6218-A1-XXX Manual

PARADYNE

ADSL Wireless Modem Router

➢ Do not open the housing!

➢ Use only the power supply provided with this device.

➢ Use only the cables provided with this device and do not perform any modification on them.

Rev 0.1
Nov, 25, 2004

Before you begin

Before installing your ADSL wireless modem router, please carefully check the following requirements with your computer. This ADSL wireless modem router is equipped with four 10/100Mbps RJ-45 Ethernet switch ports and 802.11g wireless Access Point. You can connect to the modem by Ethernet or wireless interface.

Unpacking and Inspection

Verify following items came with your ADSL Modem:

◆ ADSL wireless modem router unit

◆ RJ-11 ADSL phone cable

◆ RJ-45 UTP cable

◆ Quick Installation Guide

◆ Accessories

Note: If any items are missing or damaged, please contact your local Sales Office for service.

System Requirements

◆ IBM compatible, Macintosh or other OS-independent workstation supports TCP/IP.

◆ An Ethernet port supports 10Mbps or 10/100Mbps TCP/IP connection on your PC.

◆ For system configuration using the supplied web-based program: a web browser such as Internet Explorer v5.5 or later

◆ A wireless interface has installed properly on your PC, and it must support IEEE 802.11b or 802.11g wireless standard interface.

◆ You can connect anyone of modem four switch ports on the rear panel to PC NIC Ethernet port. If you want to allow multiple computers (more than four PCs) to enjoy internet through ADSL Modem, please purchase a hub/switch to link directly Ethernet port. You can contact your internet service provider to get more information on this.

Caution:

1. ***If you want to use private Ethernet UTP cables linking between wireless modem router with PC, please make sure that cable quality must conform to Cat.5 upward and cable's length can't exceed over 100 meters.***

2. ***Please make sure that wireless modem router's wireless signal could be accessed by wireless interface on PC, and without any interference by electromagnetic wave device or obstacle is existed around the corner.***

Getting Started

Hardware Installation

Please be sure to follow the steps in the sequence outlined below. Failure to do so could result in improper operation or damage of your ADSL wireless modem.

Step 1: Connect a RJ-11 cable from wall phone jack feed to the connector "LINE" on the back of the modem.

Step 2: Connect the AC adapter to the modem by inserting the barrel-shaped connector into the mating power connector on the back of the modem, and plug in the adapter to a wall outlet or a power strip.

Step 3: Connect any LAN port on the back of the modem with a UTP cable, and other end of UTP cable directly link to RJ-45 port of your PC's network card.

Step 4: Power on your PC and modem, now you are ready to configure PC.

Note: You also use wireless interface to configure your modem, don't need step 3 to do and then directly proceed step 4, but make sure your wireless card has installed driver properly.

Caution: Please do not power on your PC and modem before connecting steps are finished as mentioned above.

1. Configuring Your Computers

1.1 Using Wired or Wireless Network Interface Card

Before you start to access this unit via Ethernet or Wireless, please have to configure your PC's TCP/IP address to be **192.168.1.x**, where x could be any number between 2 to 254, subnet mask is **255.255.255.0,** and Default gateway is **192.168.1.1** which is default IP address of ADSL modem.
Note:

By default the router of modem's DHCP server is disable, this means that you can't obtain an IP address automatically once you've configured your PC to obtain an IP address automatically. You can enable its function after finishing configuration on this unit. But you must make sure without two DHCP servers existing in a same LAN before your PC got IP automatically.

Windows® XP PCs:

1. In the Windows task bar, click the **Start** button, and then click **Control Panel**.

2. Double-click the **Network Connections** icon.

3. In the LAN or High-Speed Internet window, right-click on icon corresponding to your network interface card (NIC) and select **Properties**. (Often this icon is labeled *Local Area Connection*). The **Local Area Connection** dialog box displays with a list of currently installed network items.

4. Ensure that the check box to the left of the item labeled **Internet Protocol (TCP/IP)** is checked, and click
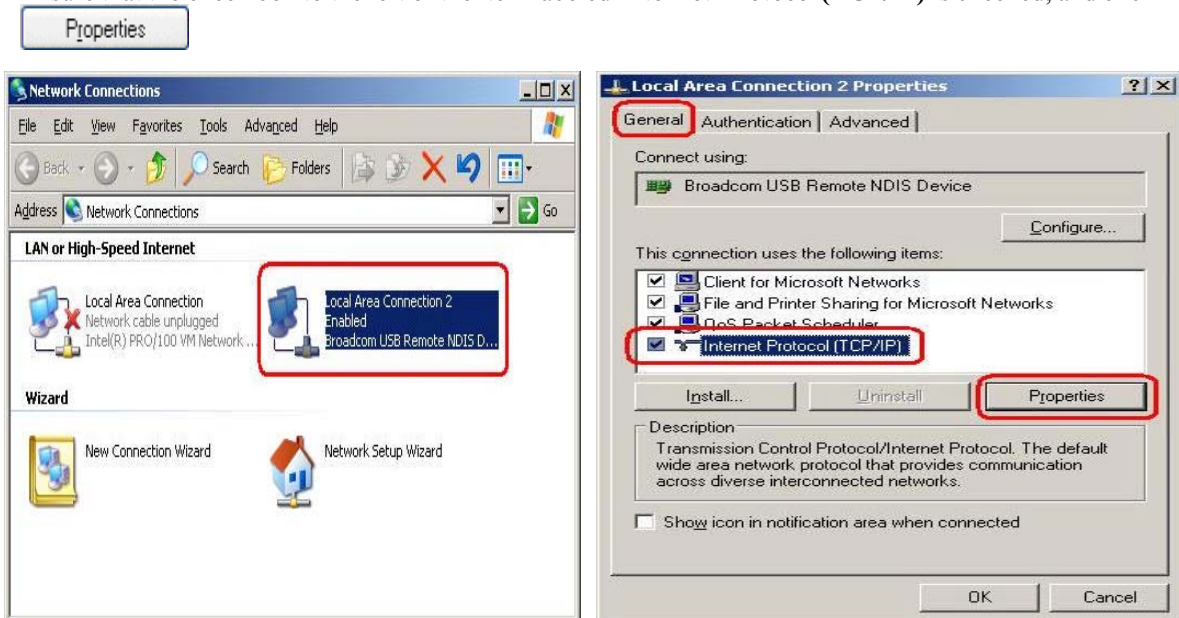
5. In the **Internet Protocol (TCP/IP) Properties** dialog box, click the radio button labeled **Use the following IP address** and type **192.168.1.x** (**192.168.1.20** is shown below as an example), **255.255.255.0** and **192.168.1.1** in the IP address field, Subnet Mask field and Default gateway, respectively.
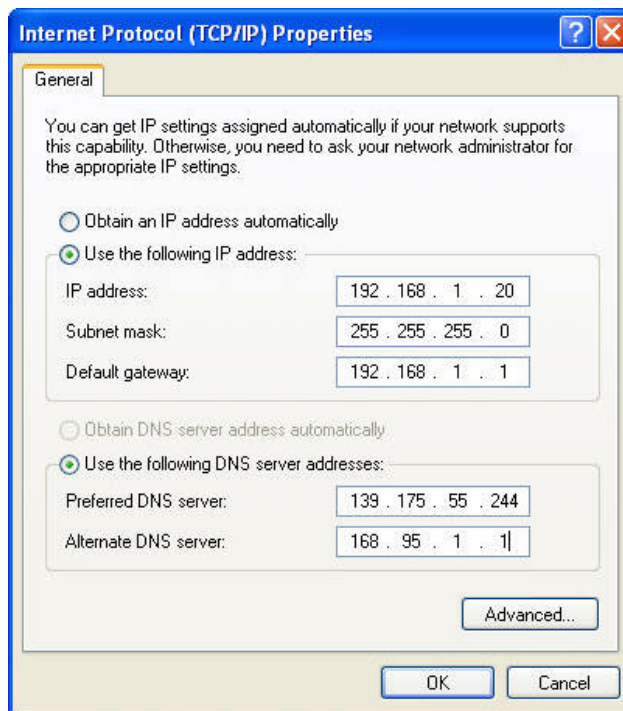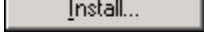
TCP/IP Property @ Windows XP

6. Click [OK] twice to confirm your changes, and close the **Control Panel**.

Windows® 2000 PCs:

1. In the Windows task bar, click the **Start** button, point to **Settings**, and then click **Control Panel**.

2. Double-click the **Network and Dial-up Connections** icon.

3. In the **Network and Dial-up Connections** window, right-click the **Local Area Connection** icon, and then select **Properties**.
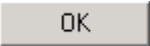
    The **Local Area Connection Properties** dialog box displays with a list of currently installed network components. If the list includes **Internet Protocol (TCP/IP)**, the protocol has already been enabled, please skip to step 10 directly.

