# VP-23Wx OS 2.4.3.0 Release Notes

Release Date: 09/18/2014

### Key Features:

Features	Supported	Description
OS Language	Yes	VP-23Wx-EN: Multi-language including :
		<ul> <li>English</li> <li>German</li> <li>Russian</li> <li>French</li> <li>Spanish</li> <li>Italian</li> <li>Korean</li> </ul>
		VP-23Wx-SC: Simplified Chinese VP-23Wx-TC: Traditional Chinese
.NET Compact Framework 2.0	Yes	V2.0.7045 for Visual Studio .Net 2005/2008
.NET Compact Framework 3.5		V3.5.7283.0 for Visual Studio .Net 2008
SQL CE 3.5	Yes	SQL CE 3.5 (3.5.5386.0)
FTP Server	Yes	
HTTP Server	Yes	
Telnet	Yes	
Printer	Yes (PCL 6)	Support for HP Laser Jet printers with USB and Ethernet interfaces
Display Resolution	Yes	320 * 240
Multiport Serial	Yes	Supported modules:
Communication Module		
		I-8112iW (RS-232 *2)
		I-8114W (RS-232 *4)
		I-8114iW (RS-232 *4)
		I-8142iW (RS-485 *2)
		I-8144iW (RS-485 *4)
		I-8212W, I-8213W (GPS)
· _ · · · · _ · _ · _		(Industrial Tri-band 2G module)
The maximum number of ports		I-8212W-3GWA, I-8213W-3GWA (GPS)
that can be used is 12.		(Industrial Tri-band 3G module)
(i.e., 3 slots * 4 ports per		
module = max. of 12 ports)		

Software	Hardware				
OS	Eboot	PCB V1.5	PCB V1.7	PCB V2.0	PCB V2.5
V.2.4.3.0 [09/18/2014]	V.1.2.1.0	Yes	Yes	Yes	Yes
V.2.4.1.0 [04/12/2013]	V.1.2.0.0	Yes	Yes	Yes	Yes
V.2.2.0.0 [07/18/2012]	V.1.2.0.0	Yes	Yes	Yes	Yes
V.2.0.0.3 [01/21/2011]	V.1.1.0.3	Yes	Yes	(* Note1)	-
V.1.1.0.2 [07/15/2010]	V.1.0.1.3	Yes	-	-	-
V.1.0.0.7 [06/20/2009]	V.1.0.0.4	Yes	-	-	-

### **Software and Hardware Compatibility**

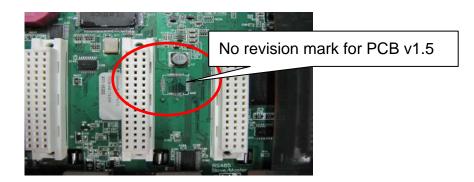
Note 1:

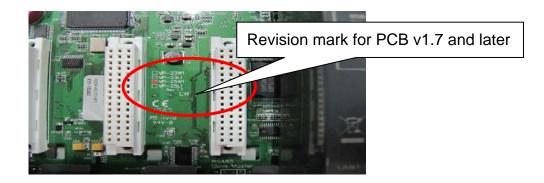
OS 2.0.0.3 works well on hardware v2.0 except support for the audio.

Note 2:

The hardware version number can be found on the PCB

### Determining the hardware version





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## VP-23Wx OS V.2.4.3.0 Release Notes

#### Abstract

This release adds new supports for non-Windows XP-style GWES that allows the user to change the button color, DHCP allocator to assign the DHCP IP address in LAN, PPTP/L2TP protocols to connect to a VPN as a dial-up client, and "Schmitt trigger" to improve the Ethernet connection stability after boot-up. It also fixes issues of where the micro SD card was sometimes not mounted after booting and the CPU usage would rise to 100% after a USB disk was inserted and then removed over eight times. The Eboot version needs be updated to 1.2.1.0 to enable "Schmitt trigger" for the Ethernet connection stability, too.

#### **New Features**

- Users now can change the GWES to non-Windows XP style skin and then change the button color.
- Adds support for DHCP allocator to assign the DHCP IP address in LAN.
- Adds support for PPTP/L2TP dial-up access, which can be used to connect to a VPN.

