

XFINITY[®] Connection Manager

Version 1.06

User Guide

<http://customer.comcast.com/2go>

1-800-COMCAST



Take Fast With You

Copyright 2011, Smith Micro Software, Inc. All rights reserved.

This document is the property of Smith Micro Software, Inc. and contains confidential and proprietary information owned by Smith Micro Software, Inc. Any unauthorized copying, use or disclosure of it without the prior written permission of Smith Micro Software, Inc. is strictly prohibited.

Table of Contents

Chapter 1 — Getting Started

System Requirements	5
Installing the XFINITY Connection Manager Software	6
Launching the XFINITY Connection Manager	6

Chapter 2 — The XFINITY Connection Manager Interface

Getting Connected	8
Supported Networks List: In Detail	9
The Main Window	11
Minimizing the Main Window	14
Using the System Tray Icon	15

Chapter 3 — Establishing Mobile Connections

Manually Connecting to a Mobile Network	17
---	----

Chapter 4 — Establishing WiFi Connections

Manually Connecting to a WiFi Network	20
Options for Connecting to a New Network	21
The List of WiFi Networks	22
WiFi Info	23
What is a Closed Network?	23
How to Access a Closed Network	23
Introduction to WiFi Encryption	24
Connecting to an Encrypted Network	26

Chapter 5 — Network Profiles

What is a Network Profile?	27
The Network Profiles Window	27
Creating a Profile for a WiFi Network	29
Configuring WiFi Data Encryption	31
Automatic Profile Creation Settings	32
Editing a Network Profile	32
Deleting a Network Profile	33
Profile Properties: WiFi	33
Profile Properties: General	34

Chapter 6 — Virtual Private Networks (VPNs)

What is a Virtual Private Network?	37
Supported Clients	37
Configuring a VPN Connection	37
Automatically Launching a VPN Connection	38
Using the Checkpoint VPN Client	39
Using the NetMotion VPN Client	40

Chapter 7 — XFINITY Connection Manager Settings

Introduction	41
Settings: General	41
Settings: Updates	42
Settings: Hardware	44
Settings: Connection Timeout	49
Settings: VPN	50

Chapter 8 — Troubleshooting Tools

Event History Manager	52
WiFi Network Information	53
Mobile 3G Info Window	56
Mobile 4G Info Window	61
About XFINITY Connection Manager	65

Chapter 9 — Troubleshooting Procedures

Numbered Errors	66
Application Launch Issues	71
Device Issues	72

Chapter 10 — Support

Support Information	73
-------------------------------	----

Chapter 11 — FAQs

Frequently Asked Questions	74
.	79

Getting Started

1

System Requirements

The minimum system requirements to install and operate the XFINITY Connection Manager are shown in the table that follows:

	Windows XP	Windows Vista	Windows 7
<i>Processor</i>	300 MHz	1 GHz (1.25 GHz recommended)	1 GHz (1.25 GHz recommended)
<i>RAM</i>	256 MB	1 GB (2 GB recommended)	1 GB (2 GB recommended)
<i>Hard Drive Space</i>	60 MB	75 MB	75 MB
<i>Internet Explorer</i>	IE 5.5 (or higher)	IE 7 (or higher)	IE 7 (or higher)
<i>Windows Service Pack</i>	Service Pack 3 (or higher)	Service Pack 2 (or higher)	Any
<i>32-Bit or 64-Bit</i>	32-Bit	32-Bit or 64-Bit	32-Bit or 64-Bit

Additional Requirements

- Windows Vista and Windows 7 operation requires a DirectX 9.0 (or better) graphics accelerator
- Internet connection (if downloading the software from the Internet)
- CD-ROM drive (if installing from CD)
- Compatible XFINITY Mobile 3G or Mobile 4G Internet Device for Mobile connections
- Compatible WiFi enabled device for WiFi connections

New Devices Supported

This version of the XFINITY Connection Manager supports the following Mobile Internet Devices:

- Novatel MC760

- Franklin Wireless CMU-300
- Franklin Wireless CMU-301
- Franklin Wireless CMU-600
- ZTE TU25
- Ubee PXU1903

Installing the XFINITY Connection Manager Software

Installing the XFINITY Connection Manager is easy. Complete the following steps to install the XFINITY Connection Manager software:

1. Insert the CD into your computer's CD ROM drive.
2. If your computer automatically starts the installation program from the CD, follow the on-screen instructions for installation and configuration.

If your computer does not automatically install the software from the CD:

- a. Open the *My Computer* folder (on Windows Vista and Windows 7, this folder is simply called *Computer*.)
- b. Browse to the CD drive in My Computer (or Computer), and double-click on the CD drive icon.
- c. Double click the "Setup" icon to begin installation.
- d. Follow the on-screen instructions to install and configure the XFINITY Connection Manager.

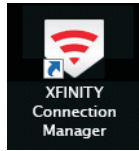
Note: Once the XFINITY Connection Manager software is installed, supported wireless devices will be detected automatically by the XFINITY Connection Manager whenever you attach them.

DO NOT plug the XFINITY Mobile Internet Device into your computer until you have completed the XFINITY Connection Manager Installation. Inserting the device prior to installing the XFINITY Connection Manager could result in the device drivers being configured incorrectly.

Launching the XFINITY Connection Manager

Once your hardware is installed and ready to connect, you may go ahead and launch the XFINITY Connection Manager by doing one of the following:

- Double-click the *XFINITY Connection Manager* icon on your computer's desktop



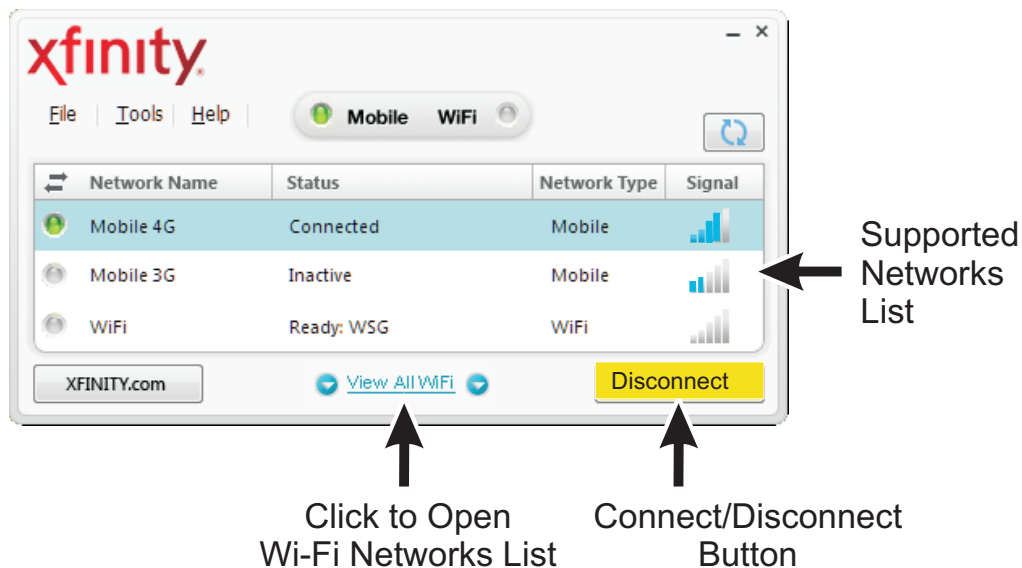
- In the Start menu, select *Programs* or *All Programs > XFINITY > XFINITY Connection Manager > XFINITY Connection Manager*.

The XFINITY Connection Manager Interface

Getting Connected

By default, the XFINITY Connection Manager automatically connects to an available Mobile 4G or Mobile 3G network. It will seek to connect to WiFi, Mobile 4G and Mobile 3G networks (in that order). You can also manually connect to a network, by first turning off the auto-connection feature. WiFi connections may require additional configuration first, but the basics of establishing a connection are simple:

1. If you are already connected to a network whose connections are not managed by the XFINITY Connection Manager, you must shut that connection down before establishing a connection with the XFINITY Connection Manager (only one connection is allowed at a time).



Note: Manually disconnecting switches off the auto-connect feature until you restart the XFINITY Connection Manager application.

2. Select the network to which you want to establish the connection by clicking one of the lines of the [Supported Networks List](#).

Note: If more than one available WiFi network is detected, the XFINITY Connection Manager selects one for you. To choose a different network, click [View All WiFi](#), which displays the complete list of WiFi networks detected (see page 22).

3. Click the [Connect](#) button to establish a connection to the currently selected network.

Note: Because only one connection is allowed at a time, any other connection will be shut down when you click [Connect](#).

See Chapter 3, “Establishing Mobile Connections” for more information on establishing Mobile 3G and Mobile 4G connections. See Chapter 4, “Establishing WiFi Connections” for more information on establishing WiFi connections.

Supported Networks List: In Detail

The main window of the XFINITY Connection Manager interface features a list of the supported networks. The networks for which you have a supported device installed are displayed in black. Those for which you do not have a supported device installed are in gray.

 Network Name	Status	Network Type	Signal
 Mobile 4G	What's 4G?	Mobile	
 Mobile 3G	Ready To Connect	Mobile	
 WiFi	Ready: *Closed*	WiFi	

Note: Networks are displayed in GRAY if the corresponding device has been disabled by the Windows operating system.

The columns in this list include the following:

Connection Indicators

If you are currently connected to a particular network, the corresponding connection indicator is lit GREEN in XFINITY. Other networks (to which you are not connected) remain GRAY.

Network Name

Networks supported by the XFINITY Connection Manager are listed in this column. If the Mobile 3G network displayed is not XFINITY's network, the **R** symbol appears next to the network's name to indicate that this is a roaming network.

Status

This column provides a brief textual description of the connection status for the currently-selected network (for example, "Ready to Connect" or "Connected").

If the XFINITY Mobile Internet Device you are currently using is a 4G-only device, this column contains a "What's 3G?" link. Click this link to view information on upgrading to 3G/4G dual mode service.

Network Type

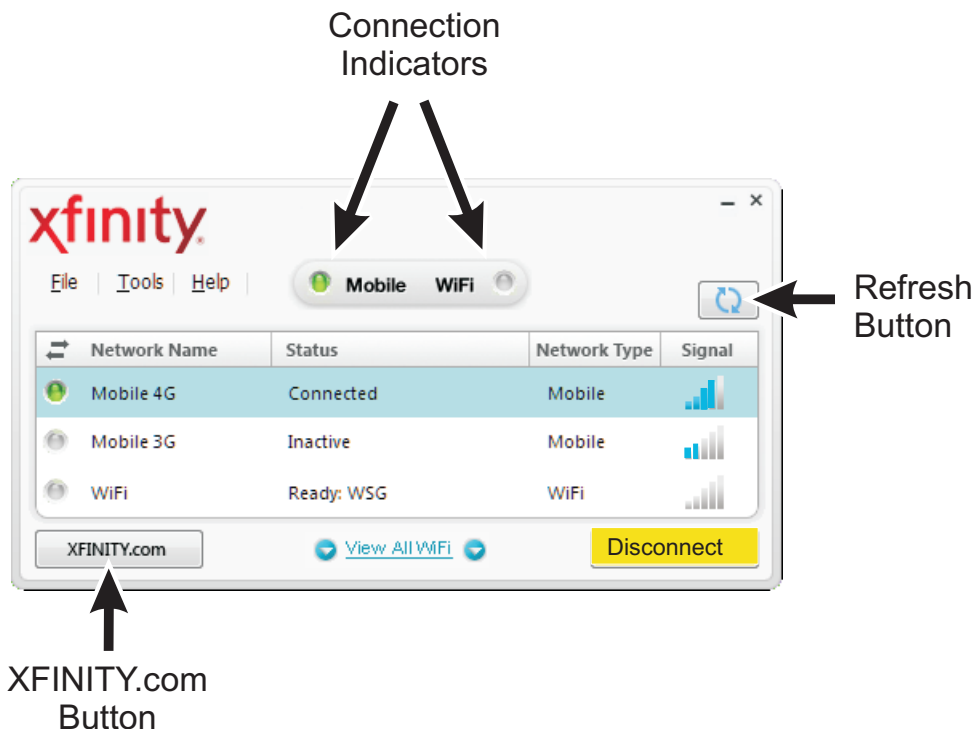
This column indicates whether each supported network is Mobile (3G or 4G) or WiFi. Additionally, an icon appears in this column, if the network to which you are currently connected has been secured using encryption technologies.

Signal

This column indicates the current strength of signals being received from this network. Stronger signals tend to produce more reliable connections.

The Main Window

The main window displays information about your current connection and other wireless networks that are available for connection.



Note: If more than one WiFi network is currently available, the XFINITY Connection Manager chooses the network to be displayed in the following manner:

1. The last network you connected to (if available) is given the highest preference.
2. Any "preferred" network (networks for which you have a profile) are chosen next, starting with the highest priority profile.
3. If no WiFi networks for which you have a profile are available, the network with the strongest signal strength is displayed.

Connection Indicators

These indicators are similar to the connection indicators on the leftmost column of the Supported Networks List. However, the Mobile indicator indicates a connection to either a Mobile 3G network or a Mobile 4G network.

Refresh Button

Click this button to refresh the information in the window.

XFINITY.com Button

When connected to one of the networks listed above, clicking this button opens your browser to the XFINITY home page.

The main window has the following menus:

- File menu
- Tools menu
- Help menu

The File Menu

Click [File](#) in the menu bar of the XFINITY Connection Manager's main window to produce a menu with the following options:

Enable/Disable WiFi

Select this option to enable and disable WiFi. Use the disable option when you want to prevent your WiFi adapter from establishing connections or consuming your laptop's power.

Enable/Disable Mobile 3G

Select this option to enable and disable XFINITY Mobile 3G connections. Use the disable option when you want to prevent your XFINITY Mobile 3G Internet Device from establishing connections or consuming your laptop's power.

Enable/Disable Mobile 4G

Select this option to enable and disable XFINITY Mobile 4G connections. Use the disable option when you want to prevent your XFINITY Mobile 4G Internet Device from establishing connections or consuming your laptop's power.

Exit

Exit the XFINITY Connection Manager application and close any wireless connections.

The Tools Menu

Click [Tools](#) in the menu bar of the XFINITY Connection Manager's main window to produce a menu with the following options:

Profiles

Select this option to display the Network Profiles window (see page 27). This window is used to create, edit and prioritize network profiles.

