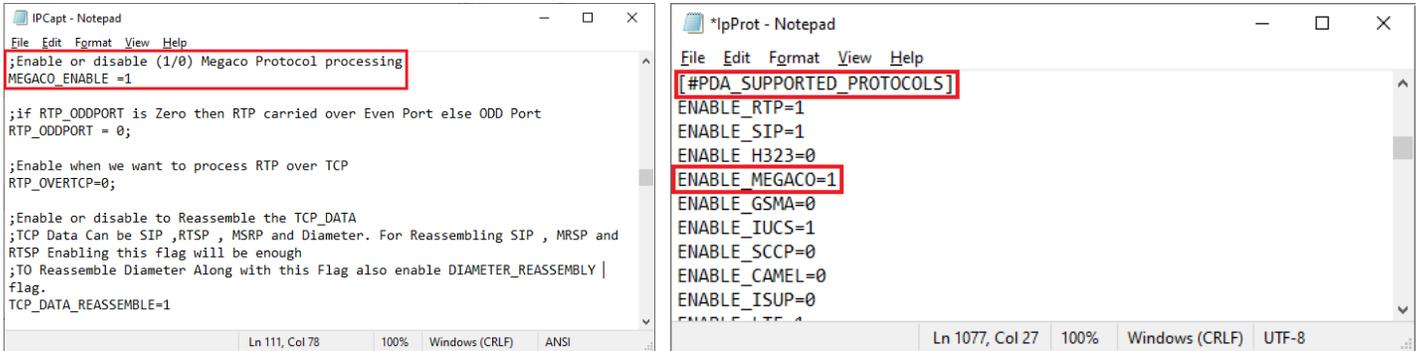


It is assumed that the PacketScan™ Analyzer Software and License installations (PKV100) are already performed referring to the Software Quick Installation Guide (PacketScan-Quick-Install-Guide.pdf). Now proceed with the verification steps below for capturing and analyzing MEGACO protocol.

Pre-Requisite

Users need to configure the **IpProt.ini** and **IPCapt.ini** files from the following path “C:\Program Files\GL Communications Inc\PacketScan”. Set the **MEGACO_Enable** parameter value to ‘1’ in the IPCapt.ini. Similarly, set the **ENABLE_MEGACO** parameter value to ‘1’ in the IpProt.ini file. Save the changes and close the files. Refer to the below screenshot.



Note:

Make sure that the PacketScan™ installation directory has full control permission to save the *.ini files. Follow the below steps to provide write permission for the **PacketScan** directory.

- Go to " C:\Program Files\GL Communications Inc"
- Right click on the “PacketScan” folder and select **Properties**
- Click on **Security** tab and click **Edit** from explorer menu
- Click **Add** in the Permission window
- Type ‘**Everyone**’ and click ‘**Check Names**’. Click **OK** to add this user group to Permissions Window
- Provide full control to the users added and click on **Apply** and **OK**.

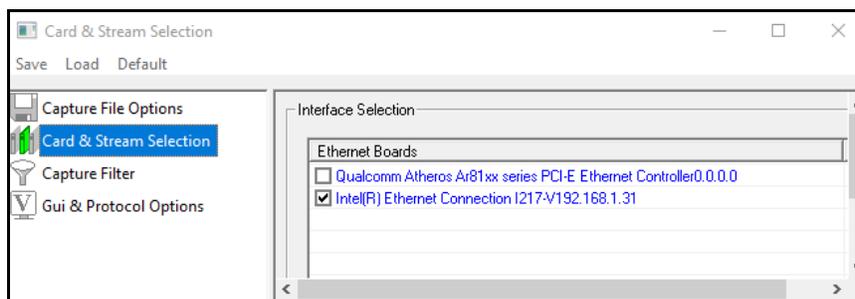
Verification



- Double click on the **PacketScan™** shortcut icon created on the desktop to launch the application.

