
MAPS™ MEGACO/H.248 and MGCP EMULATOR

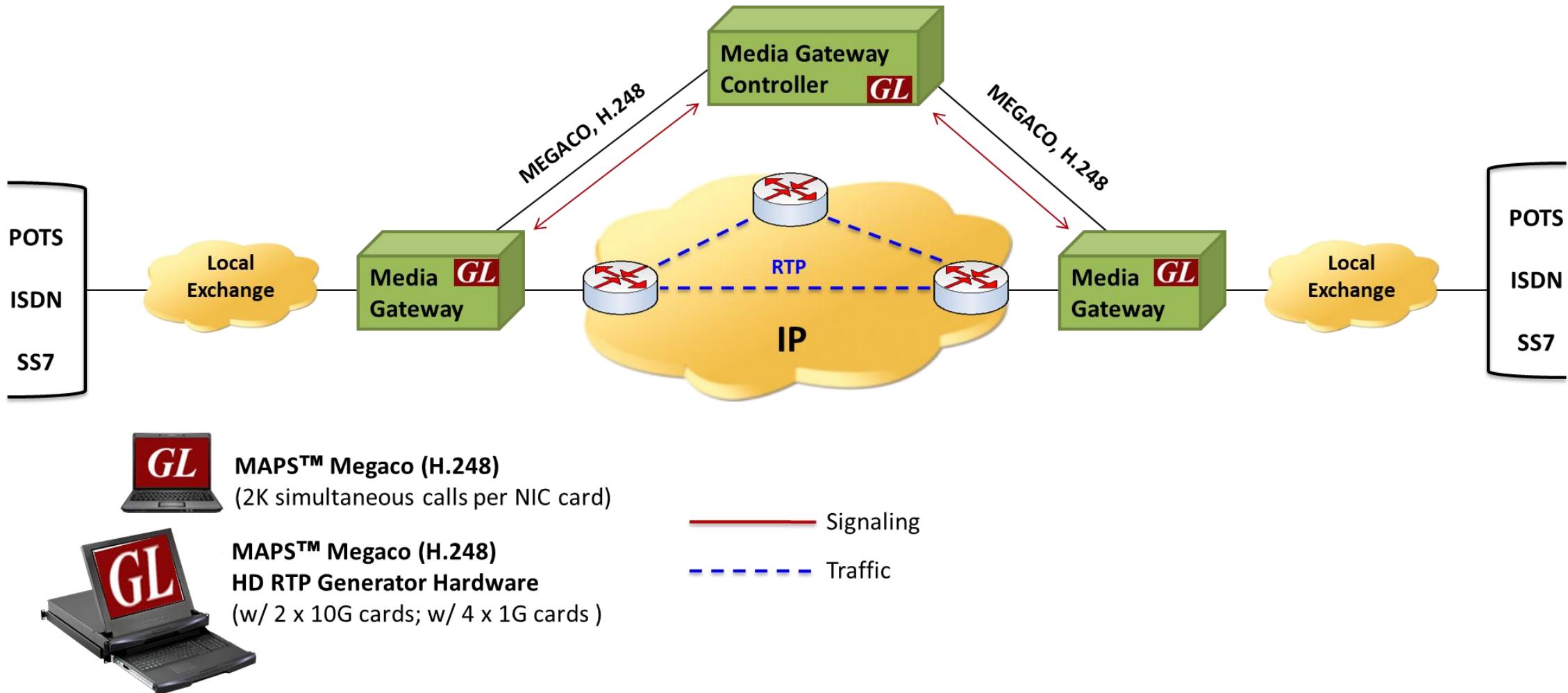
MEGACO/H.248 and MGCP Protocol Emulation



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MAPS™ MEGACO Protocol Emulator



Highlights

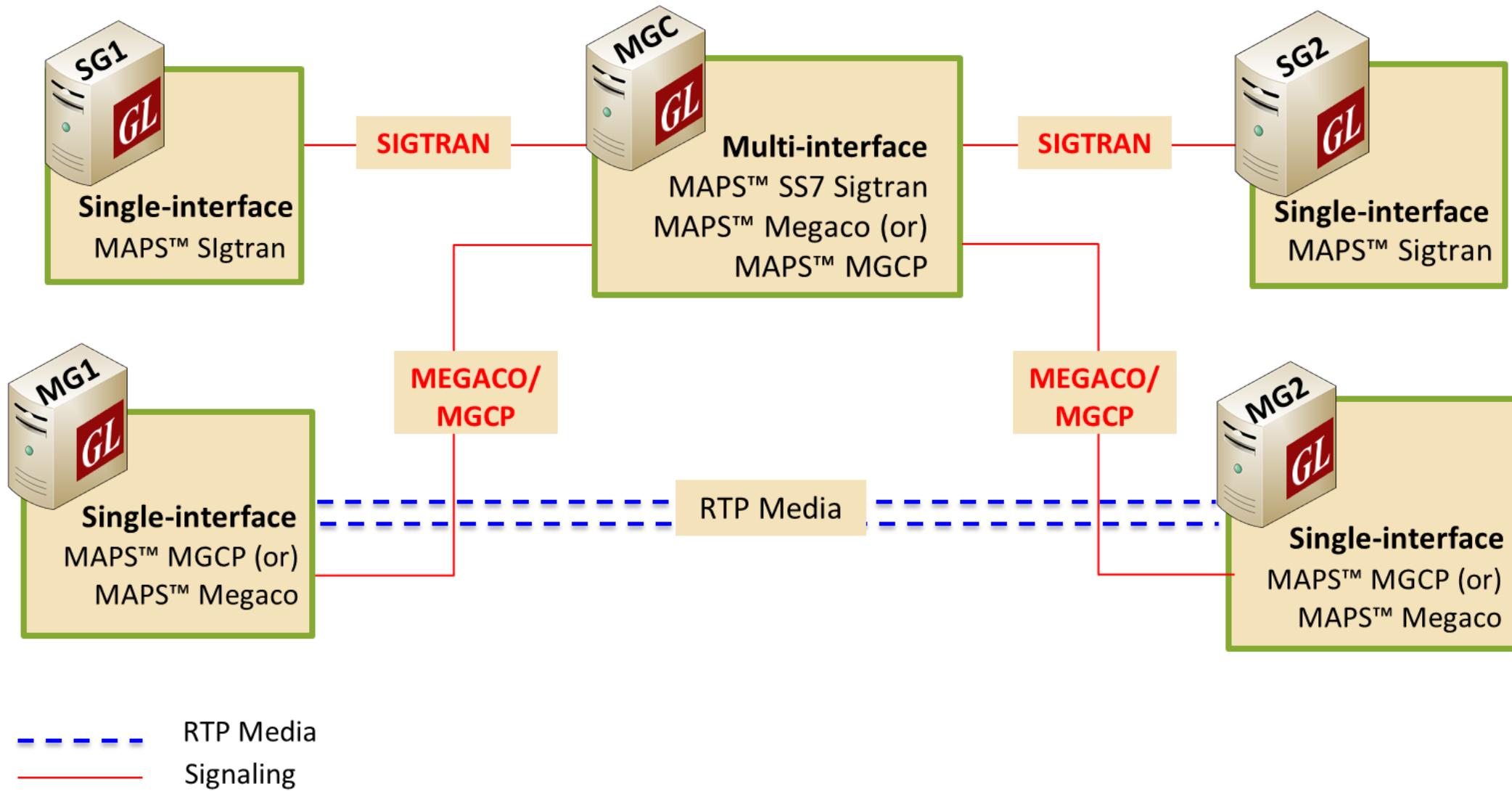
- Simulates Media Gateway (MG) and Media Gateway Controller (MGC)
- Complete end to end test environment for 2G, 3G and VoIP networks
- Fully integrated, complete test environment for MGCP
- Supports all the MGCP commands as per the protocol specification such as CRCX, NTFY, MDCX, RQNT, AUEP, AUCX, DLCX, EPCF, and RSIP
- Supports message templates for each MGCP message and customization of the field values
- Facilitates defining variables for the various protocol fields of the selected MGCP message type
- Supports Multi-interface signaling (using SIGTRAN) and RTP media (using MGCP) simulation
- Supports transmission and detection of various RTP traffic such as, digits, voice file, single tone, and dual tones in IP networks
- Multi-protocol call trace for 2G, 3G, PSTN calls

