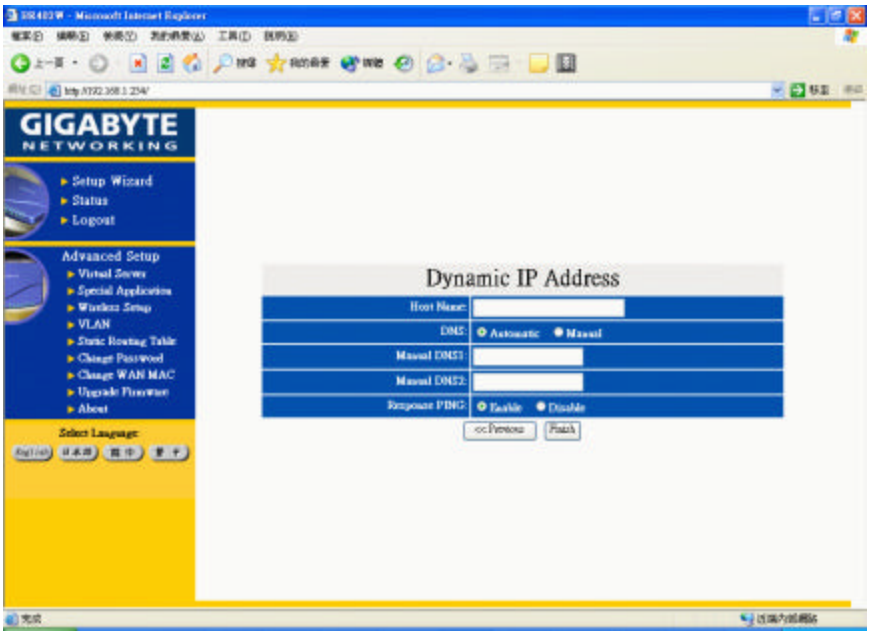
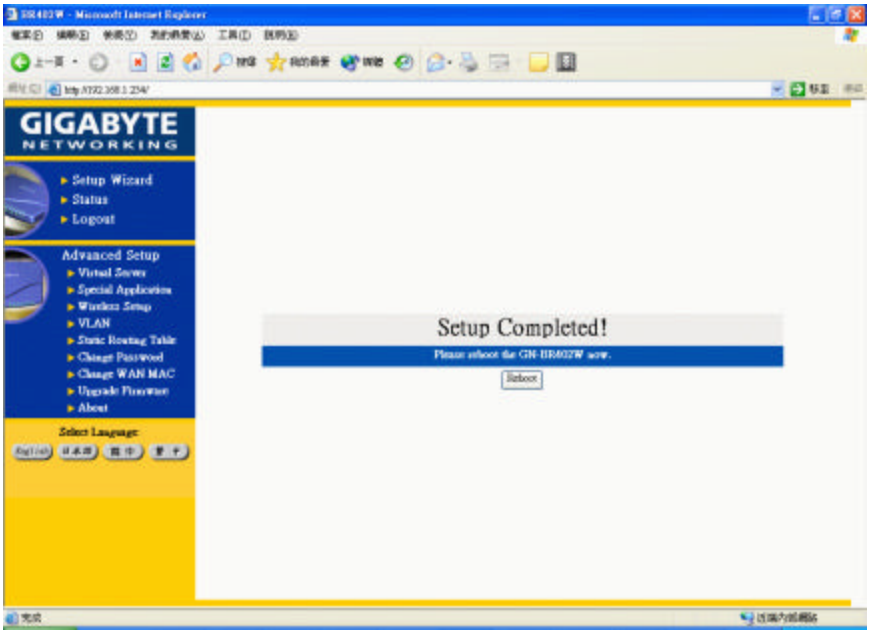
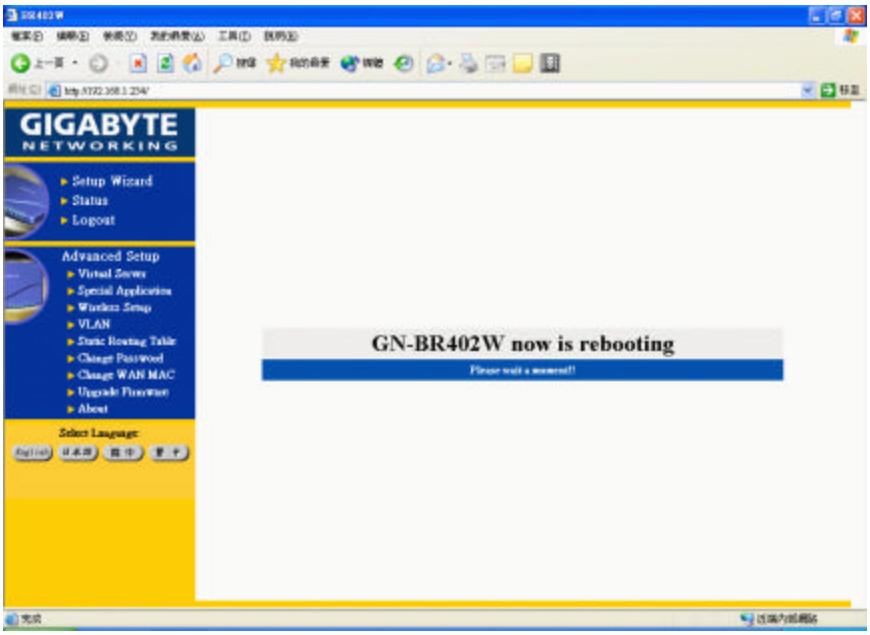
Step 11. If you select the “Dynamic IP Address” in the WAN TYPE SELECT, the following screen will appear. First, select “Automatic” or “Manual” DNS. Please key in the Host Name and Manual DNS IP address if you select “Manual” DNS. Press “Finish” to go to next step.



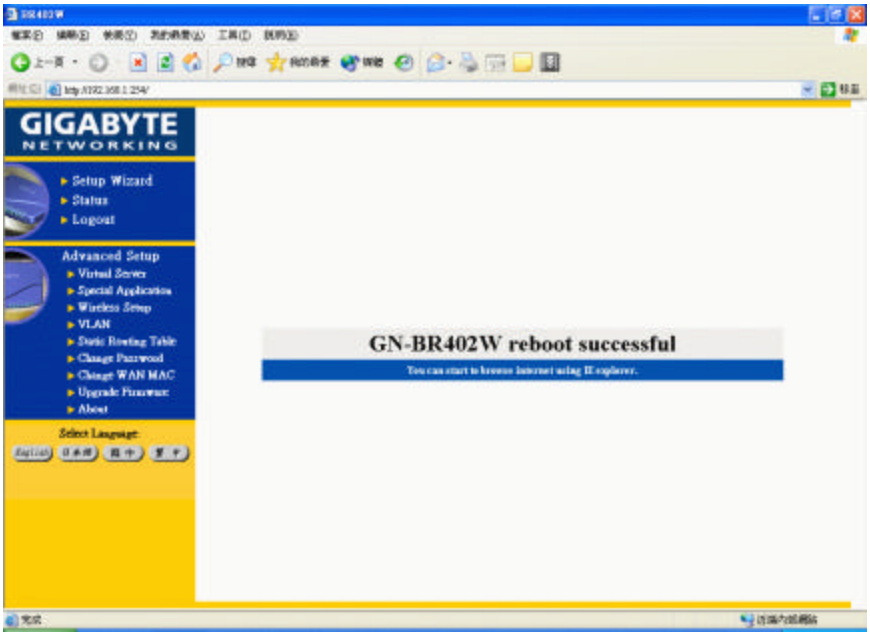
Step 12. After “Reboot” is pressed, it proceeds with the next step



Step 13. Please wait a moment.



Step 14. The IE browser will be automatically connected to the main menu, and the setup is completed by then. Please use your IE connect to Internet.



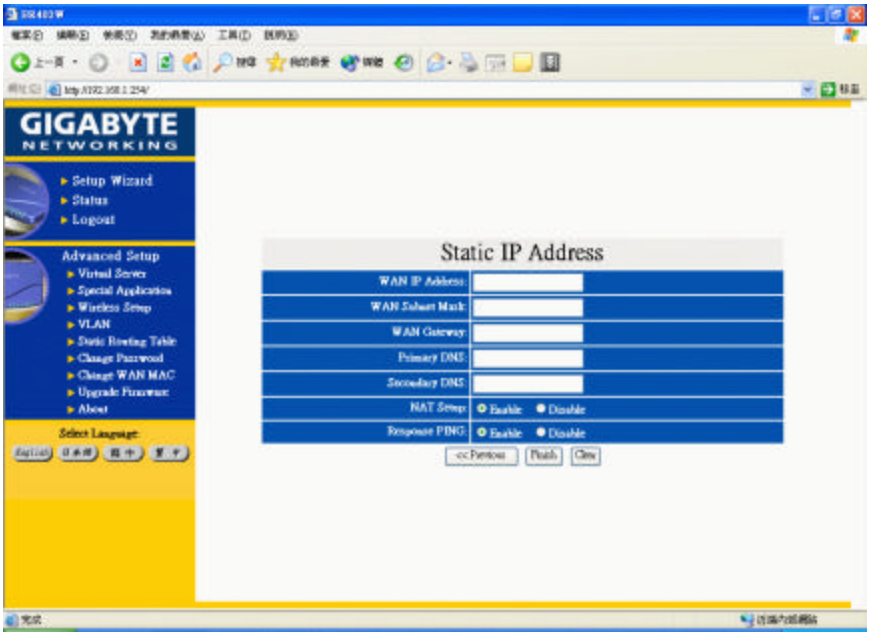
If you can connect to the Internet , the setting is completed. If you use the Wireless Lan Card connection , please continue to section 3-4 Wireless Basic Setting.

