# WiFi Combo Broadband Gateway

# User Guide

## Copyright

### Trademarks

### FCC Interference 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 radio interference in a commercial environment. This equipment can generate, use and radiate radio frequency energy and, if not installed and used in accordance with the instructions in this manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures are necessary to correct the interference.

### CE Declaration of Conformity

This equipment complies with the requirements related to electromagnetic compatibility, EN 55022/A1 Class B.

**The specification is subject to change without notice.**

# Table of Contents

# 1. Introduction

The WiFi Combo Broadband Gateway is a high-performance tool that supports wireless networking at home, work, or in a public place. The WiFi Combo Broadband Gateway supports a USB 3G modem card, either WCDMA or EVDO and even HSDPA as well, and supports wireless data transfers up to 150M bps, and wired data transfers up to 100 Mbps.
The WiFi Combo Broadband Gateway is compatible with industry security features.

## 1.1. Package Contents

**Importance: Check your product package contents FIRST.**

The WiFi Combo Broadband Gateway package should contain the items listed below. If any of the items are missing, please contact your reseller.

| items | Description | Quantity |
|---|---|---|
| 1 | WiFi Combo Broadband Gateway | 1 |
| 2 | RJ-45 Cable | 1 |
| 3 | Power adapter 5V 2.0A | 1 |
| 4 | CD | 1 |
| | | |

**Caution:** Using a power supply with a different voltage rating than the one included with the WiFi Combo Broadband Gateway will cause damage and void the warranty for this product.

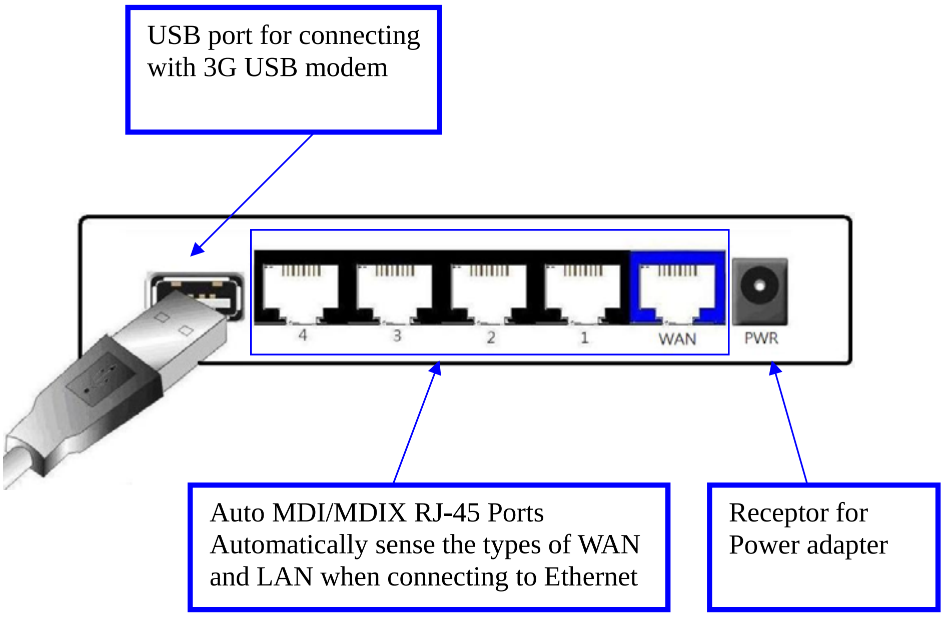
## 1.2. System Requirements for Configuration

- A compatible USB 3G modem card *with service*

**Note:** Subject to services and service terms available from your carrier.

- Computers with Windows, Macintosh, or Linux-based operating systems with an installed Ethernet adapter.
- Internet Explorer version 6.0 or Netscape Navigator version 7.0 and above.
- Wi-Fi System Requirements: An 802.11b, 802.11g, or 802.11n Adapter.

