

# PIICiX Service Tools

## CMS2024 Module 17

**Revision: 20150809**

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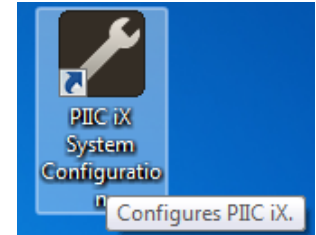


# Objectives

This module will cover the following objectives:

- Explain and demonstrate the purpose of each Service Tool feature and setting option found under the Tools Tab of System Configuration on the Primary Server.
- Introduce remote connections using UltraVNC.

# Accessing Service Tools From the Server



- Go to System Configuration
  - Service Tools are accessed within the Tools selection.
  - System Configuration can be accessed either at the Primary Server, or from any Information Center iX.
    - From the Information Center iX, if patient monitoring is running stop the application with ALT+F4, and enter the appropriate User Name and Password.
    - At the Windows desktop press and hold the Shift key then right click the configuration Icon and select “Run as different User” then enter SupportUser & Password.
- After you type in your Biomed Password you will see the following menu inside your window, we will now be focusing on the Tools screen.

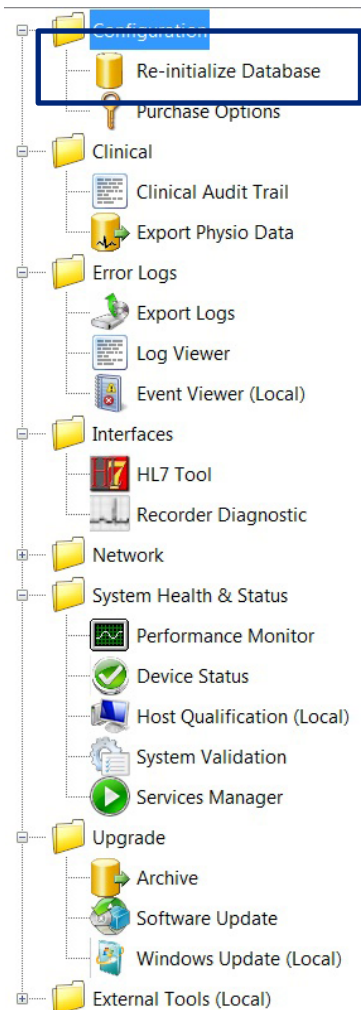


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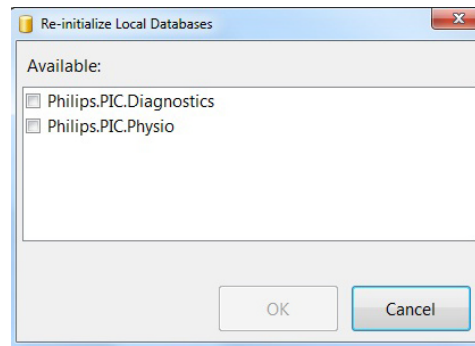
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# Configuration:

## Re-Initialize Database

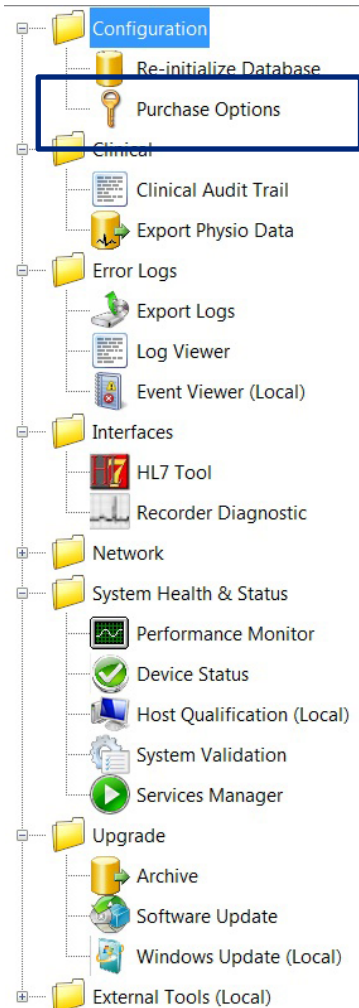


- Permits re-initialization of local databases.



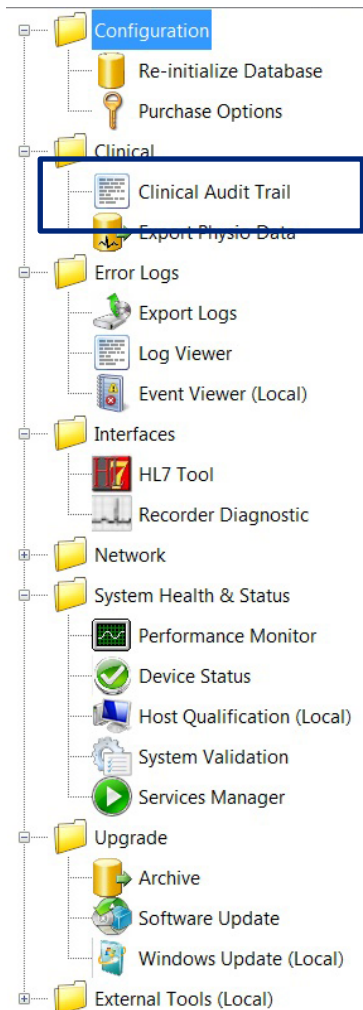
- Philips.PIC.Diagnostics database contains Diagnostics used by Log Viewer, performance values used by System Performance Monitor, and Device Statistics.
- Philips.PIC.Physio database contains Physiological data.
- If you must re-initialize the entire Primary Server database you must run System Setup and click “Install” on the System setup screen, it isn’t available in System Configuration.

# Configuration: Purchase Options



- This page permits viewing Feature Option Assignment and Feature Option Details included in the Servers and Hosts

# Clinical: Clinical Audit Trail



- The Clinical Audit Trail provides search options to produce a chronological record of Alerts and Actions preformed within a unit regarding patient management and the ability for the data's export.
- Data is stored for 90 days
- Searchable options include the alerts, patient, where alerts went, and what actions staff took as a result of an alert.

Search Options

\* Search By: My Unit

Search Patient:

Search Text:

Monday, November 28, 2011

\* Duration: Last 15 Minut

Search Filters

Alerts

☒ Red Alarm

☒ Yellow Alarm

☐ Inop

Actions

☒ Silence

☒ Pause/Resume

☐ Measurement On/Off

☒ Alarm On/Off

☐ Alarm Limit Change

☐ 12 Lead Export

☐ Standby On/Off

☐ Notification Assignment Cha

☐ Patient Data Accessed

☐ Patient Data Annotated

☐ ADT

☐ Patient Settings Changed

☐ Caregiver Assignment Chang

☐ Equipment Added/Removed

☐ 12 Lead ECG Capture

☐ Physio Data Loss

Search Results

Audit log for 11/28/2011 15:15:06-15:30

Date	Bed Label	Action
11/28/2011 15:30:03	mCMON1	*** ASYSTOLE Ended: 11/28/2011 15:30:00
11/28/2011 15:30:01	mCMON1	*** ASYSTOLE Generated: 11/28/2011 15:29:58
11/28/2011 15:29:58	mCMON1	*** ASYSTOLE Ended: 11/28/2011 15:29:56
11/28/2011 15:29:56	mCMON1	*** ASYSTOLE Generated: 11/28/2011 15:29:54
11/28/2011 15:29:47	mCMON1	*** ASYSTOLE Ended: 11/28/2011 15:29:44
11/28/2011 15:29:45	mCMON1	*** ASYSTOLE Generated: 11/28/2011 15:29:42
11/28/2011 15:29:32	mCMON1	*** ASYSTOLE Ended: 11/28/2011 15:29:29
11/28/2011 15:29:30	mCMON1	*** ASYSTOLE Generated: 11/28/2011 15:29:27
11/28/2011 15:29:21	mCMON1	*** ASYSTOLE Ended: 11/28/2011 15:29:18
11/28/2011 15:29:19	mCMON1	*** ASYSTOLE Generated: 11/28/2011 15:29:16
11/28/2011 15:29:16	mCMON1	*** ASYSTOLE Ended: 11/28/2011 15:29:14
11/28/2011 15:29:14	mCMON1	*** ASYSTOLE Generated: 11/28/2011 15:29:12
11/28/2011 15:29:11	mCMON1	*** APNEA Generated: 11/28/2011 15:29:09
11/28/2011 15:29:05	mCMON1	*** ASYSTOLE Ended: 11/28/2011 15:29:03
11/28/2011 15:29:03	mCMON6	Resume All Alarms
11/28/2011 15:29:03	mCMON1	*** Trect LOW Generated: 11/28/2011 15:29:00
11/28/2011 15:29:03	mCMON1	*** ASYSTOLE Generated: 11/28/2011 15:29:00
11/28/2011 15:29:02	mCMON1	STE : Alarms Off
11/28/2011 15:28:40	mCMON1	*** APNEA Ended: 11/28/2011 15:28:37
11/28/2011 15:28:40	mCMON1	*** Trect LOW Ended: 11/28/2011 15:28:37
11/28/2011 15:28:38	mCMON1	*** ASYSTOLE Ended: 11/28/2011 15:28:37
11/28/2011 15:28:28	mCMON1	*** ASYSTOLE Generated: 11/28/2011 15:28:26
11/28/2011 15:28:26	mCMON1	*** ASYSTOLE Ended: 11/28/2011 15:28:24
11/28/2011 15:28:24	mCMON1	*** ASYSTOLE Generated: 11/28/2011 15:28:22
11/28/2011 15:28:24	mCMON11	*** PVCs/min HIGH Generated: 11/28/2011 15:28:2
11/28/2011 15:28:24	mCMON9	*** PVCs/min HIGH Generated: 11/28/2011 15:28:2
11/28/2011 15:28:24	mCMON14	*** PVCs/min HIGH Generated: 11/28/2011 15:28:2

