FAQs

Hardware Installation:

- [How do I install the Dell TrueMobile 2300 Wireless Broadband Router for optimal coverage?](#)
- [What is the maximum number of wireless, wired, and Internet users for each Dell TrueMobile 2300 Wireless Broadband Router?](#)
- [Can the Dell TrueMobile 2300 Wireless Broadband Router attach to a hub, switch, or router?](#)
- [What is the physical connection from the Dell TrueMobile 2300 Wireless Broadband Router to a wired network?](#)

[Software Configuration](#)

[Internet Settings](#)

[Wireless Attributes](#)

[Supported Features](#)

[Troubleshooting](#)

[Other](#)

[Glossary](#)

How do I install the Dell™ TrueMobile™ 2300 Wireless Broadband Router for optimal coverage?

Each Dell TrueMobile 2300 Wireless Broadband Router supports up to about a 150 to 200 foot radius, depending on obstacles and interference issues. For smaller installations a little experimentation provides good placement of the Dell TrueMobile 2300 Wireless Broadband Router.

What is the maximum number of wireless, wired, and Internet users for each Dell TrueMobile 2300 Wireless Broadband Router?

The built-in DHCP server can provide IP addresses for up to 252 clients. 16 wireless clients are supported simultaneously on each unit. 32 clients can simultaneously access the Internet via the built-in NAT router.

NOTE: As the number of users on each Dell TrueMobile 2300 increases, the network performance level decreases.

Can the Dell TrueMobile 2300 Wireless Broadband Router attach to a hub, switch, or router?

Yes, via its LAN port, the Dell TrueMobile 2300 Wireless Broadband Router provides the flexibility for a wide variety of network configurations and connections.

What is the physical connection from the Dell TrueMobile 2300 Wireless Broadband Router to a wired network?

Each Dell TrueMobile 2300 Wireless Broadband Router has a 10/100 Ethernet (LAN port) connection, which allows communication with a 10 *megabit per second* (Mbps), 100 Mbps, or 10/100 Mbps hub or switch.

FAQs

Hardware Installation

Software Configuration:

- How can I manage the Dell TrueMobile 2300 Wireless Broadband Router?
- How do I locate the MAC address for the Dell TrueMobile 2300?

Internet Settings

Wireless Attributes

Supported Features

Troubleshooting

Other

Glossary

FAQs

Hardware Installation

Software Configuration

Internet Settings:

- How do I obtain Internet Protocol (IP) settings from my Internet Service Provider (ISP)?
- How do I install TCP/IP?
- How do I enable Point to Point Protocol over Ethernet (PPPoE)?
- How do I configure the Dell TrueMobile 2300 for either dynamic or static IP addresses?
- If I do not have a broadband connection, what do I do?

Wireless Attributes

Supported Features

Troubleshooting

Other

Glossary

FAQs

Hardware Installation

Software Configuration

Internet Settings

Wireless Attributes:

- What is the practical coverage of the Dell TrueMobile 2300 Wireless Broadband Router?
- Does the signal travel through walls?
- What devices cause interference?
- Can I roam to another subnet with the Dell TrueMobile 2300?

Supported Features

Troubleshooting

Other

Glossary

FAQs

[Hardware Installation](#)

[Software Configuration](#)

[Internet Settings](#)

[Wireless Attributes](#)

Supported Features:

- [Does the Dell TrueMobile 2300 support bridging of two or more Ethernet LANS?](#)
- [Does the Dell TrueMobile 2300 support repeating?](#)
- [Does the Dell TrueMobile 2300 support notebook computers with integrated wireless adapters and wireless adapters from vendors other than Dell?](#)
- [Does the Dell TrueMobile 2300 accommodate optional antennae?](#)
- [Does the Dell TrueMobile 2300 support Virtual Private Networking (VPN)?](#)
- [Does the Dell TrueMobile 2300 support MAC address filtering?](#)
- [Does the Dell TrueMobile 2300 support individual game port settings?](#)
- [Does the Dell TrueMobile 2300 support *Routing Information Protocol* (RIP)?](#)
- [Can I operate the Dell TrueMobile 2300 in a Macintosh environment?](#)

[Troubleshooting](#)

[Other](#)

[Glossary](#)

FAQs

[Hardware Installation](#)

[Software Configuration](#)

[Internet Settings](#)

[Wireless Attributes](#)

[Supported Features](#)

Troubleshooting:

- [I cannot access the Internet through the Dell TrueMobile 2300 Wireless Broadband Router. What should I do?](#)
- [My computer is not connected to the Dell TrueMobile 2300 Wireless Broadband Router, what should I do?](#)
- [There are only some clients on the LAN work. What should I do?](#)
- [My browser does not display the web-based configuration tool. What should I do?](#)
- [My computer is not connected to the Internet, what should I do?](#)
- [The TrueMobile CD Setup Wizard program does not run automatically after placing the CD-ROM into the CD-ROM drive. What should I do?](#)
- [How do I access the Broadband Router after disabling the DHCP server function?](#)
- [How do I restart or reset the Broadband Router?](#)

[Other](#)

[Glossary](#)

FAQs

Hardware Installation

Software Configuration

Internet Settings

Wireless Attributes

Supported Features

Troubleshooting

Other:

- How do I find out about firmware upgrades?
- What is the actual speed throughput for the Dell TrueMobile 2300?
- Are there any known health issues caused by Radio Frequency (RF) transmission from the Dell TrueMobile 2300?
- Is this a shared or switched technology medium?
- What is the difference between Bluetooth and 802.11?
- Does the Dell TrueMobile 2300 support Internet games?
- What settings do I change to play games with the router connected in the network?
- Does the Dell TrueMobile 2300 prevent hacker attacks?
- How can I find additional information?

Glossary

Glossary

- [Access Point](#)
- [Cable Modem](#)
- [Client](#)
- [Domain Name System (DNS)](#)
- [Dynamic Host Configuration Protocol (DHCP)](#)
- [Encryption](#)
- [Ethernet](#)
- [Ethernet Address (MAC Address)](#)
- [Host](#)
- [Internet Protocol (IP)](#)
- [Internet Service Provider (ISP)](#)
- [IP Address](#)
- [Link Light](#)
- [Local Area Network (LAN)](#)
- [Network Adapter](#)
- [Network Address Translation (NAT)](#)
- [Network Name (SSID)](#)
- [Point to Point Protocol over Ethernet (PPPoE)](#)
- [Port](#)
- [Protocol](#)
- [Transmission Control Protocol/Internet Protocol (TCP/IP)](#)
- [Virtual Local Area Network (VLAN)](#)
- [Virtual Server](#)
- [Wide Area Network (WAN)](#)
- [Wireless Local Area Network (WLAN)](#)
- [xDSL Modem](#)

[FAQs](#)

FAQs

Hardware Installation:

- How do I install the Dell TrueMobile 2300 Wireless Broadband Router for optimal coverage?
- What is the maximum number of wireless, wired, and Internet users for each Dell TrueMobile 2300 Wireless Broadband Router?
- Can the Dell TrueMobile 2300 Wireless Broadband Router attach to a hub, switch, or router?
- What is the physical connection from the Dell TrueMobile 2300 Wireless Broadband Router to a wired network?

Software Configuration

Internet Settings

Wireless Attributes

Supported Features

Troubleshooting

Other

Glossary

How can I manage the Dell TrueMobile 2300 Wireless Broadband Router?

The Dell TrueMobile 2300 Wireless Broadband Router can be managed on your computer using the Windows-based Setup Wizard, Control Utility programs, or a web-based configuration tool. For detailed information, refer to the *Managing your Router* section of the User's Guide.

How do I locate the MAC address for the Dell TrueMobile 2300?

The **Device Status** page from the web-based configuration tool displays the MAC address. From the web-based configuration tool, click the **Device Status** tab. Both the WAN and LAN ports have separate MAC addresses.

How do I obtain Internet Protocol (IP) settings from my Internet Service Provider (ISP)?

1. Make sure that the cable or xDSL modem is connected properly to the Wireless Broadband Router.
2. Reset the cable or xDSL modem by powering the modem off and on.
3. If you are using dynamic IP addressing, make sure that the cable or xDSL modem is DHCP capable. For assistance, consult the modem's documentation.
4. Some ISPs require that you register a MAC address with them:
     - To view the WAN Ethernet MAC address, start the web-based configuration tool. Click the **Device Status** tab.
     - In the case that your ISP requires a WAN Ethernet MAC address different from the one listed on the Device Status page, refer to the ***Cable/xDSL ISP settings*** portion of the Basic Settings section in the user's guide.

5. If you have a DSL line and your ISP requires you to input a username and password:

     NOTE: This information is required for some cable modem users.

     - Start the web-based configuration tool.
     - Click the **Basic Settings** -> **Cable/xDSL ISP Settings** tabs.
     - Enter a username and password in the fields provided.
     - Click the **Save & Restart** button to save the changes and restart the computer.

