NORTEL

EMS Alarm Guide

Version 3.0

LTRT-94601 Rev 002

NORTEL

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Date Published: Jun-22-2005   Date Printed: Jun-23-2005

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> **Note:** The Element Management System supports the following products:
>
> **1.** Media Gateway 3500

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Abbreviations and Terminology

Each abbreviation, unless widely used, is spelled out in full when first used. Only industry-standard terms are used throughout this manual. Hexadecimal notation is indicated by 0x preceding the number.

When the term 'Trunking Gateway' is used in this manual, it refers to the Media Gateway 3500.

When 'MG' is used in this manual, it refers to 'media gateway'.

Related Documentation

Manual Name
Media Gateway 3500 Installation, Operation & Maintenance Manual
Media Gateway 3500 Product Description
Element Management System (EMS) User's Manual
Element Management System (EMS) Server Installation & Maintenance Manual
Element Management System (EMS) Product Description
Element Management System (EMS) Online Help
EMS Parameter Guide for the Media Gateway 3500

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System alarms, originated by the EMS and associated with the EMS server and/or all media gateways managed by the EMS, are listed and described here.

The present version of the EMS supports the following alarms:

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2. Add Node Alarm

3. Node Connection Lost Alarm

4. Node Connection Establish Alarm

5. Software Mismatch Node Alarm

6. Hardware Mismatch Node Alarm

7. Mismatch Cleared Node Alarm

8. Upgrade MIB Version Alarm

9. Server Startup Alarm

10. Not Enough Disk Space

11. MG Software Upgrade Alarm

12. Software Replace Alarm

1.1   Cannot Bind SNMP Trap Receiver

Table 1-1: Cannot Bind SNMP Trap Receiver

Textual Description	This alarm is generated during server startup if an error occurs indicating that the SNMP trap receiver port is already taken.
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.1
AlarmTitle	Cannot Bind SNMP Trap Receiver
ItuAlarmType	Environmental Alarm
AlarmSource	EMS Server
Probable Cause	Application Subsystem Failure
Severity	Critical
Additional Info	-
Corrective Action	Run netstats command to verify which application uses alarms reception port (by default UDP post 162). ▪ EMS application: If it's busy, check what application uses this port. If it's not freed by the EMS application, restart the EMS server application according to the equipment installation manual. ▪ Other network management application: Change the EMS application and all managed gateways' default alarm reception ports.
Media Gateways	All the gateways managed by the EMS

1.2   Add Node Alarm

Table 1-2: Add Node Alarm

Textual Description	Generated when definition of Call Agent Board in Media Gateway 3500 is failed by EMS.
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.2
AlarmTitle	Add Node Failed
ItuAlarmType	Equipment Alarm
AlarmSource	Call Agent Board
Probable Cause	Software Error
Severity	Major
Additional Info	-
Corrective Action	In the Software Manager, check that the Call Agent version is defined. If not, define it. ▪ Verify that an SNMP connection between the EMS and gateway exists, that community strings are valid (check gateway details from the EMS tree). ▪ Check product compatability: Call Agent Board should have sysDescr field compatible to Media Gateway 3500 sysDescr.
Media Gateways	Media Gateway 3500 gateway

1.3   Connection Lost

Table 1-3: Connection Lost

Textual Description	Originated by the EMS when an SNMP Timeout occurs for the first time in the Media Gateway
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.3
AlarmTitle	Connection Lost
ItuAlarmType	Communications Alarm
AlarmSource	Media Gateway
Probable Cause	Communications Subsystem Failure
Severity	Critical
Additional Info	-
Corrective Action	Communication problem: Try to ping the gateway to check if there is network communication. ▪ Default gateway alive? Open the network screen. Check the default gateway IP address and ping it. ▪ SNMP Community Strings? Verify that the community string defined in the EMS for the gateway match the actual gateway community strings. To check the community string, right-click on the gateway, select the 'Details' menu. Default community strings: read = public, write = private. ▪ Hardware Problem? Check that the gateway is alive according to the LEDs, verify that network and power cables are in place and plugged in.
Media Gateways	All the gateways managed by the EMS

1.4   Connection Establish

Table 1-4: Connection Establish

Textual Description	Originated by the EMS when a previously lost Media Gateway connection returns.
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.4
AlarmTitle	Connection Lost
ItuAlarmType	Communications Alarm
AlarmSource	Media Gateway
Probable Cause	Communications Subsystem Failure
Severity	Critical
Additional Info	-
Corrective Action	-
Media Gateways	All the gateways managed by the EMS