## 1.3. Interfaces - the Rear View

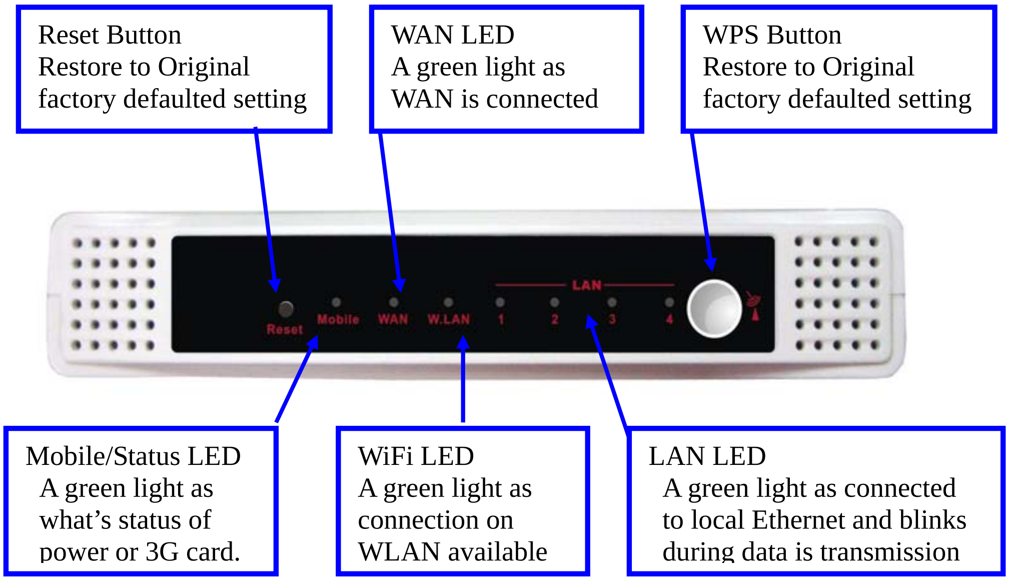


USB port for connecting with 3G USB modem

Auto MDI/MDIX RJ-45 Ports Automatically sense the types of WAN and LAN when connecting to Ethernet

Receptor for Power adapter

## 1.4. LEDs and Buttons – the Front View



Reset Button
Restore to Original factory defaulted setting

WAN LED
A green light as WAN is connected

WPS Button
Restore to Original factory defaulted setting

Mobile/Status LED
A green light as what's status of power or 3G card.

WiFi LED
A green light as connection on WLAN available

LAN LED
A green light as connected to local Ethernet and blinks during data is transmission

**Note:**
**Contains a reset button to restore the setting back to original factory defaulted setting as if your convenience of forgetting your applicable setting**

## 1.5. Features

- IEEE 802.11b/g compliant and 11n Lite (HW 1T1R not MIMO solution.)
  - Backward compatible to IEEE 802.11b standards
  - Max physical rate up to 54Mbps in 802.11g mode
  - Max physical rate up to 150Mbps in 802.11n mode
  - Security Supports: WEP (64/128 bits), WPA, WPA2, WPA-PSK, WPA2-PSK, and 802.1x
  - WPS Support
- Provide 5 * 10/100 RJ-45 ports
  - 4 * LAN
  - 1 * WAN
- WAN connection through external USB 3G/3.75G modem card
  - WCDMA,HSDPA,HSUPA(depend on region)
  - CDMA2000,EV-DO(depend on region)
  - TD-SCDMA,TD-HSDPA(Option)
  - Flash OFDM(Reserve)
  - iBurst(Option)
- Built-in NAT function: one IP sharing with PCs
- Built-in firewall to protect your Intranet
- VPN pass through supported
  - PPTP
  - L2TP
  - IPSec
- Easy to upgrade firmware
  - Web UI
  - Windows utility
- Easy to manage:
  - Web UI
  - SNMP
  - UPnP
- Network Protocols
  - UDP/TCP/IP/ARP/RARP/ICMP
  - DHCP/PPPoE
  - DNS/TFTP/HTTP
- Antenna
  - 1 x PiFa Wi-Fi antenna

**Note:** The WiFi Combo Broadband Gateway is designed to work with 3G USB dongle, (either EVDO or WCDMA (UMTS)).
Please refer to your service provider for detailed feature information.

# 2. Configuring WiFi Combo Broadband Gateway

## 2.1. Installation Considerations

The WiFi Combo Broadband Gateway allows you access your network using a wireless connection, from virtually anywhere within its operating range. Keep in mind however, that the number, thickness, and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit this range.
Typical ranges vary depending on the types of materials used, and background RF (radio frequency) noise in your home or business.

