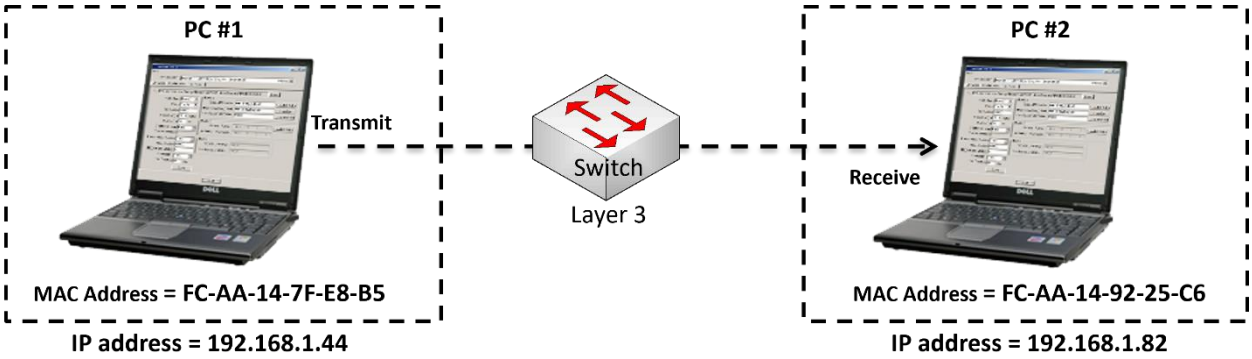
If this is the first-time use of PacketCheck™ application, then it is recommended to follow all the steps explained in PacketCheck-Quick-Install-Guide before proceeding with the application verification steps below.

Quick Verification

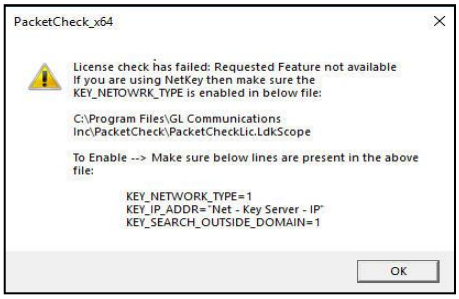
Functional verification requires two systems with PacketCheck™ and required licenses installed on each PC and are connected in the LAN through a switch for Layer 3 testing using an Ethernet cable. The two systems should have IP addresses assigned. For example, refer to the below setup diagram.



- Invoke PacketCheck™ application on both PC #1 and PC #2. Double click on the ***PacketCheck*** shortcut icon  created on the desktop.

Note:

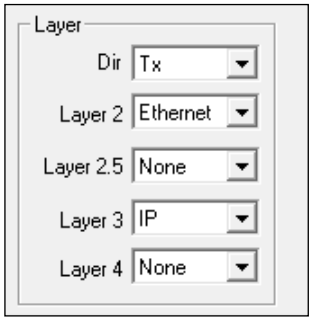
- The following error message window is prompted if the warranty license is not installed. For the installation of warranty licenses, refer to **PacketCheck-Quick-Install-Guide**. If the warranty license has expired, please contact GL Communications for warranty renewal.



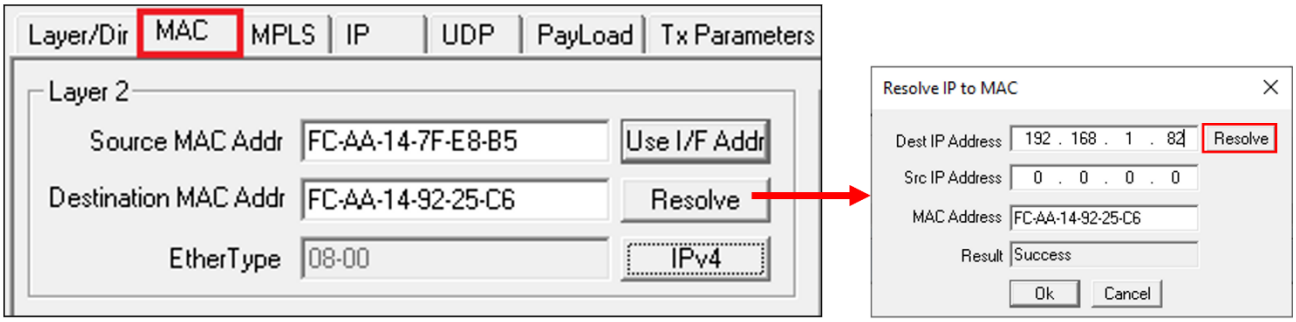
- On both the PCs, start PacketCheck™ application in **Normal** mode.

