

Test Modem Transmission
over IP Networks



Test Fax Transmission over
IP with T.38 Compliance



VoIP Protocol, and IP PBX
Testing



Supported Codecs - G.711,
G.726, G.723.1, G.720A,
EVRC, GSM FR



Test Voice Transmission thru
VoIP and IP Networks



SIP, H.323, MGCP, and
Megaco Support



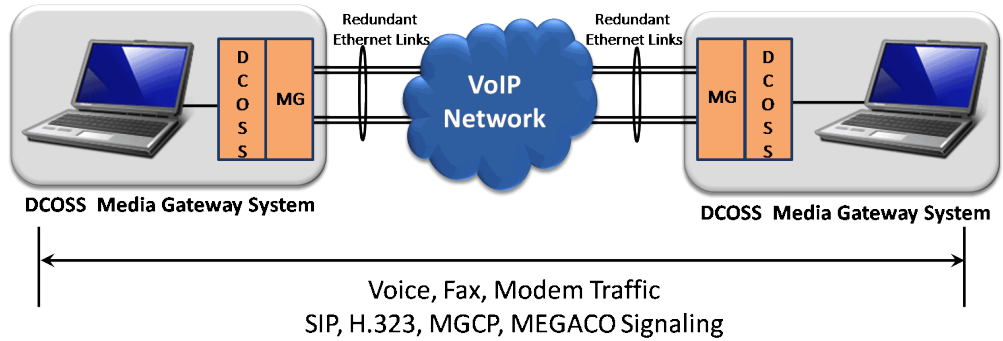
Traffic Generation &
Reception



Redundant Ethernet Links



VoIP Network Testing w/ GL's Media Gateway



Overview

GL's Digital Central Office Switch Simulator (DCOSS) along with the GL's Media Gateway (MG) supports traffic and signaling testing of VoIP and IP networks. The DCOSS / MG combination provides user friendly bulk call generation and reception for various voiceband traffic types including voice, fax, and modem. It can be connected to any IP Phone, softphone, VoIP PBX, or VoIP Network / Cloud.

The DCOSS / MG supports internal traffic generation/ reception (Fax, Modem, Voice Files, Digits and Tones) as well as external traffic from optional analog 2-wire and BRI 4-wire interfaces. The DCOSS / MG supports a variety of different VoIP protocols such as SIP, H.323, Megaco, MGCP, and T.38 fax. The following features are also supported: bulk calling, scripting, and remote client/server access.

Applications

- Testing VoIP network elements, including IP phones, softphones, IP PBX
- Fax and Modem traffic generation / reception and verification over IP networks
- Stress testing with bulk call generation capability

Main Features

- Dual redundant Ethernet trunks
- Call capacity up to 96 or 120 calls simultaneously (scalable depending on the GL Media Gateway selected)
- Voice, Fax and Modem Call Generation and Reception
- DTMF/MF Generation and Detection
- Single/Dual Frequency Tone Generation and Detection
- Call Monitoring and Recording
- Automatic Bulk Call Generation/Reception for Load Testing
- Bulk Call Scripting
- Call Statistics and Call Detail Records
- Save/Load all parameters as user-defined configurations
- Real-Time Status of all Calls
- Call Record Generation and Logging
- Telephone Number Directory with unlimited capacity
- Voice Quality Testing using PESQ ITU-P.862.2.



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Media Gateway (Basic Configuration)



GL's Media Gateway (MG) in combination with GL's DCOSS is used to provide bulk call traffic generation for VoIP interfaces. GL offers a basic MG, Item # PKS150. More advanced MGs are available on request.

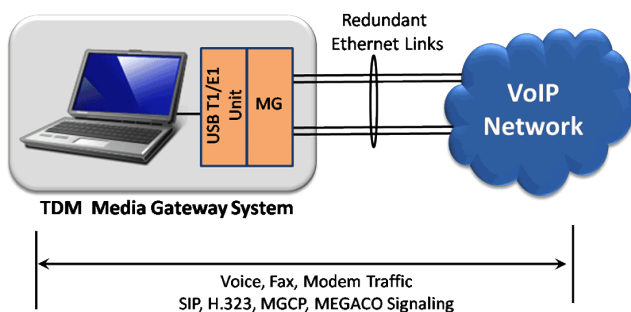
Features

- Supports up to 96 to 120 simultaneous connections using dual redundant Ethernet ports; additional capacity possible
- Supports VoIP protocols such as SIP, H.323, and MEGACO, MGCP
- Supports codecs such as G.711, G.726, G.723.1, G.720A, EVRC, and GSM-FR
- Supports G.165 and G.168 Echo Cancellation with 32, 64, 125 ms tail length
- Fax and Modem transport and T.38 Compliance
- Supports VoIP per IETF RFC 2550 and 3551 standards

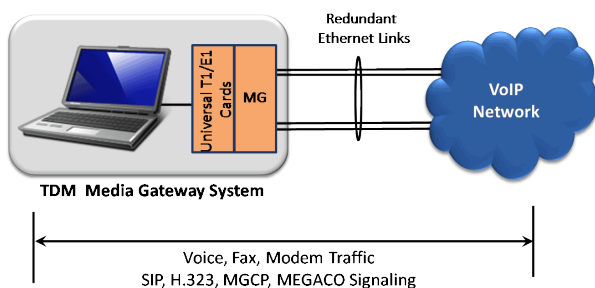
Other Configurations

The MG can also be used with GL's T1E1 Analyzer for various call capture and analysis functions.

- MG with USB T1 / E1 LITE pod (see diagram below)



- MG with Universal T1 E1 Cards (see diagram below)



DCOSS Functions



The DCOSS functionalities include:

- Manual Call Generation
- Bulk Call Generation / Reception
- Bulk Call Scripting
- PCM Voice File Generation / Reception
- Fax & Modem Generation / Reception
- DTMF / MF Digit Generation / Reception
- Frequency Tone Generation / Reception
- Switch Routing

Statistics - The DCOSS provides real-time as well as offline statistics of the established calls.

- Call Records
- Captured Events
- Real-Time Call Status
- Call Statistics

Supported Protocols in DCOSS

The following are available protocols for the DCOSS system.

- PRI ISDN (Europe, USA, Asia)
- BRI-ST ISDN
- No Call Control
- DCOSS FAX - V.29, V.27, V.33, and V.17
- DCOSS Fax over VoIP - T.38
- DCOSS Modem - V.21, V.23, V.34, V.90, and V.92

Buyers Guide

- [PKS150](#) - Media Gateway
- [DR001](#) - DCOSS Hardware / Software (call for proper configuration)

Related Products

- [EXT001](#), [EXT002](#), [MDT001](#), [MDT002](#) - GL Insight - Fax and Modem Analysis for TDM and IP
- [UTE002](#) - Portable USB based Dual T1/E1 Laptop Analyzer, USB LITE T1 E1 Pod (call for proper configuration)
- [HDT002 / HDE002](#) - HD T1 or E1 PCI Cards, HD T1 E1 LITE (call for proper configuration)
- [HUT001 / HUE001](#) - Universal T1/E1 Cards
- [PKS100](#) - PacketGen™ (includes PacketScan™)
- [PKB100](#) - RTP ToolBox™
- [PKV100](#) - PacketScan™ (Online and Offline)
- [PKS120](#), [PKS122](#), [PKS124](#), - Message Automation & Protocol Simulation (MAPS) for SIP, MEGACO, and MGCP