

MAPS[™] MEGACO (PKS122) Quick Verification Guide

If this is your First-Time-Use of MAPSTM Megaco application, then we recommend you to follow all the steps explained in MAPS- Megaco-Quick-Install-Guide to install MAPSTM Megaco application before proceeding with the steps below.

Verification

For functional verification of MAPSTM MEGACO user needs to have 3 PCs with single NIC or a single PC with 3 NIC ports. If you are using multiple PCs, MAPSTM MEGACO software and licenses must be installed on all PCs (perform this only if you have purchased multiple MAPSTM MEGACO products).

MAPSTM Megaco can be configured to simulate <u>**Trunking**</u> <u>**Gateway**</u> (**TGW**). While simulating TGW the call is initiated from the MAPSTM MGC towards MAPSTM MG1 and MAPSTM MG2 controlling the MGs.

The configuration explained below allows **MAPSTM MEGACO** application to act as **MGC** (Media Gateway Controller) as well as **MG** (Media Gateway) nodes.



MAPS[™] MEGACO configured as MGC

- Right-click on MAPS-MEGACO application shortcut icon created on the desktop and select 'Run as Administrator'.
- <u>Note:</u> The "Warranty Error" as shown in the figure may be prompted, when the user tries to start the testbed, either the Warranty licenses are not installed or the license is expired. Ensure that the warranty license
 (GLSupportWarrantyLicenseInstaller.exe) is installed and confirm that PKS122 (MAPS[™] H.248) is listed in Warranty Application List. Refer to MAPS-MEGACO-Quick-Install-Guide



Value

Serve

TGW

T1

aaln

2944

MG1

100

2945

MG2

100

40488629

TGW_Profiles.

RGW Profiles.xm

40488429

192.168.12.180

2

Config

MGC Configuration
 TransportType

🗏 MG

- MG 1

SCTP or TCP Node Type

Media Gateway Typ

TGW Interface Type

RGW Name Pattern

MG IP Addres

MG Name

MG 2

- RGW Configurations

MG IP Addres MG Port

MGC Por

MG Name

RGW Configurations

Starting Phone Numb

Number of Analog Line

Starting Phone Number

ing Gateway End User Configu

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- While invoking the second MAPS-MEGACO instance, verify the following in the Protocol Selection window
 - > Protocol Standard as MEGACO
 - Protocol Version as IETF
 - > Select Node as Media Gateway Controller
 - Click OK
- By default, **<u>Testbed Setup</u>** window is displayed.
- For MGC, click *m* and select the **TestBedDeault_TGW_MGC** configuration file.
- Verify and validate the following parameter settings as listed below:
 Set Transport Type as SCTP, it can be UDP*, TCP, or SCTP

*Note: If the Transport Type selected as UDP, ensure that proper UDP port numbers are specified.

- > Set SCTP or TCP Node Type to Server
- Set MGC IP to Source IP address of NIC #1 (for example, 192.168.12.75)
- > Set Media Gateway Type to Trunking Gateway
- Set MG1 IP address to Source IP address of NIC #2 (for example, 192.168.12.180)
- Set MG Port to 2944

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- Set MGC Port to 2944
- ➢ Set MG Name as "MG1"
- Set MG2 IP address to Source IP address of NIC #3 (for example, 192.168.12.133)
- ➢ Set MG Name as "MG2"
- Click on the Save button.
- Start the testbed setup on MGC instance.

