Dialogic
Making Innovation Thrive™

Dialogic® 1000 and 2000 Media Gateway Series

SNMP Application Note (Version 6.0 SU5 Software)

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www.dialogic.com

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1 Introduction

The Dialogic® 1000 Media Gateway Series (DMG1000) and Dialogic® 2000 Media Gateway Series (DMG2000) family, which also are referred to collectively herein as Dialogic® Media Gateway or Media Gateway or gateway, includes an SNMP v1/v2 agent. This application note provides information on the DMG MIB. It describes the gateway's MIB used in software version 6.0. The MIB for earlier software versions may be substantially different, for these versions please refer to the corresponding SNMP application note.

1.1 Assumptions

The reader is assumed to be familiar with SNMP and the general operation of an SNMP browser. However, the application note does not require knowledge of any specific SNMP browser. The reader is assumed to have a working knowledge of the gateway's operation and its web interface.

2 Overview

The gateway SNMP agent is v1/v2c compatible. The agent provides read-only access to the gateway's configuration and status data. The gateway does not support SNMP write commands since SNMP v2 does not provide secure communications. You can configure the gateway through a web browser using HTTP (or HTTPS when secure communication is required).

The SNMP agent provides GET, NEXT, BULK GET and V1 trap PDU's. The agent supports RFC 1213 MIB-II. The gateway also supplies a MIB file suitable for importing into your MIB browser.

2.1 Downloading the Gateway's MIB File

Procedure to download a gateway's MIB file to your computer:
From a web browser you navigate to the gateway's MIB-II status page (
Figure 1 shows this). Click on the download button and a save/cancel dialog opens. Click on save and the MIB file can be saved on your computer.

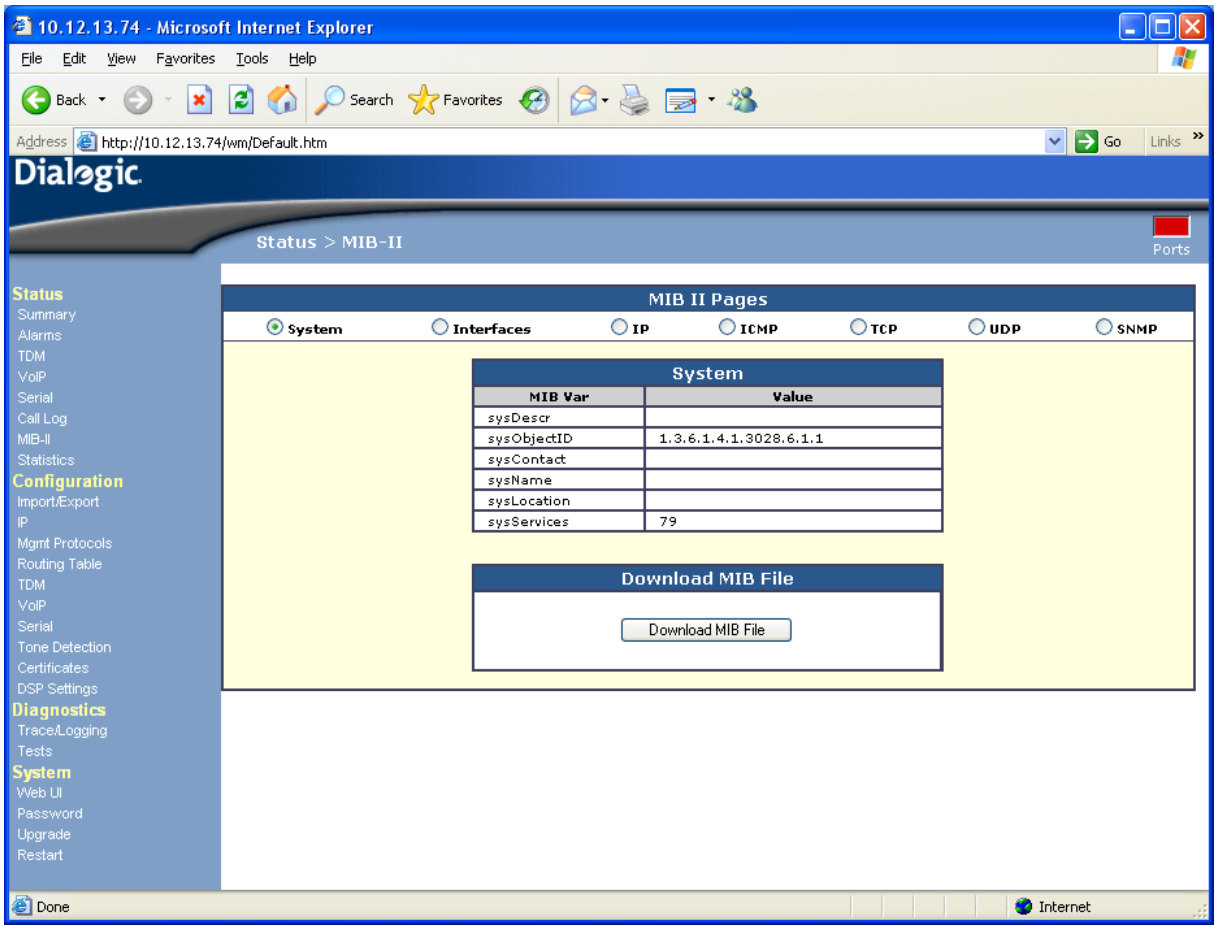

Figure 1 Use the MIB-II system page to download the gateway's MIB file

3 SUPPORTED MIBS

3.1 RFC 1213 MIB-II

The gateway supports RFC 1213 MIB-II titled "Management Information Base for Network Management of TCP/IP-based Internets: MIB-II".