Step 15. If you select “Static IP Address” in the WAN TYPE SELECT, please key in the data provided by the wideband company in the following fields as shown below:

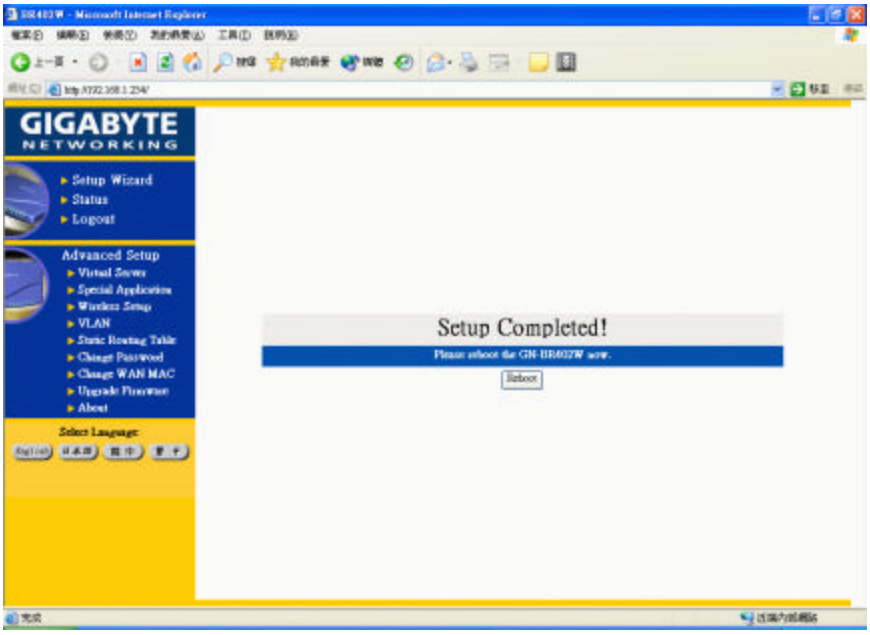
Note: a. If your wideband company gives you more than one IP address, then select one of them to fill in the column in the above figure, and refer to Appendix A for the use of other IP addresses.

b. Static IP Setup

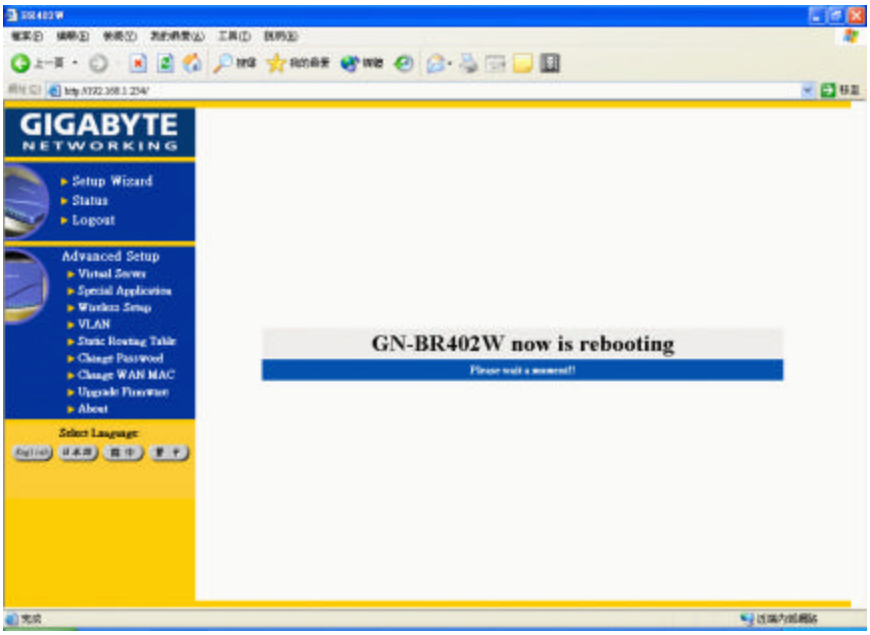
Normal Users please use "NAT enable" then connect to Internet in general.



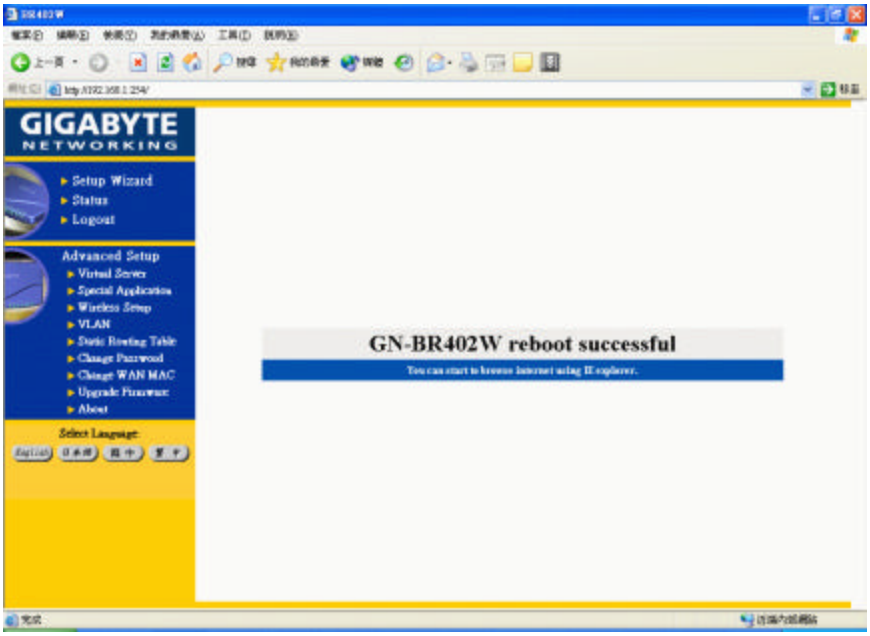
Step 15. After “Reboot” is pressed, it proceeds with the next step.



Step 16. Please wait for a moment.

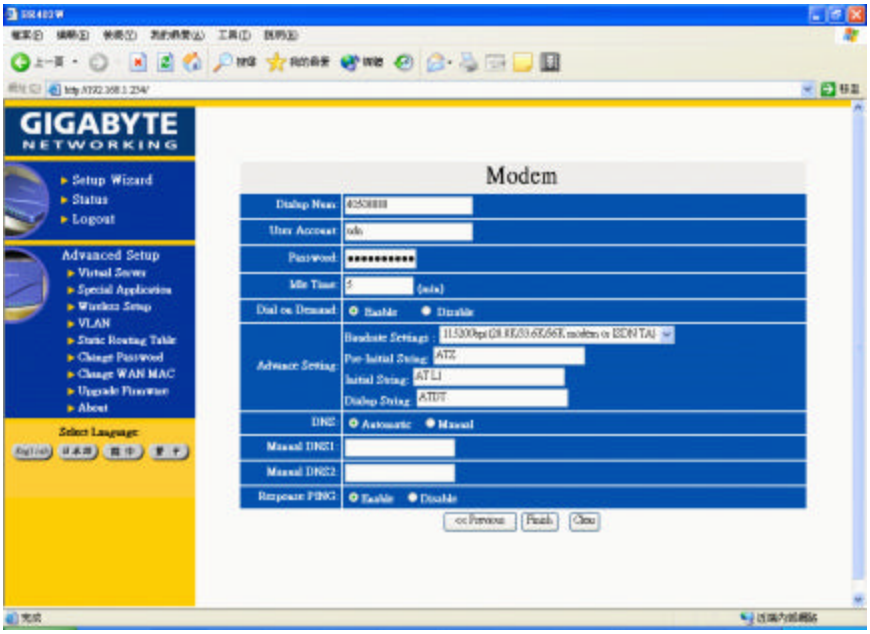


Step 17. The IE browser will be automatically connected to the main menu, and the setup at the PC end is completed by then. Please use your IE connect to Internet.

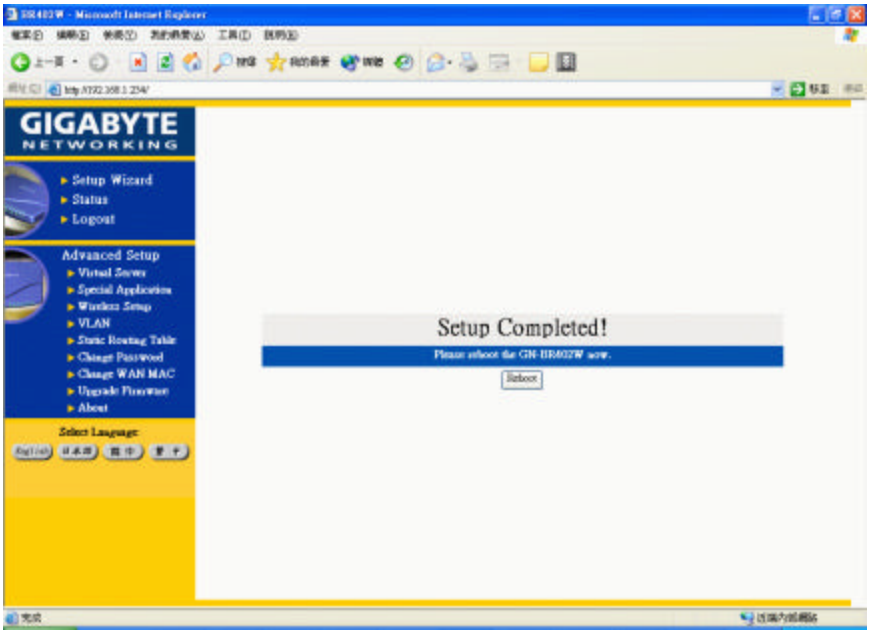


If you can connect to the Internet , the setting is completed . If you use the Wireless Lan Card connection , please continue to section 3-4 Wireless Basic Setting.

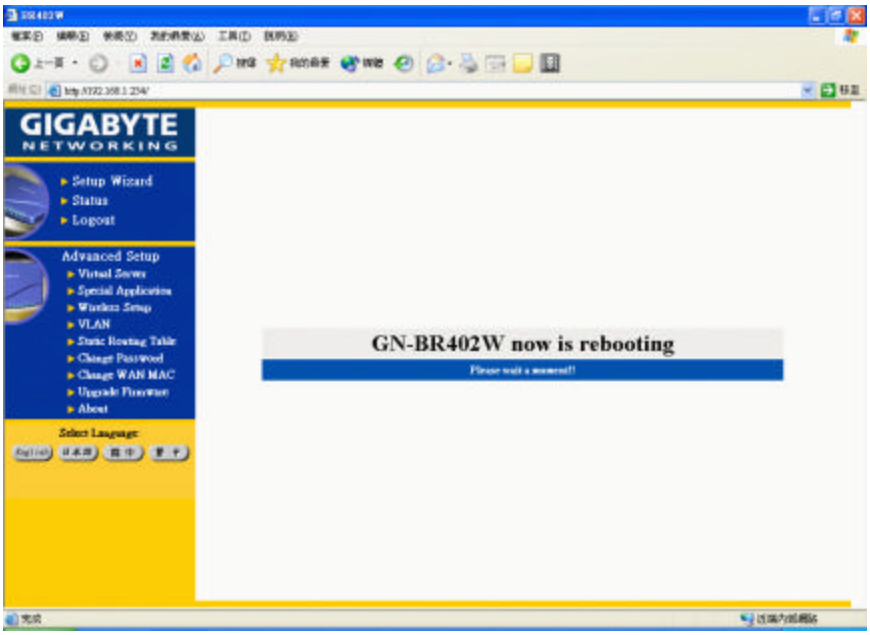
Step 18. If you select “PPP(Modem)” in the WAN TYPE SELECT, please key in the data provided by the ISP company in the following blanks , then click “finish” , shown as below:



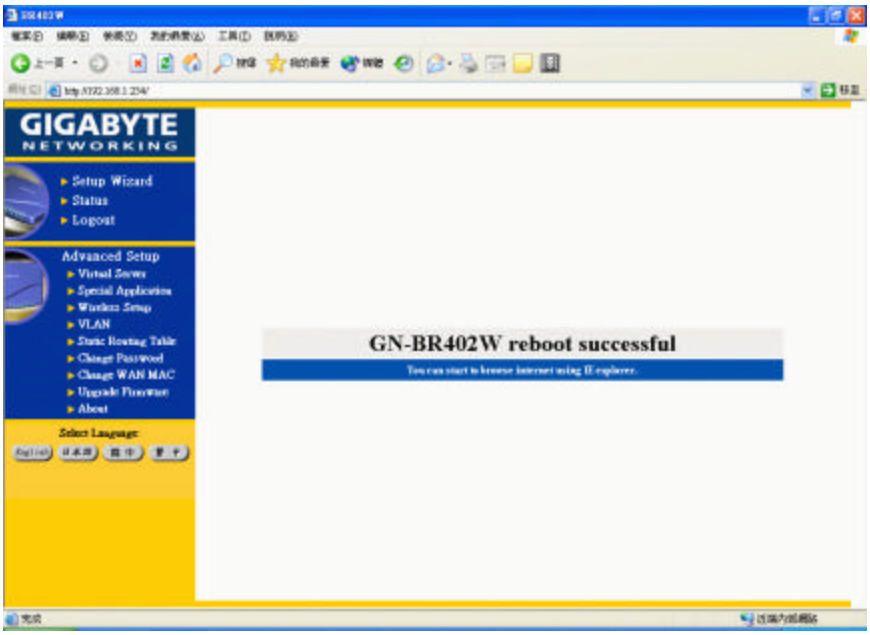
Step 19. After “Reboot” is pressed, it proceeds with the next step.



