Multi-Access Gateway – controller

Release 25.3

Log Events Reference Guide

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Nokia is committed to diversity and inclusion. We are continuously reviewing our customer documentation and consulting with standards bodies to ensure that terminology is inclusive and aligned with the industry. Our future customer documentation will be updated accordingly.

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1 Getting started

Find general information about this guide.

1.1 About this guide

This guide provides descriptions of event notifications that are forwarded to a destination such as a file or an SNMP trap. Properties that are reported include alarm or raising event name, raising condition, and clearing event information. The information is intended to assist with identifying and responding to the event notifications.

Command outputs shown in this guide are examples only; actual displays may differ depending on supported functionality and user configuration.

The CLI trees and command descriptions can be found in the *MAG-c CLI Reference Guide*.

Note: This guide generically covers content for the release specified on the title page of the guide, and may also contain some content that will be released in later maintenance loads. See the applicable *MAG-c Release Notes* for information about features supported in each load of the software release.

Note: The information in this guide is intended to be used in conjunction with the SR OS software user guides. The SR OS software user guides describe SR OS service features that are supported by the MAG-c. See the *7450 ESS, 7750 SR, 7950 XRS, and VSR Documentation Suite Overview Card 20.10.R1* for specific guide titles.

1.2 Conventions

This section describes the general conventions used in this guide.

1.2.1 Precautionary and information messages

The following information symbols are used in the documentation.

DANGER: Danger warns that the described activity or situation may result in serious personal injury or death. An electric shock hazard could exist. Before you begin work on this equipment, be aware of hazards involving electrical circuitry, be familiar with networking environments, and implement accident prevention procedures.

WARNING: Warning indicates that the described activity or situation may, or will, cause equipment damage, serious performance problems, or loss of data.

Caution: Caution indicates that the described activity or situation may reduce your component or system performance.

Note: Note provides additional operational information.

Tip: Tip provides suggestions for use or best practices.

1.2.2 Options or substeps in procedures and sequential workflows

Options in a procedure or a sequential workflow are indicated by a bulleted list. In the following example, at step 1, the user must perform the described action. At step 2, the user must perform one of the listed options to complete the step.

Example: Options in a procedure

1. User must perform this step.
2. This step offers three options. User must perform one option to complete this step.
   - This is one option.
   - This is another option.
   - This is yet another option.

Substeps in a procedure or a sequential workflow are indicated by letters. In the following example, at step 1, the user must perform the described action. At step 2, the user must perform two substeps (a. and b.) to complete the step.

Example: Substeps in a procedure

1. User must perform this step.
2. User must perform all substeps to complete this action.
   a. This is one substep.
   b. This is another substep.

2 Log events overview

Log events have common elements or properties but are formatted in a way appropriate for the specific destination whether recorded to a file or sent as an SNMP trap.

Logs can be directed to memory, a console, a session, a local file, a syslog server, or an SNMP manager. All application-generated events have the following properties:

- a time stamp in UTC or local time
- the generating application
- a unique event ID within the application
- a router name identifying the VRF-ID that generated the event
- a subject identifying the affected object
- a short text description

See the associated SNMP notification definition in the SR OS MIBs for more information about the variables found in the message format strings.

The general format for a log event with either a memory, console, or file destination is as follows:

```
nnnn YYYY/MM/DD HH:MM:SS.SS TZONE <severity>: <application> #<event_id> <router-name>
  <subject>
<message>
```

The following is a log event example:

```
252 2013/05/07 16:21:00.76 UTC WARNING: SNMP #2005 Base my-interface-abc
"Interface my-interface-abc is operational"
```

The following table lists the specific elements that compose the general format.

Table 1: Log entry field descriptions

Label	Description
nnnn	The log entry sequence number
YYYY/MM/DD	The UTC or local date stamp for the log entry *YYYY* Year *MM* Month *DD* Date
HH:MM:SS.SS	The UTC time stamp for the event *HH* Hours (24-hour format) *MM* Minutes *SS.SS* Seconds

Label	Description
TZONE	The time zone (for example, UTC, EDT) as configured by the **configure log log-id** *x* **time-format** command
<severity>	The severity level of the event • CRITICAL • MAJOR • MINOR • WARNING • INFO • CLEARED
<application>	The name of the application generating the log message
<event_id>	The application's event ID number for the event
<router>	The router name representing the VRF-ID that generated the event; some examples include: Base, management, and vprn348
<subject>	The subject or affected object for the event
<message>	A text description of the event

The following table lists the sources that trigger an event.

Table 2: Log event sources

Event source	Description
Security events	Events pertaining to attempts to breach system security
Change events	Events pertaining to the configuration and operation of the node
Main events	Events pertaining to applications that are not assigned to other event categories or sources
Debug events	Events pertaining to trace or other debugging information

2.1 Viewing log events

- View all the log events.

```
show log event-control
```

Note:

- You can use this command and specify an application (for example, subscriber management).
- When an L precedes an event, it indicates that this event does not generate an SNMP notification.
- The event severity can be modified whether the event is generated or dropped.
- The severity of an SNMP trap is assigned by the SNMP manager.
- By default, all events are throttled at 2000 per second. System throttle or event-specific throttle can be modified.
- A maximum of 100 log IDs can be configured and filters can be used to specify the application, event ID, event severity, forward or drop the matching event, and so on, by applying those to a set of logs. Each log ID is configured by specifying an event source and the log destination.

Note: Logs with ID 99 and 100 are default logs directed to memory that contain the main events. The log with ID 100 has a filter applied to match events with severity greater than or equal to major.

Example

```
show log event-control
===============================================================================
Log Events
===============================================================================
Application
 ID#    Event Name                          P    g/s    Logged    Dropped
-------------------------------------------------------------------------------
APPLICATION_ASSURANCE:
   4401 tmnxBsxIsaAaGrpFailureV2          MA   thr         0          0
   4402 tmnxBsxIsaAaGrpFailureClearV2     WA   thr         0          0
<snip>
MOBILE_GATEWAY:
   2001 tmnxMobGwPathMgmtPeerState        WA   thr         0          0
   2002 tmnxMobGwDiameterPeerState        WA   thr         0          0
L  2003 tmnxMobGwCpmRestartUpdate         WA   thr         0          0
...
...
...
===============================================================================
```

- View a specific log event.

```
show log log-id log-id
```

Example

```
show log log-id 99
===============================================================================
Event Log 99
===============================================================================
Description : Default System Log
Memory Log contents [size=500 next event=183 (not wrapped)]
182 2017/09/12 18:46:25.66 EDT WARNING: SNMP #2005 Base xyz
"Interface xyz is operational"
```

```
181 2017/09/12 18:45:53.97 EDT WARNING: SNMP #2005 Base system
"Interface system is operational"
```

- View the log collector information.

```
show log log-collector
```

Example

```
show log log-collector
===============================================================================
Log Collectors
===============================================================================
Main                 Logged : 191                        Dropped : 0
  Dest Log Id: 99    Filter Id: 0       Status: enabled    Dest Type: memory
  Dest Log Id: 100   Filter Id: 1001    Status: enabled    Dest Type: memory
  Dest Log Id: 90    Filter Id: 0       Status: enabled    Dest Type: snmp
  Dest Log Id: 20    Filter Id: 100     Status: enabled    Dest Type: file
  Dest Log Id: 5     Filter Id: 0       Status: enabled    Dest Type: syslog
Security             Logged : 28 Dropped : 0
  Dest Log Id: 90    Filter Id: 0       Status: enabled    Dest Type: snmp
  Dest Log Id: 20    Filter Id: 100     Status: enabled    Dest Type: file
  Dest Log Id: 5     Filter Id: 0       Status: enabled    Dest Type: syslog
Change               Logged : 451 Dropped : 0
  Dest Log Id: 90    Filter Id: 0       Status: enabled    Dest Type: snmp
  Dest Log Id: 20    Filter Id: 100     Status: enabled    Dest Type: file
  Dest Log Id: 5     Filter Id: 0       Status: enabled    Dest Type: syslog
Debug                Logged : 0 Dropped : 0
LI                   Logged : 65 Dropped : 0
===============================================================================
```

- Create and configure filters.

```
configure log filter filter-id
```

Note: The MAG-c also supports log events generated by the 7750 SR OS. See the SR OS documentation for more information about the SNMP notifications from SR OS.

2.2 Log event configuration

2.2.1 Configuring SNMP as the log destination

You can specify SNMP as the destination for log events.

About this task

The MAG-c supports SNMPv1, SNMPv2, and SNMPv3 with the underlying system being based on SNMPv3. SNMPv1 and SNMPv2 are implemented by creating communities based on SNMPv3. Logical objects, for example VPRNs and interfaces, are assigned an index during the boot sequence based on their order in the configuration file. To maintain this index after a reboot, SNMP persistence must be enabled in the BOF. When enabled, and an **admin save** command is issued, the persistent indexes are stored in a `.ndx` file, which has the same name as the configuration file.

Procedure

Step 1. Enable persistent indexes in the BOF.

```
bof persist on
```

Step 2. Save the BOF.

```
bof save
```

Step 3. Configure the SNMP packet size.

```
configure system snmp packet-size bytes
```

Example

```
configure system snmp packet-size 9212
```

Step 4. Enable SNMP.

```
configure system snmp no shutdown
```

Step 5. Configure an SNMP community.

```
configure system security snmp community community-string access-permissions
 version version
```

Example

```
configure system security snmp community test rwa version v2c
```

Step 6. Save the configuration.

```
admin save
```

Step 7. View the SNMP status.

```
show system information
```

If the SNMP configuration is successful, the **SNMP Index Boot Status** field in the output of the command must indicate **Persistent**.

Example

```
# show system information
===============================================================================
System Information
===============================================================================
System Name            : cses-V20
System Type            : 7750 SR-12
Chassis Topology       : Standalone
System Version         : B-0.0.I2946
System Contact         :
System Location        :
System Coordinates     :
System Active Slot     : A
System Up Time         : 64 days, 18:33:04.70 (hr:min:sec)
```

```
Configuration-mode     : classic
Configuration-oper-mode: classic
SNMP Port              : 161
SNMP Engine ID         : 0000197f0000d814ff000000
SNMP Engine Boots      : 1
SNMP Max Message Size  : 1500
SNMP Admin State       : Enabled
SNMP Oper State        : Enabled
SNMP Index Boot Status : Persistent
SNMP Sync State        : N/A
...
...
...
===============================================================================
```

Step 8. View the SNMP counters used for requests, responses, and traps.

```
show snmp counters
```

Example

```
# show snmp counters
===============================================================================
SNMP counters:
===============================================================================
  in packets : 107
-------------------------------------------------------------------------------
    in gets : 46
    in getnexts : 0
    in getbulks : 0
    in sets : 61
  out packets: 107
-------------------------------------------------------------------------------
    out get responses : 107
    out traps : 0
  variables requested: 24
  variables set : 84
-------------------------------------------------------------------------------
  Failed requests due to lock being taken by netconf
    failed sets : 0
===============================================================================
```

2.2.2 Configuring an SNMP trap destination

An SNMP trap destination is a log with SNMP set as the destination.

About this task

In this example, the SNMP trap is configured as follows:

- log ID 90
- target name set to “manager”
- IP address 192.0.2.255
- SNMP version SNMPv2
- community name set to “community”

Procedure

Step 1. Create an SNMP trap group.

```
configure log snmp-trap-group log-id
```

Example

```
configure log snmp-trap-group 90
```

Step 2. Configure the SNMP trap group.

```
snmp-trap-group log-id trap-target name address ip-address [snmpv1|snmpv2|snmpv3]
 notify-community communityName|snmpv3SecurityName
```

Example

```
snmp-trap-group 90 trap-target “manager" address 192.0.2.255 snmpv2c notify-community
 community
```

Step 3. Create a log ID.

```
configure log log-id
```

Use the log ID configured for the SNMP trap group in step 1.

Example

```
configure log 90
```

Step 4. Configure the log ID.

```
log-id log-id to snmp size
```

Specify SNMP as the destination and the number of events.

Example

```
log-id 90 to snmp 3000
```

Step 5. View the configured SNMP trap destination.

```
show log snmp-trap-group log-id
```

Example

```
# show log snmp-trap-group 90
===============================================================================
SNMP Trap Groups
===============================================================================
id        name
  port      address
-------------------------------------------------------------------------------
90        manager
  162       192.0.2.255
===============================================================================
```

Note: By default, Nokia NSP NFM-P uses log ID 98.

2.2.3 Configuring a file as the log destination

You can specify a file as the log destination.

About this task

The filename follows the format `logeeff-timestamp`, where:

ee	The log ID (*log-id*)
ff	The file ID (*log-file-id*)

In this example, the destination file is configured as follows:

- file ID 10
- storage location CF1:
- rollover of records 1440 minutes and retention 168 hours
- linked to log ID 20, which receives event logs from the main, security, and changed source streams (see Table 2: Log event sources)
- log ID 20 directed to file ID 10

Procedure

Step 1. Create a log file.

```
configure log file-id log-file-id
```

Example

```
configure log file-id 10
```

Step 2. Configure the storage location of the log file.

```
configure log file-id log-file-id location
```

Example

```
configure log file-id 10 location cf1:
```

Step 3. Configure the rollover and retention duration of the log file.

```
configure log file-id log-file-id rollover minutes [retention] hours
```

Example

```
configure log file-id 10 rollover 1440 retention 168
```

Step 4. Create a log ID.

```
configure log log-id
```

Example

```
configure log 20
```

Step 5. Configure the source streams for the log ID.

```
configure log log-id from
```

Example

```
configure log 20 from main security change
```

Step 6. Configure the destination type of the log.

```
configure log log-id to file log-file-id
```

Example

```
configure log 20 to file 10
```

2.2.4 Configuring a syslog as the log destination

You can specify a syslog as the log destination.

About this task

In this example, the syslog is configured as follows:

- syslog ID 5
- syslog host address 10.10.1.1
- linked to log ID 5, which receives event logs from the main, security, and changed source streams (see Table 2: Log event sources)

Procedure

Step 1. Create a syslog.

```
configure log syslog syslog-id
```

Example

```
configure log syslog 5
```

Step 2. Configure the storage location of the syslog.

```
configure log syslog syslog-id address ip-address
```

Example

```
configure log syslog 5 address 10.10.1.1
```

Step 3. Create a log ID.

```
configure log log-id
```

Example

```
configure log 5
```

Step 4. Configure the source streams for the log ID.

```
configure log log-id from
```

Example

```
configure log 5 from main security change
```

Step 5. Configure the destination type of the log ID.

```
configure log log-id to syslog syslog-id
```

Example

```
configure log 5 to syslog 5
```

2.2.5 Debugging an application

You can debug an application using a log with the debug trace specified as the event source. Although you can debug an application in the current session window, using a log as the destination is more useful for reviewing the log.