Supported Protocol Standards

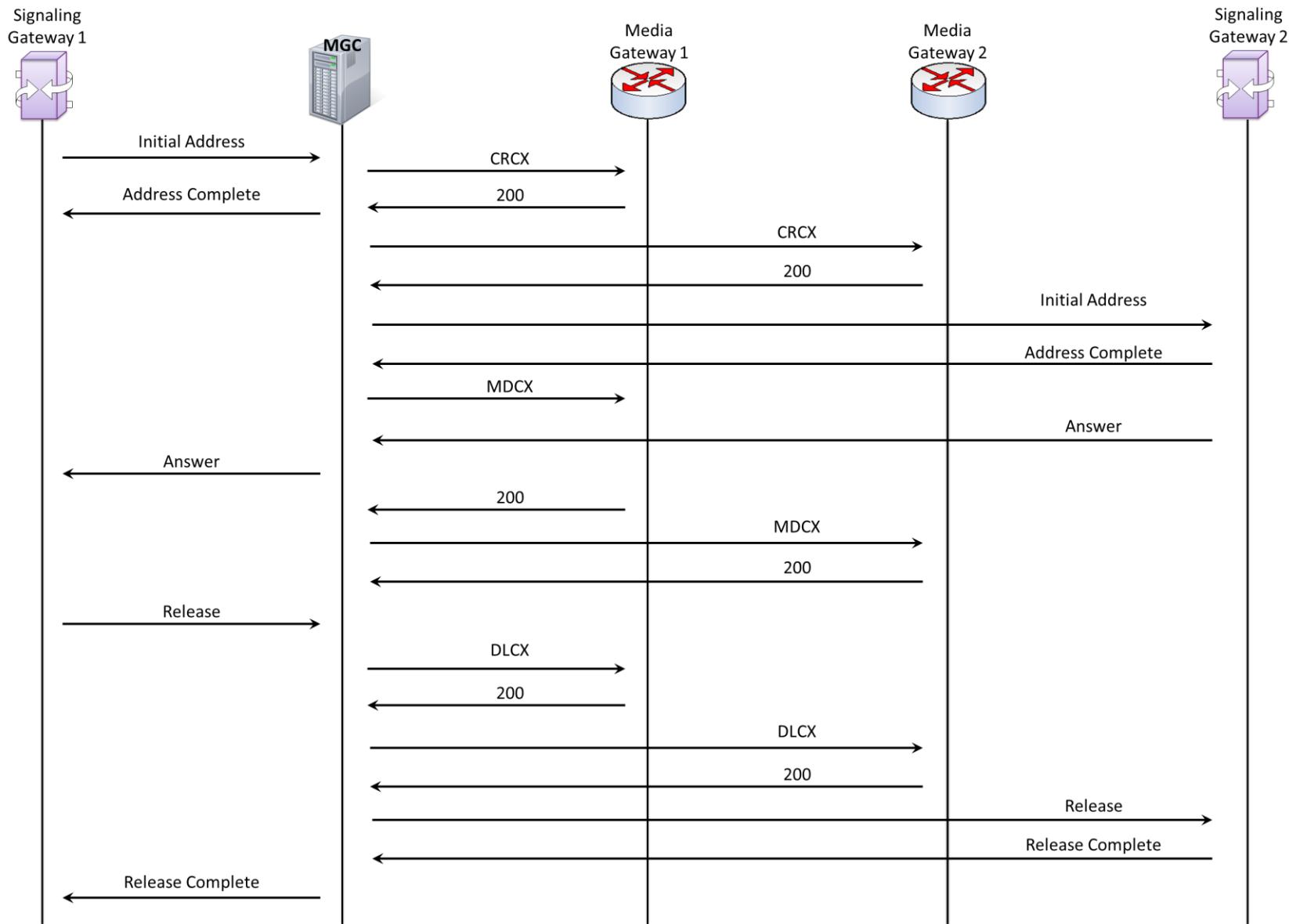
Supported Protocols	Specification Used
MEGACO/H.248	<p>IETF RFC 3525 / ITU-T Recommandation H.248, ETSI TS 102 374-2 (2004-11)</p> <p>ITU-T Rec. H.248.45</p> <p>ITU-T Rec. H.248.59 (08/2007)</p> <p>ITU-T Rec. Q.1950 (12/2002)</p> <p>ITU-T Rec. H.248.14 (03/2002)</p> <p>3GPP TS 29.232 v5.6.0</p> <p>3GPP TS 29.232 v4.1.0</p> <p>T-REC-H.248.1-201303-I</p> <p>Q.1950 Annex A</p>

MGC Multi Interface Simulation (MEGACO and MGCP)

MGC Multi-Interface End-to-End Lab Test Setup



MGC Multi-Interface End-to-End Call Simulation (MGCP)



MAPS™ MGC Multi-Interface End-to-End Call Simulation (MEGACO)

MAPS (Message Automation Protocol Simulation) (Isup-Sigtran) (MEGACO) - [Call Reception]

Configurations Emulator Reports Editor Debug Tools Windows Help

Sr No	Script Name	Call Info	Script Execution	Status	Events	Eve...	Results
1	Check_SCTP_Status.gls		Stop	Monitoring SCTP Status	None		Unknown
2	InitiateM3UA.gls	2	Stop	ASP ACTIVE	None		Pass
3	InitiateM3UA.gls	3	Stop	ASP ACTIVE	None		Pass
4	MGC_Control.gls	1.1.1.2.2.1 <-> 3.3.3.4.4.4000	Completed	Call Released	None		Pass
5	MGC_Control.gls	1.1.1.2.2.2.1861 <-> 3.3.3.4.4.4.3014	Stop	ContextDeleted	None		Unknown
6	MGC_Control.gls	1.1.1.2.2.2.1988 <-> 3.3.3.4.4.4.3013	Stop	ContextDeleted	None		Unknown
7	MGC_Control.gls	1.1.1.2.2.2.1989 <-> 3.3.3.4.4.4.3012	Stop	ContextDeleted	None		Unknown
8	MGC_Control.gls	1.1.1.2.2.2.1871 <-> 3.3.3.4.4.4.3011	Stop	ContextDeleted	None		Unknown
9	MGC_Control.gls	1.1.1.2.2.2.1958 <-> 3.3.3.4.4.4.3010	Stop	ContextDeleted	None		Unknown
10	MGC_Control.gls	1.1.1.2.2.2.1854 <-> 3.3.3.4.4.4.3009	Stop	ContextDeleted	None		Unknown
11	MGC_Control.gls	1.1.1.2.2.2.1867 <-> 3.3.3.4.4.4.3008	Stop	ContextDeleted	None		Unknown
12	MGC_Control.gls	1.1.1.2.2.2.3008 <-> 3.3.3.4.4.4.2453	Stop	ContextModified	None		Pass
13	MGC_Control.gls	1.1.1.2.2.2.358 <-> 3.3.3.4.4.4.2452	Stop	ContextModified	None		Pass

Stop Stop All Abort Abort All Show Records Select Active Call Auto Trash Trash

Save Column Width Show Latest

SG1 MGC MediaGateway1 MediaGateway2 SG2

==== MTP3 User Adaptation Layer =====

- 0000 Version = 0000001 Release 1.0
- 0002 Message Class = 0000001 Transfer
- 0003 Transfer Message Type = 0000001 Payload Data
- 0004 Message Length = 52 (x00000034)
- Protocol Data
- 0008 Tag = x0210 Transfer Protocol
- 000A Length = 44 (x002C)
- Originating Point Code = 1.1.1(..001000 0000100)
- Point Code = 2.2.2(..010000 000100)
- Destination Point Code = ...0101 ISDN User Part
- Service Indicator =00 International
- Network Indicator =00 Priority Code
- Message Priority = 1 (x01)

===== ISUP Layer =====

- 0018 Circuit Identification Code = 000000010000 (1)
- 001A Message Type = 00000001 Initial address
- Mandatory Fixed Parameters
- Nature Of Connection Indicators Parameter
- 001B Satellite Indicator =0 no satellite
- 001B Continuity check indicator =0 continuity of
- 001B Echo ctrl dev.ind(Nat.Conn.Ind) =0 outgoing echo
- Forward Call Indicators Parameter
- 001C National/international call ind =0 treated as a
- End-to-end method indicator =00.. no end-to-end
- 001C Interworking Indicator =0.. no interworking
- 001C End-to-end infor.ind(ForwardCall.Ind) =0.. not available
- 001C ISDN User Part Indicator =0.. not used all
- 001C ISDN User Part Preferences Indicators
- 001D ISDN Access Ind(ForwardCall Ind) =0 Originating ;
- 001D SCCP method indicator =00.. No Indicator
- 001D Ported number translation indicator =0.. Number not to
- Calling Party Category Parameter
- 001E Calling Party's Category = 00000000 calling part
- Transmission Medium Requirement Parameter
- 001F Transmission Medium Requirement = 00000000 speech
- 0020 Pointer to Mandatory Parameter = Par2 offset x02 (2)
- 0021 Pointer to optional parameters
- Mandatory Variable Length Parameters
- Called Party Number
- 0022 Parameter length = 7
- 0023 Nature of add.ind(CalledParty#) = .0000100 international
- 0023 Odd/even Indicator = 0..... even number
- 0024 Spare =0000 (0)
- 0024 Numbering Plan Indicator = .001.... ISDN (Telephon
- 0024 Internal Network Number Indic = 0..... routing to int
- 0025 Called Address Signal = 445375006
- Optional Variable Length Parameters
- Calling Party Number
- 002A Parameter name = 0A

MAPS™ MGC Multi-Interface End-to-End Call Simulation (MGCP)

MAPS (Message Automation Protocol Simulation) (Isup-Sigtran) (MGCP) - [Call Reception]

Configurations Emulator Reports Editor Debug Tools Windows Help

Sr No	Script Name	Call Info	Script Execution	Status	Events	Even
1	Check_SCTP_Status.gls		Stop	Monitoring SCTP Status	None	
2	InitiateM3UA.gls	2	Stop	ASP ACTIVE	None	
3	InitiateM3UA.gls	3	Stop	ASP ACTIVE	None	
4	MGCP_Control.gls	1.1.1.2.2.1 < 3.3.3.4.4.4.4000	Completed	Call Released	None	