6. If you have a cable connection and your ISP requires a host computer name or domain name:
     - Start the web-based configuration tool.
     - Click the **Basic Settings** -> **Cable/xDSL ISP Settings** tabs.
     - Enter the host computer name in the field provided.
     - Click the **Save & Restart** button to save the changes and restart the computer.

How do I install TCP/IP?

When a wired or wireless network adapter is installed, TCP/IP is usually installed. If TCP/IP is not installed on the computer, refer to the documentation that accompanied with the network adapter.

Likewise, the typical installation configures the computer to automatically obtain an IP address and other Internet protocol information from a DHCP server.

How do I enable Point to Point Protocol over Ethernet (PPPoE)?

The Dell TrueMobile 2300 Wireless Broadband Router supports PPPoE. To set PPPoE support:

1. Start the web-based configuration tool.
2. Click the **Basic Settings** -> **Cable/xDSL ISP Settings** tabs.
3. Click the **Enable** option for PPPoE.
4. Enter the username and password as specified by your Internet Service Provider (ISP).
5. Click the **Save & Restart** button to save the changes and restart the computer.
6. To ensure that PPPoE is enabled and that the status shows a successful connection, click the **Device Status** tab.

How do I configure the Dell TrueMobile 2300 for either dynamic vs. static IP addresses?

The Dell TrueMobile 2300 Wireless Broadband Router can be configured for either static or dynamic IP addresses.

For static IP addresses:

- The computer's IP address should use the same network portion of the address as the access point. For example, for the router's default IP address, the computer's IP address must begin with 192.168.2.

- The computer's subnet mask should be the same as the access point's subnet mask.
- The computer's gateway IP address should match the IP Address for the access point.
- Make sure the IP address assigned by your ISP matches the DNS IP address for your computer.

For dynamic IP addresses:

- Make sure your computer has successfully acquired an IP address from the DHCP server. Open a DOS command prompt, type `ipconfig,` and the press <Enter>.

- Compare the network portion of the address for the computer with that of the access point. The computer's IP address begins with 192.168.2. To find the current IP address for the access point, start the web-based configuration tool. Click the **Device Status** tab.

NOTE: It is recommendable to configure the devices connected to the WLAN to acquire their IP settings from the DHCP server dynamically.

If I do not have a broadband connection, what do I do?

It's recommended that you subscribe to a Broadband service from your local ISP for Internet connectivity and then try the setup again. However, if your need is to connect additional wireless or wired computers to the existing local network or to create a new isolated local network, you can configure your TM 2300 router as an access point. To configure the router as an access point, refer to the How to switch to an Access Point mode section in the User's Guide.

Glossary

- Access Point
- Cable Modem
- Client
- Domain Name System (DNS)
- Dynamic Host Configuration Protocol (DHCP)
- Encryption
- Ethernet
- Ethernet Address (MAC Address)
- Host
- Internet Protocol (IP)
- Internet Service Provider (ISP)
- IP Address
- Link Light
- Local Area Network (LAN)
- Network Adapter
- Network Address Translation (NAT)
- Network Name (SSID)
- Point to Point Protocol over Ethernet (PPPoE)
- Port
- Protocol
- Transmission Control Protocol/Internet Protocol (TCP/IP)
- Virtual Local Area Network (VLAN)
- Virtual Server
- Wide Area Network (WAN)
- Wireless Local Area Network (WLAN)
- xDSL Modem

FAQs

What is the practical coverage of the Dell TrueMobile 2300 Wireless Broadband Router?

The coverage of each Dell TrueMobile 2300 Wireless Broadband Router micro cell varies with physical objects and interference in the coverage area. The rated coverage is 1500 feet for line of site, open area, optimal conditions, and minimal throughput. Realistically, in a common home, office, or business environment, each Dell TrueMobile 2300 Wireless Broadband Router micro cell has approximately a 150 to 250 foot coverage, while maintaining optimal throughput.

The coverage of the system is virtually unlimited. By design, the coverage of the system is extended via multiple access points (Dell TrueMobile 2300 Wireless Broadband Routers) arranged into an overlapping micro cell coverage arrangement, similar to the cellular telephone system. This allows for virtually unlimited range via roaming, maximum throughput, redundancy, minimized interference issues, and increased communication reliability.

Does the signal travel through walls

Yes, the signal travels through many barriers including glass, cement, wood and brick.

What devices cause interference?