Search

Export

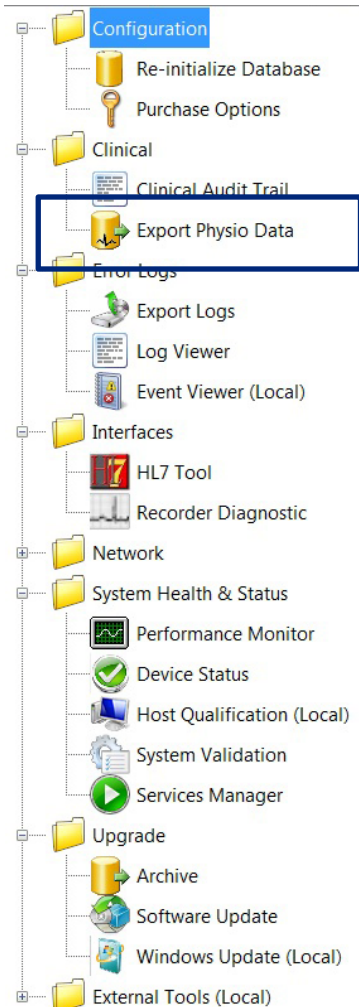
155 Records.

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# Clinical:

## Export Physio Data



- This page allows for the export of data for a selected bed.
- Select a desired Unit and Bed, then drag the slider to adjust desired Start Time & Duration.
- Enter a desired location for the file in the Output folder text box or click the ellipse to select one.
- Click export, the file name format is:
  - [host]\_[bed]\_[starttime]\_[endtime].ppd

Available Units:	Available Beds:
ICU	tele11
Telemetry	tele12
	tele13
	tele14
	tele15
	tele16
	tele17
	tele18
	TeleMon1
	TeleMon2
	TeleMon3
	TeleMon4

Start Time & Duration:

2/22/2011 1:21:37 PM 2/25/2011 9:41:50 AM

2/22/2011 7:41 AM - 9:41 AM

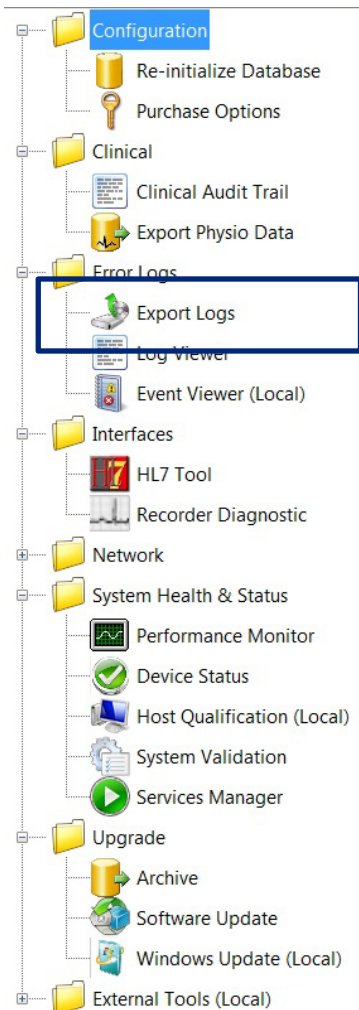
Output Folder: C:\

Export

Note: Files generated by this tool are proprietary and are for support purposes only.

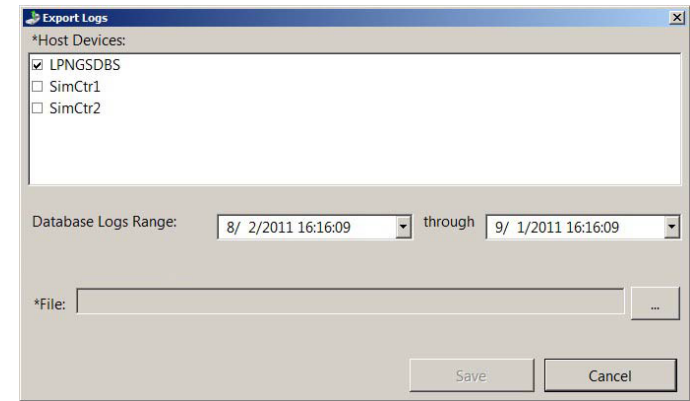


# Error Logs: Export Logs



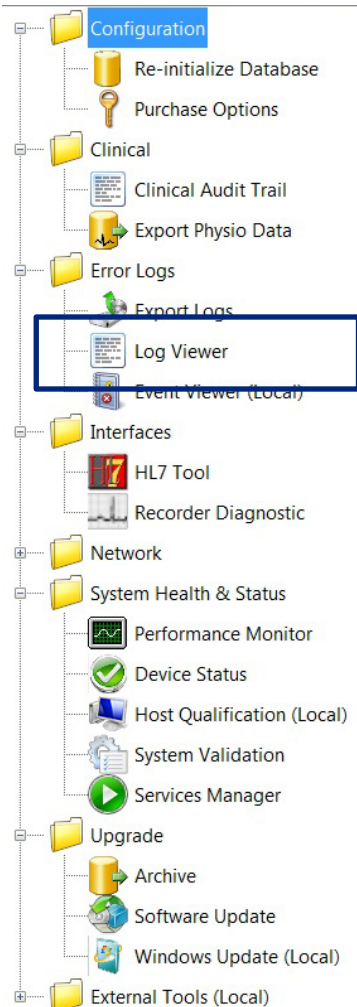
- This tool allows the user to save & export a compressed file of the following logs for a selected system;

- All PIICiX logs including System Validation results
- Application & System event logs
- Philips PIC Setup logs
- Operating System Network Settings
- PIICiX Archive
- Network Statistics Alerts
- All log files in C:\Stardate
- KaVoom logs
- Windows update

