Connecting Through a Wired LAN

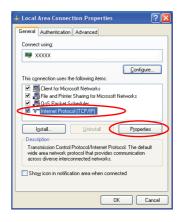
1. Connect a LAN cable to the computer's LAN port.



- 2. Click Start > Control Panel.
- 3. Click Network and Internet Connections in the [Control Panel] window.
- 4. Click **Network Connections** in the [Network and Internet Connections] window.
- 5. Right-click the Local Area Connection icon and click Properties.



6. On the **General** tab, select "Internet Protocol(TCP/IP)" and click **Properties**.



7. To use DHCP:

On the **General** tab, select "Obtain an IP address automatically" and "Obtain DNS server address automatically". Click **OK**.

To use a static IP:

On the **General** tab, select "Use the following IP address" and fill in the IP address, Subnet mask, Default gateway, Preferred DNS server, and Alternative DNS server fields. Click **OK**.

To use both DHCP and static IP simultaneously:

On the **Alternate Configuration** tab, click **User configured** and fill in the fields. Click **OK**.



Connecting Through a Wireless LAN (Option)

A wireless network (Wireless LAN) environment is a network environment that enables communication between multiple computers at home or a small-size office through wireless LAN devices.

Using the wireless network connections between the systems, you can use normal network functions such as sharing of files, folders and printers. Using computer-tocomputer network (ad hoc) connections, you can access the Internet through a computer connected directly to the Internet even if your computer is not directly connected to the Internet. For details, see "Using Network Services" on page 48.



The information provided in this section only applies to models equipped with an optional wireless LAN device.



To turn off the Wireless LAN

If the wireless LAN is turned on, the computer consumes much power, therefore shortening the amount of time you can run on battery. Therefore, if you are not using the WLAN or if you are in an environment that does not provided WLAN, you are recommended to turn off the WLAN by pushing the WLAN/Bluetooth button (p15) on the computer.

Wireless network connections can be classified into two categories.

1) Access Point

You can connect to an AP to use the network. This is possible only in an environment equipped with an AP. For details, see "Connecting to an Access Point (AP)" on page 38.



What is an Access Point (AP)?

An AP is a network device that bridges wired and wireless LANs, and corresponds to a wireless hub in a wired network. You can connect multiple wireless LAN installed computers to an AP.

2) Computer-to-computer (ad hoc)

This is also called a peer-to-peer or ad hoc network.

In computer-to-computer wireless networks, you can wirelessly connect 2 or more computers that have wireless LAN modules. Using computer-to-computer wireless networks, you can access the Internet through a computer that is connected to the Internet even if your computer is not directly connected to the Internet. For details, see "Connecting to computer-to-computer networks (peer-to-peer or ad hoc)" on page 39.

Connecting to an Access Point (AP)

This section describes how to connect to an AP. You can use the network when you are connected to an AP.

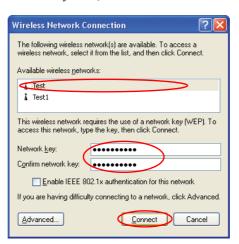


In this section, the configuration procedures are described for Windows XP installed computers. For information on the configuration procedures for other operating systems, see "Using Wireless Networks in Other Operating Systems" on page 44. Please ask your network administrator about detailed configuration information such as the network key (encryption key).

1. Right-click on the Wireless Network Connection () icon on the taskbar, and select View Available Wireless Networks.



2. Select your desired AP (e.g. Test) to connect, and enter the encryption key for the AP in the Network key field, and click **Connect**.





If the network key is not configured for the desired AP, select 'Allow me to connect to the selected wireless network, even though it is not secure'.

Now you are connected to the AP, and you can access the network.



Checking the connection status

Move the mouse pointer over the Wireless Network Connection () icon on the taskbar, and the connection status is displayed.



Connecting to computer-to-computer networks (peer-to-peer or ad hoc)

In computer-to-computer wireless networks, you can wirelessly connect 2 or more computers that have wireless LAN modules.

You can connect by completing the following steps:

- Step 1. Set up a computer-to-computer network on a computer.
- Step 2. Connect to the configured computer from other computers.



