

Dell™ TrueMobile™ 1150 Series Wireless Mini PCI Card Quick Start Guide

This guide provides instructions for setting up a wireless network using the Dell TrueMobile 1150 Series wireless Mini PCI card.

Read the information on the following pages before you complete the setup of your wireless network.

Wireless Network Installation Checklist

If you are setting up your network at home and you use a residential gateway or access point to connect to the Internet, see the documentation that came with the residential gateway or access point for the Network Name and Encryption Key information. If you do not use a residential gateway or access point, you will set up a peer-to-peer group network and creating your own Network Name and Encryption Key. Before you begin setting up your wireless network, obtain the following items from your network administrator.



NOTE: See the glossary for definitions of these terms.



NOTE: Dell cannot provide the following information because it is specific to your network.

- An SSID value (also called Network Name) for your Mini PCI card
- WEP Key information (also called Encryption Key) for your Mini PCI card
- For Windows networking, your Computer Name and Workgroup Name
- Your IP address (unless your network uses a DHCP server)
- Your User Name and Password

Be sure to also have the following items:

- Your computer with the Mini PCI card installed.
- The *Dell TrueMobile 1150 Series Wireless Mini PCI Card CD*

Choosing Your Type of Network

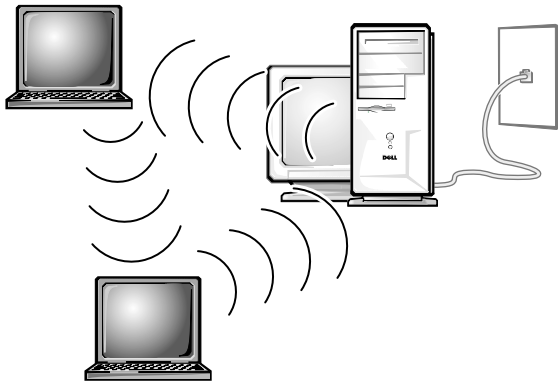
The Mini PCI card enables you to interconnect computers for sharing Internet access, files, and printers. First, determine the type of network you use or want to set up:

- A peer-to-peer group network (an access point is not required)
- An infrastructure network (an access point is required)

Peer-to-Peer Group Network Option

If you do not have an access point, then you already use or will need to set up a peer-to-peer group network. The access point is not needed for this type of setup.

Peer-to-Peer Group Network Example

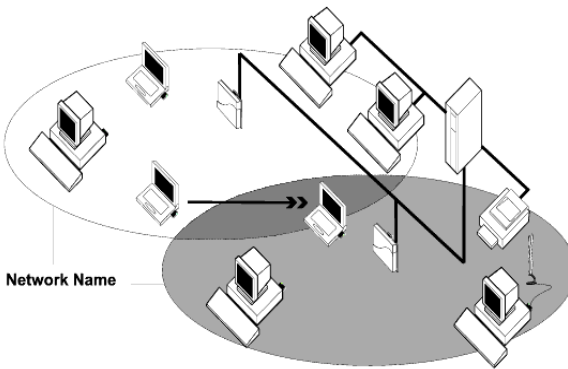


For this option, one of the desktop computers acts as a host computer. All other computers on the network access the Internet through the host computer. The host computer must remain on in order for the other computers on the network to have Internet access. For instructions on setting up a peer-to-peer group network, see “Setting Up a Peer-to-Peer Group Network” on page 8.

Infrastructure Network Option

If you have an access point, then you need to set up an infrastructure network. For instructions on setting up an infrastructure network, see the documentation that came with your access point.

Infrastructure Network Example



In an infrastructure network, the access point connects directly to a network server, which allows connection to the network. For this network option, all computers on the wireless network connect to the access point, which then connects to the server. The access point and server(s) are always on, so any computer can access the network even if the other computers on the network are turned off.

Setting Up a Peer-to-Peer Group Network



NOTE: If you do not have an access point, use this section to set up your wireless network. If you use an access point, see “Setting Up an Infrastructure Network” on page 8.

