

Software and License Installation

**Note1: If you have purchased PacketScan™ HD product, you will receive a network appliance with all the necessary PC hardware interfaces, including Regular NIC cards, Operating System (Windows® 64-bit Only), required PacketScan™ HD application, GL's High Density NICs (2x 10 Gbps), and all required licenses pre-installed. And therefore, you will need to only plug-in the monitor, and connect the network appliance to the power outlet. Then connect the USB Hardware Dongle you have received with the shipment, and proceed to verification steps.*


- NOW PLUG-IN the USB Hardware Dongle to the PC to the USB 2.0 port of your computer. A red light should appear on the dongle indicating that the device is functioning correctly and ready to use.
- Ensure that the PacketScan™ HD application and the below listed licenses are installed on the network appliance. To verify if the purchased 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:
 - PKV122 (PacketScan HD)
- It is recommended to reboot the system after the software installation.

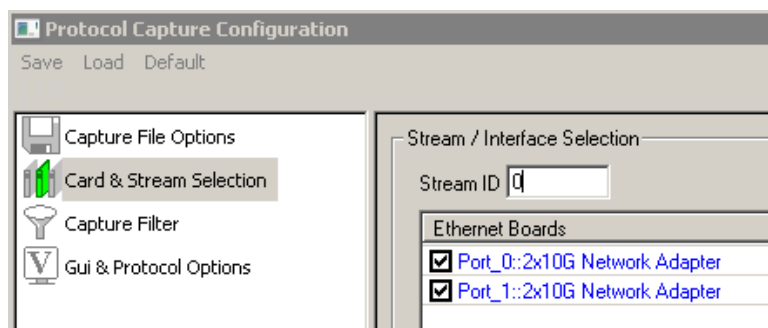



Note:


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

Verification

- Right click the PacketScan™ HD icon  created on the desktop and select "**Run as Administrator**" to launch the application. The application should invoke without any errors.
- Follow the steps below for functional verification of PacketScan™ HD **Real-time** analysis feature. For example, the below steps depict capturing high volume SIP and RTP traffic.
 - 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 on **SIP** in the Filter Selection and check **Filter all SIP data**.
- Similarly, click on **RTP** in the Filter Selection and check **Filter all RTP data**. Do not activate any other filters in the **Capture Filter**.
- From the **PacketScan™ HD** main menu, select **File → Start Real-time** or click **Start Real-time**  icon from the toolbar.
- Observe the **SIP** and **RTP** decodes displayed in PacketScan™ HD analyzer summary and detail views.

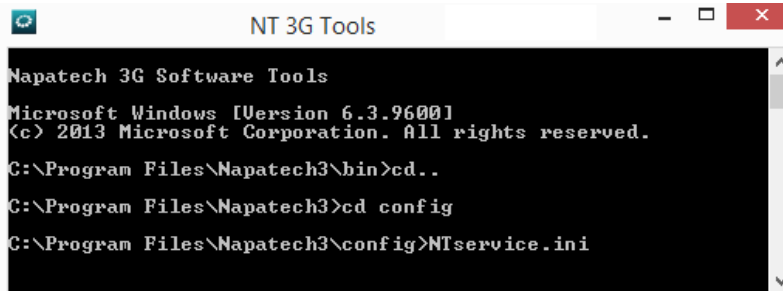
- From the **PacketScan™ HD** main toolbar, click on the **PDA**  icon to invoke PDA (Packet Data Analyzer) and view detail analysis of each session, call graphs and quality scores for the captured **SIP** and **RTP** traffic

