



USB*w* 100 Series

User Manual

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Introduction

Introduction

The Help system is designed to answer users' questions on how to perform specific tasks and to explain the Motorola Connection Manager's functions.

The menu system to the left allows users to browse help topics while the Index and Search tabs provide other mechanisms to access available help topics.

If you need additional assistance, contact your Internet Service Provider.

Getting Started

System Requirements

The system requirements for basic installation and operation of the Motorola Connection Manager software are shown in the table below.

	Windows XP	Windows Vista
Processor	300 MHz	1.0 GHz 32-bit processor
RAM	256 MB	1GB
Hard Drive Space	60 MB	100 MB
Internet Explorer	IE 5.5	IE 7
OS Service Pack	Service Pack 2	Service Pack 0,1

XP Operating System Editions Supported

XP – 32-bit Support Professional Edition Home Edition

Vista Operating System Editions Supported

Vista – 32-bit, 64-bit Starter Edition Home Basic Edition Home Premium Edition Professional Edition Small Business Edition Enterprise Edition Ultimate Edition

Additional Requirements:

- Windows Vista operation requires a DirectX 9.0 (or better) graphics accelerator
- CD-ROM drive
- Compatible WiFi device (for WiFi function)
- Ethernet device for Ethernet connections

Installing the Motorola Connection Manager Software

Installing the Motorola Connection Manager is easy. You will need the software CD to install the software, follow these steps:

- 1. Insert CD into CD-ROM drive.
- 2. If your computer automatically starts running the CD follow the on screen instructions for installation and configuration.

If your PC does not automatically install the software from the CD, follow these steps:

- 1. Open the My Computer folder by double clicking the icon on your desktop.
- 2. Find the CD-ROM drive where the Motorola Connection Manager is located; double-click the icon to access the CD in the CD-ROM drive.
- Double click on the Setup executable file to begin installation.
 Follow the on-screen instructions for installation and configuration of the Motorola Connection Manager software.

The Motorola Connection Manager Interface

The main interface for establishing WiMAX-based wireless connections is shown below.

Motorola Connection Manager	▼ = X
File Tools Help	
	WIMAX
SPEED PREFE	WIFI
Connected to Motorola WiMAX	Ethernet
CINR: 30 dBm	
Tx: -9 dBm	80°
Center Freq: 3.46 GHz ST 48.94 KB 26.84 KB 22.10 KB	DISCONNECT
Profiles VPN	-

This window will display details about the WiMAX network you are currently connected to. If you are not currently connected to a WiMAX Network, it will choose the network to display in the following order:

- 1. The last network you connected to (if available)
- 2. Any "preferred" network (networks for which you have a profile)
- 3. The network with the strongest signal strength

You can do the following from this window:

- Connect to the displayed network (if any) by clicking the Connect/Disconnect button.
- Launch a VPN network connection that you have configured by clicking the VPN button.



The main interface for establishing WiFi based wireless connection is shown below.

This window will display details about the network you are currently connected to. If you are not currently connected, it will choose the network to display in the following order:

- 1. The last network you connected to (if available)
- 2. Any "preferred" network (networks for which you have a profile)
- 3. The network with the strongest signal strength

You can do the following from this window:

- Connect to the displayed network (if any) by clicking the Connect/Disconnect button.
- Click the "networks available" text to display the entire list of WiFi networks available in the area. Use this list to select a different network to connect to.
- Search for WiFi hotspots by clicking on the Location Finder button.
- Create and edit network profiles by clicking on the Profiles button.
- Launch a VPN network connection that you have configured by clicking the VPN button.



The main interface for establishing Ethernet-based connections is shown below.

This interface allows you to connect to an Ethernet-based (wired) network utilizing the same credentials (where applicable) utilized for connections to WiFi hotspots.

You can do the following from this window:

- Establish an Ethernet Connection by clicking the Connect/Disconnect button.
- Create and edit network profiles by clicking on the Profiles button.
- Launch a VPN network connection that you have configured by clicking the VPN button.

Controls for the Main Window

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

Click this button to convert the window to a miniature toolbar version of itself like the window below.



- Click this button (which only appears on the mini toolbar version of the main window) to restore the window to full size.
 - Click this button to reduce the window to a button on the task bar at the bottom of the screen.
 - Click this button to close the window.

The File Menu

Clicking **File** in the menu bar of the Motorola Connection Manager's main window produces a short menu with the following options:

Enable/Disable WiFi Adapter

Select this option to enable and disable your WiFi adapter.

Enable/Disable WiMAX Adapter

Selecting this option shall enable and disable the WiMAX adapter.

Enable/Disable Ethernet Adapter

Select this option to enable and disable your Ethernet adapter.

Exit

Exit the Motorola Connection Manager application.

The Tools Menu

Clicking **Tools** in the menu bar of the Motorola Connection Manager's Main window produces a short menu with the following options:

User Info

Opens the User Name and Password Logon window.

WiMAX Info

Opens the WiMAX window, this window displays some technical information about the WiMAX network and the WiMAX device.