The Dell TrueMobile 2300 Wireless Broadband Router and workstation adapters operate in the unlicensed 2.4 *gigahertz* (GHz) band. Other items operating in this frequency range that may cause interference include microwave ovens and 2.4 GHz portable phones. PCS or analog cellular phones do not operate at 2.4 GHz and do not cause interference. Proper placement of access points usually eliminates interference problems created by other 2.4 GHz devices.

Can I roam to another subnet with the Dell TrueMobile 2300?

In order to roam to another subnet, consider implementing a *Virtual Local Area Network* (VLAN) and have all access points located on one VLAN.

Does the Dell TrueMobile 2300 support bridging of two or more Ethernet LANS?

The Dell TrueMobile 2300 supports either a point-to-point bridging situation or a multipoint bridging situation (for 3 remote locations). Point-to-Point and Point-to-Multipoint AP/Bridge modes require you to use the same product (Dell TrueMobile 2300) at the other end(s) of the bridge. Be sure to follow the instructions on how to use the bridging functions of AP/Bridges.

Does the Dell TrueMobile 2300 support repeating?

Yes, you can use the Dell TrueMobile 2300 as a repeater to extend the coverage range beyond the limits imposed by a single segment.

Does the Dell TrueMobile 2300 support notebook computers with integrated wireless adapters and wireless adapters from vendors other than Dell?

Several computer manufacturers are offering integrated 802.11b/g wireless adapters as an add-on option. Additionally, there are several manufacturers of 802.11b/g wireless adapters. If the adapter is WiFi™ certified, the adapter should interoperate with the Dell TrueMobile 2300 Wireless Broadband Router.

Does the Dell TrueMobile 2300 support optional antennae?

The Dell TrueMobile 2300 does not have the capability to accommodate optional antennae.

Does the Dell TrueMobile 2300 support Virtual Private Networking (VPN)?

Yes, the Dell TrueMobile 2300 supports PPTP, IPSec, L2TP VPN pass-through.

Does the Dell TrueMobile 2300 support MAC address filtering?

Yes, the Dell TrueMobile 2300 supports MAC address filtering.

Does the Dell TrueMobile 2300 support individual gaming port settings?

Yes, the Dell TrueMobile 2300 supports individual gaming port settings.

Does the Dell TrueMobile 2300 support *Routing Information Protocol* (RIP)?

No, the Dell TrueMobile 2300 currently does not support *Routing Information Protocol* (RIP).

Can I operate the Dell TrueMobile 2300 in a Macintosh environment?

The Dell TrueMobile 2300 operates in a Macintosh environment; however, the web-based configuration tool typically only functions with *Microsoft Internet Explorer* or *Netscape Navigator*, both version 4.0 or higher. Dell does not provide support for Macintosh environments.

I cannot access the Internet through the Dell TrueMobile 2300 Wireless Broadband Router. What should I do?

Use the Control Utility to first determine where the connectivity is broken. This can be verified by the presence of the arrow on its connection status window. You may also ignore this step and check for the following scenarios.

If there is a connection failure between your computer and the router, make sure the computer is successfully connected to the network.

- To review the connection status for the wireless network, start the web-based configuration tool and click the **Device Status** tab.
- Make sure the network adapter is successfully installed. For assistance, refer to the documentation that was shipped with the adapter.
- Make sure the TCP/IP stack is successfully installed.
- Check the physical network cable connections for the computer.
- Make sure the computer's IP settings are correct: Open a DOS command prompt window, type `ipconfig,` and press <Enter>.
    - The computer's IP address must use the same network extension as the access point. For example, for the access point's default IP address, the computer's IP address would have to be in the range of 192.168.2.2 to 192.168.2.254. To view the Dell TrueMobile 2300 Wireless Broadband Router IP settings, start the web-based configuration tool. Click the **Device Status** tab.
    - The computer's subnet mask should be the same as the access point's subnet mask.
    - The computer's gateway IP address should match with the IP Address for the access point.
    - Check that the IP address assigned by your Internet service provider matches with the DNS IP address for your computer.

If there is a connection failure between the Wireless Broadband Router and Internet,

- Make sure the cable or DSL modem is properly plugged in and has power.
- Verify that the cable or DSL modem has a good physical cable or telephone connection. If you are not sure, review the documentation that was shipped with your modem.
- Make sure the cable or DSL modem is properly connected to the Internet port of the TrueMobile 2300 Wireless Broadband Router.

Try to view a valid Internet site. If you go to a known Internet site and are able to view the page, then you should be able to access the Internet through the Wireless Broadband Router.

My computer is not connected to the Dell TrueMobile 2300 Wireless Broadband Router, what should I do?