**註解 [01]:** 加上 to allow you to

**註解 [02]:** 應改爲 However, keep in mind that

To maximize your wireless range, please follow these guidelines:

1. Keep the number of walls and ceilings between the WiFi Combo Broadband Gateway and other network devices to a minimum. Each wall or ceiling can reduce the WiFi Combo Broadband Gateway’s range from 3-90 feet (1-30 meters).
   **Note:** The same considerations apply to your broadband EVDO connection.
2. Keep your product aware from electrical devices (such as microwaves, air conditioners, and televisions) that emit large quantities of RFI (Radio Frequency Interference).

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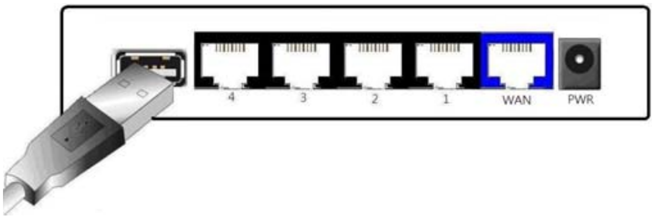
### 2.1.1. Installation Instructions- Get Start Networking

**Connect this Gateway to Your Network**
**Note:** *DO NOT connect WiFi Combo Broadband Gateway to power before performing the installation steps below.*

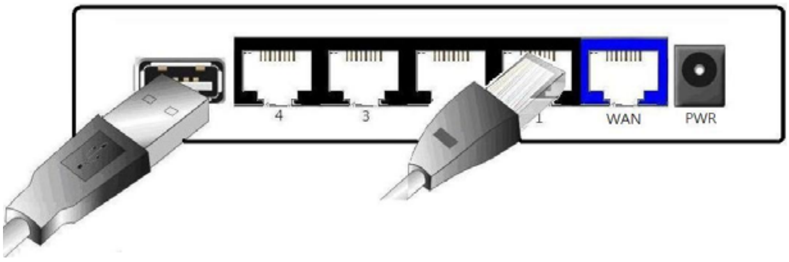
1. Connect a USB modem *with service* to the WiFi Combo Broadband Gateway-- **See Picture 2.1**



**Picture 2.1**

**Note:** The WiFi Combo Broadband Gateway is designed to work with either UMTS or EV-DO and even HSDPA 3G cards that can be used as a modem (support tethered data). Please refer to your service provider for detailed feature information.

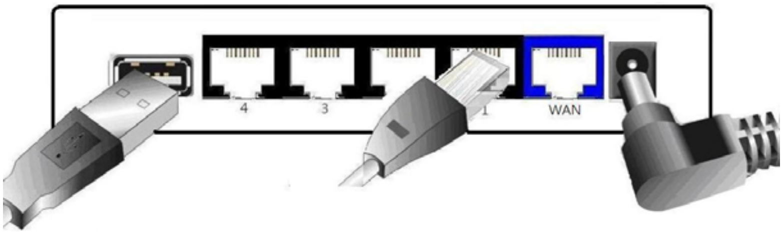
2. Insert the Ethernet patch cable into LAN Port on the back panel of the WiFi Combo Broadband Gateway, and an available Ethernet port on the network adapter in the computer you will use to configure the unit.**-See Picture 2.2**



**Picture 2.2**

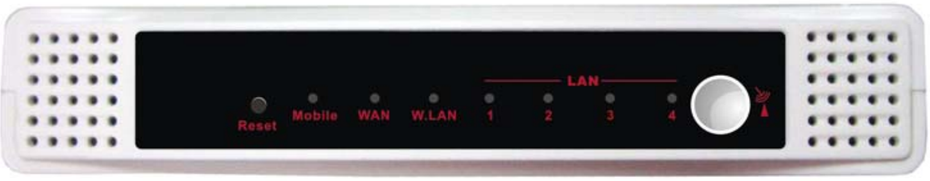
**Note:** The WiFi Combo Broadband Gateway LAN Port is "Auto-MDI/MDIX." This provides patch Ethernet cable LAN Port access.

3. Connect the power adapter to the receptor on the back panel of your WiFi Combo Broadband Gateway. Then plug the other end of the power adapter into a wall outlet or power strip. –See Picture 2.3



**Picture 2.3**

4. The LEDs
Reference the Section 1.4, LEDs and Buttons– the Front View.



### 2.1.2. Establish WiFi Connection

If you selected either **WEP** or **WPA-PSK** encryption, ensure these settings match your WiFi adapter settings.

WiFi and encryption settings must match for access to the WiFi Combo Broadband Gateway Configuration Menu, and the Internet. Please refer to your WiFi adapter documentation for additional information.