PC #1

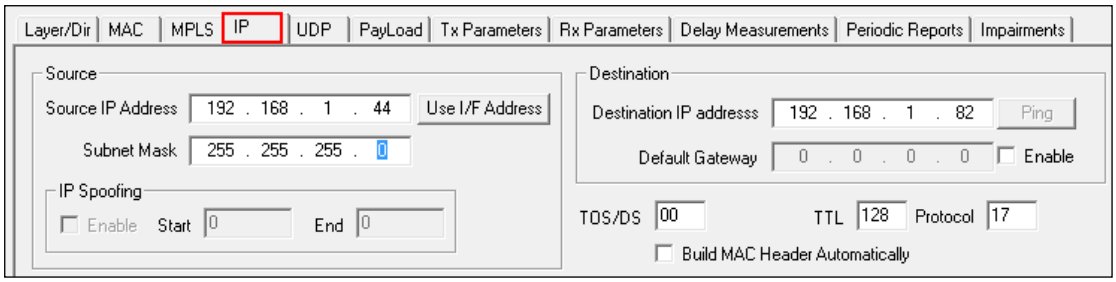
- On PC #1, click the **Add** button to add a stream and enter the **Stream Name**. For example, **Stream1**.
- Configure the added stream with following parameters: **Layer, MAC, IP, Payload**, and **Tx Parameters**. For sample configuration of these parameters refer to the below screenshot.
- In **Layer** tab, configure the values as shown below.



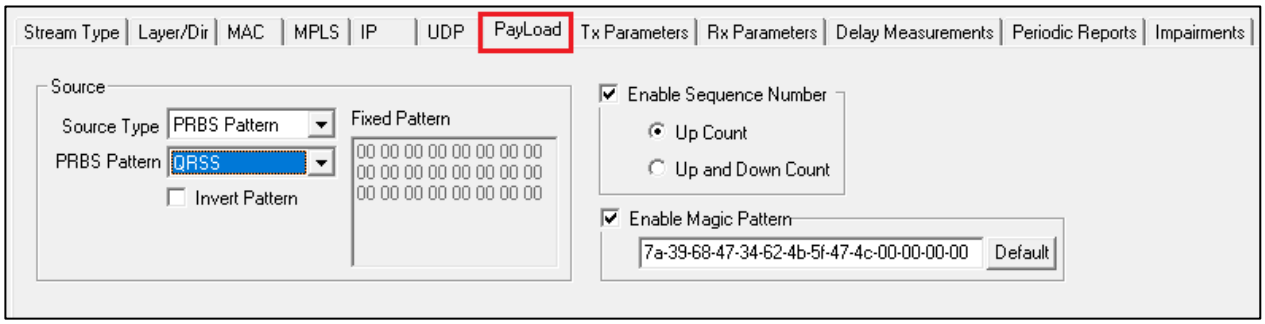
- In **MAC** tab, click the **Use I/F Addr** button to detect the **Source MAC** address (PC #1) and click the **Resolve** button to detect the **Destination MAC** address by entering the **IP address** of **PC #2**.
- Click the **User defined** button and select **IPv4**.