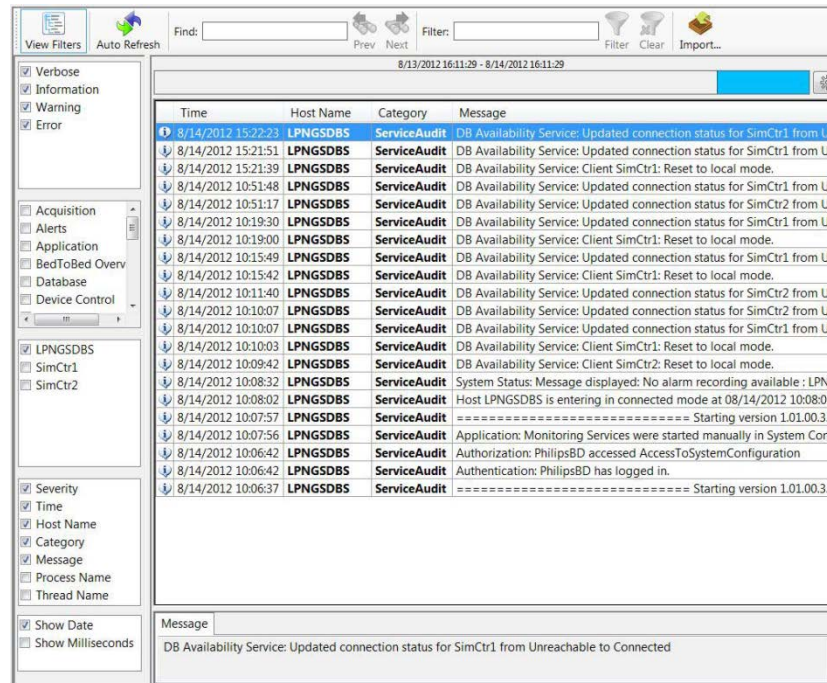




# Error Logs: Log Viewer

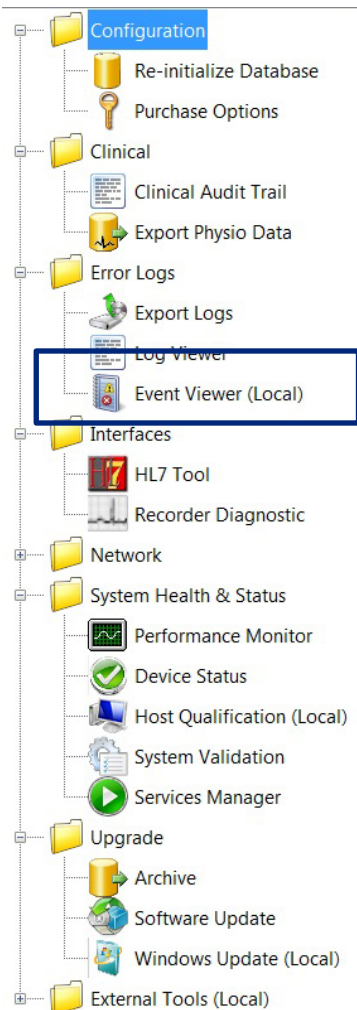


- This provides a viewer for troubleshooting and helps to expose system problems.
- Filter for specific logs from the local database.

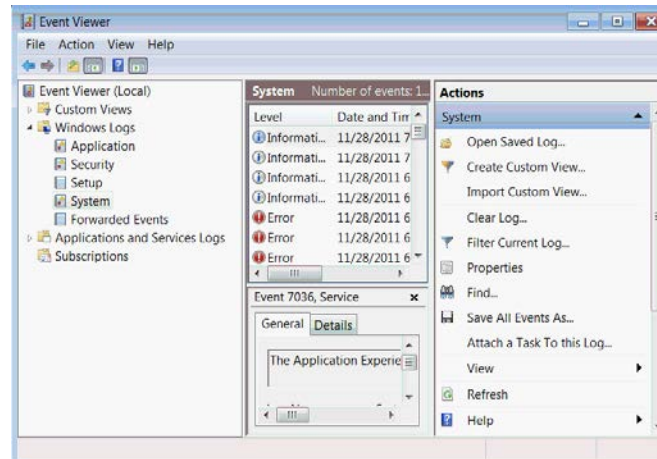


# Error Logs:

## Event Viewer (Local)

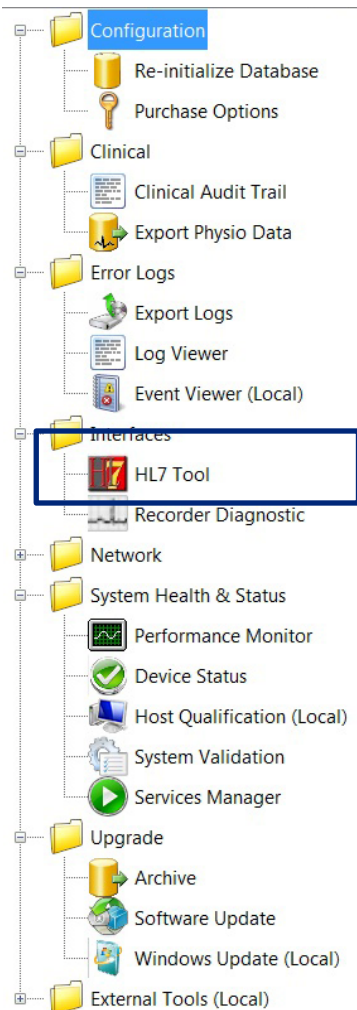


- Event Viewer is a windows application that permits viewing of monitoring and troubleshooting messages.
- The Windows Event Viewer application will open and show events from the local host machine that the tool is being run on.

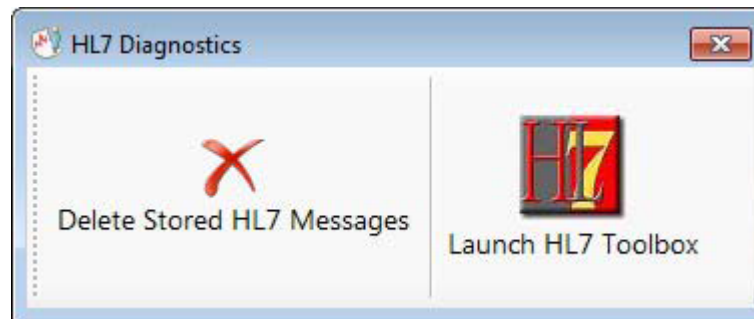


# Interfaces:

## HL7 Tool

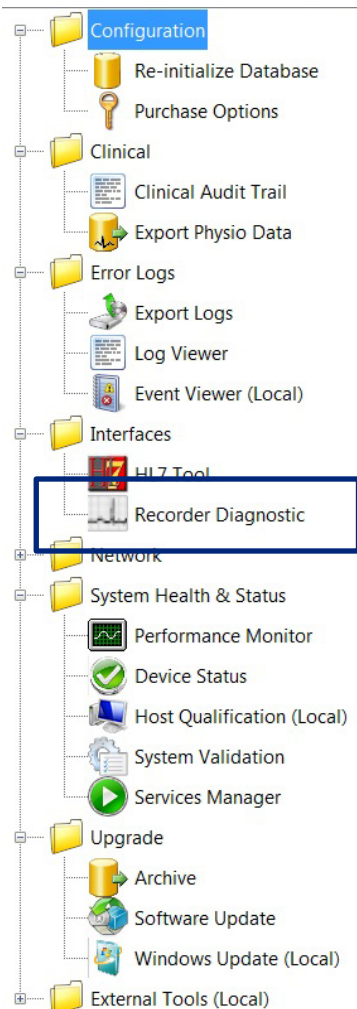


- The HL7 Tool permits data capture from various HL7 sources for troubleshooting.
- This was covered extensively in Module 15.

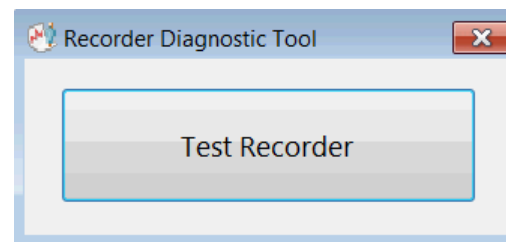


# Interfaces:

## Recorder Diagnostic

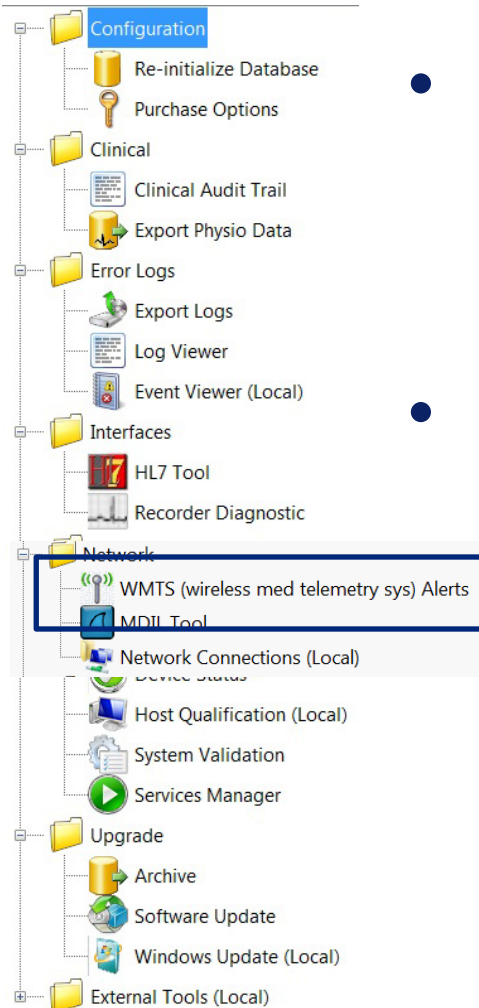


- The Recorder Diagnostic tool permits testing a recorder that is locally connected to the Central.
  - ServiceHost must be running on the local PIICiX
  - No Recording jobs are in the Queue
  - Paper Out, Door Open, USB Unplugged, and Power Unplugged conditions may not exist and will fail the diagnostic recording.
- When the tool is running all recording from monitored beds is suspended.