Step 20. Please wait for a moment.



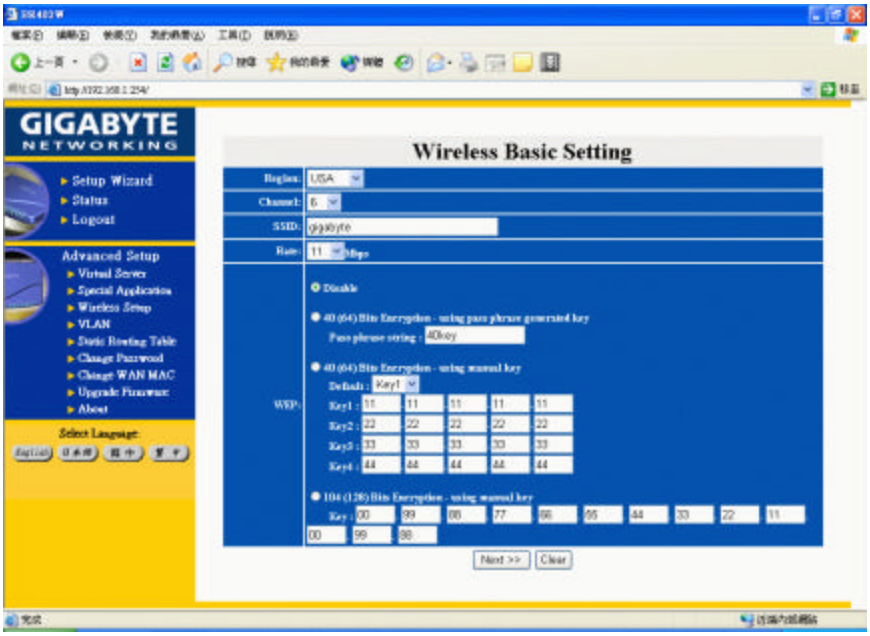
Step 21. The IE browser will be automatically connected to the main menu, and the setup at the PC end is completed by then. Please use your IE connect to Internet.



If you can connect to the Internet, it means you have finished the setting. If you use the Wireless Lan Card connection, please continue to 3-4 Wireless Basic Setting.

3-4 Wireless Basic Setting

Step 1. Please key in the data.



Region

Because of the different region has different open channel regulations, please choose your local area, system will change to your local area utilize channel list automatically.

Channel

Please choose the Channel where you at, different area has different channel range, the default value is channel 6.

SSID

The default value is “gigabyte”, if the setup value is the default value, like “router”, Only can accept the computer connection, which use the Wireless card ESSID (or SSID) set up, is “router”. (Note: The maximum length of SSID is 32bit letter of English or numeral and remember what you type, its case sinstive.)

Rate

There are four chooses for the Maximum transition rates, 11Mbps/5.5Mbps/2Mbps/1Mbps.

WEP Setup

Five chooses as following:

1. Not use.
2. Using 64-bit WEP encryption, and using pass phase change to the key. For the wireless card portion, please setup the first set password value.
3. Using 64-bit WEP encryption, enter to the key manually, and be able to choose what group of key as well.
4. Using 128-bit WEP encryption, and using pass phase change to the key. For the wireless card portion, please fill up the password on the first set password area.
5. Using 128-bit WEP encryption, enter to the key manually.

Step2. “MAC Access Control” shown as the diagram. You can set up either “allow” or “deny” the user can connect to the Internet by setting the MAC address.

Default Rules : Disable/Allow/Deny

Disable : Disable MAC Address control.

Allow : The user can connect to the Internet.

Deny : The user cannot connect to the Internet.

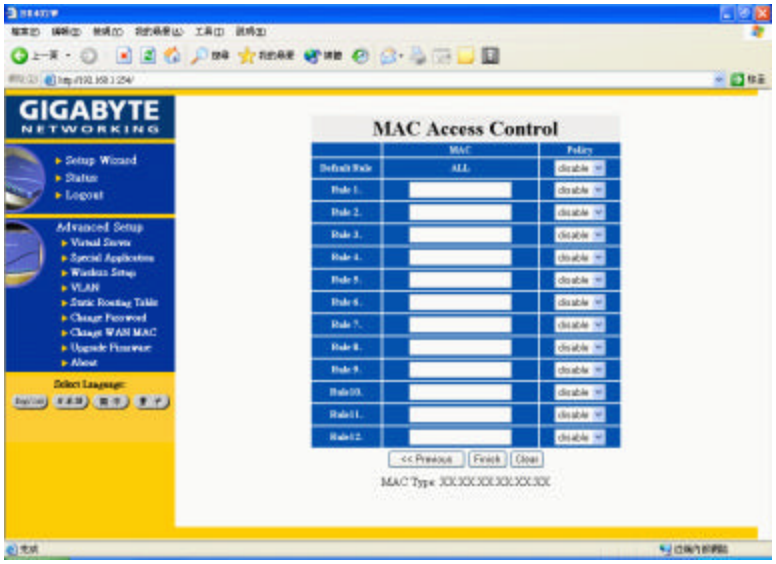
The format of MAC address is XX:XX:XX:XX:XX:XX.(exp. “01:23:45:67:89:AB”)

Note

Condition 1: "allow" It allows all users can connect to the Internet, except the users who set up under “deny” condition.

Condition 2: "deny" It denies all users can connect to the Internet, except the users who set up under “allow” condition.

Condition 3: All of the regulations from 1~12 won’t work if the status of default rule is “Disable”. All users can connect to the Internet. (The wireless card should enter correct SSID and WEP password value.)



For instance:

Case 1. Default Rule is “Allow”.

Rule1: the MAC address is ”11:22:33:44:55:66” and the status is “deny”.

Rule2: the MAC address is “77:88:99:AA:BB:CC” and the status is “deny”.

⇨ It allows all users can connect to the Internet, except the users whose MAC Address are “11:22:33:44:55:66” or “77:88:99:AA:BB:CC”.

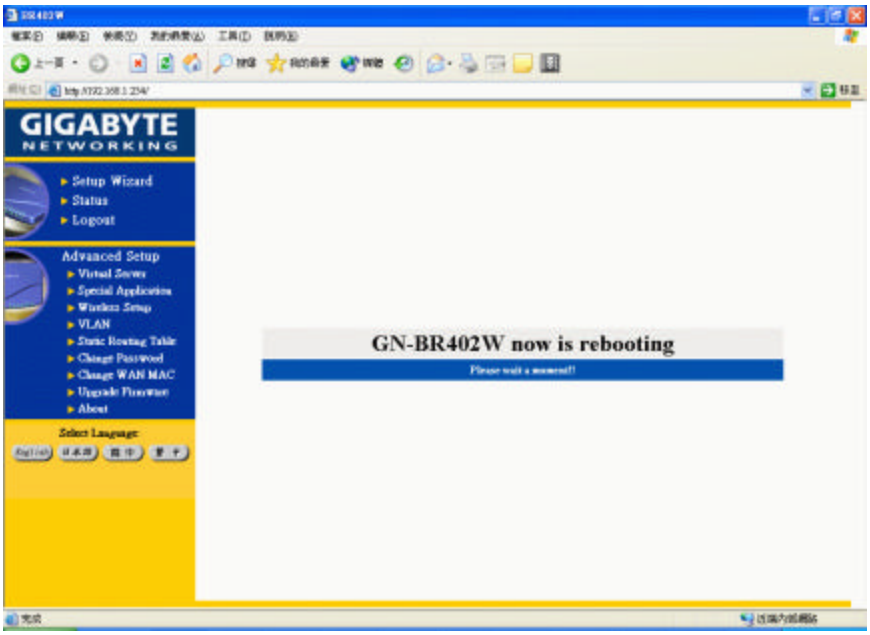
Case 2. Default Rule is “Deny”.

Rule1: the MAC address is ”11:22:33:44:55:66” and the status is “allow”.

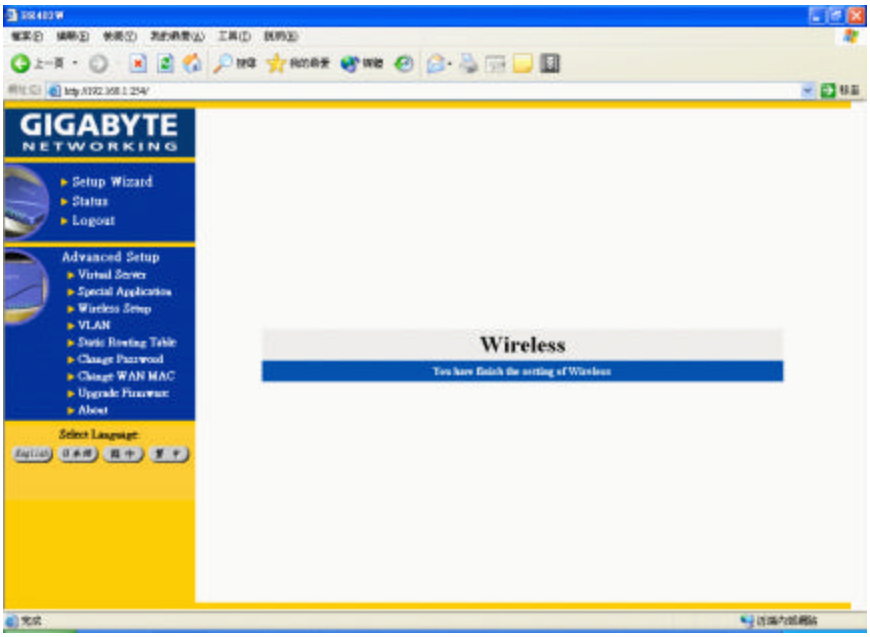
Rule2: the MAC address is “77:88:99:AA:BB:CC” and the status is “allow”.

