

**Super
Easy!**

Navi 210W

**Internet USB/Wireless
Multi-Function Router**

User's Manual

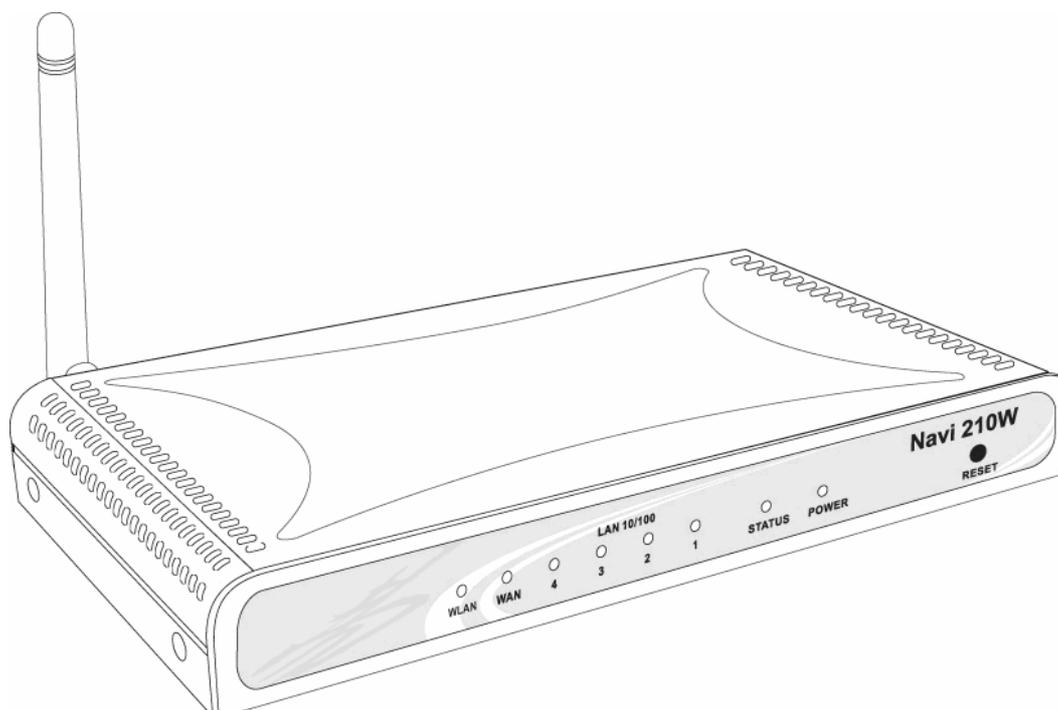


Easy to people
Wireless USB Multi-Function Router

Navi210W Internet USB/Wireless Multi-Function Router

Navi210W

Internet USB/Wireless Multi-Function Router



User's Manual

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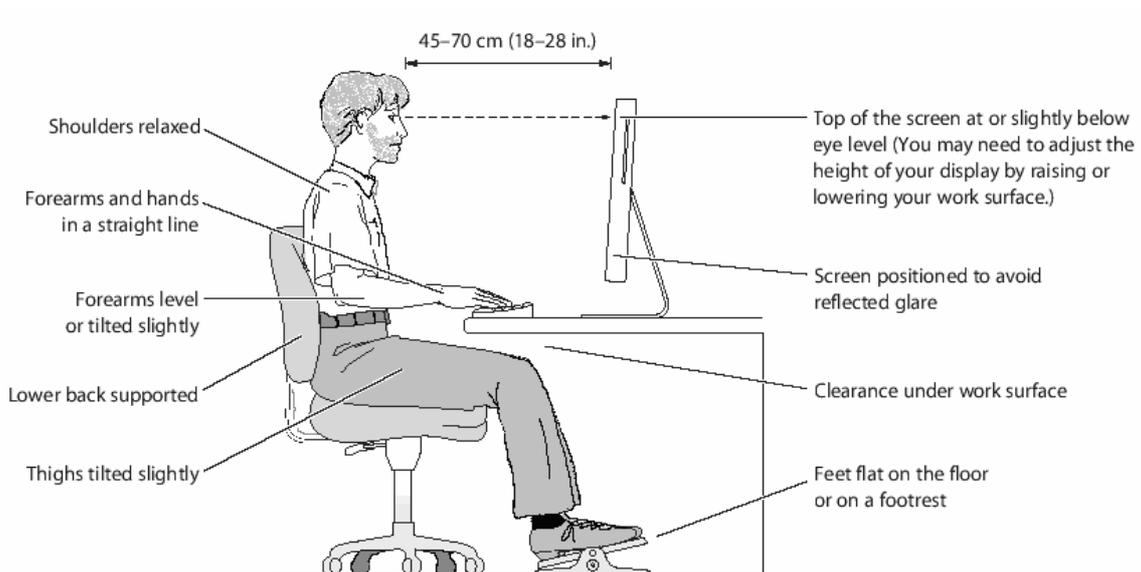
FCC Caution

1. The 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 this device must accept any interference received, including interference that may cause undesired operation.
2. FCC RF Radiation Exposure Statement: The equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.
3. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
4. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

Safe Seating Gestures:

You should follow the manufacturer's instructions for adjusting the backrest to fit your body properly.

- An adjustable chair that provides firm, comfortable support is best.
- Adjust the height of the chair so your thighs are horizontal and your feet flat on the floor.
- The back of the chair should support your lower back (lumbar region).



CE Statement of Conformity

Our product has been tested in typical configuration by Ecam Sertech Corp and was found to comply with the essential requirement of "Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility" (89/336/EEC; 92/31/EEC; 93/68/EEC)

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1 Introduction & Installation

1.1 Quick Reference

The information below is the key to access Navi210W's setting main menu. The Default IP Address "**192.168.1.1**" needs to be filled in the IE browser's address field and press "**Enter**". Then, the Navi210W's Login Screen will appear. With the key word "**admin**" filled in the User Name and Password blank fields of Login Screen and click on "**Login**" button, you can access the Navi210W's setting main menu.

Default IP Address: **192.168.1.1**

Default User Name: **admin**

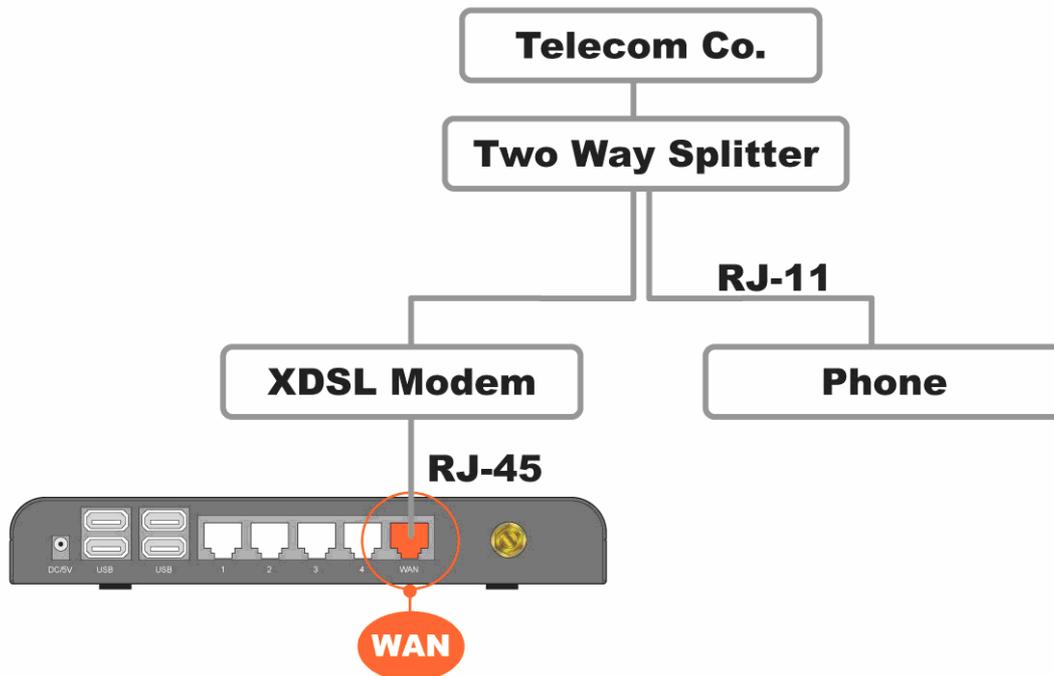
Default Password: **admin**

The Top information offers you the quick way to access Navi210W's main menu. Please keep the information in mind when you use Navi210W.

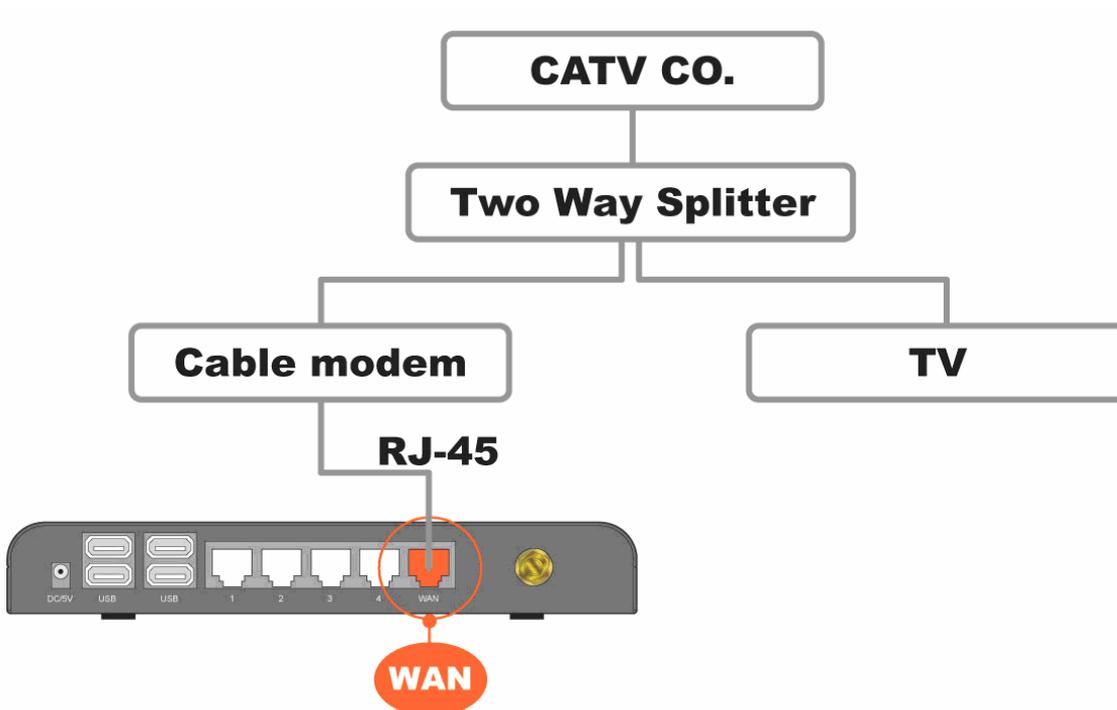
1.2 Overview

Navi210W is the latest model of networking product. It not only has the basic Internet firewall and IP sharing functions, but also contains several unique features, for instance, Wireless Transmitting, VPN Pass Through, Webcam Monitor, Print server, FTP Server. The installations of Internet (via WAN with XDSL or Cable Modem), local network (via wired and wireless LAN with computers) established below will show you all kinds of possible link to Navi210W. If you can't get Internet or there is something wrong with your local network, please check these installations whether they are connected wrong. For right installation you want, you'd better pay attention to the title of each following diagram.

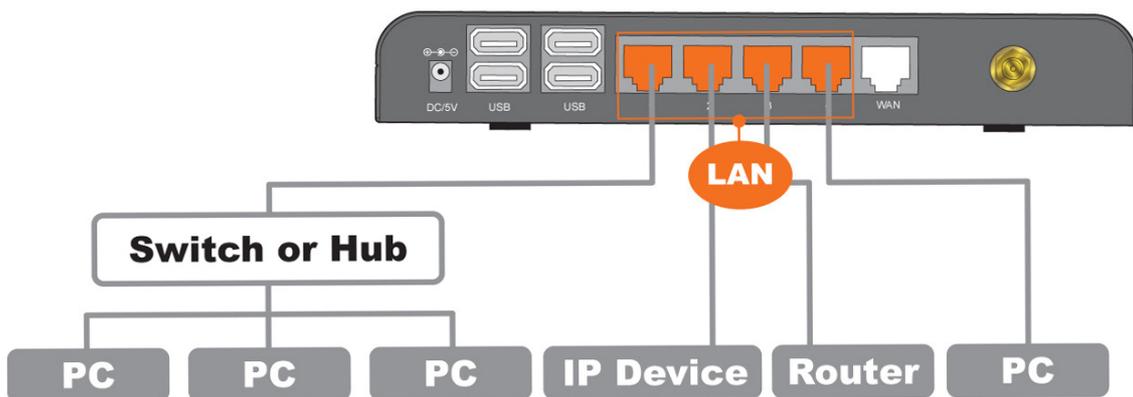
- The installation of WAN with XDSL Modem



- The installation of WAN with Cable Modem

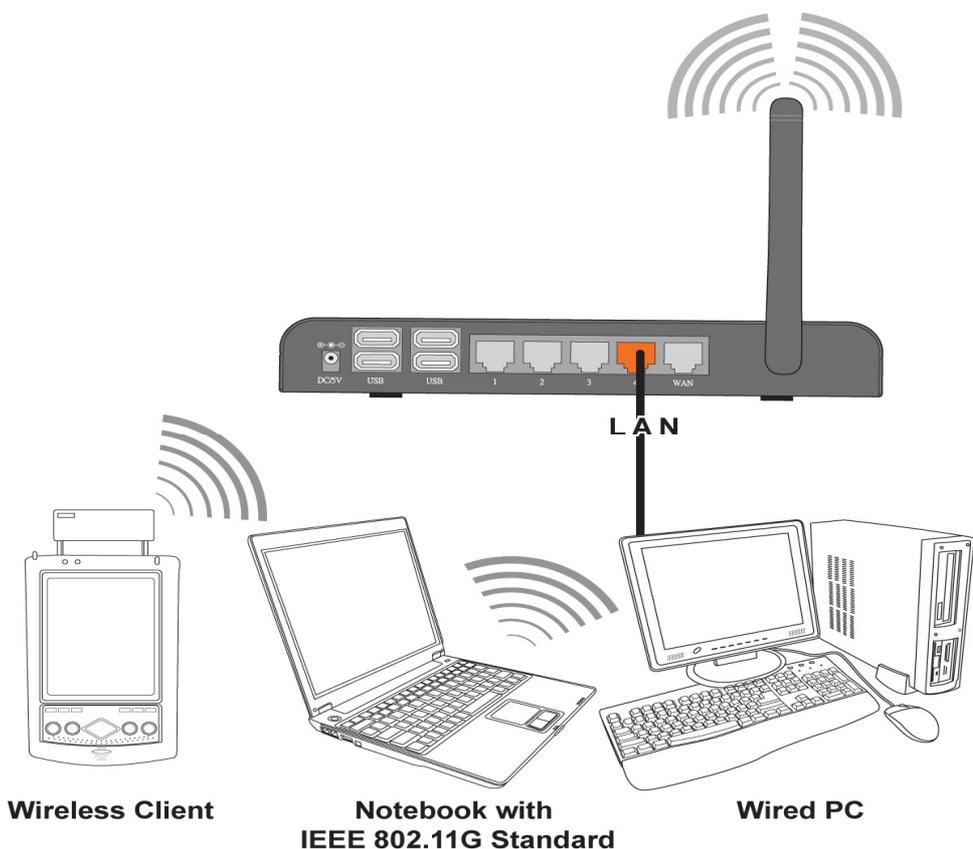


- **The installation of LAN with computers**



Notice: IP devices such as IP Webcam, IP printer and IP Phone whose connector ports are RJ45.

- **The installation of Wireless LAN with computers**



Notice: The wireless valid distance cannot be over 25 meters indoors, 60 meters outdoors.

1.3 Features

Navi210W's main functions, including Wireless Access, Webcam Monitor, Print Server, FTP Server and IP Sharing are shown below. These features belonging to Navi210W and applying instructions of the User's Manual will not only fulfill your requirements, but also ease your inconvenience from the job.

- **54Mbps Wireless Access**

Navi210W is a Wireless USB Multi-Function Router, fully compliant with the IEEE802.11G standard. It can reach data rate to 54Mbps within the 2.4 GHz band using OFDM technology.

- **FTP Server**

Navi210W supports FAT 16/32 file system format. Plug with USB hard drive or thumb drive, Navi210W becomes a FTP server and users can share files from both WAN and LAN.

- **IP Sharing**

Navi210W includes DHCP server, virtual server, virtual DMZ, NAT, IP Sharing, Internet firewall, URL filter, Mac address filter, UPnP, SNMP and DDNS. Through a DDNS hostname, it will be easier for you to transmit files, view Webcam and use printer from WAN.

- **Print Server**

Navi210W supports an USB printer. It allows all computers sharing one USB printer on your network. With LPR protocol, users can share a printer from both WAN and LAN.

- **Webcam Monitor**

Navi210W supports an USB Web Camera, which provides an easy and affordable solution for home security. It allows users to monitor home security by an USB Web camera from everywhere via Internet and also to be alerted due to intrusions by email.

1.4 Specifications

Hardware	
Standards	IEEE 802.3 / IEEE 802.3u
	IEEE 802.11b/g
	USB 1.1/ 2.0
Ports	1 10/100 WAN Port (Auto MDI/MDI-X)
	4 10/100 LAN Ports (Auto MDI/MDI-X)
	4 USB 1.1/ 2.0 Ports
Wireless Frequency Range	2.4 GHz to 2.462GHz
Wireless Distance Range	Indoor 25m, Outdoor (LOS, Light-Of-Sight) 60 m. The range may vary by different environment.
External Antenna Type	Single detachable reverse SMA
Software	
Network Protocols	TCP/IP, DHCP, SNMP, UPnP, PPTP , PPPoE , DDNS , DNS
Management	Web-based manager
Access Method	CSMA/CA, CSMA/CD
Wireless Security	64/128-bit WEP
	WPA, TKIP
	WPA-PSK (Pre-Shared Key)
Firewall	NAT and SPI enhanced firewall to protect all the computers on your network.
Modulation Technology	Orthogonal Frequency Division Multiplexing (OFDM)
	Packet Binary Convolutional Code(PBCCTM)
Others	
Safety	FCC, CE
Power Adapter	5VDC, 2.5A (minimum)
Dimension	185 (L) x 107.5(W) x 27(H) mm
Weight	530g (device only)

Notice: Firmware Upgrade Available through download.

1.5 System Requirements

To begin with Navi210W, you must have the following minimum system requirements. If your system can't correspond to the following requirements, you might get something unknown troubles on your system.

- XDSL/Cable Modem and broadband Internet Account.
- One Ethernet (10 BASE-T or 10/100 BASE-TX) network interface card.
- TCP/IP and at least one web browser software installed (E.g.: Internet Explorer or Netscape).
- At lease one 802.11g (54Mbps) or one 802.11b (11Mbps) wireless adapter for wireless mobile clients.
- Recommended OS: Win98, Win2000 or WinXP

1.6 The Product Package

After you purchased our product, please check what there are in the product package. Your product package should contents the following items:

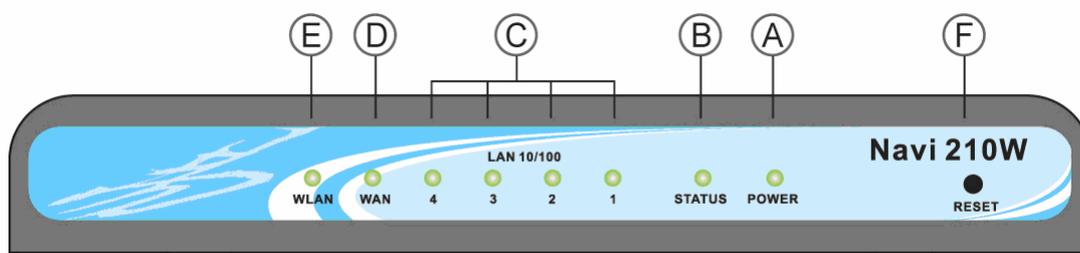
- One Navi210W wireless router unit
- One Navi210W antenna (Single detachable reverse SMA)
- One Navi210W Quick Start Guide
- One Power Adapter 5 Volts DC, 2.5 Amp (Minimum)
- One Navi210W CD (Quick Start Guide, User's Manual and Adobe Reader)
- One Web Camera, able to support PC usage and one Driver CD. (Optional)
- One USB 5M Extension Cable. (Optional)

Notice: Web Camera can be plugged in Navi210W directly without loading its driver.

1.7 Front Panel Led Indicators & Rear Panel

To identify the Led's situations will get you to know what happened to your Navi210W, and to know the rear panel will teach you how to insert the right jack to the right port. Please check your front panel led indicators. Make sure they work properly. If they failed, please follow the troubleshooting that states below.

● **Front Panel Led Indicators**



A. Power (LED color: GREEN)

On: System is ready.

Off: There is no power. Please check your power adapter if connected firmly.

Flashing: Firmware upgrades failed.

B. Status (LED color: GREEN)

On: Navi210W is working properly.

Off: System is rebooting or down. Please wait for a moment. If it still cannot work, re-plug the adapter, or contact with your product provider.

C. LAN (LED color: GREEN)

On: Connector (computer/ switch/ hub) is plugged in.

Off: LAN port can't work. Please check the LAN cable whether it is plugged firmly, or try to connect another port for testing.

Flashing: Connector is transmitting/ receiving data.

D. WAN (LED color: GREEN)

On: XDSL or Cable Modem is connected.

Off: Your WAN port can't work. Please check the networking cable whether it is connected to your Navi210W properly, or check your ISP.

Flashing: Modem is sending/ receiving data.

E. WLAN (LED color: GREEN)

On: Navi210W is activated.

Off: Navi210W doesn't detect any wireless device.

Flashing: Navi210W is transmitting/receiving data.

F. RESET Button

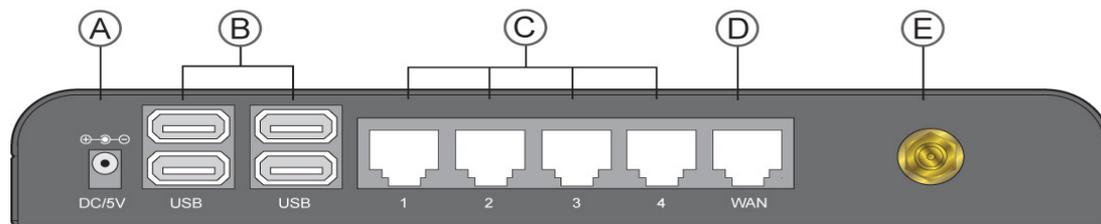
To restore the factory default values.

One press reset button for 1 second to reboot Navi210W.

One press reset button for 5 seconds for cleaning the former values.

Notice: The actions should be done in the power-on condition.

● Rear Panel



A. Power Inlet: For Power Adapter (5VDC/2.5A). Incorrect type will damage Navi210W.

B. USB Port: For USB 1.1/ 2.0 devices.

C. LAN Port (RJ-45): For computer, switch and hub.

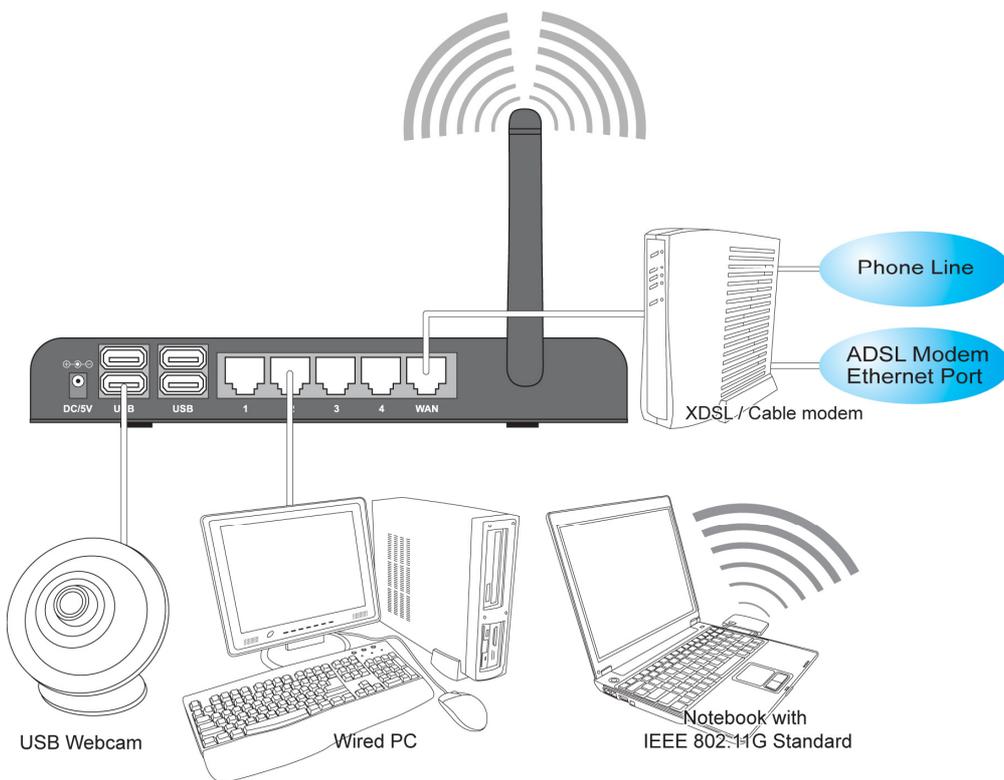
D. WAN Port (RJ-45): XDSL/ Cable Modem.

E. Wireless LAN Connector: For 2.4 GHz dipole antenna

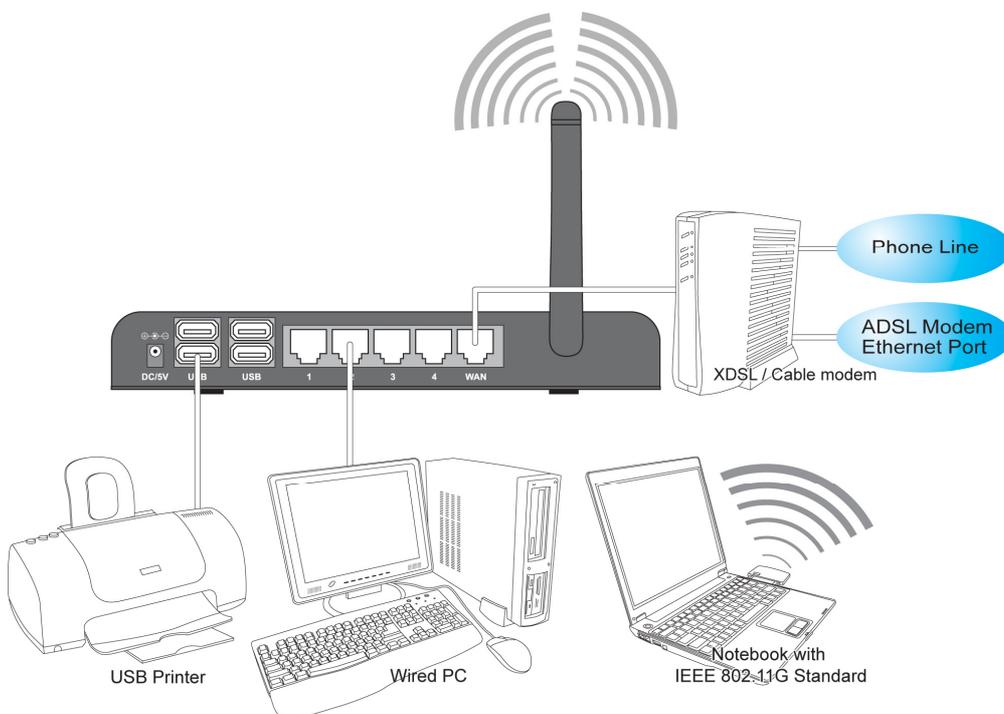
1.8 Hardware Connections

If you want to use any peripherals with Navi210W, please choose the right illustration below and follow the connection ways to connect the hardware you want to the proper positions. Here the connections are divided into 5 parts. They are Webcam, Printer, USB Hard Disk, Telecom Line and all mentioned unit combined connections.

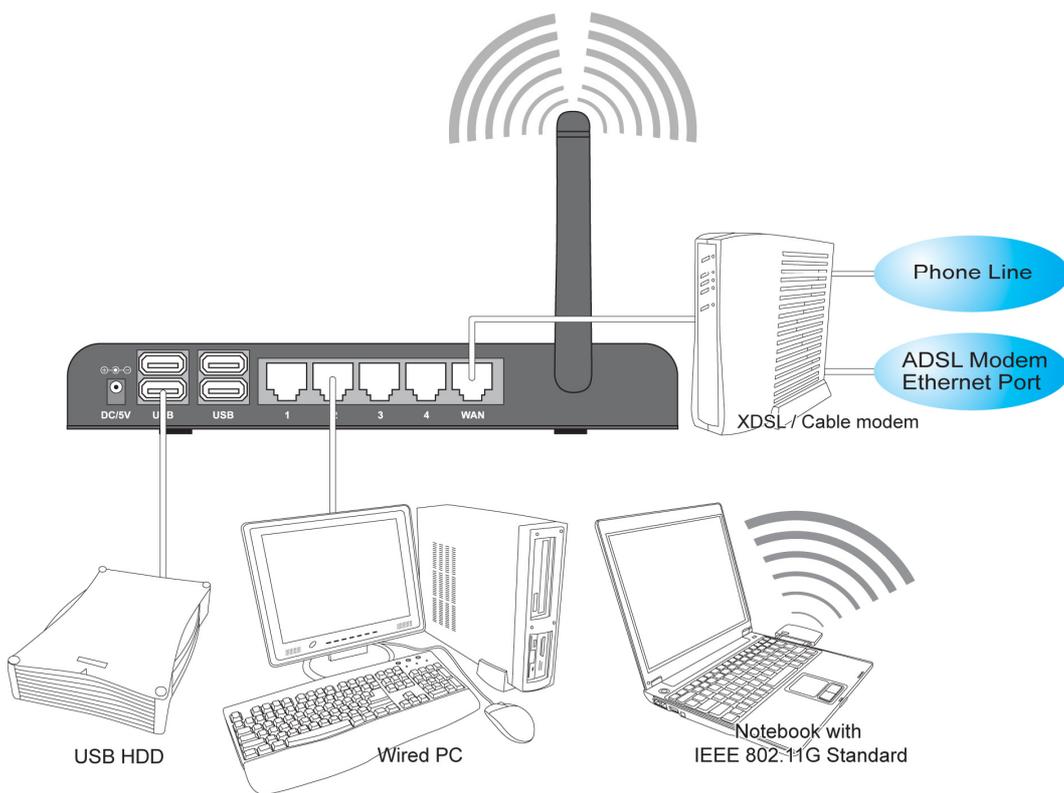
- If you want to connect a web cam, please follow the figure below.



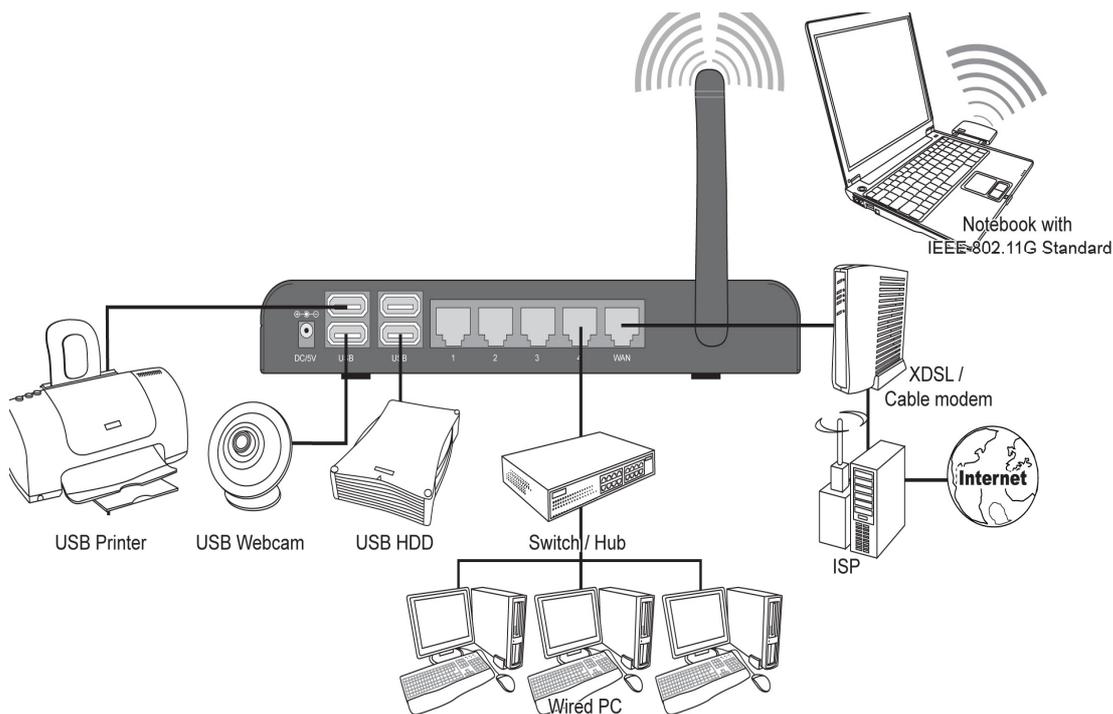
- If you want to connect a printer, please follow the figure below.



- If you want to connect a USB hard disk, please follow the figure below.



- If you want to put all devices mentioned above and connect PCs together, please follow the figure below.

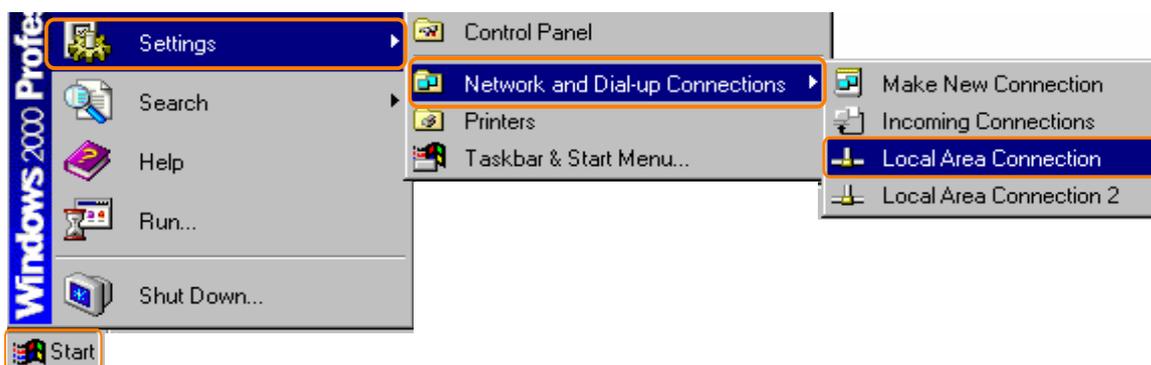


1.9 Get your IP Automatically & Manually

After connecting Navi210W to your computer, please make sure your IP is in the automatic IP position or you adjust it manually in order to activate the network from home to Internet. If you don't know how to enter the settings, please follow the steps below.

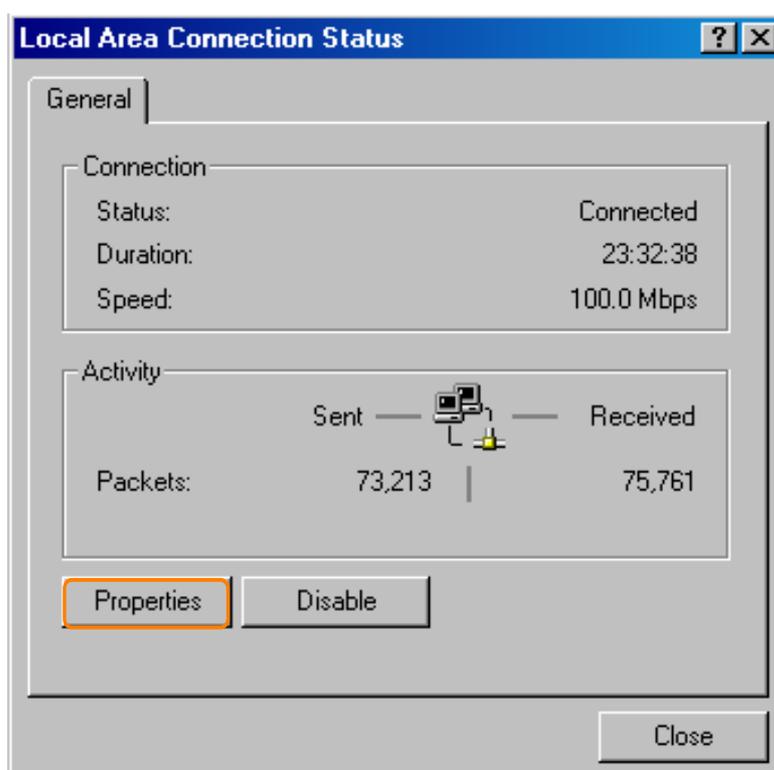
【Step1】

Go to **Start>Settings> Network and Dial-up Connections** and then **Local Area Connection**.



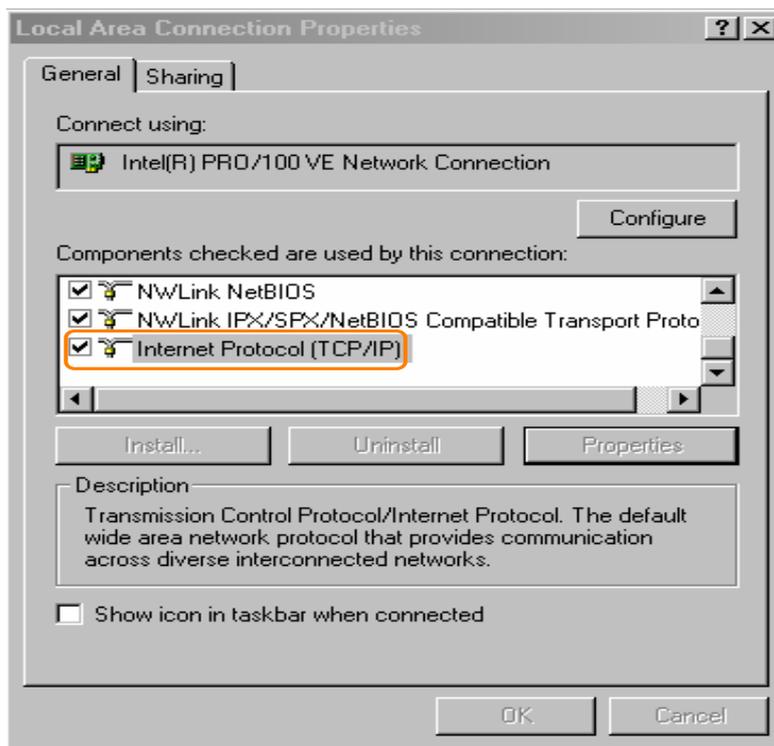
【Step2】

Click on **Properties** button.



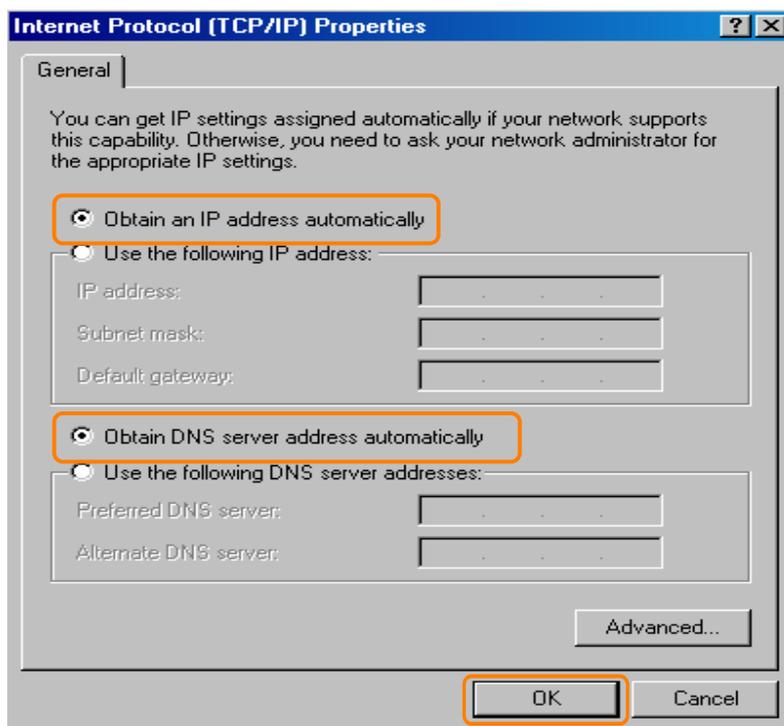
【Step3】

Double click on **Internet Protocol (TCP/IP)**.



【Step4-1】

For getting IP automatically if you are one of the users under Navi210W, please skip **“Use the following IP address”** and then select **“Obtain an IP address automatically”** and **“Obtain DNS server address automatically”** and then click on **OK** button.



【Step4-2】

For getting IP manually in order to specify a Virtual Server, such as Print Server, FTP Server or SNMP Server and so on, please skip **“Obtain an IP address automatically”** and then select **“Use the following IP address”**. And the following default setting of Navi210W should be known:

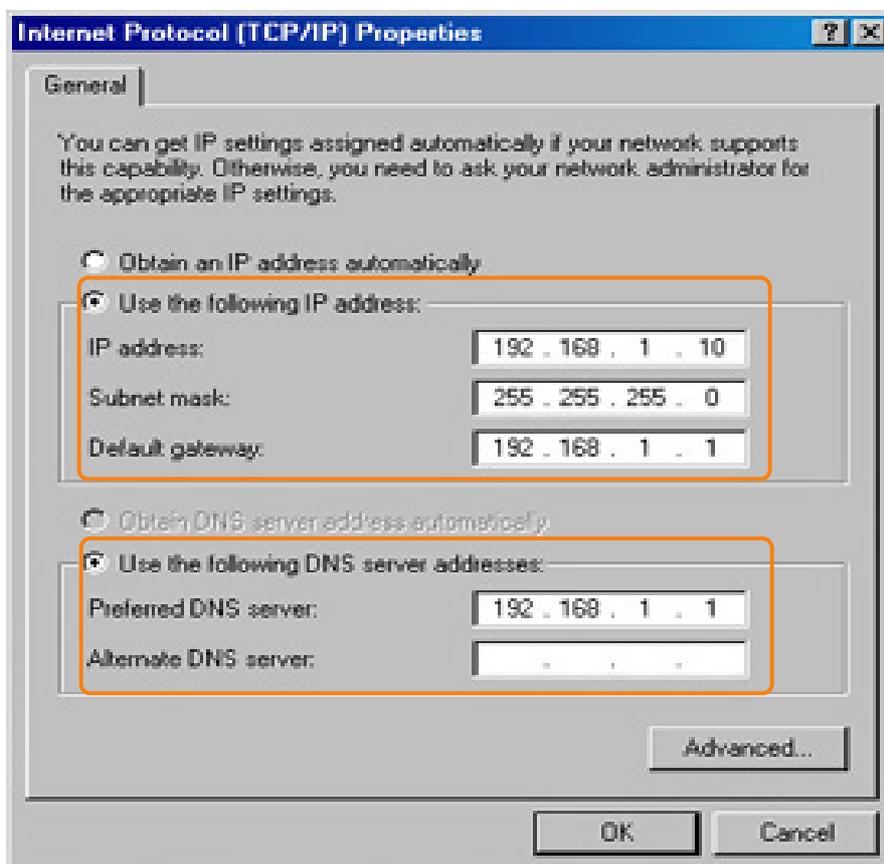
- IP Address: 192.168.1.10 (as your Print Server for example)
- Subnet Mask: 255.255.255.0
- Default gateway: 192.168.1.1

Notice: If you configure your computer’s IP Address manually, it needs to be on the same network segment.

For example:

- IP Address: 192.168.1.xxx (xxx can be any number between 2 and 254, but it can’t repeat, we use 10 to be the example.)
- Subnet Mask: 255.255.255.0
- Gateway: 192.168.1.1 (this is the IP address of Navi210W)
- DNS: 192.168.1.1 (use the Navi210W IP address or on your own choice).

Notice: IP address and Default gateway couldn’t be the same.

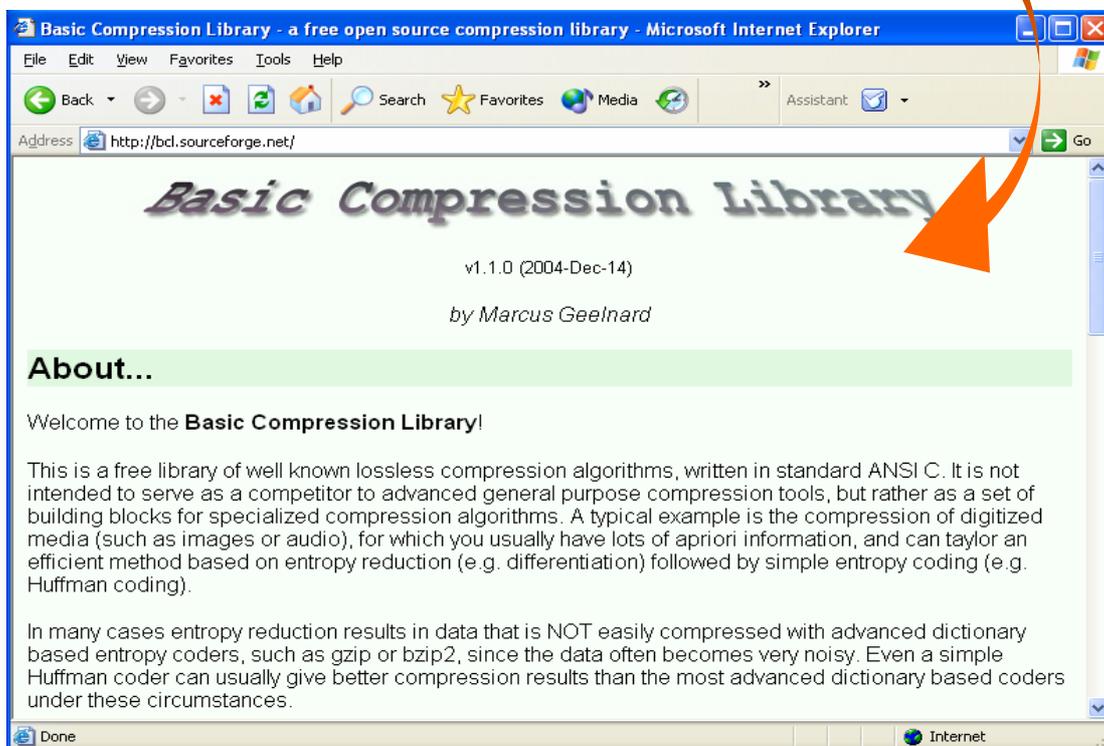
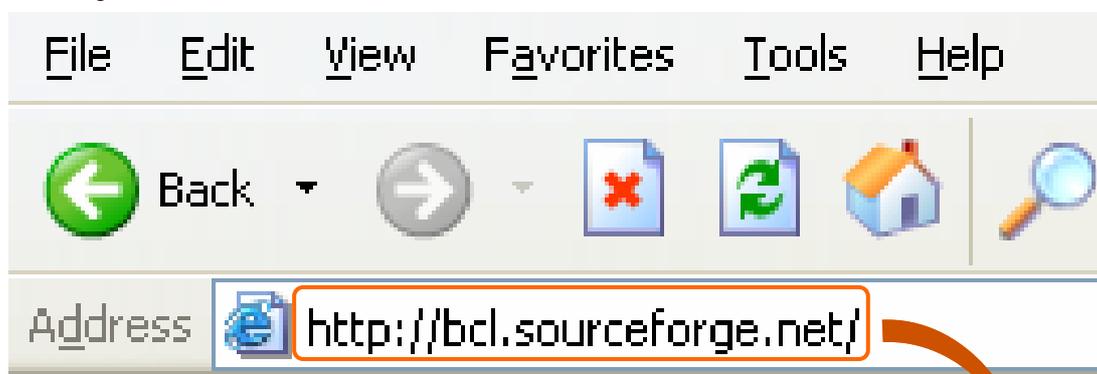


1.9.1 Network Testing

There are two ways to test your Network whether it can work on Internet or not. There are Testing with Internet Browser and Testing with Dos.

1.9.1.1 Testing with Internet Browser

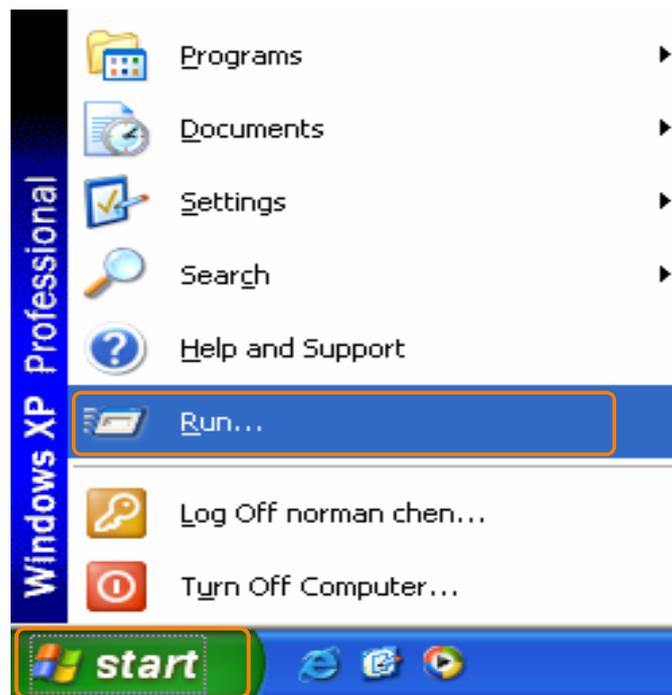
Open an Internet Browser, such as Internet Explore or Netscape. Input a valid web address you like, **http://bcl.sourceforge.net/** for example in the web address field and then press Enter. If it can work, the website will appear, that means your Network to the Internet is normal.



1.9.1.2 Testing with DOS (Windows 2000 & XP Platform)

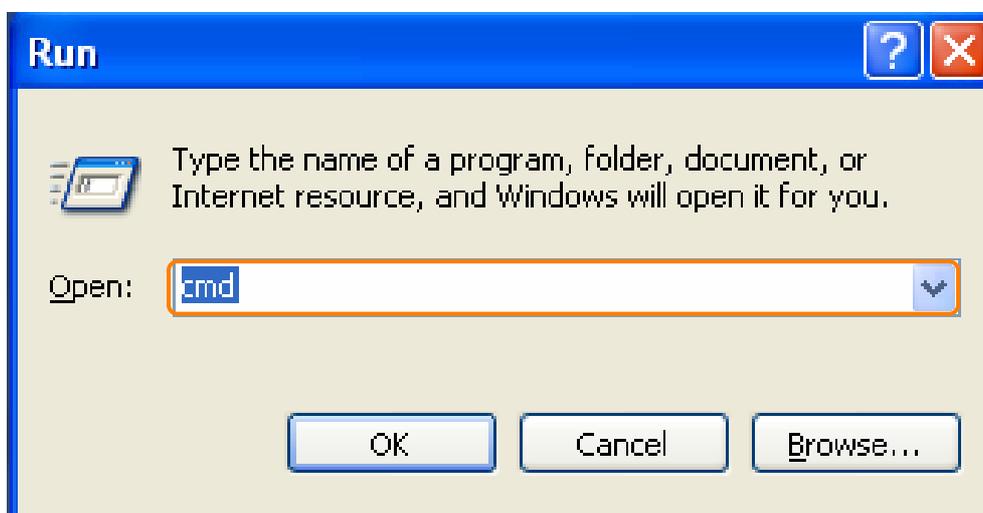
【Step1】

Go to **start** > **Run**.



【Step2】

Input **cmd** in the blank field, and then click on **OK** button. The DOS screen will appear.



【Step3】

Input **ipconfig** in the flashing area then press Enter. You will get an IP Address 192.168.1.25 for example, Default Gateway as 192.168.1.1.

```
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

D:\Documents and Settings\arnold chen>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection 2:

    Connection-specific DNS Suffix . . :
    IP Address. . . . . : 192.168.1.25
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1

D:\Documents and Settings\arnold chen>_
```

【Step4】

Ping a legal WAN Address such as 61.221.251.250. If it can work, it will show **Reply from 61.221.251.250: bytes = 32 time = 310ms TTL =57** for example.

```
D:\Documents and Settings\norman chen>ping 61.221.251.250

Pinging 61.221.251.250 with 32 bytes of data:

Reply from 61.221.251.250: bytes=32 time=310ms TTL=57
Reply from 61.221.251.250: bytes=32 time=87ms TTL=57
Reply from 61.221.251.250: bytes=32 time=107ms TTL=57
Reply from 61.221.251.250: bytes=32 time=295ms TTL=57

Ping statistics for 61.221.251.250:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 87ms, Maximum = 310ms, Average = 199ms
```

If it can't work, it will show **Request timed out.**

```
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

D:\Documents and Settings\norman chen>ping 61.221.251.250

Pinging 61.221.251.250 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
```

2 Navi210W's GUI

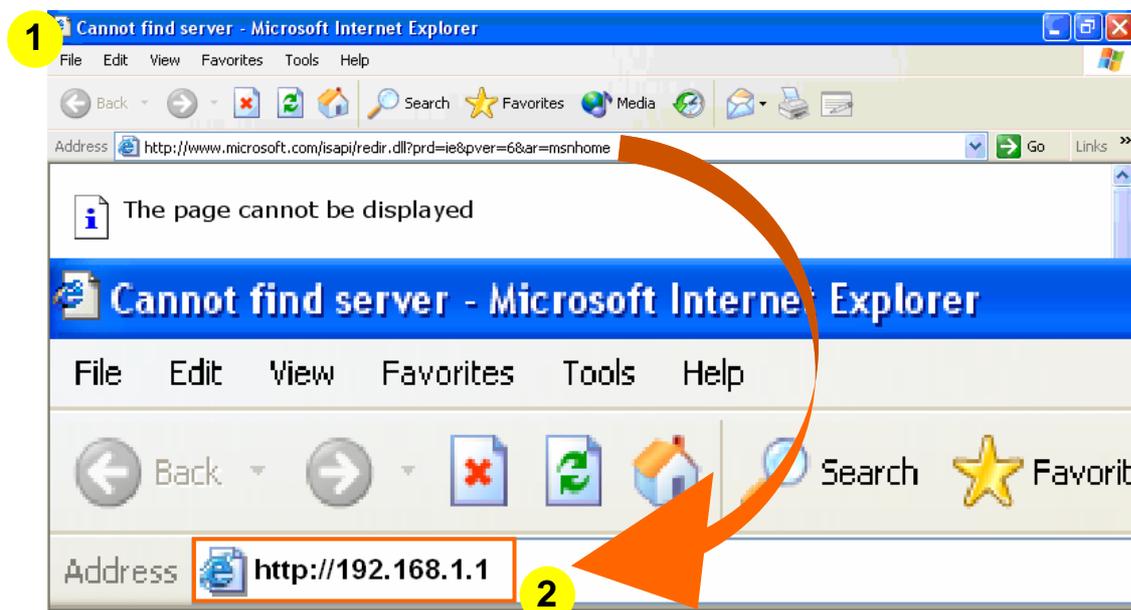
In this Chapter, Navi210W's GUI (Graphic User Interface) is divided into two parts. The first part is **How to link Navi210W's GUI**. Please follow the instructions to get in Navi210W's setting screen. The second part is **How to enter Navi210W's setting items**. It lists all the setting functions in the Main Menu.

2.1 How to link Navi210W's GUI

Please follow the steps below to link Navi210W's GUI.

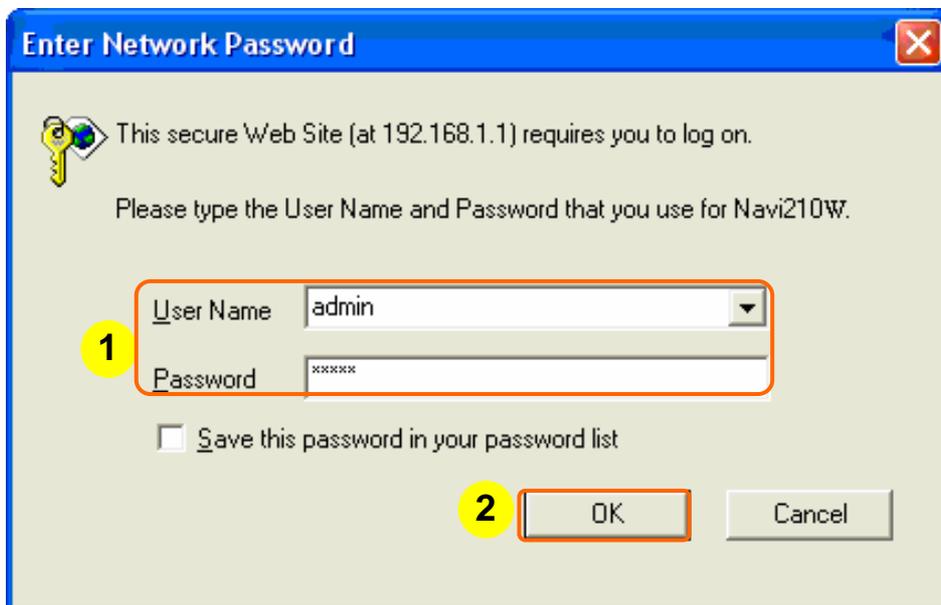
【Step1】

1. Open IE browser.
2. Input **192.168.1.1** in the address field. Then, press **Enter**.



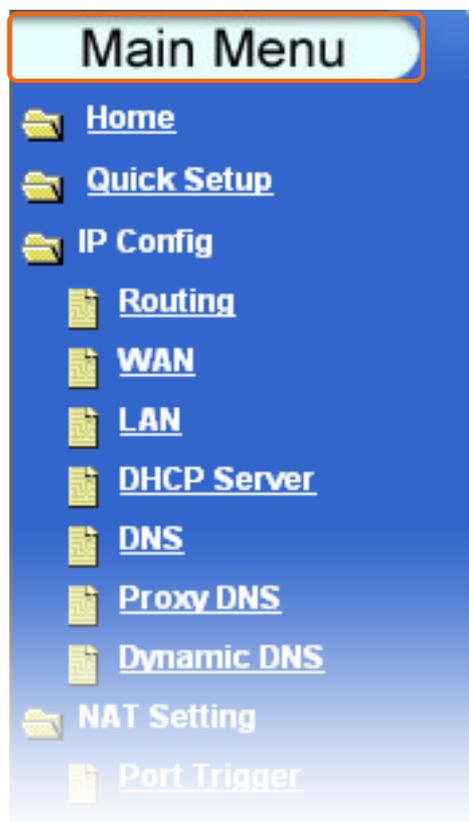
【Step2】

1. Input **admin** in **User Name** and **Password** blank fields.
2. Click on **OK** button.



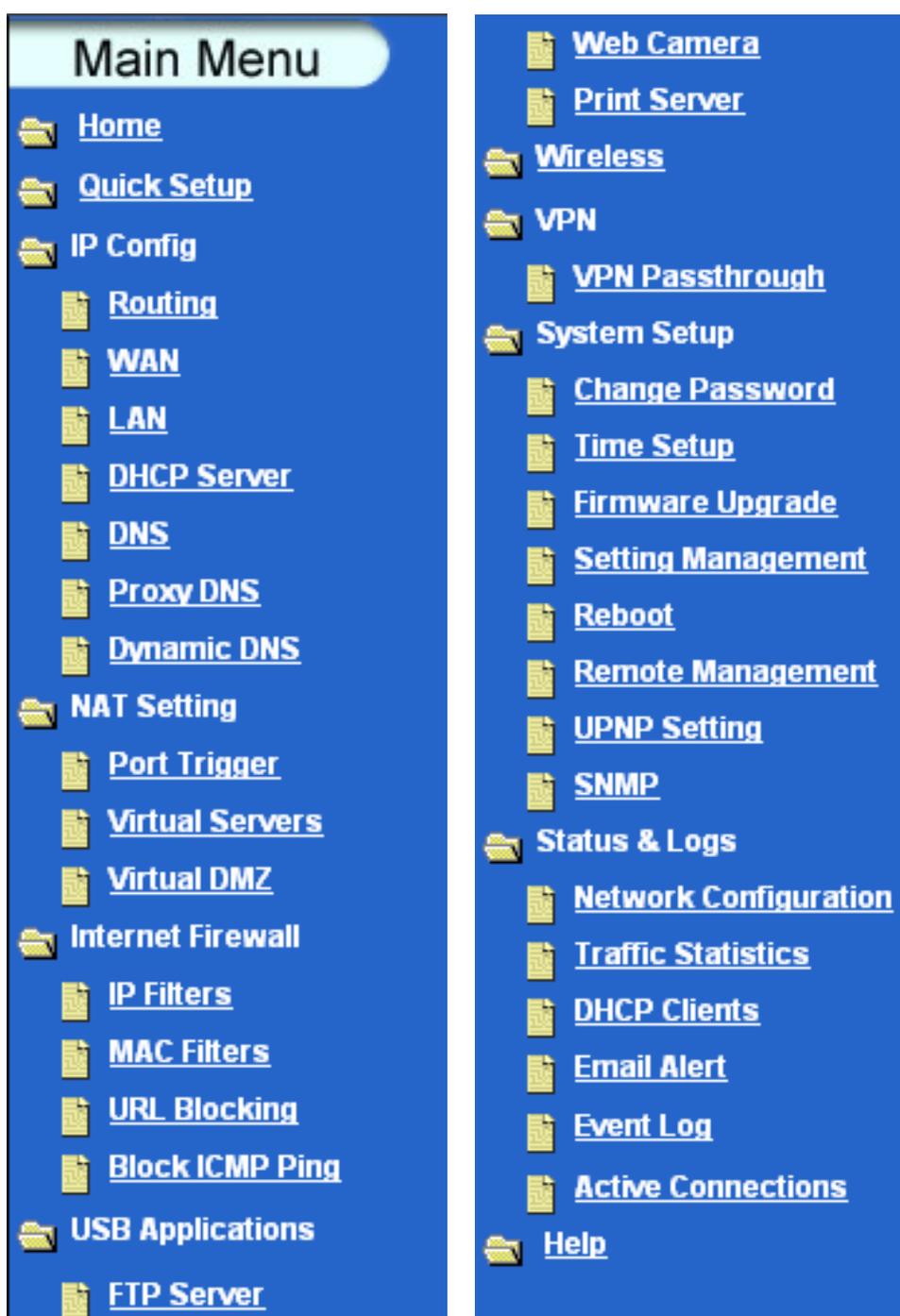
【Step3】

Select the functional items you want under the **Main Menu** bar to do related settings.



2.2 How to enter Navi210W's setting items

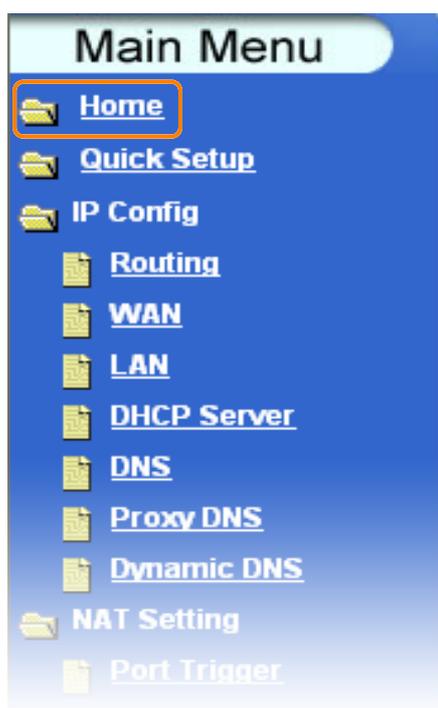
The Main Menu includes total main 10 folders as shown below. Select a specific sub-menu item you want in the left panel and it will reveal a setting page in the right hand side. Follow the instructions of Chapter 3 to setup Navi210W. Due to the main menu in long branch-list which might cause the view problem; we cut it in two and put them side by side in a page for keeping the well-view as shown below.



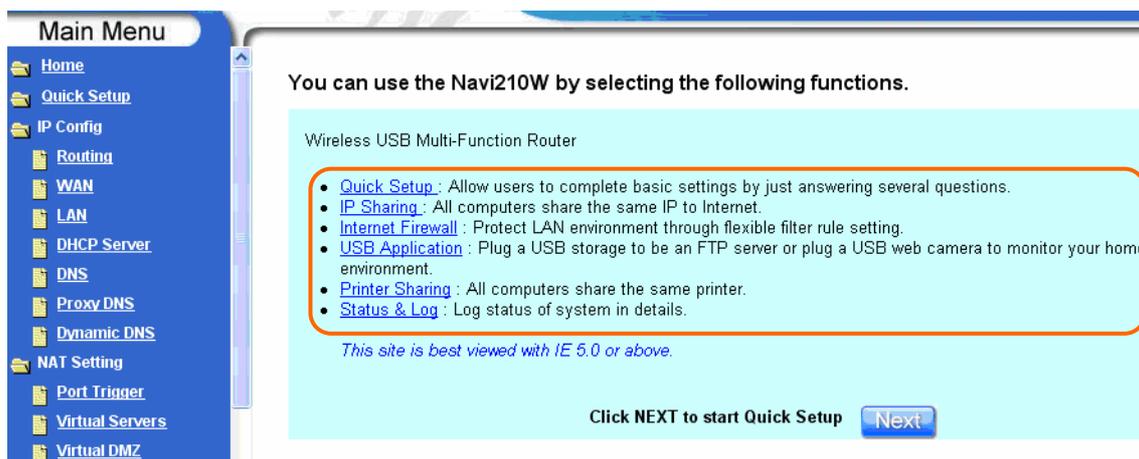
3 Navi210W Settings

3.1 Home

The **Home** page lists the main functional items for your quick linking. Click on this item will also help you to back to Navi210W's Main Menu.



The 6 functional items showed on the central part are the most common use, Quick Setup, IP Sharing, Internet Firewall, USB Application, Printer Sharing and Status & Log are selected from Main Menu for your convenience. Of course, you can set what you want from the Main Menu bar. In addition, click on **Next** button; you will enter the Quick Setup Settings.



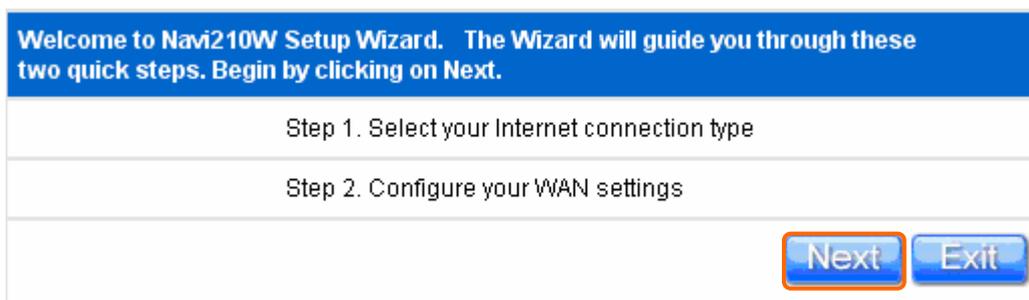
3.2 Quick Setup

Select **Quick Setup** menu for accessing Internet quickly. In addition, Navi210W support four Internet Connection Types. The setting fields will differ from each connection type you selected. Please follow the steps to do **Quick Setup**.



【Step1】

The following page will guide you through these two quick steps. The first one is **Select your Internet connection type**. The other one is **Configure your WAN settings**. Please click on **Next** button to begin.



【Step2】

Navi210W supports **four** WAN connection types such as Dynamic IP Address (default value), Static IP Address, PPPoE or PPTP. Select one of them to connect to your ISP. If you don't know, please check with your ISP. These types are placed in a table as shown below. The setting fields will differ depending on what kind of connection type you select.



If you applied for a **Dynamic IP** connection type from ISP, please follow the steps to setup your WAN connection. Cable modem providers typically use dynamic assignment of IP Address.

【Step3-1】 (Dynamic IP Address)

1. Host Name

The host name is optional; but if your ISP requires you to input a specific host name, please input it in, for example **Jack**, **navi210w** or **stevenwang** applied for from ISP.

Notice: Don't copy the mentioned Host Name as yours.

2. MAC Address: Keep, Clone & Input MAC Address

Select **Keep** or **Clone MAC Address** for copying the MAC address of your Ethernet adapter to the gateway, or **input a group of MAC Address**, such

as **00-0D-61-30-4E-C2**. Generally, your ISP will remind you.

Notice: Don't copy the mentioned MAC Address as yours.

3. Back, Next & Exit

Click on **Back** button to back to the front page. Click on **Next** button to the next page. If you want to quit the setting, please click on **Exit** button.

If you applied for a **Static IP** connection type from ISP, please follow the steps to setup your WAN connection.

【Step3-2】 (Static IP Address)

1. IP Address

Input your local IP Address supplied by ISP, **212.93.45.22** for example. If you don't know, please check with your ISP.

Notice: Don't copy the mentioned IP Address as yours.

2. Subnet Mask

Input Subnet Mask, normally it is **255.255.255.0**.

3. ISP Gateway Address

Input ISP Gateway Address supplied by ISP, **212.93.45.254** for example. If you don't know, please check with your ISP.

Notice: Don't copy the mentioned ISP Gateway Address as yours.

4. Primary DNS Address

Input your primary DNS Address supplied by ISP, **168.95.254.3** for example. If you don't know yours, please check on your ISP.

Notice: Don't copy the mentioned Primary DNS Address as yours.

5. Secondary DNS Address

Input your Secondary DNS Address. If you don't know yours, please check on your ISP.

6. Back, Next & Exit

Click on **Back** button to back to the front page. Click on **Next** button to the next page. If you want to quit the setting, please click on **Exit** button.

Set Static IP Address	
Enter in the static IP information provided to you by your ISP. Click Next to continue.	
IP Address	1 <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text" value="212"/> . <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text" value="93"/> . <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text" value="45"/> . <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text" value="22"/>
Subnet Mask	2 <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text" value="255"/> . <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text" value="255"/> . <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text" value="255"/> . <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text" value="0"/>
ISP Gateway Address	3 <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text" value="212"/> . <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text" value="93"/> . <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text" value="45"/> . <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text" value="254"/>
Primary DNS Address	4 <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text" value="168"/> . <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text" value="95"/> . <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text" value="254"/> . <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text" value="3"/>
Secondary DNS Address	5 <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text"/> . <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text"/> . <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text"/> . <input style="border: 1px solid orange; width: 100%; text-align: center;" type="text"/> (optional)
6 <input style="border: 1px solid orange; padding: 2px 10px;" type="button" value="Back"/> <input style="border: 1px solid orange; padding: 2px 10px; margin-left: 5px;" type="button" value="Next"/> <input style="border: 1px solid orange; padding: 2px 10px; margin-left: 5px;" type="button" value="Exit"/>	

【Step3-3】 (PPPoE)

If you applied for the **PPPoE** connection type, please follow the steps to setup your WAN connection.

1. Local IP Address

If you applied for a Static PPPoE IP Address, please input it in the blank field, **212.93.45.22** for example. If you applied for a Dynamic one, please leave it in blank. If you don't know, please check with your ISP.

Notice: Don't copy the mentioned Local IP Address as yours.

2. User Name

Input your User Name supplied by ISP, **navi210w** for example.

3. Password

Input your Password supplied by ISP, **1a2b3c4d5** for example.

Notice: Each Character you inputted will change to * form.

4. Auto-reconnect

Select **Enabled** to connect Internet automatically when network was cut off. Select **Disabled** to cancel automatic online connection when network was cut off.

5. Back, Next & Exit

Click on **Back** button to back to the previous page. Click on **Next** button to the next page. If you want to quit the setting, please click on **Exit** button.

【Step3-4】 (PPTP)

If your ISP supplies you the **PPTP** connection type, please follow the steps to setup your WAN connection.

1. IP Address

Input your IP Address supplied by ISP, **212.93.45.22** for example. If you don't know, please check with your ISP.

Notice: Don't copy the mentioned IP Address as yours.

2. Subnet Mask

Input Subnet Mask, normally it is **255.255.255.0**.

3. Server IP

Input the Server IP supplied by ISP, **123.220.12.90** for example. If you don't know, please check with your ISP.

Notice: Don't copy the mentioned Server IP Address as yours.

4. PPTP Account

Input the PPTP Account supplied by ISP, **navi210w** for example.

5. Password

Input your Password supplied by ISP.

Notice: Each Character you inputted will change to * form.

6. Primary DNS Address

Input your primary DNS Address supplied by ISP, **168.95.254.3** for example. If you don't know yours, please check on your ISP.

Notice: Don't copy the mentioned Primary DNS Address as yours.

7. Secondary DNS Address

Input your Secondary DNS Address. If you don't know yours, please check with your ISP.

8. Back, Next & Exit

Click on **Back** button to back to the previous page. Click on **Next** button to the next page. If you want to quit the setting, please click on **Exit** button.

Set PPTP

Please set you PPTP Client data then press **Next** to continue.

IP Address	1	212 . 93 . 45 . 22
Subnet Mask	2	255 . 255 . 255 . 0
Server IP	3	123 . 220 . 12 . 90
PPTP Account	4	Navi210W
Password	5	*****
Primary DNS Address	6	168 . 95 . 254 . 3
Secondary DNS Address	7	. . . (optional)

8
Back
Next
Exit

【Step4】

After clicking on **Next** button, the Setup Completed page will appear. Then, click on **Finish** button to save the current setting.

Setup Completed

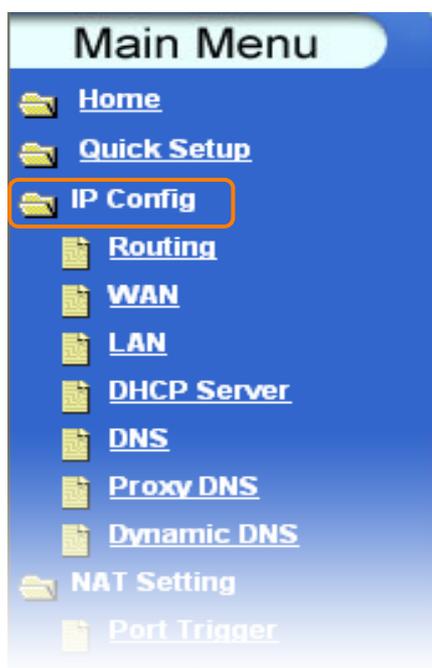
The Setup Wizard has completed. Click on **Back** to modify changes or mistakes. Click **Finish** to save the current settings.

Back
Finish
Exit

WARNING: Make sure that the cable from your computer must connect to the router's LAN port, and your ISP cable must connect to the router's WAN port.

3.3 IP Config

IP Config contains seven functional items, including **Routing**, **WAN**, **LAN**, **DHCP Server**, **DNS**, **Proxy DNS** and **Dynamic DNS**. Follow the instructions to configure your settings.



3.3.1 Routing

This function allows you to add routing rules into Navi210W. It is useful if you connect several computers behind Navi210W to share the same connection to Internet.

Select **Routing** under the **IP Config** menu. Navi210W supports two Routing modes i.e. **Enable Gateway (NAT) Mode** and **Enable Routing Mode**. Follow the instructions to enter the Routing Table setting page.



1. Enable Gateway (NAT) Mode

Select **Enable Gateway (NAT) mode** is recommended for most users. Technically, gateway mode is, NAT is enabled, WAN connection is allowed by using PPPoE, or DHCP client, or static IP. In addition, some features, which are useful for home user, such as UPnP and DDNS, are supported.

Notice: If you select "Enable Gateway (NAT) Mode", please skip the following 2~7 settings.

2. Enable Routing Mode

Select **Enable Routing Mode** will accept incoming connections (passive opens) and/or establish outgoing connections. Technically, routing mode is, NAT is disabled, static and dynamic routing protocol are allowed to set, and WAN connection is allowed only by using static IP.

3. Dynamic Router (RIP)

Select **Enabled** Dynamic Routing (RIP) by pull-down menu enable the router to automatically adjust to physical changes in the network's layout and exchange routing tables with other routers. The router determines the network packets' route based on the fewest number of hops between the source and destination.

4. Destination IP

The destination IP is the IP address of the network or host to which you want to assign a static route, **192.168.1.25** for example.

Notice: Don't copy the mentioned Destination IP Address as yours.

5. Subnet Mask

The subnet mask determines which portion of a destination LAN IP address is the network portion, and which portion is the host portion. Generally, the Subnet Mask is **255.255.255.0**.

6. Default Gateway

This is the IP address of the gateway device that allows for contact between the router and the network or host, **212.93.45.22** for example.

Notice: Don't copy the mentioned Default Gateway Address as yours.

7. Interface

Depending on where the Destination IP is located, select LAN & Wireless or WAN from the Interface drop-down list.

8. Routing Table

Click on **Show** button, the routing table for dynamic routing or static routing will be shown below. If you want to delete the setting in the list table, please mark the Delete blank grid in the right hand side, and then click on **delete** button. If you want to renew the list table, please click on **reset** button. If you want to go back to the front page, please click on underlining **Back**.

Routing Table				
Destination	Gateway	Mask	Interface	Delete
192.168.1.0	*	255.255.255.0	LAN/Wireless	<input type="checkbox"/>
delete		reset		Back

9. Apply, Cancel & Help

Click on **Apply** button to continue. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

Routing	
In this page, you can set routing mode of Navi210W. Gateway (NAT) mode is recommended for most users.	
<input checked="" type="radio"/> Enable Gateway (NAT) Mode	1
<input type="radio"/> Enable Routing Mode	2
Dynamic Routing (RIP)	3 <input type="text" value="Enable"/>
Destination IP	4 <input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="1"/> . <input type="text" value="25"/>
Subnet Mask	5 <input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="0"/>
Default Gateway	6 <input type="text" value="212"/> . <input type="text" value="93"/> . <input type="text" value="45"/> . <input type="text" value="22"/>
Interface	7 <input type="text" value="LAN/Wireless"/>
Routing Table	8 <input type="text" value="Show"/>
9 <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>	

3.3.2 WAN

Select **WAN** under the **IP Config** menu. Navi210W supports four WAN connection types, i.e. **Dynamic IP Address**, **Static IP Address**, **PPPoE** and **PPTP**. Follow the instructions to enter the WAN setting page.



【Step1】

The WAN (Wide Area Network) page shows the settings that are used to connect to your ISP (Internet Service Provider). Please select the appropriate option for your specific ISP.

WAN Settings	
Please select the appropriate option to connect to your ISP	
<input checked="" type="radio"/> Dynamic IP Address	Choose this option to obtain an IP address automatically from your ISP (For most Cable modem users)
<input type="radio"/> Static IP Address	Choose this option to set static IP information provided to you by your ISP
<input type="radio"/> PPPoE	Choose this option if your ISP uses PPPoE (For most DSL users)
<input type="radio"/> PPTP	PPTP and BigPond Cable

【Step2-1】 (Dynamic IP Address)

If you applied for a **Dynamic IP** connection type from ISP, please follow the steps to setup your WAN connection. Cable modem providers typically use dynamic assignment of IP Address.

1. Host Name

The host name is optional; but if your ISP requires you to input a specific host name, please input it in, for example **Navi210W** applied for from ISP. Generally, Cable Modem will provide the hostname information.

Notice: Don't copy the mentioned Host Name as yours.

2. MAC Address: Keep, Clone & Input MAC Address

Select **Keep** or **Clone MAC Address** for copying the MAC address of your Ethernet adapter to the gateway, or **input a group of MAC Address**, such as 00-0D-61-30-4E-C2. Generally, your ISP will remind you.

Notice: Don't copy the mentioned MAC Address as yours.

3. Back, Next & Exit

Click on **Back** button to back to the front page. Click on **Next** button to the next page. If you want to quit the setting, please click on **Exit** button.

Dynamic IP Address	
Host Name	<div style="display: flex; align-items: center;"> 1 <input style="border: 1px solid orange; width: 150px;" type="text" value="navi210w"/> (optional) </div>
MAC Address	<div style="border: 1px solid orange; padding: 5px;"> <div style="display: flex; align-items: center;"> 2 <div style="margin-left: 10px;"> <input checked="" type="radio"/> Keep MAC Address <input type="radio"/> Clone MAC Address <input type="radio"/> Restore MAC Address <input type="radio"/> <input style="width: 30px;" type="text" value="00"/> : <input style="width: 30px;" type="text" value="0D"/> : <input style="width: 30px;" type="text" value="61"/> : <input style="width: 30px;" type="text" value="30"/> : <input style="width: 30px;" type="text" value="4E"/> : <input style="width: 30px;" type="text" value="C2"/> </div> </div> </div>
<div style="display: flex; justify-content: flex-end; align-items: center;"> 3 <input style="border: 1px solid orange; margin-right: 5px;" type="button" value="Apply"/> <input style="border: 1px solid orange; margin-right: 5px;" type="button" value="Cancel"/> <input style="border: 1px solid orange;" type="button" value="Help"/> </div>	

【Step2-2】 (Static IP Address)

If you applied for a **Static IP** connection type from ISP, please follow the steps to setup your WAN connection.