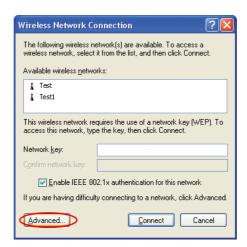
In this section, the configuration procedures are described for Windows XP installed computers. For information on the configuration procedures for other operating systems, see "Using Wireless Networks in Other Operating Systems" on page 44.

Step 1. Setting up a computer-to-computer network

1. Right-click on the Wireless Network Connection () icon on the taskbar, and select View Available Wireless Networks.

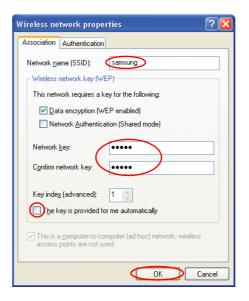


2. Click Advanced.



- 3. On the Wireless Network tab, click Advanced.
- **4.** Clear 'Automatically connect to non-default network' check box, if it is selected. Select 'Computer-to-computer (ad hoc) networks only', and click **Close**.
- 5. In the Wireless Networks tab, click Add.

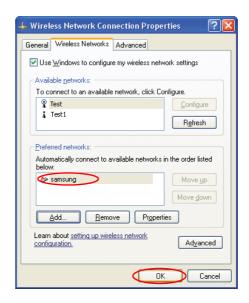
6. Enter the network name (e.g. samsung), and unselect 'The key is provided for me automatically'. Enter the encryption key in the Network key field, and click OK.





To prevent a network connection from an unauthorized user, it would be better to configure a network key (encryption key). A network key consists of 5 or 13 alphanumeric characters (e.g. magic), or of 10 or 26 hexadecimal numbers (a hexadecimal number is represented by numbers '0' to '9' or letters 'a' to 'f').

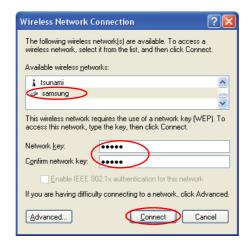
7. Check that the configured network name (e.g. samsung) is in the 'Preferred networks' item, and click **OK**.



Now your wireless network setup has been completed.

Step 2. Connecting to the configured computer

- 1. Right-click on the Wireless Network Connection () icon on the taskbar, and select View Available Wireless Networks.
- 2. Select the wireless network name (e.g. samsung) specified in "Connecting to computer-to-computer networks (peer-to-peer or ad hoc)" on page 39, enter the encryption key in the Network key field, and then click **Connect**.





If the network key is not configured in "Connecting to computer-to-computer networks (peer-to-peer or ad hoc)" on page 39, select 'Allow me to connect to the selected wireless network, even though it is not secure'.

The two computers are connected and are able to communicate with each other. When the computers are connected, the 'Wireless Network Connection' message is displayed for a short time over the Wireless Network Connection icon of the two computers.



Checking the connection status

Move the mouse pointer over the Wireless Network Connection () icon on the taskbar, and the connection status is displayed.



Using Wireless Networks in Other Operating Systems

In a operating system other than Windows XP, you have to install additional wireless LAN configuration program, and configure wireless network settings.

To use wireless network connection, complete the following procedures.

- Step1. Install the wireless LAN configuration program (PROSet).
- Step2. Configure wireless network settings through the wireless LAN configuration program.

Step 1. Installing the wireless LAN configuration program (PROSet)

You can install the wireless LAN client administrator program following the instruction displayed automatically when you insert the system software CD. Insert the system software CD into the CD-ROM drive, and install the wireless LAN configuration program.



To disable the 'Intel Configuration Service' window afterward After installing the wireless LAN configuration program, select "Do not show this again." check box, then click **Close**.

Step 2. Using the wireless LAN configuration program (PROSet)

Double-click the wireless LAN program () icon on the taskbar.

(Or, click Start > All Programs > Intel Network Adapters > Intel(R) PROSet.)



In some languages, some buttons on the window may not be displayed. If this is the case, resize the window to use the program.

Configure wireless network settings in PROSet following the procedures below.

To connect to an Access Point:

To connect to an access point or existing computer-to-computer (Ad Hoc) network, refer to the following procedures. (To create a new computer-to-computer network, refer to the following ∀To create computer-to-computer (Ad Hoc) network∀ section.)