⇨ It denies all users can connect to the Internet, except the users whose MAC Address are “11:22:33:44:55:66” or “77:88:99:AA:BB:CC”.

Step3. Please wait for a moment.



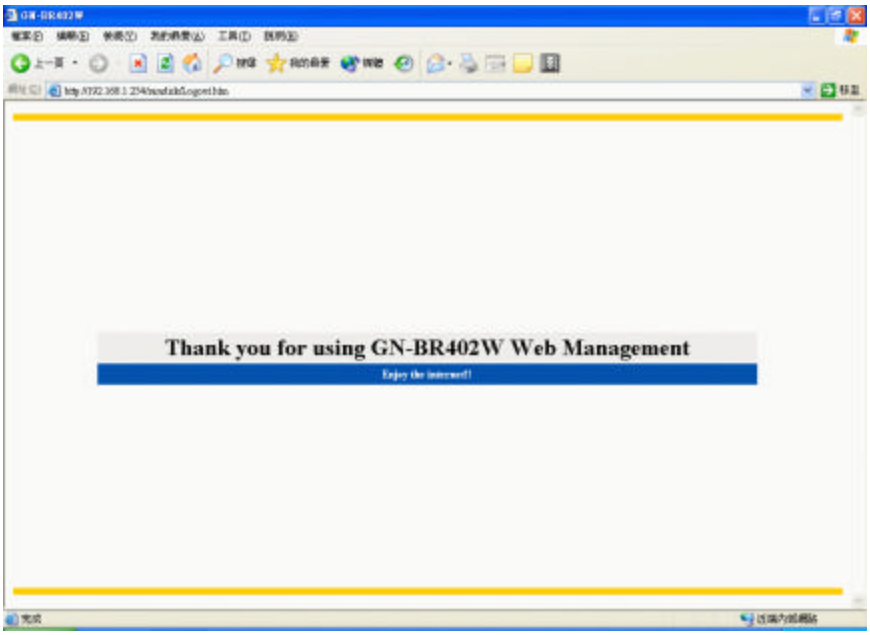
Step4. After the Wireless Basic setting is completed, check the status of the WAN connection. If the status is "connect" then you can use IE to the Internet, else please click the "connect" bottom to reconnect.



3-5 Logout

After you finish GN-BR402W setup, please choose “ Logout”.

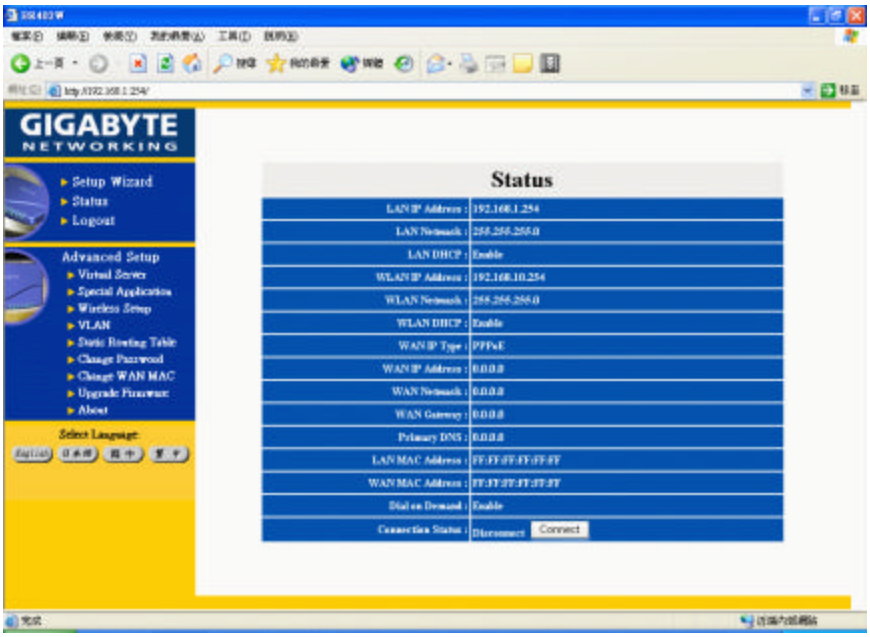
Note : After 5 minutes idle time, the system will be automatically logout.



4. Status

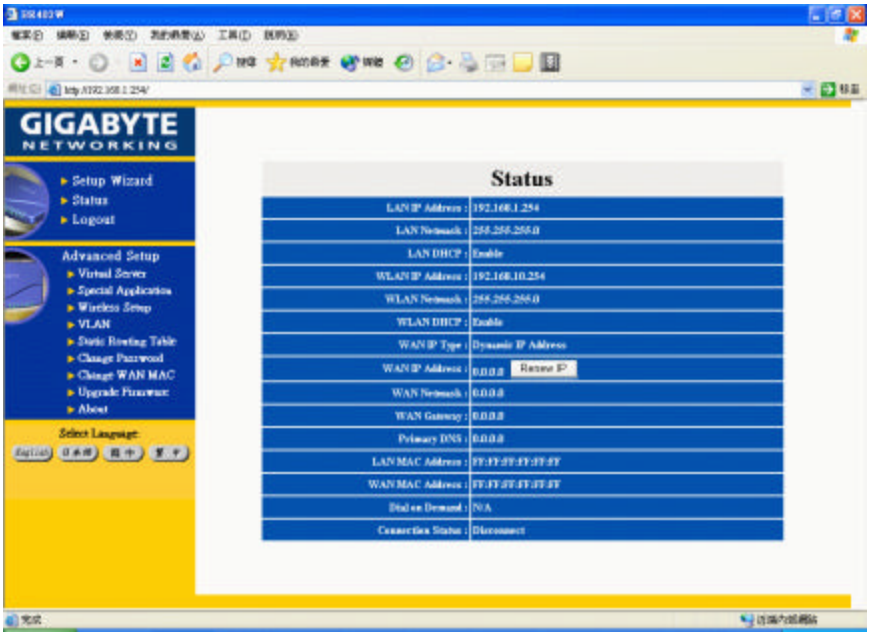
-“ Status” screen shows the current basic network setting status.

Status 1. If you select “PPPoE” in the WAN TYPE SELECT, press “Status”, and the screen shows as follows:



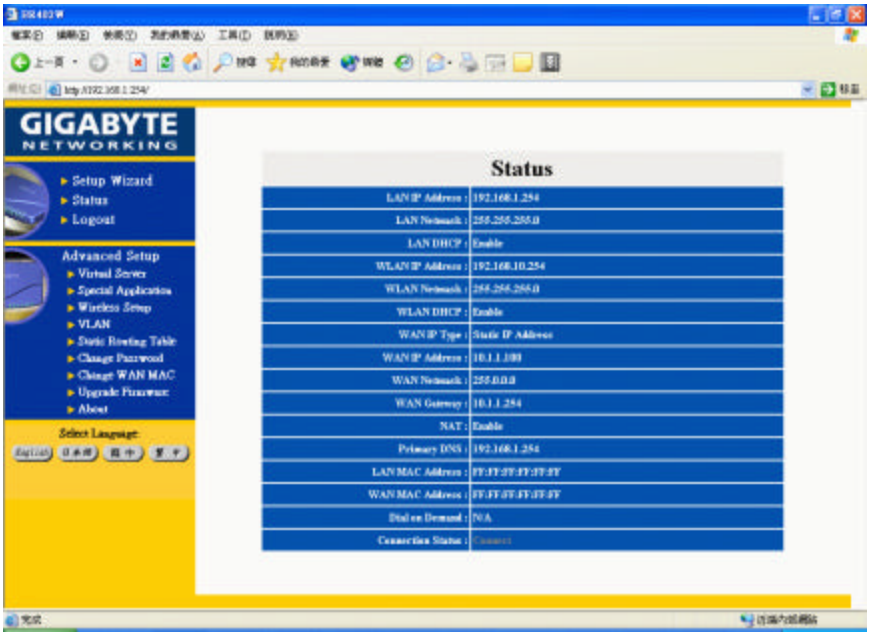
Note: your network service provider automatically obtains each of the above IP address at the WAN end.

Status 2. If you select “Dynamic IP Address” in the WAN TYPE SELECT, press “Status” screen as follows:

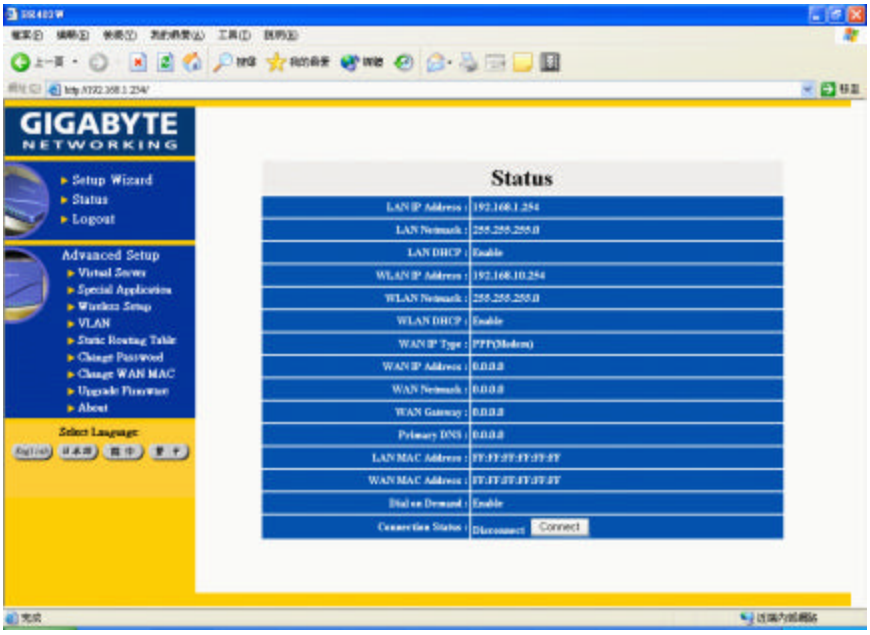


Note: your network service provider automatically obtains Each IP address of the above WAN end.

