the second host	A maximum of 15 characters
rem-dir2	Directory name on Cisco MGC2 (string) <b>Note</b> Required only if a second MGC is operational.	Full text path of the directory, for example, opt/CiscoMGC/var/bam or opt/TransPath/var/bam	A maximum of 42 characters
file-prefix2	Prefix of data files on Cisco MGC2 (string)	cdr	A maximum of 10 characters
file-suffix2	Suffix of files on Cisco MGC2 (string) <b>Note</b> Required only if a second MGC is operational.	.bin	A maximum of 10 characters
action	Action after polling (delete/rename) (string)	Delete = D Rename = R Rename to .finished on the MGC.	D or R
interval	Polling interval (in minutes) (numeric)	1 through 60 5 minutes is the recommended setting.	1 through 60
timeout	Timeout for file transfer (in minutes) (numeric)	1 through 15	1 through 15
maxtries	Maximum number of tries on each file (numeric)	1 through 10	1 through 10

**Note**

When BAMS collects a CDR file from the Cisco MGC, it renames that file on the Cisco MGC with a .finished suffix. Likewise, when a downstream polling computer collects a file from the BAMS unit, it renames that file on the BAMS unit to .finished. The Mass Storage Control (MSC) task maintains disk space and periodically checks polled and unpolled files on the BAMS unit, that is, files that have or have not been polled by a downstream polling computer.

## Updating the Rating Exception Table

Use the RATE-EXC tag ID to update the Rating Exception table. The values in the Rating Exception table override the relationships (in terms of call category) that were defined with the NPANXX tag ID. This table allows you to support special billing arrangements.

Example:

```
mml:1>prov-add:RATE-EXC:orgnpanxx=301829, trmpanxx=301831, ratetype="FLAT"
Billing and Measurements Server - BAMS-00 2002-01-08 15:59:12
B  COMPLD
   "RATE-EXC"
   ;
```

In this example, the orgnpanxx field was set to 301829, the trmpanxx field was set to 301831, and the ratetype field was set to FLAT.

## RATE-EXC Tag ID

Table 4-10 lists field names and values that can be specified with the Rating Exception tag ID.

**Table 4-10** Fields in the Rating Exception Table

Field Name	Description	Values	Range
orgnpanxx	Originating NPA and NXX (numeric)	6-digit NPANXX number	A maximum of 6 digits
trmpanxx	Terminating NPA and NXX (numeric)	6-digit NPANXX number	A maximum of 6 digits
ratetype	Rating type (string)	FLAT MESSAGE INTRALATA INTERLATA	A maximum of 24 characters

## Updating the Rating Type Table

Use the RATING-TYPE tag ID to update the Rating Type table. The Rating Type table defines the relationships (in terms of call category) between different zones. This table is directional. That is, calling from Zone 1 to Zone 2 might be categorized one way, and calling in the reverse direction might be categorized another way.

Example:

```
mml:1>prov-add:RATING-TYPE:orgzone=123, trmzone=123, ratetype="FLAT"
Billing and Measurements Server - BAMS-00 2002-01-08 15:58:19
B  COMPLD
   "RATING-TYPE"
   ;
```

In this example, the orgzone field was set to 123, the trmzone field was set to 123, and the ratetype field was set to FLAT.



## RATING-TYPE Tag ID

Table 4-11 lists field names and values that can be specified with the RATING-TYPE tag ID.

**Table 4-11** *Fields in the Rating Type Table*

Field Name	Description	Values	Range
orgzone	Originating zone (numeric)	8-digit originating zone	A maximum of 8 digits
trmzone	Terminating zone (numeric)	8-digit terminating zone	A maximum of 8 digits
ratetype	Rating type (string)	FLAT MESSAGE INTRALATA INTERLATA	A maximum of 24 characters

## Updating the Nailed Connection Table

In a nailed environment, use the SIGPATH tag ID to update the Nailed Connection table. This table maintains nailed connections for the Cisco SC2200 configuration.

Trunk groups and trunk numbers are populated in the Cisco MGC call detail records based on table lookups of read-in hexadecimal values for signal path and bearer channel. On Cisco SC2200 applications, sigpath ID and bearchan ID are used as a reference to associate trunk group and trunk number. Trunk group numbers are as follows: BAF (1 through 9999), ITU (4096), and ANSI (1684). On a nailed application, you must have a SIGPATH association for every circuit that must be added.