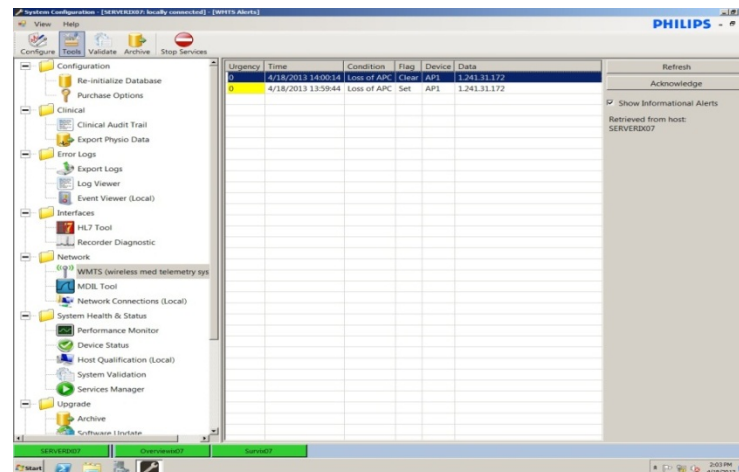


# Network:

## WMTS (Wireless Med Telemetry Sys) Alerts



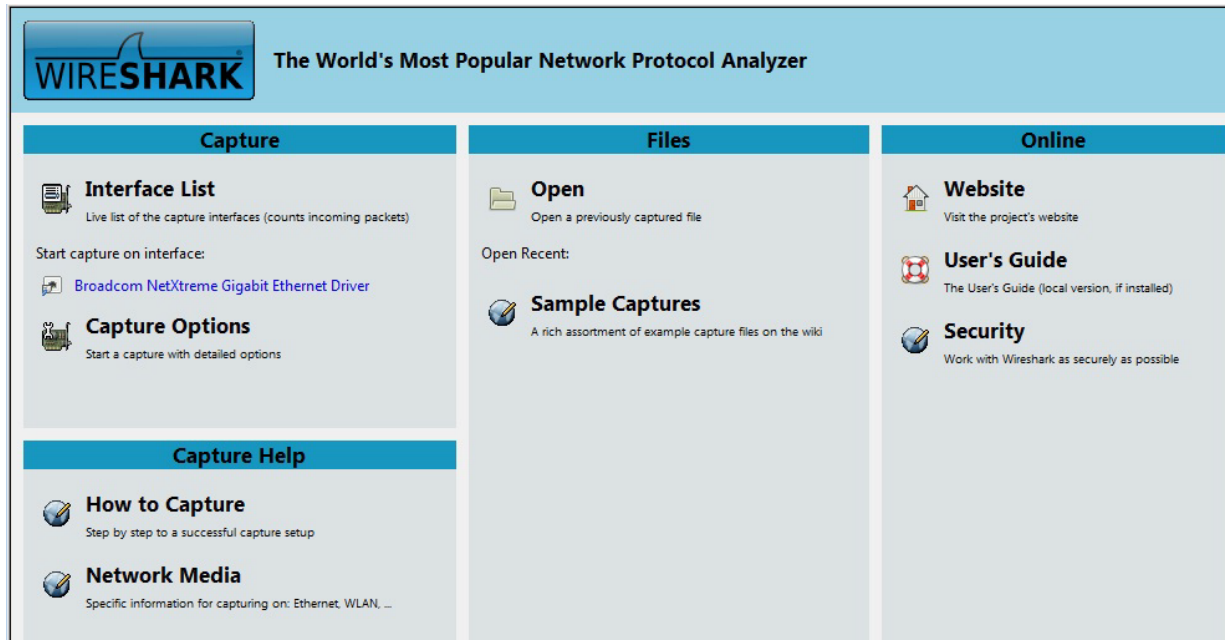
- This tool allows for configuration and viewing of alert data received from the telemetry system's Access Points and Access Point Controllers when problems occur in the infrastructure.
- APCs must be configured with the PIIcIX Server IP Address so that alerts can be received and displayed.





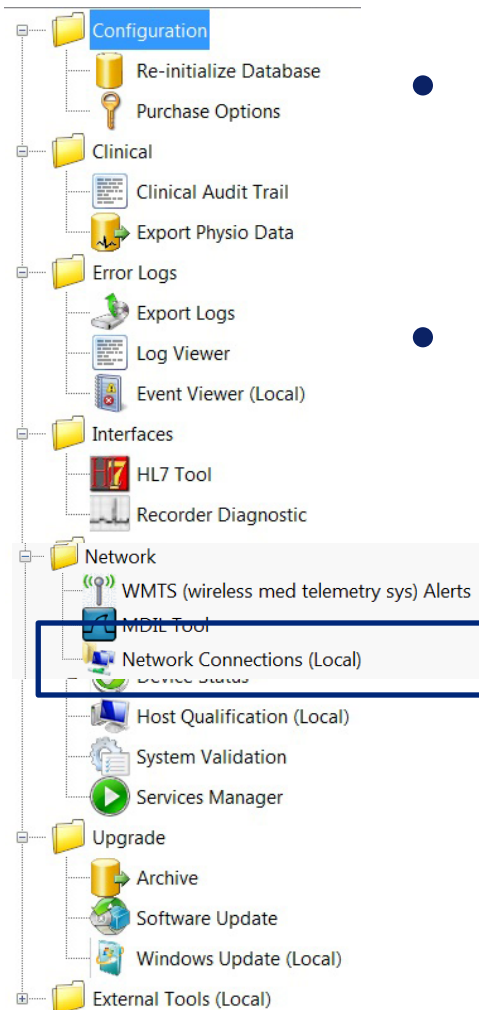
# Network: MDIL Tool (Wireshark)

- Wireshark is a network packet analyzer. It provides a type of measuring device to examine the activity inside a network cable.

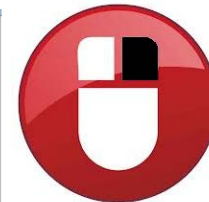
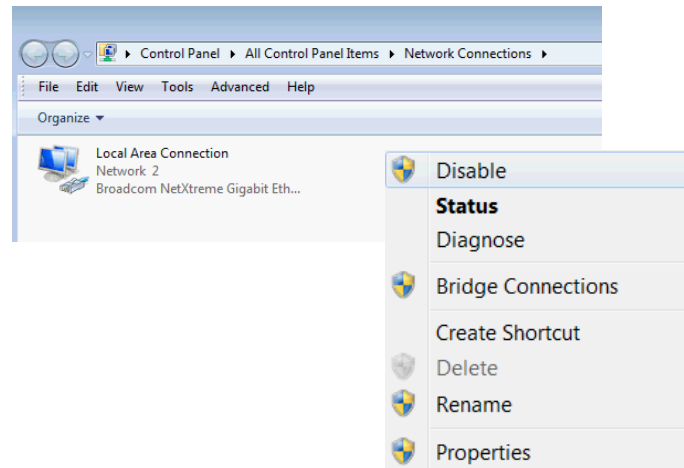


# Network:

## Network Connections (Local)

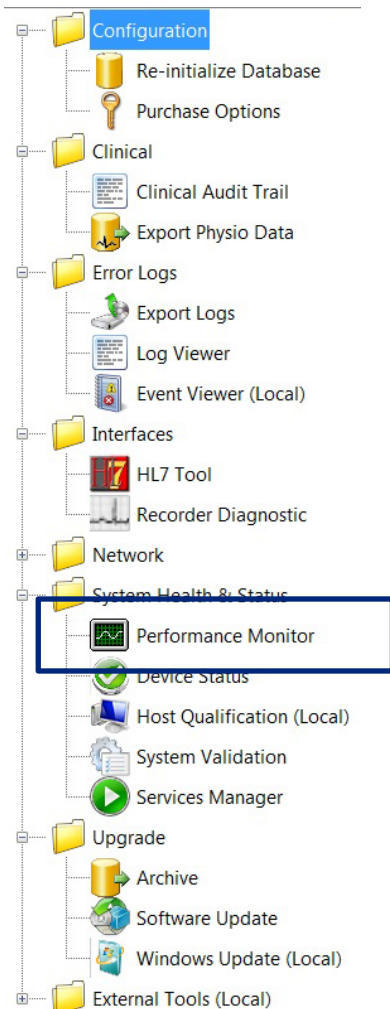


- Network Connections is a short-cut to open the Control Panel's Network Connections window on the local host that is running the tool.
- From inside this window you can permit configuration of Network Interface Connection properties.