The RFC is available on numerous web sites. A few are:
http://www.faqs.org/rfcs/rfc1213.html
http://tools.ietf.org/html/rfc1213
http://www.rfc-archive.org/getrfc.php?rfc=1213

3.2 DMG MIB

The DMG MIB is located at the **1.3.6.1.4.1.3028.6.1.1** OID. Table 1 shows the description of each node in that OID.

Table 1 DMG MIB OID Nodes

OID Node Value	OID Node Description
1	Iso
3	Org
6	Dod
1	Internet
4	Private
1	Enterprises
3028	Dialogic
6	Products
1	Gateway-products
1	DMG

Table 2 shows the DMG MIB where **<p> = 1.3.6.1.4.1.3028.6.1.1**.

Table 2 DMG MIB

OID	Name	Position	Type
<p>.1	version	Node	
<p>.1.1	.versionTable	Node	
<p>.1.1.1	..versionTableEntry	Node	
<p>.1.1.1.1	…versionIdx	Leaf	Integer
<p>.1.1.1.2	…versionDesc	Leaf	Octet String
<p>.1.1.1.3	…versionVal	Leaf	Octet String
<p>.2	alarm	Node	
<p>.2.1	.alarmTable	Node	
<p>.2.1.1	..alarmEntry	Node	
<p>.2.1.1.1	…alarmIdx	Leaf	Integer
<p>.2.1.1.2	…alarmId	Leaf	Integer
<p>.2.1.1.3	…alarmSeverity	Leaf	Integer
<p>.2.1.1.4	…alarmDesc	Leaf	Octet String
<p>.2.1.1.5	…alarmDevice	Leaf	Integer
<p>.2.1.1.6	…alarmText	Leaf	Octet String
<p>.2.1.1.7	…alarmTime	Leaf	TimeTicks
<p>.3	config	Node	
<p>.3.1	.configTable	Node	
<p>.3.1.1	..configTableEntry	Node	
<p>.3.1.1.1	…configIdx	Leaf	Integer
<p>.3.1.1.2	…configToken	Leaf	Octet String
<p>.3.1.1.3	…configInst	Leaf	Integer
<p>.3.1.1.4	…configSubInst	Leaf	Integer
<p>.3.1.1.5	…configVal	Leaf	Octet String

3.2.1 Gateway Enterprise OID Revisions

Note, earlier versions of gateway software used a different MIB OID**.** The Enterprise OID was first modified in 5.1 SU3 to utilize the Dialogic Enterprise OID of 3028 rather than the previous Enterprise OID of 343.

Pre 5.1 SU3 MIB OID
1.3.6.1.4.1.**343.2**.121.1

5.1 SU3 MIB OID
1.3.6.1.4.1.**3028.100**.121.1

6.0 MIB OID
1.3.6.1.4.1.**3028.6.1**.1

4 Alarms

Gateway alarms are reported as SNMP traps. They can also generate an e-mail as described in Section 4.1.

4.1 Alarm E-Mails

The gateway can be configured to generate an e-mail on an Alarm. The necessary parameters are configured on the Gateway Advanced web page using the Traps and Alarms section. Figure 2 shows this.

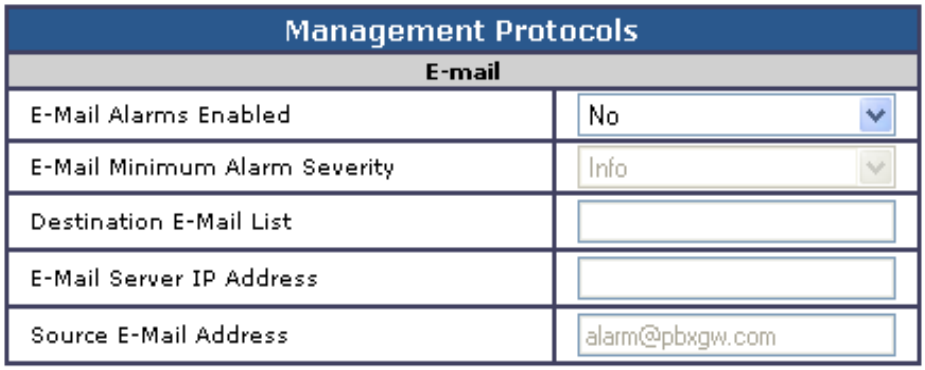

Figure 2 The Traps and Alarms section configures the e-mail parameters

E-Mail Alarms Enabled: Set to yes to generate alarm e-mails
E-Mail Minimum Alarm Severity: The gateway has three levels of alarms: Info, Warn and Error, where Info is the lowest level alarm and Error is the highest. This field specifies the lowest level that generates e-mails.
Destination E-Mail List: A list of e-mail addresses, separated by semi-colons, to which the alarm e-mails are sent.
E-Mail Server IP Address: The IP address of your network's e-mail server.
Source E-Mail Address: The e-mail address placed in the from field of the alarm e-mail. Default value is shown.

4.1.1 E-Mail Format

The e-mail's title specifies the Alarm's severity, the gateway's IP address and a short description of the alarm. The e-mail's body starts with five standard lines followed by optional lines

Line 1: the alarm's severity (Info, Warn or Error)
Line 2: the IP address of the gateway
Line 3: the MAC address of the gateway
Line 4: the alarm's identification number (in hexadecimal)
Line 5: a short description of the alarm
Line 6: the physical port number associated with the alarm (is omitted for alarms not associated with ports)
Remaining Lines: detailed text associated with the alarm (present for a limited number of alarms that require additional information)

4.1.2 Sample E-Mails

Figure 3 shows the e-mail sent when the gateway powers up. This is an info alarm.