1. Check the LAN (Ethernet) cable and make sure you have inserted it correctly in the router. Please refer to the Quick Start Guide that came with the router for reference.

2. Make sure your web browser is not configured to access the Internet via a proxy server. To do this in **Internet Explorer**, click **Tools** > **Internet Options** > **Connection Tab** > **LAN Settings** button. Make sure all boxes are unchecked.

3. Unplug the power cable from the rear of the router. Wait 5 seconds. Plug the power cable back in.

4. If you are connected by a wireless network, then make sure that you have the same SSID (network name) on your computer and the Dell TrueMobile 2300 Wireless Broadband Router. The default SSID (network name) is "**wireless**" (the name is case-sensitive).

There are only some clients on the LAN that work. What should I do?

If the wired clients work, but the wireless clients cannot access the Dell TrueMobile 2300 Wireless Broadband Router:

Make sure the network name (SSID), encryption method, and encryption key for the Dell TrueMobile 2300 Wireless Broadband Router match with those for the wireless client:

For the wireless client:

- See the documentation for your wireless adapter.

For the Dell TrueMobile 2300 Wireless Broadband Router:

- Start the web-based configuration tool.
- Click the **Basic Settings** -> **Wireless Settings** tabs.

Make sure that either the client is set to get an IP address automatically. For instructions, click here.

If the wireless clients work, but the wired clients cannot access the Dell TrueMobile 2300 Wireless Broadband Router:

Make sure the Ethernet cables are connected correctly. For information, see the documentation for the hub or switch.

My browser does not display the web-based configuration tool. What should I do?

Use *Microsoft Internet Explorer* or *Netscape Navigator*, both version 4.0 or higher, as your browser.

Check the browser's proxy server settings:

1. Open the Control Panel on your computer, and double click the **Internet** icon from the Control Panel window. This will open a window titled *Internet Properties.*
2. From the Internet Properties window select the **Connection** tab.
3. Click the **LAN Settings** button.
4. Under the heading *Proxy server* select the **Access the Internet using a proxy server** option.
5. Click the **Advanced** button. This will bring up a window titled *Proxy Settings*.
6. Disable the proxy server setting or set it to auto-detect.

Remove or disable any firewall software on the client. See the documentation included with the firewall software.

Remove any dialup settings in the browser:

1. Open a browser. For *Internet Explorer*, follow the next two steps.
2. Click **Tools** --> **Internet Options** --> **Connections**.
3. Click the **Never Dial a connection** option.

Enter `http://192.168.2.1` for the default IP address. If the default IP address has been changed, then use the new IP address assigned to the Dell TrueMobile 2300 Wireless Broadband Router.

Make sure the client is set to obtain an IP address automatically.

To obtain an IP address automatically:

1. Open the Control Panel on your computer, and double click the **Network and Dial-up Connections** icon.
2. Right-click your local area connection.
3. Click **Properties**.
4. Select the **TCP/IP** option.

   NOTE: Some systems may require you to select the **Networking** tab before selecting the **TCP/IP** option.

5. Click the **Properties** button.
6. Check the **Obtain an IP address automatically** option.

If you are using a manually assigned IP address for the client, the IP address for the client must be on the same subnet as the Dell TrueMobile 2300 Wireless Broadband Router:

1. Follow the instructions above to access the Internet Protocol (TCP/IP) Properties window.
2. The option **Use the following IP address** should be selected.

3. Check and assure that the value in the **Subnet mask** field matches that for the Dell TrueMobile 2300 Wireless Broadband Router.

If you are using a DHCP server to provide an IP address to the Dell TrueMobile 2300 Wireless Broadband Router, you must determine the address that was provided by the DHCP server. For assistance on getting the IP address from the DHCP server, see the documentation for your server or contact your network administrator.

Make sure that the Dell TrueMobile 2300 Wireless Broadband Router is properly installed and configured:

1. Make sure that the **Power** light on the front of the access point is lit.
2. Make sure that the LAN light on the front of the access point is lit. The LAN LED indicates a wired client connection.
3. Check the computer's network settings. Verify that the TCP/IP settings are correct.
    1. Open a DOS command prompt window.
    2. Type `ipconfig` and press <Enter>.
4. Compare the network portion of the address for the computer with that of the access point. The first three octets of the address should be the same. For example, if the access point's IP address is the default, 192.168.2.1, the computer's IP address should be in the range from 192.168.2.2 to 192.168.2.254; thus, it should appear as *192.168.2.xxx.*

Reset the Dell TrueMobile 2300 Wireless Broadband Router to its default settings. See *How do I restart or reset the Broadband Router?*

My computer is not connected to the Internet, what should I do?