There is a maximum number of bearer channels that can be provisioned in a nailed configuration for a single Cisco PGW node. The maximum number of records defined in the Nailed Connection table is 100,000.

Example:

```
mm1:1>prov-add:sigpath:sigpath=0x50-0x60,bearchan=0x50-0x60,trunkgrp=0-16,trunknum=2234
Billing and Measurements Server - BAMS-00 2002-01-08 16:02:37
B   COMPLD
    "SIGPATH"
    ;
```

In this example, the sigpath field was set to the range 0x50–0x60, the bearchan field was also set to the range 0x50–0x60, the trunkgrp field range was set to 0–16, and the trunknum field was set to 2234.

## SIGPATH Tag ID

Table 4-12 lists field names and values that can be specified with the SIGPATH tag ID.

**Table 4-12** Fields in the Nailed Connection Table

Field Name	Description	Values	Range
sigpath	Signal path (numeric)	8-digit hexadecimal number	A maximum of 8 digits
bearchan	Bearer channel (numeric)	8-digit hexadecimal number	A maximum of 8 digits
trunkgrp	Trunk group (numeric) <b>Note</b> BAF records store only the 4 least-significant decimal digits of the trunk group value. Cisco MGC End of Call 1110 ASCII records and measurements support the full range.	0 through 65535	0 through 65535
trunknum	Trunk number (numeric) <b>Note</b> BAF records store only the 4 least-significant decimal digits of the trunk group value. Cisco MGC End of Call 1110 ASCII records and measurements support the full range.	0 through 65535	0 through 65535

## Updating the Skip CDB Table

Use the SKIPCDB tag ID to update the Skip CDB table. This table maintains a list of CDBs produced by the Cisco MGC that BAMS should not process. By default this table contains one value: 1020.

Example:

```
mml:1>prov-add:SKIPCDB:id=1020
Billing and Measurements Server - BAMS-00 2002-01-08 16:02:37
B  COMPLD
;
```

In this example, the id field was set to 1020.

## SKIPCDB Tag ID

Table 4-13 lists the field name that can be specified with the SKIPCDB tag ID.

**Table 4-13** Fields in the Skip CDB Table

Field Name	Description	Values	Range
id	A CDB identifier is used to identify any new CDB that the Cisco MGC is producing and that BAMS should skip in its processing. Please contact Cisco for assistance.	Default: empty	Up to 10-digit numeric value ( $2^{31} - 1$ )

## Updating the Skip CDE Table

Use the SKIPCDE tag ID to update the Skip CDE table. This table maintains a list of CDEs produced by the Cisco MGC that BAMS should not process. By default this table is empty.

Example:

```
mml:1>prov-add:SKIPCDE:id=5000
Billing and Measurements Server - BAMS-00 2002-01-08 16:02:37
B   COMPLD
    ;
```

In this example, the id field was set to 5000.

## SKIPCDE Tag ID

Table 4-14 lists field names and values that can be specified with the SKIPCDE tag ID.

**Table 4-14** Fields in the Skip CDE Table

Field Name	Description	Values	Range
id	A CDE identifier is used to identify any new CDE that the Cisco MGC is producing and that BAMS should skip in its processing. Please contact Cisco for assistance.	Default: empty	Up to 10-digit numeric value ( $2^{31} - 1$ )

## Updating the Switch Information Table

Use the SWITCHINFO tag ID to update the Switch Information table. This table must be populated if BAF output has been enabled. For more information, see [Chapter 5, “Configuring BAMS for BAF Output.”](#)

The values maintained in this table are customer-specific and must be obtained from Telcordia. Refer to the Telcordia/Bellcore document GR-478-CORE for more detailed descriptions of these fields.

Example:

```
mml:1:node01>prov-ed:switchinfo:sensortype="118",sensorid="999999",recoffctype=
"118",recoffcid="999999"
Billing and Measurements Server - BAMS-00 2002-11-15 10:15:19
B   COMPLD
    "SWITCHINFO"
    ;
```

In this example, the sensortype field was set to 118, the sensorid field was set to 999999, the recoffctype field was set to 118, and the recoffcid field was set to 999999.