1.5   Software Mismatch

Table 1-5: Software Mismatch

Textual Description	Generated when the EMS detects a software version mismatch between the actual and the previous definition of the Media Gateway (Version 4.0.353 instead of the previously defined 4.0.278). In case the new version is not defined in the Software Manager.
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.5
AlarmTitle	Software Mismatch
ItuAlarmType	Equipment Alarm
AlarmSource	Media Gateway
Probable Cause	Version Mismatch
Severity	Major
Additional Info	-
Corrective Action	▪ Define the detected version in the EMS Software Manager ▪ Perform a Software Upgrade on the gateway with one of the supported versions.
Media Gateways	Media Gateway 3500 gateway

1.6 Hardware Mismatch

Table 1-6: Hardware Mismatch

Textual Description	Generated when the EMS detects a hardware mismatch between the actual and the previous definition of a Media Gateway.
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.6
AlarmTitle	Hardware Mismatch
ItuAlarmType	Equipment Alarm
AlarmSource	Media Gateway
Probable Cause	Equipment Malfunction
Severity	Major
Additional Info	-
Corrective Action	▪ Perform remove / add a gateway from the EMS tree in order to resync EMS and the gateway status ▪ Verify in the Software Manager that an appropriate version exists for the hardware type presented in the error message.
Media Gateways	All the gateways managed by the EMS.

1.7 Mismatch Cleared

Table 1-7: Mismatch Cleared

Textual Description	Generated when the EMS detects that a hardware, software, predefine or configuration mismatch is cleared.
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.9
AlarmTitle	EMS Server Started
ItuAlarmType	Equipment Alarm
AlarmSource	Media Gateway
Probable Cause	Other
Severity	Clear
Additional Info	-
Corrective Action	Clears all mismatched alarms previously originated by the EMS on a certain gateway.
Media Gateways	All the gateways managed by the EMS.

1.8   Change MIB Version

Table 1-8: Change MIB Version

Textual Description	Originated when a major software version change is detected by the EMS.
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.10
AlarmTitle	Change MIB Version
ItuAlarmType	Equipment Alarm
AlarmSource	Media Gateway
Probable Cause	Version Mismatch
Severity	Info
Additional Info	-
Corrective Action	-
Media Gateways	All the gateways managed by the EMS.

1.9   EMS Server Started

Table 1-9: EMS Server Started

Textual Description	Originated each time the server is started or restarted (warm boot/reboot) by the EMS Watchdog Process
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.11
AlarmTitle	EMS Server Started
ItuAlarmType	Communications Alarm
AlarmSource	EMS Server
Probable Cause	Other
Severity	Major
Additional Info	-
Corrective Action	-
Media Gateways	All the gateways managed by the EMS.

1.10   Not Enoght Disk Space

Table 1-10: Not Enoght Disk Space

Textual Description	Originated when the EMS server hard disk capacity is almost full.
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.12
AlarmTitle	Disk Space Alarm
ItuAlarmType	Environment Alarm
AlarmSource	EMS Server
Probable Cause	-
Severity	Critical - disk usage > 80 % Major - disk usage > 70 %
Additional Info	-
Corrective Action	▪ Clean all unnecessary files ▪ Expand the hard disk
Media Gateways	All the gateways managed by the EMS.

1.11   Software Upgrade Alarm

Table 1-11: Software Upgrade Alarm

Textual Description	Indicates a steps of Media Gateway 3500 Online Software Upgrade procedures and versions information
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.13
AlarmTitle	EMS Server Started
ItuAlarmType	Equipment Alarm
AlarmSource	EMS Server
Probable Cause	Version Mismatch
Severity	Info
Additional Info	Started / Finished / Aborted
Corrective Action	No action should be taken; this is an information alarm
Media Gateways	Media Gateway 3500

1.12   Software Replace Alarm

Table 1-12: Software Replace Alarm

Textual Description	Originated when the EMS discovers a Software version has been replaced, for example: from V4.6.009.004 to V4.6.152.003. When both versions are managed by EMS.
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.14
AlarmTitle	EMS Server Started
ItuAlarmType	Communications Alarm
AlarmSource	EMS Server
Probable Cause	Other
Severity	Info
Additional Info	-
Corrective Action	No action should be taken; this is an information alarm.
Media Gateways	All the gateways managed by the EMS.

2 Media Gateway 3500 Alarms

System alarms associated with the Media Gateway 3500 Media Gateway can be displayed, viewed, tracked and troubleshooted in the EMS's Alarm Browser.

