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## How to Use VNC with a PT series HMI from OPT

This document will describe how to use the VNC Server which is available using v2.0 or greater of the PM Designer software. (Note: VNC is not available if using any v1.2 of PM Designer.)

For a copy of PM Designer (Free Download) go to our web site – <u>http://www.offpeak-solutions.com/hmisoftware/offpeakpmv2b19.zip</u>

Please note, in this document we will be using IP addresses and other Ethernet/LAN connection settings which we know work. However, these settings must be appropriate for the network to which the HMI will be attached. So it is important to make these settings as recommended by an IT professional or other network administrator.

The VNC server will work on a Windows PC or iPad or iPhone running a VNC viewer/client.

## Follow these simple steps to get a VNC connection.

1. Download and install v2.0 of PM Designer and create a project for your model PT HMI. For testing the connection, a Numeric Display object and a Numeric Entry object will be all that is needed in the project.

Within the Project, in the Project Manager, Setup, General Setup, make the following change:

a. Set Default User Level to 0

General Setup
General Custom Keys Event Macro #1
Application Name: AP_1
Model: PT080
Splash Screen
Start Up
Screen: 1
Delay Time: 0 🚔 second(s) 🔲 Display Countdown
Language: Language 1
🗌 Login Required 🛛 Default User Level: 🚺 💌 🚔
Idle Processing
Display Idle Screen

Be sure to download the project to the HMI after making any changes.

- 2. Using the Panel Setup Screen (when PT first powers up) Press the FTP/VNC button and make these changes:
  - a. VNC
    - 1. Enable = True
    - 2. Lowest User Level For Control = 4 (recommend a number higher than 1)
    - 3. Lowest User Level for Monitor = 4 (recommend a number higher than 1)
    - 4. OK
- 3. Next Press the General button and make these changes:
  - a. Set IP Address 192.168.1.10
  - b. Set Subnet Mask 255.255.255.0
  - c. Run AP After Power On = True
  - d. Recycle power to the HMI or press RUN
- 4. Next on your PC, set the IP address to be in the range of the HMI, our is
  - 192.168.1.149, subnet mask = 255.255.255.0
- 5. On the PC, run a VNC viewer (be certain not to run a VNC server on the PC at the same time as running the viewer as there may be a conflict in communications.) We use Ultra VNC Viewer (available from web as a free download).
- 6. ON VNC Viewer screen, enter the IP address of the HMI

uick Options	ito select best settings)	Connect	
ULTRA (>2	Mbit/s) - Experimental		
Clance LAN (> 1Mbit/s) - Max Colors Cance MEDIUM (128 - 256Kbit/s) - 256 Colors			
MODEM (19	- 128Kbit/s) - 64 Colors		
DISLOW (<	19KKDit/s) - 8 Colors		
View Only	Auto Scaling 🔲 Confirm Exit	Options	
Use DSMPlugin	MSRC4Plugin_for_sc.dsm	✓ Config	
Proxy/Repeate	r		
1. 1440 x 900 @ 0	,0 - 32-bit - 60 Hz	-	
	settings as default Delete sa	aved settings	

Connection		
VNC Server:	192.168	1.10
Port:		5900
Status:	Connectir	g
Encoder:		
Speed:	123	bit/s

Cancel			Log On
This window is being served up by the	e VNC s	erver in the	(> 1Mbit/s) - Max Colors e HMI.

0

Bytes Received

- d. This window is being served up by the VNC server in the HMI.
  e. Enter your level 4 password (or which ever level you selected in Step #2 above. Our default for level 4 = 4444
- f. Then Press Log On

Traffic Bytes Sent

a. b.

c.

Password:

Cancel

7. Next, your viewer window should appear and will show whatever is being served up by the HMI.



8. If you have any operator input objects, they will be active as long as you are logged in for Control.



- 9. As mentioned previously, all network settings must be correct for VNC to function in your network environment.
- 10. The HMI VNC server will support only one client at a time.
- 11. We have this functioning as both a wired connection and a wireless connection, so both are possible with the correct network settings for all devices in the network.