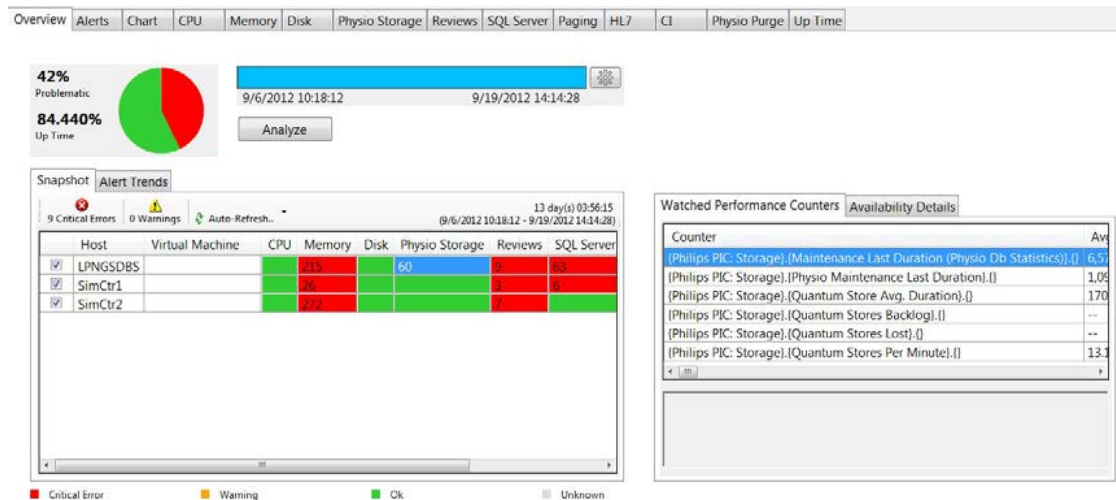




# System Health & Status: Performance Monitor



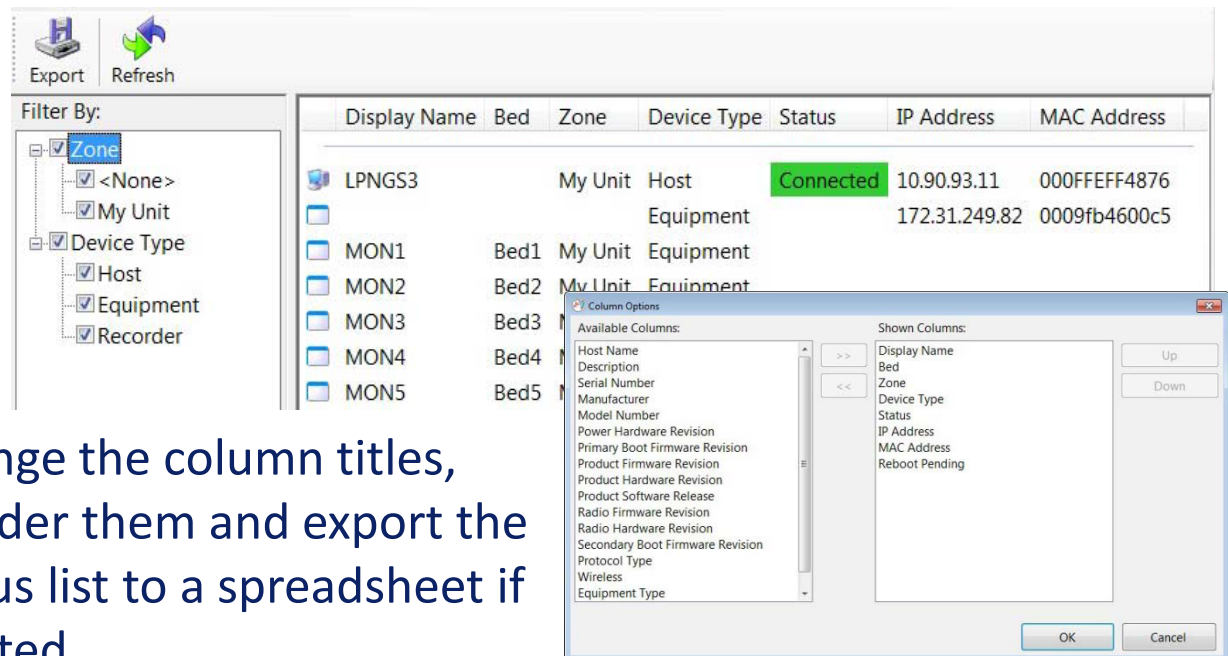
- This is a distributed service and a suite of Applications that examines retrospective system and software performance counters and metrics.
- It measures overall System Performance, health, and reliability and generate alerts.



# System Health & Status:

## Device Status

- This tool permits on-site or remote identification of the state of hosts, bedsides, telemetry and network infrastructure devices connected to the system.



Export Refresh

Filter By:

- ☒ Zone
  - ☒ <None>
  - ☒ My Unit
- ☒ Device Type
  - ☒ Host
  - ☒ Equipment
  - ☒ Recorder

Display Name	Bed	Zone	Device Type	Status	IP Address	MAC Address
LPNGS3		My Unit	Host	Connected	10.90.93.11	000FFFF4876
			Equipment		172.31.249.82	0009fb4600c5
MON1	Bed1	My Unit	Equipment			
MON2	Bed2	My Unit	Equipment			
MON3	Bed3					
MON4	Bed4					
MON5	Bed5					

Column Options

Available Columns:

- Host Name
- Description
- Serial Number
- Manufacturer
- Model Number
- Power Hardware Revision
- Primary Boot Firmware Revision
- Product Firmware Revision
- Product Hardware Revision
- Radio Software Release
- Radio Firmware Revision
- Radio Hardware Revision
- Secondary Boot Firmware Revision
- Protocol Type
- Wireless
- Equipment Type

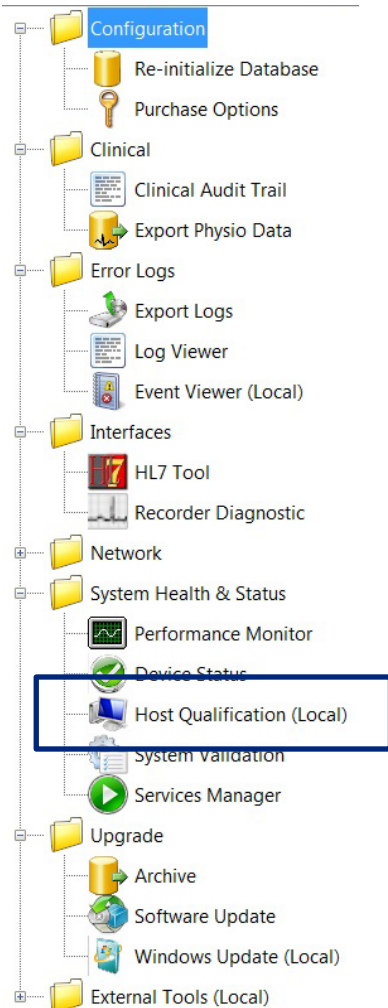
Shown Columns:

- Display Name
- Bed
- Zone
- Device Type
- Status
- IP Address
- MAC Address
- Reboot Pending

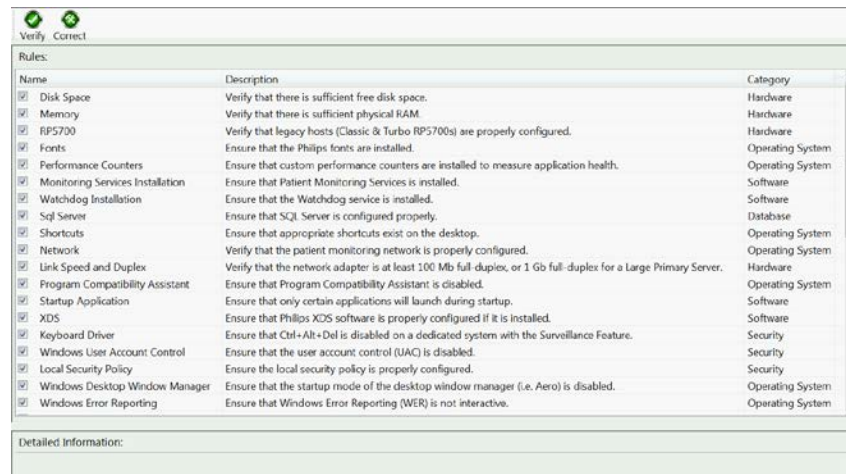
OK Cancel

Change the column titles, reorder them and export the status list to a spreadsheet if wanted.

