AnyPoint™ Wireless II Network

User's Guide

Share

internet access

printers, files,

games,

and more...

intel®

Contents

Understanding your AnyPoint™ Wireless II Network 1

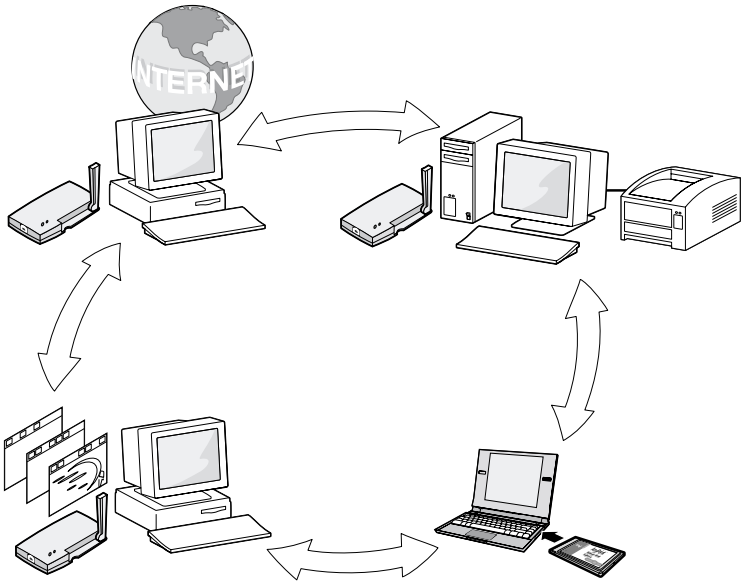
This chapter provides a basic understanding of network principles, so you can begin to take advantage of your new AnyPoint™ Wireless II Network. It also gives you useful information that will help you modify your network to meet your changing needs.

To get the most out of your home or small business network, think about what you can gain when you connect all your PCs together so they work as a group. For example, with two or more PCs connected together, you can:

- Share an Internet connection
- Share a printer
- Share files such as spreadsheets and written documents
- Play digital audio from another PC
- Play head-to-head multi-player games
- Use your laptop at home and at work

And the included Firewall and Web site filtering features help you to:

- Protect your network from electronic intrusion
- Block access to objectionable Web sites



A network allows multiple users to share resources.

What is a network?

A computer network consists of two or more PCs that are able to communicate with each other. Through a network, multiple PCs can share resources, such as printers, an Internet connection, or stored data. It costs less to share resources than provide every PC with its own printer or Internet connection.

You can also access a file located on other PCs in the network just as if the file was located on your own PC. For instance, from a PC upstairs, you may want to listen to a large music file or view digital photos located on another PC downstairs. You can keep the files for large applications on a system with a larger drive capacity and then access those files with other PCs in the network.

Components required to connect a PC to a network

To make your AnyPoint™ Wireless II network function, you need three components.

1. A Wireless II network adapter for each PC
2. A device driver and wireless settings
3. An AnyPoint™ Connectivity Suite CD

Your Wireless II network adapter

A **network adapter** is a hardware device that provides the connection between your PC and the network. The adapter converts the data inside your PC to a form that can be sent to other PCs. It connects externally to your PC through the Universal Serial Bus (USB), or in the case of a laptop PC, through a PC card.

Wireless adapters use radio waves as the means of connection, and transmit data through the air just like a cordless telephone; no connecting wires between PCs are necessary. The wireless adapter can communicate with all PCs in the network as long as they are in close proximity to each other (up to 300 feet). Keeping the adapters physically close to one another will improve the speed of data transmission.

Device driver and wireless adapter settings

Your Wireless II adapter requires a **device driver** to function. The driver is actually software code that specifically controls how the PC and the adapter communicate with each other. The **wireless adapter settings** control how your Wireless II adapter communicates with the other adapters in the network. You cannot change the device driver software, but as you will learn later in this chapter, you can change the adapter settings.

The device driver and adapter settings are installed when you first set up your AnyPoint™ Wireless II Network using the *Installation Guide*.

The AnyPoint Connectivity Software Suite CD

The AnyPoint Connectivity Software Suite is on your CD. It contains programs for your home and small business network. During network installation, you install this software:

- Device driver for your network adapter
- AnyPoint Sharing and Mapping software
- AnyPoint Internet Sharing software (ISS)
- Firewall for Internet security
- Web site filtering for Parental Control
- The AnyPoint Connection Manager to manage your Wireless II network
- Anypoint Extras for additional entertainment applications

For instructions to install the AnyPoint Connectivity Software Suite, see "Install the AnyPoint software" on page 11.

How does my Wireless II adapter operate?

The network mode is one of the adapter settings you must enter during installation. Wireless networks can operate in one of two modes:

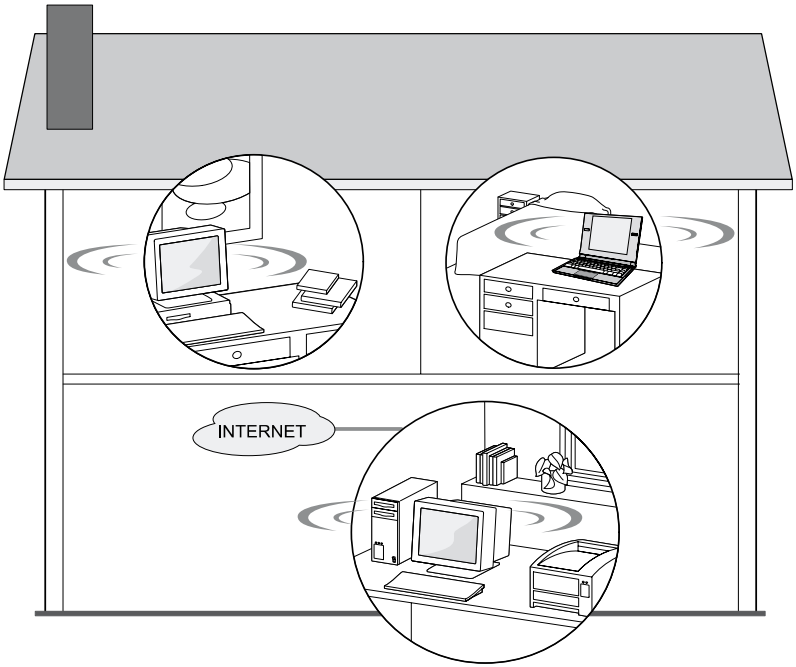
1 **Peer-to-Peer** (sometimes called Ad Hoc)

2 **Infrastructure**

Peer-to-Peer mode

In the peer-to-peer mode, sometimes called ad-hoc mode, PCs transmit and receive data *directly* with other PCs in the network using radio waves. Coordination of data traffic between PCs is done automatically. The

following figure shows PCs with Wireless II adapters in various rooms of a house communicating directly with one another in peer-to-peer mode.

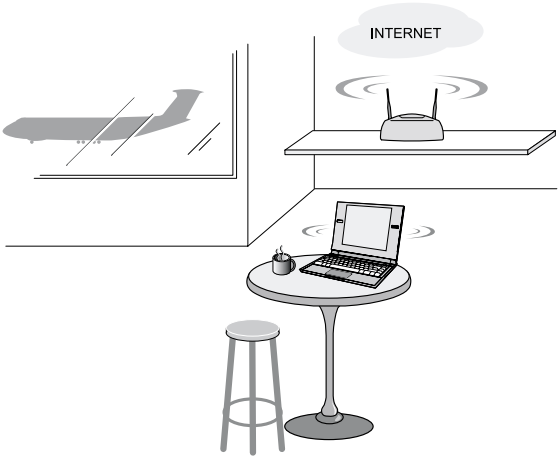


Infrastructure mode

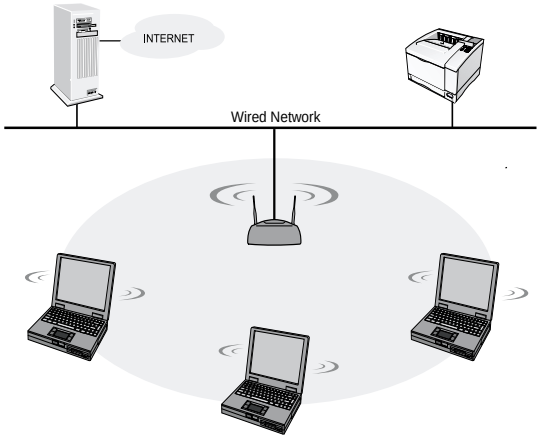
In the Infrastructure mode, PCs transmit and receive data to and from a gateway or an access point (AP). Many corporate networks use access points, which serve as a communications *hub* for all PCs using 802.11b wireless adapters to connect to a wireless or wired LAN. A residential gateway can be used in home networks to connect to the Internet.

The following figures show examples of two types of **Infrastructure networks**. The first illustration shows a wireless PC and a public access point in an airport. These access points are sometimes called *hotspots*. The

laptop with a PC card adapter is accessing the Internet by transmitting and receiving data from the access point.



The second illustration shows how wireless PCs connect to a corporate network through an access point. Laptops with wireless adapters can access the resources on the wired network including the Internet and servers.



How do I use my Wireless II laptop in different locations?

You can connect your laptop to potentially any network with 802.11b technology. In your home, you can carry your laptop from room to room and stay connected. You can take your laptop to your office, change a few wireless adapter settings, and connect to your office network. And while at

work, you can travel between your office, a conference room, and an outdoor courtyard and remain connected to the work network and its resources.

To easily connect to other networks, you can use the AnyPoint Connection Manager software.

What is the AnyPoint Connection Manager?

The AnyPoint Connection Manager is a software tool that is available when you install your AnyPoint Wireless II adapter. The basic job of the AnyPoint Connection Manager is twofold:

- **Edits Wireless settings** - You can quickly edit your current Wireless II settings of your adapter.
- **Creates Profiles** - You can save the Wireless II adapter and operating system settings into a single network profile. The software lets you create as many profiles as you wish, and switch between them at any time.

Before you can perform these tasks, you need to understand three concepts:

1. Wireless II adapter and operating system settings
2. Profiles
3. Network switching

What are Wireless II adapter and operating system settings?

The **wireless II adapter settings** are wireless controls that the adapter needs to communicate with the network. Within the standard 802.11b technology, there are several settings as defined by Institute of Electrical and Electronics Engineers (IEEE). To use your Wireless II laptop in multiple networks, you need to change a few of these settings using the AnyPoint Connection Manager **Profile Manager** tab (see "Profile Manager tab" on page 38). The major settings include:

- **Network ID Code (SSID)** - This is the network identification code. All devices that you are connecting to must have the same SSID to communicate with each other.
- **Mode** - There are two operating transmission modes: Peer-to-Peer, or Infrastructure. See page 3 in this chapter for more details.
- **Encryption password**- This is a security feature. The encryption password is a unique feature of the AnyPoint software. Every AnyPoint Wireless II adapter in the network must have the same encryption password, which the AnyPoint software uses to automatically generate the required 802.11b encryption keys.

- **Other settings** - In some networks, you will be prompted to provide other 802.11b settings.

The operating system settings define shared and mapped drives, printers, browsers, TCP/IP (addressing) functions and standard windows operating settings. You can also save these settings in network profiles using the **Profile Manager** tab.

What is a profile?

Network profiles contain all the setting listed in the previous section. For example, you can set up several network profiles — one for your AnyPoint home network; another for your place of business, and yet another for public access points. The AnyPoint Connection Manager software lets you setup as many profiles as you need.

Note: You rarely change profiles on your **desktop PC**, unless you are adding an access point or gateway into your network. For a **laptop PC**, you may add several profiles for use in several networks.

What is network switching?

The AnyPoint Connection Manager lets you easily witch between multiple networks. When shutting down or starting your PC, you can select which network profile to use. For more details, see "Using the AnyPoint Connection Manager" on page 38.

What settings are switched in a network profile?

Each network profile contains the settings found in the Network Control Panel, as well as a few others.

Wireless settings:

- All 802.11b settings including network ID code, mode, channel, and encryption

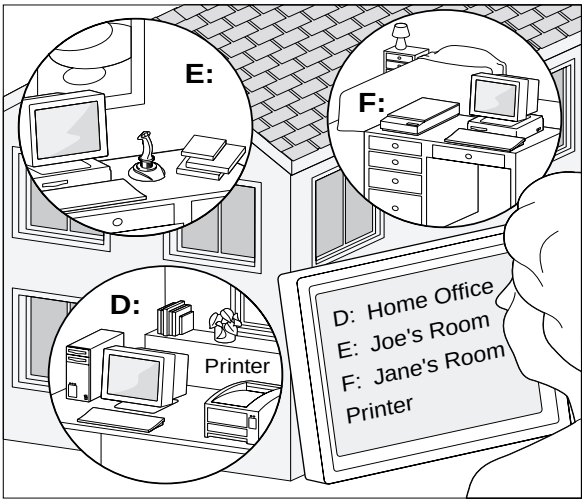
Operating system settings:

- Microsoft Internet Explorer* (4.0 and later) proxy settings
- Network resource settings, such as file and printer sharing settings, default printers, mapped drives (Windows 95 and Windows 98 only), and shared folders
- Some TCP/IP settings (found on the network control panel's TCP/IP properties tab)
- Windows domain settings
- User name and Host name
- Software running at startup for the AnyPoint applications

What is sharing and mapping?

The concept of *sharing* and *mapping* is actually a two-fold process that allows two or more PCs to locate and use each other's drives and printers as if they were on one single PC. The two processes work together. The AnyPoint Sharing and Mapping software allows you to first decide which drives and printers on each PC are to be *shared* with the network. Then, the software allows you to *map* to each shared drive and printer from each PC.

The sharing process lets you control the degree of access by setting the *share status* for each of your drives and printers. For drives, you would select either **Shared-Full**, **Shared-Read Only** or **Not Shared**. For printers, you would select either **Shared** or **Not Shared**. Refer to "Share drives and printers" on page 15 for a description of each type of share status. The mapping process sets up a drive letter on your PC that *points* to each shared drive on the other PC. You can even assign your own letters to a drive (if they are not already used by the system).



What is Internet Sharing Software (ISS)?