My Usage

Select this item to open your default browser to the [Customer Central Website](#), where you can view your current [3G/4G data usage](#). You will need your account holder login information (the login information you use to pay your bill). An informational dialog box displays to notify you of your action. This dialog box displays each time you click [My Usage](#), until you check the [Do Not Show Again](#) box. This item is grayed out when no Internet access is available.

Note: If you have not yet registered for online access, you must click the [Click Here to Register](#) link, in the dialog box, to sign up for online access. You can also visit the sign up page at <https://customer.comcast.com>.

Upon successful login, with correct credentials, the [Users & Settings](#) web page with your 3G/4G data usage displays.

Diagnostics > WiFi Info

Select this item to open the WiFi Info window. This window displays technical information about the WiFi network to which you are currently connected (if any) and the associated WiFi enabled device.

Diagnostics > Mobile 3G Info

Select this item to open the Mobile 3G Info window. This window displays technical information about the Mobile network to which you are currently connected (if any) and your XFINITY Mobile 3G Internet Device.

Diagnostics > Mobile 4G Info

Select this item to open the Mobile 4G Info window. This window displays technical information about the Mobile 4G Internet network to which you are currently connected (if any) and your XFINITY Mobile 4G Internet Device.

Diagnostics > Event History

Select this item to display a list of the most recent events (for example, network connections, network disconnection, errors, etc.).

Diagnostics > Generate Diagnostics

Select this item to generate a file containing diagnostic information; XFINITY technical support may ask you to generate and email the file to aid in diagnosing connection problems.

Check for Updates

Select this item to check for updates to the XFINITY Connection Manager software and its databases.

Settings

Select this item to open the Settings window, which allows you to configure a number of features to your personal preference.

The Help Menu

Click [Help](#) in the menu bar of the XFINITY Connection Manager's main window to produce a menu with the following options:

Help

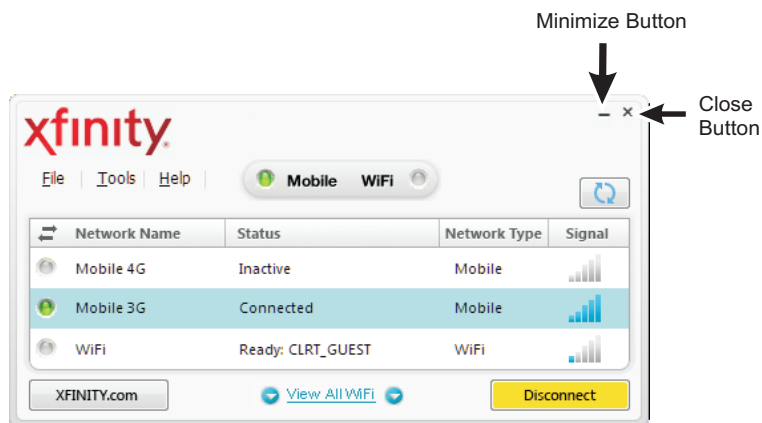
Select this item to open the XFINITY Connection Manager's help system.

About the XFINITY Connection Manager

Select this item to display version information for the XFINITY Connection Manager software.

Minimizing the Main Window

The buttons in the upper-right corner of the main window control the appearance and location of the window.



Minimize Button

Similar to the minimize button in most Windows applications, this reduces the XFINITY Connection Manager to a panel on the task bar.

Click this panel to return the XFINITY Connection Manager to full size.

Close Button

Click this button to close the main window but leave the XFINITY Connection Manager running in the background. The smaller version of the main window (shown below) appears in the corner of your screen.



After a few seconds, this window closes automatically and only the system tray icon remains on the screen (see page 15).

Available Networks

Click the Available Networks link to return to the main window.

Using the System Tray Icon

Whenever the XFINITY Connection Manager software is running, the icon shown below appears in the system tray (the row of icons next to the clock on the taskbar).



The icon remains in the system tray as long as the XFINITY Connection Manager is running, even if the main window has been closed. Click once on this icon to open a small window with

the ability to connect and disconnect. Note that this smaller version of the main window only remains on screen for a few seconds (just long enough to establish a new connection).



Double-click the system tray icon to open the main window (if it is closed) and to move it in front of other open applications.

The Right-Click Menu

Right-click the system tray icon to produce a menu with two options:

- Select [Settings](#) to open the Settings window (see Chapter 7, “XFINITY Connection Manager Settings”).
- Select [Exit](#) to close the XFINITY Connection Manager application.

Establishing Mobile Connections

Manually Connecting to a Mobile Network

By default, the XFINITY Connection Manager automatically selects an available wireless network and establish a connection. But, you can choose a different network if you like. To manually connect to a mobile network, follow these steps:

1. Connect your XFINITY Mobile Internet Device.
2. Select either *Mobile 4G* or *Mobile 3G* in the main window.
3. Click the *Connect* button to connect.

Note: Manually choosing a network to connect to stops the XFINITY Connection Manager from automatically connecting to networks for the duration of the session. If you want to return to automatic connection mode, you must restart the XFINITY Connection Manager.

Mobile 3G Info Window

To view information about your XFINITY Mobile 3G Internet Device and/or your Mobile 3G connection, select [Diagnostics > Mobile 3G Info](#) from the Tools menu. The Mobile 3G Info window appears.

The image displays two side-by-side screenshots of the 'Mobile 3G Info' window. The left window shows the 'Device' tab, and the right window shows the 'Network' tab.

Device Tab (Left Window):

- Hardware information:**
 - Device name: {4d36e96d-e325-11ce-bfc1-08002be10318}\0002
 - Device description: U600 EVDO Modem
 - Manufacturer: Franklin Wireless Corp.
 - Modem model: U600
 - Revision: Q6085B-4390-NS-1.1.519.4453
 - MEID: a10000100005cc
 - Technology: CDMA
 - Firmware version: Q6085B-4390-NS-1.1.519.4453
 - Hardware version: P 3.0
 - Modem port: COM11
- User information:**
 - User name: 8035229609@mob.comcast.net
 - Phone number: 8035229609
 - Home Carrier Name: Sprint
 - Home Carrier ID: 4384
 - PRL version: 60776
 - Imei: 8034391280

Network Tab (Right Window):

- Carrier information:**
 - Network name: Sprint
 - System Id: 4384
- Session information:**
 - Connected: no
 - Roaming: no
 - MIP error: 0
 - Signal strength (dBm): -88
 - Data sent during the session:
 - Data received during the session:
 - IP address: 0 . 0 . 0 . 0
 - Gateway address: 0 . 0 . 0 . 0
 - Workmode: 2

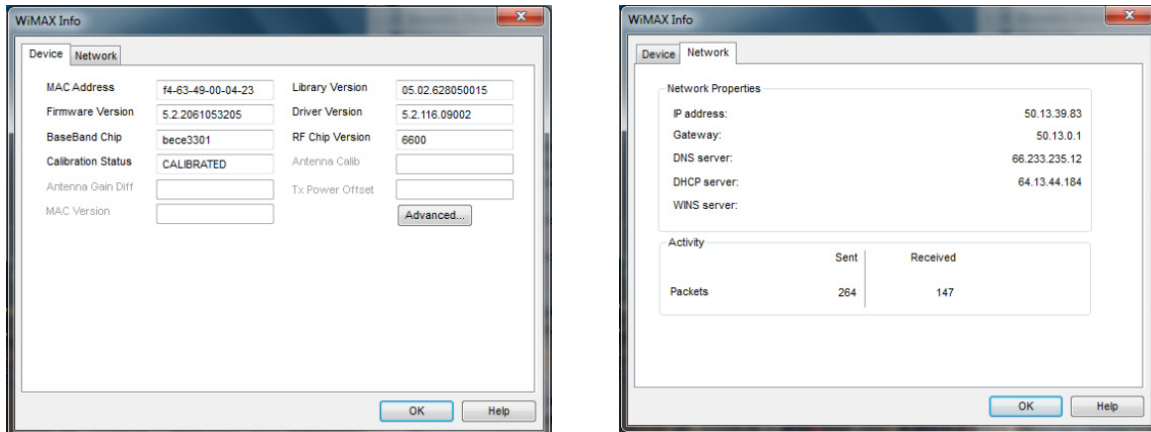
Note: Your mobile number (phone number) is listed on this window as well.

The window includes two tabs:

- Network (See page 59 for more information)
- Device (See page 56 for more information)

Mobile 4G Info Window

To view information about your XFINITY Mobile 4G Internet Device and/or your Mobile 4G connection, select [Diagnostics > Mobile 4G Info](#) from the Tools menu. The Mobile 4G Info window appears.



The window includes two tabs:

- Network (See page 63 for more information)
- Device (See page 61 for more information)

Establishing WiFi Connections

Manually Connecting to a WiFi Network

If you have a WiFi enabled laptop, or a computer with an external WiFi device attached, the XFINITY Connection Manager enables you to connect to nearby WiFi networks. When there are nearby WiFi networks available, the XFINITY Connection Manager selects a network to connect to and display its name.

By default, the XFINITY Connection Manager will automatically establish a connection to an available wireless network. But, you can choose a different network if you like. Follow these steps to connect:

1. Select [WiFi](#) in the XFINITY Connection Manager's main window.
2. To connect to the network whose name is displayed, click [Connect](#).

To connect to a different network, click the [View All WiFi](#) link. The drop-down menu that appears lists all available networks (see page 22). Select the network you want to connect to and then click the [Connect](#) button.

Note: A **closed** item under Network Name indicates the presence of one or more closed networks. See "WiFi Info" on page 23 for more information.

Note: Manually choosing a network to connect to stops the XFINITY Connection Manager from automatically connecting to networks for the duration of the session. If you want to return to automatic connection mode, you must restart the XFINITY Connection Manager.

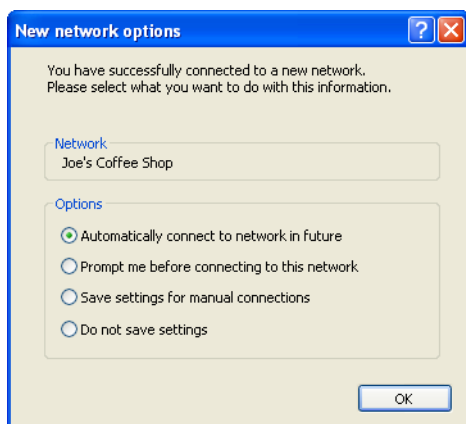
Prompts

Once the XFINITY Connection Manager has connected to the selected network, you may see the following prompts:

- If the network is encrypted, you will be prompted to enter an encryption key. Enter it and click [OK](#) or click [Cancel](#) and select a different network. See "Introduction to WiFi Encryption" on page 24 for more information on connecting to encrypted networks.
- When connecting to a WiFi network for the first time, the XFINITY Connection Manager may display the [New Network Options](#) prompt (see page 21). You can use this dialog box to configure the XFINITY Connection Manager to automatically connect to the network in the future or to prompt you when that network is available.

Options for Connecting to a New Network

If *Prompt me before saving network settings* is selected in the *Automatic Profile Creation Settings* window (see “Automatic Profile Creation Settings” on page 32), you will see the dialog pictured below when you connect to a new WiFi Network for the first time. The option selected specifies the type of profile that the XFINITY Connection Manager will create for this network. By creating a profile automatically, the XFINITY Connection Manager makes it easier for you to connect to the same network in the future.



You must choose one the following options:

Automatically connect to network in future

If this option is selected, the XFINITY Connection Manager will automatically connect to this network whenever it is detected.

Note: When multiple networks that have been configured for auto-connection are detected, the XFINITY Connection Manager connects to the network whose profile is ranked highest in the *Network Profiles* window. See “Network Profile Priority” on page 28 for more information on profile rank and how to change it.

Prompt me before connecting to this network

If this option is selected, the XFINITY Connection Manager will notify you when this network is detected and offer to establish a connection to it. However, it won't actually establish the connection unless you give your “OK.”

Save settings for manual connections

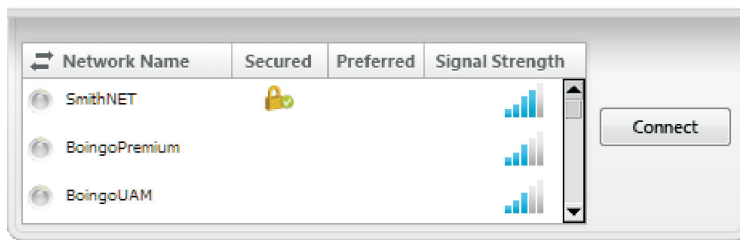
If this option is selected, the XFINITY Connection Manager will save the connection settings you used to connect to this network so that you do not have to enter them again, but it won't connect to this network automatically. To manually connect to this network, select it in the WiFi Networks List and then click the *Connect* button.

Do not save settings

Choosing this option will allow you to connect to the network this time, but will not save parameters for future connections (No profile will be created.)

The List of WiFi Networks

Clicking [View All WiFi](#) link in the XFINITY Connection Manager's main window produces a list of all available networks.



Select a network and click the [Connect](#) button to connect.

The information displayed for each network includes the items listed below:

Network Name

The Signal Set IDentifier (SSID) is the name that is broadcast by a WiFi Access Point to identify the network.

A *closed* item in this column indicates the presence of one or more closed networks. Connecting to such a network requires the creation of a profile for that network. See “WiFi Info” on page 23 for more information.

Secured

Encrypted networks display the  icon in this column. See “Introduction to WiFi Encryption” on page 24 for instructions on connecting to encrypted networks.

Preferred

A check () is displayed for any WiFi network that is listed in the Network Profiles window. This includes WiFi networks for which you have created profiles and Wi-Fi networks for which a profile has been created automatically (see “Options for Connecting to a New Network” on page 21 for more about automatic profile creation).

Signal Strength

A gauge showing the strength of the signal detected from each network. Stronger signals tend to produce more reliable connections.

WiFi Info

To view information about a WiFi network you are currently connected to or the WiFi device you are using to connect to that network, select [Diagnostics > WiFi Info](#) from the Tools menu. This produces a window with two tabs.

- The [Network tab](#) contains information about the IP Settings for and the amount of Activity on your current WiFi connection (if any).
- The [Device tab](#) contains information about your current WiFi device (if any).