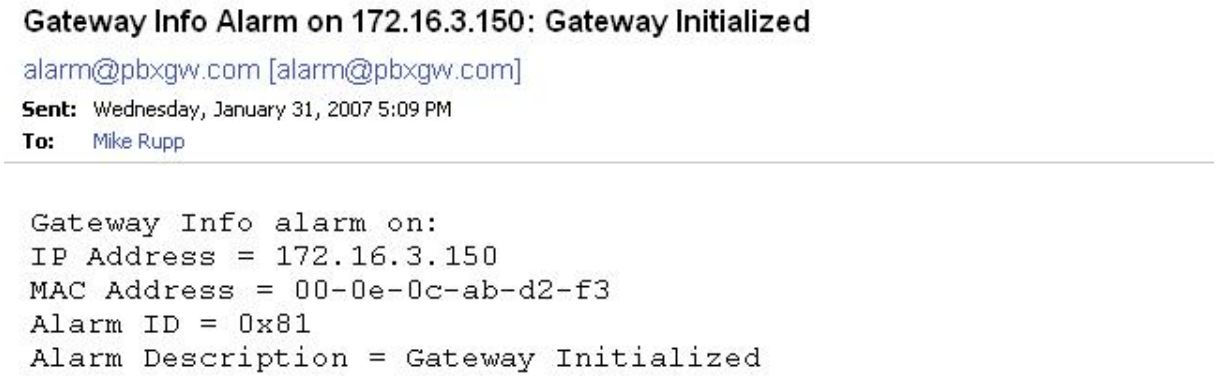

Figure 3 Sample Info Alarm E-Mail

Figure 4 shows the e-mail sent when a port loses communication with the PBX. Notice that the associated physical port is shown. This is a warn alarm.

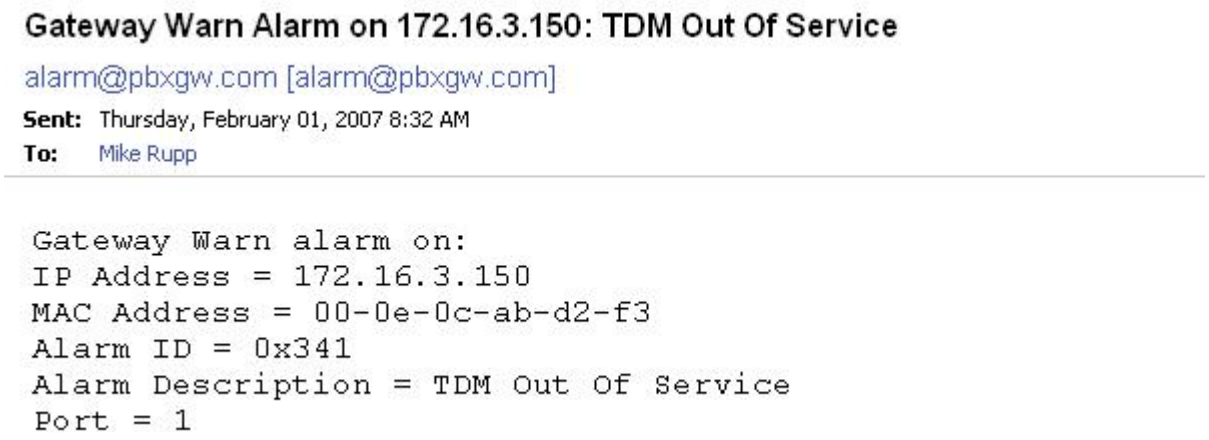

Figure 4 Sample Warn Alarm E-Mail

Figure 5 shows the e-mail sent for a software fault, more specifically a SW Watchdog Timer Expiration. Notice the detailed description. The software fault error alarm is shown only as an example.