WiFi Info

Opens the WiFi Window, this window displays some technical information about the WiFi network you are connected to and your current WiFi device.

Ethernet Info

Opens the Ethernet window, this window displays some technical information about the Ethernet network and the Ethernet device.

WiMAX ReScan for Networks

The Motorola Connection Manager will rescan all WiMAX networks.

Always on Top

The Motorola Connection Manager will always be on top of all other applications.

Transparency

Allows you to see varying degrees of your desktop.

Zoom

Allows you to increase the size of the Motorola Connection Manager application

Settings

Opens the Settings window allowing you to configure a number of personal preference features.

The Help Menu

Clicking **Help** in the menu bar of the Motorola Connection Manager's Main window produces a short menu with the following options:

Help

Opens this help system.

Event Manager History

Select this item to display a list of the most recent The Motorola Connection Manager events (network connections, network disconnection, errors, etc.).

About the Motorola Connection Manager

Displays version information for the Motorola Connection Manager software.

Establishing WiMAX Connections

How to Connect to a WiMAX Network

To connect to a WiMAX network, follow these steps:

- 1. Navigate to the WiMAX Main Window in the Motorola Connection Manager software by clicking the WiMAX button on the right side of the main window.
- 2. If there are WiMAX networks available for connection, The Motorola Connection Manager will display the name of one of the detected networks as well as the total number of networks detected.
- 3. To connect the network whose name is displayed, click Connect.

To view information about a WiMAX network you are currently connected to or the WiMAX device you are using to connect to that network, select **WiMAX 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 Activity on your current WiMAX connection.
- The Device tab contains information about your current WiMAX Device.

WiMAX Device Information

This tab contains information about the WIMAX device you are currently using. Fields include the following:

MAC Address

The hardware address of the device.

Firmware Version

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

Baseband Chip

The WiMAX chipset for the device.

Calibration Status

Device Calibration Status is reported by the Firmware on the device.

Antenna Gain Diff

The amount of Antenna Gain provided on the device with the current signal.

MAC Version

Version of the MAC chipset on the device.

Library Version

Version of the WiMAX Library used by this device's driver.

Driver Version

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

RF Chip Version

The version of the RF chip used on the device.

Antenna Calib

The value of the calibration setting for the antenna on the device.

Antenna Gain Diff

The programmed Antenna gain differential used on the device.

WiMAX Profiles

WARNING! This is not recommended for the User to complete. Please contact your Internet service provider for assistance.

The Motorola Connection Manager will have a default WiMAX profile. It is possible for your Internet Service Provider to create a new WiMAX profile.

To return your WiMAX Adapter to the original profile, re-install the software CD provided with your USB Device.

Profiles				? 🛛
File Help			-	
Ethernet 🕑 💷				
	Up	Down		
Add	Edit	Remove	Connect	Help Close

Establishing Wi-Fi Connections

To connect to a WiFi network, follow these steps:

- 1. Navigate to the WiFi Main Window in the Motorola Connection Manager software by clicking the **WiFi** button on the right side of the main window.
- 2. If there are WiFi networks available for connection, the Motorola Connection Manager will display the name of one of the detected networks as well as the total number of networks detected. If you want to connect the network whose name is displayed, click **Connect**.

If you want to connect to a different network, click the text that indicates the number of network available (or the large globe icon next to this text). This produces a list of all available networks. Select the network you want to connect to by double-clicking on this network or clicking once on the associated connect button.

Note: If you see a *closed* item in the networks list, this indicates the presence of one or more Closed networks. Connecting to such a network requires the creation of a profile for that network. See How to access a closed network for more information.

- 3. If the network is encrypted, you will now be prompted to enter an encryption key. If this is the case and you know the required encryption key, enter it and click **OK**. If you don't know the encryption key for an encrypted network, you must click **Cancel** and select a different network. See How to access an encrypted network for more information on connecting to encrypted networks. Once you have completed this procedure, the Motorola Connection Manager will attempt to establish a connection to the selected network.
- 4. When connecting to a network for the first time, the Motorola Connection Manager may prompt the user with the New Network Options dialog box. Using this dialog box, users can instruct the Motorola Connection Manager to automatically connect to a network in the future or to prompt the user when that network is available.
- 5. Once you are connected, the Motorola Connection Manager will maintain a timer on how long you have been connected.

If **Prompt me...** is selected Automatic Profile Creation window, you will see a dialog offering four options each time you connect to a new network for the first time. The option selected specifies the type of profile that will be created for this network. By choosing to automatically add network connection parameters to a Network Profile, a user can facilitate automated access to networks in the future.

You must choose one of the options shown below:

Automatically connect to network in future

If this option is selected, the Motorola Connection Manager will create a profile for this network. The profile created will specify that the Motorola Connection Manager should automatically establish a connection to this network whenever it is detected.

Note that when multiple networks that have been configured for autoconnection are detected, the Motorola Connection Manager will choose which network to connect to based on the ranking of profiles in the Network Profiles Window.