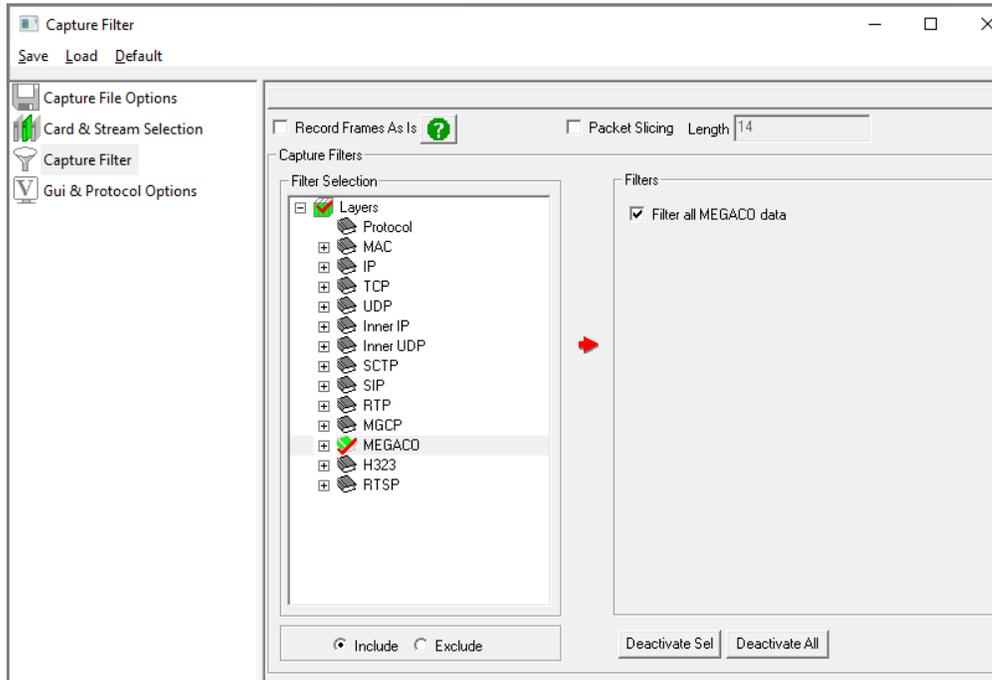
Follow the steps below for functional verification of PacketScan™ **Real-time** analysis feature.

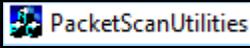
- Select **Capture → Stream/Interface Selection** and enable the Ethernet card on which packet needs to be captured.



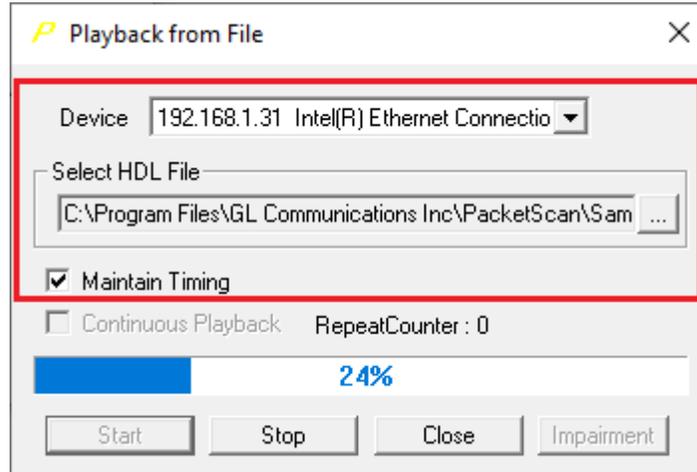
- On the left pane, select **Capture File Options** and verify that **Circular Capture Buffer** is checked.

- Now, on the left pane, select **Capture Filter** option, click on **MEGACO** in the Filter Selection and check **Filter all MEGACO data**. Do not activate any other filters in the **Capture Filter**. After Filter configuration, close the window.