4. If **Internet Protocol (TCP/IP)** does not display as an installed component, click [Install...].

5. In the **Select Network Component Type** dialog box, select **Protocol**, and then click [Add...].

6. Select **Internet Protocol (TCP/IP)** in the **Network Protocols** list, and then click [OK].

    You may be prompted to install files from your Windows 2000 installation CD or other media. Follow the instructions to install the files.

7. If prompted, click [OK] to restart your computer with the new settings.

8. After restarting your PC, double-click the **Network and Dial-up Connections** icon in the **Control Panel**.

9. In **Network and Dial-up Connections** window, right-click the **Local Area Connection** icon, and then select **Properties**.
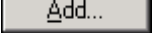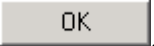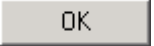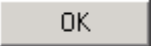
10. In the **Local Area Connection Properties** dialog box, select **Internet Protocol (TCP/IP)**, and then click [Properties].

11. In the **Internet Protocol (TCP/IP) Properties** dialog box, click the radio button labeled **Use the following IP address** and type **192.168.1.x, 255.255.255.0** and **192.168.1.1** in the IP address field, Subnet Mask field and Default gateway, respectively.

12. Click [OK] twice to confirm and save your changes, and then close the **Control Panel**.

Windows® Me PCs

1. In the Windows task bar, click the **Start** button, point to **Settings**, and then click **Control Panel**.

2. Double-click the **Network and Dial-up Connections** icon.

3. In the **Network and Dial-up Connections** window, right-click the **Network** icon, and then select **Properties**.

   The **Network Properties** dialog box displays with a list of currently installed network components. If the list includes **Internet Protocol (TCP/IP)**, the protocol has already been enabled, please skip to step 11 directly.
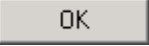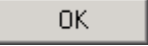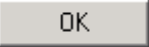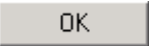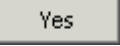
4. If **Internet Protocol (TCP/IP)** does not display as an installed component, click [Add...].

5. In the **Select Network Component Type** dialog box, select **Protocol**, and then click [Add...].

6. Select **Microsoft** in the Manufacturers box.

7. Select **Internet Protocol (TCP/IP)** in the Network Protocols list, and then click [OK].

   You may be prompted to install files from your Windows Me installation CD or other media. Follow the instructions to install the files.

8. If prompted, click [OK] to restart your computer with the new settings.

9. After restarting your PC, double-click the **Network and Dial-up Connections** icon in the **Control Panel**.

10. In **Network and Dial-up Connections** window, right-click the **Network** icon, and then select **Properties**.

11. In the **Network Properties** dialog box, select **TCP/IP**, and then click [Properties].

12. In the **TCP/IP Settings** dialog box, click the radio button labeled **Use the following IP address** and type **192.168.1.x, 255.255.255.0** and **192.168.1.1** in the IP address field, Subnet Mask field and Default gateway, respectively.

13. Click [OK] twice to confirm and save your changes, and then close the **Control Panel**.
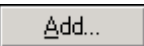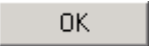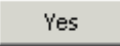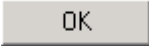
Windows® 95, 98 PCs:

1. In the Windows task bar, click the **Start** button, point to **Settings**, and then click **Control Panel**.

2. Double-click the **Network** icon.

   The **Network** dialog box displays with a list of currently installed network components. If the list includes **TCP/IP**, the protocol has already been enabled. Please skip to step 9 directly.

3. If **TCP/IP** does not display as an installed component, click [Add...]. Then **Select Network Component Type** dialog box will display.

4. Select **Protocol**, and then click [Add...].

    The **Select Network Protocol** dialog box displays.

5. Click on **Microsoft** in the Manufacturers list box, and then click **TCP/IP** in the Network Protocols list box.

6. Click [OK] to return to the **Network** dialog box, and then click [OK] again.

    You may be prompted to install files from your Windows 95/98 installation CD. Follow the instructions to install the files.

7. Click [OK] to restart the PC and complete the TCP/IP installation.

8. After restarting your PC, open the **Control Panel** window, and then click the **Network** icon.

9. Select the network component labeled **TCP/IP**, and then click [Properties].

    If you have multiple TCP/IP listings, select the listing associated with your network card or adapter.

10. In the **TCP/IP Properties** dialog box, click the **IP Address** tab.

11. Click the radio button labeled **Use the following IP address** and type **192.168.1.x**, **255.255.255.0** and **192.168.1.1** in the IP address field, Subnet Mask field and Default gateway, respectively.

12. Click [OK] twice to confirm and save your changes. You will be prompted to restart Windows. Please click [Yes] and restart your PC again.

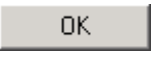## Windows® NT 4.0 workstations:

1. In the Windows NT task bar, click the **Start** button, point to **Settings**, and then click **Control Panel**.

2. In the **Control Panel** window, double click the **Network** icon.

3. In the **Network** dialog box, click the **Protocols** tab.

    The Protocols tab displays a list of currently installed network protocols. If the list includes **TCP/IP**, the protocol has already been enabled. Please skip to step 9 directly.

4. If **TCP/IP** does not display as an installed component, click [Add...].

5. In the **Select Network Protocol** dialog box, select **TCP/IP**, and then click [OK].

    You may be prompted to install files from your Windows NT installation CD or other media. Follow the instructions to install the files.

    After all files are installed, a window displays to inform you that a TCP/IP service called DHCP can be set up to dynamically assign IP information.

6. Click [Yes] to continue, and then click [OK] if prompted to restart your computer.

7. After restarting your PC, open the **Control Panel** window, and then double-click the **Network** icon.

8. In the **Network** dialog box, click the **Protocols** tab.

9. In the **Protocols** tab, select **TCP/IP**, and then click [Properties] .

10. In the **Microsoft TCP/IP Properties** dialog box, click the radio button labeled **Use the following IP address** and type **192.1 68.1.x, 255.255.255.0** and **192.168.1.1** in the IP address field, Subnet Mask field and Default gateway, respectively.

11. Click [OK] twice to confirm and save your changes, and then close the **Control Panel**.

1.2 Building Wireless Connection Using a Wireless Interface

Most of steps for accessing the modem are very similar to configure the wired NIC. Only difference with wired NIC is that your wireless card has built wireless connection with modem already. We will describe detailed linking and configuring steps, and take ASUS WL-100G 802.11G wireless card for example as below.