## SWITCHINFO Tag ID

Table 4-15 lists field names and values that can be specified with the SWITCHINFO tag ID.

**Table 4-15** Fields in the Switch Information Table

Field Name	Description	Values	Range
sensortype	Sensor type	Default = 0	See Telcordia/Bellcore document GR-478-CORE
sensorid	Sensor ID	Default = 0	See Telcordia/Bellcore document GR-478-CORE
recoffctype	Recording office type	Default = 0	See Telcordia/Bellcore document GR-478-CORE
recoffcid	Recording office ID	Default = 0	See Telcordia/Bellcore document GR-478-CORE

## Updating the Threshold Crossing Alarms Table

Use the TCA-TBL tag ID to update the Threshold Crossing Alarms (TCA) table.

Each TAG/TRK (where TAG is a user-defined value, and TRK is the trunk) can have a maximum of 43 measurements. A global TCA can be set up with a maximum of 43 measurements. Any TAG/TRK that does not have a specific TCA is checked against the global TCA.

For eight measurements, you can specify TAG/TRK/IC, where TAG is a user-defined value, TRK is the trunk, and IC is the interexchange carrier.

You need to know the carrier codes (for example, 0288 for AT&T). Enter three-digit codes as four digits with a 0 as the first digit. Refer to [Chapter 9, “Obtaining Measurements,”](#) for additional information.

A special measurement group can be specified to apply to all TAG/TRK measurement groups that are not otherwise specified. This measurement group is identified by the name “global/0,” where the TAG is “global” and the trunk group is “0.”

If there is no global/0 defined, any measurement that does not have a specific threshold set for it is not checked. The measurement is still reported in the acc\_x, acc\_r, acc\_h, or acc\_d file, but no alarm is generated, regardless of the value.

If global/0 is defined, it is used when no specific thresholds have been specified for a trunk group. If you set thresholds for a specific TAG/TRK, only the specified values are checked. Any unspecified measurements within the TAG/TRK are ignored.



### Note

When setting up a global TCA for a trunk group, do not use a global measurement change for trunk groups where measurements are not used.

In [Table 4-16](#), peg counts refer to statistics. Any number can be specified for the threshold values; the only limit is the field length. The condition values are as follows:

0 = Ignore, 1 = Less than, 2 = Equal, 3 = Greater than, and 4 = Not equal.



### Note

None of the fields shown in [Table 4-16](#) are required fields. Each threshold is based on user-defined alarms. If you specify a value parameter, you must also specify its corresponding condition parameter, and vice versa. For each defined record, the id record field must be populated.

**Note**

When setting up a TCA for all trunk groups, do not use a global measurement change for trunk groups where measurements are not used.

**Note**

Once you use the **prov-add** command for all trunk groups, use the **prov-ed** command for all other trunk group changes.

Example (one trunk group):

```
mml:1>prov-add:tca-tbl:id="1/800",igr-call-att-cond=3,igr-call-att=5
```

```
Billing and Measurements Server - BAMS-00 2002-01-06 15:45:32
B COMPLD
  "TCA-TBL"
;
```

In this example, the id field was set to 1/800, the igr-call-att-cond field was set to 3, and the igr-call-att field was set to 5.

Example (all trunk groups):

```
mml:1>prov-add:tca-tbl:id="global/0",igr-call-att-cond=3,igr-call-att=5
```

```
Billing and Measurements Server - BAMS-00 2002-01-06 15:45:32
B COMPLD
  "TCA-TBL"
;
```

In this example, the id field was set to global/0, the igr-call-att-cond field was set to 3, and the igr-call-att field was set to 5.

## TCA-TBL Tag ID

Table 4-16 lists field names and values that can be specified with the Threshold Crossing Alarm (TCA-TBL) tag ID.