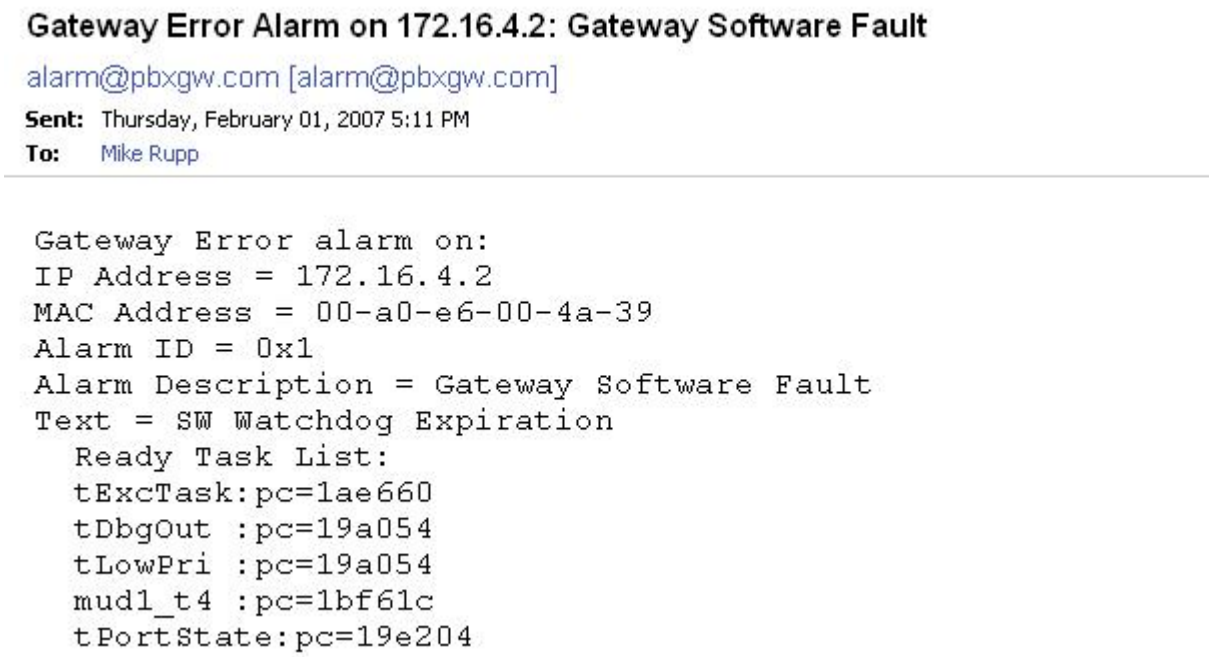

Figure 5 Sample Error Alarm E-Mail

4.2 Alarm Resolution

Some alarms are not user resolvable and should be reported to Dialogic Service. **For such alarms, please do not restart or cycle power on the gateway until you have collected the alarm information. Restarting the gateway frequently erases the alarm trace making it difficult for Dialogic to reproduce or resolve the problem.**

4.2.1 Alarms Errors - Not User Resolvable – Service Affecting

These alarms are serious errors that affect gateway operation. They are not user resolvable but they should be reported to Dialogic Service. **Please do not restart or cycle power on the gateway until you have collected the alarm information. Restarting the gateway frequently erases the alarm trace making it difficult for Dialogic to reproduce or resolve the problem.**

When reporting the alarm, include the following information.

- If you had the gateway configured to generate alarm e-mails and you received an e-mail for the alarm, a copy of the e-mail is sufficient. Send it to Dialogic Support. Cycle power to restart the gateway.
- If an e-mail is not available, navigate to the gateway's Alarms web page and take a screen shot of the display (ALT-Print Screen). Paste the screen shot into a document and send it to Dialogic Support. Cycle power to restart the gateway.
- If the gateway's web server is not operational, open a Telnet session with the gateway and log-in. Enter the command **alarm list**. Paste the resulting list into a document and send it to Dialogic Support. Cycle power to restart the gateway.

- If the gateway's Telnet server is not operational, connect a serial line from a PC to the gateway's diagnostics port (COM2 on a TIMG gateway). The DMG 1000 gateways use 38,400 baud and the DMG 2000 gateways use 115,200 baud. Log-in and enter the command **alarm list**. Paste the resulting list into a document and send it to Dialogic Support. Cycle power to restart the gateway.
- If the gateway's diagnostic port is not operating, you need to cycle power on the gateway. After the gateway powers up, go back to the top of this list and try again. It is likely the alarm information has been lost but any information you can glean will be helpful.

4.2.2 Warning Alarms – Not Service Affecting

These alarms are warnings that do not affect gateway operation. However, they should be reported to Dialogic Service. It is not necessary to cycle power or restart the gateway after receiving any of these alarms as they are not service affecting.
When reporting the alarm, include the following information

- If you had the gateway configured to generate alarm e-mails and you received an e-mail for the alarm, a copy of the e-mail is sufficient. Send it to Dialogic Support.
- If an e-mail is not available, navigate to the gateway's Alarms web page and take a screen shot of the display (ALT-Print Screen). Paste the screen shot into a document and send it to Dialogic Support.

4.2.3 Informational Alarms – No Action Required

These alarms are purely to inform a user of normal system actions. No action on your part is required.

4.3 Alarms Definitions

4.3.1 Gateway Error

Alarm Id: 0x0000
Severity: Error
Description: This error alarm is sent when a calls fails because a media session could not be opened. There is no way to recover the call; it must be retried. However, the gateway is still operational and other calls will not be affected. If you repeatedly receive this alarm, please report it to Dialogic Service. The alarm may also be used for general application load and unload failures.
Optional Fixed Text:

- "Media Session Failed [*Endpoint Name 1*] [*Endpoint Name 2*]"
- "Application [*Application Name*] Not Started, unable to stop [*Application Name*]"
- "Application [*Application Name*] Start Failed"
- "Application [*Application Name*] Stop Failed"

4.3.2 Gateway Software Fault

Alarm Id: 0x0001
Severity: Error
Description: This alarm occurs if there is a software exception and may yield information regarding the address of the exception and the call stack at the time of the exception.
Optional Fixed Text: None

4.3.3 Gateway Memory Unavailable

Alarm Id: 0x0002
Severity: Error
Description: This alarm occurs when all possible RTP port numbers are currently in use.
Optional Fixed Text:

- "No Free RTP Ports - Pool is Empty"

4.3.4 Gateway Load Error

Alarm Id: 0x0003
Severity: Error
Description: This error alarm is sent when part of the gateway's application program failed to start. Typically, it is caused by an inconsistent or incomplete configuration. Verify the gateway's configuration using the web interface.
Optional Fixed Text:

- "Init Complete"
- "ITC Failed"
- "NIM Init Error"
- "GW Start Error"
- "RT Init Failed"
- "DSP Interface Creation Failed"
- "DSP Load Failed"
- "VoIP Stack Init Failed"
- "Invalid operational mode"
- "Initialize devices failed"

4.3.5 Gateway Device Open Failure

Alarm Id: 0x0004
Severity: Error
Description: A device driver failed to initialize and open properly.
Optional Fixed Text:

- "IP Device Open Failed"
- "TDM *TdmDeviceNumber* Device Open Failed"
- "Serial Device Open Failed"