The present version of the Media Gateway 3500 Media Gateway supports the following alarms:

1.   TPBoardFailureTrap

2.   MOAdminStateChange

3.   MOOperativeStateChange

4.   TrunkAlarm

5.   ConfigurationError

6.   OperationalInfo

7.   VoltageAlarm

8.   FanAlarm

9.   tgTemperatureAlarm

10. EthernetExternalLinkAlarm

11. EthernetInternalLinkAlarm

12. PowerSupplyAlarm

13. PushbuttonAlarm

14. BoardTemperatureAlarm

15. STM 1 Link Alarm

16. BoardDiagnosticsAlarm

17. NTP Server Status Changed

2.1   Board Failure Trap

The table describes the alarm and shows the alarm information presented to Users. For Users' convenience, all alarms generated by the Media Gateway have the same standard structure, including the fields shown in the table.

Table 2-1: Board Failure Trap

Textual Description	Board extraction from chassis is underway
SNMP OID	1.3.6.1.4.1.5003.9.1.2.2.0.21
AlarmTitle	tgTPBoardFailureTrap
ItuAlarmType	Other
AlarmSource	Board #
Probable Cause	Other
Severity	Critical
AdditionalInfo1	-
AdditionalInfo2	-
AdditionalInfo3	-

2.2   Admin State Change

The table describes the alarm and shows the alarm information presented to Users. For Users' convenience, all alarms generated by the Media Gateway have the same standard structure, including the fields shown in the table.

Table 2-2: Admin State Change

Textual Description	This trap is reported when modifying the administrative state of the MIB elements (Managed Objects). Possible states are: Lock Unlock MIB elements supporting this functionality are: -moTG -moBoard -moTrunk
SNMP OID	1.3.6.1.4.1.5003.9.1.2.2.0.2
AlarmTitle	MO's Administrative State Changed
ItuAlarmType	Other
AlarmSource	mo path For entire gateway: ' TG' For TP/SB board: Board#' For trunk: Board#/Trunk#
Probable Cause	Lock = underlying resource unavailable Unlock = Other
Severity	**unlock** = cleared, **'lock** for **moTG-1000** = Critical, for **moBoard** = Major and for **moTrunk** = Minor
AdditionalInfo1	Lock, Unlock

2.3   Operative State Change

The table describes the alarm and shows the alarm information presented to Users. For Users' convenience, all alarms generated by the Media Gateway have the same standard structure, including the fields shown in the table.

Table 2-3: Operative State Change

Textual Description	This trap is reported under an operational state change of a certain Media Gateway resource mirrored by its MO (Managed Object) and MIB. Possible states are: Enabled Disabled State changes for the following resources are reported: Media Gateway (entire gateway) Board (TP/SB) Trunk
SNMP OID	1.3.6.1.4.1.5003.9.1.2.2.0.3
AlarmTitle	MO's Operational State Changed
ItuAlarmType	Other
AlarmSource	mo path For entiregateway:''TG' For TP/SB board: 'Board#' For trunk**: '**Board#/Trunk#
Probable Cause:	Disabled = Underlying resource unavailable Enabled = Other
Severity	Enable = Cleared Disabled = (for moTG-1000 = Critical, for moBoard = Major and for moTrunk = Minor)
AdditionalInfo1	Enabled, Disabled

2.4   Trunk Alarm

The table describes the alarm and shows the alarm information presented to Users. For Users' convenience, all alarms generated by the Media Gateway have the same standard structure, including the fields shown in the table.

Table 2-4: Trunk Alarm

Textual Description	Indicates events/alarms on the T1/E1 trunks in the TP-1610 boards: Critical: LOS, LOF Minor: AIS, RAI, RAI_CRC Major: RED Minor: BLUE, Yellow
SNMP OID	1.3.6.1.4.1.5003.9.1.2.2.0.5
AlarmSource	moTrunk path, indicating affected trunk. 'Board#/Trunk#'
ItuAlarmType	communicationsAlarm
Probable Cause	degradedSignal
Severity	'LOS' or 'LOF' = 'red alarm' = Major 'AIS' = 'blue alarm' = Major 'RAI' or 'RAI_CRC' = 'yellow alarm' = Minor Everything is cleared = Clear
AdditionalInfo1	Bitmap indicating alarms set/cleared according to the following standard: 1 dsx1NoAlarm 2 dsx1RcvFarEndLOF 4 dsx1XmtFarEndLOF 8 dsx1RcvAIS 16 dsx1XmtAIS 32 dsx1LossOfFrame 64 dsx1LossOfSignal 128 dsx1LoopbackState 256 dsx1T16AIS 512 dsx1RcvFarEndLOMF 1024 dsx1XmtFarEndLOMF 2048 dsx1RcvTestCode 4096 dsx1OtherFailure 8192 dsx1UnavailSigState 16384 dsx1NetEquipOOS 32768 dsx1RcvPayloadAIS 65536 dsx1Ds2PerfThreshold

2.5   Configuration Error

The table describes the alarm and shows the alarm information presented to Users. For Users' convenience, all alarms generated by the Media Gateway have the same standard structure, including the fields shown in the table.