1. IP Address

Input your IP Address supplied by ISP, **212.93.45.22** for example. If you don't know, please check with your ISP.

Notice: Don't copy the mentioned IP Address as yours.

2. Subnet Mask

Input Subnet Mask, normally it is **255.255.255.0**.

3. ISP Gateway Address

Input ISP Gateway Address, **212.93.45.254** for example. If you don't know, please check with your ISP.

Notice: Don't copy the mentioned IP Gateway Address as yours.

4. Apply, Cancel & Help

Click on **Apply** button to continue. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

Static IP address	
IP Address	1 212 . 93 . 45 . 22
Subnet Mask	2 255 . 255 . 255 . 0
ISP Gateway Address	3 212 . 93 . 45 . 254
4 Apply Cancel Help	

【Step2-3】

If you applied for a **PPPoE** connection type from ISP, please follow the steps to setup your WAN connection.

1. Local IP Address

If you applied for a Static PPPoE IP Address, please input it in the blank field, **212.93.45.22** for example. If you applied for a Dynamic one, please leave it in blank. If you don't know, please check with your ISP.

Notice: Don't copy the mentioned Local IP Address as yours.

2. User Name

Input your User Name supplied by ISP, **navi210w** for example. If you don't know, please check with your ISP.

Notice: Don't copy the mentioned User Name as yours.

3. Password

Input your Password supplied by ISP.

Notice: Each Character you inputted will change to * form.

4. Auto-reconnect

Select **Enabled** to connect Internet automatically when network was cut off. Select **Disabled** to cancel automatic online connection when network was cut off.

5. Apply, Cancel & Help

Click on **Apply** button to continue. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

PPPoE	
Local IP Address	1 <input type="text" value="212"/> . <input type="text" value="93"/> . <input type="text" value="45"/> . <input type="text" value="22"/> (optional)
User Name	2 <input type="text" value="navi210w"/>
Password	3 <input type="password" value="*****"/>
Auto-reconnect	4 <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled
5 <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>	

【Step2-4】

If you applied for a **PPTP** connection type from ISP, please follow the steps to setup your WAN connection.

1. IP Address

Input your IP Address supplied by ISP, **212.93.45.22** for example. If you don't know, please check with your ISP.

Notice: Don't copy the mentioned IP Address as yours.

2. Subnet Mask

Input Subnet Mask, normally it is **255.255.255.0**.

3. Server IP

Input the Server IP supplied by ISP, **123.220.12.90** for example. If you don't know, please check with your ISP.

Notice: Don't copy the mentioned Server IP as yours.

4. PPTP Account

Input the PPTP Account supplied by ISP, **navi210w** for example. If you don't know, please check with your ISP.

Notice: Don't copy the mentioned PPTP Account as yours.

5. PPTP Password

Input the Password supplied by ISP.

Notice: Each Character you inputted will change to * form.

6. Apply, Cancel & Help

Click on **Apply** button to continue. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

PPTP	
IP Address	1 212 . 93 . 45 . 22
Subnet Mask	2 255 . 255 . 255 . 0
Server IP	3 123 . 220 . 12 . 90
PPTP Account	4 navi210w
PPTP Password	5 *****
6 Apply Cancel Help	

3.3.3 LAN

Use this page to set up the local IP address and subnet mask for your router. Please select **LAN** under the **IP Config** menu and follow the instructions below to enter the LAN setting page to configure the settings you want.



1. IP Address

Input your IP Address supplied by ISP. The default value of LAN IP address is **192.168.1.1**.

2. Subnet Mask

Input Subnet Mask, normally it is **255.255.255.0**.

3. Local Domain Name

Input a Domain Name that you applied for or named by yourself, **navi210w** for example, but it's optional.

4. Apply, Cancel & Help

Click on **Apply** button to continue. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

LAN	
Use this page to set up the local IP address and subnet mask for the Navi 210W.	
IP Address	<div style="display: flex; align-items: center;"> 1 <input style="border: 1px solid orange; width: 100%;" type="text" value="192.168.1.1"/> </div>
Subnet Mask	<div style="display: flex; align-items: center;"> 2 <input style="border: 1px solid orange; width: 100%;" type="text" value="255.255.255.0"/> </div>
Local Domain Name	<div style="display: flex; align-items: center;"> 3 <input style="border: 1px solid orange; width: 80%;" type="text" value="navi210w"/> (optional) </div>
<div style="display: flex; justify-content: flex-end; align-items: center; gap: 10px;"> 4 <input style="border: 1px solid orange;" type="button" value="Apply"/> <input style="border: 1px solid orange;" type="button" value="Cancel"/> <input style="border: 1px solid orange;" type="button" value="Help"/> </div>	

3.3.4 DHCP Server

Use this page to setup your Navi210W as a DHCP server. DHCP servers automatically assign IP addresses to DHCP clients in your local network. Please select **DHCP Server** under the **IP Config** menu, and follow the instructions below to enter the **DHCP Server** setting page to configure the settings you want.



1. DHCP Server

If the DHCP (Dynamic Host Configuration Protocol) server is enabled, the gateway can automatically assign IP address to the DHCP clients logged into the local network.

2. Starting IP Address

The starting IP address is for the DHCP IP pool. Input a number from 2 to 254.

3. Ending IP Address

The ending IP address is for the DHCP IP pool. Input a number from 2 to 254.

Notice: If you only allow 10 clients to access, the Starting and Ending IP Addresses could be from 2 to 11, from 30 to 39, or from 245 to 254. The number must be among 2 to 254 because the number 1 is for Navi210W.

4. Lease Time

The duration of the time is for the IP lease. Input a time **1 hour** for example in the blank field. Navi210W will assign renewed or the same IP Address to clients after 1 hour.

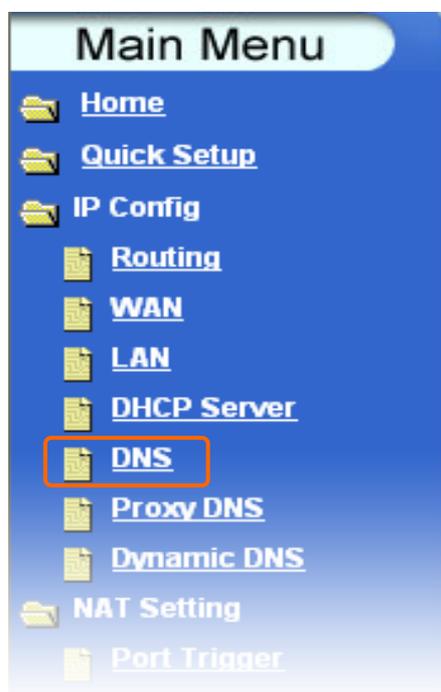
5. Apply, Cancel & Help

Click on **Apply** button to continue. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

DHCP Server	
Use this page to set up the Navi210W as a DHCP server. DHCP servers automatically assign IP addresses to DHCP clients in your local network.	
DHCP Server	<div style="display: flex; align-items: center;"> 1 <input checked="" type="radio"/> Enable <input type="radio"/> Disable </div>
Starting IP Address	<div style="display: flex; align-items: center;"> 2 <input style="width: 100px;" type="text" value="192.168.1.100"/> </div>
Ending IP Address	<div style="display: flex; align-items: center;"> 3 <input style="width: 100px;" type="text" value="192.168.1.150"/> </div>
Lease Time	<div style="display: flex; align-items: center;"> 4 <input style="width: 60px;" type="text" value="1 Hour"/> </div>
<div style="display: flex; justify-content: flex-end; gap: 10px;"> 5 <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/> </div>	

3.3.5 DNS

A DNS (Domain Name Server) is a server located in the Internet that translates URLs to IP addresses. Please select **DNS** under the **IP Config** menu and follow the instructions below to enter the **DNS** setting page to configure the settings you want.



1. Primary DNS Address

Input the Primary DNS Address supplied by your ISP, **168.95.254.3** for example. If you don't know, check with your ISP.

Notice: Don't copy the mentioned Primary DNS Address as yours.

2. Secondary DNS Address

Input the Secondary DNS Address supplied by your ISP. If you don't know, check with your ISP.

3. Apply, Cancel & Help

Click on **Apply** button to continue. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

DNS

A Domain Name Server is a server located in the Internet that translates URLs to IP addresses. Please configure your domain name server in this page

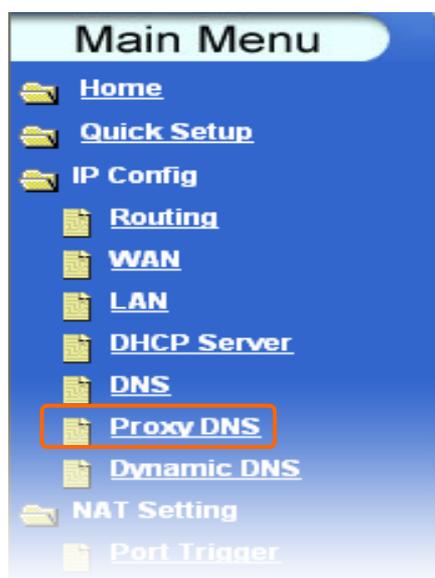
Primary DNS Address **1**

Secondary DNS Address **2** (optional)

3

3.3.6 Proxy DNS

Proxy DNS acts as a DNS server for the internal network. Please select **Proxy DNS** under the **IP Config** menu, and follow the instructions below to enter the **Proxy DNS** Setting page to configure the settings you want.



1. Proxy DNS

Select **Enabled** or **Disabled** to allow or disallow Proxy DNS function. If you select **Enabled**, please finish the following settings.

2. Domain Name

Input a Domain Name that you applied for from DNS website, **navi210w.example.net** for example.

Notice: Don't copy the mentioned Domain Name as yours.

3. IP Address

Input the IP Address where the DNS Server located, **192.168.1.65** for example.

Notice: Don't copy the mentioned IP Address as yours.

4. Delete & Edit

Click on **Delete** to delete a datum in the list table. Click on **Edit** to edit the specified datum in the list table.

5. Apply, Cancel & Help

Click on **Apply** button to add the settings into the list table. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

Proxy DNS

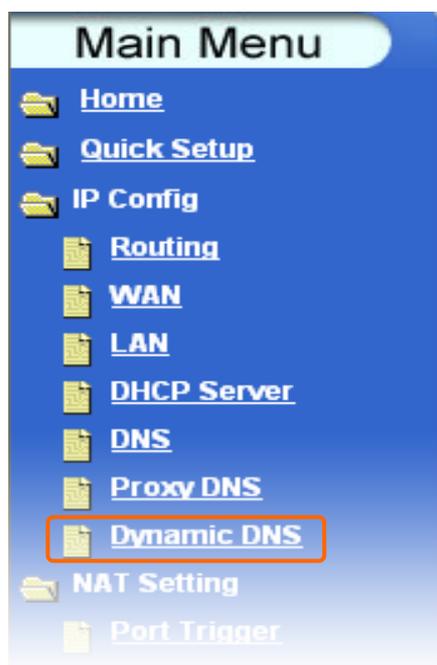
Proxy DNS acts as a DNS server for the internal network.

Proxy DNS	1 <input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
Domain Name	2 <input style="border: 1px solid orange; width: 100%;" type="text" value="navi210w.example.net"/>
IP Address	3 <input style="border: 1px solid orange; width: 20px;" type="text" value="192"/> <input style="border: 1px solid orange; width: 20px;" type="text" value="168"/> <input style="border: 1px solid orange; width: 20px;" type="text" value="1"/> <input style="border: 1px solid orange; width: 20px;" type="text" value="65"/>
5 <input style="border: 1px solid orange; margin-right: 5px;" type="button" value="Apply"/> <input style="border: 1px solid orange; margin-right: 5px;" type="button" value="Cancel"/> <input style="border: 1px solid orange;" type="button" value="Help"/>	

Domain Name	IP Address	Delete	Edit
navi210w.example.net	192.168.1.65	4 <input style="border: 1px solid orange; margin-right: 5px;" type="button" value="Delete"/> <input style="border: 1px solid orange;" type="button" value="Edit"/>	

3.3.7 Dynamic DNS

Dynamic DNS allows you to make an assumed name as a dynamic IP address to a static hostname. Please configure the dynamic DNS below. Please select **Proxy DNS** under the **IP Config** menu, and follow the instructions below to enter the **Proxy DNS** setting page to configure the settings you want.



1. Dynamic DNS

Select **Enabled** or **Disabled** to allow or disallow the DDNS Client access.

2. Provider

Select **DynDNS.org** embedded in the pull-down menu.

3. Host Name

Input your **Host Name** you had registered from Dynamic-DNS website, **navi210w** for example.

Notice: Don't copy the mentioned Host Name as yours.

4. User Name

User Name is used as an identity to login Dynamic-DNS service, **navi210w** for example.

Notice: Don't copy the mentioned User Name as yours.

5. Password

Password is applied to login Dynamic-DNS service.

Notice: Each Character you inputted will change to ● form.

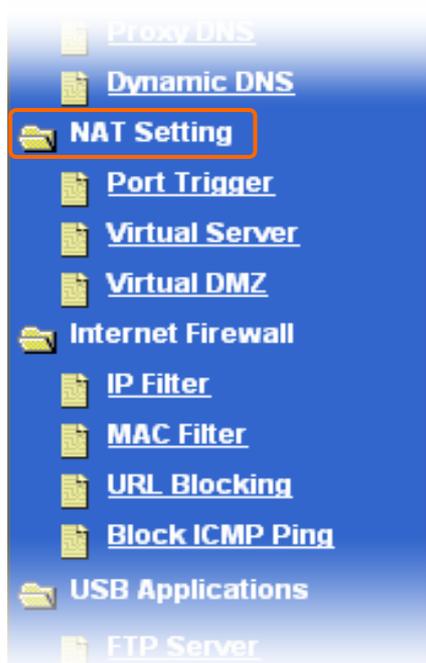
6. Apply, Cancel & Help

Click on **Apply** button to add the settings into the list table. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

Dynamic DNS	
Dynamic DNS allows you to alias a dynamic IP address to a static hostname. Please configure the dynamic DNS below	
Dynamic DNS 1	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
Provider 2	DynDNS.org
Host Name 3	navi210w
Username 4	navi210w
Password 5	••••••••
6 <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>	

3.4 NAT Setting

It contains three functional items under NAT Setting, such as **Port Trigger**, **Virtual Server** and **Virtual DMZ**. Follow the instructions to configure your settings.



3.4.1 Port Trigger

Application-triggered port forwarding opens a port only when a program needs to use it. Example programs include Internet gaming, video conferencing, and Internet telephone. Although many Internet programs will work through a firewall without any special configuration, programs that use one port to send information and another to receive information can be set up here. Please select **IP Filters** under the **NAT Setting** menu, and follow the steps below to enter the **IP Filters** setting page to configure the settings you want.



1. Enable/Disable special applications

Select **Enable** to execute special applications if you need to use special application for gaming and video conferencing.

2. Name

Input a **Name** to describe Trigger Port. Description for recording what this rule is used for, **Real Audio** for example.

Notice: Don't copy the mentioned Name as yours.

3. Trigger Port

Input the outgoing (outbound) Trigger Port, **7070-7070** for example.

Notice: Don't copy the Trigger Port as yours.

4. Trigger Type

TCP allows data loss when they are transmitted; On the contrary, **UDP** doesn't allow data loss. Select a protocol **TCP** or **UDP** in the drop-down menu, **TCP** for example.

5. **Public Port**

Enter the incoming (inbound) **Public Port** or Port range for this particular of application (e.g. **6970-7170**)

Notice: Don't copy the Public Port as yours.

6. **Public Type**

TCP allows data loss when they are transmitted; On the contrary, **UDP** doesn't allow data loss. Select a protocol **TCP** or **UDP** in the drop-down menu, **UDP** for example.

7. **Delete & Edit**

Click on **Delete** to delete a specified datum in the list table. Click on **Edit** to edit a specified datum in the list table.

8. **Apply, Cancel & Help**

Click on **Apply** button to add the settings into the list table. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

Notice: Only a LAN client can use a particular special application every time. The range of trigger ports is from 0 to 65535.

Port Trigger	
Port trigger is used to run applications that require multiple connections. This feature may be necessary for special applications like online gaming and video conferencing.	
Enable/Disable special applications	1 <input type="button" value="Enable"/>
Name	2 <input type="text" value="Real Audio"/>
Trigger Port	3 <input type="text" value="7070"/> - <input type="text" value="7070"/>
Trigger Type	4 <input type="button" value="TCP"/>
Public Port	5 <input type="text" value="6970"/> - <input type="text" value="7170"/>
Public Type	6 <input type="button" value="UDP"/>
8 <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>	

Status	Name	Trigger	Public	Delete	Edit
off	Real Audio	TCP/7070-7070	UDP/6970-7170	Delete	Edit
off	Quick Time 4	TCP/554-554	UDP/6970-6999	Delete	Edit

3.4.2 Virtual Server

Virtual servers are used to allow the Internet users to access the services, e.g. FTP, Web, within the LAN. When the Internet users want to access services in the LAN, they will send requests to the WAN IP address of the gateway. The gateway will redirect those requests to the local servers in the LAN. In addition, Navi210W has built-in firewall function, which makes all hosts behind Navi210W are invisible to the outside. If you would like to set up servers, such as web server or mail server. Follow the steps.

1. Enable/Disable Virtual Server

Select **Enable** to execute Virtual Server if you need to use Virtual Server special application. Otherwise, please skip it.

2. Name

The Name is the description for recording what this rule is used for, **ftp** for example.

Notice: You can copy the mentioned Name as yours, or change to another one.

3. Private IP

Input the local IP, **192.168.1.117** for example.

Notice: Don't copy the mentioned Private IP as yours.

4. Protocol Type

TCP allows data loss when they are transmitting; On the contrary, **UDP** doesn't allow data loss. Select a protocol **TCP** or **UDP** in the drop-down menu, **TCP** for example.

5. Private Port

Input the Local and Server Ports you knew, **21-21** for example.

Notice: You can copy the mentioned Private Port as yours, or change to another one.

6. Public Port

The port number on the WAN side will be used to access virtual services by Internet user, **21-21** for example.

Notice: You can copy the mentioned Public Port as yours, or change to another one.

7. Schedule

You can select **Always** or schedule the time when the virtual server will be enabled here.

8. Apply, Cancel & Help

Click on **Apply** button to add the above settings in the list table, but you should make sure that Virtual Servers is in **Enable** position. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

Virtual Servers	
Virtual Servers are used to allow Internet users to access LAN services	
Enable/Disable Virtual Servers	<input type="text" value="Enable"/> 1
Name	<input type="text" value="ftp"/> 2
Private IP	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="1"/> . <input type="text" value="117"/> 3
Protocol Type	<input type="text" value="TCP"/> 4
Private Port	<input type="text" value="21"/> - <input type="text" value="21"/> 5
Public Port	<input type="text" value="21"/> - <input type="text" value="21"/> 6
Schedule	<div style="border: 1px solid orange; padding: 5px;"> <input checked="" type="radio"/> Always 7 <input type="radio"/> From <input type="text" value="Sun"/> <input type="text" value="00"/> : <input type="text" value="00"/> to <input type="text" value="Sun"/> <input type="text" value="23"/> : <input type="text" value="59"/> </div>
8 <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>	

3.4.3 Virtual DMZ

Virtual DMZ (Demilitarized Zone) is used to allow a single computer in the LAN to be exposed to the Internet. You can open up two-way Internet access to a single computer on your network by setting up a virtual DMZ host on that computer. Doing so might allow Internet applications (for example, a web, gaming, or message server) to operate correctly from inside your Navi210W firewall. Follow the steps. (Caution: Enabling this function might expose the virtual DMZ host as well as your entire network to increase security risk.) Please select **Virtual DMZ** under the **NAT Setting** menu, and follow the steps below to enter the **Virtual DMZ** setting page to configure the settings you want.



1. Enable/Disable DMZ

Select **Enable** to execute Virtual DMZ if you need to use Virtual DMZ special application.

Notice: If you select Enable and apply the settings in the Virtual DMZ, the settings in Virtual Server will be invalid.

2. IP Address

Input an IP Address you want to expose to the Internet, **192.168.1.100** for example.

Notice: You can copy the mentioned Public Port as yours, or change to another one.

3. Apply, Cancel & Help

Click on **Apply** button to continue. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

Virtual DMZ	
DMZ (Demilitarized Zone) is used to allow a single computer on the LAN to be exposed to the Internet.	
Enable/DisableDMZ 1	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
IP Address 2	192.168.1.100
3 <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>	

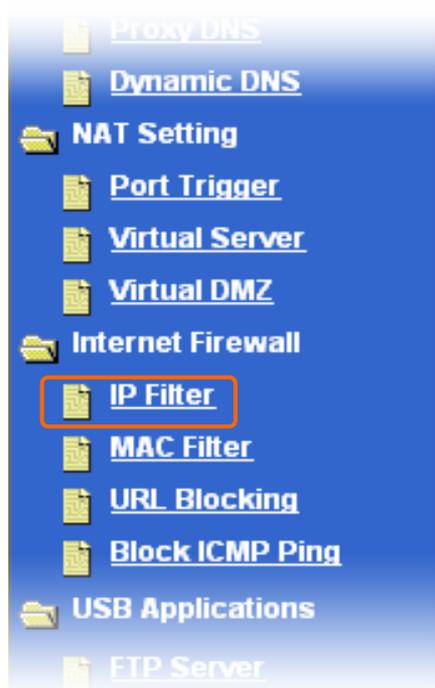
3.5 Internet Firewall

Internet Firewall contains three functional items, includes **IP Filters**, **Mac Filters**, **URL Blocking** and **Block ICMP Ping**. Follow the instructions to configure your settings.



3.5.1 IP Filter

IP Filters are used to deny particular LAN IP addresses from accessing the Internet. You can deny specific port numbers or all ports for an IP address, and also schedule the time when the IP filter will be enabled. As the matter of the fact, you can use the firewall to control certain communications, i.e. blocking malicious transmissions of users in the Internet. We remind you, when you disable the firewall, you will make your network more vulnerable. Follow the steps. Please select **IP Filters** under the **Internet Firewall** menu, and follow the instructions to enter the **IP Filters setting** page to configure the settings you want.



1. Enable/Disable

Select **Enable** to execute IP Filters if you need to use IP Filters special application. It can help you to reduce the risk of outside unauthorized access.

Notice: Only with the Enable condition, the setting value below can be valid.

2. IP

The LAN IP address range will be denied to access Internet, **192.168.1.100 ~ 192.168.1.150** for example. The LAN IP address from 100 to 150 will be denied.

Notice: The mentioned LAN IP addresses are reference value.

3. Port

The source and destination port range will be denied to access Internet, **0~65535** for example. The Ports from 0 to 65535 will be denied.

Notice: The mentioned Ports are reference value.

4. Protocol Type

TCP allows data loss when they are transmitting; On the contrary, **UDP** doesn't allow data loss. Select a protocol **TCP** or **UDP** in the drop-down menu, **TCP** for example.

Notice: The mentioned Protocol Type is a reference value.

5. Schedule

You can select **Always** or schedule the time when the IP Filters will be enabled here.

6. Delete & Edit

Click on **Delete** to delete a specified datum in the list table. Click on **Edit** to edit a specified datum in the list table.

7. Apply, Cancel & Help

Click on **Apply** button to add the settings into the list table. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

IP Filters

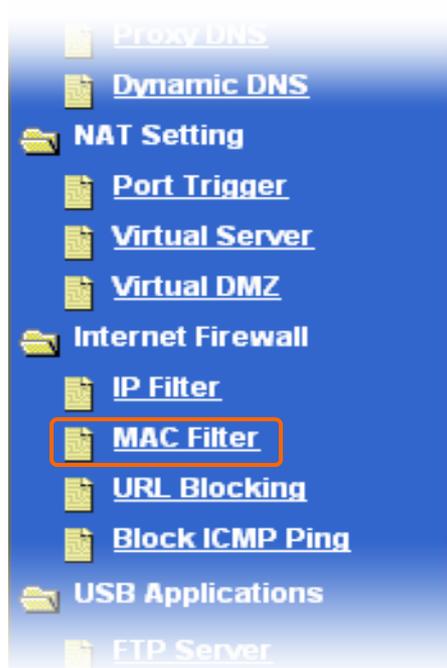
Use IP Filters to deny LAN IP addresses to access the Internet

Enable/Disable IP Filters		<input type="text" value="Enable"/> 1	
IP	2	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="1"/> . <input type="text" value="100"/> - <input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="1"/> . <input type="text" value="150"/>	
Port	3	<input type="text" value="0"/> . <input type="text" value="65535"/>	
Protocol Type	4	<input type="text" value="TCP"/>	
Schedule	5	<input checked="" type="radio"/> Always <input type="radio"/> From <input type="text"/> : <input type="text"/> : <input type="text"/> to <input type="text"/> : <input type="text"/> : <input type="text"/>	
		7	<input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>

IP Range	Protocol(port)	Schedule	delete	Edit
192.168.1.100-192.168.1.150	TCP(0-65535)	always	6	<input type="button" value="Delete"/> <input type="button" value="Edit"/>

3.5.2 MAC Filters

With a specific MAC address, MAC filters are used to allow or deny computers, in the local area network, to access the Internet. Select **“Only allow computers with MAC address listed below to access the network”** to allow clients to enter network. Select **“Only deny computers with MAC address listed below to access the network”** to deny clients to enter network. Please Select **MAC Filters** under the **Internet Firewall** menu, and follow the instructions to enter the **MAC Filters** setting page to configure the settings you want.



1. Disabled MAC Filter

If you don't want to use MAC Filter special application, please select **Disabled MAC Filters** and skip the following settings from 2 to 5.

2. Only Allow/deny computers with MAC address

Select **Only allow computers with MAC address listed below to access the network** or **Only deny computers with MAC address listed below to access the network**.

3. Name

Input a name in the blank field to describe the MAC Address you want to allow or deny, for example **navi210w**.

Notice: The mentioned Name is a reference value.

4. MAC Address

The MAC address is for the computer in the LAN to be listed in the MAC filter table, **00-0D-61-30-4E-C2** for example.

Notice: Don't copy the mentioned MAC Address as yours.

5. Delete & Edit

Click on **Delete** to delete a specified datum in the list table. Click on **Edit** to edit a specified datum in the list table.

6. Apply, Cancel & Help

Click on **Apply** button to add the settings into the list table. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

MAC Filters

Use MAC address to allow or deny computers to access the network

1 Disabled MAC Filters

2 Only allow computers with MAC address listed below to access the network

Only deny computers with MAC address listed below to access the network

3 Name (optional)

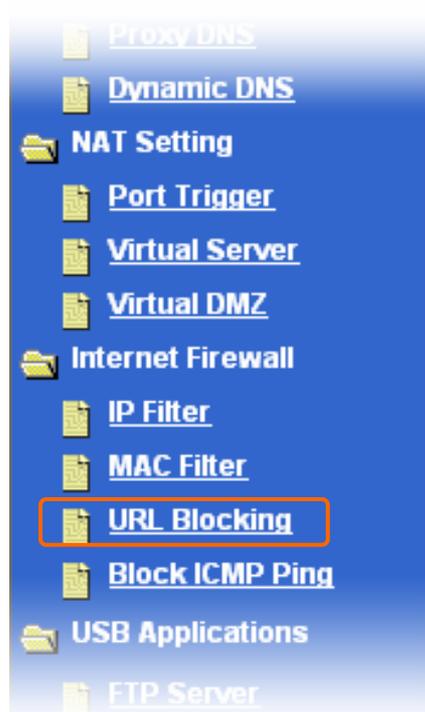
4 MAC Address

6

Name	Policy	mac adress	5 <input type="button" value="delete"/>	<input type="button" value="Edit"/>

3.5.3 URL Blocking

As long as you give the keyword in the URL Filter setting page, your LAN ports clients can't get into website with the same website address. Please select **URL Blocking** under the **Internet Firewall** menu, and follow the instructions to enter the **URL Filters** setting page to configure the settings you want.



1. Disable URL Blocking

If you don't want to use URL Blocking special application, please select **Disabled URL Blocking** and skip the following settings from 2 to 5.

2. Block/allow computers to access

Select **Only block computers to access the following URLs** or **Only allow computers to access the following URLs**.

3. Name

Input a name in the blank field to describe the URL that you want to block or allow, for example **navi210w**.

Notice: The mentioned Name is a reference value.

4. URL¹

Input an entire or abbreviated (at least input to second name space, first character) **website** that you want to block or allow, **www.sexy.com** or **www.s** (The following possible strings and the following name space are included) for example.

Notice: The mentioned keyword is a reference value.

5. Delete & Edit

Click on **Delete** to delete a specified datum in the list table. Click on **Edit** to edit a specified datum in the list table.

¹ URL: An Internet or Web address (sometimes called a URL, or Uniform Resource Locator) typically is composed of four parts: 1. A protocol name, 2. The location of the site, 3. The name of the organization that maintains the site, 4. A suffix that identifies the kind of organization it is (such as .com for a commercial organization), for example, <http://www.Navi210W.com/> 1. http, 2. www, 3. navi210w, 4. com

6. Apply, Cancel & Help

Click on **Apply** button to add the settings into the list table. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

URL Blocking

Use URL blocking to allow or deny PCs to access certain URLs.

Disable URL Blocking **1**

Only block computers to access the following URLs **2**

Only allow computers to access the following URLs

Name **3**

URL **4**

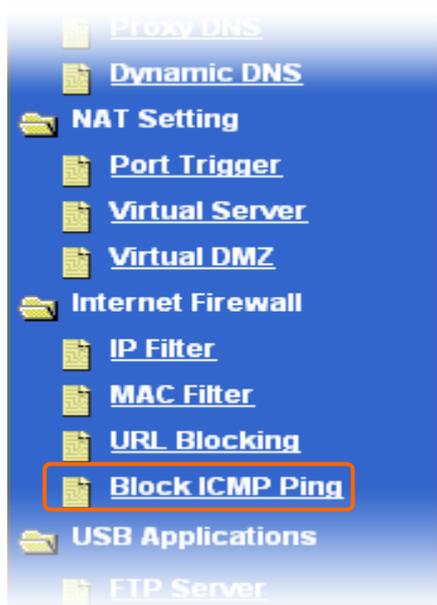
6

Name	Policy	URL	5 <input type="button" value="Delete"/>	<input type="button" value="Edit"/>
------	--------	-----	--	-------------------------------------

Notice: In the URL example www.sexy.com the website is composed of three name spaces and divided by ".". With Navi210W's specific function to block/allow computers to access the following URLs, you are allowed to input a fragment website address you want in the URL blank field; but the first name space is necessary to be filled, such as "www.s". That means if a word located in the second name field beginning with "s", then the following string combined with possible characters will be blocked or allowed.

3.5.4 Block ICMP Ping

By setting up block ICMP ping, the gateway won't response the ICMP ping Internet. Pinging public WAN IP addresses is a common method used by hackers to test whether your WAN IP address is valid. Please select **Block ICMP Ping** under the **Internet Firewall** menu, and follow the instructions to enter the **Block ICMP** Ping setting page to configure the settings you want.

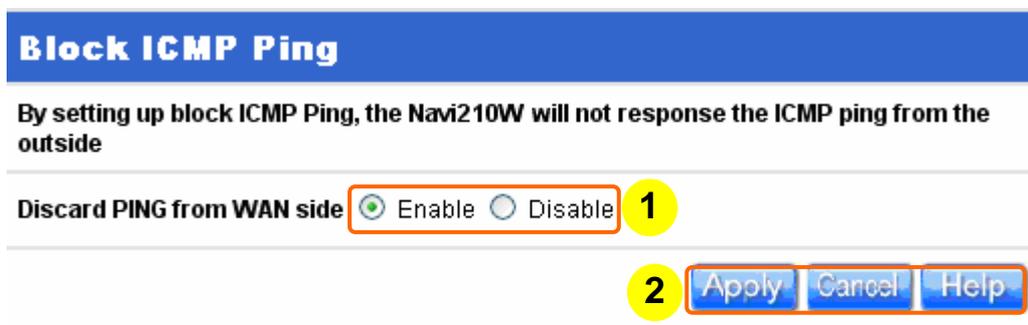


1. Discard PING from WAN side

Select **Enabled** or **Disabled** to allow or disallow clients to ping from WAN side.

2. Apply, Cancel & Help

Click on **Apply** button to continue. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.



3.6 USB Application

Navi210W has built-in 4 USB 2.0 ports for easy plug and share with wide range of USB devices. There is no need to install driver for these USB devices. Simply plug and Share to enjoy the fun and benefits from the following utilities.

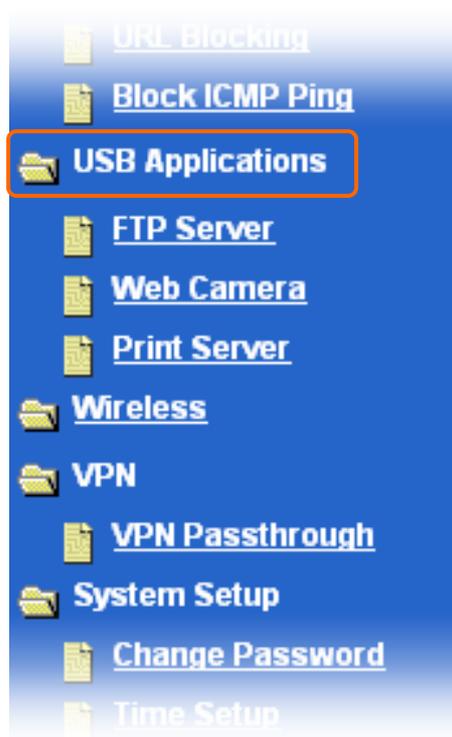
- **FTP Server:** By connecting USB HDD and USB Flash Memory, user can easily setup a FTP Server to share or download files from remote and local network.

- **Webcam Monitor:** Navi210W provides Webcam Monitor function. By connecting a Webcam to the router, it allows user to monitor their home or office from remote and local places. Motion Detection function also been built-in and allows user to use Webcam to detect any motion at their home or office and send email alert with captured images.
- **Printer:** One printer can be shared to your network at the same time.

The following table shows the maximum number of each USB device you can connect to the router in any combination of up to 4 ports.

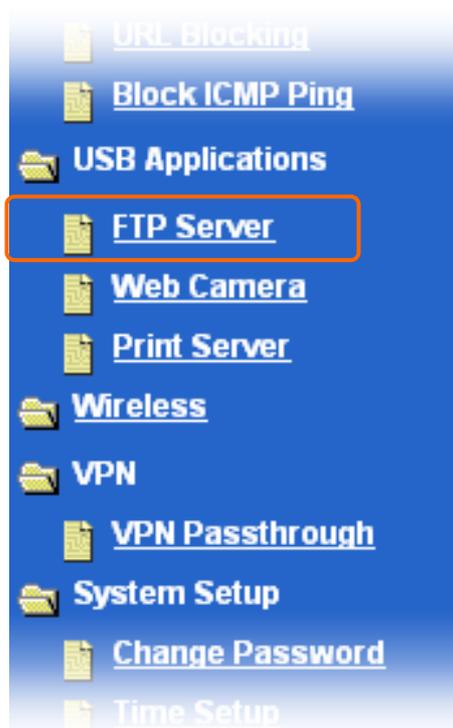
USB HDD	Flash Memory	Webcam	Printer
4	4	1	1

The detail configuration for each server or device function will be explained in the following sections.



3.6.1 FTP Server

In order to efficiently and securely control user to access FTP Server, the accounts are needed to be set in case unauthorized anonyms with malicious purposes will intrude. Please follow these steps to complete Navi210W's FTP settings.



【Step1】

1. Enable FTP Server

Select **Enabled** to allow clients to login FTP Server, please complete the following steps. If you disable FTP Server, please ignore the following steps.

2. Allow Anonymous User to Login

Select **Enabled** or **Disabled** to allow or disallow Anonymous User to Login.

Notice: Enable anonymous access, anonym can read file but write or edit it.

3. Allow Super User to Login

Select **Enabled** or **Disabled** to allow or disallow Super User to Login.

4. Enable FTP Access from WAN

Select **Enabled** or **Disabled** to allow or disallow clients to access FTP from WAN.

Notice: If you select Enabled, users can access your FTP Server from WAN; In contrast, users can access your FTP Server only from LAN.

5. Maximum Users Allowed to Login

Give the maximum log in user number (at most **5** users can access FTP Server at the same time.)

6. FTP Port

The FTP Port default value is **21**, but it can be changed as long as it does

not conflict with other applications.

Notice: When you specified a physical server as your FTP server; please don't use port 21 as your FTP port and change the port 21 to another because 21 here is for the Navi210W's FTP port. The specified physical FTP port is not the same as the Navi210W's FTP port. Don't mix them.

7. Apply, Cancel & Help

After setting user's account in the list table as shown in 【Step2】 , please click on **Apply** button to continue. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

FTP Server

Navi210W supports an embedded FTP server for USB storage. In this page, you can configure the FTP server and manage accounts for the FTP server.

Enable FTP Server	1	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
Allow Anonymous User to Login	2	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled <input type="button" value="Login"/>
Allow Super User to Login	3	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled <input type="button" value="Login"/>
Enable FTP Access from WAN	4	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled
Maximum Users Allowed to Login	5	<input style="width: 50px;" type="text" value="5"/>
FTP Port	6	<input style="width: 50px;" type="text" value="21"/>
7		<input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>

【Step2】

1. User Name, Password & Max. Login

Input a user name, a password and a number of maximum access clients in the blank fields in turn, such as **guest** for **User Name**, ********* for **Password**, **3** for **Max. Login**.

Notice: The mentioned examples are reference value.

2. Rights

Give user a specific right such as **Read/Write Erase**, **Read/Write** or **Read Only**.

3. Add, Delete & Edit

Click on **Add** button to save the inputted information in the User Account List Table. Click on **Delete** to delete a datum in the list table. Click on **Edit** to edit the specified setting in the list table.

User Account List				Add	
User Name	Password	Max. Login	Rights		
guest	*****	3	Read/Write		
User Name	Password	Max. Login	Rights	Delete	Edit
guest	*****	3	RW-	Delete	Edit

【Step3】

1. Address

Open Internet browser and input **ftp://192.168.1.1** in the web address field and then press **Enter**.

2. User Name, Password & Log On

Input User Name "**guest**" and Password "**guest**" for examples you had set before and then click on **Login** button. The data folders will appear. If you are super user, the default values are "**root**" for user name and "**987654321**" for password.



3.6.1.1 Setup FTP User Accounts

In order to efficiently and securely control user to access FTP Server, the accounts are needed to be set in case unauthorized anonyms with malice purposes will intrude. Please follow these steps to complete Navi210W's FTP settings.

【Step1】

1. USB Application

Click on **FTP Server** under the **USB Application** menu.

2. Enable FTP Server

Select **Enabled** to allow clients to login FTP Server, please complete the following steps. If you disable FTP Server, please ignore the following steps.

3. Enable FTP access from WAN

Select **Enabled** or **Disabled** to allow or disallow FTP Access from WAN.

Notice: If you select Enabled, users can access your FTP Server from WAN; On the contrary, users can access your FTP Server only from LAN.

4. Maximum Users Allowed to Log in:

Give the maximum user login numbers (at most 5 users can access FTP Server at the same time.)

5. FTP Port:

The FTP Port default value is **21**, but it can be changed as long as it does not conflict with other applications.

6. User Name, Password & Max. Login

Input a user name, a password and a number of maximum access clients in the blank fields in turn, such as **guest** for **User Name**, ********* for **Password**, **3** for **Max. Login**.

7. Rights

Give the user specific rights such as read, write and erase.

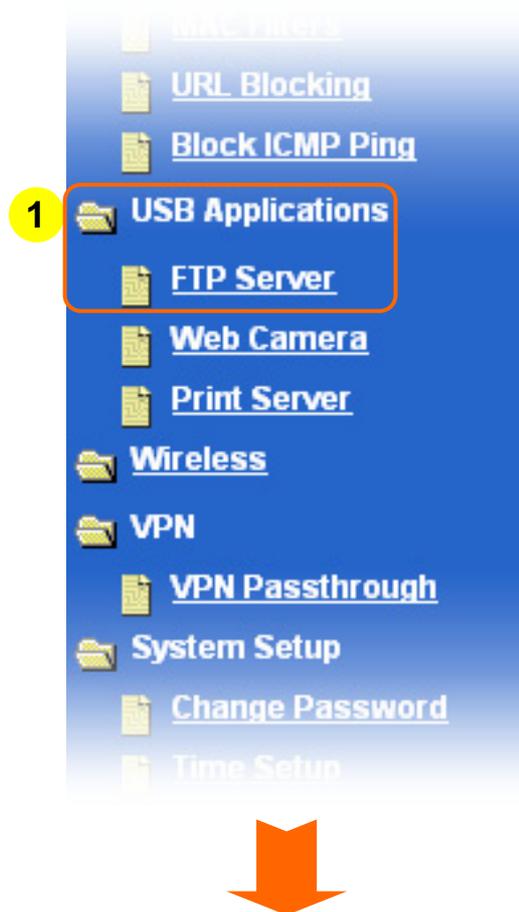
8. Add

Click on **Add** button to save the user name, password and number of client access in the User Account Table. **Del & Edit**

Click on **Delete** to delete a datum in the list table. Click on **Edit** to edit the specified setting in the list table.

9. Apply, Cancel & Help

After setting user's account in the list table as shown in **【Step2】**, please click on **Apply** button to continue. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.



FTP Server

Navi210W supports an embedded FTP server for USB storage. In this page, you can configure the FTP server and manage accounts for the FTP server.



Enable FTP Server	2	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled	
Allow Anonymous User to Login		<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	<input type="button" value="Login"/>
Allow Super User to Login		<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	<input type="button" value="Login"/>
Enable FTP Access from WAN	3	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled	
Maximum Users Allowed to Login	4	5	
FTP Port	5	21	
10 <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>			

User Account List

8

User Name	Password	Max. Login	Rights
6	6	6	7
guest	*****	3	Read/Write

User Name	Password	Max. Login	Rights	Delete	Edit
guest	*****	3	RW-	Delete	Edit

9

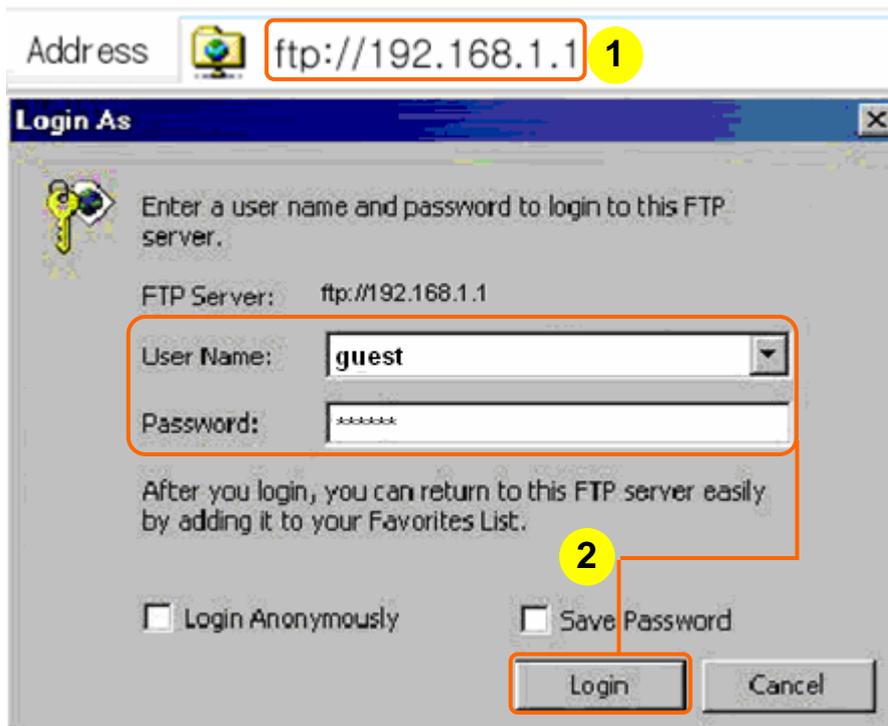
【Step2】

1. Address

Open IE browser and input **ftp://192.168.1.1** in the web address field and then press **Enter**.

2. User Name, Password & Login

Input User Name "**guest**" and Password "**guest**" for examples you had set before and then click on **Login** button. The data folders will appear. If you are super user, the default values are "**root**" for user name and "**987654321**" for password.



3.6.2 Web Camera

By directly connecting USB Webcam to any port of USB 2.0, the router can act as Webcam Monitor and perform the following functions:

- **Digital Home/Office Surveillance Security system**

Simply connecting a Web Camera to the router, users can monitor their home or office through the web page from any remote or local places wherever Internet connection is available. This is the cheapest way to help users to keep close eyes on their office and home or other properties.

- **Motion Detection Security Alert System**

This function allows movement from any unauthorized intruders to be detected at home or office. Once the router detected the movement, it will automatically send alert emails to pre-defined email address with captured images.

Notice: Webcam Monitor is compatible with limited web cameras. Please find the Compatible list from our website.

To setup this function, please select **Web Camera** under the **USB Application** menu. Then, follow the instructions to enter the Web Camera page and finish the settings to use Web Camera from both WAN and LAN.

Notice: After setting, using and then closing this function, next time when you want to reuse it, the values will be changed to the default. You need to set them again.



1. Enable Web Camera

Select **Enabled** to start Webcam function.

2. Web Camera Mode

Select **ActiveX**.

Notice: Click on Preview button, the video screen will show nothing because you didn't click on Apply button to activate the function.

3. Image Size

Users can choose image size from the drop-down list. 320x240 provides a larger image and wide view. 160x120 provides small image and faster transmission.

4. Access from WAN

Select **Yes** or **No** in drop-down menu to allow or disallow user access from outside network.

5. Connection Port

This field indicates the port that the server uses to communicate with ActiveX clients. Input a Connection Port in the blank, normally it is **4940**.

Notice: We recommend you don't change the value.

6. Enable Security Mode

Users can choose appropriate camera mode from the drop-down list. ActiveX mode only allows users to view images from IE.

7. Sense Level

Users can adjust the sensitivity of the motion detection with this option. Please give your webcam a sense level, high, medium or low in order to operate itself automatically, when moving objects pass.

8. Email Server

This field indicates the IP address of the email server that users use to send motion detection alert, **stevenchen@ms80.hinet.net** for example. If you don't know, we advise you to check with your email service provider.

Notice: Don't copy the mentioned Email Server as yours.

9. Account

The account in the email server is used to send motion detection alert, **navi210w** for example.

Notice: The mentioned Account is a reference value.

10. Password

The password, required by some SMTP servers, needs to be filled in order to pass the SMTP verification.

11. Sender Address

Sender Address, required by some SMTP server, needs to be filled in order to pass the SMTP verification.

12. Email Address

The email address is for receiving the motion detection alert, such as **jackwang@ms20.hinet.net**.

Notice: The mentioned Email Address is a reference value.

13. Subject

Please give a description to the alert email, **invader** for example.

Notice: The mentioned Subject is a reference value.

14. Apply, Cancel & Help

Click on **Apply** button to save the settings. If you want to clean the

settings, please click on **Cancel** button. The functional button, **Cancel** can take effect after clicking on **Apply** button. If you don't know how to do it, please click on **Help** button for more information.

Web Camera

With the USB web camera support, the Navi210W allows you to monitor locations such as your home or office from any location through a wireless LAN or over the Internet.



Enable Web Camera	1	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Web Camera Mode	2	ActiveX Mode <input type="button" value="preview"/>
Image Size	3	320*240
Access from WAN	4	No
Connection Port	5	4940

Security Mode Setting

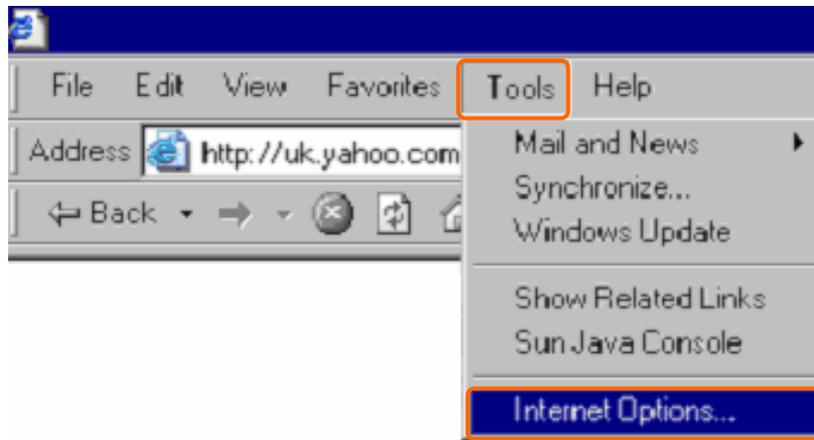
Enable Security Mode	6	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Sense Level	7	low
Email Server	8	ms80,hinet.net
Account	9	navi210w
Password	10	●●●●●● (required by some SMTP servers)
Sender Address	11	abc@ms1.url.com.tw (required by some SMTP servers)
Email Address	12	jackwang@ms20,hinet.net
Subject	13	invader
		14 <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>

Notice: Motion Detection Security Alert System with limited OV511 Webcam only.

3.6.2.1 IE Browser's Settings

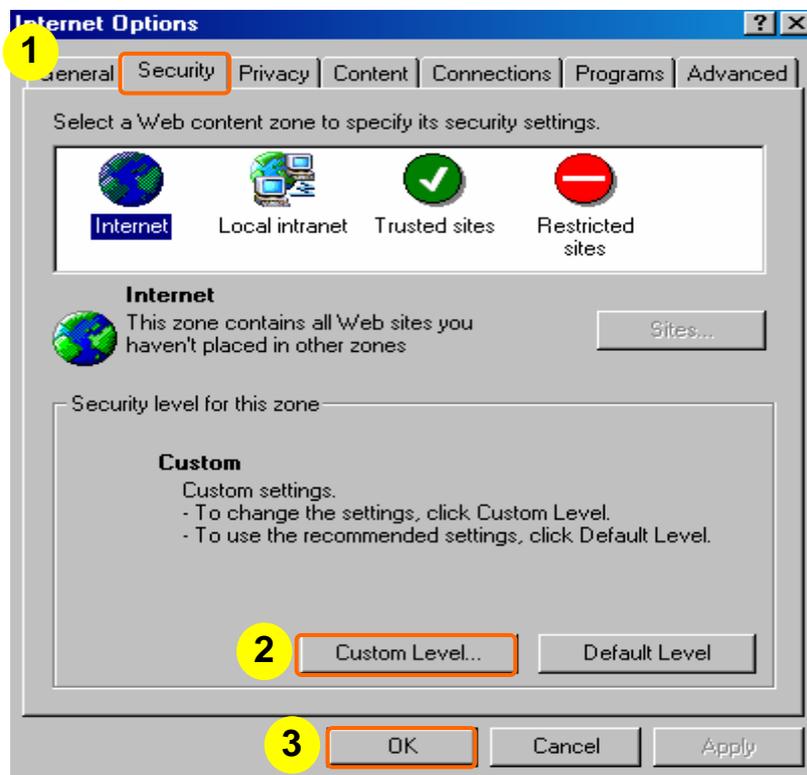
【Step1】

Open **Internet browser** and click on **Tools** tab and **Internet Options....**



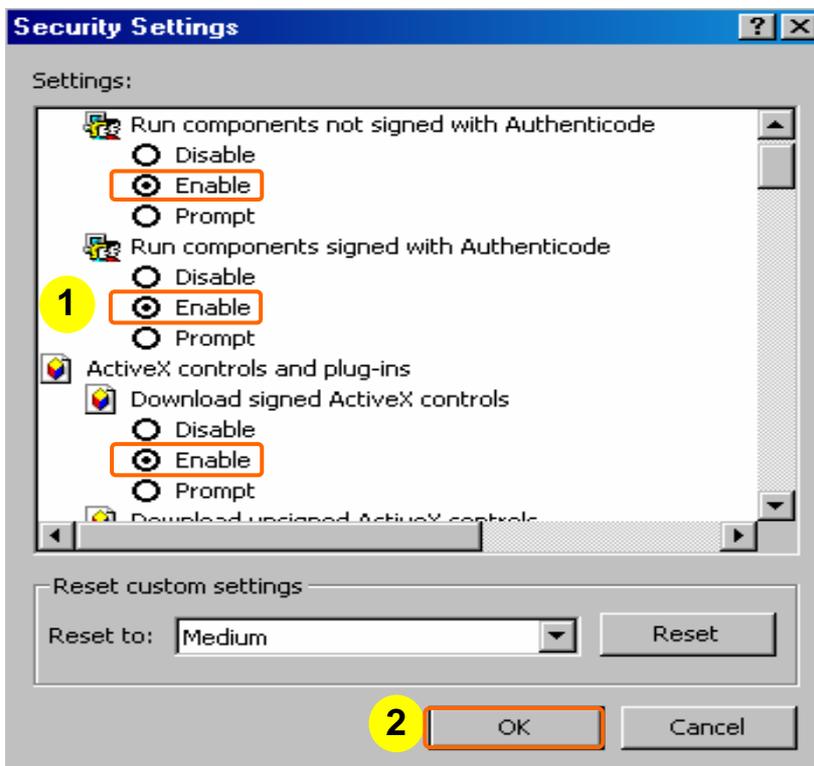
【Step2】

1. Click on **Security** tab.
2. Click on **Custom Level....**
3. Click on **OK** button.



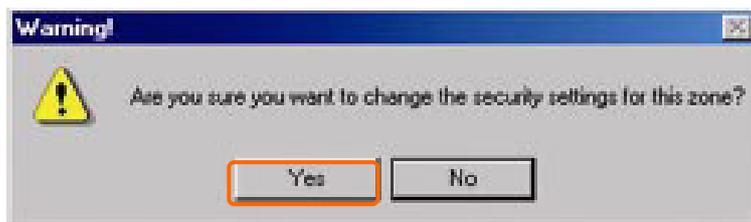
【Step3】

1. Select **Enable** in the items.
2. Click on **OK** button.



【Step4】

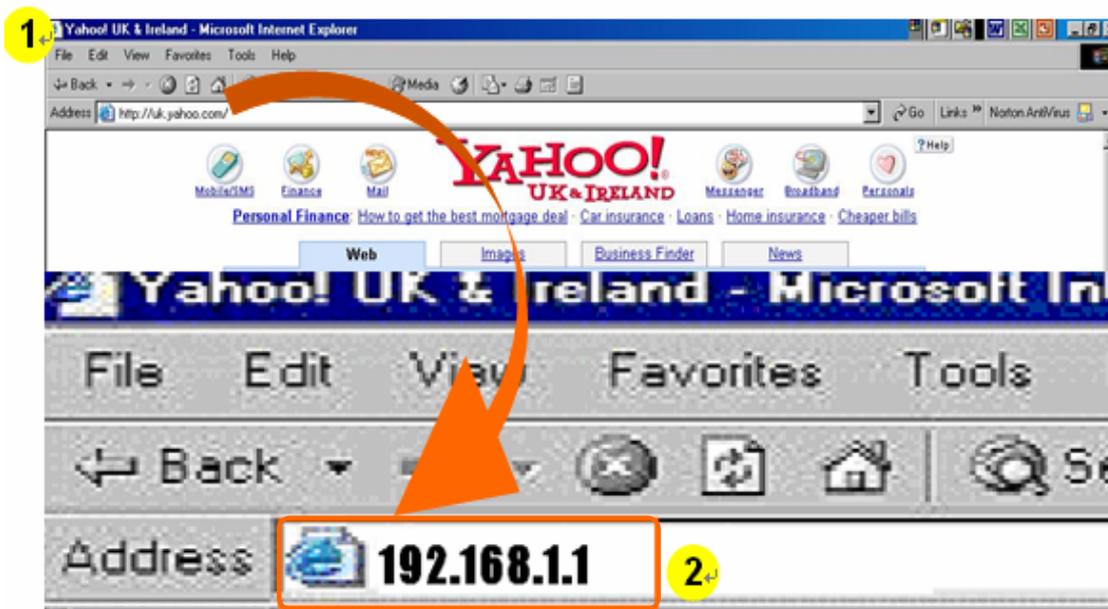
Click on **Yes** button.



3.6.2.2 Configure and Use Web Camera

【Step1】

1. Open **IE** browser.
2. Input **http://192.168.1.1** in the address field. Then, press Enter.



【Step2】

Navi210W's Login Screen appears.

1. Input **admin** in both **User Name** and **Password** blank fields.
2. Click on **Login** button.



【Step3】

1. USB Application & Web Camera

Click on **Web Camera** under the **USB Application** menu.

2. Enable Web Camera

Select **Enable** to start Web Camera function.

3. Web Camera Mode:

Select **ActiveX Mode**.

4. Apply

Click on **Apply** button to complete the settings.

1 USB Applications

1 FTP Server

1 Web Camera

Print Server

Wireless

VPN

VPN Passthrough

System Setup

Change Password

Time Setup

Firmware Upgrade

Setting Management

Reboot

Remote Management

UPNP Setting

SNMP

Status & Logs

Web Camera

With the USB web camera support, the Navi210W allows you to monitor locations such as your home or office from any location through a wireless LAN or over the Internet.

2 Enable Web Camera Enable Disable

3 Web Camera Mode **ActiveX Mode**

Image Size 320*240

Access from WAN No

Connection Port 4940

4

【Step4】

Click on **Return** button.

Settings have been saved.

【Step5】

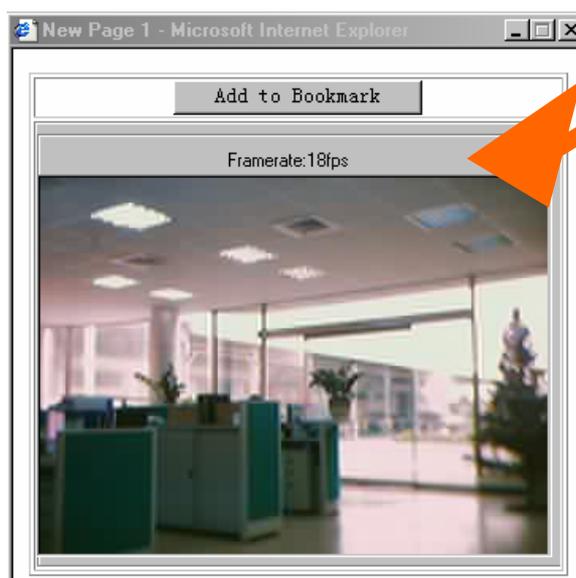
Click on **Preview** button. The monitor screen will appear immediately.

Web Camera

With the USB web camera support, the Navi210W allows you to monitor locations such as your home or office from any location through a wireless LAN or over the Internet.



Enable Web Camera	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Web Camera Mode	ActiveX Mode <input type="button" value="preview"/>
Image Size	320*240
Access from WAN	No
Connection Port	4940



Notice: After completing the above settings you can open the video screen directly through the following two ways.

- **From outside (WAN):**

Input Navi210W's **http://WAN IP/webcam.asp** in the address field, when you access from outside.

Notice: Before activating this function from WAN, you must enable remote management first. Please move your sight on the main menu, select remote management under System Setup and then enable the function.

- **From your local network (LAN):**

Input Navi210W's **http://LAN IP/webcam.asp** in the address field, when you access from your local network (for example, **http://192.168.1.1/webcam.asp**).

3.6.2.3 Bookmark for Accessing Webcam

【Step1】 (Set Bookmark Function)

Set "Bookmark" function to access your webcam in an easy way. Please follow the instructions below.

1. Address

Open **IE browser** and then input, such as

http://n88118088.ath.cx/webcam.asp (DDNS),

http://192.168.1.1/webcam.asp (Router's IP), or

http://220.123.5.56/webcam.asp (WAN IP) for example. Then, press **Enter**. The monitor screen will appear immediately.

Notice: These mentioned Addresses are not optional. It's according to where you are, such as If you are in the WAN side and have a dynamic IP Address, DDNS is the best way to choose for using. If you are in the LAN side, just use the Router's LAN IP Address for application. If you are in the WAN side and have a static IP Address supplied by ISP, please use WAN IP Address for application.

2. Login Screen

Input **admin** in the **User Name** and **Password** blank fields then click on **OK** button.

3. Bookmark

Click on **Add to Bookmark** button.

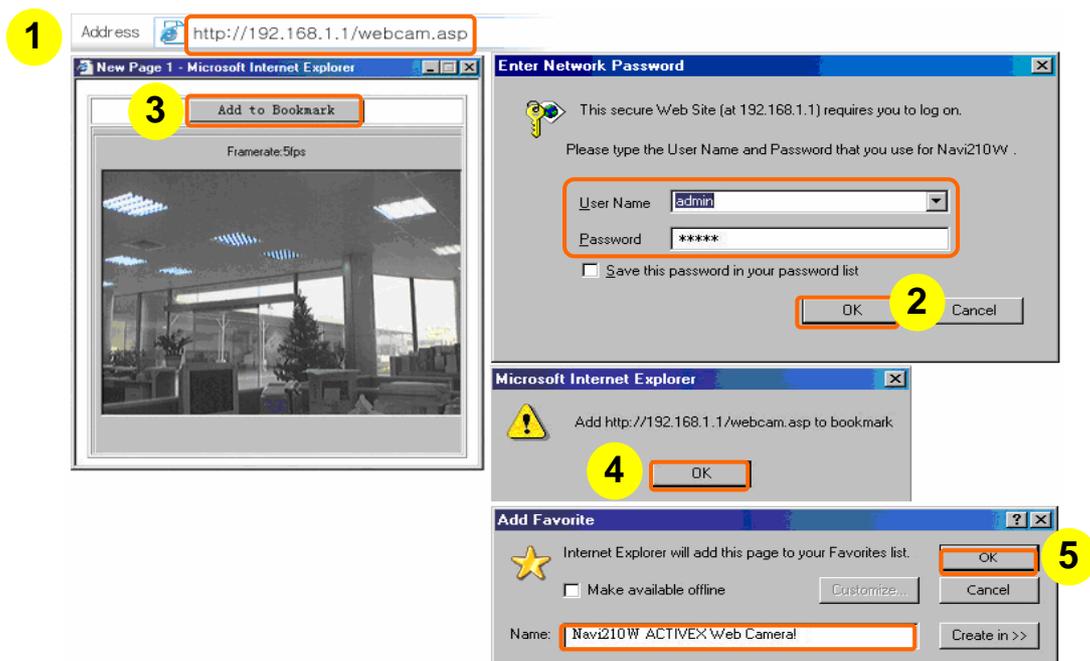
4. Confirm the Bookmark

Click on **OK** button.

5. Add Favorites

Use the name Navi210W provides or Give a name your want and then click on **OK** button.

Navi210W Internet USB/Wireless Multi-Function Router



【Step2】 (Use Bookmark Function)

Use "Bookmark" function to access your webcam in an easy way. Please follow the instructions below.

1. Open IE browser

Double click on **Internet Explore icon** on the desktop.

2. Favorite button

Click on **Favorite** button. A Menu will appear on the left side.

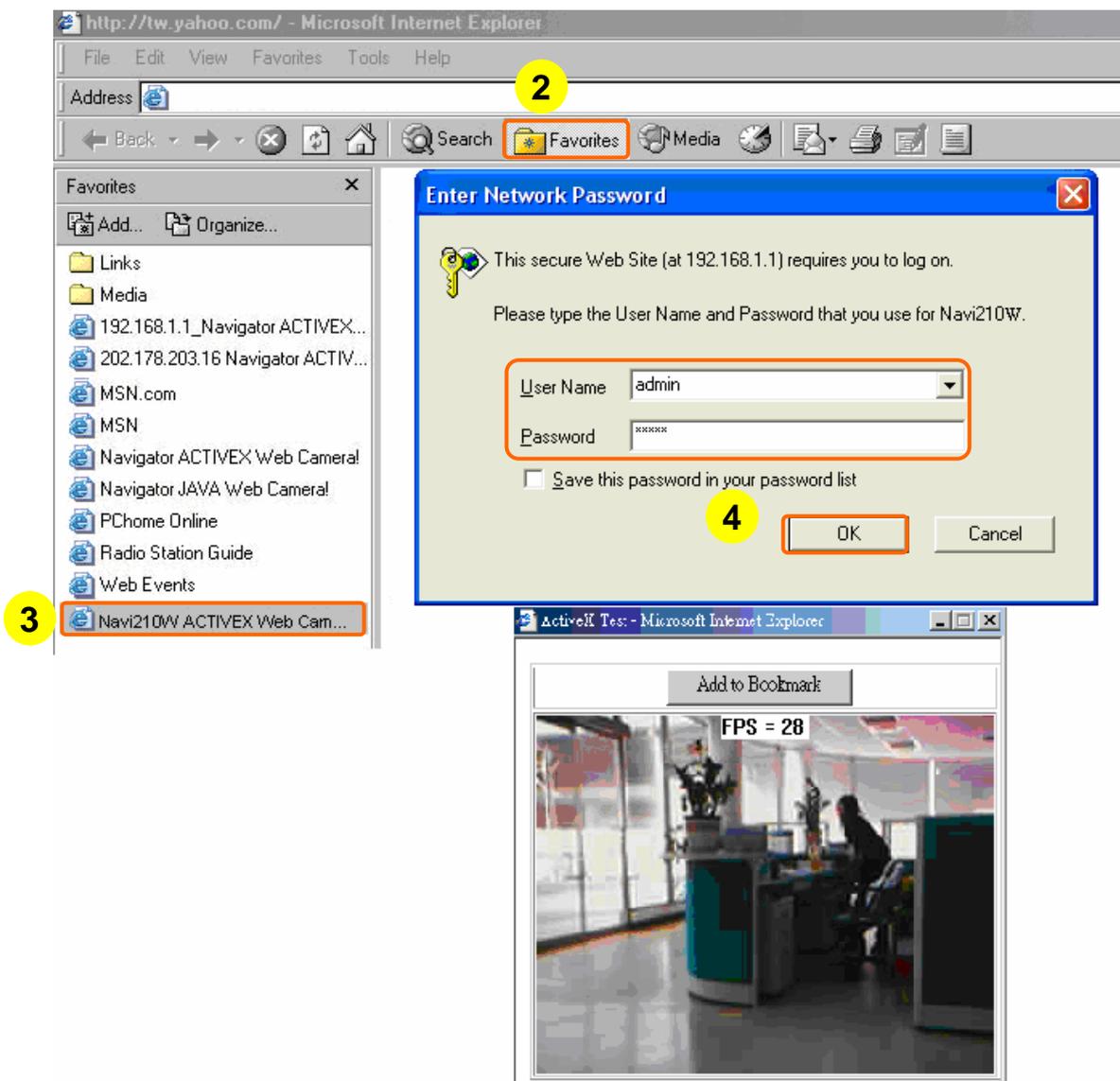
3. Added item

Click on the added **Navi210W ACTIVEX Web Camera** item.

4. Login Screen

Input **admin** in the User Name and Password blank fields then click on **OK** button. Then, the monitor screen will appear.





3.6.2.4 Webcam Application from WAN with DDNS

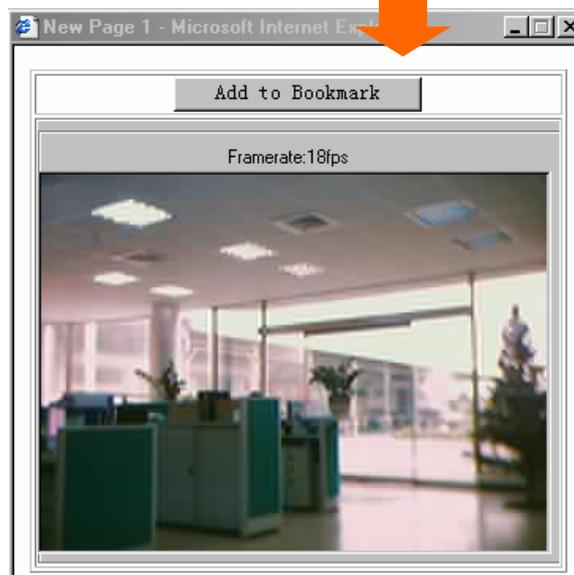
For more DDNS application information, please check on **Chapter 4 DDNS Service**.

1. Open IE browser

Open IE browser and then input your **http://hostname/webcam.asp** from WAN, for example **http://Navi210W/webcam.asp**.

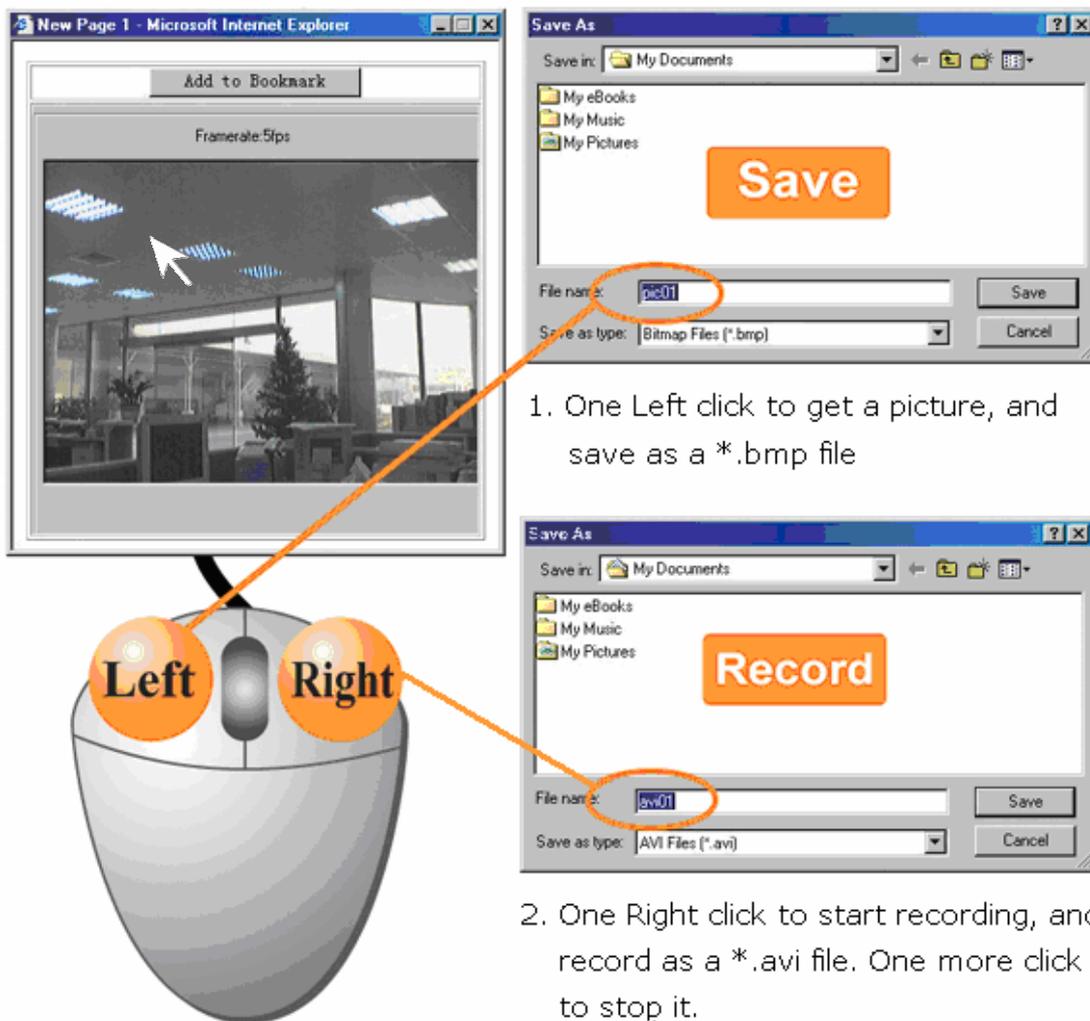
2. Login Screen

Input **admin** in the User Name and Password blank fields then click on **OK** button. You will view what the Web Camera monitors.



3.6.2.5 Store Webcam's File

In order to store files, please move your cursor on the active window and click on the right or left buttons.

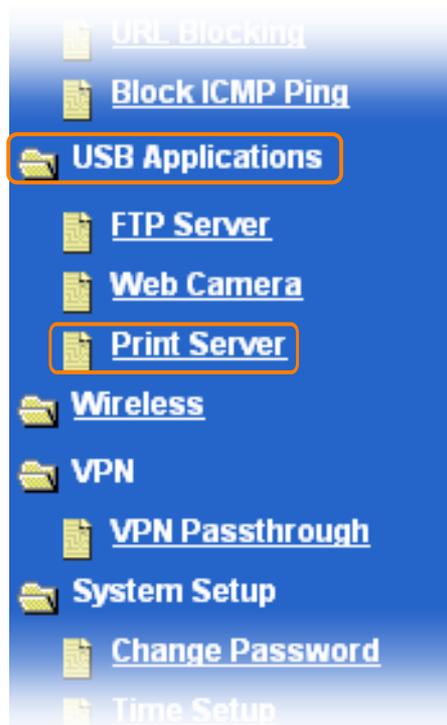


3.6.3 Print Server

The current print server support USB printers that use standard TCP/IP (LPR) protocol for printing. Multi-purpose printer/scanner device that use proprietary protocol is not supported.

When installing print server, you need to know its Port Name and Queue Name. IP Address is the LAN IP address (IP Address of the printer).

To setup this function, please select **Print Server** under the **USB Application** menu. Follow the instructions to enter the Print Server page and finish the settings to share a USB printer from both WAN and LAN.



3.6.3.1 Share USB Printer on your Local & Remote Network

Please follow the steps to complete Navi210W printer settings and the printer configuration on Windows platforms.

1. Print Server

Click on **Print Server** under the **USB Application** menu. The screen of Printer Setup will appear. Please follow the instructions to configure this function.

2. Enable Print Server

Select **Enabled** or **Disabled** to start or close Print Server.

3. Enable Printer Access from WAN

Select **Enabled** or **Disabled** to allow or disallow client access from WAN.

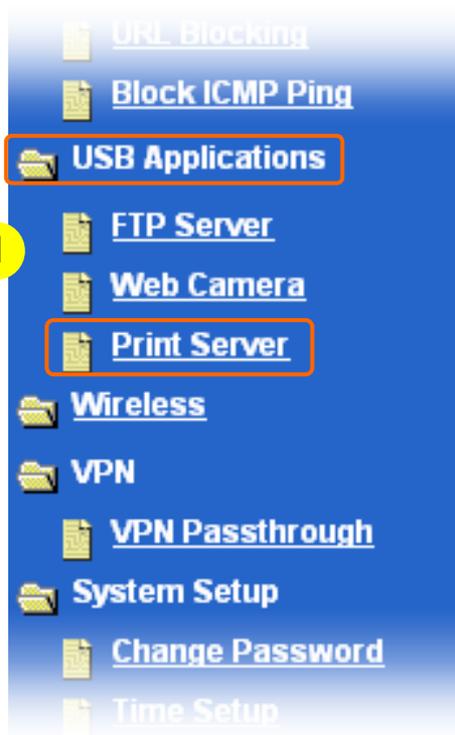
4. Printer Name, Description & Model

Input a **Printer Name** "111" for example, **Description** and **Model** in the blank fields.

5. Apply, Cancel & Help

Click on **Apply** button to save the settings. If you want to clean the settings, please click on **Cancel** button. The functional button, **Cancel** can take

effect after clicking on **Apply** button. If you don't know how to do it, please click on **Help** button for more information.



Print Server

The Navi210W supports an embedded print server. This page allows you to setup this printer server.

USB Printer IEEE 802.11b/g Standard PC Internet

Enable Print Server	2	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
Enable Printer Access from WAN	3	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
Printer Name		<input type="text" value="111"/>
Printer Description	4	<input type="text"/>
Printer Model		<input type="text"/>

5

3.6.3.2 The configuration on Windows platforms

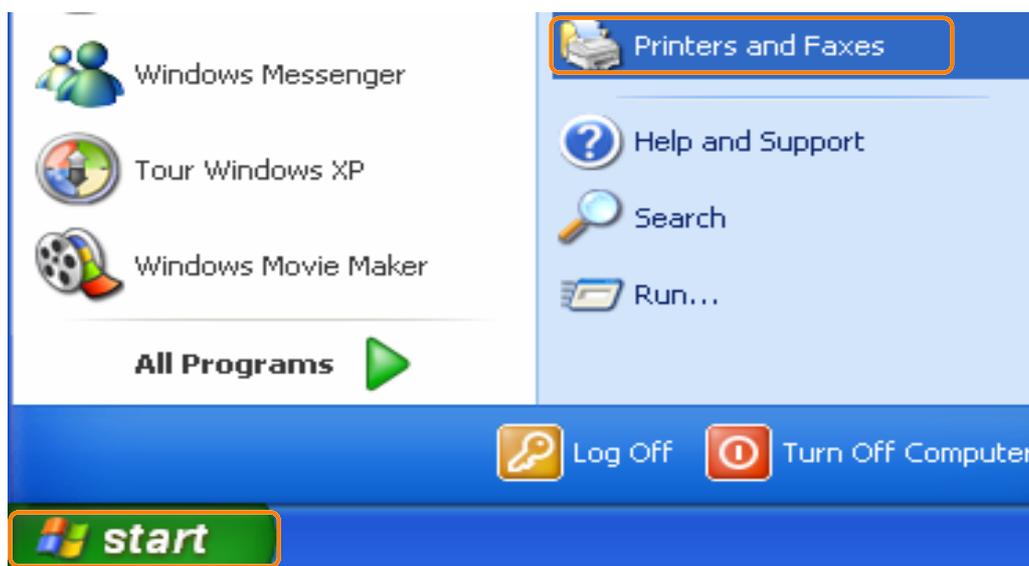
The printer configurations include other Windows platforms, such as Windows 98 (SE), Windows 2000 and Windows XP.

3.6.3.2.1 For Windows XP

Please follow the steps below to complete the printer configuration for Windows XP platform.

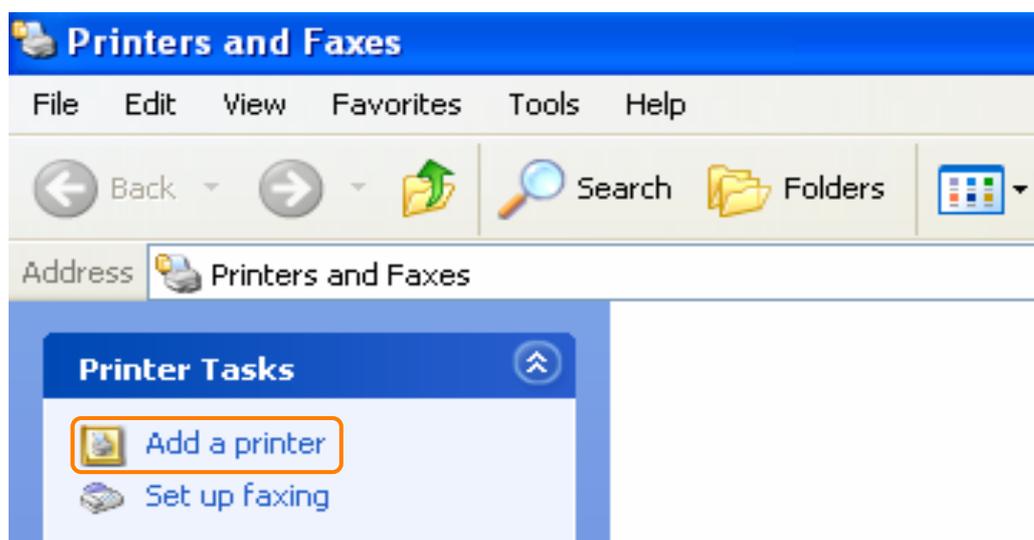
【Step1】

Go to **Start > Printers and Faxes**.



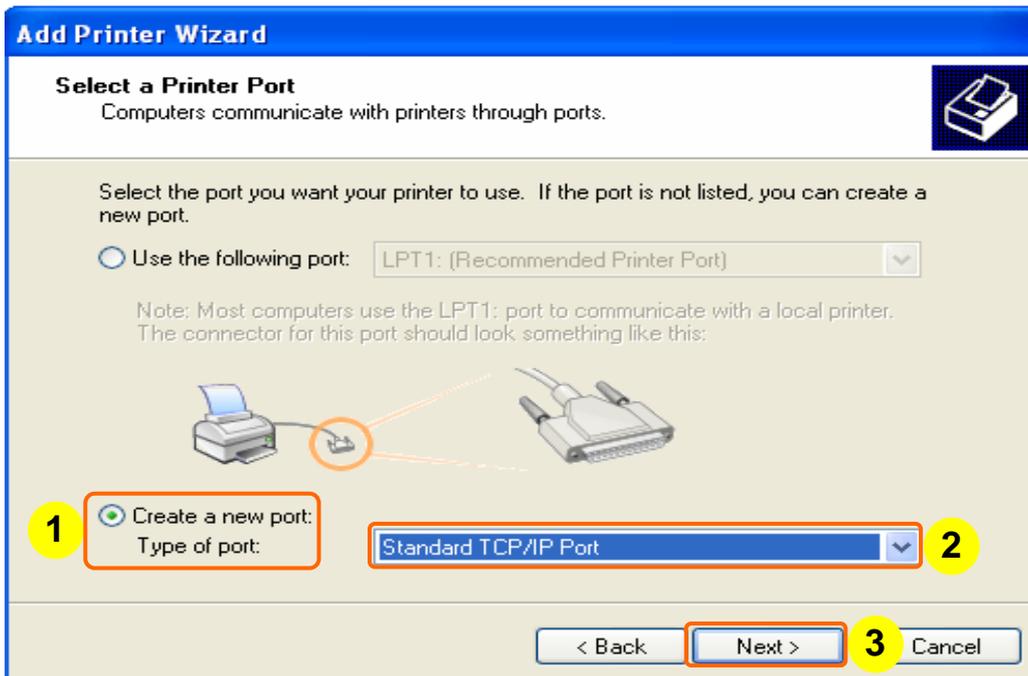
【Step2】

Double click on **Add a printer** button.