Stop Stop All Abort Abort All Show Records Select Active Call Auto Trash Trash

Save Column Width Show Latest

```

sequenceDiagram
    participant SG1
    participant MGC
    participant MediaGateway1
    participant MediaGateway2
    participant SG2
    SG1->>MGC: Initial Address
    activate MGC
    MGC->>MediaGateway1: CRCX
    activate MediaGateway1
    MediaGateway1->>MediaGateway2: CRCX
    activate MediaGateway2
    MediaGateway2->>SG2: Initial Address
    deactivate SG2
    SG2->>SG1: Address Complete
    deactivate SG1
    SG1->>MGC: MDCX
    activate MGC
    MGC->>MediaGateway1: Answer
    activate MediaGateway1
    MediaGateway1->>MediaGateway2: 200
    activate MediaGateway2
    MediaGateway2->>SG2: Release
    deactivate SG2
    SG2->>SG1: Release Complete
    deactivate SG1
    
```

===== MTP3 User Adaptation Layer =====

- 0000 Version = 0000001 Release 1.0
- 0002 Message Class = 0000001 Transfer
- 0003 Transfer Message Type = 0000001 Payload Data
- 0004 Message Length = 52 (x00000034)
- 0005 Protocol Data
- 0008 Tag = x0210 Transfer Protocol I
- 000A Length = 44 (x002C)
- 000B Originating Point Code = 1.1.1(..001000 00001001)
- 000E Point Code = 2.2.2(..010000 00010010)
- 0012 Destination Point Code = ...0101 ISDN User Part
- 0014 Service Indicator =0 International n
- 0015 Network Indicator =0 Priority Code 0
- 0017 Signalling Link Selection = 1 (x01)

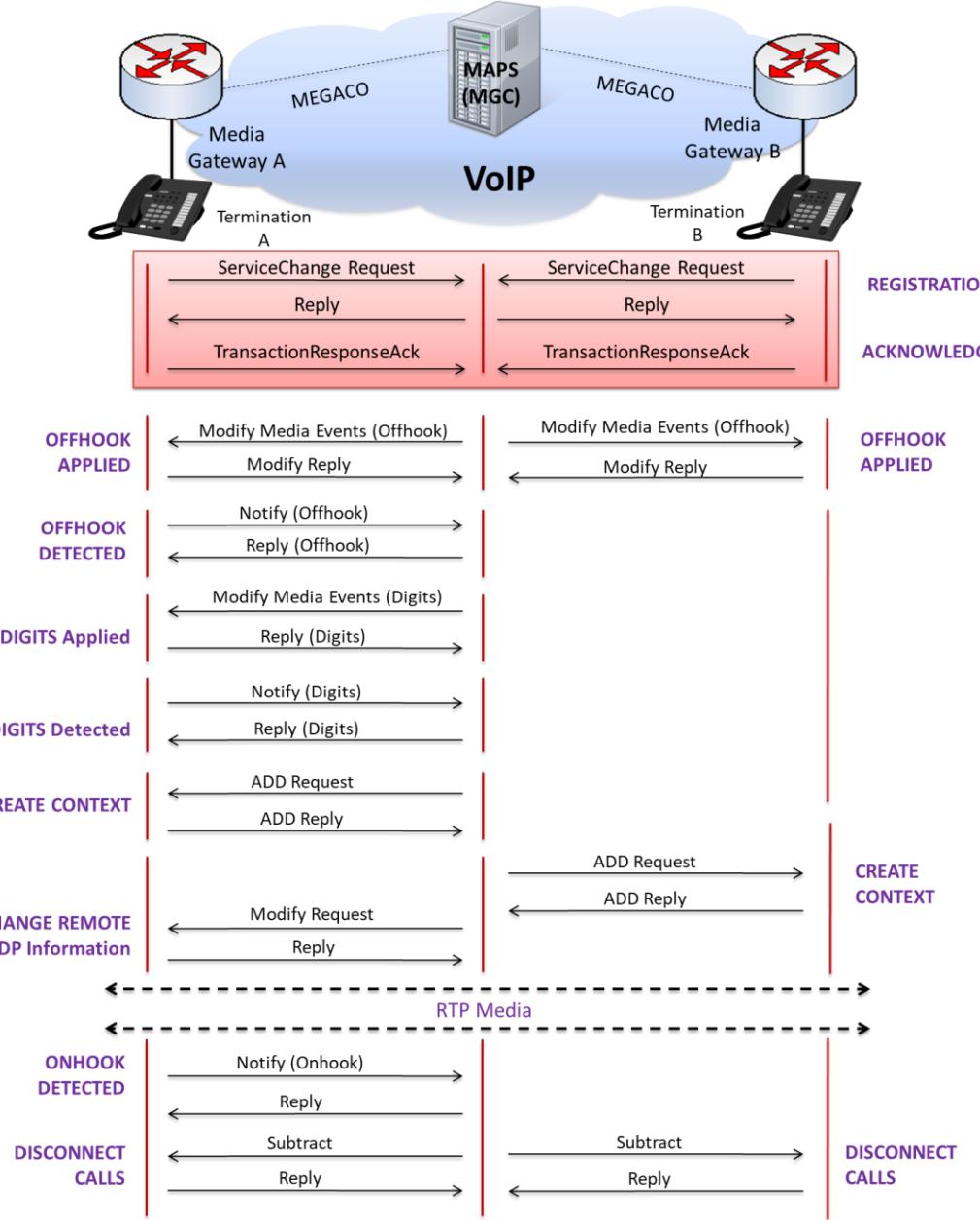
===== ISUP Layer =====

- 0018 Circuit Identification Code = 000000010000 (1)
- 001A Message Type = 00000001 Initial address
- 001B Mandatory Fixed Parameters
- 001B Nature of Connection Indicators Parameter
- 001B Satellite indicator =0 no satellite ci
- 001B Continuity check indicator =0.. continuity checl
- 001B Echo ctrl dev.ind(Nat.Conn.Ind) = ...0.... outgoing echo co
- 001C Forward Call Indicators Parameter
- 001C National/international call ind =0 treated as a na
- 001C End-to-end method indicator =00 No end-to-end me
- 001C Interworking Indicator =0... no interworking
- 001C End-to-end infor.ind(ForwardCall.Ind) = ...0.... not available
- 001C ISDN User Part Indicator = ..0.... not used all th
- 001C ISDN User Preferences Indicators = 00..... preferred all th
- 001D ISDN Access Ind(ForwardCall Ind) =0 Originating Acc
- 001D SCCP method indicator =00. No Indication
- 001D Ported number translation indicator = ...0.... Number not tran
- 001E Calling Party's Category Parameter
- 001E Transmission Medium Requirement Parameter
- 001F Transmission Medium Requirement = 00000000 speech
- 0020 Pointer to Mandatory Parameter = Parm0 offset x02 (2)
- 0021 Pointer to optional parameters
- 0021 Mandatory Variable Length Parameters
- 0021 Called Party Number = mandatory parameter
- 0022 Parameter length = 7
- 0023 Nature of add.ind(CalledParty#) = .0000100 international nu
- 0023 Odd/even Indicator = 0..... even number of c
- 0024 Spare = ...0000 (0)
- 0024 Numbering Plan Indicator = .001.... ISDN (Telephony)
- 0024 Internal Network Number Indic = 0..... routing to intern
- 0025 Called Address Signal = 4445375006
- 0026 Optional Variable Length Parameters
- 0026 Calling Party Number = optional parameter
- 0028 Parameter name = OA
- 0028 Parameter length = 7

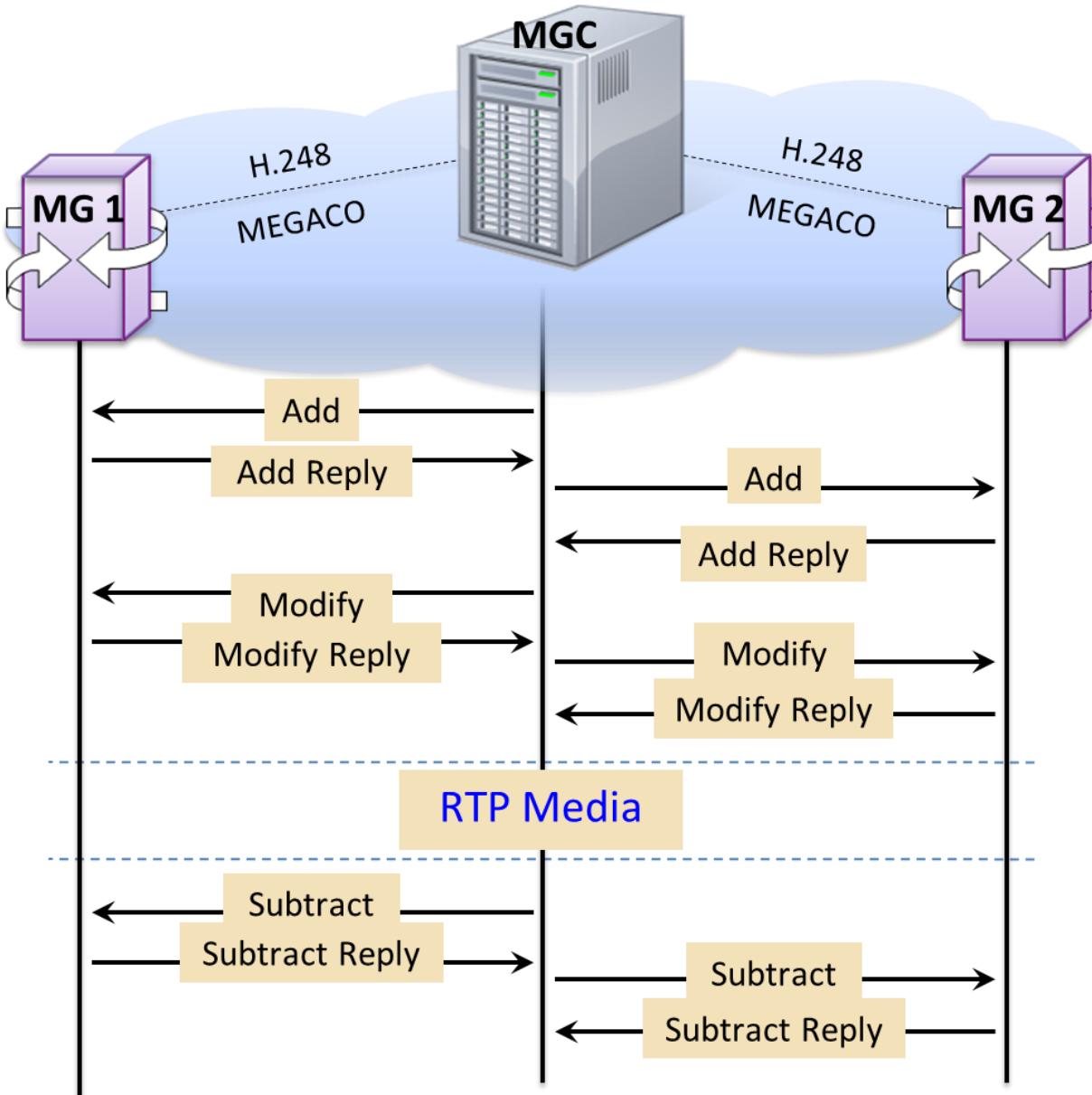
Scripts Message Sequence Event Config Script Flow