4.3.6 Gateway ARP Failure

Alarm Id: 0x0005
Severity: Error
Description: This error alarm is sent when the gateway can't resolve an IP address (or URI) into a MAC address.
Possible causes

- One of the IP addresses configured into the gateway is invalid. Verify the VoIP Endpoints (Gateway Routine web page) and the URI's on the Outbound TDM Routing web page (if dial plan is used).
- The IP address is on a sub-net that the gateway can't reach

Optional Fixed Text:

- "ARP Queue Full"
- *IPAddress*

4.3.7 Gateway SNTP Time Query Failed

Alarm Id: 0x0006
Severity: Error
Description: This error alarm is sent when the gateway could not get the time from the network. When this error occurs the gateway is operational but does not have the correct time/date.
Possible causes:

- The gateway is configured with an incorrect address of the SNTP server. See gateway's **IP Web page**.
- The SNTP server is not running.
- The SNTP server is on a network not reachable by the gateway.

Optional Fixed Text:

- "Invalid address";
- "Time-out";
- "SNTP server version is not supported";
- "SNTP server clock is unsynchronized";

4.3.8 Gateway Certificate Error

Alarm Id: 0x0007
Severity: Error
Description: This error alarm is sent when the gateway detects a problem with the digital certificate installed on the gateway. The type of certificate and error is further indicated in the alarm message. Use this information to verify the installed certificate. Until the issue is resolved the module associated with the certificate is not operational but, otherwise, the gateway is operational. For more information on certificates, see the "SIP Call Control Security Using TLS" section in the User's Guide.
Optional Fixed Text:

- None

4.3.9 Gateway Warning

Alarm Id: 0x0040
Severity: Warn
Description: This warning alarm is sent when a VoIP call has failed. The failure reason is further delineated in the alarm message. This results in the loss of a call and is non-recoverable. The call must be retried. This failure is caused, typically, by random IP problems that can't be diagnosed. If you repeatedly receive this alarm, please report it to Dialogic Customer Service.
This alarm may also be triggered due to configuration and password resets.
This alarm may also be triggered due to a voip endpoint monitoring event
Optional Fixed Text:

- "Configuration reset to factory defaults"
- "Password reset to factory default."
- "VoIP[*IP Address*] Out-of-Service"
- "VoIP [*IP Address*] Unavailable"

4.3.10 Gateway Memory Low

Alarm Id: 0x0041
Severity: Warn
Description: Reserved.
Optional Fixed Text:

- None

4.3.11 Gateway Configuration Failure

Alarm Id: 0x0042
Severity: Warn
Description: Reserved.
Optional Fixed Text:

- None

4.3.12 Gateway Peer Connection Failure

Alarm Id: 0x0043
Severity: Warn
Description: Reserved.
Optional Fixed Text:

- None

4.3.13 Gateway Peer Connection Lost

Alarm Id: 0x0044
Severity: Warn
Description: Reserved.
Optional Fixed Text:

- None

4.3.14 Gateway Processor Utilization High

Alarm Id: 0x0045
Severity: Warn
Description: Reserved.
Optional Fixed Text:

- None

4.3.15 Gateway Information

Alarm Id: 0x0080
Severity: Info
Description: These alarms are purely to inform a user of system actions. No user action is required.
This alarm may be triggered if an unexpected application was requested to be executed:
This alarm is triggered when an application is halted.
This alarm may be triggered if an application was failed to stop properly.
This alarm may be triggered if an application was requested to execute while another application was executing.
This alarm is generated when a VoIP endpoint is back on line.
Optional Fixed Text:

- "Unknown Application [*Application Name*]"
- "Application [*Application Name*] Started"
- "Application [*Application Name*] Stopped"
- "Application [*Application Name*] Stop Failed"
- "Application [*Application Name Queued*] Blocked by [*Application Name Running*]"
- "VoIP [*IP Address*] Available"

4.3.16 Gateway Initialized

Alarm Id: 0x0081
Severity: Info
Description: This alarm is triggered when the gateway is successfully initialized.
Optional Fixed Text:

- None

4.3.17 Gateway Restarted

Alarm Id: 0x0082
Severity: Info
Description: This alarm is triggered when the gateway is rebooted.
Optional Fixed Text:

- "On Idle Requested."

4.3.18 Gateway Upgrade Failed

Alarm Id: 0x0083
Severity: Info
Description: Reserved.
Optional Fixed Text:

- None

4.3.19 Gateway Memory Normal

Alarm Id: 0x0084
Severity: Info
Description: Reserved
Optional Fixed Text:

- None

4.3.20 Gateway Peer Connection Gained

Alarm Id: 0x0085
Severity: Info
Description: Reserved
Optional Fixed Text:

- None

4.3.21 Gateway MIB-II Alarm

Alarm Id: 0x0086
Severity: Info
Description: This alarm is used to send an RFC 1213 MIB-II alarm.
Optional Fixed Text:

- "Cold start"
- "Warm start"
- "Link Down"
- "Link Up"
- "Authentication failure"
- "EGP Neighbor Loss"
- "Enterprise Specific"
- "Unknown: trap"

4.3.22 Gateway SNTP Time Query Completed

Alarm Id: 0x0087
Severity: Info
Description: This alarm is triggered the first time the gateway connects to an SNTP server and sets the time.
Optional Fixed Text:

- "Time Set"

4.3.23 SysMonitor Info

Alarm Id: 0x0090
Severity: Info
Description: The System Monitor has detected that a system module in an error state has been restored to its normal runtime state.
Possible Causes:

- A system task was over utilizing the CPU resource. It is now operating within normal utilization parameters.
- A system resource was being over utilized. It is now operating within normal utilization parameters.