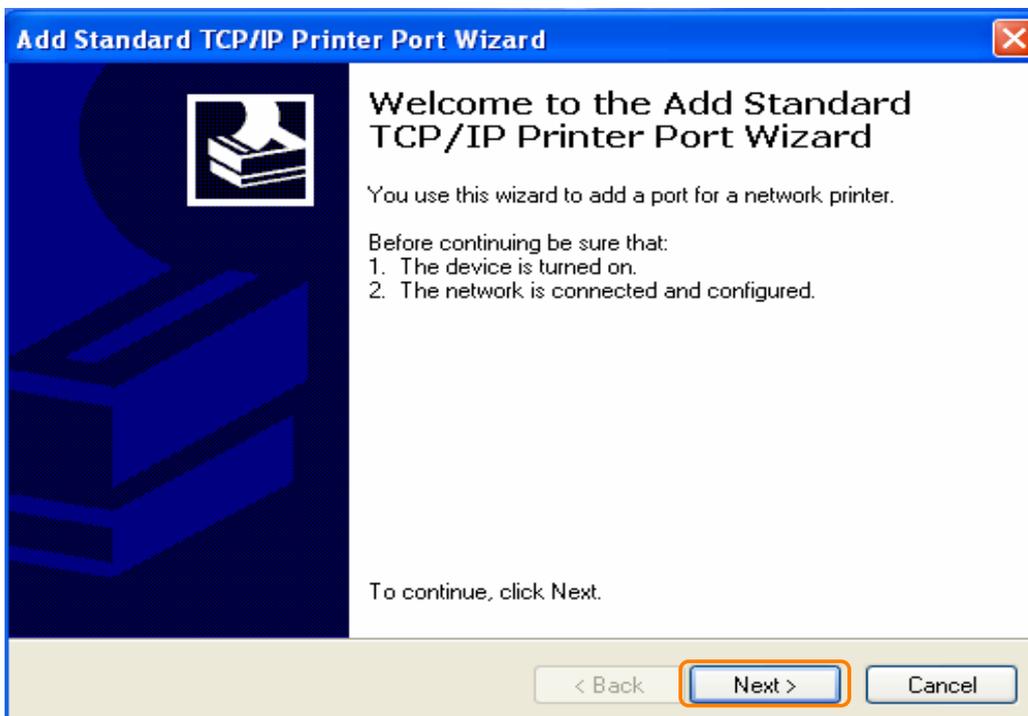
【Step3】

1. Select **Create a new port**.
2. Select the Type of port: **Standard TCP/IP Port**.
3. Click on **Next** button.



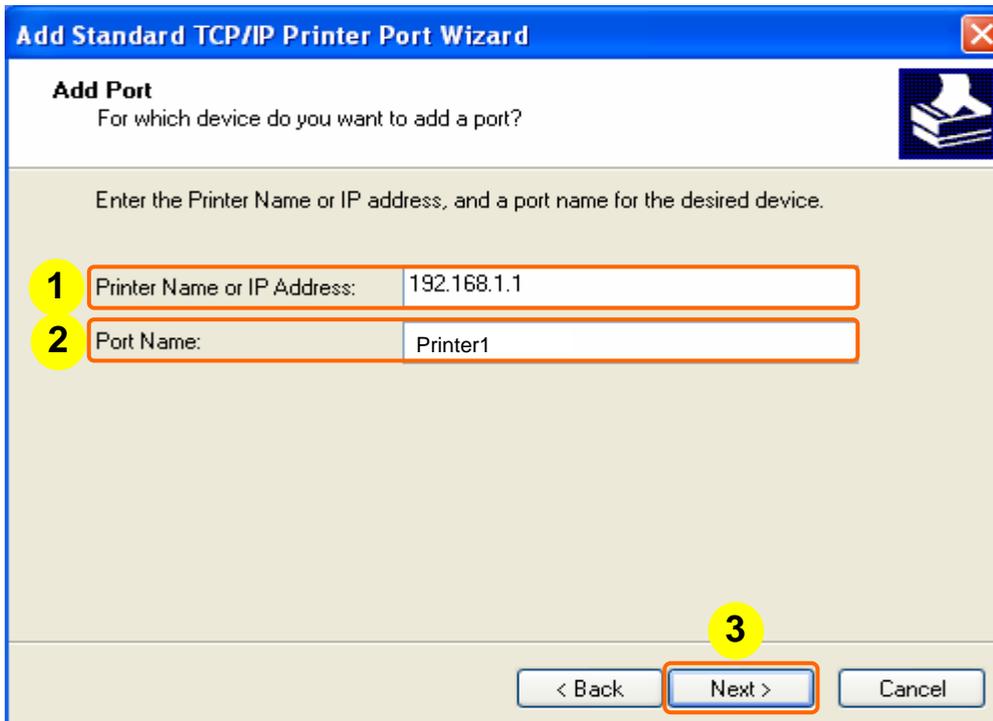
【Step4】

Click on **Next** button.



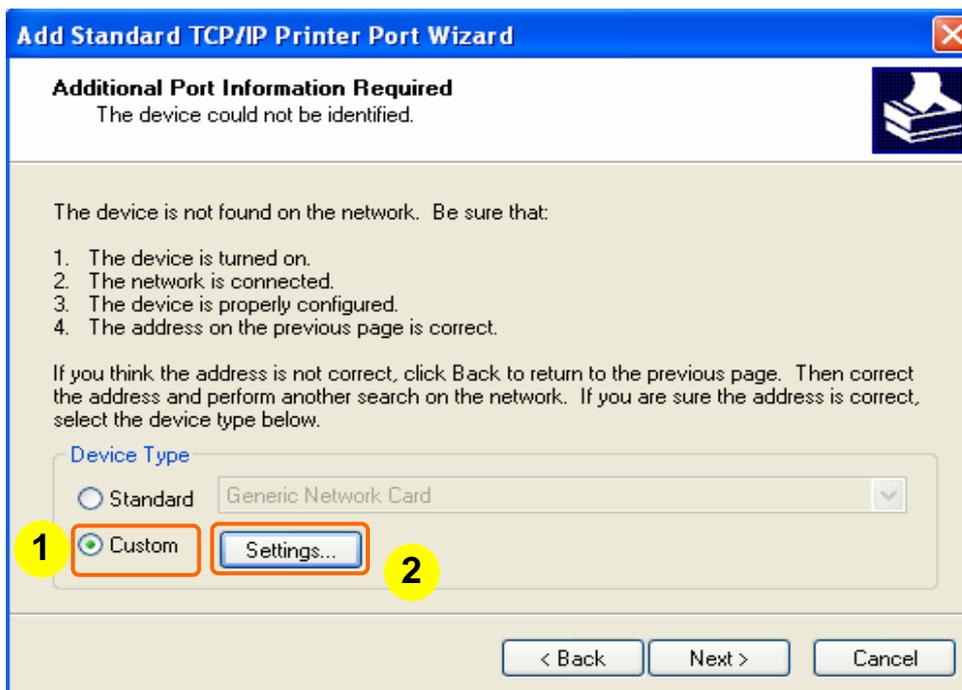
【Step5】

1. Input **192.168.1.1** in the IP Address field.
2. Give this port a name **"Printer1"** for example.
3. Click on **Next** button.



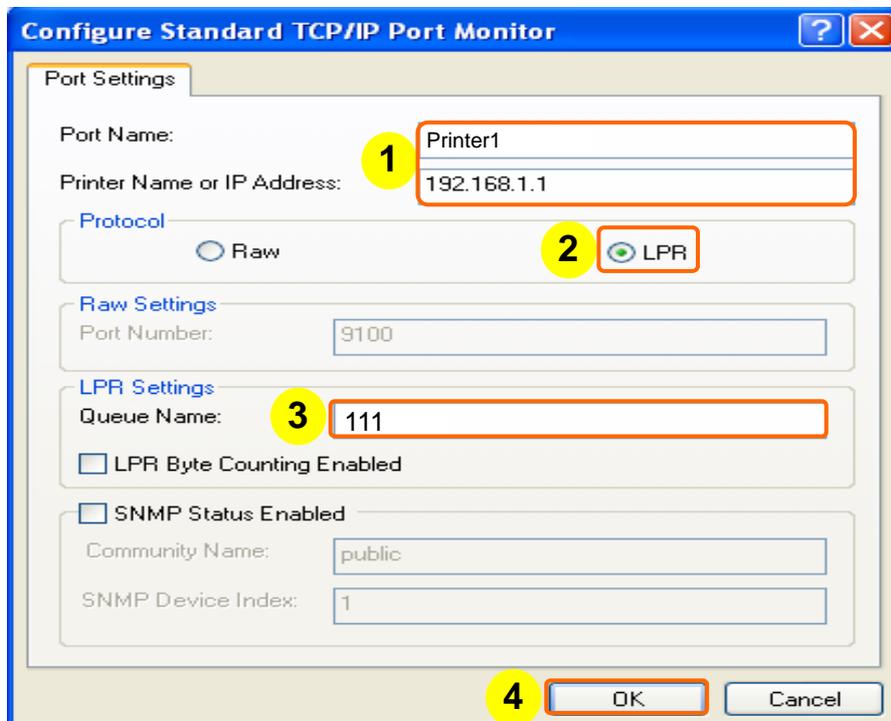
【Step6】

1. Select **Custom**.
2. Click on **Settings** button.



【Step7】

1. The information you had input will be showed on this screen.
2. Select **LPR**.
3. Input **Queue Name** "111" for example, which must be the same as the **USB Printer Name** you set on **Print Server** setting page.
4. Click on **OK** button.



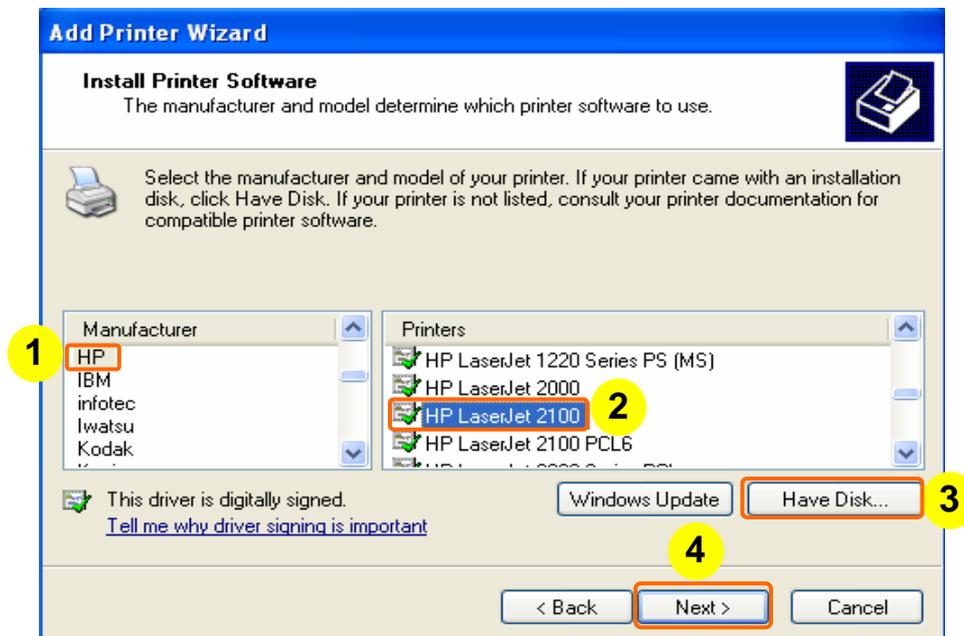
【Step8】

Click on **Finish** button.



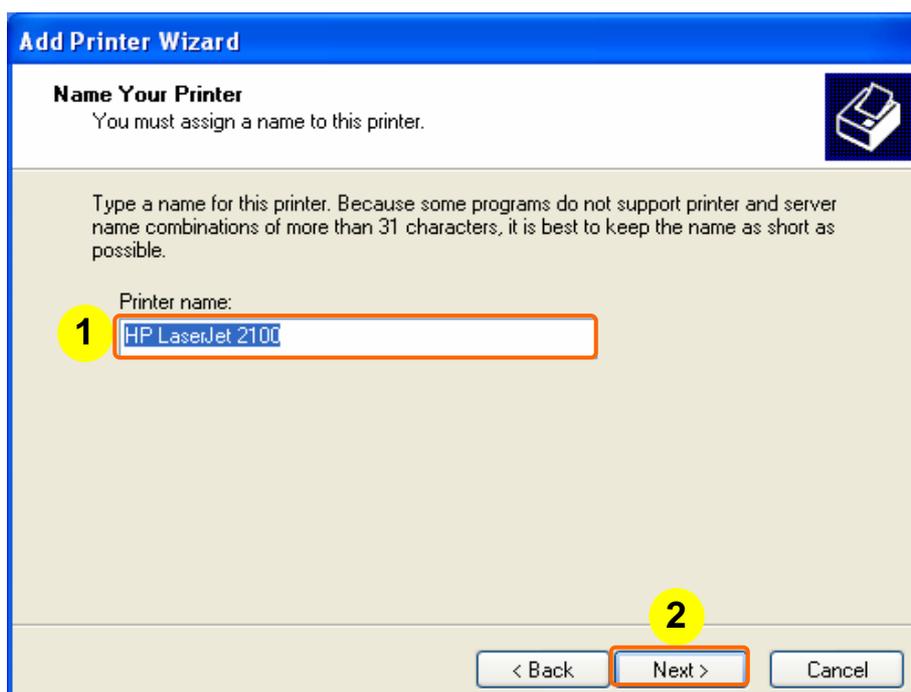
【Step9】

1. Select your printer's manufacturer "**HP**" for example.
2. Select your printer's model "**HP LaserJet 2100**" for example.
3. If yours is not on the list, please click on **Have Disk...** button to get yours from CD or floppy disc.
4. Click on **Next** button.



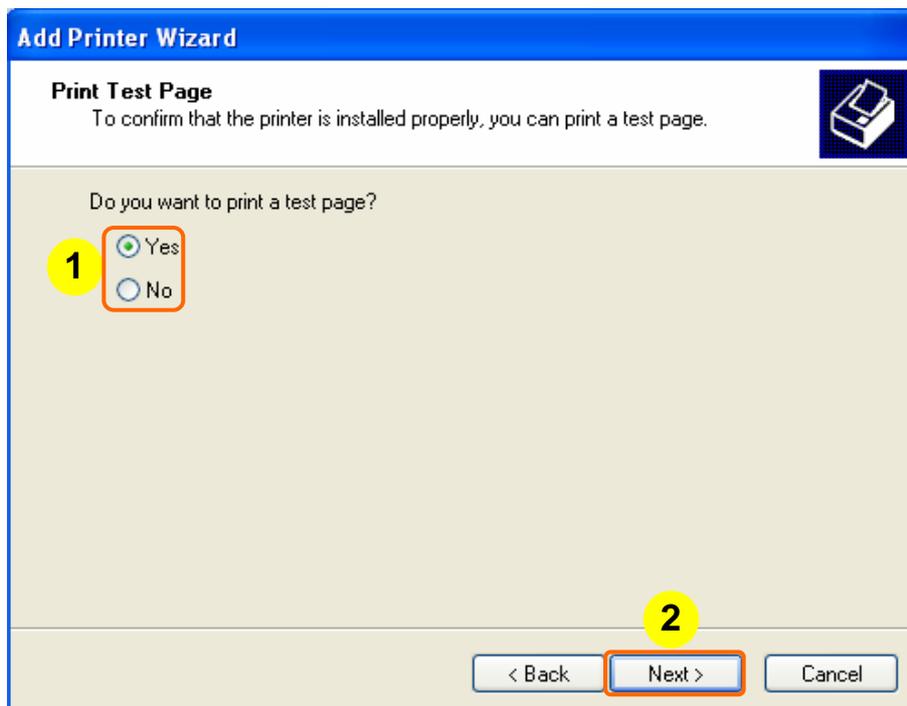
【Step10】

1. Your computer will supply a name for this printer automatically or you can change it.
2. Click on **Next** button.



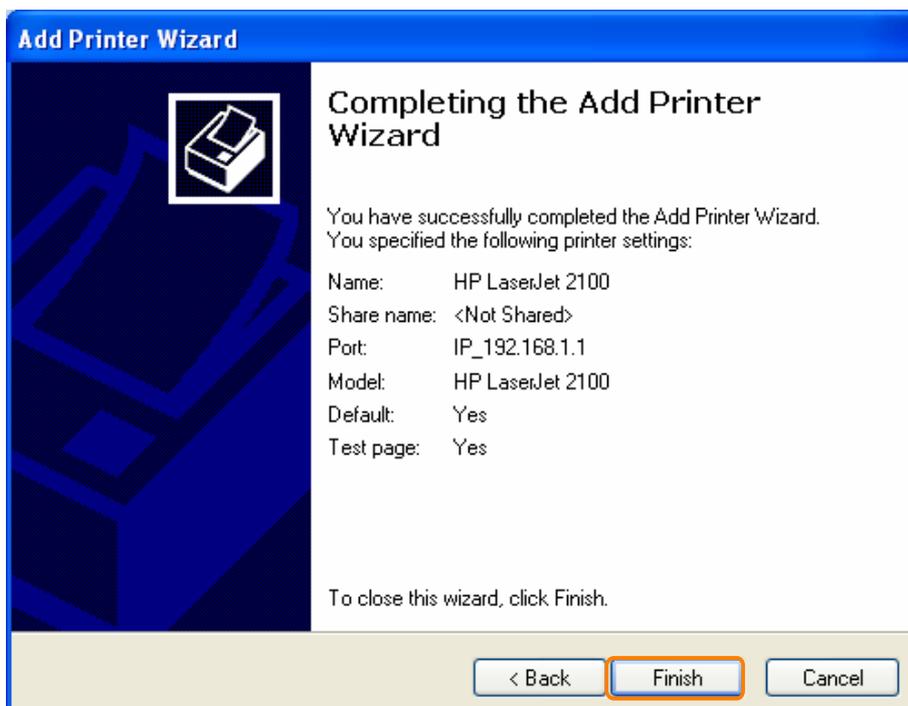
【Step11】

1. Select **Yes** or **No** to print or not to print a test page.
2. Click on **Next** button.



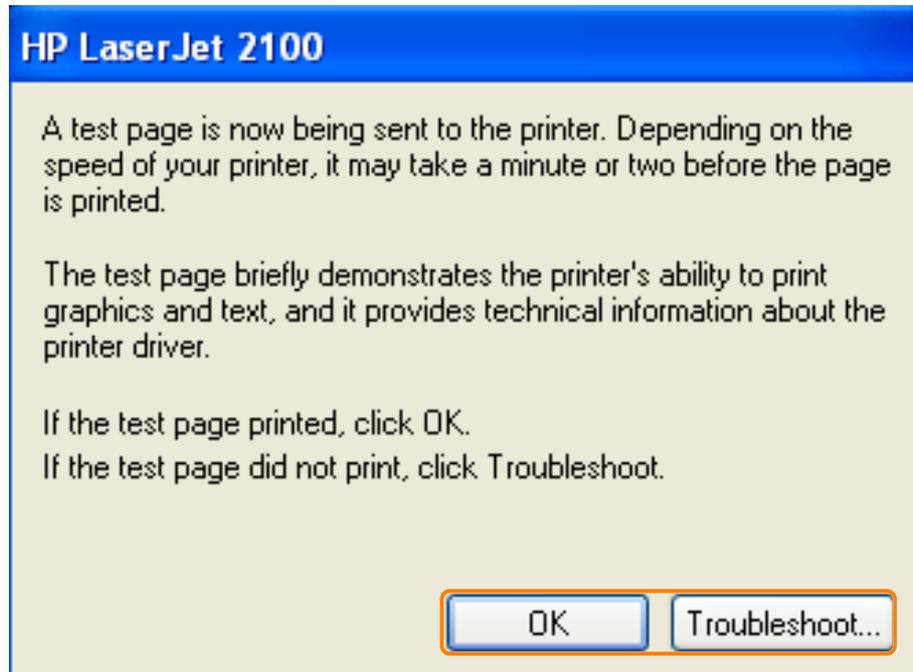
【Step12】

It shows you the printer setting information that you have specified and then click on **Finish** button.



【Step13】

Click on **OK** button. If the test page isn't printed out, click on **Troubleshoot...** button.

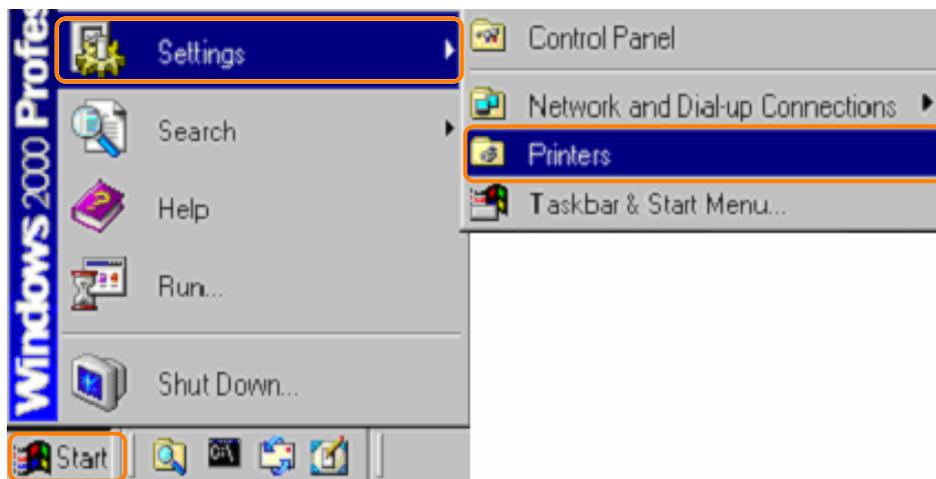


3.6.3.2.2 For Windows 2000

Please follow the steps below to complete the printer configuration on Windows 2000 platform.

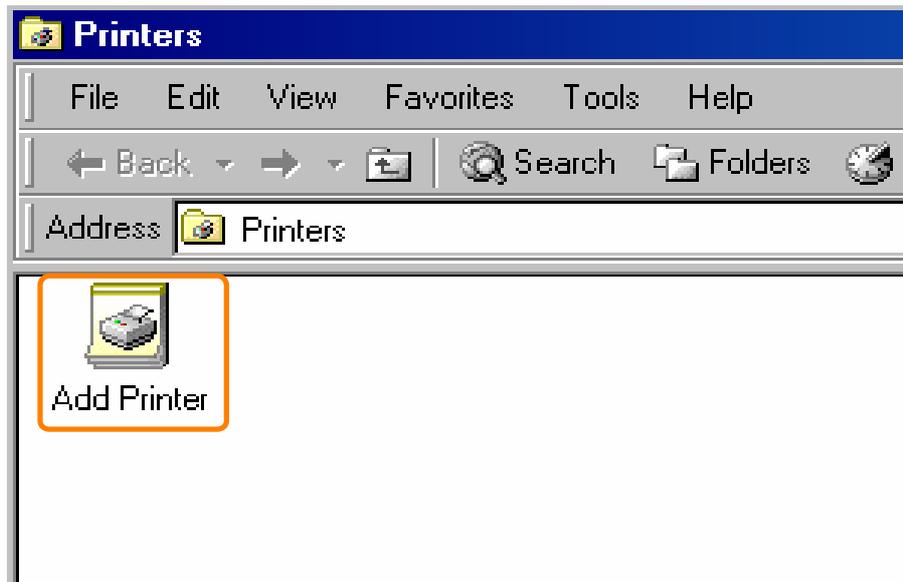
【Step1】

Go to **Start > Settings > Printers**.



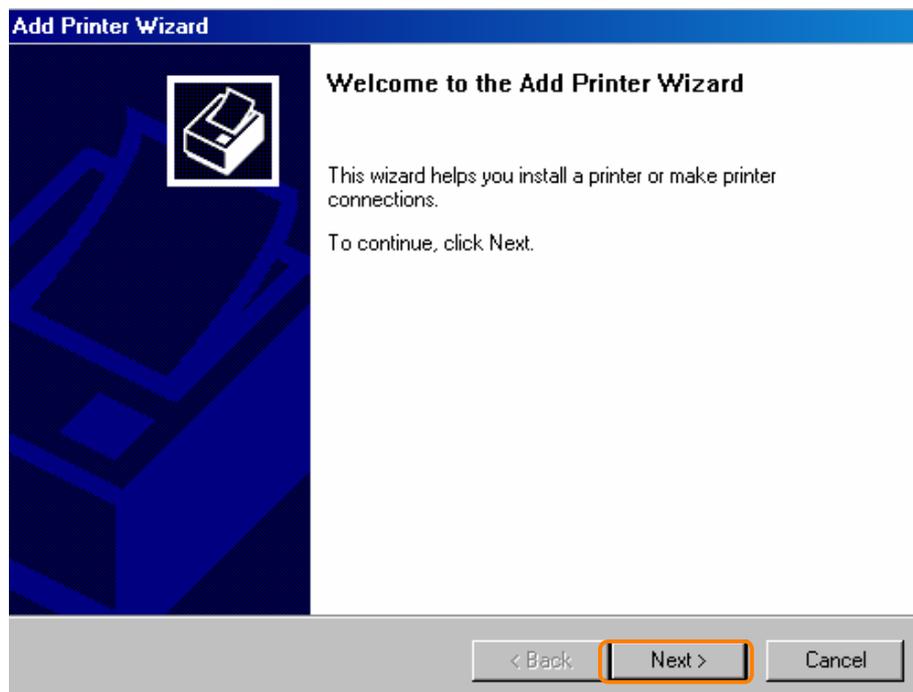
【Step2】

Double click on **Add Printer** button.



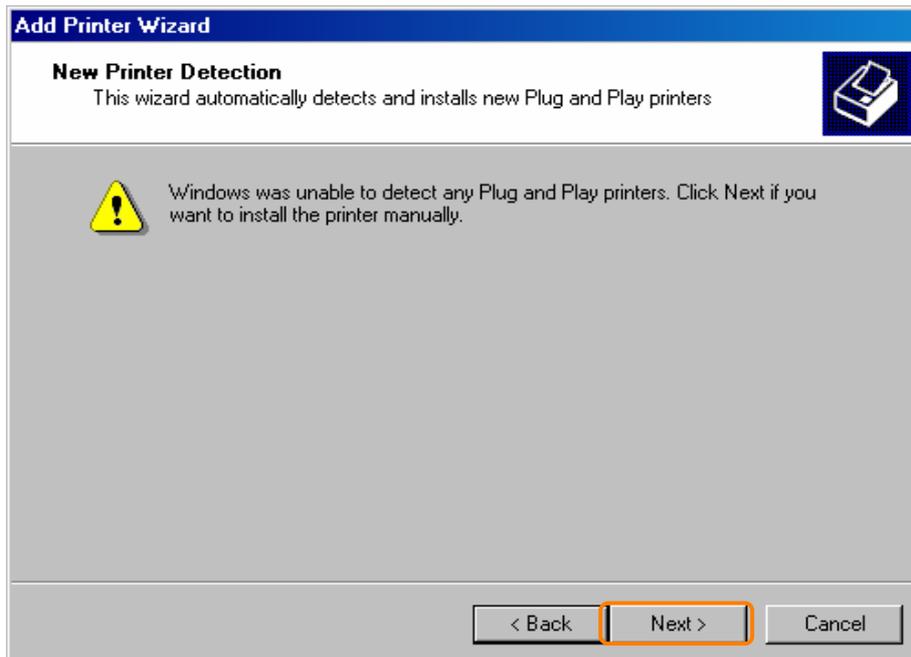
【Step3】

Click on **Next** button.



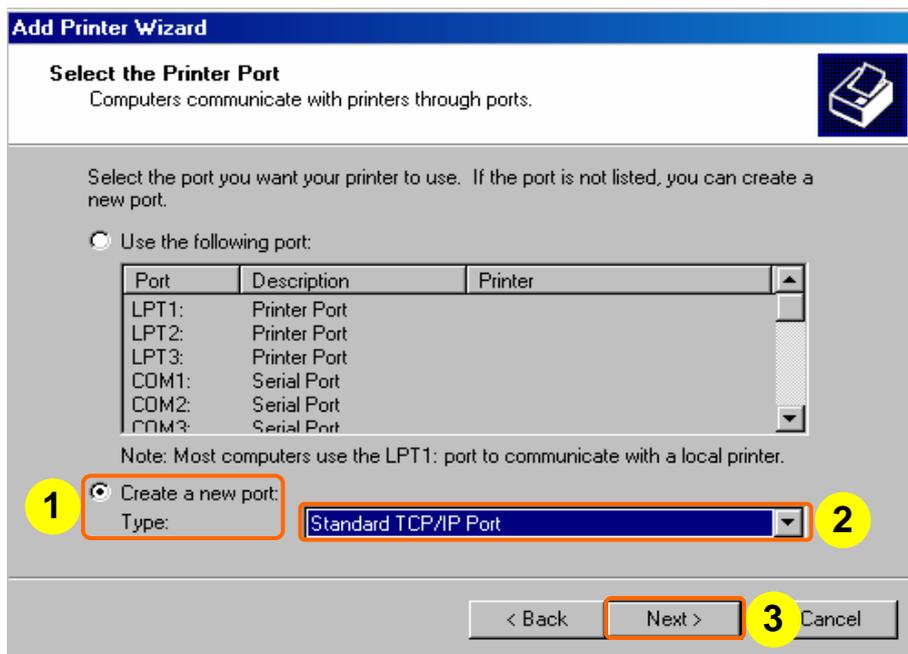
【Step4】

Click on **Next** button.



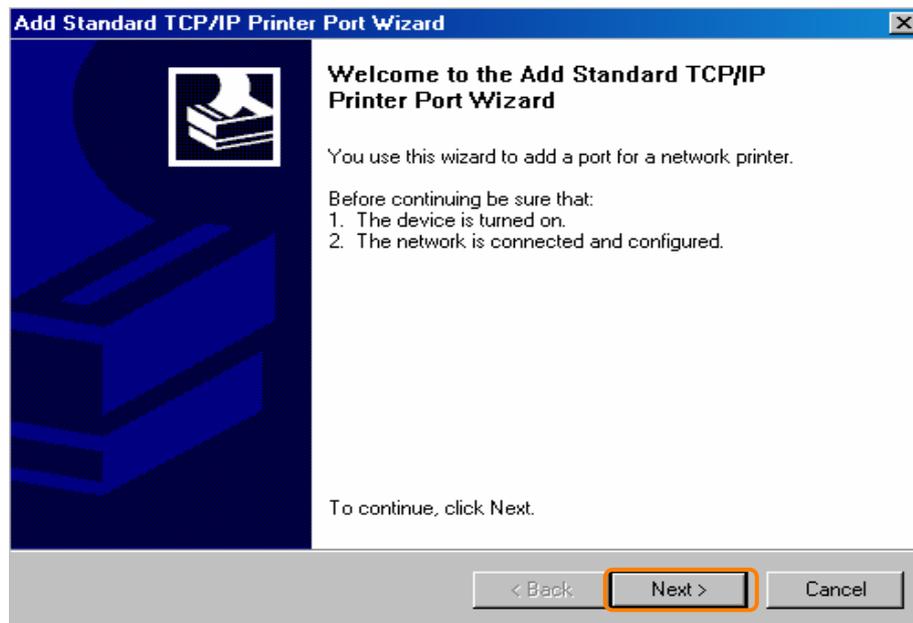
【Step5】

1. Select **Create a new port.**
2. Select the Type: **Standard TCP/IP Port.**
3. Click on **Next** button.



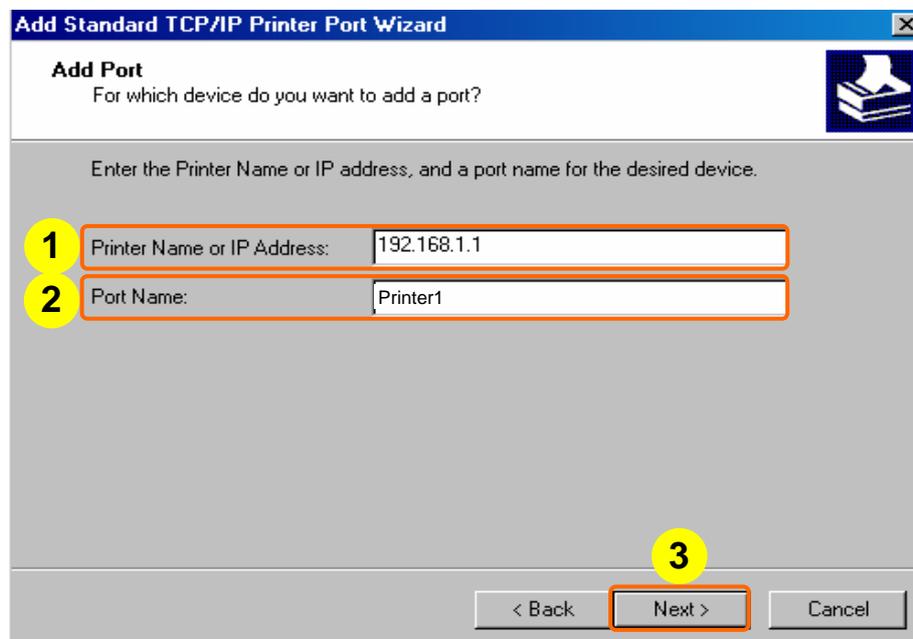
【Step6】

Click on **Next** button.



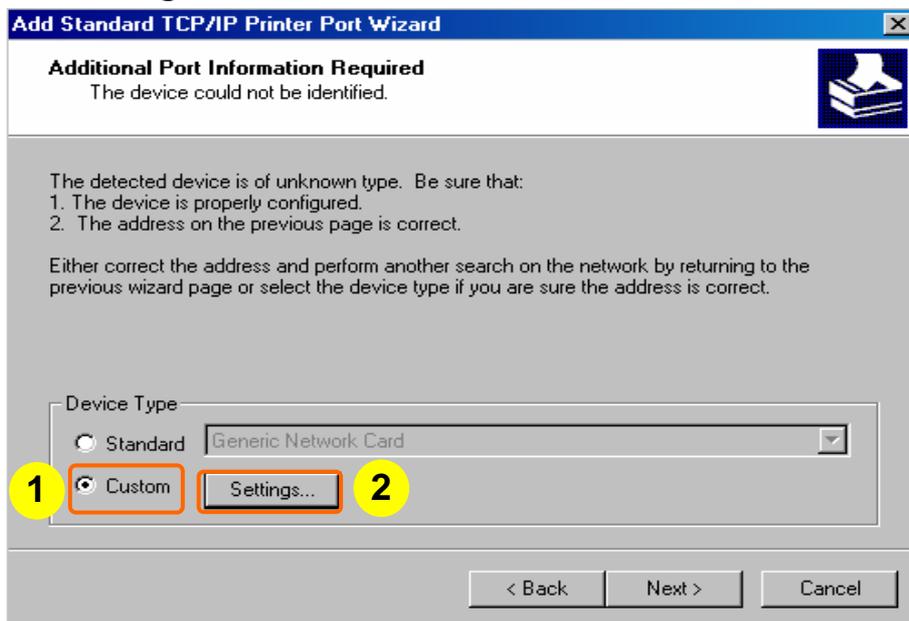
【Step7】

1. Input **192.168.1.1** in the IP Address field.
2. Give this port a name "**Printer1**" for example.
3. Click on **Next** button.



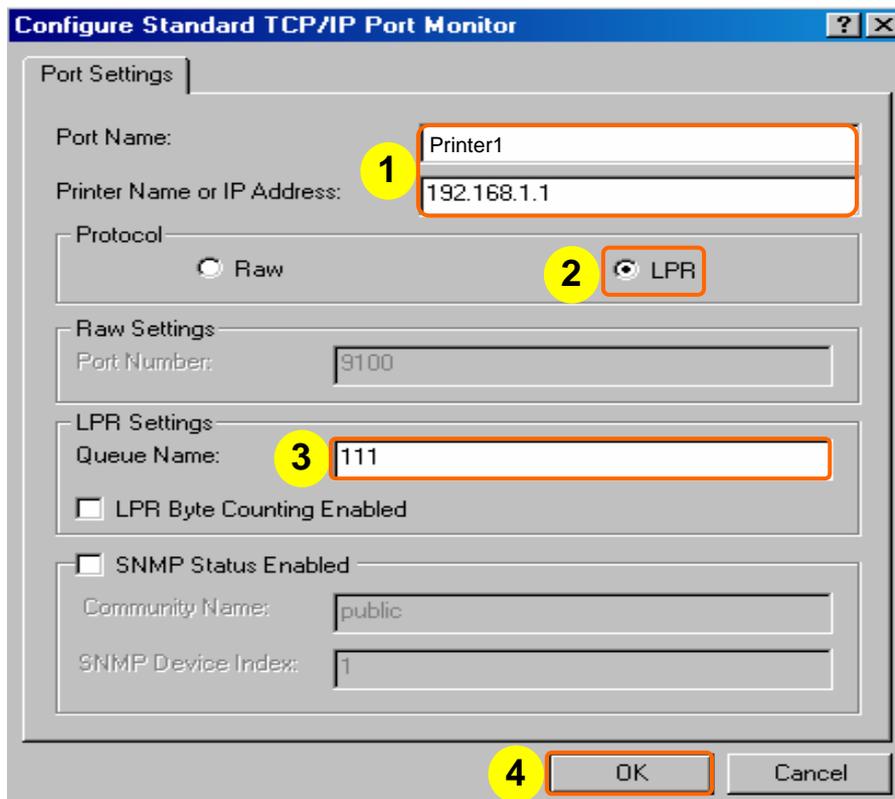
【Step8】

1. Select **Custom**.
2. Click on **Settings** button.



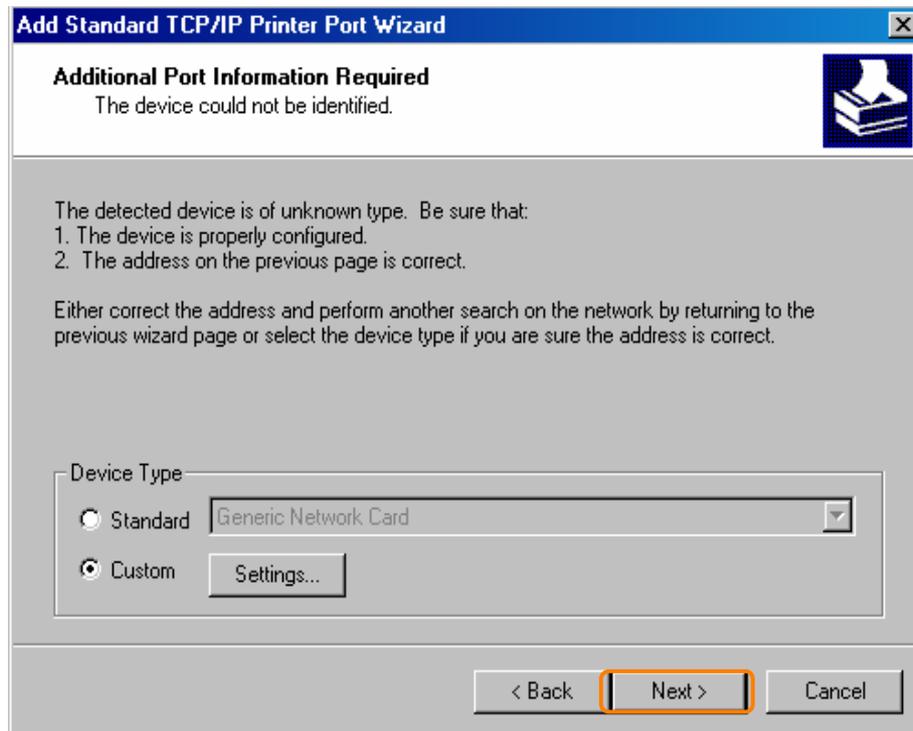
【Step9】

1. The information you had input will be shown on this screen.
2. Select **LPR**.
3. Input **Queue Name "111"** for example, which must be the same as the **USB Printer Name** that you set on **Print Server** setting page.
4. Click on **OK** button.



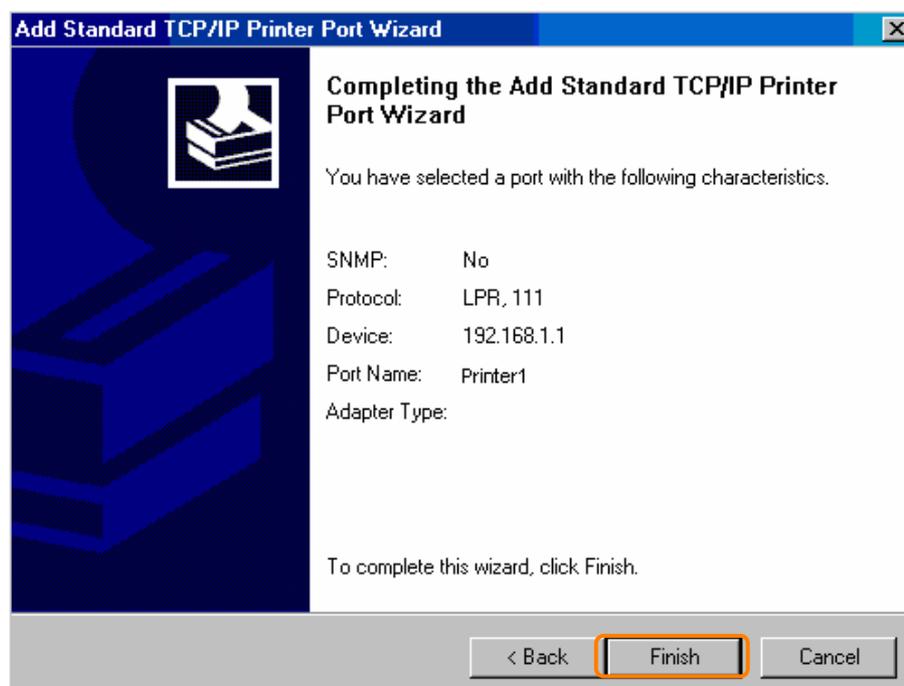
【Step10】

Click on **Next** button.



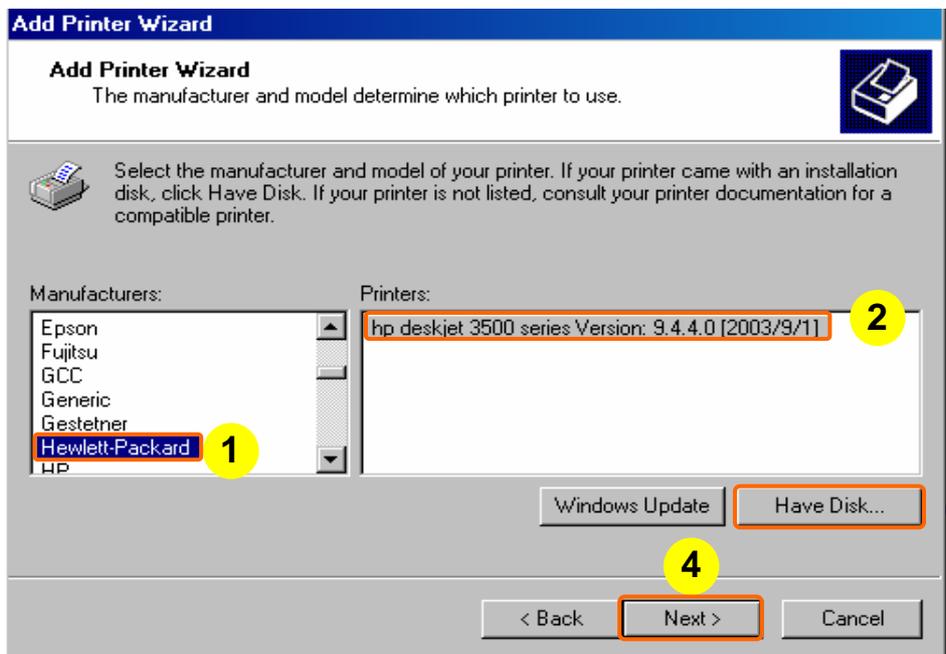
【Step11】

Click on **Finish** button.



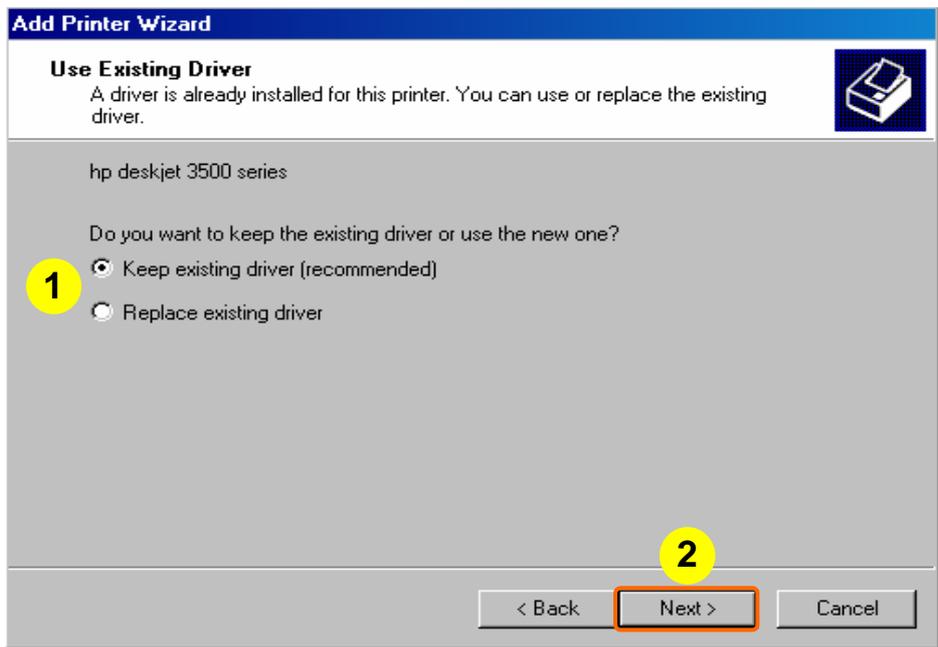
【Step12】

1. Select your printer's manufacturers "**Hewlett-Packard**" for example.
2. Select your printer's model "**HP deskjet 3500 ...**" for example.
3. If yours is not on the list, please click **Have Disk...** to get yours from CD or floppy disc.
4. Click on **Next** button.



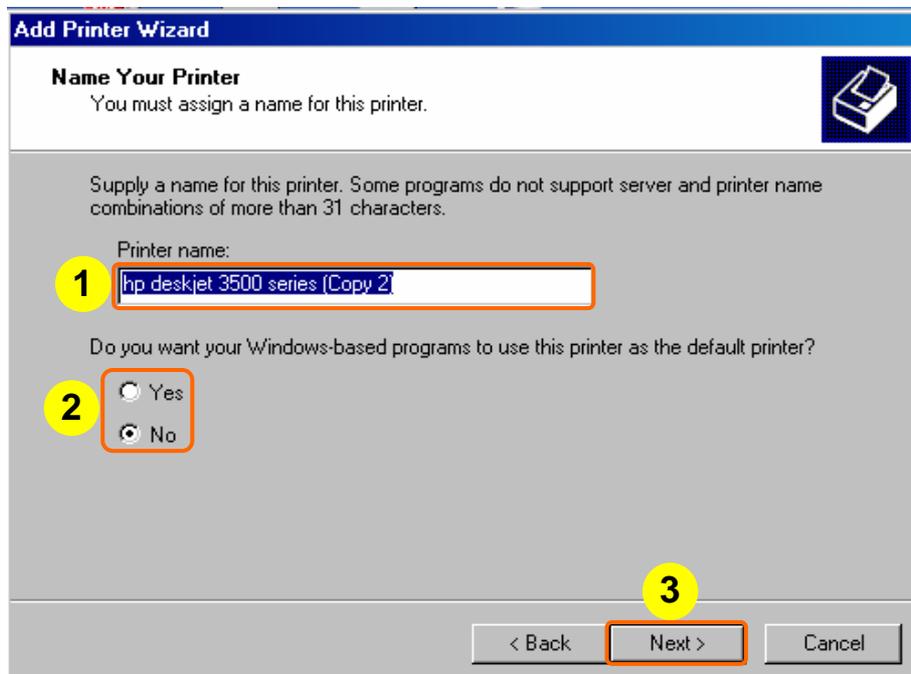
【Step13】

1. If you had installed the print driver, it will appear this window to ask you to keep you own or to replace it. We choose **Keep existing driver** for example.
2. Click on **Next** button.



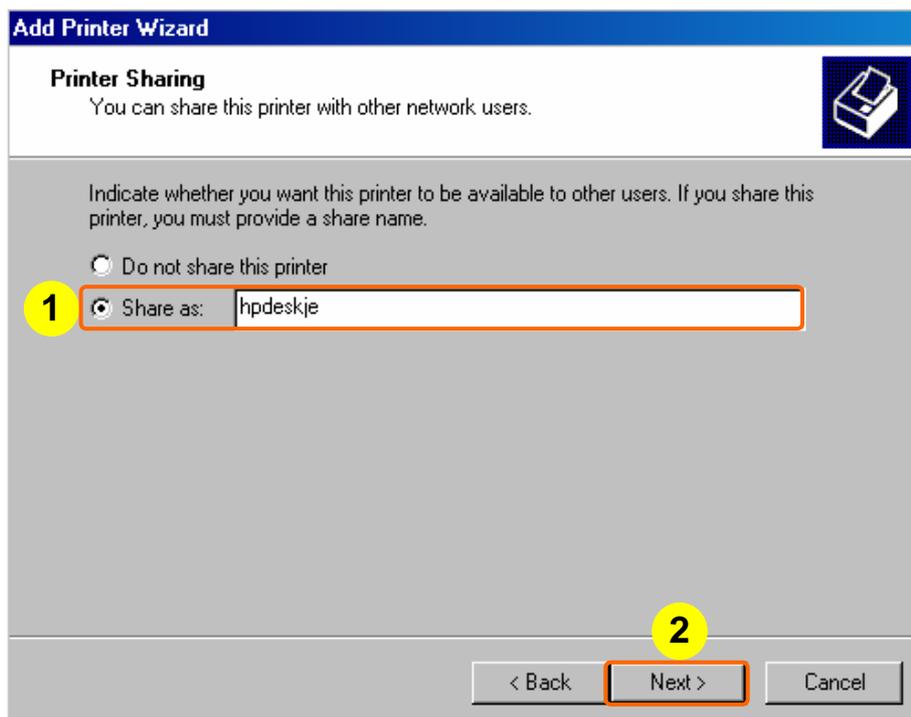
【Step14】

1. Your computer will supply a name for this printer automatically or you can change it.
2. Select **Yes** or **No** to use or not to use this printer as the default printer.
3. Click on **Next** button.



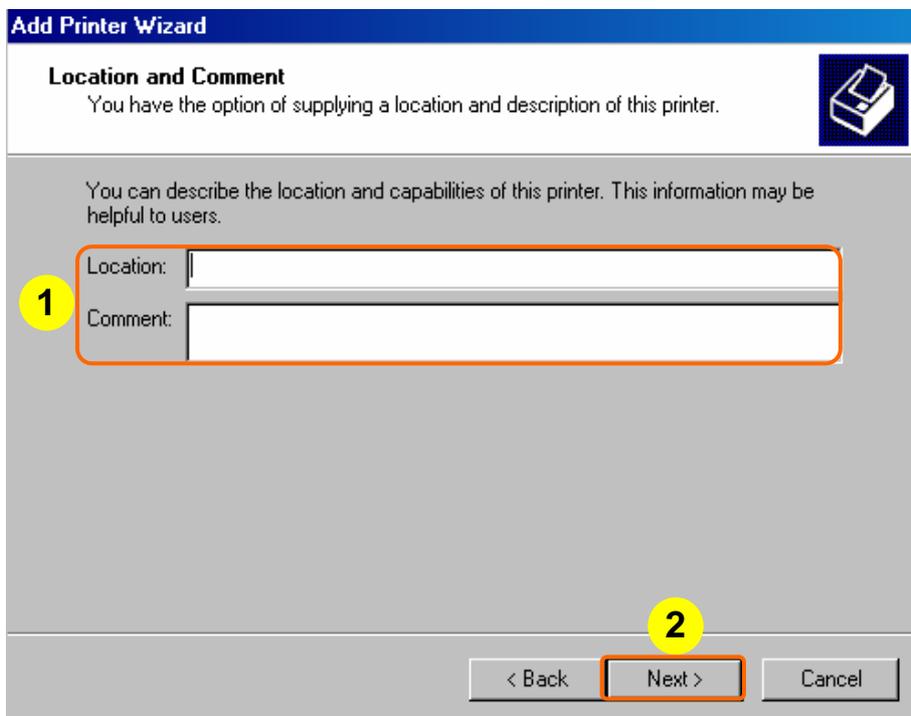
【Step15】

1. Select **Share as:** and Input a share name **"hpdeskje"** for example, if you want to share this printer to other users.
2. Click on **Next** button.



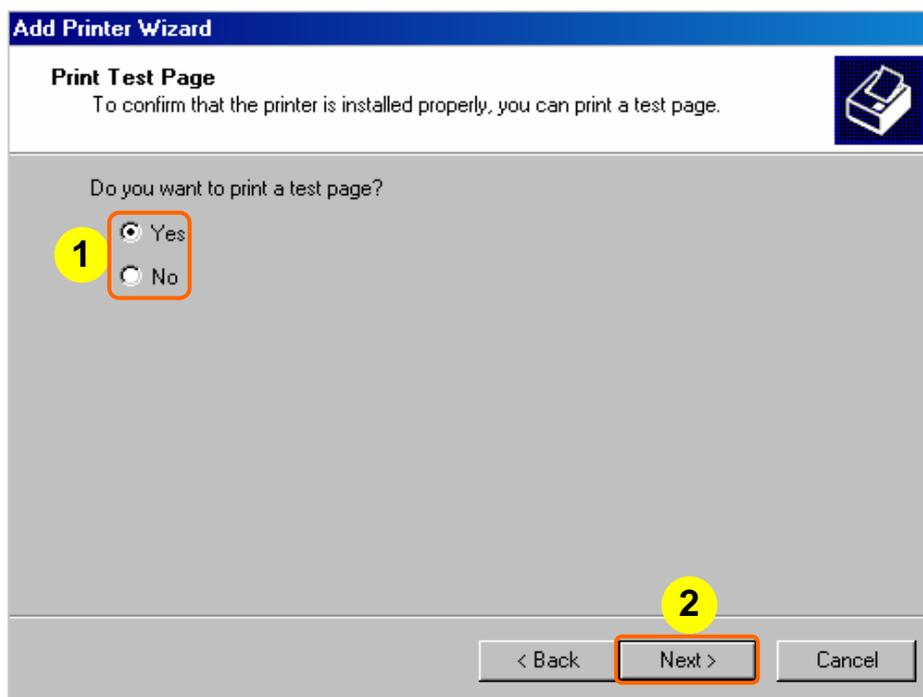
【Step16】

1. You can describe the location and capabilities of this printer or skip it.
2. Click on **Next** button.



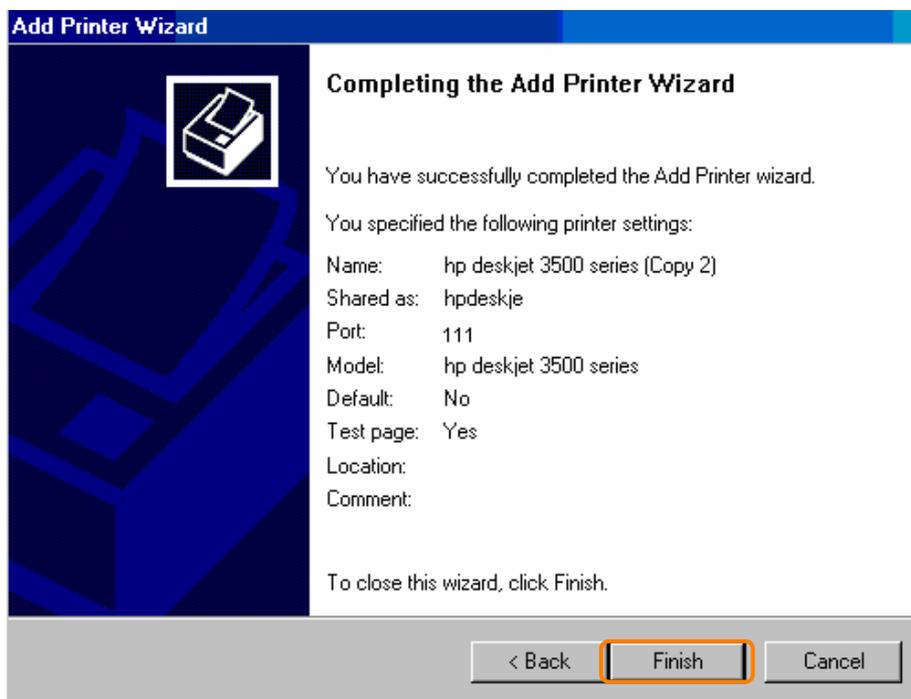
【Step17】

1. Select **Yes** or **No** to print or not to print a test page.
2. Click on **Next** button.



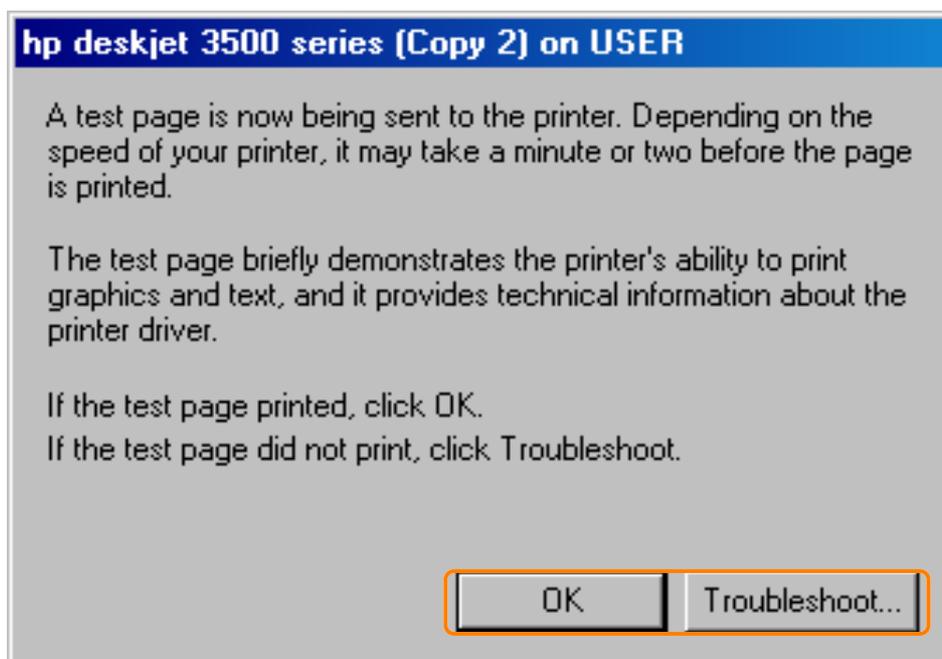
【Step18】

It shows you the printer setting information that you have specified, and then click on **Finish** button.



【Step19】

Click on **OK** button. If the test page isn't printed out, click on **Troubleshoot...** button.



3.6.3.2.3 For Windows 98 or 98SE

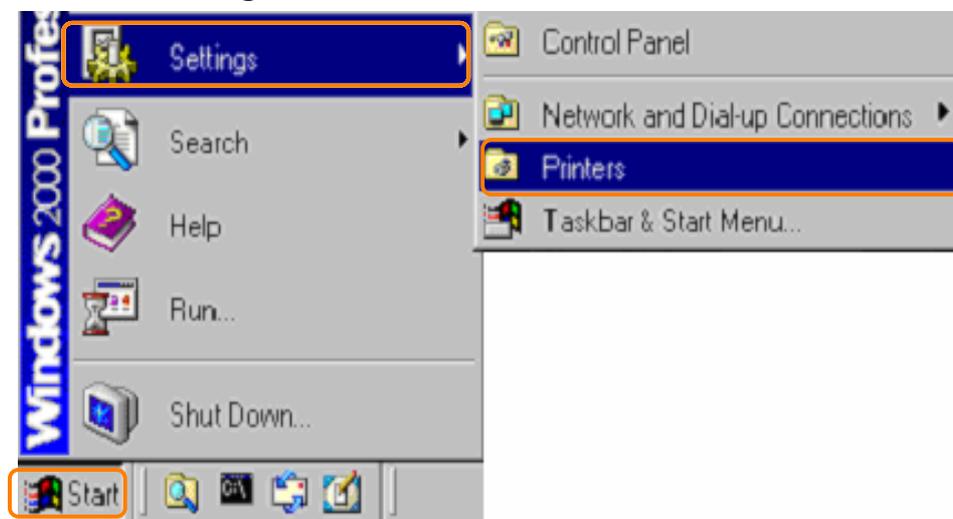
If your OS (Operation System) is Windows 98 or 98SE, please follow the steps to complete your printer settings. From the beginning, there must be two computers or more in the local network because Windows 98 or 98 SE doesn't support LPR TCP/IP printer sharing. So in detail there must be at least a Windows 2000 or up platform as the print server because it can share a printer to the client computer with windows98 or 98SE. This Setting is separated into two parts. The first part is Printer Settings on Windows 2000. The other part is Printer Settings on Windows 98 or 98SE.

3.6.3.2.3.1 Printer Settings on Windows 2000

We assume that the printer device has been installed and set on Windows 2000.

【Step1】

Go to **Start > Settings > Printers**.



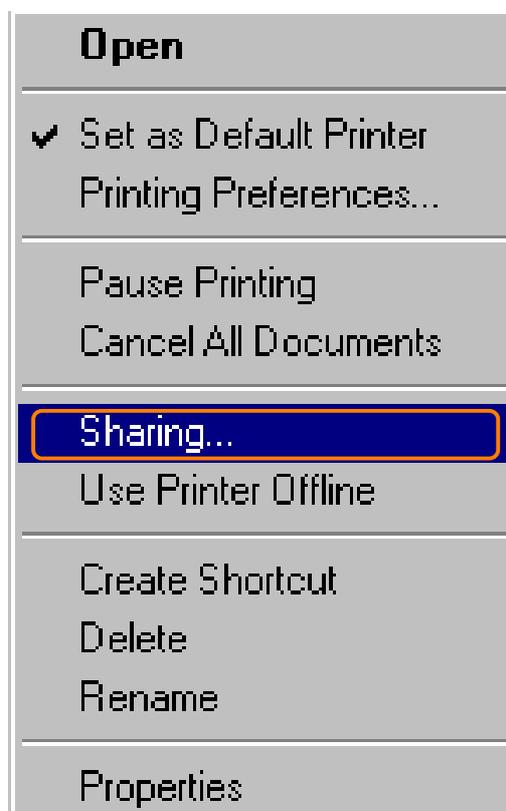
【Step2】

Click on the right button of your mouse.



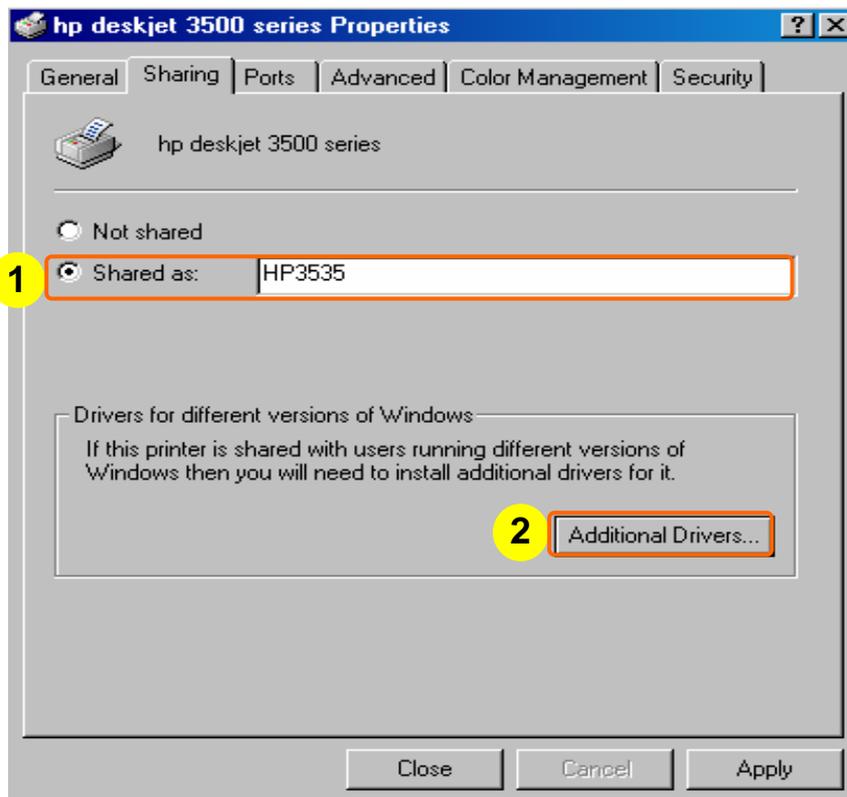
【Step3】

It will appear a pull down menu. Select **Sharing...**



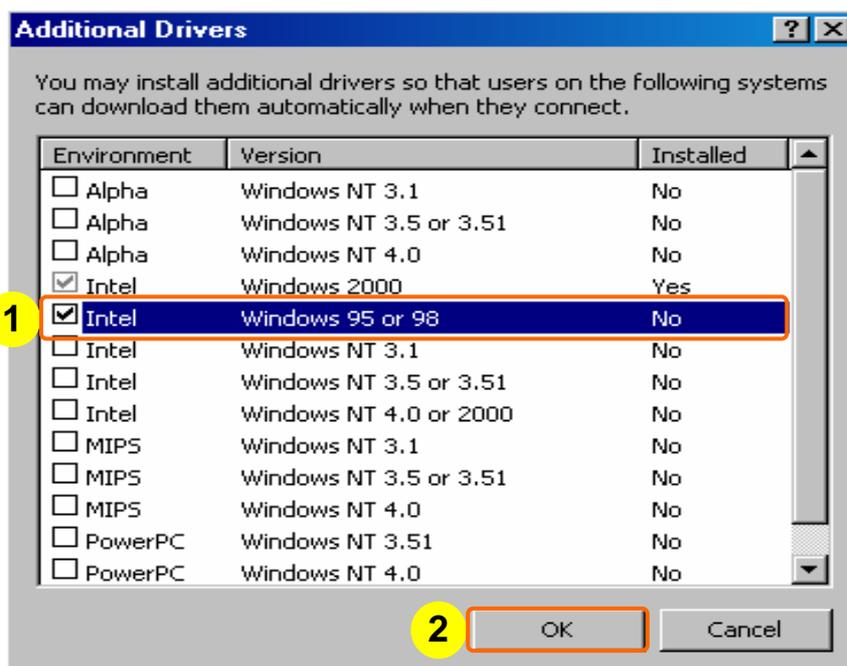
【Step4】

1. In **Shared as** field: The default printer model **“HP3535”** for example will appear.
2. Click on **Additional Drivers...** button.



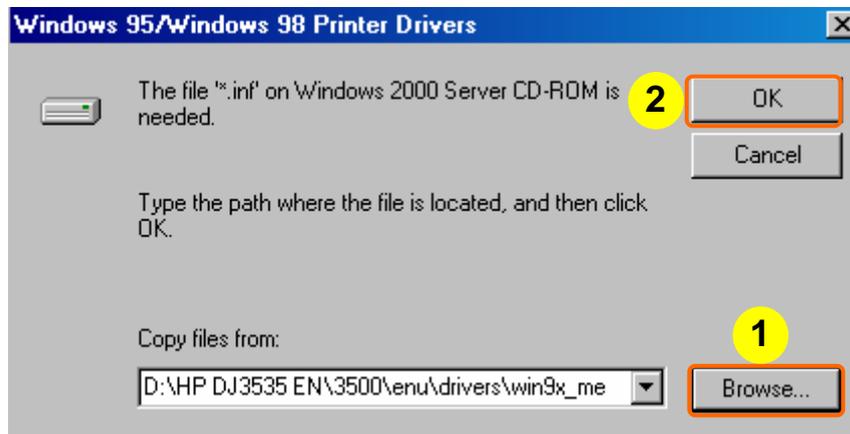
【Step5】

1. Select an OS (operation system) platform you want to share.
2. Click on **OK** button.



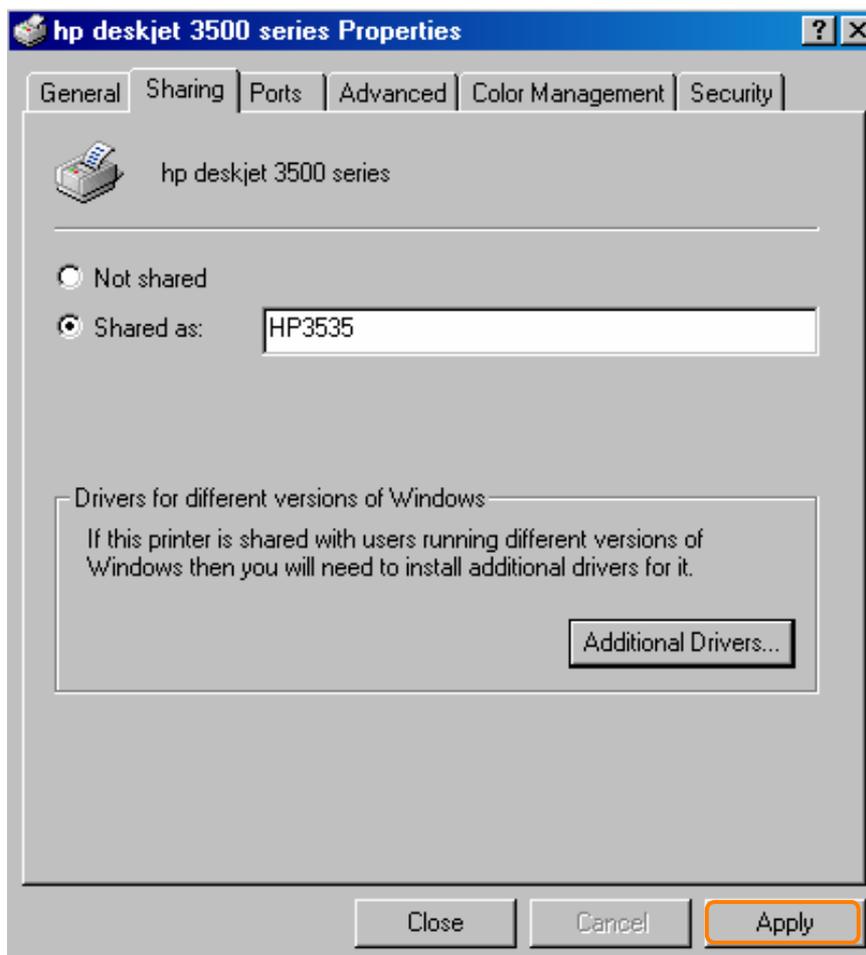
【Step6】

1. Click on **Browse...** button to find the path where the file is located.
2. Click on **OK** button.



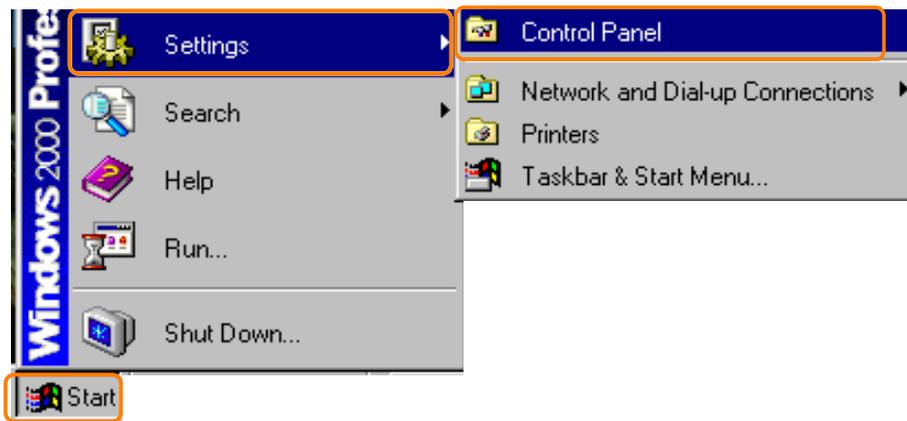
【Step7】

Click on **Apply** button to finish the settings.



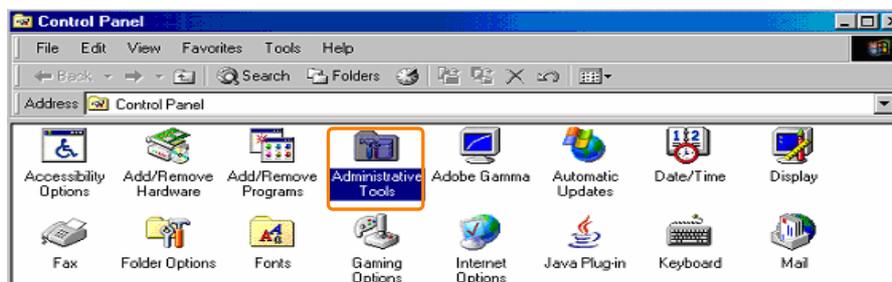
【Step8】

Go to **Start > Settings > Control Panel**.



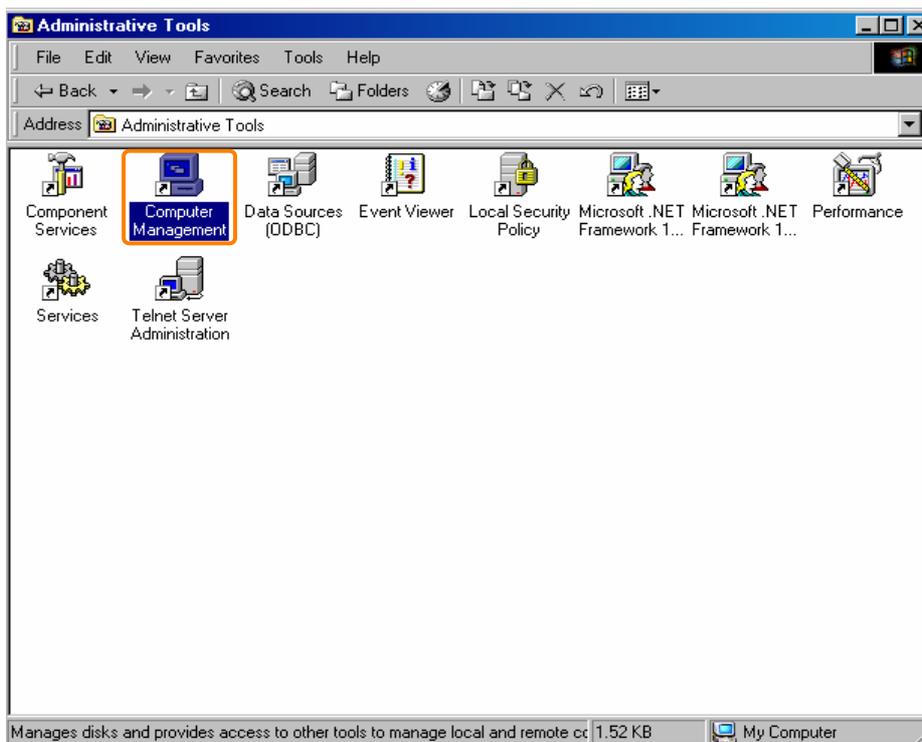
【Step9】

Double click on **Administrative Tools** icon.



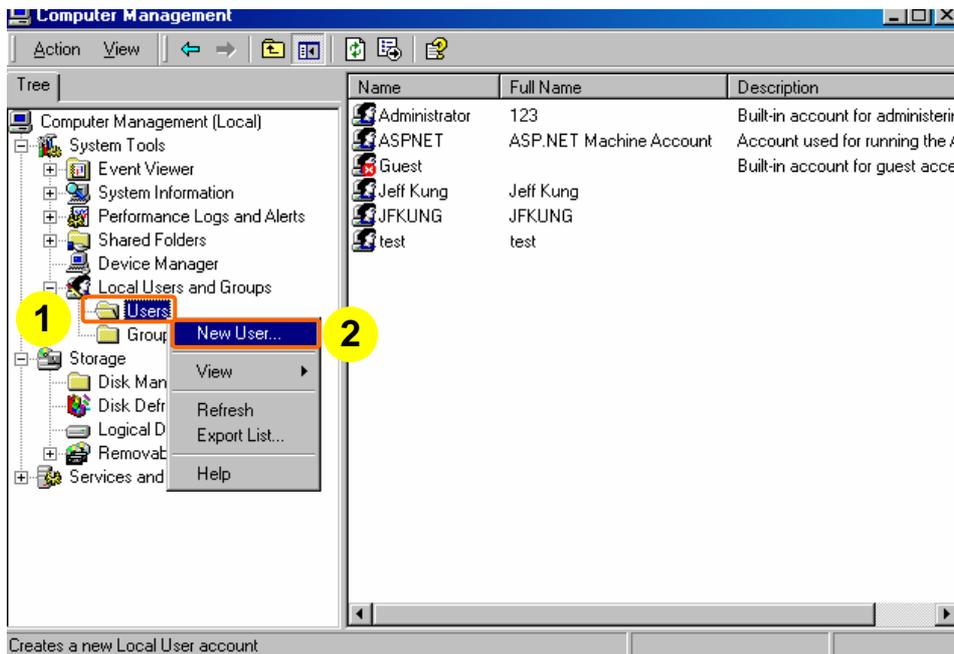
【Step10】

Double click on **Computer Management** icon.



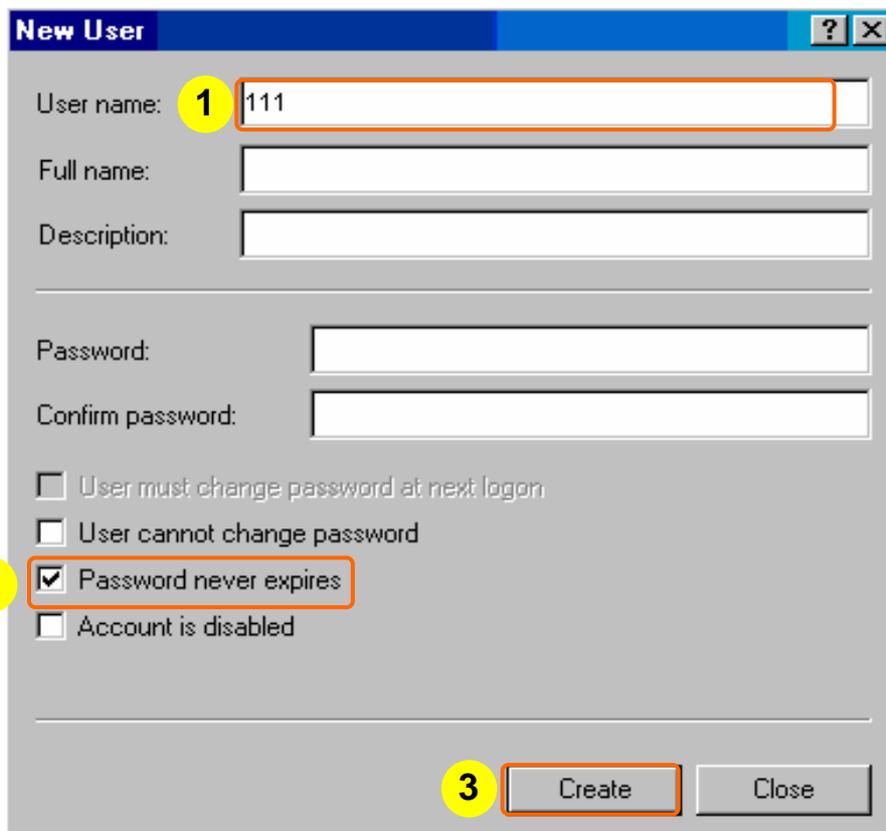
【Step11】

1. Move your cursor on the item **Users**.
2. Click the right button of your mouse. Select **New User...**



【Step12】

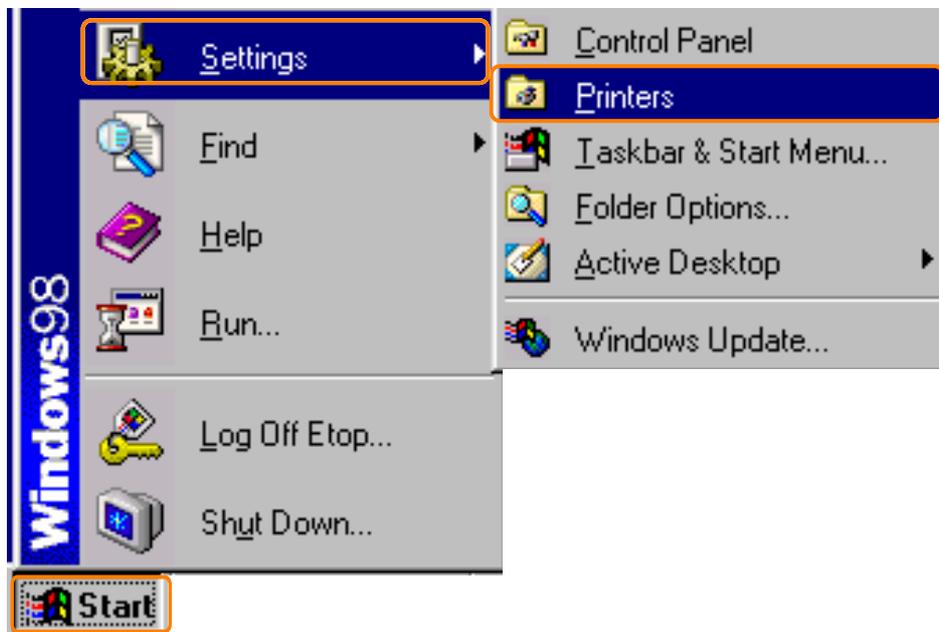
1. Input your client computer's name **111** for example.
2. Select **Password never expires**.
3. Click on **Create** button to save Windows 2000 printer settings.