What is a Closed Network?

Closed networks are private networks that do not choose to broadcast their existence. The XFINITY Connection Manager can detect when there are closed networks present simply because it "sees" unidentified broadcasts in the WiFi frequency band. When this happens, the word *closed* appears in the WiFi networks list.

However, the XFINITY Connection Manager cannot detect the actual name of or establish a connection to a closed network unless you create a profile for that network. For more information, see the following:

- How to access a closed network (see below)
- How to create a WiFi Network Profile (see "Creating a Profile for a WiFi Network" on page 29)

How to Access a Closed Network

To access a closed network with the XFINITY Connection Manager, you must set up a network profile for that network. Follow these steps:

1. Select [Profiles](#) from the Tools menu to display the [Network Profiles](#) window.
2. Select [Add New Profile](#) from the [Settings](#) menu. A list of network profile types appears.
3. Select [WiFi](#).
4. Click [Add](#). The first page of properties for the new profile appears.
5. Enter the name of the network you want to add in the [SSID](#) field exactly as provided by the network administrator.
6. Check [This is a non-broadcasted network \(Closed\)](#) to identify this as a closed network.
7. Fill out the remaining fields on this page as instructed by the network administrator.

8. Click [Next](#) to continue to the [General](#) page.
9. Configure the fields on the [General](#) page as desired.
10. Click [Finish](#) to exit.

Introduction to WiFi Encryption

Mobile 4G networks and Mobile 3G networks are encrypted and connection to them secured using special software in your XFINITY Mobile Internet Devices. Similarly, WiFi networks often use encryption technologies to protect data travelling over the network. Unlike Mobile 4G networks and Mobile 3G networks, however, connecting to an encrypted WiFi network requires that you enter an encryption key.

What is an Encryption Key?

An encryption key is a code used to encrypt data exchanged between an encrypted network and the XFINITY Connection Manager. You must obtain the appropriate encryption key from the administrator of an encrypted network in order to connect to that network.

How to Change an Encryption Key

When a network is added to the Network Profile list, all encryption information is saved with it. Therefore, you will not be asked for encryption information again when connecting. For security purposes, the network administrator may find it necessary to change the encryption key for the network. When this happens, you will need to update the encryption keys in the appropriate network profile to match the new keys specified by the network administrator. Follow these steps:

1. Select [Profiles](#) from the Tools menu. The Network Profiles window appears.
2. Select the network for which you wish to edit the encryption keys.
3. Click [Edit](#).
4. Switch to the [WiFi](#) tab.
5. Enter the new encryption key in both the Network Key box and the [Confirm Network Key](#) box.
6. Click the [OK](#) button.

What Does “PSK” Stand For?

PSK stands for “Pre-Shared Key,” which means that your encryption key has to be entered manually rather than using a protocol like 802.1x to obtain it from the network as part of the connection process. Because of its simplicity, PSK is the typical choice for home and small office environments.

Wired Equivalent Privacy (WEP)

WEP is a standard encryption technology that has been used since the early days of WiFi networks. Although even more secure methods such as WPA have since emerged, WEP remains an extremely popular choice for encrypted networks. There are two variants of WEP:

- ***WEP Open:*** This is by far the most commonly-used version of WEP. Networks that use WEP Open do not verify that you have the correct encryption key before allowing you to connect. However, if you don't have the correct encryption key, you will not be able to communicate with the network.
- ***WEP Shared:*** The network sends out sample text for the XFINITY Connection Manager to encrypt. If the result that the network gets back is what it expected, it allows the connection. Ironically, this is somewhat less secure than WEP Open because the verification process gives potential intruders a large hint about the contents of the encryption key.

WiFi Protected Access (WPA and WPA2)

Developed by an industry trade group known as the WiFi Alliance, WPA is an interim standard meant to address the shortcomings of WEP. WPA2 is a newer standard that succeeded WPA, but both versions remain in common use.

To use WPA, you need a WPA-compliant WiFi device.

What are TKIP and AES?

Temporal Key Integrity Protocol (TKIP) and Advanced Encryption Standard (AES) are different encryption protocols that can be used with WPA. TKIP is the method that was called for in the original WPA Specification. AES, which is even more secure, was added as an alternate method to later versions of the specification. If network uses WPA, but does not specify which one, TKIP is the most likely to be supported by the network.

Connecting to an Encrypted Network

When you choose to connect to an encrypted network, the software will prompt you to enter a network encryption key. To proceed, enter a network encryption key obtained from the network administrator and then click the [Connect](#) button on the prompt dialog.

Tip: You can create a profile containing the appropriate encryption information to avoid having to manually enter an encryption key each time you connect. See “Creating a Profile for a WiFi Network” on page 29 for more information.

Network Profiles

What is a Network Profile?

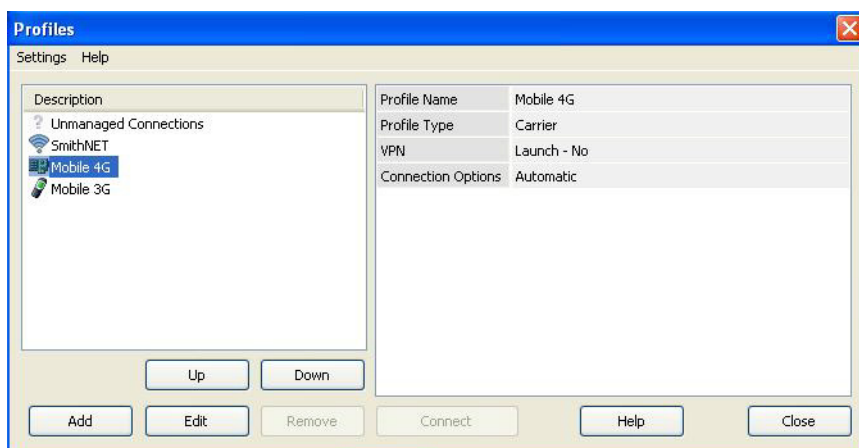
A network profile contains the configuration information needed to connect to a particular network. Mobile Internet profiles are predefined by Comcast (though some configuration options are available). WiFi profiles can be created in the Network Profiles window or created automatically when you connect to a new WiFi network.

Among other things, network profiles allow you to:

- Configure the XFINITY Connection Manager to automatically connect using the profile's settings whenever the associated network is available.
- Prioritize networks to help the XFINITY Connection Manager choose which network to connect to.
- Save settings, such as encryption keys for WiFi security or VPN configuration, to enable one-click connection.

The Network Profiles Window

Network profiles can be added and configured in the Network Profiles window. To access the Network Profiles window, click the [Tools > Profiles](#) tab in the main window.



The left pane of this window lists all the Network Profiles you have defined so far. Also listed are any Network Profiles that have been pre-configured by XFINITY and any profiles automatically added when you first connected to a new network.

A profile's position in the list indicates its priority. See “Network Profile Priority” on page 28 for more information.

Profile Icons

Each profile listed in the Network Profiles window has an icon next to the name. This icon indicates the technology that this profile uses to establish connections.

 Mobile 4G

 Mobile 3G

 WiFi

 Unmanaged Connections - this is a placeholder for types of networks not managed by the XFINITY Connection Manager. See “Network Profile Priority” on page 28 for more information.

Network Profile Priority

In the Network Profiles window, profiles are listed in order of priority. When selecting a network to connect to, the XFINITY Connection Manager will choose the topmost profile for which all of the following are true:

- The network described by the profile is available
- You have a device capable of connecting to the network connected to your computer
- The [Connection Options](#) field on the [General](#) tab in the profile's configuration is set to either “Automatic” or “Prompt”
- The profile is not “Unmanaged Connections” (see Unmanaged Connections that follows).

Profile priority also determines when the XFINITY Connection Manager automatically switches from one network to another. If you are connected to one network and a higher priority network becomes available, the XFINITY Connection Manager will switch to the higher priority network.

Note: Automatic connection switching only occurs when in automatic connection mode. The XFINITY Connection Manager starts out in this mode each time it is launched, but switches to manual mode if you manually choose a network and click [Connect](#). To return to automatic mode, restart the XFINITY Connection Manager application.

Changing Profile Priority

To change the priority of a specific profile, select the profile whose priority you would like to change. Then, click the [Up](#) button or the [Down](#) button to move the profile up or down the list.

Unmanaged Connections

“Unmanaged Connections” is not a network profile. It is a placeholder for all network connections that are not managed by the XFINITY Connection Manager software. Since “Unmanaged Connections” is always at the top of the list, connections of this type always take precedence over the wireless connections managed by the XFINITY Connection Manager.

Ethernet LAN connections are an example of connections not managed by the XFINITY Connection Manager. Since LAN connections take precedence over managed wireless connections, your managed wireless connections will be shut down when you connect to your LAN.

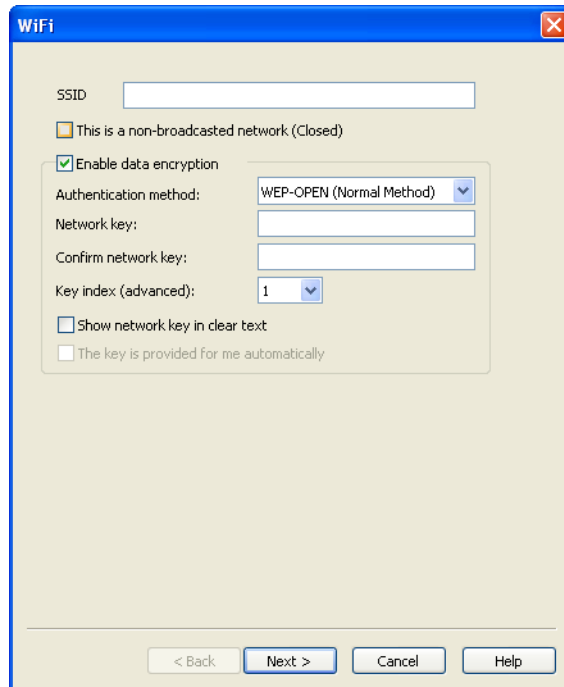
Note: You can specify which devices are included in the “Unmanaged Connections” group in the Hardware tab of the Settings window.

Creating a Profile for a WiFi Network

Perform these steps to create a WiFi network profile.

1. Click the [Tools > Profiles](#) button in the main window. The Network Profiles Window displays.
2. Select [Add New Profile](#) from the [Settings](#) menu. A list of network profile types now appears.
3. Select [WiFi](#).

4. Click the [Add](#) button to bring up the first page of the wizard used to create WiFi network profiles

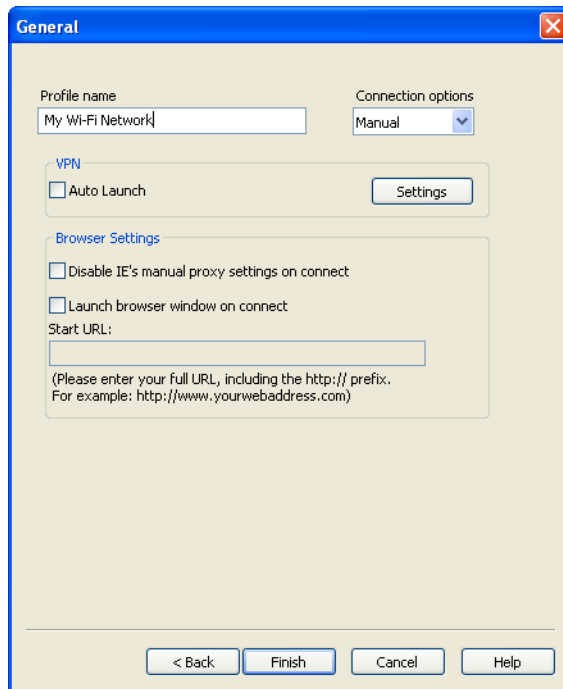


5. In the [SSID](#) Field, enter the broadcast name of the network to which you will be connecting. Note that the name entered here must match the SSID (Service Set Identifier) used by the network exactly.
6. If the network is a [Closed](#) network, check the [This is a non-broadcast network](#) box.
7. If the network whose profile you are configuring does not use WEP or WPA encryption, leave the [Enable data encryption](#) box unchecked.

—or—

If the network uses WEP or WPA encryption, check the [Enable data encryption](#) box and configure the WiFi Data Encryption Settings as explained in “Configuring WiFi Data Encryption” on page 31.

8. Click *Next*. The *General* page appears (see page 34).



9. Configure the settings in the *General* page as desired and then click *Finish*.

Configuring WiFi Data Encryption

Follow these steps to configure WEP or WPA data encryption:

1. Contact the administrator of the network to obtain information needed for access, such as the security method used, encryption keys required, etc.
2. Check the *Enable data encryption* box.
3. Select the appropriate *Authentication method* for this network. Supported authentication methods include the following:
 - *None*: For an unencrypted network.
 - *WEP-Open (Normal Method)*: This is the standard WEP encryption method.
 - *WEP-Shared*: Similar to WEP-Open, but the base station asks the client to prove that it has the right key before the connection is established.
 - *WPA-PSK (TKIP or AES)*: This is the pre-shared key version of the WPA protocol.
 - *WPA2-PSK (TKIP or AES)*: This is the pre-shared key version of the WPA2 protocol.

Note: The WPA methods listed above will only be displayed if your WiFi adapter supports WPA security.

4. Enter the encryption key for this network in [Network Key](#) and [Confirm Network Key](#) fields.

Note: Normally, the display of the encryption key is obscured for privacy reasons. If you prefer to actually see the key's text, check the [Show network key in clear text](#) box.

Automatic Profile Creation Settings

The XFINITY Connection Manager can automatically create network profiles for each new WiFi network you successfully connect to. The setting that controls this can be found by selecting [Automatic Profile Creation](#) from the [Settings](#) menu in the Network Profiles window. Choose from the following options:

- [Automatically save all networks that I connect to](#) — The XFINITY Connection Manager will create a new profile for every new WiFi Network you successfully connect to.
- [Prompt me before saving network settings](#) — The XFINITY Connection Manager will ask you if you want to create a new profile each time you successfully connect to a new network.
- [Allow manual input of network settings only](#) — The XFINITY Connection Manager will not automatically create network profiles.

Editing a Network Profile

You can edit all of the settings contained in WiFi network profiles. A reduced set of parameters will be available for modification in profiles that were created for you by XFINITY.