1. Please make sure that you have well-installed wireless card driver and utility into your PC.

2. Configure IP address same as section1.1.

3. Run **ASUS WLAN Control Center**, you will find *ASUS WLAN Setting* screen.
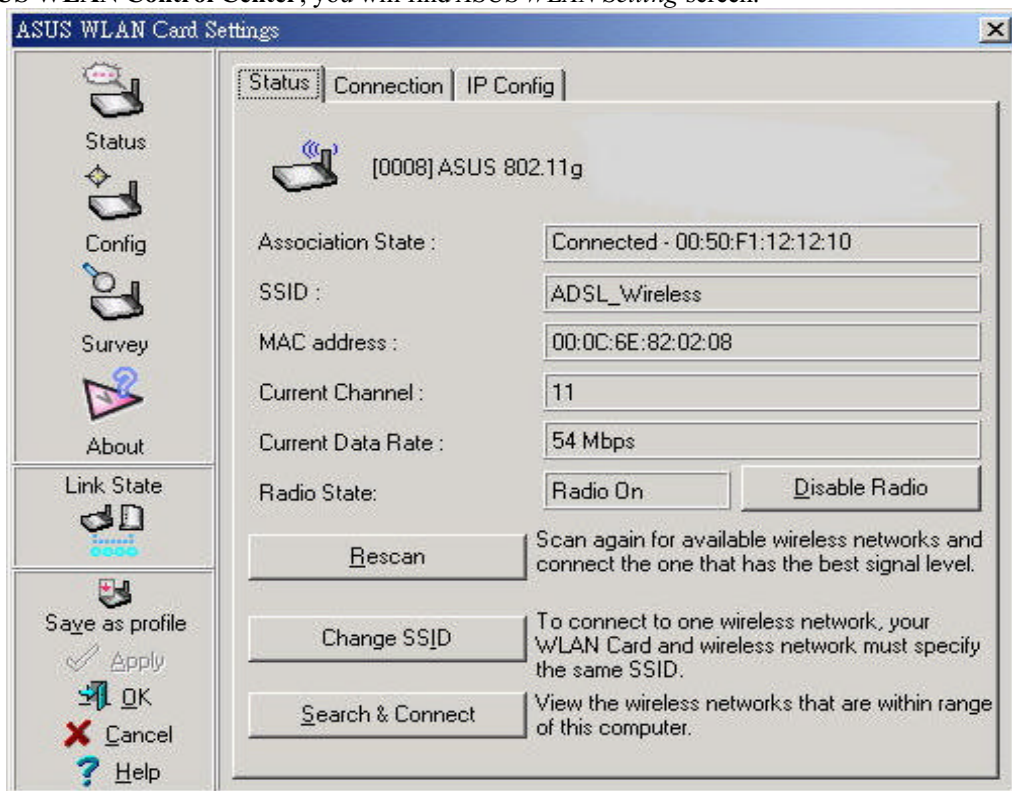
4. Click **Survey** icon on left column of Setting screen, you will find *ADSL_Wireless* - modem default SSID setting to be showed on Available Network. Select *ADSL_Wireless* , than click **Connect**.
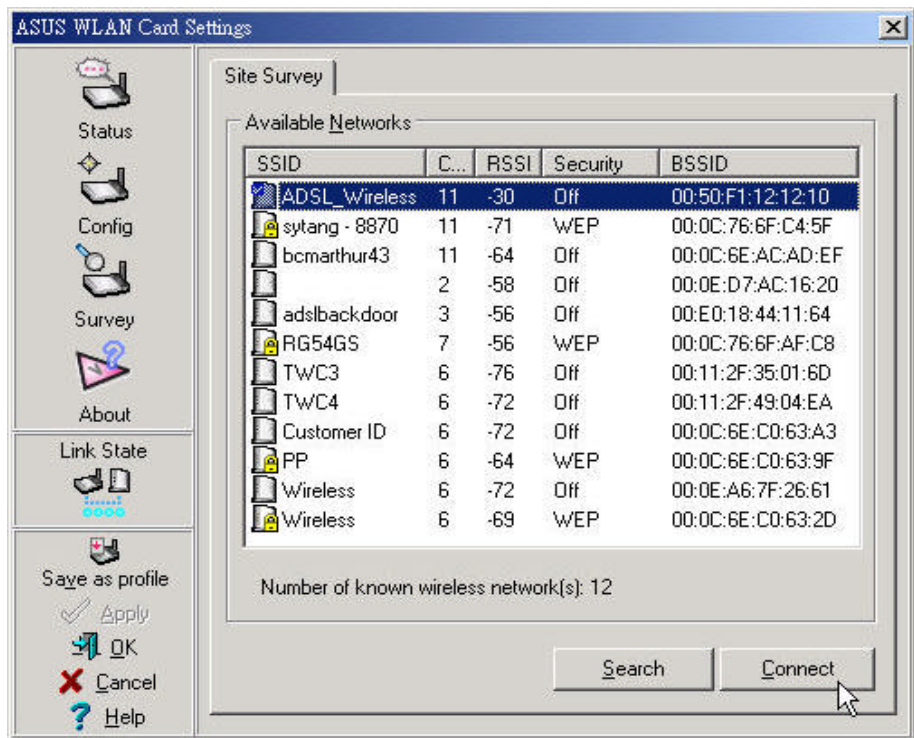
5. Click **Status** icon, then click **IP Config** to check IP address among 2~254 range. If it is true, then click **Ping** tab and run **ping** to do connection test between modem with your PC.
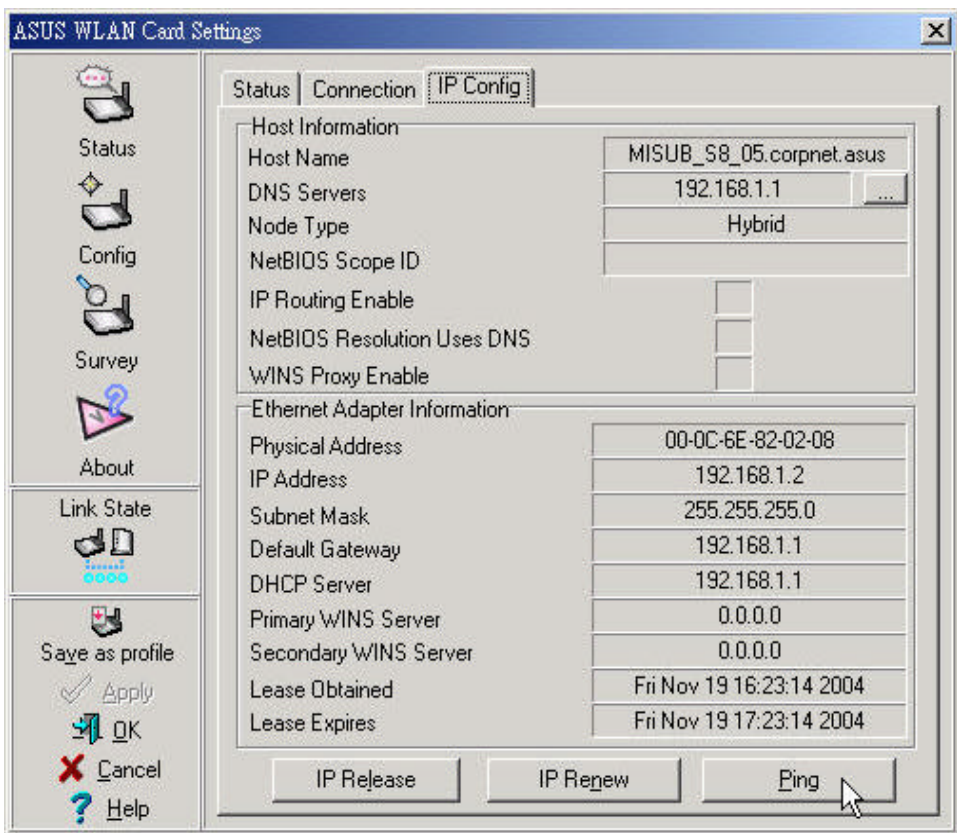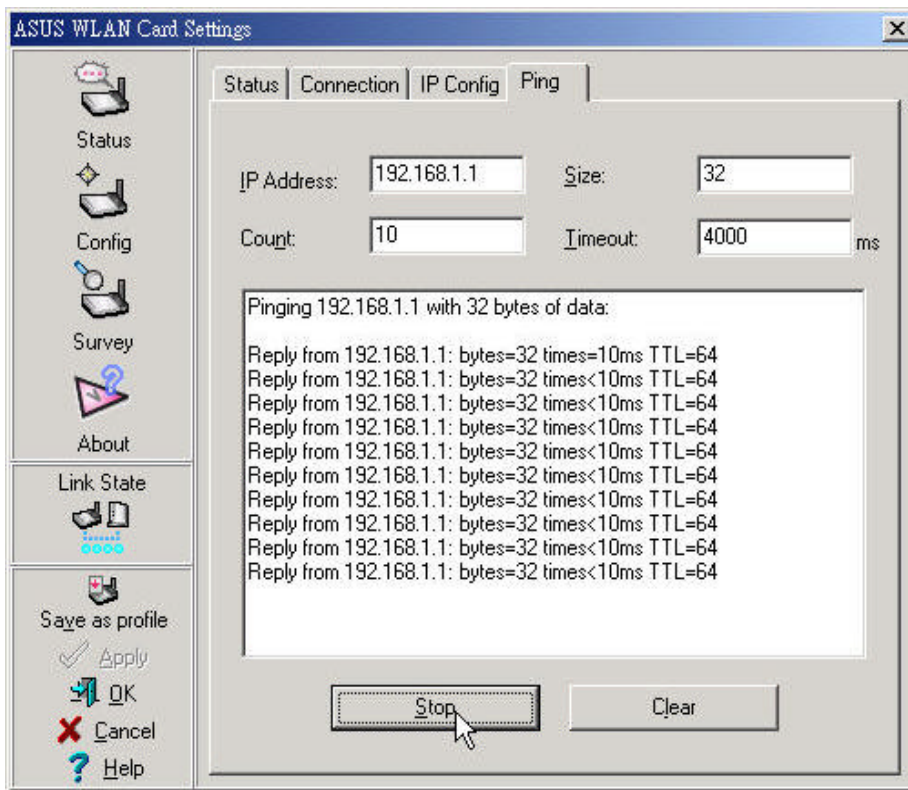
After finishing above steps, you are ready to login and start to configure modem now.

