

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

Quick Checkout Procedure

Functional verification of MAPS-SIGTRAN application requires a system with 2 NIC cards for testing. MAPS-SIGTRAN is configured as **Client** node on one NIC and as **Server** node on the other.

Note down the IP address of NIC1 and NIC2, in this example the IP addresses used and configured are:

- NIC1 IP address is 192.xx.xx.239, and configured as **Client**
- NIC2 IP address is 192.xx.xx.163, and configured as **Server**

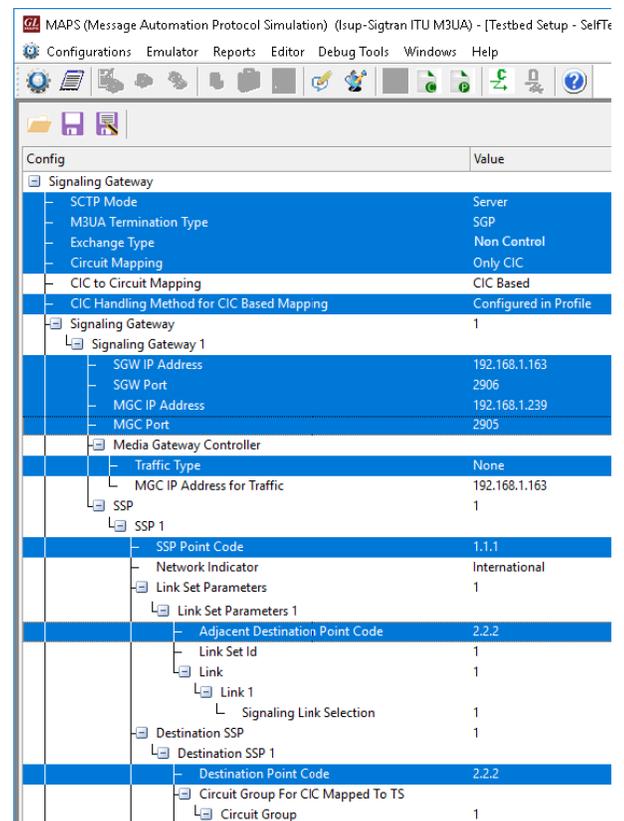
***Note:** In this test scenario, we have configured MAPS™ SIGTRAN as Client node generating calls and Server node to receive calls.

MAPS™ SS7 SIGTRAN (Server)

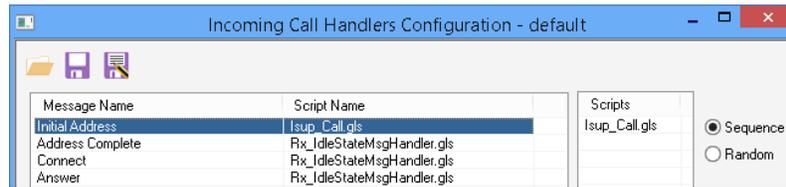
- Double-click on the **MAPS-SS7 SIGTRAN** application shortcut icon created on the desktop and invoke the application. This instance of MAPS™ is configured for **Call Reception**.
- While invoking the MAPS™ SS7 SIGTRAN (Server) instance, verify the following in the Protocol Selection window -
 - Select Protocol Standard as **Isup-Sigtran**
 - Protocol Version as **ITU**.
 - Select **Transport** as **M3UA** and click **OK**.

- By default, **Testbed Setup** window is displayed. Click on  icon, select **SelfTest_Server** and click on **OK**. Check for the parameter default values as listed below:

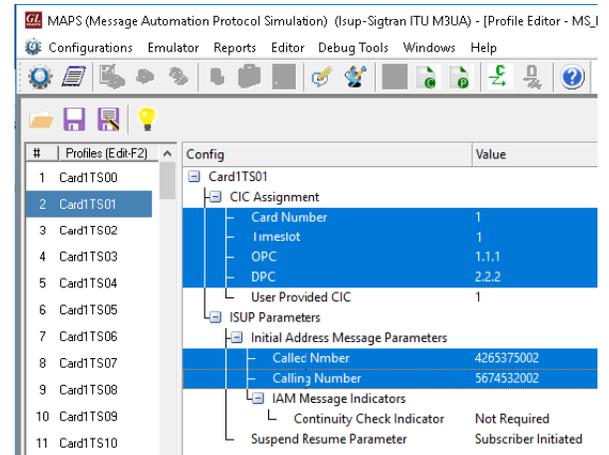
- Verify that the **SCTP Mode** is set to **Server**;
- **M3UA Termination Type** is set to **SGP** (maintain Server association);
- **Exchange Type** is set to **Non-Control**;
- Set the **SGW IP address** to NIC2 IP address (192.xx.xx.163)
- Set **MGC IP Address** to NIC1 IP address (192.xx.xx.239)
- Verify that the **SGW Port** is set to **2906** and **MGC Port** is set to **2905**.
- SSP Point Code = 1.1.1 and Adjacent Destination Point Code = 2.2.2
- Destination Point Code = 2.2.2
- Circuit Group 1 → Port Number = 1
- Click  **Save** to save the configuration.



- On the same MAPS™ SS7 SIGTRAN (Server) main window, select **Configuration → Incoming Call Handlers Configuration**. Verify that the **Isup_Call.gls** script is loaded against the **Initial Address** message. Close the window.

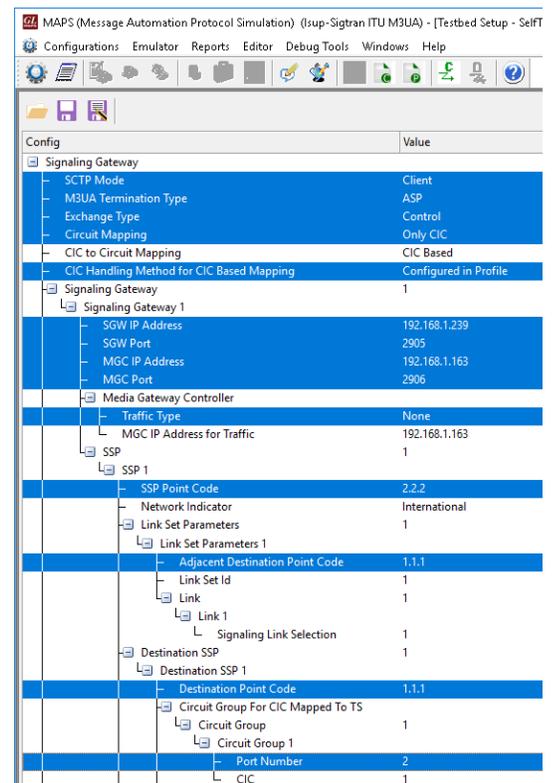


- From MAPS™ main window, select **Editor → Profile Editor**. Click on  icon, select **MS_Profiles** and click on **OK**. From the left pane, choose **Card1TS01** profile. Verify the following settings:
 - Card Number = 1; Timeslot = 1
 - OPC= 1.1.1; DPC= 2.2.2 [Note: Same as the settings in the Testbed Setup window]
 - Click  **Save** button and exit from the Profile Editor window.

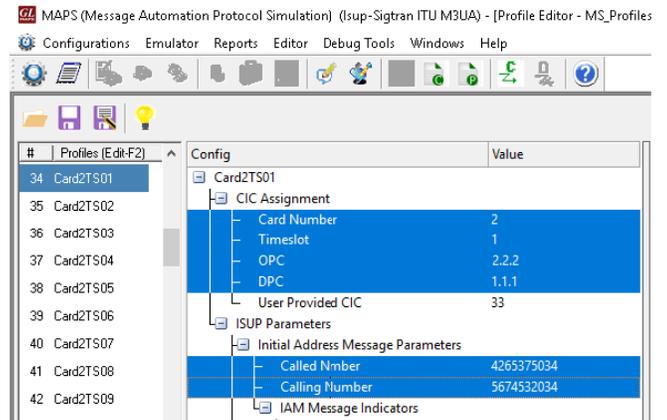


MAPS™ SS7 SIGTRAN (Client)