About this task

Note: The steps in this section only describe the procedure for configuring a log file that stores the output of debug commands. See the *MAG-c Control Plane Function Guide* for more information about how to enable and use the **call-insight** and PDN **debug** commands.

In this example, application debugging is configured as follows:

- file ID 10
- storage location CF2:
- linked to log ID 30, which receives event logs from the debug trace (see Table 2: Log event sources)
- log ID 30 directed to file ID 10

Caution: Debug commands must be used with caution. Nokia recommends disabling debugging after any debug operation has been finished. The **no debug** command disables all the enabled debug commands.

Procedure

Step 1. Create a log file.

```
configure log file-id log-file-id
```

Example

```
configure log file-id 10
```

Step 2. Configure the storage location of the log file.

```
configure log file-id log-file-id location
```

Example

```
configure log file-id 10 location cf2:
```

Step 3. Create a log ID.

```
configure log log-id
```

Example

```
configure log 30
```

Step 4. Configure the source stream for the log ID.

```
configure log log-id from
```

Example

```
configure log 30 from debug-trace
```

Step 5. Configure the destination type of the log.

```
configure log log-id to file log-file-id
```

Example

```
configure log 30 to file 10
```

2.3 Sample log event

In this guide, each log event is described in a separate table.

The following table contains a sample log event entry for the tmnxMobGwBngLockoutLimitExceeded log event.

Table 3: tmnxMobGwBngLockoutLimitExceeded properties

Property name	Value
Application name	MOBILE_CUPS_BNG
Event ID	2007
Event name	tmnxMobGwBngLockoutLimitExceeded
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.120
Default severity	warning
Source stream	main
Message format string	The maximum number of BNG sessions in locked-out or monitored state is exceeded *$tmnxMobGwNtfyInformation$*
Cause	While the maximum number of BNG sessions in monitored or locked-out state is in use, a new session must be monitored or locked out.
Effect	Another session being monitored or locked out is prematurely released to accommodate the new session.
Recovery	Recovery is not necessary.

The table title for a log event entry is the event name. Each entry contains the information described in the following table.

Table 4: Log entry field descriptions

Label	Description
Application name	The name of the application generating the log message
Event ID	The application event ID number for the event
Event name	The name of the event
SNMP notification prefix and OID	The prefix and OID of the SNMP notification associated with the log event
Default severity	The default severity level of the event • CRITICAL • MAJOR • MINOR • WARNING • INFO • CLEARED

Label	Description
Source stream	The event source • main • security • change • debug See Table 2: Log event sources for more information.
Message format string	A text description of the event
Cause	The cause of the event
Effect	The effect of the event
Recovery	How to recover from this event, if necessary

3 Log events

Get a summary of the supported alarms and raising events and detailed descriptions per alarm and event object.

3.1 MC_REDUNDANCY

3.1.1 tmnxMcMobileBothLockedToMaster

Table 5: tmnxMcMobileBothLockedToMaster properties

Property name	Value
Application name	MC_REDUNDANCY
Event ID	5002
Event name	tmnxMcMobileBothLockedToMaster
SNMP notification prefix and OID	TIMETRA-MC-REDUNDANCY-MIB.tmnxMcMobRedundancy Notifications.6
Default severity	minor
Source stream	main
Message format string	For peers *$tmnxMcPeerIpAddrForNotify$* and *$tmnxMcPeerSrcIpAddr $* both nodes locked to the active operational role
Cause	A misconfiguration, to enable mc-master-lock on both Primary and Secondary geo-redundancy nodes is ONLY allowed when mc-mobile link between the geo-redundancy nodes is down and both have turned into the active operational role. When the mc-mobile link comes UP, the notification tmnxMcMobileBothLockedToMaster is generated indicating both the Primary and Secondary nodes are locked in the active operational role. Under steady state, that is, mc-mobile link between the geo-redundancy nodes is UP and peering is successful, mc-master-lock CLI configuration is allowed only on the node in the active operational role.
Effect	The geo-redundancy link will not be established as these mobile-gateways cannot be peered.
Recovery	Diagnose and fix the mc-master-lock misconfiguration.

3.1.2 tmnxMcMobileGeoRedChgInfo

Table 6: tmnxMcMobileGeoRedChgInfo properties

Property name	Value
Application name	MC_REDUNDANCY
Event ID	2040
Event name	tmnxMcMobileGeoRedChgInfo
SNMP notification prefix and OID	TIMETRA-MC-REDUNDANCY-MIB.tmnxMcMobRedundancy Notifications.2
Default severity	major
Source stream	main
Message format string	Gw- *$tmnxMcPeerMobileMGId$* ,Src Address-*$tmnxMcPeerSrcIpAddr $*, CPM Geo-Red State- *$tmnxMcPeerMobileMGCPMGeoRedState $*, Mob GW Geo Red State-*$tmnxMcPeerMobileMGGeoRedState $*, Number of Hot Groups- *$tmnxMcPeerMobileMGNumHotGroups$* (*$tmnxMcPeerMGHotGroupList$*), Number Of Warm Groups-*$tmnx McPeerMobileMGNumWarmGroups$* (*$tmnxMcPeerMGWarmGroup List$*), Number Of Cold Groups-*$tmnxMcPeerMobileMGNumCold Groups$* (*$tmnxMcPeerMGColdGroupList$*), Peer Address- *$tmnx McPeerIpAddr$*, Peer State-*$tmnxMcPeerMobileMGPeerState$*, Peer State Reason-*$tmnxMcPeerMobileMGPeerStChgRsn$*
Cause	The chassis or the CPM changed its geo-redundancy state or the peer connection status changed.
Effect	If the chassis state or the CPM state has changed to "cold" or "warm" the system is no longer in geo-redundant state. If the peer state is "disconnected" the system is no longer in a geo-redundant state.
Recovery	Diagnose what caused this state change. Bring the peer and/or peer-link up and ensure that the chassis and CPM geo-redundancy states are "hot".

3.1.3 tmnxMcMonitorMclcrAlarm

Table 7: tmnxMcMonitorMcIcrAlarm properties

Property name	Value
Application name	MC_REDUNDANCY
Event ID	5001
Event name	tmnxMcMonitorMcIcrAlarm
SNMP notification prefix and OID	TIMETRA-MC-REDUNDANCY-MIB.tmnxMcMobRedundancy Notifications.5
Default severity	minor
Source stream	main
Message format string	The monitor-mc-icr alarm occurred on interface *$vRtrIfIndex$* for the reason *$tmnxMcMonitorMcIcrAlarmRsnCode$*.
Cause	Generated with the following reason codes: 1. tmnxMcMonitorMcIcr AlarmRsnCode trafficDetected the reference point traffic detected on the standby node reaches the configured monitor-mc-redirect high threshold vRtrIfMonMcRedirectHighThresh. 2. tmnxMcMonitorMcIcr AlarmRsnCode trafficCleared the reference point traffic is below the configured monitor-mc- redirect low threshold vRtrIfMonMcRedirectLow Thresh.
Effect	A network configuration issue or a partial network failure is detected.
Recovery	Diagnose and fix the partial network failure.

3.2 MOBILE_CUPS_BNG

3.2.1 tmnxMobBngStaticSeOperStateUp

Table 8: tmnxMobBngStaticSeOperStateUp properties

Property name	Value
Application name	MOBILE_CUPS_BNG
Event ID	2012
Event name	tmnxMobBngStaticSeOperStateUp
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.150

Property name	Value
Default severity	warning
Source stream	main
Message format string	Static session *$tmnxMobGwNtfySessionName$* is *$tmnxMobGwNtfy TruthValue$*operational
Cause	The operational state of a static CUPS BNG session changes.
Effect	When the operational state of a static CUPS BNG session is down, the user associated with the session is disconnected.
Recovery	The recovery action depends on the cause.

3.2.2 tmnxMobGwBngLockoutLimitExceeded

Table 9: tmnxMobGwBngLockoutLimitExceeded properties

Property name	Value
Application name	MOBILE_CUPS_BNG
Event ID	2007
Event name	tmnxMobGwBngLockoutLimitExceeded
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.120
Default severity	warning
Source stream	main
Message format string	The maximum number of BNG sessions in locked-out or monitored state is exceeded *$tmnxMobGwNtfyInformation$*
Cause	While the maximum number of BNG sessions in monitored or locked-out state is in use, a new session must be monitored or locked out.
Effect	Another session being monitored or locked out is prematurely released to accommodate the new session.
Recovery	Recovery is not necessary.

3.2.3 tmnxMobGwBngNatPrefixRevocation

Table 10: tmnxMobGwBngNatPrefixRevocation properties

Property name	Value
Application name	MOBILE_CUPS_BNG
Event ID	2009
Event name	tmnxMobGwBngNatPrefixRevocation
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.133
Default severity	minor
Source stream	main
Message format string	CUPS BNG NAT Prefix revocation : MSCP *$tmnxMobGwNtfyMscpId $* Realm *$tmnxMobGwNtfyNwRealmName$* pool *$tmnxMobGwNtfy PoolName$* Gw *$tmnxMobGwNtfyGatewayId$*, UP *$tmnxMobGwNtfy UpPeerAddress$*, prefix *$tmnxMobGwNtfyAddr$*/*$tmnxMobGwNtfyPfx Length$*, reason '*$tmnxMobGwNtfyRevocationReason$*'
Cause	An error occurred during NAT audit between MSCP and OAM or ODSA can't ack the prefix.
Effect	The session will be deleted.
Recovery	N/A

3.2.4 tmnxMobGwBngResFsgUpfChange

Table 11: tmnxMobGwBngResFsgUpfChange properties

Property name	Value
Application name	MOBILE_CUPS_BNG
Event ID	2010
Event name	tmnxMobGwBngResFsgUpfChange
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.134
Default severity	warning
Source stream	main
Message format string	UP resiliency: UP change: Gw *$tmnxMobGwNtfyGatewayId$*, UP group *$tmnxMobGwNtfyCupsBngUpGroup$*, FSG *$tmnxMobGwNtfy FsgId$*, primary UP *$tmnxMobGwNtfyUpf1$* (health *$tmnxMobGwNtfy*

Property name	Value
	Upf1Health$*), secondary UP *$tmnxMobGwNtfyUpf2$* (health *$tmnx MobGwNtfyUpf2Health$*), previous primary UP *$tmnxMobGwNtfy Upf1Prev$*, previous secondary UP *$tmnxMobGwNtfyUpf2Prev$
Cause	The value of TIMETRA-MOBILE-PDN-MIB::tmnxMobPdnBngResFsg PrimUpf or TIMETRA-MOBILE-PDN-MIB::tmnxMobPdnBngResFsgSec Upf has changed.
Effect	If it is the primary UPF that changed, the traffic associated with this Fate Sharing Group is now going through another UPF system. If it is the secondary UPF that changed and if the pair is hot-standby, another UPF system now keeps track of sessions state.
Recovery	No recovery actions are required.

3.2.5 tmnxMobGwBngResFsgUpfError

Table 12: tmnxMobGwBngResFsgUpfError properties

Property name	Value
Application name	MOBILE_CUPS_BNG
Event ID	2011
Event name	tmnxMobGwBngResFsgUpfError
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.149
Default severity	warning
Source stream	main
Message format string	UP resiliency: UP error: Gw *$tmnxMobGwNtfyGatewayId$*, UP group *$tmnxMobGwNtfyCupsBngUpGroup$*, FSG *$tmnxMobGwNtfyFsgId$*, *$tmnxMobGwNtfyTruthValue$* UP *$tmnxMobGwNtfyUpf1$*: *$tmnxMob GwNtfyError$$tmnxMobGwNtfyInformation$*
Cause	This system, acting as a CUPS Control Plane, has requested a UP to modify (including create/delete) a Fate Sharing Group, and the UP reported an error.
Effect	If the UP is the active UPF for this Fate Sharing Group, the role of active UPF is transferred to the UPF that was previously the active UPF.
Recovery	No recovery actions are required.

3.2.6 tmnxMobGwBngSessCreateUpfNonResp

Table 13: tmnxMobGwBngSessCreateUpfNonResp properties

Property name	Value
Application name	MOBILE_CUPS_BNG
Event ID	2002
Event name	tmnxMobGwBngSessCreateUpfNonResp
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.106
Default severity	minor
Source stream	main
Message format string	CUPS BNG Session create UP non-response for: Gw *$tmnxMobGwNtfyGatewayId$*, VRtr *$tmnxMobGwNtfyVrtrId$*, UP *$tmnxMobGwNtfyUpPeerAddress$*, node-ID *$tmnxMobGwNtfyPeerNodeId$*, session key: L2-access-id *$tmnxMobGwNtfyCupsBngSessKeyL2Acc$*, s-vlan *$tmnxMobGwNtfyCupsBngSessKeySVlan$*, c-vlan *$tmnxMobGwNtfyCupsBngSessKeyCVlan$*, mac *$tmnxMobGwNtfyCupsBngSessKeyMac$*, circuit-id '0x*$tmnxMobGwNtfyCupsBngSessKeyCirId$*', remote-id '0x *$tmnxMobGwNtfyCupsBngSessKeyRemId$*'
Cause	A Create Session Request sent to the UP is not acknowledged with a response message.
Effect	The session in setup is cancelled on the CP. The UP might have a lingering session state.
Recovery	The operator's assistance is needed to remove any session state lingering on the UP.

3.2.7 tmnxMobGwBngSessDuplAttr

Table 14: tmnxMobGwBngSessDuplAttr properties

Property name	Value
Application name	MOBILE_CUPS_BNG
Event ID	2008
Event name	tmnxMobGwBngSessDuplAttr

Property name	Value
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.132
Default severity	minor
Source stream	main
Message format string	CUPS BNG Session setup duplicate session identification attribute detected: Gw *$tmnxMobGwNtfyGatewayId$*, VRtr *$tmnxMobGwNtfy VrtrId$*, UP *$tmnxMobGwNtfyUpPeerAddress$*, node-ID *$tmnxMob GwNtfyPeerNodeId$*, L2-access-id *$tmnxMobGwNtfyCupsBngSess KeyL2Acc$*, s-vlan *$tmnxMobGwNtfyCupsBngSessKeySVlan$*, c-vlan *$tmnxMobGwNtfyCupsBngSessKeyCVlan$*, mac *$tmnxMobGwNtfy CupsBngSessKeyMac$*, circuit-id '0x*$tmnxMobGwNtfyCupsBngSess KeyCirId$*', remote-id '0x *$tmnxMobGwNtfyCupsBngSessKeyRemId$*', up-group '*$tmnxMobGwNtfyCupsBngUpGroup$*'
Cause	A session is setup with attributes which conflict with other active sessions' unique session identification attributes or attribute combinations.
Effect	The setup session is not available for external targeting based on session attribute identification.
Recovery	In case external targeting capability is required, the operator's assistance is needed to clear the session.