1. Click the [Tools > Profiles](#) button in the main window. The Network Profiles window appears.
2. Select the profile you wish to edit in the left pane of the window.
3. Click the [Edit](#) button. A tabbed interface showing all the user-editable settings of the selected profile appears. Depending on the type of profile you are editing, the following tabs may be displayed:
 - WiFi (see page 33)
 - General (see page 34)
4. Make the desired changes.

5. Click the **OK** button when you are finished.

Deleting a Network Profile

Follow these steps to delete a profile from the Network Profiles window:

1. Click the **Profiles** button in the main window. The Network Profiles window will now be displayed.
2. Select the profile that you want to delete from the list in the left pane of the window.
3. Click **Remove**. A prompt that asks if you are sure you want to delete this profile appears.
4. Click **Yes** to confirm that you want to delete the profile.

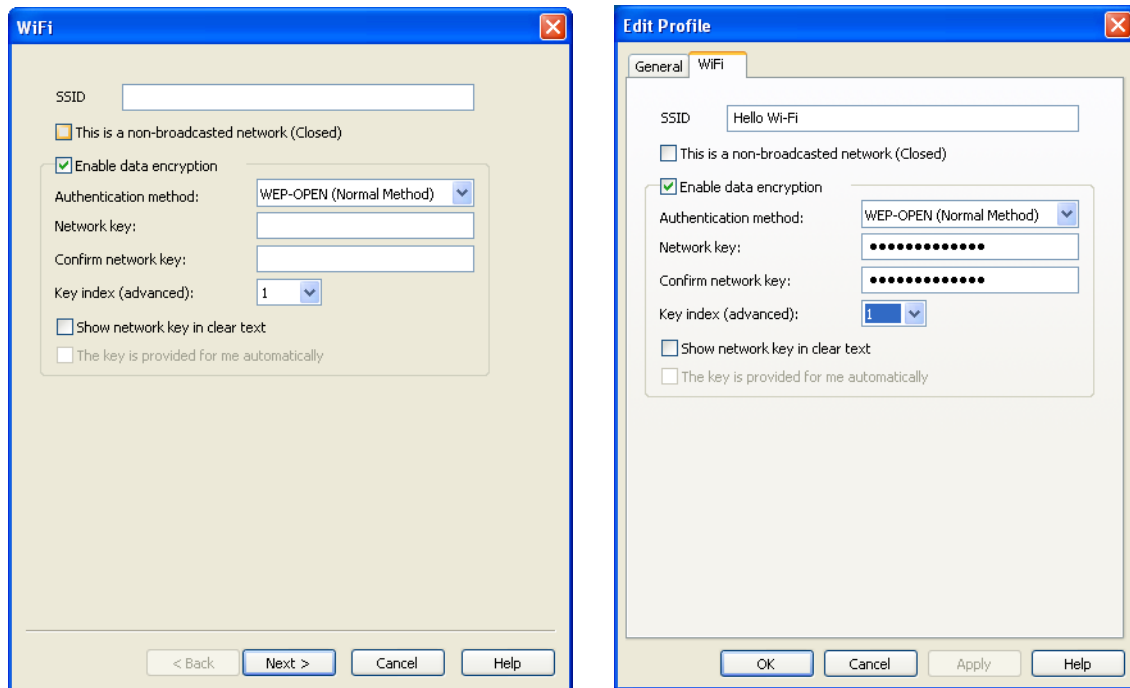
Note: *You cannot delete network profiles that were created for you by XFINITY.*

Profile Properties: WiFi

The **WiFi** page contains the security settings for WiFi network profiles.

- The version of this window pictured on the left below appears when creating a new profile.
- The tabbed version on the right appears when editing an existing profile.

Although the window controls vary, the actual parameters included are identical for both versions.



Follow these steps to configure WiFi network security:

1. In the **SSID** field, enter the name broadcast by the network for which you are creating a profile. The name entered here must match the SSID (Service Set Identifier) used by the network exactly.
2. If this is a closed network, check **This is a non-broadcast network (closed)**.
3. If the network does not use WEP or WPA encryption, leave **Enable data encryption** unchecked and no further configuration is necessary on this page.

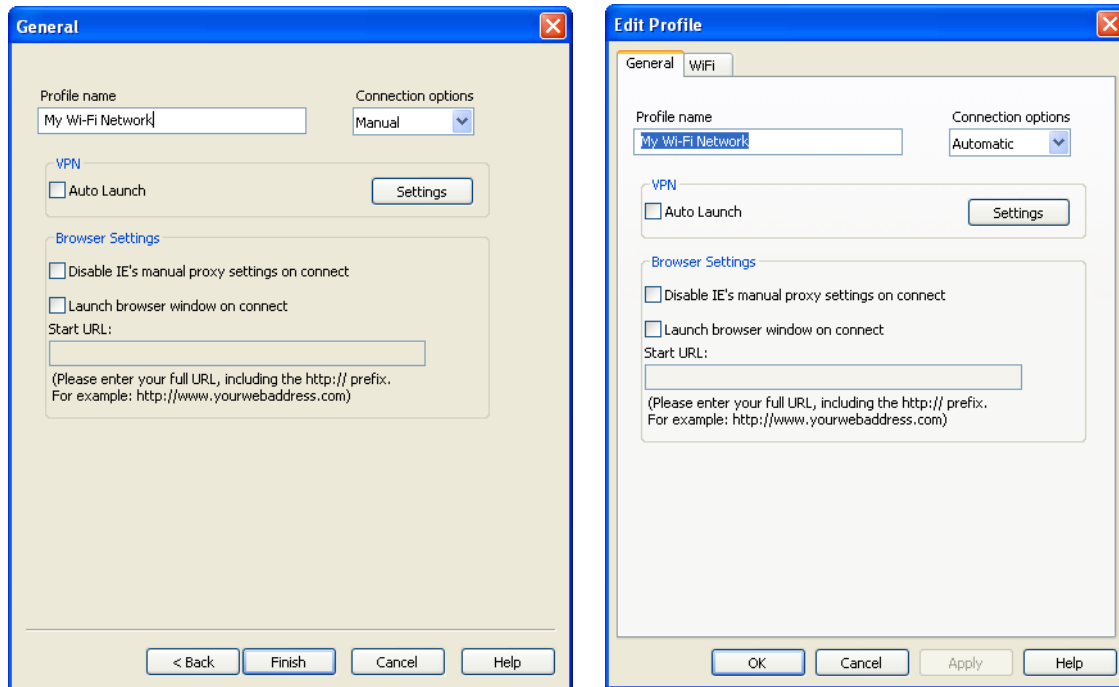
If the network does use WEP or WPA encryption, check **Enable data encryption** and configure the WiFi data encryption settings. (See “Configuring WiFi Data Encryption” on page 31).

Profile Properties: General

The **General** page contains settings that apply to all types of network profiles.

- The version of this window pictured on the left below appears when creating a new profile.
- The tab version on the right appears when editing an existing profile.

Although the window controls vary, the actual parameters included are identical for both versions.



Note: Some of the options pictured on this page may not be available if you are editing a profile created for you by XFINITY.

Profile Name

The name entered here will be displayed in the Network Profiles window and the XFINITY Connection Manager's main window.

Connection Options

This setting controls what the XFINITY Connection Manager will do when it detects the network to which this profile applies. Select one of the following options:

- **Automatic** — The XFINITY Connection Manager will automatically connect to this network whenever it is detected.
- **Prompt me** — The XFINITY Connection Manager will ask you whether to connect to this network each time the network is detected.
- **Manual** — Connections to this network may be established using the controls in the main window or by selecting it in the Network Profiles window and then clicking **Connect**, but the XFINITY Connection Manager will not connect to this network automatically.

VPN Auto Launch

Check this box if you would like to automatically launch your VPN client software when you establish a connection to this network. Click the accompanying [Settings](#) button to open the VPN tab of the Settings window.

Disable IE's manual proxy settings on connect

If you normally connect to the Internet through a proxy server (common on corporate LANs), you may experience difficulty connecting to the Internet with Internet Explorer when you are traveling. This is because Internet Explorer is trying to connect through a proxy server that is on your home network rather than on the network to which you are connected.

If this is the case, you can check this box to disable proxy server settings while you are connected using this profile.

Launch browser window on connect

Check this box to automatically launch your browser each time you connect to this network. If you want the browser to start at a particular Web page each time you connect to this network, enter its web address in the [Start URL](#) box.

Virtual Private Networks (VPNs)

What is a Virtual Private Network?

A Virtual Private Network (VPN) is a private network that can be accessed over a public backbone network (like the Internet) without compromising the privacy of the VPN. Typically, VPNs maintain their privacy by forming secure (encrypted) “tunnels” directly to users who access them. For example, a company might set up a VPN for its employees to access their corporate network securely when they are away from the office.

The software responsible for forming the tunnel with the private network is called a VPN Client. Because the VPN Client and the private network exchange data in an encrypted format, no one on the public network over which this information passes can access it.

Supported Clients

Although the XFINITY Connection Manager is not a VPN Client itself, it can automate the launching of your VPN Client software when needed. The XFINITY Connection Manager has been tested with the following VPN Clients and even automates certain tasks for these clients:

- Microsoft
- Cisco
- Nortel
- Checkpoint (please see “Using the Checkpoint VPN Client” on page 39 for important caveats)
- NetMotion (please see “Using the NetMotion VPN Client” on page 40 for important caveats)

The XFINITY Connection Manager can also launch other VPN Clients, but may require more manual configuration to do so.

Configuring a VPN Connection

As with any other secure network, accessing a VPN requires some security-related configuration. Perform these steps:

1. Consult the administrator of the VPN you wish to access. The administrator will provide you with VPN Client software and instructions for establishing VPN connections.
2. If the VPN Client software is not already installed on your system, install it now. (Microsoft's VPN Client is preinstalled on most versions of Windows).
3. Follow your administrator's instructions for setting up a VPN Login Profile.
4. Access the **VPN** tab by selecting the **Settings** option in the **Tools** menu and then clicking the **VPN** tab.
5. If the VPN client software you are using is supported by the XFINITY Connection Manager, select **Use existing VPN profile**. Then, specify the client software and the login profile that you want to use.

If the VPN Client software you are using is NOT supported by the XFINITY Connection Manager, select **Use Third Party VPN Client**. Then, click the **Browse** button to specify the location of the client software that you are using.

6. Click the **OK** button to exit the **Settings** window.

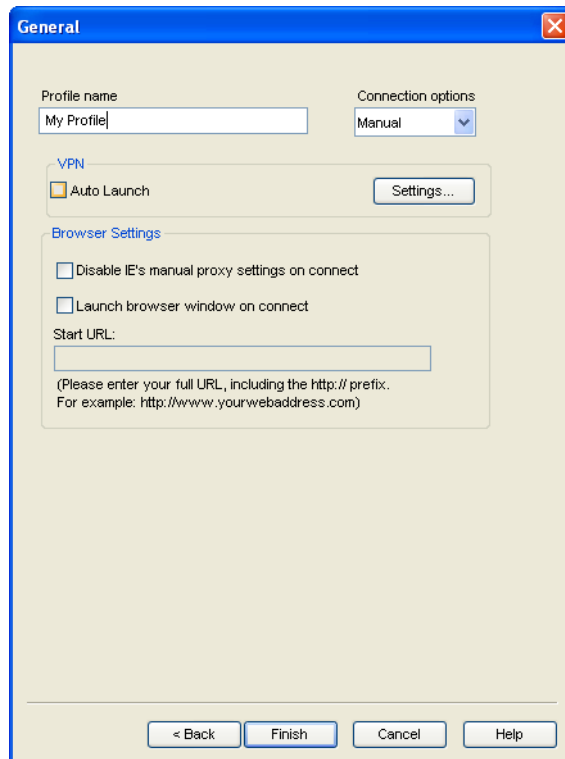
Once your VPN Settings have been configured, you can configure network profiles to automatically start your VPN Session upon connection. See "Automatically Launching a VPN Connection" on page 38.

Automatically Launching a VPN Connection

You can configure a network profile to automatically launch your VPN Client and log into a VPN once the connection to a wireless network has been established. Follow these steps:

1. If you have not already done so, configure the connection settings for the VPN you wish to connect to. (See "Configuring a VPN Connection" on page 37).
2. Open the Network Profiles window by clicking the **Tools > Profiles** button in the main window.
3. In the left pane, select the profile for which you want to automate VPN connections.

4. Click the [Edit](#) button. The [Edit Profile](#) window for the selected profile appears.



5. If the [General](#) tab is not already selected, select it now.
6. Check the [Auto Launch](#) box.
7. Click [OK](#) to exit.

Tip: If you want your VPN Client to be launched automatically with all (or most) of the new profiles you create, consider checking the [Set VPN Auto Launch for newly created connection profiles](#) box on the [VPN](#) tab of the [Settings](#) window. This configures the default behavior of all newly created profiles.

Using the Checkpoint VPN Client

Although CheckPoint's VPN client provides a command line interface that applications such as the XFINITY Connection Manager can use to establish connections, the user cannot access other modes of the CheckPoint VPN client while the client is in command line mode.

What does this mean for CheckPoint VPN users? Essentially, you should keep the XFINITY Connection Manager open only when you have an active connection managed by the XFINITY Connection Manager open. If you want to establish another type of connection with the

CheckPoint VPN client, you MUST shut down the XFINITY Connection Manager first. When the XFINITY Connection Manager shuts down, it will put the VPN client back into a mode that users can access.

Using the NetMotion VPN Client

NetMotion's VPN client takes complete control of all data communication to and from your computer. This forces all data communication applications to go through the “tunnel” it creates. However, the XFINITY Connection Manager needs to bypass this tunnel in order to establish connections. The XFINITY Connection Manager will accomplish this in one of the following ways:

- The NetMotion VPN client maintains a list of applications that are allowed to bypass its VPN tunnel. If your VPN administrator has added the XFINITY Connection Manager to this list, the XFINITY Connection Manager can establish connections without interrupting the operation of the NetMotion client.
- If the XFINITY Connection Manager has not been added to NetMotion's bypass list, the XFINITY Connection Manager will detect that the NetMotion client is interfering with its operations when it attempts to establish a connection. When this happens, it will instruct the NetMotion client to enter bypass mode (which allows all applications to bypass its tunnel) while the connection is being established. Once the connection has been successfully established, the XFINITY Connection Manager will return the NetMotion client to its normal operating mode.