2. Configuring Wireless Modem Router

2.1 Internet connection with NAT function:

Please enter the modem's default IP address http://192.168.1.1 into your PC's web browser and press **Enter** button on keyboard. The Login screen will show as below, following enter **Admin** for Username and **Admin** for Password then click on **Log In** button.
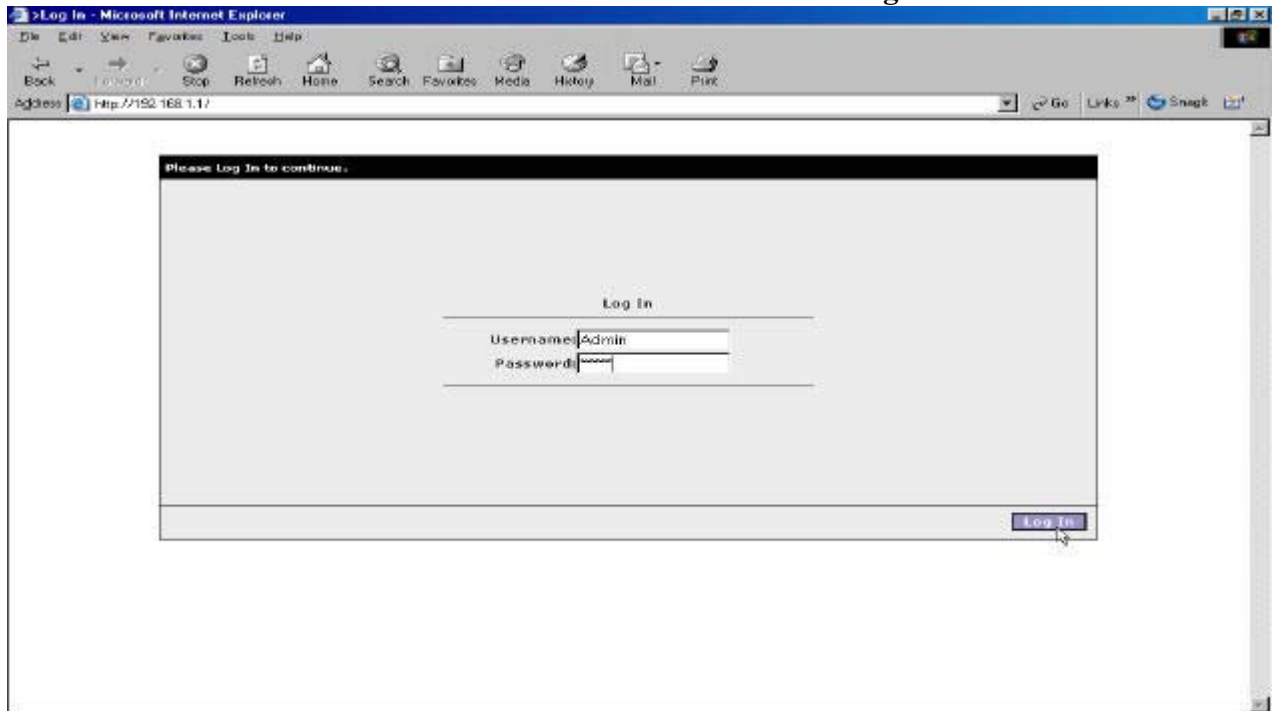
2.2 The ADSL modem home page will show as below, and it is divided into seven sections — HOME, SETUP, ADVANCED, WIRELESS, TOOLS, STATUS and HELP.
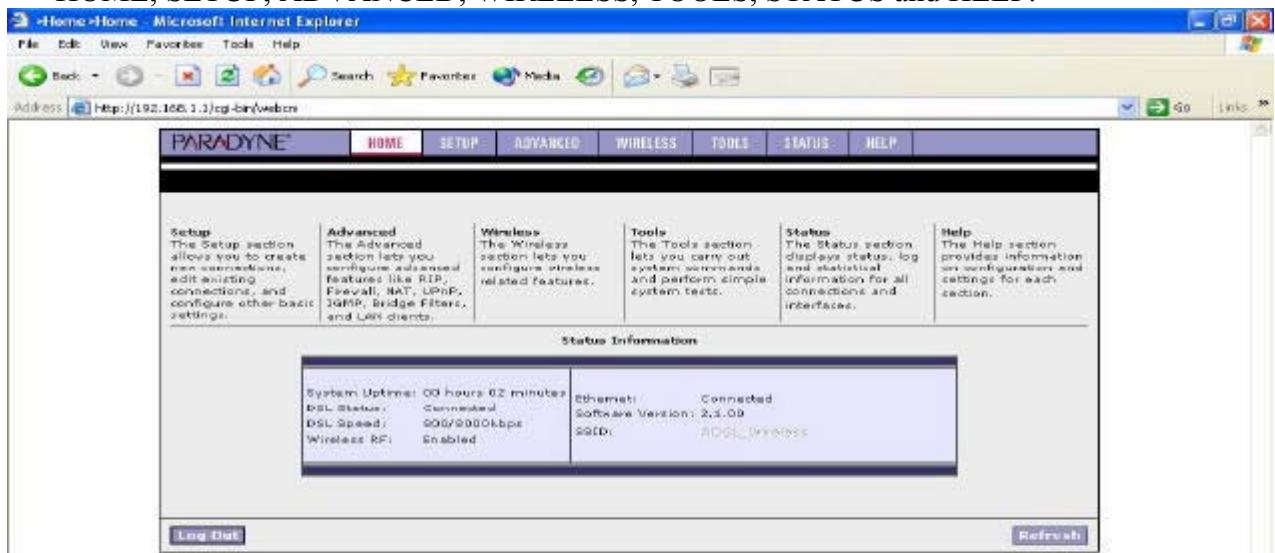
2.3 Click **SETUP** tab.

2.4 Click **Firewall/NAT Services** icon to select **Enable Firewall and NAT** Service, then click
on **Apply** tab. Now re-login modem again.