Prompt me before connecting to this network

If this option is selected, the Motorola Connection Manager will create a profile for this network. The profile created will specify that the Motorola Connection Manager should offer to connect to this network whenever this network is detected.

Save settings for manual connections

If this option is selected, the Motorola Connection Manager will create a profile to save the settings you used to connect to this network. This allows the Motorola Connection Manager to automate the details of establishing a connection to this network. However, you must still initiate connections to this network manually by selecting the network and then clicking the **Connect** button.

Do not save settings

Choosing this option will allow the user to connect to the network this time, but will not save any parameters for future connections.

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

However, the Motorola 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

How to create a WiFi Network Profile

How to Access a Closed Network

To access a closed network with the Motorola Connection Manager, you must set up a Profile for that network. Follow these steps to create a closed Network Profile:

- 1. Click the on the Profiles button. The Network Profiles window will now be displayed.
- 2. Select the WiFi heading in the left pane of the network profiles window.
- 3. Click the Add button. The first page of properties for the new profile appears.
- 4. Enter the name of the network you want to add in the SSID field. Be aware that the network name is case sensitive and must be entered exactly as provided by the administrator of the closed network to which you want to connect.
- 5. Check the This is a non-broadcasted network (closed) box to identify this as a closed network.
- 6. Fill out the remaining fields on this window as instructed by the administrator of the closed network.
- 7. Click Next. The IP Settings page appears.
- 8. The default selections on the IP Properties page are correct for most networks. If, however, this particular network requires specific IP address and/or DNS server settings, you can specify them here.
- 9. Click Next. The General page appears.
- 10. Configure the settings on the General page as desired and then click Finish to exit the profile wizard.

The List of WiFi Networks

Clicking the next to the Globe in the **WiFi main window** opens the **Available Networks** list.

Available N	etworks			Rescan Re	set		
Connect	Preferred	Network	Mode	BSSID	Channel	Encryption	Signal Strength
Disconnect		Chicago	🕹 🐳	00-90-4B-6E-A1-22	11		
Connect)	SMSI	💊 🐳	00-02-2D-2D-0F-5D	11	HEP WEP	
Connect)	SMSI-54G	😪 🐳	00-0F-3D-DF-10-F0	6	WEP	

To connect to a network on the list either select the network and then click the **Connect** button or double-click on the network in the list. The information displayed for each network will include some (if not all) of the items shown below. Right-clicking anywhere in the window will produce a menu that controls which columns are displayed.

Connect

This column provides connection/disconnection buttons for each available network.

Preferred

A check mark is presented for any WiFi network that is currently listed in the Network Profiles window. This includes network profiles that have been pre-defined, WiFi networks for which you have created Network Profiles and WiFi networks that you have saved using the New Network Options dialog.

Network

This is the Network Signal Set Identifier (SSID). Essentially this is just a name that is broadcast by a WiFi access point to identify the network.

If you see a *closed* item in this column, this indicates the presence of one or more Closed networks. Connecting to such a network requires the creation of a profile for that network. See How to access a closed network for more information.

Mode

This column displays two possible entries:





Indicates that this network is in ad hoc mode. You will be connecting directly to another PC through its wireless network interface card.

BSSID

This is the MAC address of the Access Point's Wireless Network Interface Card.

Channel

The channel on which the wireless network is broadcasting.

AP Vendor

The manufacturer of the wireless access point.

Encryption

Networks that are encrypted will have the 🖑 icon in this column. The accompanying text indicates the encryption method. See How to access an encrypted network for instructions on connecting to encrypted networks.

Signal Strength

Displays the strength of the signal being broadcast from each network. Stronger signals tend to produce more reliable connections.

Beacon Period

Wireless access points periodically broadcast a packet called a "beacon" which helps to synchronize communications with connected systems. The number in this column indicates how often (in milliseconds) the beacon is transmitted.

Supported Rates

A list of all the transmission rates supported by this network.

Time First Seen

The time of day when the Motorola Connection Manager first detected this network. Note that this value represents the current session only. It will be reset when you restart the Motorola Connection Manager.

Time Last Seen

The time of day when the Motorola Connection Manager last detected this network.

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 **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 Activity on your current WiFi connection (if any).
- The **Device** tab contains information about your current WiFi Device (if any).

Disabling Windows XP's Native WiFi Client

By default, Windows XP attempts to manage any wireless network connections it detects. However, this conflicts with the management functions provided by the Motorola Connection Manager software. For this reason, the Motorola Connection Manager will report the Windows XP wireless network management tool as a conflicting application. Like other conflicting applications, the client can automatically disable Windows XP's native WiFi management feature while it runs and restart it when it shuts down. However, the feature can also be manually disabled if you desire.

Manually Disabling XP's WiFi Management

You can tell Windows to disable its wireless network management functions manually. Follow these steps:

 Right click on any network connection icon that appears in the system tray.



- Select Open Network Connections from the menu that appears.
- The Windows XP Network Connections window appears.
- Right click on the icon that corresponds to your wireless network connection.
- Select Properties from the menu that appears.
- Select the Wireless Networks tab.
- Uncheck Use Windows to configure my wireless network settings.
- Click OK to close the window.