XFINITY Connection Manager Settings

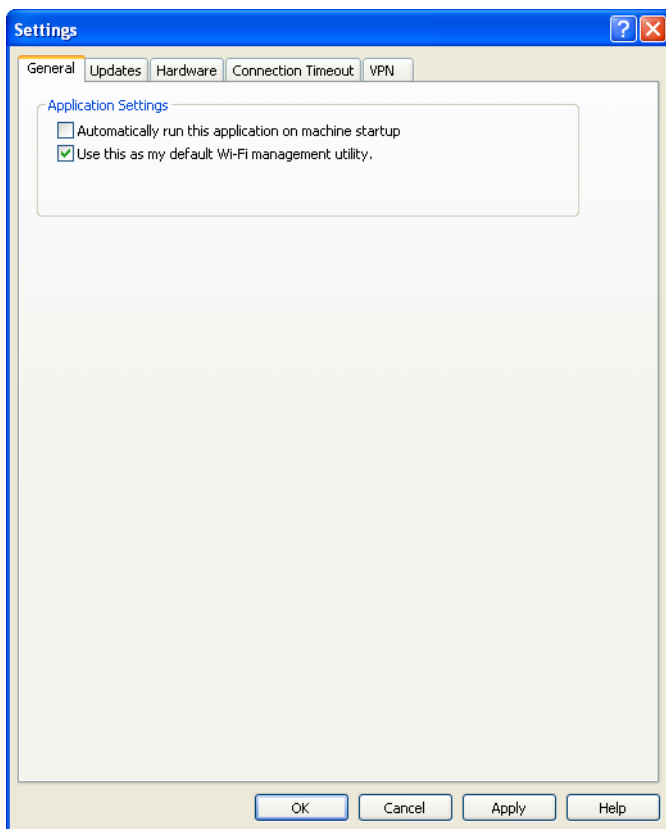
Introduction

The Settings window allows you to configure the behavior of the XFINITY Connection Manager software. Among other things, these settings control how the client connects to networks, when it retrieves updates and if its connections should time out.

To access the Settings window, select *Tools > Settings* on the main menu.

Settings: General

The *General* tab contains general settings for the XFINITY Connection Manager software.



Automatically run this application on machine startup

When this box is checked, the XFINITY Connection Manager is launched automatically each time you start your computer.

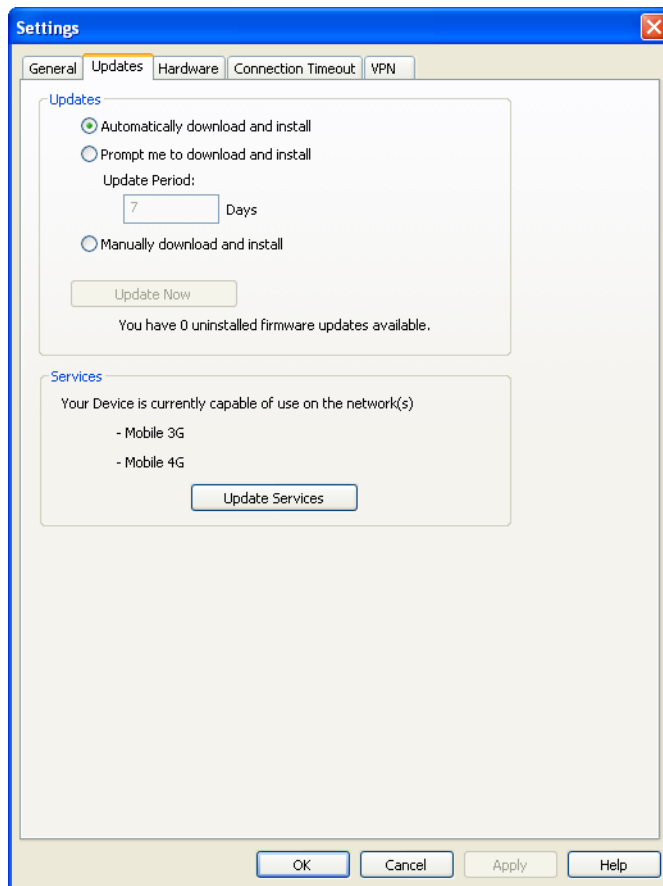
Use this as my default WiFi management utility

If this box is checked, the XFINITY Connection Manager manages all WiFi connections on your computer when it is running. If you wish to return control of WiFi connections to the operating system (or to another application), you must exit the XFINITY Connection Manager software.

When this box is NOT checked, the XFINITY Connection Manager's WiFi functionality is disabled.

Settings: Updates

The [Updates](#) tab allows you to specify when updates to the XFINITY Connection Manager software and device firmware are made.



The following items can be found on this tab:

Automatically download and install

Select this option to have the XFINITY Connection Manager automatically download and install product updates at regular intervals (once a week).

Note: *These updates are silent (occur in the background). You do not see the update wizard when updates are downloaded silently.*

Prompt me to download and install

Select this option to have the XFINITY Connection Manager periodically prompts you to download and install product updates.

Manually download and install

Select this option if you want product updates to be downloaded only when you click the [Update Now](#) button.

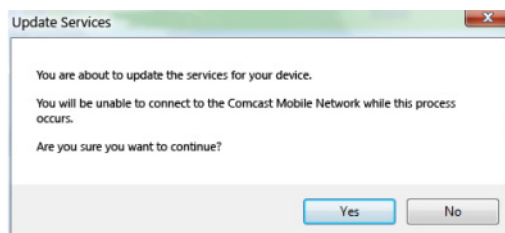
Update Now

Click [Update Now](#) to have the XFINITY Connection Manager immediately check for and download available updates.

Update Services

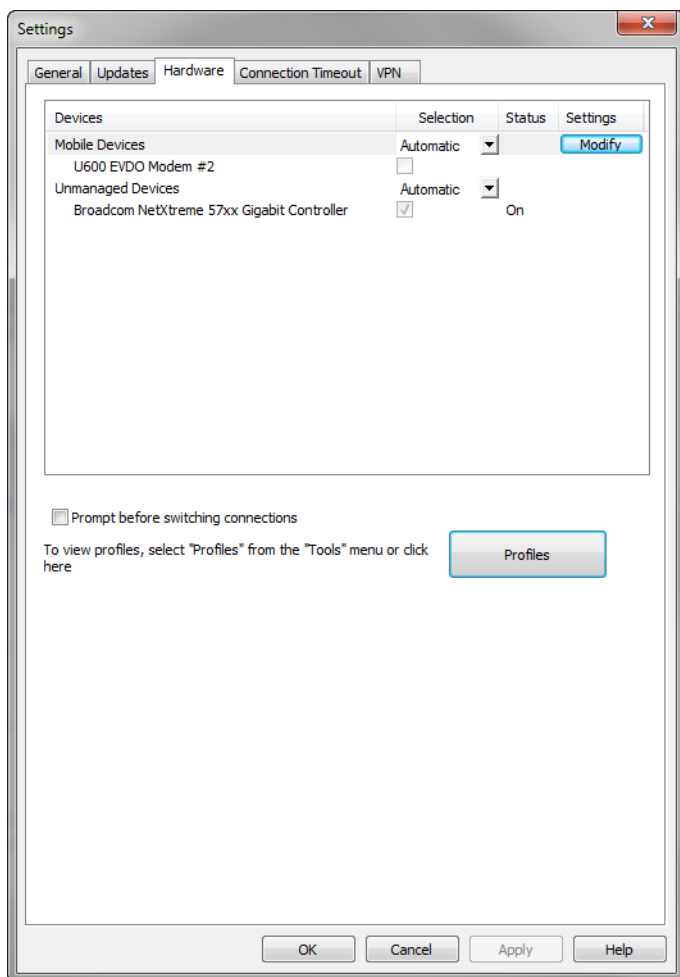
Clicking on the [Update Services](#) button triggers an update to the service profile and parameters on the device. Note that Update Services is only applicable to a Dual Mode or 3G-Only device. A Dual Mode device can function as a Dual Mode or Single Mode device. You can call [Customer Care](#) to change your service plan at any time.

A warning prompt is displayed to inform you that Update Services will interrupt any active Mobile (3G or 4G) connection.



Settings: Hardware

The [Hardware](#) tab is used to configure hardware-related settings for connection establishment.



The following items can be found on this tab:

The Device List

This table lists all the devices connected to your computer that may be used to establish network connections. Among other things, this table allows you to:

- Enable and disable individual devices.
- Choose between multiple devices of the same type.
- Configure additional properties for XFINITY Mobile 3G Internet Devices.

For more information, see “The Device List” on page 45.

Prompt before switching connections

When in automatic connection mode, the XFINITY Connection Manager software automatically switches to a higher priority network if one becomes available. This has the potential to disrupt any activity that was relying on the original connection.

Checking this box will cause the XFINITY Connection Manager to prompt you for permission before establishing the connection to the new network.

The Profiles Button

Click this button to open the Network Profiles window.

The Device List

The device list is a table that appears on the Hardware tab of the Settings window. It is primarily used to select and configure connected devices.

Devices Column

This column lists all the network access devices installed on your computer, grouped by the connection technologies they use. Each technology type heading is followed by the device names of the specific devices of that type that are installed on your computer. The technology types are:

- WiFi Devices
- Mobile 3G Devices
- Mobile 4G Devices
- Unmanaged Devices

Note: The network devices listed under *Unmanaged Devices* are not managed by the XFINITY Connection Manager application. So, the configuration in this window works a bit differently for them. See “Unmanaged Devices” on page 46 for more information.

Selection Column

This column allows you to specify which devices should be used to connect. The choices for this column are:

- *Automatic*: The XFINITY Connection Manager automatically chooses the best device for this technology type.
- *Manual*: Allows you to manually select the device to be used. After selecting this option, check the box next to the device you wish to use.

- **Disabled:** This option is useful when you are using a multifunction wireless device that can only use one wireless mode at a time. For example, you may have a WiFi/Mobile Internet Device that can not access both types of network at the same time. When using such devices, you may have to temporarily shut down the XFINITY Connection Manager's use of one of these functions when you want to use the other technology.

Status Column

This column identifies the operational status of the device. It indicates whether the device is **On** or **Off**.

Property Column

Additional properties (such as roaming) may be configured for devices if a **Modify** button is displayed in this column. Click **Modify** to open a pop-up window that provides additional configuration options for the device. Currently, only XFINITY Mobile 3G Internet Devices have such a window. (For more information, see "Device Properties" on page 47)

Unmanaged Devices

Unlike other categories in the device list, "Unmanaged Devices" are NOT supported by the XFINITY Connection Manager. Although the XFINITY Connection Manager cannot use these devices to establish connections, it can detect when a device in this category has established a connection and (if you desire) shut down its own connections when this occurs.

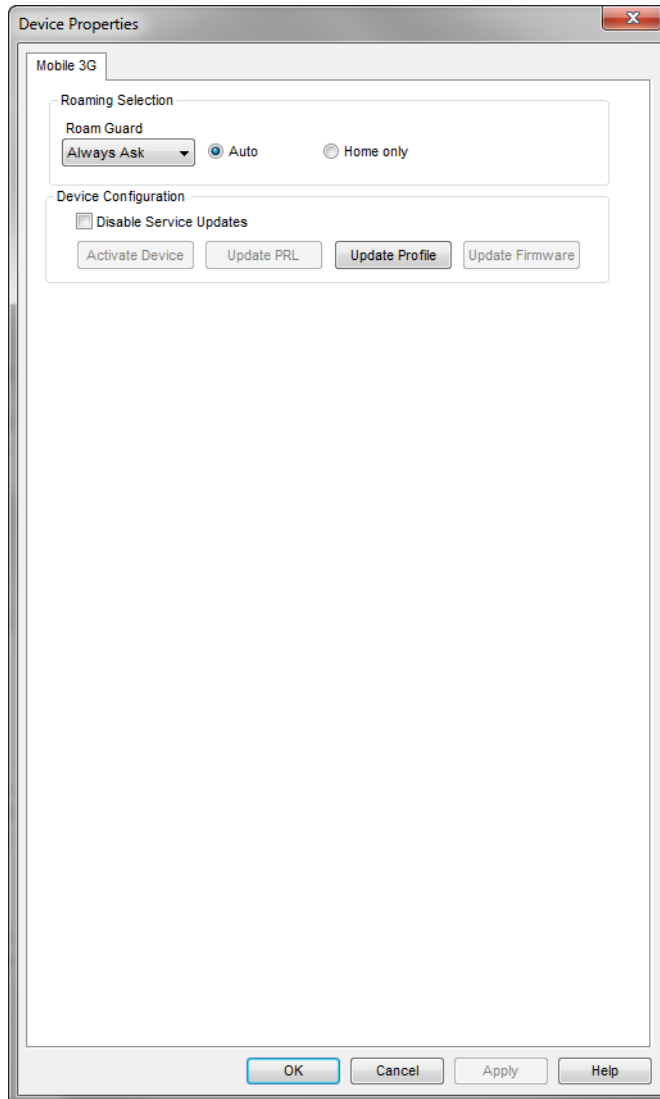
To monitor the connection status of a device in this group, check the box in the **Selected** column. Connections for all checked devices will be included in the **Unmanaged Connections** group in the Network Profiles window. For more information, see "Network Profile Priority" on page 28.

Note: The Automatic/Manual Disabled drop-down menu at the top of the **Unmanaged Devices** group must be set to **Manual** to change which devices are checked. This menu also determines the default state of the checkbox for newly-detected devices:

- If the drop-down menu is set to **Automatic**, new devices added to the other group will be checked by default.
- If the drop-down menu is set to **Manual**, new devices will be unchecked by default.

Device Properties

The *Device Properties* window contains three sections used to configure the behavior of Mobile 3G devices connected to your computer.



Roaming Selection

Configure permission for the XFINITY Connection Manager to connect to roaming networks. Consult your service agreement for more information about roaming service and any charges that such service might incur. You can choose one of these options:

- *Auto* — connects to XFINITY's network when available, using roaming networks only when a connection to XFINITY's network is not available.
- *Home Only* — connects only to XFINITY's network. Never connects to other networks.