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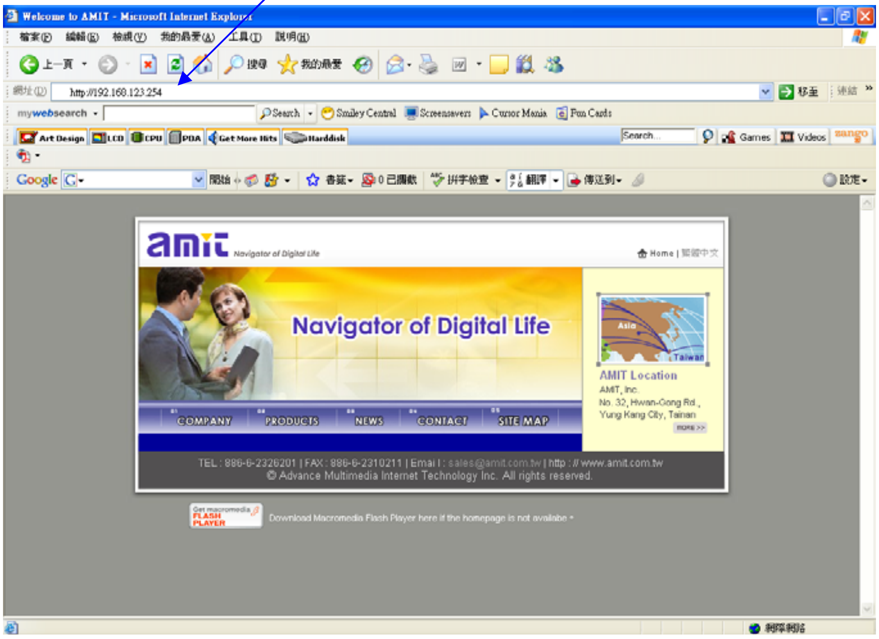
# 3. Using the Configuration Menu

Once properly configured, the WiFi Combo Broadband Gateway will obtain and assign IP address information automatically. Configuration settings can be established through the WiFi Combo Broadband Gateway Configuration Menu. You can access this interface by performing the steps listed below:

1. Open a web-browser.
2. Type in the **IP Address** (**http://192.168.123.254**) of the WiFi Combo Broadband Gateway.



Welcome to AMIT - Microsoft Internet Explorer
http://192.168.123.254
amit Navigator of Digital Life
Home | 繁體中文
Navigator of Digital Life
COMPANY
PRODUCTS
NEWS
CONTACT
SITE MAP
Asia
Taiwan
AMIT Location
more >>
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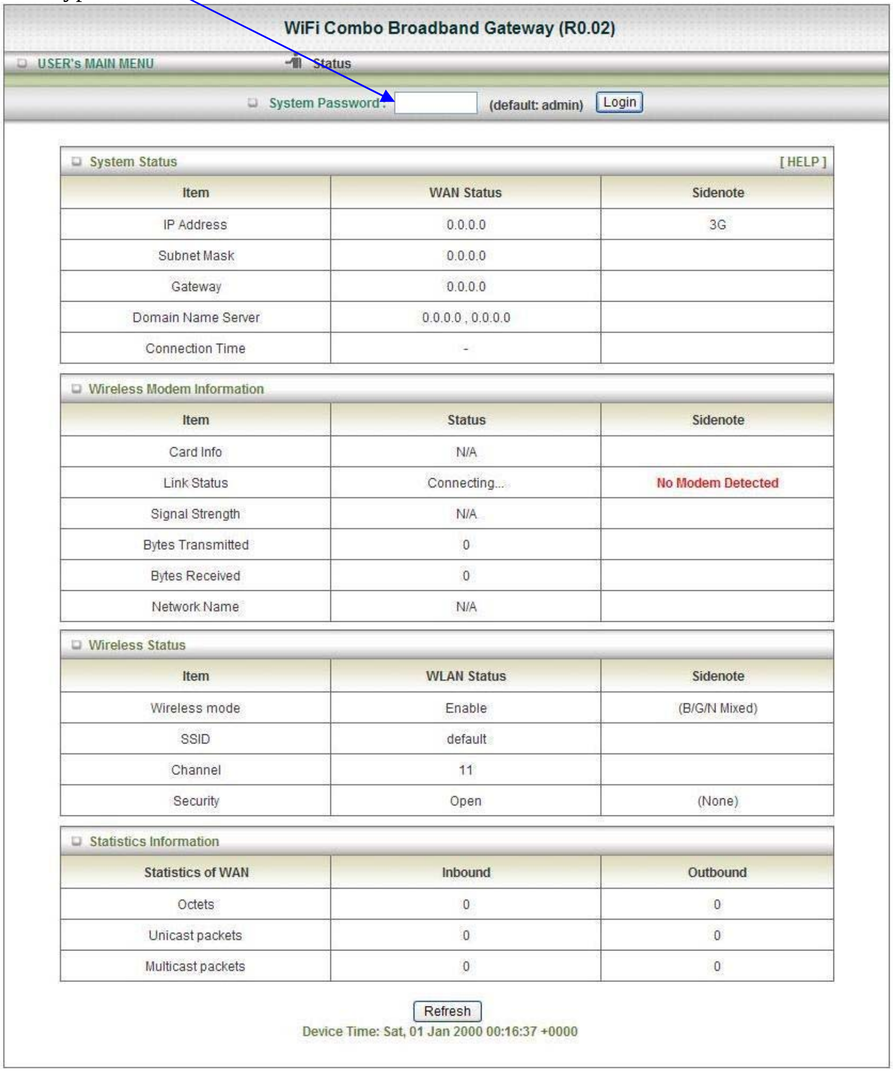
**Note:** If you have changed the **default** IP Address assigned to the WiFi Combo Broadband Gateway, ensure you enter the correct IP Address now.