- 1. Click Scan in the Networks tab.
- 2. Select the name of desired access point or computer-to-computer network to connect from the searched available networks list, and click Connect.



If your desired network does not appear, click Refresh.



An access point is represented by the ($\begin{cal}L\end{cal}$) icon, and a computer-to-computer network is represented by the () icon. An () icon is displayed in front of an access point or a computer-to-computer network with configured security

- 3. Select "Yes, create a profile for this Network.", and click **OK**.
- 4. Enter Profile Name and click Next.
- 5. Enter the network authentication, data encryption (WEP), key index, and password configured for the target access point or computer-to-computer network in the Security Settings window, and click Finish.



The network authentication, data encryption (WEP), key index, and password of a access point are configured in the access point management program. For information on the security information, check the security settings of the access point or ask your wireless network administrator.



To connect to an existing computer-to-computer (Ad Hoc) network, enter the password configured when creating the computer-to-computer network for the first time. You do not need to enter network authentication or key index.



Security Settings

- Network authentication: Network authentication has two options of Open System and Shared Key. If you select Open, no authentication procedure is used. If you select Shared, the WEP key is used as the authentication procedure. The default option setting is Open.

- **Data encryption (WEP)**: IEEE 802.11 WEP (Wired Equivalent Privacy) standard has two security levels of 64-bit key (40-bit key for some cases) and 128-bit key.
- **Key index**: Select the current encryption key index used by the access point out of 1 to 4.
- **To use pass phrase**: Click **Use pass phrase** to activate, and enter 5 (for 64-bit) or 13 (for 128-bit) alphanumeric characters (represented by 0-9, a-z, or A-Z).
- **To use WEP key**: Click **Use WEP keys** to activate, and enter a hexadecimal number (represented by 0-9 and A-F) of 10 (for 64-bit) or 26 (for 128-bit) digits in the WEP key field.

When a wireless connection to an access point is established, the connection icon (((g))) appears in front of the name of the connected profile.

To create a computer-to-computer (Ad Hoc) network:

To create a new computer-to-computer (Ad Hoc) network or to connect to a hidden access point (Stealth/Closed Mode), refer to the following procedures.



A hidden access point is an access point that exists, but is configured not to be detected by the scan operation to prevent access attempts from unauthorized users.

- 1. Click Add in the Networks tab.
- 2. Enter Profile Name and Network name (SSID), select Operating Mode, then click Next.



What is a network name (SSID)?

Network name (SSID) is a name that a wireless adapter uses for identifying connection. Enter the name of computer-to-computer network to create (e.g., P2P) or the name of access point to connect. The network name identifies cases. (capital and lowercase) For the name of access point, check the settings of the access point, or ask your wireless network administrator.

Operating Mode:

- $-\mbox{ Infrastructure}$ Connect to an Access Point Select to connect to an access point.
- Ad hoc Connect directly to other computers Select to create a computer-to-computer (Ad Hoc) network.

3. Configure password setting to be used for computer-to-computer network connection in the Security Settings window. To connect to an access point, enter the network authentication, data encryption (WEP), key index, and password configured in the access point.



It is recommended to configure data encryption for security purposes when creating a computer-to-computer network connection profile. For more information on security settings refer to the security settings in Connecting to an AP or Help.



When you are creating a computer-to-computer network connection profile, the network authentication setting is disabled.

4. When a profile creation is completed, the new created profile appears in the profiles list in the Networks tab. Select corresponding profile, and click Connect to connect to the created profile.

When a wireless connection to the created profile is established, the connection icon () appears in front of the name of the connected profile.

Using Network Services

While the computer is connected to the network, you can use network services to share files, folders, and printers. Using computer-to-computer wireless networks, you can access the Internet through a computer that is connected to the Internet even if your computer is not directly connected to the Internet.



Network services are provided for the computers that are connected to the network through wired or wireless network connections. For details, see "Connecting Through a Wired LAN" on page 35 and see "Connecting Through a Wireless LAN (Option)" on page 37.

Sharing files or folders

This section describes how to share files and folders between computers connected to the network.

To share files, complete the following procedures:

- Step 1. Configuring the sharing of files and folders on a computer.
- Step 2. Accessing shared files and folders from another computer.