Is this a problem on Windows Vista as well?

No. Although Windows Vista also manages WiFi connections, the Vista architecture allows the Motorola Connection Manager to work with Vista's native WiFi management facility. So, there is no conflict.

Wi-Fi Network Security

How to Access an Encrypted Network

The steps required to connect to an encrypted WiFi network are the same as those required to connect to a non-encrypted WiFi network — until you click **Connect**. When you click the **Connect** button, the client will display a dialog that prompts you to enter a network encryption key. In order to proceed, you must do one of the following:

- Enter a network encryption key obtained from the administrator of the network you are trying to access.
- Configure 802.1 x authentications according to the instructions of the network's administrator.
- When you are finished, click the **Connect** button to proceed.

Note: If you create a profile for this network containing the appropriate encryption parameters, you will not see this dialog when you attempt to connect.

What is an Encryption Key?

An encryption key is a code key used to encrypt data exchanged between an encrypted network and the Motorola Connection Manager. You cannot exchange data with an encrypted network without having the appropriate encryption key.

There are two ways to obtain an encryption key:

- Obtain a key from the administrator of the network you are trying to access.
- Configure 802.1x authentication according to the instructions of the network's administrator. A key will be provided automatically as part of the login process.

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:

- Click the **Profiles** button in the main window of the Motorola Connection Manager software. The Network Profiles window appears.
- Select the network for which you wish to edit the encryption keys.
- Click the Edit button.
- Switch to the WiFi tab.
- Enter the new encryption key in both the Network Key box and the Confirm Network Key box.
- Click the OK button.

Enabling 802.1x Authentication

The Motorola Connection Manager software allows you to use to authenticate against your corporate network or other domain. The Motorola Connection Manager will allow you to use any authentication method that is installed on your computer. (Please note that authentication is only available on Windows XP and on Windows Vista.

To enable automatic 802.1x authentication:

- 1. Create a network profile for the WiFi network that you wish to authenticate.
- 2. Open the Network Profile window by clicking the Profiles button.
- 3. Select the Network Profile you wish to edit.
- 4. Click the Edit button.
- 5. Select the WiFi tab.
- 6. Check the Enable data encryption box.
- If you selected a WEP method, you will also have to check Enable 802.1x authentication. (If you selected WPA, this box was checked automatically).
- 8. From the EAP type dropdown, select the type of authentication you wish to enable.

Establishing Ethernet Connections

Follow these steps to establish a connection to an Ethernet network.

- 1. Connect the Ethernet port on your computer to an Ethernet jack belonging to the network to which you wish to connect.
- 2. Navigate to the Ethernet Main Window by clicking the Ethernet button on the right side of the main window.
- 3. Click the Connect button.

Note: a message stating "No Cable Connected" will be displayed if the Ethernet Main Window is accessed when your computer has not been attached to an Ethernet network via an Ethernet jack.

Once you have connected to an Ethernet network, the screen will be updated to display a "Connected" status message.

This box displays the number of packets of data that your computer has sent and received over the Ethernet connection since it was established.

This box contains information about the Ethernet device you are currently using. Fields include the following:

Vendor Description

This is the name of your Ethernet network interface card.

MAC Address

The hardware address of the device.

Driver Version

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

Firmware Version

The version of the devices on-board operating software.

To view information about an Ethernet network you are currently connected to or the Ethernet device you are using to connect to that network, select **Ethernet 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 Activity on your current WiFi connection (if any).
- The **Device** tab contains information about your current Ethernet Device (if any).

This box displays your computer's current network configuration. It includes the following information:

IP Address

The Internet address your computer is using for the current network Ethernet connection.

Gateway

The address of the device that is responsible for routing all of your network traffic onto the Internet.

DNS Server

The address of the server your computer is using to translate verbal Internet addresses into numerical addresses (and vice versa).

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.

Virtual Private Networks (VPNs)

Virtual Private Networks (VPNs) are private networks that can be accessed over a public backbone network (like the Internet) without compromising their privacy. Typically, they maintain their privacy by forming secure (encrypted) "tunnels" directly to users who access them.

Automatically Launching a VPN Connection

You can configure any network profile to automatically connect to a Virtual Private Network whenever you connect using that profile. 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).

Description	Profile Name	SMSI
SMSI SI	Profile Type	Carrier
💎 SMSI 🖉 My Mobile Carrier	VPN	Launch - No

2. Open the Network Profiles window.

- 3. In the left pane, select the profile for which you want to automate VPN connection.
- 4. Click the Edit button. The properties sheet for the selected profile appears.
- 5. If the General tab is not already selected, select it now.

- 6. Check the Auto Launch box in the VPN section.
- 7. Click OK to exit the window.
- 8. Repeat steps 3 through 7 for any additional profiles that you want to auto-launch your VPN connection with.