Status 3. If you select “Static IP Address” in the WAN TYPE SELECT, press “Status”, and the screen shows as follows:

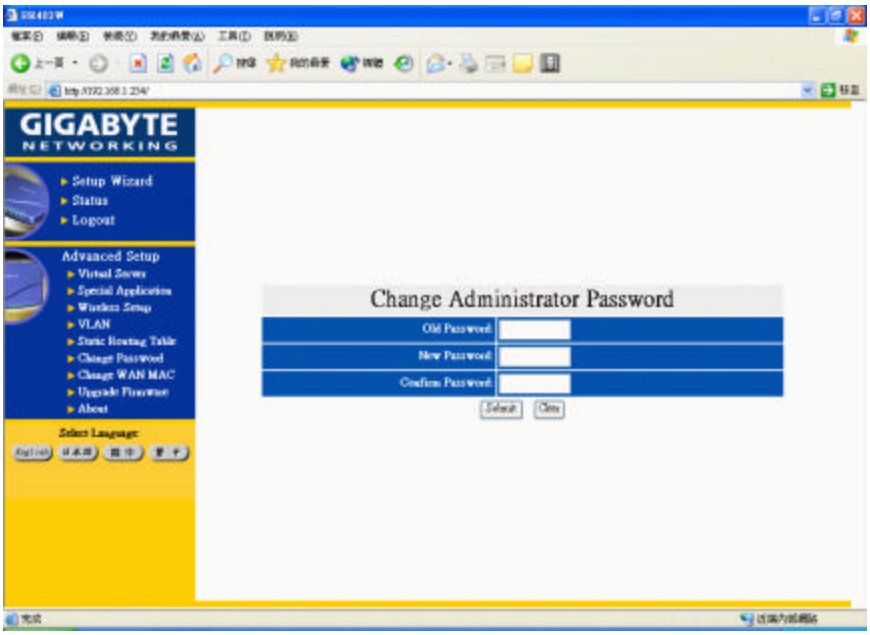


Status 3. If you select “PPP (Modem)” in the WAN TYPE SELECT, press “Status”, and the screen shows as follows:



5. Change Password

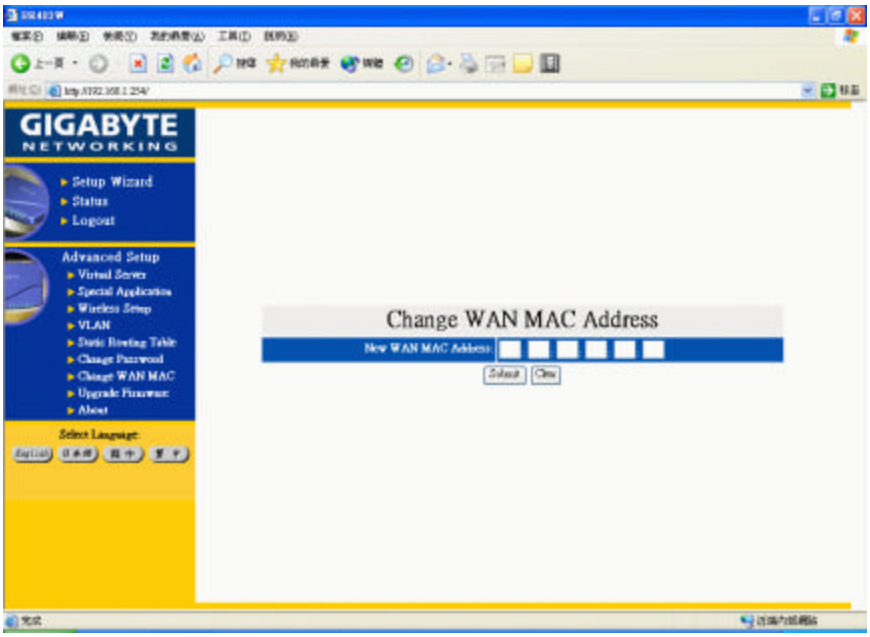
- Key in your old password, and key in your new password. After your confirmation, key in your new password once again, and the procedure will complete after you press: “Submit”.



6. Change MAC address

-If your ISP Company asks you to use the original MAC address. You can enter your MAC address at this place.

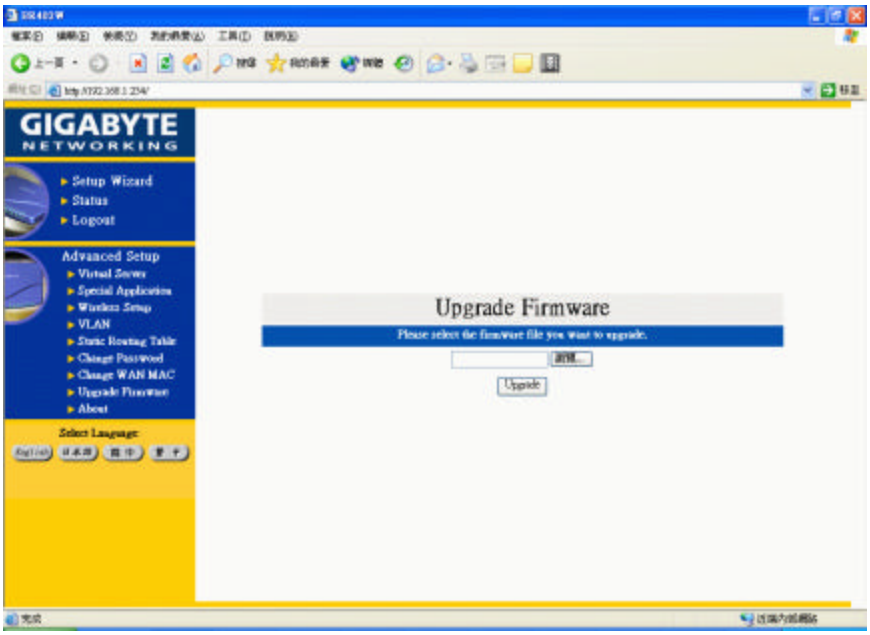
PS: MAC address is from your NIC that you registered with your ISP Company. If you want to restore to the factory default, please use “reset MAC” from GN-BR402W install CD.



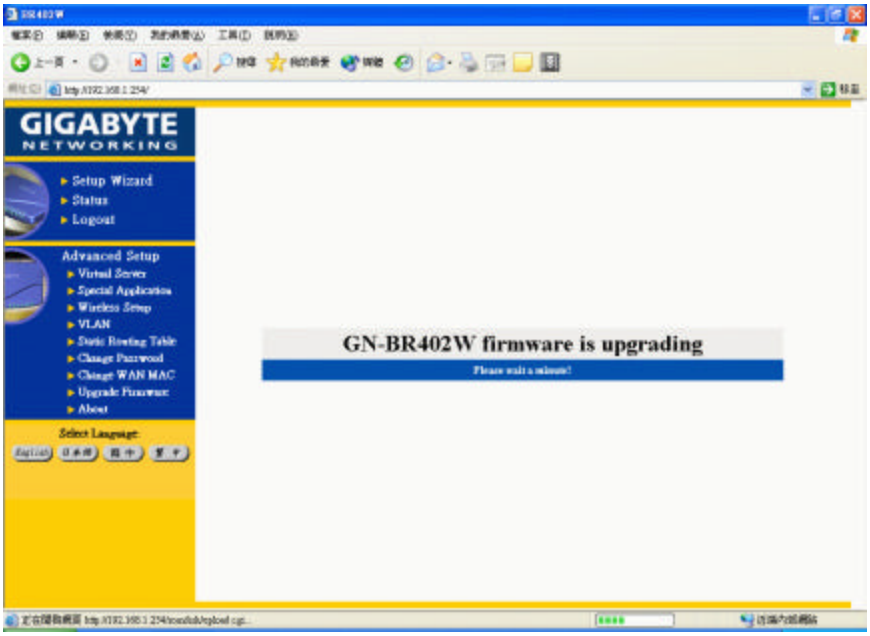
7. Firmware Upgrade

- Please browse and select your desired upgrade file (firmware version), and press upgrade.

Note: you can download the upgraded firmware version from Gigabyte website.



Please wait a moment, and the IE browser will be automatically connected to the main menu, and the setting of our firmware upgrade is completed.



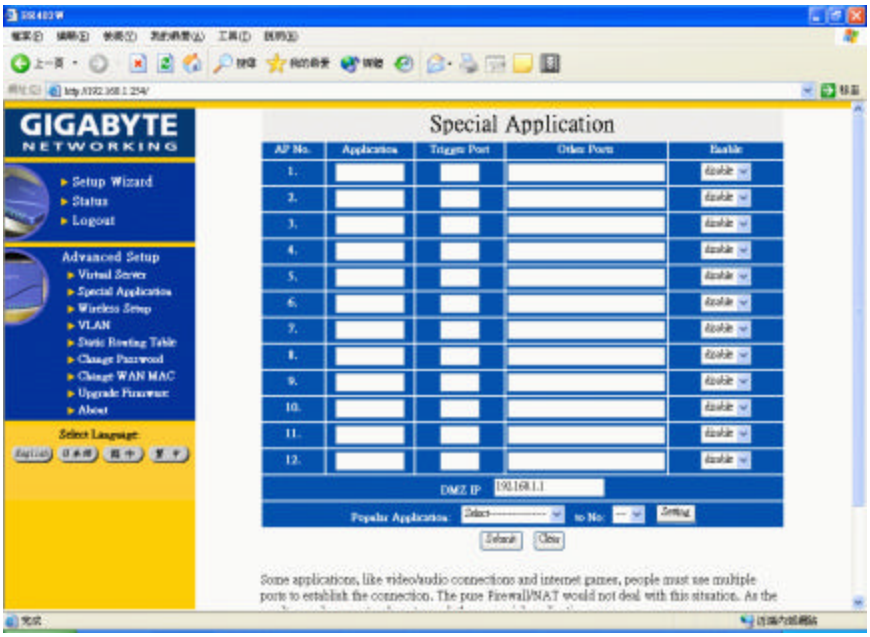
8. Instruction of Using Special Application

When special application program users at the LAN end want to use a certain network application program, such application program needs more set up than the regular connection, and most of these application programs are games or audio/video multimedia. Take AOK (Age of Kings) for example:

- Application: AOK
- Trigger Port: 47624
- Other Ports: 2300 2400,28800 29000
- Enable: enable

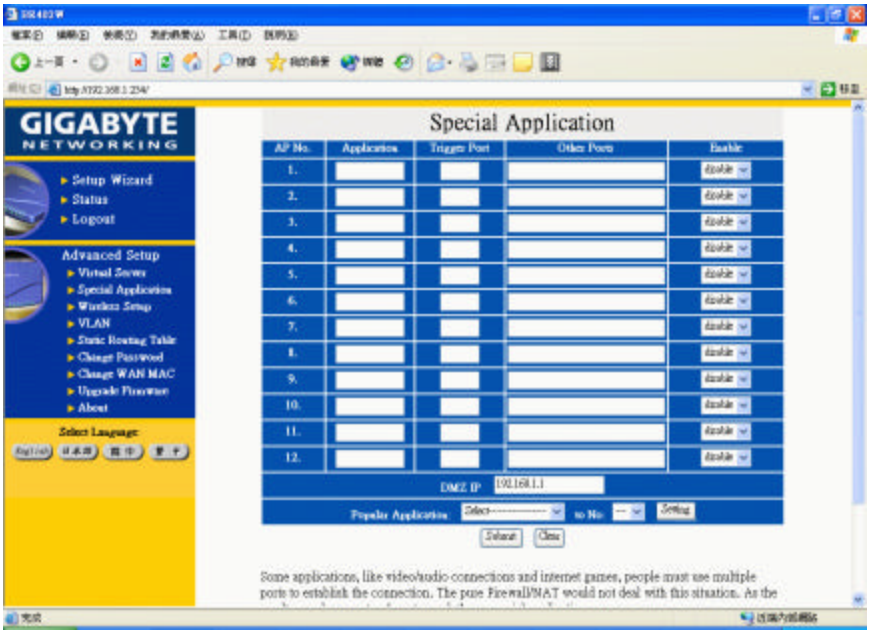
1. Application: Key in the desired software name, such as AOK (Age of Kings); it only needs an input for this field, and its value will not affect the operation of the BR402W.
2. Trigger Port: A port number.
3. Other Ports: The port interval of each section that needs to open is separated by a "space" (e.g. 2300 2400), and each interval is separated by a "comma" (2300 2400, 28800 29000).
4. Enable: Select "enable" to open such setting.