MAPS™ MEGACO (H.248) in Analog and Digital Network

Residential Gateway Simulation in Analog Network

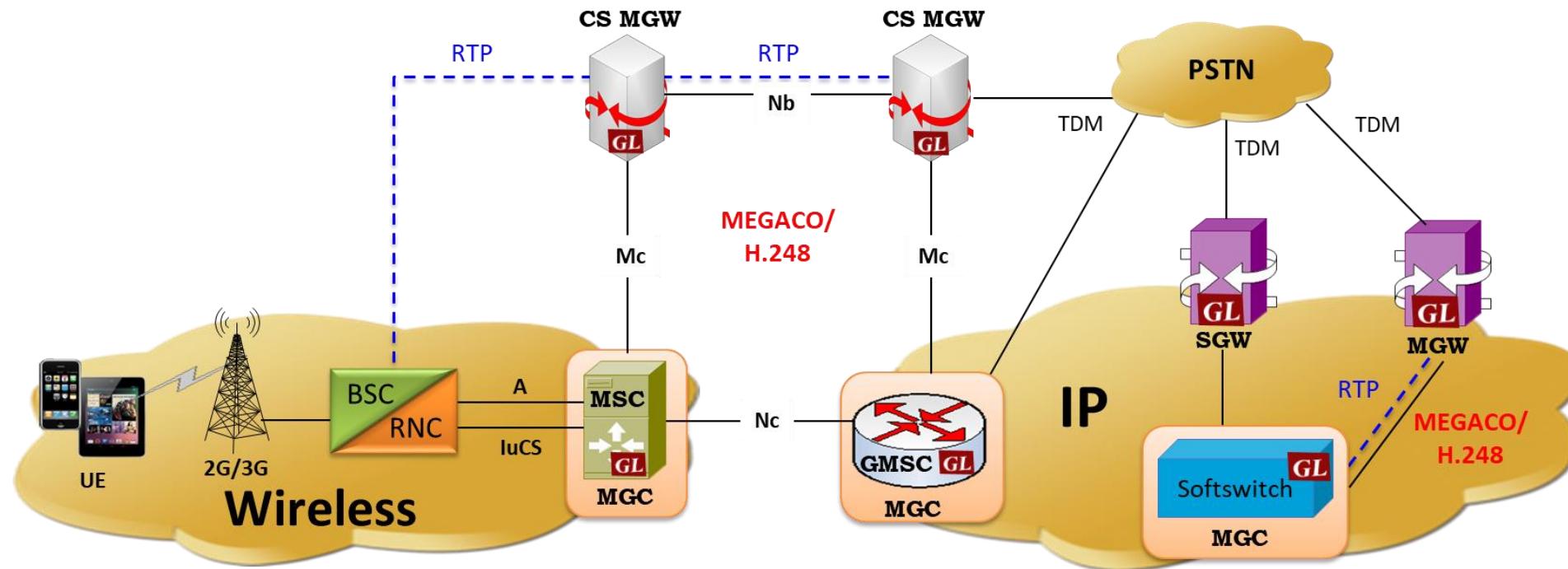


Trunking Gateway Simulation in Digital Network



MAPS™ MEGACO (H.248) in 2G 3G Network

MAPS™ MEGACO/H.248 Protocol Emulator in 2G, 3G Network



MAPS™ MEGACO/ H.248 Protocol Emulator
(2K simultaneous calls per NIC card)

— Signaling



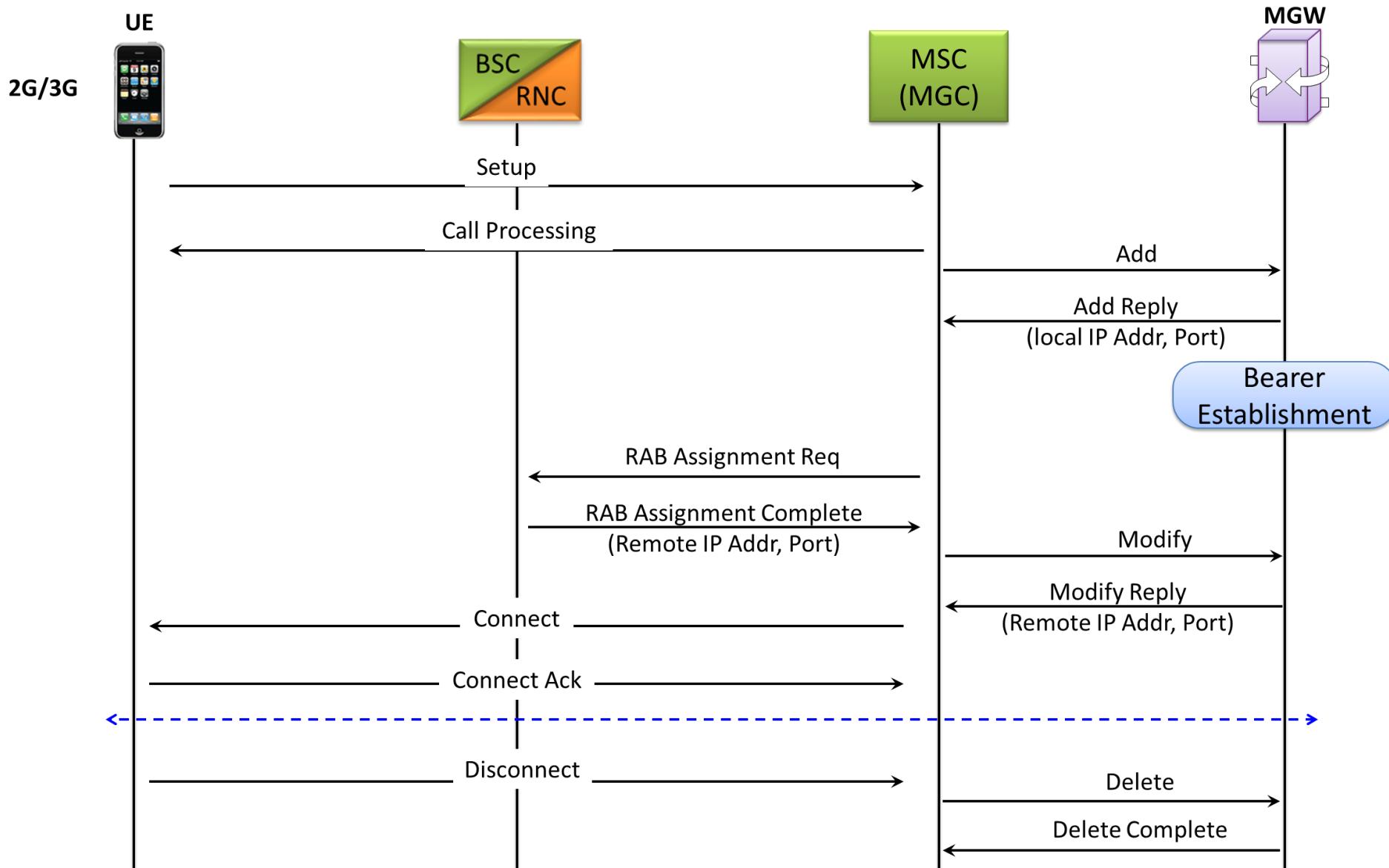
MAPS™ MEGACO
HD RTP Generator Hardware
(w/ 4 x 1G cards)

- - - - - Traffic

Highlights

- Simulates Media Gateways (MG) and Media Gateways Controller (MGC)
- With MAPS™ MGC Multi-interface (requires additional licenses), both end-to-end signaling (using SIGTRAN) and RTP media (using MEGACO) simulation can be performed
- Both text based and binary based syntax are supported in MEGACO
- Complete end to end test environment for 2G, 3G and VoIP networks
- Fully integrated, complete test environment for MEGACO/ H.248
- Supports commands such as Add, Subtract, Notify, Modify, Move, Service Change, Audit Value, and Audit Capabilities
- Supports message templates for each MEGACO (H.248) message and customization of the field values
- Facilitates defining variables for the various protocol fields of the selected MEGACO (H.248) message type

H.248 (Binary) Protocol Procedure



MGC H248 Testbed Configuration

MAPS (Message Automation Protocol Simulation) Media Gateway Controller (H248 3GPP SCTP) - [Testbed Setup - ...]