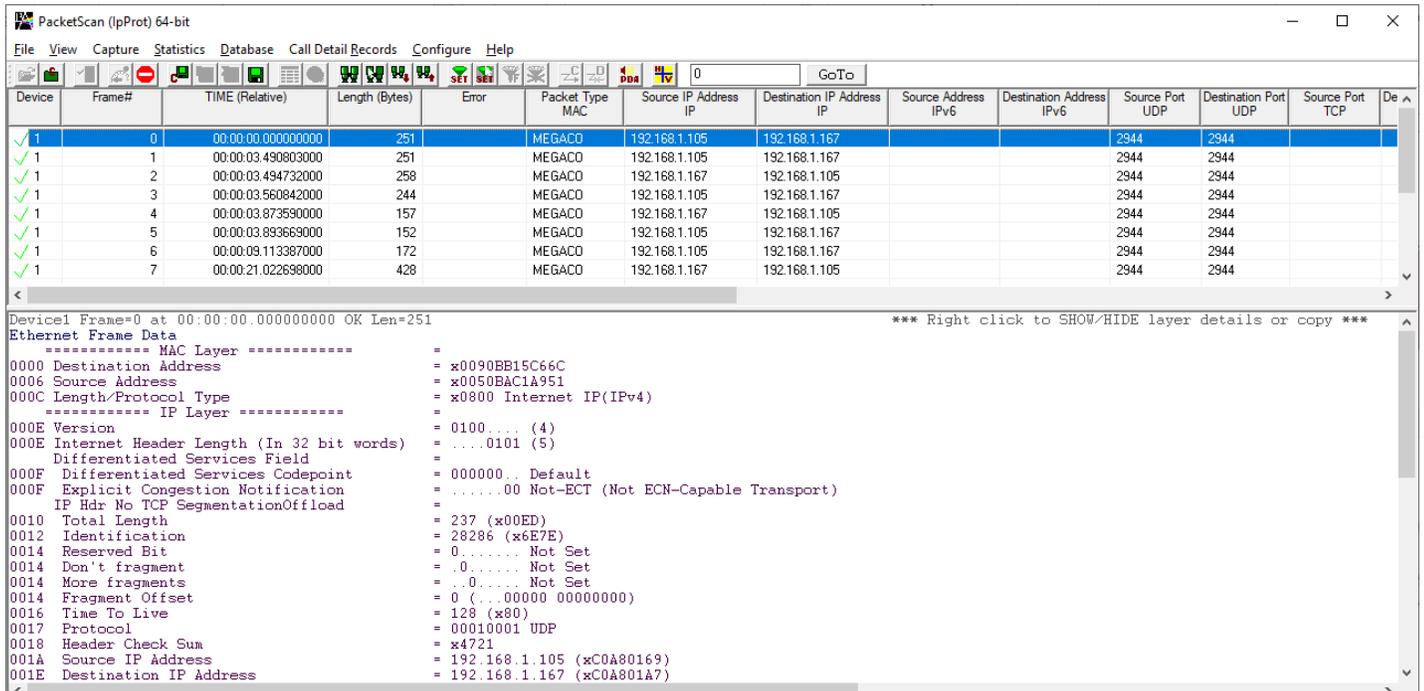


- From the **PacketScan™** main menu, select **File** → **Start Real-time** or click **Start Real-time**  icon from the toolbar.
- If the **Temp.hdl** file already exists in the PacketScan installation directory, a warning message will appear to replace Temp.hdl file, click **Yes** to overwrite the file.
- Generate traffic by playing HDL file using **PacketScanUtilities** application. From the PacketScan installation directory (**C:\Program Files\GL Communications Inc\PacketScan**) double-click on  application. This will invoke PacketScan Utility application.