Several common application program set-ups are provided at the bottom of the screen. The user can complete the settings by clicking the mouse.



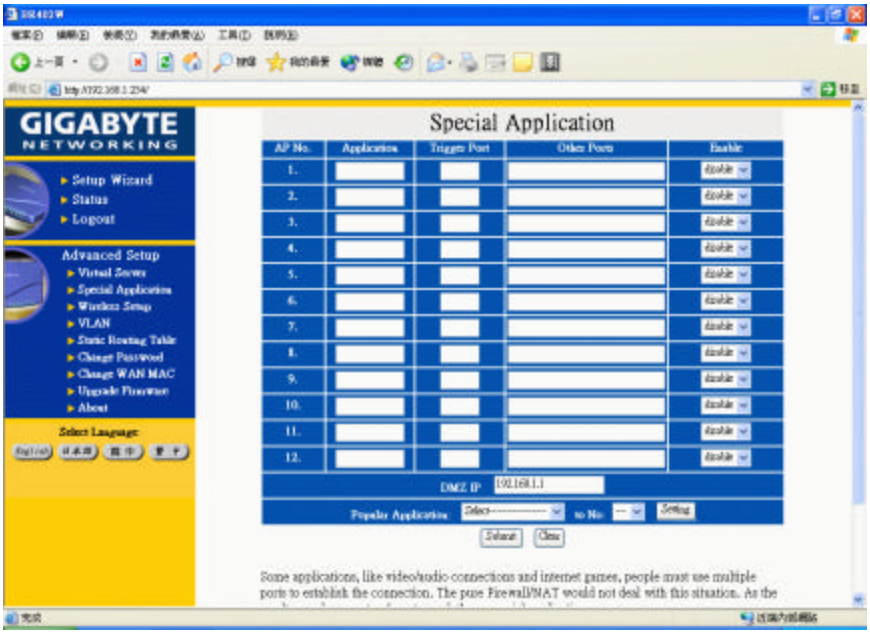
8-1 Instruction of Using DMZ

If we do not know how to set up certain game or software or the field for set up cannot satisfy the need, then the virtual IP Address (such as 192.168.1.1) obtained the PC at the LAN terminal can be used to input to the field of DMZ. Taking NetMeeting for example, if you just want to call an external computer from the computer at the LAN terminal, it does not need any set up. However, if you want to let the external PC to call the computer at the LAN terminal, then the virtual IP Address must be filled in the field of DMZ.)



8-2 Instruction of Using Netmeeting

1. If we need to actively call the PC of the external network from the PC at the LAN terminal, it does not need special set up.
2. To let a PC at the WAN end call a PC at the LAN end, set the virtual IP Address (such as 192.168.1.1) of the PC at the LAN end to the DMZ field in the Special Application as shown in the following figure. The PC at the WAN end can call the external IP Address (provide by the ISP) of the BR402W, and the internally connects to such PC.



9. Instruction of Using the Virtual Server

Virtual server provides a way to let the PC at the WAN end connect to a server of a PC at the LAN end.

Taking the IP Address 192.168.1.1 of a PC on a FTP (port:21) at the LAN end for example:

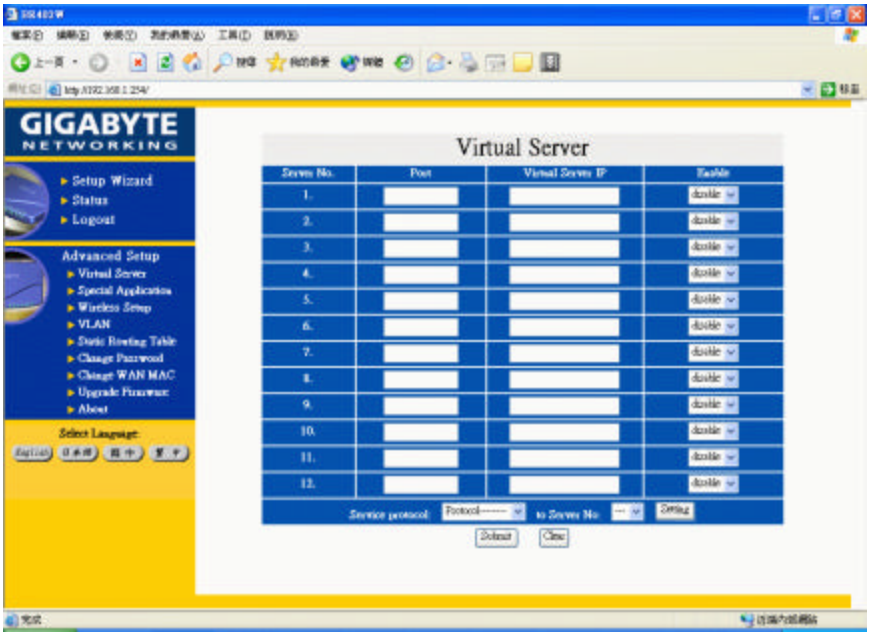
Port: 21

Virtual Server IP: 192.168.1.1

Enable: enable

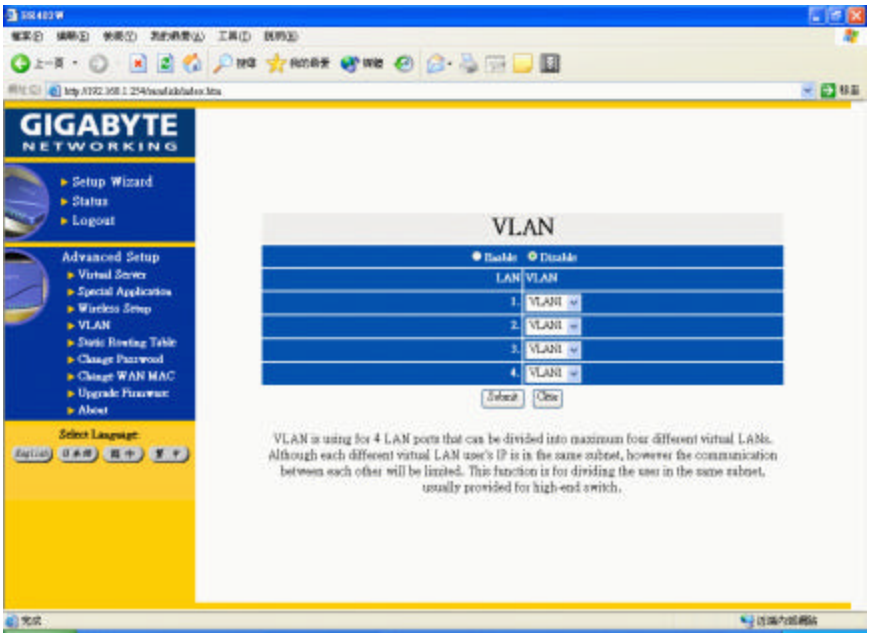
The PC at the WAN end can connect to the internal FTP server at the IP address 192.168.1.1 via the WAN end of the IP Address of the FTP BR402W.

At the bottom of the screen, we provide several common server port numbers for the setting, and the user can click one of them, and then fill in the virtual IP address set for the server to complete the set up.



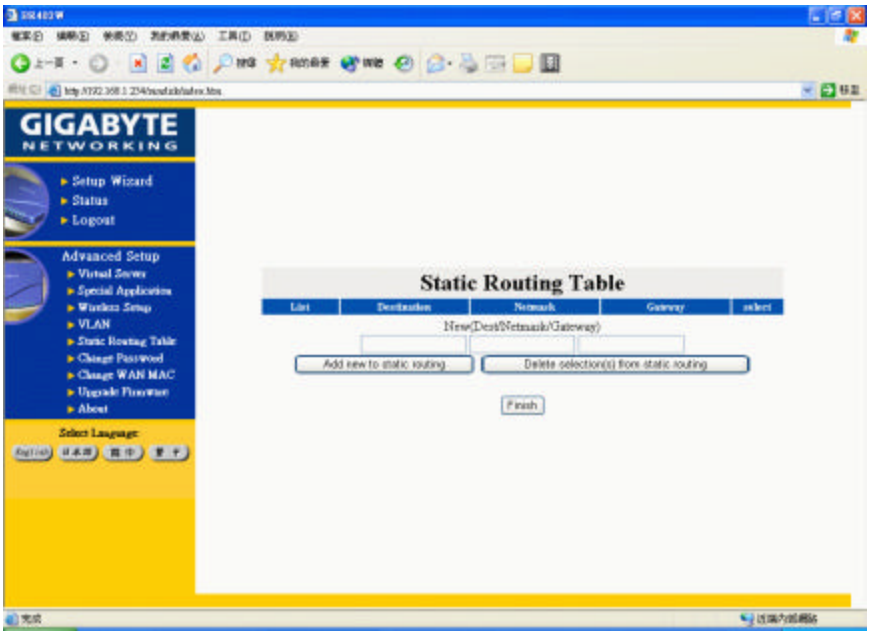
10. VLAN

VLAN is using for 4 LAN ports that can be divided into maximum four different virtual LANs. Although each different virtual LAN user's IP is in the same subnet, however the communication between each other will be limited. This function is for dividing the user in the same subnet, usually provided for high-end switch.



11. Static Routing Table

Under some of Internet environments, some of the subnet do not go through the default gateway. Users can add those routing information to Static Routing Table by themselves.



You can enter new routing information and click "Add new to Static routing" then there will add the new routing information to Static Routing Table. Otherwise, you can mark the checkbox of the routing table that you want to delete and click "Delete selection(s) from static routing" then there will delete the marked routing information from Static routing table. Press "Finish".

12. Troubleshooting

Q: What to do if you forget your password or forget the IP address of the GN-BR402W?