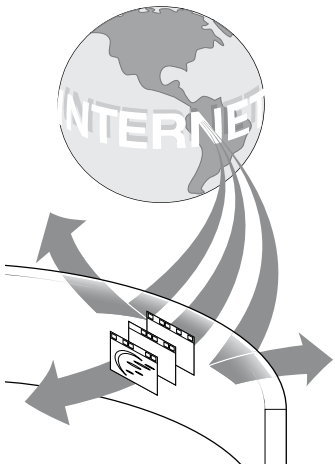
AnyPoint Internet Sharing Software (ISS) allows all of your PCs to share one PC's Internet connection. With AnyPoint Wireless II adapters, ISS is available only in Peer-to Peer mode, when all PCs communicate directly with each other. You merely set up the PC with the Internet connection as an ISS server. You then set up the remaining PCs as ISS clients. The ISS server PC directs data between the Internet and all PCs on the network. Because each client PC connects to the Internet through the server, only the server PC needs the actual physical connection to the Internet (see "Connect to the Internet" on page 33). With the server on, any other PC in the network has access to the Internet. Also, for connecting to virtual private networks with Internet access, see "Connecting with Virtual Private Network (VPN)" on page 37.

The ISS server also provides Internet security with Firewall and Web site filtering.

Note: If you are connecting to a network such as an access point or a gateway, you cannot use ISS, the Firewall, and Web site filtering. Refer to the documentation for the access point or gateway for setting up connections to the Internet.

What is a Firewall?

A Firewall helps prevent intruders (hackers) from breaking into your home or office network. When your connection to the Internet is active, the Firewall acts like a barrier to outside intrusion.



Once you install the Firewall through your ISS server, it works silently to protect your PC whenever the ISS server PC is operating.

The Firewall has four security levels: **Trusting, Cautious, Nervous and Paranoid**. Inbound traffic is blocked according to the security level you select. The more restrictive the security level, the more likely the Firewall will block unsolicited inbound traffic. **Paranoid** is the most restrictive and **Trusting** is the least restrictive. Refer to the section "Set up the Firewall" on page 20 for more information.

Important: A Firewall provides protection against unauthorized access by hackers, but you will still need additional software to help protect you against computer viruses.

What is Web site filtering?

The AnyPoint Connectivity Software Suite identifies and filters Web page content in specified categories (such as pornography, hate speech, weapons, drugs, and gambling). At home, you can set up Parental Control to block undesirable Web pages from appearing on specific PCs on your network. Refer to the section "Set up Parental Control" on page 23 to set up each PC with different levels of Web access:

- Select the option **Automatically filter Web sites** to automatically filter objectionable sites. You can add exceptions to the automatic option for sites you wish to allow or filter.
- Select **Allow these sites only** to specify an acceptable list of Web sites each PC can visit. You must click **Configure** and type the specific HTTP sites you want to allow.
- Select **No restrictions** to disable Parental Control.

Web site filtering does not block chat programs, download sites, e-mail, or news groups.

Guidelines for setting up your network

It is easy to set up your network, but you need to plan a little. Draw a diagram showing the location of PCs and printer(s). Indicate the location of data or printers you want to be available to everyone on the network and other data or printers you do *not* want to be available to everyone. It is important to identify the PC you will use for your shared Internet connection. This is usually the PC with the fastest connection through your modem (or cable).

Set Up the AnyPoint™ Wireless II Network 2

Where do I begin?

See "What is a network?" on page 2.

There are four steps to successfully installing and configuring your AnyPoint™ Wireless II Network:

1. Install the hardware and drivers and your 802.11b wireless settings. Refer to the *AnyPoint Wireless II Network Installation Guide* (the poster included with the adapter) for detailed, step-by-step instructions.
2. Install the AnyPoint Connectivity Software Suite.

See "What is sharing and mapping?" on page 8.

3. Share drives and printers.

   "Share drives and printers" on page 15 explains how to share your network drives and printers for the first time.

See "What is Internet Sharing Software (ISS)?" on page 9.

4. Set up the Internet Sharing Software (ISS) server.

   ISS also enables the Firewall and Parental Control features on the AnyPoint Wireless II Network. See "Configure the Internet Sharing Software (ISS) server" on page 18.

Important: If you already have BlackIce Defender* installed on your system, you may want to choose between AnyPoint or BlackICE Firewalls before installing your software. To help you decide, review the table in the section"Set up the Firewall" on page 20.

Important: If you are upgrading your operating system, uninstall your AnyPoint™ software first, perform the upgrade, then install the AnyPoint Software.

Important: (Windows* 2000 users) You will receive a screen notifying you not to install the AnyPoint Wireless II Network unless you log in to an account that has administrative rights.

Install the AnyPoint software

Once you've installed the hardware and drivers using the *Installation Guide*, you are ready to install the software using the setup program and the instructions from this chapter. The setup program guides you through the

installation process. During installation, you will be making decisions that will affect the way your network operates, so be sure to pay careful attention to the screens.

1 Insert the AnyPoint Connectivity Suite CD in the CD-ROM drive. Using Windows Explorer, double-click the CD-ROM drive, then double-click **Setup** to begin. The main presentation screen appears.

2 Click **Install**. An installation summary screen appears. Click **Next**. The license agreement screen appears.

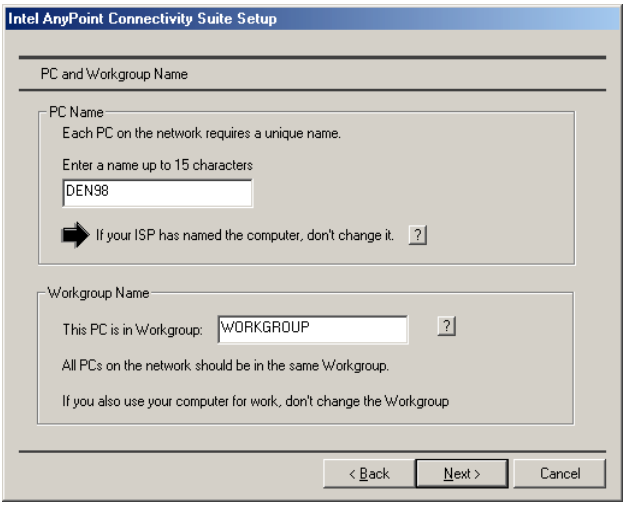
See "Your Wireless II network adapter" on page 2.

If Setup detects an incompatible network adapter already installed on your PC, the **More than one network adapter found** screen appears. If you receive this screen, refer to "Remove incompatible network adapters" on page 53, which will show you how to resolve the adapter conflict. If you do not receive this screen, go to the next step.

3 Click **I Accept** or **I decline** the agreement. If you decline, the Setup program exits. If you click **Accept**, the destination directory appears.

4 Click **Next** to select the default directory. The **PC name** screen appears.

The PC name can have up to 15 characters, including any combination of letters (A-Z), numerals (0-9), and dashes (-).



5 Assign a name to the PC. Be sure to use a different name for each PC on the network. Make a note of the Workgroup name. All PCs **must** use the same Workgroup name.

Important: If your ISP has named the PC, **don't** change the PC's name.

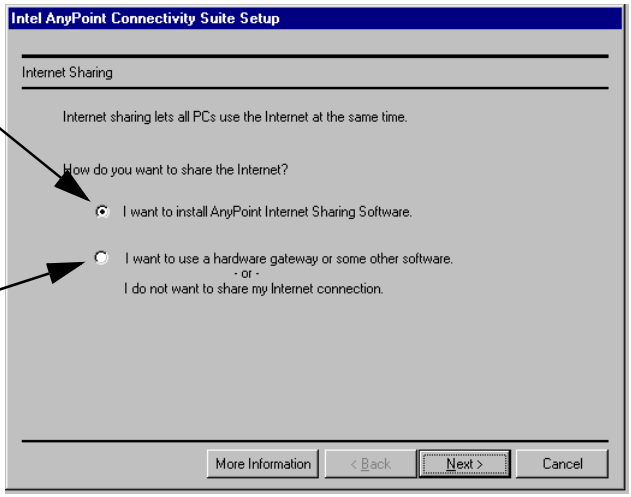
6 When the summary screen appears, review your network configuration choices carefully *before* you click **Install**. Once you install, you cannot come back to this screen without reinstalling the software.

7 You will be notified that your software installed successfully. Click **OK**.

The following screen helps you decide if you want to install the AnyPoint Internet Sharing Software (ISS) for use with an Internet Service Provider (ISP).

Click here if you want to install ISS on your server PC.

If you use other software for Internet sharing or you have chosen not to have Internet Sharing Service, then click here. Also, if you plan to install a gateway, an access point device, or a Virtual Private Network, do not install Internet Sharing Software.



8 Select one of the following options:

- **I want to install AnyPoint Internet Sharing Software.** Choose this default option if you want to use the AnyPoint Internet Sharing Software (ISS) to share Internet access with all PCs in your home network. For more information on ISS, refer to "Connect to the Internet using ISS" on page 33. If you choose this option, go to step 9.
- **I do not want to share my Internet connection.** Choose this option if you use other software for Internet sharing, a Virtual Private Network (VPN), a gateway or access point, or do not want AnyPoint™ Internet Sharing Service (you can always install it later). For installing to VPN, refer also to "Connecting with Virtual Private Network (VPN)" on page 37.

After you select one of the above options, click **Next**.

If you do not install the Internet Sharing Software, the install program will skip the remaining ISS screens.

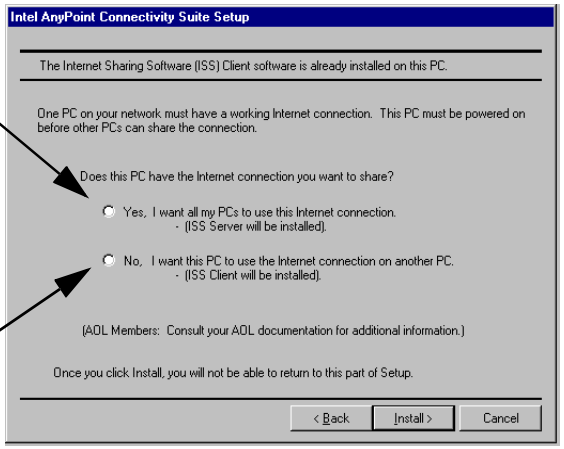
9 A decision screen appears. Decide whether this PC is going to be the ISS server or an ISS client, then click **Install**.

ISS Server

The network can have only one ISS server and it must be set up and running (not turned off) to share its Internet connection with ISS clients.

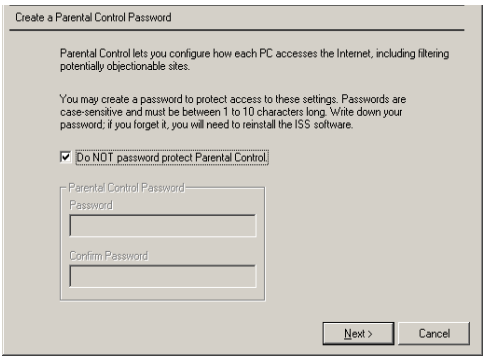
ISS Client

ISS clients can access the Internet through the ISS server PC.



Note: For most Internet Service Providers (ISPs), the Internet connection is shared automatically when you install ISS. However, some ISPs may require extra steps to work with ISS. Cable modems and DSL may also require special steps (see "Internet Service Provider Reference" on page 63 for more information).

10 If this PC is the ISS server, type in a Parental Control password for Web site filtering. If you don't want a password, just click **Next**.



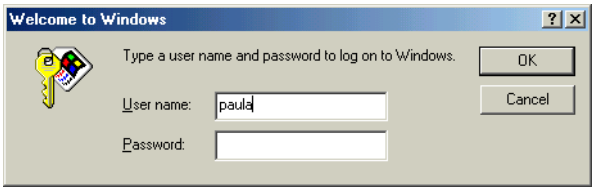
Be sure to write down the password you enter. If you forget the password later, you will have to uninstall and then reinstall the AnyPoint Connectivity Software Suite to make any changes to the Parental Control settings.

The password can be from 1-10 characters and is case-sensitive. Therefore, **PASSWORD**, **Password**, and **password** would each be considered unique. If you choose to create a password, no one can make changes to the Parental Control settings unless they enter the password when prompted.

11 Click **Next** then **Finish**. A confirmation screen appears notifying you that your software has successfully installed. You will then be prompted to restart the PC.

12 When your PC restarts, you are prompted to type a user name to log on to the network.

Important: Do not click Cancel! If you do, this PC will not connect to the network.



The Windows user name can be different from the PC name you typed when you installed the AnyPoint Wireless II Network software. You do not need to have different user names at each PC, but you can if you wish.

Windows passwords are associated with user names. If you don't create a password now, you are not prompted to type your user name each time you restart this PC. If you create a password, you must type the same password each time you log on to this PC with this user name.

Note: At this point, your system includes a default network profile. To view or edit those values, see "View and edit current settings using the Wireless Control Panel tab" on page 39.

Share drives and printers

See "What is sharing and mapping?" on page 8.

The Sharing and Mapping Software lets you locate and use drives and printers from several PCs as if they were on one single PC. The first time you run the Setup program, the Sharing and Mapping Software runs automatically (skip to step 2 below).

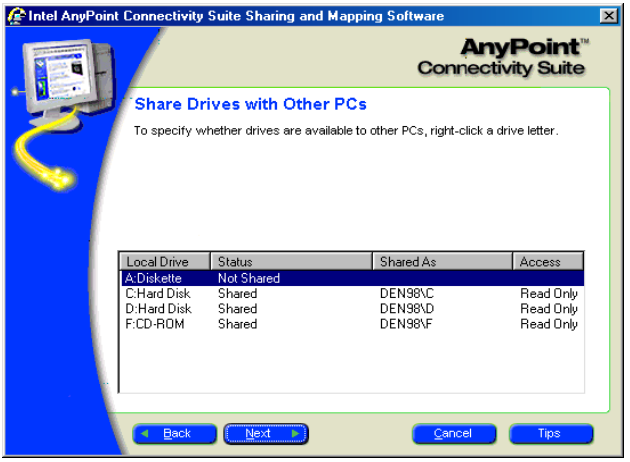
Important: Windows 2000 users should see "I have an insufficient permissions error when running Windows 2000" on page 52.