3.6.3.2.3.2 Printer Settings on Windows 98 or 98SE

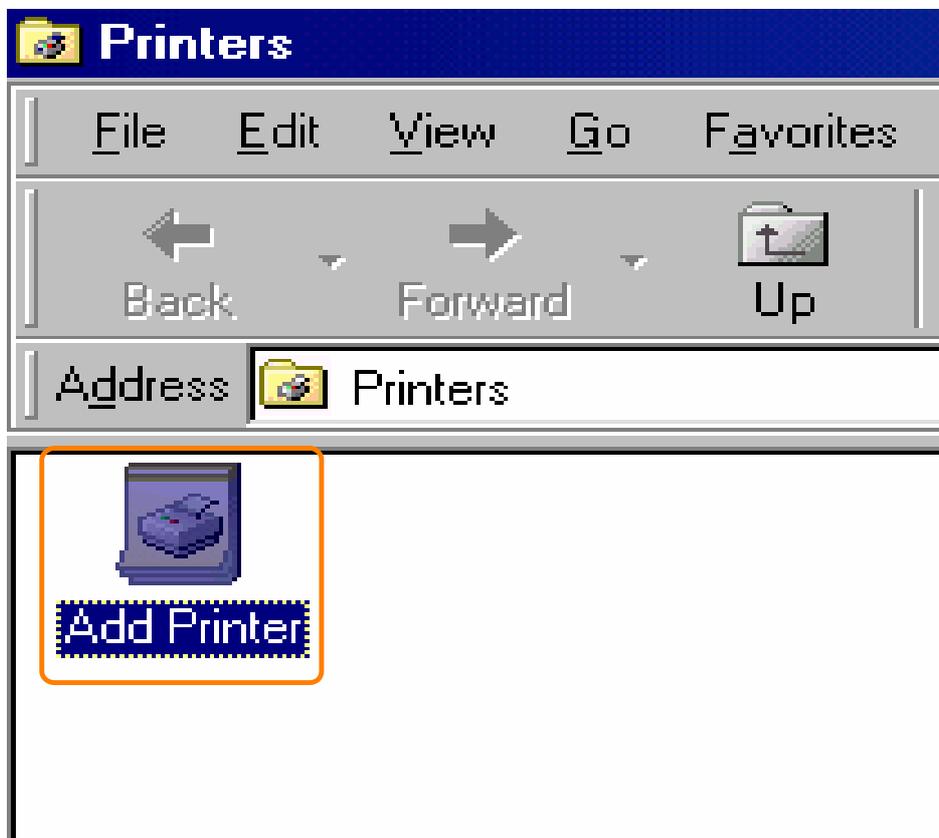
【Step1】

Go to **Start > Settings > Printers**.



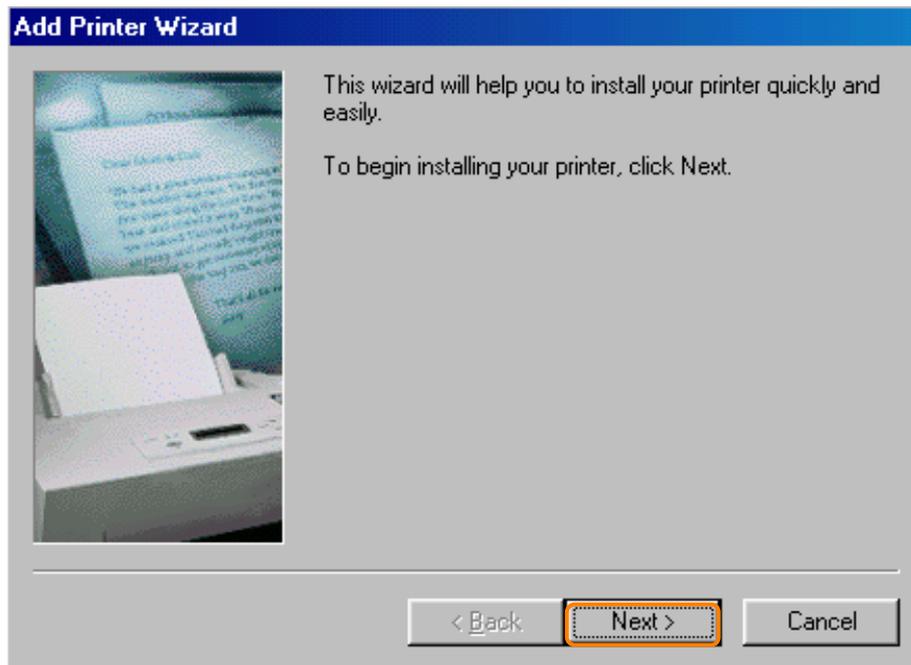
【Step2】

Double click on **Add Printer** icon.



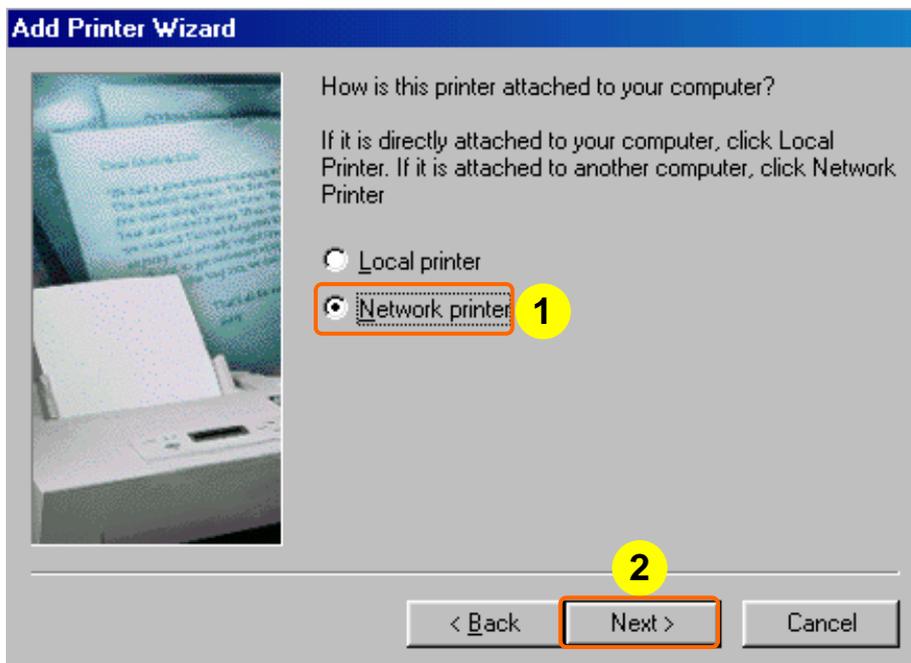
【Step3】

Click on **Next** button.



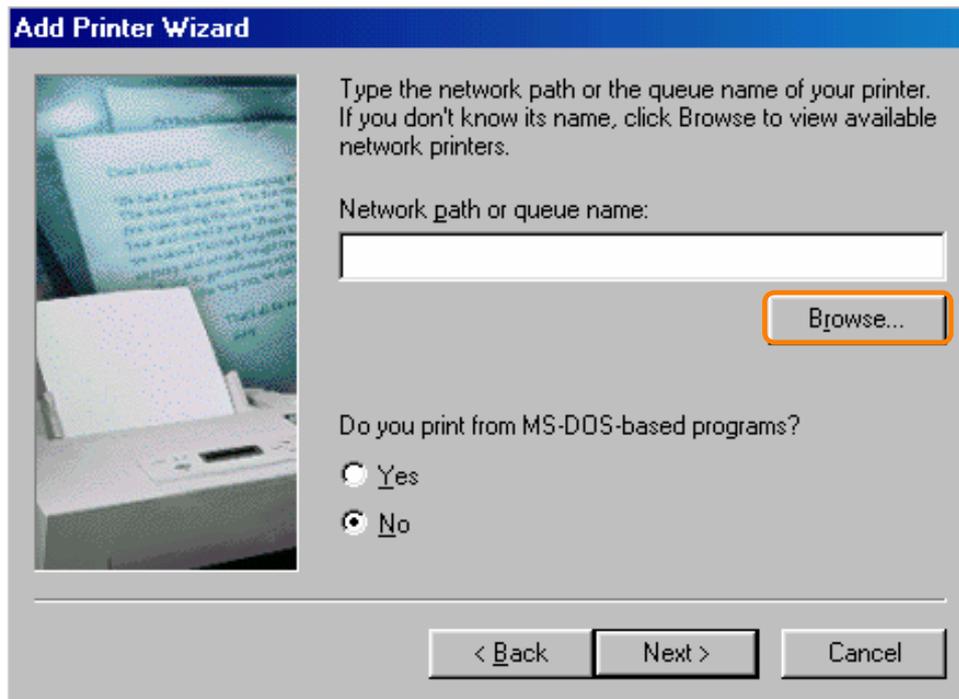
【Step4】

1. Select **Network printer**.
2. Click on **Next** button.



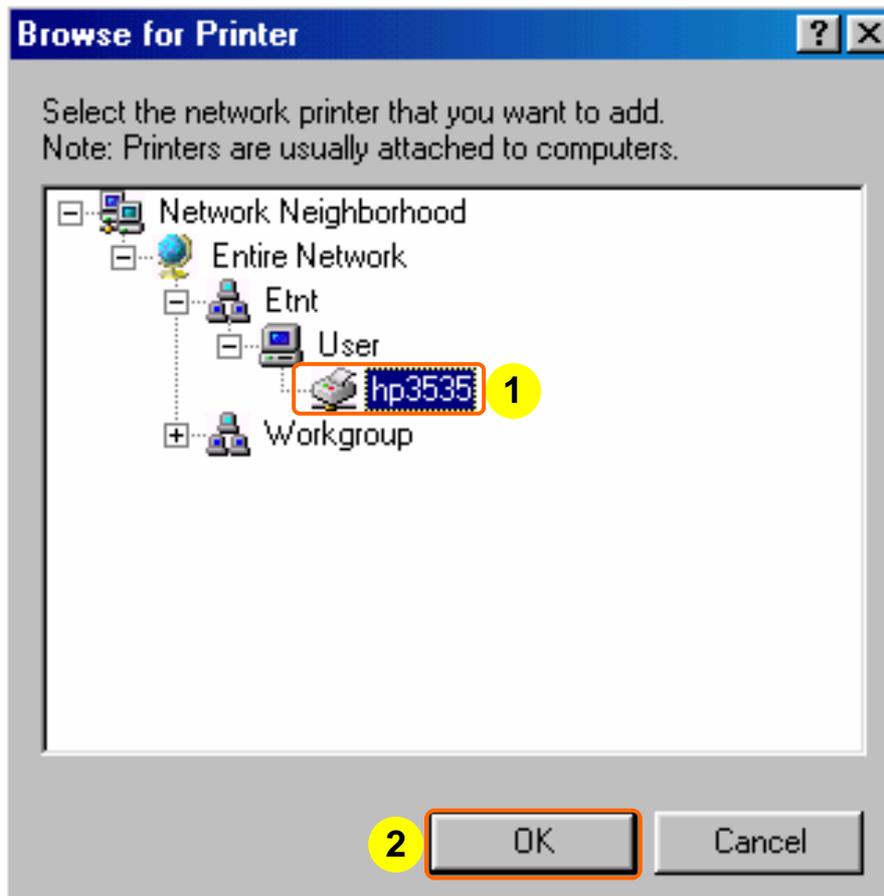
【Step5】

Click on **Browse...** button.



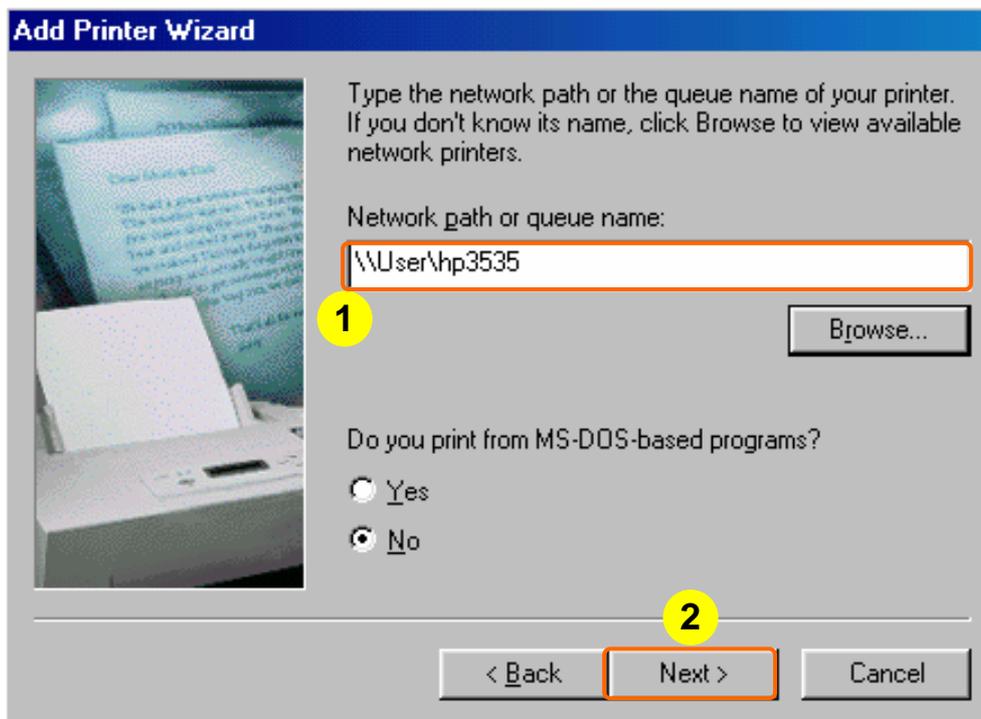
【Step6】

1. Find the printer that is attached to the computer "hp3535" for example.
2. Click on **OK** button.



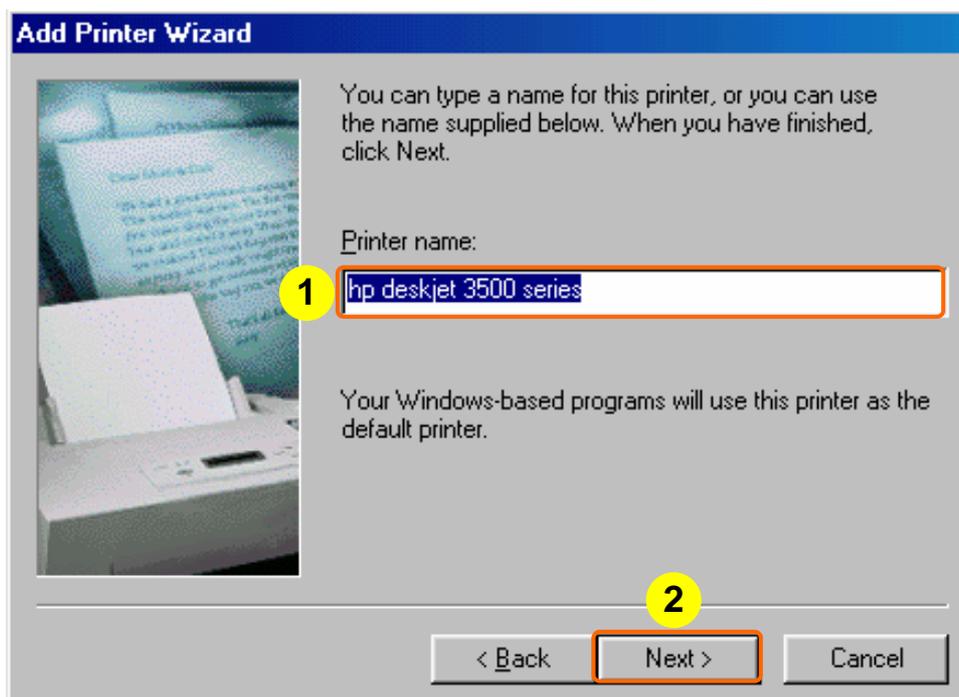
【Step7】

1. The Network path or queue name **\\User\hp3535** for example will appear automatically.
2. Click on **Next** button.



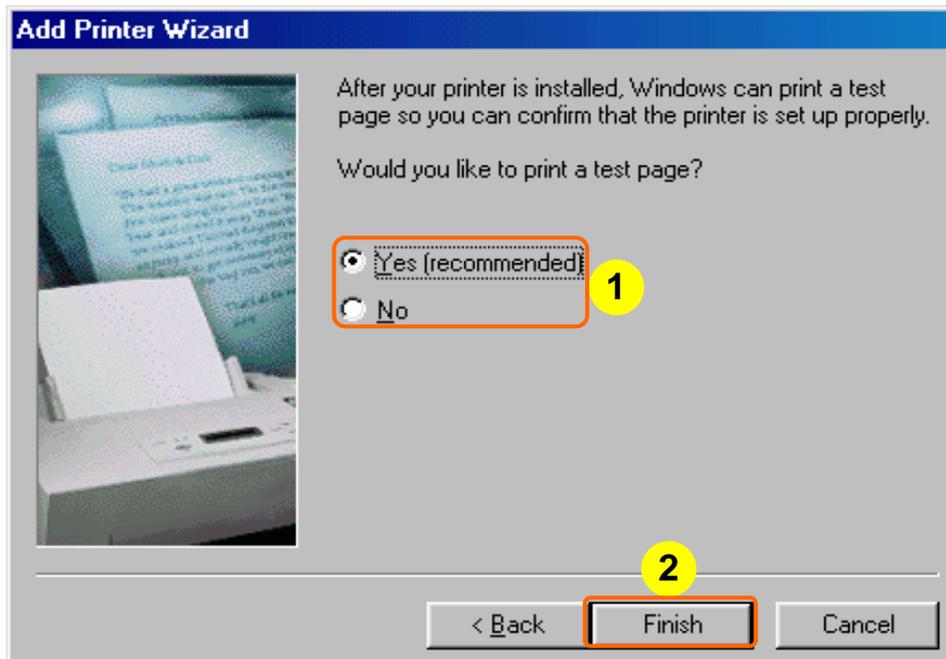
【Step8】

1. The Printer name, **hp deskjet 3500 series** for example will be showed automatically.
2. Click on **Next** button.



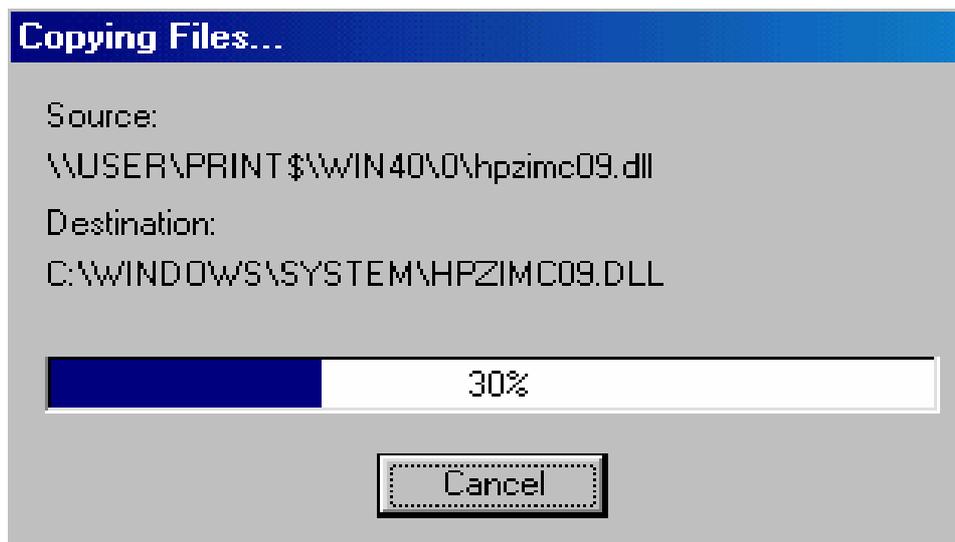
【Step9】

1. Select **Yes** or **No** to print or not to print a test page.
2. Click on **Finish** button to complete Windows 98 or 98SE printer settings.



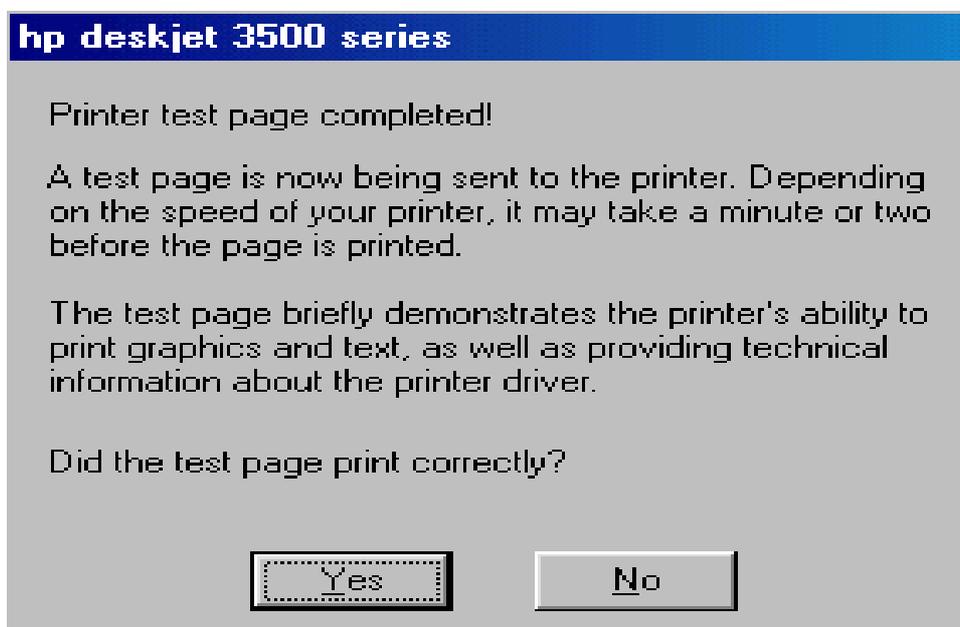
【Step10】

The client computer with Windows 98 or 98SE will copy the print driver from the print server computer with Windows 2000.



【Step11】

The client computer with Windows 98 or 98SE will appear a test page screen, and then the sharing printer will print a test page. It means that the client computer can share the network printer if the test print is correct.



Notice: The PCs with Windows 98 or 98SE use the printer shared from the print server computer with Windows 2000 or higher, please make sure that the print server computer is Power –On and on the LAN.

Notice: If you want to know whether your inserted device such as USB Web Camera, USB Printer or USB HDD corresponds with Navi210W, please check with your product provider.

3.7 Wireless

Navi210W enables fastest 54 Mbps IEEE802.11g wireless transmission and keep compatibility with existing IEEE 802.11b devices. Navi210W complies with IEEE 802.11b standard. Please select **Wireless** under the Main menu. Follow the instructions to enter the **Wireless** setting page to configure the settings you want.



1. Wireless

Select **Enable** (default value) or **Disable** to allow or disallow for operating Wireless.

2. SSID

You can use the default SSID and radio channel unless more than Navi210 or Access Point is deployed in the same area. Under this situation, you should use a different SSID and radio channel for each Navi210 or Access Point. All Navi210 and your wireless LAN card must have the same SSID to allow a wireless mobile client to roam between Navi210s. By default, the SSID is set to "**navi210w**".

3. Channel

IEEE 802.11g and 802.11b devices are direct sequence spread spectrum devices that spread a radio signal over a range of frequencies. The range of frequencies used by a direct sequence device is called Channel.

The 802.11g and 802.11b specification supports up to 14 overlapping Channels for radio communication. But only 11 Channels are supported in the United States and therefore on Navi210W. To minimize interference, configure each Navi210W to use Non-overlapping channels. Non-overlapping channels have 25 Mhz separation beginning at the first allowed channel for the country (for the US and most of Europe, channel 1, 6 & 11 are used.)

Make sure that Navi210W sharing the same Channel (or Channels close in number) are as far away from each other as possible, based on the results of your site survey of the facility. You can find the site survey utility in

Navi210W's setup CD. By default, the channel is "6".

4. Data Rate

This field allows you to specify the transmission rate. Leave on "Auto" to maximize performance versus distance.

5. 54g Mode

This field indicates the 802.11g interface mode. "54g Only" prevents the 802.11b clients from accessing the router. "802.11b/g Mixed" allows both 802.11b and 802.11g clients to access the router. "802.11b Only" will enable the network as an 802.11b wireless network. By default, the Mode is "802.11 b/g Mixed".

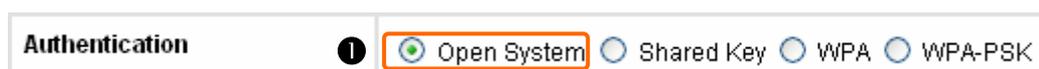
6. Block Broadcast SSID

By default, if you select "ON", wireless mobile users can't see your Navi210W's SSID. If you select "OFF", your Navi210W will show in site surveys by wireless mobile clients and they will enter your Navi210W's SSID. If you want to restrict access to "your" Navi210W, this is a simple way to do it, but for security reasons, don't forget to change the SSID to something other than "default".

7. Authentication

Four authentication methods are supported: Open System, Shared Key, WPA, and WPA-PSK.

❶ **Open System:** Select Open System, your wireless network would be intruded by anonymous. Not only your network bandwidth would be shared; but also transmitting data might be intercepted.



❷ **Shared Key:** Select Shared Key and enable WEP function. The Shared Key function can take effect. Select WEP Encryption as 128Bit and Key Type as HEX, the Key fields can be filled with 26 characters. Select 128Bit and ASCII, the Key fields can be filled with 13 characters...and so on, (Select 64Bit, HEX = Input 10 characters) and (Select 64Bit, ASCII = Input 5 characters).

Authentication	<input type="radio"/> Open System <input checked="" type="radio"/> Shared Key <input type="radio"/> WPA <input type="radio"/> WPA-PSK
WEP	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
WEP Encryption	128Bit
Key Type	HEX
Key1	<input checked="" type="radio"/> 678901234567890123456
Key2	<input type="radio"/> <input type="text"/>
Key3	<input type="radio"/> <input type="text"/>
Key4	<input type="radio"/> <input type="text"/>
Advanced Settings	<input type="button" value="Advanced Settings"/>

Notice 1: The Shared Keys from Key1 to Key4 can be filled with identifiable characters. You can select one of them to change the Key without a fixed schedule.

Notice 2: The client router must be set as the same value. Otherwise, the transmitted data can't be decryption.

3 WPA: WPA is an ID authentication mode. It provides a better way via an access authentication server to secure your wireless network. You should indicate the specified Server IP Address, such as **192.168.1.200** for example, so that the access client ID with the shared secret key **123456** for example, will be verified. Generally, the Port is **1812**.

Authentication	<input type="radio"/> Open System <input type="radio"/> Shared Key <input checked="" type="radio"/> WPA <input type="radio"/> WPA-PSK
Radius Server IP	192 . 168 . 1 . 200
Port	1812
Shared Secret	123456
Advanced Settings	<input type="button" value="Advanced Settings"/>

Notice: The mentioned example is a reference value.

4 WPA-PSK: WPA-PSK is a simple ID authentication mode. It just only requests a secret number, i.e. Shared Secret, such as 123456.

Authentication	<input type="radio"/> Open System <input type="radio"/> Shared Key <input type="radio"/> WPA <input checked="" type="radio"/> WPA-PSK
Pre-Shared Key	123456
Confirmed Pre-Shared Key	123456
Advanced Settings	Advanced Settings
<input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>	

Notice: The mentioned example is a reference value.

8. Advanced Settings

Click this button for more advanced Settings, such as beacon interval, RTS Threshold and Data Rate as shown below.

❶ **Beacon Interval:** When a wirelessly networked device sends a beacon, it includes with it a beacon interval, which specifies the period of time before it will send the beacon again. The interval tells receiving devices on the network how long they can wait in low-power mode before waking up to handle the beacon. Network managers can adjust the beacon interval, usually measured in milliseconds (ms) or its equivalent, kilomicroseconds (Kmsec).

❷ **RTS Threshold:** This value should remain at its default setting of 2432. The range is 256~2432 bytes. Should you encounter inconsistent data flow, only minor modifications are recommended. If a network packet is smaller than the present RTS threshold size, the RTS/CTS mechanism will not be enabled. The router sends Request to Send (RTS) frames to a particular receiving station and negotiates the sending of a data frame. After receiving an RTS, the wireless station responds with a Clear to Send (CTS) frame to acknowledge the right to begin transmission.

❸ **Preamble Type:** Preamble is the first subfield of PPDU, which is the appropriate frame format form transmission to PHY (Physical layer). There are two options, Short Preamble and Long Preamble. The Short Preamble option improves throughput performance.

❹ **Apply, Cancel & Help:** Click on **Apply** button to save the settings. If you want to clean the settings, please click on **Cancel** button. The functional button, **Cancel** can take effect after clicking on **Apply** button. If you don't know how to do it, please click on **Help** button for more information or you can click on underlining blue phrase to return back to basic setup.

Advanced Wireless Settings	
You can configure advanced features for wireless in the page.	
Beacon interval ❶	<input style="width: 80px;" type="text" value="100"/> (msec, range:1~1000, default:100)
RTS Threshold ❷	<input style="width: 80px;" type="text" value="2432"/> (range: 256~2432, default:2432)
Preamble Type ❸	<input checked="" type="radio"/> Short Preamble <input type="radio"/> Long Preamble
❹ Return Back to basic setup <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>	

9. Apply, Cancel & Help

Click on **Apply** button to save the settings. If you want to clean the settings, please click on **Cancel** button. The functional button, **Cancel** can take effect after clicking on **Apply** button. If you don't know how to do it, please click on **Help** button for more information.

Wireless Settings	
Please configure the wireless settings of Navi210W in this page.	
Wireless ❶	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
SSID ❷	<input style="width: 150px;" type="text" value="navi210w"/>
Channel ❸	<input style="width: 40px;" type="text" value="6"/>
Data Rate ❹	<input style="width: 60px;" type="text" value="AUTO"/>
54g Mode ❺	<input style="width: 100px;" type="text" value="802.11b/g Mixed"/>
Block Broadcast SSID ❻	<input style="width: 60px;" type="text" value="OFF"/>
Authentication ❼	<input checked="" type="radio"/> Open System <input type="radio"/> Shared Key <input type="radio"/> WPA <input type="radio"/> WPA-PSK
Advanced Settings ❽	<input style="width: 150px;" type="text" value="Advanced Settings"/>
❾ <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>	

3.8 VPN

VPN (Virtual Private Network) is the extension of a private network around shared or public networks like the Internet. VPN allows you to send encrypted data securely between two computers across a shared or public network in a manner that emulates the properties of a point-to-point private link. Please follow the instructions to configure your settings. It contains one functional items under such as VPN Pass through.



3.8.1 VPN Pass Through

The gateway supports VPN pass through for both PPTP (Point to Point Tunneling Protocol) and IPsec (IP Security). Multiple VPN connections can be made through the gateway.



1. VPN Pass through

Please select **Enable** or **Disable** to allow or disallow VPN connections to pass through Navi210W.

2. Apply, Cancel & Help

Click on **Apply** button to save the settings. If you want to clean the settings, please click on **Cancel** button. The functional button, **Cancel** can take effect after clicking on **Apply** button. If you don't know how to do it, please click on **Help** button for more information.

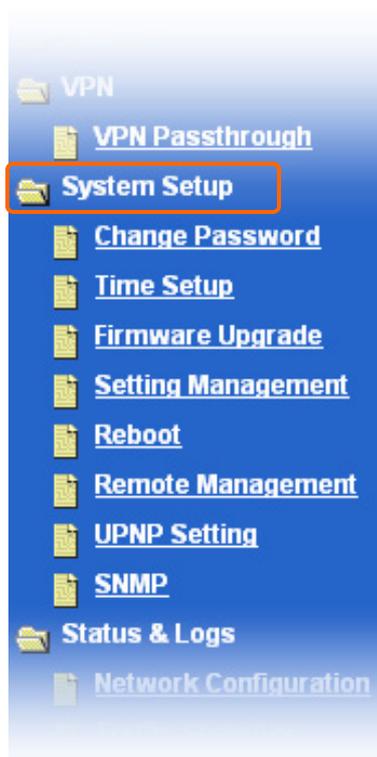
VPN Pass through

Use VPN Pass Through page to allow or deny VPN connections to pass through the Navi210WV.

PPTP	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
IPSec	<input type="radio"/> Enable <input checked="" type="radio"/> Disable

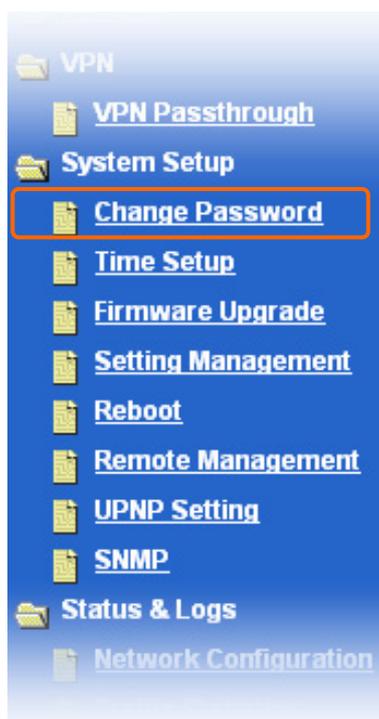
3.9 System Setup

System Setup contains eight functional items, including **Change Password**, **Time Setup**, **Firmware Upgrade**, **Setting Management**, **Reboot**, **Remote Management**, **UPNP Setting** and **SNMP**. Please follow the instructions to configure your settings.



3.9.1 Change Password

Navi210W's chip is designed with no password. You are allowed to set a password or change your current password in this page. Please select **Change Password** under the **System Setup** menu. Follow the instructions to enter the **Change Password** setting page to configure the settings you want.



1. Old Password, New Password & New Password (Confirm)

Input the **Old Password**, **New Password** and **New Password** in the blank fields.

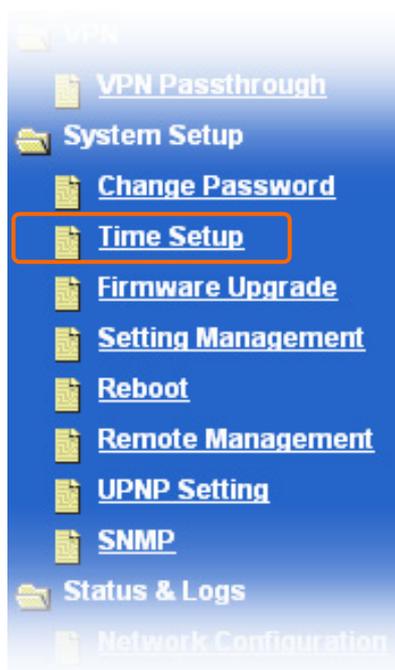
2. Apply, Cancel & Help

Click on **Apply** button to save the settings. If you want to clean the settings, please click on **Cancel** button. The functional button, **Cancel** can take effect after clicking on **Apply** button. If you don't know how to do it, please click on **Help** button for more information.

Change Password	
The Navi210W ships with no password. You may set a password or change your current password in this page.	
Login	admin
Old Password	••••••
New Password	••••
New Password (Confirm)	••••
1 2 <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>	

3.9.2 Time Setup

In this page, you can set the time zone corresponding to your location. The time can be set manually or the gateway can connect to a NTP (Network Time Protocol) server to retrieve the time. You may also set Daylight Saving dates and the system time will automatically adjust on those dates. Please select **Time Setup** under the **System Setup** menu, and follow the instructions to enter the **Time Setup** setting page to configure the settings you want.



1. Local Time

The Local Time will be shown automatically after you click on **Apply** button, **10-01-2003 Wednesday 01:35:55 timezone: SGT +8** for example.

Notice: The mentioned example is a reference value.

2. Your PC Time

This area will show a current time from your PC, **01-21-2005 Friday 17:09:30** for example.

Notice: The mentioned example is a reference value.

3. Set the Time

You can also set a time by yourself if you don't like the above time, for example, **Year: 2005, Month: Jan, Day: 21, Hour: 17, Minute: 09, Second: 30**. Please remember to click on **Set Time** button to finish your settings.

Notice: The mentioned example is a reference value.

4. Time Zone

Please set a time zone from where the accurate time can be supplied, **(GMT+08:00) Beijing, Hong Kong, Singapore, Taipei** for example.

Notice: The mentioned example is a reference value.

5. Default NTP Server

Please select a Default NTP Server, but it's optional.

6. Apply, Cancel & Help

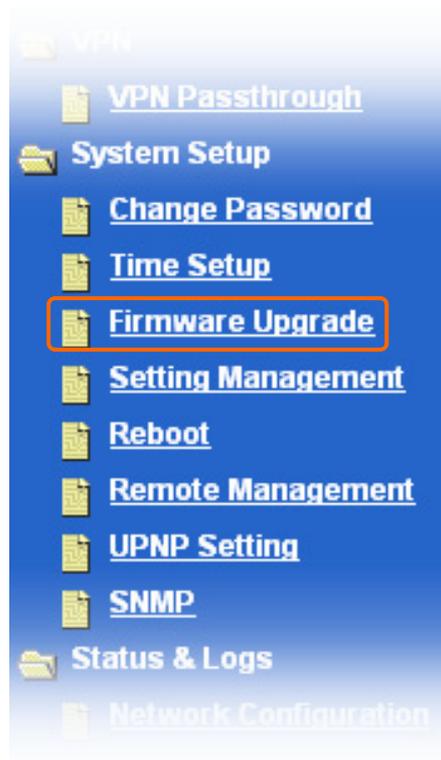
Click on **Apply** button to save the settings. If you want to clean the settings, please click on **Cancel** button. The functional button, **Cancel** can take effect after clicking on **Apply** button. If you don't know how to do it, please click on **Help** button for more information.

Time Setup	
Please set your time and time zone in this page.	
Local Time 1	10-01-2003 Wednesday 01:35:55 timezone: SGT +8
Your PC Time 2	01-21-2005 Friday 17:09:30
Set the Time 3	Year <input type="text" value="2005"/> Month <input type="text" value="Jan"/> Day <input type="text" value="21"/> Hour <input type="text" value="17"/> Minute <input type="text" value="09"/> Second <input type="text" value="30"/> <input type="button" value="Set Time"/>
Time Zone 4	(GMT+08:00) Beijing, Hong Kong, Singapore, Taipei
Default NTP Server 5	Please Select <input type="text" value="Please Select"/> (optional)
6 <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>	

3.9.3 Firmware Upgrade

From time to time, Navi210W's manufacturer may release new versions of the gateway's firmware. Firmware updates contain feature improvements and fixes to problems that may have existed. When Navi210W's manufacturer releases new firmware, you can download the firmware from the manufacturer's update website and update your gateway's firmware to the latest version.

Please select **Firmware Upgrade** under the **System Setup** menu, and follow the instructions to enter the **Firmware Upgrade** setting page to configure the settings you want.



From time to time, Navi210W's manufacturer may release new versions of the gateway's firmware. Firmware updates contain feature improvements and fixes to problems that may have existed. When Navi210W's manufacturer releases new firmware, you can download the firmware from the manufacturer's update website and update your gateway's firmware to the latest version.

1. Information

The current firmware information will be shown automatically on the page.

2. Check Firmware

If you want to check for the new Firmware Version, please click on the link item **Check Firmware**.

3. Browse...

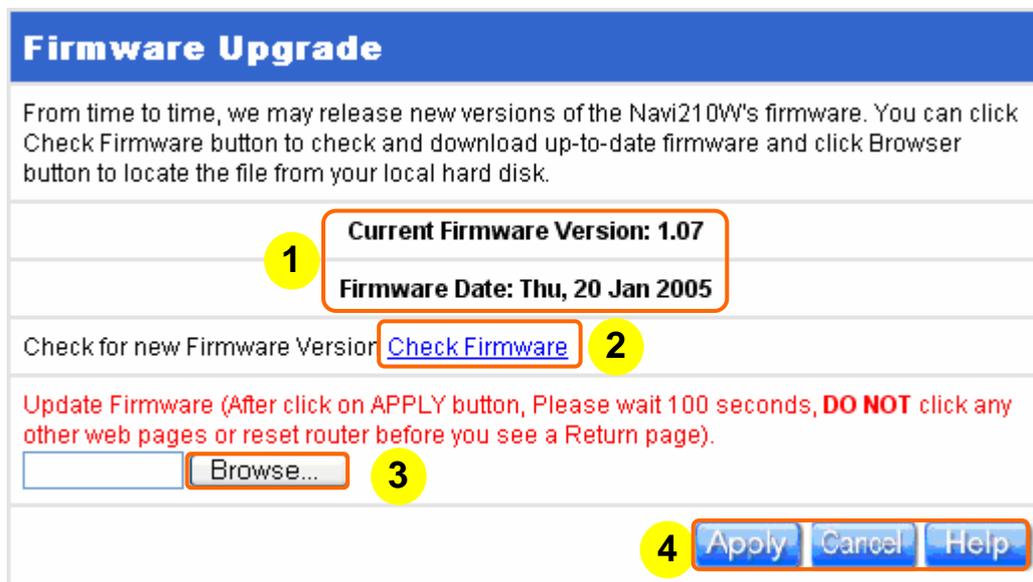
Click on **Browse...** button to find out the path and the file you saved.

4. Apply, Cancel & Help

Click on **Apply** button to save the settings, and it will take you 100 seconds.

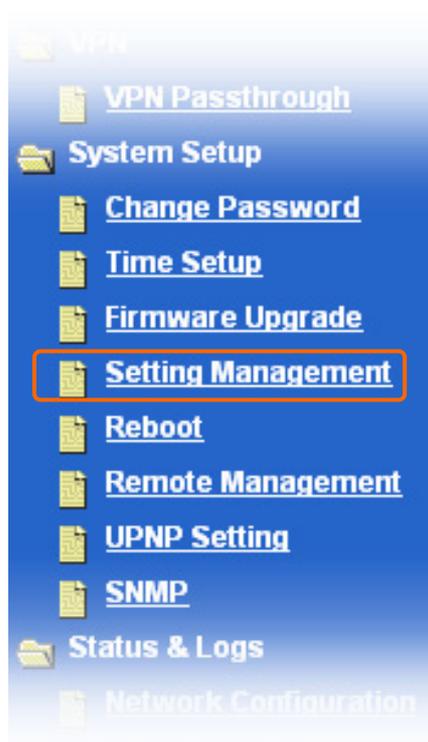
If you want to clean the settings, please click on **Cancel** button. The functional button, **Cancel** can take effect after clicking on **Apply** button. If you don't know how to do it, please click on **Help** button for more information.

Notice: Do not click on any other web page or reset router before you see a return page.



3.9.4 Setting Management

In this page, you can save your current configuration, restore a previously saved configuration, or restore all of the settings for Navi210W to the factory (default) settings. Please select **Setting Management** under the **System Setup** menu, and follow the instructions to enter the **Setting Management** setting page to configure the settings you want.



1. Save Settings To Local Hard Drive

Click on **Save** button to save your current configuration.

2. Load Settings From Local Hard Drive

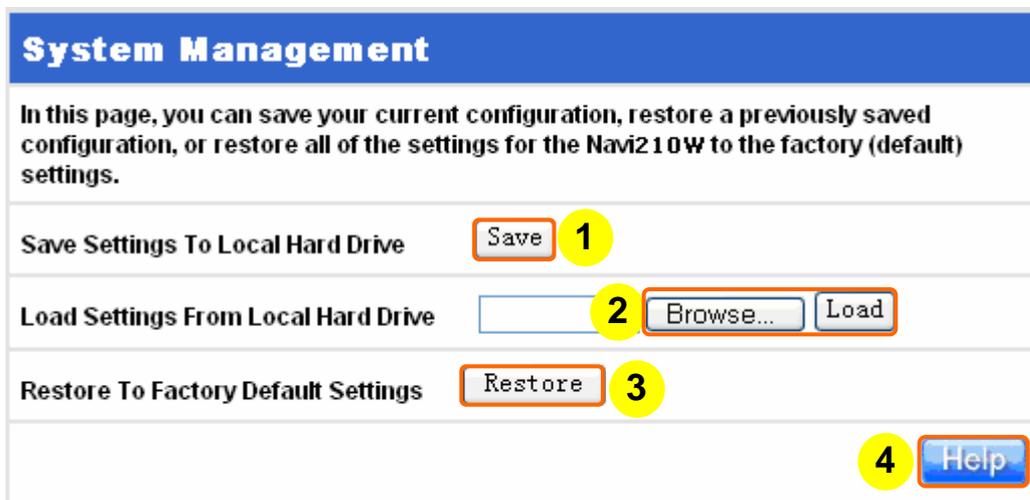
Click on **Browse...** button to find the saved file, and then click on **Load** button to recover from the unsatisfied settings. **Load**

3. Restore To Factory Default Settings

Click on **Restore** button to get the factory default value.

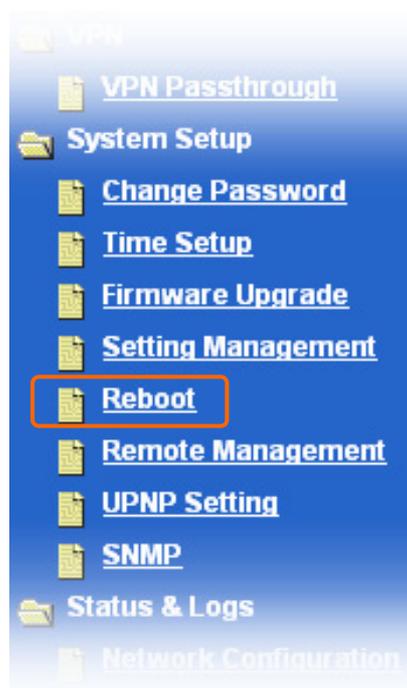
4. Help

If you don't know how to do it, please click on **Help** button for more information.



3.9.5 Reboot

Sometimes it may be necessary to reboot the Navi210W if it begins working improperly. Rebooting Navi210W will not delete any of your configuration settings if you click on **reboot** button to reboot Navi210W. If you don't know how to do it, please click on **Help** button for more information. Please select **Reboot** under the **System Setup** menu, and follow the instructions to enter the **Reboot** setting page to configure the settings you want.



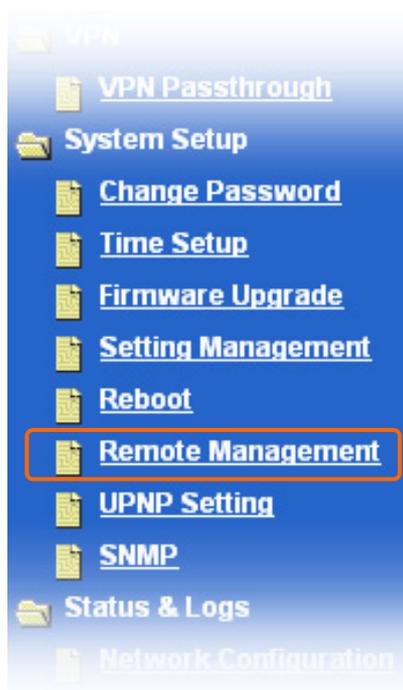
Reboot

Sometimes it may be necessary to reboot the Navi210W if it begins working improperly. Rebooting the router will not delete any of your configuration settings. Click reboot button to reboot the router.

[Reboot](#) [Help](#)

3.9.6 Remote Management

Remote Management allows the device to be configured through the WAN (Wide Area Network) port from the Internet using a web browser. A username and password is required to access the browser-based management interface. Please select **Remote Management** under the **System Setup** menu, and follow the instructions to enter the **Remote Management** setting page to configure the settings you want.



1. Remote Management

Select **Enabled** or **Disabled** to allow or disallow Remote Management.

2. IP Address

This IP address is for the computer to access the gateway, such as **220.24.234.3**. If set IP address to *, all the computers will get permission to access the gateway.

Notice: Don't copy the mentioned IP Address as yours.

Notice: If you select Enabled and leave IP Address field blank, everyone can get access to make changes to the Navi210W's settings from WAN.

3. Port

The port number used to access the gateway, **80** for example.

Notice: The mentioned Port is a reference value.

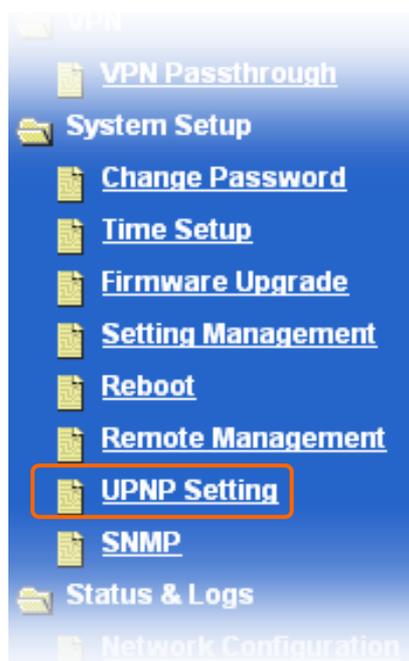
4. Apply, Cancel & Help

Click on **Apply** button to save the settings. If you want to clean the settings, please click on **Cancel** button. The functional button, **Cancel** can take effect after clicking on **Apply** button. If you don't know how to do it, please click on **Help** button for more information.

Remote Management	
Remote management allows you to make changes to the Navi210W's settings from a specific IP address in Internet	
Remote Management	1 <input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
IP Address	2 220 . 24 . 234 . 3
Port	3 80
4 <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>	

3.9.7 UPNP Setting

UPnP is short for Universal Plug and Play that is a networking architecture that provides compatibility among networking equipment, software, and peripherals. Please select **Remote Management** under the **System Setup** menu, and follow the instructions to enter the **Remote Management** setting page to configure the settings you want.

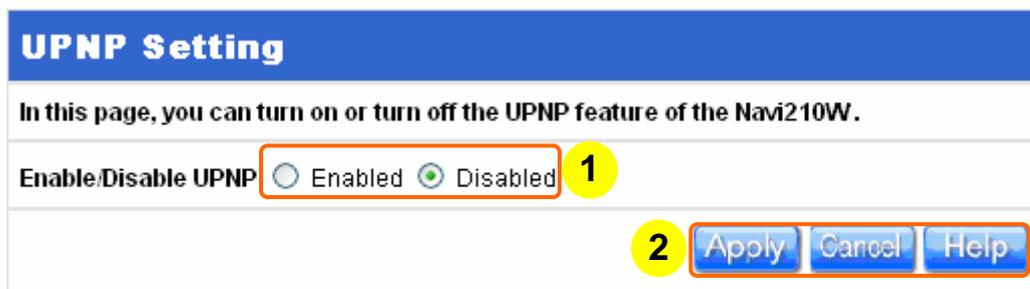


1. Enable/Disable UPNP

Select **Enabled** or **Disabled** to start or close this UPNP function.

2. Apply, Cancel & Help

Click on **Apply** button to save the settings. If you want to clean the settings, please click on **Cancel** button. The functional button, **Cancel** can take effect after clicking on **Apply** button. If you don't know how to do it, please click on **Help** button for more information.

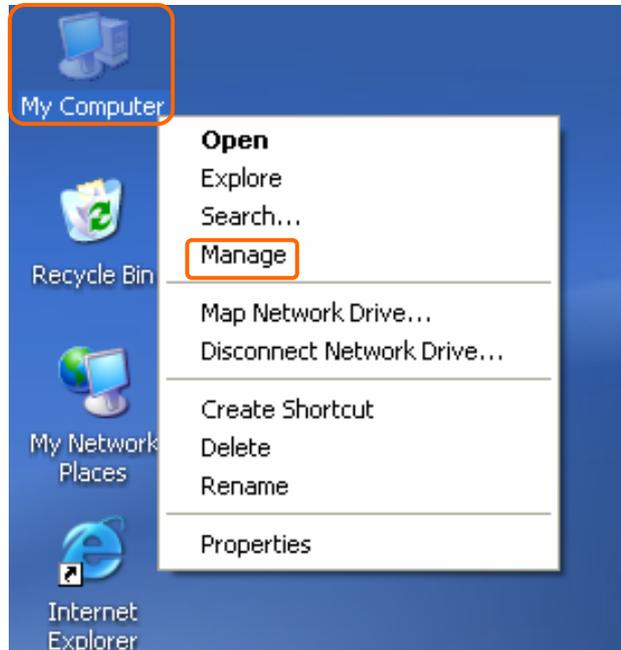


Notice: This function only supports OS Windows Me & Windows XP. When you enable this function as the figure above and follow the OS settings below, you will add a path on the Local Network. Double left click on the added Icon, you will see a Navi210W's Login Screen. It is easy for you to login Navi210W to make configuration.

3.9.7.1 OS settings – Step 1

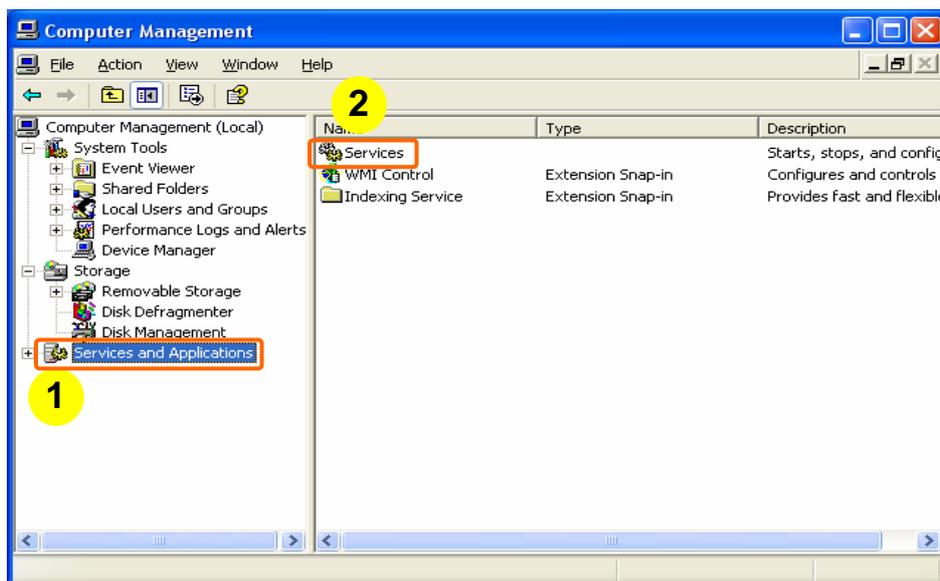
【Step1】

One right click on **My Computer icon** and then select **Manage** item.



【Step2】

1. One left click on **Services and Applications**. The following three right items will appear.
2. Double click on **Services** item.



【Step3】

Check **SSDP Discovery Service** whether it is in **Started** conditions.

Server	Supports fil...	Started	Automatic	Local System
Shell Hardware Detection		Started	Automatic	Local System
Smart Card	Manages a...		Manual	Local Service
Smart Card Helper	Enables su...		Manual	Local Service
SSDP Discovery Service	Enables dis...	Started	Manual	Local Service
System Event Notification	Tracks syst...	Started	Automatic	Local System
System Restore Service	Performs s...	Started	Automatic	Local System
Task Scheduler	Enables a ...	Started	Automatic	Local System
TCP/IP NetBIOS Helper	Enables su...	Started	Automatic	Local Service

【Step4】

Check **Universal Plug and Play Device Host** whether it is in **Started** condition.

Terminal Services	Allows mult...	Started	Manual	Local System
Themes	Provides u...	Started	Automatic	Local System
Uninterruptible Power Supply	Manages a...		Manual	Local Service
Universal Plug and Play Device Host	Provides s...		Manual	Local Service
Upload Manager	Manages s...	Started	Automatic	Local System
Volume Shadow Copy	Manages a...		Manual	Local System
WebClient	Enables Wi...	Started	Automatic	Local Service

【Step5】

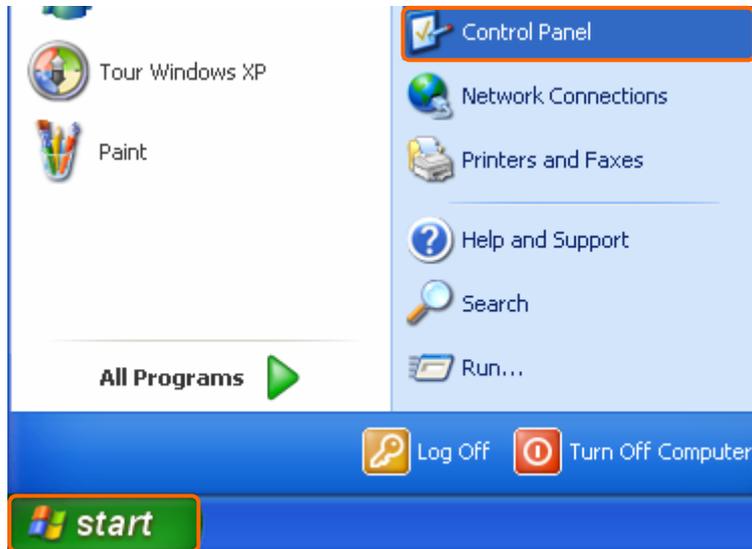
If not, please one right click on the **Universal Plug and Play Device Host** item, and select **Start** to activate it.



3.9.7.2 OS settings – Step 2

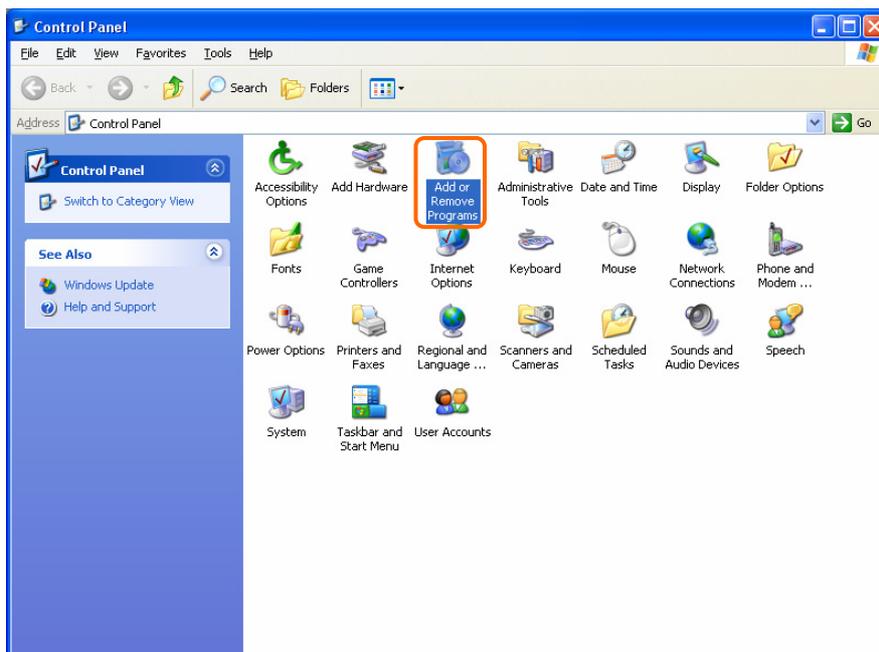
【Step1】

Go to **start > Control Panel**.



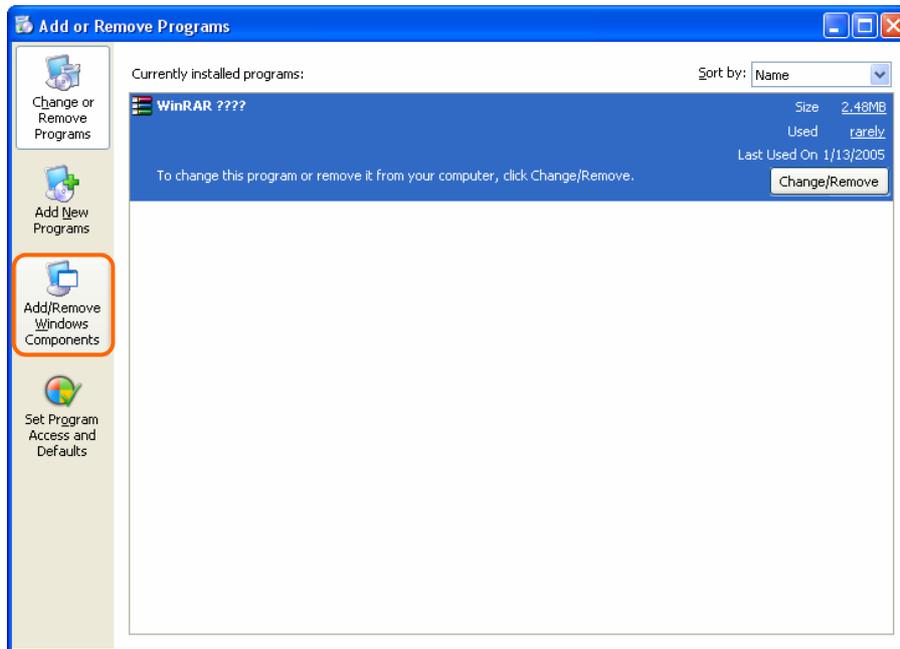
【Step2】

Double click on **Add or Remove programs** icon.



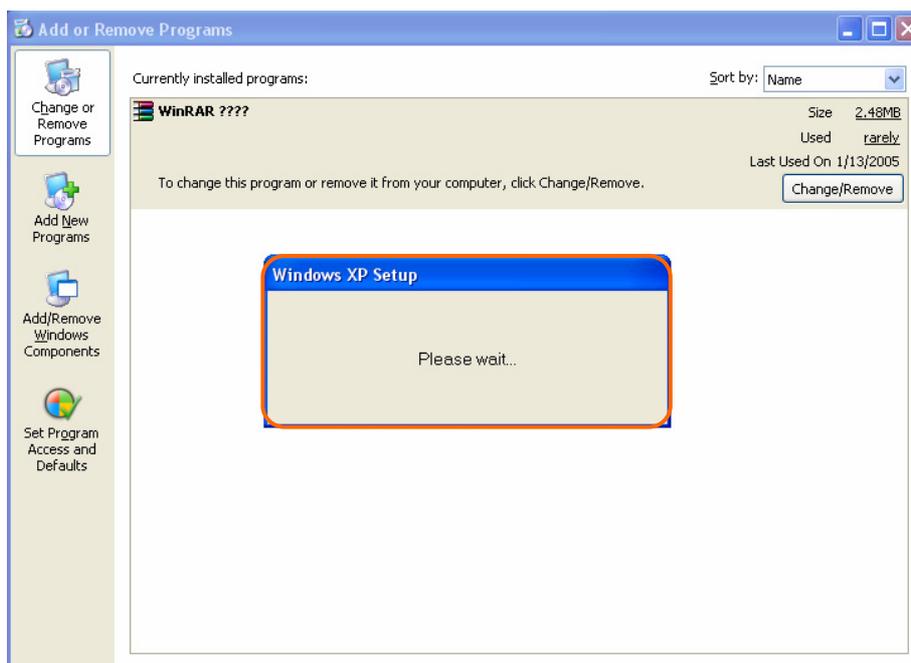
【Step3】

Double click on **Add/Remove Windows Components** icon.



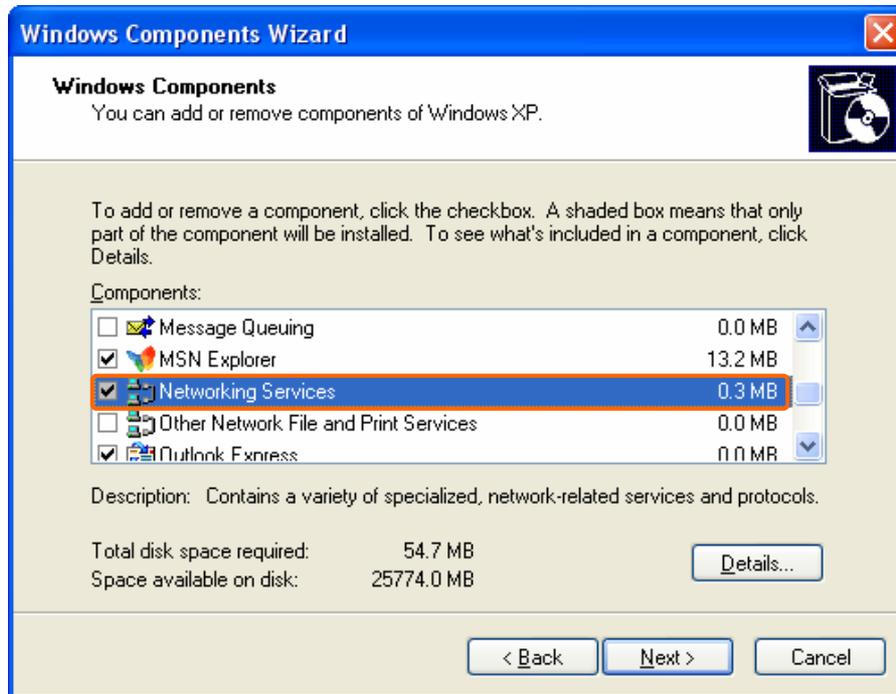
【Step4】

Please wait for a while.



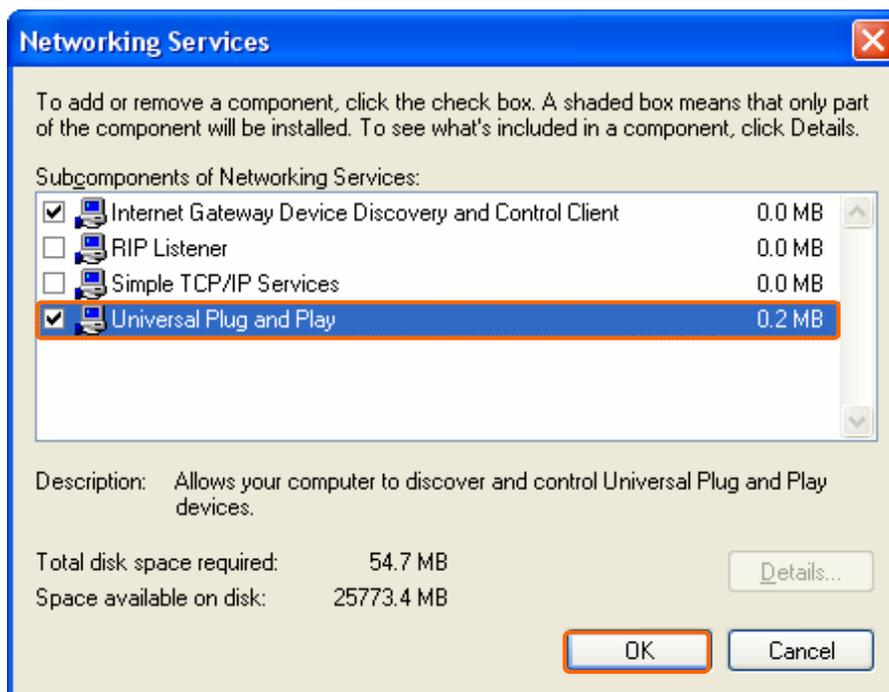
【Step5】

Leave it in marked condition. Double left click on **Networking Services** item, or one left click on **Networking Services** item and then click on Details button.



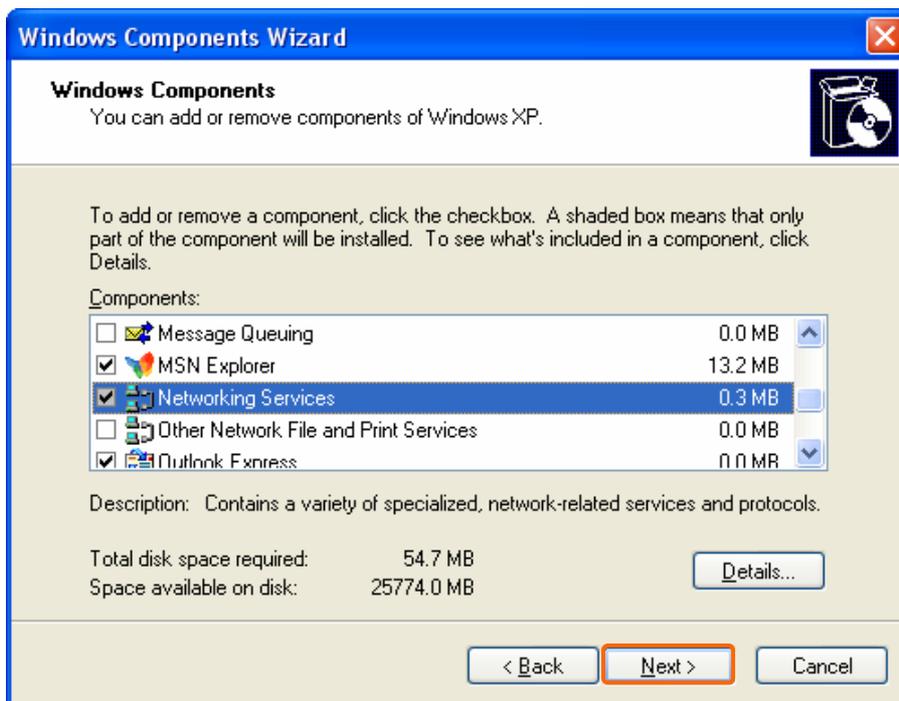
【Step6】

Mark the **Universal Plug and Play** icon and then click on **OK** button.



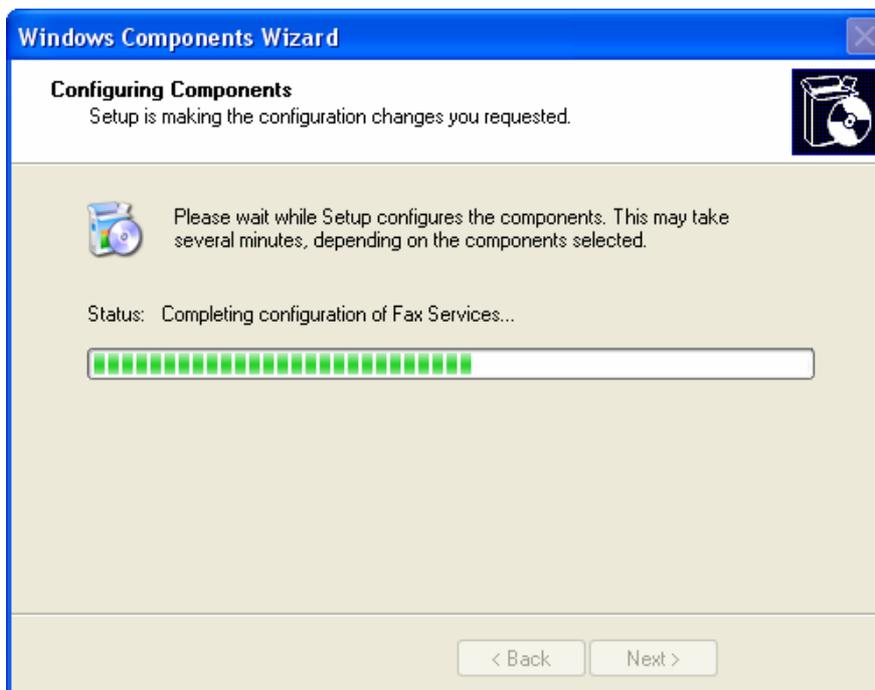
【Step7】

Click on **Next** button.



【Step8】

Please wait while Setup configures the components.



【Step9】

Click on Finish button the complete the settings.



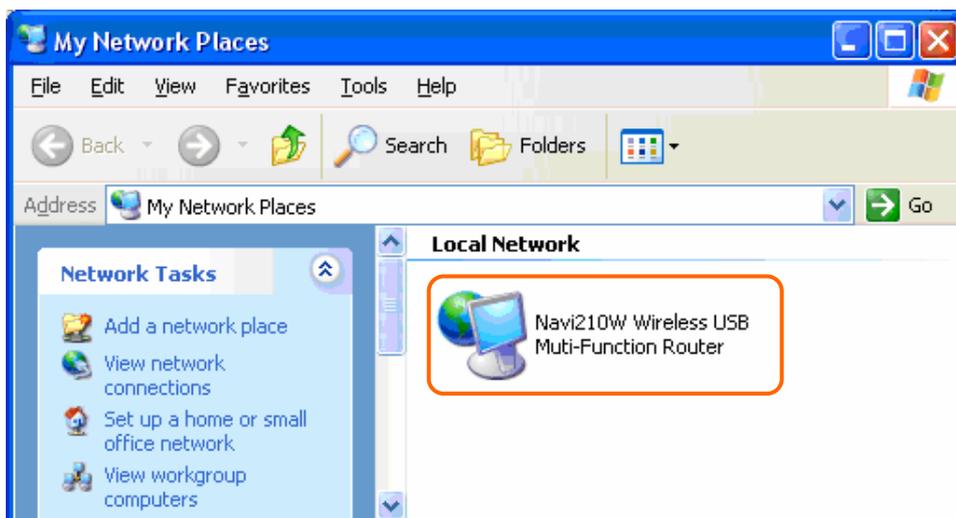
【Step10】

The icon will be created. Double click the small icon. It will disappear.



【Step11】

A new icon, **Navi210W Wireless UAB Multi-Function Router** will be added in **My Network Places**. If you want to easily login Navi210W, please open **My Network Places** and double click on the icon.



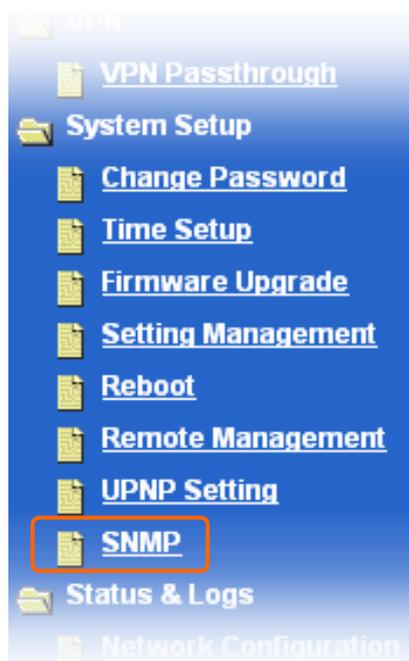
【Step12】

Please input **admin** in User Name and Password blank fields. Then, click on **OK** button for the settings you want.



3.9.8 SNMP

Simple Network Management Protocol (SNMP) is a popular network monitoring and management protocol. In this page, users can configure the SNMP agent. Please select **SNMP** under the **System Setup** menu, and follow the instructions to enter the **SNMP** setting page to configure the settings you want.



1. SNMP

Select **Enabled** to start SNMP function.

2. Contact

Please note the User Name, **user1** for example.

Notice: The mentioned Contact is a reference value.

3. Device Name

Please note the name of your router, **super router** for example.

Notice: The mentioned Device Name is a reference value.

4. Location

Please note the area or location where Navi210W resides, **on boss's desk** for example.

Notice: The mentioned Location is a reference value.

5. Community

Please note community string for getting and setting. It will correspond to other related software, and can replace your IP address, **SNMP Manager** for example.

Notice: The mentioned Community is a reference value.

6. Listen Interface

Select a network interface **LAN/Wireless** or **WAN** for listening SNMP requests.

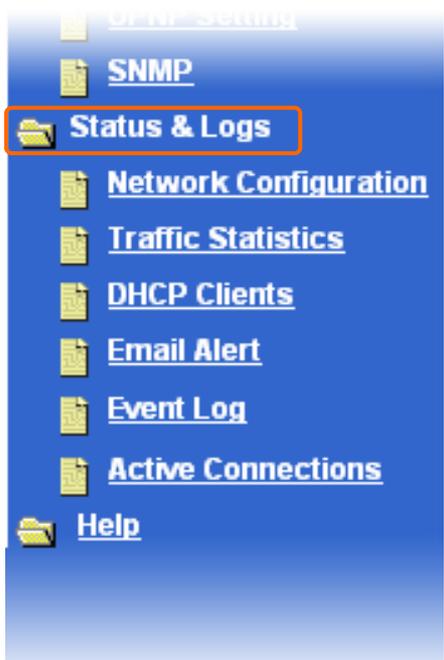
7. Apply, Cancel & Help

Click on **Apply** button to save the settings. If you want to clean the settings, please click on **Cancel** button. The functional button, **Cancel** can take effect after clicking on **Apply** button. If you don't know how to do it, please click on **Help** button for more information.

SNMP		
Simple Network Management Protocol (SNMP) is a popular network monitoring and management protocol. In this page, you can configure the SNMP agent.		
SNMP	1	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
Contact	2	<input type="text" value="user1"/>
Device Name	3	<input type="text" value="super router"/>
Location	4	<input type="text" value="on boss's desk"/>
Community	5	<input type="text" value="SNMP Manager"/>
Listen Interface	6	<input type="text" value="LAN/Wireless"/>
		7 <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>

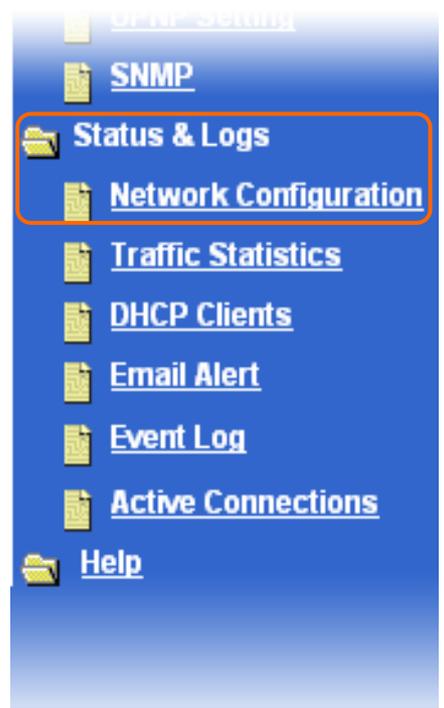
3.10 Status & Logs

This part displays all user records of accessing Navi210W's settings. Please follow the instructions to configure your settings. **Status & Logs** contains six functional items, including **Network**, **Traffic Statistics**, **DHCP Clients**, **Email Alert**, **Event Log** and **Active Connections**.



3.10.1 Network Configuration

This page displays the network configuration information, including the information for LAN interface, WAN interface and wireless settings. Please select **Network Configuration** under the **Status & Logs** menu, and follow the instructions to enter the **Network** setting page to configure the settings you want.



1. LAN

This part will show the MAC address, the IP address, and the subnet mask for the LAN interface of the gateway. Whether the DHCP server is enabled or not will also be displayed here.

2. WAN

This part will show the MAC address, the connection type (Static, Dynamic, PPPoE, PPTP), IP address, subnet mask, default gateway, and DNS servers for the WAN interface. For Dynamic setting, there are buttons for releasing and renewing the IP Address assigned by the ISP (Internet Service Provider). For PPPoE setting, there are buttons for connecting and disconnecting the DSL connection.

- **Disconnect button:** If you click on this button, the WAN will stop service.

3. Wireless

The MAC address, SSID, Channel number, and WEP for wireless connection will be displayed.

4. System Bootup Time

The Bootup Time lasting until now will be displayed.

5. Help

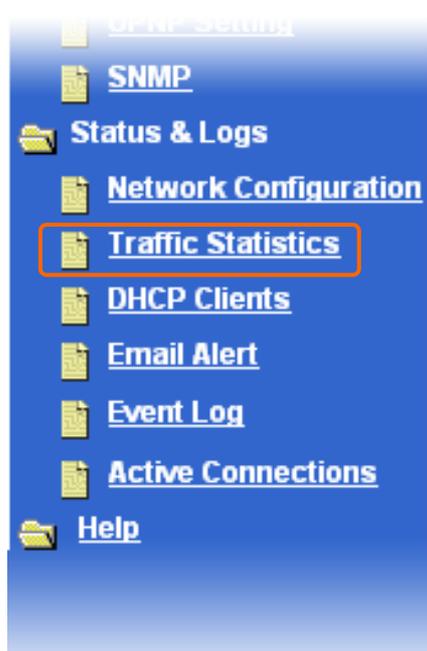
If you don't know how to do it, please click on **Help** button for more information.

