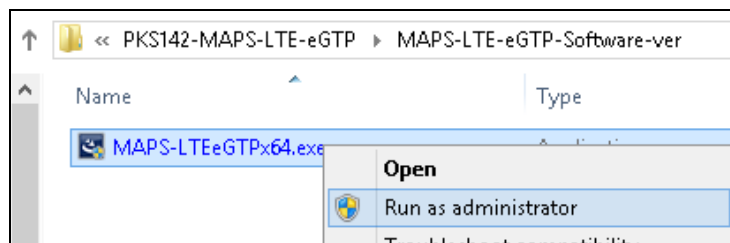


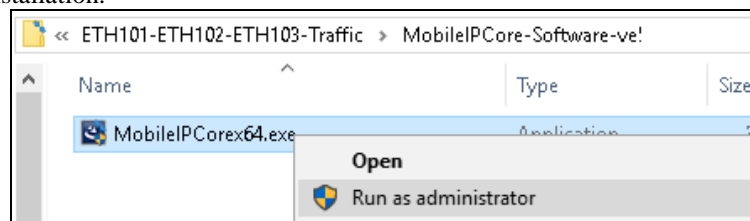
Software and License Installation

DO NOT CONNECT USB DONGLE TO THE PC FIRST. Perform Software installation first, followed by License installation and then plug-in the USB hardware dongle to the PC.

- PC Requirements
 - Windows® 7 and above Operating System (**64 bit Only**).
 - Core i7 (or equivalent), 8 GB Memory, NIC, and USB 2.0 Ports.
 - Ensure that system has latest Windows® updates and service packs installed.
 - Turn OFF Windows Firewall - navigate to Control Panel > Systems & Security > Windows Firewall, click Turn Off Windows Firewall for all networks
- Plug-in the **USB Installation Stick** (pen drive) to the PC. This is provided with the shipment package by GL Communications.
- Navigate to **PKS142-MAPS-LTE-eGTP\MAPS-LTE-eGTP-Software-verXX** folder, right click **MAPS-LTEeGTPx64.exe** and select **Run as Administrator**. Follow the onscreen instructions and complete the installation.



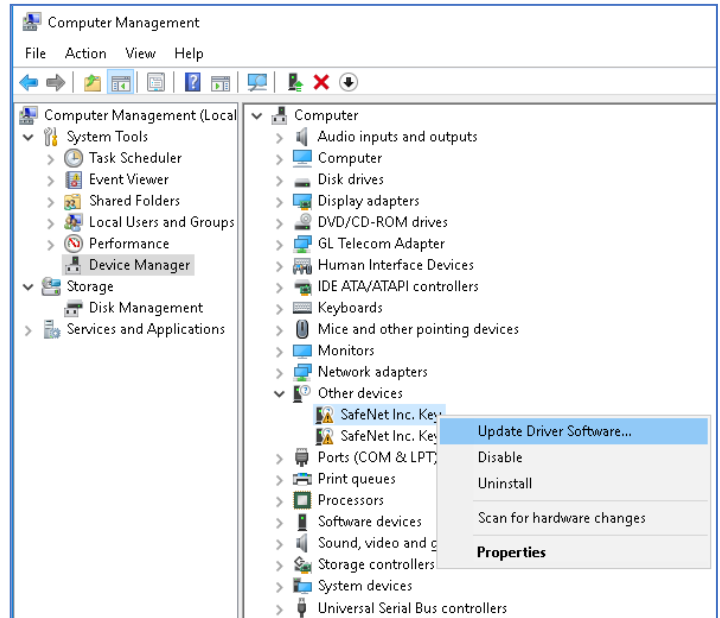
- (Optional Step) For traffic simulation on LTE eGTP interfaces, execute **MobileIPCorex64.exe** from **ETH101-Traffic\MobileIPCore-Software-verXX** folder in the USB installation stick. Follow the onscreen instructions and complete the server application installation.



- Navigate back to root directory in USB installation stick (pen drive) to **GL-Dongle License Installer** folder, execute **GLDongleLicenseInstaller_x64.exe**. Follow the onscreen instructions and complete the installation.
- NOW PLUG-IN the USB Dongle to the PC 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 the device is functioning correctly and ready to use.
- It is recommended to reboot the system after the software installation. If you had problems with installation so far, refer to [Troubleshoot](#) section explained in this document.
- You can verify if the required licenses are installed. Navigate to **C:\Program Files\GL Communications Inc\GLDONGLE** directory, execute **appl_list.exe** and confirm that the following licenses are listed.
 - PKS142 (LTE-eGTP Emulation)
 - ETH101 (MobileTrafficCore-GTP) (Optional)
- Right-click on **MAPS LTE eGTP** short-cut icon created on the desktop and select '**Run as Administrator**'.
- The application must invoke without any errors.
- This completes the installation process. If you had problems with installation so far, refer to [Troubleshoot](#) section explained in this document
- To quickly get started with the MAPS™ LTE eGTP application, refer to [MAPS-LTE-eGTP-Quick-Verification-Guide](#)
- To quickly get started with the MAPS™ LTE eGTP with Mobile Traffic Core-GTP application, refer to [MAPS-LTE-eGTP-and-Mobile-Traffic-ETH101-Quick-Verification-Guide](#)

Troubleshoot

- “Unknown device” error while installing USB Dongle.
- If you see this error, ensure you have installed the GL Dongle License Installer software first and then plugged the USB Dongle to the PC. The USB Dongle will then be recognized as “SafeNetInc. USB Key” and appropriate drivers will get installed automatically. If problem still persists, plug the USB Dongle to a different USB2.0 port and try again.
- In the **Device Manager** → **Other devices** list, right-click “SafeNetInc. USB Key” and select **Update Device Software**. Update device drivers for unknown USB device using internet or check and install latest windows updates.



- **Error: “Security Error: Application is not licensed”.** If you see this error when you run MAPS™ LTE eGTP 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
 - To use MAPS™ 64-bit version – use *GLDongleLicenseInstaller_x64.exe* utility to install licenses
 - 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 *PKS142 LTE-eGTP Emulation* and *ETH101 MobileTrafficCore-GTP* 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.
- **Error: “Unable to create GLIpHandler:Invalid Arguments”**, if you see this error when you start the Testbed from MAPS™ LTE eGTP application it indicates that the Network Adaptor is not configured correctly.
 - From **Help** menu → run **Display Adaptor Info** and obtain the **Adapter Index** for the IP address in use, which has to be appropriately configured in the Testbed.
- If you cannot resolve the issues, please contact GL Communications at info@gl.com for technical support.