To share a drive:

1 Click **Start > Programs > Intel AnyPoint Network > Sharing and Mapping Software**

A decision screen asks if you want to set up your PC to share drives and printers. Click **Yes**. An informational screen describing Sharing and Mapping appears. Click **Next** to continue.

2 In the **Share Drives With Other PCs** screen, right-click on any drive to change the share status, selecting options from the menu. By default, all drives, except floppy disk drives, are set up as **Shared - Read Only**.

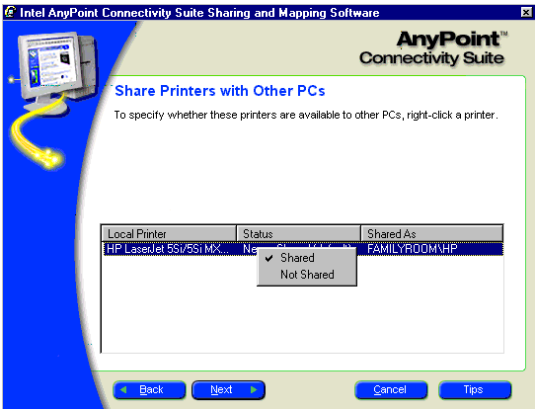


If you don't want others to use the drive, select **Not Shared**.

If you want others to see or copy the files and folders from the shared drive, but not change, save, or delete them on the shared drive, select **Shared - Read Only**.

If you want others to view, copy, change, save, or delete the files and folders on the shared drive, select **Shared - Full**.

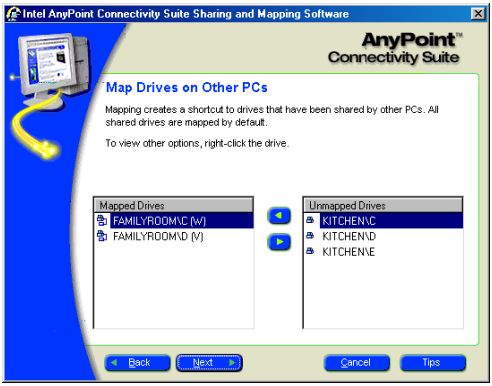
3 Click **Next**. The **Share Printers with Other PCs** screen appears.



Printers are shared by default. If you don't want to share a printer, right-click the printer in the list and select **Not Shared**.

4 Click **Next.** The **Map Drives on Other PCs** screen appears.

> **Note:** The following screen does not appear if the drives on other networked PCs have not been shared (for example, if this is the first PC on the network), or if the other PCs are turned off.

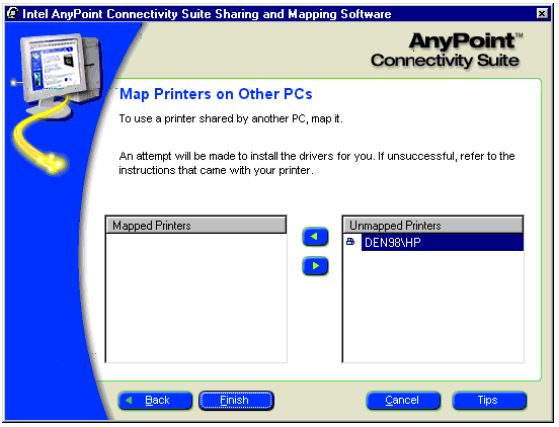


To unmap a drive, select the drive from the **Mapped Drives** box then click the right arrow to move it to the **Unmapped Drives** box.

To change a mapped drive letter, right-click the drive, point to **Properties**, select another available letter from the **Drive** box, and click **OK**.

> **Note:** When you map to a drive, an icon for that PC is automatically placed on your Windows desktop. You can quickly access a mapped drive by double-clicking the desktop icon. For Windows 95 users, you will need to create the shortcut manually.

5 Click **Next**. The **Map Printers on Other PCs** screen appears. To use a shared printer, you need to map it. Printers are not mapped by default.



- Select the printer in the **Unmapped Printers** box then click the left arrow to move it to the **Mapped Printers** box.
- Windows should start the Add Printer Wizard. **Make sure you have the printer software disks that came from the printer manufacturer or with the printer.** To add the printer, follow the instructions on the screen.

Note: The screen does not appear if other networked PCs haven't shared their printers, or if all other PCs are turned off.

To map another printer, repeat step 5.

6 Click **Finish** after mapping to your printers and drives.

Your printers and drive shares are set up for Sharing and Mapping!

Configure the Internet Sharing Software (ISS) server

See "What is Internet Sharing Software (ISS)?" on page 9.

Now that you have finished installing the software and configuring shared drives and printers, you are ready to configure the ISS server. This includes configuring the network's:

- Connection settings
- Firewall

- Parental Control for Web site filtering

Important: If you are using a gateway or access point in your network, do not install ISS. Refer to the documentation for those devices for instructions on connecting to the Internet.

Configure the ISS connection

Note: If you use a DSL service, cable modem, or other continuous connection, the only setting you can change is the default ISP.

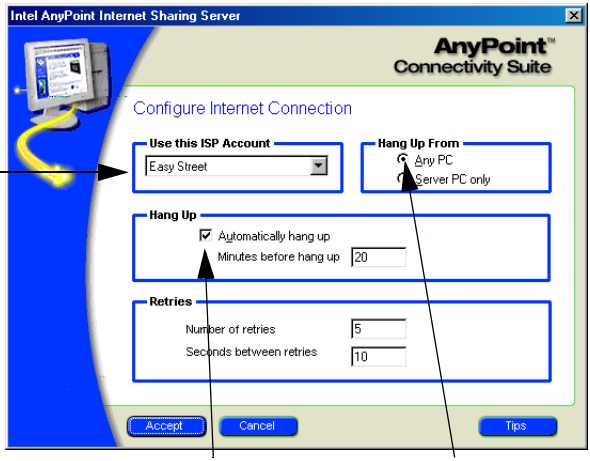
To configure the ISS connection:

1 At the ISS server PC, open ISS by double-clicking the ISS icon in the taskbar.

2 Click **Configure**. The Internet sharing server screen appears.

To change the default ISP, select an account name from the list.

Type the number of times you want ISS to redial when the line is busy and the number of seconds to wait between redials.



Type the number of minutes of inactivity you want ISS to wait before ending the Internet connection. To disable automatic hang up, uncheck **Automatically hang up**.

Select whether **Any PC** should be able to hang up the connection, or whether this should be allowed from the ISS **Server PC only**.

3 Click **Accept**. The changes take effect the next time you connect to the Internet through ISS.

Set up the Firewall

See "What is a Firewall?" on page 9.

The AnyPoint Connectivity Software Suite includes a Firewall, which helps protect your network from hackers trying to gain access. By default, the Firewall is enabled when you install the ISS server software.

Important: If you use a third-party Firewall product other than BlackICE Defender (such as Norton Internet Security* or McAfee), reinstall the ISS portion of the AnyPoint software *after* installing the firewall software. Use the instructions in "Install the AnyPoint software" on page 11 (be sure to install as an ISS server). You may need to make additional configuration changes to use the other manufacturer's Internet security software (see manufacturer's manual) with your AnyPoint Wireless II Network.

If you already have BlackICE Defender* by NetworkICE installed on your system, you may want to choose between AnyPoint or BlackICE Firewalls. For details, review the following table.

If you have BlackICE installed	If you do *not* have BlackICE installed
and you want to use BlackICE: **1** Uninstall BlackICE Defender software using instructions from the manufacturer. **2** Disable the Anypoint Firewall through the ISS software (see page 22). **3** Restart the PC. **4** Reinstall BlackICE Defender.	**and you want to use BlackICE**: **1** Disable the Anypoint Firewall through the ISS software (see page 22). **2** Restart the PC. **3** Install BlackICE Defender software using instructions from the manufacturer.
and you want the ISS Firewall: **1** Uninstall BlackICE Defender software using instructions from the manufacturer. **2** Restart the PC. **3** Install the AnyPoint Internet Sharing Software (ISS) on the Server PC.	**and you want the ISS Firewall:** Proceed with normal ISS configuration instructions.

Select a security level

The Firewall has four security levels: **Paranoid** (most restrictive), **Nervous**, **Cautious**, and **Trusting** (least restrictive).

Security Level	Description
Paranoid	Blocks all inbound intrusions and restricts some Web browsing and interactive content.
Nervous	Restricts some interactive content on Web sites. Does not affect streaming media and other application-specific Internet usage.
Cautious (default)	Blocks some inbound intrusions and does not interfere with normal Internet usage. This setting is best for regular use of the Internet.
Trusting	Blocks file sharing over the Internet. Internet file sharing allows the user to share files on their disk with others across the Internet. Blocking Internet file sharing ensures that hackers cannot download files to your computer. Does not affect file sharing on your AnyPoint network, even though Internet file sharing is disabled.

Change the security level

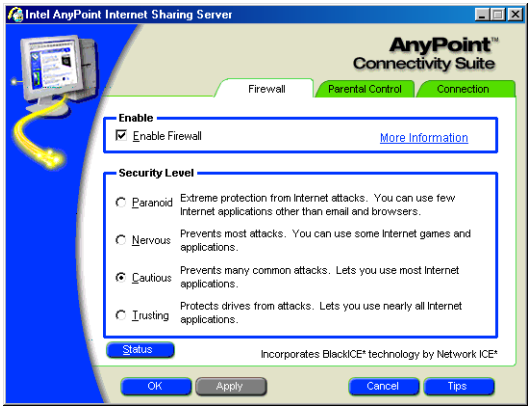
By default, the security level is set to **Cautious**, which prevents many common Internet attacks while still letting you use most Internet programs.

To change the security level:

1 Double-click the ISS icon to open ISS.

Note: When you click on the ISS server icon and select the Firewall tab, the **Status** and **More Information** buttons appear. **Status** tells you if the Firewall is running. The **More Information** button provides details about your Firewall.

2 Click the **Firewall** tab. The security level screen appears.



3 Select the desired security level, then click **Apply**.

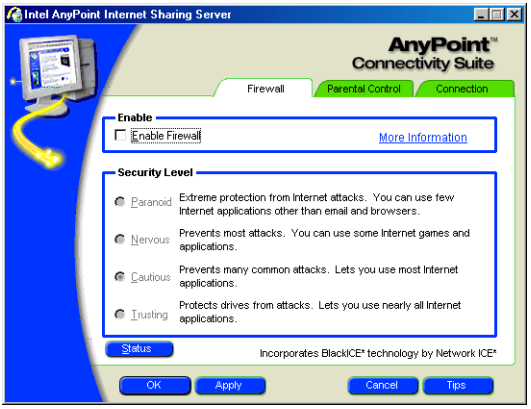
Disable the Firewall

If you do not want the protection of the Firewall (for example, if you have another Firewall program), you can choose to turn it off.

To disable the Firewall:

1 Double-click the ISS icon to open ISS.

2 Click the **Firewall** tab.



3 Click to clear the **Enable Firewall** check box, and click **Apply**.

4 At the prompt to restart your PC, click **Yes**.

Set up Parental Control

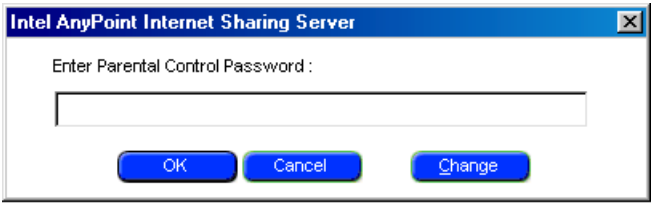
See "What is Web site filtering?" on page 10.

The Parental Control feature lets you filter the Web sites each PC can visit. With Parental Control, you can assign different restrictions to each PC running ISS. You can also specifically block or approve different sites. You must use the ISS server to set up Web site filtering features. Also, client PCs on the network must enter the Internet through the server for Parental Control features to operate. If a client PC dials the Internet through a separate modem, Parental Control features will not operate or protect the client PC.

Setting up and changing the Parental Control password

To set up a password:

1. Click **Start > AnyPoint software > Internet Sharing Server**.
2. Click the **Parental Control** tab.



3. Type a password and click OK.

   The password can have up to 15 characters, including any combination of letters (A-Z), numerals (0-9), and dashes (-)

To change the Parental Control password, click **Change**. At the dialog box, type the old password, new password, and confirmation.

Set up the Server and Client PCs

Before you can set up a client PC on the **Parental Control** tab of the Internet Sharing Server, launch a Web browser at a client PC and connect to the Internet.

To set up the server and client PCs:

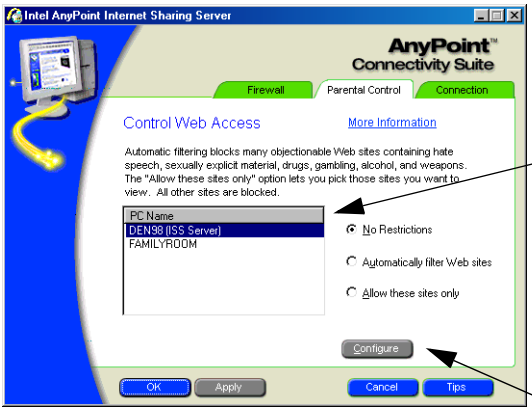
1. From the client PC, verify that you can access the Internet. Open your Web browser and access any Internet site. The server PC connects and the client displays the Web page.
2. From the ISS server PC, refresh the **Parental Control** tab (click another tab and then click **Parental Control**).

   You should now see the client PC you want to configure on the **Parental Control** tab.

Configure Parental Control

To configure Parental Control:

1. Double-click the ISS icon to open ISS.
2. Click the **Parental Control** tab.
3. Type the password, if prompted. You are prompted for a password only if you entered one while running the Setup program. Remember, the password is case-sensitive.



From the list of PCs, click the one you want to configure.

Choose the type of Web access control for that PC:

- To disable Parental Control for the selected PC, keep the setting at **No restrictions** (default).
- To block material in predefined categories, click **Automatically filter Web sites**.
- To allow access to only specific Web sites, click **Allow these sites only**.

To specify exceptions to automatic filtering or to set up the Web sites that this PC can visit, Click **Configure**. See "Set up exceptions to automatic filtering" later in this chapter for more information.