Network Configuration	
LAN 1	
MAC Address	00:02:B3:01:01:00
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
DHCP Server	enable
WAN 2	
MAC Address	00:02:B3:02:02:00
Connection	NO connection
IP Address	192.168.1.200
Subnet Mask	255.255.255.0

Default Gateway	
DNS1	EMPTY
DNS2	EMPTY
Wireless 3	
MAC Address	none
SSID	none
Channel	none
WEP	Disable
System Bootup Time 4	
Bootup time	0 days 00:02:29
5 Help	

3.10.2 Traffic Statistics

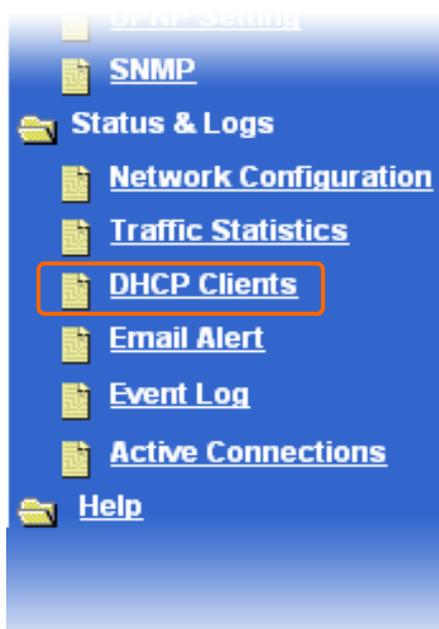
This page displays the packet numbers passing through the gateway, including the packets sent by the gateway from local number and the packets received by the gateway from WAN. You can click on **Refresh** button to update the counter and click on **Clear** button to erase the information. If you don't know how to do it, please click on **Help** button for more information. Please select **Traffic Statistics** in the **Status & Logs** menu, and follow the instructions to enter the **Traffic Statistics** setting page to configure the settings you want.



Traffic Statistics		
Traffic Statistics displays the received and transmitted packets passing through the Navi210W.		
	Receive	Transmit
WAN	0 packets	0 packets
LAN	180 packets	111 packets
WIRELESS	0 packets	0 packets
<input type="button" value="Refresh"/> <input type="button" value="Clear"/> <input type="button" value="Help"/>		

3.10.3 DHCP Clients

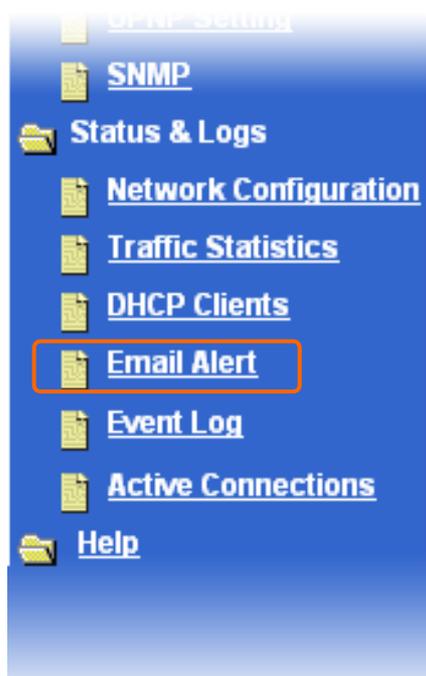
This page shows IP Address, MAC Address, and Remained Time for all the DHCP clients connected to the gateway as shown below. Click on **Refresh** button to update the counter. If you don't know how to do it, please click on **Help** button for more information. Please select **DHCP Clients** under the **Status & Logs** menu, and follow the instructions to enter the **DHCP Clients** setting page to configure the settings you want.



DHCP Clients		
This page shows the active DHCP clients in your local network.		
IP Address	MAC Address	Remained Time
192.168.1.100	00:50:ba:cd:0a:5f	22 hours, 19 minutes, 8 seconds
<input type="button" value="Refresh"/> <input type="button" value="Help"/>		

3.10.4 Email Alert

Logs can be sent to an email address specified by the user. You can configure your email account settings in this page. Please select **Email Alert** under the **Status & Logs** menu, and follow the instructions to enter the **Email Alert** setting page to configure the settings you want.



1. Email Alert

Select **Enabled** or **Disabled** to start or close Email Alert function.

2. SMTP Server

Input the Email Server IP address, such as **stevenchen@ms80.hinet.net**.

Notice: Don't copy the mentioned SMTP Server IP Address as yours.

3. Account

Input the account you used to send emails, **navi210w** for example.

Notice: The mentioned Account is a reference value.

4. Password

The password, required by some SMTP servers, needs to be filled in order to pass the SMTP verification.

5. Sender Address

Sender Address, required by some SMTP server, needs to be filled in order to pass the SMTP verification.

6. Email Address

Input the email address that you want to send the logs to, such as **jackwang@ms20.hinet.net**.

Notice: Don't copy the mentioned Email Address as yours.

7. Schedule

You can send logs now or send at a scheduled time.

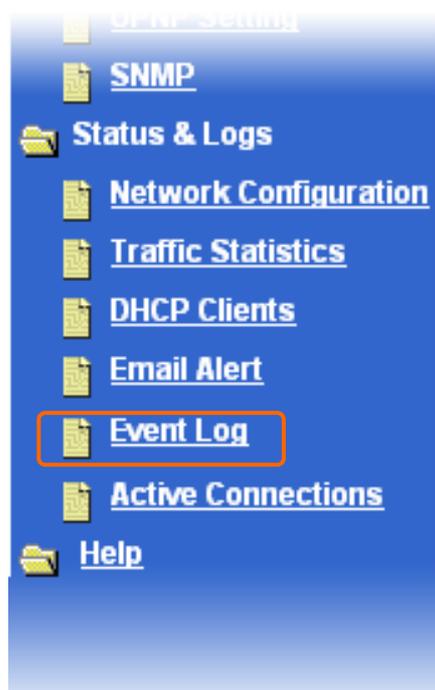
8. Apply, Cancel & Help

Click on **Apply** button to save the settings. If you want to clean the settings, please click on **Cancel** button. The functional button, **Cancel** can take effect after clicking on **Apply** button. If you don't know how to do it, please click on **Help** button for more information.

Email Alert	
Logs can be sent to an email address specified by the user. Please configure your email account settings in this page.	
Email Alert	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
SMTP Server	ms80.hinet.net
Account	navi210w
Password	●●●●●● (required by some SMTP servers)
Sender Address	abc@ms1.url.com.tw (required by some SMTP servers)
Email Address	jackwang@ms20.hinet.net
Schedule	<input checked="" type="radio"/> Send now <input type="radio"/> Send at [] : []
<input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>	

3.10.5 Event Log

This page displays the logs of activities and events for the gateway. The time, when the log is recorded, is also shown in the event lists. Please select **Event Log** under the **Status & Logs** menu, and follow the instructions to enter the **Event Log** setting page to configure the settings you want.



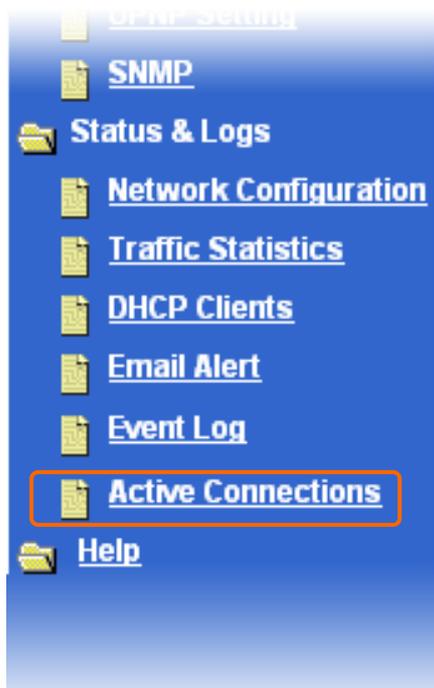
You can click on **Refresh** button to update the counter, or click on **Clear** button to erase the information. If you don't know how to do it, please click on **Help** button for more information.

Event Log		
This page displays the logs of activities and events for the Navi210W.		
Time	Type	Message
		<input type="button" value="Refresh"/> <input type="button" value="Clear"/> <input type="button" value="Help"/>

3.10.6 Active Connections

This page displays the connections currently open between the local network and the outside world. The protocol type, source IP address and port, and the destination IP address and port will be shown in the active connection list. Please select **Email Alert** under the **Status & Logs** menu, and follow the

instructions to enter the **Email Alert** setting page to configure the settings you want.



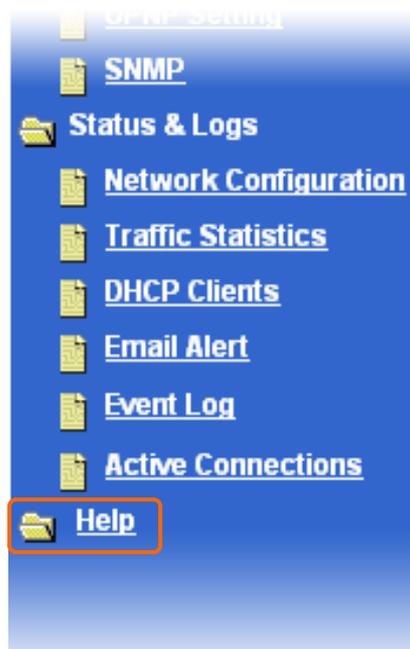
You can click on **Refresh** button to update the counter. If you don't know how to do it, please click on **Help** button for more information.

Active Connections				
This page shows the connections currently open between your network and the outside world.				
	Source		Destination	
Protocol	IP Address	Port	IP Address	Port
tcp	192.168.1.100	1326	192.168.1.1	80
tcp	192.168.1.100	1329	192.168.1.1	80
tcp	192.168.1.1	80	192.168.1.100	1329

[Refresh](#) [Help](#)

3.11 Help

Select **Help** under the Main Menu. When you click on Help item in the Main Menu, all items from the Main Menu will appear in turn. One click on each of them, the information about item instructions in the setting page will be shown as the figure below.



Due to the **Help** contents in long branch-list under the menu might cause the view problem; we cut it in two and put them side by side in a page for keeping the well-view as shown below.

IP Config

[Routing](#)

[WAN](#)

[LAN](#)

[DHCP Server](#)

[DNS](#)

[Proxy DNS](#)

[Dynamic DNS](#)

NAT Setting

[Port Trigger](#)

[Virtual Server](#)

[Virtual DMZ](#)

Internet Firewall

[IP Filter](#)

[MAC Filter](#)

[URL Blocking](#)

[Block ICMP Ping](#)

USB Applications

[FTP Server](#)

[Web Camera](#)

[Print Server](#)

Wireless

[Open System](#)

[Shared Key](#)

[WPA](#)

[WPA-PSK](#)

VPN

[VPN Passthrough](#)

System Setup

[Change Password](#)

[Time Setup](#)

[Firmware Upgrade](#)

[Setting Management](#)

[Reboot](#)

[Remote Management](#)

[UPNP Setting](#)

[SNMP](#)

Status & Logs

[Network Configuration](#)

[Traffic Statistics](#)

[DHCP Clients](#)

[Email Alert](#)

[Event Log](#)

[Active Connections](#)

About

Notice: When you click on the purple item under the Navi210W Main Menu, the following instructions relating the item will appear. The whole instruction contents are supplied below as the reference.

IP Config

Routing

In this page, you can set the routing mode of the router. There are two options: Gateway (NAT) mode, and Routing mode. The Gateway (NAT) mode is recommended for most users. Dynamic Routing enables the router to automatically adjust to physical changes in the network's layout and exchange routing tables with other routers. The router determines the network packets' route based on the fewest number of hops between the source and destination. For Static Routing, a static route is a pre-determined path that network packets must travel to reach a specific host or network. To set up a static route between the router and another network, you will select static routing in the drop down list and configure the following parameters:

Destination IP: The destination IP is the IP address of the network or host to which you want to

assign a static route.

Subnet Mask: The subnet mask determines which portion of a destination LAN IP address is the network portion, and which portion is the host portion.

Default Gateway: This is the IP address of the gateway device that allows for contact between the router and the network or host.

Interface: Depending on where the Destination IP is located, select LAN & Wireless or WAN from the Interface drop-down list.

Routing Table: Press this button, the routing table for dynamic routing or static routing will be shown.

WAN

The WAN (Wide Area Network) page shows the settings that are used to connect to your ISP (Internet Service Provider). Please select the appropriate option for your specific ISP.

WAN – Dynamic IP Address

Select this option if your ISP (Internet Service Provider) provides you an IP address automatically. Cable modem providers typically use dynamic assignment of IP Address.

Host Name: (optional) The Host Name field is optional but may be required by some Internet Service Providers.

MAC Address: The MAC (Media Access Control) address is required by some Internet Service Providers. There are four alternatives for users to choose. The “Keep MAC Address” option will keep your current MAC address for the WAN port of the gateway. The “Clone MAC Address” option can be used to automatically copy the MAC address of the Ethernet card installed in your computer to the WAN port of the gateway. The “Restore MAC Address” option is to copy the factory default MAC address back to the WAN port of the gateway. Users may also input a MAC address manually using the last option.

WAN – Static IP Address

You can select this option to configure the gateway with static IP address information provided by the ISP. In order to use static IP address option, you will enter the following information: IP address, subnet mask, and ISP gateway address.

IP Address: The static IP address for the WAN port.

Subnet Mask: The subnet mask for the WAN port.

ISP Gateway Address: The IP address for the default gateway.

WAN – PPPoE

Select this option if your ISP requires you to use a PPPoE (Point to Point Protocol over Ethernet) connection. DSL providers typically use this option.

Local IP Address: This is needed only for static PPPoE connection.

User Name: Enter your PPPoE username.

Password: Enter your PPPoE password.

Auto-reconnect: If auto-reconnect is enabled, the gateway will automatically connect to the ISP after the connection is dropped.

WAN – PPTP

Select this option if your ISP requires you to use a PPTP (Point to Point Tunneling Protocol) connection. This option is for Europe use only.

IP Address: This is your IP address, which is provided to you by your ISP.

Subnet Mask: The subnet mask for your IP address.

Server IP: The IP address for the PPTP server, which is provided to you by your ISP.

PPTP Account: The account provided to you by your ISP.

PPTP password: The password provided to you by your ISP.

LAN

This page shows the IP settings for the LAN (Local Area Network) interface of the gateway.

IP Address: The IP address for the LAN interface. The default value is 192.168.1.1.

Subnet Mask: The subnet mask for the LAN interface. The default value is 255.255.255.0.

Local Domain Name: Enter the local domain name in this field (optional).

DHCP Server

This page can be used to setup your router as a DHCP (Dynamic Host Configuration Protocol) server. If the DHCP server is enabled, the gateway can automatically assign IP address to the DHCP clients logged into the local network.

Starting IP Address: The starting IP address for the DHCP IP pool.

Ending IP Address: The ending IP address for the DHCP IP pool.

Lease Time: The duration of the time for the IP lease.

DNS

A DNS (Domain Name Server) is a server located in the Internet that translates URLs to IP addresses.

Primary DNS Address: The primary DNS address provided by your ISP.

Secondary DNS Address: The backup DNS address provided by your ISP (optional).

Proxy DNS

Proxy DNS acts a DNS server for the internal network. Users can assign a domain name for the IP addresses in your local network.

Domain Name: The domain name for the IP address.

IP Address: The IP address that corresponds to the domain name.

Dynamic DNS

Dynamic DNS allows you to alias a dynamic IP address to a static hostname. The gateway can automatically update your dynamic DNS server every time it receives a different IP address.

Provider: The address for the dynamic DNS server.

Host Name: The name set for the gateway.

Username: The user's account name in the dynamic DNS server.

Password: The password for the user.

NAT Setting

Port Trigger

Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and so on. These applications have difficulties working through NAT. If you need to run applications that require multiple connections, you can configure this page.

Name: The name referring the special application.

Trigger Port: The port used to trigger the application.

Trigger Type: The protocol used to trigger the application.

Public Port: The port number on the WAN side that will be used to access the application.

Public Type: The protocol used for the special application.

Virtual Servers

Virtual servers are used to allow the Internet users to access the services, e.g. FTP, Web, within the LAN. When the Internet users want to access services in the LAN, they will send requests to the WAN IP address of the gateway. The gateway will redirect those requests to the local servers in the

LAN.

Name: The name referring the virtual server.

Private IP: The IP address for the local server.

Protocol Type: The protocol used for the virtual server.

Private Port: The port number or range of the service used by local server in the LAN.

Public Port: The port number or range on the WAN side that will be used to access virtual services by Internet user.

Schedule: You can schedule the time when the virtual server will be enabled here.

Virtual DMZ

DMZ (Demilitarized Zone) is used to allow a single computer in the LAN to be exposed to the Internet. You can enable the DMZ and configure the DMZ host in this page.

IP Address: The IP address for the DMZ host inside the local network.

Internet Firewall

IP Filters

IP Filters are used to deny particular LAN IP addresses from accessing the Internet. You can deny specific port numbers or all ports for an IP address. You also can schedule the time when the IP filter will be enabled.

IP: The IP address or IP address range that will be denied to access Internet.

Port: The port of port range that will be denied to access Internet.

Protocol Type: The protocol type will be used with the port that will be blocked.

Schedule: You can schedule the time when the IP filter will be enabled here.

MAC Filters

MAC filters are used to allow or deny computers, with specific MAC address, in the local area network to access the Internet. Select “Only allow computers with MAC address listed below to access the network” if you only want selected computers to access Internet while others not. Select “Only deny computers with MAC address listed below to access the network” if you want all computers to access Internet except those computers in the list.

Name: The name referring the MAC filter.

MAC Address: The MAC address for the computer in the LAN to be listed in the MAC filter table.

URL Blocking

URL Blocking is applied to allow or deny PCs in your local network to access certain URLs. Select “Only block computers to access the following URLs” if you allow PCs in your local network to visit all the web pages in Internet except the URLs in the list. Select “Only allows computers to access the following URLs” if you only let PCs in your local network visit a number of URLs in Internet.

Name: The name referring the URL link.

URL: The URL link to be listed in the URL table.

Block ICMP Ping

By setting up block ICMP ping, the gateway won't response the ICMP ping from the Internet. Pinging public WAN IP addresses is a common method used by hackers to test whether your WAN IP address is valid.

USB Applications

FTP Server

The router supports an embedded FTP server for USB storage. In this page, users can configure the FTP server and manage accounts for the FTP server.

Allow Anonymous User to Login: This option is used to enable an anonymous user account with all access rights. The user name is ftp and no password is required. After this feature is enabled, users can click Login to log in this FTP server with the anonymous user account.

Allow Super User to Login: This option is used to enable a super user account with all access rights. After this feature is enabled, users can click Login to log in this FTP server with the super user account.

Enable FTP Access from WAN: This option is used to allow users to access the FTP server from outside network.

Maximum Users Allowed to Login: The maximum number of users allowed to login the FTP server simultaneously.

FTP Port: The port number to be used for the FTP server. The default port number is 21.

Web Camera

With the USB web camera support, the router allows you to monitor locations such as your home or office from any location through a wireless LAN or over the Internet.

Web Camera Mode: Users can choose appropriate camera mode from the drop-down list. ActiveX mode only allows users to view images from Windows IE.

Preview: Users can click "Preview" to view the images.

Image Size: Users can choose image size from the drop-down list. 320x240 provides a larger image, while 160x120 provides faster transmission.

Access from WAN: This option is used to allow users to access the web camera from outside network.

Connection Port: This field indicates the port that the server uses to communicate with ActiveX clients.

Enable Security Mode: Users can enable motion detection with this option.

Sense Level: Users can adjust the sensitivity of the motion detection with this option.

Email Server: The IP address of the email server that users use to send motion detection alert.

Account: The account in the email server used to send motion detection alert.

Password: The password is required by some SMTP servers.

Sender Address: The sender address is required by some SMTP servers.

Email Address: The email address to receive the motion detection alert.

Subject: The subject of the email.

Attach Image file: Users can configure whether to attach an image or not with this option.

Print Server

The router supports an embedded print server. This page allows you to setup this print server.

Enable Printer Access from WAN: This option is used to allow the users to access the printer from outside network.

Printer Name: The name of the printer.

Printer Description: The description for the printer (optional).

Printer Model: The printer's model information (optional).

Wireless

This page allows you to configure your wireless settings.

SSID: To identify your wireless network, a name called the SSID (Service Set Identifier) is used.

Channel: There are a number of operating channels you can choose from. In the United States, there are 11 channels. In the United Kingdom and most of Europe, there are 13 channels. Your gateway is configured to operate on the proper channels for the country you reside in. If there are other wireless networks operating in your area, your network should be set to operate on a channel that is different

than the other wireless networks. For best performance, use a channel that is at least five channels away from the other wireless network.

Data Rate: This field allows you to specify the transmission rate. Leave it as “Auto” to maximize performance versus distance.

54g Mode: This field indicates the 802.11g interface mode. “54g Only” prevents the 802.11b clients from accessing the router. “802.11b/g Mixed” allows both 802.11b and 802.11g clients to access the router. “802.11b Only” will enable the network as an 802.11b wireless network.

Block Broadcast SSID: The default value for this field is “OFF” and the wireless clients can see the SSID of the router. If “ON” is set for this field, wireless clients will not see the SSID of the router and they have to input the SSID manually.

Authentication: Four authentication methods are supported: Open System, Shared Key, WPA-PSK, and WPA.

Wireless – Open System

With “Open System” authentication, a wireless client can join any network and receive any messages that are not encrypted. “Open System” is the default authentication method for the router.

Wireless – Shared Key

With “Shared Key” authentication, only the wireless clients with correct authentication key can join the network. Wired Equivalent Protocol (WEP) data encryption is used when the router is configured to operate in “Shared Key” authentication method.

WEP Encryption: WEP supports two levels of WEP encryption: 64Bit encryption, and 128Bit encryption. You can select the proper level of WEP encryption here.

Key Type: The key types supported by the gateway are HEX (Hexadecimal) and ASCII (American Standard Code for Information Interchange).

Keys: Keys 1-4 allow you to easily change wireless encryption settings to maintain a secure network. Simply select the specific key to use for encrypting wireless data on the network.

Wireless – WPA

Wi-Fi Protected Access (WPA) authorizes and authenticates users in the wireless network. WPA uses stronger security than WEP and is based on a key that changes automatically at a regular interval. This mode requires a RADIUS server in the network.

Radius Server IP: The IP address for the Radius server.

Port: The port used for 802.1x authentication.

Shared Secret: The security key used for 802.1x authentication.

Wireless – WPA PSK

In Pre-Shared Key (PSK) mode, wireless clients and the router must have the same security key in order to establish the wireless connection. The RADIUS server is not required in WPA PSK mode.

Pre-Shared Key: The shared security key.

Confirmed Pre-Shared Key: confirm the shared security key.

Wireless – Advanced Setting

Users can configure advanced features for wireless in this page.

Beacon Interval: Beacons are packets sent by an Access Point to synchronize a wireless network. The default value is set to 100 milliseconds.

RTS Threshold: The default value for RTS Threshold is set to 2432.

Preamble Type: The Preamble Type defines the length of the CRC (Cyclic Redundancy Check) block for communication between the Access Point and the wireless clients.

VPN

VPN Pass-Through

The gateway supports VPN pass through for both PPTP (Point to Point Tunneling Protocol) and IPSec (IP Security). Multiple VPN connections can be made through the gateway.

System Setup

Change Password

The gateway ships with no password entered. If you wish to add a password or change your current password, you can set the new password in this page.

Time Setup

In this page, you can set the time zone corresponding to your location. The time can be set manually or the gateway can connect to a NTP (Network Time Protocol) server to retrieve the time. You may also set Daylight Saving dates and the system time will automatically adjust on those dates.

Firmware Upgrade

From time to time, we may release new versions of the gateway's firmware. Firmware updates contain feature improvements and fixes to problems that may have existed. When we release new firmware, you can download the firmware from our update website and update your gateway's firmware to the latest version.

Check Firmware: Check Firmware button allows you to instantly check for a new version of firmware.

Update Firmware: To upgrade the firmware, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Apply button to start the firmware upgrade.

Settings Management

Save Settings to Local Hard Drive: You can save your current configuration by using this feature. Saving your configuration will allow you to restore it later if your settings are lost or changed.

Load Settings From Local Hard Drive: This option allows you to restore a previously saved configuration.

Restore To Factory Default Settings: Using this option will restore all of the settings in the gateway to the factory (default) settings.

Reboot

Sometimes it may be necessary to restart or reboot the gateway if it begins working improperly. Restarting or rebooting the gateway will not delete any of your configuration settings.

Remote Management

Remote Management allows the device to be configured through the WAN (Wide Area Network) port from the Internet using a web browser. A username and password is required to access the browser-based management interface.

IP Address: IP address for the computer to access the gateway. If you leave all the fields empty, all the computers will get permission to access the gateway.

Port: The port number used to access the gateway.

UPnP Setting

UPnP is short for Universal Plug and Play that is a networking architecture that provides compatibility among networking equipment, software, and peripherals. This router is UPnP compatible and will work with other UPnP devices/software.

SNMP

Simple Network Management Protocol (SNMP) is a popular network monitoring and management protocol. In this page, users can configure the SNMP agent.

Contact: The contact information for the router.

Device Name: The name of the router.

Location: The area or location where the router resides.

Community: Community string for get and set.

Listen Interface: The network interface for listening SNMP requests.

Status & Logs

Network Configuration

This page displays the network configuration information, including the information for LAN interface, WAN interface and wireless settings.

LAN: This part will show the MAC address, the IP address, and the subnet mask for the LAN interface of the gateway. Whether the DHCP server is enabled or not will also be displayed here.

WAN: This part will show the MAC address, the connection type (Static, Dynamic, PPPoE, PPTP), IP address, subnet mask, default gateway, and DNS servers for the WAN interface. For Dynamic setting, there are buttons for releasing and renewing the IP Address assigned by the ISP (Internet Service Provider). For PPPoE setting, there are buttons for connecting and disconnecting the DSL connection.

Wireless: The MAC address, SSID, Channel number, and WEP for wireless connection will be displayed.

System Bootup Time: This part will show the live time for the router since the last boot-up.

Traffic Statistics

This page displays the packet numbers passing through the gateway, including the packets sent by the gateway from local number and the packets received by the gateway from WAN. You can click the Refresh button to update the counter and click the Clear button to reset the counter.

DHCP Clients

This page shows the host name, IP address, MAC address, and Remained Time for all the DHCP clients connected to the gateway.

Email Alert

Logs can be sent to an email address specified by the user. You can configure your email account settings in this page.

SMTP Server: The IP address for the SMTP server.

Account: The account you use to send emails.

Password: The password is required by some SMTP servers.

Sender Address: The sender address is required by some SMTP servers.

Email Address: The email address that you want to send the logs to.

Schedule: You can send logs now or send at a scheduled time.

Event Log

This page displays the logs of activities and events for the gateway. The time, when the log is recorded, is also shown in the event lists.

Active Connections

This page displays the connections currently open between the local network and the outside world. The protocol type, source IP address and port, and the destination IP address and port will be shown in the active connection list.

4 DDNS Service

DDNS is a service changes the dynamic IP to the static IP. The settings of DDNS can solve the problem of being given the different IP by router every time. After setting the Router, your hostname would correspond to your dynamic IP. Moreover, via the hostname application, it could be easier for you to use FTP, Webcam and Printer remotely. Please follow the steps to apply for your account.

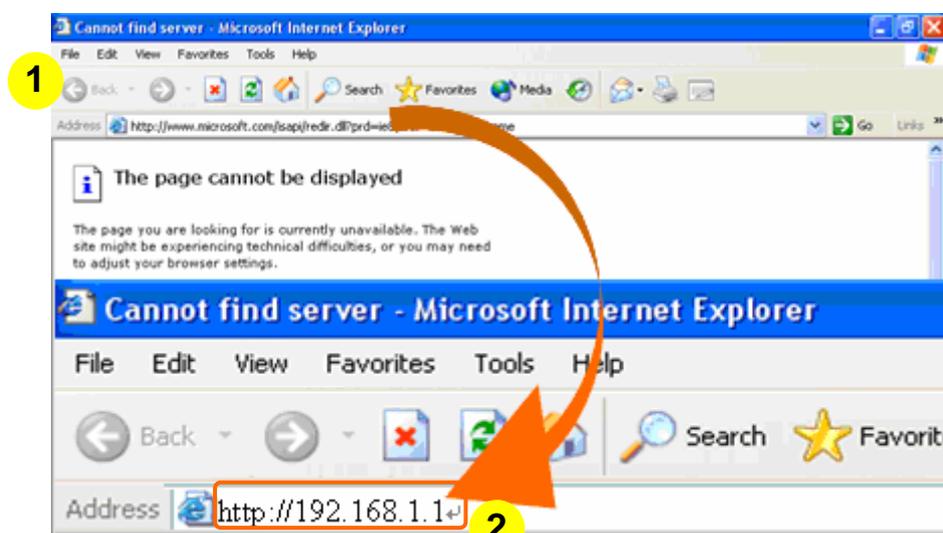
4.1 How do I apply for a DDNS account with Dynamic IP

If you don't have a DDNS account, please follow the steps to complete your DDNS with Dynamic IP settings.

Notice: *If you have applied for a DDNS account, please skip these setting guides and go to 4.3 section: "How do I setup Navi210W with DDNS".*

【Step1】

1. Open IE browser as an example.
2. Blank this field and Input **http://192.168.1.1** in the address field. Then, press **Enter**.



【Step2】

1. Input **admin** in **User Name** and **Password** blank fields.
2. Click on **OK** button.



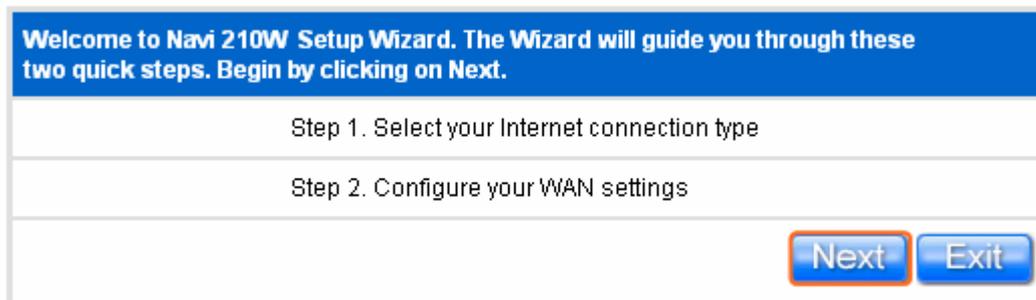
【Step3】

Select **Quick Setup** menu to enter the Quick Setup page, or select **WAN** under the **IP Config** menu. Here we select **Quick Setup** instructions as the example.



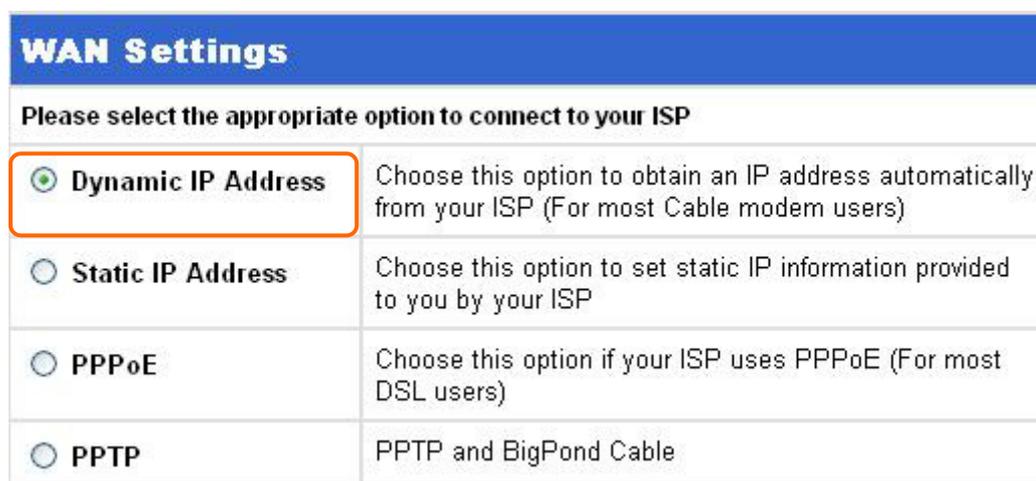
【Step4】

Click on **Next** button.



【Step5】

Select **Dynamic IP Address** connection type.



【Step6】

If you applied for the **Dynamic IP** connection type from ISP, please follow the steps to setup your WAN connection. Cable modem providers typically use dynamic assignment of IP Address.

1. Host Name

Input the Host Name supplied by your ISP, **navi210w** for example.

Notice: The mentioned Host Name is a reference value.

2. MAC Address

Select one of the following MAC Addresses

*** Keep MAC Address**

You can select **Keep MAC Address**; but if your ISP requires you to input a specific MAC address, please input it in.

*** Clone MAC Address**

Select **Clone MAC Address** for copying the MAC address of your Ethernet adapter to the gateway or leave it in blank.

*** Restore MAC Address**

Select **Restore MAC Address** to get default MAC Address value.

*** Input MAC Address manually**

Input your MAC Address your ISP requires in the blank fields.

3. Apply, Cancel & Help

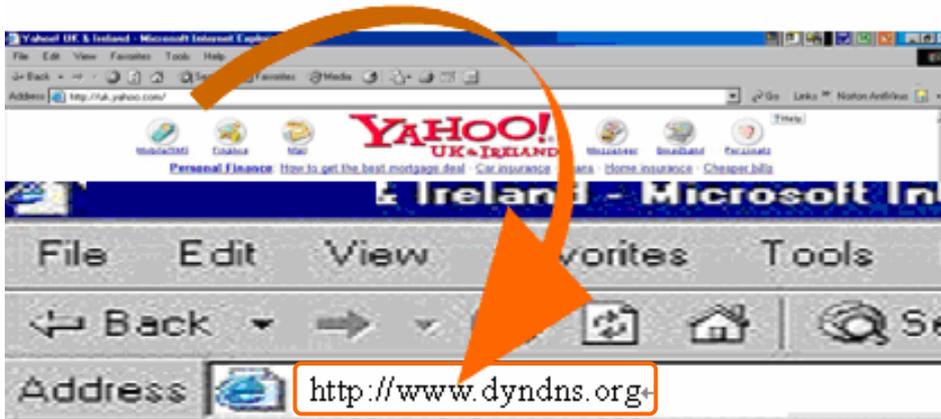
Click on **Apply** button to continue. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

【Step7】

After clicking on **Next** button, the Setup Completed page will appear. Then, click on **Finish** button to save the current setting.

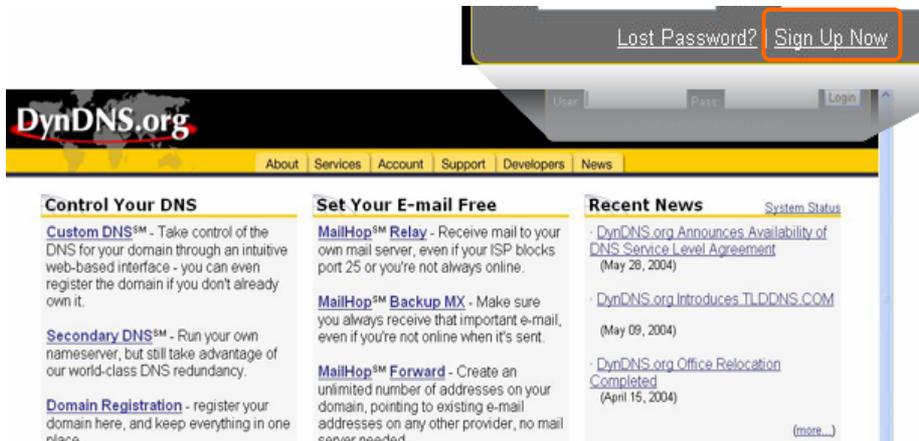
【Step8】

Make sure you can access Internet and input **http://www.dyndns.org** in the blank field.



【Step9】

Click on **Sign Up Now**.



【Step10】

Please finish these blank fields. Then, click on **Create Account** button.

operating rules and policies set forth by DynDNS. The AUP comprises

I have read and agree to the Acceptable Use Policy above:

Username

Your username will be used to login to your account and make changes.

Username:

E-mail Address

The e-mail address you enter must be valid. Instructions to activate your account will be sent to the e-mail address provided. You must keep this address current and accounts with invalid e-mail addresses will be removed with no warning. We do not sell our list to anyone. Read more about our [privacy policy](#).

E-Mail Address:

Confirm E-Mail Address:

Password

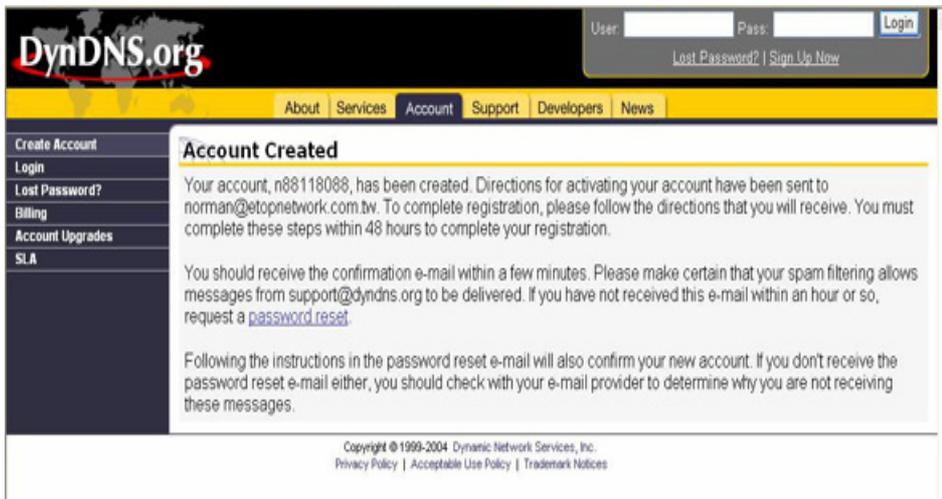
The password you enter will be used to access your account. It must be more than 5 characters and cannot be your username.

Password:

Confirm Password:

【Step11】

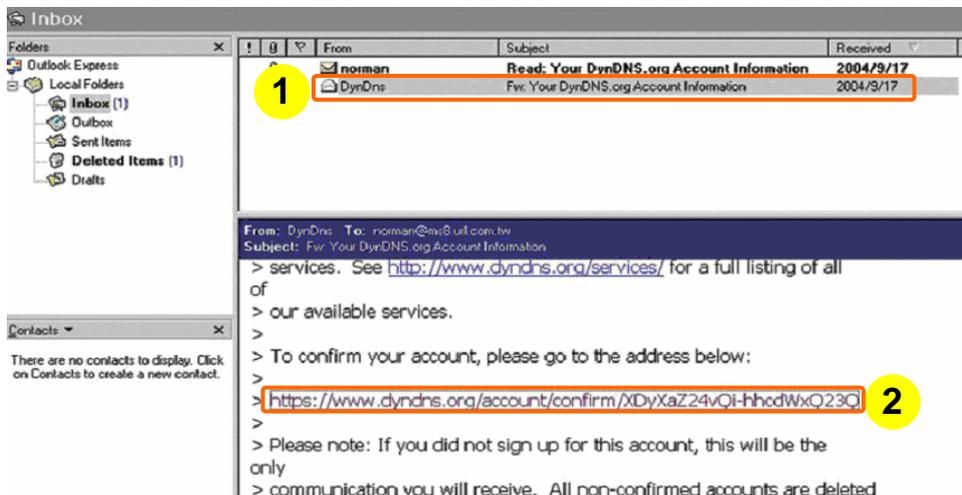
When you got this account created message, close it, and check your mailbox. You would get a mail from DynDNS website.



【Step12】

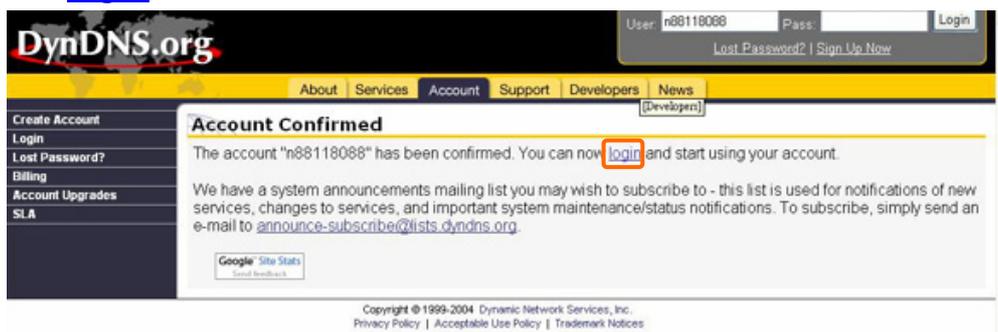
1. Click on the mail.
2. Click on the address:

<https://www.dyndns.org/account/confirm/XDyXaZ24vQi-hhcdWx0230>



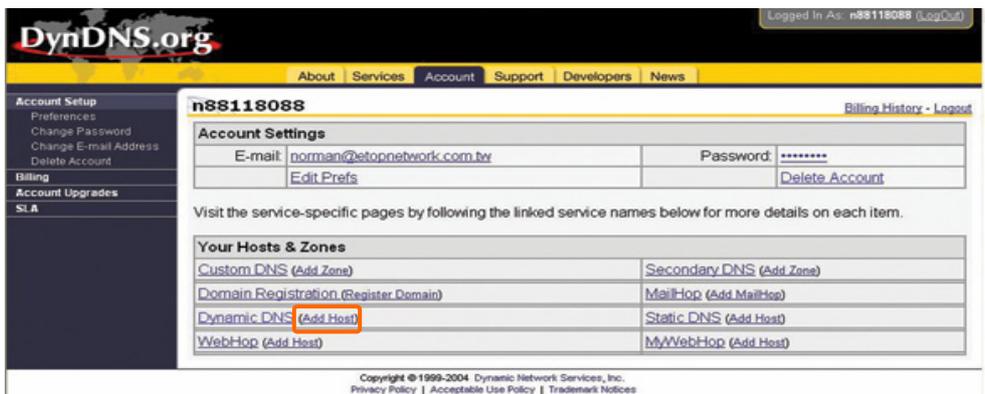
【Step13】

Click on [login](#).



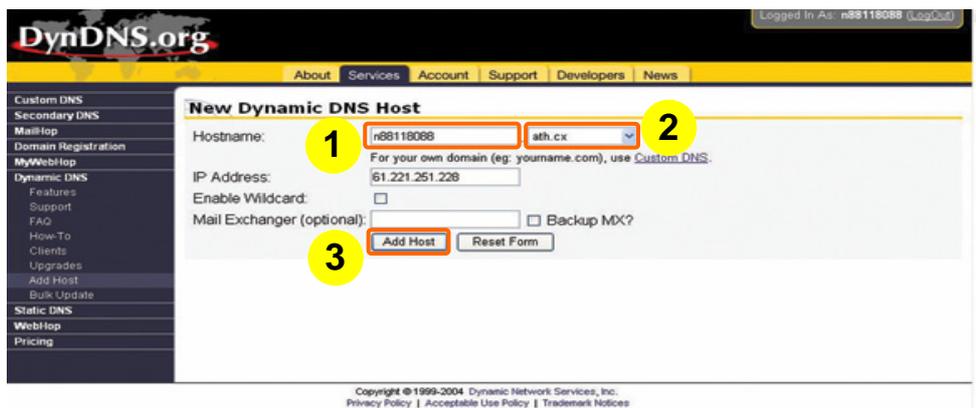
【Step14】

Click on the **Add Host** of Dynamic DNS.



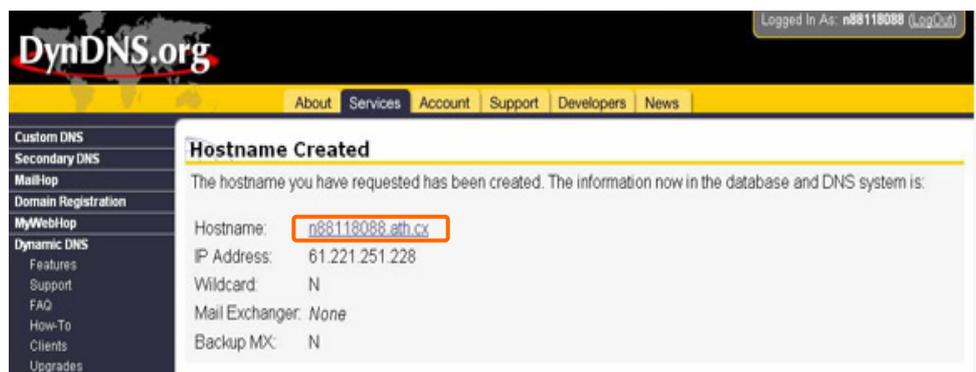
【Step15】

1. Input the name created in **【Step10】** .
2. Select one of the tails you like.
3. Then, click on **Add Host** button.



【Step16】

Your hostname have been created.



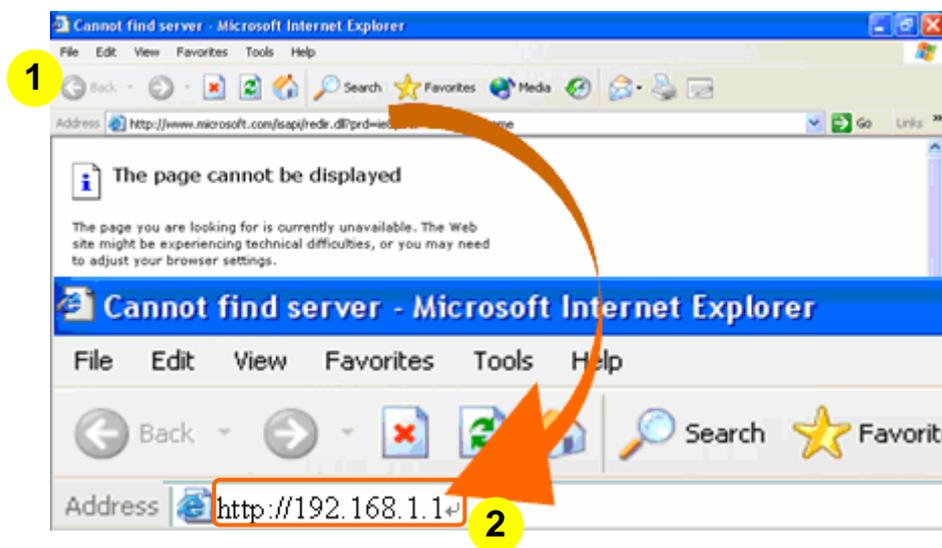
4.2 How do I apply for a DDNS account with PPPoE

If you don't have a DDNS account, please follow the steps to complete your DDNS with PPPoE settings.

Notice: *If you have applied for a DDNS account, please skip these setting guides and go to 4.3 section, "How do I setup Navi210W with DDNS".*

【Step1】

1. Open IE browser as an example.
2. Blank this field and Input **http://192.168.1.1** in the address field. Then, press **Enter**.



【Step2】

1. Input **admin** in **User Name** and **Password** blank fields.
2. Click on **OK** button.



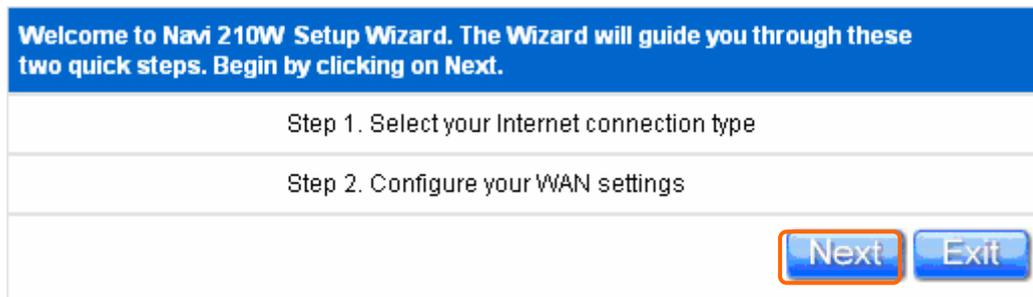
【Step3】

Select **Quick Setup** menu to enter the Quick Setup page, or select **WAN** under the **IP Config** menu. Here we select **Quick Setup** instructions as the example.



【Step4】

Click on **Next** button.



【Step5】

Select **PPPoE** connection type.

Set Internet Connection	
Select the connection type to connect to your ISP. Click Next to continue.	
<input type="radio"/> Dynamic IP Address	Choose this option to obtain an IP address automatically from your ISP. (For most Cable modem users)
<input type="radio"/> Static IP Address	Choose this option to set static IP information provided to you by your ISP.
<input checked="" type="radio"/> PPPoE	Choose this option if your ISP uses PPPoE. (For most DSL users)
<input type="radio"/> PPTP	For Europe use only.
<input type="button" value="Back"/> <input type="button" value="Next"/> <input type="button" value="Exit"/>	

【Step6】

If you applied for the **PPPoE** connection type from ISP, please follow the steps to setup your WAN connection.

1. Local IP Address

If you applied for the Static PPPoE IP Address from ISP, please input it in the blank field, **212.93.45.22** for example. If you applied for a Dynamic one, please leave it in blank. If you don't know, please check with your ISP.

Notice: Don't copy the mentioned Local IP Address as yours.

2. User Name

Input your User Name supplied by ISP, **Navi210W** for example. If you don't know, please check with your ISP.

Notice: Don't copy the mentioned User Name as yours.

3. Password

Input your Password supplied by ISP.

Notice: Each Character you inputted will change to * form.

4. Auto-reconnect

Select **Enabled** to connect Internet automatically when network was cut off. Select **Disabled** to cancel automatic online connection when network was cut off.

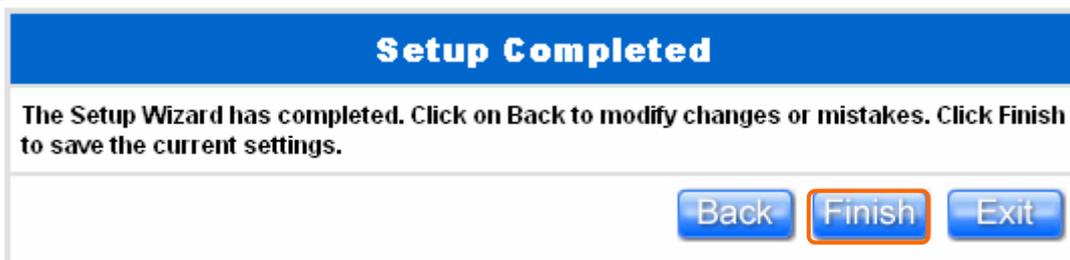
5. Apply, Cancel & Help

Click on **Apply** button to continue. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

PPPoE	
Local IP Address	1 <input type="text" value="212"/> <input type="text" value="93"/> <input type="text" value="45"/> <input type="text" value="22"/> (optional)
User Name	2 <input type="text" value="navi210w"/>
Password	3 <input type="password" value="*****"/>
Auto-reconnect	4 <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled
5 <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>	

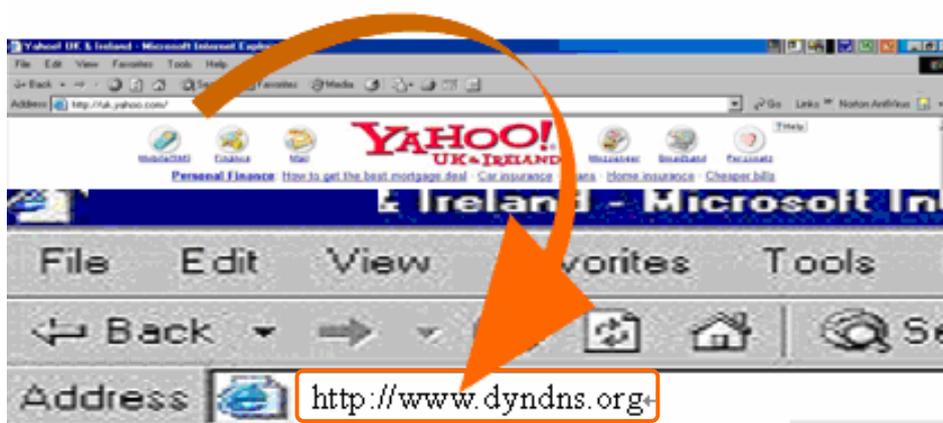
【Step7】

After clicking on Next button, the Setup Completed page will appear. Then, click on Finish button to save the current setting.



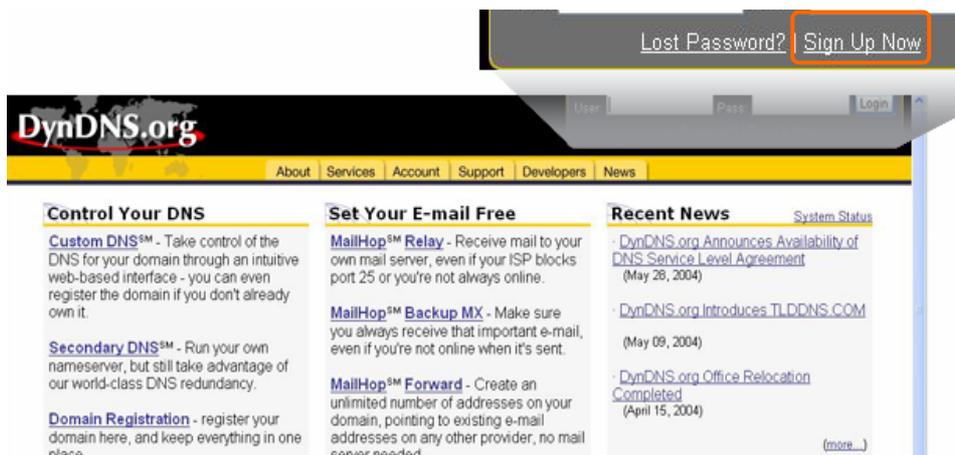
【Step8】

Make sure you can access Internet and input **http://www.dyndns.org** in the blank field.



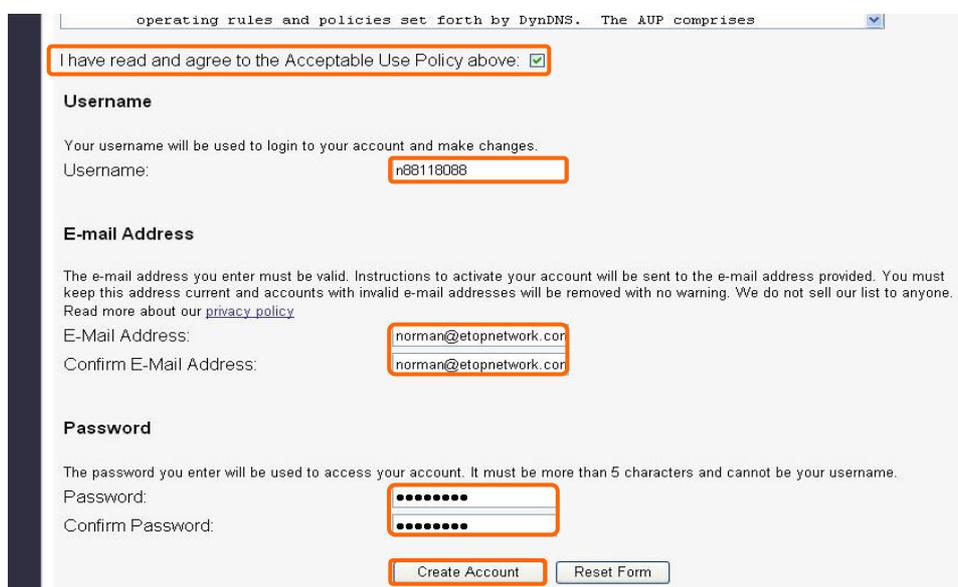
【Step9】

Click on **Sign Up Now.**



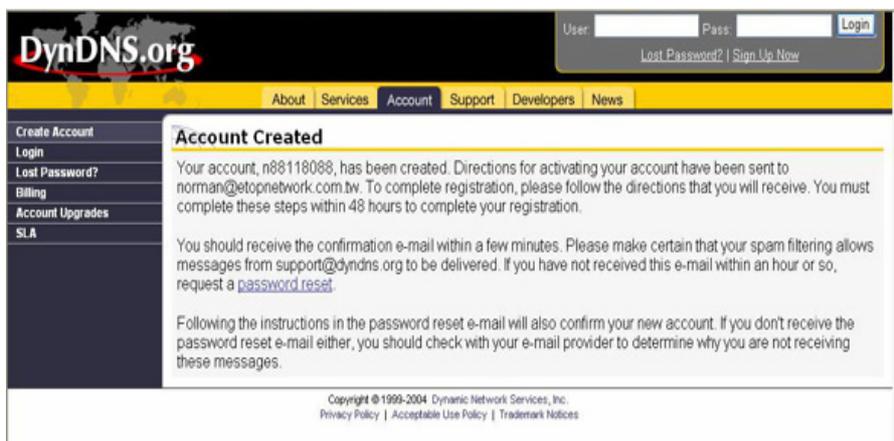
【Step10】

Please finish these blank fields. Then, click on **Create Account** button.



【Step11】

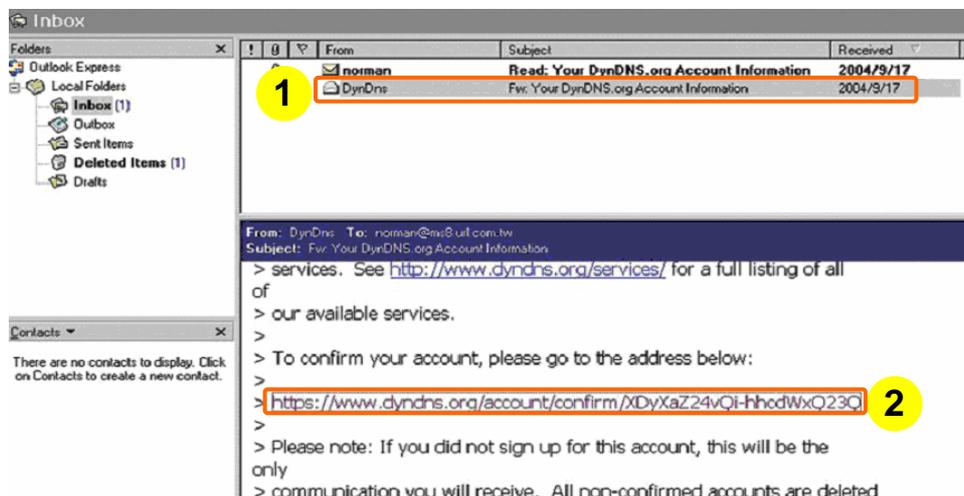
When you got this account created message, close it, and check your mailbox. You would get a mail from DynDNS website.



【Step12】

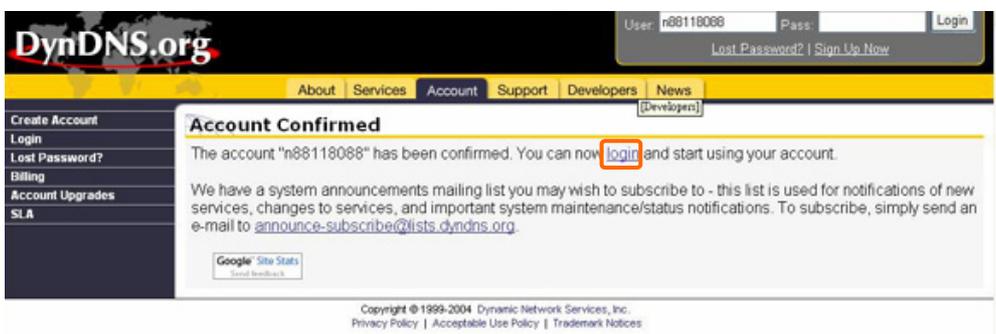
1. Click on the mail.
2. Click on the address:

https://www.dyndns.org/account/confirm/XDyXaZ24vQi-hhcdWx0230



【Step13】

Click on [login](#).



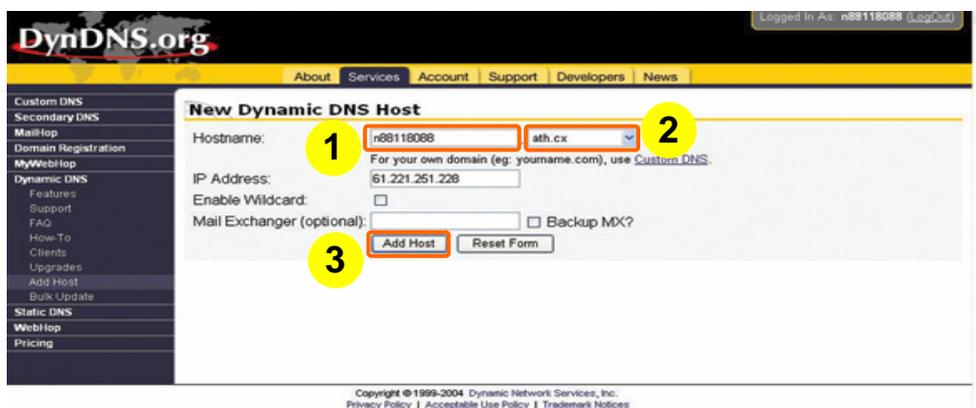
【Step14】

Click on the **Add Host** of Dynamic DNS.



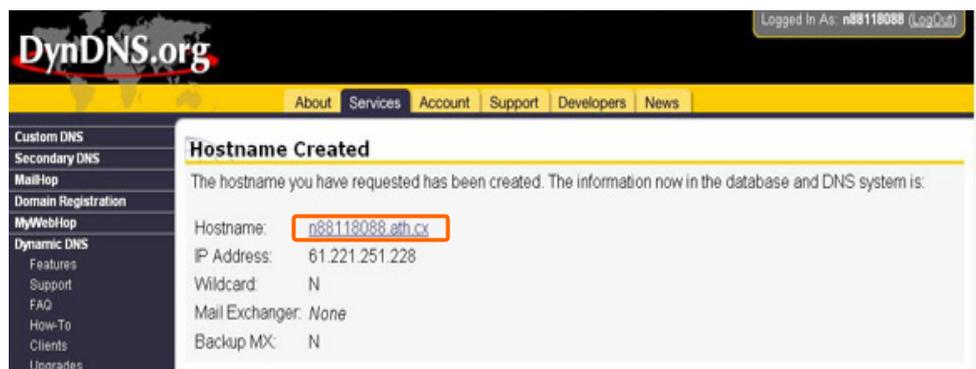
【Step15】

1. Input the name created in **【Step10】** .
2. Select one of the tails you like.
3. Then, click on **Add Host** button.



【Step16】

Your hostname have been created.



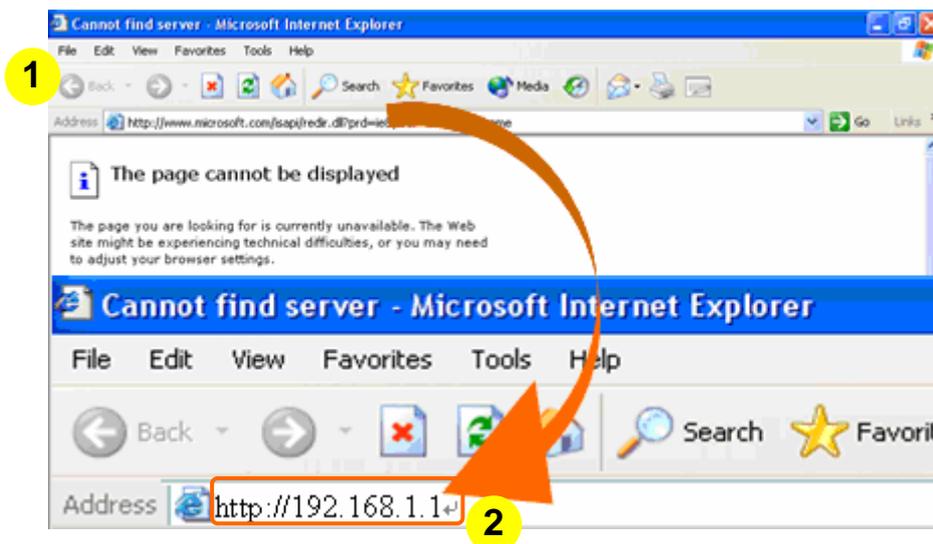
4.3 How do I apply for an DDNS with PPTP

If you don't have a DDNS account, please follow the steps to complete your DDNS with PPTP settings.

Notice: If you have applied for a DDNS account, please skip these setting guides and go to 4.4 section, "How do I setup Navi210W with DDNS".

【Step1】

1. Open IE browser as an example.
2. Blank this field and Input **http://192.168.1.1** in the address field. Then, press **Enter**.



【Step2】

1. Input **admin** in **User Name** and **Password** blank fields.
2. Click on **OK** button.



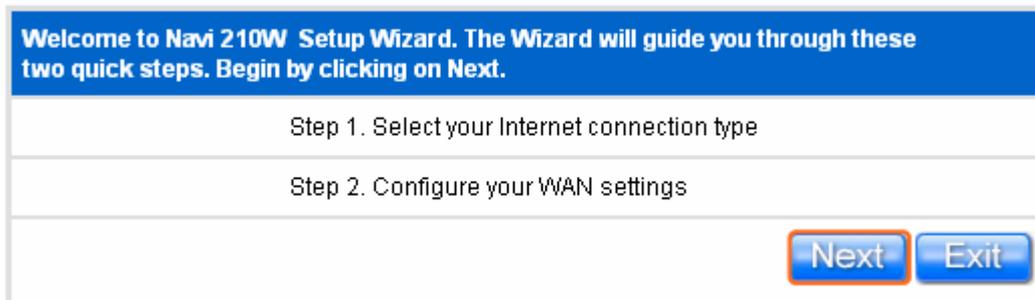
【Step3】

Select **Quick Setup** menu to enter the Quick Setup page, or select **WAN** under the **IP Config** menu. Here we select **Quick Setup** instructions as the example.



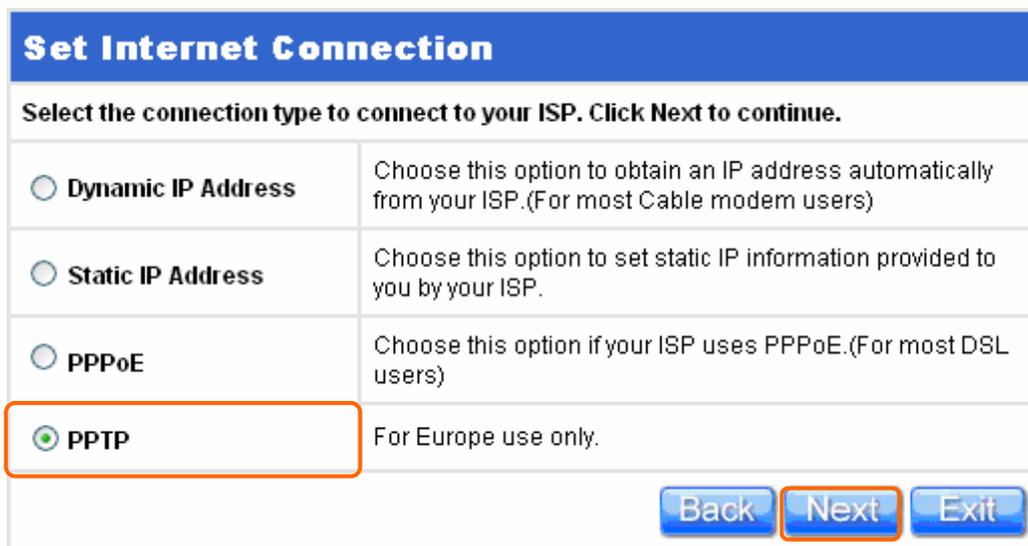
【Step4】

Click on **Next** button.



【Step5】

Select **PPTP** connection type. Then, click on **Next** button.



【Step6】

If your ISP supplies you the **PPTP** connection type, please follow the steps to setup your WAN connection.

1. IP Address

Input your IP Address supplied by ISP, **212.93.45.22** for example. If you don't know, please check with your ISP.

Notice: Don't copy the mentioned IP Address as yours.

2. Subnet Mask

Input Subnet Mask, normally it is **255.255.255.0**.

3. Server IP

Input the Server IP supplied by ISP, **123.220.12.90** for example. If you don't know, please check with your ISP.

Notice: Don't copy the mentioned Server IP Address as yours.

4. PPTP Account

Input the PPTP Account supplied by ISP, **navi210w** for example.

5. Password

Input your Password supplied by ISP.

Notice: Each Character you inputted will change to * form.

6. Primary DNS Address

Input your primary DNS Address supplied by ISP, **168.95.254.3** for example. If you don't know yours, please check on your ISP.

Notice: Don't copy the mentioned Primary DNS Address as yours.

7. Secondary DNS Address

Input your Secondary DNS Address. If you don't know yours, please check with your ISP.

8. Back, Next & Exit

Click on **Back** button to back to the previous page. Click on **Next** button to the next page. If you want to quit the setting, please click on **Exit** button.

Set PPTP			
Please set you PPTP Client data then press Next to continue.			
IP Address	1	212 . 93 . 45 . 22	
Subnet Mask	2	255 . 255 . 255 . 0	
Server IP	3	123 . 220 . 12 . 90	
PPTP Account	4	navi210w	
Password	5	*****	
Primary DNS Address	6	168 . 95 . 254 . 3	
Secondary DNS Address	7	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>	(optional)
		8	Back Next Exit

【Step7】

After clicking on **Next** button, the Setup Completed page will appear. Then, click on **Finish** button to save the current setting.

Setup Completed	
The Setup Wizard has completed. Click on Back to modify changes or mistakes. Click Finish to save the current settings.	
Back Finish Exit	

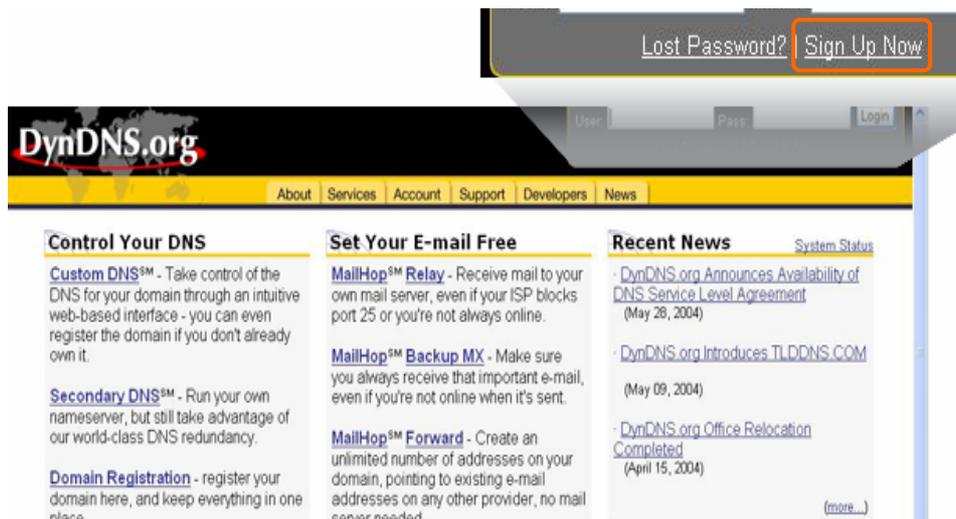
【Step8】

Make sure you can access Internet and input **http://www.dyndns.org** in the blank field.



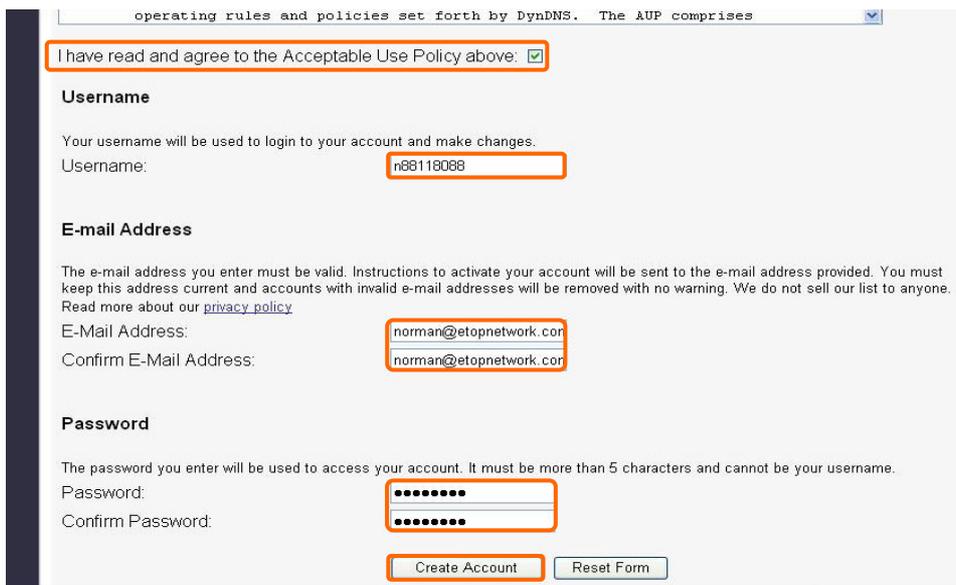
【Step9】

Click on **Sign Up Now**.



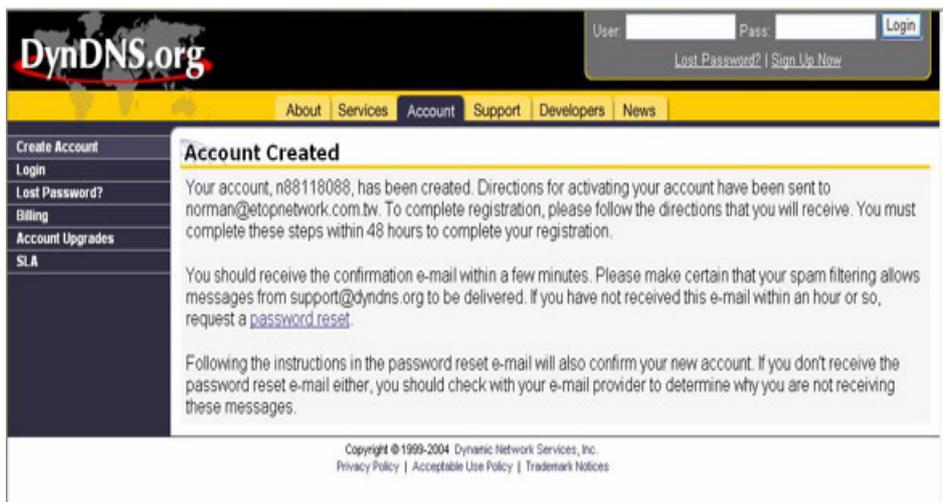
【Step10】

Please finish these blank fields. Then, click on **Create Account** button.



【Step11】

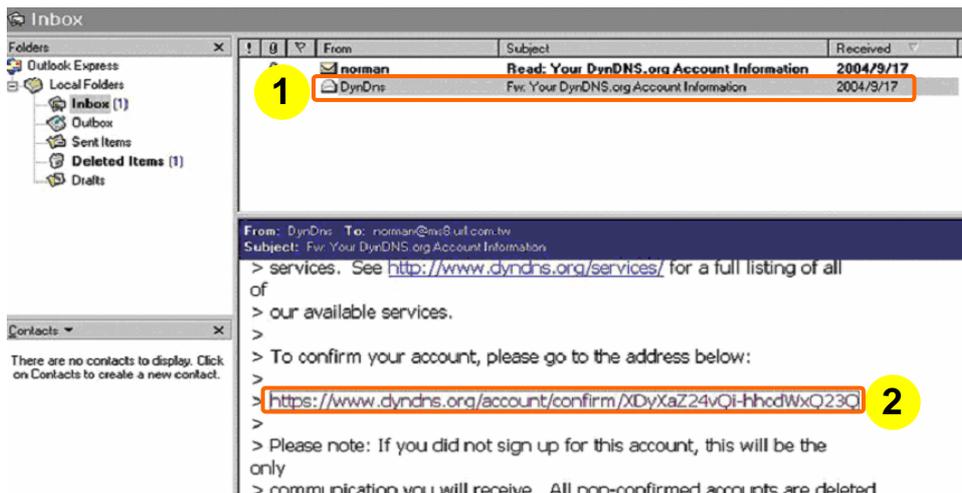
When you got this account created message, close it, and check your mailbox. You would get a mail from DynDNS website.



【Step12】

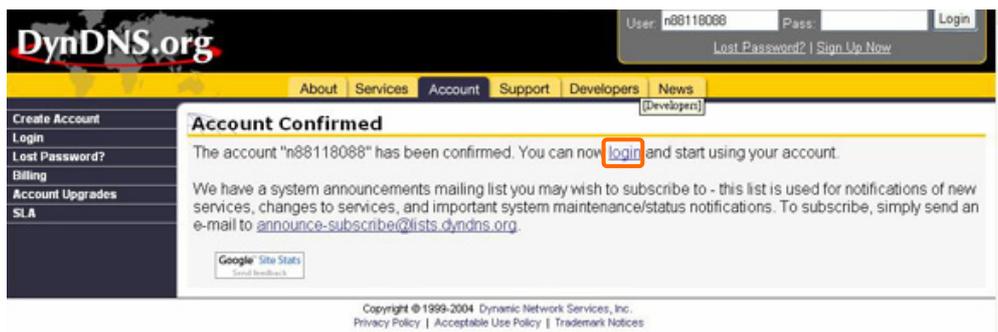
1. Click on the mail.
2. Click on the address:

<https://www.dyndns.org/account/confirm/XDyXaZ24vQi-hhcdWx0230>



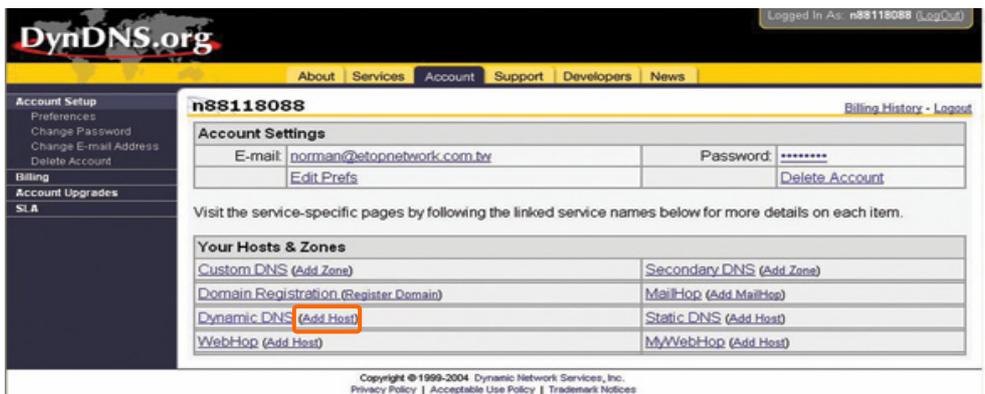
【Step13】

Click on [login](#).



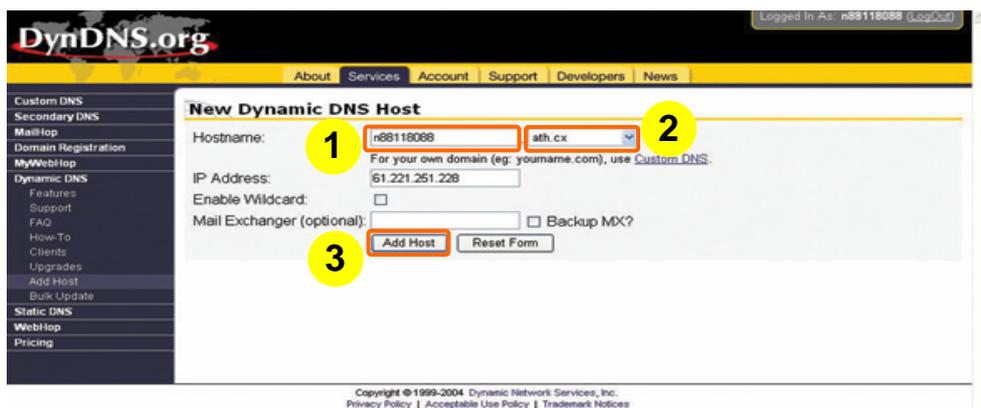
【Step14】

Click on the **Add Host** of Dynamic DNS.



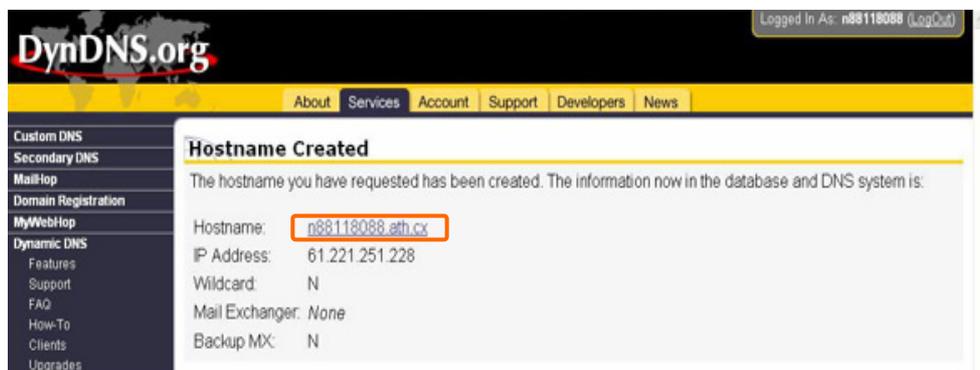
【Step15】

1. Input the name created in **【Step10】**.
2. Select one of the tails you like.
3. Then, click on **Add Host** button.



【Step16】

Your hostname have been created.