3.2.8 tmnxMobGwBngSessTermBySystem

Table 15: tmnxMobGwBngSessTermBySystem properties

Property name	Value
Application name	MOBILE_CUPS_BNG
Event ID	2001
Event name	tmnxMobGwBngSessTermBySystem
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.105
Default severity	warning
Source stream	main
Message format string	CUPS BNG session terminated by the system: Reason *$tmnxMob GwNtfyCupsBngSessTermReas$*, extra info ' *$tmnxMobGwNtfyCups BngSessTermInfo$*', Gw *$tmnxMobGwNtfyGatewayId$*, VRtr *$tmnx MobGwNtfyVrtrId$*, UP-ip *$tmnxMobGwNtfyUpPeerAddress$*, L2-

Property name	Value
	access-id *$tmnxMobGwNtfyCupsBngSessKeyL2Acc$*, s-vlan *$tmnxMobGwNtfyCupsBngSessKeySVlan$*, c-vlan *$tmnxMobGwNtfyCupsBngSessKeyCVlan$*, mac *$tmnxMobGwNtfyCupsBngSessKeyMac$*, circuit-id '0x*$tmnxMobGwNtfyCupsBngSessKeyCirId$*', remote-id '0x *$tmnxMobGwNtfyCupsBngSessKeyRemId$*', up-group '*$tmnxMobGwNtfyCupsBngUpGroup$*'
Cause	The system found a reason, as indicated by tmnxMobGwNtfyCupsBngSessTermReas for terminating a session.
Effect	The established session is terminated or the session in setup is cancelled.
Recovery	None.

3.2.9 tmnxMobGwBngSubscriberCreate

Table 16: tmnxMobGwBngSubscriberCreate properties

Property name	Value
Application name	MOBILE_CUPS_BNG
Event ID	2003
Event name	tmnxMobGwBngSubscriberCreate
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.111
Default severity	warning
Source stream	main
Message format string	CUPS BNG new subscriber created: Sub-Id '*$tmnxMobGwNtfyCupsBngSubId$*', externally assigned alias (if any) ' *$tmnxMobGwNtfyCupsBngSubExtAlias$*, UP IP *$tmnxMobGwNtfyAddr$*'
Cause	A session setup, for which there wasn't any subscriber state yet, is successful.
Effect	The subscriber state is created.
Recovery	Not applicable.

3.2.10 tmnxMobGwBngSubscriberDelete

Table 17: tmnxMobGwBngSubscriberDelete properties

Property name	Value
Application name	MOBILE_CUPS_BNG
Event ID	2004
Event name	tmnxMobGwBngSubscriberDelete
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.112
Default severity	warning
Source stream	main
Message format string	CUPS BNG subscriber deleted: Sub-Id ' *$tmnxMobGwNtfyCupsBngSubId$*', externally assigned alias (if any) '*$tmnxMobGwNtfyCupsBngSubExtAlias$*, UP IP *$tmnxMobGwNtfyAddr$*'
Cause	A session termination of the last session belonging to an active subscriber.
Effect	The subscriber state is deleted.
Recovery	Not applicable.

3.3 MOBILE_GATEWAY

3.3.1 tmnxMcRedundancyTrafficReceived

Table 18: tmnxMcRedundancyTrafficReceived properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2084
Event name	tmnxMcRedundancyTrafficReceived
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.82
Default severity	major
Source stream	main

Property name	Value
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, Ref point- *$tmnxMobGwNtfy RefPointType$*, RefPointName-*$tmnxMobGwNtfyRefPointName$*, InterfaceType-*$tmnxMobGwNtfyIfType$*.
Cause	Traffic is detected at the ICR node due to a network issue.
Effect	When traffic comes to the ICR node, it is dropped if traffic redirection, which means shunting, is not used. If shunting is used, then the traffic is forwarded accordingly.
Recovery	Check the cause of routing change in the network and fix it if possible. If the traffic can not be directed back, but the whole routing works towards the node, perform an ICR switchover.

3.3.2 tmnxMobDbRedRoleActive

Table 19: tmnxMobDbRedRoleActive properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2151
Event name	tmnxMobDbRedRoleActive
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.153
Default severity	warning
Source stream	main
Message format string	Database *$tmnxMobDbId$* with IP address *$tmnxMobDbIpAddr$* is now active
Cause	The redundancy role of a database has changed from 'standby' to 'active'.
Effect	The database is actively being used.
Recovery	Not applicable.

3.3.3 tmnxMobDbStatusChanged

Table 20: tmnxMobDbStatusChanged properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2152
Event name	tmnxMobDbStatusChanged
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.154
Default severity	minor
Source stream	main
Message format string	Database *$tmnxMobDbId$* with IP address *$tmnxMobDbIpAddr$* is now *$tmnxMobDbStatus$*
Cause	The state of a database has changed.
Effect	When the new state is 'up', the connection with the database is available. When the new state is 'down', the connection with the database is not available.
Recovery	If the new state is 'down' and there is no subsequent 'tmnxMobDbRed RoleActive' notification, an ICR switchover is recommended.

3.3.4 tmnxMobGwABSAlarm

Table 21: tmnxMobGwABSAlarm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2038
Event name	tmnxMobGwABSAlarm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.36
Default severity	major
Source stream	main
Message format string	ABS Alarm State: *$tmnxMobGwNtfyABSAlarmState$*: Gw-*$tmnxMob GwNtfyGatewayId$*, Group- *$tmnxMobGwNtfySysGroupId$*, Card-*$tmnxMobGwNtfyCardSlotNum$*, reason-*$tmnxMobGwNtfyABSAlarm RsnCode$*.

Property name	Value
Cause	The set of internal parameters for ICC call latency and memory utilization reach the high threshold (activated), and/or fall below the low threshold for at least some time period (de-activated).
Effect	When the ABS alarm is active, the application will use the Selective Packet Discard flag passed from the Octeon drive to make a decision if the packet should be dropped. When the ABS alarm is inactive, the Octeon drive will stop passing the Selective Packet Discard flag to the application.
Recovery	Diagnose why the high memory utilization and/or control signaling overload happened.

3.3.5 tmnxMobGwAcctBuffResourceProblem

Table 22: tmnxMobGwAcctBuffResourceProblem properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2109
Event name	tmnxMobGwAcctBuffResourceProblem
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.107
Default severity	warning
Source stream	main
Message format string	Insufficient Radius accounting messages retransmission buffer resources for Radius group *$tmnxMobGwNtfyRadGrpName$*
Cause	A Radius server does not reply timely to the Radius accounting messages the system transmitted, or the configuration does not adequately distribute the accounting messages.
Effect	Some Radius accounting messages will never be retransmitted.
Recovery	Recovery depends on the problem cause.

3.3.6 tmnxMobGwAcrFailuresAlarmClear

Table 23: tmnxMobGwAcrFailuresAlarmClear properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2010
Event name	tmnxMobGwAcrFailuresAlarmClear
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.6
Default severity	major
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, Ref point-*$tmnxMobGwNtfyChrg RefPointType$*, peer name- *$tmnxMobGwNtfyDiaPeerName$*, peer index-*$tmnxMobGwNtfyDiaPeerIndex$*, peer address-*$tmnxMob GwNtfyDiaPeerAddr$*, port- *$tmnxMobGwNtfyDiaPeerPort$* Failure Type-*$tmnxMobGwNtfyAcrFailureType$*.
Cause	The 2 ACR transmission failures occur in a 10 second interval or 5 ACR transmission failures occur in a 60 second interval to the peer.
Effect	N/A
Recovery	N/A

3.3.7 tmnxMobGwAcrFailuresAlarmMajor

Table 24: tmnxMobGwAcrFailuresAlarmMajor properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2007
Event name	tmnxMobGwAcrFailuresAlarmMajor
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.3
Default severity	major
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, Ref point-*$tmnxMobGwNtfyChrg RefPointType$*, peer name- *$tmnxMobGwNtfyDiaPeerName$*, peer index-*$tmnxMobGwNtfyDiaPeerIndex$*, peer address-*$tmnxMob*

Property name	Value
	GwNtfyDiaPeerAddr$*, port- *$tmnxMobGwNtfyDiaPeerPort$*, Failure Type-*$tmnxMobGwNtfyAcrFailureType$.
Cause	The Charging Data Functions (CDF) peer is slow to respond or is not responding to RF ACR messages. From a Diameter connection perspective, the peer is still in service.
Effect	The gateway chooses a secondary CDF peer to send the RF accounting messages to.
Recovery	Diagnose why the CDF peer is slow to respond or is not responding to RF accounting message requests.

3.3.8 tmnxMobGwApnMaxAttachLmtAlrm

Table 25: tmnxMobGwApnMaxAttachLmtAlrm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2124
Event name	tmnxMobGwApnMaxAttachLmtAlrm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.124
Default severity	major
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, APN Name-*$tmnxMobGwNtfyApnName$*, attach request rate reached maximum limit.
Cause	The GTP-based attach rate exceeds the configurable max-session-attach limit for tmnxMobGwNtfyApnName is reached
Effect	If there is a new GTP-based attach and attach rate has been exceeded, the new attach will be rejected.
Recovery	The alarm is cleared when the rate goes back below the limit.

3.3.9 tmnxMobGwApnMaxAttachLmtAlrmClr

Table 26: tmnxMobGwApnMaxAttachLmtAlrmClr properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2125
Event name	tmnxMobGwApnMaxAttachLmtAlrmClr
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.125
Default severity	major
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, APN Name-*$tmnxMobGwNtfyApnName$*, attach request rate goes below maximum limit.
Cause	The GTP-based attach rate drops below the configurable limit max-session-attach limit for this tmnxMobGwNtfyApnName.
Effect	The GTP-based attach rate drops below the configurable limit.
Recovery	No further action required.

3.3.10 tmnxMobGwAssociationPeerState

Table 27: tmnxMobGwAssociationPeerState properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2075
Event name	tmnxMobGwAssociationPeerState
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.73
Default severity	minor
Source stream	main
Message format string	Association state changed to *$tmnxMobGwNtfyPeerAssociatnState$* for *$tmnxMobGwNtfySigPlaneType$* Peer *$tmnxMobGwNtfyPeerNodeId$* on GW *$tmnxMobGwNtfyGatewayId$* Reference Point *$tmnxMobGwNtfyRefPointType$ $tmnxMobGwNtfyRefPointName$* (IP Address: *$tmnxMobGwNtfyRfPtPeerAddr$*). Recovery Time: *$tmnxMobGwNtfyRecoveryTimestamp$* cp func *$tmnxMobGwNtfyPeerCPFuncFeatures*

Property name	Value
	$* up func *$tmnxMobGwNtfyPeerUPFuncFeatures$* bbf up func *$tmnxMobGwNtfyPeerBbfUPFuncFeats$
Cause	The Association state changes when the association is either setup or released. The association can be setup/released by association related Node level messages triggered by either the gateway or the peer. Association Messages are initiated by the gateway if the peer is configured in the association Peer list.
Effect	Path management for PFCP peers and UPF selection can occur after the association is established. Path management or UPF selection will not happen in case of association down.
Recovery	If the association state is down and the release was initiated by the Gateway, the Gateway must come up for the association to be reestablished. If the release was initiated by the peer, the peer will trigger the setup when it comes up again.

3.3.11 tmnxMobGwAssocNodeIdFail

Table 28: tmnxMobGwAssocNodeIdFail properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2121
Event name	tmnxMobGwAssocNodeIdFail
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.121
Default severity	major
Source stream	main
Message format string	Gw - *$tmnxMobGwNtfyGatewayId$*, epc-node not configured for *$tmnxMobGwPdnNtfySxAssociation$*
Cause	PFCP Association Setup failure to establish due to Node ID missing.
Effect	PFCP Association Setup procedure will continue to fail to peer node while Node ID is missing.
Recovery	Configure a valid string for epc-node under the context configure mobile-gateway pdn.

3.3.12 tmnxMobGwAssocNodeIdFailClr

Table 29: tmnxMobGwAssocNodeIdFailClr properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2123
Event name	tmnxMobGwAssocNodeIdFailClr
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.123
Default severity	major
Source stream	main
Message format string	Gw - *$tmnxMobGwNtfyGatewayId$*, configured epc-node re-established for *$tmnxMobGwPdnNtfySxAssociation$*
Cause	PFCP Association Setup re-established after node id is present.
Effect	There is no effect for this notification.
Recovery	No further action is required.

3.3.13 tmnxMobGwAssocNodeIdMismatch

Table 30: tmnxMobGwAssocNodeIdMismatch properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2143
Event name	tmnxMobGwAssocNodeIdMismatch
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.143
Default severity	major
Source stream	main
Message format string	Gw - *$tmnxMobGwNtfyGatewayId$*, node ID mismatched for *$tmnx MobGwPdnNtfySxAssociation$* PFCP association setup

Property name	Value
Cause	PFCP Association Setup failure to establish due to mismatch of the provided node ID value from all of the PFCP association peer list configuration.
Effect	PFCP Association Setup procedure will continue to fail the peer node while node ID provided continues to mismatch to any entry in the association list.
Recovery	Provide a valid node ID configuration entry for the peer list configuration based on the node ID in the PFCP association.

3.3.14 tmnxMobGwAssocNodeIdMismatchClr

Table 31: tmnxMobGwAssocNodeIdMismatchClr properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2144
Event name	tmnxMobGwAssocNodeIdMismatchClr
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.144
Default severity	cleared
Source stream	main
Message format string	Gw - *$tmnxMobGwNtfyGatewayId$*, node ID match found for *$tmnx MobGwPdnNtfySxAssociation$* PFCP association
Cause	PFCP Association Setup is re-established after the node id provided matches with a valid peer list configuration.
Effect	PFCP Association Setup is established.
Recovery	No further action is required.

3.3.15 tmnxMobGwAssocPfcpNdIdIpTypErClr

Table 32: tmnxMobGwAssocPfcpNdIdIpTypErClr properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2146
Event name	tmnxMobGwAssocPfcpNdIdIpTypErClr
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.146
Default severity	cleared
Source stream	main
Message format string	Gw - *$tmnxMobGwNtfyGatewayId$*, PFCP node ID IP type match occurred after a prior mismatch for *$tmnxMobGwPdnNtfySxAssociation $* PFCP association
Cause	PFCP Association Setup is re-established after the node ID IP-type value provided matches with a valid Sx reference point peer interface address configuration.
Effect	PFCP Association Setup is established.
Recovery	No further action is required.