Before you begin, you must first create a Network Name and an Encryption Key. Your Network Name is case-sensitive and can contain up to 32 characters and use the characters 0 through 9, a through z, and A through Z. The Encryption Key is case-sensitive and can be either 5 or 13 characters in length and use the characters 0 through 9, a through z, and A through Z. Fill in your Network Name and Encryption Key here:

Network Name: _____

Encryption Key: _____



NOTE: All computers in this type of network must use the same Network Name and the same Encryption Key.

Next, perform the procedures in “Setting Up and Configuring the Mini PCI Card” on page 9:

Setting Up an Infrastructure Network

To set up an infrastructure network, see the documentation that came with your access point. To set up your Mini PCI card so that it can access an infrastructure network, perform the following procedures in sequence:

- “Installing the Drivers” (see page 9)
- “Verifying the Mini PCI Card Driver Installation” (see page 12)
- “Installing the Client Manager Utility” (see page 13)
- “Setting Up a Configuration Profile” (see page 14)

Then, see the access point documentation for instructions on completing the infrastructure network setup.

Setting Up and Configuring the Mini PCI Card

If you ordered the Mini PCI card when you ordered your new Dell portable computer, the necessary drivers and software were installed by Dell. To complete the configuration of your peer-to-peer group network on your new Dell computer, you must perform the procedures in the following sections in sequence:

- “Setting Up a Configuration Profile” (see page 14)
- “Completing the Setup For Peer-to-Peer Group Networks” (see page 15)
- “Setting Up File and Printer Sharing” (see page 19)

For all other portable computers, you must complete the procedures on the following pages in sequence to complete the configuration of your peer-to-peer group network.

Installing the Drivers


Install the appropriate drivers for the Windows operating system on your computer.

Windows XP

Turn on your computer. Windows XP detects the Mini PCI card and installs the drivers automatically.

Windows 98

- 1 If your computer is off, turn it on.

 **NOTE:** During the installation of the drivers, you may be required to enter a path to additional required files. In the dialog box, type `C:\Windows\Options\Cabs` and then click **OK**. If the files are not located on your computer, insert the *System Software* CD or *Operating System* CD that came with your computer into your CD or DVD drive and type `x:\win98` (where `x` is the letter for your CD or DVD drive). Click **OK**.

- 2 When the **Add New Hardware Wizard** detects the Texas Instruments PCI-1410 CardBus Controller, click **Next**.
- 3 Click **Search for the best driver for your device (Recommended)**, and click **Next**.
- 4 Ensure that **Floppy disk drives** is not checked, click **Specify a location**, type `C:\windows\options\cabs`, and then click **Next**.
- 5 Click **Next** again.
- 6 Click **Finish**, and then click **Yes** to restart your computer.

After your computer restarts, Windows detects the Mini PCI card.

- 7 If Windows prompts you to restart your computer again, click **Yes**.
- 8 When the **Add New Hardware Wizard** window appears, insert the *Dell TrueMobile 1150 Series Wireless Mini PCI Card* CD into the CD or DVD drive on your computer, wait 10 seconds, and then click **Next**.
- 9 Click **Search for the best driver for your device (Recommended)**, and click **Next**.
- 10 Ensure that **Floppy disk drives** is not checked, and click **Specify a location**. Type `x:\win98` (where `x` is the letter for your CD or DVD drive), click **Next**, and then click **Next** again.
- 11 After Windows finishes installing the drivers, click **Finish**, and then click **Yes** to restart your computer.

- 12 To verify the installation, complete the steps in the “Verifying the Mini PCI Card Driver Installation” section on page 12.

Windows Me

- 1 If your computer is off, turn it on.
- 2 When Windows detects the new hardware, follow the instructions on the screen.
- 3 After Windows finds the new drivers, click **Finish**, and then click **Yes** to restart your computer.
- 4 If Windows prompts you to restart your computer again, click **Yes**.