#### Improvements and Bug Fixes

- Modified the driver for the micro SD card to solve a problem where the micro SD card was sometimes was not mounted after booting.
- Fixed an issue in the USB driver that the CPU usage would rise to up to 100% when the user inserted and then removed a USB Disk over 8 times.
- Enabled the "Schmitt trigger" to improve the Ethernet driver and prevent problems of Ethernet connections after boot-up.

#### Eboot Version 1.2.1.0 [07/09/2013]

Enabled the "Schmitt trigger" to improve the Ethernet driver and prevent a problem where the user could not use Eshell to update the OS image file.

#### Software and Hardware Compatibility

Software		Hardware			
OS	Eboot	PCB V1.5 PCB V1.7 PCB V2.0 PCB V2.5			
V.2.4.3.0	V.1.2.1.0	Yes	Yes	Yes	Yes

#### ViewPAC Utility and WinPAC SDK

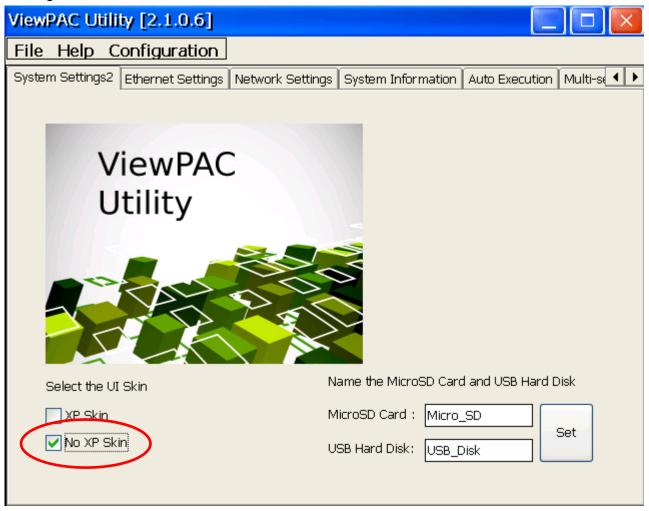
PACSDK DLL Version	4.2.3.8	(0)	2/2	1/20	13)

■ ViewPAC Utility Version 2.1.0.6 (11/30/2013)

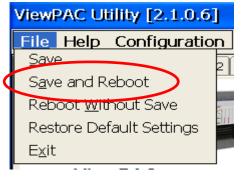
## How to change to non-Windows XP style skin GWES

The GWES for the Windows CE5.0 uses a Windows style XP skin that does not allow the user to change the color of the buttons in the programs. If you wish to change the color of the button, perform the following steps:

Step 1: Execute the ViewPAC Utility, and check the "No XP Skin" checkbox on the System Settings2 tab.



Step 2: Select the "Save and Reboot" option from the "File" menu.



### How to set the ViewPAC to assign DHCP IP address in LAN

Although Windows CE does not support the services required to operate a full DHCP server, it does support a subset of these services called the DHCP allocator. Windows CE implements the DHCP allocator as part of the ipnat module (Ipnat.dll).Typically, the DHCP allocator is contained in a gateway device. The gateway always checks if another DHCP Server is available. A full DHCP Server always supercedes the gateway DHCP allocator.

Note: More information of DHCP allocator is at: <a href="http://msdn.microsoft.com/en-us/library/ms881700.aspx">http://msdn.microsoft.com/en-us/library/ms881700.aspx</a>

If your LAN network does not contain a DHCP server, you can set the ViewPAC to allocate a DHCP IP address to each device that sends a DHCP request by performing the following steps:

Step 1: Execute the ViewPAC Utility, and check the "Enable LAN1 as DHCP allocator" checkbox on the Ethernet Settings tab.