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

- Click  icon from the desktop and invoke **NT 3G Tools** console window.
 - Type the commands as shown in the screen below and from the **C:\Program Files\Napatech3\config** directory, open **NTservice.ini** file.



```

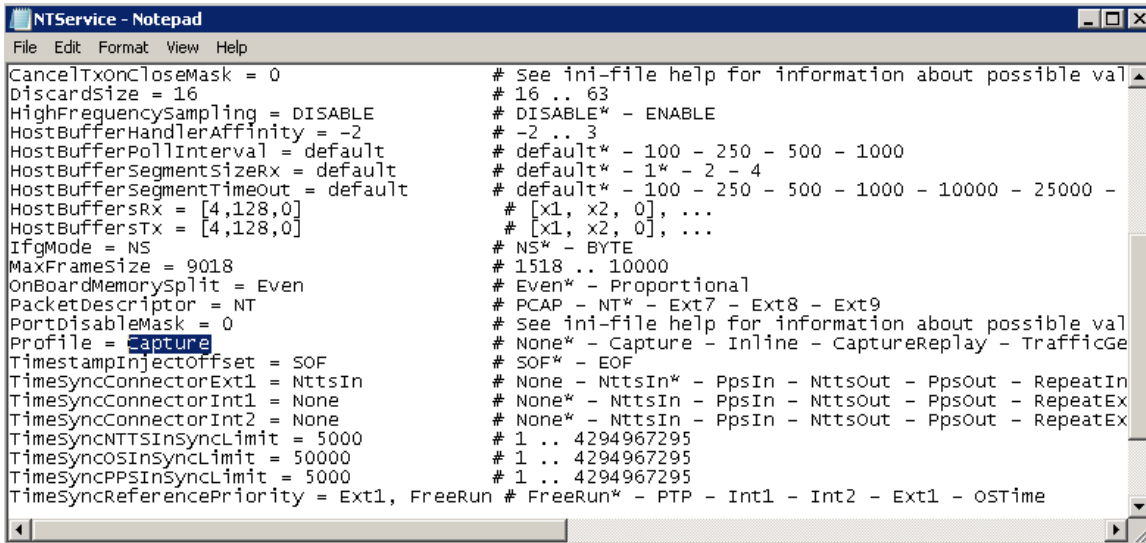
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\Program Files\Napatech3\bin>cd..

C:\Program Files\Napatech3>cd config

C:\Program Files\Napatech3\config>NTservice.ini
  
```

- Make sure that **Profile** parameter in the file is set to **'Capture'**. Save the file in the same location.



```

NTService - Notepad
File Edit Format View Help
CancelTxonCloseMask = 0 # See ini-file help for information about possible val
Discardsize = 16 # 16 .. 63
HighFrequencySampling = DISABLE # DISABLE* - ENABLE
HostBufferHandlerAffinity = -2 # -2 .. 3
HostBufferPollInterval = default # default* - 100 - 250 - 500 - 1000
HostBufferSegmentsizeRx = default # default* - 1* - 2 - 4
HostBufferSegmentTimeout = default # default* - 100 - 250 - 500 - 1000 - 10000 - 25000 -
HostBuffersRx = [4,128,0] # [x1, x2, 0], ...
HostBuffersTx = [4,128,0] # [x1, x2, 0], ...
IfgMode = NS # NS* - BYTE
MaxFrameSize = 9018 # 1518 .. 10000
OnBoardMemorySplit = Even # Even* - Proportional
PacketDescriptor = NT # PCAP - NT* - Ext7 - Ext8 - Ext9
PortDisableMask = 0 # See ini-file help for information about possible val
Profile = capture # None* - Capture - Inline - CaptureReplay - TrafficGe
TimestampInjectOffset = SOF # SOF* - EOF
TimeSyncConnectorExt1 = NttsIn # None - NttsIn* - PpsIn - NttsOut - PpsOut - RepeatIn
TimeSyncConnectorInt1 = None # None* - NttsIn - PpsIn - NttsOut - PpsOut - RepeatEX
TimeSyncConnectorInt2 = None # None* - NttsIn - PpsIn - NttsOut - PpsOut - RepeatEX
TimeSyncNTTTSInSyncLimit = 5000 # 1 .. 4294967295
TimeSyncCOSInSyncLimit = 50000 # 1 .. 4294967295
TimeSyncPPSInSyncLimit = 5000 # 1 .. 4294967295
TimeSyncReferencePriority = Ext1, FreeRun # FreeRun* - PTP - Int1 - Int2 - Ext1 - OStime
  
```

- “**Security Error: Application is not licensed**”, if you see this error when you run PacketScan™ HD 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 **PKVI22 PacketScan HD** 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