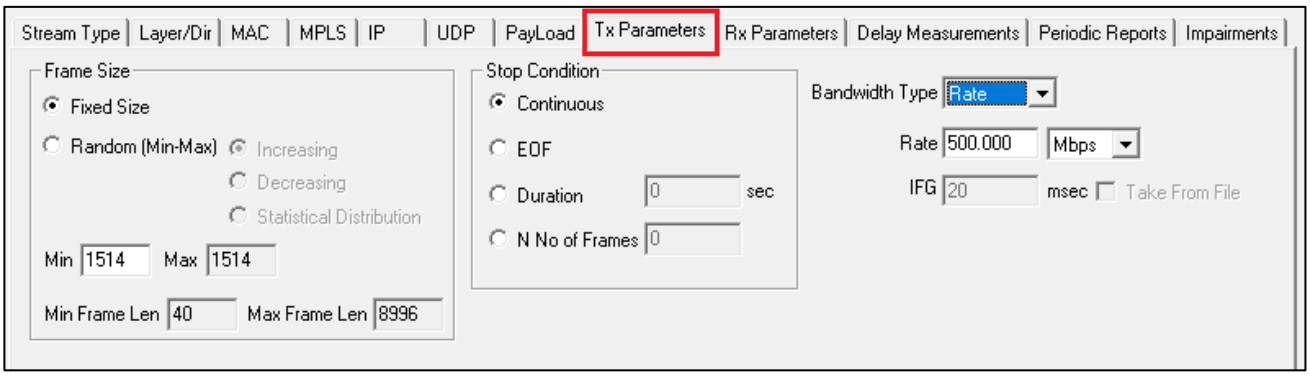
- In **IP** tab, click the **Use I/F Address** button to detect the **IP address** automatically and enter the required **Destination IP address** (PC #2 IP Address).



- In **PayLoad** tab, verify the parameters as shown below.

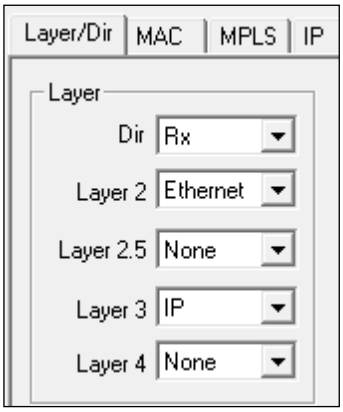


- In **Tx Parameter** tab, verify the parameters as shown below.

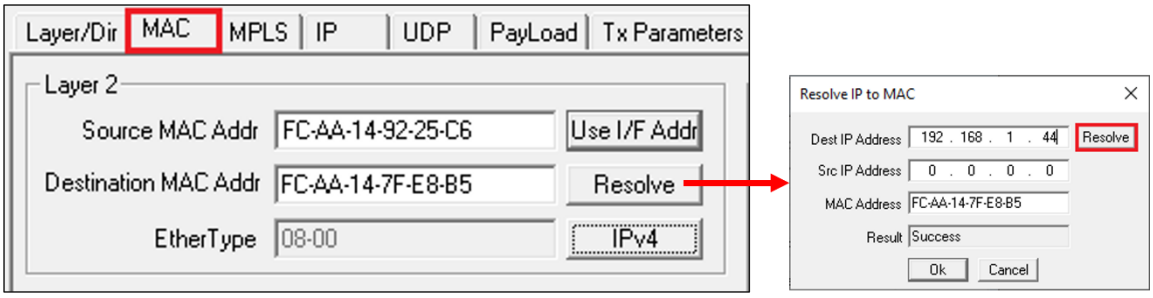


PC #2

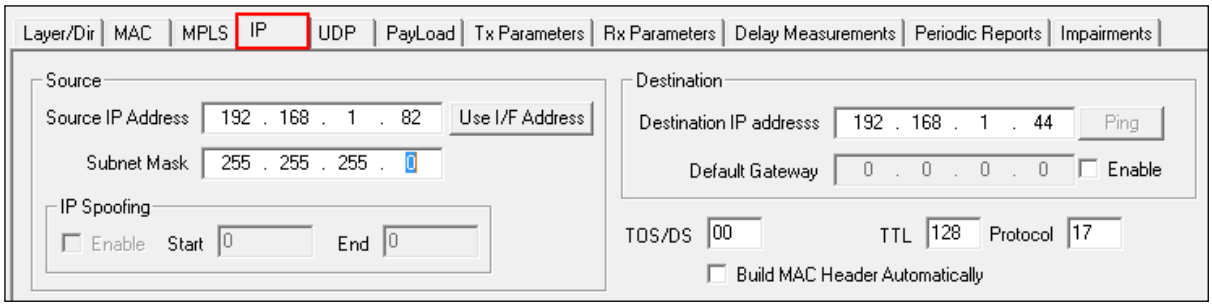
- On PC #2, click the **Add** button to add a stream and enter the **Stream Name**. For example, **Stream1**.
- Configure the added stream with following parameters: **Layer, MAC, IP, Payload** and **Rx Parameters** as shown in the below screenshot.
- In **Layer** tab, configure the values as shown below.