NOTE: During the installation of the drivers, you may be required to enter a path to additional required files. In the dialog box, type `C:\Windows\Options\Cabs` and then click **OK**. If the files are not located on your computer, insert the *System Software* CD or *Operating System* CD that came with your computer into your CD or DVD drive and type `x:\winme` (where *x* is the letter for your CD or DVD drive). Click **OK**.

- 5 When the **Add New Hardware Wizard** appears, insert the TrueMobile CD and wait 10 seconds.
- 6 Click **Specify a location**, and ensure that **Floppy disk drives, CD-ROM drive, and Microsoft Windows Update** are not checked.
- 7 Type `x:me-2k` (where *x* is the letter for your CD or DVD drive), and then click **Next**.
- 8 After Windows finds the driver, click **Next**.
- 9 Click **Finish**, and then click **Yes** to restart your computer.
- 10 To verify the installation, complete the steps in the “Verifying the Mini PCI Card Driver Installation” section on page 12.

Windows 2000

- 1 If your computer is off, turn it on.

- 2 When the **Found New Hardware Wizard** window appears, insert the *Dell TrueMobile 1150 Series Wireless Mini PCI Card* CD into the CD or DVD drive. Wait 10 seconds, and click **OK**.
- 3 Click **Search for a suitable driver for my device (recommended)**, and then click **Next**.
- 4 Click **Specific a location**, and ensure that **Floppy disk drives, CD-ROM drive, and Microsoft Windows Update** are not checked.
- 5 Type $x:me-2k$ (where x is the letter for your CD or DVD drive), and then click **Next**.
- 6 After Windows finds the driver, click **Next**, and then click **Finish**.
- 7 To verify the installation, complete the steps in "Verifying the Mini PCI Card Driver Installation."
- 8 Click **Install Software** and then click **Install Necessary Software Software for Windows 2000**.

Verifying the Mini PCI Card Driver Installation

- 1 Click the **Start** button, point to **Settings**, and then click **Control Panel**. *For Windows XP*, if **Settings** does not appear, click **Control Panel**.

- 2 *For Windows XP:*

Double-click the **System** icon. (If the **System** icon does not appear, click the **Switch to Classic View** icon, and then click the **System** icon.). Click the **Hardware** tab, click **Device Manager**, and then double-click **Network Adapters**.

For Windows 98:

Double-click the **System** icon, click **Device Manager** and then double-click **Network Adapters**.

For Windows Me:

Click **View all control panel options**, double-click the **System** icon, click **Device Manager** and then double-click **Network Adapters**.

For Windows 2000:

Double-click the **System** icon, click the **Hardware** tab, click **Device Manager** and then double-click **Network Adapters**.

If the Mini PCI card and drivers are properly installed, **TrueMobile 1150 Series Mini PCI Card** (*in Windows XP, Dell TrueMobile 1150 Series Wireless LAN Mini PCI Card*) appears on the list. If a red X or yellow exclamation mark appears next to the Mini PCI card, see the troubleshooting section of the *Dell TrueMobile 1150 Series User Guide*. For instructions on how to access the *User Guide*, see page 20.

Installing the Client Manager Utility

After you have successfully installed the Mini PCI card and drivers, you must install the Client Manager utility from the *Dell TrueMobile 1150 Series Wireless Mini PCI Card* CD on all computers that are not new Dell computers:

- 1 If your computer is off, turn it on.
- 2 After Windows completely starts, insert the *Dell TrueMobile 1150 Series Wireless Mini PCI Card* CD into the CD or DVD drive of your computer.

The **Main Menu** screen appears (see page 21). If the **Main Menu** screen does not appear, click the **Start** button, click **Run**, type `x:\setup.exe` (where *x* is your CD or DVD drive letter), and then click OK.


- 3 In the **Main Menu** screen, click **Install Software**.
- 4 From the **Software Menu**, click **Install Client Manager** and then follow the instructions to complete the installation.

After the setup is complete, a window opens that contains information about the Client Manager utility.

- 5 Read the information, and then close the window by clicking the X in the top-right corner of the window.