- Select **Utilities** → **HDL Playback** from the menu.
- In the **Device** option select NIC card on which PacketScan™ Real-time capture is configured. **Note:** Ensure that selected NIC card is enabled in PacketScan™ under **Capture** → **Stream/Interface Selection**.
- In the **Select HDL File** option click on browse button to browse and select **CC:\Program Files\GL Communications Inc\PacketScan\SampleTraces\Megaco\Megaco.hdl** file from the PacketScan installation directory.
- Enable **Maintain Timing** option and click **Start**.



- Observe the **MEGACO** decodes displayed in PacketScan™ analyzer summary and detail views.

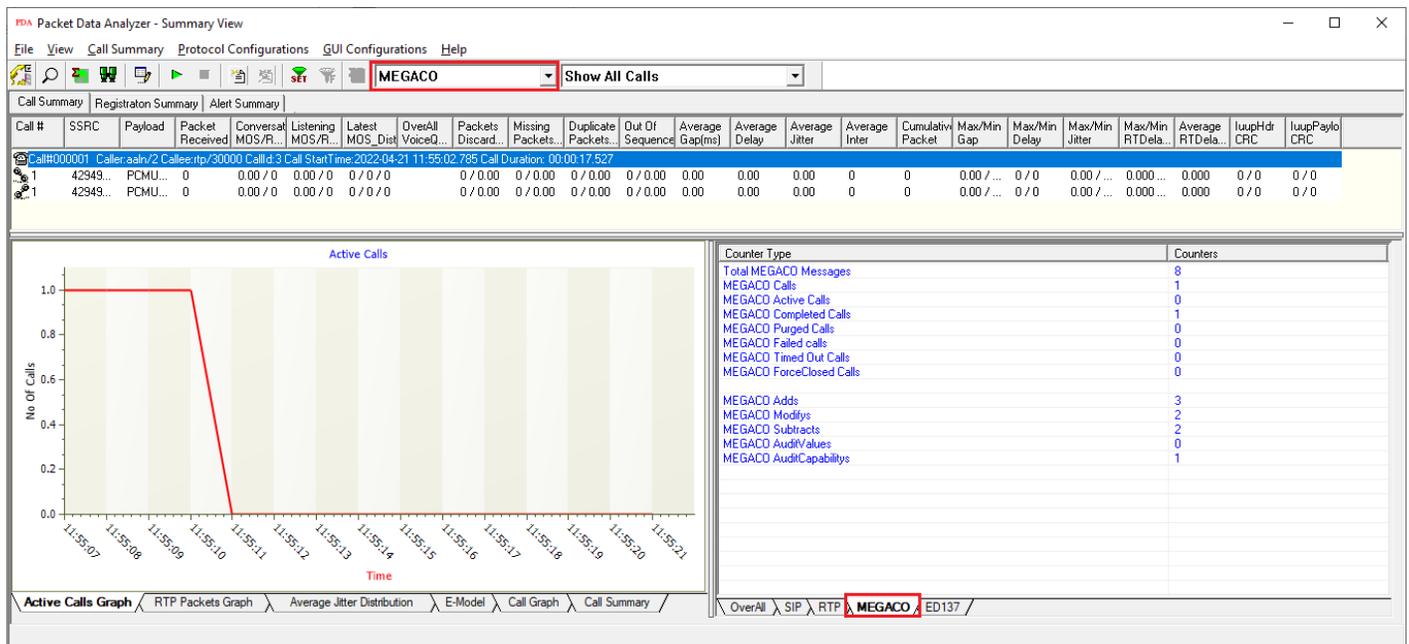
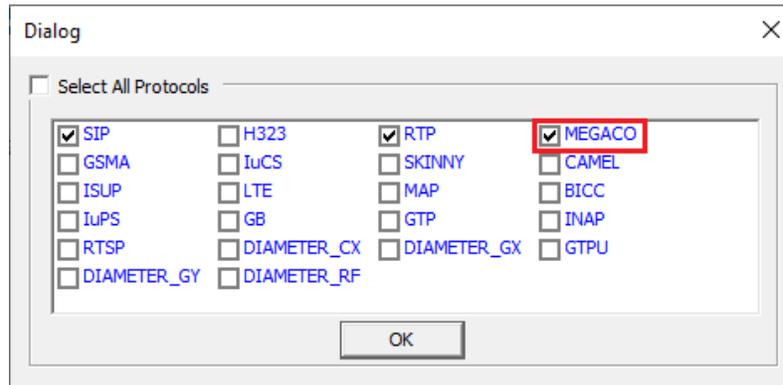


