

Xirrus Wi-Fi Monitor Gadget for Windows Vista Guide

Version 1.1

June 23, 2008

Description

The Xirrus Wi-Fi Monitor is a free gadget utility for Windows Vista systems. Gadgets are simple, mini-applications that run on the Vista desktop and provide easy access to commonly used information and tools. The Xirrus Wi-Fi Monitor gadget provides at a glance access to information about the surrounding Wi-Fi environment, plus your system's Wi-Fi adapters and connections. It provides a useful tool for anyone deploying and operating Wi-Fi.

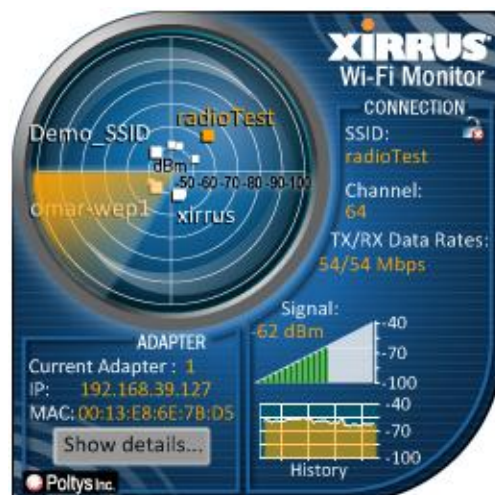
Applications

The Wi-Fi Monitor gadget can be used for a number of practical applications, including:

- Search for local Wi-Fi networks
- Display laptop wireless settings
- Verify Wi-Fi coverage (simple site survey)
- Locate Wi-Fi devices
- Detect rogue APs
- Verify AP settings
- Aim Wi-Fi antennas
- Education on Wi-Fi

Features

- At-a-glance radar-like view of available Wi-Fi networks and their relative distance
- Current Wi-Fi connection signal strength with 5 minute history
- Display of Wi-Fi adapter IP and MAC addresses
- Details on available Wi-Fi networks – SSID, channel, security, type, etc.
- Support for multiple adapters
- Summary view when on sidebar, expanded view when operating on desktop
- 9 different color skins



What's New

New in the 1.1 release (June 23, 2008):

1. 802.11n support
2. Eight new skins (select from the Settings screen)
3. Locate mode (Geiger counter) for locating Wi-Fi networks
4. Connect/Disconnect button on flyout window to connect to a Wi-Fi network
5. Enable/Disable Adapter button on flyout window to turn Wi-Fi on/off
6. TX/RX Data Rates of current connection
7. Color coded graphical RSSI indicator per SSID on flyout window
8. Rates on all statistics in flyout window
9. Adjustable polling interval
10. Sonar animation on radar window
11. Updated Glossary of Wi-Fi technology

Installation

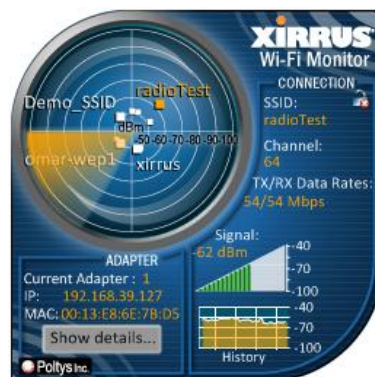
1. It is recommended, but not required, to run the gadget with Vista SP1.
2. Uninstall any previous versions of the Xirrus Wi-Fi Monitor gadget first. To do so, close the gadget if it is running. Open the gadgets window by clicking the "+" at the top of the Windows Sidebar. Right click on the Wi-Fi Monitor gadget icon and select "Uninstall".
3. Download the 1.1 version gadget from the Xirrus or Microsoft web sites (see below).
4. Double click on the .zip file (if downloaded from the Xirrus web site)
5. Double click on the .gadget file to install.
6. Select "Install" on the Security Warning dialog that appears.
7. The gadget should install directly into the sidebar panel on your Vista desktop.

Operation

1. Sidebar: When on the sidebar, the gadget displays Wi-Fi network names (SSIDs) on the sweeping radar display, currently connected SSID, IP address, and signal strength.



2. Desktop: Drag/drop the gadget from the sidebar to your desktop, or right click on the gadget and select Detach from Sidebar. The gadget face will enlarge with additional details, including MAC address, channel, BSSID, and a 5 minute signal history graph.