**Table 4-16 Fields in the Threshold Crossing Alarms Table**

Field Name	Description	Values
id	User-defined tag/trunk group/interconnect carrier (string) <b>Note</b> Do not include the trunk group prefix (from the TRUNKGRP table) in this field.	A maximum of 43 characters
igr-call-att-cond	Call attempts incoming threshold condition (numeric)	0 through 4
igr-call-att	Call attempts incoming threshold value (numeric)	Any number
egr-call-att-cond	Call attempts outgoing threshold condition (numeric)	0 through 4
egr-call-att	Call attempts outgoing threshold value (numeric)	Any number
egr-call-blkd-cond	Outgoing calls blocked threshold condition (numeric)	0 through 4
egr-call-blkd	Outgoing calls blocked threshold value	Any number

**Table 4-16** Fields in the Threshold Crossing Alarms Table (continued)

Field Name	Description	Values
t1l-failed-cong-cond	Failed calls congestion threshold condition (numeric)	0 through 4
t1l-failed-cong	Failed calls congestion threshold value (numeric)	Any number
igr-term-norm-cond	Successful calls incoming threshold condition (numeric)	0 through 4
igr-term-norm	Successful calls incoming threshold value (numeric)	Any number
egr-term-norm-cond	Successful calls outgoing threshold condition (numeric)	0 through 4
egr-term-norm	Successful calls outgoing threshold value (numeric)	Any number
igr-pct-trk-use-cond	Percent trunk group usage incoming threshold condition (numeric)	0 through 4
igr-pct-trk-use	Percent trunk group usage incoming threshold condition (numeric)	Any number
egr-pct-trk-use-cond	Percent trunk group usage outgoing threshold condition (numeric)	0 through 4
egr-pct-trk-use	Percent trunk group usage outgoing threshold value (numeric)	Any number
t1l-maint-use-cond	Maintenance usage per trunk group threshold condition (numeric) <sup>1</sup>	0 through 4
t1l-maint-use	Maintenance usage per trunk group threshold value (numeric) <sup>1</sup>	Any number
t1l-erlangs-cond	Total traffic erlangs threshold condition (numeric)	0 through 4
t1l-erlangs	Total traffic erlangs threshold value (numeric)	Any number
t1l-term-norm-cond	Total calls terminated normally threshold condition (numeric)	0 through 4
t1l-term-norm	Total calls terminated normally threshold value (numeric)	Any number
t1l-term-abnorm-cond	Calls terminated abnormally threshold condition (numeric)	0 through 4
t1l-term-abnorm	Calls terminated abnormally threshold value (numeric)	Any number
t1l-term-failed-mgw-cond	Calls terminated, failed MGW or NAS threshold condition (numeric)	0 through 4
t1l-term-failed-mgw	Calls terminated, failed MGW or NAS threshold value (numeric)	Any number
t1l-calls-rejected-cond	Calls rejected threshold condition (numeric)	0 through 4
t1l-calls-rejected	Calls rejected threshold value (numeric)	Any number
t1l-rejected-dialnum-cond	Calls rejected, unknown dialed number threshold condition (numeric)	0 through 4
t1l-rejected-dialnum	Calls rejected, unknown dialed number threshold value (numeric)	Any number

**Table 4-16 Fields in the Threshold Crossing Alarms Table (continued)**

Field Name	Description	Values
ttl-rejected-other-cond	Calls rejected, other reasons threshold condition (numeric)	0 through 4
ttl-rejected-other	Calls rejected, other reasons threshold value (numeric)	Any number
egr-ofl-blkd-cond	Overflow, outgoing attempts blocked threshold condition (numeric)	0 through 4
egr-ofl-blkd	Overflow, outgoing attempts blocked threshold value (numeric)	Any number
ttl-traffic-usage-pegs-cond	Total traffic usage pegs threshold condition (numeric)	0 through 4
ttl-traffic-usage-pegs	Total traffic usage pegs threshold value (numeric)	Any number
egr-tndm-att-cond	Tandem routing attempts, outgoing threshold condition (numeric)	0 through 4
egr-tndm-att	Tandem routing attempts, outgoing threshold value (numeric)	Any number
egr-tndm-cmplt-cond	Tandem completions, outgoing threshold condition (numeric)	0 through 4
egr-tndm-cmplt	Tandem completions, outgoing threshold value (numeric)	Any number
igr-tndm-att-cond	Tandem routing attempts, incoming threshold condition (numeric)	0 through 4
igr-tndm-att	Tandem routing attempts, incoming threshold value (numeric)	Any number
igr-tndm-cmplt-cond	Tandem completions, incoming threshold condition (numeric)	0 through 4
igr-tndm-cmplt	Tandem completions, incoming threshold value (numeric)	Any number
egr-tndm-dur-cond	Tandem duration, outgoing threshold condition (numeric)	0 through 4
egr-tndm-dur	Tandem duration, outgoing threshold value (numeric)	Any number
igr-tndm-dur-cond	Tandem duration, incoming threshold condition (numeric)	0 through 4
igr-tndm-dur	Tandem duration, incoming threshold value (numeric)	Any number
igr-conv-dur-cond	Conversation duration, incoming threshold condition (numeric)	0 through 4
igr-conv-dur	Conversation duration, incoming threshold value (numeric)	Any number
egr-conv-dur-cond	Conversation duration, outgoing threshold condition (numeric)	0 through 4
egr-conv-dur	Conversation duration, outgoing threshold value (numeric)	Any number