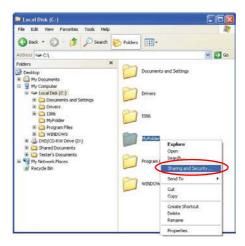


When a file or folder is shared, anyone connected to the network can open and delete the shared file or folder.

Configure a file sharing network only when the network is secure, and do not share important data.

Step 1. Configuring Sharing

1. Right-click the target file or folder to share in My Computer, and select Sharing and Security.



2. Click 'IF you understand the security risks but want to share files without running the wizard, click here'.



It has the same security effect as that of the 'Network Setup Wizard'. This screen does not appear if Internet Sharing Network Wizard has been installed in the computer-to-computer wireless network environment.

- 3. Select 'Just enable file sharing', and click **OK**.
- 4. In the 'Network sharing and security' field, select 'Share this folder on the network', enter the share name, and click OK.



Be cautious when selecting 'Allow network users to change my files' since other network users can change the files in the shared folder.

The file and folder sharing configuration has been completed.

Step 2. Using Shared Files or Folders

This section describes how to access shared files or folders if your computer is a member of the same workgroup.

- 1. Click Start > My Computer. Under Other Places, click My Network Places in your computer.
- **2.** Click 'View workgroup computers', and click the desired computer to access the shared file.





If your computer is a member of another workgroup:

- 1. Click Other Places > Microsoft Windows Network.
- 2. Click the desired workgroup.
- 3. Click the desired computer to display the shared files or folders.

Sharing Printers

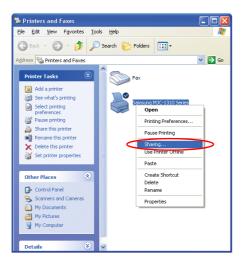
This section describes how to share a printer between computers connected to a network.

To share a printer, complete the following procedures:

- Step 1. Configure printer sharing in the computer connected to the printer.
- Step 2. Add and use the shared printer in other computers on the network.

Step 1. Configuring Printer Sharing

- 1. From the computer connected to the printer, click Start > Printers and Faxes.
- 2. Right-click the printer you want to share, and click **Sharing**.



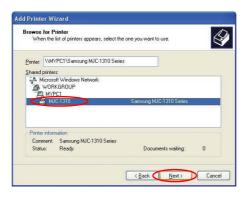
- 3. Select 'Share this printer', enter a share name for the shared printer, and click OK.
- In the Printers and Faxes window, you will find the printer icon has been changed to another icon on a hand.



Step 2. Adding and Using a Shared Printer.

- 1. From a different computer that wants to use the shared printer, click **Start** > Printers and Faxes.
- 2. Click Add a printer.
- 3. In the Add Printer Wizard, click Next.
- 4. Select 'A network printer, or a printer attached to another computer', and click Next.

- 5. Select 'Browse for a printer', and click Next.
- **6.** Select the workgroup or computer, select the desired printer, and click **Next**.



If you cannot find the desired printer, try again after a while.

- 7. Read the warning about a shared printer, and click Yes to install the shared printer.
- 8. Select Yes for 'Do you want to use this printer as a default printer?', and click Next.
- 9. Click Finish.
- **10.** When the printer sharing configuration has been completed, the shared printer appears in the Printers and Faxes window.



Now you can print using the shared printer even if your computer is not directly connected to a printer.

Sharing an Internet Connection

Using computer-to-computer (peer-to-peer) network connections, you can access the Internet through a computer connected to the Internet even if your computer is not directly connected to the Internet.



To share an Internet connection, the computers should be connected to a computer-to-computer (peer-to-peer) wireless network. For details, see "Connecting to computer-to-computer networks (peer-to-peer or ad hoc)" on page 39.

Also, one of the computers has to be connected to the Internet (external network).

The configuration procedure to share an Internet connection are described for Windows XP installed computers.

To share an Internet connection, complete the following procedures:

- Step 1. Configuring a Internet connection sharing from the computer connected to the Internet.
- Step 2. After completing the shared Internet connection configuration, check that the other computers can access the Internet through the shared Internet connection.