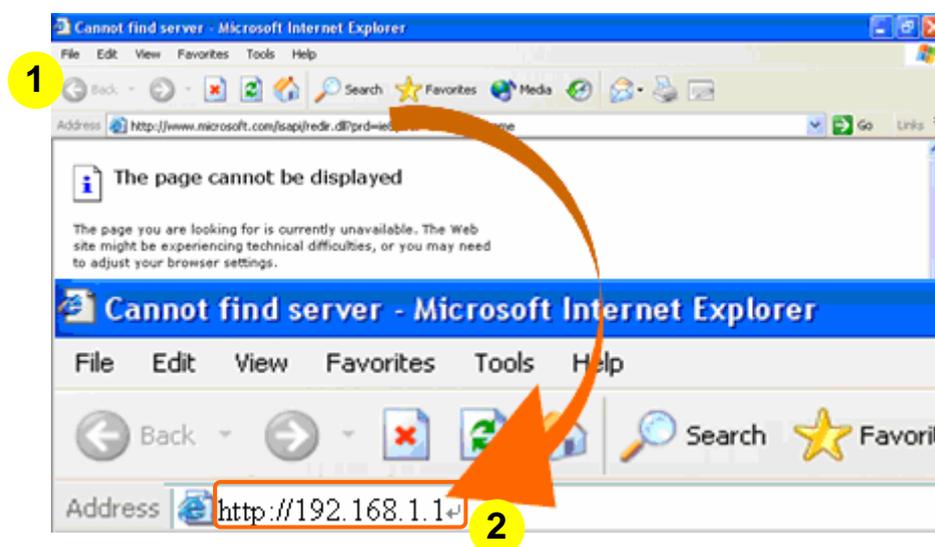
4.4 How do I setup Navi210W with DDNS

If you have applied for a DDNS account, please follow the steps to complete your router's settings.

Notice: *If you have done what the setting guides instructed in 4.1, 4.2 or 4.3 section, please skip the following instructions.*

【Step1】

1. Open IE browser as an example.
3. Blank this field and Input **http://192.168.1.1** in the address field. Then, press **Enter**.



【Step2】

1. Input **admin** in **User Name** and **Password** blank fields.
2. Click on **OK** button.



【Step3】

Select **Dynamic DNS** under the **IP Config** menu.



【Step4】

1. Dynamic DNS

Select **Enabled** to allow or disallow the DDNS Client access.

2. Provider

Select **DynDNS.org** orembedded in the pull-down menu.

3. Host Name

Input your **Host Name** you had registered from Dynamic-DNS website, **Navi210W** for example.

Notice: Don't copy the mentioned Host Name as yours.

4. User Name

User Name is used as an identity to login Dynamic-DNS service, **Navi210W** for example.

Notice: Don't copy the mentioned User Name as yours.

5. Password

Password is applied to login Dynamic-DNS service.

Notice: Each Character you inputted will change to ● form.

6. Apply, Cancel & Help

Click on **Apply** button to add the settings into the list table. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

Dynamic DNS		
Dynamic DNS allows you to alias a dynamic IP address to a static hostname. Please configure the dynamic DNS below		
Dynamic DNS	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled	1
Provider	DynDNS.org	2
Host Name	<input type="text" value="navi210w"/>	3
Username	<input type="text" value="navi210w"/>	4
Password	<input type="password" value="••••••••"/>	5
		6 <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>

5 What can Navi210W do for you

Are you strange to Navi210W's functions, and don't know what it can do for you? Is it so important for you when you are in the Local Network or in the Internet? Indeed, a router can enliven our network application, especially Navi210W. Here we will offer you some motives to let you know how useful is the router Navi210W. There are eight different motive studies mentioned below, such as DHCP Server; FTP; Webcam; Print; VPN pass through; Wireless; ICMP Ping Blocking and URL Blocking.

5.1 DHCP Server Motive Study

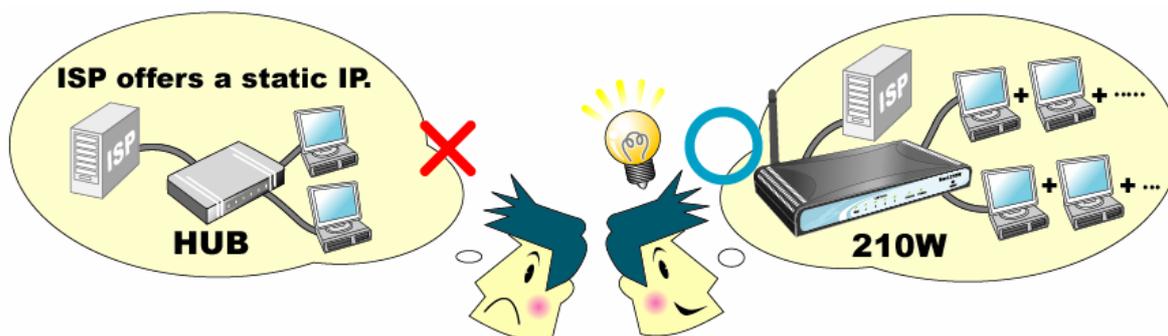
Sharing IP Addresses (DHCP Server)

Motive Study1: Sara applied for a PPPoE account a moment ago; but the account is just for two users to go online at a time, and there are six persons who want to share it.

Motive Study2: Tim applied for a static IP from Telecom two days ago. After he had set the network cable with a Hub from first to second and third floor for other computers, he found only one computer can work online properly, because he doesn't know the static IP just for a user access Internet, and he also doesn't know how to use and set Microsoft Windows as the software solution.

Motive Study3: Adrian is a MIS engineer of a network company. He knew how to use and set Microsoft Windows with a Hub as the IP Sharing solution. Recently he found the main computer has shut down itself inexplicably again and again, and in the same way, other computers affected can't work online properly. He decided to change the IP Sharing solution.

Solution: Navi210W as a DHCP Server provides you an IP Sharing function. It can solve the mentioned problems. For more DHCP Server Settings, please refer to 3.3.4 DHCP Server.



5.2 FTP Motive Study

Downloading music or file to your remote Notebook, PDA or PC. (FTP Server)

Motive Study1: Ben is a salesman. He usually goes for business outdoors. However, one day he forgot to store some important files in his Notebook at home. After 10 minutes his appointment will start; but he doesn't have enough time to go home for getting them.

Motive Study2: Susan studies in the senior high school. She likes listening to music very much, especially the 70's ~ 90's songs, and collects them completely in her PC at home. One day when she knew her boyfriend got a new girl, she was extreme upset. In this moment she wants to listen to those songs.

Motive Study3: Lisa is a secretary. She often brings her works home and works to the midnight. Tomorrow there is an important conference with factories and stores, but she lacks some files in the office.

Solution: Navi210W as a FTP Server provides you a file transmission function. It can solve the mentioned problems. For more FTP Settings, please refer to 3.6.1 FTP Server.



5.3 Webcam Motive Study

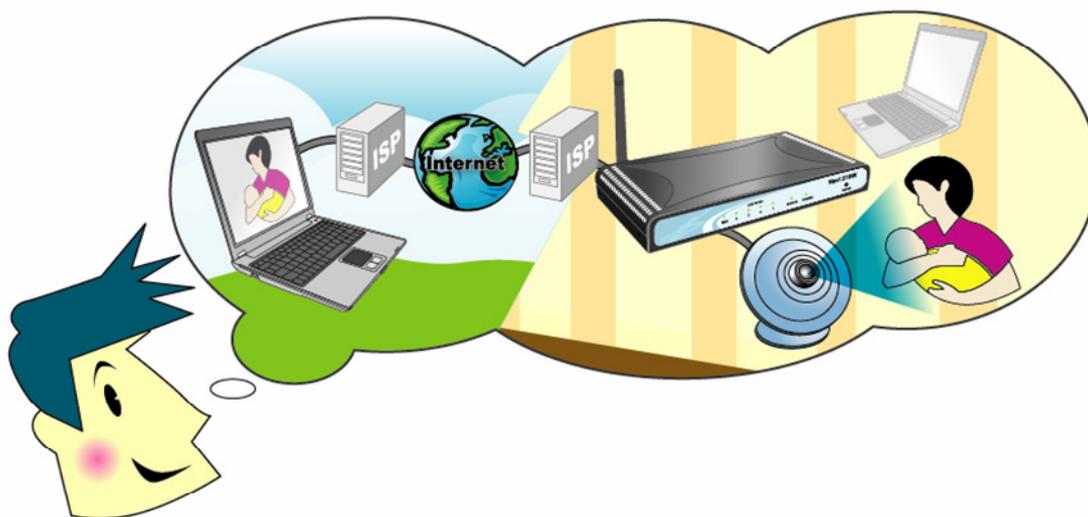
Securing Home from remote place (Webcam Monitor)

Motive Study1: Bob is a businessman. So he often goes for business to the remote places; but he concerns with home property and family all the time.

Motive Study2: Johnny got a baby a month ago. However, he always worries about his baby when he goes working because he doesn't know what the babysitter does to the baby.

Motive Study3: Tim is a chemistry teacher. He often makes experiments at home. Some experiments need time to observe, but in the meanwhile he must go to school for teaching.

Solution: Navi210W provides you a Webcam function to monitor anywhere. It can solve the mentioned problems. For more Web Camera Settings, please refer to 3.6.2 Web Camera.



5.4 Print Motive Study

Printing by remote or local control (Print Server)

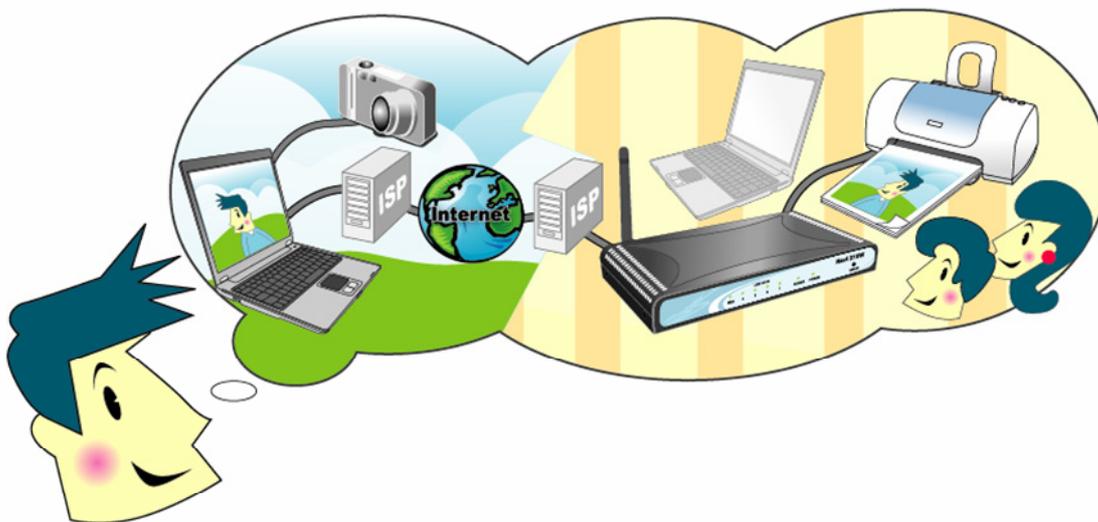
Motive Study1: Sue is studying and working in the foreign country. However, her family urgently needs her photos, school report card, personal ID or some information for applying scholarship.

Motive Study2: Mike is traveling around the world, and wants to send home his life-photos from digital camera.

Motive Study3: Peter remembers something haven't done in the office after he came off work and stayed at home, for example, he forgot giving his boss documents, and leaving administrator an excuse.

Motive Study4: In the office Martin wants to share a printer to his coworkers through Local Network.

Solution: Navi210W as a Print Server provides you a remote or local printer service. For more Print Server Settings, please refer to 3.6.3 Print Server.



5.5 Wireless Motive Study

Wandering indoors with a 802.11b/g device (Wireless)

Motive Study1: After seminar, Steven usually goes home and opens PC for chatting with his girlfriend. They always chat for a long time. However, Steven's mother too busy to take care of her 6 month old baby, so she sometimes calls Steven to go downstairs to look after his little brother. Steven's conversation with his girlfriend is like so, interrupted at this circumstance.

Motive Study2: Cindy has her own clothes design SOHO. One day her cooperator, Su is online and talking about business. She wants Cindy to send her all design information at once, but her design room is 20 meters far from here, and the cable is not long enough.

Motive Study3: Marie is a house designer. She is fastidious about her own dwelling. In her room must be clean and neat. She doesn't want to see disorderly lines or cables in the field of vision. So when she is online by her wired Notebook, she always concerns about the cable.

Solution: Navi210W provides wireless function for releasing your usage limited indoors. It can solve the mentioned problems. For more Wireless Settings, please refer to 3.8 Wireless.



5.6 URL Blocking Motive Study

Preventing your children to go to adult website

Motive Study1: Ivan is always busy for Internet business. She doesn't have enough time to look after her 13 year old son; especially she doesn't know what her son has done in his room after school. In addition, she found her son's behavior was more and more strange. One day when she cleaned up his room, she found there are many printed naked girl pictures under his mattress. At the bottom of the pictures, a website address was left there.

Motive Study2: Every time when Andy came home after work, he always found his son was playing online game without finishing his homework. So he considered calling Internet Services Provider to stop service; but he was confused because he usually used Internet for business.

Motive Study3: Bonny is an executive secretary. She sometimes detects that some coworkers play online game or wander in the Internet and can't concentrate on their job. She told her boss all what she saw. The boss is confused because their works need using Internet.

Solution: Navi210W provides you a URL Blocking service for preventing your children to go to adult website. It can solve the mentioned problems. For more URL Blocking Settings, please refer to 3.5.3 URL Blocking.



6 Application

6.1 FTP Application

There are three FTP applications in this part. Those are "How to easily use FTP with DDNS", "How to easily use FTP from LAN" and "How to easily use FTP from WAN".

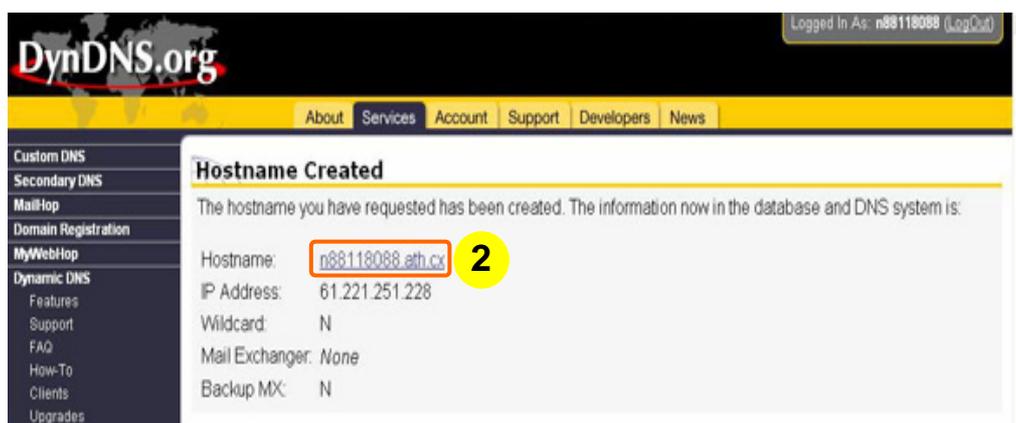
6.1.1 How to easily use FTP with DDNS (Add a Virtual HDD)

If you want to access FTP easily for down- and uploading data or to add a network HDD for your own from WAN, you should apply for a DDNS account. After applying for a hostname from DDNS website <http://www.dyndns.org> and completing the following steps below, you can easily use FTP as your own network HDD. (For more DDNS Settings, please check Chapter 4: DDNS Settings)

【Step1】 (Apply for a DDNS account)

1. Please open the IE browser, and go to DDNS website to apply for a free account, such as <http://www.dyndns.org>.
2. Follow the DDNS applying steps in Chapter 4. You will get a free hostname as your account.





【Step2】 (Configure Navi210W)

1. Open Internet browser

Open the Navi210W's configuration web page by typing the router's IP address 192.168.1.1 on your web browser.

2. User Name & Password

Input **admin** in **User Name** and **Password** blank fields and then click on **OK** button.

3. Main Menu

Select **FTP Server** in the **USB Application** menu.

4. FTP Server

Please **enable** the FTP Server feature.

5. Enable FTP access from WAN

Select **Yes** to enable FTP Access from WAN.

6. Maximum Users Allowed to Log in:

Give the users' number (at most 5 users can access Internet at a time.)

7. FTP Port:

The FTP Port default value is **21**, but it can be changed.

8. User Name, Password & Max. Login

Input one or more groups of name, password and number of maximum access clients in the blank fields, **guest** and **123456** for example.

Notice: The mentioned examples are reference values.

Notice: Each Password Character you inputted will change to * form.

9. Rights

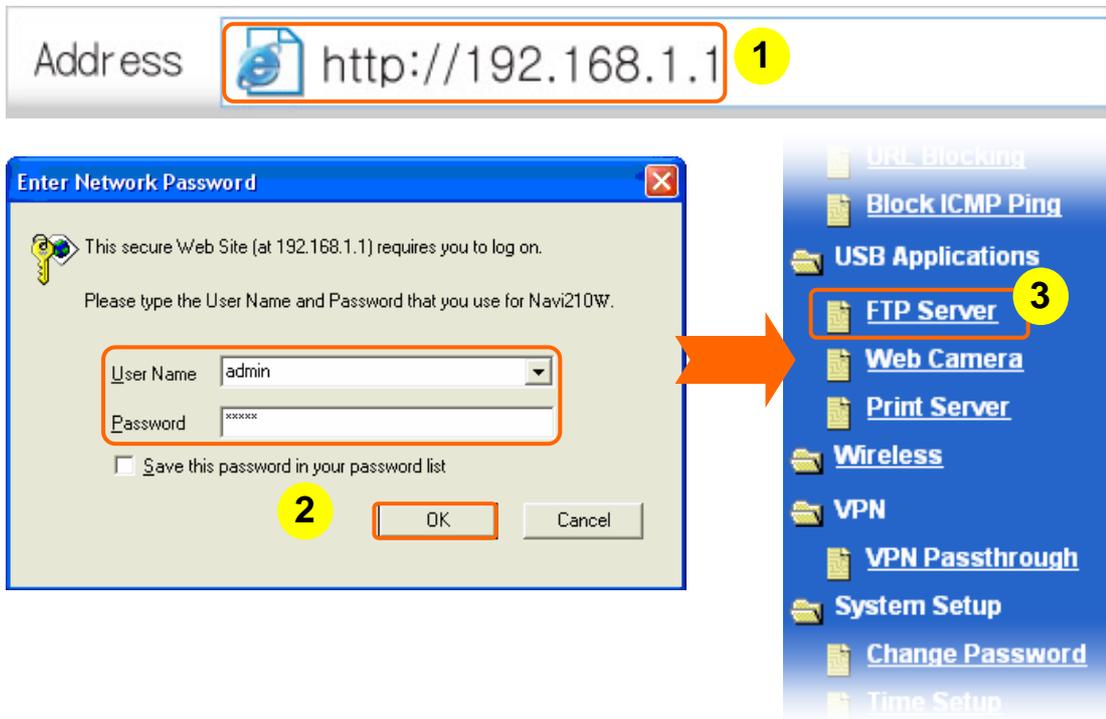
Give the user access rights of read, write and erase.

10. Add, Delete & Edit

Click on **Add** button to save the inputted information in the User Account List Table. Click on **Delete** to delete a datum in the list table. Click on **Edit** to edit the specified setting in the list table.

11. Apply & Cancel

Click on **Apply** button to complete Navi210's FTP Setup. Click on **Cancel** button to recover from the default value except the records in the user account list table.



FTP Server

Navi210WV supports an embedded FTP server for USB storage. In this page, you can configure the FTP server and manage accounts for the FTP server.

Pen Drive USB HDD Notebook with IEEE 802.11b/G Standard PC

Enable FTP Server	4	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
Allow Anonymous User to Login		<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled <input type="button" value="Login"/>
Allow Super User to Login		<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled <input type="button" value="Login"/>
Enable FTP Access from WAN	5	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
Maximum Users Allowed to Login	6	<input type="text" value="5"/>
FTP Port	7	<input type="text" value="21"/>
		11 <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>

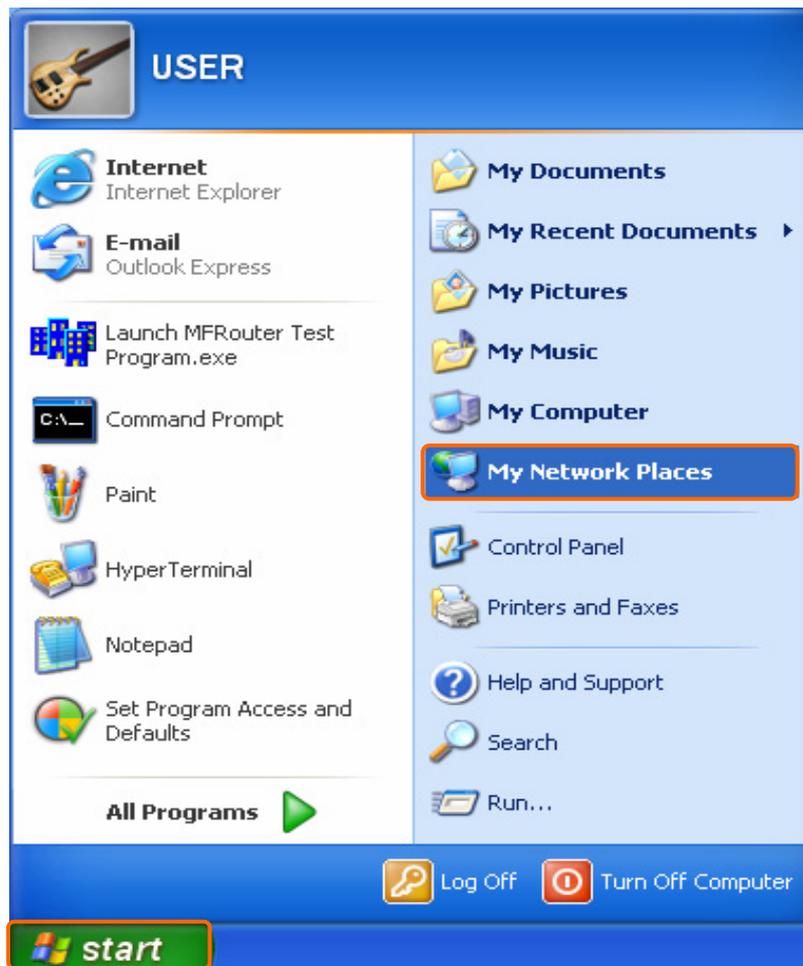
User Account List

9

8	User Name	Password	Max. Login	Rights
	<input type="text"/>	<input type="text"/>	<input type="text"/>	Read/Write <input type="button" value="v"/>

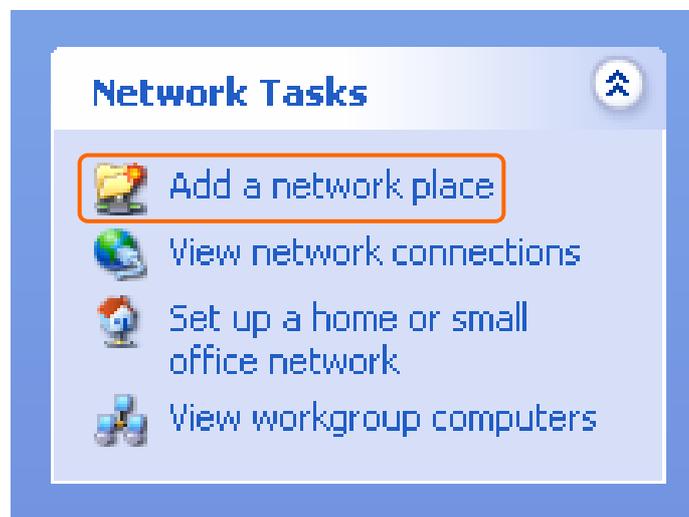
User Name	Password	Max. Login	Rights	Delete	Edit
guest	*****	3	RW-	10 <input type="button" value="Delete"/>	<input type="button" value="Edit"/>

【Step3】 (Windows XP Settings)
Go to **start > My Network Places**.



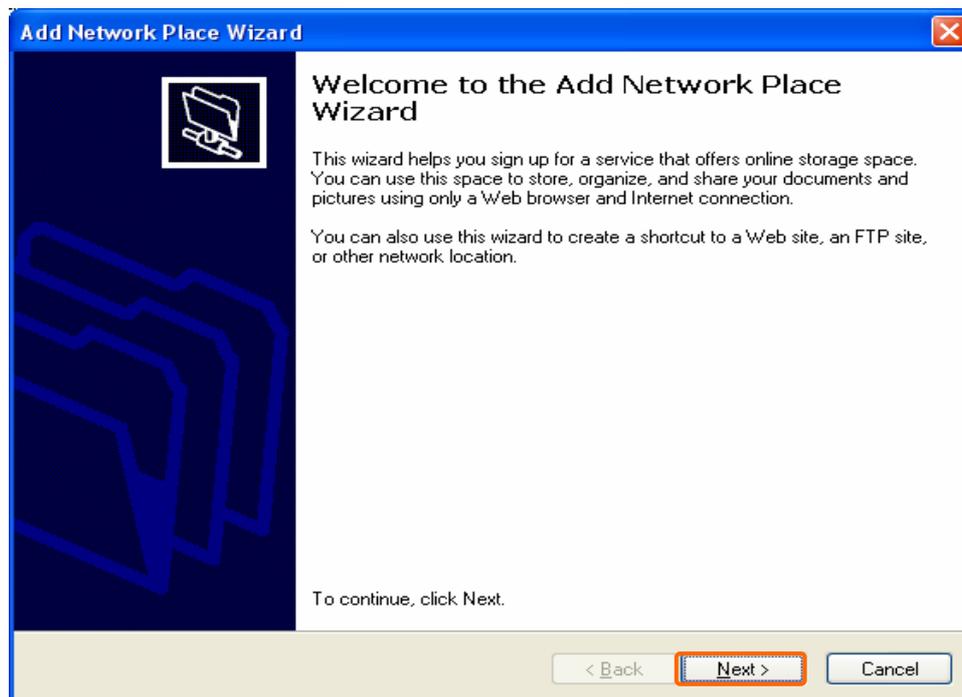
【Step4】

Click on **Add a network place** item.



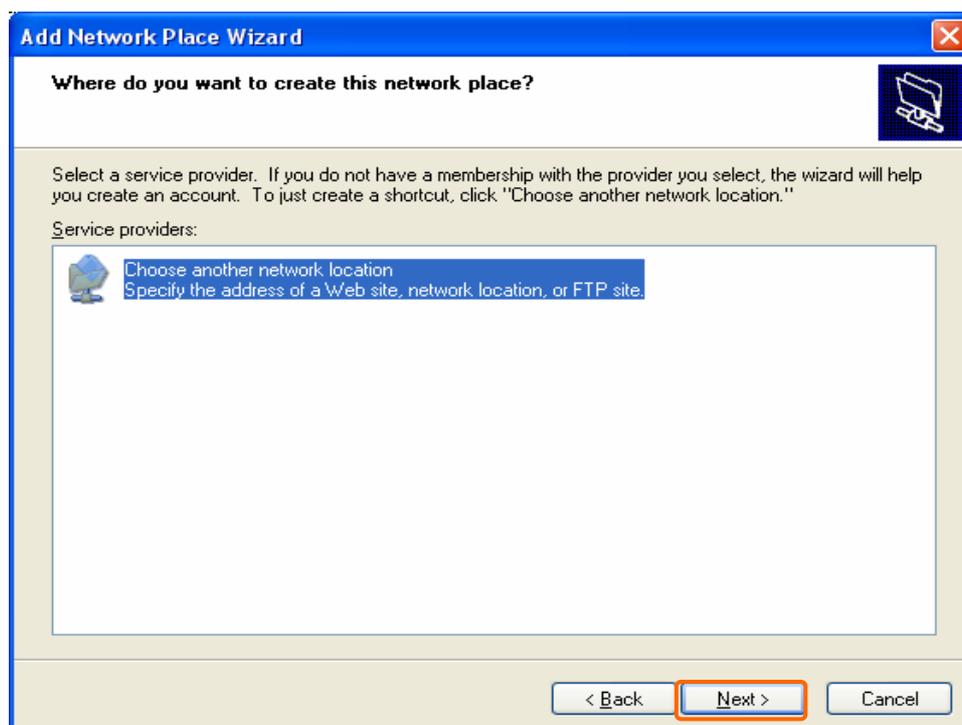
【Step5】

Click on **Next** button.



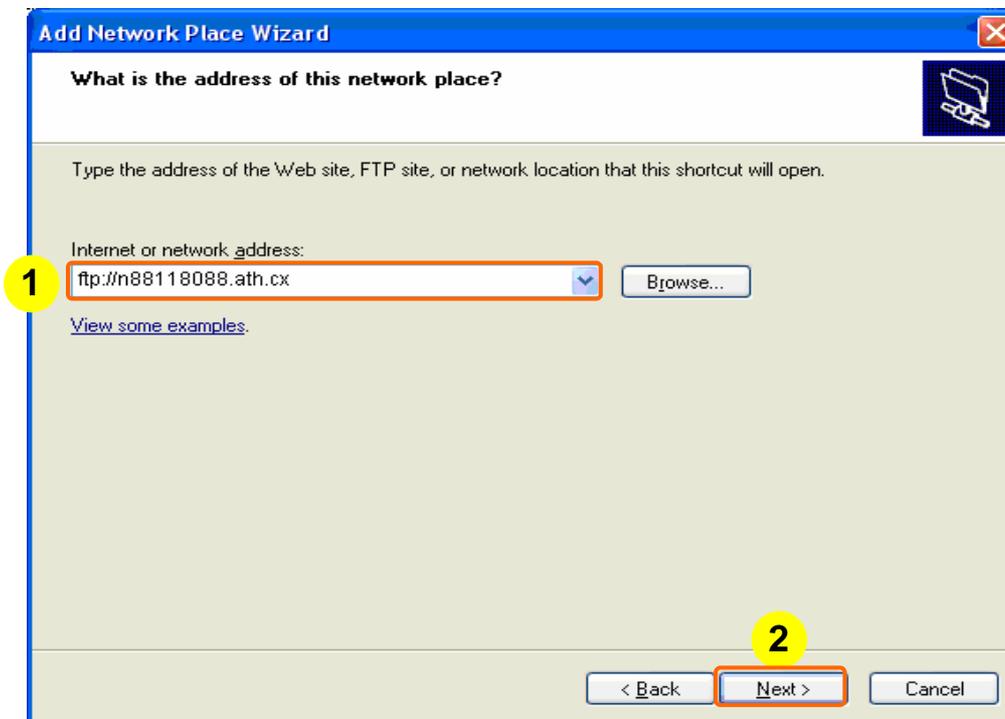
【Step6】

Click on **Next** button.



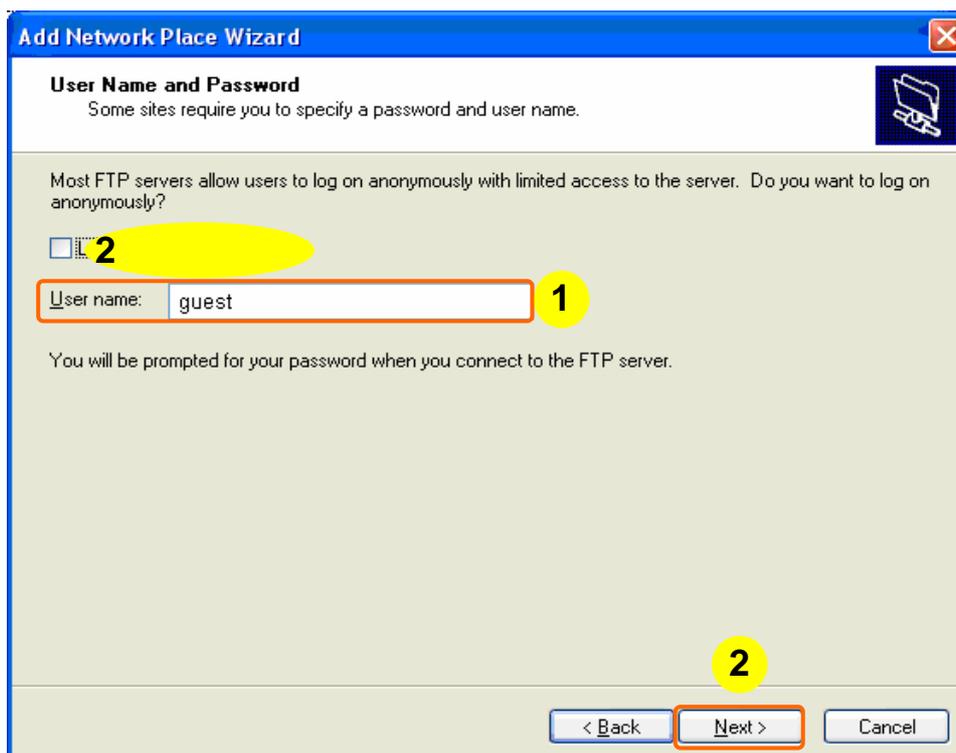
【Step7】

1. Input ftp://DDNS hostname, **ftp://n88118088.ath.cx** for example.
2. Click on **Next** button.



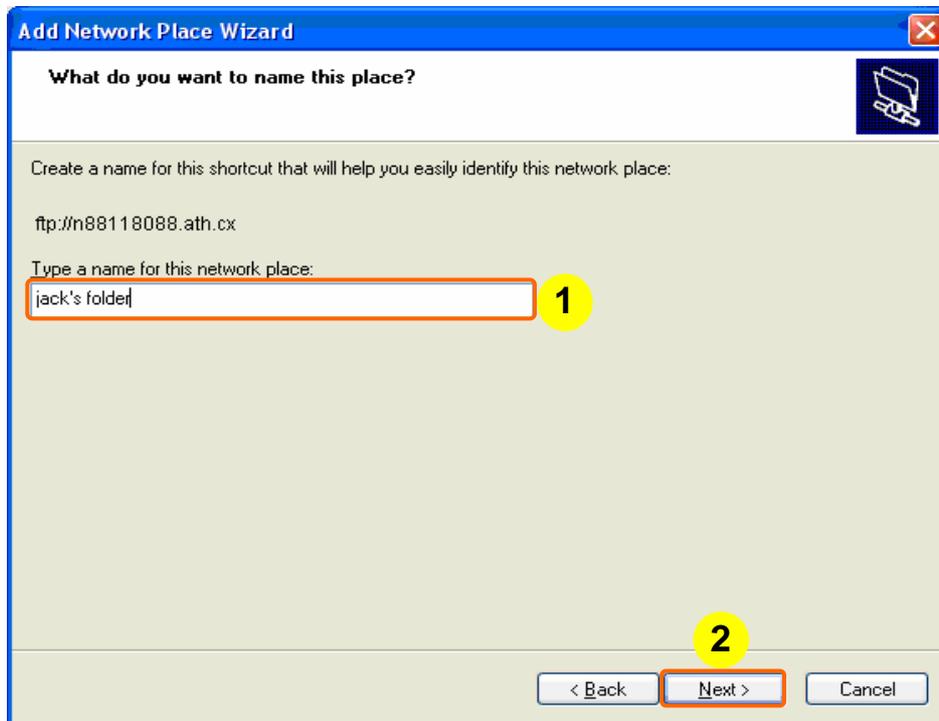
【Step8】

1. Input a user account name set before, **guest** for example.
2. Click on **Next** button.



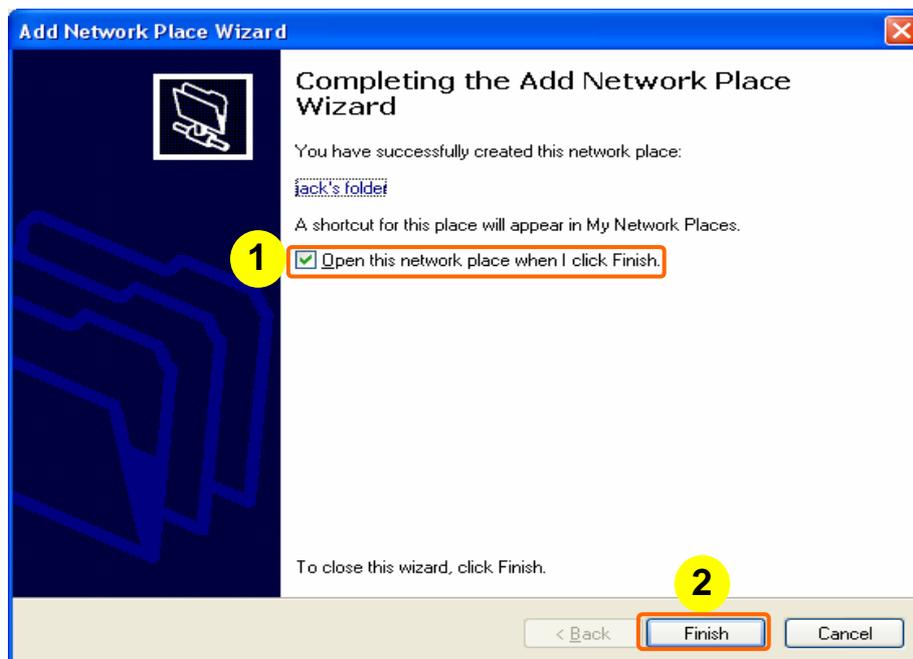
【Step9】

1. Give your network place a name, **jack's folder** for example.
2. Click on **Next** button.



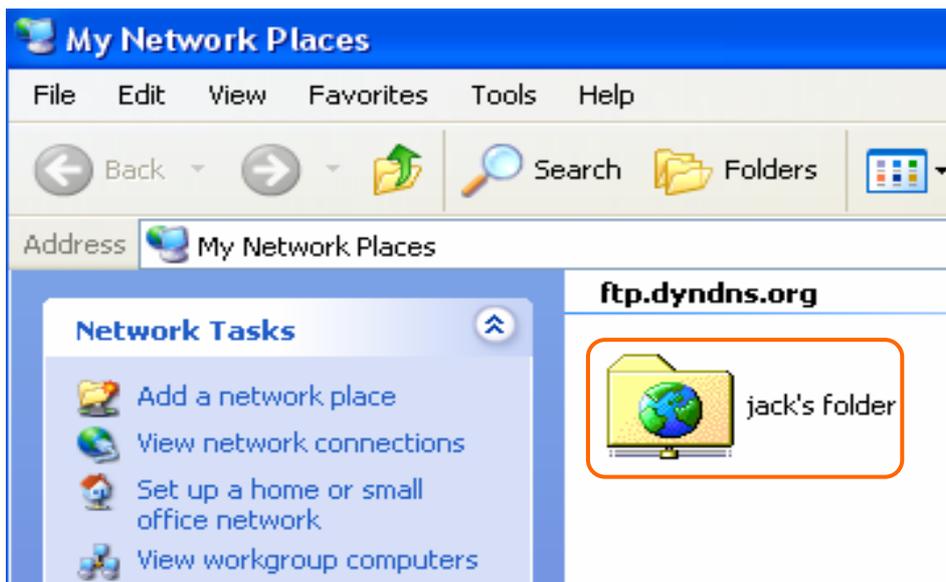
【Step10】

1. Select **Open this network place when I click Finish.**
2. Click on **Finish** button.



【Step11】

The jack's folder appeared. Then, double click on **jack's folder**.



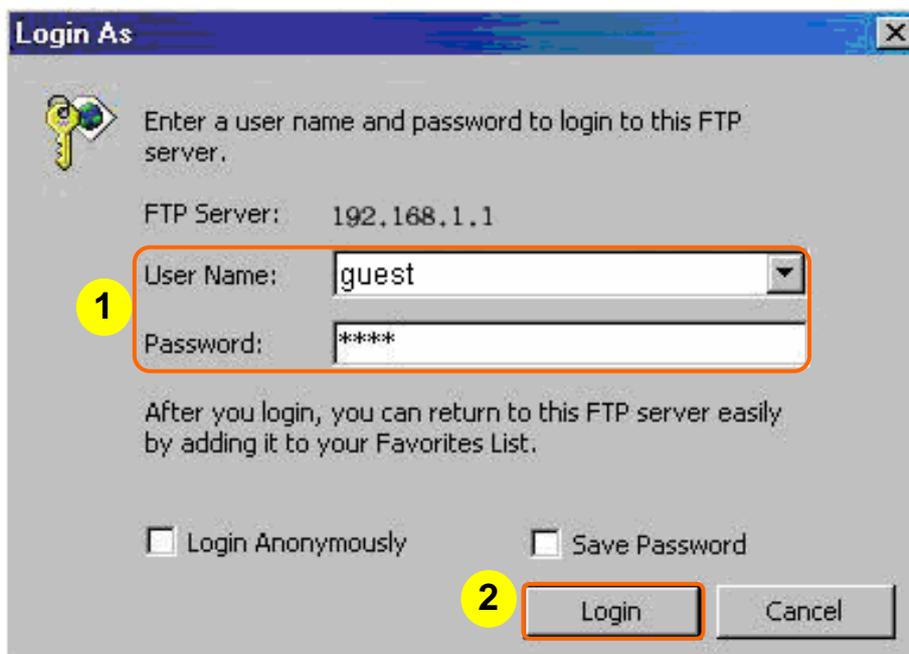
【Step12】

1. User Name & Password

Input **User Name** and **Password** given according to Account User Listed in 【Step2】 .

2. Login

Click on **Login** button.



Notice: Navi210W supports at most two HDDs, and when clients

login with correct user name and password, it will appear a two folder page. The two folders represent the two HDDs.

Notice: If you allow a super user to login, the super user can see all anonymous users' folders. In addition, the super one also can add, delete and edit anonymous users' data.

6.1.2 How to easily use FTP from LAN

If you are in the Local Area Network (LAN) and want to easily use Navi210W's FTP Server, please follow the steps to add a private folder.

【Step1】 (Configure Navi210W)

1. Open IE browser

Open the Navi210W's configuration web page by typing the router's IP address 192.168.1.1 on your web browser.

2. User Name & Password

Input **admin** in **User Name** and **Password** blank fields and then click on **OK** button.

3. Main Menu

Select **FTP Server** in the **USB Application** menu.

4. FTP Server

Please **enable** the FTP Server feature.

5. Maximum Users Allowed to Log in:

Give the users' number (at most 5 users can access Internet at a time.)

6. FTP Port:

The FTP Port default value is **21**, but it can be changed.

7. User Name, Password & Max. Login

Input one or more groups of name, password and number of maximum access clients in the blank fields, **guest** and **123456** for example.

Notice: The mentioned examples are reference values.

*Notice: Each Password Character you inputted will change to * form.*

8. Rights

Give the user rights of read, write and erase.

9. Add, Delete & Edit

Click on **Add** button to save the inputted information in the User Account List Table. Click on **Delete** to delete a datum in the list table. Click on **Edit** to edit the specified setting in the list table.

10. Apply & Cancel

Click on **Apply** button to complete Navi210's FTP Setup. Click on **Cancel** button to recover from the default value except the records in the user account list table.

Address http://192.168.1.1 1

Enter Network Password

This secure Web Site [at 192.168.1.1] requires you to log on.
Please type the User Name and Password that you use for Navi210W.

2 User Name:

Password:

Save this password in your password list

➔

- URL Blocking
- Block ICMP Ping
- USB Applications
 - FTP Server 3
 - Web Camera
 - Print Server
- Wireless
- VPN
 - VPN Passthrough
- System Setup
 - Change Password
 - Time Setup

FTP Server

Navi210WV supports an embedded FTP server for USB storage. In this page, you can configure the FTP server and manage accounts for the FTP server.

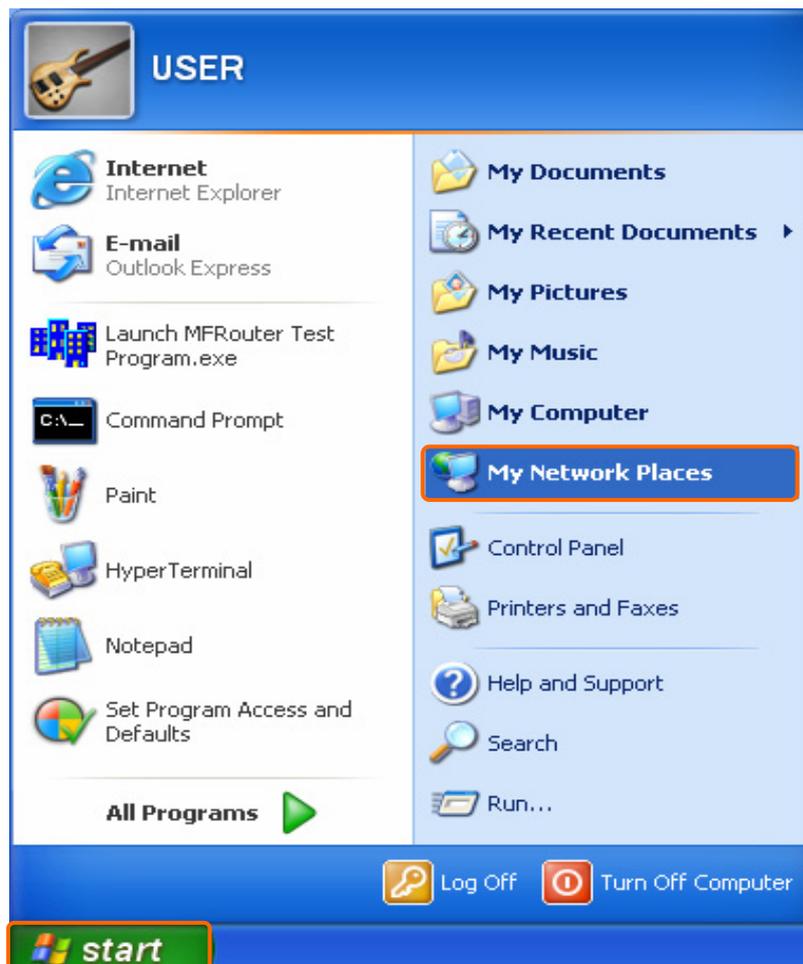
Enable FTP Server	4 <input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
Allow Anonymous User to Login	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled <input type="button" value="Login"/>
Allow Super User to Login	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled <input type="button" value="Login"/>
Enable FTP Access from WAN	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled
Maximum Users Allowed to Login	5 <input style="border: 1px solid orange;" type="text" value="5"/>
FTP Port	6 <input style="border: 1px solid orange;" type="text" value="21"/>

10

User Account List			Add			
7	User Name	Password	Max. Login	Rights		8
	<input type="text"/>	<input type="text"/>	<input type="text"/>	Read/Write		

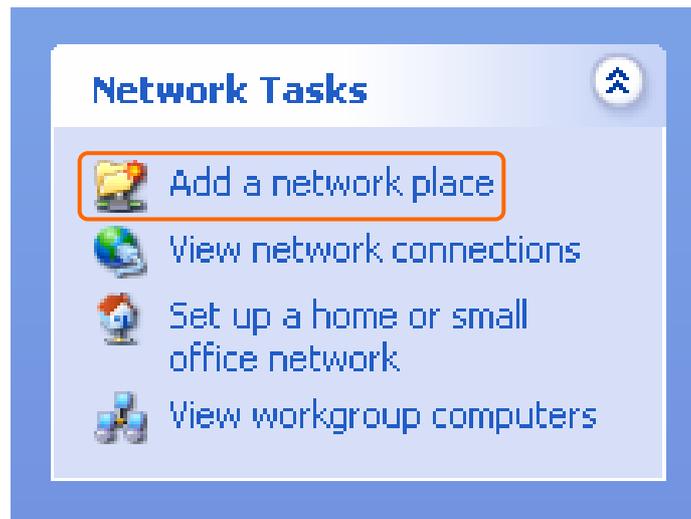
User Name	Password	Max. Login	Rights	Delete	Edit	9
guest	*****	3	RW-	Delete	Edit	

【Step2】 (Windows XP Settings)
Go to **start > My Network Places**.



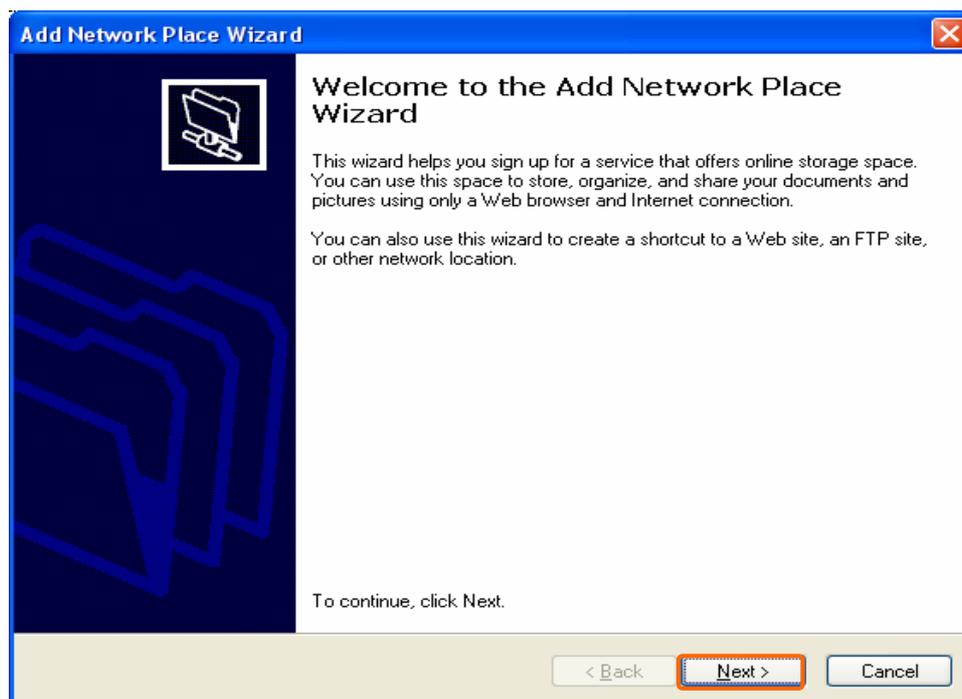
【Step3】

Click on **Add a network place** item.



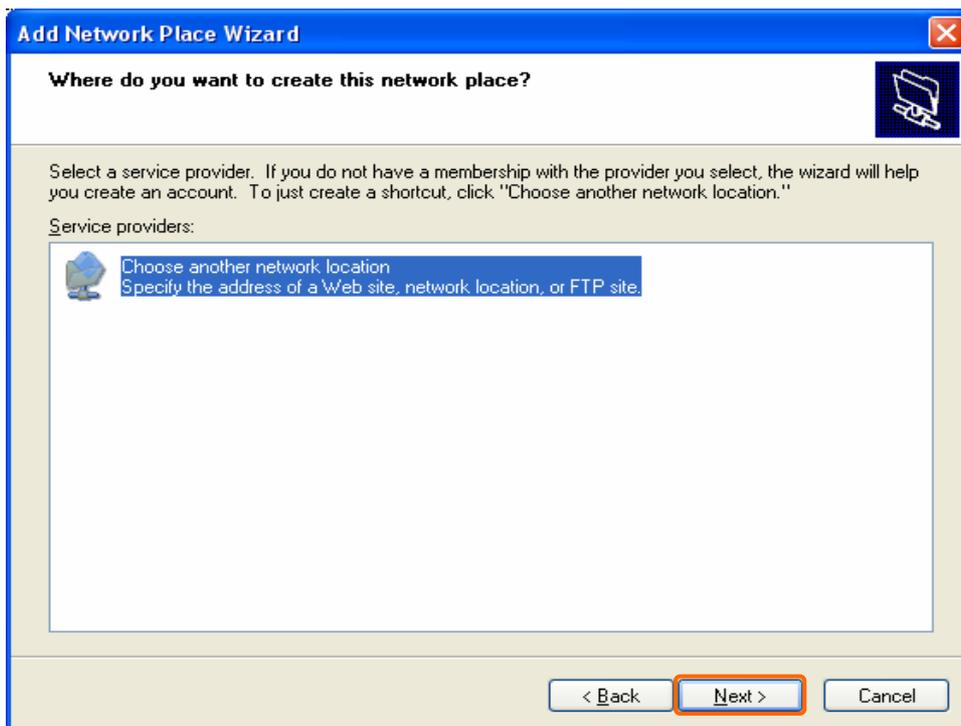
【Step4】

Click on **Next** button.



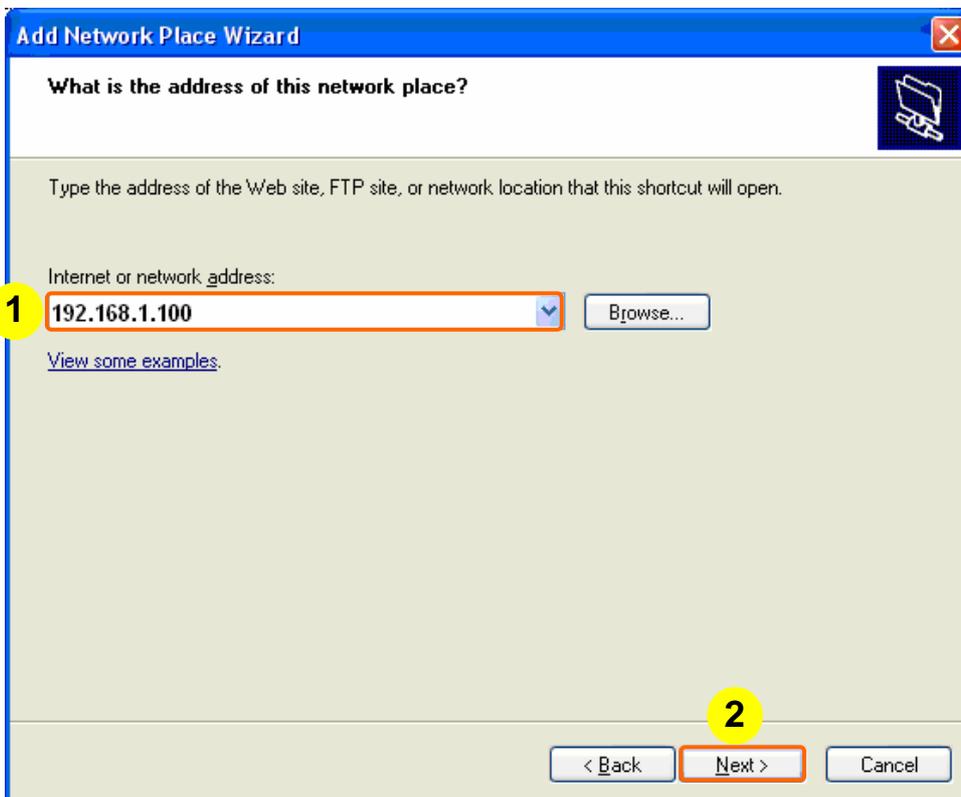
【Step5】

Click on **Next** button.



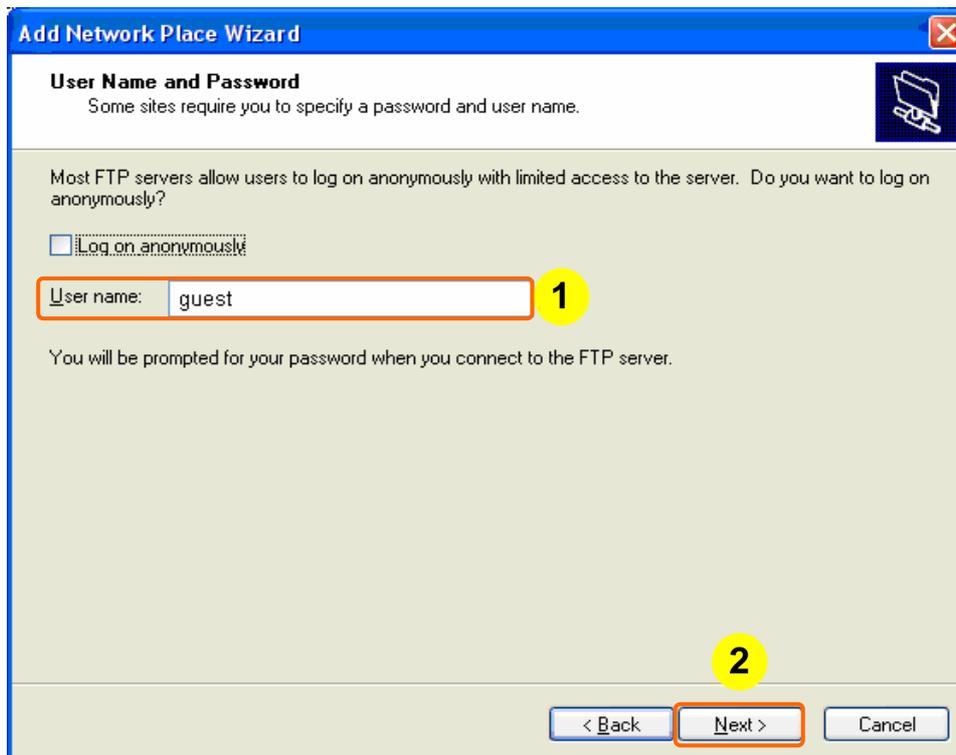
【Step6】

1. Input Navi210W's FTP IP Address, **192.168.1.100** for example.
2. Click on **Next** button.



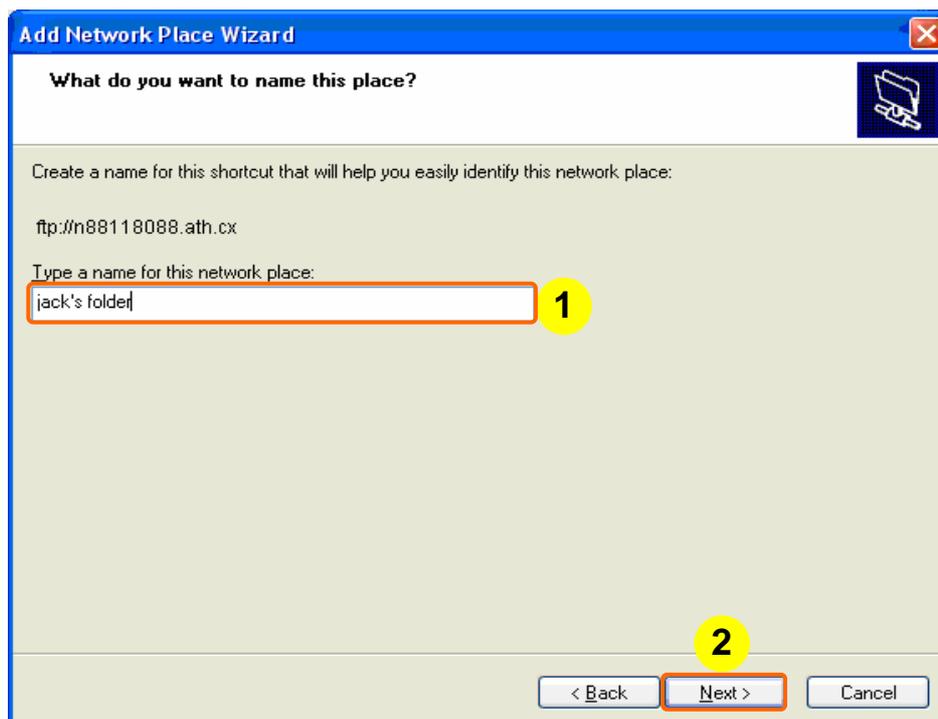
【Step7】

1. Input a user account name set before, **guest** for example.
2. Click on **Next** button.



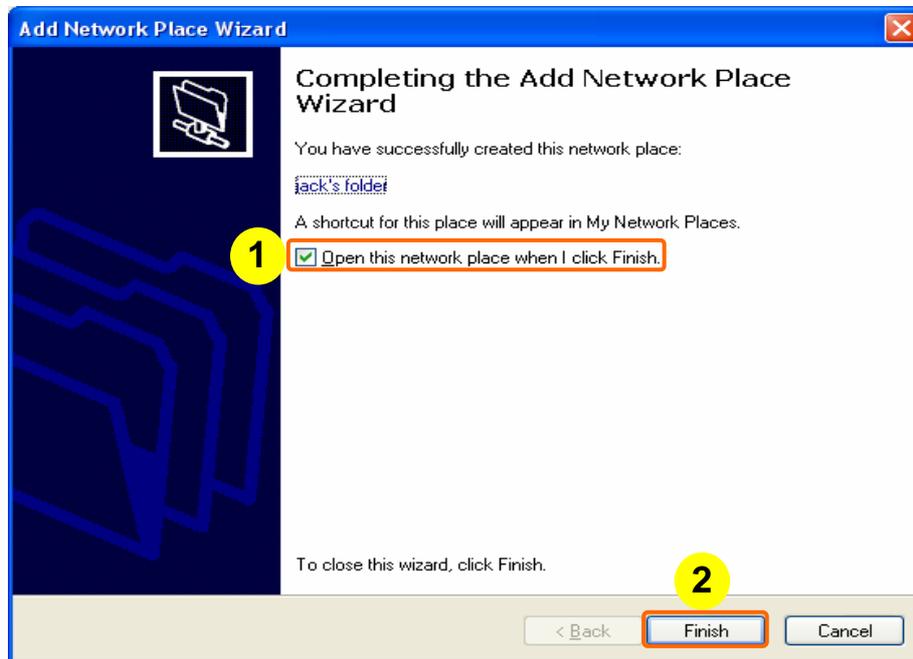
【Step8】

1. Give your network place a name, **jack's folder** for example.
2. Click on **Next** button.



【Step9】

1. Select **Open this network place when I click Finish.**
2. Click on **Finish** button.



【Step10】

The jack's folder appeared. Then, double click on **jack's folder**.



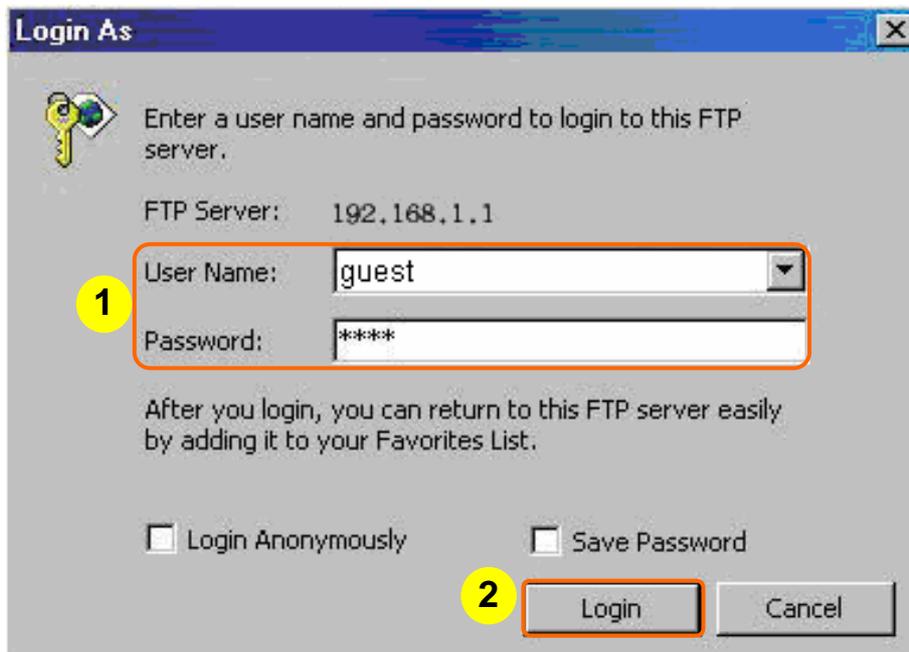
【Step11】

1. User Name & Password

Input **User Name** and **Password** given according to Account User Listed in **【Step1】** .

2. Login

Click on **Login** button.



Notice: Navi210W supports at most two HDDs, and when clients login with correct user name and password, it will appear a two folder page. The two folders represent the two HDDs.

Notice: If you allow a super user to login, the super user can see all anonymous users' folders. In addition, the super one also can add, delete and edit anonymous users' data.

6.1.3 How to easily use FTP from WAN

If you are in the Wide Area Network (WAN) and want to easily use Navi210W's FTP Server, please follow the steps to add a private folder.

【Step1】 (Configure Navi210W)

1. Open IE browser

Open the Navi210W's configuration web page by typing the router's IP address 192.168.1.1 on your web browser.

2. User Name & Password

Input **admin** in **User Name** and **Password** blank fields and then click on **OK** button.

3. Main Menu

Select **FTP Server** in the **USB Application** menu.

4. FTP Server

Please **enable** the FTP Server feature.

5. Enable FTP access from WAN

Select **Yes** to enable FTP Access from WAN.

6. Maximum Users Allowed to Log in:

Give the users' number (at most 5 users can access Internet at a time.)

7. FTP Port:

The FTP Port default value is **21**, but it can be changed.

8. User Name, Password & Max. Login

Input one or more groups of name, password and number of maximum access clients in the blank fields, **guest** and **123456** for example.

Notice: The mentioned examples are reference values.

Notice: Each Password Character you inputted will change to * form.

9. Rights

Give the user access rights of read, write and erase.

10. Add, Delete & Edit

Click on **Add** button to save the inputted information in the User Account List Table. Click on **Delete** to delete a datum in the list table. Click on **Edit** to edit the specified setting in the list table.

11. Apply & Cancel

Click on **Apply** button to complete Navi210's FTP Setup. Click on **Cancel** button to recover from the default value except the records in the user account list table.

Address 1

Enter Network Password

This secure Web Site (at 192.168.1.1) requires you to log on.
Please type the User Name and Password that you use for Navi210W.

User Name

Password

Save this password in your password list

2

- URL Blocking
- Block ICMP Ping
- 3 USB Applications
 - FTP Server
 - Web Camera
 - Print Server
- Wireless
- VPN
 - VPN Passthrough
- System Setup
 - Change Password
 - Time Setup

FTP Server

Navi210W supports an embedded FTP server for USB storage. In this page, you can configure the FTP server and manage accounts for the FTP server.



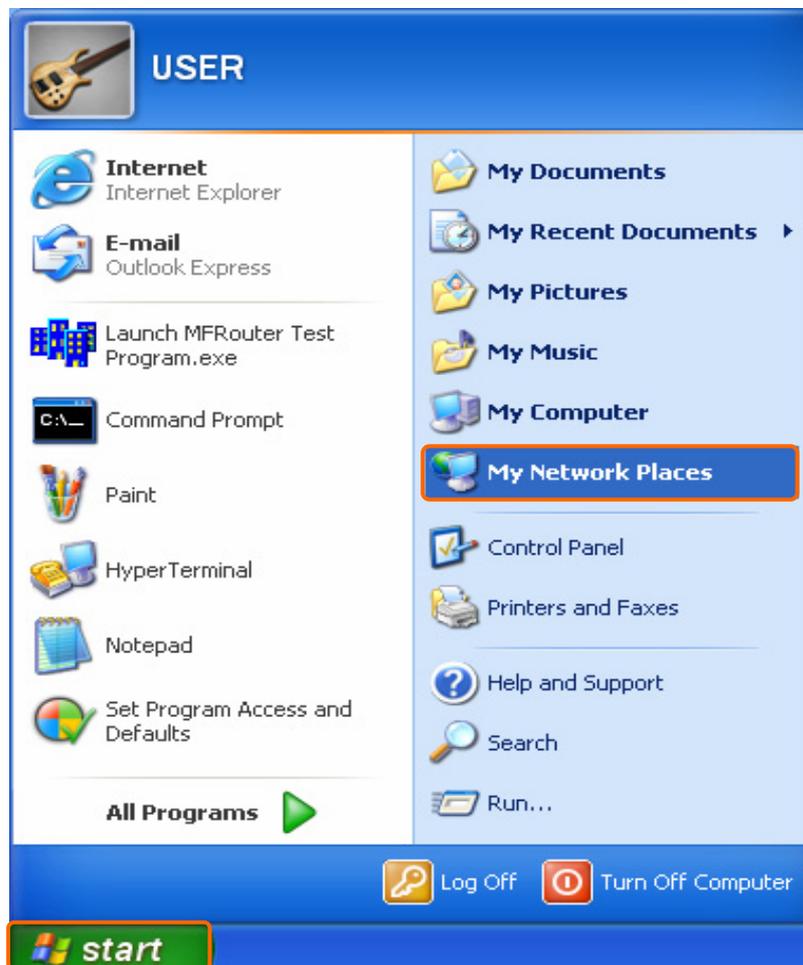
Enable FTP Server	4	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
Allow Anonymous User to Login		<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled <input type="button" value="Login"/>
Allow Super User to Login		<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled <input type="button" value="Login"/>
Enable FTP Access from WAN	5	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
Maximum Users Allowed to Login	6	<input type="text" value="5"/>
FTP Port	7	<input type="text" value="21"/>
		11 <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>

User Account List			9 Add		
8 User Name	Password	Max. Login	Rights		
<input type="text"/>	<input type="text"/>	<input type="text"/>	Read/Write		

User Name	Password	Max. Login	Rights	Delete	Edit
guest	*****	3	RW-	10 Delete	Edit

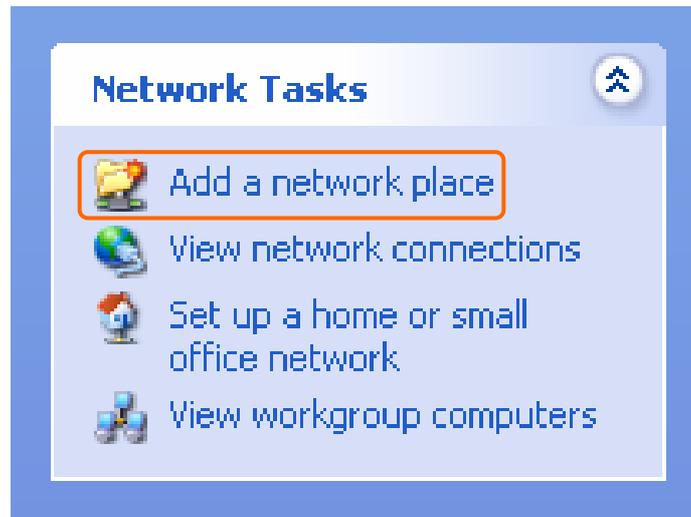
【Step2】 (Windows XP Settings)

Go to **start** > **My Network Places**.



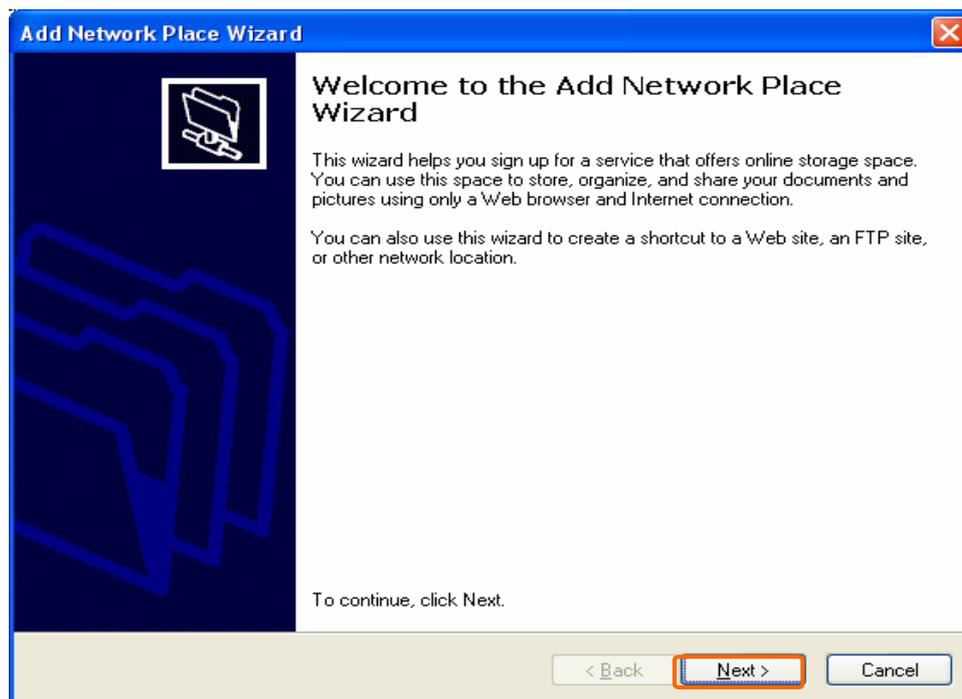
【Step3】

Click on **Add a network place** item.



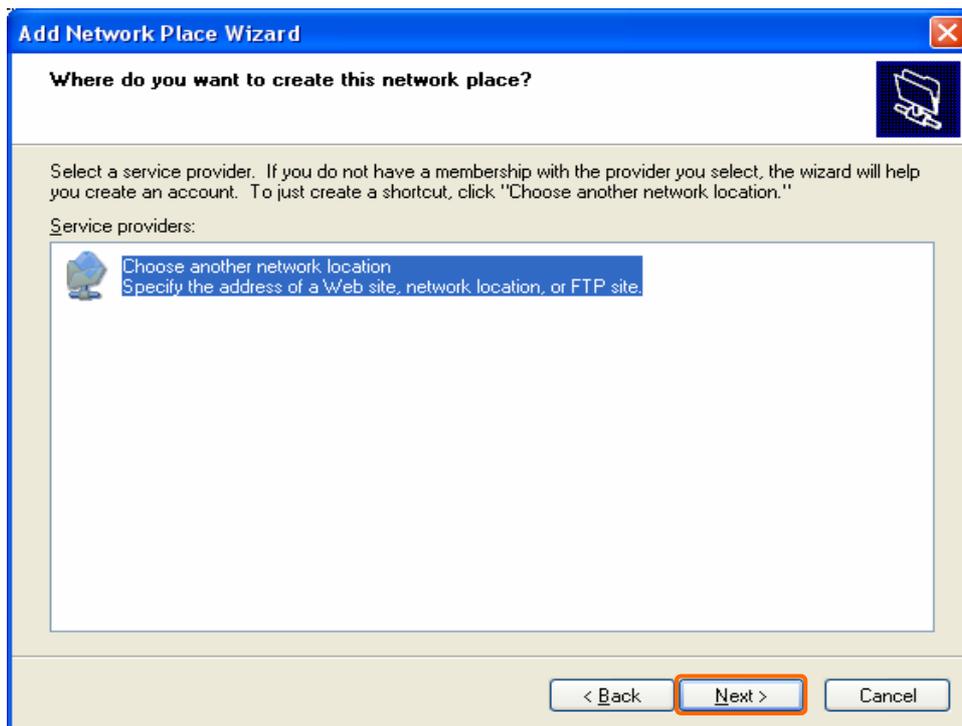
【Step4】

Click on **Next** button.



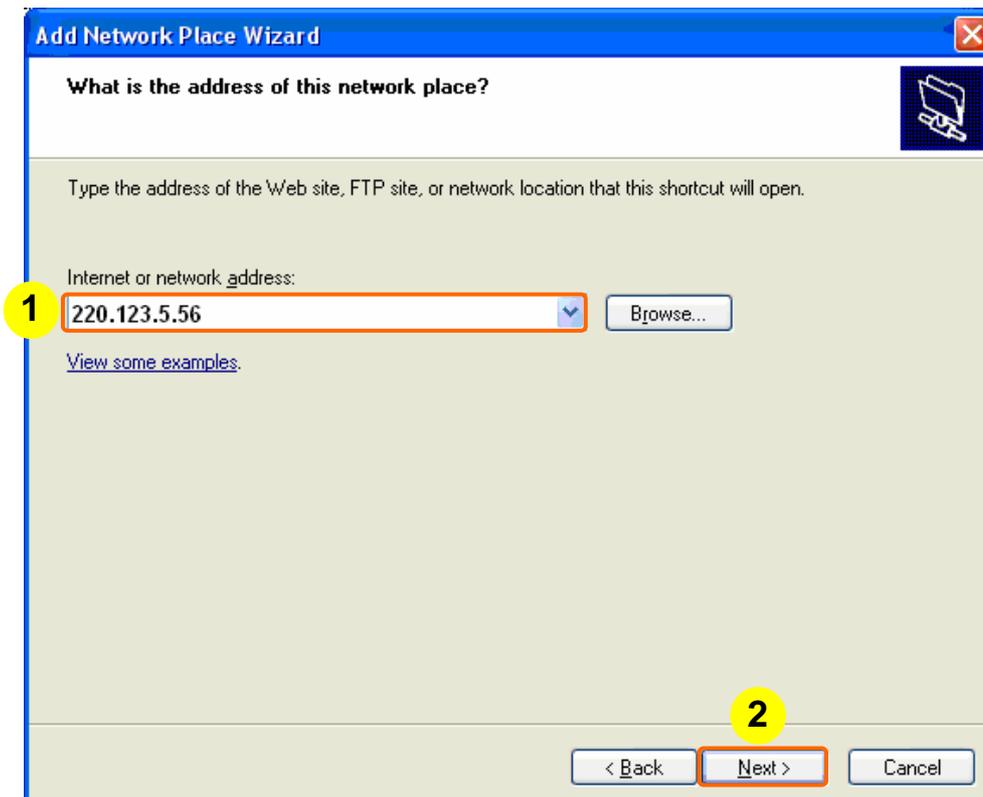
【Step5】

Click on **Next** button.



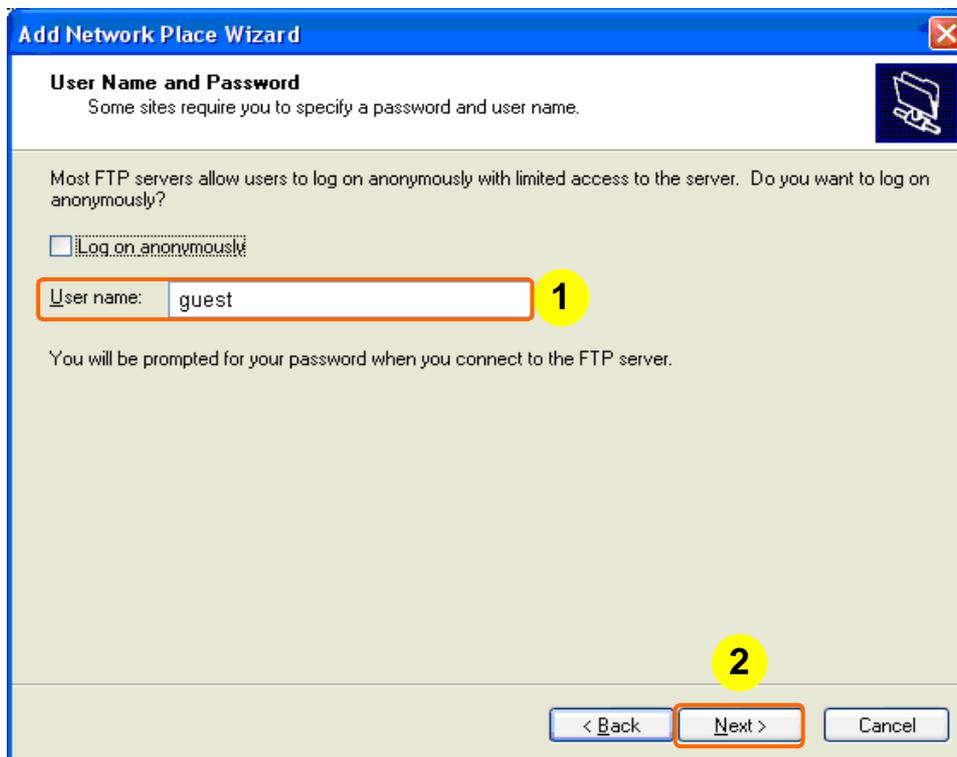
【Step6】

1. Input an IP Address supplied by your ISP, **220.123.5.56** for example. If you don't know, please check with your ISP.
2. Click on **Next** button.