**Table 4-16 Fields in the Threshold Crossing Alarms Table (continued)**

Field Name	Description	Values
igr-setup-dur-cond	Setup duration, incoming threshold condition (numeric)	0 through 4
igr-setup-dur	Setup duration, incoming threshold value (numeric)	Any number
egr-setup-dur-cond	Setup duration, outgoing threshold condition (numeric)	0 through 4
egr-setup-dur	Setup duration, outgoing threshold value (numeric)	Any number
igr-teardown-dur-cond	Teardown duration, incoming threshold condition (numeric)	0 through 4
igr-teardown-dur	Teardown duration, incoming threshold value (numeric)	Any number
egr-teardown-dur-cond	Teardown duration, outgoing threshold condition (numeric)	0 through 4
egr-teardown-dur	Teardown duration, outgoing threshold value (numeric)	Any number
egr-ic-calls-cond	IC destined calls threshold condition (numeric)	0 through 4
egr-ic-calls	IC destined calls threshold value (numeric)	Any number
egr-ic-nockt-cond	IC destined calls, no circuit threshold condition (numeric)	0 through 4
egr-ic-nockt	IC destined calls, no circuit threshold value (numeric)	Any number
t1l-ic-usage-cond	IC usage threshold condition (numeric)	0 through 4
t1l-ic-usage	IC usage threshold value (numeric)	Any number
t1l-route1-cond	Route 1 threshold condition (numeric)	0 through 4
t1l-route1	Route 1 threshold value (numeric)	Any number
t1l-route2-cond	Route 2 threshold condition (numeric)	0 through 4
t1l-route2	Route 2 threshold value (numeric)	Any number
t1l-route3-cond	Route 3 threshold condition (numeric)	0 through 4
t1l-route3	Route 3 threshold value (numeric)	Any number
egr-scfl-h323-cond	Successful H.323 terminating threshold condition (numeric)	0 through 4
egr-scfl-h323	Successful H.323 terminating threshold value (numeric)	Any number
igr-scfl-h323-cond	Successful H.323 originating threshold condition (numeric)	0 through 4
igr-scfl-h323	Successful H.323 originating threshold value (numeric)	Any number
egr-unscfl-h323-cond	Unsuccessful H.323 terminating threshold condition (numeric)	0 through 4
egr-unscfl-h323	Unsuccessful H.323 terminating threshold value (numeric)	Any number