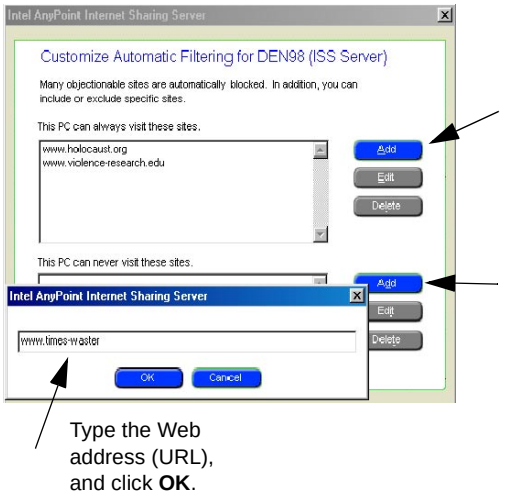
Set up exceptions to automatic filtering

The automatic filtering mechanism in Parental Control blocks sites based on its analysis of their content. Sometimes innocent sites (news sites, for example) include language or other content that looks suspicious to the software, so it blocks them. If Parental Control blocks sites you want a PC to be able to visit, you can configure Parental Control to ignore those sites.

To set up exceptions for automatic filtering:

1. From the list of PCs in the **Parental Control** tab, click the one you want to configure.

2 Click **Automatically filter Web sites**, and then click **Configure**.



Configure a PC to visit only certain Web sites

You may want to allow a PC to visit only specific Web sites, regardless of how Parental Control would normally handle the sites. For example, you might want the PC for a child or employee to be restricted to visiting sites in a favorites list that you define for its Web browser. It's important to remember that Parental Control blocks access to all sites except the ones you specify, but **does not** filter the sites you specify with its normal restriction methods.

To configure a PC to visit only certain Web sites:

1 From the list of PCs, click the one you want to configure.

2 Click **Allow these sites only**, and then click **Configure**.

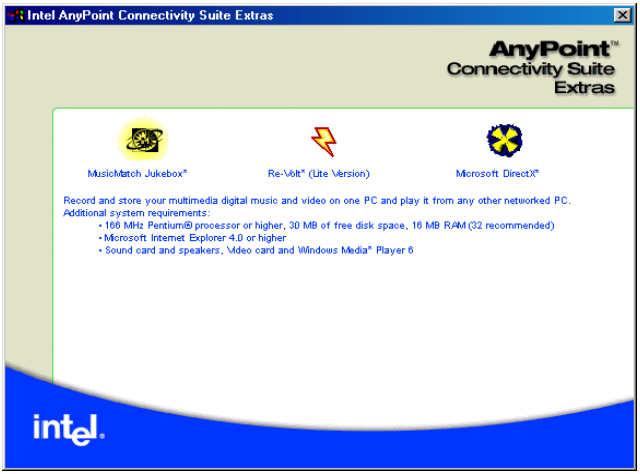
3 Once you see the configure screen, click **Add** to set up the sites the PC can visit.

4 Type the Web address (URL), and click **OK**.

Set up AnyPoint Connectivity Suite Extras

> **Note:** The extras you receive will vary, depending on your operating system and the AnyPoint software version in your PC.

Click **Start > Programs > Intel AnyPoint Network > AnyPoint Extras** to select the AnyPoint Connectivity Suite extras:



Registration

From the PC that you have designated as the server, a registration screen appears in a day or so. It asks you questions that help us serve you better in the future. If you wish, you can fill it out at a more convenient time.

Share Drives and Printers 3

This chapter explains how to use and change shared drives and printers after you've set up the AnyPoint™ Wireless II Network. For conceptual information, see "What is sharing and mapping?" on page 8.

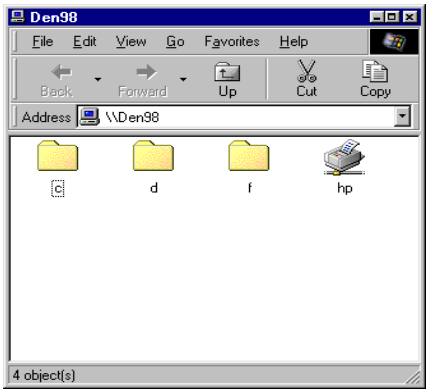
Note: Windows* 2000 users can set different mapping configurations for separate accounts so that they can use a laptop at home on one account and use the other account at work. Refer to "How do I use my Wireless II laptop in different locations?" on page 5 for more information.

Use network drives

See "What is sharing and mapping?" on page 8.

When a PC *shares* a drive, other users on the network can share information on the drive as though it were directly attached to their PC. When you *map* to a shared drive, you allow your PC to access shared drives on other PCs in your network.

For example, to view the shared drives and printers on your home network, double-click **Network Neighborhood** on the desktop. Double-click the icon for a PC to see that PC's shared drives and printers. In this example, the Kitchen PC is sharing drives C and D and a printer.



Note: For Windows 2000 and Windows Millennium Edition (Windows Me) users, when you are instructed to look in **Network Neighborhood**, look in **My Network Places**.

It may take several minutes for the PC to appear in Network Neighborhood. If it does not appear, see "I can't see a network PC from another PC" on page 51.

You can view the mapped drives on your own PC by looking in the following places:

- Network Neighborhood
- My Computer
- Windows desktop icons (shortcuts)
- Open and Save file dialog boxes
- Sharing and Mapping Software
- Windows Explorer

Note: If you are a Windows 2000 user and have installed the AnyPoint Connection Manager (ACM), the sharing and mapping software only shares information for the drives when it detects an AnyPoint adapter in the active profile. With a different network profile, different shared drives are visible.

Use files across the network

When you have access to drives from other PCs on the network, you can open files as though the drive is physically attached to your PC.

	Drive access		
What you can do with the other PC's drive	**Shared - Full**	**Shared - Read Only**	**Not Shared**
Open files on this drive	yes	yes	no
Save files on this drive	yes	no	no
Copy files to this drive	yes	no	no
Copy files from this drive	yes	yes	no
Delete files on this drive	yes	no	no
Print files on this drive	yes	yes	no

Viewing video files across the network

Video files that you download off the Internet (or create with a PC camera) can be viewed on most connected PCs. PCs with less than 32MB of RAM may experience problems viewing video. PCs with Pentium II processors (and later versions) using 64 MB RAM (or more) and Windows Media

Player (default on most Windows PCs and available for free download from Microsoft's website) are recommended. Simply open Windows Explorer and double-click on the video file you wish to view.

Certain video formats may require installation of additional software called a codec (compression/decompression). The codec allows the PC to uncompress the video format, such as the DiVX codec for certain MPEG4 videos. You can use Media Player to automatically download and install many of these codecs for you.

Note: Third party software, such as SnapStream PVS* (www.snapstream.com), offers additional video sharing and TV recording capabilities and makes sharing video content on your Wireless II network simpler and more enjoyable."

Change drive sharing and mapping

When you first view the Sharing and Mapping screens, the following defaults are applied to your drives:

- All drives are shared except diskette drives.
- All shared drives have **Shared - Read Only** access.
- All shared drives are mapped.

Change drive access

Changing access to your drives will allow (or prevent) others from changing files on your PC.

To change drive access (at the PC physically attached to the drive):

1. Click **Start > Programs > Intel AnyPoint Network > Sharing and Mapping Software**.
2. On the **Share Drives with Other PCs** screen, right-click the drive you want to change access.
3. Select the access level you want to assign to the selected drive (**Shared**, **Shared - Read Only**, or **Shared - Full**).
4. Click **Next** until the **Finish** button appears, then click **Finish.**

Change drive mapping

To change mapping for a specific drive (at the PC from which you access a shared drive):

1 Click **Start > Programs > Intel AnyPoint Network > Sharing and Mapping Software**.

> **Note:** If your PC detects new drives or printers to share or map, the AnyPoint Sharing and Mapping Software runs automatically.

2 Click **Next** until the **Map Drives on other PCs** screen appears.

Select the drive and then click the appropriate arrow (right or left) when you want to move it from one box to the other. For example, if you do not want to map the Kitchen's C drive, select it, then click the right arrow to move it from the **Mapped Drives** box to the **Unmapped Drives** box.

3 Click **Next** until you have finished mapping drives. Then, click **Finish**.

Change printer sharing and mapping

You can use the AnyPoint Sharing and Mapping Software to change how you share and map printers with other networked PCs.

Change printer sharing

To change printer sharing (at the PC physically attached to the printer):

1 Click **Start > Programs > Intel AnyPoint Network > Sharing and Mapping Software**.

2 Click **Next** until the **Share Printers with Other PCs** screen appears.

3 Right-click the printer you want to change.

4 Select **Shared** to share a printer. Select **Not Shared** to stop sharing.

5 Click **Next** until you have completed sharing printers. Then click **Finish**.

Change printer mapping

To change printer mapping (at the PC from which you want to use the network printer):

1 Click **Start > Programs > Intel AnyPoint Network > Sharing and Mapping Software**.

2 Click **Next** until the **Map Printers on other PCs** screen appears.

3 Select the printer from the **Unmapped Printers** box and click the left-arrow button to move it to the **Mapped Printers** box.

4 Windows starts the Add Printer Wizard. **Make sure you have the driver disk(s) for the printer** (you may need them). To add the printer driver, follow the instructions on the screen.

5 To map another printer, repeat steps 3 and 4.

6 On the **Map Printers on other PCs** screen, Click **Finish**.

Install printer drivers

To map a network printer, its printer driver must be installed on each PC that will print to that printer. The printer driver is software that enables your PC to communicate with that particular kind of printer.

When mapping a printer, the Sharing and Mapping Software automatically runs the Windows Add Printer Wizard and tries to copy the printer drivers from the PC attached to the printer. If this doesn't work, you may need to install the printer drivers manually using the printer software.

Some printers come with custom installation software. These printers do not use the Windows Add Printer Wizard to install and configure the printer. To map a printer that uses custom installation software, first manually install the printer software on each PC that will use the printer. Refer to the printer documentation for installation procedures.

Unmap a printer

To unmap a printer (at the PC that no longer needs access to the network printer):

1 Click **Start > Programs > Intel AnyPoint Network > Sharing and Mapping Software**.

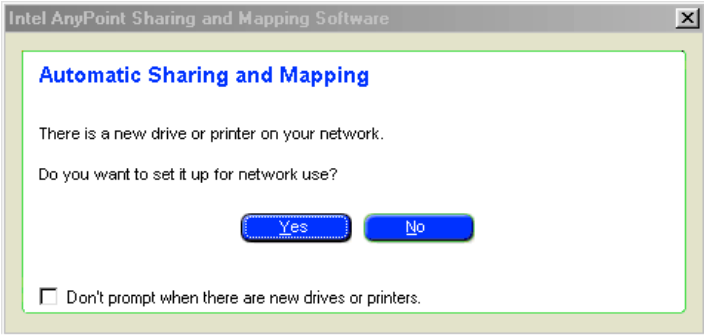
2 Click **Next** several times until the **Map Printers on other PCs** screen appears.

3 Click the printer in the **Mapped Printers** box then click the left-arrow button to move it to the **Unmapped Printers** box.

4 To unmap another printer, repeat step 3; otherwise, click **Finish**.

Share and map automatically

When new drives or printers are added to your network, the AnyPoint Sharing and Mapping software detects them and automatically offers you the opportunity to share or map them.



To disable automatic sharing and mapping:

Click **Don't prompt when there are new drives or printers** in the message box.

To enable automatic sharing and mapping:

1. Click **Start > Programs > Intel AnyPoint Network > Sharing and Mapping Software**.
2. Click the system menu in the upper-left corner of the title bar, and click **Automatic Prompt**.

Multiple user profiles

Multiple user profiles let different people who use the same PC customize their Windows settings. A user profile becomes active when the user logs on to the network at a PC with multiple user profiles turned on, using his or her unique user name and password.

> **Note:** If a PC has multiple user profiles, **each user** must map the network drives they want to access.

To find out if your PC has multiple user profiles, click **Start > Settings > Control Panel > Passwords > User Profiles** tab. If **All users of this computer use the same preferences and desktop settings** is selected, multiple user profiles are turned off.

Connect to the Internet 4

With AnyPoint™ Internet Sharing Software (ISS), you can connect to the Internet on multiple PCs at the same time, all with just one modem and one Internet or broadband cable account. The PC with the Internet connection is called the ISS server, and all the other PCs on the network that are sharing the Internet account through the ISS server are called ISS clients.

Important: If you have installed your AnyPoint Wireless II adapter into a network through an access point or a gateway, ISS and its features are not available. Refer to documentation for those devices for instructions on connecting to the Internet.

Note: If you are using Virtual Private network (VPN) software, refer to "Connecting with Virtual Private Network (VPN)" on page 37. Refer also to the AnyPoint Wireless II Network Online Support site, **www.intel.com/anypoint/support/** for information.

Connect to the Internet using ISS

To see if ISS is running on the ISS server, look for the ISS icon on the right side of the Windows* taskbar. If the icon is present, ISS is running.

If the icon is not present, you can manually start ISS on the server by selecting **Start > Programs > Intel AnyPoint Network > Internet Sharing Server**.

Connect from the ISS server

To connect from the ISS server:

1. Make sure that ISS is running on your ISS server PC.
2. Start an Internet browser (such as Netscape Navigator* or Microsoft Internet Explorer*), and ISS automatically connects you to the Internet.

Note: To close the shared Internet connection from the server PC, double-click the ISS icon in the status area of the Windows taskbar, and select **Hang Up**.

Connect from an ISS client

1. Make sure the ISS server PC is turned on and that ISS is running.

   Even though the server PC does not need to be connected to the Internet, it does need to be running ISS.

2. At the ISS client, start any Internet program (such as a web browser).

   ISS automatically connects the ISS server to the Internet and shares the connection with the ISS client. If AOL*, AT&T WorldNet*, CompuServe* 2000, Gateway.net*, or Prodigy* is your Internet Service Provider, see "Internet Service Provider Reference" on page 63.