Roam Guard

Use the [Roam Guard](#) pull-down menu to specify whether you would like the XFINITY Connection Manager to display a warning message when you are about to connect to a roaming network for which there may be additional roaming charges.

- [Always Ask](#): always prompt before connecting to a roaming network.
- [Never Ask](#): never ask before connecting to a roaming network.
- [Default](#): display the prompt when the Extended Roaming Indicators (ERI) file on your mobile device says it is necessary to do so.

Device Configuration

This group allows you to update the configuration files that actually reside on your mobile device.

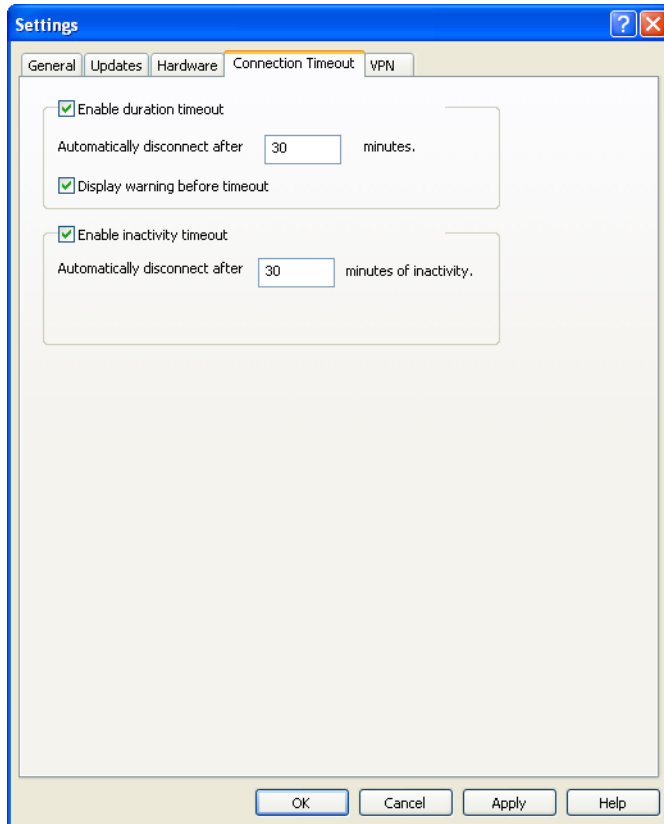
Note: *This group of settings is only available for some Mobile Broadband devices.*

The options here include the following:

- Check [Disable Service Updates](#) if you want to disable all updates to your device's configuration. This item disables all the other items in the Device Configuration group and disables network-initiated updates of the same information.'
- Click [Activate Device](#) if the selected device has not yet been activated. This will initiate the device activation process. Note that this button will not be available if the selected device has already been activated.
- Click [Update PRL](#) to download the latest Preferred Roaming List. The Preferred Roaming List informs your device who XFINITY's current roaming partners are. Keeping the list current ensures that your device will select networks with the most reasonable roaming fees.
- Click [Update Profile](#) to update the profile your device uses to establish connections.
- Click [Update Firmware](#) to download the latest version of your device's firmware (its onboard operating software).

Settings: Connection Timeout

The Connection Timeout tab allows you to specify if and when the XFINITY Connection Manager automatically shuts down a connection.



Configuring Duration Timeouts

A duration timeout is a maximum time allowed for any connection. So, a duration timeout of 30 minutes shuts down any connection that lasts longer than 30 minutes.

To configure a duration timeout, check the *Enable Duration Timeout* box. Then, specify the number of minutes after which the timeout should occur.

If you want the XFINITY Connection Manager to warn you before it disconnects for a duration timeout, check the *Display warning before timeout* box.

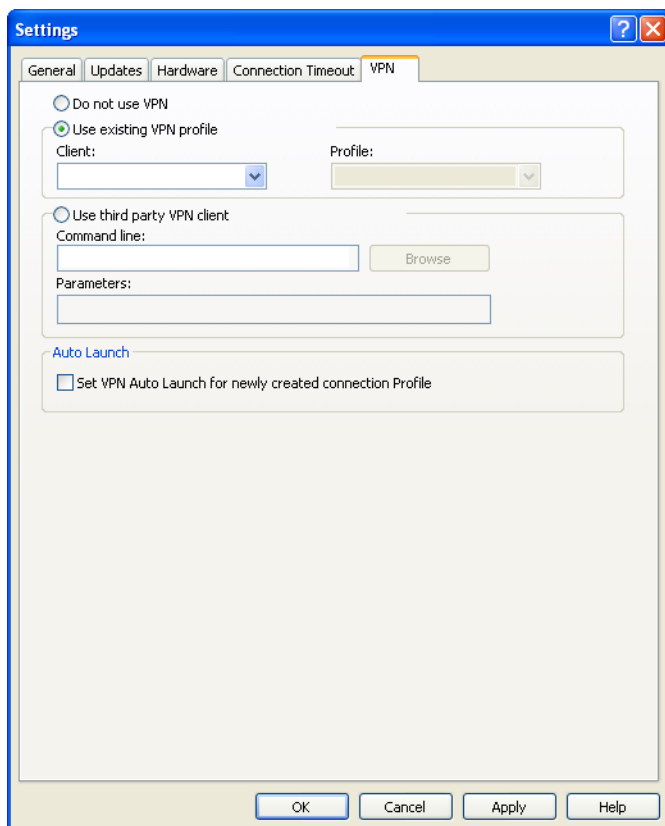
Configuring Inactivity Timeouts

Configuring an inactivity timeout instructs the XFINITY Connection Manager to disconnect if there has been little or no data exchanged on a connection for a specified number of minutes.

To configure an inactivity timeout, check the *Enable Inactivity Timeout* box. Then, specify the number of minutes of inactivity that will trigger the timeout.

Settings: VPN

The **VPN** tab specifies how the XFINITY Connection Manager accesses Virtual Private Networks.



The top item, **Do Not Use VPN**, disables the XFINITY Connection Manager's capacity to log into VPNs. Select this option if you do not wish to establish connections to Virtual Private Networks.

You must choose one of the other two options and fill in the corresponding fields if you wish to automatically log into a VPN when you connect to a specific network (see “Automatically Launching a VPN Connection” on page 38).

Use existing VPN profile

Select this item if the VPN client software you will be using is supported by the XFINITY Connection Manager. Then, specify the supported client software and the login profile that you want to use. See “Supported Clients” on page 37 for more information on supported VPN client software.

Use third party VPN client

Select this item if the VPN client software you will be using is NOT supported by the XFINITY Connection Manager. Follow these steps to configure the XFINITY Connection Manager to launch the unsupported software:

1. Click the [Browse](#) button.
2. Select the program file to be launched.
3. Click [Open](#). The path of the selected file appears in the [Command Line](#) box.
4. If your VPN client software requires that additional parameters be included after the program filename on the command line, these may be entered in the [Parameters](#) box. Consult the documentation for your VPN client to determine if such parameters are needed.

See “Supported Clients” on page 37 for more information on which VPN client software is supported.

Set VPN autolaunch for newly created connection profiles

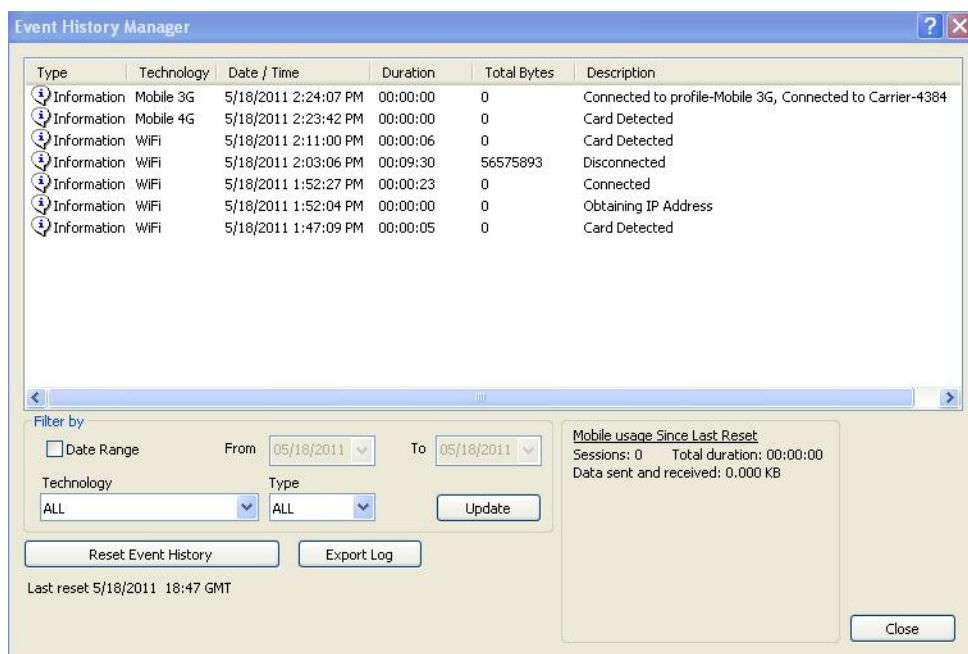
If this box is checked, all new network profiles created will be configured to automatically launch your VPN upon successful connection. If this box not checked, new profiles will not connect to your VPN until you follow the instructions in Automatically Launching a VPN.

Note: This setting specifies the initial state of the [VPN Autolaunch](#) box on the General page of settings for each new profile (see page 36). You can easily change this setting for an individual profile after the profile is created.

Troubleshooting Tools

Event History Manager

Select **Diagnostics > Event History** from the Tools menu to see a log of events (for example, connections, disconnections, errors). The window shown below appears.



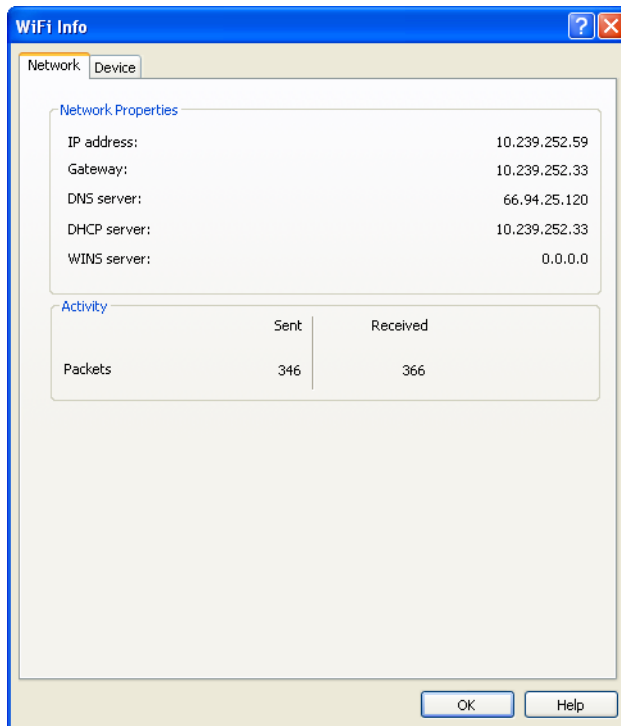
- You can do the following in this window:
- Double-click any item in the list to see more information about that event.
- Use the options in the **Filter by** section to limit the events displayed to a particular date range, connection technology or event type.
- Click on the **Reset Event History Manager** button to delete all the currently logged events.
- Click on the **Export Log** button to save the currently logged events information to a text file.
- Check your total usage data by viewing the statistics listed under **Mobile Usage Since Last Reset**.

Note: Byte Totals displayed are approximate and do not include any currently in-progress session. More information about data usage is available at XFINITY Customer Central ([https:// customer.comcast.com/Secure/Users.aspx](https://customer.comcast.com/Secure/Users.aspx)).

WiFi Network Information

To view information about a WiFi network you are currently connected to or about your current WiFi device, select *Diagnostics > WiFi Info* from the *Tools* main menu. This produces the window shown below:

Network Tab



IP Address

The Internet address your computer is using for the current WiFi network connection. Ordinarily, the address displayed here is assigned only for the duration of the current connection. It is most likely NOT permanently assigned to your computer.

Gateway

The address of the device that is responsible for routing all the network traffic you send over the WiFi connection.

DNS Server

The address of the server your computer is using to translate textual Internet addresses (like XFINITY.com) into the numerical addresses used natively by the Internet Protocol.

DHCP Server

The address of the server that assigned your computer's network configuration for the current wireless connection.

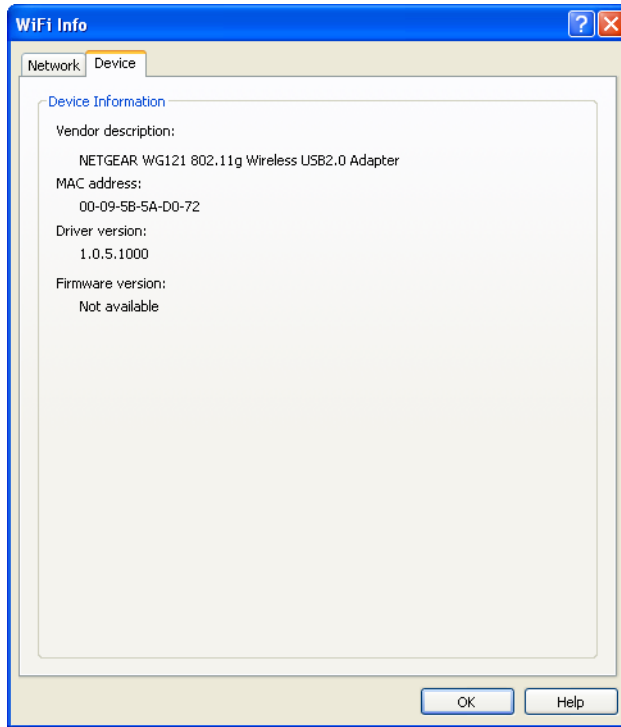
WINS Server

The address of the server (if any) that your computer is using to find the names of computers on a Windows network.

Activity

The number of packets of data that your computer has sent and received over the WiFi connection since it was established.

Device Tab



Vendor Description

The name of your WiFi device, as reported by its on-board operating software.