**Table 4-16 Fields in the Threshold Crossing Alarms Table (continued)**

Field Name	Description	Values
igr-unsfl-h323-cond	Unsuccessful H.323 originating threshold condition (numeric)	0 through 4
igr-unsfl-h323	Unsuccessful H.323 originating threshold value (numeric)	Any number
ttl-ic-sel-noind-cond	Total carrier select no indication threshold condition (numeric)	0 through 4
ttl-ic-sel-noind	Total carrier select no indication threshold value (numeric)	Any number
ttl-ic-sel-pr-nipt-cond	Total carrier select presubscribed not input threshold condition (numeric)	0 through 4
ttl-ic-sel-pr-nipt	Total carrier select presubscribed not input threshold value (numeric)	Any number
ttl-ic-sel-pr-input-cond	Total carrier select presubscribed input threshold condition (numeric)	0 through 4
ttl-ic-sel-pr-input	Total carrier select presubscribed input threshold value (numeric)	Any number
ttl-ic-sel-pr-wni-cond	Total carrier select presubscribed with no indication threshold condition (numeric)	0 through 4
ttl-ic-sel-pr-wni	Total carrier select presubscribed with no indication threshold value (numeric)	Any number
ttl-ic-sel-no-pr-cond	Total carrier select not presubscribed threshold condition (numeric)	0 through 4
ttl-ic-sel-no-pr	Total carrier select not presubscribe threshold value (numeric)	Any number
egr-scfl-isup-cond	Successful ISUP terminating pegs condition (numeric)	0 through 4
egr-scfl-isup	Successful ISUP terminating pegs value (numeric)	Any number
igr-scfl-isup-cond	Successful ISUP originating pegs condition (numeric)	0 through 4
igr-scfl-isup	Successful ISUP originating pegs value (numeric)	Any number
egr-unsfl-isup-cond	Unsuccessful ISUP terminating pegs condition (numeric)	0 through 4
egr-unsfl-isup	Unsuccessful ISUP terminating pegs value (numeric)	Any number
igr-unsfl-isup-cond	Unsuccessful ISUP originating pegs condition (numeric)	0 through 4
igr-unsfl-isup	Unsuccessful ISUP originating pegs value (numeric)	Any number
egr-isdn-su-msg-delay-cond	ISDN terminating setup message delay pegs condition (numeric)	0 through 4
egr-isdn-su-msg-delay	ISDN terminating setup message delay pegs value (numeric)	Any number
igr-isdn-su-msg-delay-cond	ISDN originating setup message delay pegs condition (numeric)	0 through 4

**Table 4-16** Fields in the Threshold Crossing Alarms Table (continued)

Field Name	Description	Values
igr-isdn-su-msg-delay	ISDN originating setup message delay pegs value (numeric)	Any number
ttd-avlbl-cic-cond	Total number of available CICs threshold condition (numeric)	0 through 4
ttd-avlbl-cic	Total number of available CICs threshold value (numeric)	Any number

1. This value is disabled and if populated, no alarm is generated.

## Updating the Tollfree Table

Use the TOLLFREE tag ID to update the Tollfree table. The Tollfree table maintains the toll-free prefixes.

Example:

```
mm1:1>prov-add:TOLLFREE:digits=800
Billing and Measurements Server - BAMS-00 2002-01-08 16:25:17
B  COMPLD
  "TOLLFREE"
;
```

In this example, the digits field was set to 800.

## TOLLFREE Tag ID

Table 4-17 lists the field name that can be specified with the TOLLFREE tag ID.

**Table 4-17** Fields in the Tollfree Table

Field Name	Description	Values	Range
digits	This numeric prefix identifies a toll-free call. Default values are 800, 877, 888, 1800, 1877, and 1888. Additional values can be entered if needed.	800, 877, 888, 1877, 1800, 1888, any valid NPA, three or four characters	A maximum of 12 digits

## Updating the Trunk Group Table

Use the TRUNKGRP tag ID to update the Trunk Group table. The Trunk Group table provides information about each trunk group. This information determines if a call is originating or terminating. In addition, the default NPA is taken from here if only 7 digits are populated in the calling or called phone numbers.

Example:

```
mm1:1>prov-add:TRUNKGRP:trunkgrp=1234,connection="D",orgnpa=301,trmnpa=503,circuits=456,
prefix="Ab"
Billing and Measurements Server - BAMS-00 2002-01-08 16:26:06
```

```
B  COMPLD
   "TRUNKGRP"
   ;
```

In this example, the trunkgrp field was set to 1234, the connection field was set to D, the orgnpa field was set to 301, the trmnpa field was set to 503, the circuits field was set to 456, and the prefix field was set to Ab.

## TRUNKGRP—Trunk Group Table

Table 4-18 lists field names and values that can be specified with the TRUNKGRP tag ID.