Table 2-5: Configuration Error

Textual Description	This trap is issued when a configuration error or configuration inconsistency is caused by the User (via the EMS or MIB Browser). It's a general alarm. The problem description is provided in the 'text' form (AdditionalInfo1 field).
SNMP OID	1.3.6.1.4.1.5003.9.1.2.2.0.6
AlarmTitle	Configuration Error
AlarmSource	Appropriate MO path
Probable Cause	Configuration or customization error
ItuAlarmPerceivedSeverity	Indeterminate
ItuAlarmType	Processing error alarm
AdditionalInfo1	String explaining a certain problem in configuration or data inconsistency. **Examples**: 'Redundant board is configured as Normal board' 'Data of the SC is corrupted. Parameter name'

2.6   Operational Info

The table describes the alarm and shows the alarm information presented to Users. For Users' convenience, all alarms generated by the Media Gateway have the same standard structure, including the fields shown in the table.

Table 2-6: Operational Info

Textual Description	In the current version, this alarm gathers all events (not only errors) caused by either actions performed by Operators or by operation of the Media Gateway itself. All operational events are reported through this alarm. For example, a System Controller switchover event or an SC failure is reported through OperationalInfo. The problem description is provided in the 'text' form (AdditionalInfo1 field).
SNMP OID	1.3.6.1.4.1.5003.9.1.2.2.0.7
AlarmTitle	Operational Information
AlarmSource	Appropriate MO path
Probable Cause	Other
ItuAlarmPerceivedSeverity	Indeterminate
ItuAlarmType	Processing error alarm
AdditionalInfo1	String explaining a certain problem or event that occurred in the system. **Examples**: 'Cannot TAKEOVER board at this state' 'UNLOCK operation cannot be done while board is shutting down' 'Change clock source'

2.7 Voltage Alarm

The table describes the alarm and shows the alarm information presented to Users. For Users' convenience, all alarms generated by the Media Gateway have the same standard structure, including the fields shown in the table.

Table 2-7: Voltage Alarm

Textual Description	Specifies the midplane voltages that are out of range: +3.3V / +5V / +12V / -12V midplane voltage [is out of nominal voltage (Active alarm)] [returned to nominal range (Cleared alarm)]
SNMP OID	1.3.6.1.4.1.5003.9.1.2.2.0.8
AlarmTitle	VoltageAlarm
AlarmSource	SAT / Voltage +12V / -12V / +5V / +3.3V /
Severity	Warning, Minor, Major or Cleared
Probable Cause	Power problem
ItuAlarmType	Equipment alarm
AdditionalInfo1	Measured voltages: +3.3V / +5V / +12V / -12V
AdditionalInfo2	Crossed thresholds: V1, V2, V3, V4, V5, V6 (The configured thresholds are the voltage levels of the threshold bands)

2.8   Fan Alarm

The table describes the alarm and shows the alarm information presented to Users. For Users' convenience, all alarms generated by the Media Gateway have the same standard structure, including the fields shown in the table.

Table 2-8: Fan Alarm

Textual Description	Fan (location description) speed [is out of nominal range (Active alarm), [returned to nominal range (Cleared alarm)]
SNMP OID	1.3.6.1.4.1.5003.9.1.2.2.0.9
AlarmTitle	Fan Alarm
AlarmSource	SAT/Fan (location description)
Severity	Mediant 8000: Minor, Major or Cleared Media Gateway 3500: Critical when the large front fan fails.
Probable Cause	Power problem
ItuAlarmType	Equipment Alarm
AdditionalInfo1	Measured fans speed: FL=yyy, FR=xxx, RL=zzz (abbreviations: Front Left, Front Right, Rear Left, Rear Right.).
AdditionalInfo2	'Crossed Threshold = Fx', Configured thresholds: F1, F2, F3, F4

2.9   Temperature Alarm

The table describes the alarm and shows the alarm information presented to Users. For Users' convenience, all alarms generated by the Media Gateway have the same standard structure, including the fields shown in the table.

Table 2-9: Temperature Alarm

Textual Description	Planned for the future.
SNMP OID	1.3.6.1.4.1.5003.9.1.2.2.0.10

2.10   Ethernet External Link Alarm

The table describes the alarm and shows the alarm information presented to Users. For Users' convenience, all alarms generated by the Media Gateway have the same standard structure, including the fields shown in the table.