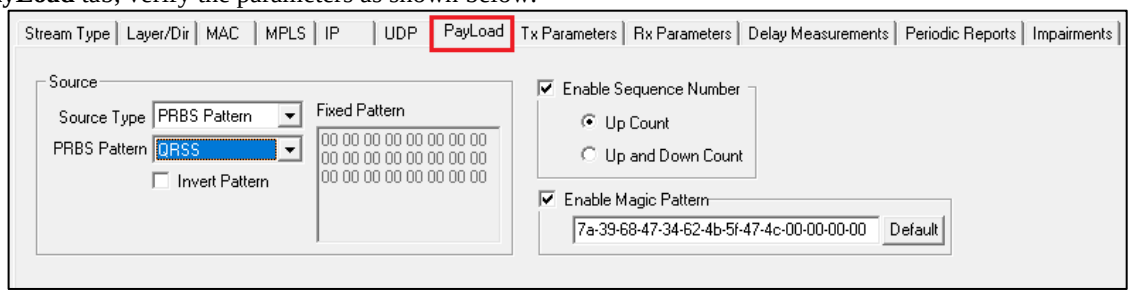
- In **MAC** tab, click the **Use I/F Addr** button to detect the **Source MAC** address (PC #2) and click the **Resolve** button to detect the **Destination MAC** address by entering the **IP address** of PC #1.
- Click the **User defined** button and select **IPv4**.



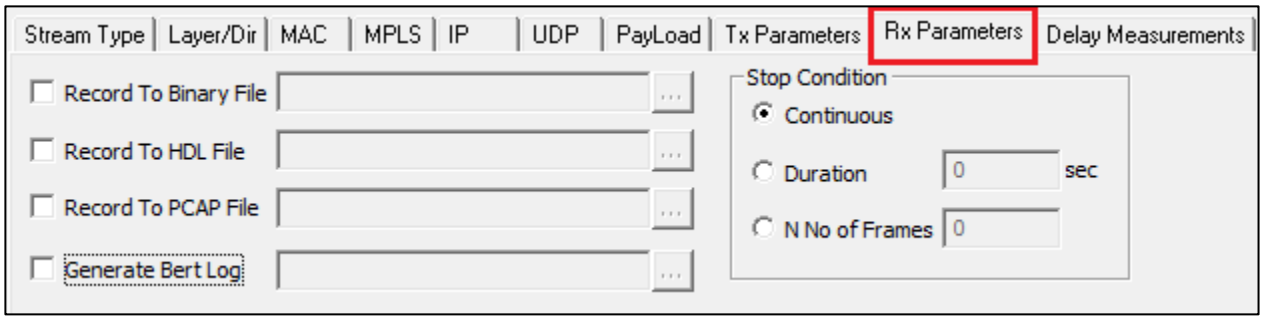
- In **IP** tab, click the **Use I/F Address** button to detect the **IP address** automatically and enter the required **Destination IP address** (PC #1 IP Address).