No action is required because the system has already recovered from the condition.
Optional Fixed Text:

- "Critical Task [*TaskName*] Normal"
- "Non-Critical Task [*TaskName*] Normal"
- "Resource [*ResourceName*] Normal"

4.3.24 SysMonitor Warning

Alarm Id: 0x0091
Severity: Warn
Description: This warning is issued when a non-critical task is utilizing a significant percentage of the processor.
Optional Fixed Text:

- None

4.3.25 SysMonitor Error

Alarm Id: 0x0092
Severity: Error
Description: The System Monitor has detected an error condition for a system module. A description of the error condition is provided.
Possible Causes:

- A system task is unresponsive.
- A system task over utilizing the CPU resource.
- A system resource is being over utilized.

No action is required because the system will attempt to recover from the condition automatically. The automatic recovery may require that the system restarts itself. The system will resume normal operation when the restart completes.

Optional Fixed Text:

- "Critical Task [*TaskName*] No Response"
- "Critical Task [*TaskName*] Utilization = [*PercentUtilization*]"
- "Critical Task [*TaskName*] No Response: Unit Restart"
- "Critical Task [*TaskName*] Utilization = [*PercentUtilization*]: Unit Restart"
- "Non-Critical Task [*TaskName*] No Response"
- "Non-Critical Task [*TaskName*] Utilization = [*PercentUtilization*]"
- "Non-Critical Task [*TaskName*] No Response: Unit Restart"
- "Non-Critical Task [*TaskName*] Utilization = [*PercentUtilization*]: Unit Restart"
- "Resource [*ResourceName*] Exhausted at [*UsedPercentage*] [*UsedResources*]"

4.3.26 SIP Interface Error

Alarm Id: 0x0100
Severity: Error
Description: Reserved.
Optional Fixed Text:

- None

4.3.27 SIP Registration Failure

Alarm Id: 0x0101
Severity: Error
Description: This error alarm is sent then a gateway's SIP registration request fails.
Possible causes:

- A mismatch between the gateway's configuration and the registration server's configuration.

Optional Fixed Text:

- *NetworkGroupName*

4.3.28 SIP Resources Unavailable

Alarm Id: 0x0102
Severity: Error
Description: This error alarm is sent when the gateway has exhausted SIP resources. The type of resource is indicated in the alarm message. This results in the loss of a call and is non-recoverable. The call must be retried. This could occur if the gateway experiences a higher call load than it can support. An alarm will be sent when the resources reach a normal level and the gateway is able to process calls.
Optional Fixed Text:

- "TCP/UDP Out of Resources"

4.3.29 SIP TLS Initialization Failure

Alarm Id: 0x0103
Severity: Error
Description: This error alarm is sent then the gateway's TLS module does not start-up correctly. The failure reason is further identified in the alarm message. Please verify the gateway's TLS settings. Until the error is corrected the gateway does not have TLS capability, but otherwise, is operational.
Possible causes:

- A certificate has not been installed
- A certificate is installed but it has an invalid private key. The certificate must be deleted and recreated.

Optional Fixed Text:
- "Failed to create the context"
- "Failed to load trusted certificates"
- "TLS public certificate is not installed"
- "TLS Private key is invalid"
- "Failed to load the ciphers"
- "Failed to installed session caching ID"
- "Failed to set session time-out"

4.3.30 SIP TLS Certificate Verification Failure

Alarm Id: 0x0104
Severity: Error
Description: This error alarm is sent when the gateway can't verify a peer digital certificate during the TLS handshake. The reason for the failure is further identified in the alarm message.
Possible causes:
- There is an inconsistency in the configurations of the gateway and the peer. Please verify the two units are configured the same.
- The peer is creating an invalid TLS certificate

Optional Fixed Text:
- None

4.3.31 SIP Interface Warning

Alarm Id: 0x0140
Severity: Warn
Description: This warning alarm is sent when a call has failed because a SIP 415 Media Unsupported response has been received in response to an INVITE.
Possible causes:
- Gateway is configured for **SRTP Only** but the VoIP endpoint supports only **RTP**, or vice versa.

Optional Fixed Text:
- "SIP XML Configuration Invalid"
- "Unsup SDP Rcvd, Call Rejected"

4.3.32 SIP Switched to Proxy Backup

Alarm Id: 0x0141
Severity: Warn
Description: This warning alarm is sent when the gateway switches from using the primary proxy server to the backup proxy server. This alarm is not service affecting. When the primary proxy server returns, the gateway will switch back.
Possible causes:
- The primary proxy server is down.

Optional Fixed Text:
- *NetworkGroupName IPAddress IPport*

4.3.33 SIP Resources Low

Alarm Id: 0x0142
Severity: Warn
Description: This warning alarm is sent when the gateway is running low on resources. It is only a warning and gateway service is not affected. No action is required on your part. However, should it occur repeatedly, please inform Dialogic Service.
Optional Fixed Text:
- "TCP/UDP Resources Low"

4.3.34 SIP Invalid Codec

Alarm Id: 0x0143
Severity: Warn
Description: This warning alarm is sent when a call has failed because a SIP 415 Media Unsupported has been received in response to an INVITE.
Possible causes:

- Gateway is configured for a codec that the VoIP endpoint does not support, or vice versa.

Optional Fixed Text:

- "488 Not Acceptable Here"

4.3.35 SIP Proxy Connection Lost

Alarm Id: 0x0144
Severity: Warn
Description: Communication with both the primary and secondary SIP Proxy servers has been lost.
Possible causes:

- The primary and secondary SIP Proxy servers are not online.