MAPS[™] MEGACO configured as MG #1

- Right-click on MAPS-MEGACO application shortcut icon created on the desktop and select 'Run as Administrator'.
- <u>Note:</u> The "Warranty Error" as shown in the figure may be prompted, when the user tries to start the testbed, either the Warranty licenses are not installed or the license is expired. Ensure that the warranty license
 (GLSupportWarrantyLicenseInstaller.exe) is installed and confirm that PKS122 (MAPSTM H.248) is listed in Warranty Application List. Refer to MAPS-MEGACO-Quick-Install-Guide



- While invoking the first MAPS-MEGACO instance, verify the following in the Protocol Selection window -
 - Protocol Standard as MEGACO
 - Protocol Version as IETF
 - Select Node as Media Gateway
 - Click OK
- By default, <u>Testbed Setup</u> window is displayed. For MG1, click *m* and select the **TestBedDefault_TGW_MG1** configuration file.
- Verify and validate the following parameter settings as listed below:
 - Set Enable RTP Simulation = True
 - > Set **RTP** Hardware Interface Type = PC NIC
 - Set Media IP Address to Source IP address of NIC #2 (for example, 192.168.12.180)
 - Set Transport Type as **SCTP**, it can be UDP*, TCP, or SCTP

***Note:** If the Transport Type selected as UDP, ensure that proper UDP port numbers are specified.

- > Set SCTP or TCP Node Type to Client
- Set MG IP to Source IP address of NIC #2 (for example, 192.168.12.180)
- > Set **MG Port** to **2944**
- Set MGC IP to Source IP address of NIC #1 (for example, 192.168.12.75)
- Set MGC Port to 2944
- > Set Physical Termination Type to TGW
- Click on the Save button.

Config	Value							
MG Configuration								
 Enable RTP Simulation 	True							
 RTP Hardware Interface Type 	PC NIC							
Normal RTP Media Configuration								
L Media IP Address	192.168.12.133							
 TransportType 	SCTP							
 SCTP or TCP Node Type 	Client							
Physical Termination Type	TGW							
- MG	1							
L MG 1								
 MG IP Address 	192.168.12.133 2944 192.168.12.75							
– MG Port								
 MGC IP Address 								
– MGC Port	2944							
Physical Termination Parameters								
- TDM Configurations								
 TDM Termination Name 	Card/TS							
 Number of Cards 	2							
 Enable TDM Connection 	False							
 TDM InterfaceType 	T1							
 T1E1 WCS Server IP Address 	0.0.0.0							
T1E1 WCS Server Port	17090							
Analog Configurations								
 RGW Name Pattern 	aaln							
 Number of Analog Lines 	500							
Starting Phone Number	40488001							



MAPS[™] MEGACO configured as MG #2

- Right-click on MAPS-MEGACO application shortcut icon created on the desktop and select 'Run as Administrator'.
- <u>Note:</u> The "Warranty Error" as shown in the figure may be prompted, when the user tries to start the testbed, either the Warranty licenses are not installed or the license is expired. Ensure that the warranty license
 (GLSupportWarrantyLicenseInstaller.exe) is installed and confirm that PKS122 (MAPS[™] H.248) is listed in Warranty Application List. Refer to MAPS-MEGACO-Quick-Install-Guide



- While invoking the first MAPS-MEGACO instance, verify the following in the <u>Protocol Selection</u> window -
 - Protocol Standard as MEGACO
 - Protocol Version as IETF
 - Select Node as Media Gateway
 - Click OK
- By default, **Testbed Setup** window is displayed.
- For MG2, click and select the TestBedDefault_TGW_MG2 configuration file.
- Verify and validate the following parameter settings as listed below:
 - Set Enable RTP Simulation = True
 - Set RTP Hardware Interface Type = PC NIC
 - Set Media IP Address to Source IP address of NIC #3 (for example, 192.168.12.133)
 - Set TransportType as SCTP, it can be UDP*, TCP, or SCTP

*Note: If the Transport Type selected as UDP, ensure that proper UDP port numbers are specified.

- > Set SCTP or TCP Node Type to Client
- Set MG IP to Source IP address of NIC #3 (for example, 192.168.12.133)
- > Set MG Port to 2944
- Set MGC IP to Source IP address of NIC #1 (for example, 192.168.12.75)
- > Set MGC Port to 2944
- > Set Physical Termination Type to TGW
- Click on the Save button.