Reading mail after connecting to ISS

When your server and client PCs are connected to ISS, keep the following notes in mind:

- Only your server PC needs to connect to your primary Internet Service Provider (ISP).
- The client PCs do not need to have a modem for you to read e-mail; just run the mail application and mail is retrieved through the ISS server. During installation of ISS, you can configure your mail application to connect to a LAN and not a dial-up connection.
- You can download e-mail from a server or a client PC.
- Utilize a common “Mbox” on your network so that all PCs can view all e-mail. refer to your email documentation for details.

Disconnect or hang up from the ISS server

1. Double-click the ISS icon and click **Hang Up**.
2. If you can’t hang up the Internet connection by clicking **Hang Up**, exit ISS to close the connection.
3. Restart the ISS server from the Start menu.

Note: You cannot hang up a continuous connection like DSL or cable modems.

Disconnect or hang up from an ISS client

From an ISS client, you can close the shared connection only if the settings on the ISS server allow any PC to hang up. When any PC hangs up the shared connection, the connection closes for all PCs on the network.

- To disconnect or hang up from an ISS client without hanging up the shared connection, quit all Internet programs on the ISS client.
- To end the network's shared Internet connection and disconnect all PCs, double-click the ISS icon, and click **Hang Up**. If **Hang Up** is not available, the ISS server has not granted permission for clients to end the connection, or, in the case of continuous connections like cable modems and DSL lines, you cannot disconnect the connection.

Exiting or bypassing ISS when connecting to the Internet

If you need to connect your PC to the Internet without using the AnyPoint Internet Sharing Software, use these instructions to exit or bypass ISS.

Choose one of two methods of connecting to the Internet without ISS:

- **Exit ISS from the ISS server** to prevent all PCs on the network from using the shared Internet connection, or
- **Bypass ISS from any PC**. This bypasses ISS only on that PC. None of the ISS services are available in this mode of operation.

> **Note:** If your network uses a gateway or an access point, refer to the documentation for these devices for connecting to the Internet.

Exit ISS from the ISS server

To prevent all PCs on the network from using the shared connection, quit ISS at the ISS server. This closes the ISS window and disconnects all network PCs from the shared Internet connection.

To quit ISS:

1 At the server PC, right-click the ISS icon on the right side of the Windows taskbar.

2 Click **Exit**.

ISS starts again when you restart the ISS server PC or when you start ISS manually at the ISS server.

Bypass ISS from any PC

You can bypass ISS at either an ISS client or at the ISS server. You might want to bypass ISS in order to play a non-Internet game with another PC on your AnyPoint™ Wireless II Network. To bypass ISS, right-click the ISS icon on the taskbar, and click to deselect **Internet Programs Connect Through ISS**.

Note: ISS clients can use the shared Internet connection even when the server PC has bypassed ISS.

Note: If you have questions about connecting to the Internet, you can refer to the AnyPoint Wireless II Network Online Support site, **www.intel.com/anypoint/support/**.

To undo the ISS bypass and share the Internet connection, right-click the ISS icon in the status area, and click to select **Internet Programs Connect Through ISS**.

Note: If you bypass ISS and then restart the PC, ISS remains bypassed. Click the ISS icon in the service tray to re-enable.

View connection status and settings

To view the connection settings and status at any PC, double-click the ISS icon, then click the **Connection** tab.

You can view the connection status and settings from either the ISS server or an ISS client, but you can change the settings only at the ISS server.

Change the ISS server

You can either add a new PC to the network and designate it as the ISS server or you can make an existing ISS client the ISS server. Remember that the ISS server must have a way to connect to the Internet. If possible, you should choose the PC with the fastest Internet connection as the server.

There can be only one ISS server on the network.

To change the ISS server:

1. At each PC, click **Start** and then click **Shut Down**.
2. If there is already an ISS server on the network, reinstall the AnyPoint software on the ISS server, and choose **ISS client** in the server/client setup screen.
3. Turn on the PC that you want as the new ISS server.
4. Install (or reinstall) the AnyPoint software on the new server PC, and choose **ISS server** in the server/client setup screen.
5. Restart the new ISS server.
6. Restart the other PCs on the network.

Connecting with Virtual Private Network (VPN)

Important: If you use or plan to install a VPN, you will not want to install Internet Sharing Software (ISS). To optimize your network with VPN, you may want to consider purchasing a Wireless Gateway or use Microsoft's Internet Connection Software (ICS) provided with windows.

If you need more information on VPN, check the AnyPoint Wireless II Network Online Support site at:

Important: www.intel.com/anypoint/support/

A VPN is an encrypted network that provides a secure private connection, usually for a corporate network. If you use VPN, note the following:

- We recommend an 802.11b Wireless Gateway, which works with most VPNs. See **www.intel.com/anypoint** for more information.
- Without a gateway, install the AnyPoint Connectivity Software Suite, but choose not to install Internet Sharing Software when prompted. If users have a Win98 SE (or higher), install Microsoft's ICS to share Internet access.
- Do not install the VPN client software on the same computer as the ICS server (the computer with the Internet connection).

With these considerations in mind, refer to your VPN manual for installation instructions.

Managing your Wireless II Network 5

When you installed your AnyPoint™ Wireless II adapter, you configured your adapter settings to work in your primary network. For desktop PCs, you rarely need to change these settings. For laptop PCs that you want to use in different locations, you need to change the settings everytime you connect to another network.

This chapter describes various tasks you might encounter when managing your Wireless II network.

Note: For a description of all networking concepts, refer to *Understanding your AnyPoint™ Wireless II Network* on page 1.

Using the AnyPoint Connection Manager

You can use the AnyPoint Connection Manager to edit wireless settings, create profiles, and connect to any network profile. You can use one of two tabs:

Wireless Control Panel tab

Use the **Wireless Control Panel (WCP)** tab to view or edit current wireless settings, such as Network ID code (SSID), Mode (Peer-to-peer or Infrastructure), channel, header, and encryption keys. This tab is the first screen you see when you open the AnyPoint Connection Manager.

On desktop PCs, you can view and edit the settings on this tab when you are changing your network, such as adding a new PC or gateway. On laptop PCs, you can easily change settings on this tab to connect to a different network.

Profile Manager tab

Use the **Profile Manager** tab to create, edit, and switch profiles. Profiles contain all the wireless settings and operating system settings such as shared drives, printers, browsers, TCP/IP addressing, and windows settings. You can also use this tab to **Scan** for other networks. See *Scan for public access points* on page 42 for details.

You may use this tab frequently if you carry your laptop from home to work or to public access points. It provides a wizard for changing basic settings. Once you select and connect to a given profile, the connection manager software loads the appropriate settings.

View and edit current settings using the Wireless Control Panel tab

You can view and edit current wireless settings using the **Wireless Control Panel.** When you open the AnyPoint Connection manager, you see the **Control Panel** tab.

The **Wireless Control Panel** shows you Status, Statistics, and Wireless Settings.

Note: To get more details for each of the settings, click **Help** on the **Wireless Control Panel** screen.

- **Status** - Shows the basic connection settings. The settings include network ID code, operating mode, and encryption. If you click **Details**, you will see additional wireless settings.
- **Statistics**:
  - **Signal strength** - This provides an indication of how well your adapter is receiving and transmitting radio signals. To maximize the signal strength, you can move your laptop PC to various locations of your room, or you can adjust the antenna on your USB adapter.

- **Signal quality** - This provides an indication of how much background noise is interfering with your signal. Poor signal quality may mean you are too close to a microwave or cordless phone in operation.

- **Wireless settings** - Provides an **Edit** button to modify your settings. If you want to edit settings for a network that has all AnyPoint devices, select **AnyPoint wireless network**. You will see a series of Wizard screens with current values. You can change any value in the screens.

  Or, if you want to edit settings for a network does not have all AnyPoint devices, choose **Manual wireless network configuration**.

Once you make your changes, click **Finish** to keep all changes.

Activate a profile

The **Profile** tab of the AnyPoint Connection Manager lists all available profiles on your computer. When you installed your adapter, the profile manager automatically created a default profile, named AnyPoint. Each time you create a new profile, the name is added to the list on the **Profile Manager** tab.

To activate an existing profile on your Profile Manager tab:

1 Click **Start > Programs > Intel AnyPoint Network > AnyPoint Connection Manager**. You can also click the AnyPoint Connection Manager icon in the lower right service tray.

2 Click **Profile Manager**. The **Profile Manager** screen and the list of current profiles will appear.

3 Click one of the profiles listed under the **Profile Name** column.

4 Select **Activate** then **Close**. Your computer will load the settings for the selected profile and reboot if necessary.

Creating a new profile

If you plan to use your laptop in several networks, you can create a profile for each network. All profiles contain the wireless and operating system settings including:

- profile name
- profile network configuration type
- network mode
- encryption
- Windows network settings

What are the profile configuration types?

With your Wireless II network, there are two ways to configure profiles:

1 **AnyPoint wireless network configuration** - Choose this profile type if your network uses only AnyPoint Wireless II devices. This profile type is the easiest to create. The profile wizard merely asks you for a name and password, and an encryption code. Using your input, the software defaults the other settings.

2 **Manual wireless network configuration** - Choose this profile type if your network includes any wireless adapter (using 802.11b technology) other than an AnyPoint Wireless II adapter. In this case, the profile wizard prompts you for more input for specific 802.11b settings.

What are the profile modes?

When you create a profile, you will select one of two profile modes: **Peer-to-Peer** (or ad hoc) mode or the **Infrastructure** mode.

Before you can make that decision, you must know which type of profile you want to create. To help you decide, consider the following options.

Configure an *Infrastructure* profile if you want to connect:

- to a public access point, such as an airport or coffee house.
- to a home or small office network with a gateway.
- to a corporate wired network or in a network that uses a gateway.

Configure a *Peer-to-Peer* profile if you want to connect to:

- a home or small office network with only PCs (and no gateway).

Refer to one of the remaining sections that best represents the type of network profile you want to create. The steps in each section help you select profile type, mode, and 802.11b settings for each.

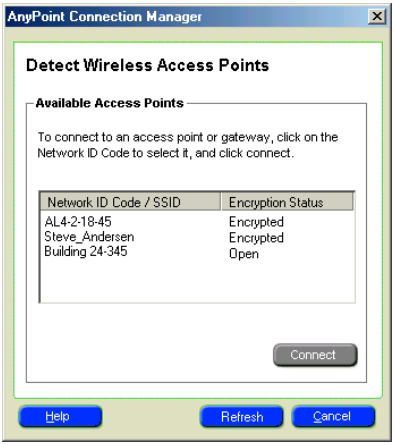
Note: For information explaining the technical differences between the mode variations, see page 3.

Scan for public access points

The **Profile Manager** tab of the AnyPoint Connection Manager includes a button to scan for access points. If you want to see if any access points are in range of your adapter, click the **Scan** button.

To scan for public access points:

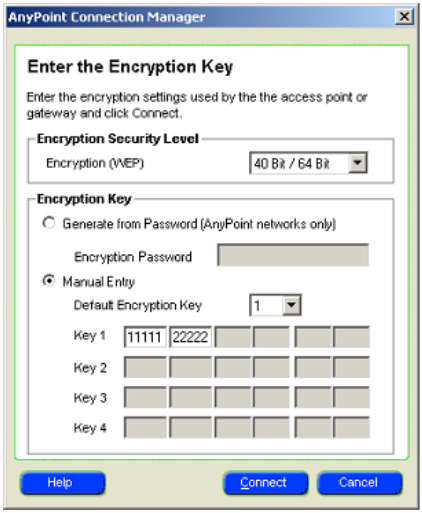
1 From the **Profile Manager** tab of the AnyPoint Connection Manager, click **Scan**. The **Detect Wireless Access Points** screen appears. You will see a listing of all access points in the area.



2 Click the access point you want to connect to.

3 Click **Connect** to obtain all the settings for that access point. If encryption is not needed for the access point, the **Detect Wireless Access Point** screen disappears and you will be connected.

If the network has encryption, you will see the **Enter the Encryption Key** screen.



If you are accessing an AnyPoint network, you can enter a password. If not, manually enter the Encryption number and key for the access point.

Create a profile for a public access point

> **Note:** These instructions represent an example of an infrastructure network. For conceptual information, refer to *Infrastructure mode* on page 4.

The following instructions help you to create a profile that connects your laptop to a public access point.

The administrator for the network must provide you with the values of all the settings, like the network ID code (SSID), channel, and encryption codes. Open the AnyPoint™ Connection Manager and use the following instructions to start a new profile and enter those settings.

> **Note:** For any screen or dialog box that appears on your monitor, you can click **Help** to provide more information.

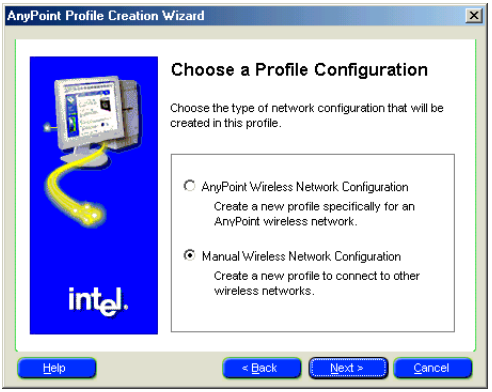
To create a profile connecting your PC to an access point (AP):

1 Click **Start > Programs > Intel AnyPoint Network > AnyPoint Connection Manager**. Alternatively, you can click the AnyPoint Connection Manager icon in the service tray.

2 Click the **Profile Manager** tab. You will see the Profile Manager screen and the list of current profiles.

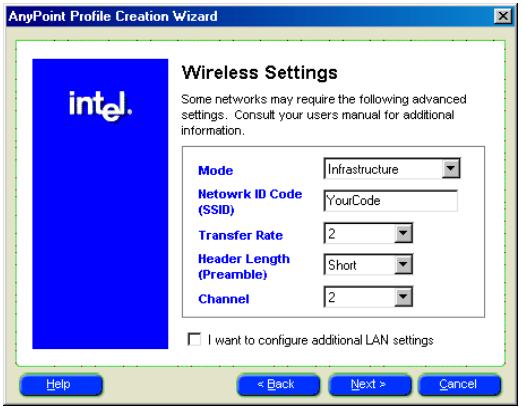
3 Click **New**. The **Create New Profile** screen appears.

4 Type a **Profile name** for your new profile, a brief **Description,** then click **Next**. The **Choose a profile Configuration** screen appears.