3.3.16 tmnxMobGwAssocPfcpNodeIdIpTypErr

Table 33: tmnxMobGwAssocPfcpNodeIdIpTypErr properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2145
Event name	tmnxMobGwAssocPfcpNodeIdIpTypErr
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.145
Default severity	major
Source stream	main
Message format string	Gw - *$tmnxMobGwNtfyGatewayId$*, pfcp node ID IP type mismatched for *$tmnxMobGwPdnNtfySxAssociation$* PFCP association

Property name	Value
Cause	PFCP Association Setup failure to establish due to mismatch of the provided node ID IP-type value with all the configured Sx reference point entry interface address types.
Effect	PFCP Association Setup procedure will continue to fail while the PFCP node ID IP-type provided continues to mismatch to any address in all the Sx reference point interface configuration.
Recovery	To provide a valid node ID IP-type configuration in the TIMETRA-MOBILE-PDN-MIB::tmnxMobPdnPfcpNodeIdIpType or create an equivalent IP-type address interface configuration of the Sx reference point configuration.

3.3.17 tmnxMobGwCamUtilAlarmMajor

Table 34: tmnxMobGwCamUtilAlarmMajor properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2098
Event name	tmnxMobGwCamUtilAlarmMajor
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.94
Default severity	major
Source stream	main
Message format string	CAM utilization alarm major: Gw-*$tmnxMobGwNtfyGatewayId$*, group- *$tmnxMobGwNtfySysGroupId$*, resource-id-*$tmnxMobGwNtfy ResourceId$*, alarm type-*$tmnxMobGwNtfyCamUtilIpType$*, ipv4 CAM size- *$tmnxMobGwNtfyIpv4CamSize$*, ipv4 CAM utilization-*$tmnxMobGwNtfyIpv4CamUtilization$*, ipv6 CAM size- *$tmnxMob GwNtfyIpv6CamSize$*, ipv6 CAM utilization-*$tmnxMobGwNtfyIpv6Cam Utilization$*
Cause	The IPv4 or IPv6 CAM usage reaches the configured threshold because the IPv4 or IPv6 CAM is close to being exhausted.
Effect	If the utilization of the IPv4 or IPv6 CAM reaches 100%, the PGW rejects requests for new PDN connections.
Recovery	If the utilization of the IPv4 or IPv6 CAM reaches 100%, the operator's assistance is needed to remove rules from the configuration.

3.3.18 tmnxMobGwCamUtilAlarmMinor

Table 35: tmnxMobGwCamUtilAlarmMinor properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2096
Event name	tmnxMobGwCamUtilAlarmMinor
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.92
Default severity	minor
Source stream	main
Message format string	CAM utilization alarm minor: Gw-*$tmnxMobGwNtfyGatewayId$*, group- *$tmnxMobGwNtfySysGroupId$*, resource-id-*$tmnxMobGwNtfy ResourceId$*, alarm type-*$tmnxMobGwNtfyCamUtilIpType$*, ipv4 CAM size- *$tmnxMobGwNtfyIpv4CamSize$*, ipv4 CAM utilization-*$tmnxMobGwNtfyIpv4CamUtilization$*, ipv6 CAM size- *$tmnxMob GwNtfyIpv6CamSize$*, ipv6 CAM utilization-*$tmnxMobGwNtfyIpv6Cam Utilization$*
Cause	The IPv4 or IPv6 CAM usage reaches the configured threshold because the IPv4 or IPv6 CAM is close to being exhausted.
Effect	If the utilization of the IPv4 or IPv6 CAM reaches 100%, the PGW rejects requests for new PDN connections.
Recovery	If the utilization of the IPv4 or IPv6 CAM reaches 100%, the operator's assistance is needed to remove rules from the configuration.

3.3.19 tmnxMobGwCamUtilAlmMjrClear

Table 36: tmnxMobGwCamUtilAlmMjrClear properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2099
Event name	tmnxMobGwCamUtilAlmMjrClear

Property name	Value
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.95
Default severity	major
Source stream	main
Message format string	CAM utilization alarm major clear: Gw-*$tmnxMobGwNtfyGatewayId$*, group- *$tmnxMobGwNtfySysGroupId$*, resource-id-*$tmnxMobGwNtfyResourceId$*, alarm type-*$tmnxMobGwNtfyCamUtilIpType$*, ipv4 CAM size- *$tmnxMobGwNtfyIpv4CamSize$*, ipv4 CAM utilization-*$tmnxMobGwNtfyIpv4CamUtilization$*, ipv6 CAM size- *$tmnxMobGwNtfyIpv6CamSize$*, ipv6 CAM utilization-*$tmnxMobGwNtfyIpv6CamUtilization$*
Cause	The IPv4 or IPv6 CAM usage is below the configured threshold.
Effect	The PGW continues to accept requests for new PDN connections.
Recovery	None.

3.3.20 tmnxMobGwCamUtilAlmMnrClear

Table 37: tmnxMobGwCamUtilAlmMnrClear properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2097
Event name	tmnxMobGwCamUtilAlmMnrClear
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.93
Default severity	minor
Source stream	main
Message format string	CAM utilization alarm minor clear: Gw-*$tmnxMobGwNtfyGatewayId$*, group- *$tmnxMobGwNtfySysGroupId$*, resource-id-*$tmnxMobGwNtfyResourceId$*, alarm type-*$tmnxMobGwNtfyCamUtilIpType$*, ipv4 CAM size- *$tmnxMobGwNtfyIpv4CamSize$*, ipv4 CAM utilization-*$tmnxMobGwNtfyIpv4CamUtilization$*, ipv6 CAM size- *$tmnxMobGwNtfyIpv6CamSize$*, ipv6 CAM utilization-*$tmnxMobGwNtfyIpv6CamUtilization$*
Cause	The IPv4 or IPv6 CAM usage is below the configured threshold.

Property name	Value
Effect	The PGW continues to accept requests for new PDN connections.
Recovery	None.

3.3.21 tmnxMobGwCdfDownAlarm

Table 38: tmnxMobGwCdfDownAlarm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2008
Event name	tmnxMobGwCdfDownAlarm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.4
Default severity	major
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, Primary CDF- *$tmnxMobGwNtfyPriCdfDiaPeer$*, Secondary CDF-*$tmnxMobGwNtfySecCdfDiaPeer$*.
Cause	CDF peers are down or communication paths to the peers are down.
Effect	RF accounting messages are stored locally on the compact flash of the gateway.
Recovery	Recover CDF peers or communication links with the peers.

3.3.22 tmnxMobGwCdfDownAlarmCleared

Table 39: tmnxMobGwCdfDownAlarmCleared properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2009
Event name	tmnxMobGwCdfDownAlarmCleared
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.5

Property name	Value
Default severity	major
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, CDF-*$tmnxMobGwNtfyCdfDiaPeer $*.
Cause	One of the primary or secondary CDFs comes up for active Rf diameter sessions.
Effect	N/A
Recovery	N/A

3.3.23 tmnxMobGwCdrCfRedStateChange

Table 40: tmnxMobGwCdrCfRedStateChange properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2071
Event name	tmnxMobGwCdrCfRedStateChange
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.69
Default severity	minor
Source stream	main
Message format string	Detected Gtp Prime Group *$tmnxMobGwNtfyGtpPriGrpName$* writing CDR files to flash Id *$tmnxMobGwNtfyFlashId$*
Cause	The compact flash (CF) card is full causing Ga CDR files to be written to another CF card.
Effect	Ga CDR files are written to another CF card.
Recovery	Pull Ga CDR files from the gateway and then delete the files from the CF.

3.3.24 tmnxMobGwCdrMaxSubDirsUsedAlarm

Table 41: tmnxMobGwCdrMaxSubDirsUsedAlarm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2069
Event name	tmnxMobGwCdrMaxSubDirsUsedAlarm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.67
Default severity	minor
Source stream	main
Message format string	Full subdirectories for storing CDR files on compact flash *$tmnxMob GwNtfyFlashId$* reached maximum number of subdirectories
Cause	The subdirectories used to store Ga CDR files on the CF containing the maximum number of files per subdirectory reach the maximum number of subdirectories.
Effect	The Ga CDR files are still written to the existing subdirectories following the round-robin algorithm and no CDR files are lost.
Recovery	Pull the Ga CDR files from the gateway and then delete the files from the CF.

3.3.25 tmnxMobGwCdrMaxSubDirsUsedAlmClr

Table 42: tmnxMobGwCdrMaxSubDirsUsedAlmClr properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2070
Event name	tmnxMobGwCdrMaxSubDirsUsedAlmClr
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.68
Default severity	minor
Source stream	main
Message format string	Full subdirectories for storing CDR files on compact flash *$tmnxMob GwNtfyFlashId$* dropped below maximum number of subdirectories

Property name	Value
Cause	The number of full subdirectories for storing Ga CDR files on the CF drops below the maximum number of subdirectories.
Effect	The CDR files are written to the existing subdirectories as per the limit set by the number of maximum files per subdirectory.
Recovery	No further action is required.

3.3.26 tmnxMobGwCfCapacityAlarmMajor

Table 43: tmnxMobGwCfCapacityAlarmMajor properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2013
Event name	tmnxMobGwCfCapacityAlarmMajor
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.9
Default severity	major
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, Flash ID-*$tmnxMobGwNtfyFlashId $*, Flash Limit- *$tmnxMobGwNtfyCfLimit$*, GTP Prime Server Group-*$tmnxMobGwNtfyGtpPriGrpName$*.
Cause	Compact flash capacity is low because a CDF outage has occurred and accounting messages are stored locally on the compact flash of the gateway.
Effect	There is limited space to store accounting messages on the compact flash of the gateway. Accounting messages will be lost when the compact flash has no space left.
Recovery	Pull Accounting files from the gateway and then delete the files from the compact flash.

3.3.27 tmnxMobGwCfCapacityAlarmMinor

Table 44: tmnxMobGwCfCapacityAlarmMinor properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2011
Event name	tmnxMobGwCfCapacityAlarmMinor
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.7
Default severity	minor
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, Flash ID-*$tmnxMobGwNtfyFlashId $*, Flash Limit- *$tmnxMobGwNtfyCfLimit$*, GTP Prime Server Group-*$tmnxMobGwNtfyGtpPriGrpName$*.
Cause	The compact flash capacity reaches the 85% limit.
Effect	N/A
Recovery	N/A

3.3.28 tmnxMobGwCfCapacityAlmMjrClear

Table 45: tmnxMobGwCfCapacityAlmMjrClear properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2014
Event name	tmnxMobGwCfCapacityAlmMjrClear
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.10
Default severity	major
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, Flash ID-*$tmnxMobGwNtfyFlashId $*, Flash Limit- *$tmnxMobGwNtfyCfLimit$*, GTP Prime Server Group-*$tmnxMobGwNtfyGtpPriGrpName$*.
Cause	The compact flash capacity drops below the 90% limit.

Property name	Value
Effect	N/A
Recovery	N/A

3.3.29 tmnxMobGwCfCapacityAlmMnrClear

Table 46: tmnxMobGwCfCapacityAlmMnrClear properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2012
Event name	tmnxMobGwCfCapacityAlmMnrClear
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.8
Default severity	minor
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, Flash ID-*$tmnxMobGwNtfyFlashId $*, Flash Limit- *$tmnxMobGwNtfyCfLimit$*, GTP Prime Server Group-*$tmnxMobGwNtfyGtpPriGrpName$*.
Cause	The compact flash capacity drops below the 80% limit.
Effect	N/A
Recovery	N/A

3.3.30 tmnxMobGwCntrlFabricPartialFail

Table 47: tmnxMobGwCntrlFabricPartialFail properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2100
Event name	tmnxMobGwCntrlFabricPartialFail
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.98

Property name	Value
Default severity	minor
Source stream	main
Message format string	Detected *$tmnxMobGwNtfyFailureDirection$* failure for slot *$tmnxMobGwNtfySlot$* on control fabric *$tmnxMobGwNtfyFabricId$*
Cause	A tmnxMobGwCntrlFabricPartialFail is generated when a card loses connectivity to other cards in a particular direction over a particular control fabric. The card ID is indicated in tmnxMobGwNtfySlot, the failed fabric ID is indicated in tmnxMobGwNtfyFabricId and the direction of the failure (transmit/receive) is indicated in tmnxMobGwNtfyFailureDirection.
Effect	The system uses a different control fabric that is operational to communicate with the affected card.
Recovery	Manual intervention may be required to restore the connectivity.

3.3.31 tmnxMobGwControlFabricFailure

Table 48: tmnxMobGwControlFabricFailure properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2101
Event name	tmnxMobGwControlFabricFailure
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.99
Default severity	minor
Source stream	main
Message format string	Detected *$tmnxMobGwNtfyFailureDirection$* failure for slot *$tmnxMobGwNtfySlot$* on all control fabrics
Cause	A loss of connectivity to other cards in a particular direction over all available control fabrics.
Effect	The card cannot function properly as part of the system.
Recovery	Attempt to restore connectivity by rebooting the affected card.

3.3.32 tmnxMobGwDdnThrottlingStart

Table 49: tmnxMobGwDdnThrottlingStart properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2033
Event name	tmnxMobGwDdnThrottlingStart
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.29
Default severity	warning
Source stream	main
Message format string	Acct Application: Throttling DDN: Gw-*$tmnxMobGwNtfyGatewayId$*, Ref point- *$tmnxMobGwNtfyRefPointType$*, Ref protocol-*$tmnxMobGwNtfyRefPointProtocol$*, RefPointName-*$tmnxMobGwNtfyRefPointName$*, address type- *$tmnxMobGwNtfyRfPtPeerAddrType$*, peer address-*$tmnxMobGwNtfyRfPtPeerAddr$*, port-*$tmnxMobGwNtfyRfPtPeerPort$*, duration- *$tmnxMobGwNtfyDdnThrotDuration$*, factor-*$tmnxMobGwNtfyDdnThrotFactor$*
Cause	The SGW starts throttling the DDN when it receives a throttling instruction carried in the "downlink (DL) low priority traffic Throttling" IE from a peer node.
Effect	The SGW starts throttling the DDN based on a priority threshold value. The traffic with a priority value higher than or equal to the threshold value is considered as a bearer for non-priority traffic.
Recovery	When the throttling time is over, the SGW stops throttling the DDN.

3.3.33 tmnxMobGwDdnThrottlingStop

Table 50: tmnxMobGwDdnThrottlingStop properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2034
Event name	tmnxMobGwDdnThrottlingStop

Property name	Value
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.30
Default severity	warning
Source stream	main
Message format string	Acct Application: Throttling DDN: Gw-*$tmnxMobGwNtfyGatewayId$*, Ref point- *$tmnxMobGwNtfyRefPointType$*, Ref protocol-*$tmnxMobGwNtfyRefPointProtocol$*, RefPointName-*$tmnxMobGwNtfyRefPointName$*, address type- *$tmnxMobGwNtfyRfPtPeerAddrType$*, peer address-*$tmnxMobGwNtfyRfPtPeerAddr$*, port-*$tmnxMobGwNtfyRfPtPeerPort$*, duration- *$tmnxMobGwNtfyDdnThrotDuration$*, factor-*$tmnxMobGwNtfyDdnThrotFactor$*
Cause	The SGW stops throttling the DDN when the throttling time is over.
Effect	The SGW stops throttling the DDN based on a priority threshold value. All DDNs are sent to the peer node.
Recovery	When another throttling instruction is received from a peer node, the SGW starts throttling the DDN.

