History

With the advent of Windows 7, the Windows Operating System will no longer auto-connect to an ad hoc network. This has been a concern because the operator is required to manually connect to the "wvsm" network and if for any reason that network is dropped, the operator is required to reconnect to the "wvsm" ad hoc network to view vitals remotely. In order to automate this function the following script was developed to return the auto-connect feature to the remote PC viewing software. These instructions are very specific and case sensative. Every care should be taken to follow them exactly as written. With changes and updates in Windows these instructions are subject to change at any time. If you have any difficulties in getting these to perform as required please contact us immediately and we will work together to resolve any issue that you find.

To set up Windows 7 to connect automatically to the WVSM ad hoc network you need to have the following available to set up and verify the network:

WVSM Wireless Vital Signs Monitor (at least 1).

A Personal Computer running Windows 7 Professional with a 802.11b/g Wi-Fi network adapter and the "WVSM Management Suite" already installed on it.

Note: The WVSM Management Suite is capable of connecting to a maximum of 20 WVSMs at the same time but not all wireless adapters are capable of supporting 20 WVSMs simultaneously. Most Wi-Fi adapters are capable of simultaneously connecting to 20 devices but a few are only capable of supporting from 10 to 15 devices at once. If you desire to connect to more than one device at a time you need to verify that your wireless adapter is capable of attaching to the total number of devices you want to connect to (maximum of 20).

Pre-Installation

- 1. Install the .NET and WVSM Management Suite Software.
- 2. Right click on the wireless network icon and select "Open Network and Sharing Center".

Figure 1. Network and Sharing Center



3. Open Manage Wireless Networks page.



- 4. Highlight any existing network(s) and tell Windows to "Remove" them.

	Figure 3. Re	emove Existing Pro	ofiles
🗿 🔵 💌 🌌 🕨 Control Panel 🕨 Netwo	rk and Internet 🔸 Manage Wireless Networks		
Manage wireless networks tha Windows tries to connect to these netw	It use (Wireless Network Connection orks in the order listed below.)	
Add Remove Move up Adapter pro	operties Profile types Network and Sharin	g Center	0
Networks you can view, modify, and reorde	r (2)		
GTX_AP_2G	Security: WPA2-Personal	Type: Any supported	Automatically connect
wvsm	Security: Unsecured	Type: Any supported	Manually connect
<u>.</u>			
wvsm Profile name: wvsm Security type: Unsecure	Radio type: Any supported d Mode: Manually connect		

5. When all existing profiles have been removed click on "Add".

Figure 4. Add New Profile

Control Panel + Network and Internet + Manage Wireless Networks	
Manage wireless networks that use (Wireless Network Connection)	
Windows tries to connect to these networks in the order listed below.	
Adapter properties Profile types Network and Sharing Center	
0 items	
o nems	

6. In the window that pops up click on "Manually create a network profile". (DO NOT click on "Create an ad hoc network").



Figure 5. Manually Create a Network Profile

- 7. In the new window enter the Network name (SSID) for the WVSM Management Suite. The default SSID is "wvsm" all lower case.
 - a. Under security type in the dropdown select "No authentication (Open)".
 - b. Make sure encryption type is blank.
 - c. Verify that both "Start this connection automatically" and "Connect even if the network is not broadcasting" are UNCHECKED.
 - d. Click "Next" and in the popup click on the "Close" button.

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~				
G all Manually connect to	a wireless network			
Enter information	for the wireless network you want to add			
	, i i i i i i i i i i i i i i i i i i i			
Network name:	wvsm			
Security type:	No authentication (Open) 🚽			
Encryption type:	None			
	None			
Security Key:	Hide characters			
Ctat this connection automatically				
Start this connection automatically				
Connect even if the network is not broadcasting Warning: If you select this option, your computer's privacy might be at risk.				
wanning, ir you s	elect this option, your computers privacy might be at risk.			
	Next			

Figure 6. Network Information

8. In the remaining window confirm that the network profile has been added. It will appear as an infrastructure icon (two big screens connected to a tube) this is ok for now.



Figure 7. WVSM Network with Infrastructure Icon

9. Close the "Manage Wireless Networks" window.

Command Line

1. Click on the start button and in the search window type "cmd" and press enter.



Figure 8. Open Command Line

a. A command line box will open and an underscore symbol will be blinking at the end of a short line of text starting with C:. Type the following exactly as shown but without the quotes "netsh wlan set profileparameter name=wvsm connectiontype=ibss" and press enter.



Figure 9. Command Line Entry

b. If everything went correctly the following message will appear: Profile "wvsm" on interface "wireless adapter" updated successfully. The "wireless adapter" name may change depending on the name assigned to it by Windows.