Vi	ewPAC Utility	[2.1.0.6]			
F	ile Help Cor	figuration			
S	ystem Settings   Sys	tem Settingse	Ethernet	Settings	Network Settin
	LAN1				
	MAC Address 1:	00-0D-E0-30-3	3D-C2		
	LAN 1 IP Address	; Settings:			
	🔵 Use DHCP to a	allocate IP addr	966		
	🔘 Assign IP add	ress 🔽 Enab	ole LAN1 a	is DHCP a	llocator.
	IP Address:	10.1.0.47			
	Mask:	255.255.0.0			
	Gateway:	10.1.0.254			
	DNS Server:	10.0.0.3			
					Set

Step 2: Set a static IP address and a Mask for LAN1. The ViewPAC will then allocate the IP address to each device (i.e., if you set the Mask to 255.255.0.0, the ViewPAC will allocate the IP address 10.1.x.x. If you set the Mask to 255.255.255.0, the ViewPAC will allocate the IP address 10.1.0.x, where x=0 to 254).

LAN1
MAC Address 1: 00-0D-E0-30-3D-C2
LAN 1 IP Address Settings:
Use DHCP to allocate IP address
Assign IP address Enable LAN1 as DHCP allocator.
IP Address: 10.1.0.47
Mask: 255.255.0.0
Gateway: 10:1.0.254
DNS Server: 10.0.0.3
Set

Step 3: Click the Set button to set the new configuration.

Step 4: Select the "Save and Reboot" option from the "File" menu to save the settings and reboot the ViewPAC.

	View	PAC Utility [2.1.0.	6]		
	_File_	Help Configurat	ion		
	<u>S</u> ave	e	Ē		
4	S <u>a</u> ve	e and Reboot 🔿	E		
	Reboot Without Save				
	Restore Default Settings 🚪				
	E <u>x</u> it				

### How to create a VPN connection

To create a VPN connection, perform the follows.

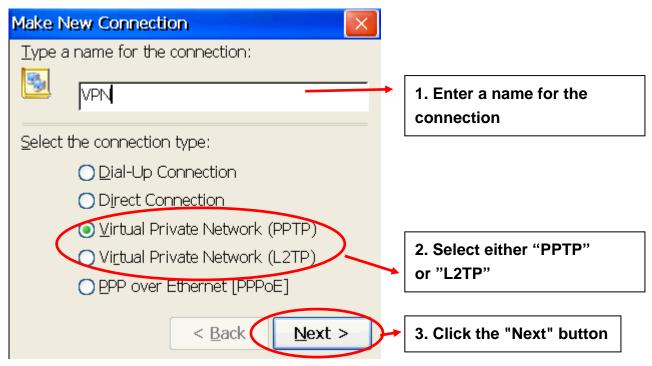
Step 1: Go to "control panel" and then double-click the icon for "Network and Dial-up connections".



Step 2: Double-click the icon for "Make New Connection".



Step 3: In the "Make New Connection" dialog box, enter a name for the connection and select either the "PPTP" or the "L2TP" option as the connection type, and then click the "Next" button.



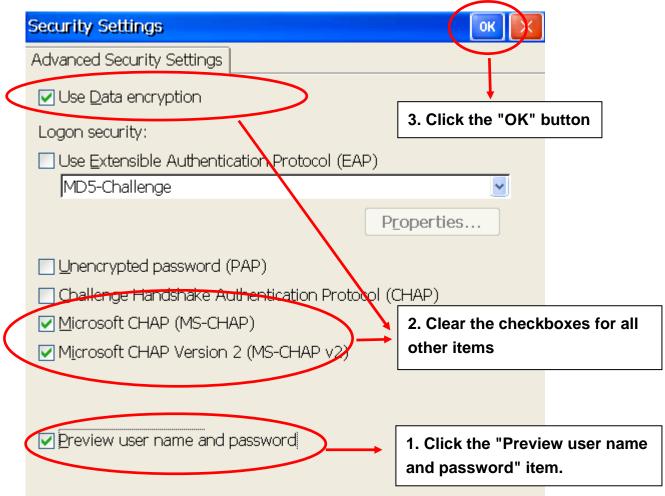
Step 4: Enter the host name or the IP address for the VPN server.

Connection	
🕺 VPN	
Host name or IP address	:
10.1.0.195	
	<u>C</u> onfigure
ICP/IP Settings	Security Settings
	< <u>B</u> ack Finish

Step 5: Click the "Security Settings..." button to open the "Security Settings" dialog box.