# System Health & Status: Host Qualification (Local)

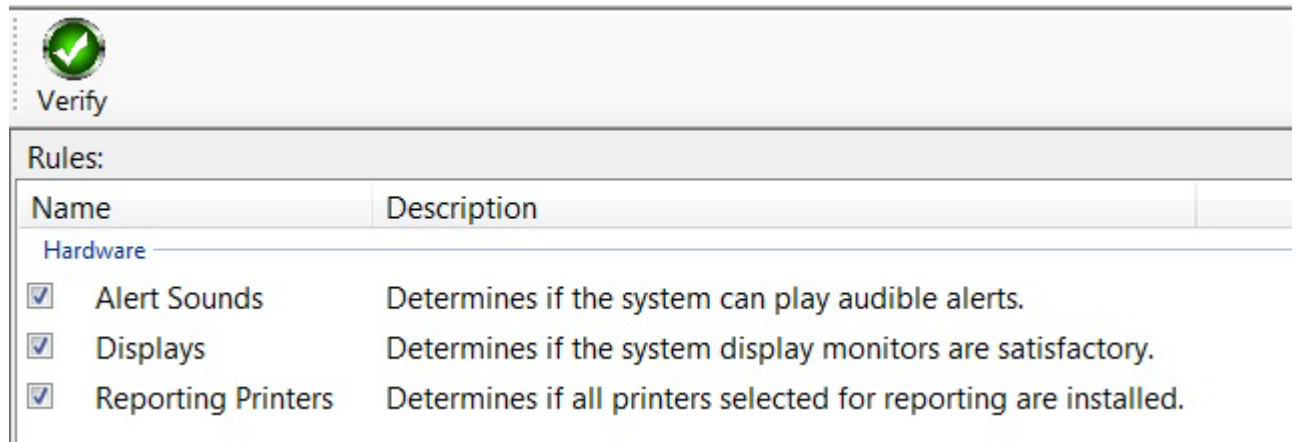
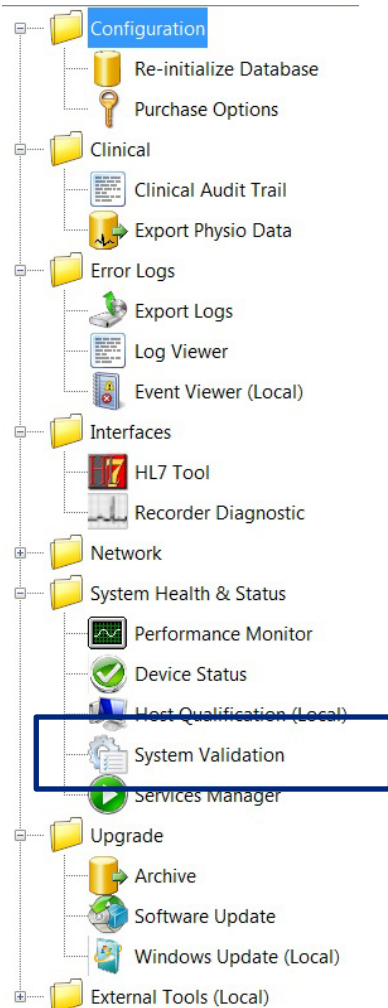


- Host Qualification feature provides a post-installation assessment of rules for the local host it is run on. Each item in the list is a rule that must be satisfied.
- If a rule is not satisfied there is an opportunity to correct a rule failure if possible.

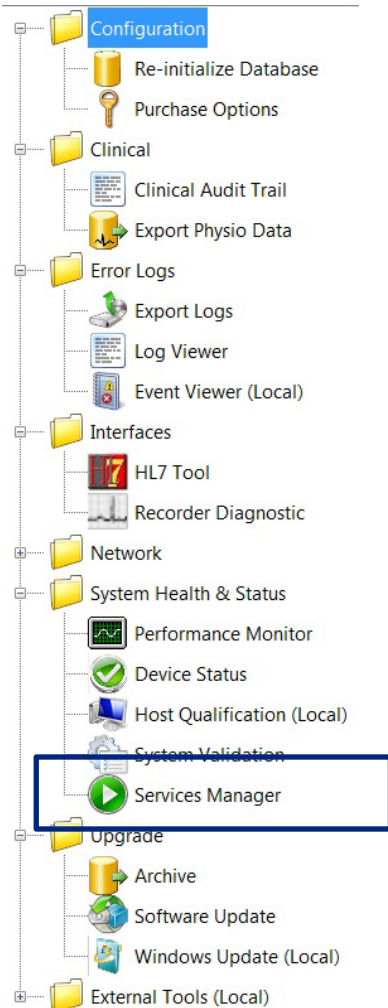


# System Health & Status: System Validation

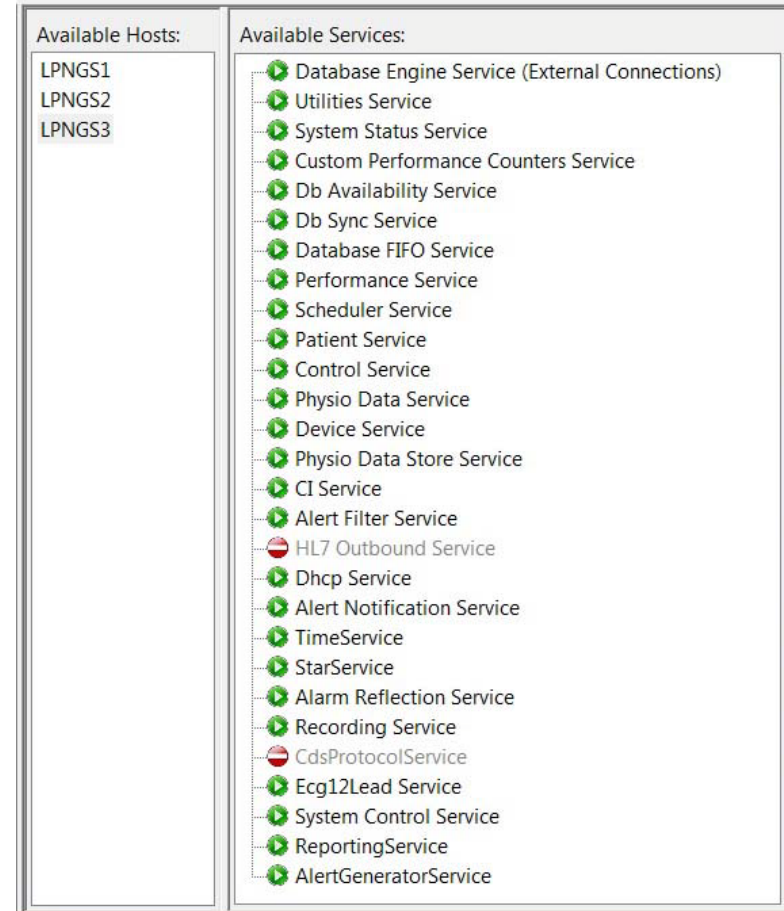
- System Validation provides a post-installation assessment of a customized configuration of hardware and software for the entire system.



# System Health & Status: Services Manager

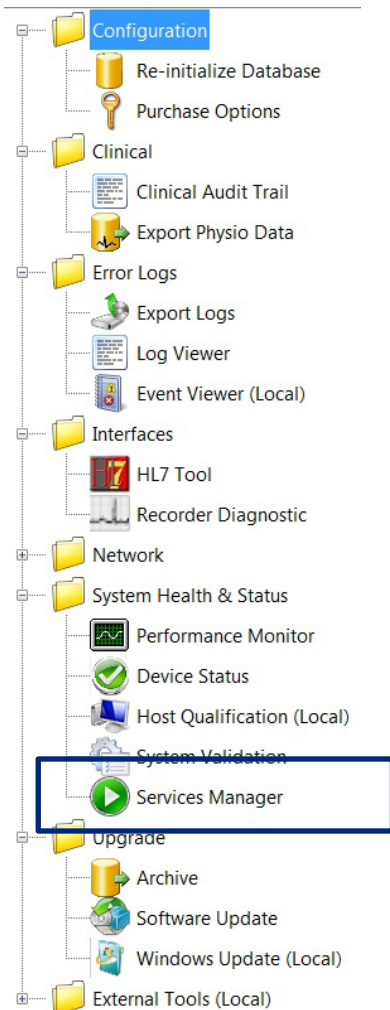


- Services Manager is a READ-ONLY list of all available services running on the hosts and the server in the system.
- Red indicates that a service is stopped.
- If a host is not connected there are no available services listed.