Device	Frame#	TIME (Relative)	Length (Bytes)	Error	Packet Type MAC	Source IP Address IP	Destination IP Address IP	Source Address IPv6	Destination Address IPv6	Source Port UDP	Destination Port UDP	Source Port TCP	De ^
✓ 1	0	00:00:00.000000000	251		MEGACO	192.168.1.105	192.168.1.167			2944	2944		
✓ 1	1	00:00:03.490803000	251		MEGACO	192.168.1.105	192.168.1.167			2944	2944		
✓ 1	2	00:00:03.494732000	258		MEGACO	192.168.1.167	192.168.1.105			2944	2944		
✓ 1	3	00:00:03.560842000	244		MEGACO	192.168.1.105	192.168.1.167			2944	2944		
✓ 1	4	00:00:03.873590000	157		MEGACO	192.168.1.167	192.168.1.105			2944	2944		
✓ 1	5	00:00:03.893693000	152		MEGACO	192.168.1.105	192.168.1.167			2944	2944		
✓ 1	6	00:00:03.113387000	172		MEGACO	192.168.1.105	192.168.1.167			2944	2944		
✓ 1	7	00:00:21.022698000	428		MEGACO	192.168.1.167	192.168.1.105			2944	2944		

```

Device1 Frame=0 at 00:00:00.000000000 OK Len=251
Ethernet Frame Data
***** MAC Layer *****
0000 Destination Address = x0090BB15C66C
0006 Source Address = x0050BAC1A951
000C Length/Protocol Type = x0800 Internet IP(IPv4)
***** IP Layer *****
000E Version = 0100... (4)
000E Internet Header Length (In 32 bit words) = ...0101 (5)
Differentiated Services Field
000F Differentiated Services Codepoint = 000000.. Default
000F Explicit Congestion Notification = .....00 Not-ECT (Not ECN-Capable Transport)
IP Hdr No TCP SegmentationOffload =
0010 Total Length = 237 (x00ED)
0012 Identification = 28286 (x6E7E)
0014 Reserved Bit = 0..... Not Set
0014 Don't fragment = .0..... Not Set
0014 More fragments = .0..... Not Set
0014 Fragment Offset = 0 (...00000 00000000)
0016 Time To Live = 128 (x80)
0017 Protocol = 00010001 UDP
0018 Header Check Sum = x4721
001A Source IP Address = 192.168.1.105 (xC0A80169)
001E Destination IP Address = 192.168.1.167 (xC0A801A7)
  
```

- From the **PacketScan™** main toolbar, click on the **PDA** icon  to invoke PDA (Packet Data Analyzer), from the drop-down protocol list select **MEGACO** to view detail analysis of each session, call graphs and quality scores for the captured **MEGACO** Traffic.
- On PDA, Under GUI Configurations menu, make sure that **Show New CDR Summary View** option is unchecked.
- Select **GUI Configurations** → **Protocol Statistics Display Configuration** this will display **Dialog** window. Check the **MEGACO** option to view the MEGACO counters on PDA. Refer to the below screenshots.



Note:

If you are unable to view the real-time decodes, verify if the Windows® Firewall is enabled. You should **Turn off Windows Firewall** on Windows® and on any 3rd party Anti-Virus software that may be installed on the PC to make sure that Firewall is not blocking any packets or frames.