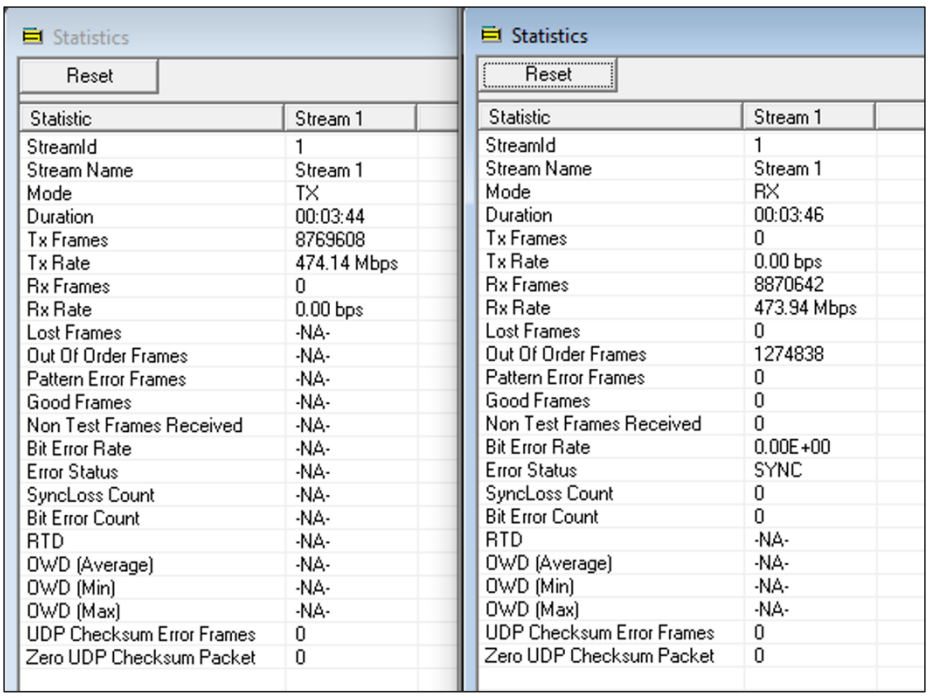
- In **PayLoad** tab, verify the parameters as shown below.



- In **Rx Parameter** tab, verify the parameters as shown below.



- On **PC #2,** click the **Start** button to start the **Stream1** on Rx.
- On **PC #1,** click the **Start** button to start the **Stream1** on Tx.
- Observe the Tx and Rx statistics on PC #1 and PC #2 as shown below.



Statistics

Reset

Statistic	Stream 1
StreamId	1
Stream Name	Stream 1
Mode	TX
Duration	00:03:44
Tx Frames	8769608
Tx Rate	474.14 Mbps
Rx Frames	0
Rx Rate	0.00 bps
Lost Frames	-NA-
Out Of Order Frames	-NA-
Pattern Error Frames	-NA-
Good Frames	-NA-
Non Test Frames Received	-NA-
Bit Error Rate	-NA-
Error Status	-NA-
SyncLoss Count	-NA-
Bit Error Count	-NA-
RTD	-NA-
OWD (Average)	-NA-
OWD (Min)	-NA-
OWD (Max)	-NA-
UDP Checksum Error Frames	0
Zero UDP Checksum Packet	0

Statistics

Reset

Statistic	Stream 1
StreamId	1
Stream Name	Stream 1
Mode	RX
Duration	00:03:46
Tx Frames	0
Tx Rate	0.00 bps
Rx Frames	8870642
Rx Rate	473.94 Mbps
Lost Frames	0
Out Of Order Frames	1274838
Pattern Error Frames	0
Good Frames	0
Non Test Frames Received	0
Bit Error Rate	0.00E+00
Error Status	SYNC
SyncLoss Count	0
Bit Error Count	0
RTD	-NA-
OWD (Average)	-NA-
OWD (Min)	-NA-
OWD (Max)	-NA-
UDP Checksum Error Frames	0
Zero UDP Checksum Packet	0

Tx Statistics on PC #1 **Rx Statistics on PC #2**

- Observe that **Tx** and **Rx** rates are approximately the same. On **PC #2**, observe that **Bit Error Rate** is **0** and **Error Status** is showing as **SYNC**.

Troubleshoot

- Reasons why the **Verification Step** might fail are various:
  - Intermittent Frame Errors or Bit Errors generally indicate faulty equipment, either due to the Ethernet cable, the NICs or both.
  - Complete failure to SYNC could be a configuration issue, please review the settings. It could also be due to firewalls or other forms of security software. Please disable any security software if possible and try again.
- If the users cannot resolve the issues, please contact GL Communications at info@gl.com for technical support.