**Table 4-18 Fields in the Trunk Group Table**

Field Name	Description	Values	Range
trunkgrp	Trunk group (numeric). This field is mandatory.  <b>Note</b> BAF records store only the 4 least-significant decimal digits of the trunk group value. Cisco MGC End of Call 1110 ASCII records and measurements support the full range.	0 through 65535	0 through 65535
connection	Connection (string). This field is mandatory. This value is used for BAF output mapping. If BAF output is not enabled, you can use either value.  <b>Note</b> A Direct (D) connection refers to calls terminated locally (directly) on the VSC. A Tandem (T) connection is a call collected over a long distance or remote tandem switching system and forwarded to the VSC.	Direct = D (for direct or local) Tandem = T	D or T
orgnpa	Originating NPA (numeric). This field is optional. For local 7-digit calls, this value is prepended to create a 10-digit number.	The 3-digit originating NPA	A maximum of 3 digits
trmnpa	Terminating NPA (numeric). This field is optional. For local 7-digit calls, this value is prepended to create a 10-digit number.	The 3-digit terminating NPA	A maximum of 3 digits

Table 4-18 Fields in the Trunk Group Table

Field Name	Description	Values	Range
circuits	<p>Circuits (numeric). This field is optional. This value is used to determine some statistics, such as trunk group usage</p> <p><b>Note</b> To eliminate data-validation errors on the BAMS system, this field should be populated even if a valid number does not exist (for example, there are no circuits in an IP trunk group). For a case in which the number of circuits does not exist for a trunk group, set this field to 1.</p>	The number of total circuits in the trunk group.	0 through 65535
prefix	Trunk group prefix (string). This field is optional. If you populate this field, the trunk group prefix is prepended to the trunkgrp field value, and both are displayed in statistics output and NICS output.	The trunk group prefix.	A maximum of 3 letters (A–Z, a–z)

## Updating the Trunk Group Prefix Table



### Note

This table is only required for systems that are configured to produce NICS output. For more information, see [Chapter 8, “Configuring BAMS for NICS Output”](#).

Use the TKGPREFIX tag ID to update the Trunk Group Prefix table. The Trunk Group Prefix table provides information about each trunk group prefix. This table is used by the NIC task to produce NICS output. For each record to be processed, the NIC task does a TKGPREFIX table lookup based on the trunk group prefix of the ingress and egress trunks. If the prefix is found, the ingress and/or egress trunk type is assigned. By default this table is empty.

Example:

```
mml:1>prov-add:TKGPREFIX:prefix="ABC",type=1
Billing and Measurements Server - BAMS-00 2002-01-08 16:26:06
B  COMPLD
   "TKGPREFIX"
;
```

In this example, the prefix field was set to ABC and the type field was set to 1 (that is, PSTN).

**Note**

To correctly provision the Trunk Group Prefix table, each unique value of the prefix field from the Trunk Group table (TRUNKGRP tag ID) must have an entry in the Trunk Group Prefix table that defines the trunk group type (PSTN, SIP, PGW, etc.).

## TKGPREFIX—Trunk Group Prefix Table

Table 4-19 lists field names and values that can be specified with the TKGPREFIX tag ID.

**Table 4-19** Fields in the Trunk Group Prefix Table

Field Name	Description	Values	Range
prefix	Trunk group prefix (string)	The trunk group prefix. Each value must be unique	A maximum of 3 letters (A–Z, a–z)
type	The trunk group prefix type (numeric)	The trunk group prefix type	1 through 5: 1 = PSTN 2 = PGW 3 = SIP 4 = HIS 5 = HIS-NETCHAT

## Updating the Zone Information Table

Use the ZONE-INFO tag ID to update the Zone Information table. This table maintains zone membership information.

Example:

```
mm1:1>prov-add:ZONE-INFO:zone=456,info="zone2"
Billing and Measurements Server - BAMS-00 2002-01-08 16:27:08
B  COMPLD
   "ZONE-INFO"
   ;
```

In this example, the *zone* field was set to 456, and the *info* field was set to zone2.

## ZONE-INFO Tag ID

Table 4-20 lists field names and values that can be specified with the ZONE-INFO tag ID.

**Table 4-20** *Fields in the Zone Information Table*

<b>Field Name</b>	<b>Description</b>	<b>Values</b>	<b>Range</b>
zone	The zone ID number (numeric) <b>Note</b> Not required. Useful for reference purposes.	The zone ID	A maximum of 8 digits
info	The zone description (string) <b>Note</b> Not required. Useful for reference purposes.	The zone description	A maximum of 80 characters