3.3.34 tmnxMobGwDhcpSvrState

Table 51: tmnxMobGwDhcpSvrState properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2037
Event name	tmnxMobGwDhcpSvrState
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.35
Default severity	warning
Source stream	main
Message format string	DHCP' Server State: *$tmnxMobGwNtfyDhcpSvrState$*: Gw- *$tmnxMobGwNtfyGatewayId$*, DHCP' Group Name- *$tmnxMobProfDHCPSvrGrpName$*, DHCP' Server Index - *$tmnxMobProfDHCPSGPeerIndex$*, DHCP' Server address- *$tmnxMobProfDHCPSGPeerAddress$*, reason - *$tmnxMobGwNtfyDhcpSvrStRsnCode$*
Cause	When there is a change in the DHCP Server State.

Property name	Value
Effect	When the DHCP server state is add, the server has been added to the system. When the state is delete, the server has been deleted from the system. When the state is down, the discover/request messages are not sent to the server. When the state is up and the DHCP server is selected, the discover/request messages are sent to this server.
Recovery	If the DHCP server is down, the discover/request messages are sent to alternate configured servers. This server will be brought back up after the dead time 'tmnxMobProfDHCPSGDeadTime' expires.

3.3.35 tmnxMobGwDiameterPeerState

Table 52: tmnxMobGwDiameterPeerState properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2002
Event name	tmnxMobGwDiameterPeerState
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.2
Default severity	warning
Source stream	main
Message format string	Diameter Application: Peer State: *$tmnxMobGwNtfyDiameterPeerState$*: Gw- *$tmnxMobGwNtfyGatewayId$*, Ref point-*$tmnxMobGwNtfyDiaRefPointType$*, peer name-*$tmnxMobGwNtfyDiaPeerName$*, peer index- *$tmnxMobGwNtfyDiaPeerIndex$*, peer address-*$tmnxMobGwNtfyDiaPeerAddr$*, port-*$tmnxMobGwNtfyDiaPeerPort$*, reason - *$tmnxMobGwNtfyDiameterReasonCode$*
Cause	A change occurs in the reference point peer state for the Diameter application.
Effect	N/A
Recovery	N/A

3.3.36 tmnxMobGwDiaMsgQueHighThrsAlarm

Table 53: tmnxMobGwDiaMsgQueHighThrsAlarm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2055
Event name	tmnxMobGwDiaMsgQueHighThrsAlarm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.53
Default severity	minor
Source stream	main
Message format string	Diameter: message queue high threshold alarm: Utilization-*$tmnxMobGwNtfyDiaMsgQueueUtilizat$*: Gw- *$tmnxMobGwNtfyGatewayId$*, Ref point-*$tmnxMobGwNtfyDiaRefPointType$*, Peer name-*$tmnxMobGwNtfyDiaPeerName$*, Peer index- *$tmnxMobGwNtfyDiaPeerIndex$*, Peer address-*$tmnxMobGwNtfyDiaPeerAddr$*, Port-*$tmnxMobGwNtfyDiaPeerPort$*, Peer connections queue utilization- *$tmnxMobGwNtfyDiaPeerConnQueUtil$*, DiamRateLimitProf-*$tmnxMobGwNtfyDiaRateLimitProfile$*
Cause	The Diameter message queue utilization reaches the percentage defined by the tmnxMobProfDiaRateLimQueThrsHigh.
Effect	If the utilization of the Diameter message queue reaches 100%, the PGW drops the messages. The message are queued for the maximum number of seconds defined by the TIMETRA-MOBILE-PROFILE-MIB::tmnxMobProfDiaRateLimDelayToler.
Recovery	If the utilization of the Diameter message queue reaches 100%, the operator should consider changing the values for TIMETRA-MOBILE-PROFILE-MIB::tmnxMobProfDiaRateLimMessageRate, TIMETRA-MOBILE-PROFILE-MIB::tmnxMobProfDiaRateLimBurstSize or the TIMETRA-MOBILE-PROFILE-MIB::tmnxMobProfDiaRateLimDelayToler of the Diameter rate limit profile.

3.3.37 tmnxMobGwDiaMsgQueLowThrsAlarm

Table 54: tmnxMobGwDiaMsgQueLowThrsAlarm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2053

Property name	Value
Event name	tmnxMobGwDiaMsgQueLowThrsAlarm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.51
Default severity	warning
Source stream	main
Message format string	Diameter: message queue low threshold alarm: Utilization-*$tmnxMobGwNtfyDiaMsgQueueUtilizat$*: Gw- *$tmnxMobGwNtfyGatewayId$*, Ref point-*$tmnxMobGwNtfyDiaRefPointType$*, Peer name-*$tmnxMobGwNtfyDiaPeerName$*, Peer index- *$tmnxMobGwNtfyDiaPeerIndex$*, Peer address-*$tmnxMobGwNtfyDiaPeerAddr$*, Port-*$tmnxMobGwNtfyDiaPeerPort$*, Peer connections queue utilization- *$tmnxMobGwNtfyDiaPeerConnQueUtil$*, DiamRateLimitProf-*$tmnxMobGwNtfyDiaRateLimitProfile$*
Cause	The Diameter message queue utilization reaches the percentage defined by the tmnxMobProfDiaRateLimQueThrsLow.
Effect	If the utilization of the Diameter message queue reaches 100%, the PGW drops the messages. The messages are queued for the maximum number of seconds defined by the TIMETRA-MOBILE-PROFILE-MIB::tmnxMobProfDiaRateLimDelayToler.
Recovery	If the utilization of the Diameter message queue reaches 100%, the operator should consider changing the values for TIMETRA-MOBILE-PROFILE-MIB::tmnxMobProfDiaRateLimMessageRate, TIMETRA-MOBILE-PROFILE-MIB::tmnxMobProfDiaRateLimBurstSize or the TIMETRA-MOBILE-PROFILE-MIB::tmnxMobProfDiaRateLimDelayToler of the Diameter rate limit profile.

3.3.38 tmnxMobGwDiaMsgQueueFullAlarm

Table 55: tmnxMobGwDiaMsgQueueFullAlarm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2057
Event name	tmnxMobGwDiaMsgQueueFullAlarm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.55
Default severity	minor

Property name	Value
Source stream	main
Message format string	Diameter: message queue full alarm: Gw-*$tmnxMobGwNtfyGatewayId$*, Ref point- *$tmnxMobGwNtfyDiaRefPointType$*, Peer name-*$tmnxMobGwNtfyDiaPeerName$*, Peer index-*$tmnxMobGwNtfyDiaPeerIndex$*, Peer address- *$tmnxMobGwNtfyDiaPeerAddr$*, Port-*$tmnxMobGwNtfyDiaPeerPort$*, Peer connections queue utilization-*$tmnxMobGwNtfyDiaPeerConnQueUtil$*, DiamRateLimitProf- *$tmnxMobGwNtfyDiaRateLimitProfile$*
Cause	The diameter message queue utilization reaches 100%.
Effect	The PGW drops the messages. The messages can be queued for the maximum number of seconds defined by the TIMETRA-MOBILE-PROFILE-MIB::tmnxMobProfDiaRateLimDelayToler.
Recovery	The operator should consider changing the values for TIMETRA-MOBILE-PROFILE-MIB::tmnxMobProfDiaRateLimMessageRate, TIMETRA-MOBILE-PROFILE-MIB::tmnxMobProfDiaRateLimBurstSize or the TIMETRA-MOBILE-PROFILE-MIB::tmnxMobProfDiaRateLimDelayToler of the Diameter rate limit profile.

3.3.39 tmnxMobGwDnsSnpFqdnIpLimitAlarm

Table 56: tmnxMobGwDnsSnpFqdnIpLimitAlarm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2102
Event name	tmnxMobGwDnsSnpFqdnIpLimitAlarm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.100
Default severity	minor
Source stream	main
Message format string	Gw:*$tmnxMobGwNtfyGatewayId$* Number of server addresses learned by DNS Snooping reached *$tmnxMobGwDnsSnpFqdnThres$* % of maximum *$tmnxMobGwDnsSnpFqdnIpMax$*
Cause	The number of stored DNS resolved IP addresses approaches a threshold limit of the maximum number of cacheable addresses. The threshold in percentage is indicated by tmnxMobGwDnsSnpFqdnThres

Property name	Value
	and the maximum size of stored IP addresses is indicated by the tmnx MobGwDnsSnpFqdnIpMax value.
Effect	The PGW may reach the maximum limit and may not be able to store new IP addresses.
Recovery	The operator assistance is needed to clear the resolved filters for the specified FQDN list.

3.3.40 tmnxMobGwFqdnGrpCamLimitAlarm

Table 57: tmnxMobGwFqdnGrpCamLimitAlarm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2043
Event name	tmnxMobGwFqdnGrpCamLimitAlarm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.41
Default severity	warning
Source stream	main
Message format string	FQDN group CAM limit alarm: Gw-*$tmnxMobGwNtfyGatewayId$*, FQDN group name- *$tmnxMobGwNtfyFqdnGroupName$*
Cause	The CAM resource usage for the DNS resolution of the FQDN group reaches 75% of the CAM resource size and the CAM resource is very close to being exhausted.
Effect	The PGW stops programming for further DNS resolution.
Recovery	The operator's assistance is needed to clear the resolved filters for the specified FQDN group.

3.3.41 tmnxMobGwFqdnGrpCamLimitAlmClear

Table 58: tmnxMobGwFqdnGrpCamLimitAlmClear properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2044
Event name	tmnxMobGwFqdnGrpCamLimitAlmClear
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.42
Default severity	warning
Source stream	main
Message format string	FQDN group CAM limit alarm clear: Gw-*$tmnxMobGwNtfyGatewayId$*, FQDN group name- *$tmnxMobGwNtfyFqdnGroupName$*
Cause	The CAM resource usage for the DNS resolution of the FQDN group drops below 75% of the CAM resource size.
Effect	N/A
Recovery	N/A

3.3.42 tmnxMobGwGrpScaleInReady

Table 59: tmnxMobGwGrpScaleInReady properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2061
Event name	tmnxMobGwGrpScaleInReady
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.59
Default severity	minor
Source stream	main
Message format string	Cloud Mobile Gateway Scale in: Scale in is ready for the System Group - $tmnxMobGwNtfySysGroupId
Cause	The maximum suspended duration represented by the tmnxMobGwGrpSuspendMaxDuration expires for this particular MG-ISM group and all sessions for this group are gracefully terminated.

Property name	Value
Effect	When all sessions are cleaned up, the NSP NFM-P starts removing VMs belonging to this group.
Recovery	No further action is required.

3.3.43 tmnxMobGwGtpPriServerState

Table 60: tmnxMobGwGtpPriServerState properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2027
Event name	tmnxMobGwGtpPriServerState
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.23
Default severity	warning
Source stream	main
Message format string	Acct Application: GTP' Server State: *$tmnxMobGwNtfyGtpPriServer State$*: Gw- *$tmnxMobGwNtfyGatewayId$*, GTP' Group Name- *$tmnx MobGtpPriGrpName$*, GTP' Server Index - *$tmnxMobGtpPriServer Index$*, GTP' Server address- *$tmnxMobGtpPriServerAddr$*, GTP' Server Port-*$tmnxMobGtpPriServerPort$*, reason - *$tmnxMobGwNtfy GtpPriSvrReasonCode$*
Cause	A change in the GTP Prime Server State.
Effect	When the GTP Prime Server State is add, the server has been added to the system. When the state is delete, the server has been deleted from the system. When the state is down, the Charging Data Record (CDR) packets are not sent to the peer. When the state is up, the CDR packets can be sent to the peer.
Recovery	If a GTP Prime server state is down, then the Charging Data Request (CDR) packets are sent to an alternate GTP Prime server. If no servers are available, the CDR packets are written to the CDR files.

3.3.44 tmnxMobGwGtpPriSrvGrpState

Table 61: tmnxMobGwGtpPriSrvGrpState properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2029
Event name	tmnxMobGwGtpPriSrvGrpState
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.25
Default severity	warning
Source stream	main
Message format string	Acct Application: GTP' Server Group State: *$tmnxMobGwNtfyGtpPriGrpState$*: Gw- *$tmnxMobGwNtfyGatewayId$*, GTP' Group - *$tmnxMobGwNtfyGtpPriGrpName$*, reason - *$tmnxMobGwNtfyGtpPriGrpReasonCode$*
Cause	A change in the GTP Prime Server Group State.
Effect	When the GTP Prime Server Group State is add, the group has been added to the system. When the state is delete, the group has been deleted from the system. When the state is down, all GTP Prime Servers in the group are down, and the CDR packets are not sent to the group server. When the state is up, CDR packets are sent to the group server.
Recovery	If a GTP Prime server group state is down, CDR packets are written to CDR files until at least one server becomes available.

3.3.45 tmnxMobGwIpRangesDBLoadStateChng

Table 62: tmnxMobGwIpRangesDBLoadStateChng properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2074
Event name	tmnxMobGwIpRangesDBLoadStateChng
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.72
Default severity	minor
Source stream	main

Property name	Value
Message format string	Wlan-Emergency profile: *$tmnxMobGwNtfyIpFileEmergProf$* Previous DB Loading State: *$tmnxMobGwNtfyIpFilePrevLoadState$* New DB Loading State: *$tmnxMobGwNtfyIpFileNewLoadState$* Message: *$tmnxMobGwNtfyIpFileLoadMessage$*
Cause	The state of the database with IP-range to country-code mappings changed.
Effect	Further operation may depend on or be restricted by the current state of the database.
Recovery	If an unexpected state occurs, try to reload or delete the existing database.

3.3.46 tmnxMobGwIpSecISCertUnreachable

Table 63: tmnxMobGwIpSecISCertUnreachable properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2049
Event name	tmnxMobGwIpSecISCertUnreachable
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.47
Default severity	minor
Source stream	main
Message format string	ePDG: IKE SA Certificate URL *$tmnxMobGwNtfyIpSecISCert$* not reachable, IPsec profile - *$tmnxMobGwNtfyIpSecProfile$*
Cause	The IKE SA cert URL is not reachable at the time of execution of configuration.
Effect	When the certificate content is not fetched at the time of configuration, the certificate-based (pubkey) authentication of the IKE SA will not work.
Recovery	Ensure that the ePDG can reach the certificate and reassign the certificate to the IPsec profile.