Setting Up a Configuration Profile

Perform the following procedure on each computer that will connect to the network:

- 1 To use Client Manager, click the **Start** button, point to **Programs**—> **Dell TrueMobile 1150**, and then click **Client Manager**. Or, you can double-click the **TrueMobile 1150 Client Manager** icon on your Windows desktop, and then click the icon  that appears in the system tray.
- 2 In the **TrueMobile 1150 Client Manager** window, click **Actions**.
- 3 In the **Add/Edit Configuration Profile** window, make sure that the first profile in the list is selected.
- 4 *If you have a peer-to-peer group network*, click **Peer-to-Peer Group** in the right-hand box of the selected profile.

If you have an infrastructure network that uses a Residential Gateway, click **Residential Gateway** in the right-hand box of the selected profile.

If you have an infrastructure network that uses an access point, click **Access Point** in the right-hand box of the selected profile.

- 5 Click **Edit Profile**.
- 6 In the **Edit Configuration** window, type your Network Name in the **Network Name** field, ensure that **Enable Data Security** is checked, and then enter an Encryption Key in the **Encryption Key** field (an Encryption Key is optional).
- 7 Click **OK**, and then click **OK** again.
- 8 Click **OK** again.

If you use an access point, the setup is complete, and you can now connect to the Internet. If you are setting

up a peer-to-peer group network, complete the procedures in “Completing the Setup For Peer-to-Peer Group Networks.”

Completing the Setup For Peer-to-Peer Group Networks

If you are setting up a peer-to-peer group network, the Mini PCI card and the necessary software and drivers have already been installed on all of the computers on the network. You must now install the Internet Connection Sharing component.

Select one of your desktop computers to serve as the host computer (all other computers are called clients). The host computer must be running the Windows 98 SE, Windows Me, Windows 2000, or Windows XP operating system. The host computer is the only computer that connects directly to the Internet. Dell recommends that the host computer be the desktop computer that has the fastest microprocessor and the most memory.



NOTE: In order to perform Internet Connection Sharing, your host computer must have either a modem or another network adapter in addition to your wireless network adapter. The modem or network adapter is used to access the Internet. Your Mini PCI card is used to share the Internet connection with other clients.

See the following procedures to set up Internet Connection Sharing on the host computer and the client computer(s).

Setting Up Internet Connection Sharing (ICS) on the Host Computer

To set up ICS on computers running Windows XP:

- 1 Connect the host computer to the Internet.
- 2 Click the **Start** button.
- 3 Click **Help and Support**.
- 4 Perform a search on Internet connection sharing.

- 5 From the **Pick a task** list, select **Enable Internet Connection Sharing on a Network Connection**.
- 6 Follow the instructions on the screen to complete the ICS.

To set up ICS on computers running Windows 98:

- 1 Connect the host computer to the Internet using your network connection, such as a cable or DSL modem.
- 2 Click the **Start** button, point to **Settings**, and click **Control Panel**.
- 3 Double-click **Add/Remove Programs**.
- 4 Click **Windows Setup**.
- 5 Click **Internet Tools**, and then click **Details**.
- 6 Ensure that **Internet Connection Sharing** is checked, click **OK**, and then click **OK** again.

You may need to insert your *Operating System* CD, or, for some computers, the *System Software* CD, into the CD or DVD drive.

- 7 After the **Internet Connection Sharing Wizard** starts, click **Next**.
- 8 Specify the type of connection you want to share: dial-up or high-speed (such as cable or DSL modem).
- 9 *If you use a dial-up connection*, click the ISP you want to use to connect to the Internet, and then click **Next**.
If you use a high-speed connection, click the network adapter you want to use to connect to the Internet, and then click **Next**.
- 10 Click the **TrueMobile 1150 Series Mini PCI Card** as your local connection, and then click **Next** twice.
- 11 Click **Cancel** when the **Internet Connection Sharing Wizard** asks you if you want to create a Client Configuration Disk.