Connection	
2 VPN	
Host name or IP address:	
10.1.0.195	
<u>C</u> onfigure	
<u>T</u> CP/IP Settings Security Settings	
< <u>B</u> ack Finish	

Step 6: In the "Security Settings" dialog box, check the "Preview user name and password" checkbox item, and clear the checkboxes for all other items, and then click the "OK" button.



Step 7: Click the "Finish" button to save the settings.

Connection	
2 VPN	
Host name or IP address	
10.1.0.195	
	Configure
TCP/IP Settings	Security Settings
	< <u>B</u> ack Finish

Step 8: In the Network settings window, double-click the icon for the new "VPN" connection and then enter a user name and password in the login window. Click the "OK" button to establish a connection.

Enter Net	work Password			
<b>P</b>	Please type yo	ur user name and password.	:	3. Click the "OK"
	<u>U</u> ser Name		1. Ente	r a user name
	<u>P</u> assword		2. Ente	r a password
	<u>D</u> omain			
	Save passw	ord		

Step 9: A status window will be displayed with the message "Connected", indicating that the connection was successfully established.



Step10: Execute the ViewPAC Utility and then click the "Save" option from the "File" menu to save the settings.

	ViewPAC Utility [2.1.0.6]						
	File_Help Configuration	n					
Q	<u>S</u> ave	2					
	S <u>a</u> ve and Reboot						
	Reboot <u>W</u> ithout Save						
	Restore Default Settings						
	E <u>x</u> it						

### How to connect to a VPN automatically at start-up

The Dial\_utility is a program that can be used to automatically connect to a VPN, and users can use VB.net, C# or C programs to send a command to instruct it to connect or interrupt the connection. It can also be used to retrieve details related to the connection status and the command status.

Step 1: In the \System\_disk\Tools\dial\_utility folder, execute dial\_utility.exe program.

Address \System_Disk\Tools\dial_utility								
*			Dial_u	.p_utility				
dial_up	dial_up.	dial_ut	Currer	n Cmd .	Dis	connect		
			Comin	i. status :	Disc	connected		
			C	onnect		Disconnect		Address
			Entry	GPRS		Domain		
			User			Passwd		
			🔽 Conr	hect when st	arting u	р		Ver.1.01
				Jnlock	9	iet parameter		About

Step 2: Click the "Unlock" button and then enter the name for VPN connection, the User ID, and the password in the textbox and check the "Connect when starting up" checkbox. Click the "Lock" button to complete settings.

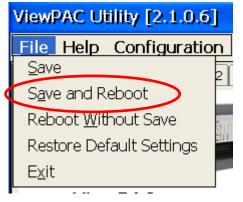
	VPN PC CONNECT	EAN1	2 LAN2	
	Dial_up_utility			
	Curren Cmd :	No command		
	Comm. status :	No action		
	Connect	Disconnect		Address
	Entry	Domain		
	User test	Passwd	test	
<	Connect when start	ing un		Ver.1.01
	Lock	Set paramete	er	About

Step 3: Execute the ViewPAC Utility, and then click the "Auto Execution tab". Set the dial\_utility.exe to be automatically executed after booting by clicking the "Browse" button and selecting the file from the "dial\_utility" folder.

ViewPAC Utility [2.1.0.6]							
File Help Configuration							
System Settings2 Ethernet Settings Network Settings System Information Auto Execution Multi-s: 4 🕨							
	Program 1: \System_Disk\di	al_utility\dial_utility.exe	Browse				
	Program 2:		Browse				
	Program 3:		Browse				
	Program 4:		Browse				
	Program 5:		Browse				
At most 10 programs can be	Program 6:		Browse				
specified to execute	Program 7:		Browse				
automatically at system startup.	Program 8:		Browse				
5y506111504104p.	Program 9:		Browse				
	Program 10:		Browse				
			Get				

Step 4: Click the "Set" button to complete the settings.

Step 5: Click the "Save" option from the "File" menu.



Next time when the ViewPAC reboots, the dial\_utility will auto connect to the VPN.