Configuring a VPN Connection

Follow these steps to configure a VPN connection:

- 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 using that software.
- 2. If the VPN client software is not already installed on your system, install it now. (Microsoft's VPN client is pre-installed on most versions of Windows).
- 3. Open the Motorola Connection Manager software.
- 4. Access the VPN settings tab by selecting the Settings option from the Tools drop-down menu and then clicking the 'VPN' tab.
- 5. If the VPN client software you are using is supported by the Motorola Connection Manager and you want to manually specify your connection information, select Define VPN login info and then enter the VPN profile information in the provided fields.
- 6. If the VPN client software you are using is supported by the Motorola Connection Manager and you already have a connection profile configured for that VPN client, select Use existing VPN profile. Then, specify the client software and the login profile that you want to use.
- 7. If the VPN client software you are using is NOT supported by the Motorola 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.
- 8. Click OK to exit the Settings window.

Once your VPN settings are configured, there are two ways to start your VPN connection.

- Automatically start your VPN upon connection by configuring your connection profile to do so.
- One click manual launch of the VPN by pressing the **VPN** button on the main interface.

Connecting to a Virtual Private Network (VPN)

There are two ways to connect to a Virtual Private Network:

- Configure a network profile to automatically launch a VPN connection when you connect to the network (see automatically launching a VPN connection).
- Whenever you are connected to the Internet, you can launch a configured VPN connection by pressing the **VPN** button in the Main Window.

Supported VPN Clients

The Motorola Connection Manager currently supports VPN clients from the following vendors:

- Microsoft
- Cisco
- Nortel
- Checkpoint (please see Using the Checkpoint VPN Client for important caveats)
- NetMotion (please see Using the NetMotion VPN Client for important caveats)

Using the CheckPoint VPN Client

Although CheckPoint's VPN client provides a command line interface that applications such as the Motorola 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 Motorola Connection Manager open only when you have an active connection managed by the Motorola Connection Manager open. If you want to establish another type of connection with the CheckPoint VPN client, you **MUST** shut down the Motorola Connection Manager first. When the Motorola 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 a PC. This forces all data communication applications to go through the "tunnel" it creates. The Motorola Connection Manager needs to bypass this tunnel in order to establish connections. The Motorola 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 Motorola Connection Manager to this list, the Motorola Connection Manager can establish connections without interrupting the operation of the NetMotion client.
- If the Motorola Connection Manager has not been added to NetMotion's bypass list, the Motorola 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 Motorola Connection Manager will return the NetMotion client to its normal operating mode.

Creating and Managing Network Profiles

Network Profiles are networks that you have saved at connection time using the auto-connect options or have manually added to the Network Profiles network list.

Creating Network Profiles have the following advantages:

You can configure the client to automatically connect to a Network Profile whenever that network is available.

If the last network you connected to is not available at a particular location, the Motorola Connection Manager software will display a network from your list of network profiles in the main window. This allows the same easy, one click connecting to an alternate network.

You can automate steps in the connection process like entering an encryption key or logging into a VPN so that you don't have to perform these actions each time you connect.

You must have a profile for the following:

- You cannot connect to a closed WiFi network unless you create a "closed network" Network Profile.
- You must have a network profile for each WiFi, WiMAX or Ethernet network that you wish to connect to.

Creating a Profile for a WiFi Network

Follow these steps to create a WiFi Network Profile:

- Click the Profiles button in the main window of the Motorola Connection Manager software. The Network Profiles window will now be displayed.
- 2. Click on the WiFi heading in the left pane of the window.
- 3. Click the Add button to bring up the WiFi page of the new profile wizard.
- 4. In the SSID field, enter the broadcast name of the network profile. Note that the name entered here must match the SSID (Service Set Identifier) used by the network exactly.

- 5. If you are configuring a profile for a closed network, check this is a non-broadcast network.
- If the network whose profile you are configuring does not use <u>WEP</u> or <u>WPA</u> encryption, no further security configuration is necessary, the Enable data encryption box should remain unchecked and no further configuration is necessary on this page.
- 7. If the network does use WEP or WPA encryption, check the Enable data encryption box and configure the WiFi data encryption settings (see Enabling WiFi Data Encryption for instructions).
- 8. Click Next. The General page appears.
- 9. Configure the settings on the General page and then click Finish.

Creating an Ethernet Network Profile

Follow these steps to create an Ethernet Network Profile:

- Click the Profiles button in the main window of the Motorola Connection Manager software. The Network Profiles window will now be displayed.
- 2. Click on the Ethernet heading in the list of profiles on the left side of the window.
- 3. Click the Add button. The Ethernet page of the Add Profile Wizard appears.
- 4. In the fields provided, enter the criteria that the Motorola Connection Manager should use when attempting to match this profile to Ethernet networks that you connect to. You must enter a value in at least one of these fields (it does not matter which). Additional fields are optional.
- 5. Click Next to continue to the IP Properties page.
- 6. The default selections on the IP Properties page are correct for most networks. If, however, this particular network requires specific IP address and/or DNS server settings, you can specify them here.
- 7. Click Next. The General page appears.

- 8. The settings on the General page are largely personal preference. Configure these as desired.
- 9. Click Finish.