- 12 Click **Finish**, and then click **Yes** to restart your computer. After your computer restarts, the **Internet Connection Sharing** installation is complete on the host computer.

To set up ICS on computers running Windows Me:

- 1 Connect the host computer to the Internet using your network connection, such as a cable or DSL modem.
- 2 Click the **Start** button, point to **Settings**, and click **Control Panel**.
- 3 Double-click **Add/Remove Programs**.
- 4 Click **Windows Setup**.
- 5 Ensure that **Communications** is checked and selected, and then click **Details**.
- 6 Ensure that **Internet Connection Sharing** is checked, and then click **OK**.

You may need to insert your *Operating System* CD, or, for some computers, the *System Software* CD, into the CD or DVD drive.

- 7 After the **Home Networking Wizard** starts, click **Next**.
- 8 To specify the Internet connection you want to share, click **Yes, this computer uses the following**, and then click **A Direct connection to my ISP using the following device**. From the pull-down menu, select the type of connection you want to use (such as dial-up networking).



NOTE: Do not select **TrueMobile 1150 Series Mini PCI Card** as the connection type.

- 9 Click **Next**.
- 10 Click **Yes**, click **TrueMobile 1150 Series Card** from the pull-down menu, and then click **Next**.
- 11 Click **No, do not create a Home Networking Setup disk**, and then click **Next**.
- 12 Click **Finish**, and then click **Yes** to restart your computer.

After your computer restarts, the **Internet Connection Sharing** installation is complete on the host computer.

To set up ICS on computers running Windows 2000:

- 1 Connect the host computer to the Internet using your network connection, such as a cable or DSL modem.
- 2 Click the **Start** button, point to **Settings**, and click **Control Panel**.
- 3 Double-click **Network and Dial-up Connections**.
- 4 If the host computer is connected to the Internet using a dial-up connection, double-click **Dial-up Connection**, click **Properties**, click **Sharing**, and then ensure that both **Enable Internet Connection Sharing for this connection** and **Enable on-demand dialing** are checked.
- 5 *If the host computer is connected to the Internet using a dial-up connection*, double-click **Dial-up Connection**, click **Properties**, click **Sharing**, and then ensure that both **Enabled Internet Connection Sharing for this connection** and **Enabled on-demand dialing** are checked.

If the host computer is connected to the Internet using a cable or DSL modem, double-click **Local Area Connection**. On the **Network and Dial-up Connections** screen, click **Yes**.

The **Internet Connection Sharing** installation is complete on the host computer.

Setting Up ICS on the Client Computer(s)



NOTE: The client computer(s) must be running Microsoft Internet Explorer 6.0, 5.0, or 4.0, and Windows XP, Windows 98 SE, Windows Me, or Windows 2000.



NOTE: All client computers must have the TCP/IP protocol installed and DHCP enabled.

To install the TCP/IP protocol and enable DHCP:

- 1 Click the **Start** button, and click **Help**.

- 2 Click the **Index** tab and perform a search for **TCP/IP**.
- 3 Click the topic, click **Display**, click the subtopic, and then follow the instructions on the screen.
- 4 After you have installed the TCP/IP protocol, perform another search for **DHCP**.
- 5 Click the topic, click **Display**, click the subtopic, and then follow the instructions on the screen.

To set up ICS on the client computer(s):

- 1 Click the **Start** button, and click **Help**.
- 2 Click the **Index** tab and perform a search for the **Internet Connection Sharing Wizard**.
- 3 Click the topic, click **Display**, click the subtopic, and then follow the instructions on the screen.

Setting Up File and Printer Sharing

Follow the instructions below to enable file and printer sharing. Perform the following steps on every computer that you want to have file and printer sharing:



NOTE: Ensure that you have file and printer sharing enabled on the computer that is connected to the printer you want to share.

- 1 Click the **Start** button, and click **Help**.
- 2 Click the **Index** tab and perform a search for file and printer sharing.
- 3 Click the topic, click **Display**, click the subtopic, and follow the instructions on the screen.