- To invoke second instance of MAPS™ SS7 SIGTRAN, double-click on the MAPS-SS7SIGTRAN application shortcut icon created on the desktop. This instance of MAPS™ is configured for **Call Generation**.
- While invoking the second MAPS™ **Isup-Sigtran** instance, verify the following in the **Protocol Selection** window -
 - Protocol Standard = **Isup-Sigtran**
 - Protocol Version = **ITU**.
 - **Transport = M3UA** and click **OK**.
- By default, **Testbed Setup** window is displayed. Click on  icon and select **SelfTest_Client** configuration check for the parameter default values as listed below:
 - Verify that the **SCTP Mode** is set to **Client**;
 - **M3UA Termination Type** is set to **ASP** (maintain Client association);
 - **Exchange Type** is set to **Control**;
 - Set the **SGW IP address** to NIC1 IP address (192.xx.xx.239)
 - Set **MGC IP Address** to NIC2 IP address (192.xx.xx.163)
 - Verify that the **SGW Port** is set to **2905** and **MGC Port** is set to **2906**.
 - SSP Point Code = 2.2.2 and Adjacent Destination Point Code = 1.1.1
 - Destination Point Code = 1.1.1
 - Circuit Group 1 → Port Number = 2
 - Click  **Save** button.



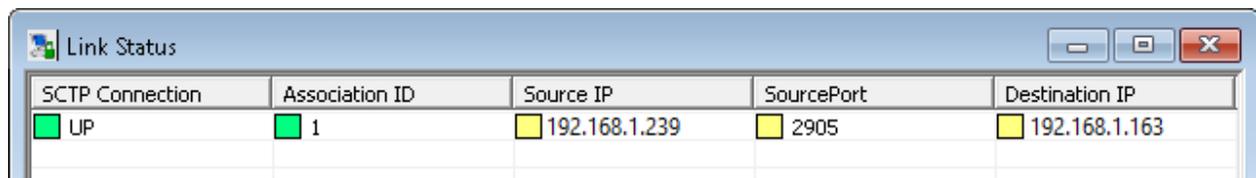
- From MAPS™ main window, select **Editor** → **Profile Editor**. Click on  icon, select **MS_Profiles** and click on **OK**. Scroll-down the left pane and choose **Card2TS01** profile. Verify the following settings:
 - Card Number = 2; Timeslot = 1
 - OPC= 2.2.2; DPC = 1.1.1 [**Note:** Same as the settings in the Testbed Setup window]
 - Click  **Save** button. Exit from the Profile Editor window.
- Start** the testbed on both the MAPS™ instances.



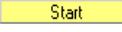
- Note:** The "Warranty Error" as shown in the figure may be prompted, while starting the testbed, if the Warranty licenses are not installed or the license is expired.
- Note:** Ensure that latest warranty license (GLSupportWarrantyLicenseInstaller.exe) is installed and confirm that PKS130 (MAPS™ SIGTRAN) is listed in Warranty Application List. Refer to MAPS-SIGTRAN -Quick-Install-Guide