Table 2-10: Ethernet External Link Alarm

Textual Description	The link between the ES and the external network device has been established/has failed
SNMP OID	1.3.6.1.4.1.5003.9.1.2.2.0.11
AlarmTitle	Ethernet Uplink Alarm
AlarmSource	ES/Slot#
Severity	Major for disable, Cleared for enable
Probable Cause	Loss of signal
ItuAlarmType	Communication Alarm
AdditionalInfo1	Media Gateway 3500 - MG Slots Ethernet links status:1,2 = 00,5..10=00000
AdditionalInfo2	ES Ports (ES LEDs) status: 1..26 = 010100101 ……

2.11   Ethernet Internal Link Alarm

The table describes the alarm and shows the alarm information presented to Users. For Users' convenience, all alarms generated by the Media Gateway have the same standard structure, including the fields shown in the table.

Table 2-11: Ethernet Internal Link Alarm

Textual Description	Ethernet link between the ES and the Media Gateway board has failed / has been established
SNMP OID	1.3.6.1.4.1.5003.9.1.2.2.0.12
AlarmTitle	Ethernet Uplink Alarm
AlarmSource	ES/Slot#
Severity	Major for disable, Cleared for enable
Probable Cause	Loss of signal
ItuAlarmType	Communication Alarm
AdditionalInfo1	Media Gateway 3500 - MG Slots Ethernet links status:1,2 = 00,5..10=00000
AdditionalInfo2	ES Ports (ES LEDs) status: 1..26 = 010100101 ……

2.12 Power Supply Alarm

The table describes the alarm and shows the alarm information presented to Users. For Users' convenience, all alarms generated by the Media Gateway have the same standard structure, including the fields shown in the table.

Table 2-12: Power Supply Alarm

Textual Description	Specifies: Alarm severity Fan number Current value
SNMP OID	1.3.6.1.4.1.5003.9.1.2.2.0.13
AlarmTitle	Power supply alarm
AlarmSource	SAT/PS/'location description'
Severity	Major for FAIL and EXIST; Minor for DEG; Cleared
Probable Cause	Power problem
ItuAlarmType	Equipment alarm
AdditionalInfo1	Current status of fault cassette
AdditionalInfo2	Status of other PS cassettes

2.13   Push Button Alarm

The table describes the alarm and shows the alarm information presented to Users. For Users' convenience, all alarms generated by the Media Gateway have the same standard structure, including the fields shown in the table.

Table 2-13: Push Button Alarm

Textual Description	Alarms relays manually deactivated
SNMP OID	1.3.6.1.4.1.5003.9.1.2.2.0.14
AlarmTitle	PushButtonAlarm
AlarmSource	SAT/Pushbutton [Cutoff] [Switchover]
Severity	Informational
Probable Cause	Pushbutton pressed
ItuAlarmType	equipmentAlarm
AdditionalInfo1	Cutoff case. Previous state of alarm relays: Minor = open/connect, Major = o/c, Critical = o/c
AdditionalInfo2	Cutoff case. Previous state of alarm LEDs: Minor = Red/Green, Major = Red/Yellow and Critical = Red/Blue

2.14   Board Temperature Alarm

The table describes the alarm and shows the alarm information presented to Users. For Users' convenience, all alarms generated by the Media Gateway have the same standard structure, including the fields shown in the table.

Table 2-14: Board Temperature Alarm

Textual Description	The alarm is triggered when the temperature exceeds 55 degrees Celsius and ceases when the temperature falls below 55 degrees Celsius again..
SNMP OID	1.3.6.1.4.1.5003.9.1.2.2.0.4
AlarmTitle	BoardTemperatureAlarm
AlarmSource	Board #
Severity	Critical
Probable Cause	Unacceptable temperature
ItuAlarmType	Equipment alarm
AdditionalInfo1	Board temperature is too high
AdditionalInfo2	-

2.15 Board Diagnostics Alarm

The table describes the alarm and shows the alarm information presented to Users. For Users' convenience, all alarms generated by the Media Gateway have the same standard structure, including the fields shown in the table.