Optional Fixed Text:

- *NetworkGroupName*

4.3.36 SIP Authorization Challenge Failed

Alarm Id: 0x0145
Severity: Warn
Description: Reserved
Optional Fixed Text:

- None

4.3.37 SIP Interface Information

Alarm Id: 0x0180
Severity: Info
Description: This alarm may be triggered on a SIP stack error when the event is other than a call leg transaction error.
Optional Fixed Text:

- None

4.3.38 SIP Switched to Proxy Primary

Alarm Id: 0x0181
Severity: Info
Description: The SIP stack switched to using the primary proxy server.
Optional Fixed Text:

- *NetworkGroupName IPAddress IPport*

4.3.39 SIP Resources Normal

Alarm Id: 0x0182
Severity: Info
Description: This alarm is sent when SIP resources have transitioned to a normal level.
Optional Fixed Text:

- "TCP/UDP Resources Normal"

4.3.40 SIP Registration Success

Alarm Id: 0x0183
Severity: Info
Description: The alarm is sent the first time the gateway registers with a registration server.
Optional Fixed Text:

- *NetworkGroupName*

4.3.41 TDM Interface Error

Alarm Id: 0x0300
Severity: Error
Description: This alarm may be triggered in the event of a watchdog timeout in the TDM processor or an inability to process TDM messages.
Optional Fixed Text:

- "Msg Post from L4 failed"

4.3.42 TDM Interface Load Failure

Alarm Id: 0x0301
Severity: Error
Description: This alarm may be triggered in the event of a failure to initialize the TDM processor interface.
Optional Fixed Text:

- "Driver Initialization Failure. "
- "NIM Load: NIM does not support PBX. "
- "NIM Load: NIM Load Failed"
- "NIM Load: Invalid NIM ID"

4.3.43 TDM Interface Warning

Alarm Id: 0x0340
Severity: Warn
Description: This alarm is used for general TDM warnings.
Optional Fixed Text:

- "Port-Reset Request from Switch"
- "Mitel Invalid Data: [*Data*]"
- "Command *CommandNumber* Timed Out *FunctionCode FunctionCode*"

4.3.44 TDM Out Of Service

Alarm Id: 0x0341
Severity: Warn
Description: This warning alarm is sent when one of the gateway's physical ports becomes out of service. When this occurs the gateway can't initiate calls or receive calls over the line.

Possible Causes:

- If the line was previously functional
  - Line is unplugged from gateway
  - Line has been disabled by the PBX or PSTN
  - Gateway hardware failure
- If the connection is Intermittent
  - Cable does not support transmission frequency
  - Cable is not properly shielded
  - Cable's neighbors are not properly shielded
  - Cable's connectors are not properly crimped.

Optional Fixed Text:

- None

4.3.45 TDM Power Fault

Alarm Id: 0x0342
Severity: Warn
Description: Reserved
Optional Fixed Text:

- None

4.3.46 TDM Upgrade Required

Alarm Id: 0x0343
Severity: Warn
Description: This warning alarm is sent when the flash base PBX/PSTN module file must be reinstalled. Use the gateway's upgrade web page to reinstall the PBX/PSTN module files. There are three files with extensions .ilc, .iap and .ibt. Please contact Dialogic Service to receive the files corresponding to your gateway's software.
Optional Fixed Text:

- "Corrupted iNIM application image. Please upgrade. "
- "Corrupted iNIM FPGA image. Please upgrade. "
- "NIM Load: LCA image not found. "

4.3.47 TDM Configuration Failed

Alarm Id: 0x0344
Severity: Warn
Description: This warning alarm is sent when the gateway's configuration is not valid.
Possible Causes:

- The gateway's System Operating Mode is not correctly set. See the gateway's System web page.
- The gateway's Telephone Switch Type is not valid. See the gateway's System web page.

Optional Fixed Text:

- "No Telephony Interface Type, System Unconfigured! "
- "NIM Load: Unsupported SwitchType"
- "NIM Load: No PBX type selected. "

4.3.48 TDM Link Lost

Alarm Id: 0x0345
Severity: Warn
Description: This alarm may be triggered when the communication link to the TDM processor is down.
Optional Fixed Text:

- "NIM interface is down. Re-initializing."

4.3.49 TDM MWI Failure

Alarm Id: 0x0346
Severity: Warn
Description: This warning alarm is sent because there is not a PBX/PSTN interface device available to service the MWI request.
Possible Causes:

- On the Gateway Capabilities web page under the Telephony Port Capability column there are too few (or none) ports configured to support MWI requests. To support an MWI request a port must be configured as **both** or **MWI's only**.
- The line is not configured, within the PBX, to support MWI requests.

Optional Fixed Text:

- "Failed to add entry to msg table."

4.3.50 TDM Invalid PCM Coding

Alarm Id: 0x0347
Severity: Warn
Description: The warning alarm is sent when an incompatible PCM coding request is received from a PBX/PSTN interface device.
Possible Causes:

- The gateway's PCM Coding, uLaw or aLaw, does not match the configuration of the PBX/PSTN line.