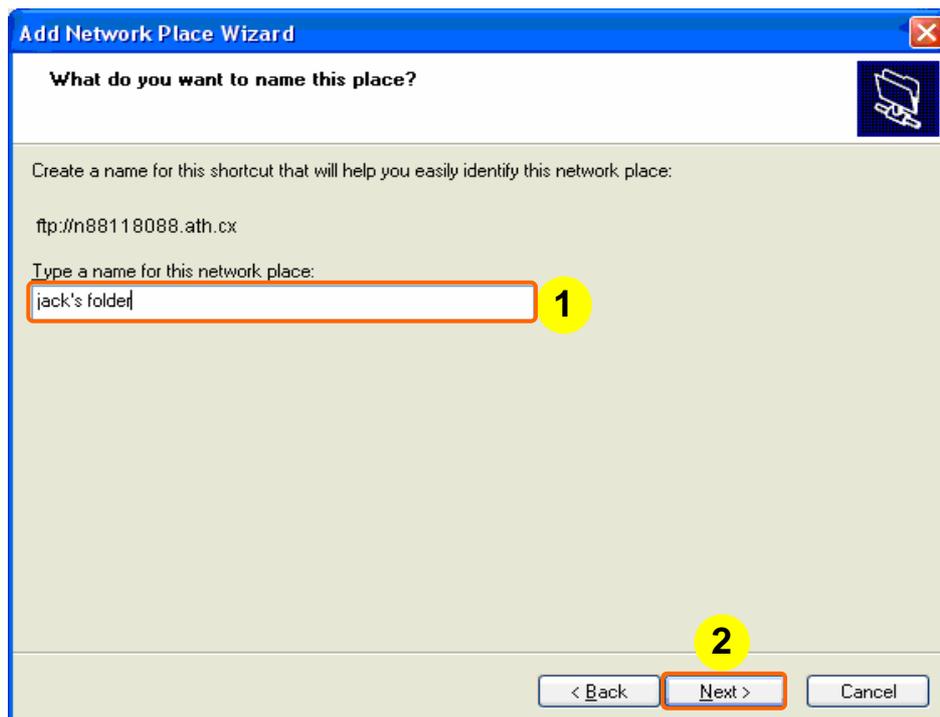
【Step7】

1. Input a user account name set before, **guest** for example.
2. Click on **Next** button.



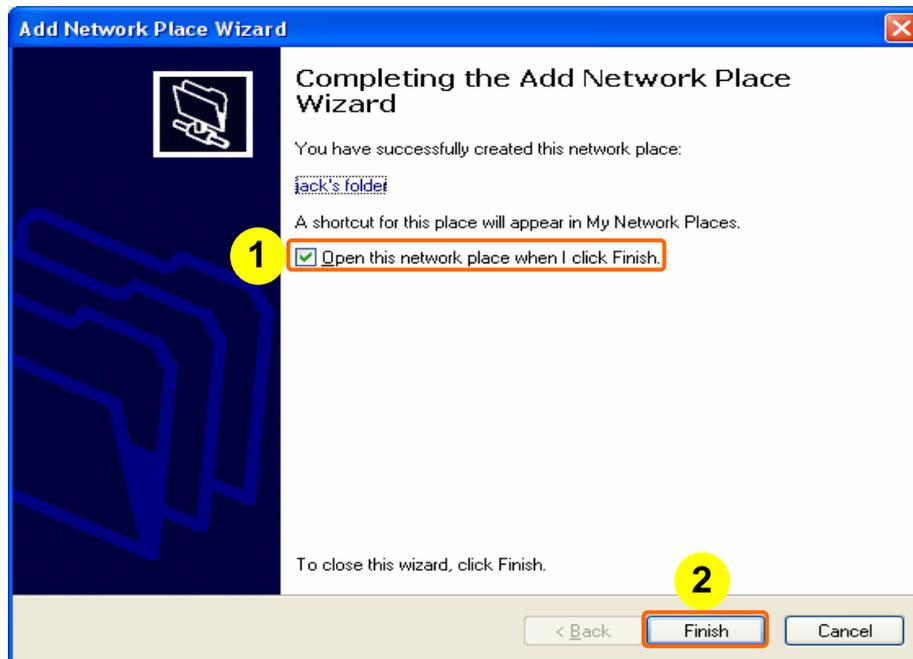
【Step8】

1. Give your network place a name, **jack's folder** for example.
2. Click on **Next** button.



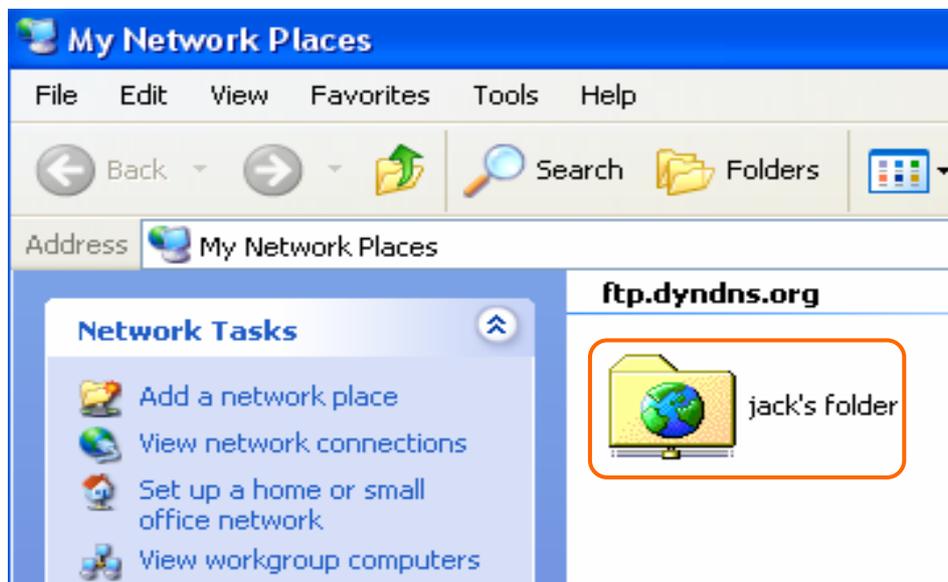
【Step9】

1. Select **Open this network place when I click Finish.**
2. Click on **Finish** button.



【Step10】

The jack's folder appeared. Then, double click on **jack's folder**.



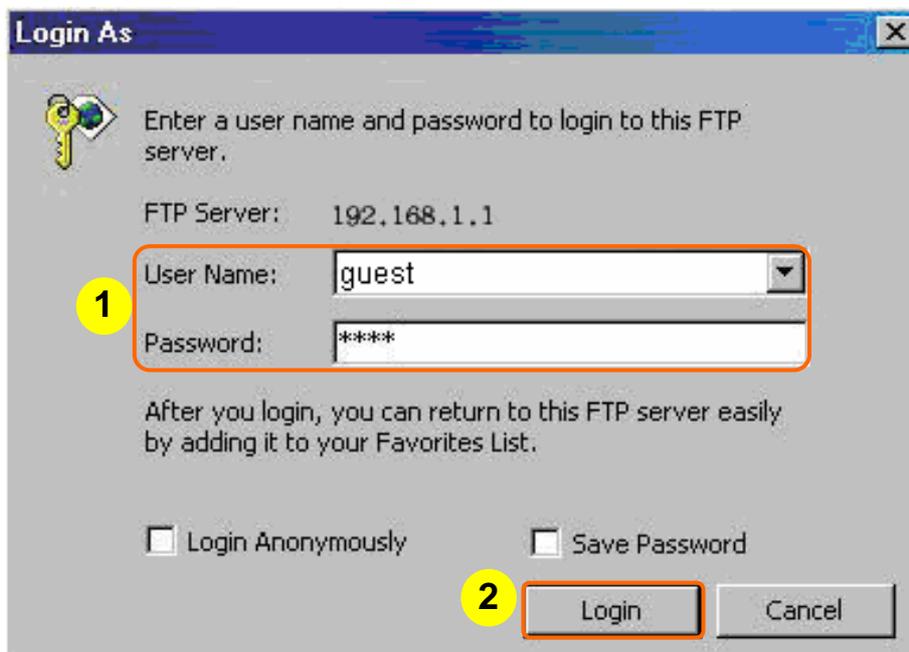
【Step11】

1. User Name & Password

Input **User Name** and **Password** given according to Account User Listed in **【Step1】** .

2. Login

Click on **Login** button.



Notice: Navi210W supports at most two HDDs, and when clients login with correct user name and password, it will appear a two folder page. The two folders represent the two HDDs.

Notice: If you allow a super user to login, the super user can see all anonymous users' folders. In addition, the super one also can add, delete and edit anonymous users' data.

6.2 Webcam Application

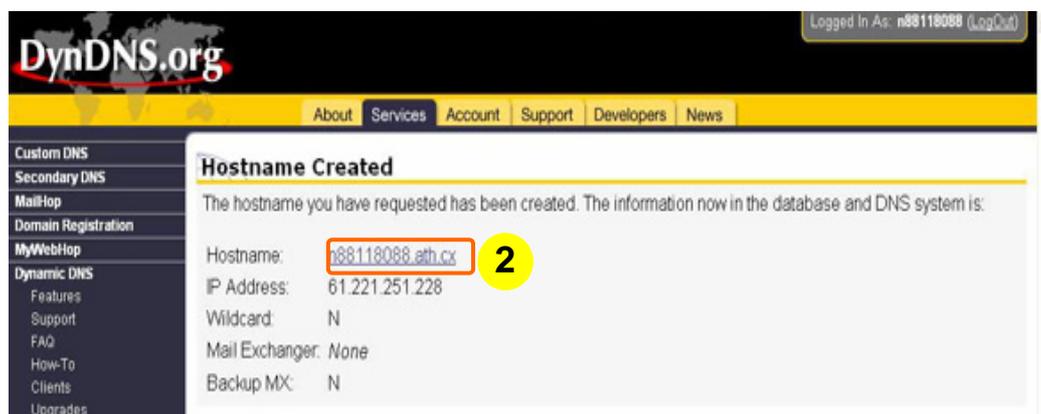
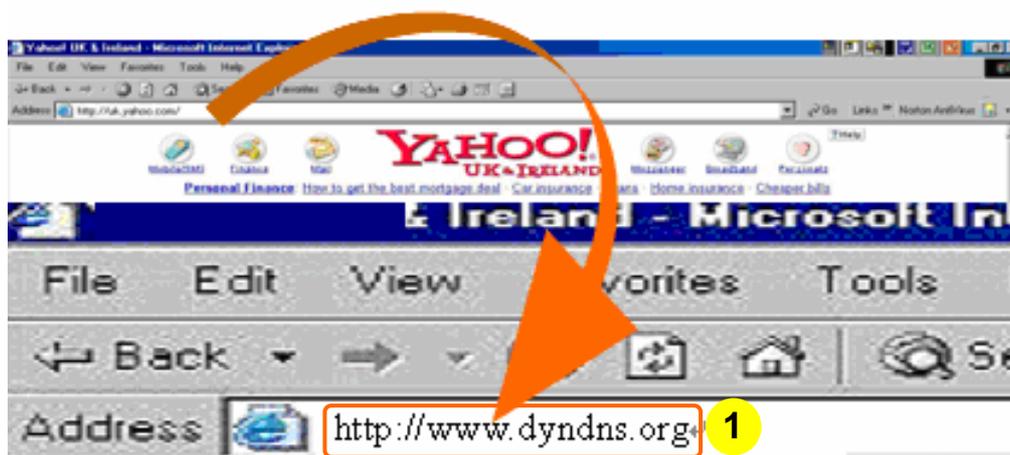
There are five Webcam applications in this part. Those are “How to easily use Webcam with DDNS”, “How to easily use Webcam from LAN”, “How to easily use Webcam from WAN”, “How to easily start Webcam” and “How to store Webcam files”.

6.2.1 How to easily use Webcam with DDNS (Transfer IP Address)

DDNS provides not only to easily memorize the self-IP address, but also to effectively transfer a numeral address in to a meaningful address for solving the usage problems on remote dynamic network. It's usually used on FTP Server, Webcam Monitor and Print Server. In this paragraph the Webcam with DDNS will be introduced. Please follow the simple steps to easily view the Webcam.

【Step1】 (Apply for a DDNS account)

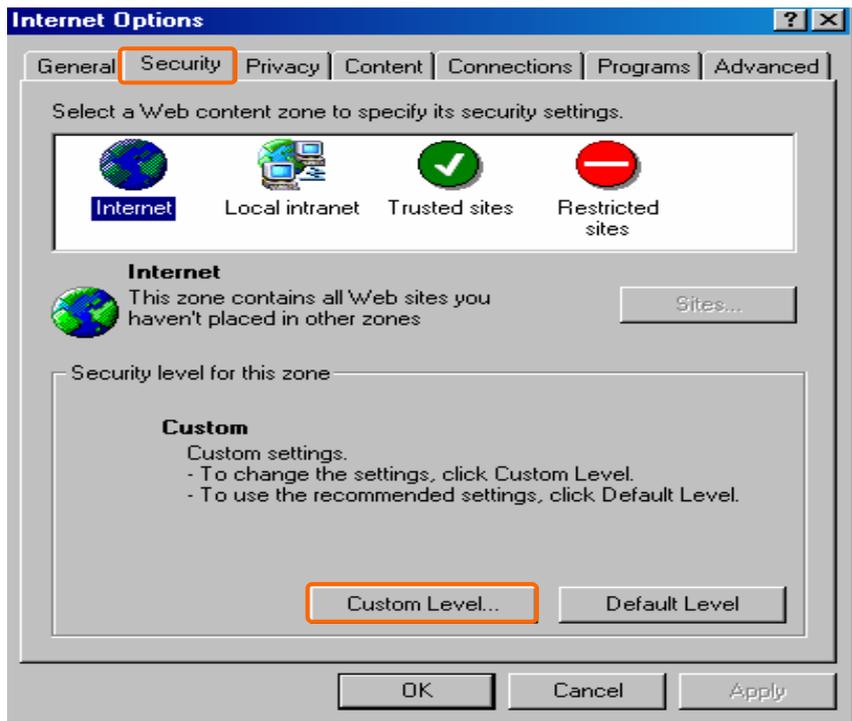
1. Please open an Internet browser, and go to DDNS website to apply for a free account, such as <http://www.dyndns.org>.
2. Follow the DDNS applying steps in Chapter 4. You will get a free hostname as your account.



【Step2】 (Configure Internet Browser)

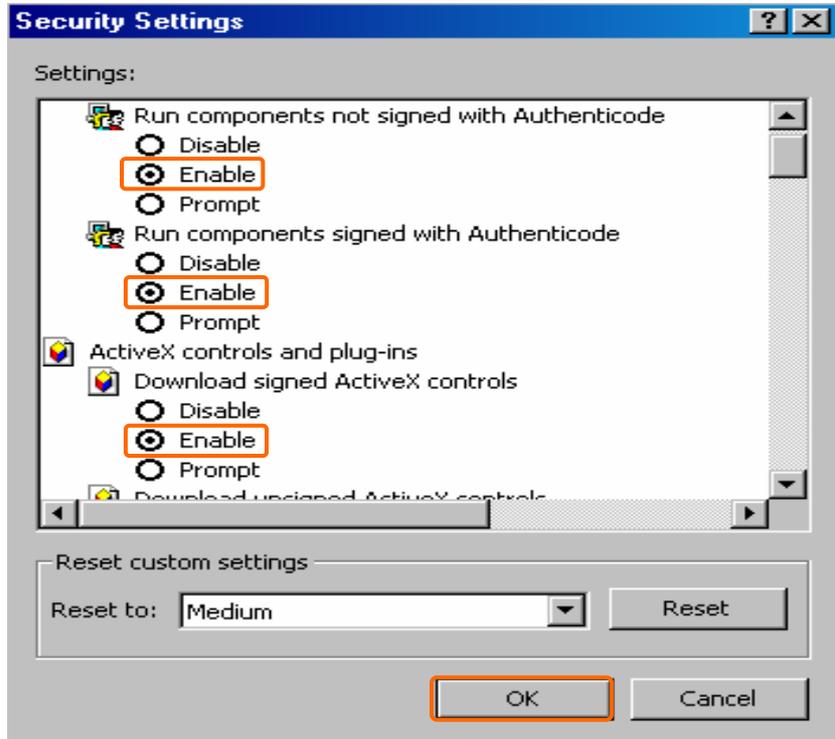
Please follow the steps of **3.6.2.1 IE Browser's Settings**. Open Internet browser > Select **Tools** > Select **Internet Options** > Select **Security** >

Select **Custom Level**.



【Step3】

Select these three **Enables**. Then, click on **OK** button.



【Step4】 (Configure Navi210W)

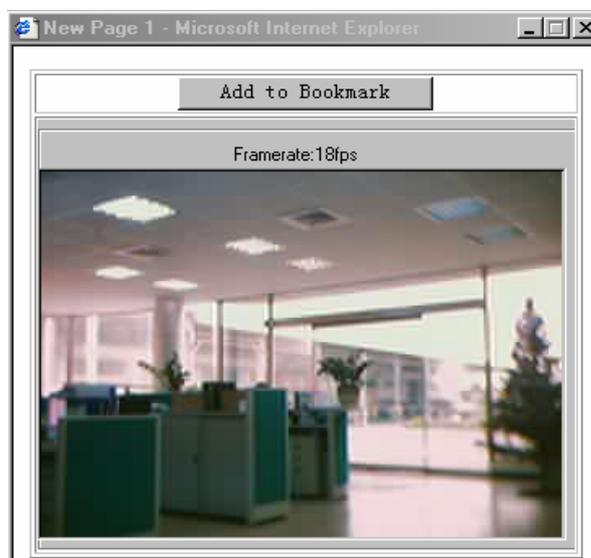
Get into Navi210W Main Menu. Select **Web Camera** > Enabled **Web Camera** > Select **ActiveX Mode** > Select **Yes to allow access from WAN** > Click on **Apply** button.

Enable Web Camera	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
Web Camera Mode	ActiveX Mode <input type="button" value="preview"/>
Image Size	320*240 <input type="button" value="v"/>
Access from WAN	Yes <input type="button" value="v"/>
Connection Port	4940 <input type="text"/>

【Step5】 (View Webcam)

1. Open an Internet Browser. Input **http://your applied DDNS Hostname/webcam.asp** in the website blank field, such as **http://n88118088.ath.cx/webcam.asp**. Then, click on **Enter**.
2. After inputting **admin** in User Name and Password blank fields, please click on **OK** button. You will see what the Webcam monitoring is.



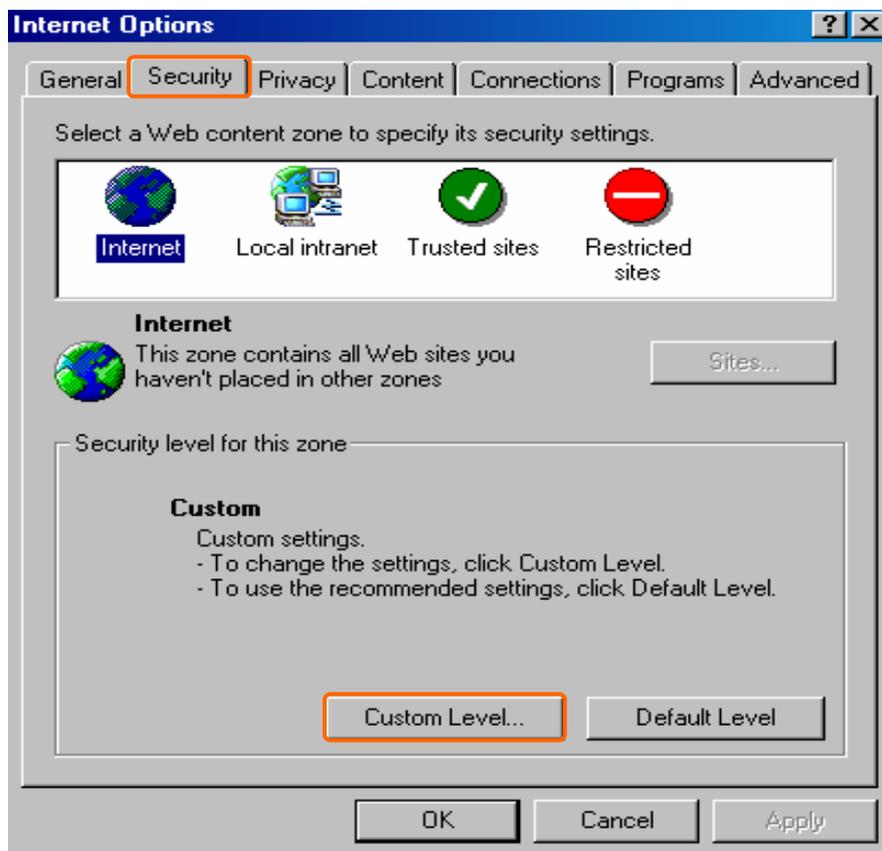
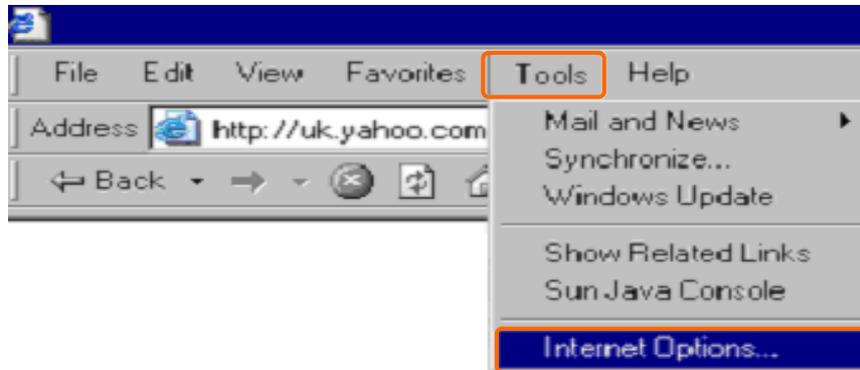


6.2.2 How to easily use Webcam from LAN

If you are in the local area network and want to use Webcam, please configure the Internet settings in your OS (Operation System) and Navi210W's settings and then open IE browser for using. For more detail settings, please follow the steps below.

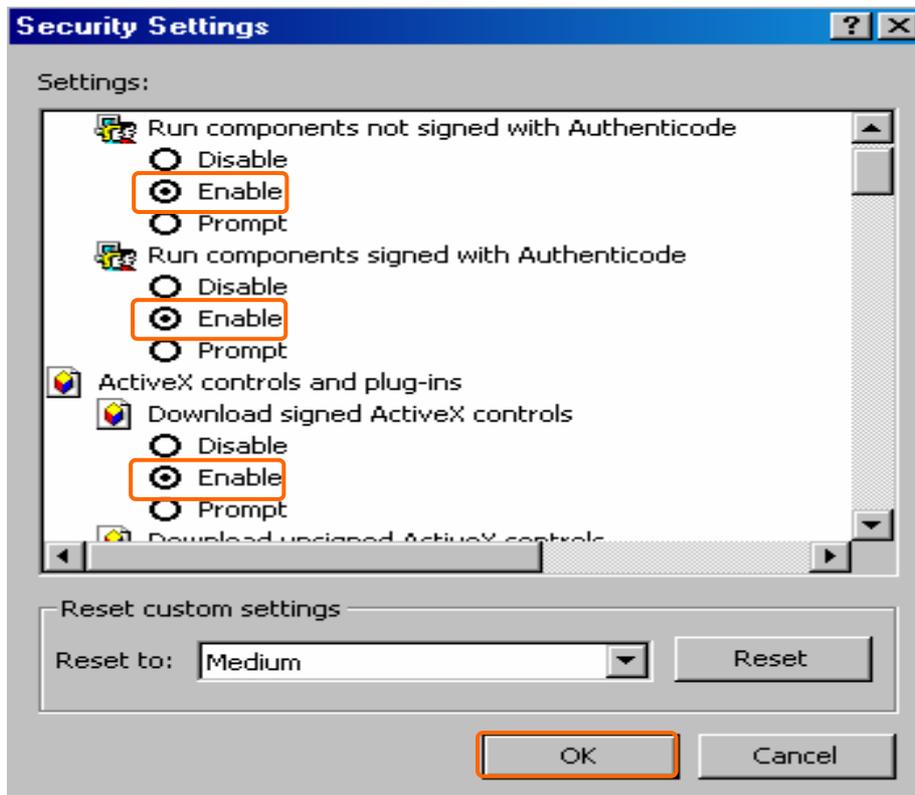
【Step1】

Please follow the steps of **3.6.2.1 IE Browser's Settings**. Open IE browser > Select **Tools** > Select **Internet Options** > Select **Security** > Select **Custom Level**.



【Step2】

Select these three **Enables**. Then, click on **OK** button.



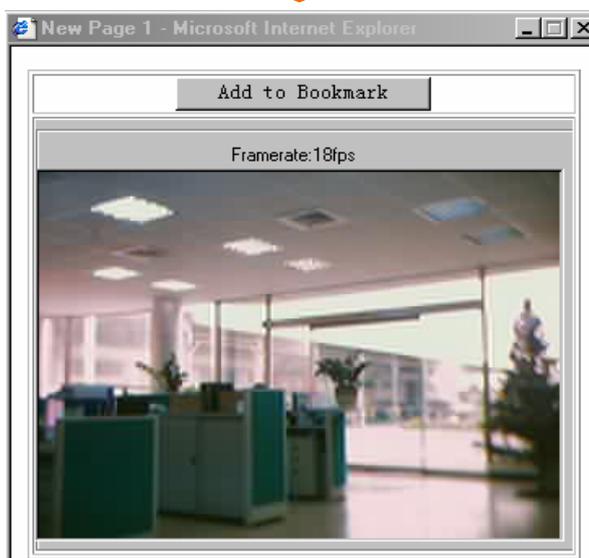
【Step3】 (Configure Navi210W)

Get into Navi210W Main Menu. Select **Web Camera** > Enabled **Web Camera** > Select **ActiveX Mode** > Select **Yes to allow access from WAN** > Click on **Apply** button.



【Step4】 (View Webcam)

1. Open IE Browser, and input **http://your Router's LAN IP Address/webcam.asp** in the website blank field, such as **http://192.168.1.1/webcam.asp**. Then, click on **Enter**.
2. After inputting **admin** in User Name and Password blank fields, please click on **OK** button. You will see what the Webcam monitoring is.



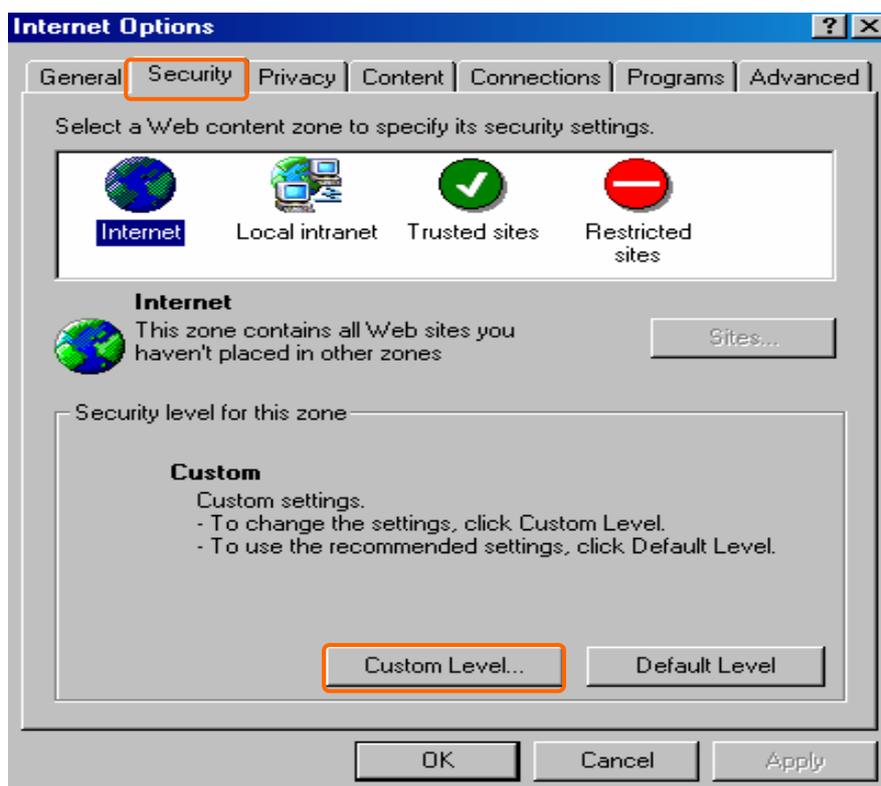
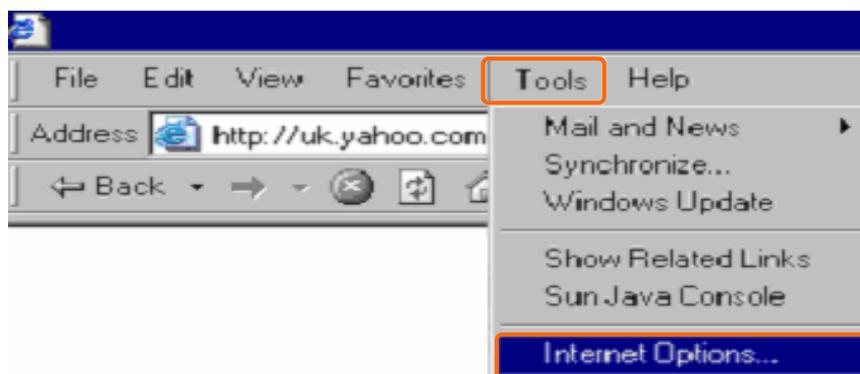
6.2.3 How to easily use Webcam from WAN

If you are in the wide area network and want to use Webcam, please configure the Internet settings in your OS (Operation System) and Navi210W's settings and then open IE browser for using. For more detail settings, please follow the steps below.

Notice: Please make sure that your WAN IP Address is static. Then, the following settings are meaningful. On the contrary, your following settings are in vain.

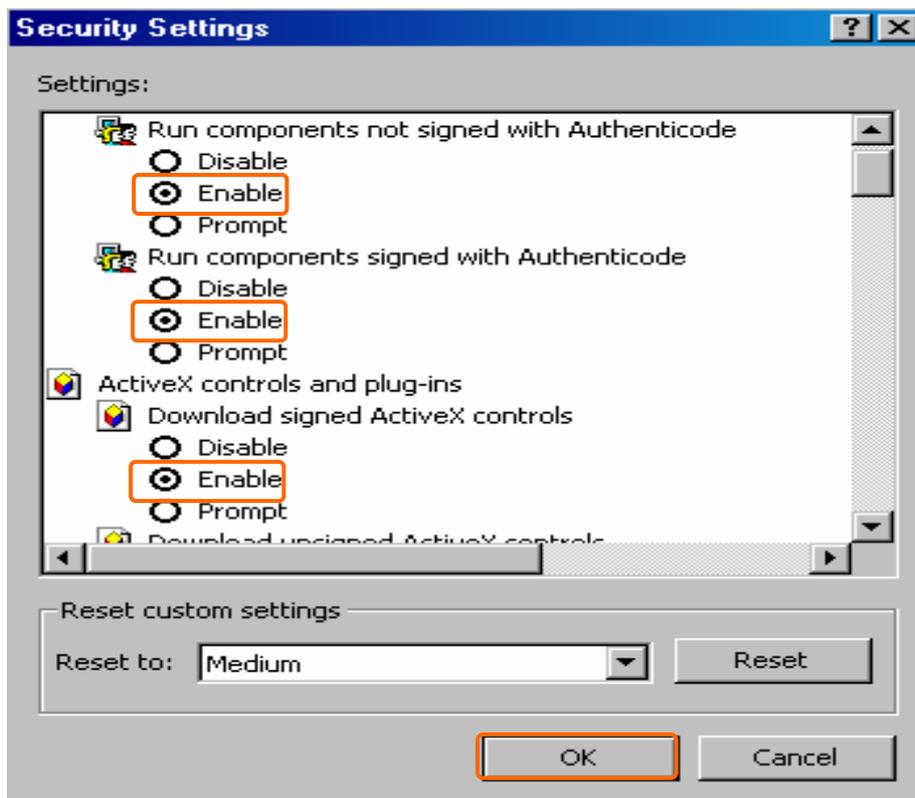
【Step1】

Please follow the steps of **3.6.2.1 IE Browser's Settings**. Open Internet browser > Select **Tools** > Select **Internet Options** > Select **Security** > Select **Custom Level**.



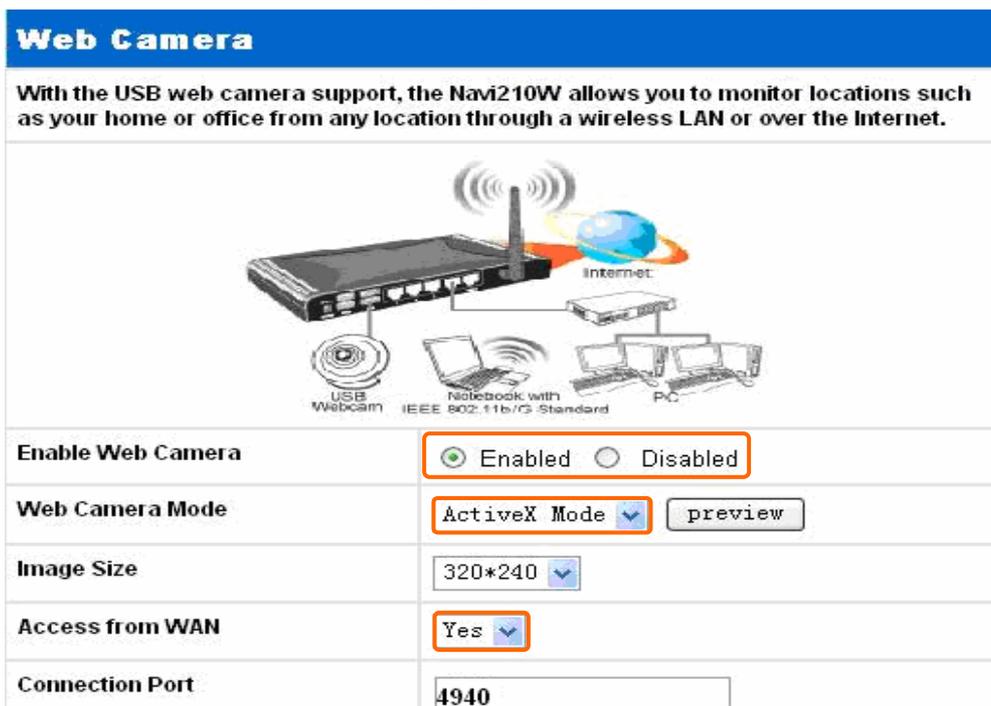
【Step2】

Select these three **Enables**. Then, click on **OK** button.



【Step3】 (Configure Navi210W)

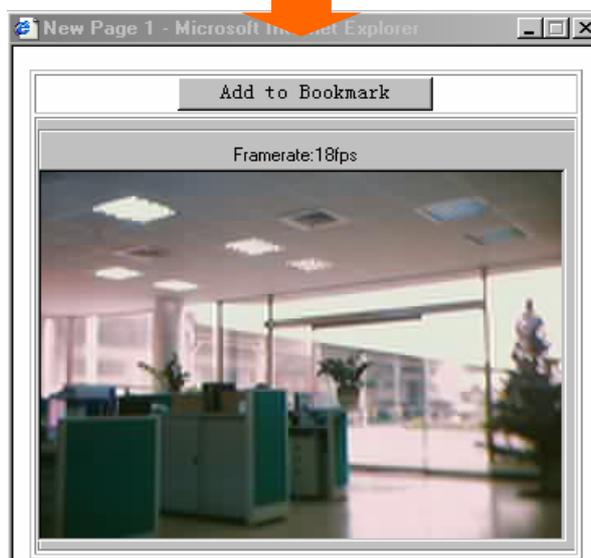
First, you have to access Navi210W Main Menu. Select **Web Camera** > Enabled **Web Camera** > Select **ActiveX Mode** > Select **Yes to allow access from WAN** > Click on **Apply** button.





【Step4】 (View Webcam)

Open an Internet Browser. Input **http://your IP Address supplied by ISP (WAN IP Address)/webcam.asp** in the website blank field, such as **http://220.123.5.56/webcam.asp**. Then, click on **Enter**. After inputting **admin** in User Name and Password blank fields, please click on **OK** button. You will see what the Webcam monitoring is.



6.2.4 How to easily start Webcam (Bookmark for Access Webcam)

【Step1】 (Set Bookmark Function)

Set "Bookmark" function. Please follow the instructions below.

1. Address

Open **IE browser** and then input

http://n88118088.ath.cx/webcam.asp (DDNS Hostname Access),

http://192.168.1.1/webcam.asp (LAN IP Address Access), or

http://220.123.5.56/webcam.asp (Static WAN IP Address Access) for example. Then, press **Enter**. The monitor screen will appear immediately.

Notice: These mentioned Addresses are not optional. It's according to where you are, such as If you are in the WAN side and have a dynamic IP Address, DDNS is the best way to choose. If you are in the LAN side, just use the Router's LAN IP Address for application. If you are in the WAN side and have a static IP Address supplied by ISP, please use WAN IP Address for application.

2. Login Screen

Input **admin** in the User Name and Password blank fields then click on **OK** button.

3. Bookmark

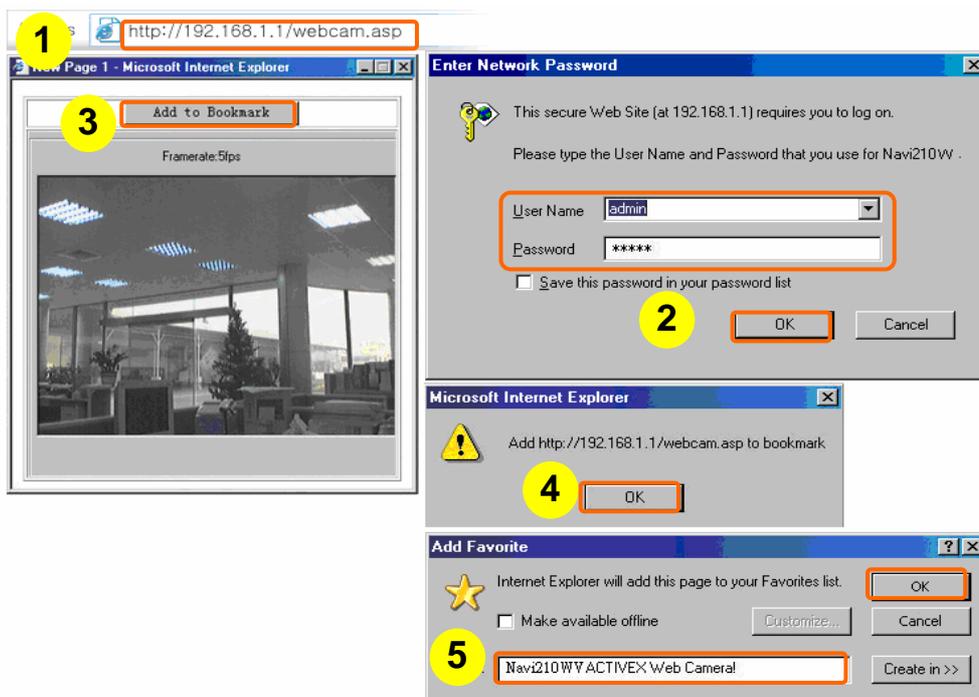
Click on **Add to Bookmark** button.

4. Confirm the Bookmark

Click on **OK** button.

5. Add Favorites

Use the name Navi210W provides or Give a name your want, and then click on **OK** button.



【Step2】 (Use Bookmark Function)

Use "Bookmark" function to access your webcam in an easy way. Please follow the instructions below.

1. Open IE browser

Double click on **Internet Explore icon** on the desktop.

2. Favorite button

Click on **Favorite** button. A Menu will appear on the left side.

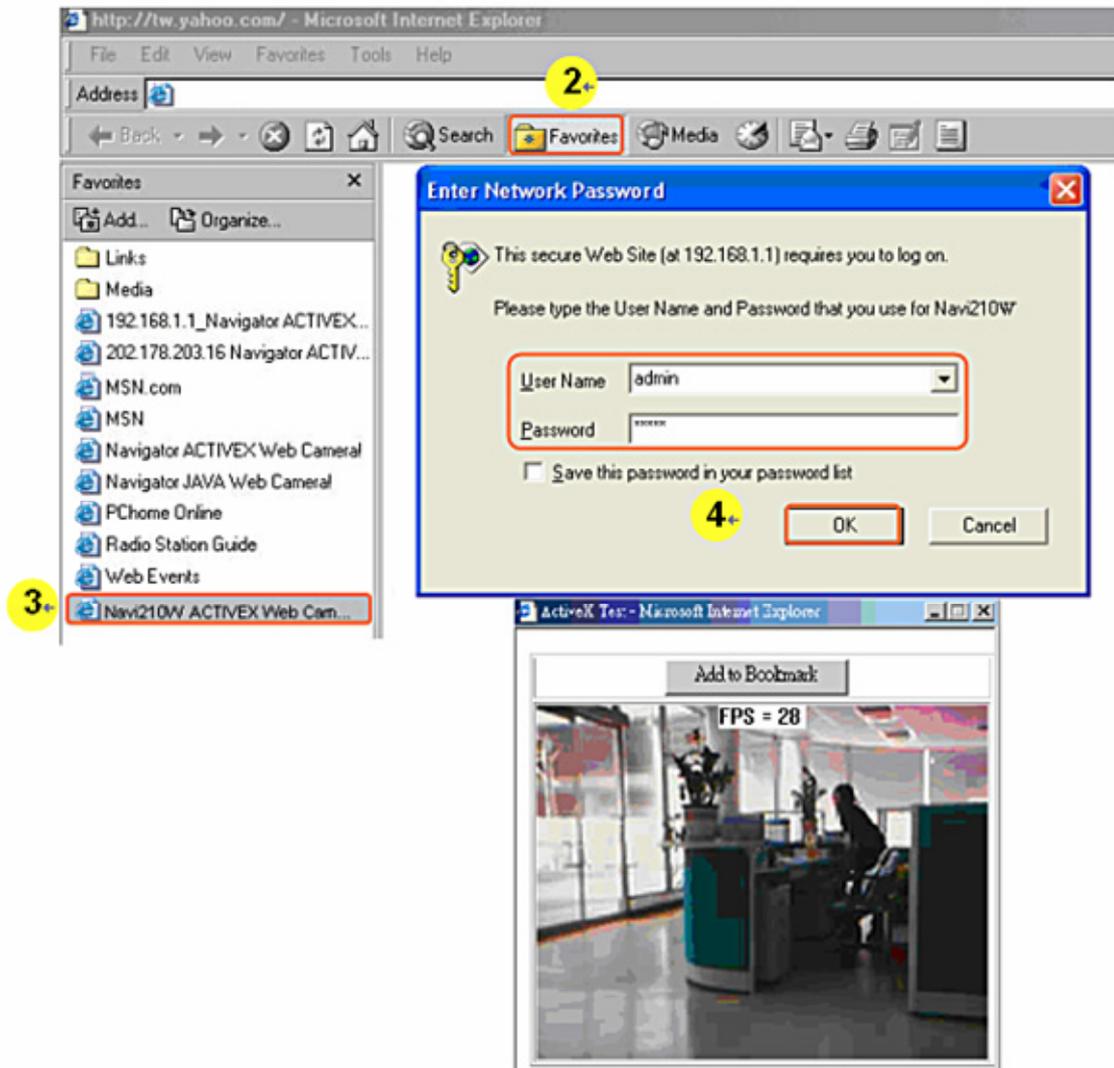
3. Added item

Click on the added **Navi210W ACTIVEX Web Camera** item.

4. Login Screen

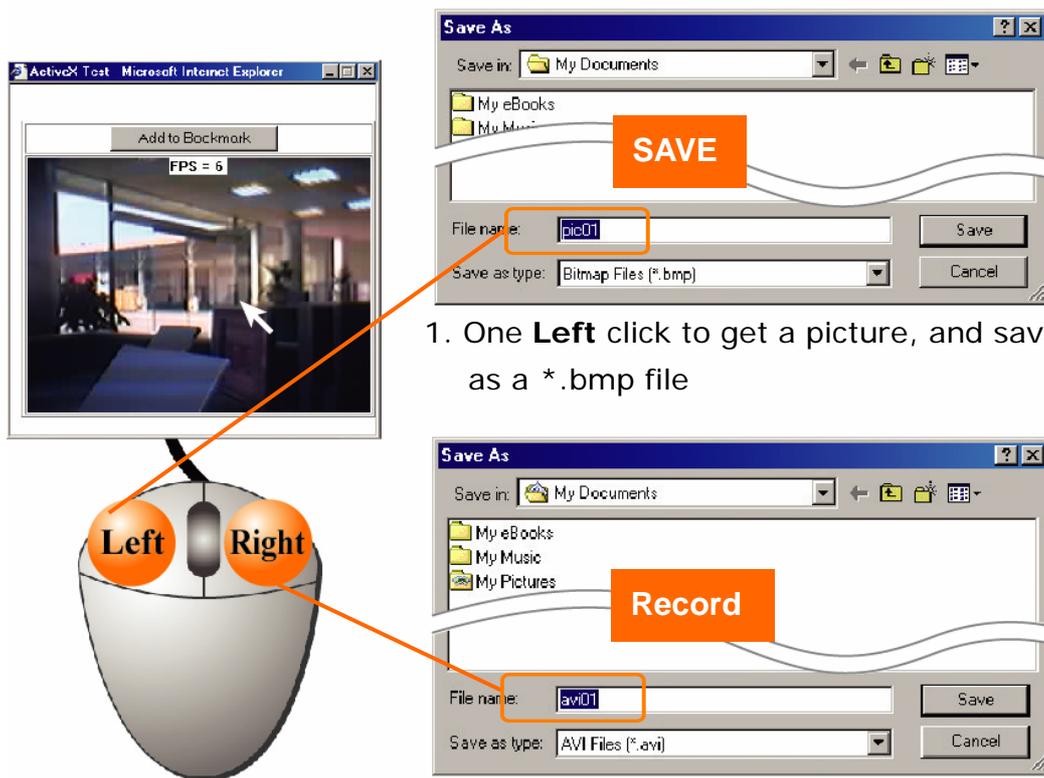
Input **admin** in the User Name and Password blank fields and then click on **OK** button. Then, the monitor screen will appear.





6.2.5 How to store Webcam files

In order to store files, please move your cursor on the active window and click on the right or left buttons.



1. One **Left** click to get a picture, and save as a *.bmp file

2. One **Right** click to start recording, and record as a *.avi file. One more click to stop it.

6.3 Printer Application

There are three Printer applications in this part. Those are “How to easily use Printer with DDNS”, “How to easily use Printer from LAN” and “How to easily use Printer from WAN”.

6.3.1 How to easily use Printer with DDNS

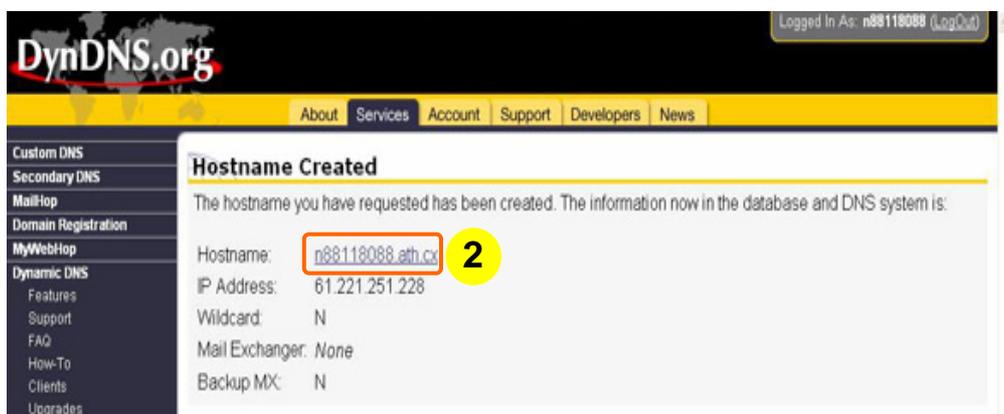
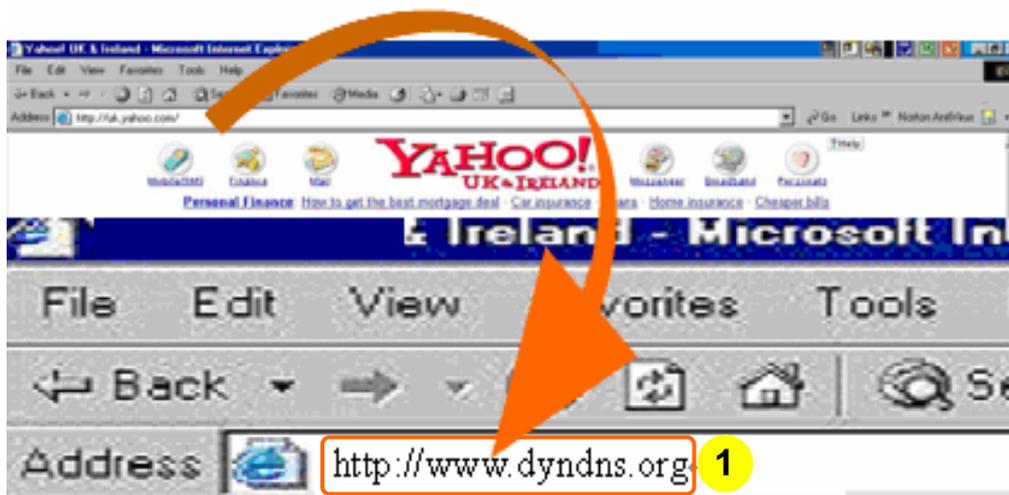
If you have to remotely (even when you are in the foreign country) use the network Printer from WAN, you should apply for a DDNS account. After applying for a hostname from DDNS website <http://www.dyndns.org> and completing the following steps below, you can easily remote use Print Server. (For more DDNS Settings, please check Chapter 4: DDNS Settings)

【Step1】 (Apply for a DDNS account)

1. Please open IE browser, and go to DDNS website to apply for a free account, such as <http://www.dyndns.org>.
2. Follow the DDNS applying steps in Chapter 4. You will get a free hostname

as your account.

If you have to remotely (even when you are in the foreign country) use the network Printer from WAN, you should apply for a DDNS account. After applying for a hostname from DDNS website <http://www.dyndns.org> and completing the following steps below, you can easily remote use Print Server. (For more DDNS Settings, please check Chapter 4: DDNS Settings)



【Step2】 (Access from WAN with a DDNS hostname)

To enable the following settings, users can access your Printer Server from WAN with a DDNS hostname.

1. IP Config & Print Server

Select **Print Server** under the **USB Application** menu. The screen of Printer Setup will appear. Please follow the instructions to configure this function.

2. Enable Print Server

Select **Enabled** to start or close Print Server.

3. Enable Printer Access from WAN

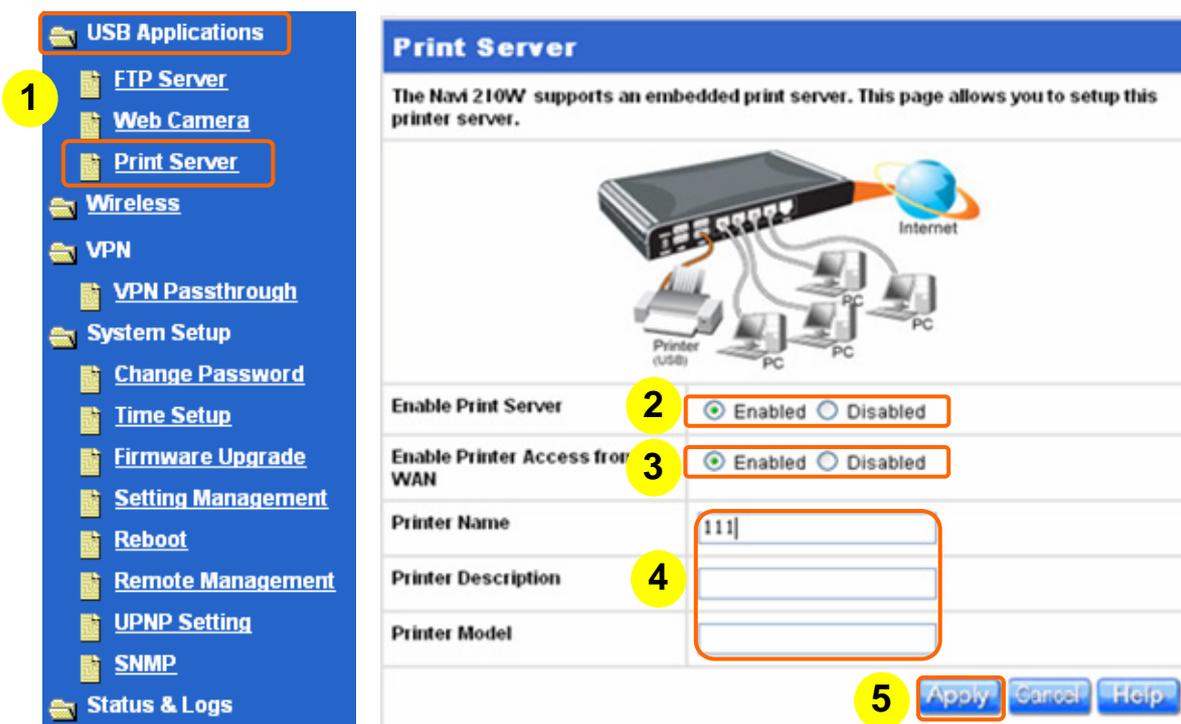
Select **Enabled** to allow or disallow client access from WAN.

4. Printer Name, Description & Model

Input a **Printer Name** "111" for example, **Description** and **Model** in the blank fields.

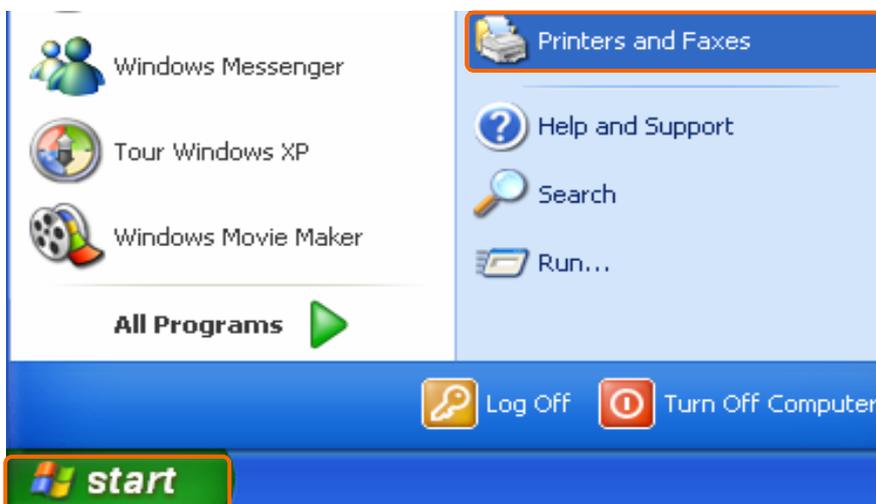
5. Apply, Cancel & Help

Click on **Apply** button to save the settings. If you want to clean the settings, please click on **Cancel** button. The functional button, **Cancel** can take effect after clicking on **Apply** button. If you don't know how to do it, please click on **Help** button for more information.



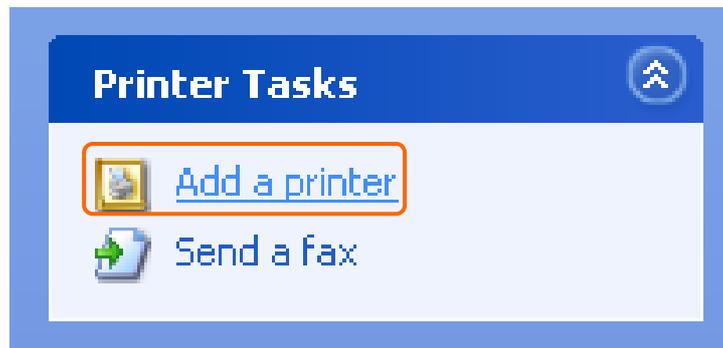
【Step3】 (Windows XP Settings)

Go to **start > Printers and Faxes**.



【Step4】

Click on **Add a printer** item.



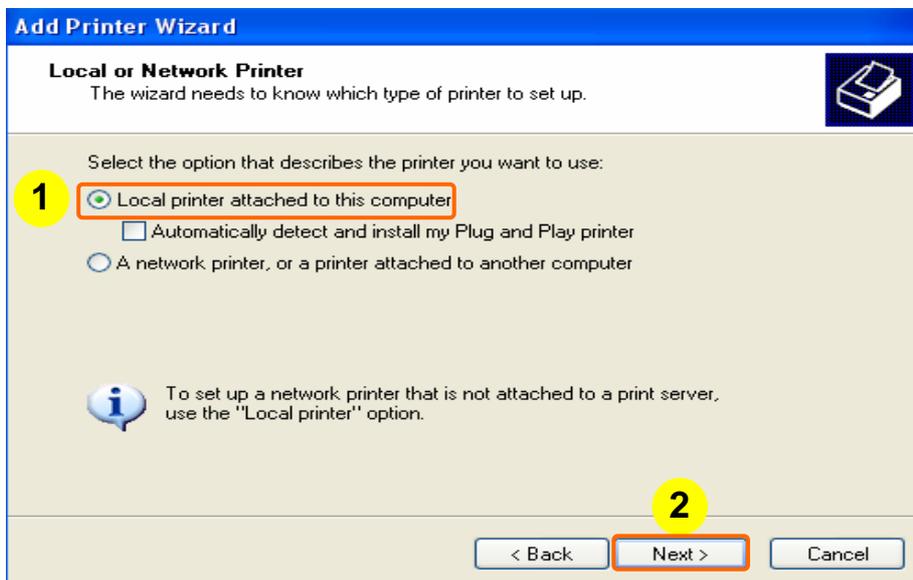
【Step5】

Click on **Next** button.



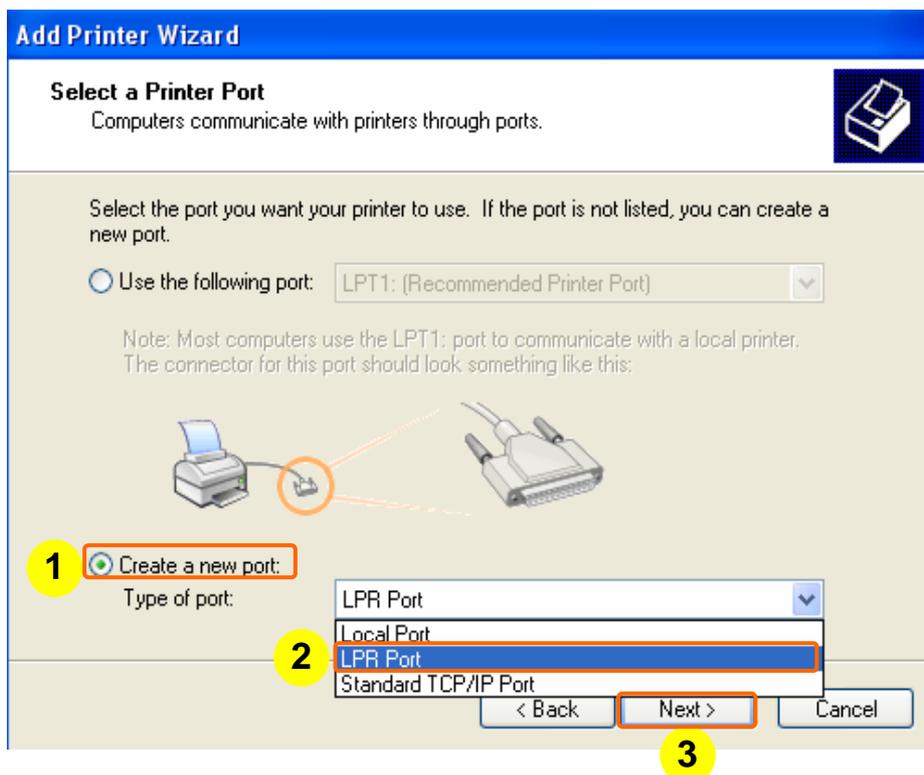
【Step6】

1. Select **Local printer attached to this computer.**
2. Click on **Next** button.



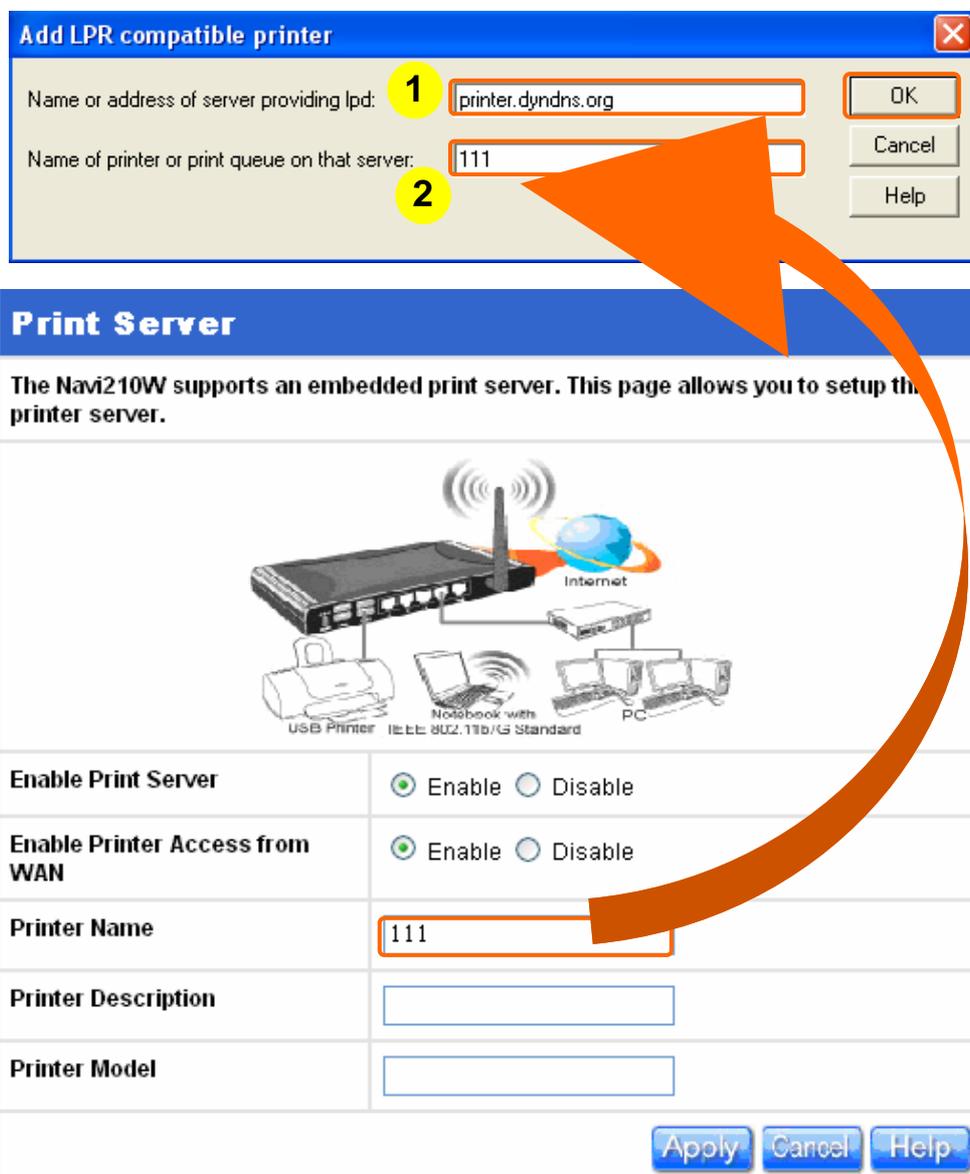
【Step7】

1. Select **Create a new port.**
2. Select **LPR Port**
3. Click on **Next** button.



【Step8】

1. Input your DDNS hostname **printer.dyndns.org** for example in the Name or address of server providing lpd.
2. Input the name of printer the same as USB Printer Name **111** for example in Navi210W Printer Server's setting and then click on **OK** button.



【Step9】

1. Manufacturer

Select your printer's manufacturer **HP** for example.

2. Printers

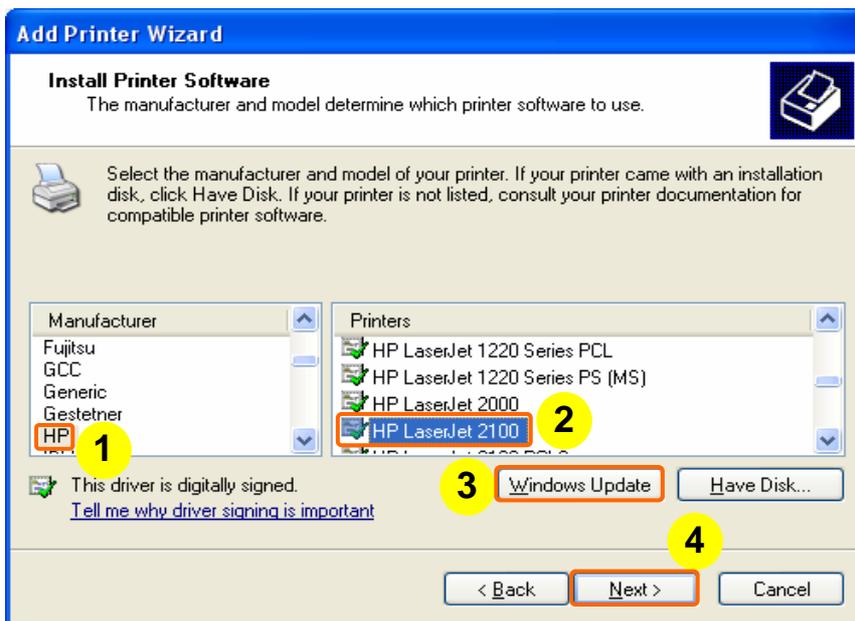
Select your printer's model **hp LaserJet 2100** for example.

3. Have Disk...

If yours doesn't be listed on, please click **Have Disk...** to get yours from CD or floppy disc.

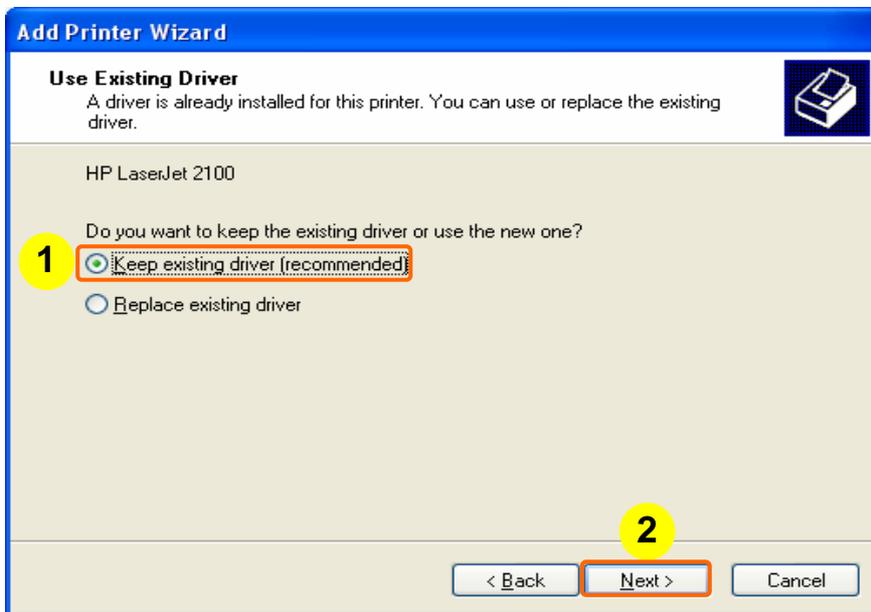
4. Next

Click on **Next** button.



【Step10】

1. Select **Keep existing driver (recommended)**.
2. Click on **Next** button.



【Step11】

1. Printer name:

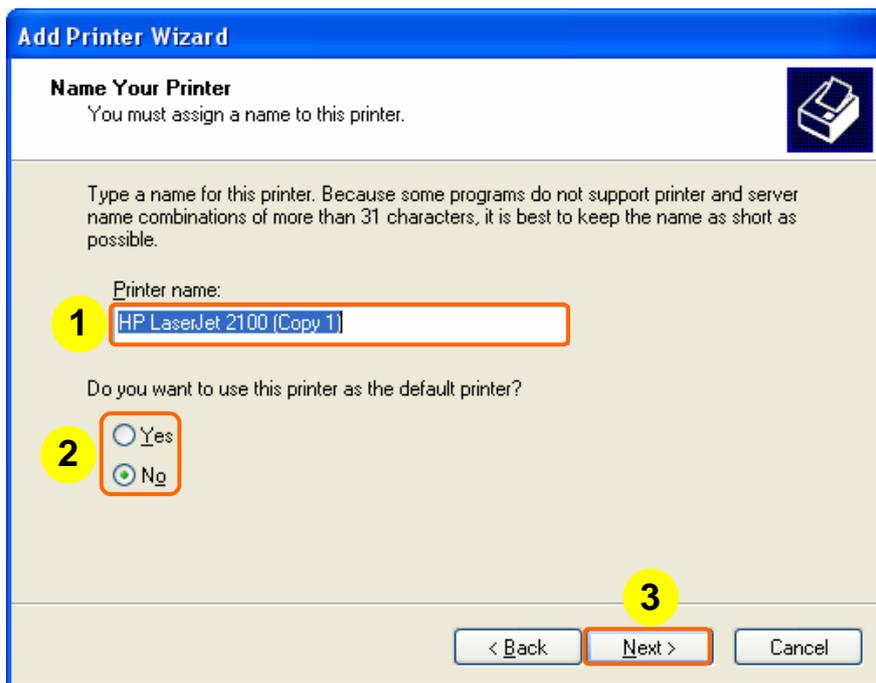
The printer name will appear automatically, or you can give one.

2. Default Printer?

Select **Yes** or **No** to use this printer as the default printer or not.

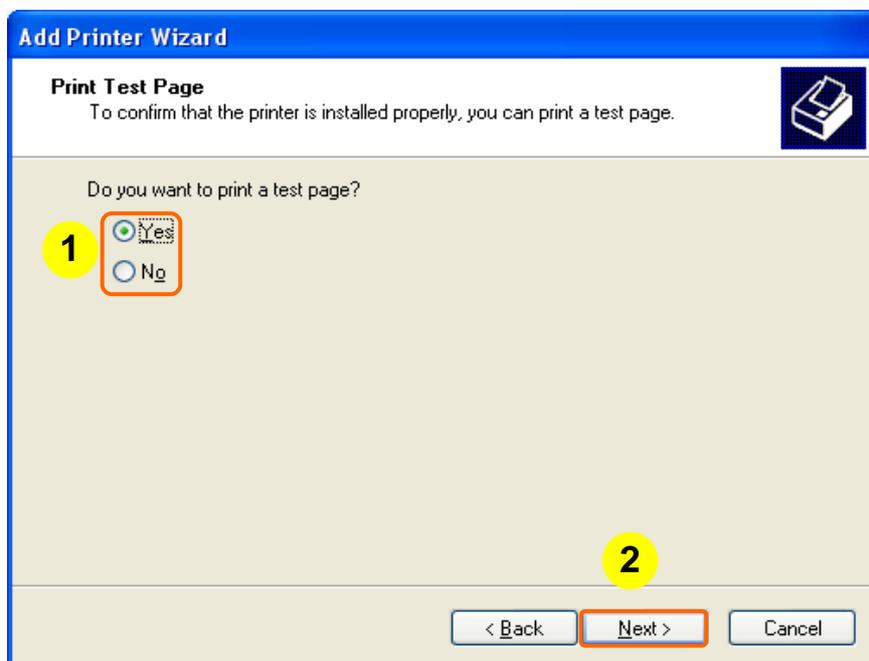
3. Next

Click on **Next** button.



【Step12】

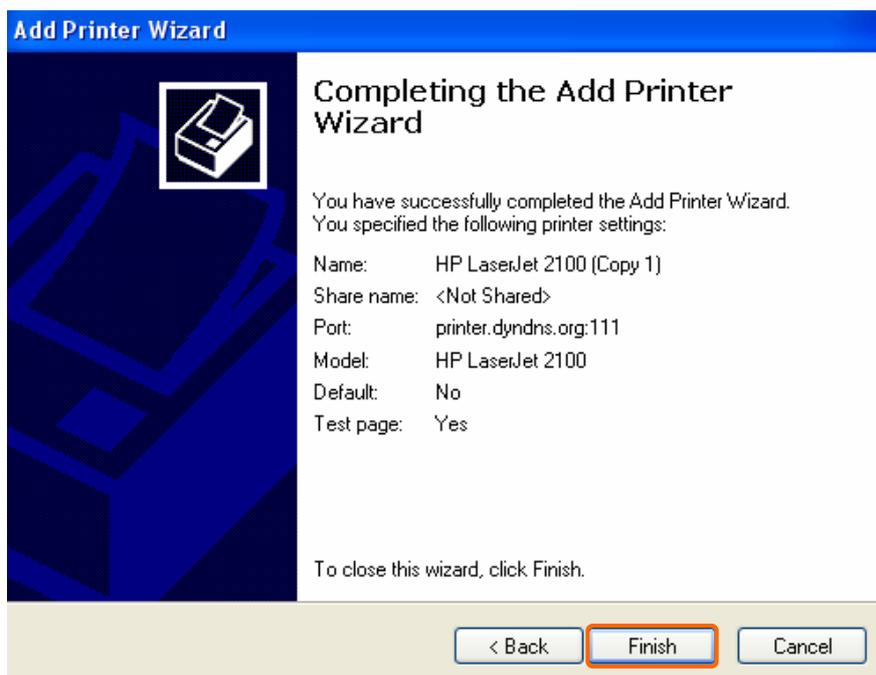
1. Select **Yes** or **No** to print a test page or not.
2. Click on **Next** button.



【Step13】

It shows you the printer settings you specified and then click on **Finish** button.

After settings, your printer device will added into **Printers and Faxes** page.



6.3.2 How to easily use Printer from LAN

If you are in the local area network and want to use Printer, please configure Navi210W's settings and the printer's settings in your OS (Operation System) and then print one page for testing. For more detail settings, please follow the steps below.

【Step1】 (Access from LAN)

To enable the following settings, users can access your Printer Server from LAN.

1. IP Config & Print Server

Select **Print Server** under the **USB Application** menu. The screen of Printer Setup will appear. Please follow the instructions to configure this function.

2. Enable Print Server

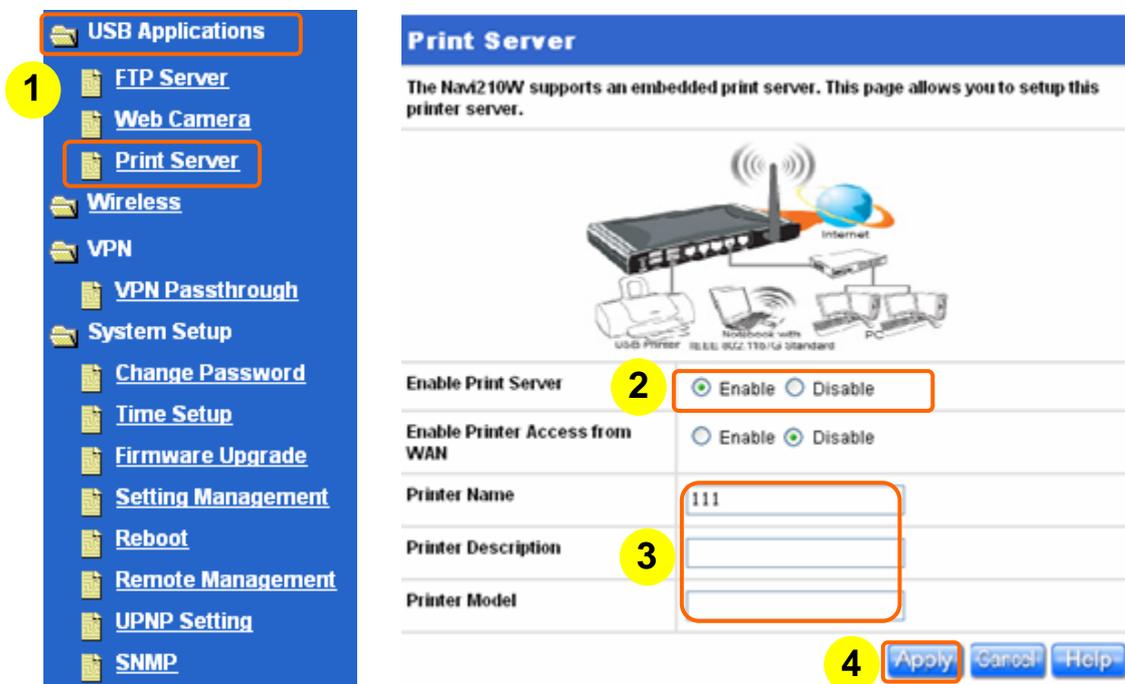
Select **Enabled** to start or close Print Server.

3. Printer Name

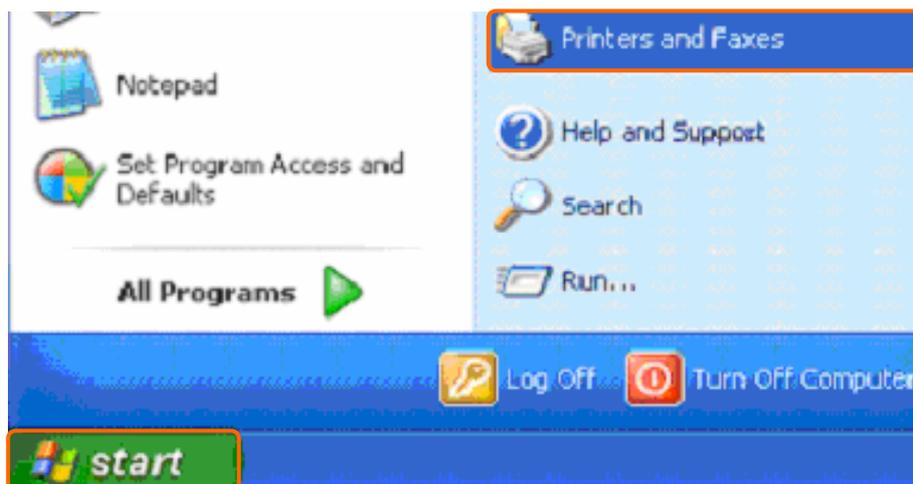
Input a **Printer Name** "111" for example, **Description** and **Model** in the blank fields.

4. Apply, Cancel & Help

Click on **Apply** button to save the settings. If you want to clean the settings, please click on **Cancel** button. The functional button, **Cancel** can take effect after clicking on **Apply** button. If you don't know how to do it, please click on **Help** button for more information.

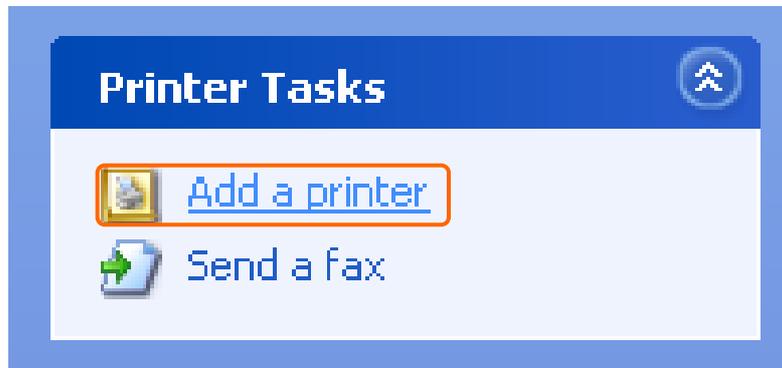


【Step2】 (Windows XP Settings)
Go to **start > Printers and Faxes**.



【Step3】

Click on **Add a printer** item.



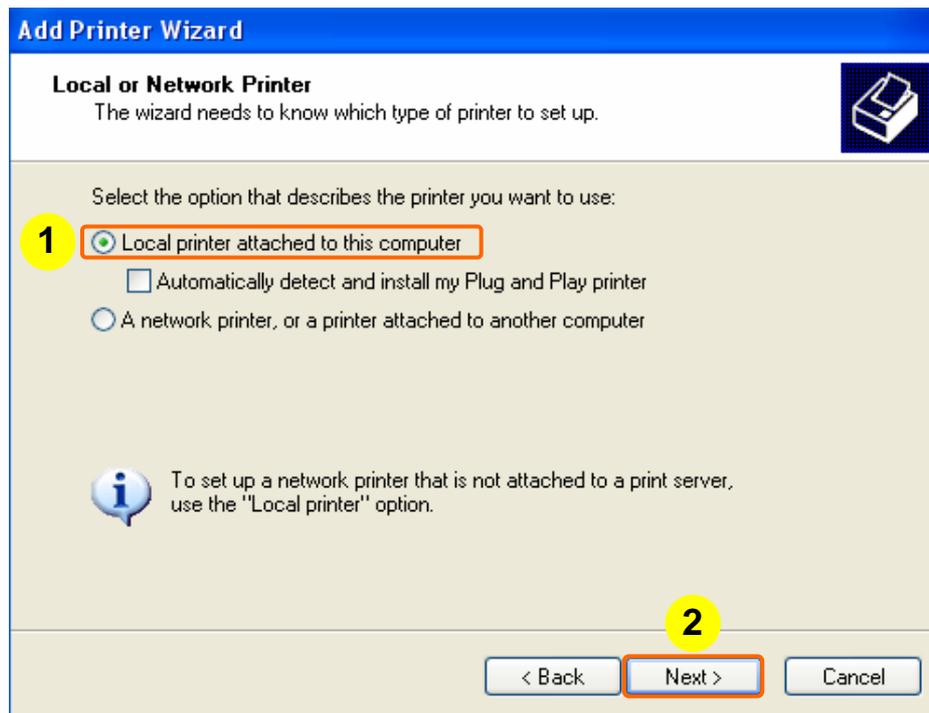
【Step4】

Click on **Next** button.