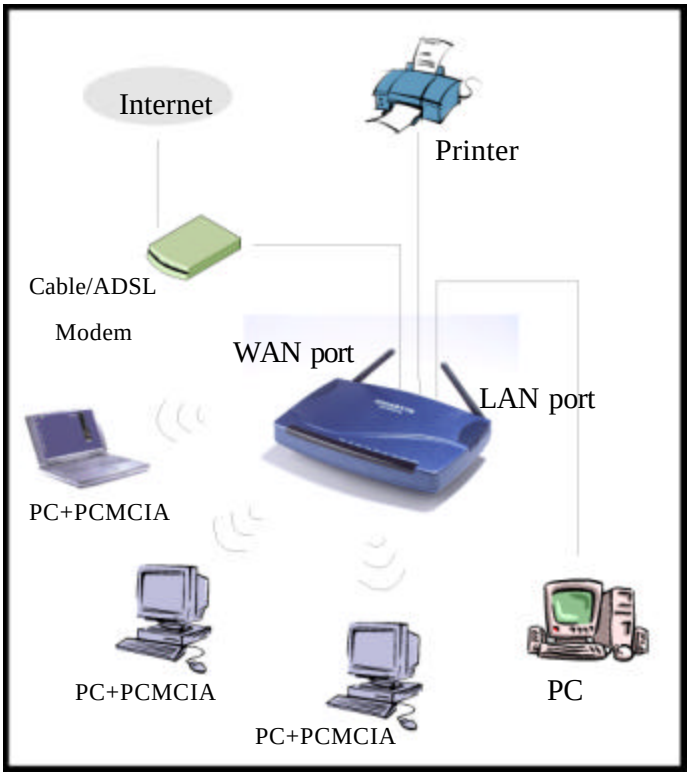
Please press the "Reset" bottom on the GN-BR402W about 4 sec. The GN-BR402W will be restart and the system setting will restore to default value.

Q: Unable to connect to Internet?

- Please confirm whether or not the power cord is properly connected, and the power indicating light of the GN-BR402W is normal.
- Please confirm whether or not all of the settings described in this manual are set
- Please confirm if ADSL or Cable Modem operates properly, and if the ISP network service expires.
- Please confirm if your network cable is connected properly, and the LED status is normal

13. Appendix

(A) GN-BR402W Functional Diagram



(B) USB Driver Installation

Preface

1. Before installing the USB driver, please refer to Section 3-2 for the installation at your PC end. If "obtain an IP address automatically" is not selected in the installation at your PC, then you should know the following information:
   IP address ranges from "192.168.2.1" to "92.168.2.252"
   Subnet Mask "255.255.255.0"
   Default Gateway "192.168.2.253".

2. Follow the "Found New Hardware Wizard" to complete the GN-BR402W USB Driver Installation.

Steps:

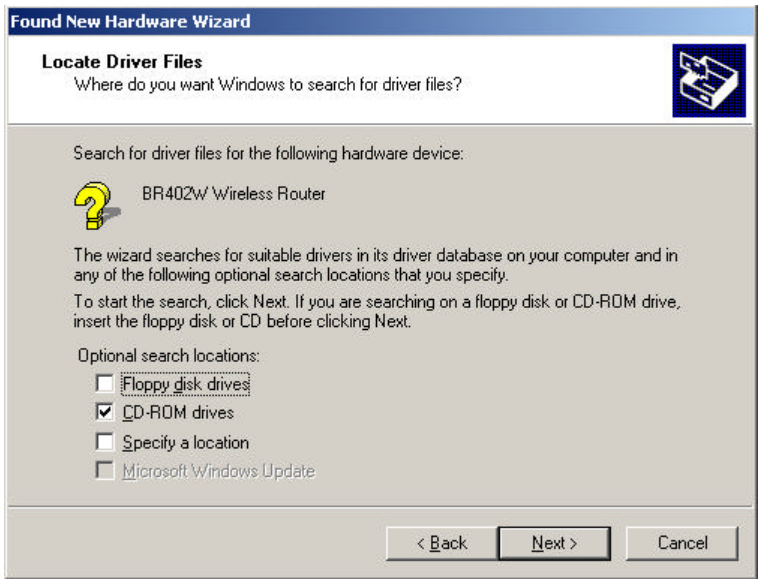
Please connect the power to the GN-BR402W and wait until the GN-BR402W completely boots up (when the status LED is off). Connect the USB cable to the USB slot on your computer and the USB slot of the GN-BR402W.

The following screen will appear:

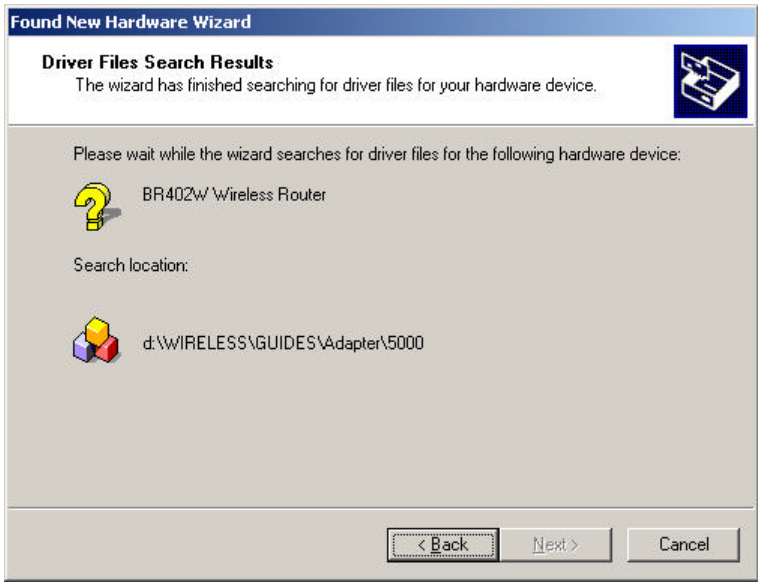
Please press "Next" for next step.

Please choose “Search for a suitable driver for my device (recommended)”, and then press “Next” for next step.

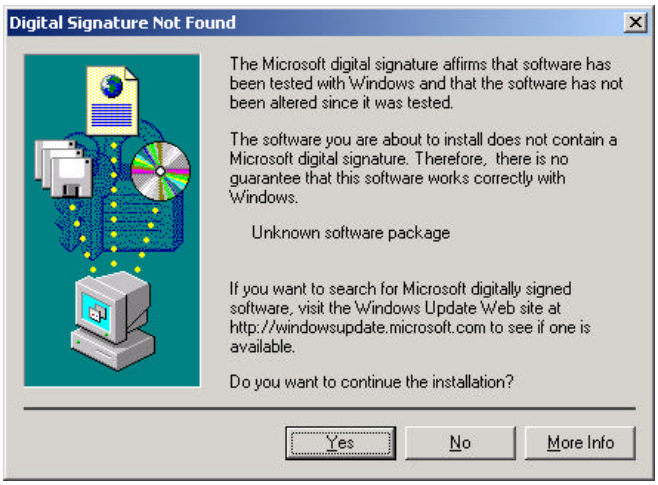
Please choose the location where you place the GN-BR402W Driver , and then press “next”.



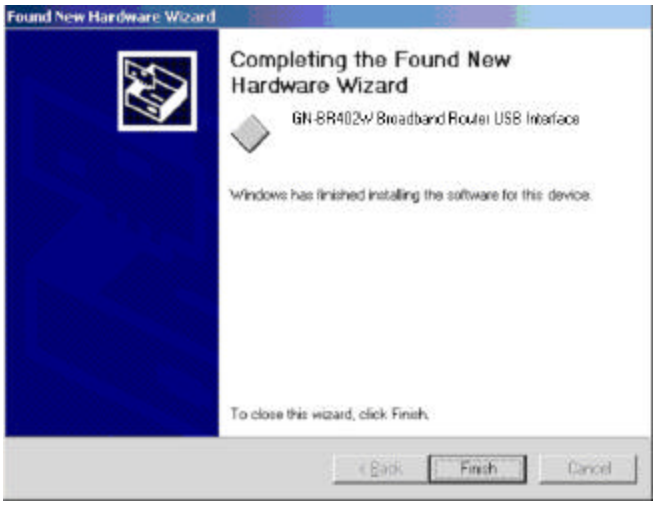
Please click “Next” for next step.



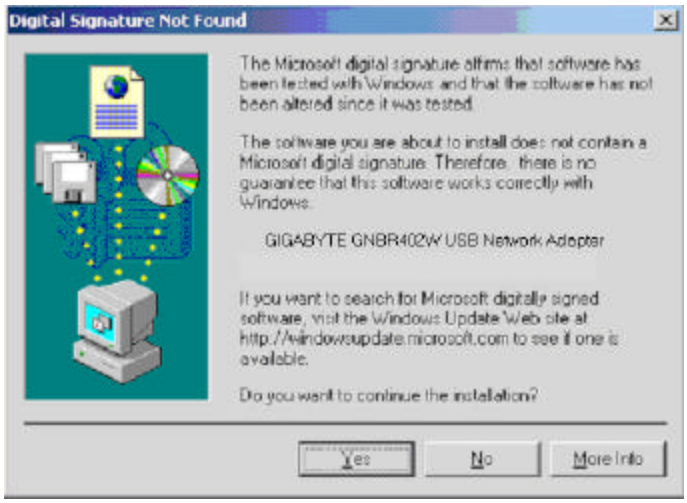
Please click “Yes” for next step.



Please click “Finish” for next step.



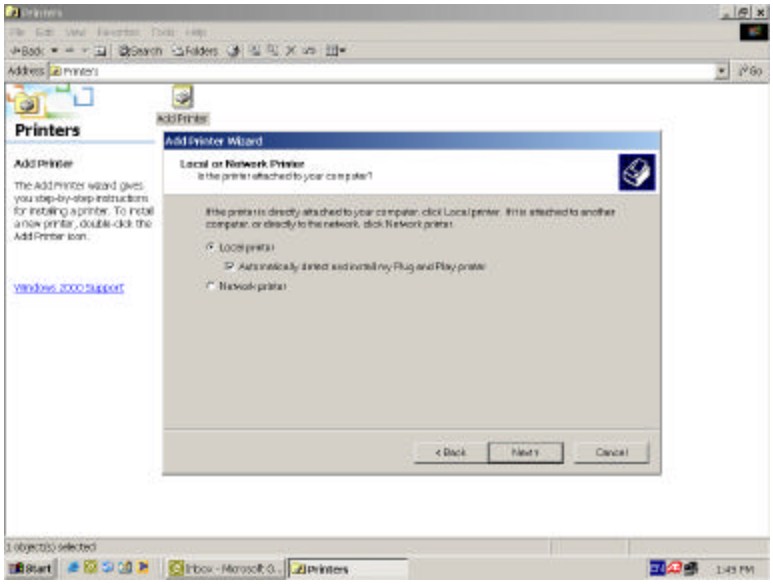
Please click “Yes”. NOW YOU HAVE COMPLETED THE USB DRIVER INSTALLATION.