Configurations Emulator Reports Editor Utilities Windows Help

Config Value

Configurations

RTP Media Type Regular

MGC

MGC 1

- MGC IP Address 192.168.1.246
- MGC Port 1905
- MGW IP Address 192.168.1.246
- MGW Port 3985

MGC 2

- MGC IP Address 192.168.1.139
- MGC Port 1905
- MGW IP Address 192.168.1.139
- MGW Port 3985

End User Configurations UserConfigProfiles.xml

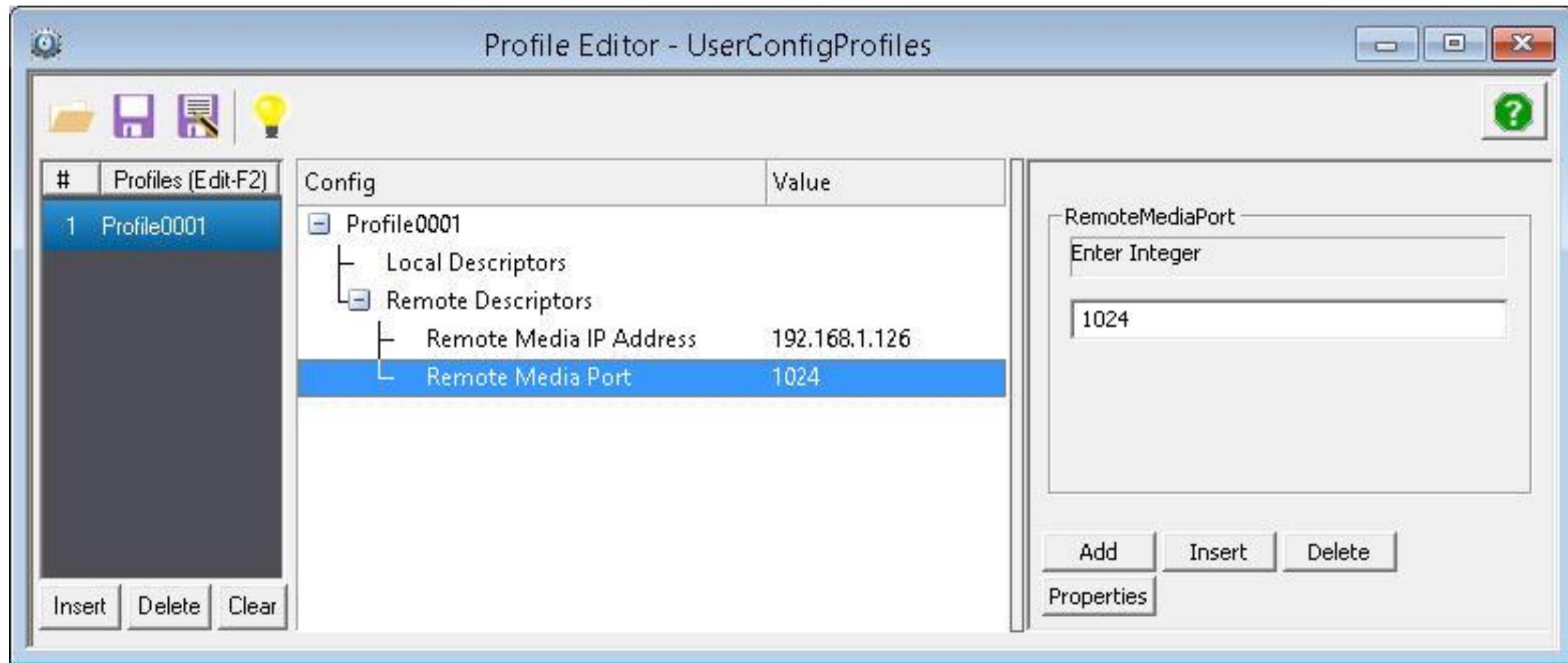
_RTPMediaType Select Option

Regular

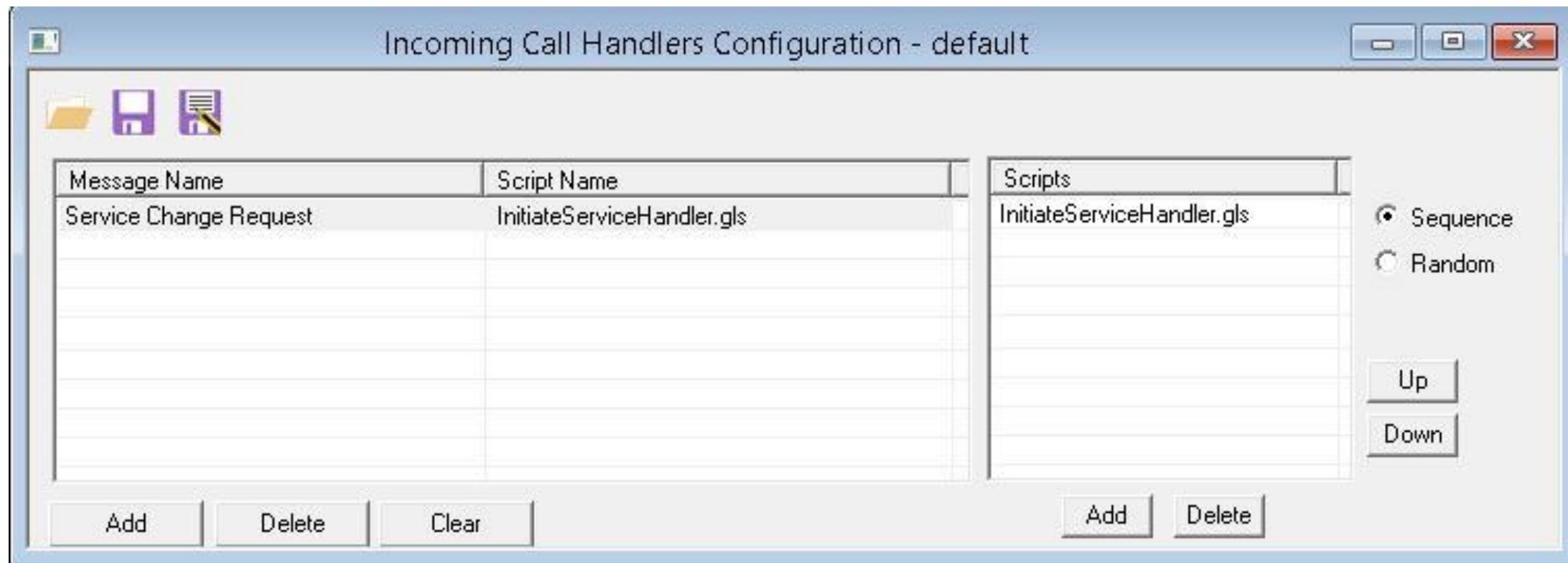
Start Edit

Error Events Captured Errors Link Status Up=0 Down=0

MGC H248 Profile Configuration



MGC H248 Incoming Call Handler Configuration



MGC H248 Call Generation

MAPS (Message Automation Protocol Simulation) Media Gateway Controller (H248 3GPP SCTP) - [Call Generation - CallGenDefault]

Configurations Emulator Reports Editor Utilities Windows Help

Sr No Script Name Profile Call Info Script Execution Status Events Event... Result Total Iterations Com

1	H248Call.gls	Profile0001	CxtId,0x00000001,Tmld,0x000000000000000000000002	Stop.	Deleteb Context Initiated	None	Unknown	1
2				Start.		None	Unknown	1

Add Delete Insert Refresh Start Start All Stop Stop All Abort Abort All

Save Column Width Show Latest

MGC MGW0

Add Request 17:11:39.805000
Add Reply 17:11:40.204000
Add Request 17:11:40.216000
Add Reply 17:11:40.232000
Mod Request 17:11:40.258000
Mod Reply 17:11:43.338000
Subtract Request 17:11:53.399000
Subtract Reply 17:11:53.437000

===== Megaco-Binary Layer =====

MEDIA-GATEWAY-CONTROL DEFINITIONS = CHOICE
0000 MegacoMessage = TAG 00110000 UNIV CONST SEQUENCE/SEQ OF
0001 Length = 60 (x3C)
0002 Message = TAG 10100001 CONTEXT CONST (IMPLICIT SEQUENCE)
0003 Length = 58 (x3A)
0004 version = TAG 10000000 CONTEXT PRIM (IMPLICIT INTEGER)
0005 Length = 1 (x01)
0006 Value = 1 (x01)
0007 mId = TAG EXPLICIT CHOICE 10100001 CONTEXT CONST
0008 Length = 12 (x0C)
0009 mId = CHOICE
0009 ip4Address = TAG 10100000 CONTEXT CONST (IMPLICIT SEQUENCE)
000A Length = 10 (xA)
000B ip4 Address = TAG 10000000 CONTEXT PRIM Tag
000C Length = 4 (x04)
000D IPv4 Address = 192.168.1.246 (xCOA801F6)
0011 portNumber = TAG 10000001 CONTEXT PRIM (IMPLICIT INTEGER)
0012 Length = 2 (x02)
0013 Value = 3985 (xF91)