MAC Address

The Hardware Address of the device. MAC (Media Access Control) addresses are pre-configured by the device's manufacturer and usually cannot be altered. These addresses are used for transferring data by hardware-level protocols such as Ethernet and 802.11 (WiFi). Higher level protocols such as the TCP/IP Protocol Suite used by the Internet have their own addressing schemes, but still rely on the hardware-level protocol for the transfer of data between individual nodes on a network.

Driver Version

The version of the driver for the device that is currently installed on your computer.

Firmware Version

The version of the device's on-board operating software.

Mobile 3G Info Window

To view information about your Mobile 3G Internet Device and/or your Mobile 3G connection (if any), select [Diagnostics > Mobile 3G Info](#) from the [Tools](#) menu. The window shown below will appear.

Note: The information displayed in this window is provided by your XFINITY Mobile 3G Internet Device and its drivers. If the device does not provide this information or the information provided is incorrect, this will be reflected in the displayed data.

Device Tab

The screenshot shows a window titled "Mobile 3G Info" with a close button in the top right corner. Inside the window, there are two tabs: "Device" (selected) and "Network". The "Device" tab contains two sections: "Hardware information" and "User information". Each section has a list of fields with their corresponding values displayed in the text boxes.

Section	Field	Value	
Hardware information	Device name:	{4d36e96d-e325-11ce-bfc1-08002be10318}\0002	
	Device description:	U600 EVDO Modem	
	Manufacturer:	Franklin Wireless Corp.	
	Modem model:	U600	
	Revision:	Q6085B-4390-NS-1.1.519.4453	
	MED:	a10000100005cc	
	Technology:	CDMA	
	Firmware version:	Q6085B-4390-NS-1.1.519.4453	
	Hardware version:	P 3.0	
	Modem port:	COM11	
	User information	User name:	8035229609@mob.comcast.net
		Phone number:	8035229609
		Home Carrier Name:	Sprint
Home Carrier ID:		4384	
PRL version		60776	
Imsi:		8034391280	
Buttons: Copy, OK, Help			

Device Name

The name used internally by software applications to uniquely identify your Mobile 3G Internet Device.

Device Description

The commercial name of your XFINITY Mobile 3G Internet Device.

Manufacturer

The name of the manufacturer of your XFINITY Mobile 3G Internet Device.

Modem Model

The model name of your XFINITY Mobile 3G Internet Device.

Revision

The revision field contains manufacturer-specific information about the version of your device. It may, for example, contain additional information about your device's model number or its firmware version.

ESN

Your XFINITY Mobile 3G Internet Device's Electronic Serial Number.

Technology

The type of XFINITY Mobile 3G Internet Device you are using.

Firmware Version

The version of your XFINITY Mobile 3G Internet Device's on-board operating software.

Hardware Version

The version of your device's hardware.

Modem Port

The communications (COM) port that your XFINITY Mobile 3G Internet Device is currently attached to.

User Name

Your Network Access Identity (NAI), usually in the form of username@companyabc.com.

Phone Number (MDN)

The telephone number of your XFINITY Mobile 3G Internet Device.

Home Carrier Name

The name of the wireless service provider that your XFINITY Mobile 3G Internet Device considers to be its “home” network.

Home Carrier ID

The ID of the wireless service provider that your device considers to be its “home” network.

PRL Version

The version of the file on your device that contains the Preferred Roaming List.

MSID (IMSI_S)

Your XFINITY Mobile 3G Internet Device's IMSI (International Mobile Subscriber Identity) code. The IMSI allows any mobile network to know the home country and network of the subscriber.

Network Tab

The screenshot shows a window titled "Mobile 3G Info" with a close button in the top right corner. Inside the window, there are two tabs: "Device" and "Network". The "Network" tab is selected. The content is organized into two sections: "Carrier information" and "Session information".

Carrier information

Network name:	Sprint
System Id:	4384

Session information

Connected:	no
Roaming:	no
MIP error:	0
Signal strength (dBm):	-88
Data sent during the session:	
Data received during the session:	
IP address:	0 . 0 . 0 . 0
Gateway address:	0 . 0 . 0 . 0
Workmode:	2

At the bottom of the window, there are three buttons: "Copy", "OK", and "Help".

Network Name

The name of the Mobile 3G carrier to which you are currently connected.

System ID

The ID of the network to which your XFINITY Mobile 3G Internet Device is currently connected.

Connected

Indicates whether you are currently connected to a Mobile 3G network.

Roaming

Indicates whether you are currently connected to a Mobile 3G network other than a Home network.

MIP Error

The last Mobile IP Error Code reported by your XFINITY Mobile 3G Internet Device.

Signal Strength (dBm)

The strength of the signal being received from this network, expressed in dBm.

Data Sent

The amount of data sent over this connection since it was established (in bytes).

Data Received

The amount of data received over this connection since it was established (in bytes).

IP Address

The IP Address you are using for the current XFINITYMobile 3G Internet connection. Ordinarily, the address displayed here is assigned only for the duration of the current connection. It is most likely NOT permanently assigned to your computer.

Gateway Address

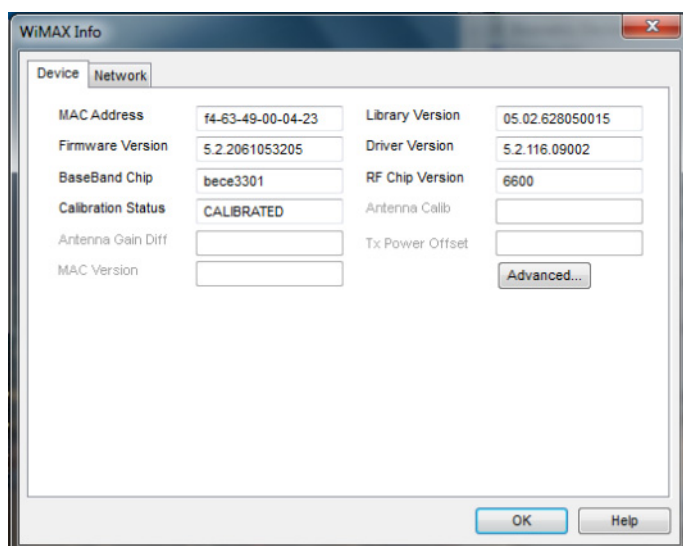
The address of the default gateway that has been assigned to your device.

Mobile 4G Info Window

To view information about your XFINITY Mobile 4G Internet Device and/or your Mobile 4G connection (if any), select [Diagnostics > Mobile 4G Info](#) from the Tools menu. The window shown below appears:

Note: The information displayed in this window is provided by your XFINITY Mobile 4G Internet Device and its drivers. If the device does not provide this information or the information provided is incorrect, this will be reflected in the displayed data.

Device Tab



The image shows a screenshot of the 'WiMAX Info' window with the 'Device' tab selected. The window displays various system information in a two-column layout. The 'Device' tab is active, and the 'Network' tab is also visible. The information includes MAC Address, Firmware Version, BaseBand Chip, Calibration Status, Antenna Gain Diff, MAC Version, Library Version, Driver Version, RF Chip Version, Antenna Calib, and Tx Power Offset. An 'Advanced...' button is located at the bottom right of the main content area. At the bottom of the window are 'OK' and 'Help' buttons.

Device		Network	
MAC Address	f4-63-49-00-04-23	Library Version	05.02.628050015
Firmware Version	5.2.2061053205	Driver Version	5.2.116.09002
BaseBand Chip	bece3301	RF Chip Version	6600
Calibration Status	CALIBRATED	Antenna Calib	
Antenna Gain Diff		Tx Power Offset	
MAC Version		Advanced...	

This page displays various information about the XFINITY Mobile 4G Internet Device currently attached to your computer.

MAC Address

The Hardware Address of the device. MAC (Media Access Control) addresses are preconfigured by the device's manufacturer and usually cannot be altered. These addresses are used for transferring data by hardware-level protocols such as Ethernet or WiMAX. Higher level protocols such as the TCP/IP Protocol Suite used by the Internet have their own addressing schemes, but still rely on the hardware-level protocol for the transfer of data between individual nodes on a network.

Library Version

The version of the software interface of the device's Mobile 4G chipset.

Firmware Version

The version of your XFINITY Mobile 4G Internet Device's onboard operating software.

Driver Version

The version of the driver for the device that is currently installed on your computer.

BaseBand Chip

The version of the chip in your XFINITY Mobile 4G Internet Device that formulates the baseband Mobile 4G signal.

RF Chip Version

The version of the chip in your XFINITY Mobile 4G Internet Device that modulates and multiplexes the baseband Mobile 4G signal for RF transmission.

Calibration Status

This indicates whether your XFINITY Mobile 4G Internet Device has been calibrated.

Antenna Calib

This item is not currently reported by the XFINITY Connection Manager software.

Antenna Gain Diff

This item is not currently reported by the XFINITY Connection Manager software.

Tx Power Offset

This item is not currently reported by the XFINITY Connection Manager software.

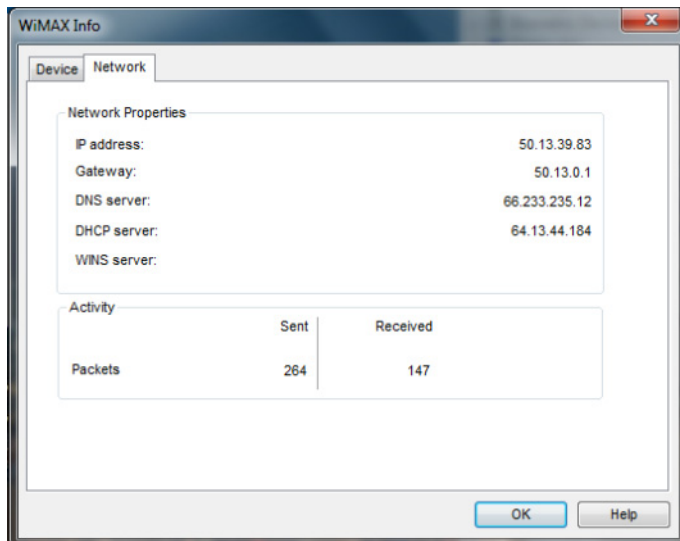
MAC Version

This item is not currently reported by the XFINITY Connection Manager software.

The Advanced Button

Click this button to open the Advanced Mobile 4G Info window.

Network Tab



This page displays various information about the Mobile 4G network you are currently connected to (if any).

IP Address

The Internet address your computer is using for the current Mobile 4G network connection. Ordinarily, the address displayed here is assigned only for the duration of the current connection. It is most likely NOT permanently assigned to your computer.

Gateway

The address of the device that is responsible for routing all the network traffic you send via Mobile 4G.

DNS Server

The address of the server your computer is using to translate textual Internet addresses (like XFINITY.com) into numerical addresses used natively by the Internet Protocol.

DHCP Server

The address of the server that assigned your computer's network configuration for the current Mobile 4G connection.

WINS Server

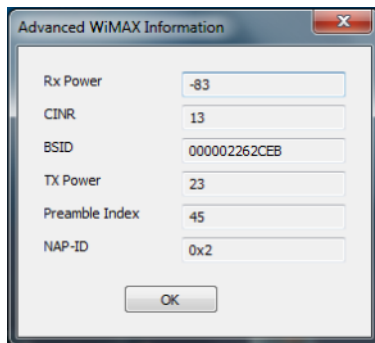
The address of the server (if any) that your computer is using to find the names used by computers in a Windows workgroup.

Activity

The number of packets of data that your computer has sent and received over the WiMAX connection since it was established.

Advanced Mobile 4G Information

Clicking the [Advanced](#) button on the Device page of the Mobile 4G Info window produces the Advanced Mobile 4G Info window (shown below). This window provides advanced information for troubleshooting a Mobile 4G connection.



Rx Power

The strength of the signal received.

CINR

Carrier to Interference + Noise Ratio. This is an indication of how strong the desired signal is compared to any interfering signals and noise. This gives a slightly more accurate indication of the overall quality of the signal received than just the signal strength by itself.

BSID

Base Station ID. The ID of the base station you are currently connected to.

TX Power

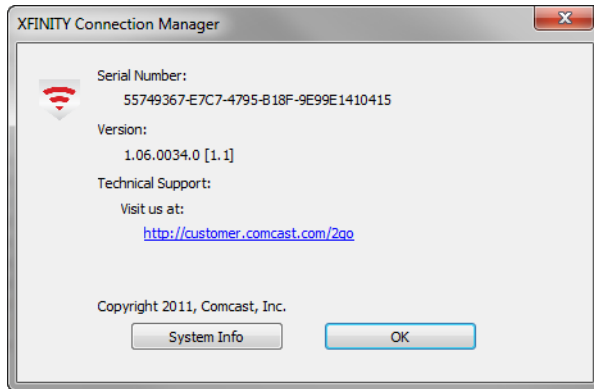
The level of power your XFINITY Mobile 4G Internet Device is using to transmit.

Preamble Index

The Preamble Index of the Mobile 4G base station sector you are currently connected to.

About XFINITY Connection Manager

Select [About XFINITY Connection Manager](#) from the Help menu to see the version number of the XFINITY Connection Manager software as well as the website for XFINITY customer service.



Click the [System Info](#) button to see information about your computer's current configuration, which may be useful to a customer service representative in resolving a problem.

Troubleshooting Procedures

Numbered Errors

The most commonly-reported connection errors are listed below, along with some advice on their resolution.

Error 67

Possible causes for this error include the following:

- Mobile Internet Device account credentials have changed.
- Mobile Internet Device is no longer provisioned for service.

Resolution

- Select Update Services from the [Tools > Settings > Update](#) tab to manually update your service profile and parameters for your device.
- Contact [XFINITY Internet 2go Technical Support](#) at **1-866-206-2182** to ensure that your device is properly provisioned and that there are no problems with the account.

Error 131

Your Mobile Internet Device account credentials may have changed.

Resolution

- Select Update Services from the [Tools > Settings > Update](#) tab to manually update your service profile and parameters for your device.
- Contact [XFINITY Internet 2go Technical Support](#) to ensure that your device is properly provisioned and that there are no problems with the account.

Error 619

A connection to the remote computer could not be established, so the port used for this connection was closed. Possible causes for this error include the following:

- Network resources are unavailable.
- Attempting to reconnect before your Mobile Internet Device has finished disconnecting from a previous call.
- Your Mobile Internet Device may be malfunctioning.