5 Since you are creating a profile for a network that uses an access point, a gateway, or adapters that are *not* Anypoint Wireless II adapters, select Manual **Wireless Network Configuration**.

6 Click **Next**. The **Wireless Settings** screen appears.



Enter these settings:

- Mode
- Network ID code (SSID)
- Transfer Rate
- Preamble (or header)
- Channel

For a description of each, click Help.

7 Click **Next**. The **Encryption (WEP) Key** screen appears.

8 Select the encryption security level (either 40/64 bit or 128 bit). Select the default encryption key (a number from 1 to 4). Then enter the encryption key in hexadecimal characters. For more information, click Help.

Note: The Hexadecimal character set consists of alpha-numeric characters 0 through 9 and A through F.

9 Click **Next**. The **Finish** screen appears. Click **Finish** to add your profile to the profile list of the AnyPoint Connection Manager.

If you want to activate the profile immediately, go to the AnyPoint profile Manager tab, select the profile you created and click **Activate**. If you want to wait and connect later, refer to *Activate a profile* on page 40.

Create an AnyPoint profile for your home or small office

> **Note:** These instructions do not cover installing home or small office networks with gateways or access points. See the instructions in the documentation for those devices.

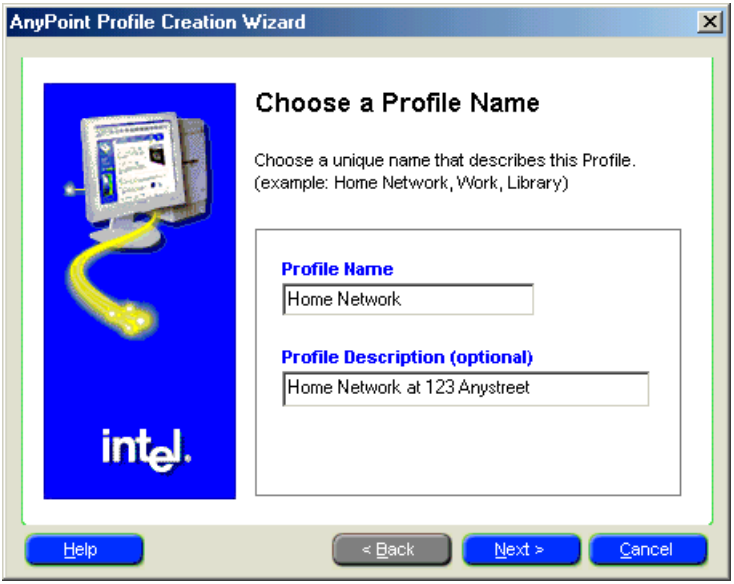
The following instructions help you create a profile to use in your home or small business office. These instructions illustrate a *Peer-to-Peer* network. For conceptual information, refer to *Peer-to-Peer mode* on page 3. Use these instructions if you are creating a profile that uses only AnyPoint devices.

To create a new AnyPoint profile.

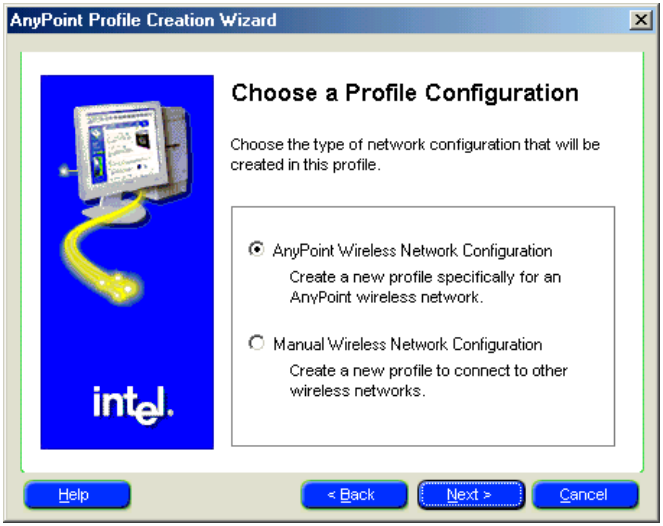
1 Click **Start > Programs > Intel AnyPoint Network > AnyPoint Connection Manager**. Alternatively, you can click the AnyPoint Connection Manager icon in the service tray

2 Click the **Profile Manager** tab. You will see the Profile Manager screen and the list of current profiles.

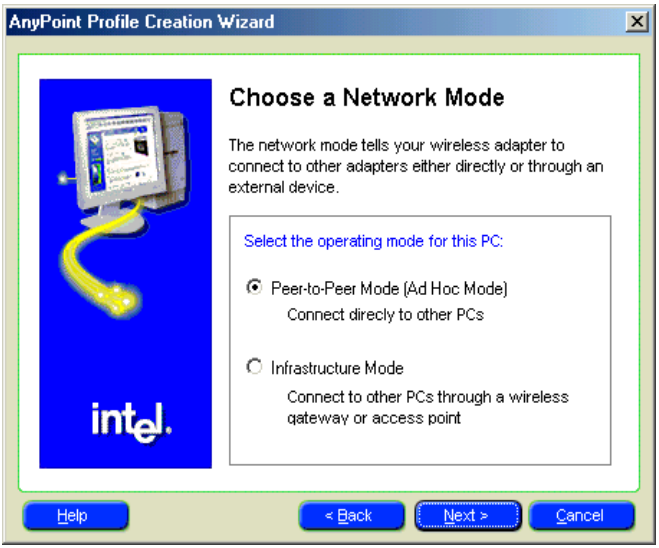
3 Click **New**. The **Choose a Profile Name** screen appears.



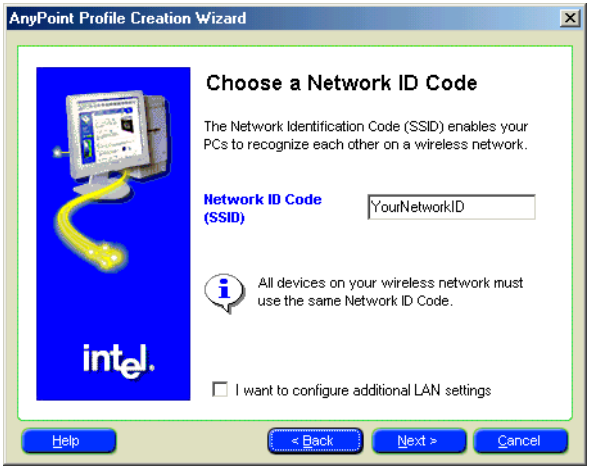
4 Type a **Profile Name** for your new profile, a brief **Profile Description,** then click **Next**. The **Choose a Profile Configuration** screen appears.



5 Select the **AnyPoint Wireless Network Configuration** type (only if all devices in your network are AnyPoint hardware). Click **Next**. The **Choose a Network Mode** screen appears.



6 Select **Peer-to-Peer** (Connect directly to other PCs) and click **Next**. The **Choose a Network ID Code** screen appears.



7 Create and type a unique network ID code (SSID). The code you create must be 32 characters or less. The code is case-sensitive. Use this same code for all the PCs in the network. Make sure the **I want to configure additional LAN settings** box is left unchecked.

8 Click **Next**. The **Data Encryption** screen appears.

Important: Data Encryption is the method that the wireless communications industry uses to ensure secure transmission of your data. It is an 802.11b standard.

Create and type an encryption password. The code you create must be 32 characters or less. The code is case-sensitive. Enter the same code for all the peer PCs in the network.

For more information describing the encryption password, see *What are Wireless II adapter and operating system settings?* on page 6.

If you are not concerned with security of your transmitted data, check the **Disable Data Encryption** box. This will slightly increase the performance of any data transfer between PCs. Unchecking the box will slightly decrease the performance, but will increase security. We recommend leaving the box unchecked. Click **Next**. The **Finished** screen appears.

9 Click **Finish**. Your profile will be added to the existing **Profile Manager** tab of the AnyPoint Connection Manager.

If you want to activate the profile immediately, go to the AnyPoint profile Manager tab, select the profile you created and click **Activate**. If you want to connect later, refer to *Activate a profile* on page 40.

Create a profile for a corporate wired network

> **Important:** If you connect your laptop to a corporate network, contact an MIS or IT representative.

In the office environment, laptops equipped with wireless network adapters connect to the corporate network through an access point or gateway, which acts as a bridge to connect your wireless laptop to the hard-wired infrastructure of your office network. Often, access points are mounted on walls or ceilings, so users can access the corporate network from any location in the building or campus.

Once connected, your laptop functions in the same way on the corporate network as it does using a wired connection.

Use AnyPoint Connection Manager to create your corporate network profile. Your IT representative can provide values for any of the wireless settings listed below.

- Profile Name
- Profile Description (optional)
- Profile Type
- Mode
- Network ID (SSID or ESSID)
- Transfer Rate (TxRate)
- Preamble (header) Length
- Channel
- Encryption Level (WEP)
- Encryption Password
- Manually entered encryption key (optional)
- IP Address (manual or auto assigned)
- DNS Server Address (manual or auto assigned)
- Automatically Detect Proxy Settings
- Automatic Proxy Configuration Script
- Use Proxy Server
- Do not use Proxy Server for Intranet
- Use Same Proxy Server for all Protocols
- Proxy Exceptions

Troubleshooting 6

This chapter addresses some of the most common problems people have with their AnyPoint™ Wireless II Network. If the information you need is not here, check the AnyPoint Wireless II Network Online Support site at:

www.intel.com/anypoint/support/

I can't see a network PC from another PC

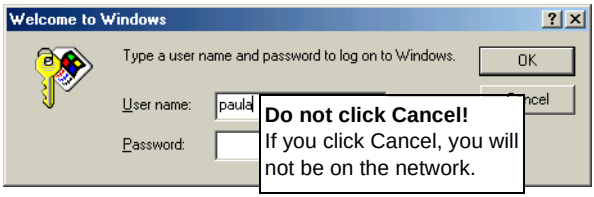
First, make sure both PCs are turned on, and that the network adapters' hardware and software are correctly installed. Follow these steps in order.

Make sure the adapters and cables are installed correctly

For information about installation and cables, refer to the *Installation Guide* (the poster that came with your adapter).

Make sure you are logged on to the network

Restart all the PCs on the network. When Windows* restarts, the **Enter Network Password** screen *may* appear, depending on your previous system settings. If it does appear, type a new user name (or accept the default), create a password (optional), and then click **OK**.



See page 15 for more information on user names and network passwords.

Make sure the PCs on the network are in the same workgroup

To verify work group settings:

1. Click **Start > Settings > Control Panel**.
2. Double-click **Network**.
3. Click the **Identification** tab.
4. Change the **Workgroup** setting to the same name on all PCs.

Check the IP address and subnet mask on PCs running Windows* 95, Windows 98, and Windows Me

Most of the time, the AnyPoint software or Windows automatically sets the IP address and subnet mask on your PC. If you have problems, you can manually specify an IP address.

To verify an IP address and subnet mask for your adapter:

1. Click **Start** then click **Run**.
2. In the Run box, type "winipcfg" then click **OK**. The **IP Configuration screen** appears,

> **Note:** For Windows 2000 Professional, view the IP address at the command prompt. Then type the following: command
> C:> ipconfig /all.

3. View the **Intel AnyPoint Wireless II Adapter** and verify that the address is in the same subnet range (such as 192.254.10.10, subnet 255.255.255.0).

   If you need to change the IP address, reference the following URL, **www.intel.com/anypoint/support**, and read the document entitled, "I want to change my adapter's IP (Internet Protocol) address."

I have an insufficient permissions error when running Windows 2000

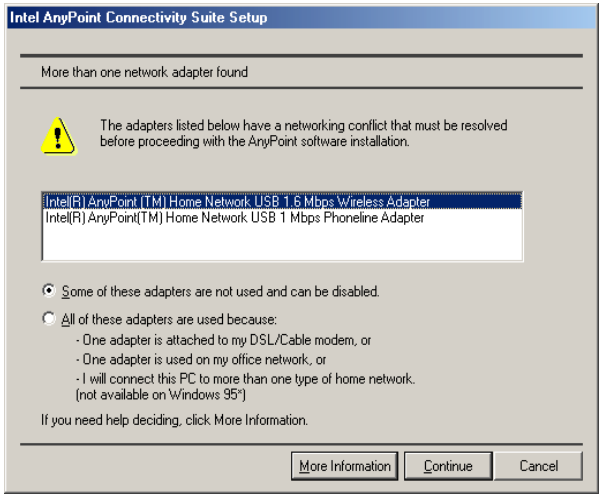
Any user who is not a member of the Administrator's group will not have permissions to run the AnyPoint™ software.

To add the current user to the Administrator's group:

1. Log on as an administrator or as a member of the Administrators group.
2. Click **Start > Settings > Control Panel**.
3. Double-click **Users and Passwords**.
4. Under Users for this computer, click the user you want to change and then click **Properties**.
5. On the **Group Membership** tab, click **Standard user** (Administrators Group)
6. Click **OK** to close all dialog boxes.

Remove incompatible network adapters

If the Setup program determines you have an additional network adapter, the following screen appears.



To resolve the conflict between adapters:

1. If you already know which adapter in the list can be disabled, select **Some of these adapters are not used and can be disabled**. If you are not sure which adapter to remove or you need all of the adapters listed, go to step 4.
2. If you have selected **Some of these adapters are not used and can be disabled**, then click **Continue**. A screen showing the conflicting adapters appears.
3. Select the adapter you want to remove, click **Disable** and then click **Continue**.

   The Setup program continues with the software installation. Go back to the Setup chapter, "Install the AnyPoint software" on page 11, and continue with the instructions.
4. If you selected **All of these adapters used because**, then click **Continue**. A dialog box appears that provides more information to help you decide which adapter to disable.
5. Exit the Setup program and assign a different IP/Subnet address for the the adapter. For instructions to do this, refer to the customer support site: **www.intel.com/anypoint/support/.**

   Once you reach the support site, find the topic “I want to change my adapter IP address.”

I can’t connect to my ISP from an ISS client PC

Try the following actions in order. After each step, try connecting to your ISP. If your attempt is unsuccessful, go to the next step.