Scripts Message Sequence Event Config Script Flow Capture Events

Error Events Captured Errors Link Status Up=1 Down=0

MGC H248 Call Reception

MAPS (Message Automation Protocol Simulation) Media Gateway (H248 3GPP SCTP) - [Call Reception]

Configurations Emulator Reports Editor Utilities Windows Help

Sr No	Script Name	Call Info	Script Execution	Status	Events	Events Profile
1	Check_SCTP_Status...		Stop	Monitoring SCTP Status	None	
2	InitiateServiceHandle...	CxtId,0x00,Tmld,0xFFFFFFFFFFFF	Stop	Monitoring Service Change	None	
3	H248Call.gls	CxtId,0x00000001,Tmld,0x00000000000000000002	Completed	Add Context Requested	None	

Abort Abort All Show Records Auto Trash Trash

Save Column Width Show Latest

MGC MG

Add Request → 17:11:39.946000
Add Reply ← 17:11:40.188000
Add Request → 17:11:40.222000
Add Reply ← 17:11:40.225000
Mod Request → 17:11:40.271000
Mod Reply ← 17:11:43.330000
Subtract Request → 17:11:53.406000
Subtract Reply ← 17:11:53.428000

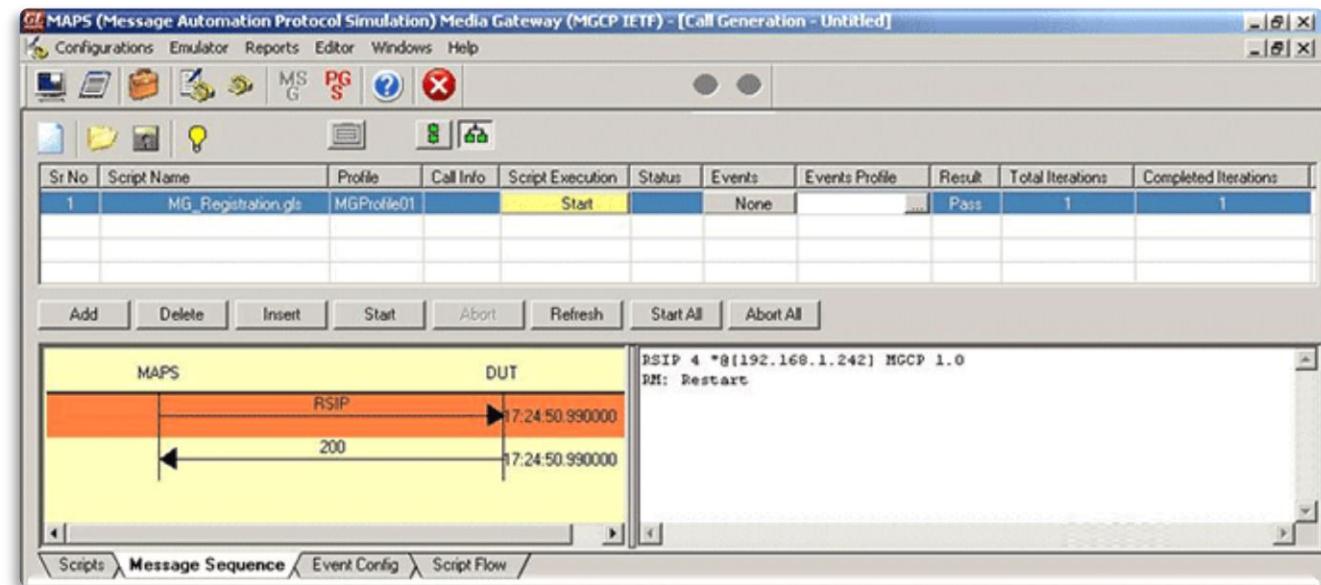
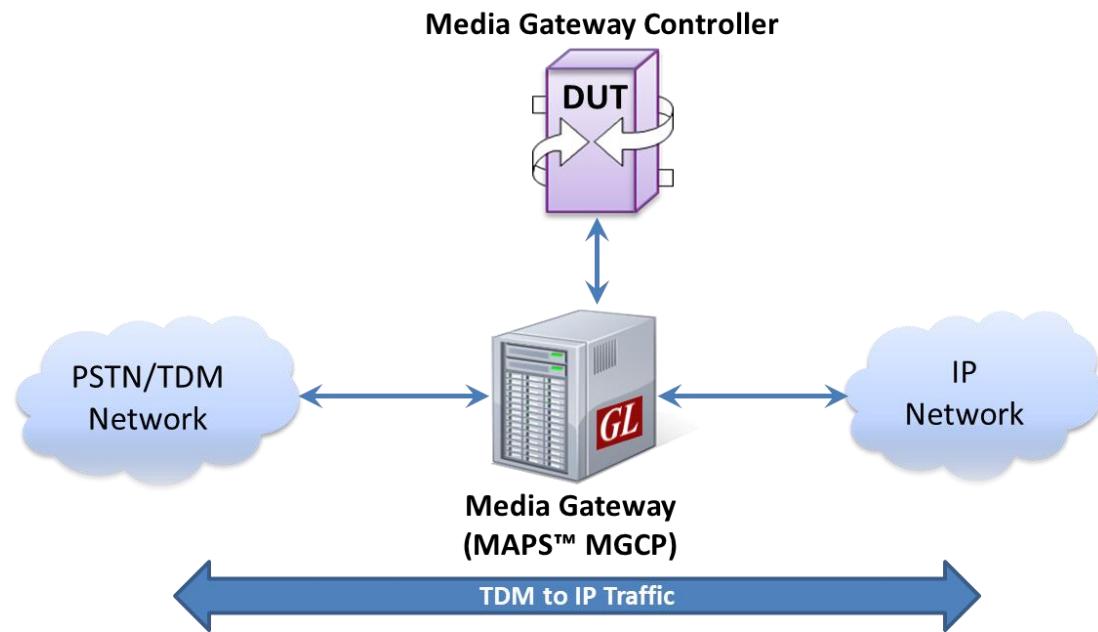
===== Megaco-Binary Layer =====
MEDIA-GATEWAY-CONTROL DEFINITIONS
0000 MegacoMessage
0001 Length
0002 Message
0003 Length
0004 version
0005 Length
0006 Value
0007 mID
0008 Length
0009 mID
0009 ip4Address
000A Length
000B ip4 Address
000C Length
000D IPv4 Address
0011 portNumber
0012 Length
0012 Value

Scripts Message Sequence Event Config Script Flow Capture Events

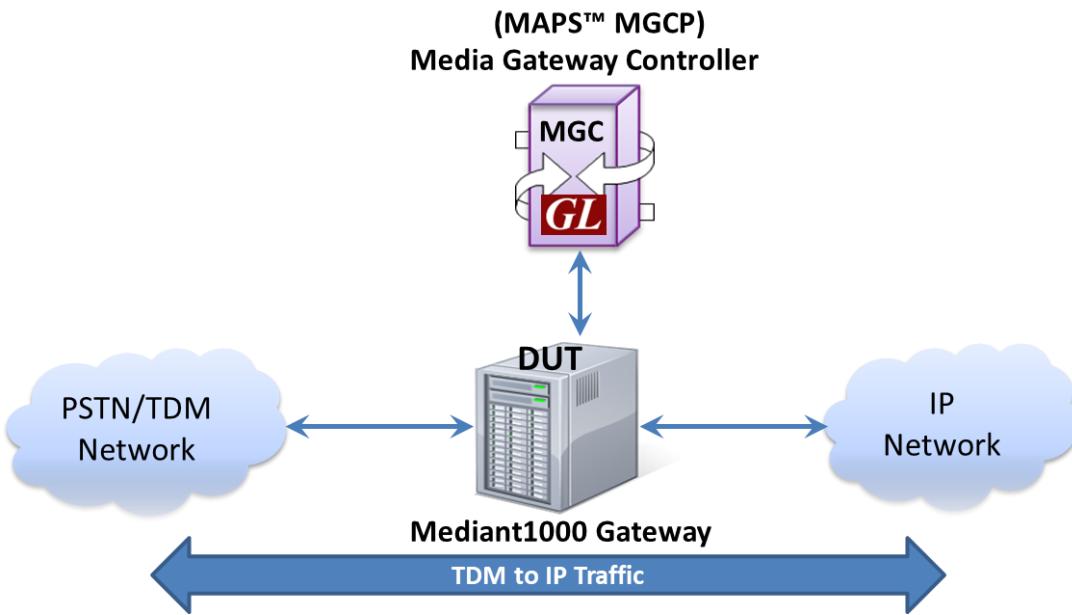
Error Events Captured Errors Link Status Up=1 Down=0