Figure 10. Success Message

2. Reopen the "Manage Wireless Networks" window and verify that the icon for the wvsm profile has changed to an ad hoc symbol (three small screens connected to each other).

	ingule II. WVSIVI		
G S - M + Control Panel	Network and Internet Manage Wireless Networks		👻 🍫 Search Manage Wireless Networks 👂
-	orks that use (Wireless Network Connection) hese networks in the order listed below.		
Add Adapter properties Pro	file types Network and Sharing Center		0
Networks you can view, modify, a			· · · · · · · · · · · · · · · · · · ·
wvsm	Security: Unsecured	Type: Any supported	Manually connect
1 item			

Figure 11. WVSM Network with ad hoc Icon

3. Close the Manage Wireless Networks window.

Startup Utility

- 1. Click "Start".
 - a. Point to "All Programs".
 - b. Right click on the "Startup" folder.
 - c. Click "Open" or "Open all users".





d. Right click on the window that appears. In the dialogue box that appears select "New" then "Shortcut". In a recent update, Windows will no longer allow you to create a shortcut in the "Startup" folder. If this is the case, create the shortcut on the desktop instead and then move it to the "Startup" folder when complete.

🕥 🕞 🔍 Microsoft 🔸 Windows 🔸 Start Menu	• • •	rograms 🔸 Startup 👻 🔩 Se	arch	h Startup 🔎
Organize Include in library Share with		lew folder		lii 🕶 🔟 🔞
Favorites Eventop Dexitop Devinloads Sources Sources Sources Sources	Nar	e Date n This folder is empt		ified Type Siz
Libraries Documents Music Pictures Videos Compouter WND7 (Cc) DATA (C): AthenaData (\\ATHENANAS-PC) (Z)	۷	AMD VISION Engine Control Center View > Sort by > Refresh Customize this folder Paste Paste Abntcut Undo Delete Ctrl=Z Share with >		
🗣 Network		New Properties		Microsoft Access Database Bitmap image Contact Microsoft Word Document Journal Document
0 items				Microsoft Publisher Document Text Document Microsoft Excel Worksheet Compressed (zipped) Folder

Figure 13. Add New Shortcut

e. Type in the following exactly as written but without the quotes "netsh wlan connect wvsm".



f. Click "Next" and enter "connect to wvsm" without the quotes.

G	g Create Shortcut		<u> </u>
	What would you like to name the shortcut?		
	Type a name for this shortcut:		
	connect to wvsm]	
2	Click Finish to create the shortcut.		
		Finish Can	cel

Figure 15. Shortcut Name

g. Click Finish.

Adapter Settings

- Right click on the wireless network icon and select "Open Network and Sharing Center" (See Figure 1).
- 2. On the left hand side, click "Change Adapter Settings".



Figure 16. Change Adapter Settings

3. Right click on the "Wireless Network Connection" and select "Properties".

Figure 17. Wire	eless Network Propert	ies
Control Panel + Network and Internet + Network Connections	a delicity a dependent of the a	Search Network Connections
Control Year 1 Reference and Internet 9 Network Control Control View Organize Control Year 1 Reference And Andree Despine a Network Revice Control Year 1 Reference Control Year 1 Review Control Rev View Reference Control View Reference Contro	nection Rename this connection View status of this connection	1.500

a. Click "Internet Protocol Version 4" then "Properties".

Figure 18. Internet Protocol 4				
Uvireless Network Connection 3 Properties				
Networking Sharing				
Connect using:				
Belkin 54g Wireless USB Network Adapter #3				
Configure				
This connection uses the following items:				
Client for Microsoft Networks				
🗹 💂 QoS Packet Scheduler				
✓ ➡ File and Printer Sharing for Microsoft Networks				
Internet Protocol Version 6 (TCP/IPv6)				
✓ Internet Protocol Version 4 (TCP/IPv4)				
Link-Layer Topology Discovery Mapper I/O Driver				
🗹 🔟 Link-Layer Topology Discovery Responder				
Install Uninstall Properties				
Description				
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.				
OK Cancel				

- b. Click the button "Use the following IP address:"
- c. In the box for IP address enter: 10.19.1.XXX.
 - i. Replace XXX with a number 1-254 not already being used.

d. In the box for Subnet mask enter: 255.255.0.0 and click "OK".

Figure 19. IP Address and Subnet Mask					
Internet Protocol Version 4 (TCP/IPv4)	Properties ? X				
General					
	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.				
Obtain an IP address automatical	у				
Use the following IP address:					
IP address:	10 . 19 . 1 . 54				
Subnet mask:	255.255.0.0				
Default gateway:					
Obtain DNS server address autom	natically				
Use the following DNS server add	resses:				
Preferred DNS server:					
Alternate DNS server:	• • •				
Validate settings upon exit	Advanced				
	OK Cancel				

e. Click "OK".

4. Close Network and Sharing Center

Notes

- 1. The examples above use "wvsm" as the SSID for the wvsm network. If a different SSID has been chosen, all references to "wvsm" should be changed to the new SSID.
- 2. If you choose to, you can copy the shortcut to the taskbar or desktop so it would be easy, should it be necessary, to reconnect the network at any time.
- 3. A shortcut for the "WVSM Management Suite" software may be placed in the "Startup Folder" similar to the "startup utility" so that the "WVSM Management Suite" software will auto start when the system boots.

Verification

- 1. When all functions are complete reboot the computer.
- 2. With at least one WVSM turned on and the wireless broadcasting, start the "WVSM Management Suite" and verify that the WVSM automatically connects to the "WVSM Management Suite" software.
- 3. Turn on the remainder of the WVSMs designated for your network (Maximum of 20) and verify that they all connect to the software suite.