


Normal Instructions – Follow these precisely

START WITH DONGLE UNPLUGGED FROM MACHINE

- Run *..|Dongle License Installer|GLDongleLicenseInstaller_x86.exe* (or *GLDongleLicenseInstaller_x64.exe* for PacketScan™ 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.
- If a previous version of PacketScan™ is already installed, uninstall this program completely, manually delete all the files from the installation directory, and then run the above executable.
- 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:
 - PKV100 – PacketScan™
 - PKV103 – GSM and UMTS Analyzer
- Run the PacketScan™ Installation executable **PacketScan.exe** (or *PacketScan_x64.exe* for 64-bit OS) from the Installation CD.
- It is recommended to reboot the system after the software installation.
- Double-click the PacketScan™ icon  from the desktop. The application should invoke without any errors.




Note:

- Additional licenses may be required for optional codec. Please verify that all licenses purchased are displayed using the *appl_list.exe* utility

Verification



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

- From the **PacketScan™** main menu, select **Configure → Protocol and GUI Options** →  **INI Decode Options** from **Configure → Protocol and GUI Options** to open the **Edit INI** screen. Click on Edit INI, this will invoke PacketScanProt.ini file in the Notepad
- In the ini file search for **#SCTP_PORT_FLAG_INDEX** and enter the value for SCTP ports on which **GSMAoIP** signaling is known to receive as given below:
 - **SCTP_SRC_GSMAoIP_MIN = 0**
 - **SCTP_SRC_GSMAoIP_MAX = 65535**
 - **SCTP_DST_GSMAoIP_MIN = 0**
 - **SCTP_DST_GSMAoIP_MAX = 65535**



Note:

- The values shown here represent generic minimum and maximum values.
- User can enter the exact minimum and maximum port number range as required. If the user doesn't know the port number, configure minimum and maximum port range as given above.
- In the ini file search for **#PROCESS_IUCS_GSMA_CALLS** and enter the **IUCS_GSMA_CALLS_PROCESS_FLAG** as 1
- Save and close the **PacketScanProt.ini** file
- Close the **PacketScan™** application and invoke again to apply the changes done for PacketScanProt.ini.
- Select **Capture → Stream/Interface Selection** and enable the Ethernet card on which packet needs to be captured
- Select **Capture → Capture File Options** and enable **Circular Capture Buffer**
- Select **Capture → Capture Filter** option, click **SCTP** in the Filter Selection and check **Filter all SCTP data**. Do not activate any other filters in the **Capture Filter**.

- From the **PacketScan™** main menu, select **Call Detail Records** → **Build Call Detail Records**
- From the **PacketScan™** main menu, select **File** → **Start Real-time** or Click **Start Real-time**  icon from the toolbar. (Or Check Start real-time tracing option provided under **Configure** → **Startup Options**, and then click **Execute**)
- To playback an HDL file containing packets, use **PacketscanUtilities** application. From the GL installation directory double-click **PacketscanUtilities** application.
- Select **Utilities** > **HDL Playback** from the menu.
- In the **Device** option select required NIC card
- In the **Select HDL File** option click on browse button to browse and select **C:\Program Files\GL Communications Inc\PacketScan\Examples\GSMAoIP\GSM-A.hdl** file from the GL installation directory
- Enable **Maintain Timing** option and click **Start**
- Observe the **GSM-A** decodes displayed in PacketScan™ analyzer summary and detail views.
- From the **PacketScan™** main menu, select **Call Detail Records** → **Open Call Detail Records** to view Call Trace.
- From the **PacketScan™** main toolbar, click on the PDA icon  to invoke PDA (Packet Data Analyzer) and view detail analysis of each session, call graphs and quality scores for the captured GSMA calls.



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.

Troubleshoot

- **“Security Error: Application is not licensed”**, if you see this error when you run PacketScan™ it 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 **PKV100 PacketScan Online VoIP Analysis Software** 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.
- Reasons why the Verification Step might fail are various:
 - Intermittent Frame Errors or Bit Errors generally indicates faulty equipment, either due to the Ethernet cable, the NICs or both.
 - Complete failure to SYNC could be a configuration issue, please review your settings. It could also be due to firewalls or other forms of security software. Please disable any security software if possible and try again.
 - Make sure that Firewall is not blocking any packets or frames. **Turn off Windows Firewall** on Windows® and on any 3rd party Anti-Virus software that may be installed on the PC. **Turn OFF Windows Firewall** - navigate to Control Panel > Systems & Security > Windows Firewall, click Turn Off windows Firewall for all networks.
- If you cannot resolve your issues, please contact your appointed technical support person. If you do not know your technical support contact, please reach us at info@gl.com