3.3.47 tmnxMobGwIpSecISPrivKeyUnreach

Table 64: tmnxMobGwIpSecISPrivKeyUnreach properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2050
Event name	tmnxMobGwIpSecISPrivKeyUnreach
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.48
Default severity	minor
Source stream	main
Message format string	ePDG: IKE SA Private Key URL *$tmnxMobGwNtfyIpSecISPrivateKey$* not reachable, IPsec profile - *$tmnxMobGwNtfyIpSecProfile$*
Cause	The IKE SA private key URL is not reachable at the time of execution of configuration.
Effect	When the private key content is not fetched at the time of configuration, the certificate-based (pubkey) authentication of the IKE SA will not work.
Recovery	Ensure that the ePDG can reach the private key and reassign the private key to the IPsec profile.

3.3.48 tmnxMobGwIpSecLarvSALimitReached

Table 65: tmnxMobGwIpSecLarvSALimitReached properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2048
Event name	tmnxMobGwIpSecLarvSALimitReached
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.46
Default severity	minor
Source stream	main

Property name	Value
Message format string	ePDG: *$tmnxMobGwNtfyIpSecISLarvLimType$* half-open SA limit *$tmnxMobGwNtfyIpSecISLarvalLimit$* reached: Gw-*$tmnxMobGwNtfyGatewayId$*, IPsec profile - *$tmnxMobGwNtfyIpSecProfile$*, Peer address - *$tmnxMobGwNtfyIpSecISPeerAddr$*
Cause	Either the global or peer half-open IKE SA limit is reached.
Effect	The ePDG starts sending COOKIE challenge responses when either the global or peer half-open IKE SA limit is reached.
Recovery	Investigate the peers that are suspected for the Denial-of-service (DoS) attack.

3.3.49 tmnxMobGwIpsecLockoutAlarm

Table 66: tmnxMobGwIpsecLockoutAlarm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2066
Event name	tmnxMobGwIpsecLockoutAlarm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.64
Default severity	minor
Source stream	main
Message format string	Ipsec lockout: The ratio between locked users (*$tmnxMobGwIpsecLockoutUserLocked$*) and currently attached users (*$tmnxMobGwIpsecLockoutUserAttched$*) is over the threshold (*$tmnxMobGwIpsecLockoutUserThr$*%)
Cause	The ratio between tmnxMobGwIpsecLockoutUserLocked and tmnxMobGwIpsecLockoutUserAttched is over the tmnxMobGwIpsecLockoutUserThr threshold.
Effect	The tmnxMobGwIpsecLockoutAlarm notification is generated.
Recovery	Locked users can be recovered manually or recovered after the lockout duration expires. After the ratio drops below the threshold, the tmnxMobGwIpsecLockoutAlarmClr notification is generated.

3.3.50 tmnxMobGwIpsecLockoutAlarmClr

Table 67: tmnxMobGwIpsecLockoutAlarmClr properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2067
Event name	tmnxMobGwIpsecLockoutAlarmClr
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.65
Default severity	minor
Source stream	main
Message format string	Ipsec lockout: The ratio between locked users (*$tmnxMobGwIpsec LockoutUserLocked$*) and currently attached users (*$tmnxMob GwIpsecLockoutUserAttched$*) drops below the threshold (*$tmnxMob GwIpsecLockoutUserThr$*%)
Cause	The ratio between tmnxMobGwIpsecLockoutUserLocked and tmnxMob GwIpsecLockoutUserAttched drops below the threshold.
Effect	The tmnxMobGwIpsecLockoutAlarmClr notification is generated.
Recovery	No further action is required.

3.3.51 tmnxMobGwLciOverload

Table 68: tmnxMobGwLciOverload properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2080
Event name	tmnxMobGwLciOverload
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.78
Default severity	minor
Source stream	main

Property name	Value
Message format string	Mobile Gateway in GTP-C LCI 100%
Cause	The resources for the mobile gateway group have reached their limit.
Effect	The mobile gateway group resources are at critical levels. The system will attempt to lower resource usage on this mobile gateway group.
Recovery	None

3.3.52 tmnxMobGwLciOverloadClear

Table 69: tmnxMobGwLciOverloadClear properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2081
Event name	tmnxMobGwLciOverloadClear
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.79
Default severity	minor
Source stream	main
Message format string	Mobile Gateway GTP-C no longer at LCI 100%
Cause	The resources for the mobile gateway group are back to the normal operating levels.
Effect	The mobile gateway group is back to the normal operating levels.
Recovery	None, the system is back to the normal operating levels.

3.3.53 tmnxMobGwMcRedPurgeRebootStandby

Table 70: tmnxMobGwMcRedPurgeRebootStandby properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2063

Property name	Value
Event name	tmnxMobGwMcRedPurgeRebootStandby
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.61
Default severity	minor
Source stream	main
Message format string	MC_RED purge: Active card-*$tmnxMobGwNtfyActiveCardSlotNum$* initialized reboot on standby card- *$tmnxMobGwNtfyStandbyCardSlotNum$*
Cause	In the case of a multi-chassis redundancy purge, if the RED state is not 'hot', the active card initializes a reboot on the standby card after the purge finishes on the active card.
Effect	The standby card reboots.
Recovery	No further action is required.

3.3.54 tmnxMobGwMscpUeIdUsgAlarm

Table 71: tmnxMobGwMscpUeIdUsgAlarm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2046
Event name	tmnxMobGwMscpUeIdUsgAlarm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.44
Default severity	minor
Source stream	main
Message format string	MSCP group UE ID load usage threshold limit alarm: Load-80%, Gw-*$tmnxMobGwNtfyGatewayId$*, System Group- *$tmnxMobGwNtfySysGroupId$*
Cause	The UE ID load count for the MSCP group crosses the 80% threshold.
Effect	Nokia support needs to be notified to find out the reason. After the usage hits 100%, the call is rejected.
Recovery	Engage the Nokia support team to find out the root cause.

3.3.55 tmnxMobGwMscpUeIdUsgAlarmClear

Table 72: tmnxMobGwMscpUeIdUsgAlarmClear properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2047
Event name	tmnxMobGwMscpUeIdUsgAlarmClear
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.45
Default severity	minor
Source stream	main
Message format string	MSCP group UE ID load usage threshold limit alarm clear: Load-60%, Gw- *$tmnxMobGwNtfyGatewayId$*, System Group-*$tmnxMobGwNtfy SysGroupId$*
Cause	The UE ID load count for the MSCP group drops below 60%.
Effect	N/A
Recovery	N/A

3.3.56 tmnxMobGwNnrfBlocklistAlarm

Table 73: tmnxMobGwNnrfBlocklistAlarm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2126
Event name	tmnxMobGwNnrfBlocklistAlarm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.126
Default severity	warning
Source stream	main
Message format string	NRF peer for service *$tmnxMobGwNtfyNnrfServiceType$* on GW-*$tmnxMobGwNtfyGatewayId$* is block-listed

Property name	Value
Cause	All the NRF peers for service nnrf-nfm or nnrf-disc are block-listed after failure responses or response timeouts.
Effect	The block list duration is not applied. All NRF peers are sending failure responses or the responses time out. The Gateway continuously retries service requests to all peers.
Recovery	The alarm is cleared when the first NRF peer from the block list is successfully contacted (a success HTTP status is received).

3.3.57 tmnxMobGwNnrfBlocklistAlarmClear

Table 74: tmnxMobGwNnrfBlocklistAlarmClear properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2127
Event name	tmnxMobGwNnrfBlocklistAlarmClear
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.127
Default severity	warning
Source stream	main
Message format string	NRF peer for service *$tmnxMobGwNtfyNnrfServiceType$* on GW-*$tmnxMobGwNtfyGatewayId$* is no longer block-listed
Cause	All the NRF peers for service nnrf-nfm or nnrf-disc are no longer block-listed.
Effect	The block list duration is applied.
Recovery	No further action required.

3.3.58 tmnxMobGwNrfHeartbeatAlarm

Table 75: tmnxMobGwNrfHeartbeatAlarm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2094
Event name	tmnxMobGwNrfHeartbeatAlarm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.90
Default severity	major
Source stream	main
Message format string	NRF heartbeat failed for peer *$tmnxMobGwNtfyRfPtPeerAddr$* on GW *$tmnxMobGwNtfyGatewayId$* with error: *$tmnxMobGwNtfyNrfHbAlarmReason$*
Cause	Loss of connectivity to the NRF, NRF failure.
Effect	The NRF does not consider MAG-c SMF or UPF to be registered and eligible for discovery anymore. The NRF may also consider the MAG-c SMF or UPF to be out of service and notify the subscribed peer NF instances.
Recovery	Recovery is TBD according to failure handling of failed HB responses and failover to next NRF is concluded.

3.3.59 tmnxMobGwNrfHeartbeatAlarmClear

Table 76: tmnxMobGwNrfHeartbeatAlarmClear properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2095
Event name	tmnxMobGwNrfHeartbeatAlarmClear
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.91
Default severity	major
Source stream	main

Property name	Value
Message format string	NRF heartbeat succeeded for peer *$tmnxMobGwNtfyRfPtPeerAddr$* on GW *$tmnxMobGwNtfyGatewayId$* with error: *$tmnxMobGwNtfyNrfHbAlarmReason$*
Cause	Successful Heartbeat message request/response sequence with NRF.
Effect	The NRF considers MAG-c SMF or UPF to be registered and eligible for discovery.
Recovery	No further action is required.

3.3.60 tmnxMobGwOciOverload

Table 77: tmnxMobGwOciOverload properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2082
Event name	tmnxMobGwOciOverload
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.80
Default severity	major
Source stream	main
Message format string	Mobile Gateway in GTP-C OCI overload
Cause	The resources for the mobile gateway group have been almost exhausted due to high load.
Effect	The mobile gateway group resources are at critical levels. The system will attempt to lower resource usage on this mobile gateway group.
Recovery	None.

3.3.61 tmnxMobGwOciOverloadClear

Table 78: tmnxMobGwOciOverloadClear properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2083
Event name	tmnxMobGwOciOverloadClear
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.81
Default severity	major
Source stream	main
Message format string	Mobile Gateway no longer in GTP-C overload
Cause	The resources for the mobile gateway group are back to the normal operating levels.
Effect	The mobile gateway group is back to the normal operating levels.
Recovery	None, the system is back to the normal operating levels.

3.3.62 tmnxMobGwOciOvldThrtStart

Table 79: tmnxMobGwOciOvldThrtStart properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2103
Event name	tmnxMobGwOciOvldThrtStart
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.101
Default severity	major
Source stream	main
Message format string	The mobile gateway has started throttling incoming call flows due to local overload.
Cause	The resources for the mobile gateway group have been almost exhausted due to high load.

Property name	Value
Effect	The mobile gateway group resources are at critical level. The system attempts to lower the resource usage on this mobile gateway group.
Recovery	The mobile-gateway stops throttling incoming call flows when it is out of local overload.

3.3.63 tmnxMobGwOciOvldThrtStop

Table 80: tmnxMobGwOciOvldThrtStop properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2104
Event name	tmnxMobGwOciOvldThrtStop
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.102
Default severity	major
Source stream	main
Message format string	The mobile gateway has stopped throttling incoming call flows due to local overload.
Cause	Either incoming call flows are not received for the last 30 seconds, or the resources for the mobile gateway group are back to normal operating levels in the last 30 seconds.
Effect	The mobile gateway is no longer throttling incoming call flows due local overload.
Recovery	Not applicable.

3.3.64 tmnxMobGwPathMgmtPeerState

Table 81: tmnxMobGwPathMgmtPeerState properties

Property name	Value
Application name	MOBILE_GATEWAY

Property name	Value
Event ID	2001
Event name	tmnxMobGwPathMgmtPeerState
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.1
Default severity	major
Source stream	main
Message format string	Path Management: Peer State: *$tmnxMobGwNtfyPathMgmtPeerState$*: Gw- *$tmnxMobGwNtfyGatewayId$*, Ref point-*$tmnxMobGwNtfyRefPointType$*, protocol-*$tmnxMobGwNtfyRefPointProtocol$*, RefPoint Name- *$tmnxMobGwNtfyRefPointName$*,peer-*$tmnxMobGwNtfyRfPtPeerAddr$*, port-*$tmnxMobGwNtfyRfPtPeerPort$*, Local address - *$tmnxMobGwNtfyPathLocAddress$*, Previous Restart Counter-*$tmnxMobGwNtfyPrevRestartCounter$*, Current Restart Counter- *$tmnxMobGwNtfyCurrRestartCounter$*, Peer Restart Reason-*$tmnxMobGwNtfyPeerRestartReason$*, Pkt Seq Number- *$tmnxMobGwNtfyPeerRestPktSeqNum$*, Peer Type-*$tmnxMobGwNtfySigPeerType$*, Plane Type-*$tmnxMobGwNtfySigPlaneType$*.
Cause	A change in the reference point peer state during path management. The supported trap event values are the following: Added - raised when a new peer is identified due to incoming messages Up - raised when a peer moves to UP state, for a SGW peer, this state change happens when a CS Req is received. for PGW peers, this state change happens when a CS Resp from the PGW peer is received (this is to make sure that Path UP trap is generated only for a real PGW peer in case of GTP-C redirection) Down - raised when a peer moves to the FAULT state while detecting a path management failure. Idle - raised when a peer moves to the IDLE state after session cleanup is done due to path management Failure/ Detach/Admin delete Restart - raised when a peer restart is detected, it is associated with Peer RESTART state Deleted - raised when a peer entry is deleted due to a peer aging out, a peer ages out when it is Idle for more than the Age Out Interval.
Effect	N/A
Recovery	N/A

3.3.65 tmnxMobGwPcmdOperStateChange

Table 82: tmnxMobGwPcmdOperStateChange properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2045
Event name	tmnxMobGwPcmdOperStateChange
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.43
Default severity	minor
Source stream	main
Message format string	PCMD: Oper State: *$tmnxMobGwNtfyPcmdOperState$*: Gw-*$tmnxMobGwNtfyGatewayId$*, PCMD profile- *$tmnxMobGwNtfyPcmdProfile$*
Cause	The PCMD operational state changes when the destination address reachability changes.
Effect	When the PCMD state is down, the generated PCMD packets are not sent to the destination address. When the PCMD state is up, the PCMD packets are sent to the destination address.
Recovery	If the PCMD state is down, then generated PCMD packets are dropped.