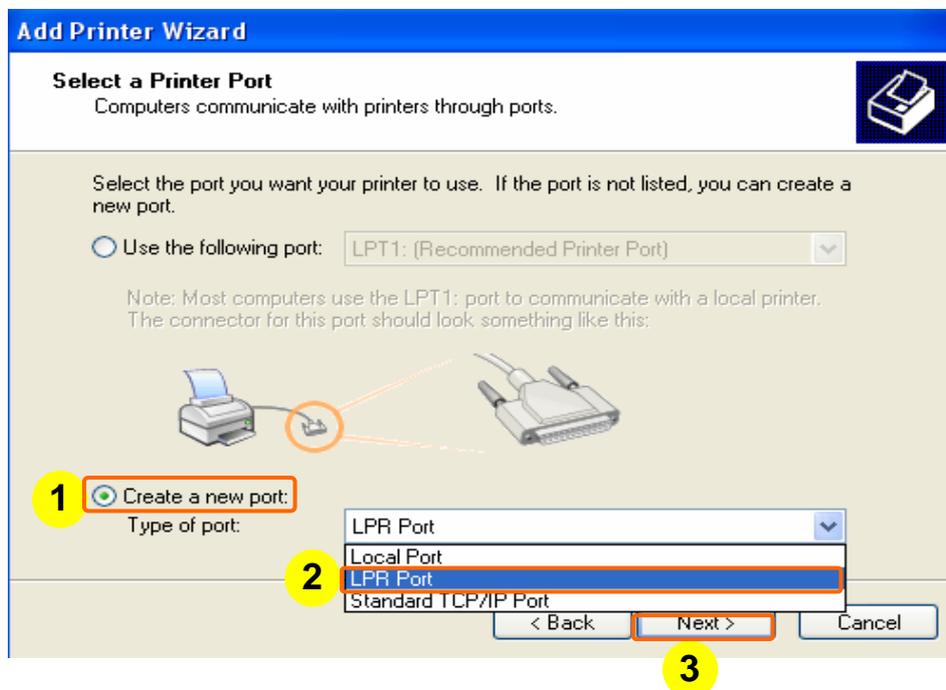
【Step5】

1. Select **Local printer attached to this computer.**
2. Click on **Next** button.



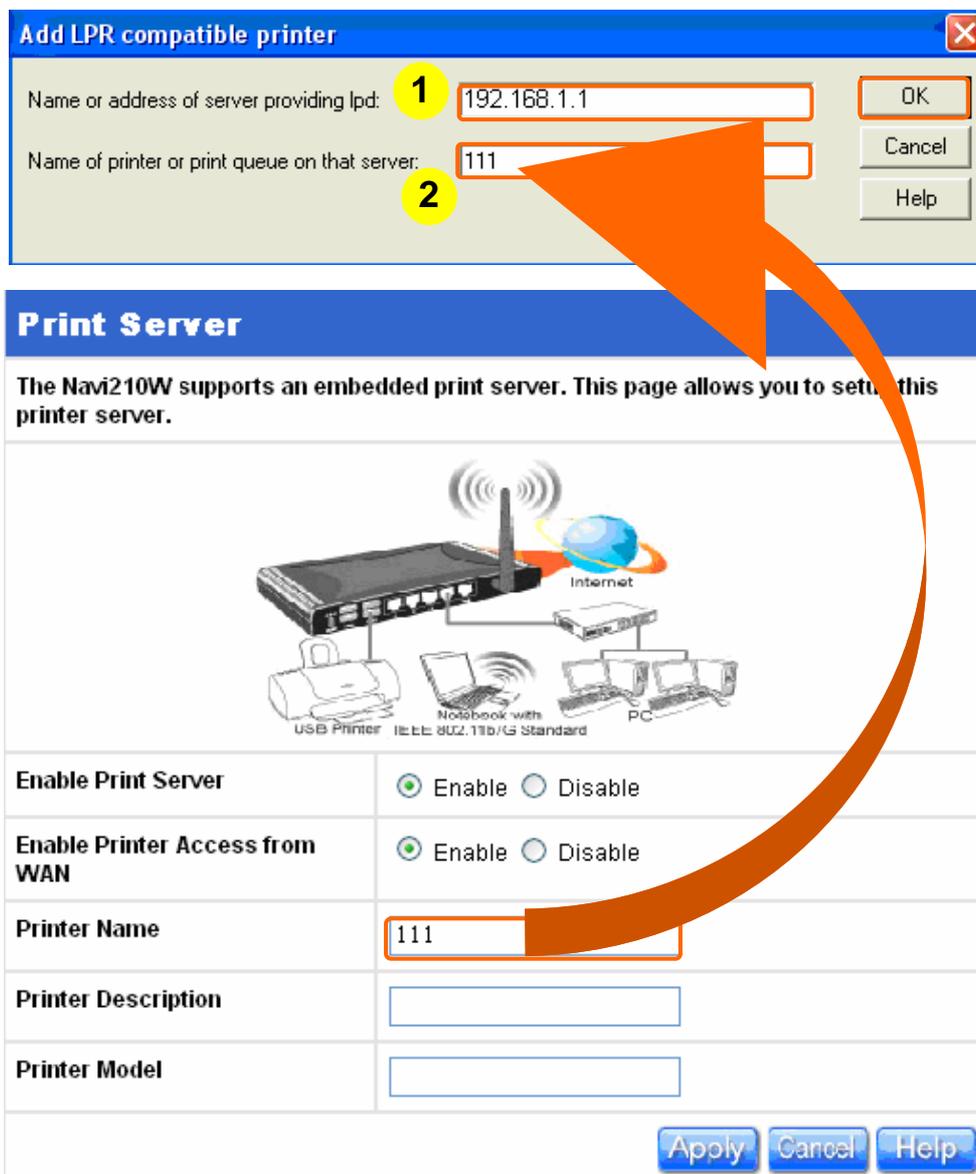
【Step6】

1. Select **Create a new port.**
2. Select **LPR Port.**
3. Click on **Next** button.



【Step7】

1. Input your LAN IP Address, **192.168.1.1** for example in the Name or address of server providing lpd.
2. Input **111** for example in the name of printer blank field which must be the same as USB Printer Name in Navi210W Printer Server's setting as shown below and then click on **OK** button.



【Step8】

1. Manufacturer

Select your printer's manufacturer **HP** for example.

2. Printers

Select your printer's model **hp LaserJet 2100** for example.

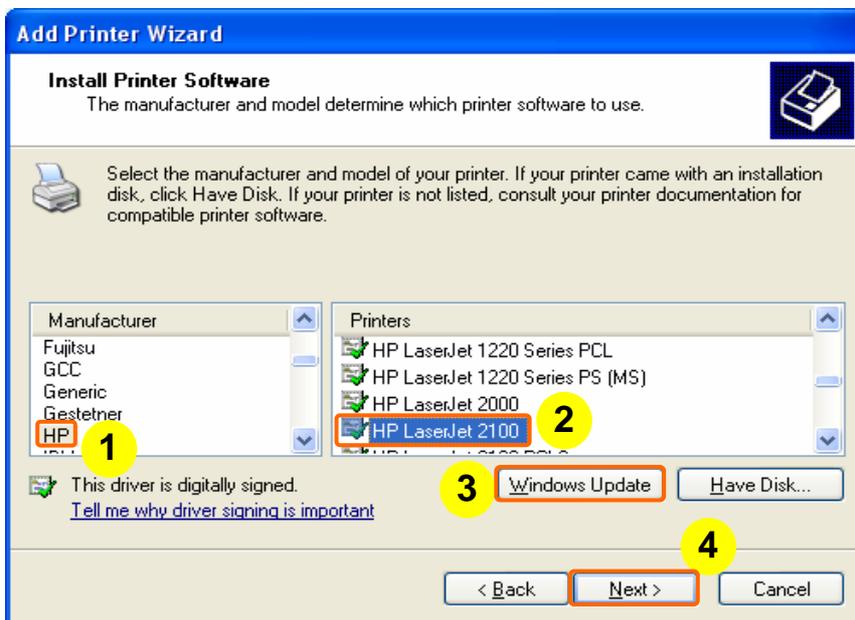
3. Have Disk...

If yours doesn't be listed on, please click **Have Disk...** to get yours from CD

or floppy disc.

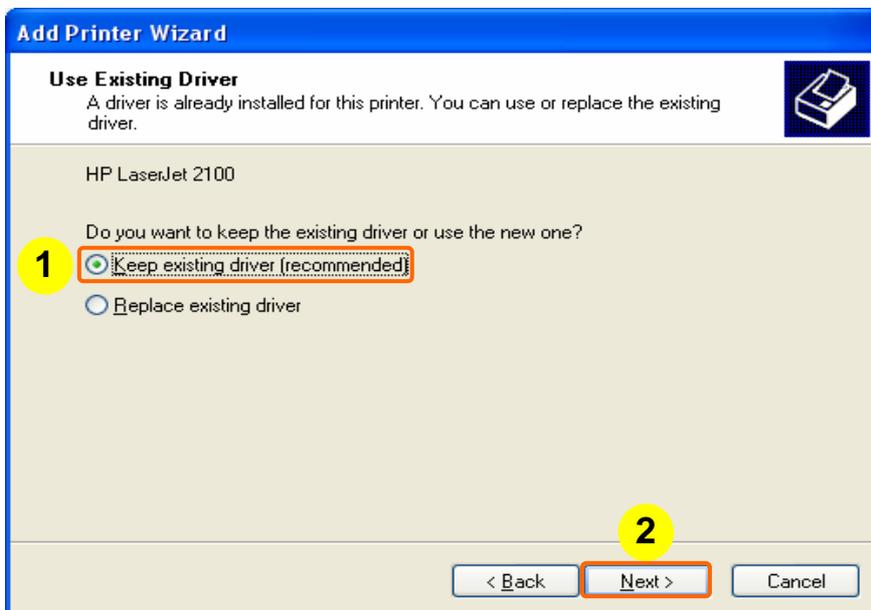
4. Next

Click on **Next** button.



【Step9】

1. Select **Keep existing driver (recommended)**.
2. Click on **Next** button.



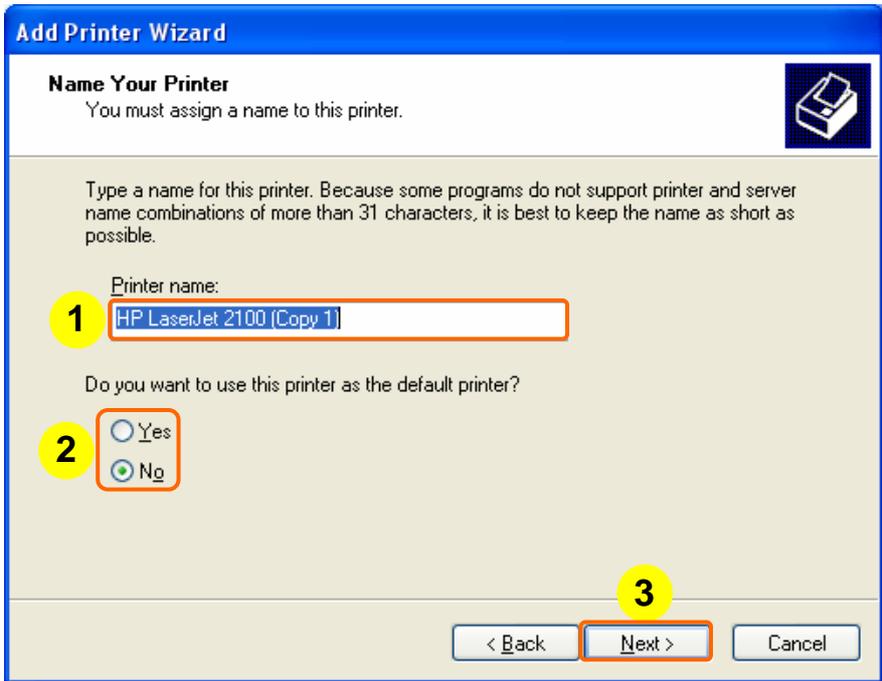
【Step10】

1. **Printer name:**
The printer name will appear automatically, or you can give one.
2. **Default Printer?**

Select **Yes** or **No** to use this printer as the default printer or not.

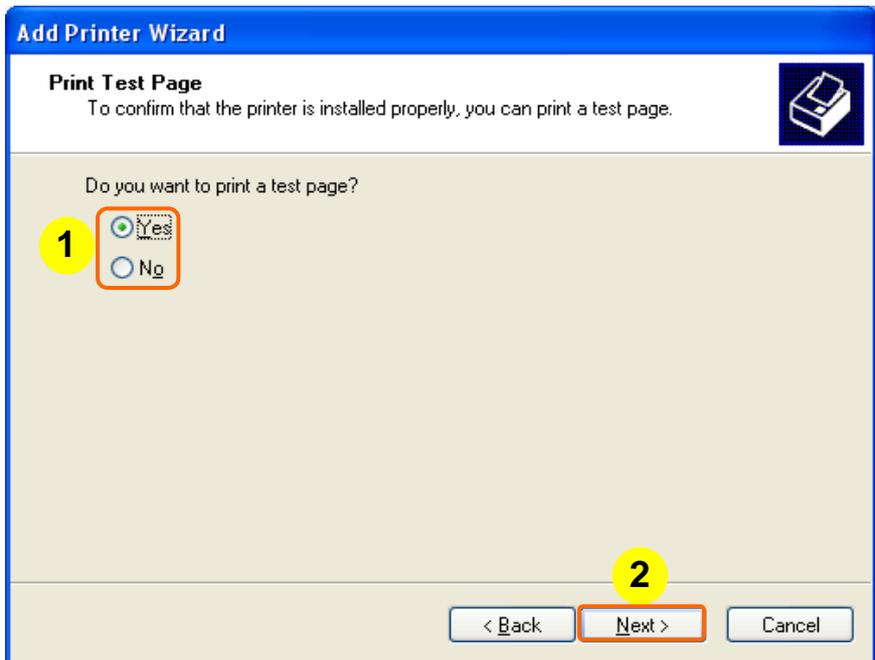
3. Next

Click on **Next** button.



【Step11】

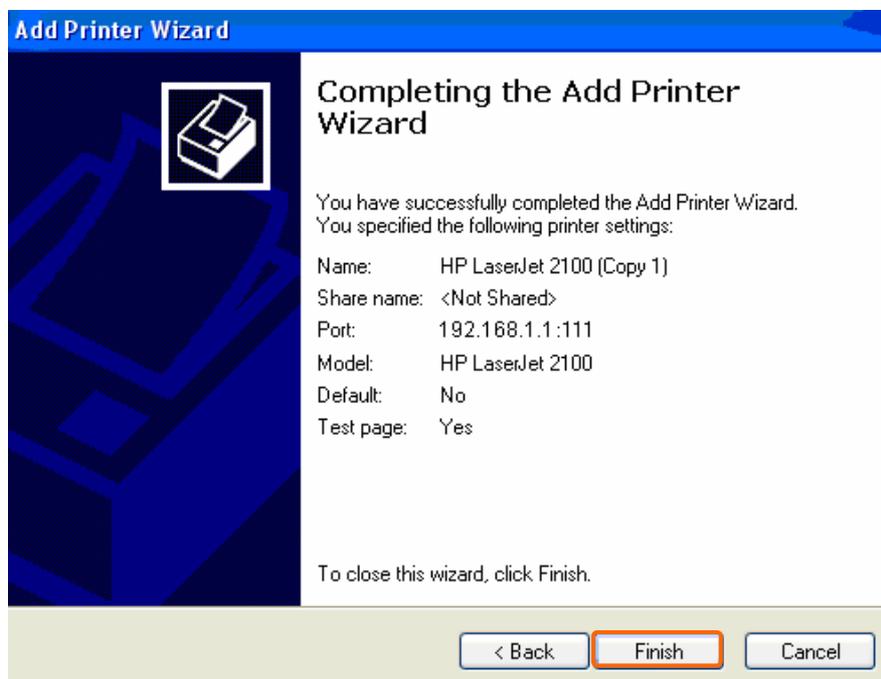
- 1. Select **Yes** or **No** to print a test page or not.
- 2. Click on **Next** button.



【Step12】

It shows you the printer settings you specified, and then click on **Finish** button.

After settings, your printer device will added into **Printers and Faxes** page.



6.3.3 How to easily use Printer from WAN

If you are in the wide area network and want to use Printer, please configure Navi210W's settings and the printer's settings in your OS (Operation System) and then print one page for testing. For more detail settings, please follow the steps below.

【Step1】 (Access from WAN)

To enable the following settings, users can access your Printer Server from WAN.

1. IP Config & Print Server

Select **Print Server** under the **USB Application** menu. The screen of Printer Setup will appear. Please follow the instructions to configure this function.

2. Enable Print Server

Select **Enabled** to start or close Print Server.

3. Enable Printer Access from WAN

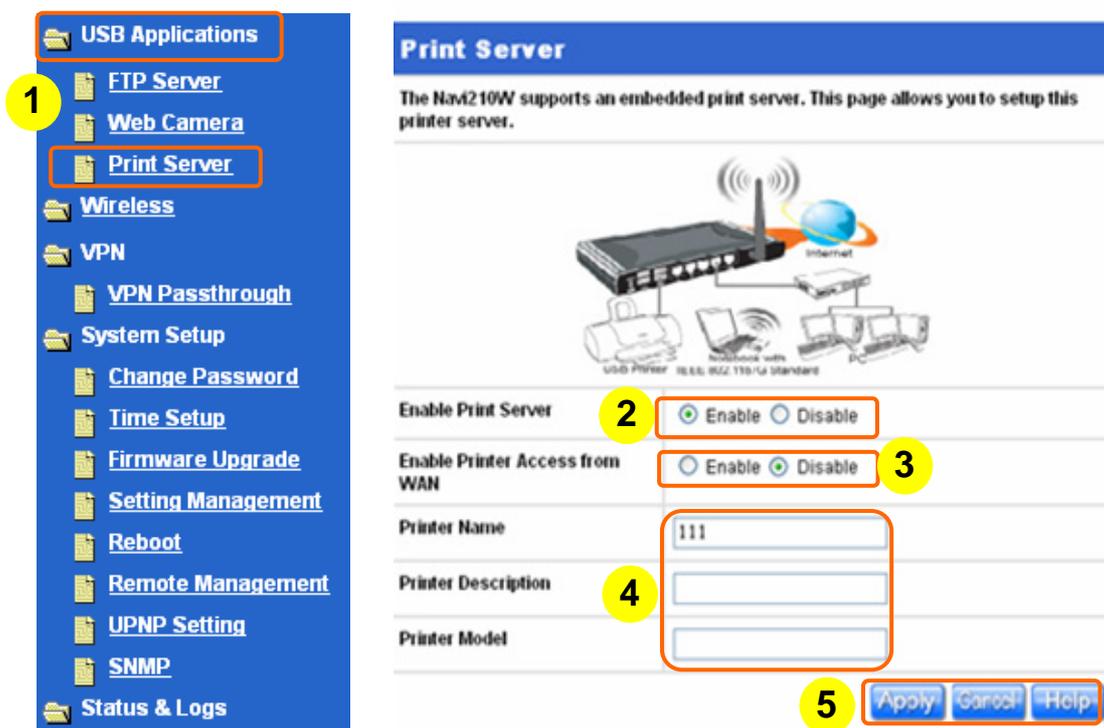
Select **Enabled** to allow or disallow client access from WAN.

4. Printer Name, Description & Model

Input a **Printer Name** "111" for example, **Description** and **Model** in the blank fields.

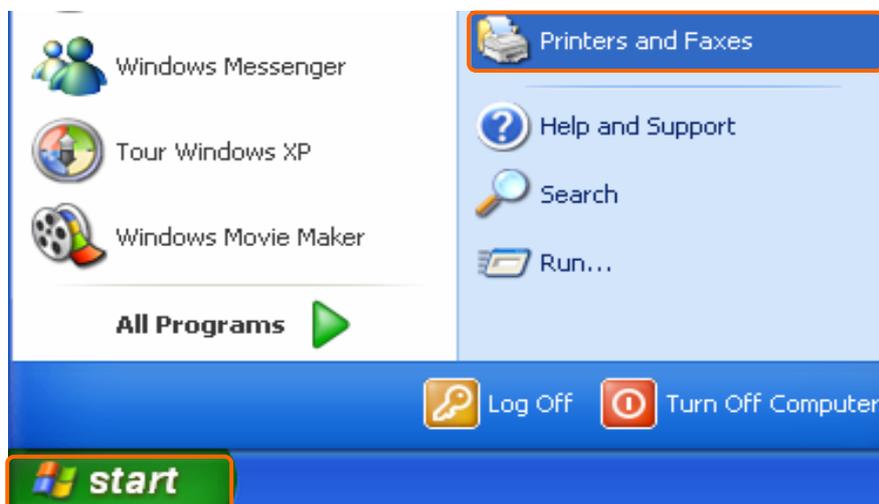
5. Apply, Cancel & Help

Click on **Apply** button to save the settings. If you want to clean the settings, please click on **Cancel** button. The functional button, **Cancel** can take effect after clicking on **Apply** button. If you don't know how to do it, please click on **Help** button for more information.



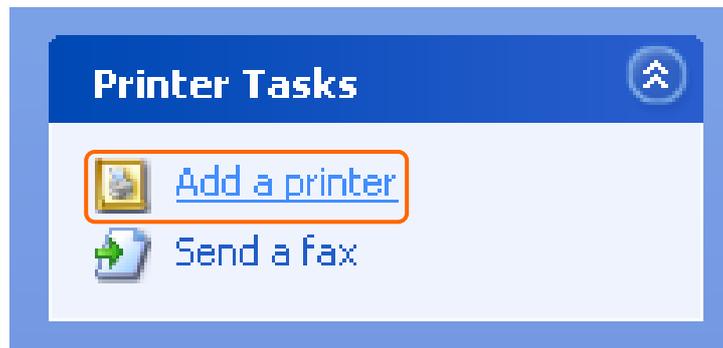
【Step3】 (Windows XP Settings)

Go to **start > Printers and Faxes**.



【Step4】

Click on **Add a printer** item.



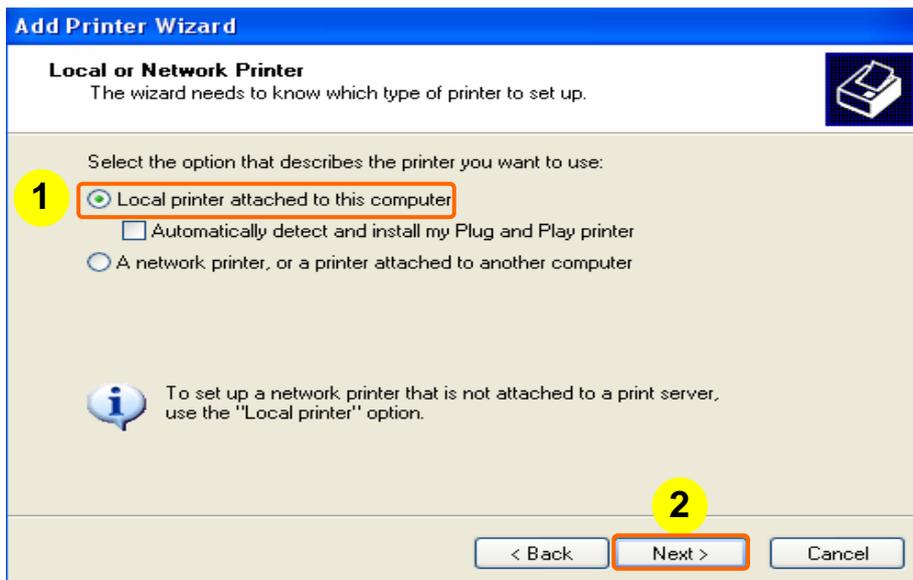
【Step5】

Click on **Next** button.



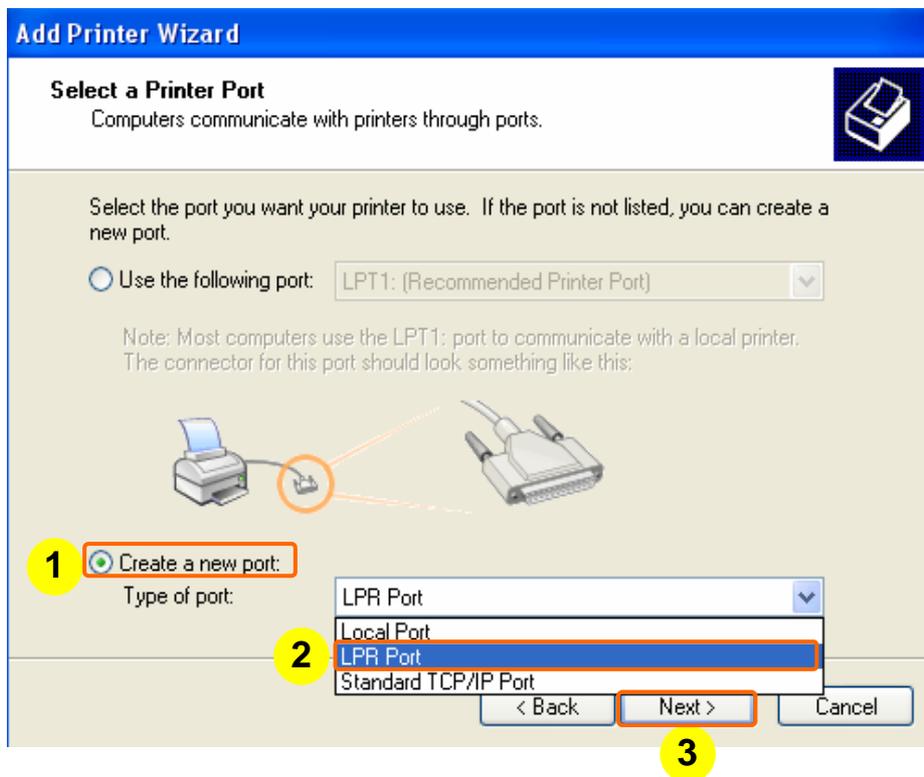
【Step6】

1. Select **Local printer attached to this computer**.
2. Click on **Next** button.



【Step7】

1. Select **Create a new port.**
2. Select **LPR Port**
3. Click on **Next** button.



【Step8】

1. Input your WAN IP Address, **220.123.5.56** for example in the Name or address of server providing lpd.
2. Input the name of printer the same as USB Printer Name **111** for example

in Navi210W Printer Server's setting and then click on **OK** button.

【Step9】

1. Manufacturer

Select your printer's manufacturer **HP** for example.

2. Printers

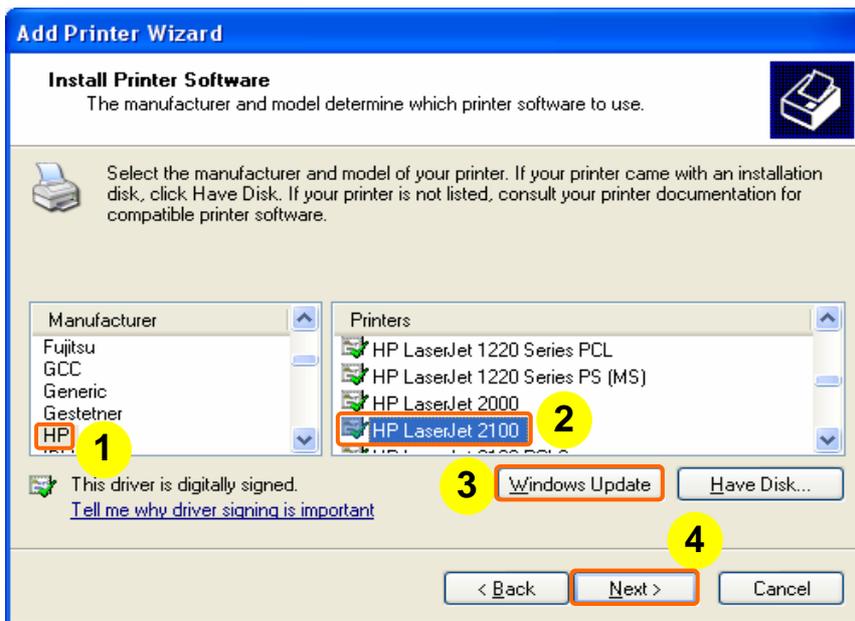
Select your printer's model **hp LaserJet 2100** for example.

3. Have Disk...

If yours doesn't be listed on, please click **Have Disk...** to get yours from CD or floppy disc.

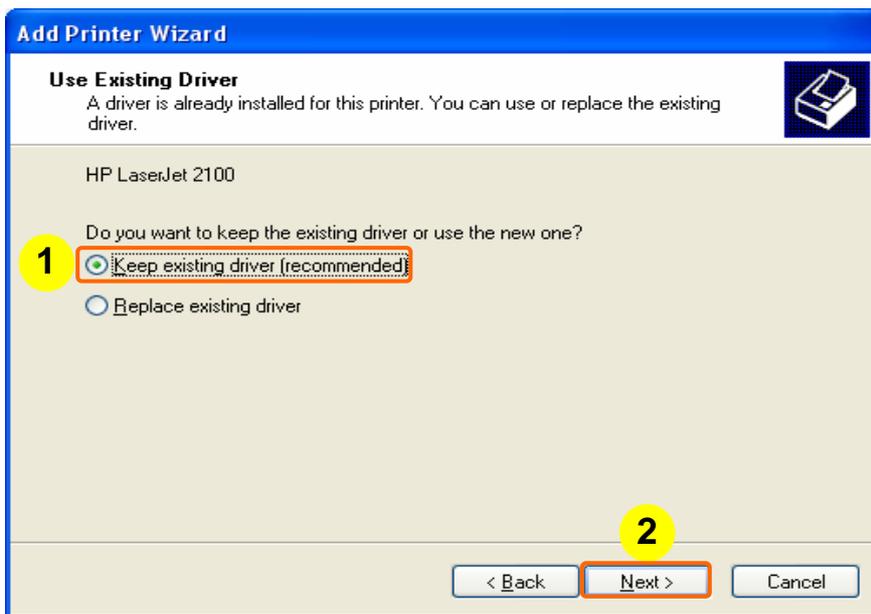
4. Next

Click on **Next** button.



【Step10】

1. Select **Keep existing driver (recommended)**.
2. Click on **Next** button.



【Step11】

1. Printer name:

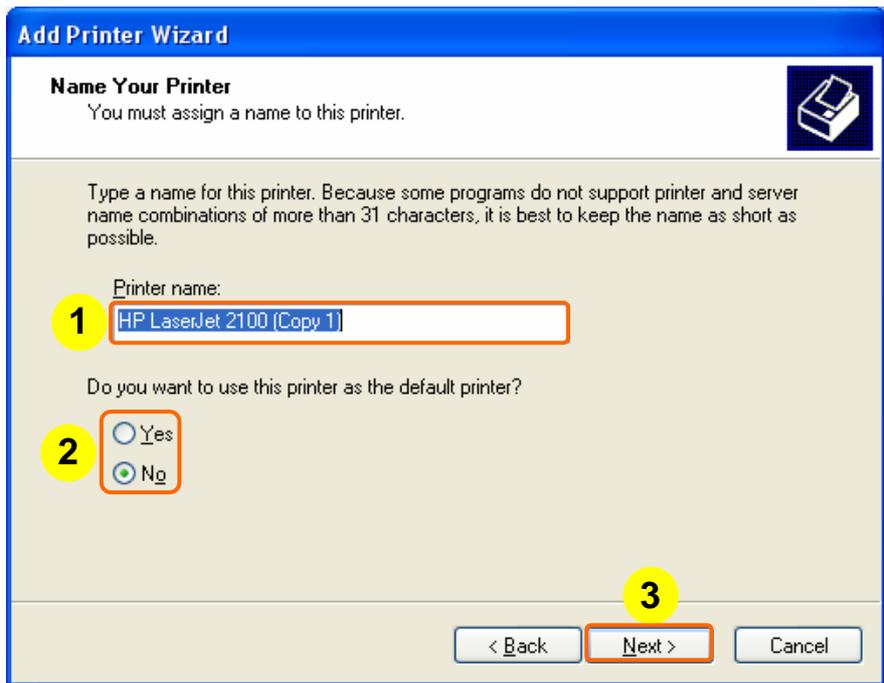
The printer name will appear automatically, or you can give one.

2. Default Printer?

Select **Yes** or **No** to use this printer as the default printer or not.

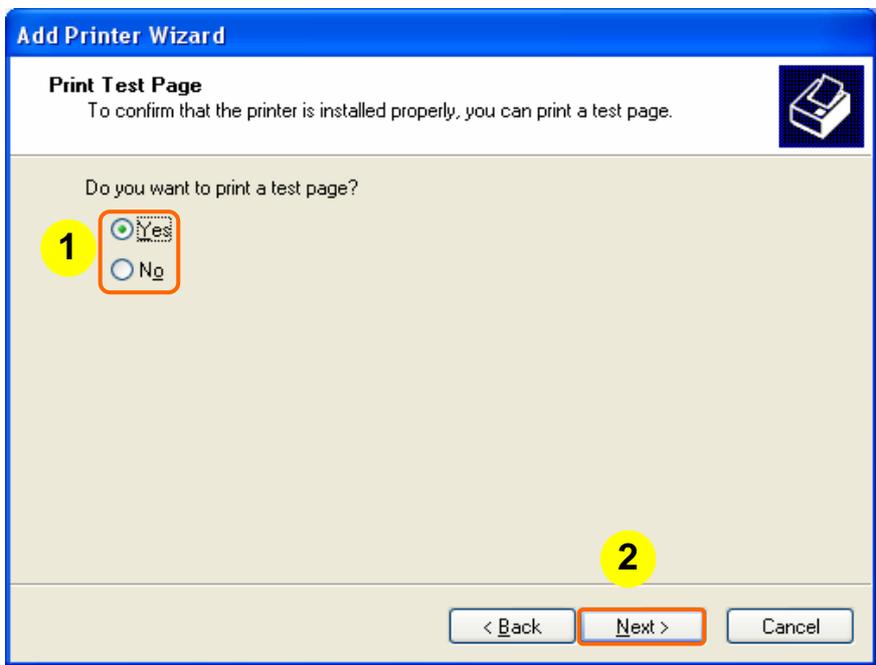
3. Next

Click on **Next** button.



【Step12】

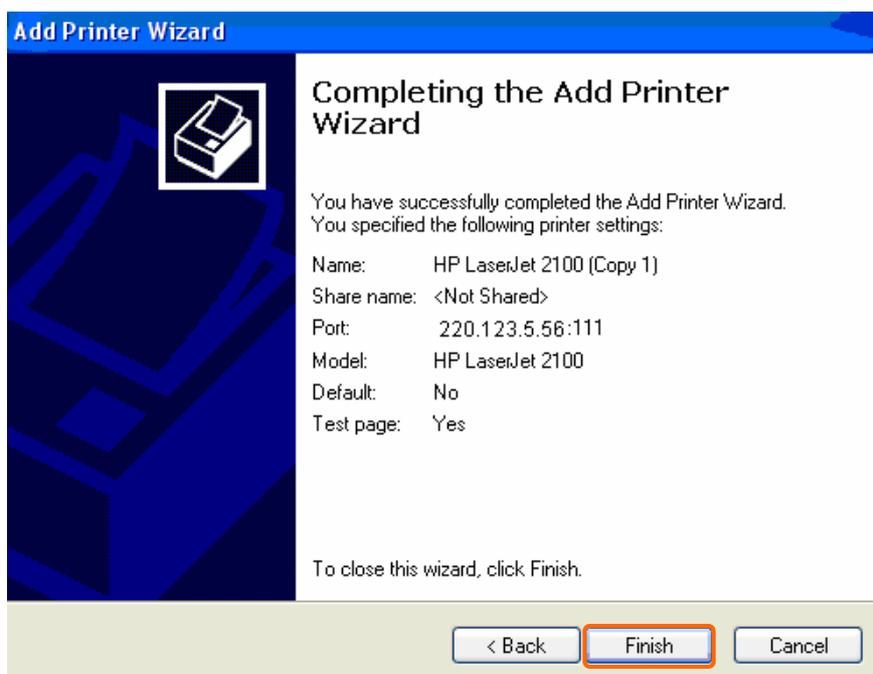
- 1. Select **Yes** or **No** to print a test page or not.
- 2. Click on **Next** button.



【Step13】

It shows you the printer settings you specified and then click on **Finish** button.

After settings, your printer device will added into **Printers and Faxes** page.



6.4 Firewall Application

We have mentioned Firewall function in the section 3.5. However, there are only functional meanings by items. Now we give you the detail instructions, including living example, to teach you how to use it.

6.4.1 How to easily use Firewall with FTP

If you are willing or not willing to allow someone or some clients to use your FTP, you can setup the Firewall Application to manage them whom you want to access your FTP. There are three Blocking Control Applications on FTP, such as IP Source Management, Time period Access Management and Control Right Management. Please follow the instructions to make the settings.

【Set1】 (IP Source Management)

1. IP Filters

Select **IP Filters** in the Firewall Application menu.

2. Enable/Disable IP Filters

Select **Enable** in the pull down menu.

3. IP

Input IP Addresses you want to block, such as **192.168.1.100 ~ 150**.

Notice: The blocking LAN IP Address Range is from 2 to 254. In

Addition, this firewall setting doesn't support WAN IP Address blocking.

4. Port

Input the FTP Port, **21-21**. That means the IP Addresses (100~ 150) above mentioned can't use the 21 port FTP.

Notice: The FTP Port 21 can be change to another one according to the setting in the FTP Server. Please refer to the setting of [Step3].

5. Apply

Click on **Apply** button.

IP Filters	
Use IP Filters to deny LAN IP addresses to access the Internet	
Enable/Disable IP Filters	Enable 1
IP	192 . 168 . 1 . 100 - 192 . 168 . 1 . 150 2
Port	21 - 21 3
Protocol Type	TCP 4
5 Apply Cancel Help	

【Set2】 (Time Period Access Management)

1. IP Filters

Select **IP Filters** in the Firewall Application menu.

2. Enable/Disable IP Filters

Select **Enable** in the pull down menu.

3. IP

Input IP Addresses you want to block, such as **192.168.1.100 ~ 150**.

Notice: The blocking LAN IP Address Range is from 2 to 254. In Addition, this firewall setting doesn't support WAN IP Address blocking.

4. Port

Input the FTP Port, **21-21**. That means the IP Addresses (100~150) above mentioned can't use the 21 port FTP.

Notice: The FTP Port 21 can be change to another one according to the setting in the FTP Server. Please refer to the setting of **[Step3].**

5. Schedule

Input a time range.

Notice: Setting this item will give your FTP more controllable security.

6. Apply

Click on **Apply** button.

IP Filters

Use IP Filters to deny LAN IP addresses to access the Internet

Enable/Disable IP Filters		<input type="text" value="Enable"/> 1
IP	2	<input style="border: 1px solid orange;" type="text" value="192"/> . <input style="border: 1px solid orange;" type="text" value="168"/> . <input style="border: 1px solid orange;" type="text" value="1"/> . <input style="border: 1px solid orange;" type="text" value="100"/> - <input style="border: 1px solid orange;" type="text" value="192"/> . <input style="border: 1px solid orange;" type="text" value="168"/> . <input style="border: 1px solid orange;" type="text" value="1"/> . <input style="border: 1px solid orange;" type="text" value="150"/>
Port	3	<input style="border: 1px solid orange;" type="text" value="21"/> - <input style="border: 1px solid orange;" type="text" value="21"/>
Protocol Type	4	<input style="border: 1px solid orange;" type="text" value="TCP"/>
Schedule	5	<input checked="" type="radio"/> From <input type="text" value="Mon"/> : <input type="text" value="18"/> : <input type="text" value="00"/> to <input type="text" value="Tue"/> : <input type="text" value="09"/> : <input type="text" value="00"/>

Notice: When you enable Firewall function, the blocking ICMP function will be executed. Blocking ICMP can prevent outsider to ping your WAN IP.

[Set3] (Quantity Control)

1. Enable FTP Server

Select **Enabled** to allow clients to login FTP Server, please complete the

following steps. If you disable FTP Server, please ignore the following steps.

2. Enable FTP Access from WAN

Select **Enabled** or **Disabled** to allow or disallow clients to access FTP from WAN.

Notice: If you select Yes, users can access your FTP Server from WAN; In contrast, users only can access your FTP Server from LAN.

3. Maximum Users Allowed to Login

Give the maximum log in user number (at most **5** users can access FTP Server at the same time.)

4. FTP Port

The FTP Port default value is **21**, but it can be changed as long as it does not conflict with other applications.

Notice: The FTP Port 21 can be changed to another one.

FTP Server

Navi210W supports an embedded FTP server for USB storage. In this page, you can configure the FTP server and manage accounts for the FTP server.



Enable FTP Server	1	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
Allow Anonymous User to Login		<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled <input type="button" value="Login"/>
Allow Super User to Login		<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled <input type="button" value="Login"/>
Enable FTP Access from WAN	2	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
Maximum Users Allowed to Login	3	<input type="text" value="5"/>
FTP Port	4	<input type="text" value="21"/>
		5 <input type="button" value="Apply"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>

【Step4】 (Control Right Management)

1. User Name, Password & Max. Login

Input a user name, a password and a number of maximum access clients in the blank fields in turn, such as **guest** for User Name, ********* for Password, **3** for Max. Login.

Notice: The mentioned examples are reference value.

2. Rights

Give user a specific right such as **Read/Write Erase**, **Read/Write** or **Read Only**.

3. Add, Delete & Edit

Click on **Add** button to save the inputted information in the User Account List Table. Click on **Delete** to delete a datum in the list table. Click on **Edit** to edit the specified setting in the list table.

4. Apply

Click on **Apply** button.

Notice: Setting this item is the key point to control the user access. The rest of settings mentioned in the 【Step1】 and 【Step2】 also need to be set.

The screenshot shows the 'User Account List' management interface. At the top, there are three buttons: 'Apply' (highlighted with a yellow circle and the number 4), 'Cancel', and 'Help'. Below this is a form for adding a new user account. The form has four main sections: 'User Name' (input field with 'guest'), 'Password' (input field with '*****'), 'Max. Login' (input field with '3'), and 'Rights' (dropdown menu with 'Read/Write' selected). The 'Add' button is highlighted with a yellow circle and the number 3. Below the form is a table of existing user accounts. The table has columns for 'User Name', 'Password', 'Max. Login', 'Rights', 'Delete', and 'Edit'. The 'Delete' and 'Edit' buttons in the table are highlighted with a yellow circle and the number 3. The 'Rights' dropdown menu is highlighted with a yellow circle and the number 2. The 'User Name', 'Password', and 'Max. Login' input fields are highlighted with a yellow circle and the number 1.

User Name	Password	Max. Login	Rights	Delete	Edit
guest	*****	3	RW-	Delete	Edit

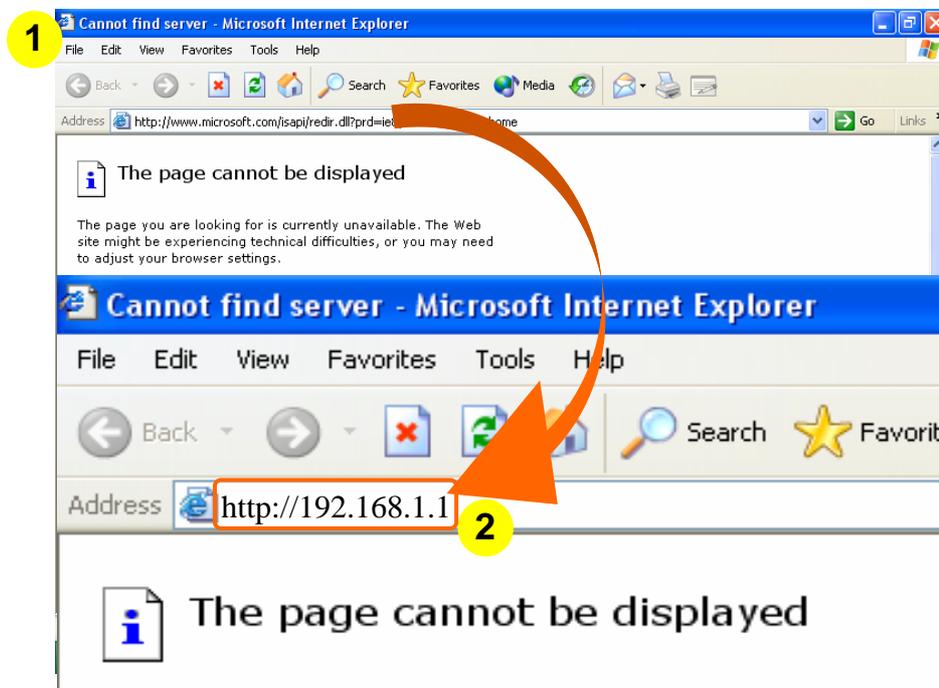
6.4.2 Firewall Living Example

John's 10 year old son, Tom gets home after school and stays at his room with the locked door for three hours every day. John's wife, Mary found the rare behavior from her son. Then, after John came off work, she told John what happened with Tom. In this moment, John got a little bit angry and went upstairs to his own study room, he checked the switch hub led, and found someone is online. He knocked Tom's door, and asked Tom what he did. John

detected that his son responded with fear and moved his uneasy eyes up and down. He knew his son was on the website where with the age Tom shouldn't go. After that, John bought a router Navi210W back to home and installed it carefully. For the purpose, he expected Tom couldn't be online without his permission. He wanted to make a schedule with the time when no one can supervise Tom. John got two time periods among which Tom might access Internet at will, between 3: 30 o'clock to 6: 30 PM. Let's see what he has done in the following settings.

【Step1】

1. Open IE browser as an example.
2. Blank this field and input **http://192.168.1.1** in the address field. Then, press **Enter**.



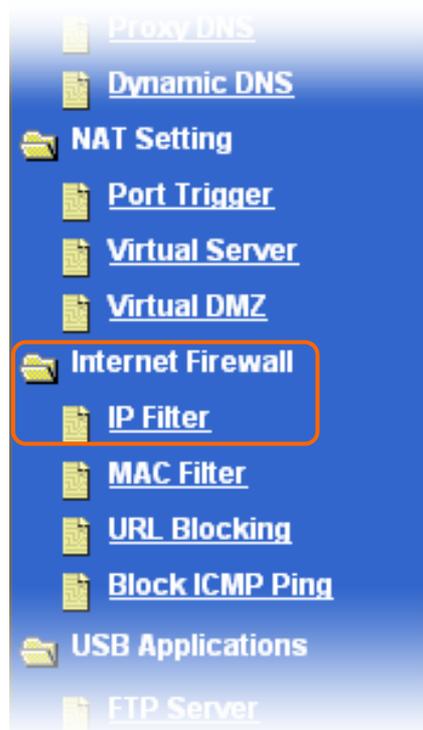
【Step2】

1. Input **admin** in **User Name** and **Password** blank fields.
2. Click on **OK** button.



【Step3】

Select **IP Filters** under the **Internet Firewall** menu. Follow the instructions to enter the **IP Filters setting** page to configure the settings you want.



【Step4】

1. Enable/Disable IP Filters

Select **Enable** to start this function.

2. IP

John found out Tom's IP Address is **192.168.1.2** after checking **Active Connections** in the System Log menu. Then, he inputs 192.168.1.2 in the blank field.

3. Port

John left Source Port Range field blank to block all ports from 0 to 65535, and inputted **80** in the Destination Port Range field. It means he wanted to block **www** network service.

4. Schedule

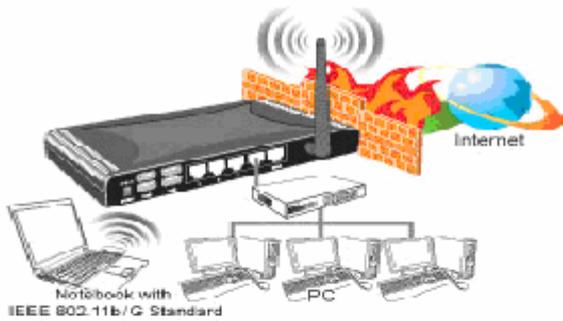
John inputted the time period he wants, from 15:30 to 18:30 every day.

5. Apply

John clicked on **Apply** button to add valid blocking information in the list table.

IP Filters

Use IP Filters to deny LAN IP addresses to access the Internet



Enable/Disable IP Filters	Enable 1
IP 2	192 . 168 . 1 . 2 - 192 . 168 . 1 . 2
Port 3	0 - 65535
Protocol Type	TCP 4
Schedule	<input type="radio"/> Always <input checked="" type="radio"/> From Mon 4 : 15 : 30 to Mon : 18 : 30
5 Apply Cancel Help	

IP Range	Protocol(port)	Schedule	delete	Edit
192.168.1.2 192.168.1.2	TCP(0-65535)	from Mon 15:30 to Mon 18:30 every week	Delete	Edit

After John set the Firewall, his son, Tom couldn't use internet from 15:30 to 18:30 on Mondays.

6.5 UPNP Application

Universal Plug and Play (UPnP) is a distributed, open networking architecture that enhances peer-to-peer network connectivity for personal computers, wireless devices, and other intelligent appliances. UPnP uses existing standard protocols, such as TCP/IP and Hypertext Transfer Protocol (HTTP) to seamlessly connect networked devices and to manage data transfer among connected devices.

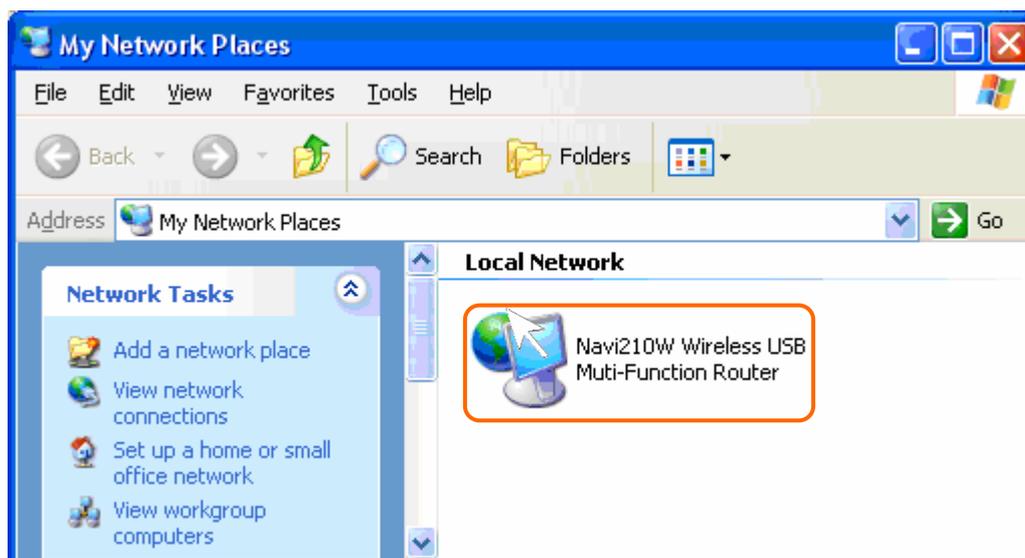
UPnP provides an architectural framework for creating self-configuring, self-describing devices and services. Networks managed by UPnP require no setup by users or network administrators because UPnP supports automatic discovery.

6.5.1 How to easily configure Navi210W

It's easy for you to access Navi210W's Login Screen. Please complete 3.9.7 UPNP Settings to add an icon on the Local Network and follow the next simply steps to apply UPNP.

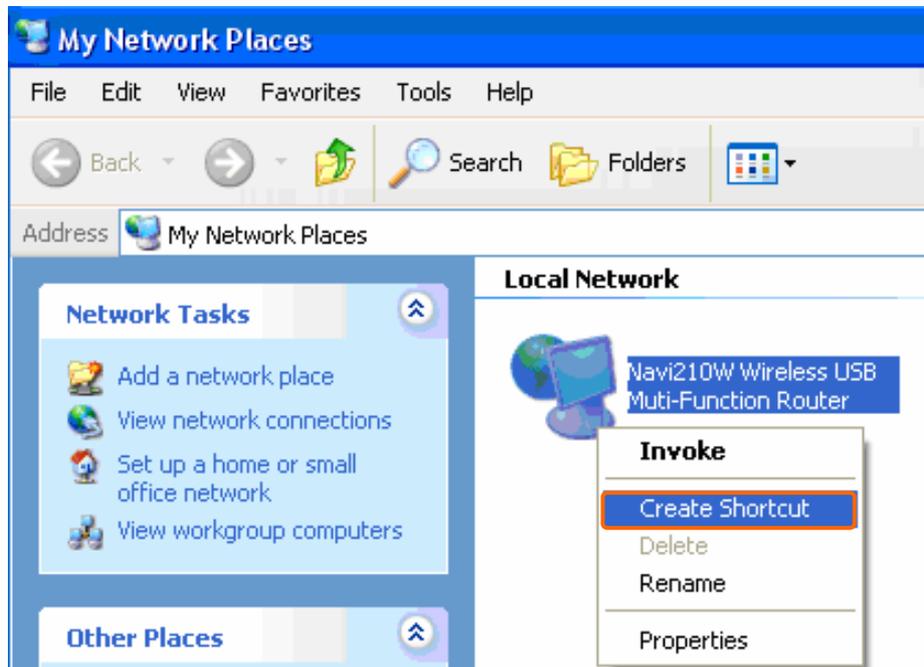
【Step1】

Please move your cursor on the icon of **Navi210W Wireless USB Multi-Function Router**.



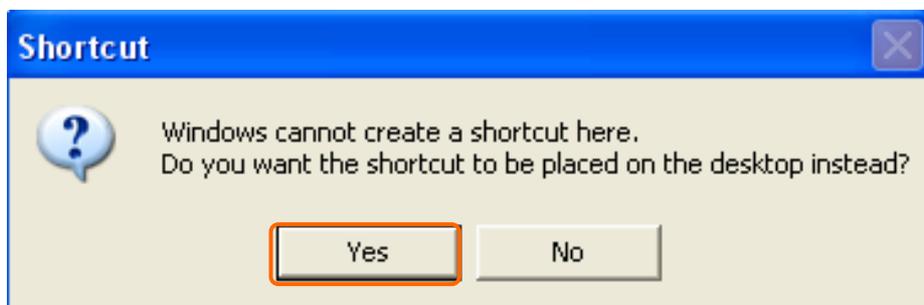
【Step2】

Please one right click on the icon. A menu will appear. Select **Create Shortcut**.



【Step3】

The confirmation dialog screen will pop-up.



【Step4】

The shortcut icon will be added on the desktop. Double click on the icon.



【Step5】

The Navi210W Login screen will appear. Input **admin** in the User Name and Password then click on **OK** button for more settings.

Enter Network Password

This secure Web Site (at 192.168.1.1) requires you to log on.

Please type the User Name and Password that you use for Navi210W.

User Name: admin

Password: xxxxxx

Save this password in your password list

OK Cancel

7 Q & A

7.1 Installation

1. Q: Where is the XDSL Router installed on the network?

A: In a typical environment, the Router is installed between the XDSL line and the LAN. Plug the XDSL Router into the XDSL line on the wall and Ethernet port on the Hub (switch or computer).

2. Q: Why does the throughput seem slow?

A: To achieve maximum throughput, verify that your cable doesn't exceed 100 meter. If you have to do so, we advise you to purchase a bridge to place it in the middle of the rout in order to keep the quality of transmitting signal. Out of this condition you would better test something else.

- Verify network traffic does not exceed 37% of bandwidth.
- Check to see that the network does not exceed 10 broadcast messages per second.
- Verify network topology and configuration.

7.2 Led

1. Q: Why doesn't Navi210W power up?

A: Check if the output voltage is suitable, or check if the power supply is out of order.

2. Q: The Internet browser still cannot find or connect to the Navi210W after verifying the IP address and LAN cable, the changes cannot be made, or password is lost.

A: In case the Navi210W is inaccessible, you can try to restore its factory default settings. Please press the "Reset" button on the front of Navi210W and keep it pressed for over 5 seconds and the light of STATUS will vanish. The LEDs will flash again when reset is successful.

3. Q: Why does Navi210W shut down unexpectedly?

A: Re-plug your power adapter. Then, check the STATUS indicator; if it is off, the internal flash memory is damaged. For more help, please contact with your provider.

7.3 IP Address

1. Q: What is the default IP address of the router for LAN port?

A: The default IP address is 192.168.1.1 with subnet mask 255.255.255.0

2. Q: I don't know my WAN IP.

A: There are two ways to know.

Way 1: Check with your Internet Service Provider.

Way 2: Check the setting screen of Navi210W. Click on **Status & Log** item to select **Network Configuration** in the Main Menu. WAN IP is shown on the WAN interface.

3. Q: How can I check whether I have static WAN IP Adresse?

A: Consult your ISP to confirm the information, or check **Network Configuration** in Navi210W's Main Menu.

4. Q: Will the Router allow me to use my own public IPs and Domain, or do I have to use the IPs provided by the Router?

A: Yes, the Router mode allows for customization of your public IPs and Domain.

7.4 OS Setting

1. Q: Why can't my computer work online after connecting to Navi210W?

A: It's possible that your Internet protocol (TCP/IP) was set to use the follow IP address. Please do as the following steps. (Windows 2000 & XP) **Start > Settings > Network and Dial-up Connections > double click on Internet Protocol(TCP/IP) > select obtain IP address automatically > Click on OK button.** Then, open Internet browser for testing. If you still can't go online, please test something else below.

- Verify network configuration by ensuring that there are no duplicate IP addresses.
- Power down the device in question and ping the assigned IP address of the device. Ensure no other device responds to that address.
- Check that the cables and connectors or use another LAN cable.

2. Q: I can't connect to the router's configuration utility.

A: Possible Solution 1: Make sure that your Ethernet connect properly and securely. Make sure that you've plugged in the power cord.

Possible Solution 2: Make sure that your PC is using an IP address within the range of 192.168.1.2 to 192.168.1.254. Make sure that the address of the subnet mask is 255.255.255.0. If necessary, the Default Gateway data should be at 192.168.1.1. To verify these settings, perform the following steps:

Windows 95, 98, or Me Users:

1. Click on Windows **Start** > click on **Run** > input **winipcfg** > click on **OK** button.
2. Check the IP Address, Subnet Mask, Default Gateway data. Is this data correct? If the data isn't correct, click on **Release All**. Then click on **Renew All**.

Windows NT, 2000, or XP Users:

1. Click on Windows **Start** > click on **Run** > input **cmd** > click on **OK** button.

2. At the DOS prompt, type **ipconfig/all**.
3. Check the IP Address, Subnet Mask, Default Gateway data. Is this data correct? If the data isn't correct. Please input **ipconfig/release** > press **Enter** > input **ipconfig/renew** > press **Enter**.

Possible Solution 3: Verify the connection setting of your Web browser and verify that the HTTP Proxy feature of your Web browser is disabled. Make these verifications so that your Web browser can read configuration pages inside your router. Launch your Web browser.

Internet Explorer Users:

1. Click on **Tools** > **Internet Options** > **Connections tab**.
2. Select **Never dial a connection**, click on **Apply** button, and then click on **OK** button.
3. Click on **Tools** and then click on **Internet Options**.
4. Click on **Connections** and then click on **LAN Settings**.
5. Make sure none of the check boxes are selected and click on **OK** button.
6. Click on **OK** button.

Netscape Navigator Users:

1. Click on **Edit** > **Preferences** > double-click **Advanced** in the Category window.
2. Click on **Proxies** > select **Direct connection to the Internet** > click on **OK** button.
3. Click on **Edit again** and then click on **Preferences**.
4. Under Category, double-click on **Advanced** and then click on **Proxies**.
5. Select **Direct connection to the Internet** and click on **OK** button.
6. Click on **OK** button.

- 3. Q: Web page hangs, corrupt downloads, or nothing but junk characters is being displayed on the screen. What do I need to do?**

A: Force your NIC to 10Mbps or half duplex mode, and turn off the "Auto-negotiate" feature of your NIC as a temporary measure. (Please

look at the Network Control Panel, in your Ethernet Adapter's Advanced Properties tab.)

4. Q: Why can't I connect to the Web Configurator?

A: you can remove the proxy server settings in your web browser.

7.5 Navi210W Setup

1. Q: Why does Navi210W's setup page shut down unexpectedly?

A: If one of the pages appears incompletely in the Navi210W's setup pages, please click on **Logout** item in the Main Menu before it shutting down. Don't keep it working. Then, close Internet browser and open it again for going back to the former page.

2. Q: Why can't my USB devices and LAN ports work properly after setting the DHCP?

A: There are two rules over here.

Rule1: After connecting USB devices, please reboot your Router.

Rule2: Before finishing the DHCP setup, please don't connect any computer to LAN ports, because the conflict of having the same IP may occur and cause some computers a lot of trouble.

Notice: Make sure that you always click on the Apply button after configuring each setting. And in order to let others LAN ports work properly, please reboot your PC.

3. Q: I don't know how to configure DHCP.

A: DHCP is commonly used in the large local network. It allows you to manage and distribute IP addresses from 2 to 254 throughout your local network via Navi210W. Without DHCP, you would have to configure each computer separately. It's very troublesome. Please Open **Internet browser** > Input **192.168.1.1 in the website blank field** > Select **DHCP Server under the IP Config Menu**. For more setting information, please refer to 3.3.4 DHCP Server.

4. Q: How do I upgrade the firmware of Navi210W?

A: Periodically, a new Flash Code is available for Navi210W on your product provider website. Ideally, you should update Navi210W Router's Flash Code using "Firmware Upgrade" on the "System Setup" menu of Navi210W Settings.

5. Q: My Navi210W cannot connect to the ISP?

A: There are three possible solutions.

1. Check the Cable/XDSL modem is power on.
2. Check the Cable/XDSL link light is on to verify a good physical connection.
3. Check the WAN port LED to verify if the Cable/XDSL modem is connected to the router:

If your ISP Login method is following, please make sure the username and password are correct or not.

If your ISP is using dynamic IP addressing (DHCP) then the DHCP protocol does not have the authentication feature. Some Cable service providers often used the following to determine user's identification.

6. Q: Why is that I can ping to outside hosts, but not access Internet websites?

A: Check the DNS server settings on your PC. You should get the DNS servers settings from your ISP. If your PC is running a DHCP client, remove any DNS IP address setting. As the router assign the DNS settings to the DHCP-client-enabled PC.

7.6 Webcam

1. Q: I cannot view Webcam's video screen from WAN.

A: Please follow the steps below.

Step1. Open Internet browser and enter `http://192.168.1.1` in the address field.

Step2. Enter **admin** in both "**User Name**" and "**Password**" fields.

Then, click on **Login** button.

Step3. Click on **Web Camera** item under **USB Applications** of the Main Menu.

Step4. Then, select **Enable** to turn on **Webcam Access from WAN**.

2. Q: Why is that the image from Webcam is so vague?

A: Please adjust the circular-frame around the Webcam's Len, until the image from Webcam showed on PC's screen is clear.

3. Q: Can I use two Webcams at the same time?

A: No, Navi210W supports only one Webcam to monitor.

4. Q: Can I use any digital camera which supports webcam function to connect to Navi210W?

A: No, exactly Navi210W doesn't support digital camera.

5. Q: Does Navi210W support all Webcam models?

A: No, Navi210W only supports the Webcams possessing OV511+ or Philips chip.

7.7 Printer

1. Q: Why can't my printer work?

A: For more details, please refer to Chapter 3 Print Server in the USB Application. Maybe Navi210W doesn't support your printer. You can contact with us to get more updated information about printer driver support.

2. Q: Printer is beginning printing, but it prints slowly and with unidentified words or codes. How could it happen?

A: Your printer's driver is lost or incompatible with your router. Please setup the printer's driver again. If you don't have the appropriate driver or want to get a compatible one, please contact with your printer supplier.

7.8 Wireless

1. Q: Why couldn't my wireless notebook work on-line, and after checking, it used an IP address that begins with a 196 when I run "ipconfig" in DOS mode?

A: Typically, Address begins with 169 means that the NIC is not communicating with the DHCP server. Wireless networks can sometimes be very complicated to setup, particularly if you're dealing with encryption and products from different vendors. Any number of variables can keep your workstations from talking with each other. Let's go over some of the more common ones.

For starters, verify that your router and your workstation are using the same SSID descriptions. SSID acts as a password when a mobile device tries to connect to the wireless network. The SSID also differentiates one WLAN from another, so all access points and all devices attempting to connect to a specific WLAN must use the same SSID. A workstation will not be permitted to connect to the network unless it can provide this unique identifier. This is similar to the function of your network's Workgroup or Domain name.

When you're experiencing conductivity problems, it is always best to keep things simple. So next you are going to do is that, please disable any WEP encryption you might have configured.

Successful implementation of encryption also includes the use of a shared key. A HEX key is most common, but other formats are also used. This key identifies the workstation to the router as a trusted member of this network. Different manufactures can implement this key technology in ways that might prevent them from working correctly with another vendor's products. So attention to detail is going to be the key to a successful installation.

Next make sure the router and the NIC are configured to use the same communications channel. There are normally 11 of them, and the default channel can also vary from vendor to vendor. You might also want to confirm that the router has DHCP services enabled and an address pool configured. If not, the NIC won't be able to pick up an IP address. I have run across a few access points that offer DHCP services

but do not assign all of the needed IP information to the NIC. As a result, I was able to connect to the network, but could not browse the web. The point is, don't assume anything. Verify for yourself that all of the required settings are being received by the workstation.

Finally, you might want to keep the system you're trying to configure in the same room as the router, at least during the initial configuration, in order to minimize potential interference from concrete walls or steel beams.

2. Q: My PC can't locate the Wireless Access Point.

A: Check the following.

- Your PC is set to Infrastructure Mode. (Access Points are always in Infrastructure Mode)
- The SSID on your PC and the Wireless Access Point are the same. Remember that the SSID is case-sensitive. So, for example "Workgroup" does NOT match "workgroup".
- Both your PC and the Wireless Access Point must have the same setting for WEP. The default setting for the Wireless Router is disabled, so your wireless station should also have WEP disabled.
- If WEP is enabled on the Wireless Router, your PC must have WEP enabled, and the key must match.
- If the Wireless Router's Wireless screen is set to Allow LAN access to selected Wireless Stations only, then each of your Wireless stations must have been selected, or access will be blocked.
- To see if radio interference is causing a problem, see if connection is possible when close to Wireless Access Point.
- To see if radio interference is causing a problem, see if connection is possible when close to the Wireless Access Point. Remember that the connection range can be as little as 100 feet in poor environments.

3. Q: Wireless connection speed is very slow.

A: The wireless system will connect at highest possible speed, depending on the distance and the environment. To obtain the highest possible connection speed, you can experiment with following:

- Access Point location: Try adjusting the location and orientation of the Access Point.
- Wireless Channel: If interference is the problem, changing to another channel may show a marked improvement.
- Radio Interference: Other devices may be causing interference. You can experiment by switching other devices off, and see if this helps. Any "noisy" devices should be shielded or relocated.
- RF Shielding: Your environment may tend to block transmission between the wireless stations. This will mean high access speed is only possible when close to the Access Point.

4. Q: Some applications do not run properly when using the Wireless Router.

A: The Wireless Router processes the data passing through it, so it is not transparent. Use the Special Application feature to allow the use of Internet applications which do not function correctly. If this does solve the problem, you can use the DMZ function. This should work with almost every application, but:

- It is a security risk, since the firewall is disabled.
- Only one (1) PC can use this feature.

5. Q: I can't connect to the Wireless Router to configure it.

A: Check the following:

- The Wireless Router is properly installed, LAN connections are OK, and it is powered ON.
- Make sure that your PC and the Wireless Router are on the same network segment.
- If your PC is set to "Obtain an IP Address automatically" (DHCP client), restart it.
- If your PC uses a Fixed (Static) IP address, make sure that it is using an IP Address within the range 192.168.1.129 to 192.168.1.253 and thus compatible with the Wireless Router's default IP Address of 192.168.1.254. Also, the Network Mask should be set to 255.255.255.255.0 to match the Wireless Router. In Windows, you can check these settings by using *Control Panel ~ Network* to check the *Properties* for the TCP/IP protocol.

7.9 Support

1. Q: Why can't be the NTFS hard disk used with Navi210W?

A: Navi210W doesn't support the NTFS hard disk. It only supports FAT16 and FAT32 hard disk.

2. Q: Why can't my USB devices work on Navi210W?

A: Maybe your USB devices and Navi210W are not compatible. So if you want to know whether your inserted device such as USB Web Camera, USB Printer or USB HDD corresponds with Navi210W, please check with your product provider.

3. Q: What is the maximum number of IP addresses that the XDSL Router will support?

A: The Router will support to 253 IP addresses with NAT mode.

4. Q: Does Napster work with the Router?

A: Napster is fully compatible with the Router and requires no special settings.

5. Q: Is the Router cross-platform compatible?

A: Any platform that supports Ethernet and TCP/IP is compatible with the Router.

7.10 Others

1. Q: Why can't I receive corrupted FTP downloads?

A: If you are experiencing corrupted files when you download a file with your FTP client, try using another FTP program.

2. Q: Why does the router dial out for PPPoE mode very often?

A: Normally some of game, music or anti-virus program will send out packets that trigger the router to dial out, you can close these program. Or you can set the idle time to 0, then control to dial out manually.

3. Q: How can I do if there is already a DHCP server in LAN?

A: If there are two DHCP servers existing in the same network, it may cause conflict and generate trouble. In this situation, we suggest to disable DHCP server in router and configure your PC manually.

8 Glossary

10BASE-T: A designation for the type of wiring used by Ethernet networks with a data rate of 10 Mbps. Also known as Category 3 (CAT3) wiring. See also data rate, Ethernet.

100BASE-T: A designation for the type of wiring used by Ethernet networks with a data rate of 100 Mbps. Also known as Category 5 (CAT5) wiring. See also data rate, Ethernet.

Binary: The "base two" system of numbers, that uses only two digits, 0 and 1, to represent all numbers. In binary, the number 1 is written as 1, 2 as 10, 3 as 11, 4 as 100, etc. Although expressed as decimal numbers for convenience, IP addresses in actual use are binary numbers: e.g., the IP address 209.191.4.240 is 11010001.10111111.00000100.11110000 in binary. See also bit, IP address, network mask.

Bit: Short for "binary digit," a bit is a number that can have two values, 0 or 1. See also binary.

Bps: Bit per second.

Broadband: A type of data transmission in which a single medium (such as cable) carries several channels of data at once.

Cable Modem (CM): The term "Cable Modem" is quite new and refers to a modem that operates over the ordinary cable TV network cables. Basically you just connect the Cable Modem to the TV outlet for your cable TV, and the cable TV operator connects a Cable Modem Termination System (CMTS) in his end (the Head-End).

CATV: Community Antenna Television or Cable TV system. It can be coaxial or HFC (Hybrid Fiber Coax) based.

CMTS: Cable Modem Termination System. It means central device for connecting the cable TV network to a data network like the Internet. Normally it placed in the head-end of the cable TV system.

DDNS: DDNS is a service let the dynamic IP switch to the static. The settings

of DDNS can solve the problem of giving the different IP at a time. After setting the router, the hostname will match the dynamic IP.

Default Gateway (Router): Every non-router IP device needs to configure a default gateway's IP address. When the device sends out an IP packet, if the destination is not on the same network, the device has to send the packet to its default gateway, which will then send it out towards the destination.

Device name: Also known as DHCP client ID or network name. Sometimes it's provided by an ISP when it uses DHCP to assign addresses.

DHCP (Dynamic Host Configuration Protocol): Dynamic Host Configuration Protocol. This protocol provides a mechanism for allocating IP addresses dynamically so that addresses can be reused. Often used for managing the IP addresses of all the cable modems in a cable plant and the PC's connected to the cable modems.

DHCP: Dynamic Host Configuration Protocol (DHCP) automates address assignment and management. When a computer connects to the LAN, DHCP assigns it an IP address from a shared pool of IP addresses; after a specified time limit, DHCP returns the address to the pool.

DHCP Server (Dynamic Host Configuration Protocol Server): A DHCP server is a computer that is responsible for assigning IP addresses to the computers on a LAN.

Diffie-Hellman: The Diffie-Hellman key agreement protocol (also called exponential key agreement) was developed by Diffie and Hellman in 1976 and published in the ground-breaking paper "New Directions in Cryptography". The protocol allows two users to exchange a secret key over an insecure medium without any prior secrets.

Diffie-Hellman Algorithm: The protocol has two system parameters p and g . They are both public and may be used by all the users in a system. Parameter p is a prime number and parameter g (usually called a generator) is an integer less than p , with the following property: for every number n between 1 and $p-1$ inclusive, there is a power k of g such that $n = g^k \text{ mode } p$.

Domain Name: A domain name is a user-friendly name used in place of its associated IP address. For example, www.hinet.net is the domain name associated with IP address 168.95.1.88. Domain names must be unique; their assignment is controlled by the Internet Corporation for Assigned Names and

Numbers (ICANN). Domain names are a key element of URLs, which identify a specific file at a web site.

DNS Server Address (Domain Name System): DNS stands for Domain Name System, which allows Internet servers to have a domain name (such as www.Broadbandrouter.com) and one or more IP addresses (such as 192.34.45.8). A DNS server keeps a database of Internet servers and their respective domain "Broadbandrouter.com" into your Internet browser), the user is sent to the proper IP address. The DNS server IP address used by the computers on your home network is the location of the DNS server your ISP has assigned to you.

Ethernet: The most commonly installed computer network technology, usually using twisted pair wiring. Ethernet data rates are 10 Mbps and 100 Mbps. See also 10BASE-T, twisted pair.

Filtering: To screen out selected types of data, based on filtering rules. Filtering can be applied in one direction (upstream or downstream), or in both directions.

Firewall: A firewall determines which information passes in and out of a network. NAT can create a natural firewall by hiding a local network's IP addresses from the Internet. A Firewall prevents anyone outside of your network from accessing your computer and possibly damaging or viewing your files.

FTP (File Transfer Protocol): A program used to transfer files between computers connected to the Internet. Common uses include uploading new or updated files to a web server, and downloading files from web server.

Gateway: A network point that manages all the data traffic of your network, as well as to the Internet and connects one network to another.

Head-end: Central distribution point for a CATV system. Video signals are received here from satellites and maybe other sources, frequency converted to the appropriate channels, combined with locally originated signals, and rebroadcast onto the HFC plant. The head-end is where the CMTS is normally located.

HFC: Hybrid fiber-coaxial (cable network). Older CATV systems were provisioned using only coaxial cable. Modern systems use fiber transport from the head-end to an optical node located in the neighborhood to reduce system

noise. Coaxial cable runs from the node to the subscriber. The fiber plant is generally a star configuration with all optical node fibers terminating at a head-end. The coaxial cable part of the system is generally a trunk-and-branch configuration.

Host: A device (usually a computer) connected to a network.

HTTP: Hyper-Text Transfer Protocol (HTTP) is the main protocol used to transfer data from web sites so that it can be displayed by web browsers.

ICMP: Internet Control Message Protocol (ICMP) is an Internet protocol used to report errors and other network-related information. The ping command makes use of ICMP.

IEEE: The Institute of Electrical and Electronics Engineers. The IEEE sets standards for networking, including Ethernet LANs. IEEE standards ensure interoperability between systems of the same type.

Internet: The global collection of interconnected networks used for both private and business communications.

IP Address: IP stands for Internet Protocol. An IP address consists of a series of four numbers separated by periods, that identifies a single, unique Internet computer host in an IP network. Example: 192.168.1.1. It consists of 2 portions: the IP network address, and the host identifier.

The IP address is a 32-bit binary pattern, which can be represented as four cascaded decimal numbers separated by ".": aaa.aaa.aaa.aaa, where each "aaa" can be anything from 000 to 255, or as four cascaded binary numbers separated by "bbbbbbbb.bbbbbbbb.bbbbbbbb.bbbbbbbb, where each "b" can either be 0 or 1.

ISP (Internet Service Provider): An ISP is a business that allows individuals or businesses to connect to the Internet. Users log on to the Internet using an account with an ISP or Internet Service Provider. ISPs can server IP addresses dynamically, or assign static (fixed) IP addresses to individual computers.

ISP Gateway Address: The ISP Gateway Address is an IP address for the Internet router. This address is only required when using a cable or DSL modem.

LAN (Local Area Network): A LAN is a group of computers and devices connected together in a relatively small area (such as a house or an office). Your home network is considered a LAN.

LED: Light Emitting Diode (LED) is an electronic light-emitting device. The indicator lights on the front of the Internet Security Router are LEDs.

MAC Address (Media Access Control): A MAC address is the hardware address of a device connected to a network.

Mbps: Abbreviation for Megabits per second, or one million bits per second. Network data rates are often expressed in Mbps.

NAT (Network Address Translation): NAT masks a local network's group of IP addresses from the external network, allowing a local network of computers to share a single ISP account. This process allows all of the computers on your home network to use one IP address. This will enable access to the Internet from any computer on your home network without having to purchase more IP addresses from your ISP.

Network: A group of computers that are connected together, allowing them to communicate with each other and share resources, such as software, files, etc. A network can be small, such as a LAN, or very large, such as the Internet.

Network Mask: A network mask is a sequence of bits applied to an IP address to select the network ID while ignoring the host ID. Bits set to 1 mean "select this bit" while bits set to 0 the IP address 100.1010.50.1, the network ID is 100.10.50, and the host ID is 1.

A network mask is also a 32-bit binary pattern, and consists of consecutive leading 1's followed by consecutive trailing 0's, such as 11111111.11111111.11111111.00000000. Therefore sometimes a network mask can also be described simply as "x" number of leading 1's.

When both are represented side by side in their binary forms, all bits in the IP address that correspond to 1's in the network mask become part of the IP network address, and the remaining bits correspond to the host ID.

For instance, if the IP address for a device is, in its binary form, 11011001.10110000.10010000.00000111, and if its network mask is, 11111111.11111111.11110000.00000000. It means the device's network address is 11011001.10110000.10010000.00000000, and its host ID is,

00000000.00000000.00000000.00000111. This is a convenient and efficient method for routers to route IP packets to their destination.

Packet: Data transmitted on a network consists of units called packets. Each packet contains a payload (the data), plus overhead information such as where it came from (source address) and where it should go (destination address).

PFS: PFS stands for perfect forward secrecy. You may choose to use the same keys (generated when the IKE tunnel is created) for all re-negotiations or you can choose to generate new keys for every re-negotiation.

Ping (Packet Internet or Inter-network) group: A program used to verify whether the host associated with an IP address is online. It can also be used to reveal the IP address for a given domain name.

Port: A physical access point to a device such as a computer or router, through which data flows into and out of the device.

PPP (Point-to-Point Protocol): PPP is a protocol for communication between computers using a serial interface, typically a personal computer connected by phone line to a server.

PPPoE (Point-to-Point protocol over Ethernet): Point-to-Point protocol is a method of secure data transmission. PPP is using Ethernet to connect to an ISP.

Protocol: A set of rules governing the transmission of data. In order for a data transmission to work, both ends of the connection have to follow the rules of the protocol.

Remote: In a physically separate location. For example, an employee away on travel who logs in to the company's intranet is a remote user.

RJ-45: Registered Jack Standard-45 (RJ-45) is the 8-pin plug used in transmitting data over phone lines. Ethernet cabling usually uses this type of connector.

Routing: Forwarding data between your network and the Internet on the most efficient route, based on the data's destination IP address and current network conditions. A device that performs routing is called a router.

RIP (Routing Information Protocol): The original TCP/IP routing protocol. There are two versions of RIP : Version I and version II.

SNMP: Simple Network Management Protocol (SNMP) is the TCP/IP protocol used for network management.

SSID: The SSID is an identification string of up to 32 ASCII characters that differentiate one AP or Access Point from other manufacturers. The SSID is also referred to as the "ESSID" or "Extended Service Set ID."

Subnet Mask : A Subnet mask is a set of four numbers configured like an IP address. It is used to create IP address numbers used only within a particular network.

TCP/IP (Transmission Control Protocol/Internet Protocol): This is the standard protocol for data transmission over the Internet. Protocol used to connect hosts on the Internet.

URL: An Internet or Web address (sometimes called a URL, or Uniform Resource Locator) typically is composed of four parts: 1. A protocol name, 2. The location of the site, 3. The name of the organization that maintains the site, 4. A suffix that identifies the kind of organization it is (such as .com for a commercial organization)

XDSL: XDSL is a kind of Digital Subscriber Line the most commonly deployed "flavor" of DSL for home users.

WAN (Wide Area Network): A system of LANs, connected together. A network connects computers located in separate areas (i.e., different buildings, cities, countries). The Internet is an example of wide area network.

Web browser: A software program that uses Hyper-Text Transfer Protocol (HTTP) to download information from (and upload to) web sites, and displays the information, which may consist of text, graphic images, audio, or video, to the user. Web browsers use Hyper-Text Transfer Protocol (HTTP). Popular web browsers include Netscape Navigator and Microsoft Internet Explorer.

Web page: A web site file typically containing text, graphics and hyperlinks (cross - references) to the other pages on that web site, as well as to pages on other web sites. When a user accesses a web site, the first page that is displayed is called the home page.

Web site: A computer on the Internet that distributes information to (and gets information from) remote users through web browsers. A web site typically consists of web pages that contain text, graphics, and hyperlinks.

WWW: World Wide Web (WWW), also called (the) Web. It is a collective term for all web sites anywhere in the world that can be accessed via the Internet.