# System Health & Status: Services Manager



- If you must restart all services click the top menu item.
- If it is RED services are running,
- If it is GREEN services are stopped.

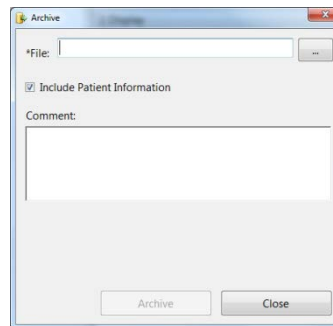


- If you need to start XDS (Services for bedside printing and PDF export) you must open the windows Task Manager
  - Go to the desktop and right-click the task bar then select Start Task Manager.

# Upgrade: Archive



- If you need to make a new Archive of your system double click here.
- Enter a desired filename, or click the ellipse to navigate to a location to save the file.
- Enter a comment about why you're making this for future reference should it be needed.
- Check the include patient information if you expect to have to use the archive soon.

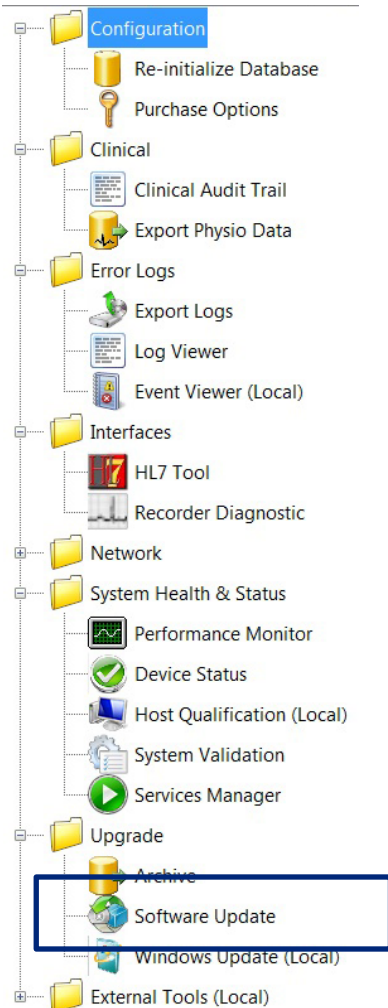


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# Upgrade: Software Update



- Software Update permits patch installations.
- The latest available software revision V.U.F. appears in the Software Update screen.
- This was covered extensively in Module 7.

Update

Announce

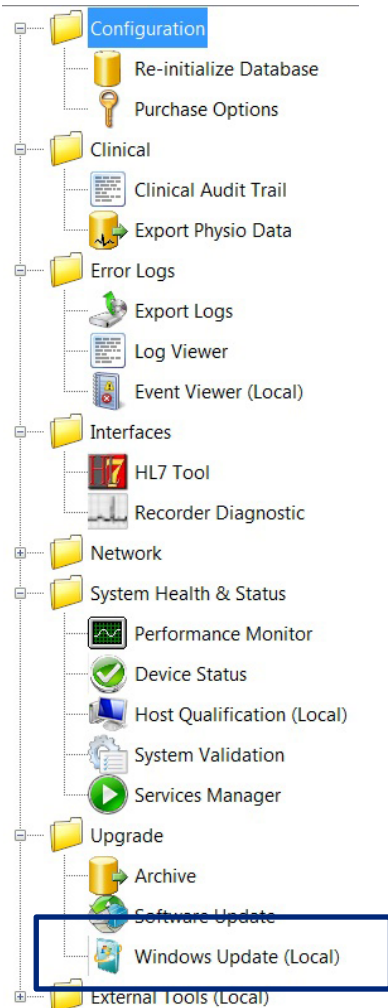
Retract

Refresh

Latest Available Software Revision: None

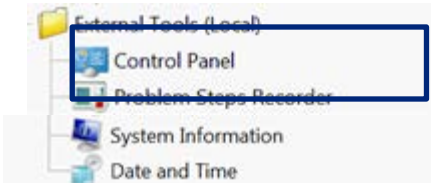
Display Name	Host Name	Zone Name	Software Revision	Build	Install Status	Compatibility Revision
SimCtr1	SimCtr1	PCU	B.00.00	393	Complete	B.00.00
SimCtr2	SimCtr2	Telemetry	B.00.00	393	Complete	B.00.00
LPNGSDBS	LPNGSDBS	Equipment Room	B.00.00	393	Complete	B.00.00

# Upgrade: Windows Update (Local)



- Windows Update allows for checking for any updates to the local host's Windows Operating System.
- Remember not to install un-validated updates.
- More information on this is available in Module 8.

# External Tools (Local): Control Panel



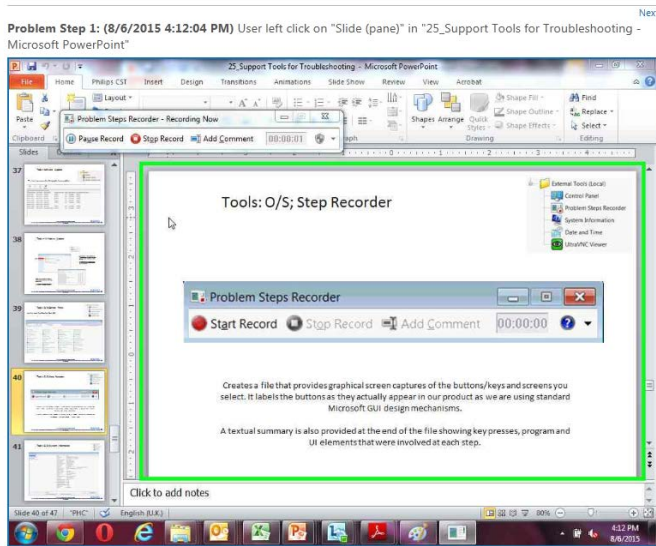
- This is simply a short-cut to the Control Panel in Windows



# External Tools (Local): Problem Steps Recorder (PSR)

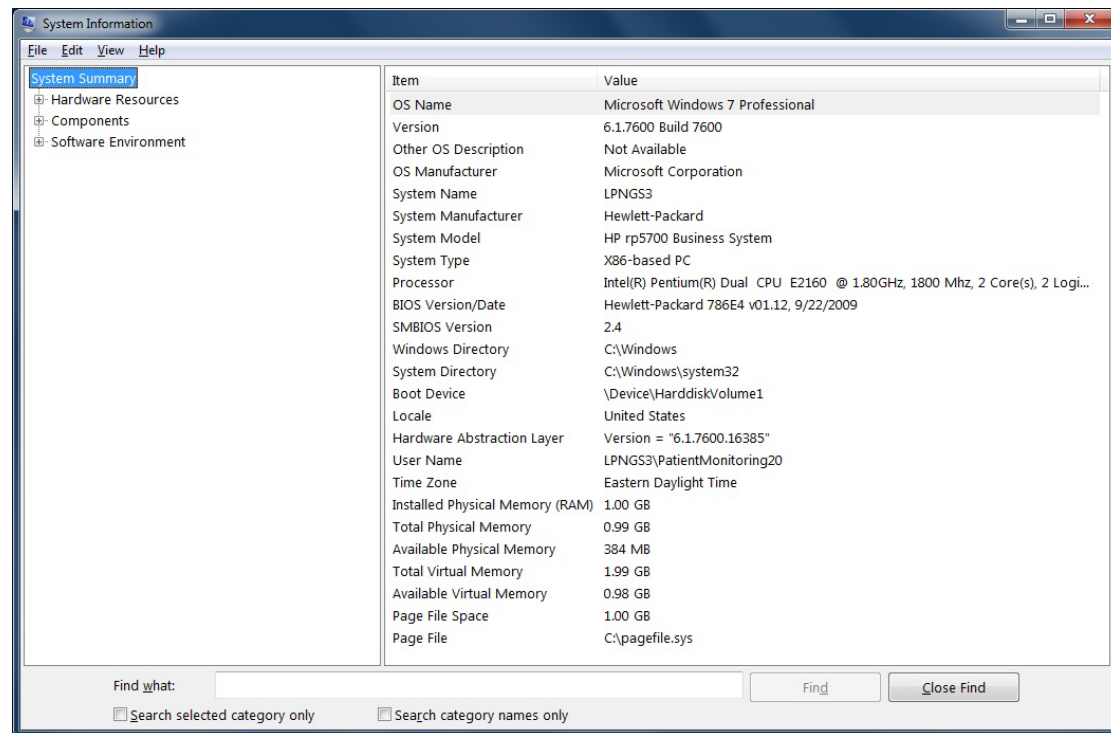
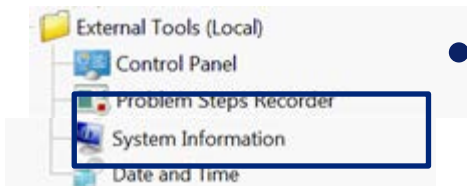


- PSR is a windows feature that automatically captures the steps you take on a computer and creates a file with graphics and text of what was done.