• Now, start Testbed Setup on both MG1 and MG2. Once all the instances are started, on MGC main window (first instance) go to Link Status under Report menu and observe that Link Status is "UP" in all 3 instances.

3		Link Status		-	×
SCTP Connection	Connection ID	Source IP	SourcePort	Destination IP	
UP UP	1028	192.168.12.75	2944	192.168.12.180	
UP UP	1029	192.168.12.75	2944	192.168.12.133	



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Trunking Gateway (TGW) - Call Simulation from MGC to TGW1 and TGW2

- From the MAPS-MEGACO (MGC) main window, click the *Call Generation* icon and invoke the *Call Generation* window.
- By default, you will observe call instances loaded with **MGCController.gls** script and **TGW** profile displayed in the Call Generation window. <u>Note:</u> If by default the profiles are not loaded in the call instances, then the user should manually double-click the field in the Profiles column and select the configured profile from the list.
- Select the call instance and click **Start** button to execute the script.

MAPS (Me	essage Automation Protoc	ol Simulation) Me	edia Gateway Contro	oller (MEGACO IETF) - [Cal	Generation - CallGenD	efault]	-	a ×
<u>Configurations</u> Emulator <u>R</u> eports <u>E</u> ditor	Debug Tools Windows Hel	p						- 6 >
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Sr No Script Name	Profile Call I	nfo	Script Execution	Status	Events	Events Profile	Result	Total Ite 🔺
1 MGCController.gls	TGW	1013	Start	Subtract Request	None		Pass	=
2 MGCController.gls	TGW		Start		None		Unknown	•
X								,
Add Delete Insert Refresh Start	Start All Stop Stop Al	Abort Abort Al	I					
Save Column Width	Show Latest							
MGC M	v 10	62	^	Find				
Add Add Reply Add Modity Modity Reply Modity Reply Subtract Subtract Subtract Subtract Subtract	15.27.22.43000 15.27.22.51200 45 15.27.22.787000 15.27.22.78000 46 15.27.22.78000 47 15.28.12.81600 15.28.12.81600 15.28.12.83400 48 15.28.12.83400 48 15.28.12.834000 15.28.12.834000 15.28.12.834000 15.28.12.834000 15.28	15 27 22 612000 15 27 22 786000 15 27 22 786000 15 27 22 806000 15 28 12 836000 15 28 12 836000		<pre>mail</pre>				

MGC Call Generation

- On the MAPS-MEGACO MG1 and MG2 main window, click *Call Reception* icon and observe that the calls are being received running the **ContextHandler.gls** answer scripts.
- Once call gets terminated, verify the **Message Sequence Flow** by selecting the call objects at both generation and reception end.

MAPS (Message Automation Protocol Simulation) Media Gateway (MEGACO IETF)												
<u>C</u> onfigurati	ons E <u>m</u> ulato	r <u>R</u> eports	Editor <u>D</u> ebu	ug Tools	$\underline{W} indows$	<u>H</u> elp						
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2	8						Ca	all Re	ception			_ □ ×
Config MG	St No 1 2 3 4 C Stop Stop	Script Name Check_L InitiateSer RTP_Sitz Contex Stop All Column V MGC	ink_Status.gls iriceHandler.gls LDisplay.gls Handler.gls Abort Ab Vidth Add Add Reply Modify Repp Subtract Subtract Re	ort All [v	e Show Reco Show I 15:27:22. 15:27:22. 15:27:22. 15:27:22. 15:28:12.0 15:28:12.0	III rds Latest 599000 599000 790000 321000 323000	Select A	Active	IInio Cxild, RTP/IC Call Auto Trash	Trash MEGACO/1 Transact { Context 0 { Media { LocalCon Mode = S }, Modify = Media {	Script Execution Stop Completed Stop Completed Find [192.168.12.75]:294 ion = 21 = 28 Card2/TS1 trol { endReceive} RTP/1026 {	Status Connection-Up Service Change Reply Received Subtract Reply >
										LocalCon Mode = S	trol { endReceive},	

MG Call Reception

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