Resolution

- Wait 30 seconds, and then try to connect again.
- Remove the Mobile Internet Device and reattach it to the computer.
- Reboot the computer.

Error 628

The connection was terminated by the remote computer before it could be completed. Possible causes for this error include the following:

- Call was dropped due to poor signal.
- Call was dropped due to network congestion.

Resolution

- If indoors, move closer to a window, exterior wall or move to a higher level. Re-orienting the computer/wireless device may help as well.
- Wait 30 seconds, and then try to connect again.

Error 633

The device is already in use or is not configured properly. Possible causes for this error include:

- There is a problem with the drivers installed for the wireless device.
- Another application such as a fax program or PDA device software is attempting to use the port.

Resolution

- Shut down all FAX and PDA software and launch the again. Examples of common applications that can cause this type of problem include: PalmSource Hotsync, Microsoft ActiveSync, and Blackberry Desktop Manager.

- Uninstall any other wireless device connection management software installed on the computer.
- Reinstall the XFINITY Connection Manager.

Error 635

The device is already in use or is not configured properly.

Possible causes

Unknown error. Possible causes for this error include:

- Resuming the computer system from standby

Resolution

- Close the XFINITY Connection Manager.
- Remove the Mobile Internet Device.
- Re-open the XFINITY Connection Manager.
- Connect the Mobile Internet Device.
- Reboot the computer if the steps above do no work.

Error 668

The connection was dropped. Possible causes for this error include:

- Recent service change to the device.
- Poor signal.
- Network congestion.

Resolution

- If a service change has been requested recently, you may need to update your service profile and parameters for your device by selecting the [Update Services](#) option from the Error Dialog.
- Select [Update Services](#) from the [Tools > Settings > Update](#) tab to manually update your service profile and parameters for your device.
- If indoors, move closer to a window, exterior wall, or a higher level. Reorienting the computer or wireless device may help as well.

- Reboot the computer.
- Contact [XFINITY Internet 2go Technical Support](#) at **1-866-206-2182** to ensure that your device is properly provisioned.

Error 678

The remote computer is not responding. Possible causes for this error include:

- Recent service change to the device.
- Poor signal.
- Network resources are unavailable.

Resolution

- If a service change has been requested recently, you may need to update your service profile and parameters for your device by selecting the [Update Services](#) option from the Error Dialog.
- Select [Update Services](#) from the [Tools > Settings > Update](#) tab to manually update your service profile and parameters for your device.
- If indoors, move closer to a window or exterior wall or move to a higher level. Reorienting the computer or wireless device may help as well.
- Wait 30 seconds, and then try to connect again.
- Contact [XFINITY Internet 2go Technical Support](#) at **1-866-206-2182** to ensure that your device is properly provisioned.

Error 691

Access was denied because user name and/or password supplied is invalid on the domain. Possible causes for this error include:

- Poor signal.
- Mobile Internet Device account credentials have changed.

Resolution

- If indoors, move closer to a window or exterior wall or move to a higher level. Re-orienting the computer/wireless device may help as well.
- Reboot the computer.

- Select [Update Services](#) from the [Tools > Settings > Update](#) tab to manually update your service profile and parameters for your device.
- Contact XFINITY [XFINITY Internet 2go Technical Support](#) to ensure that your device is properly provisioned.

Error 692

There was a hardware failure in the device. Possible causes of this error include:

- Wireless device is defective or broken.
- Problem with PC Card Slot, ExpressCard slot, or USB port.

Resolution

- Close the XFINITY Connection Manager, reinsert the device, and launch the XFINITY Connection Manager again.
- Reboot the computer.
- Try connecting the device to another slot (or port).

Error 718

PPP/Network Timeout. Possible causes for this error include:

- Recent service change to the device.
- Poor signal.
- Network resources are unavailable.

Resolution

- If a service change has been requested recently, you may need to update your service profile and parameters for your device by selecting the [Update Services](#) option from the Error Dialog.
- Select [Update Services](#) from the [Tools > Settings > Update](#) tab to manually update your service profile and parameters for your device.
- If indoors, move closer to a window or exterior wall or move to a higher level. Reorienting the computer or wireless device may help as well.
- Wait 30 seconds, and then try to connect again.
- Reboot the computer.

Error 719

PPP termination by remote machine. Possible causes for this error include the following:

- Poor signal.
- Network resources are unavailable.

Resolution

- If indoors, move closer to a window or exterior wall, or move to a higher level. Reorienting the computer or wireless device may help as well.
- Wait 30 seconds, and then try to connect again.
- Reboot the computer.

Error 777

The connection attempt failed because the connecting device on the remote computer is out of order. Possible causes for this error include:

- Poor signal.
- Network resources are unavailable.
- There is a problem with one of the wireless device drivers.

Resolution

- If indoors, move closer to a window or exterior wall, or move to a higher level. Reorienting the computer or wireless device may help as well.
- Wait 30 seconds, then try to connect again.
- Close the XFINITY Connection Manager, reinsert the wireless device and launch the XFINITY Connection Manager again.
- Reboot the computer.
- Uninstall any other software that manages wireless connections (if any are present on the computer).
- Reinstall the XFINITY Connection Manager.

Application Launch Issues

In some instances you may encounter application launch issues which can easily be resolved.

Auto launching of the XFINITY Connection Manager at Startup

The XFINITY Connection Manager installation can be configured to allow the application to automatically launch when a computer boots up or when a new user logs into the machine. This may (or may not) be the way you prefer it to behave.

Resolution — You can access the setting that controls this behavior by selecting Settings from the Tools menu and then choosing the General tab. Check (or uncheck) the Automatically run this application on machine startup box to specify whether the XFINITY Connection Manager should be automatically launched.

Windows XP's native WiFi management is shut down at startup

This behavior is intentional. XFINITY Connection Manager provides significantly more powerful WiFi management than XP's native WiFi engine. However, if you prefer XP's native tool, you can disable the XFINITY Connection Manager's WiFi management entirely.

Device Issues

In some circumstances, the XFINITY Connection Manager will not be able to use your WiFi, Mobile 3G or Mobile 4G Device.

A network name displayed in the main window will turn gray when the corresponding device's presence has been disabled or if the device's presence is not detected by the XFINITY Connection Manager.

- Device Disabled ([Top FAQs](#) “Why is my device disabled?” on page 76)
- No Wireless Device Detected ([Top FAQs](#) “Why is my wireless device not detected?” on page 77)

Support Information

Support for the XFINITY Connection Manager can be obtained through XFINITY's website at <http://customer.comcast.com/2go>

Visit the FAQ section for troubleshooting tips on [Top FAQs](#) to connect to the XFINITY Internet 2go service.

Further assistance is available by phone at **1-866-206-2182**

When contacting *XFINITY Internet 2go Technical Support* be sure to include the version of Windows and the type of wireless device you are using as well a description of the problem you are experiencing.

Frequently Asked Questions

I Cannot Connect.

If this is the first time the device is used, it may take 3-5 minutes for the device to be installed, configured and activated.

- **Option 1: Re-insert Mobile Broadband device**
 - Remove device, wait 10 seconds, re-insert device and try to connect again.
 - If above did not work: Remove device, then [File > Exit](#) the XFINITY Connection Manager and wait 20 sec. Re-launch the XFINITY Connection Manager, re-insert device to a different USB port if available, and try again.
- **Option 2: Reboot computer**
 - Remove device and reboot computer. With the XFINITY Connection Manager running, re-insert device, and try to connect again.
- **Option 3: Update the service**
 - If you have a Mobile 3G Broadband device, the device profile may need to be updated.
 - Start XFINITY Connection Manager, insert device. Select Update Services from [Tools > Settings > Update](#) tab to manually update service profile and parameters for your device.
 - Once the update process is complete, the device will restart and attempt to connect.
- **Option 4: Update XFINITY Connection Manager (must have Internet available)**
 - Start XFINITY Connection Manager, click on [Tools > Check for Updates](#)
 - If an update is available, download and install it.
 - Launch XFINITY Connection Manager, re-insert device and try to connect again.
- **Option 5: Disable WiFi on machine**
 - Click the start menu and open control panel.
 - Click on "Network and Internet Connections" or "Network Connection"
 - **In Windows 7 and Vista**

- Click the "View Network Status and Tasks" to open Network Sharing center.
- Click Change Adapter Settings on the left menu
- Right click on WiFi adapter and disable
- **In Windows XP**
 - The network connections window lists all High-Speed Internet connections
 - Right click the "Wireless Network Connection" and disable
 - You can right click on WiFi adapter and re-enable it at any time.
 - Launch XFINITY Connection Manager, re-insert device and try to connect again.

If you are trying to connect to the 4G network you must have a Dual Mode device. Single Mode devices can only connect to the 3G network. If you are interested in 4G service please contact billing to change your plan and get the appropriate device.

Which operating systems does the XFINITY Connection Manager support?

The XFINITY Connection Manager supports Windows XP, Windows Vista 32-bit and 64-bit, and Windows 7 32-bit and 64-bit systems. See [Top FAQs](#) for more information on supported system configurations.

The XFINITY Connection Manager launched, but no wireless device is detected.

For troubleshooting instructions, see "Why is my wireless device not detected?" on page 77.

How do I stop the XFINITY Connection Manager from launching every time I restart my computer?

Follow these steps:

1. Select [Tools > Settings](#) from the main menu.
2. Select the [General](#) tab.
3. Remove the check from the [Automatically run this application on machine startup](#) box.
4. Click the [OK](#) button.

Why Does the XFINITY Connection Manager keep scanning for WiFi networks?

The XFINITY Connection Manager will continue to scan until it finds one or more available networks or hot spots. If it keeps scanning, there are most likely no WiFi networks or hot spots in the area. “Closed” networks are a special case. Although the XFINITY Connection Manager can detect whether closed networks are in the area, it cannot actually identify (or connect to) individual closed networks without probing for these networks using their exact names. To enable this, you have to create a profile for the network you wish to connect to. See “WiFi Info” on page 23 for more information.

Why do I keep losing my connection?

This may be due to interference by other devices like cordless phones, microwave ovens, and other 2.4GHz band devices. Move a few feet away from such devices. Interference can also be caused when in steel frame buildings, on fast moving trains, in rural or mountainous areas, on underground subways and near high voltage lines.

Why am I unable to connect to a network that I can see in the XFINITY Connection Manager?

Signal strength from the wireless Access Point may not be strong enough to allow reliable connections. It may not be a publicly available Access Point. Many companies or campuses use wireless networking within their buildings, but will not grant public access.

Why is my device disabled?

In some circumstances, the XFINITY Connection Manager will not be able to use your Wi-Fi, Mobile 3G Internet Device or Mobile 4G Internet Device. A network name displayed in the main window will turn gray when the corresponding device has been disabled or if the device’s presence is not currently detected by the XFINITY Connection Manager. All the devices used by the XFINITY Connection Manager can be disabled by Microsoft Windows. If this is the case, you can re-enable the device. If this is the case, you can re-enable the device. You can enable an attached wireless device by selecting [Enable Mobile 3G](#), [Enable Mobile 4G](#) or [Enable WiFi](#) from the [File](#) menu.

Note: On Windows Vista systems, these options may be grayed out at all times. This may be because of security restrictions in your Microsoft Vista security configuration. Running the application as an administrator may allow access to these options.

Follow these steps:

1. Close the XFINITY Connection Manager.
2. Right click on the XFINITY Connection Manager icon on your computer's desktop. A short menu appears.
3. Select [Run As Administrator](#) from this menu.

Why is my wireless device not detected?

Failure to detect the device may result from any of the following causes:

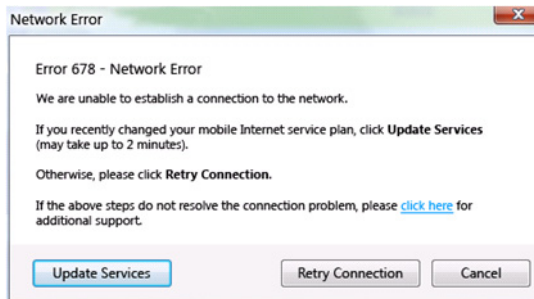
- Devices that must be tethered to your computer with a data cable (such as USB), but are not currently properly connected. Make sure the cables for devices that require them are properly attached to both your computer and the device.
- External devices that are not currently powered on. Make sure external devices are switched on. Make sure the batteries of battery-powered devices are charged. Make sure devices that must be plugged into an electrical outlet are plugged in.
- PC Card, USB, or Express Card devices that are not properly inserted. Make sure such devices are firmly seated in the appropriate slots.
- The wrong device is selected in the [Hardware](#) Tab of the [Settings](#) Window. Ordinarily, automatic selection should be specified in the "Selected" column. If [Manual](#) selection is specified, verify that the selected device is the device you are trying to use. See "Settings: Hardware" on page 44 for more information.
- No driver or incorrect driver installed. Ensure that the latest drivers for the device are correctly installed according to the instructions of the device's manufacturer.

I am receiving PPP errors when trying to connect to Mobile 3G

If a service change has been requested recently, you may need to update your service profile and parameters for your device by selecting the Update Services option.

If a temporary network problem causes the connection error, use Retry Connection to connect to 3G again after 30 seconds.

Use the [Click Here](#) link to view more troubleshooting topics and suggestions.



Why can't the XFINITY Connection Manager find a WiFi network?

The XFINITY Connection Manager will continue to scan until it finds one or more available networks or Hot Spots. Most likely, there are no WiFi Hot Spots within range.

Does XFINITY Connection Manager support WEP encryption?

Yes, XFINITY Connection Manager supports ASCII 64, 128 and HEX 64, 128.

Can I leave my card in the USB slot all the time even when not using it?

No, you should only have the card inserted when you are going to use it.

My card feels very hot when I remove it from the USB slot after use.

This is normal and will not affect your card.

Can I use my card on another laptop?

Yes. You will need to install the XFINITY Connection Manager software on the laptop you plan to use.

Will I be charged for the time I use the card?

It depends on the plan you subscribe to. All plans offer an initial amount of data included in the plan and after you reach that limit you will be charged overage.

The LED light on my card is off.

The card has no power or is off. Remove the card and reinsert it.

The LED light on my card is solid?

An error has occurred. Remove the card and reinsert it.

The LED light on my card is blinking?

The card is ready to use.