3. **Fly Out:** In both sidebar and desktop modes, selecting “Show Details” opens up a fly out window. More detailed information about your adapter is displayed at top. A table of available networks is listed below with the currently connected network (SSID) highlighted in orange. Selecting the Statistics tab provides current stats for the adapter. The Glossary tab provides definitions for Wi-Fi terminology.

The screenshot shows the XIRRUS Wi-Fi Monitor flyout window. The left sidebar displays a radar chart for 'radioTest' and 'Demo_SSID', along with adapter information: 'Current Adapter: 1', IP: 192.168.39.127, and MAC: 00:13:E8:6E:7B:05. The main window shows connection details for '1. Intel(R) Wireless WiFi Link 4965AG', including SSID, Association Mode, Driver Version, Authentication, Transmit Rate, BSSID, Association Type, MAC Address, and Receive Rate. Below this is a table of available networks with columns for SSID, Default Authentication, Default Encryption, RSSI (dBm), Channel, Frequency (MHz), BSSID (MAC Address), Network Mode, and Network Type. The 'radioTest' network is highlighted in orange.

SSID	Default Authentication	Default Encryption	RSSI (dBm)	Channel	Frequency (MHz)	BSSID (MAC Address)	Network Mode	Network Type
radioTest	Open	None	-56	64	5320	Xirrus:03:38:71	802.11a	Access Point
omar-wep1	Open	WEP	-26	1	2412	Xirrus:07:B3:91	802.11g	Access Point
Demo_SSID	Open	None	-26	1	2412	Xirrus:07:B3:92	802.11g	Access Point
xirrus	Open	None	-27	1	2412	Xirrus:07:B3:90	802.11g	Access Point

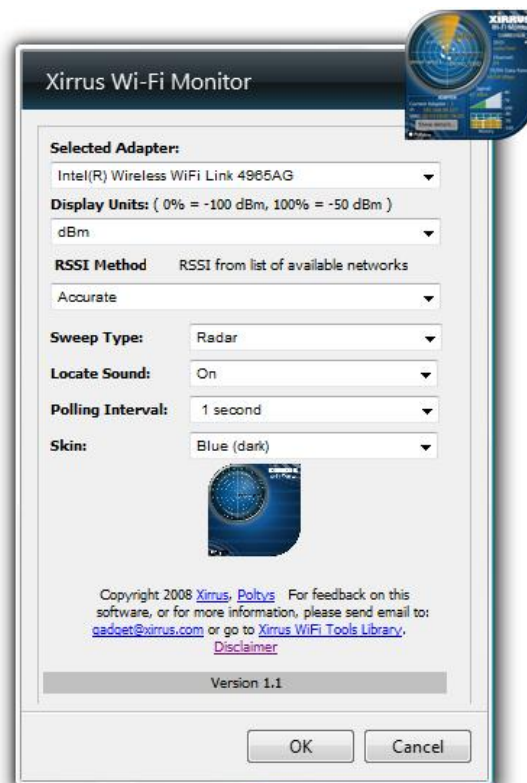
4. **Locate:** Click on an SSID name in the left hand column of the flyout window to enter Locate mode for that Wi-Fi network. This mode works like a Geiger counter for helping to locate any Wi-Fi network, whether your system is connected to it or not. The SSID selected for locate Data mode becomes highlighted in yellow in the table. The gadget face changes to display information only about that SSID, including its signal strength and an expanded history graph. A periodic beeping sound provides an indication of distance to the device – the nearer it is, the faster the beeping rate.

The screenshot shows the XIRRUS Wi-Fi Monitor in Locate mode. The left sidebar displays a radar chart for 'Demo_SSID' and 'Locate' mode information: BSSID: 00:0F:7D:07:B3:D2, Channel: 11, and Signal: 31 dBm. The main window shows a table of available networks with columns for SSID, Default Authentication, Default Encryption, RSSI (dBm), Channel, Frequency (MHz), BSSID (MAC Address), Network Mode, and Network Type. The 'Demo_SSID' network is highlighted in yellow.