How to Edit a Network Profile

Follow these steps to edit an existing network Profile:

1. Click the **Profiles** button in the main window of the Motorola Connection Manager software. The Network Profiles window appears.

Profiles		? 🛛
File Settings Help		
Description	Profile Name	SMSI
■ PSMSI	Profile Type	Carrier
SMSI	VPN	Launch - No
Up Down Add Edit Remove	Connect	Help Close

- 2. In the left pane, select the network you wish to edit.
- 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
 - WiMAX
 - Ethernet
 - Security
 - IP
 - General

Note: If the profile you are editing was created for you by your service provider, you may not be allowed to edit some of its settings. Some of the tabs may not be present for this profile.

- 4. Make the desired changes.
- 5. Click the OK button when you are finished.

How to Remove a Network Profile

Follow these steps to remove a network from the Network Profiles window:

- Click the Profiles button in the main window of the Motorola Connection Manager software. The Network Profiles window will now be displayed.
- 2. Select the network that you want to remove from the list in the left pane of the window.
- 3. Click the Remove button.
- 4. Click Close to exit the Profile Properties window.

Use this window to add a Network Profile and to edit existing Network Profile settings.

Profiles		? 🛛
File Settings Help		
Description	Profile Name	SMSI
SMSI	Profile Type	Carrier
SMSI	VPN	Launch - No
Up Down		
Add Edit Remove	Connect	Help Close

Profile Icons

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



Profile Properties: WiMAX

The Motorola Connection Manager will have a default WiMAX profile.

Profile Properties: Ethernet

This window contains the Ethernet-specific settings for Network Profiles. In the fields provided, enter the criteria that the Motorola Connection Manager should use when attempting to match this profile to Ethernet networks that you connect to. You must enter a value in at least one of these fields (it does not matter which). Additional fields are optional.

DNS Suffix

The name of the DNS domain that this network belongs to. For example, motorola.com.

IP Subnet

Specify possible IP addresses that may be assigned to your Ethernet interface when you are connected to this network. To specify a range of addresses, enter only the beginning of the IP address. For example:

172	The profile will be used if the Ethernet interface is assigned any IP address that begins with 172
172.77	The profile will be used if the Ethernet interface is assigned any IP address that begins with 172.77
172.77.64	The profile will be used if the Ethernet interface is assigned any IP address that begins with 172.77.64
172.77.64.5	The profile will be used only if the Ethernet interface is assigned 172.77.64.5

NT Domain

Specify the Windows NT domain that you will belong to when attached to this network.

Must Match all Associations

When this box is checked, a network you are connecting to must match ALL of the values entered above in order to use this profile.

When this box is NOT checked, only one matching value must be found.

Profile Properties: WiFi

This window contains the security settings for WiFi Network Profiles. Follow these steps to configure WiFi network security.

In the SSID field, enter the broadcast name of the network profile. Note that the name entered here must match the SSID (Service Set Identifier) used by the network exactly.

If the network you are configuring is a closed network, check This is a non-broadcast network.

If the network whose profile you are configuring does not use WEP or WPA encryption, no further security configuration is necessary, the Enable

data encryption box should remain unchecked and no further configuration is necessary on this page.

If the network does use WEP or WPA encryption, check the **Enable data encryption** box and configure the WiFi data encryption settings (click here for instructions).

Profile Properties: WiMAX

The Motorola Connection Manager will have a default WiMAX profile.

Profile Properties: General

This tab contains settings that apply to all types of Network Profiles.

Note: Some of these options may not be available if you are configuring a profile created by your network service provider.

Profile Name

Enter a name for this network profile. This is how the network profile will be displayed in the Network Profiles window.

Connection Options

This setting controls what the Motorola Connection Manager will do when it detects the network you are configuring. There are three options:

- Select **Automatic** if you want the Motorola Connection Manager to automatically connect to this network whenever it is detected.
- Select **Prompt me** if you want the Motorola Connection Manager to ask you whether to connect to this network each time the network is detected.
- Select **Manual** if you only want to connect to this network manually (by selecting it from the list of networks and clicking **Connect**).

VPN Auto Launch

Check this box if you would like to automatically launch your default VPN profile when you establish a connection to this network.

Enable Application Launcher

If this box is checked, the Motorola Connection Manager software will launch the applications listed on the App Launcher tab of the Settings window whenever it establishes a connection to the network whose profile you are configuring.

If this box is not checked, the specified applications will not be launched.

Disable IE's Manual Proxy Settings...

If you normally connect to the Internet through a proxy server (this is 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 may wish to disable Internet Explorer's proxy settings while you are connected to other networks. Check this box to disable proxy 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 the address of the desired web page in the box below.

Profile Properties: IP

The IP Settings page allows you to configure the Internet Protocol (IP) addressing to be used with this Profile. You will not need to alter these values unless specifically instructed to by your administrator.

Profile IP Address

The top group of settings specifies the IP address that your system will use when connected to this network. The default selection, **Obtain IP address automatically**, instructs the Motorola Connection Manager to ask the network to assign it an appropriate address each time it connects. This is the correct setting for most network profiles.