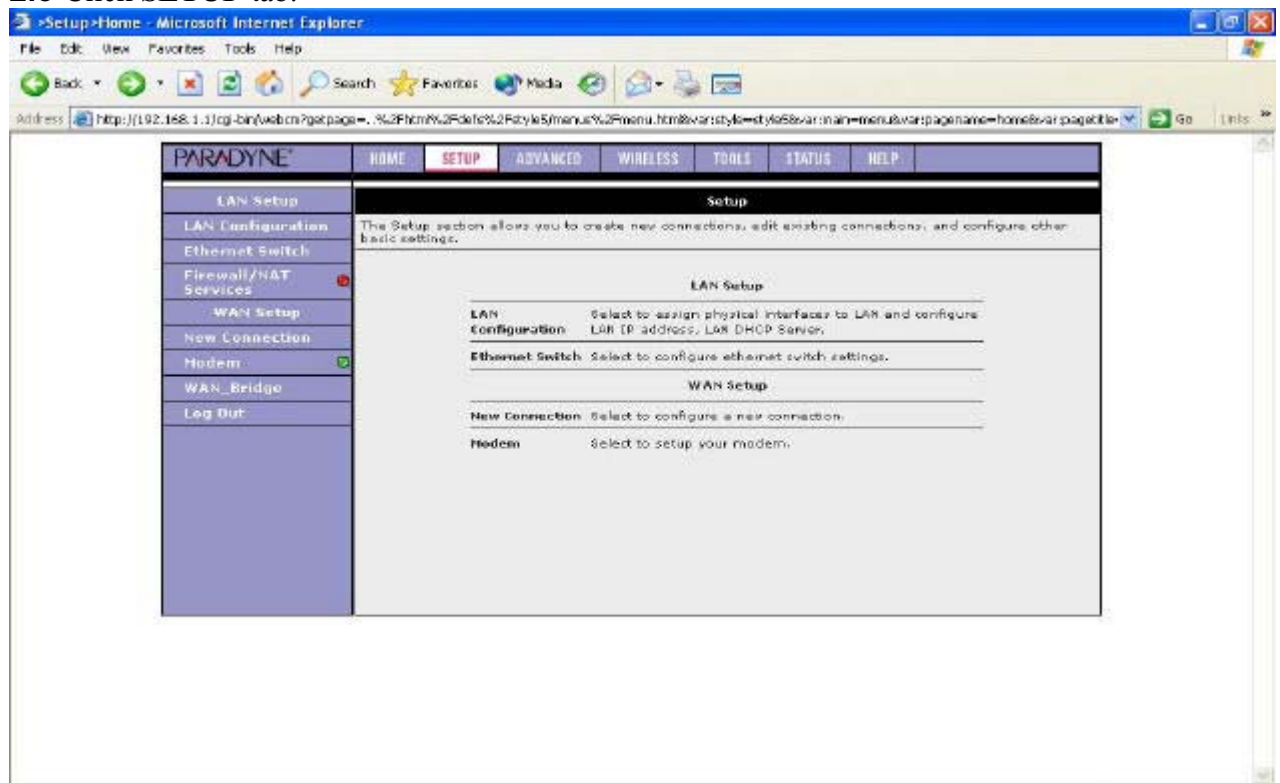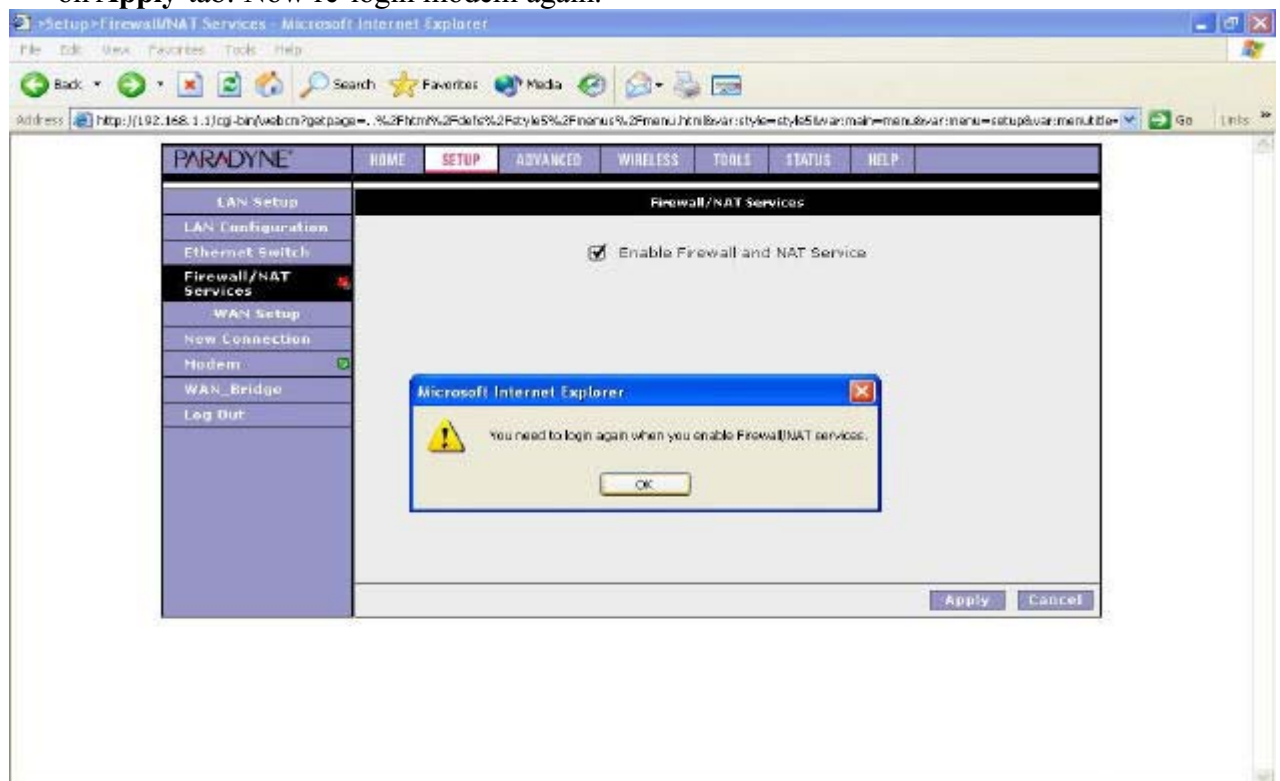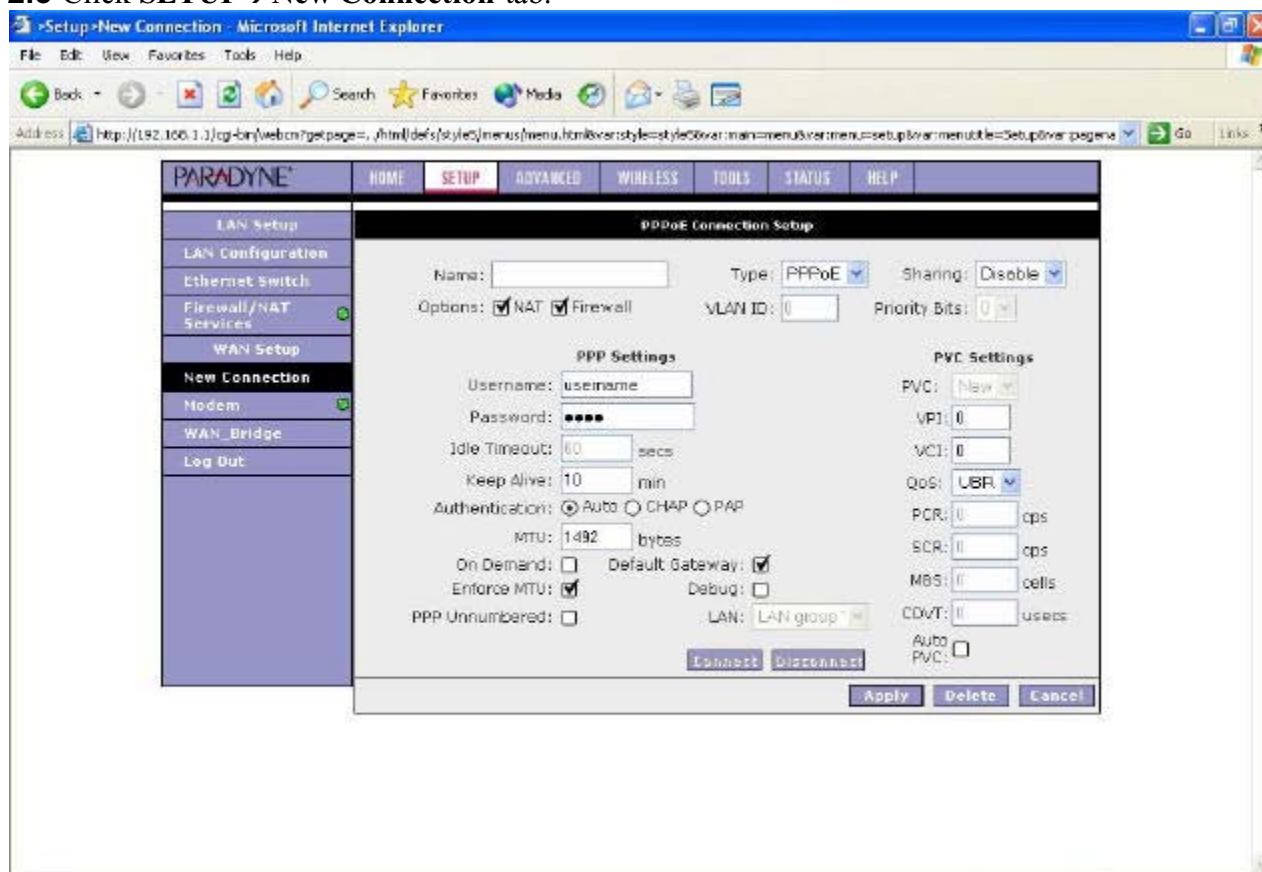**2.5** Click **SETUP**→**New Connection** tab.