Make sure the ISS server PC is turned on and running the ISS software

To tell if ISS is running, look for the ISS icon in the status area of the server PC’s Windows taskbar.

Make sure both the ISS server and ISS client PCs are on the network

To find out if both PCs are on the network, open Network Neighborhood on the client PC. If you can see the ISS server PC, both PCs are on the network. Otherwise, refer to "I can’t see a network PC from another PC" on page 51.

If you are using AOL*, check the AOL software

At the ISS client PC, make sure the AOL* software is **not** running.

At the ISS server PC, check if you need to enter your AOL password or close an advertising screen. If the server PC is waiting for user input on either of these things you will not be able to connect at the client PC (see "Set up America Online* (AOL*) with ISS" on page 63).

If you are using AT&T WorldNet*, or CompuServe 2000*, check their settings

Make sure you have set up ISS to work with your ISP.

- AT&T WorldNet. See "Set up AT&T WorldNet* with ISS" on page 64.
- CompuServe 2000. See "Set up CompuServe* 2000 with ISS" on page 65.

Find out if the problem is ISS or your ISP connection

To rule out ISS as the problem:

1. Use ISS to connect at the server PC. If you **can** connect to the Internet from the ISS server PC, reinstall ISS on the **client** PC.
2. If the problem persists, try to connect from the server PC without using ISS. See "Exiting or bypassing ISS when connecting to the Internet" on page 35.
   - If you can connect to your ISP **without** ISS, reinstall ISS on the **server** PC.
   - If you can’t connect to your ISP with or without using ISS, the problem is not ISS. Check your ISP connection settings.

I keep getting disconnected from the Internet without hanging up

Check automatic hang-up settings

ISS has an automatic feature that hangs up a connection after a certain amount of time with no Internet activity. Change the automatic hang-up setting to wait for a longer amount of time.

Windows also has an automatic timeout setting. If necessary, change it so it is longer than the ISS timeout setting.

To check automatic hang-up settings:

1. Click **Start > Settings > Control Panel**, then double-click **Internet**.
2. Select the **Connection** tab, and click **Settings**.

   Check how long a connection can be idle before being disconnected. If it is less time than the automatic hang-up setting in ISS, increase the amount of time.

Verify that your ISP connection information is correct

Check the settings in the program you use for dialing your ISP.

Contact your Internet Service Provider

If none of these steps solves the problem, there may be a problem with your ISP. Contact your ISP.

Can I use Internet sharing software from more than one manufacturer?

No. All PCs on the network must run Internet sharing software from the same manufacturer. See the next section for more information.

ISS and ICS (Internet Connection Sharing)

> **Note:** If you have or are planning to install Virtual Private Network (VPN), you may want to use Internet Connection Sharing. For details, see "Connecting with Virtual Private Network (VPN)" on page 37.

Configuring your browser to use the Microsoft Internet Connection Wizard

If the Microsoft Internet Connection Wizard starts when you run an Internet program, make sure you select the option that says you **already have an Internet account on the computer** when asked about the Internet connection.

- In Internet Explorer* 3.0, select **I already have an Internet connection set up on this computer and do not want to change it.**
- In Internet Explorer 4.0, select **My computer is already set up for the Internet. Do not show this wizard again.**
- In Internet Explorer 5.0, select **I want to set up my Internet connection manually, or I want to connect through a local area network (LAN).**

Selecting any other option prevents ISS from working properly.

What is the difference between ISS and Microsoft's ICS?

The AnyPoint Internet Sharing Software (ISS) enables all PCs on your network to access the Internet through one shared connection. Microsoft's Windows 98 Second Edition has an optional feature, Internet Connection Sharing (ICS), that provides similar capabilities.

Do ICS and ISS work together?

Yes, they can co-exist, but this is not recommended. Select one or the other. See "How do I decide if I should use ISS or ICS?" on page 56.

How do I decide if I should use ISS or ICS?

If you have only Windows-based PCs on your network, use ISS and leave ICS uninstalled. ISS provides better status reporting and control of the shared connection. If you have other devices, such as a Macintosh* or PCs running other operating systems or VPNs on your network, use ICS.

Check PCs running Internet Connection Sharing (ICS)

To determine which PC has ICS installed:

1. On the PCs running Windows 98, Second Edition, click **Start > Settings > Control Panel > Add/Remove Programs**.
2. Select the **Windows Setup** tab.
3. Select **Internet Tools** in the list, and click **Details**.
4. If **Internet Connection Sharing** is checked, ICS is installed on that PC.

To restore PCs to a home network that has a PC with ICS installed:

1. Determine which PC has ICS installed.
2. Shut down all network PCs.
3. Restart the PC with ICS installed first.
4. Restart the other network PCs.

Network game problems

Make sure the PCs you want to use are turned on and are on the network

With some network games, you will need to see if other clients are on the network before you can play computer games. To find out if the PCs are on the network, open **Network Neighborhood** (or **My Network Places** for Windows Me). If you can see the other PC, both PCs are on the network. If you cannot, refer to "I can't see a network PC from another PC" on page 51.

Make sure the game is installed on each PC you want to use

To play a game across the network, each participating PC must have a copy of the game installed. Some games also require you to use a different CD for each PC. See the documentation included with the game or the manufacturer's Web site.

Make sure the network settings are correct for the game

See the game's documentation for information about required network settings. In particular, make sure you are using the same protocol (TCP/IP or IPX) for the game on each PC.

Also, some games require that only client PCs are operational, and not the Server PC. In those cases, you will need to right-click the ISS icon and remove the check from the message **Internet Programs Connect through ISS**. This will prevent the ISS server from interrupting the game.

Make sure you are accessing the game correctly

See the game's documentation to find out how to access the game on a network.

I can't see a drive or printer on a network PC

Open **My Computer** and look for the drive or printer (printers are in the Printer folder) after each step. If you cannot see it, go to the next step.

To view a drive or printer on a network PC:

1. Make sure to turn on the PC where the drive or printer is located.
2. Make sure both PCs are on the network.
3. Make sure the PC has shared the drive or printer.

   Open **Network Neighborhood**. If you can see the other PC, both PCs are on the network. Otherwise, refer to "I can't see a network PC from another PC" on page 51.

I can't map or print to a printer

If you can't map to a printer, try to map again each time you verify one of the following:

- Make sure the PC that has the printer physically attached to it is on the network and turned on.
- At the PC mapping the printer, open **Network Neighborhood**. If you can see the PC sharing the printer, both PCs are on the network. If you cannot, refer to "I can't see a network PC from another PC" on page 51.
- Make sure the printer is shared. Printers must be shared before they can be mapped. See "Change printer sharing and mapping" on page 30.
- Make sure the printer driver is installed on the PC mapping the printer. See "Install printer drivers" on page 31.

If you cannot print to a mapped printer, try printing after the following:

- Make sure the printer and the PC sharing the printer are turned on.
- Make sure both PCs are on the network.
  Open **Network Neighborhood**. If you can see the other PC, both PCs are on the network. If you cannot, refer to "I can't see a network PC from another PC" on page 51.
- Make sure the printer is shared and mapped. See "Change printer sharing" on page 30 and "Change printer mapping" on page 30.

I can’t map to a drive

After each of the following steps, try mapping the drive. If you still cannot map the drive, go to the next step.

1. Make sure the PC sharing the drive is turned on and on the network.
2. At the PC mapping the drive, open **Network Neighborhood**. If you can see the other PC, both PCs are on the network. If you cannot, refer to "I can’t see a network PC from another PC" on page 51.
3. Make sure the drive is shared. If it is not, go to the PC and share the drive. See "Change drive access" on page 29.

I can’t write or save files to a drive on a network PC

Make sure your drives are operational. Check also that the drive access permissions are set for **Shared - Read Only** access. To change the drive’s access from **Shared - Read Only** to **Shared - Full**, see "Change drive access" on page 29.

> **Note:** After you change the drive’s access to **Shared - Full**, you may need to save the file to another location, close the file, reopen it, and select **Save** again.

Printer drivers not found

The printer driver you need may not be installed on the PC trying to print. This should be installed automatically when you map to the printer, but some printers require manual installation.

Some printer manufacturers have their own printer installation software. You may have to install this software on all PCs that will use the printer. Use the CD or disk(s) that came with your printer, and follow the printer manufacturer’s instructions for installing the printer drivers. Often this requires you to run the Windows Add Printer wizard (click **Start > Settings > Printers**, then double-click **Add Printer**). See "Install printer drivers" on page 31.

My laptop has speaker noise

Certain types and brands of laptops experience static noise through speakers due to PC Card or radio frequency networking products.

One work-around is to plug in either an external speaker or headphones.

Note: If you have troubleshooting questions not contained in this manual, you can find more information at the AnyPoint Wireless II Network Online Support site, **www.intel.com/anypoint/support/**.

I am trying to access my Wireless II network with an Intel PRO/Wireless adapter

The following instructions help you use a PC with an Intel® PRO/Wireless adapter in an existing Wireless II network. The instructions in this method are similar to those for accessing an AnyPoint™ Wireless II network with any 802.11b PC card. Basically, you will use the profile switching software from the PRO/Wireless unit to switch to the settings of the Wireless II network.

To access your AnyPoint Wireless II Network with a PRO/Wireless adapter:

1. On any PC with an AnyPoint Wireless II adapter (already on the network), open the AnyPoint Connection Manager.
2. Click the **Details** button on the **Control Panel** tab. This displays the **Detailed Settings** information box.
3. Print this information box.
4. On the PRO/Wireless PC, start the Profile Manager software (WLAN places), create a new profile, and copy the following settings into the profile.
   - Profile mode (Peer-to-Peer or Infrastructure)
   - Encryption Code (Enabled or Disabled). If the encryption is Enabled, then the specific encryption keys must match the Wireless II code
   - Channel
   - SSID Network ID name (sometimes referred to as ESSID)
   - Header length (short or long)

5 Save the new Profile and name it (Anypoint, for example).

> **Note:** If the PC card is not an Intel PRO/Wireless adapter, then you will need to change settings in another manner.

I am trying to install a Wireless II adapter into an Intel PRO/Wireless network

Use the following instructions if you have an existing 802.11 network (other than an AnyPoint Wireless II network) and you want to add one or more AnyPoint Wireless II adapters to the network.

> **Note:** These instructions are generic and will work with most models in the PRO/Wireless series.

To install a laptop with an AnyPoint Wireless II adapter into a Pro-Wireless network:

1 On the PRO/Wireless PC, start the Profile Manager software (WLAN places) and write down the following settings from the profile.

- Profile mode (Peer-to-Peer or Infrastructure)
- Encryption Code (Enabled or Disabled. If the encryption is Enabled, then the specific encryption keys must match the Wireless II code
- Channel
- SSID Network ID name (sometimes referred to as ESSID)
- Header length (short or long)
- TCP/IP addressing

2 On the PC with the AnyPoint Adapter, install the AnyPoint software and restart your PC.

3 Start the AnyPoint Connection Manager.

4 Click the **Profile Manager** tab.

5 Click **New** to create a new profile.

6 Select the **Wireless Profile**.

7 Enter the same values printed from the 802.11b network. All adapters in the network must match these 802.11b settings.

8 Save the new profile, then click **Activate**.

My Wireless II connection keeps getting interrupted

Occasionally, frequencies from your wireless II adapters can conflict with some cordless phones which use the same frequency range (2.4 Ghz). Also, some interference may occur if your 802.11b equipment is physically close to microwave units. If possible, keep your cordless phones and microwave units several feet away from the Wireless II adapter.

What do the lights on my Wireless II adapter mean?

The Wireless II adapters include special Light Emitting Diodes (LEDs) that informs you of its operating state.

For the USB adapter, the lights indicate:

- **Power light** - ON indicates power
- **Link** - OFF indicates that the device is unconfigured. ON (but not blinking) indicates that the device driver is loaded, but there is no network connection. A blinking light indicates connection to the network.

For the PC card adapter, the lights indicate:

- **Link** - OFF indicates no power or that the device is unconfigured. ON (but not blinking) indicates connection to the network. A blinking light indicates that the device driver is loaded, but there is no network connection.

Internet Service Provider Reference 7

Set up the network to share Internet access

Internet Sharing Software (ISS) lets multiple PCs on the AnyPoint™ Wireless II Network access the Internet simultaneously, using only one modem (or other Internet connection) and one Internet account.

Important: If you have installed your AnyPoint Wireless II adapter into a network through an access point, VPN, or a gateway, you cannot use ISS and its features.

For most Internet Service Providers (ISPs), the Internet connection is shared automatically when you install ISS. However, some ISPs (such as America Online* and AT&T WorldNet*) require extra steps to work with ISS. Continuous connections, such as cable modems or DSL, also require special procedures to set up the connection. If you access the Internet through any of these systems, see the appropriate section below.

Note: If you can't find the ISP or the information you are looking for, visit the AnyPoint™ Wireless II Network Online Support site at:

www.intel.com/anypoint/support/

Set up America Online* (AOL*) with ISS

In addition to Internet access, AOL* provides other services to its subscribers. Only the ISS server can access those services through AOL's software. ISS clients can use Internet programs such as Netscape Navigator* or Microsoft Internet Explorer* to access the Internet through the ISS server's connection. Users as ISS clients can also access AOL services, like e-mail, at AOL's Web site (www.aol.com).

The AnyPoint Internet Sharing Software is compatible with AOL versions 3.0 or higher. To find out which version of AOL you are using:

- Start AOL, and click **Help > About America Online**.

Note: AOL versions 5.0 and higher include an option to make AOL the default Internet application. **Do not enable this option.**

Save your AOL password

When AOL starts, it prompts you for a password. You can set up AOL to remember your password permanently.

If you don't set up a password, ISS client users must enter the password at the ISS server every time they connect to AOL.

To save an AOL 4.0/ 5.0/6.0 password:

1. From the ISS server, start and sign on to AOL.
2. From the **My AOL** menu, select **Preferences > Passwords**.
3. Type the password, and click **OK**.
4. For each screen name, repeat step 3.

To save an AOL 3.0 password:

1. At the server PC, start AOL.
2. From the **Members** menu, select **Members > Preferences > Passwords**.
3. Type the password in the password text box, and click **OK**.
4. For each screen name, repeat step 3.