Optional Fixed Text:

- "Unit Configured for uLaw, but received ALaw [0xA3] Request");
- "Unit Configured for ALaw, but received uLaw [0xA2] Request");

4.3.51 TDM Link Pending D-Channel

Alarm Id: 0x0348
Severity: Warn
Description: The warning alarm is sent when a T1/E1 line enters the pending d-channel state. In this state, frame sync is gained and the line is waiting for the d-channel to be initialized.
Possible Causes:

- Cabling is incorrect
- Line is not connected

Optional Fixed Text:

- None

4.3.52 TDM Link (Red Alarm)

Alarm Id: 0x0349
Severity: Warn
Description: The warning alarm is sent when a T1/E1 line enters the red alarm state. A red alarm indicates that no incoming framing signal was detected on the line.
Possible Causes:

- Cabling is incorrect
- Line is not connected

Optional Fixed Text:

- None

4.3.53 TDM Link (Yellow Alarm)

Alarm Id: 0x034a
Severity: Warn
Description: The warning alarm is sent when a T1/E1 line enters the yellow alarm state. A yellow alarm indicates that the far end is receiving an invalid signal and has reported a red alarm.
Possible Causes:

- Cabling is incorrect
- Line is not configured correctly

Optional Fixed Text:

- None

4.3.54 TDM Link (AIS Alarm)

Alarm Id: 0x034b
Severity: Warn
Description: The warning alarm is sent when a T1/E1 line enters the AIS alarm state. An AIS alarm indicates that there is a disruption in the communication path.
Possible Causes:

- Cabling is incorrect
- Line is not configured correctly

Optional Fixed Text:

- None

4.3.55 TDM Link (Alarm Cleared)

Alarm Id: 0x034c
Severity: Warn
Description: The warning alarm is sent when a T1/E1 line has recovered from an alarm state.
Possible Causes:

- The line was previously in a red, yellow or AIS alarm state.

Optional Fixed Text:

- None

4.3.56 TDM Interface Information

Alarm Id: 0x0380
Severity: Info
Description: Reserved
Optional Fixed Text:

- None

4.3.57 TDM Interface Initialized

Alarm Id: 0x0381
Severity: Info
Description: This alarm may be set when the TDM interface is fully initialized at system start up.
Optional Fixed Text:

- None

4.3.58 TDM Port Restarted

Alarm Id: 0x0382
Severity: Info
Description: This alarm may be set when a TDM port or is re-started.
Optional Fixed Text:
- "Auto restart"
- "Recovered from LOCKED OUT condition"

4.3.59 TDM In Service

Alarm Id: 0x0383
Severity: Info
Description: This alarm may be set when a TDM port or interface gains carrier.
Optional Fixed Text:
- None

4.3.60 TDM Link Gained

Alarm Id: 0x0384
Severity: Info
Description: This alarm may be set when a TDM interface gains communication link.
Optional Fixed Text:
- "NIM interface is up."

4.3.61 DSP Interface Error

Alarm Id: 0x0400
Severity: Error
Description: This alarm is triggered if a DSP channel is shutdown or reset.
Optional Fixed Text:
- None

4.3.62 DSP Resources Unavailable

Alarm Id: 0x0401
Severity: Error
Description: This warning alarm may be sent when the gateway has run out of DSP Fax resources. This results in the loss of a Fax call and is non-recoverable. The call must be retried.
Possible Causes:
- You have exceeded the number of simultaneous FAX calls that the gateway supports.
- You have exceeded the number of simultaneous Transcoded calls that the gateway supports.
- You have exceeded the number of simultaneous Audio calls that the gateway supports.

Optional Fixed Text:
- "Audio Resource Failure"
- "Fax Resource Failure"
- "Transcoding Resource Failure"
- "Stop Resource Failure"

4.3.63 DSP Interface Warning

Alarm Id: 0x0440
Severity: Warn
Description: Reserved
Optional Fixed Text:

- None

4.3.64 DSP Interface Information

Alarm Id: 0x0480
Severity: Info
Description: Reserved
Optional Fixed Text:

- None

4.3.65 SRTP Rx Error

Alarm Id: 0x0500
Severity: Error
Description: This error alarm is sent when the gateway receives an SRTP packet that is smaller than the gateway supports. The packet is dropped and silence is inserted into the received data stream.
Possible causes:

- The VoIP endpoint is configured incorrectly. Increase the size of its transmitted SRTP packets.

Optional Fixed Text:

- "packet size is too small"

4.3.66 SRTP Tx Error

Alarm Id: 0x0501
Severity: Error
Description: This error alarm is sent when the gateway attempts to transmit an SRTP packet that is smaller than the gateway supports. The packet is dropped and silence is inserted into the transmitted data stream.
Possible causes:
The gateway is configured incorrectly. Increase the size of gateway's transmitted SRTP packets (see the gateway advance web page).
Optional Fixed Text:

- "packet size is too small"

4.3.67 Routing Error

Alarm Id: 0x0600
Severity: Error
Description: The routing table configuration failed during read.
Optional Fixed Text:

- "Routing Table Runtime Configuration Failed."

4.3.68 Routing Warning

Alarm Id: 0x0640
Severity: Warn
Description: The routing table XML data experienced a parse error.
Optional Fixed Text:

- "Routing Table XML Configuration Invalid"

4.3.69 Routing Invalid Configuration

Alarm Id: 0x0641
Severity: Warn
Description: An outbound route is unusable because it contains invalid data.
Possible causes:
- The outbound route is not configured correctly.

Optional Fixed Text:
- None

4.3.70 Routing Group Full Capacity

Alarm Id: 0x0642
Severity: Warn
Description: An outbound route request failed for a TDM trunk group.
Possible causes:
- The trunk group is at full capacity (all channels are currently in-use).

Optional Fixed Text:
- None

4.3.71 Routing Information

Alarm Id: 0x0680
Severity: Info
Description: This alarm may be issued when the routing table is converted from an older software version of the gateway.
Optional Fixed Text:
- "Routing Table configuration migrated from 5.x Dial-Plan."
- "Routing Table configuration migrated from 5.x Server List."