To share a printer, complete the following steps on the computer that has the printer connected that you want to share:

- 1 Click the **Start** button, point to **Settings**, and click **Printers**.
- 2 Select the printer you want to share by clicking it once.
- 3 Click **File**, and then click **Properties**.

- 4 Click **Sharing**, and then click **Shared As**.
- 5 Follow the instructions on the screen.

The printer is now available for the other computers to use.

To set up other computers so they can use the shared printer:

- 1 Click the **Start** button, point to **Settings**, and click **Printers**.
- 2 Double-click **Add Printer**
- 3 Click **Next**.
- 4 Click **Network printer**, and then click **Next**.
- 5 Click **Browse**, find the shared printer in the list, and then click the shared printer.
- 6 Follow the instructions on the screen.

To share files:

- 1 From Windows Explorer, right-click the file, folder, or drive letter you want to share, click **Sharing**, and then click **Share As**.
- 2 Type a name for the shared file, folder, or drive letter, and then follow the instructions on the screen.

Using Your Network

After you have set up your wireless network, refer to the *Dell TrueMobile 1150 Series User Guide* for instructions on how to use the network. To access the *Dell TrueMobile 1150 Series User Guide*:

- 1 Insert the Dell *TrueMobile 1150 Series Wireless Mini PCI Card* CD into the CD or DVD drive of your computer.

The **Main Menu** screen appears. If the **Main Menu** screen does not appear, click the **Start** button, click **Run**, type `x:\setup.exe` (where `x` is your CD or DVD drive letter), and then click **OK**.

Wireless Networking Main Menu Screen



- 2 Select the language you want from the drop-down menu, and then click **View User Guide in**.

Troubleshooting

- 1 Insert the *Dell TrueMobile 1150 Series Wireless Mini PCI Card* CD into the CD or DVD drive of your computer.

The **Main Menu** screen appears (see page 21). If the **Main Menu** screen does not appear, click the **Start** button, click **Run**, type `x:\setup.exe` (where *x* is your CD or DVD drive letter), and then click **OK**.

- 2 Select the language you want from the drop-down menu, and then click **View User Guide in**.
- 3 See the “Troubleshooting” section.

Technical Support

After determining the type of network option that you need to set up, you can obtain technical support by referring to your Dell computer documentation for Dell contact numbers and website support.

Glossary

access point

A standalone wireless hub that allows any computer that has a wireless network adapter to communicate with another computer and to connect to the Internet.

client computer

The computer that gets its Internet connection by sharing either the host computer's connection or the access point's connection.

file and printer sharing

A capability that allows a number of people to view, modify, and print the same file(s) from different computers.

host computer

The computer that is directly connected to the Internet via a modem or network adapter.

infrastructure network

A wireless network topology in which the wireless computers, called clients, communicate with one another through a wireless access point, such as the AP1000. The access point can also be connected to the Internet, which allows the wireless clients to access the Internet through the access point's Internet connection.

Internet Connection Sharing (ICS)

A capability that allows Internet access to all computers on a network.

Internet Protocol (IP) address

The address of a computer that is attached to a network. Part of the address designates which network the computer is on, and the other part represents the host identification.

Internet service provider (ISP)

A company that provides access to the Internet. An ISP may offer other related services, such as e-mail and chat rooms.

peer-to-peer network

A communication configuration in which every computer has the same capabilities and any computer can initiate a communication session.

proxy server

A server that some ISPs incorporate between the Internet and themselves to ensure security and to enable administrative control.

Service Set Identifier (SSID)

A value that controls access to a wireless network. The SSID for your wireless network card must match the SSID for any access points that you want to communicate with. If the value does not match, you are not granted access to the network. You can have up to three SSIDs. Each SSID can be up to 32 characters long and is case sensitive.

Wired Equivalent Privacy (WEP)

A form of data encryption. You must set the WEP Key information in the client to match the WEP Key used by the access point. The WEP Key can be enabled or disabled.