1. Check the connection between the router and the cable/DSL modem to make sure it is properly connected.

2. Double-click the information you entered in the cable/DSL settings.

3. Unplug the power cable from the rear of the cable/DSL modem. Wait 5 seconds. Plug the power cable back in.

The TrueMobile CD Setup Wizard program does not run automatically after inserting the Installation CD into the CD-ROM drive. What should I do?

a. Go to start > Run
b. Type x:\setup.exe (where "x" is the drive letter of your CD-ROM drive)

How do I access the Wireless Broadband Router after disabling the DHCP server function?

Once you have disabled the DHCP server function on the Wireless Broadband Router by un-checking the **Enable DHCP Server Function** box on the DHCP Server Settings page in the **Advanced Settings**, you may not be able to access the web-based configuration tool again. To restore access to the web tool, use one of your network clients to do the following:

For Windows XP and 2000

1. Right-click **My Network Places** and click **Properties**.

2. Right-click your local area network connection and click **Properties**.

3. Select **Internet Protocol (TCP/IP)** and click **Properties**.

4. Click the **Use the following IP address** option.

5. In the **IP Address** field, enter `192.168.2.2.`

6. In the **Subnet Mask**, enter `255.255.255.0.`

> **NOTICE: After making changes to the Broadband Router settings, you must reassign your network client to obtain an IP address dynamically. Follow the instructions above for the Internet Protocol Settings on your computer. Recheck the appropriate option to obtain an IP address automatically.**

How do I restart or reset the Wireless Broadband Router?

To restart the Dell TrueMobile 2300 Wireless Broadband Router, unplug the power connector and plug it back in.

To load the Dell TrueMobile 2300 Wireless Broadband Router's default settings, hold down the reset button on the router for at least five seconds. While the unit resets, the Power light blinks.

NOTICE: When you reset the Dell TrueMobile 2300 via the reset button, press it for at least five seconds, the current configurations will be erased and the factory default settings will be loaded on the unit.

For customer support, go to support.dell.com.

How do I find out about firmware upgrades?

All new firmware upgrades are posted on the web. To download the latest firmware, go to the Dell support website: support.dell.com.

NOTE: You can only use firmware designed specifically for the Dell TrueMobile 2300 Wireless Broadband Router.

Use the Upgrade Firmware page on the web-based configuration tool once you have downloaded the firmware. Click the **System Tools** -> **Upgrade Firmware** tabs. Enter the file name and path for the new firmware. Click the **Start** button to load the file on your Dell TrueMobile 2300 Wireless Broadband Router.

What is the actual speed throughput for the Dell TrueMobile 2300?

In 802.11g, wireless network adapters and access points provide up to 54 Mbps data transmission rate. In 802.11b, the data can be transmitted at the rate up to 11 Mbps. Actual throughput, however, may be less, just as 10 Mbps-cabled Ethernet does not always provide 10 Mbps performance. Transmission speeds vary with files size, number of users, and distance from the access point. A properly designed system provides Ethernet-like performance for users. As signal strength decreases, the automatic data rate of 802.11g decreases from 54 Mbps to 48, 36, 24, 18, 12, 9, or 6 Mbps in order to maintain the connection. The data rate of 802.11b may decrease from 11 Mbps to 5.5, 2, or 1 Mbps.

Are there any known health issues caused by Radio Frequency (RF) transmission from the Dell TrueMobile 2300?

There is no conclusive evidence, to date, that RF waves from the 2.4 *gigahertz* (GHz) range pose any health issues. Although wireless LAN devices operate at the same frequency as microwave ovens, wireless access points and adapters at 2.4 GHz emit a power signal of 100 *megawatts* (MW), less than other 2.4 GHz products, such as microwave ovens or cordless phones.

Is this a shared or switched technology medium?

The wireless access point of the Dell TrueMobile 2300 Wireless Broadband Router is similar to a hub, which is a shared medium.

What is the difference between Bluetooth and 802.11?

These technologies are aimed at different situations. Bluetooth is a 1 Mbps technology designed for the interconnection of devices that are in close proximity to one another. You use Bluetooth when you have two or more devices requiring direct connectivity in short distances of about 30 feet. Some examples include PDAs or handheld computers to computers; notebooks to printers; and phones to headsets. The 802.11 products are a full LAN connectivity solution, designed to provide network transmissions at high data rates and in a greater distance. You use 802.11 product when you want to access to the Internet or a local area network.