Disable AOL's special offer screens

AOL might display a pop-up advertising screen when it starts. If you don't move past or disable this screen at the ISS server, the ISS client cannot share the Internet connection. By disabling the advertising screen, you can avoid trips to the server PC every time an ISS client establishes an Internet connection.

To disable the special offer screens:

1. At the ISS server, start AOL.
2. Click **Keyword**, type **Marketing Preferences**, and then click **Go**.
3. Click **POP-UP > Continue**, and select **No, I do not want to receive special AOL members only pop-up offers**.
4. Click **OK**, and follow the instructions on the screen to exit out of the **Marketing Preferences** screens.

Set up AT&T WorldNet* with ISS

AT&T WorldNet software creates a file that identifies your account to AT&T's system when you dial in. This file is called account.txt or att_account.txt. You must copy this file to all ISS clients that use the AT&T WorldNet software.

To set up AT&T WorldNet on your AnyPoint Wireless II network:

1. On the ISS server PC, install AT&T WorldNet software. For more information, refer to AT&T's documentation.
2. Copy the account.txt or att_account.txt file to a disk.

> **Note:** If you don't know where the file is, use the Find feature in Windows (**Start > Find > Files or Folders**) to locate it.

To install AT&T WorldNet on ISS client PCs

1. On an ISS client, begin installing the AT&T WorldNet software.
2. At the **Register Account** screen, select **I already have an account that I would like to use**, and click **Next**.
3. Select **By importing an account file**, and click **Next**.
4. Insert the disk containing the account.txt or att_account.txt file into the disk drive.

> **Note:** Make sure the location of the account file reads "a:\account.txt" or "a:\att_account.txt" (where "a" is the letter of the disk drive). If it does not, click **Browse**, and locate it on your disk drive.

5. Click **Next**, and follow the screen prompts to finish installation.
6. Repeat steps 1-5 for each ISS client.

Set up CompuServe* 2000 with ISS

You can use a PC with a CompuServe* 2000 account as your ISS server PC. For details on setting up ISS with earlier versions of CompuServe, see the AnyPoint Wireless II Network Online Support site at **www.intel.com/anypoint/support** and search for "CompuServe."

> **Note:** CompuServe 2000 doesn't appear in the ISP list in the ISS setup program. To select CompuServe 2000 as your ISP, select "America Online" from the drop-down list.

In addition to Internet access, CompuServe 2000 provides other services to subscribers. Only the ISS server can use the CompuServe 2000 program to access those services.

ISS clients can use programs such as Netscape Navigator or Microsoft Internet Explorer to access the Internet.

Save your CompuServe 2000 password

When CompuServe 2000 starts, it prompts you for a password. You can set up CompuServe 2000 to remember your password permanently. If you don't, ISS client users must enter their password **at the ISS server PC** every time they connect to CompuServe 2000.

To save your CompuServe 2000 password:

1. At the ISS server, connect to CompuServe 2000.
2. From the **Access** menu, click **Preferences > Passwords**.
3. Type the password for each member name, and then select the **Connect** check box.
4. Click **OK**.

Set up continuous Internet connections with ISS

ISS treats continuous Internet connections (cable modems, DSL lines, satellite connections) like dial-up Internet accounts, with some exceptions:

- You can't hang up the connection
- The connection doesn't time out

To make sure your cable or DSL service is set up properly:

1. Click **Start > Intel AnyPoint Network > Internet Sharing Server**.
2. Click on the **Connection** tab and select **DSL service or Cable Modem**.

To use a continuous Internet connection from an ISS server or client, run an Internet application like Microsoft Internet Explorer or Netscape Navigator.

An important note on PC naming with continuous Internet connections

When continuous Internet connections are installed, it is often necessary for the installer to rename your PC. **Do not change this name**. Changing the name assigned by the installer may make the PC unable to access the Internet.

If you have already changed the PC name, reset it:

1. From the **Start** menu, click **Settings > Control Panel > Network**.
2. Click the **Identification** tab.
3. In the **Computer name** text box, type the PC name the installer provided, and then click **OK**.

Note: If you have questions about Internet Service Providers, you can find information at the AnyPoint Wireless II Online Support site, **www.intel.com/anypoint/support/**.

Technical Support Option 8

E-mail and Web Support

You will find several self-help tools at www.intel.com/anypoint/support . On this site you can try our interactive troubleshooting guide, find a solution to your specific error message, check for compatibility and software updates. You are also able to submit a question to us via the web and review any pervious cases you have had with us should you encounter the same issue in the future.

Phone Support

Find your serial number

For external adapters, including PC Cards, the serial number is located on the adapter.

To find out the serial number for an internal adapter:

1. Click **Start > Settings > Control Panel**, then double-click **Network**.
2. In the list of network components, select the **Intel® AnyPoint™ adapter**.
3. Click **Properties**.
4. Click the **Advanced** tab.

Phone number and hours

(916) 377-0283

Monday-Friday 7AM-8PM Pacific time
Saturday 7AM-3PM Pacific time

We are closed on these US holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.

Agency Notices

All notices apply only to products bearing the associated marks.

Underwriter Laboratories Statement

This product complies with the safety requirements for Information Technology Equipment, and is Listed by Underwriters Laboratories, Inc. to UL 60950 and CSA C22.2 No. 950 for the U.S. and Canada.

FCC Compliance Statement

FCC Rules and Regulations - Part 15

This product has been tested and found to comply with the limits for a Class B computing device pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Installed correctly, it probably will not interfere with radio or TV reception. However, we do not guarantee the absence of interference.

This product generates and uses energy of about the same frequency as radio and TV broadcasts. Installed incorrectly, it may interfere with reception of radio and TV broadcasts. If you suspect this product is causing interference, turn your computer on and off while the radio or TV is showing interference. If the interference disappears when you turn the computer off and reappears when you turn the computer on, something in the computer is causing interference.

To reduce interference, try these suggestions:

- Change the direction of the radio or TV antenna.
- Move the computer, radio, or TV. For example, if the computer is to the right of the TV, move it to the left of the TV. Or move them farther apart.
- Plug the computer into a different electrical outlet than the radio or TV.
- Ensure that all expansion slots (on the back or side of the computer) are covered. Also ensure that all metal retaining brackets are tightly attached to the computer.

Note: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution: If the device is changed or modified without permission from Intel, the user may void his or her authority to operate the equipment.

If you experience trouble with this telephone equipment, please contact Intel Customer Support, at 800-228-4549 for information on obtaining service or repairs. The telephone company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

There are no user serviceable parts contained in this equipment.

This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subject to state tariffs.

FCC RF exposure compliance

Warning: Install or position the USB device so that the antenna is at least 20 cm (8 in.) distance from the user or other persons. Failure to locate the antenna at this minimum distance may result in exceeding the FCC limits for human exposure to RF (radio frequency) energy. Also, do not operate in conjunction with any other antenna or transmitters. For laptop PC card antenna, there is no minimum distance. The pc card has been tested and found compliant with FCC requirements for human exposure to RF energy.

Canadian compliance (Industry Canada)

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the interference-causing equipment standard entitled “Digital Apparatus”, ICES-003 of the Canadian Department of Communications.

Cet appareil numérique respecte les limites bruits radioélectriques applicables aux appareils numériques de Class B prescrites dans la norme sur le matériel brouilleur: “Appareils Numériques”, NMB-003 édictée par le Ministre Canadien des Communications.

This equipment complies with Canada 210.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing."

Glossary

802.11b: A specific networking standard created by IEEE that defines engineering design parameters for high-speed wireless data transmission. The 802.11b standard allows different manufacturers to create wireless products that are compatible with each other.

Ad Hoc Mode: (or peer-to-peer) A software setting for 802.11b wireless adapters. Ad-Hoc mode allows independent peer-to-peer connectivity from one PC to another in a wireless network. See also Access Point and Infrastructure Mode.

Adapter (network adapter or NIC): A hardware device that allows your PC to connect to a network. Internal adapters install inside your PC like other expansion cards. External adapters connect to your PC through the USB or a serial port like other external devices.

Access Point (AP): A hardware device that serves as a communications "hub" for 802.11b wireless PCs and can also provide a connection to a wired network. An AP can double the range of wireless client PCs and provide enhanced security.

Channel:

Client: Any PC that requests services (files, print capability) from another member of the network. Typically, a group of client PCs depend on the functions of a server PC. Similarly, client wireless adapters can depend on a variety of functions provided by an access point.

Driver (Device Driver): Special software programs required for any device to install properly on a PC. Devices include network adapters, printers, scanners, modems, audio cards, CD drives, monitors etc. Drivers enable the device to coordinate its activities with the PC to which it is attached.

Encryption: A method of converting all of the information that is transmitted over a wireless network into a form that cannot be read by unauthorized persons. Encryption provides additional data security in 802.11b wireless networks.

Ethernet: The most widely used network access method. Ethernet is defined by the IEEE 802.3 standard. Ethernet networks operate at 10Mbps using CSMA/CD (Carrier-Sense Multiple Access) to run over 10BaseT cables.

Gateway: A network device that provides a bridge or entrance to another network. For example, a residential gateway can allow a wireless network to connect to a phoneline or Ethernet network.

Infrastructure Mode: A software setting for 802.11b wireless adapters allowing connectivity to a central access point (AP). The AP not only mediates wireless network traffic in the immediate neighborhood, but also provides communication with a wired network. See AD-Hoc and Access Point.

IEEE: The Institute of Electrical and Electronics Engineers.

ISP (Internet Service Provider): An organization that provides access to the Internet. Users connect with the ISP using a conventional or broadband modem. The major online services

such as America Online* and CompuServe 2000* provide Internet access but are still known as “online services”, not ISPs.

LAN (Local Area Network): A computer network that serves users within a defined geographical area. The benefits include the sharing of Internet access, files and equipment like printers and storage devices. LANs use Ethernet cabling (10BaseT), existing phone lines or radio waves to transmit data between the PCs. LANs include home and small-business networks.

Mapping: Lets your PC recognize and communicate with a drive or printer located on another PC in the network. For example, in order to copy files from a hard drive located in another PC, you must “map to the drive” from your PC **and** make sure the drive is shared at the other end. See also Sharing.

Mbps: Megabits per second, a measure of data transmission speed.

PCI: A local bus standard that applies to internal PC devices such as network cards or sound cards. The standard defines the way data travels between the CPU, system memory and the device as well as the physical dimensions of the connector.

Peer-toPeer: See Ad Hoc.

Preamble (Header):

Profiles (Network Profiles): A collection of software settings and network identification information that is unique for each network. When a single PC disconnects from one network and reconnects with a different network, the active network profile must also be changed.

Protocols (Network Protocols): Define the rules for all aspects of data communication just like a written language uses rules for spelling, sentence structure, etc. Protocols describe the way data is organized, transmitted and received. The TCP/IP protocol is one of the most common.

Resources (Network resources): Software or hardware shared by the users of a network. Resources can include software applications, documents, digital pictures and music, games, numeric data, and devices such as printers, modems and disk drives.

Roaming: Moving seamlessly from one access point coverage area to another with no loss in connectivity.

Server: Indicates a relationship where the server PC provides specific functions for a group of client PCs. The server component of AnyPoint Internet Sharing Software (ISS) provides the Internet connection as well as firewall and parental-control protection for other PCs in the network that have ISS client installed.

Sharing: Makes drives and printers on your PC accessible to other PCs on the network. The user sets the “share status” for each drive or printer on his or her own PC. The user selects either *Shared-Full, Shared-Read Only* or *Not Shared* for each drive and printer. (Note: You “share” resources on your own PC and “map to” resources on other PCs.)

Transfer rate:

SSID: Stationary Set ID. To communicate with each other, all wireless devices on the same network must use the same SSID. The SSID allows two or more wireless networks to function in the same vicinity without interfering with each other. The SSID can be a word or a combination of letters and numbers.

USB: A peripheral bus standard that enables external devices to attach to a PC while the PC is powered on. The flat shaped USB connector plugs into a similar shaped socket on the PC.

VPN: Virtual Private Network. A VPN is a type of computer network that functions like a private network but uses public phone lines to carry data. VPNs use special communication protocols and security techniques to maintain privacy at a lower cost than is possible with dedicated phone lines.

Specifications

The following technical specifications are for reference purposes only. Actual product performance and compliance with local telecommunications regulations may vary from country to country. Intel Corporation will only ship products that are type approved in the destination country.

AnyPoint Wireless II Network Adapters

USB External	
Connection type	External USB connection on PC
Frequency Band	2.400–2.4835 GHz
Data Rate	11 Mbps, 5.5 Mbps, 2 Mpbs, 1 Mbps
Output Power	13 dBm TYP
Range	Up to 300 feet
Operating Temperature	0°C to +40°C
Humidity	Maximum 95% noncondensing
Roaming	Full mobility and seamless roaming from cell to cell and across access points
Operating Voltage	5 V
Number of Channels	11– United States and Canada 13 – Most European Countries 4 – France 13 – Japan (14 optional)
Security	40/64 and 128 bit WEP encryption

USB External	
Warranty	3 year
Standards	IEEE 802.11b, Wi-Fi compliant
Network Protocols	TCP/IP, IPX
Network Architecture Types	Supports peer-to-peer networking and communication to wired networks via Access Points

Note: Data rate and range will vary with environmental conditions. Product automatically “steps-back” to lower data rates to maintain connectivity.

PC Card	
Connection type	Type II 16–bit PC card
Frequency Band	2.400–2.4835 GHz
Data Rate	Dynamic rate shifting: (auto selects highest possible rate) 11 Mbps, 5.5 Mbps, 2 Mpbs, 1 Mbps
Output Power	13 dBm TYP
Range	Up to 300 feet
Operating Temperature	0°C to +55°C
Humidity	Maximum 95% noncondensing
Roaming	Full mobility and seamless roaming from cell to cell and across access points

PC Card	
Number of Channels	11– United States and Canada 13 – Most European Countries 4 – France 13 – Japan (14 optional)
Security	40/64 and 128 bit WEP encryption
Warranty	3 year
Standards	IEEE 802.11b, Wi-Fi compliant
Network Protocols	TCP/IP, IPX
Network Architecture Types	Supports peer-to-peer networking and communication to wired networks via Access Points

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