2.6 Input data

Name column: It could be inputted anything you prefer.

Type: There are listed five selections which you can choose from Type item — PPPoE,
    PPPoA, Static, DHCP and Bridge. Please select correct item which ISP gave you

PPP Settings:

Options: Select both NAT and Firewall functions.

Encapsulation: Please select correct encapsulation from your ISP, but it is except for PPPoE.

Username: Please input correct username which ISP gave you.

Password: Please input correct password which ISP gave you.

Keep Alive: Keep the default setting. If you want to change it, please input any number you
    prefer.

MTU: Keep the default setting. If you want to change it, please get the correct number from
    your ISP.

On Demand: If you have linking time-to-cost issue, please select this item and input number
    into **Idle Timeout** column you prefer.

PVC Settings:

VPI: Please input correct number which ISP gave you.

VCI: Please input correct number which ISP gave you.

QoS: Keep the default setting.

Auto PVC: You also use this function to get correct VPI/VCI instead of inputting manually.

Please click on **Apply** icon.
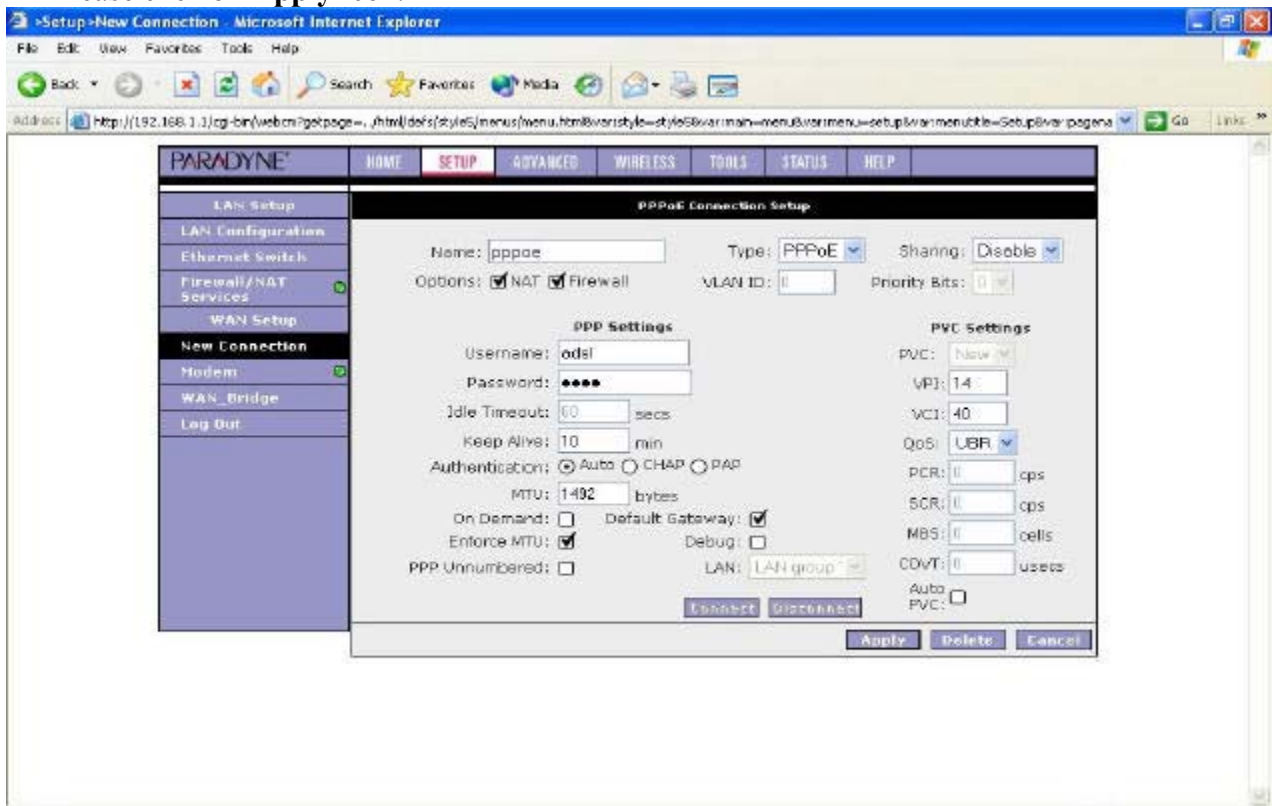
2.7 Go to the **Status** tab, then click on Connection Status.
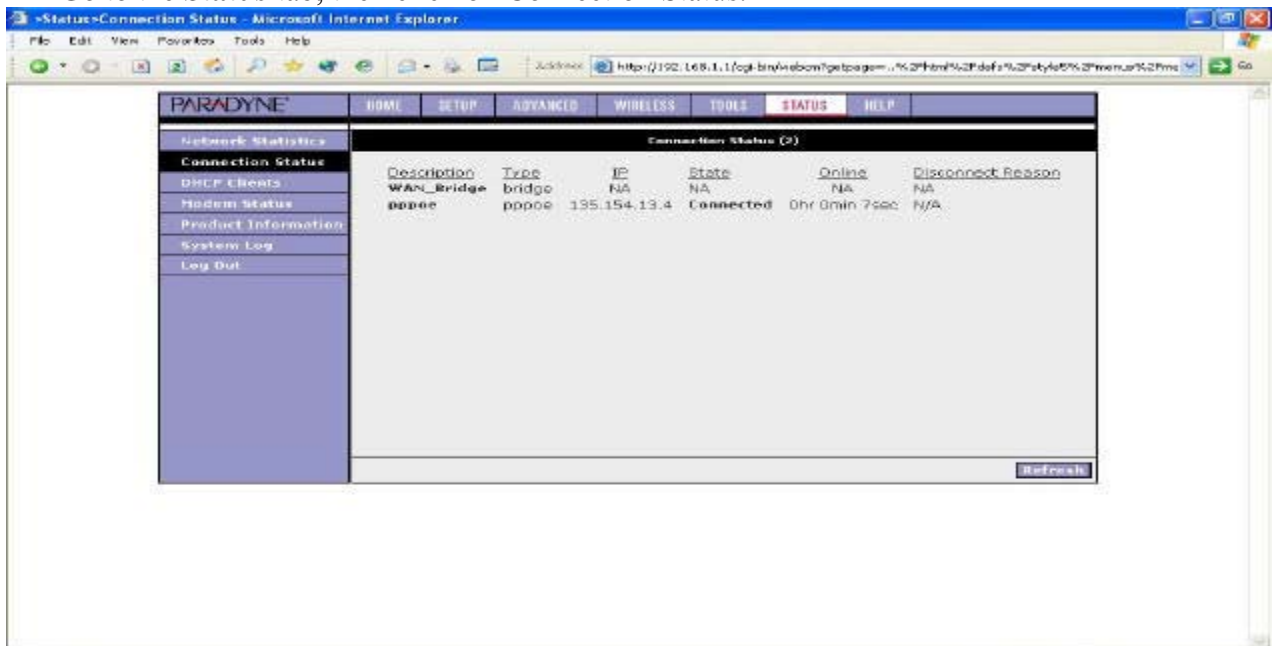
Under State of Connection Status, your WAN connection is now connected and you should be able to link to enjoy internet services.