Table 2-15: Board Diagnostics Alarm

Description	tgBoardDiagnosticsAlarm
TextualDescription	Indicates that the board's health diagnostics tests have failed/solved TP-1610/ES/SC health diagnostics test failed - failure alarm TP-1610/ES/SC health diagnostics failure cleared - for cleared alarm
Source	Shelf GA, board#
Severity	Major for fails, Cleared when changed to normal.
SNMP OID	1.3.6.1.4.1.5003.9.1.2.2.0.17
Type (ITU)	Equipment failure
ProbableCause (ITU)	Equipment malfunction
AdditionalInfo1	Fault Element: [string from the list of board's components - ElementID in the case of TP, including its index]
AdditionalInfo2	Test Initiative: [Board Startup Diagnostics, PeriodicDiagnostics, User Initiated Diagnostics] Initial Test State: [list of standing alarms, clear of alarms]
AdditionalInfo3	-

2.16   NTP Server Status Changed

The table describes the alarm and shows the alarm information presented to Users. For Users' convenience, all alarms generated by the Media Gateway have the same standard structure, including the fields shown in the table.

Table 2-16: NTP Server Status Changed

Description	NTP Server Status Changed
TextualDescription	The connection with the NTP server is lost but Internal Clock synchronization is still going. *or* NTP server has been restored.
Source	NTP server
Severity	Warning (when the connection with the NTP server is lost; see Textual Description above) *or* Clear (when the NTP server has been restored; see Textual Description above)
SNMP OID	1.3.6.1.4.1.5003.9.1.2.2.0.582
Type (ITU)	Communications alarm
ProbableCause (ITU)	Other
AdditionalInfo1	-
AdditionalInfo2	-
AdditionalInfo3	-

3   Call Agent Alarms

System alarms, associated with the Call Agent, can be displayed, viewed and tracked and troubleshooted in the EMS's Alarm Browser. The present version of the Call Agent supports the following alarms:

1. caSysPacketsDelayTrap

2. caSysPacketLostTrap

3. caSysBadQualityCallsTrap

4. caSysResourceLackTrap

5. caSysDisconnectedCallsTrap

6. caSysRddcySwappedTrap

7. caSysRddcyStandByStatusTrap

8. caSysConfigFileNotFoundTrap

9. caSysEndpointsFileNotFoundTrap

10. caSysConfigurationError

11. caLinesJitterTrap

12. caLinesPacketsDelayTrap

13. caLinesDialToneDelayTrap

14. caLinesPacketLostTrap

15. caLinesBadQualityCallsTrap

16. caLinesResourceLackTrap

17. caLinesDisconnectedCallsTrap

18. caLinesQosTrap

19. caGWLostConnectionTrap

20. caGWJitterTrap

21. caGWPacketsDelayTrap

22. caGWDialToneDelayTrap

23. caGWAverageChannelTrap

24. caGWMaxChannelTrap

25. caGWPacketLostTrap

26. caGWBadQualityCallsTrap

27. caGWResourceLackTrap

28. caGWDisconnectedCallsTrap

29. caCMTSDialToneDelayTrap

30. caCMTSPacketLostTrap

31. caCMTSBadQualityCallsTrap

32. caCMTSResourceLackTrap

33. caCMTSDisconnectedCallsTrap

34. caCMTSQoSTrap

35. caCMTSLostConnectionTrap

3.1   caSysPacketsDelayTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-1: caSysPacketsDelayTrap

Textual Description	Packet delay (msec) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.2.0.2
Alarm Title	caSysPacketsDelayTrap
Itu Alarm Type	Other
Alarm Source	No source
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.2   caSysPacketLostTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-2: caSysPacketLostTrap

Textual Description	Packet loss ratio (%) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.2.0.3
Alarm Title	caSysPacketLostTrap
Itu Alarm Type	Other
Alarm Source	No source
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.3   caSysBadQualityCallsTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-3: caSysBadQualityCallsTrap

Textual Description	Bad quality calls ratio (%) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.2.0.4
Alarm Title	caSysBadQualityCallsTrap
Itu Alarm Type	Other
Alarm Source	No source
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.4   caSysResourceLackTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-4: caSysResourceLackTrap

Textual Description	Resource lack ratio (%) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.2.0.5
Alarm Title	caSysResourceLackTrap
Itu Alarm Type	Other
Alarm Source	No source
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.5   caSysDisconnectedCallsTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-5: caSysDisconnectedCallsTrap

Textual Description	Disconnected calls ratio (%) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.2.0.6
Alarm Title	caSysDisconnectedCallsTrap
Itu Alarm Type	Other
Alarm Source	No source
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.6   caSysRddcySwappedTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-6: caSysRddcySwappedTrap

Textual Description	Hosts swapped by redundancy HA mechanism
SNMP OID	1.3.6.1.4.1.5003.9.2.9.2.0.7
Alarm Title	caSysRddcySwappedTrap
Itu Alarm Type	Other
Alarm Source	No source
Probable Cause	Active CA not responding swap to redundent
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.7   caSysRddcyStandByStatusTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-7: caSysRddcyStandByStatusTrap