3.3.66 tmnxMobGwPeerOrigHostOsiChange

Table 83: tmnxMobGwPeerOrigHostOsiChange properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2062
Event name	tmnxMobGwPeerOrigHostOsiChange
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.60
Default severity	minor
Source stream	main
Message format string	Diameter Application: Peer State: *$tmnxMobGwNtfyDiameterPeerState$*: Gw- *$tmnxMobGwNtfyGatewayId$*, Ref point-*$tmnxMobGwNtfyDiaRefPointType$*, System Group - *$tmnxMobGwNtfySysGroupId$*, peer

Property name	Value
	name- *$tmnxMobGwNtfyDiaPeerName$*, peer index-*$tmnxMobGwNtfyDiaPeerIndex$*, peer address-*$tmnxMobGwNtfyDiaPeerAddr$*, port- *$tmnxMobGwNtfyDiaPeerPort$*, destination realm name-*$tmnxMobGwNtfyDestRealmName$*, destination host name- *$tmnxMobGwNtfyDestHostName$*, old osi value-*$tmnxMobGwNtfyOldOsiValue$*, new osi value-*$tmnxMobGwNtfyNewOsiValue$*
Cause	A change in Origin State ID (OSI) value of the peer's origin-hosts.
Effect	If the Origin State ID change is detected, then all the sessions in that host are deleted.
Recovery	No recovery action is required for this notification." notification.

3.3.67 tmnxMobGwPfcpRestoreInProg

Table 84: tmnxMobGwPfcpRestoreInProg properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2122
Event name	tmnxMobGwPfcpRestoreInProg
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.122
Default severity	major
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$* VRtr-*$tmnxMobGwNtfyVrtrId$* Ref PointType- *$tmnxMobGwNtfyRefPointType$* RefPointName-*$tmnxMobGwNtfyRefPointName$* PFCP restoration in progress for RemotePeer Address- *$tmnxMobGwNtfyRfPtPeerAddr$* LocalPeerAddress-*$tmnxMobGwNtfyPeerLocAddress$* RestoreTimer-*$tmnxMobGwNtfyRestoreTimer$* NodeId- *$tmnxMobGwNtfyPeerNodeId$*
Cause	A PFCP keepalive failure between UP and CP has been detected.
Effect	The restoration timer has started.
Recovery	Restore the path between UP and CP to allow keepalives to succeed again. If keepalives recover before the restoration timer times out, the CP and UP will perform an audit and recover from the failure automatically.

3.3.68 tmnxMobGwPfcpViaUpFuncFailure

Table 85: tmnxMobGwPfcpViaUpFuncFailure properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2128
Event name	tmnxMobGwPfcpViaUpFuncFailure
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.128
Default severity	major
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, *$tmnxMobGwNtfyGrpName$*, detected a PFCP-u tunnel connectivity lost or failed to get established between the CP function and UP function
Cause	PFCP-u tunnel used for via-up-function (radius-group or dhcp-server-group) traffic between CP and UP function is failing to get established/re-established.
Effect	Any traffic routed over the PFCP-u tunnel will fail and may cause attach failure.
Recovery	Verify that the PFCP-u tunnel for via-up-function is correctly configured and that connectivity between the CP and UP function over the sx-n4 interface is up.

3.3.69 tmnxMobGwPfcpViaUpFuncFailureClr

Table 86: tmnxMobGwPfcpViaUpFuncFailureClr properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2129
Event name	tmnxMobGwPfcpViaUpFuncFailureClr
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.129

Property name	Value
Default severity	cleared
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, *$tmnxMobGwNtfyGrpName$* detected a PFCP-u tunnel connectivity re-established between the CP function and UP function.
Cause	PFCP-u tunnel used for via-up-function (radius-group or dhcp-server-group) traffic between CP and UP function is failing re-established.
Effect	Any traffic routed over the PFCP-u tunnel will no longer fail.
Recovery	No further action required.

3.3.70 tmnxMobGwPoolCapacityAlarmMajor

Table 87: tmnxMobGwPoolCapacityAlarmMajor properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2041
Event name	tmnxMobGwPoolCapacityAlarmMajor
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.39
Default severity	warning
Source stream	main
Message format string	Pool capacity alarm major: Gw-*$tmnxMobGwNtfyGatewayId$*, pool name- *$tmnxMobGwNtfyIpPoolName$*, ipv4 pool size-*$tmnxMobGwNtfyIpv4PoolSize$*, ipv4 pool utilization-*$tmnxMobGwNtfyIpv4PoolUtilization$*, ipv6 pool size- *$tmnxMobGwNtfyIpv6PoolSize$*, ipv6 pool utilization-*$tmnxMobGwNtfyIpv6PoolUtilization$*
Cause	The IPv4 or IPv6 address pool usage reaches the configured threshold because the IPv4 or IPv6 address pool is close to being exhausted.
Effect	If the utilization of the IPv4 or IPv6 address pool reaches 100%, the PGW rejects requests for new PDN connections.
Recovery	If the utilization of the IPv4 or IPv6 address pool reaches 100%, the operator's assistance is needed to increase the address pool size. More IP addresses might be added by creating a new entry in vRtr

Property name	Value
	IpPoolAddrTable for the corresponding router and IP pool name with a non-overlapping IP prefix.

3.3.71 tmnxMobGwPoolCapacityAlarmMinor

Table 88: tmnxMobGwPoolCapacityAlarmMinor properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2039
Event name	tmnxMobGwPoolCapacityAlarmMinor
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.37
Default severity	warning
Source stream	main
Message format string	Pool capacity alarm minor: Gw-*$tmnxMobGwNtfyGatewayId$*, pool name- *$tmnxMobGwNtfyIpPoolName$*, ipv4 pool size-*$tmnxMobGwNtfyIpv4PoolSize$*, ipv4 pool utilization-*$tmnxMobGwNtfyIpv4PoolUtilization$*, ipv6 pool size- *$tmnxMobGwNtfyIpv6PoolSize$*, ipv6 pool utilization-*$tmnxMobGwNtfyIpv6PoolUtilization$*
Cause	The IPv4 or IPv6 address pool usage reaches the configured threshold because the IPv4 or IPv6 address pool is close to being exhausted.
Effect	If the utilization of IPv4 or IPv6 address pool reaches 100%, the PGW rejects requests for new PDN connections.
Recovery	If the utilization of the IPv4 or IPv6 address pool reaches 100%, the operator's assistance is needed to increase the address pool size. More IP addresses might be added by creating a new entry in vRtr IpPoolAddrTable for the corresponding router and IP pool name with a non-overlapping IP prefix.

3.3.72 tmnxMobGwPoolCapacityAlmMjrClear

Table 89: tmnxMobGwPoolCapacityAlmMjrClear properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2042
Event name	tmnxMobGwPoolCapacityAlmMjrClear
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.40
Default severity	warning
Source stream	main
Message format string	Pool capacity alarm major clear: Gw-*$tmnxMobGwNtfyGatewayId$*, pool name- *$tmnxMobGwNtfyIpPoolName$*, ipv4 pool size-*$tmnxMobGwNtfyIpv4PoolSize$*, ipv4 pool utilization-*$tmnxMobGwNtfyIpv4PoolUtilization$*, ipv6 pool size- *$tmnxMobGwNtfyIpv6PoolSize$*, ipv6 pool utilization-*$tmnxMobGwNtfyIpv6PoolUtilization$*
Cause	The IPv4 or IPv6 address pool usage drops below the configured threshold - 5%.
Effect	N/A
Recovery	N/A

3.3.73 tmnxMobGwPoolCapacityAlmMnrClear

Table 90: tmnxMobGwPoolCapacityAlmMnrClear properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2040
Event name	tmnxMobGwPoolCapacityAlmMnrClear
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.38
Default severity	warning
Source stream	main
Message format string	Pool capacity alarm minor clear: Gw-*$tmnxMobGwNtfyGatewayId$*, pool name- *$tmnxMobGwNtfyIpPoolName$*, ipv4 pool size-*$tmnxMobGwNtfyIpv4PoolSize$*, ipv4 pool utilization-*$tmnxMobGwNtfyIpv4Pool*

Property name	Value
	Utilization$*, ipv6 pool size- *$tmnxMobGwNtfyIpv6PoolSize$*, ipv6 pool utilization-*$tmnxMobGwNtfyIpv6PoolUtilization$
Cause	The IPv4 or IPv6 address pool usage drops below the configured threshold - 5%.
Effect	N/A
Recovery	N/A

3.3.74 tmnxMobGwRadGrpFailAlarm

Table 91: tmnxMobGwRadGrpFailAlarm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2024
Event name	tmnxMobGwRadGrpFailAlarm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.20
Default severity	major
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, Radius Server Group-*$tmnxMob GwNtfyRadGrpName$*, Group State- *$tmnxMobGwNtfyRadGrpState$*.
Cause	All the RADIUS servers for the group are in a down operating state.
Effect	When the group of RADIUS servers fails, RADIUS messages may not be sent to the group.
Recovery	The RADIUS server group will recover from this failure mode when one of its servers returns to the up operating state.

3.3.75 tmnxMobGwRadGrpFailAlarmClrd

Table 92: tmnxMobGwRadGrpFailAlarmClrd properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2025
Event name	tmnxMobGwRadGrpFailAlarmClrd
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.21
Default severity	minor
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, Radius Server Group-*$tmnxMob GwNtfyRadGrpName$*, Group State- *$tmnxMobGwNtfyRadGrpState$*.
Cause	The RADIUS server group is recovered from the previous failure mode and at least one of its servers has transitioned to the up operating state.
Effect	The operation for the RADIUS group is back to normal.
Recovery	No further action is required.

3.3.76 tmnxMobGwRadPeerFailAlarm

Table 93: tmnxMobGwRadPeerFailAlarm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2022
Event name	tmnxMobGwRadPeerFailAlarm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.18
Default severity	minor
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, Radius Server Group-*$tmnxMob GwNtfyRadGrpName$*, Address- *$tmnxMobGwNtfyRadPeerAddr$*, Authentication port-*$tmnxMobGwNtfyRadPeerAuthPort$*, Accounting port-*$tmnxMobGwNtfyRadPeerAcctPort$*, Peer State- *$tmnxMob GwNtfyRadPeerState$*.

Property name	Value
Cause	The operating state for RADIUS server is changed to the down state.
Effect	RADIUS messages may not be sent to the RADIUS server.
Recovery	RADIUS messages can continue to be sent to a RADIUS server after the RADIUS server's operating state changes back to up or the dead timer expires.

3.3.77 tmnxMobGwRadPeerFailAlarmClrd

Table 94: tmnxMobGwRadPeerFailAlarmClrd properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2023
Event name	tmnxMobGwRadPeerFailAlarmClrd
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.19
Default severity	minor
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, Radius Server Group-*$tmnxMobGwNtfyRadGrpName$*, Address- *$tmnxMobGwNtfyRadPeerAddr$*, Authentication port-*$tmnxMobGwNtfyRadPeerAuthPort$*, Accounting port-*$tmnxMobGwNtfyRadPeerAcctPort$*, Peer State- *$tmnxMobGwNtfyRadPeerState$*.
Cause	The RADIUS server recovered from the previous failure mode and one of its servers has transitioned to the up operating state.
Effect	The operation for the RADIUS server is back to normal.
Recovery	No further action is required.

3.3.78 tmnxMobGwSbiPeerState

Table 95: tmnxMobGwSbiPeerState properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2130
Event name	tmnxMobGwSbiPeerState
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.130
Default severity	warning
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, Group ID-*$tmnxMobGwNtfySbi GroupId$*, NF service name- *$tmnxMobGwNtfySbiNfServiceName $*, Service Instance- *$tmnxMobGwNtfySbiNfServiceIns$*, peer UUID-*$tmnxMobGwNtfySbiPeerUuid$*, peer ip address- *$tmnxMobGwNtfySbi PeerIpAddress$*, peer port- *$tmnxMobGwNtfySbiPeerPort$*, connection state- *$tmnxMobGwNtfySbiConnectionState$*, NF service state- *$tmnx MobGwNtfySbiNfServiceState$*.
Cause	A change in the NF peer connection status or peer is deleted from peer list.
Effect	N/A.
Recovery	N/A.

3.3.79 tmnxMobGwSwmConLostAlarm

Table 96: tmnxMobGwSwmConLostAlarm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2111
Event name	tmnxMobGwSwmConLostAlarm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.109
Default severity	major
Source stream	main

Property name	Value
Message format string	Gw - *$tmnxMobGwNtfyGatewayId$*, System group - *$tmnxMobGwNtfySysGroupId$* connectivity to all SWm peers lost
Cause	All SWm peers are in down state.
Effect	The mobile gateway group is not available for load balancing.
Recovery	N/A.

3.3.80 tmnxMobGwSwmConLostAlarmClr

Table 97: tmnxMobGwSwmConLostAlarmClr properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2112
Event name	tmnxMobGwSwmConLostAlarmClr
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.110
Default severity	major
Source stream	main
Message format string	Gw - *$tmnxMobGwNtfyGatewayId$*, System group - *$tmnxMobGwNtfySysGroupId$* SWm peer connectivity restored
Cause	One of the SWm peers is in the up state.
Effect	The mobile gateway group is now available for load balancing.
Recovery	N/A.

3.3.81 tmnxMobGwSysGrpCardRedStChange

Table 98: tmnxMobGwSysGrpCardRedStChange properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2016

Property name	Value
Event name	tmnxMobGwSysGrpCardRedStChange
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.12
Default severity	major
Source stream	main
Message format string	Card oper state-*$tmnxMobGwSysGroupCardRedState$*.
Cause	A card failure changes the card redundancy state to NOTVALID. When an active card goes down, the standby card becomes active which triggers a state change to active. When a STANDBYINPROG card becomes in sync with the active card, the state changes to standby.
Effect	When the card goes down, it will not be able to provide any mobile gateway services supported by the system.
Recovery	If the card goes down, the operator's assistance is needed to get the card back online.

3.3.82 tmnxMobGwSysGrpRedStateChange

Table 99: tmnxMobGwSysGrpRedStateChange properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2015
Event name	tmnxMobGwSysGrpRedStateChange
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.11
Default severity	major
Source stream	main
Message format string	Group Oper state-*$tmnxMobGwSysGroupRedState$*.
Cause	A working card failure, change in the redundancy configuration, or a protect card addition triggers a change to the group redundancy state.
Effect	When the value of tmnxMobGwSysGroupRedState changes from HOT to COLD, a switchover happened. No services are affected when the value of tmnxMobGwSysGroupRedState changes.

Property name	Value
Recovery	After a switchover happens, no backup card will be up and the operator must get a backup card online to avoid any disruption to services, in case of further failures.

3.3.83 tmnxMobGwSysGrpWriteCdrToCfAlarm

Table 100: tmnxMobGwSysGrpWriteCdrToCfAlarm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2031
Event name	tmnxMobGwSysGrpWriteCdrToCfAlarm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.27
Default severity	warning
Source stream	main
Message format string	Acct Application: Action for CDRs: *$tmnxMobGwNtfyWriteCdrAction$*: Gw- *$tmnxMobGwNtfyGatewayId$*, System Group - *$tmnxMobGwNtfySysGroupId$*, GTP Prime Server Group-*$tmnxMobGwNtfyGtpPriGrpName$*
Cause	A change in the action of writing CDR packets to the compact flash.
Effect	The system has started writing CDR packets to the files on the compact flash, when the action START is displayed. The system has stopped writing CDR packets to the files on the compact flash, when the action STOP is displayed.
Recovery	Retrieve the CDR files from the compact flash.