SSID	Default Authentication	Default Encryption	RSSI (dBm)	Channel	Frequency (MHz)	BSSID (MAC Address)	Network Mode	Network Type
radioTest	Open	None	-61	64	5320	Xirrus:03:38:71	802.11a	Access Point
xirrus	Open	None	-9	11	2462	Xirrus:07:B3:D0	802.11g	Access Point
xirrus	Open	None	-27	1	2412	Xirrus:07:B3:90	802.11g	Access Point
omar-wep1	Open	WEP	-27	1	2412	Xirrus:07:B3:91	802.11g	Access Point
Demo_SSID	Open	None	-28	1	2412	Xirrus:07:B3:92	802.11g	Access Point
Demo_SSID	Open	None	-31	11	2462	Xirrus:07:B3:D2	802.11g	Access Point
Demo_SSID	Open	None	-33	6	2437	Xirrus:07:B3:F2	802.11g	Access Point
xirrus	Open	None	-33	6	2437	Xirrus:07:B3:F0	802.11g	Access Point
omar-wep1	Open	WEP	-33	6	2437	Xirrus:07:B3:F1	802.11g	Access Point
xirrus1	Open	None	-39	6	2437	Xirrus:03:60:F1	802.11g	Access Point

5. **Settings:** Moving your mouse over the upper right hand corner of the gadget (in both Sidebar and Desktop modes) displays an ‘X’ icon which closes the gadget and a wrench icon which opens up a Settings window. Available settings include:

- Selected Adapter: Choose the Wi-Fi adapter to display information about on the main gadget face (when more than one adapter is present on your system)
- Display Units: Select units to display signal strength (RSSI), either % or dBm. A 0% signal corresponds to -100dBm. A 100% signal corresponds to -50dBm or greater.
- RSSI Method: Select either Accurate or Classic method. The Accurate method is the default and best indication of current signal strength.
- Sweep Type: Select either a radar or sonar style sweep animation on the radar face of the gadget. The animation can also be disabled.
- Locate Sound: Choose to either enable or disable beeping sound in Locate mode.
- Polling Interval: Select the interval in seconds that the gadget samples new Wi-Fi information. The shorter the interval, the faster the gadget will update information.
- Skin: Select from 9 different color/style graphical skins for the gadget.



Tips

1. To reduce CPU utilization of the gadget, increase the Polling Interval (from Settings window) and/or select "None" for the Sweep Type on the Settings window.
2. Clicking on the radar display opens the flyout window, in addition to the "Show details" button.
3. Choose Accurate (the default) for the RSSI Method from the Settings menu for most accurate signal strength information. This information comes from the Wi-Fi adapter scanning across Wi-Fi channels. The Classical method is commonly used by many other Wi-Fi utilities and takes RSSI information from the connection itself. This information is updated less frequently than with the Accurate method.
4. Click on the column headers on the flyout table to sort by that item, especially useful if there are a lot of networks (SSIDs) in the table.

5. When there are multiple Wi-Fi adapters on the system, click on the adapter name in the fly out window to expand/contract the view of its information.
6. Detect Ad Hoc networks (a potential security threat in Wi-Fi networks) using the Network Type column in the Available Networks table on the fly out. This column will display values of either Access Point or Ad Hoc.

Known Issues

Following are known issues with the 1.1 version of the Wi-Fi Monitor gadget:

1. In some installations, the gadget does not properly connect to the system's Wi-Fi adapter and the "Selected Adapter" box on the Settings screen will be blank. If this occurs, try the following in order:
 - o Uninstall then reinstall the gadget
 - o Uninstall the gadget, reboot the computer, then reinstall the gadget
 - o Uninstall the gadget, disable then re-enable your Wi-Fi adapter, then reinstall the gadget
 - o Upgrade your system to Vista Service Pack 1 if it is not already running this SP
2. In some installations, the IP address field may display blank. In this case, try upgrading to Vista Service Pack 1 (SP1).
3. The gadget will not run properly on systems running virtualization software such as VMware or Microsoft VirtualPC.
4. The gadget may have issues coexisting with some anti-virus packages. Try temporarily disabling this software, then reinstalling the gadget, to see if this is the issue.

Updates

The Xirrus Wi-Fi Monitor gadget may be updated periodically with new features and fixes. The latest gadget versions are posted for free download from:

1. Xirrus website, Wi-Fi Tools page: <http://www.xirrus.com/library/wifitools.php>
2. Microsoft Windows Live Gallery: <http://gallery.live.com>, search for "Xirrus".

Support/Feedback

The Wi-Fi Monitor gadget is a free tool and does not come with a guarantee of support. However, inquiries and feedback about our gadgets can be made by sending an email to gadget@xirrus.com or by using the review feature or troubleshoot forum on the Windows Live Gallery site.

Also Available

The Xirrus Wi-Fi Monitor is also available as a widget for Windows XP and Apple Mac. A Linux desklet version is also in development. Check back on the Xirrus web site for updates and new operating system versions: <http://www.xirrus.com/library/wifitools.php>