Textual Description	Standby Host Status
SNMP OID	1.3.6.1.4.1.5003.9.2.9.2.0.8
Alarm Title	caSysRddcyStandByStatusTrap
Itu Alarm Type	Other
Alarm Source	No source
Probable Cause	Redundent CA is not responding!
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.8   caSysConfigFileNotFoundTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-8: caSysConfigFileNotFoundTrap

Textual Description	Configuration file not found
SNMP OID	1.3.6.1.4.1.5003.9.2.9.2.0.9
Alarm Title	caSysConfigFileNotFoundTrap
Itu Alarm Type	Other
Alarm Source	No source
Probable Cause	Configuration file not found
Severity	Major (4); Cleared (0)
AdditionalInfo1	-

3.9   caSysEndpointsFileNotFoundTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-9: caSysEndpointsFileNotFoundTrap

Textual Description	Endpoints setup file not found
SNMP OID	1.3.6.1.4.1.5003.9.2.9.2.0.10
Alarm Title	caSysEndpointsFileNotFoundTrap
Itu Alarm Type	Other
Alarm Source	No source
Probable Cause	Endpoint file is missing, endpoints not provisioned yet
Severity	Major (4); Cleared (0)
AdditionalInfo1	-

3.10   caSysConfigurationError

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-10: caSysConfigurationError

Textual Description	CA identifies configuration inconsistence (any level)
SNMP OID	1.3.6.1.4.1.5003.9.2.9.2.0.11
Alarm Title	caSysConfigurationError
Itu Alarm Type	Other
Alarm Source	GW# ; V5.2#, MTA#, MTA#/LINE#, Module#, CMTS#
Probable Cause	Configuration error at all levels
Severity	Major (4); Cleared (0)
AdditionalInfo1	-

3.11 caLinesJitterTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-11: caLinesJitterTrap

Textual Description	Jitter exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.4.0.1
Alarm Title	caLinesJitterTrap
Itu Alarm Type	Other
Alarm Source	MTA#/Line#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.12 caLinesPacketsDelayTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-12: caLinesPacketsDelayTrap

Textual Description	Packet delay (msec) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.4.0.2
Alarm Title	caLinesPacketsDelayTrap
Itu Alarm Type	Other
Alarm Source	MTA#/Line#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.13   caLinesDialToneDelayTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-13: caLinesDialToneDelayTrap

Textual Description	Dial tone delay (msec) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.4.0.3
Alarm Title	caLinesDialToneDelayTrap
Itu Alarm Type	Other
Alarm Source	MTA#/Line#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.14   caLinesPacketLostTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-14: caLinesPacketLostTrap

Textual Description	Packet loss ratio (%) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.4.0.4
Alarm Title	caLinesPacketLostTrap
Itu Alarm Type	Other
Alarm Source	MTA#/Line#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.15   caLinesBadQualityCallsTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-15: caLinesBadQualityCallsTrap

Textual Description	Bad quality calls ratio (%) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.4.0.5
Alarm Title	caLinesBadQualityCallsTrap
Itu Alarm Type	Other
Alarm Source	MTA#/Line#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.16   caLinesResourceLackTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-16: caLinesResourceLackTrap

Textual Description	Resource lack ratio (%) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.4.0.6
Alarm Title	caLinesResourceLackTrap
Itu Alarm Type	Other
Alarm Source	MTA#/Line#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.17 caLinesDisconnectedCallsTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-17: caLinesDisconnectedCallsTrap

Textual Description	Disconnected calls ratio (%) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.4.0.7
Alarm Title	caLinesDisconnectedCallsTrap
Itu Alarm Type	Other
Alarm Source	MTA#/Line#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.18 caLinesQosTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-18: caLinesQosTrap

Textual Description	Calls that didn`t get bandwidth (QoS) ratio (%) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.4.0.8
Alarm Title	caLinesQosTrap
Itu Alarm Type	Other
Alarm Source	MTA#/Line#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.19   caGWLostConnectionTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-19: caGWLostConnectionTrap

Textual Description	Lost Connection
SNMP OID	1.3.6.1.4.1.5003.9.2.9.5.0.1
Alarm Title	caGWLostConnectionTrap
Itu Alarm Type	Other
Alarm Source	Module#
Probable Cause	Board reset or network disconnection
Severity	Major (4); Cleared (0)
AdditionalInfo1	-

3.20   caGWJitterTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-20: caGWJitterTrap

Textual Description	Jitter exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.5.0.2
Alarm Title	caGWJitterTrap
Itu Alarm Type	Other
Alarm Source	Module#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.21   caGWPacketsDelayTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-21: caGWPacketsDelayTrap