MAPS™ MEGACO Conformance

MGC Conformance Testing



MG Conformance Testing

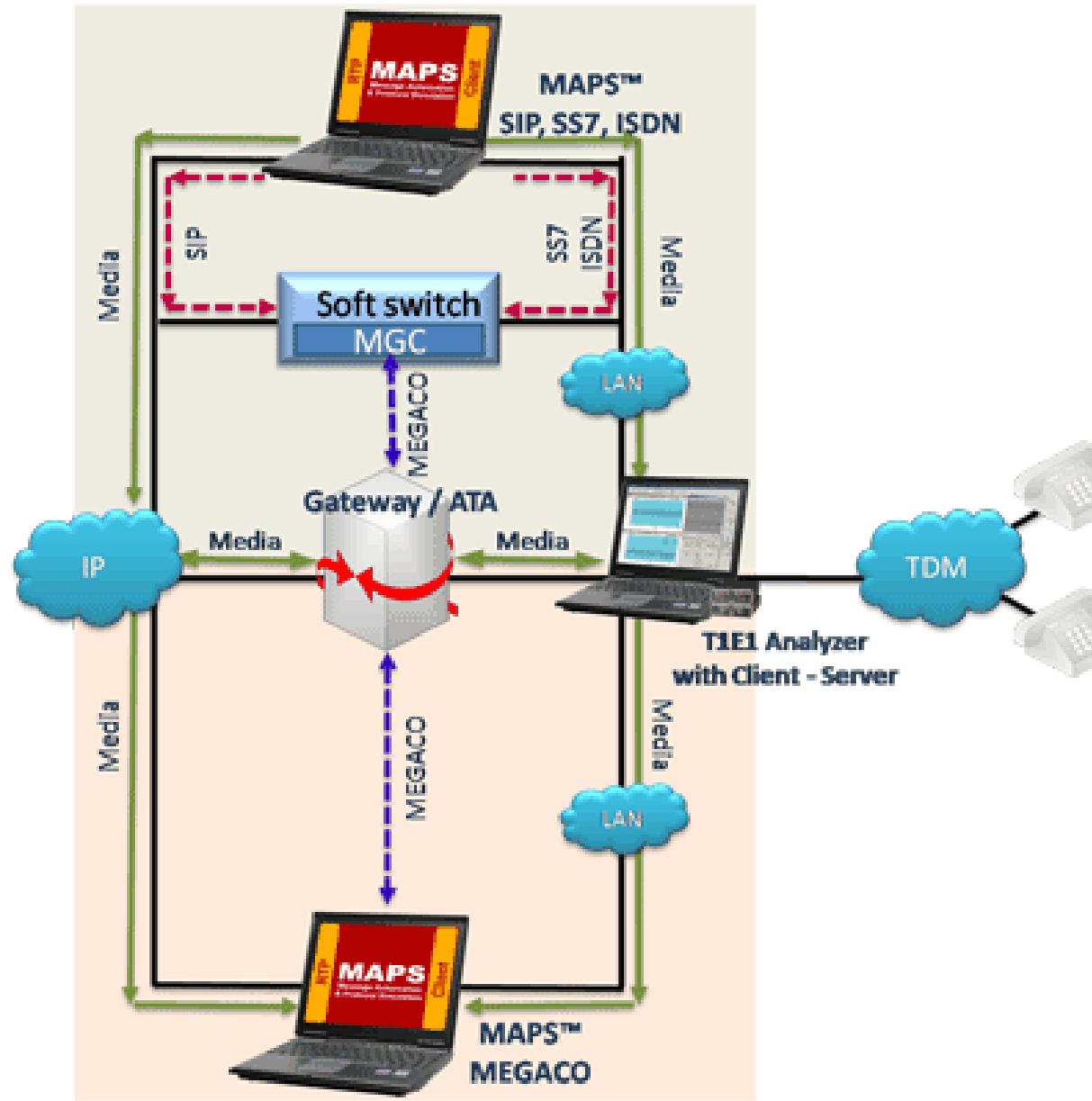


The screenshot shows the 'GL MAPS (Message Automation Protocol Simulation) Media Gateway Controller (MGCP IETF) - [Call Generation - Conf_TP's_CRCX_Valid]' window. The top menu includes 'Configurations', 'Emulator', 'Reports', 'Editor', 'Windows', and 'Help'. The toolbar has icons for 'MS', 'PG', 'S', and others. The main area has tabs for 'Scripts', 'Message Sequence', 'Event Config', and 'Script Flow'. The 'Message Sequence' tab is active, showing a timeline with four messages: 'CRCK' (18:34:54.593000), '200' (18:34:54.593000), 'DLCK' (18:34:54.593000), and '250' (18:34:54.609000). The 'Event Config' tab displays a table of 11 rows, each with a script name like 'Conf_TX_MGC_TP_MG_V_CR_01.gls', a profile 'MGC-RGWProfile01', and a status 'Start'. The bottom pane shows a text log of protocol messages, starting with '200 14 0K' and 'I: ?' followed by various SIP and MGCP headers.

Sr...	Script Name	Profile	Call Info	Script Exec...	Status	Events	Events Profile	Result	Total Iterations	Completed Iteration
1	Conf_TX_MGC_TP_MG_V_CR_01.gls	MGC-RGWProfile01		Start	ConnectionCreated	None	.....	Pass	1	1
2	Conf_TX_MGC_TP_MG_V_CR_02.gls	MGC-RGWProfile01		Start	ConnectionCreated	None	.....	Pass	1	1
3	Conf_TX_MGC_TP_MG_V_CR_03.gls	MGC-RGWProfile01		Start	ConnectionCreated	None	.....	Pass	1	1
4	Conf_TX_MGC_TP_MG_V_CR_04.gls	MGC-RGWProfile01		Start	ConnectionCreated	None	.....	Pass	1	1
5	Conf_TX_MGC_TP_MG_V_CR_05.gls	MGC-RGWProfile01		Start	ConnectionCreated	None	.....	Pass	1	1
6	Conf_TX_MGC_TP_MG_V_CR_06.gls	MGC-RGWProfile01		Start	Invalid mode	None	.....	Fail	1	1
7	Conf_TX_MGC_TP_MG_V_CR_07.gls	MGC-RGWProfile01		Start	ConnectionCreated	None	.....	Pass	1	1
8	Conf_TX_MGC_TP_MG_V_CR_08.gls	MGC-RGWProfile01		Start	ConnectionCreated	None	.....	Pass	1	1
9	Conf_TX_MGC_TP_MG_V_CR_09.gls	MGC-RGWProfile01		Start	ConnectionCreated	None	.....	Pass	1	1
10	Conf_TX_MGC_TP_MG_V_CR_10.gls	MGC-RGWProfile01		Start	ConnectionCreated	None	.....	Pass	1	1
11	Conf_TX_MGC_TP_MG_V_CR_11.gls	MGC-RGWProfile01		Start	ConnectionCreated	None	.....	Pass	1	1

End-to-End Gateway Testing

End-to-End Gateway Testing



High Density (HD) Traffic Simulation (MEGACO and MGCP)

High Density (HD) RTP Traffic Simulation



- Rackmount network appliance with 4x1GigE NIC
- Transport over UDP and TCP, IPv4 and IPv6, and TLS for secure transport
- Easily achieve up to 20,000 endpoints per appliance (5000 per port)
- Up to 250 calls per second (with RTP traffic)
- Scales to around 100,000 to 200,000 endpoints with use of Master Controller for single point of control
- Manage 10+ MAPS™ systems with single point of control from Master Controller

Call Generation

MAPS (Message Automation Protocol Simulation) Media Gateway Controller (H248 3GPP SCTP) - [Call Generation - CallGenDefault]

Configurations Emulator Reports Editor Utilities Windows Help

Sr No Script Name Profile Call Info Script Execution Status Events Event... Result Total Iterations Com

1	H248Call.gls	Profile0001	CxtId.0x00000001.Trnid.0x000000000000000000000002	Stop	Deleted Context Initiated	None	Unknown	1
2				Start		None	Unknown	1

Add Delete Insert Refresh Start Start All Stop Stop All Abort Abort All

Save Column Width Show Latest

MGC MGW0

Add Request 17:11:39.805000
Add Reply 17:11:40.204000
Add Request 17:11:40.216000
Add Reply 17:11:40.232000
Mod Request 17:11:40.258000
Mod Reply 17:11:43.338000
Subtract Request 17:11:53.399000
Subtract Reply 17:11:53.437000

===== Megaco-Binary Layer =====
MEDIA-GATEWAY-CONTROL DEFINITIONS = CHOICE
0000 MegacoMessage = TAG 00110000 UNIV CONST SEQUENCE/SEQ OF
0001 Length = 60 (x3C)
0002 Message = TAG 10100001 CONTEXT CONST (IMPLICIT SEQUENCE)
0003 Length = 58 (x3A)
0004 version = TAG 10000000 CONTEXT PRIM (IMPLICIT INTEGER)
0005 Length = 1 (x01)
0006 Value = 1 (x01)
0007 mId = TAG EXPLICIT CHOICE 10100001 CONTEXT CONST
0008 Length = 12 (x0C)
0009 mId = CHOICE
0009 ip4Address = TAG 10100000 CONTEXT CONST (IMPLICIT SEQUENCE)
000A Length = 10 (x0A)
000B ip4 Address = TAG 10000000 CONTEXT PRIM Tag
000C Length = 4 (x04)
000D IPv4 Address = 192.168.1.246 (xCOA801F6)
000E portNumber = TAG 10000001 CONTEXT PRIM (IMPLICIT INTEGER)
0011 Length = 2 (x02)
0012 Value = 3985 (x0F91)