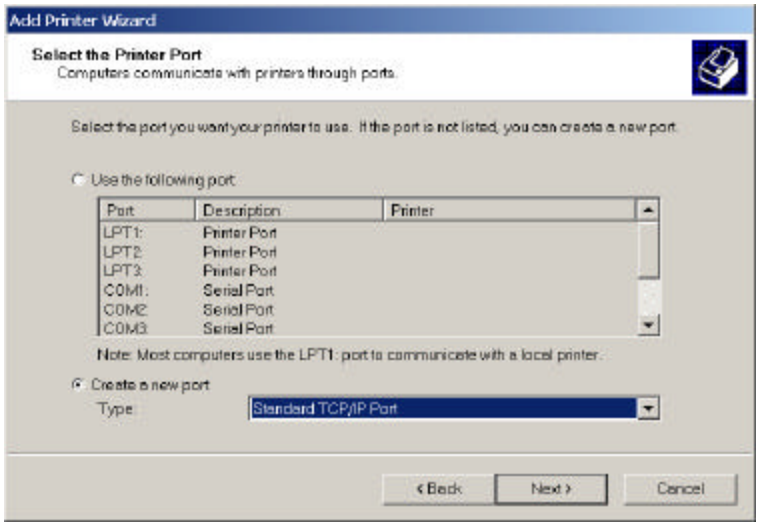
(C) Instruction of Printer Server

The GN-BR402W Wireless Broadband Router can be as a Printer Server, Please follow the setup procedure in Printer Setting. Example as follow:

Start > Setting > Printer, Double-Click Add Printer. The Add Printer Wizard dialog will be displayed, please select the **Local Printer** option and press "Next".

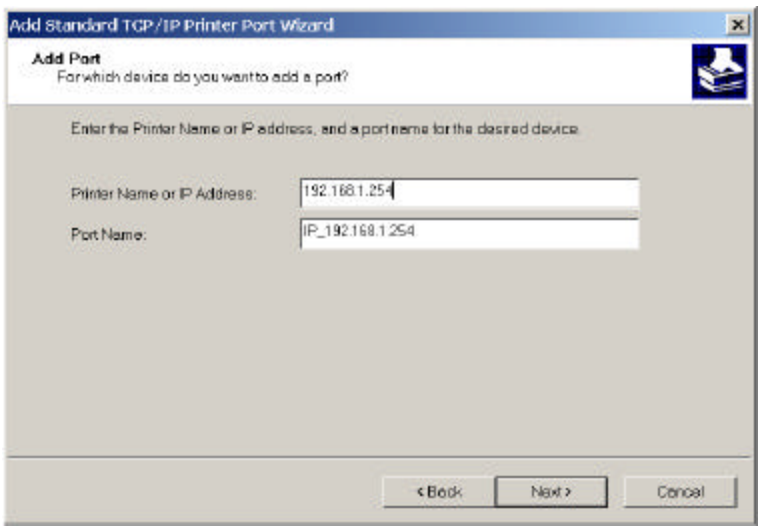


Select **Create a new port** option, Type: "Standard TCP/IP Port" then press "Next".

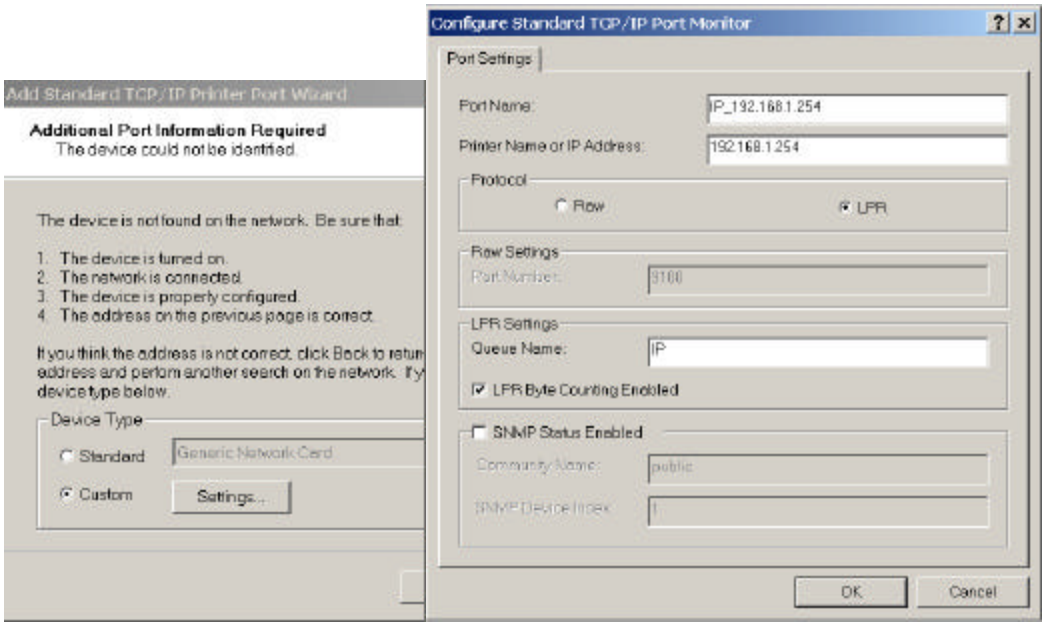


Press “Next”.

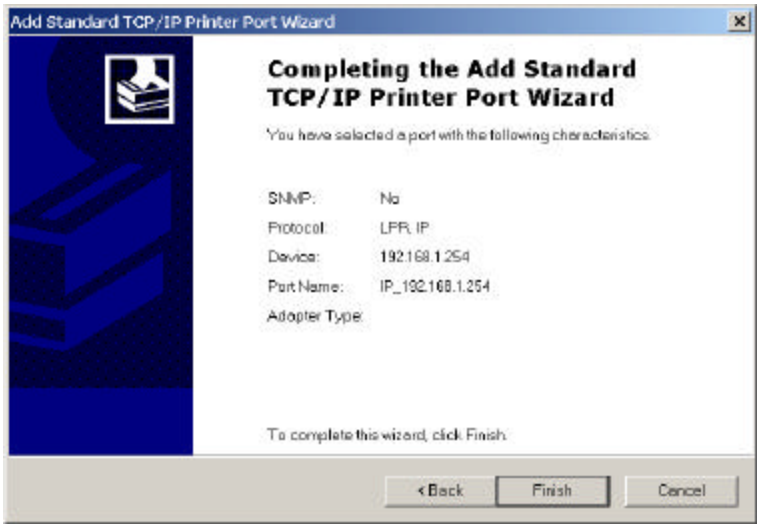
Please enter the Printer Name or IP Address : 192.168.1.254 and the Port Name : IP_192.168.1.254, Press “Next”.



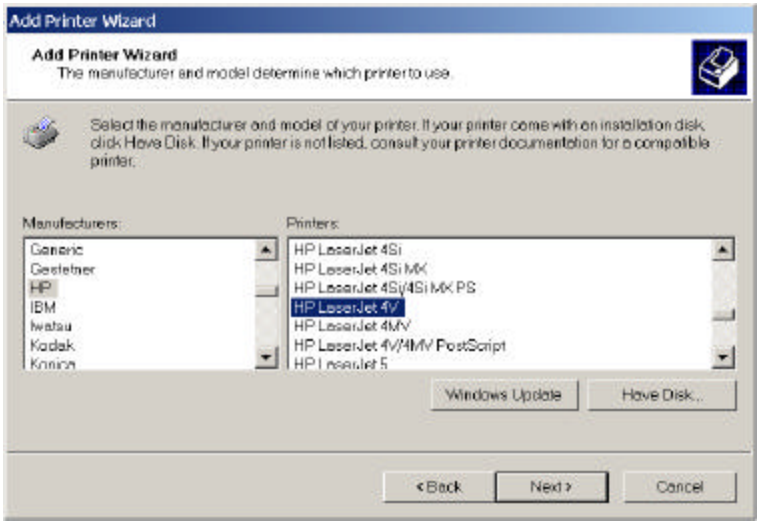
The Device Type selects **Custom** option and press "Setting". The Configure Standard TCP/IP Port Monitor dialog will be displayed. Enter the **Port Name**: IP_192.168.1.254 and **Printer Name or IP Address** is 192.168.1.254. Select the **LPR** Protocol and enter the **Queue Name**: lp and select the **LPR Byte Counting Enabled** check box in the LPR setting then press "OK".



Press "Finish".



Select the manufacturer and model of your printer. (If your pr inter is not listed, click “Have Disk ” to install your printer driver.) Click “Next”, the wizard will help you finish the installation automatically.



Limited Warranty

1-Year Warranty

Gigabyte warrants to the original consumer/purchaser that the adapter product free from defects in material and workmanship for no limited time from the original manufactory shipment date. This warranty does not cover the adapter product if it is damaged in the process of being installed or improperly used.

Gigabyte may replace or repair the adapter product with either new or reconditioned parts. Repaired or replaced adapter products will be returned to you at the same revision level as received or higher at Gigabyte's option. Gigabyte reverses the right to replace discounted adapter products with an equivalent generation adapter product.

KEEP THIS STUB FOR YOUR PURCHASING RECORD

Customer:	
Phone No:	
Address:	
Email:	
Model:	
Serial:	
Date of Purchase:	
Place of Purchase:	
From Whom:	
Distributor:	

Safety, Care and Regulatory Information

Important safety instructions

Read and follow all instructions marked on the product and in the documentation before you operate your system. Retain all safety and operating instructions for future use.

The product should be operated only from the type of power source indicated on the rating label.

If your computer has a voltage selector switch, make sure that the switch is in the proper position for your area. The voltage selector switch is set at the factory to the correct voltage.

The plug-socket combination must be accessible at all times because it serves as the main disconnecting device.

All products hipped with a three-wire electrical grounding-type plug only fits into a grounding-type power outlet. This is a safety feature. The equipment grounding should be in accordance with local and national electrical codes. The equipment operates safely when it is used in accordance with its marked electrical ratings and product usage instructions

Do not use this product near water or a heat source.

Set up the product on a stable work surface or so as to ensure stability of the system.

Openings in the case are provided for ventilation. Do not block or cover these openings. Make sure you provide adequate space around the system for ventilation when you set up your work area. Never insert objects of any kind into the ventilation openings.

To avoid electrical shock, always unplug all power cables and modem cables from the wall outlets before removing covers.

Allow the product to cool before removing covers or touching internal components.

Use only the power cord and batteries indicated in this manual. Do not dispose of batteries in a fire. They may explode. Check with codes for possible special disposal instructions.

Precautions for Products With Modems, Telecommunications, or Local Area Network Options

Observe the following guidelines when working with options:

Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.

CAUTION - To reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord.

Do not plug a modem or telephone cable into the network interface controller (NIC) receptacle.

Disconnect the modem cable before opening a product enclosure, touching or installing internal components, or touching an uninsulated modem cable or jack.

Do not use a telephone line to report a gas leak while you are in the vicinity of the leak.

Do not use this product near water, for example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool.

Federal Communications Commission (FCC) Statement

NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection. This equipment generates, uses and can radiated radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user‘s authority to operate the equipment.