Textual Description	Packet delay (msec) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.5.0.3
Alarm Title	caGWPacketsDelayTrap
Itu Alarm Type	Other
Alarm Source	Module#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.22   caGWDialToneDelayTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-22: caGWDialToneDelayTrap

Textual Description	Dial tone delay (msec) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.5.0.4
Alarm Title	caGWDialToneDelayTrap
Itu Alarm Type	Other
Alarm Source	Module#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.23   caGWAverageChannelTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-23: caGWAverageChannelTrap

Textual Description	Used more than the average channels
SNMP OID	1.3.6.1.4.1.5003.9.2.9.5.0.5
Alarm Title	caGWAverageChannelTrap
Itu Alarm Type	Other
Alarm Source	Module#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.24   caGWMaxChannelTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-24: caGWMaxChannelTrap

Textual Description	Used more than the number of channels
SNMP OID	1.3.6.1.4.1.5003.9.2.9.5.0.6
Alarm Title	caGWMaxChannelTrap
Itu Alarm Type	Other
Alarm Source	Module#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.25   caGWPacketLostTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-25: caGWPacketLostTrap

Textual Description	Packet loss ratio (%) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.5.0.7
Alarm Title	caGWPacketLostTrap
Itu Alarm Type	Other
Alarm Source	Module#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.26   caGWBadQualityCallsTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-26: caGWBadQualityCallsTrap

Textual Description	Bad quality calls ratio (%) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.5.0.8
Alarm Title	caGWBadQualityCallsTrap
Itu Alarm Type	Other
Alarm Source	Module#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.27   caGWResourceLackTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-27: caGWResourceLackTrap

Textual Description	Resource lack ratio (%) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.5.0.9
Alarm Title	caGWResourceLackTrap
Itu Alarm Type	Other
Alarm Source	Module#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.28   caGWDisconnectedCallsTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-28: caGWDisconnectedCallsTrap

Textual Description	Disconnected calls ratio (%) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.5.0.10
Alarm Title	caGWDisconnectedCallsTrap
Itu Alarm Type	Other
Alarm Source	Module#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.29   caCMTSDialToneDelayTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-29: caCMTSDialToneDelayTrap

Textual Description	Dial tone delay (msec) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.6.0.1
Alarm Title	caCMTSDialToneDelayTrap
Itu Alarm Type	Other
Alarm Source	CMTS#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.30   caCMTSPacketLostTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-30: caCMTSPacketLostTrap

Textual Description	Packet loss ratio (%) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.6.0.2
Alarm Title	caCMTSPacketLostTrap
Itu Alarm Type	Other
Alarm Source	CMTS#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.31 caCMTSBadQualityCallsTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-31: caCMTSBadQualityCallsTrap

Textual Description	Bad quality calls ratio (%) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.6.0.3
Alarm Title	caCMTSBadQualityCallsTrap
Itu Alarm Type	Other
Alarm Source	CMTS#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.32 caCMTSResourceLackTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-32: caCMTSResourceLackTrap

Textual Description	Resource lack ratio (%) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.6.0.4
Alarm Title	caCMTSResourceLackTrap
Itu Alarm Type	Other
Alarm Source	CMTS#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.33   caCMTSDisconnectedCallsTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-33: caCMTSDisconnectedCallsTrap

Textual Description	Disconnected calls ratio (%) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.6.0.5
Alarm Title	caCMTSDisconnectedCallsTrap
Itu Alarm Type	Other
Alarm Source	CMTS#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.34   caCMTSQoSTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-34: caCMTSQoSTrap

Textual Description	The ratio (%) of calls that didn`t get bandwidth (QoS) exceeds the threshold
SNMP OID	1.3.6.1.4.1.5003.9.2.9.6.0.6
Alarm Title	caCMTSQoSTrap
Itu Alarm Type	Other
Alarm Source	CMTS#
Probable Cause	Performance monitoring alarm
Severity	Warning (2); Cleared (0)
AdditionalInfo1	-

3.35   caCMTSLostConnectionTrap

The table describes the alarm and shows the alarm information presented to users. For users' convenience, all alarms generated by the gateway have the same standard structure, including the fields shown in the table.

Table 3-35: caCMTSLostConnectionTrap

Textual Description	Lost Connection
SNMP OID	1.3.6.1.4.1.5003.9.2.9.6.0.7
Alarm Title	caCMTSLostConnectionTrap
Itu Alarm Type	Other
Alarm Source	CMTS#
Probable Cause	Lost connection with CMTS
Severity	Major (4); Cleared (0)
AdditionalInfo1	-

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