3.3.84 tmnxMobGwTlmPthUnsupSampleIntvl

Table 101: tmnxMobGwTlmPthUnsupSampleIntvl properties

Property name	Value
Application name	MOBILE_GATEWAY

Property name	Value
Event ID	2131
Event name	tmnxMobGwTlmPthUnsupSampleIntvl
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.131
Default severity	warning
Source stream	main
Message format string	A MG telemetry subscription with a sample interval *$tmnxMobGwTlmtryGrpcSubPathIntvl$*ms is not supported, must be N*60seconds with N in 1 to 5
Cause	Telemetry subscription created to MG supported path with sample interval that is not a multiple of 60s.
Effect	Statistics obtained through subscription will not be updated correctly according to the unsupported sample interval.
Recovery	Cancel active subscription and subscribe providing a supported sample interval value (multiple of 60s).

3.3.85 tmnxMobGwVmgAutoHeal

Table 102: tmnxMobGwVmgAutoHeal properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2059
Event name	tmnxMobGwVmgAutoHeal
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.57
Default severity	major
Source stream	main
Message format string	VMG Auto Healing required: Card-*$tmnxMobGwNtfyCardSlotNum$*
Cause	The card-$tmnxMobGwNtfyCardSlotNum$ goes down and is not able to be restored.
Effect	The auto-healing process starts by trying to bring up the card identified as $tmnxMobGwNtfyCardSlotNum$

Property name	Value
Recovery	If the auto-healing is successful, no further action is required. If it is not successful, the operator must rectify the virtual infrastructure manually.

3.3.86 tmnxMobGwVmgLcseGwTypeBreach

Table 103: tmnxMobGwVmgLcseGwTypeBreach properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2052
Event name	tmnxMobGwVmgLcseGwTypeBreach
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.50
Default severity	minor
Source stream	main
Message format string	Unable to process call for gateway type *$tmnxMobGwNtfyVmgLcseGwTypBreach$* - gateway type not supported by VMG license
Cause	A gateway type breach occurs.
Effect	The calls for that particular gateway type are dropped.
Recovery	Get a new license to enable the gateway features that have been breached.

3.3.87 tmnxMobGwVmgLcseScaleBreach

Table 104: tmnxMobGwVmgLcseScaleBreach properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2051
Event name	tmnxMobGwVmgLcseScaleBreach
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.49

Property name	Value
Default severity	minor
Source stream	main
Message format string	*$tmnxMobGwNtfyVmgLcseScaleBreach$* VMG license breach: Current level - *$tmnxMobGwNtfyVmgLcseScaleLevel$*
Cause	There is a sessions limit, bearers limit, or throughput breach.
Effect	There is no effect for this notification.
Recovery	There is no recovery action required for this notification.

3.3.88 tmnxMobPdnApnMaxPdnActAlarm

Table 105: tmnxMobPdnApnMaxPdnActAlarm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2064
Event name	tmnxMobPdnApnMaxPdnActAlarm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.62
Default severity	minor
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, APN Name-*$tmnxMobGwNtfyApnName$*.
Cause	The maximum number of PDN activations per second for this APN on the gateway is reached.
Effect	New PDN activations will not be accepted until the limit drops below the value of TIMETRA-MOBILE-PDN-MIB::tmnxMobPdnApnGtpPdnThrshMaxAct.
Recovery	To accept new PDN activations, the system has to wait until the number of PDN activations drops below the value of TIMETRA-MOBILE-PDN-MIB::tmnxMobPdnApnGtpPdnThrshMaxAct.

3.3.89 tmnxMobPdnApnMaxPdnActAlarmClr

Table 106: tmnxMobPdnApnMaxPdnActAlarmClr properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2065
Event name	tmnxMobPdnApnMaxPdnActAlarmClr
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.63
Default severity	minor
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, APN Name-*$tmnxMobGwNtfyApnName$*.
Cause	The value of the maximum number of PDN activations for this APN on the gateway drops below the value of TIMETRA-MOBILE-PDN-MIB::tmnxMobPdnApnGtpPdnThrshMaxAct.
Effect	New PDN activations are accepted.
Recovery	No further action is required.

3.3.90 tmnxMobPdnApnMaxPdnConnAlarm

Table 107: tmnxMobPdnApnMaxPdnConnAlarm properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2035
Event name	tmnxMobPdnApnMaxPdnConnAlarm
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.33
Default severity	major
Source stream	main

Property name	Value
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, APN Name-*$tmnxMobGwNtfyApnName$*.
Cause	The maximum number of PDN connections for this APN on the gateway is reached.
Effect	New PDN connections are not accepted until the limit drops below the value of TIMETRA-MOBILE-PDN-MIB::tmnxMobPdnApnMaxPdnConnections.
Recovery	To accept new PDN connections, the system has to wait until the maximum PDN connections number drops below the threshold.

3.3.91 tmnxMobPdnApnMaxPdnConnAlarmClr

Table 108: tmnxMobPdnApnMaxPdnConnAlarmClr properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2036
Event name	tmnxMobPdnApnMaxPdnConnAlarmClr
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.34
Default severity	major
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, APN Name-*$tmnxMobGwNtfyApnName$*.
Cause	The existing number of PDN connections for this APN on the gateway drops below the value of TIMETRA-MOBILE-PDN-MIB::tmnxMobPdnApnMaxPdnConnections.
Effect	New PDN connections are accepted.
Recovery	No further action is required.

3.3.92 tmnxMobPdnEmerCallFailures

Table 109: tmnxMobPdnEmerCallFailures properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2068
Event name	tmnxMobPdnEmerCallFailures
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.66
Default severity	minor
Source stream	main
Message format string	ePDG: number of emergency call failures during last 60 seconds: *$tmnxMobGwNtfyEmerCallFailures$*
Cause	Triggered by ePDG for emergency call failures during the last 60 seconds.
Effect	The UE(s) were not able to do an emergency attach during the last 60 seconds.
Recovery	Based on the call flow statistics, identify the cause of the emergency attach failure and perform corrective action.

3.3.93 tmnxMobPdnLaaPfxInsufficientMem

Table 110: tmnxMobPdnLaaPfxInsufficientMem properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2113
Event name	tmnxMobPdnLaaPfxInsufficientMem
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.113
Default severity	warning
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, network realm *$tmnxMobGwNtfy NwRealmName$*, pool *$tmnxMobGwNtfyPoolName$*, prefix *$tmnx MobGwNtfyAddr$*/*$tmnxMobGwNtfyPfxLength$* not operational due to insufficient memory

Property name	Value
Cause	Insufficient memory for an IP address prefix and all of its micronets.
Effect	The IP address prefix is not activated, and its operational status goes down.
Recovery	Add memory to the system, or reduce the number of the prefix micronets.

3.3.94 tmnxMobPdnLaaPlNoFreeMnets

Table 111: tmnxMobPdnLaaPlNoFreeMnets properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2136
Event name	tmnxMobPdnLaaPlNoFreeMnets
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.136
Default severity	minor
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, network realm *$tmnxMobGwNtfy NwRealmName$*, pool *$tmnxMobGwNtfyPoolName$* IPv6 type *$tmnx MobGwNtfyIpv6AssignmentType$*: no more free *$tmnxMobGwNtfyLaa UnfragmentedMn$* micronets *$tmnxMobGwNtfyTruthValue$*
Cause	The last available micronet of its kind in the pool is activated.
Effect	Setup of new end user sessions will start to fail.
Recovery	Add prefixes to the pool.

3.3.95 tmnxMobPdnLaaPlNumFreeMnetsLow

Table 112: tmnxMobPdnLaaPlNumFreeMnetsLow properties

Property name	Value
Application name	MOBILE_GATEWAY

Property name	Value
Event ID	2110
Event name	tmnxMobPdnLaaPlNumFreeMnetsLow
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.108
Default severity	warning
Source stream	main
Message format string	Gw-*$tmnxMobGwNtfyGatewayId$*, network realm *$tmnxMobGwNtfy NwRealmName$*, pool *$tmnxMobGwNtfyPoolName$* IPv6 type *$tmnx MobGwNtfyIpv6AssignmentType$*: running low on *$tmnxMobGwNtfy LaaUnfragmentedMn$* micronets *$tmnxMobGwNtfyTruthValue$*
Cause	A micronet is activated while the number of free micronets in the pool is already low.
Effect	None.
Recovery	No recovery is immediately required. However, it is recommended to add prefixes in order to avoid complete depletion of the pool.

3.3.96 tmnxMobProfNodeSelTrgtSugstRebal

Table 113: tmnxMobProfNodeSelTrgtSugstRebal properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2149
Event name	tmnxMobProfNodeSelTrgtSugstRebal
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.151
Default severity	warning
Source stream	main
Message format string	Evaluate target-profile *$tmnxMobGwNtfyProfileName$* and rebalance if necessary - new UP= *$tmnxMobGwNtfyUpPeerAddress$*, surviving number of UPs=*$tmnxMobGwNtfyNumber$*
Cause	The system has reconnected to a UPF after having been disconnected.

Property name	Value
Effect	While the UPF connection was down session distribution among the UPFs in a target profile may have become unbalanced. This event indicates session load rebalancing may be necessary.
Recovery	Session load among the available UPFs in the target profile should be evaluated, and if necessary, rebalanced using a clear operation.

3.3.97 tmnxMobProfNodeSelTrgtSugstRevrt

Table 114: tmnxMobProfNodeSelTrgtSugstRevrt properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2150
Event name	tmnxMobProfNodeSelTrgtSugstRevrt
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.152
Default severity	warning
Source stream	main
Message format string	Evaluate target-profile *$tmnxMobGwNtfyProfileName$* and revert if necessary
Cause	The number of available UPFs in a target profile entry has reached the necessary minimum threshold.
Effect	While the number of available UPF connections was below the minimum threshold new sessions will be directed to backup UPFs. This event indicates it may be appropriate to revert sessions to primary UPFs.
Recovery	Session load among primary and secondary UPFs of the target profile should be evaluated and if necessary, reverted using a clear operation.

3.3.98 tmnxOverlayFabricFailure

Table 115: tmnxOverlayFabricFailure properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2072
Event name	tmnxOverlayFabricFailure
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.70
Default severity	minor
Source stream	main
Message format string	Detected *$tmnxMobGwNtfyFailureDirection$* failure for slot *$tmnxMobGwNtfySlot$* on all overlay fabrics
Cause	A loss of connectivity to other cards in a particular direction over all available overlay fabrics.
Effect	The card cannot function properly as part of the system.
Recovery	Attempt to restore connectivity by rebooting the affected card.

3.3.99 tmnxOverlayFabricPartialFailure

Table 116: tmnxOverlayFabricPartialFailure properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2073
Event name	tmnxOverlayFabricPartialFailure
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.71
Default severity	minor
Source stream	main
Message format string	Detected *$tmnxMobGwNtfyFailureDirection$* failure for slot *$tmnxMobGwNtfySlot$* on overlay fabric *$tmnxMobGwNtfyFabricId$*
Cause	Loss of connectivity between the affected card and the other cards in a particular direction over a particular overlay fabric.

Property name	Value
Effect	The system will use a different overlay fabric that is operational to communicate with the affected card, but the capacity will be reduced.
Recovery	Manual intervention may be required to restore the connectivity.

3.3.100 tmnxOverlayFabricStatus

Table 117: tmnxOverlayFabricStatus properties

Property name	Value
Application name	MOBILE_GATEWAY
Event ID	2060
Event name	tmnxOverlayFabricStatus
SNMP notification prefix and OID	TIMETRA-MOBILE-GATEWAY-MIB.tmnxMobGatewayNotifications.58
Default severity	major
Source stream	main
Message format string	Operational state of last overlay fabric port transitioned to *$tmnxMobGwNtfyOverlayFabricState$* state for VM *$tmnxMobGwNtfyVmId$*
Cause	A change in the operational state of the overlay fabric switch, either when the last operational overlay fabric port transitions to the down state or when the first overlay fabric port transitions to an operationally up state.
Effect	If the value of tmnxMobGwNtfyOverlayFabricState is down, the VM fails (crashes) and ceases to process any new packets.
Recovery	If the value of tmnxMobGwNtfyOverlayFabricState is down, the VM fails to process new packets and reboots. The VM remains in the booting state until the value of tmnxMobGwNtfyOverlayFabricState changes to up.

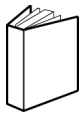
3.4 SYSTEM

3.4.1 sysMGMCSwitchOverStatusNotify

Table 118: sysMGMCSwitchOverStatusNotify properties

Property name	Value
Application name	SYSTEM
Event ID	2059
Event name	sysMGMCSwitchOverStatusNotify
SNMP notification prefix and OID	TIMETRA-SYSTEM-MIB.tmnxSysMGNotifications.1
Default severity	major
Source stream	main
Message format string	Manual switch over: Peer - *$sysMGMCSwitchOverPeerAddress$*, GW - *$sysMGMCSwitchOverMobGwId$*, Status - *$sysMGMCSwitchOver Status$*, Reboot - *$sysMGMCSwitchOverReboot$*, Failure reason - *$sysMGMCSwitchOverFailureReason$*, Exceptional Condition - *$sysMGMCSwitchOverExpCondition$*
Cause	Change in status of "sysMGMCSwitchOverStatus" of the switchover which is over-enforced on the mobile gateway "sysMGMCSwitchOver MobGwId" belonging to the peer "sysMGMCSwitchOverPeerAddress" participating in the georedundancy.
Effect	If sysMGMCSwitchOverStatus is set to: start - the process of switching the mobile gateway, "sysMGMCSwitchOverMobGwId", from the active role to the standby role has started. inprogress - the mobile gateway "sysMGMCSwitchOverMobGwId" on which the switchover is enforced, is transitioning to the standby role from its current active role. fail - the switchover process failed. success - the switchover process succeeded and the mobile gateway "sysMGMCSwitchOverMobGwId" has transitioned from active to standby. The previous standby mobile gateway will have transitioned to active. now - the switchover process starts without a full reconcile between active and standby systems. New active gateway might have incomplete data. abort - the switchover process is aborted after the switchover stays in progress for at least 5 minutes. The active mobile gateway is still the same. If the active node is in an overload condition (ABS, GTP-C, or PFCP overload) and an admin switchover is triggered, the 'sysMGMCSwitchOverExpCondition' string is set to 'local node is in overload'.
Recovery	If the switchover status "sysMGMCSwitchOverStatus", is set to "fail", try to diagnose the cause of failure and attempt the switchover process again. The "sysMGMCSwitchOverFailureReason" specifies the reason for this failure. 'sysMGMCSwitchOverExpCondition' specifies any exceptional conditions that occurred at the time of switchover.

Customer document and product support



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