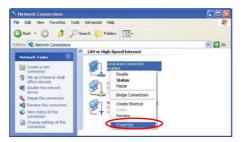
Step 1. Configuring Internet Sharing.

Configuring a shared Internet connection on the computer connected to the Internet.

- 1. Click Start > Control Panel > Network and Internet Connections > Network Connections.
- 2. Right-click on the device connected to the Internet, the external network, and select Properties.



If the computer is connected to the Internet through a wired LAN, select 'Local Area Connection'.



3. On the **Advanced** tab, select 'Allow other network users to connect through this computer's Internet connection', and click **OK**.

Step 2. Checking the Shared Internet Connection.

When the Internet connection sharing configuration has been completed, the network icon in the Network Connections window is displayed as follows:

Click Start > Control Panel > Network and Internet Connections > Network Connections.

- A computer connected to the Internet.



- A computer sharing the remote Internet connection (other computer).



If the icon does not appear after a long time, restart the computer.



Computers on the network can access the Internet through the shared Internet connection only when the computer connected to the Internet is turned on.

Infrared Communication (Optional)

Your computer may have infrared port. Using the infrared port, you can transfer data to computer, printer, camera and other devices through infrared communication.



Restrictions in Use

For infrared communication, the devices should have infrared communication capability, and should be located within 1 m of each other. In addition, there should be no obstacle between the infrared ports of the target devices.

To establish infrared connection

The procedures to communicate with another computer through infrared port are described below.

- 1. Locate the target computers so that the infrared ports face each other.
- 2. When infrared communication is available, a beep sounds and Send files to another computer icon () appears on the desktop.

You can now transfer data through infrared communication.

To transmit data through infrared communication

The procedures to transmit files to another computer are described below.

- 1. Connect the target computers through infrared communication.
- 2. Drag a file over the Send files to another computer icon(v) in one of the computer.
- 3. [Wireless Link] dialog box appears on the other computer screen. Click Yes.
- 4. When the file transmission is completed, click Close to close the [Receiving Files] dialog box.



To change infrared communication configuration

To change the folder to save the received files, or to receive images from a digital camera, click Start > Control Panel > Printers and Other Hardware > Wireless Link and change the configuration.



If you cannot use infrared communication

- 1. Check BIOS setup.
- a. Start the computer, and press <F2> to enter System Setup.
- b. Select **I/O Device Configuration** in the **Advanced** menu, and press **<Enter>**.
- c. Select **Infrared Port**, and set the item to **Enabled** by pressing **<F5>** or **<F6>**.
- d. Save the configuration, and exit the Setup.
- 2. Check Windows configuration.
- a. Click Start > Control Panel > Performance and Management > System > Hardware tab > Device Manager.
- b. Double-click the "Infrared device", and then double-click "IrDA Fast Infrared Port" item.
- c. On the **Advanced** tab, select "Infrared Transceiver A" in the Properties field, then select "HP HSDL-2300/3600" in the Value field.
- d. Click OK.

Customizing Your Computer

Using System Setup

The System Setup (BIOS) program enables you to configure your computer hardware and set security and power-savings options. The settings you choose are stored in battery-maintained CMOS memory that saves the information even when the computer's power is turned off. When your computer is turned back on, it is configured with the values found in this memory.

Run System Setup if you get a message prompting you to run the program. You may also want to run System Setup, particularly the first time you use your computer, to set the time and date, use security or power-management features, or alter the settings of other features.



BIOS Caution:

If you are not familiar with BIOS setup and what the parameters mean, seek help from a person who is knowledgeable. Incorrect settings may cause your system to malfunction or "Crash".



Your computer's version of System Setup may not include all the fields listed here or may include additional fields. Field names and order of appearance can vary according to the version of the BIOS (basic input/output system) on your computer.

Starting System Setup

To start System Setup, turn on your computer and then press <F2> and hold until the System Setup screen appears.

Table 2. System Setup Menus

Menu	Function
Main	Changes the basic system.
Advanced	Configures advanced features on your computer.
Security	Enables security features, including passwords.
Boot	Specifies the order of boot devices and configures boot features.
Exit	Specifies how to exit System Setup.

To open the menu you need to use, use the left or right arrow keys to select the menu name.