If the network does not support automatic address assignment, you can enter appropriate values manually by clicking **Use the following IP address.** Contact the administrator of the network whose profile you are configuring to obtain appropriate values for these fields.

Profile DNS server

Obtain DNS server address automatically, instructs the Motorola Connection Manager to ask the network to provide the address of a server each time it connects. This is the correct setting for most network profiles.

Use the following DNS server address, contacts the administrator of the network whose profile you are configuring to obtain appropriate values for these fields.

Advanced Button, will configure detailed settings for DNS and WINS servers.

Profile Properties: Security

This page specifies which protocols your mobile device can use to send your password to the Mobile network. Your Mobile device will be permitted to use any of the protocols that are checked on this page. If multiple boxes are checked, your device will negotiate with the Mobile network to select the best protocol to use out of those that you have checked.

Creating and Managing Network Profiles

The Motorola Connection Manager Settings

The Settings Window

The "Settings" window allows you to configure the behavior of the Motorola Connection Manager software. These settings control how the client connects to networks, the sounds it produces, when it retrieves updates and how it handles conflicting applications.

Select **Settings** from the Tools menu as shown below:

Motorola Connection Manager	▼ = X
File Tools Help	
User Info WiFi Info	WIMAX
Wi <u>M</u> ax Info Ethernet Info	WIFI
WiMax evice Detected	Ethernet
Always on Top D0:00	•
Location Finder SIGNAL	CONNECT
Profiles VPN	

For information on the individual settings tabs, see the following:

- App Launcher Tab
- Application Tab
- Sounds Tab
- Updates Tab
- VPN Tab
- Hardware Tab

Settings: Application

The Application tab contains general settings for the Motorola Connection Manager.

User interface is always on top

The Motorola Connection Manager will always appear on top of other application windows.

Enable splash screen

The Motorola Connection Manager will display a splash screen while it loads. If you don't want the splash screen to be displayed, remove the check mark from this box.

Automatically run this application...

The Motorola Connection Manager will be automatically launched each time you start Windows.

Display connection timer

This box controls whether the connection timer will be displayed in the main window. When the box is checked (default), the timer will be displayed. When the box is unchecked, the timer will not appear.

Reset all warning messages

The Motorola Connection Manager provides various warning messages that can be disabled if you do not want to see them. For example, the connection software will warn you that you will lose network connectivity if you close the application. These warning dialogs provide you with a method to turn off the warning. You can turn these warning messages back on by pressing the **Reset** button.

The list of applications on this tab will be automatically launched when connections are established with particular network profiles. In addition to adding and removing applications from this list, you can specify their launch options and how the Motorola Connection Manager should respond if one of these applications is shut down.

Settings: Hardware

The Hardware tab displays information about the devices connected to your computer. The following items can be found on this tab:

The Device List

This four column table takes up most of the tab's area. It is a list of all the devices connected to your computer that may be used to establish network connections. You can do the following here:

Enable and disable individual devices.

Choose which device to use.

For more information, see The Device List.

Allow simultaneous connections

If this box is checked, the Motorola Connection Manager will allow you to establish more than one connection at a time (you could be connected to both WiFi and WiMAX concurrently).

If this box is NOT checked, the Motorola Connection Manager will prompt you to disconnect before allowing you to establish a second connection.

Prompt before switching connections

The Motorola Connection Manager software can automatically switch to a higher priority network if one becomes available. The original connection is shut down when the new connection is fully established, this has the potential to disrupt any activity that was relying on the original connection.

The Motorola Connection Manager will prompt you for permission to switch networks before it actually does so.

Include support for other network connections

When this box is checked, the Motorola Connection Manager will monitor devices listed in the "Other Devices" group. When it detects that a device listed in this group has established a connection, it can respond by shutting down its own connections. For example, it can shut down a wireless connection it has established when you connect to an Ethernet network. For a disconnection to occur, both of the following must also be true.

In the Device List, the "other" device which has established a connection must be selected in the "Other Devices" group (to see which devices are currently selected, set the menu in the Selected column to "Manual").

In the Network Profiles window, "Other Connections" must be listed above the profile for the network to be disconnected. See Profile Priorities for more information.

When this box is not checked, the Motorola Connection Manager will not respond to connections established by "Other Devices."

The Profiles Button

Click this button to open the The Network Profiles Window.

Settings: Sounds

The Sounds Tab allows you to instruct the Motorola Connection Manager to play a sound when various events occur. It also allows you to specify the sounds that the Motorola Connection Manager plays. To enable this feature, check the **Enable sounds** box. Once the feature is enabled, the playing of an individual tone can be enabled by checking the box that corresponds to the tone you wish to play. Click **Browse** to select the sound file that you wish to play (a Windows .WAV file). You can specify sounds for the following events:

Connected

Enables the playing of a tone when the Motorola Connection Manager successfully connects to a WiFi network.

Lost Connection

Enables the playing of a tone when the Motorola Connection Manager disconnects from or loses its connection to a WiFi or Ethernet network.