Scripts Message Sequence Event Config Script Flow Capture Events

Error Events Captured Errors Link Status Up=1 Down=0

Bulk Call Reception

MAPS (Message Automation Protocol Simulation) Media Gateway (H248 3GPP SCTP) - [Call Reception]

Configurations Emulator Reports Editor Utilities Windows Help

Sr No Script Name Call Info Script Execution Status Events Events Profile

1	Check_SCTP_Status...	CtxId,0x00,Tmld,0xFFFFFFFFFFFF	Stop	Monitoring SCTP Status	None
2	InitiateServiceHandle...	CtxId,0x00,Tmld,0xFFFFFFFFFFFF	Stop	Monitoring Service Change	None
3	H248Call.gls	CtxId,0x00000001,Tmld,0x00000000000000000002	Completed	Add Context Requested	None

Abort Abort All Show Records Auto Trash Trash

Save Column Width Show Latest

MGC MG

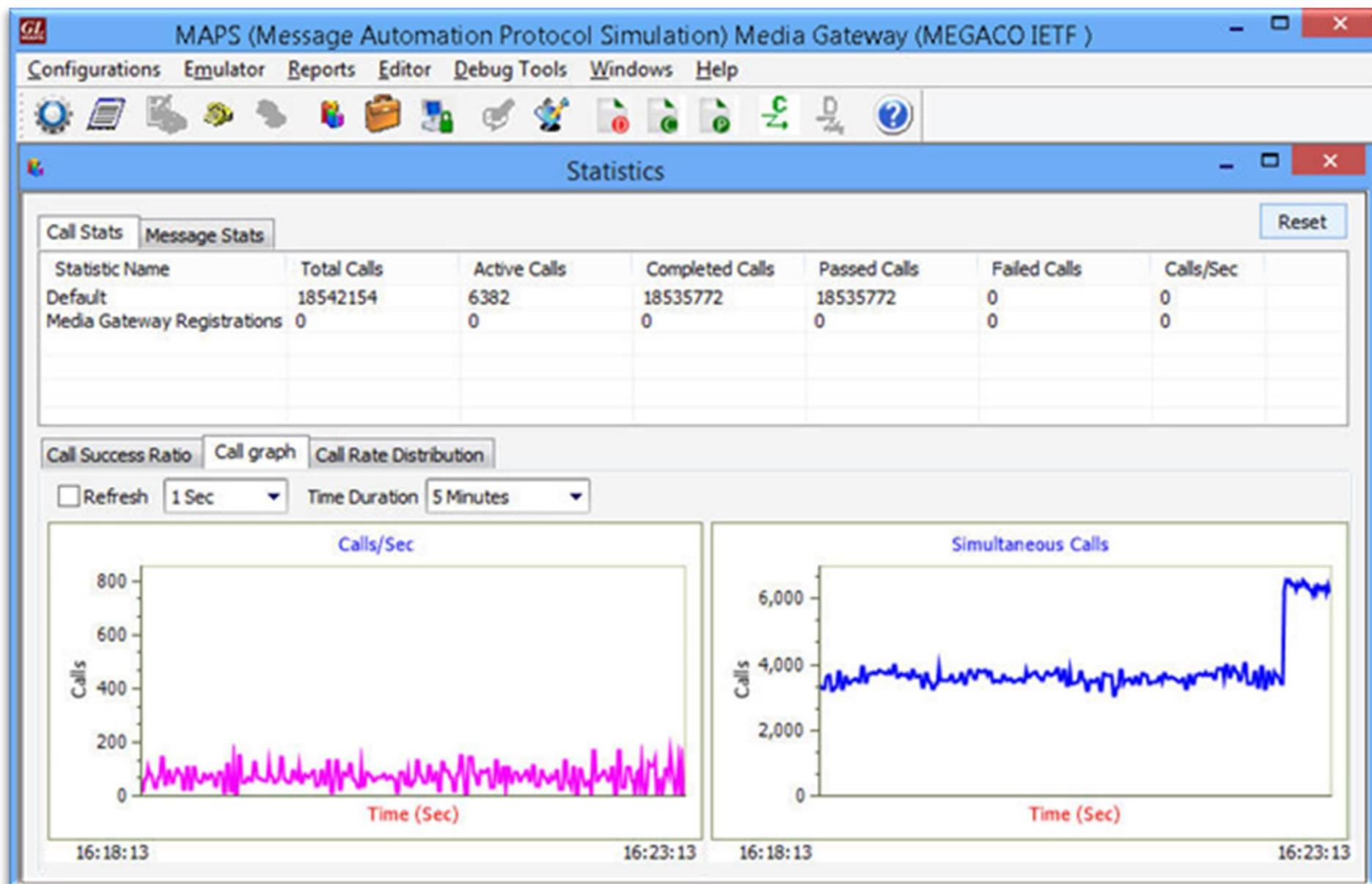
Add Request 17:11:39.946000
Add Reply 17:11:40.188000
Add Request 17:11:40.222000
Add Reply 17:11:40.225000
Mod Request 17:11:40.271000
Mod Reply 17:11:43.330000
Subtract Request 17:11:53.406000
Subtract Reply 17:11:53.428000

===== Megaco-Binary Layer =====
----- MEDIA-GATEWAY-CONTROL DEFINITIONS -----
0000 MegacoMessage = CHOICE
0001 Length = TAG 00110000 UNIV CONST SEQUENCE/SEQ OF
0002 Message = 60 (x3C)
0003 Length = TAG 10100001 CONTEXT CONST (IMPLICIT SEQU
0004 version = 58 (x3A)
0005 Length = TAG 10000000 CONTEXT PRIM (IMPLICIT INTEG
0006 Value = 1 (x01)
0007 mId = 1 (x01)
0008 Length = TAG EXPLICIT CHOICE 10100001 CONTEXT CONS
0009 mId = 12 (x0C)
0009 ip4Address = CHOICE
000A Length = TAG 10100000 CONTEXT CONST (IMPLICIT SEQU
000B ip4 Address = 10 (x0A)
000C Length = TAG 10000000 CONTEXT PRIM Tag
000D IPv4 Address = 4 (x04)
000E portNumber = 192.168.1.246 (xCOA801F6)
0011 portNumber = TAG 10000001 CONTEXT PRIM (IMPLICIT INTEG
0012 Length = 2 (x02)
0012 Value = 0000 />0001

Scripts Message Sequence Event Config Script Flow Capture Events

Error Events Captured Errors Link Status Up=1 Down=0

Bulk Call Simulation Results



Speech Quality Metrics (R Factor and MOS)

Name	Values
Sessions with MosLQ or MosCQ (>= 4.0)	56767
Sessions with MosLQ or MosCQ (< 4.0 && >= 3.5)	5759
Sessions with MosLQ or MosCQ (< 3.5 && >= 3.0)	298
Sessions with MosLQ or MosCQ (< 3.0)	1

Name	Values
Total Packet Sent	22888719
Total Packet Received	22420853
Total Out Of Sequence Packet	0
Total Duplicate Packet	0
<hr/>	
Packet-Loss Stats	
Sessions with Packet-Loss(=0)	56632
Sessions with Packet-Loss(>=1 and <=50)	6057
Sessions with Packet-Loss(>=51 and <=100)	0
Sessions with Packet-Loss(>100)	1
Total PacketLoss	8440902
Percentage of Total Packet Loss	27
<hr/>	
Packet-Discarded Stats	
Sessions with Packet-Discarded(=0)	62884
Sessions with Packet-Discarded(>=1 and <=50)	0
Sessions with Packet-Discarded(>=51 and <=100)	0
Sessions with Packet-Discarded(>100)	1
Total PacketDiscarded	6242436
Percentage of Total Discarded Packet	27
<hr/>	

Voice Quality Statistics

The image shows two windows titled "User Defined Statistics - VoiceQualityStats". Both windows have a toolbar with icons for File, Folder, and Save, and buttons for "Add Tab" and "Delete Tab".

Top Window (MOS Score Stats Tab):

Name	Values
Sessions with MosLQ or MosCQ (>= 4.0)	56767
Sessions with MosLQ or MosCQ (< 4.0 && >= 3.5)	5759
Sessions with MosLQ or MosCQ (< 3.5 && >= 3.0)	298
Sessions with MosLQ or MosCQ (< 3.0)	1

Bottom Window (Packet Stats Tab):

Name	Values
Total Packet Sent	22888719
Total Packet Received	22420853
Total Out Of Sequence Packet	0
Total Duplicate Packet	0
-----	0
Packet-Loss Stats	0
-----	0
Sessions with Packet-Loss(=0)	56632
Sessions with Packet-Loss(>=1 and <=50)	6057
Sessions with Packet-Loss(>=51 and <=100)	0
Sessions with Packet-Loss(>100)	1
Total PacketLoss	8440902
Percentage of Total Packet Loss	27
-----	0
Packet-Discarded Stats	0
-----	0
Sessions with Packet-Discarded(=0)	62884
Sessions with Packet-Discarded(>=1 and <=50)	0
Sessions with Packet-Discarded(>=51 and <=100)	0
Sessions with Packet-Discarded(>100)	1
Total PacketDiscarded	6242436
Percentage of Total Discarded Packet	27
-----	0

THANK YOU