Table 3. System Setup Navigation Keys

Navigation Key	Function
<f1></f1>	Displays the General Help window.
<esc></esc>	Exits the current menu.
< ↑ > or < ↓ >	Moves the cursor up and down between fields.
< -> or < -> >	Selects different menus. Pressing the <esc></esc> key at the Main menu brings you to the Exit menu.
<f5></f5>	Scrolls backwards through the options for the highlighted field.
<f6></f6>	Scrolls forward through the options for the highlighted field.
<f9></f9>	Sets the parameters for the current menu to their default values.
<f10></f10>	Save changes and exit system setup.
<enter></enter>	Executes commands or opens a submenu.

Changing Booting Priority

You can select the booting priority among the devices such as the hard drive, CD-ROM drive, etc. The following example describes how to configure the hard drive as the first booting device when the CD-ROM drive is configured as the first booting device by default.

- 1. Select the **Boot** menu in System Setup.
- 2. Use $\langle \downarrow \rangle$ key to move to the **Boot Device Priority**, and press \langle **Enter** \rangle .
- 3. Use $< \downarrow >$ key to move to the **Hard Drive** item, and press <F6> until it is at the very top.
- **4.** Press **<F10>** to save the changed configuration, and exit System Setup. Now you can boot the system with the hard disk drive as the first booting device.

Configuring the Password

Setting the Supervisor Password

By configuring a supervisor password, you can restrict system access to authorized users only.



Do not lose or forget your password. If you have forgotten your password, contact the Samsung service center.

- 1. Select the Security menu in the System Setup. To enter System Setup, see "Starting System Setup" on page 58.
- 2. On the **Set Supervisor Password** item, press **<Enter>**.
- **3.** Enter a password, press **Enter**>, re-enter the password for confirmation, and press **Enter**> again.
- **4.** When a message confirming the password configuration appears in the [Setup Notice] window, press **<Enter>**.

Setting the User Password

You can configure user passwords so that other users can use the system.



Before configuring a user password, a supervisor password must have been configured.

Users can start the system with their user password, but cannot enter into the System Setup.

Deactivating the supervisor password also deactivates the user password.

On the **Set User Password** item, press **<Enter>**, and complete step 3-4 of "Setting the Supervisor Password".

Activating the Booting Password



Before activating the booting password, the supervisor password must have been configured.

Set the **Password on boot** option to [Enabled].

From now on, system booting will not proceed without the password.

Activating the Hard Disk Drive Password

Activating the hard disk drive password prevents the currently installed hard disk drive from being used in other systems.



Before activating the hard disk drive password, the supervisor password must have been configured.

On the Set HDD 0 Password item, press <Enter>, and complete step 3-4 of "Setting the Supervisor Password".

Deactivating the Password

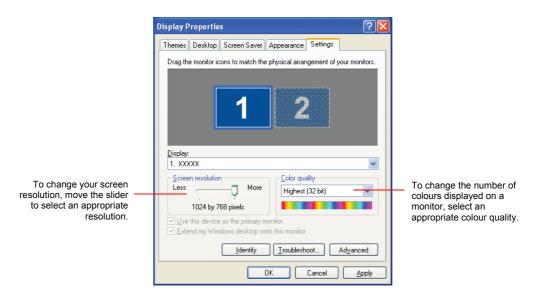
- 1. On the password to delete, press **<Enter>**. (e.g. supervisor password)
- 2. Enter the current configured password, and press <Enter>.
- 3. Leave the 'Enter New Password' and 'Confirm New Password' field empty, and press **<Enter>** to deactivate the password.

Configuring Resolution and Colour Depth

Screen resolution is the number of pixels displayed on the screen. High resolution makes the overall screen area large, although individual items appear small.

Colour quality is determined by the number of bits used to represent a pixel on the screen. High colour quality displays more number of colours on your screen.

- 1. Select Start > Control Panel > Appearance and Themes > Change the screen resolution.
- 2. Make changes on the **Settings** tab of the [Display Properties] dialog box.



3. When you have completed configuration, click Apply.



It is recommended setting the resolution to 1024x768, and the number of colours to Highest (32bit) on XGA models.

It is recommended setting the resolution to 1400x1050, and the number of colours to Highest (32bit) on SXGA+ models.