2.8 If you want to enable DHCP server embedded modem, please click on **SETUP → LAN Configuration.** Click on **Configure** tab under LAN group 1 sub-item.
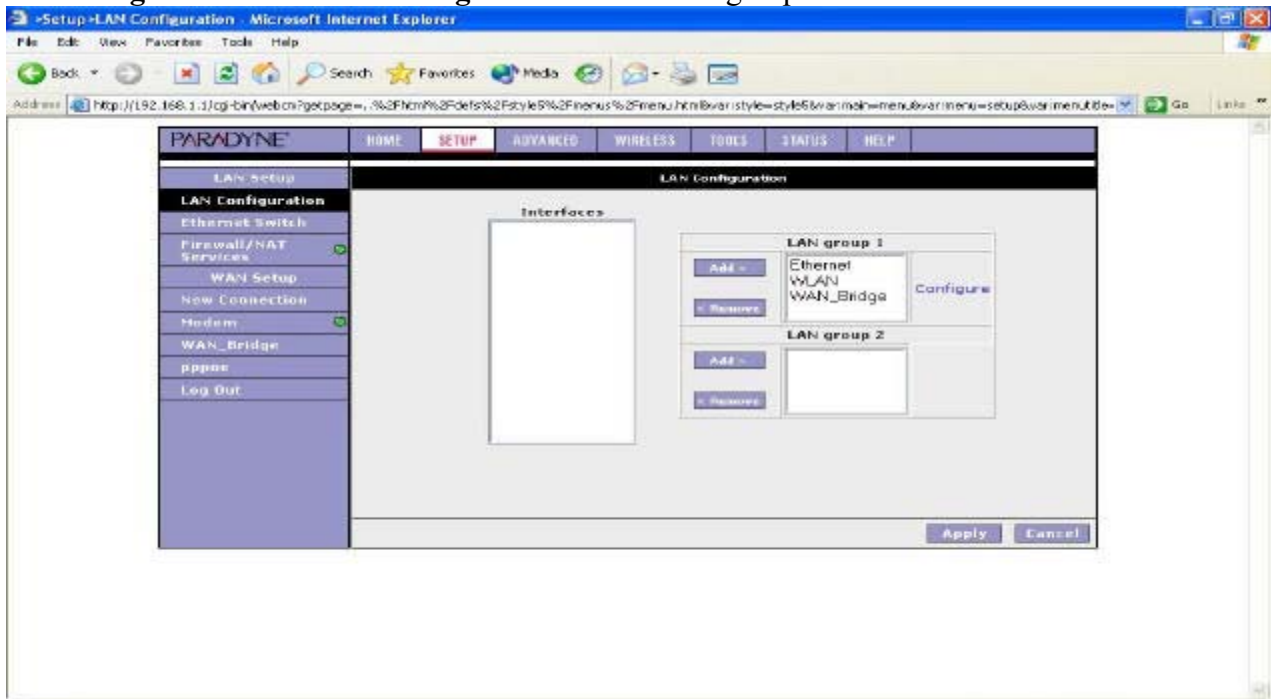
2.9 Select **"Enable DHCP Server"** item, then click on **Apply** tab.
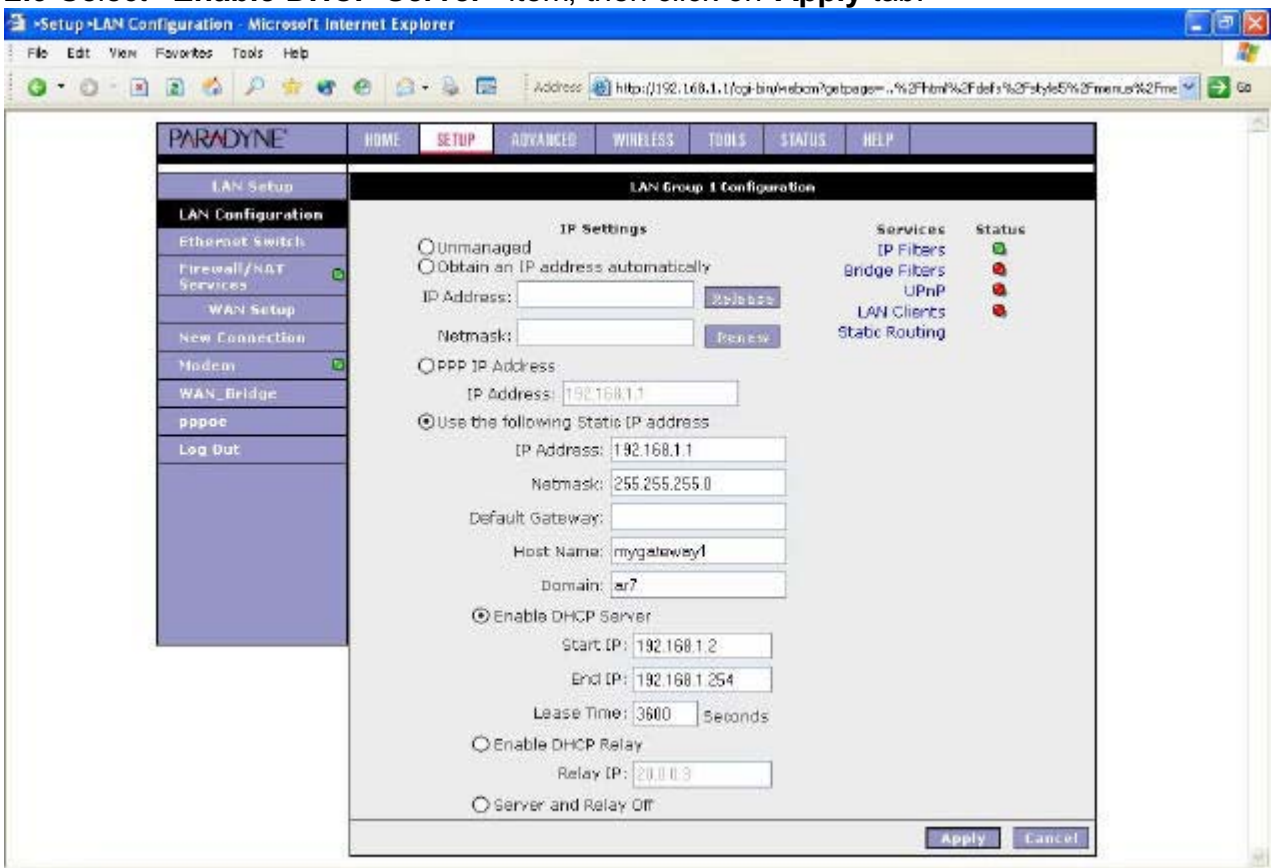
2.10 Click on **Tools** tab, then select **System Commands**. Please click on **Save All**, all of your changes on settings will be saved into this unit; if you don't run Save All process, you will lose all changes you did once power off or restart modem.
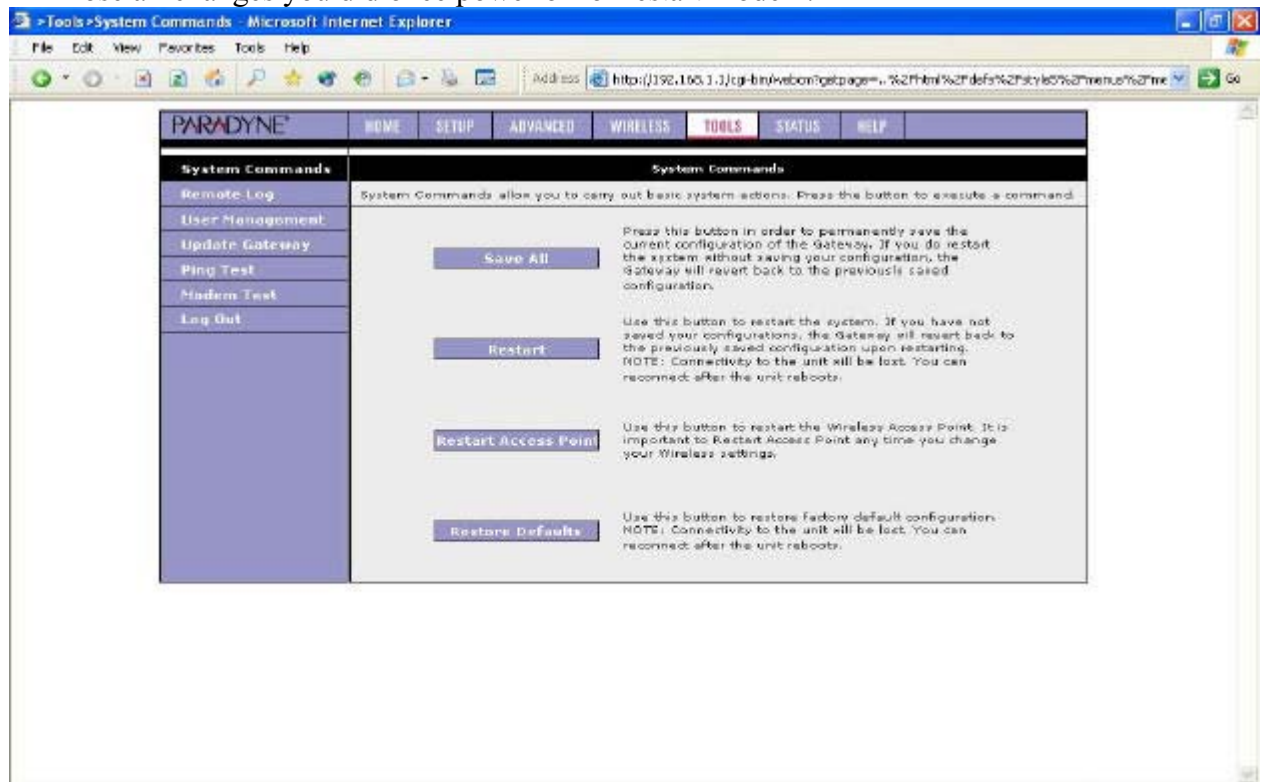
3. Performing a Factory Reset