Hot Spot Authentication

Enables the playing of a tone when the Motorola Connection Manager associates with and connects to a Hot Spot.

Settings: Updates

The Updates tab allows you to specify how often the Motorola Connection Manager attempts to retrieve updates to its software and its databases.

Automatically download and install

The Motorola Connection Manager will automatically download and install product updates at regular intervals.

Prompt me to download and install

The Motorola Connection Manager will periodically prompt you to download and install product updates.

Manually download and install

Product updates will be downloaded only when you manually initiate the download process using the **Update Now** button below.

Update Now

The Motorola Connection Manager will check for available updates now.

Settings: VPN

The VPN tab specifies how the Motorola Connection Manager accesses Virtual Private Networks. The top item, **Do Not Use VPN**, disables the Motorola Connection Manager's capacity to log into VPNs. This is the correct setting if you do not wish to establish connections to Virtual Private Networks.

You must choose one of the other three options and fill in the corresponding fields if you wish to do either of the following things:

Connect to a VPN by clicking the VPN button in the main window.

Automatically log into a VPN when you connect to a specific network (see Automatically Launching a VPN Connection).

If the VPN client software you are using is supported by the Motorola Connection Manager and you want to manually specify your connection information, select **Define VPN login info** and then enter the VPN profile information in the provided fields.

If the VPN client software you are using is supported by the Motorola Connection Manager and you already have a connection profile configured for that VPN client, 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 Motorola 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. Users may also connect to any other 3rd party VPN client using a command line interface. Please note that when this command line interface is used, the Motorola Connection Manager application shall be unable to display and track VPN status information as is possible with pre-configured VPN clients.

Support and FAQ

Technical Support

Contact your Internet Service Provider. Be sure to include the version of Windows and the type of wireless card you are using as well as description of the problem you are experiencing.

Event History

The event history is available from the Help Menu from the main window. Click **Help > Event Manager History** to see the client events that have been logged. The window shown below will appear.

encristory	Manager				?
Туре	Technology	Date / Time	Duration	Total Bytes	Description
Warning	authenticator	8/7/2008 5:27:05 PM	00:00:00	0	AuthenticationNotRevoked
Information	VPN	8/11/2008 9:32:53	00:00:00	0	VPN connecting
Information	VPN	8/8/2008 2:32:47 PM	00:00:00	0	VPN connecting
Information	VPN	8/8/2008 2:27:32 PM	00:00:00	0	VPN connecting
Information	VPN	8/6/2008 12:48:29 PM	00:00:00	0	VPN connecting
Information	VPN	8/6/2008 11:56:42	00:00:00	0	VPN connecting
Information	VPN	8/5/2008 4:53:53 PM	00:00:00	0	VPN connecting
6					1
t Filter by					Session(s) 1. Duration 00:00:00. 0 Bvl
Filter by	je	From 8/11/2008 🗸	To 8/	11/2008	Session(s) 1, Duration 00:00:00, 0 Byt

You can do the following in this window:

- Double-click on any item in the list to see more information about that event.
- Use the options in the **Filter by** box 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 and reset the usage data at the bottom of the page to zero.

Frequently Asked Questions

Which operating systems does the Motorola Connection Manager support?

The Motorola Connection Manager supports Windows XP (Home Edition/ Professional). Windows Vista Ultimate, Home Premium, Home Basic, Business, and Enterprise are also supported (32 and 64 bit versions). See System Requirements for more information on supported system configurations.

The Motorola Connection Manager launched, but no card is detected.

Please verify that your WiFi/WiMAX card or USB client is on the supported hardware list. Check the drivers and firmware.

Why can't the Motorola Connection Manager find a network?

The Motorola Connection Manager will continue to scan until it finds one or more available networks or Hot Spots. Wireless providers can easily update a user's local database of WLAN Hot Spots.

How do I connect to a network?

When The Motorola Connection Manager finds one or more available networks, click on the **Connect** button. If more than one network is found, click on the menu button and select a network by double-clicking on the network, or click on the **Connect** button.

How do I stop the client from launching every time I restart my PC?

Follow these steps:

- 1. Select Settings from the Tools menu.
- 2. Select the Application tab.
- 3. Remove the check from the Automatically run this application on machine startup box.
- 4. Click OK.

Why do I keep losing my connection?

This may be due to interference caused by other devices like cordless phones, microwave ovens and other 2.4 GHz band devices.

Why am I unable to connect to a signal that I can see in the Motorola Connection Manager Mobile?

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 will use wireless networking within their buildings, but will not grant public access.

Does the Motorola Connection Manager support WEP Encryption?

The Motorola Connection Manager supports ASCII 64, 128 and HEX 64, 128.

Does the Motorola Connection Manager support VPN?

The Motorola Connection Manager's VPN auto-launch allows users to automatically initiate secure wireless connections using their existing security mechanisms.

Who can I contact if need assistance with the Motorola Connection Manager?

If you need assistance with the Motorola Connection Manager, contact your Internet Service Provider.



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