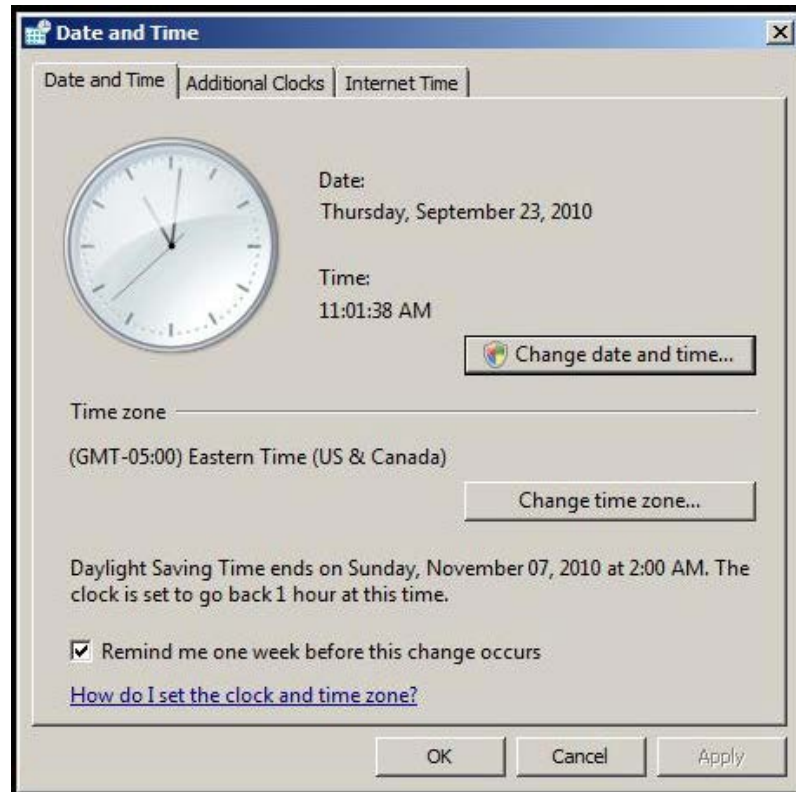
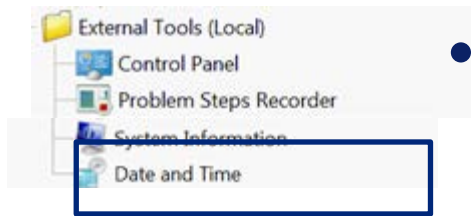
# External Tools (Local): System Information

- You can expand the system information screen with data about the local machine.



# External Tools (Local): Date and Time

- Short-cut to Windows Date and Time dialogue.



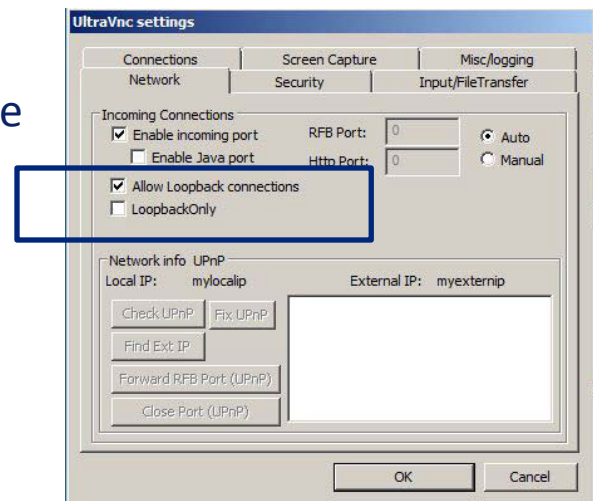
# External Tools (Local):

## Other

- Command Prompt is a shortcut to the Windows CMD.exe application.
- Ultra VNC is a link to the Viewer which is an application that you can use for remote support for a PIIcIX host.
  - Configuration information available at:  
<http://www.uvnc.com/install/viewerconfig.html>

To connect to a PIIcIX from within your hospital the LoopBackOnly checkbox must be clear.

If you clear this checkbox you are responsible for meeting security, privacy and auditing policies for internal remote access.





# If you want to access a PIIcIX Host from your Server

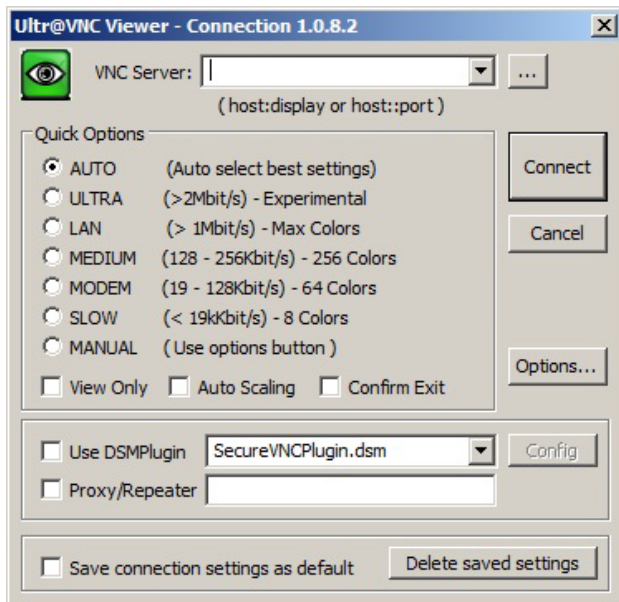
- The Clinical User must permit the remote connection at the PIIcIX through the Product Support page.

The screenshot displays the Philips Product Support interface. At the top, a status bar shows 'PHILIPS', 'Status: Connected', 'Telemetry', and the date/time 'Monday, January 30, 2012 13:23'. Below this, the 'Product Support' section is active. The interface is divided into several panels:

- Product Information:** Displays Service Number (866999), Serial Number (2A0V-7A1H-E), Product Number (M3290B), Software Version (B.00.05), Computer Host Name (LPNGSDBS), and Computer Serial Number (2UA144155Q).
- Upgrade Information:** Shows a warning 'Software update is available.' with an 'Update Now' button.
- Pending Reboot Information:** Shows a message 'This machine does not currently have a pending reboot.' with a 'Reboot Now' button.
- Remote Support Assistance:** This section is highlighted with a blue border. It contains the message 'This machine will be remotely accessed by Support personnel.' and an 'Allow' button.
- License Information:** Includes a dropdown for 'Host Name' (set to 'SimCtr1 (2UA144156W)') and an 'Export...' button.
- Feature List Table:** A table with columns 'Feature Name', 'Assigned Value', and 'Remaining Value'. It lists 'Data Acquisition' (checked), 'Patient Connections' (checked), 'Data Processing' (checked), and 'Monitor Connectivity' (checked).
- Contact Information:** A section for contact details, currently empty.

# UltraVNC Viewer-Connection

- Clicking on the UltraVNC Viewer will open this page
- Enter the hostname or IP Address of the PIICiX you wish to remotely access in the VNC Server box



When the connection has been allowed the dialogue opens



Enter your password in the box and click Log On.



# Adding New Tools to the External Tools (Local) Folder

- If you want to add additional tools to the folder:
  - Right-click the External Tools (Local) folder and select “Add”
  - Click the ellipse button next to the command text box.
    - Locate the executable file for the new tool in the Open window
  - Enter a display name in the text box
  - If necessary, add appropriate Arguments for the tool.
  - Click OK.
- To Delete:
  - Right-click the desired tool and select “Delete” from the drop down menu.

# Log Out!

- Whenever you are in a password protected function please make sure that you sign out to prevent un-authorized access and changes.

# Summary

- Access Tools under the Systems Configuration while logged in as the appropriate user.
- There are a variety of tools, some of which run locally on the machine others are for the entire PII CiX System.
- UltraVNC can be used to remote into a PII CiX Host device from the Primary Server.
- Local tools can be added to the list.



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