

Software and License Installation

START WITH DONGLE UNPLUGGED FROM MACHINE

- Run `.\Dongle License Installer\GLDongleLicenseInstaller_x86.exe` (or `GLDongleLicenseInstaller_x64.exe` for MAPS™ 64-bit installers) from the installation CD provided by GL Communications Inc.
- Plug the dongle to the USB 2.0 port of your computer. Windows® should install all required drivers automatically. A red light should appear on the dongle indicating that it is functioning correctly from a physical point of view.
- Run `appl_list.exe` available in the `C:\Program Files(x86)\GL Communications Inc\GLDONGLE` (or `C:\Program Files\GL Communications Inc\GLDONGLE`) directory and confirm that the following licenses are listed:
 - PKS126 (MAPS SIPI)
 - PKS102 (RTP Traffic)
- Run the `MAPS-SIPI.exe` (or `MAPS-SIPIx64.exe` on 64-bit OS) installer from the Installation CD:
- It is recommended to reboot the system after the software installation.
- Double-click the **MAPSSipI** icon created on the desktop. The application should execute without any errors.


Verification

Functional verification requires 2 systems with **MAPS™ SIP-I** application installed on each, and connected back-to-back with an Ethernet cable or the systems can be connected in same subnet via switch.


Invoke the **MAPS™ SIP-I** application on **two different PC's** say PC1 with IP Address 192.xx.xx.225 and PC2 with IP Address 192.xx.xx.226. The configuration explained below allows MAPS™ SIP-I application to act as **User Agent Client (UAC)** and **User Agent Server (UAS)** to generate SIP-I call messages and perform IVR Testing on the two different PC's.

MAPS™ SIP-I on PC1 (GUI)

- This instance of MAPS™ SIP-I acts as UAS (**Call Receptor**).
- On the Test Bed Default window,
 - Verify that **TestBedDefault** configuration loads with **UA_IPV4_Profiles.xml** as the default profile.
 - Verify the **Adapter Index** value. This value indicates the NIC interface on which the RTP Core binds for RTP traffic generation and reception. The **Display Adapter Info** option under the **Help** menu displays all the network adapters available in the system. Select appropriate adaptor index value under "**Adapter Index for IP Transport Handler**" section.
- Open **Profile Editor** from "Editor" menu and load "UA_IPV4_Profiles". Make the following changes to initiate SIP and RTP core on PC1.
 - Edit **Contact Address** ---> `9964636035@192.xx.xx.225`
 - Edit **Address of Record** ---> `9964636035@192.xx.xx.225`
 - Edit **To Address** ---> `9591616202@192.xx.xx.226`
 - Edit **RTP IP Address** -> `192.xx.xx.225`
 - Set **Enable Traffic** to **IVR** type. This automatically sends and detects DTMF digits verifying the traffic.
 - Save the configuration to "UA_IPV4_Profiles"
- Click **Start** to start the testbed setup and wait for RTP-Core command prompt to open. If the SIP/RTP Core console does not invoke with the MAPS™ TestBed start-up, refer to [Troubleshoot](#) section explained in this document.
- Select **Configuration > Incoming Call Handler Configuration** from the main menu to make sure that the **SipCallControl.gls** script is loaded against the **INVITE** message in the **Incoming Call Handler Configuration** window.

- Click  icon and open **Call Reception** at the **UAS end** to observe the call instances being received after placing call from (UAC) generation end. Refer to MAPS™ SIP configuration on PC2.
- Select the received call and click on **Message Sequence** tab to verify the call flow.

MAPS™ SIP-I on PC2 (GUI)

- This instance of MAPS™ SIP-I acts as UAC (**Call Generator**).
- On the Test Bed Default window,
 - Verify that **TestBedDefault** configuration loads with **UA_IPV4_Profiles.xml** as the default profile.
 - Verify the **Adapter Index** value. This value indicates the NIC interface on which the RTP Core binds for RTP traffic generation and reception. The **Display Adapter Info** option under the **Help** menu displays all the network adapters available in the system. Select appropriate adaptor index value under "**Adapter Index for IP Transport Handler**" section.
- Open **Profile Editor** from "**Editor**" menu and load "**UA_IPV4_Profiles**"
 - Edit **Contact Address** ---> **9591616202@192.xx.xx.226**
 - Edit **Address of Record** ---> **9591616202@192.xx.xx.226**
 - Edit **To Address** ---> **9964636035@ 192.xx.xx.225**
 - Edit **RTP IP Address** -> **192.xx.xx.226**
 - Set **Enable Traffic** to **IVR** type. This automatically sends and detects DTMF digits verifying the traffic.
 - Save the configuration to "**UA_IPV4_Profiles**"
- Click **Start** to start the testbed setup and wait for RTP-Core command prompt to open. If the SIP/RTP Core console does not invoke with the MAPS™ TestBed start-up, refer to [Troubleshoot](#) section explained in this document.
- Select **Emulator > Call Generation** from main menu.
- Select the call instance with **SipCallControl.gls** script and **Profile0001** profile. Click  button to place the call.
- Observe the received call instance in the **Call Reception Window (UAS)** running the **SipCallControl.gls** answer script.
- Call gets terminated once call duration is complete or we can terminate the call manually by clicking on "**SIP_TerminateCall**" user event.
- Once call gets terminated, verify the **Message Sequence Flow** by selecting the call objects at both generation and reception end.
- User can also verify the RTP traffic event reported in the **Event Log** window (invoke from **Reports menu -> Events**)

Troubleshoot

- “**Security Error: Application is not licensed**” error indicates a problem with either your dongle or license file.
 - First verify that the dongle is plugged in and the red light is ON
 - Navigate to *C:\Program Files\GL Communications Inc\GLDONGLE*
 - Run *haspinfohl.exe*. Verify that Status is **OK** and make a note of the Serial #.
 - Run *appl_list.exe*. Verify that there is a line in the table reading **PKS126 MAPS™ SIP-I** with the serial number you noted above.
 - If the dongle does not appear in *haspinfohl.exe*, verify that it appears as a USB device in the Windows Device Manager. If it does not appear even in the device manager, remove the dongle and plug it into a different USB port, preferably one directly on the motherboard.

- If the SIP/RTP Core console does not invoke with the MAPS™ TestBed start-up, check for the following:
 - RTP Soft Core licenses may not be installed for the dongle used. Run *appl_list.exe* available in the *C:\Program Files\GL Communications Inc\GLDONGLE* directory. Verify that there is a line in the table reading **PKS102 RTP Soft Core** with the serial number you noted above.
 - Verify that the SIP IP Address in the testbed configuration is configured with system IP address.

- If you cannot resolve the issues, please contact the appointed technical support person. If you do not know the technical support contact, please reach us at info@gl.com