Does the Dell TrueMobile 2300 support Internet games?

The Dell TrueMobile 2300 Wireless Broadband Router supports some Internet games, depending on the game software. If you have difficulties, consult the software supplier's technical support as they may be aware of configurations to enable their game to be played via a NAT server.

You may play games over a wireless network as long as the game supports multiple users on a LAN. To find out if multiple

users are supported for your particular game, consult the software's technical support or documentation.

What settings do I change to play games with the router connected in the network?

The Dell TrueMobile 2300 Wireless Broadband Router supports many Internet games. Some Internet games may require the router to forward in-bound data to a computer through an application-specific port or ports. To enable the support for these Internet games, configure the **Custom Port Forwarding Settings** portion of the **Port Forwarding** section to open a specific port or a range of ports.

NOTE: It's recommended that you use some form of static IP addressing on the game hosting computer.

Does the Dell TrueMobile 2300 prevent hacker attacks?

The Dell TrueMobile 2300 Wireless Broadband Router attempts to prevent unauthorized access by restricting permissions to specified users on your wireless network.

The web-based configuration tool also contains an intruder detection log which records any attempted break-ins by unidentified users. To view the log, start the web-based configuration tool. Click the **System Tools** -> **Intruder Detection Log** tabs.

How can I find additional information?

For additional information, including international telecommunication certificates and customer support, visit support.dell.com.

Access Point:

An access point is a device on the wireless network that receives and retransmits data. It allows computers with wireless network adapters to be connected, typically, to an Ethernet network.

Cable Modem:

A cable modem is a device that enables you to hook up your PC to the Internet via a local cable TV line.

Client:

A client is a computer on a network.

Domain Name System (or Service) (DNS):

DNS is an Internet service that translates domain names into IP addresses. A DNS server keeps a database of host computers, their respective domain names, and IP addresses. When a domain name is requested, the DNS server uses this table to send the user to the proper IP address.

The DNS system is really its own network. If one DNS server doesn't know how to translate a particular domain name, it asks another one, and so on, until the correct IP address is returned.

Dynamic Host Configuration Protocol (DHCP):

DHCP is the process of automatically configuring the TCP/IP settings for every computer on a network.

Encryption:

Encryption is a common way of implementing security and protecting information. Encryption applies a set of instructions, called an *algorithm*, to information. The instructions combine the *plain* or *clear* text of information with a sequence of hexadecimal numbers, called an *encryption key*.

Before transmitting information over the airwaves, the wireless client or access point *encrypts* or scrambles the information. The access point or wireless client receiving the information uses the same key to *decrypt* or unscramble the information. The information is only readable to WLAN devices that have the correct encryption key. The longer the key is, the stronger the encryption. All wireless clients and access points in a WLAN must use the same encryption method and key. 802.11-compliant wireless network has *Wired Equivalent Privacy* (WEP) and *Wi-Fi Protected Access* (WPA) technologies for wireless security.

Ethernet:

Ethernet is the most widely used local area networking technology. It is an industry-wide standard originally developed by

Xerox and formalized in 1980 by DEC, Intel, and Xerox. Ethernet networks transmit data at 10/100 Mbps using a specified protocol.

Ethernet Address (MAC Address):

An Ethernet address is a unique, pre-programmed address, sometimes referred to as a media access control (MAC) address. Each computer on an Ethernet network has its own Ethernet address. This 12-digit hexadecimal address is encoded into the circuitry of the computer's network adapter when it is manufactured. Other devices on the network use this address to identify the computer. This address is not the same as the IP address that is assigned to computers on TCP/IP networks. On these networks, the IP address is associated with the MAC address to enable network communication.

Host:

A host is any device that is connected to the network, for example, a computer, network printer, or router. Each host has a unique name (called "Host Name") or IP address (called "Host IP") for identifying on the network.

Internet Protocol (IP):

IP is the protocol used to send data from one computer to another over the Internet. The IP protocol describes how Internet computers keep track of the IP address of each computer on the network and route packets of data from one IP address to another.

Internet Service Provider (ISP):

An ISP is a company that provides individuals and other companies access to the Internet and other related services such as website building and virtual hosting. An ISP has the equipment and the telecommunication line access required to have POP on the Internet for the geographic area served. The larger ISPs have their own high-speed leased lines so that they are less dependent on the telecommunication providers and can provide better service to their customers.