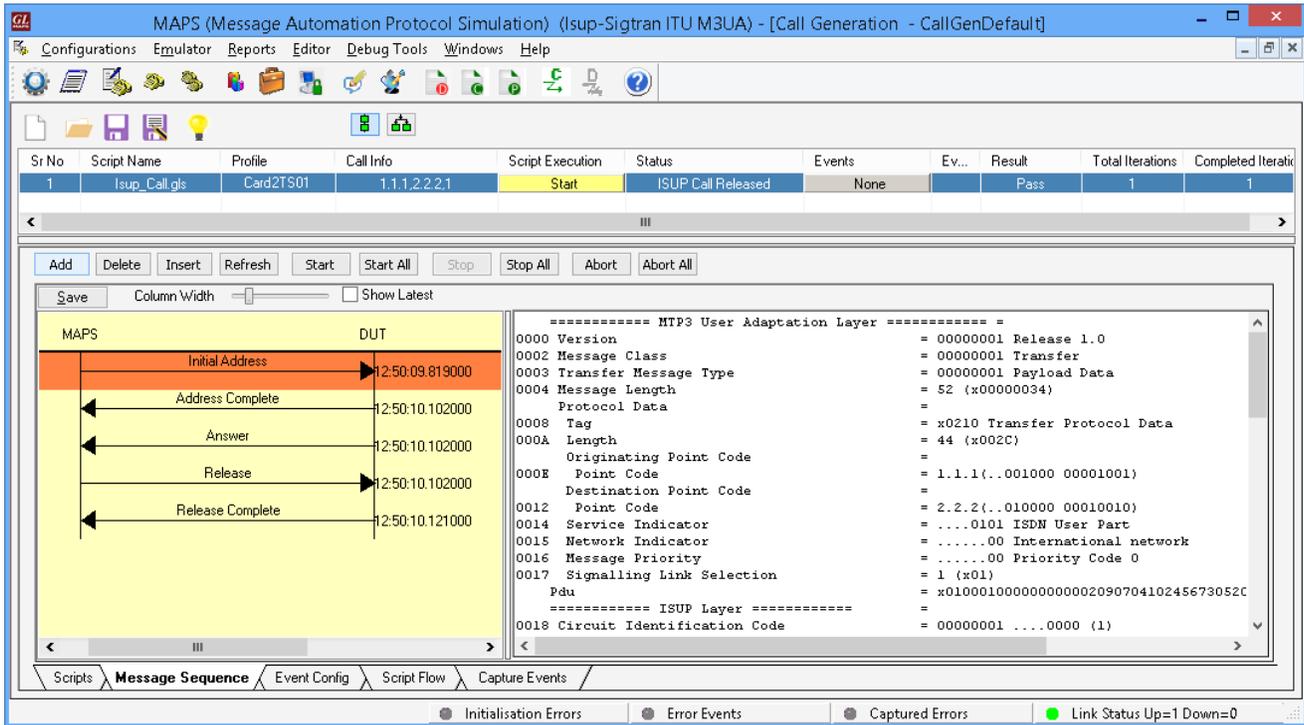
- On both the MAPS™ instances main window, from **Reports** menu → select **Link Status** option to verify the link status. Verify that the **SCTP Link** Status is **UP** (indicated in Green color) before placing the call. Refer to **Troubleshoot** section explained in MAPS™ ISUP Sigtran Quick Install Guide.



SCTP Connection	Association ID	Source IP	SourcePort	Destination IP
 UP	 1	 192.168.1.239	 2905	 192.168.1.163

- On both instances of MAPS- SS7SIGTRAN (Server and Client) main window, click **Call Reception**  icon and check the option **Show Records** to see the records on the **Call Reception** window. Observe that the **Check_SCTP_Status.gls** script is activated.
- On the MAPS- SS7SIGTRAN (Client) instance, select **Configurations** → **Performance Options** and ensure that **Message Sequence** option is checked.
- In the MAPS- SS7SIGTRAN (Client) instance, click the **Call Generation**  icon on main window, and invoke the **Call Generation** window.
- By default, a call instance loaded with **Isup_Call.gls** script is displayed in the window. Double-click the area in the Profile column and select the **Card2TS01** profile from the drop-down list. Click  button to start the call generation.
- Wait for the calls to terminate and verify the call flow under the **Message Sequence** tab at both generation and reception end.

- Select any message in the ladder diagram and observe the respective decode message on the right pane for the respective message.



Sr No	Script Name	Profile	Call Info	Script Execution	Status	Events	Ev...	Result	Total Iterations	Completed Iterati
1	Isup_Call.gls	Card2TS01	1.1.1.2.2.2.1	Start	ISUP Call Released	None		Pass	1	1

```

===== MTP3 User Adaptation Layer =====
0000 Version = 00000001 Release 1.0
0002 Message Class = 00000001 Transfer
0003 Transfer Message Type = 00000001 Payload Data
0004 Message Length = 52 (x00000034)
      Protocol Data
0008 Tag = x0210 Transfer Protocol Data
000A Length = 44 (x002C)
      Originating Point Code
000E Point Code = 1.1.1(..001000 0001001)
      Destination Point Code
0012 Point Code = 2.2.2(..010000 00010010)
0014 Service Indicator = ....0101 ISDN User Part
0015 Network Indicator = .....00 International network
0016 Message Priority = .....00 Priority Code 0
0017 Signalling Link Selection = 1 (x01)
      Pdu
===== ISUP Layer =====
0018 Circuit Identification Code = 00000001 ....0000 (1)
  
```

- On the *Call Reception* window, check the **Auto Trash** option to clear the window and to verify the active calls automatically being received running the Rx script.