There are two methods to perform a factory default settings on this unit — by software management or reset manually.

3.1 Software Management:

Please first login into this unit using Username and Password, click on **Tools** →
System Commands. You will find a Restore Defaults tab is showed on the screen.
Use this button to restore factory default configurations. Connectivity to the unit will be
lost, you can build reconnection after the unit reboots.
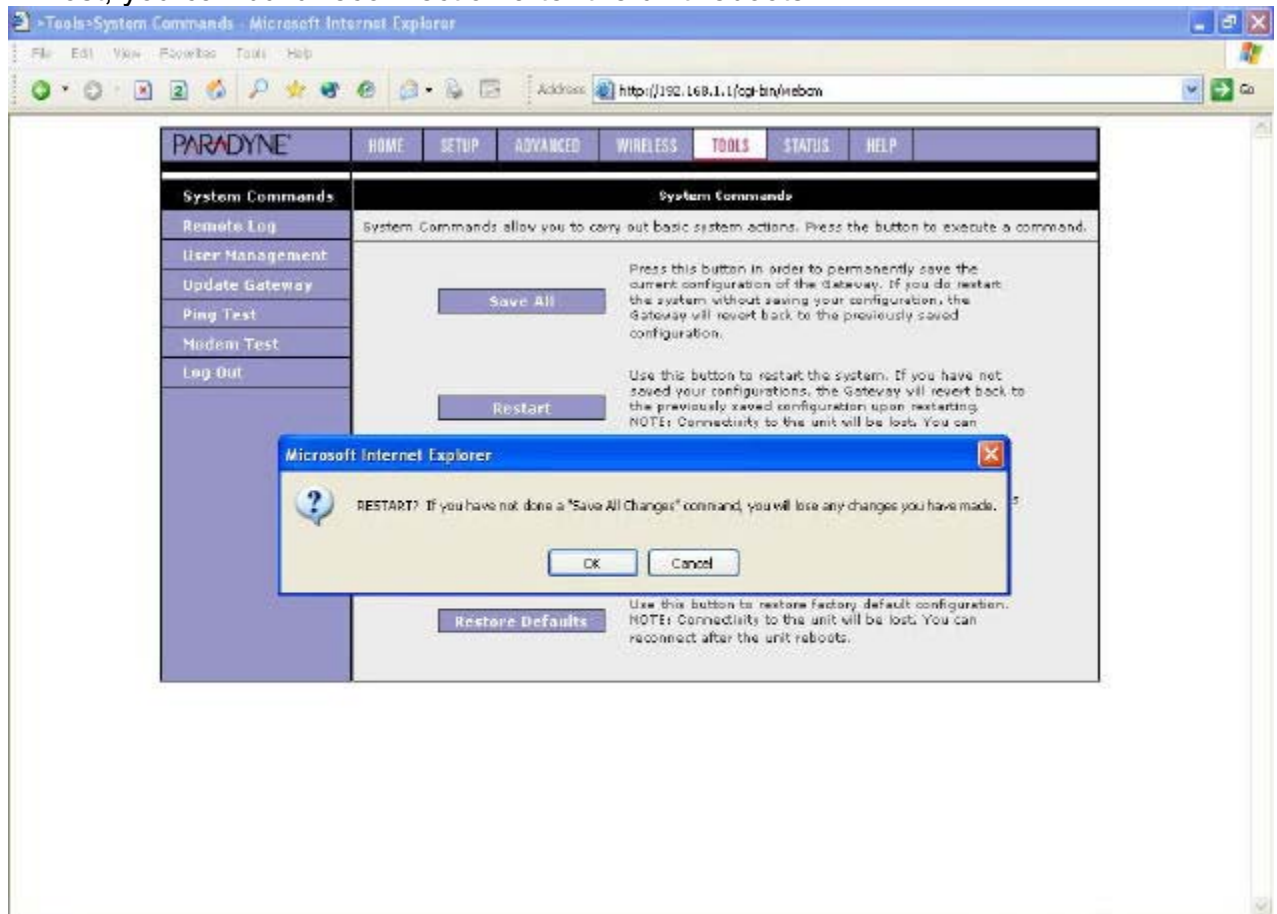
3.2 Reset Manually:

If you experience extreme problem or forgot your password, please press the reset
button with a pencil tip till the status led goes off, then release the reset button. After
20 seconds, the led will come back on and all of settings will become to factory
defaults.

Front panel system messages

The following illustration shows the front panel of the ADSL Wireless Modem Router.

LED Indicators

The ADSL Wireless Modem Router is equipped with LEDs on the front panel as described in the table below.

Label	Color	Status	Description
STATUS	Green	On Flashing Off	ADSL link is established and active Try to create an ADSL connection No ADSL link
LINK	Green	Flashing	Data transfer over ADSL line
LAN 1~4	Green	On Flashing Off	LAN link is established Data transfer at LAN connection No LAN link
WLAN	Green	On Off	Wireless AP is ON Wireless AP is OFF
POWER	Green	On Off	Modem is powered ON Modem is powered OFF

Rear panel system messages

The following illustration shows the rear panel of the ADSL Wireless Modem Router.

Outlet

The ADSL Wireless Modem Router is equipped with outlets on the rear panel as described in the table below.

Label	Function
LINE	RJ-11 outlet, for ADSL line connector
LAN 1~4	RJ-45 outlet, for PC Ethernet port or hub/switch LAN connector
POWER SWITCH	Power ON/OFF modem
PHONE	For linking to analog telephone set
POWER	For supplied power adapter connector
RESET/DEFAULT	Reset modem configuration to factory default settings

===== End of Quick Installation Guide =====

FCC Statement

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 against harmful interference in a residential installation.

This equipment generates, uses and can radiate 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

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

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

To maintain compliance with FCC's RF exposure guidelines, this equipment should be installed and operated with minimum distance 20cm between the radiator and your body. Use on the supplied antenna.

Declaration of Conformity for R&TTE directive 1999/5/EC

Essential requirements – Article 3

Protection requirements for health and safety – Article 3.1a

Testing for electric safety according to EN 60950 has been conducted. These are considered relevant and sufficient.

Protection requirements for electromagnetic compatibility – Article 3.1b

Testing for electromagnetic compatibility according to EN 301 489-1, EN 301 489-17 and

EN 300 386 has been conducted. These are considered relevant and sufficient.

Effective use of the radio spectrum – Article 3.2

Testing for radio test suites according to EN 300 328-2 has been conducted. These are considered relevant and sufficient.