IP Address:

An IP address provides unique identification for each computer on the Internet or on a local network. IP addresses are usually expressed as a group of four numbers separated by periods, for example, 169.254.10.2. None of the numbers can be greater than 255. Each Ethernet interface has an IP address. For the Dell TrueMobile 2300 Wireless Broadband Router, there is a LAN Ethernet interface and a WAN Ethernet interface; hence, there is a LAN IP address and a WAN IP address.

Link Light:

A link light is a light on a network device that indicates a good network connection. Hubs typically have a link light for each port; although, they may not be labeled as such, and the lights may show other information. These lights often blink for network activity. Some hubs display different colored lights for 10 Mbps and 100 Mbps. For more information, see the documentation accompanying your product.

Local Area Network (LAN):

A LAN is a network in one location. The network lets users at that location share files, printers and other services. *See WAN.*

Network Adapter:

A network adapter is a device expansion card that provides the physical connection between a computer and the network. There are many types of adapters. They include PC cards for laptops, a card that fits into a slot on your computer, just like you install a sound card or modem card, and embedded cards, embedded USB adapters, USB dongle adapters, and USB desktop adapters. Some newer computers have a network adapter already built into the system. PC cards or cards that fit into a slot in the desktop are sometimes referred to as network interface cards, or NICs.

Network Address Translation (NAT):

NAT occurs when multiple IP addresses on a private LAN are converted to one public address. This public address is sent out to the Internet. NAT adds a level of security because the IP address for a PC connected to the private LAN is never transmitted to the Internet. NAT also allows xDSL/cable routers to be used with low-cost Internet accounts, where only one TCP/IP address is provided by the Internet service provider. The user may have many private addresses masked by the single address provided by the ISP. NAT prevents denial of service (DoS) from external networks on internal hosts.

Network Name (SSID):

Access points are grouped together by an identifier called an ESSID. The ESSID is also referred to as a Net ID. This identifier is a combination of any letters or numbers that are appropriate for the network environment. ESSID is specifically for access points. When you talk about peer-to-peer networks, you cannot use the term ESSID.

Service Set Identifier (SSID) is more generic and is a 32-character name that uniquely identifies all the computers and equipments that make up a wireless network. A type of SSID is ESSID. Another type of SSID is Basic Service Set Identifier (BSSID). The BSSID is the MAC address of a wireless adapter or access point.

Point to Point Protocol over Ethernet (PPPoE):

PPPoE is the methodology of authenticating or validating a user or equipment to an Internet service provider, usually via a username and/or password. It is a selection or action that reconfigures a device to the default parameters, as it was originally manufactured.

Port:

A port is a connector on a networking device, used to attach the network cable. Hubs and switches have numerous ports that connect to computers on the network.

Protocol:

Protocol refers to a set of rules for sending and receiving information on a network. The rules determine the format of the data that is transmitted and other aspects of networking, such as how errors are detected and corrected. The protocol driver in each computer is software that adheres to these rules when sending and receiving information. These drivers are also often called protocols.

Transmission Control Protocol/Internet Protocol (TCP/IP):

TCP/IP refers to the protocol that computers use to communicate over the Internet. TCP determines how a computer breaks up

data into small units, called "packets," to be sent to another computer and how the receiving computer reassembles the packets into a single file. IP determines how the packets are routed across the Internet. *See Internet Protocol.*

Virtual Local Area Network (VLAN):

A VLAN is a network of computers that behave as if they are connected to the same wire, even though they may be physically located on different segments of a LAN. VLANs are configured through software rather than hardware, which makes them extremely flexible. When a computer on a VLAN is physically moved to another location, it can stay on the same VLAN without any hardware reconfigurations.

Virtual Server:

A virtual server is a device that performs Internet protocol (IP) mapping. IP mapping allows remote client access to your network via the Internet.

Wide Area Network (WAN):

A WAN is a communications network that uses devices such as telephone lines, satellite dishes, or radio waves to span a larger geographic area than can be covered by a LAN.

Wireless Local Area Network (WLAN):

A WLAN is a type of Local Area Network (LAN) that uses high frequency radio waves rather than wires to communicate and transmit data among the network clients and devices. It is a flexible data communication system implemented as an extension to, or as an alternative for, a wired LAN. Just like a LAN, the network lets users at that location share files, printers and other services.

xDSL Modem:

DSL is a type of service that allows people to access the Internet via their telephone lines. This service is typically available via a telephone company or service provider.

An xDSL connection is a high-speed digital connection to the Internet using standard copper twisted pair telephone wires. There are several kinds of DSL; the x refers to all of them.