3. Type **“admin”** in the **Password** field.



System Status [ HELP ]

| Item | WAN Status | Sidenote |
|---|---|---|
| IP Address | 0.0.0.0 | 3G |
| Subnet Mask | 0.0.0.0 | |
| Gateway | 0.0.0.0 | |
| Domain Name Server | 0.0.0.0 , 0.0.0.0 | |
| Connection Time | - | |

Wireless Modem Information

| Item | Status | Sidenote |
|---|---|---|
| Card Info | N/A | |
| Link Status | Connecting... | No Modem Detected |
| Signal Strength | N/A | |
| Bytes Transmitted | 0 | |
| Bytes Received | 0 | |
| Network Name | N/A | |

Wireless Status

| Item | WLAN Status | Sidenote |
|---|---|---|
| Wireless mode | Enable | (B/G/N Mixed) |
| SSID | default | |
| Channel | 11 | |
| Security | Open | (None) |

Statistics Information

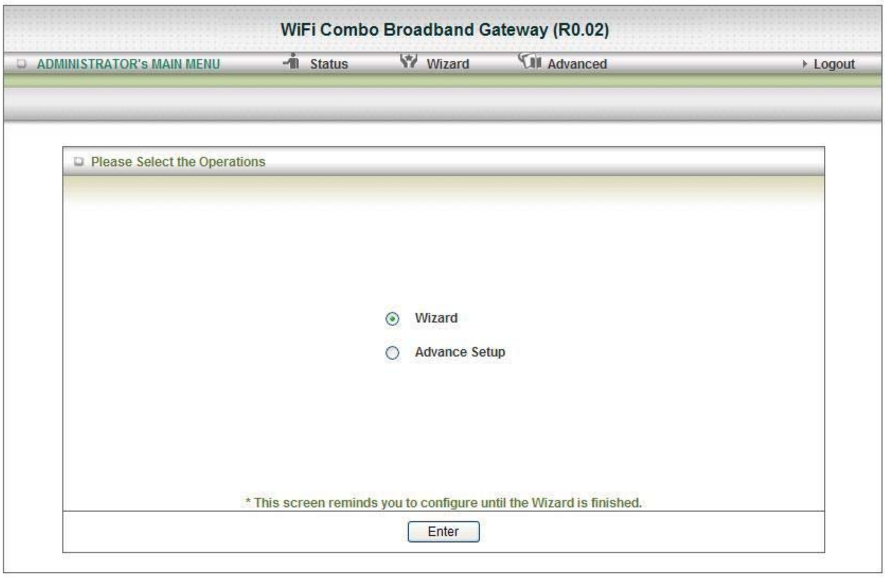
| Statistics of WAN | Inbound | Outbound |
|---|---|---|
| Octets | 0 | 0 |
| Unicast packets | 0 | 0 |
| Multicast packets | 0 | 0 |

Device Time: Sat, 01 Jan 2000 00:16:37 +0000

4. Click “logon” button.

## 3.1. Wizard setting

- Press “**Wizard**” button → for basic settings with simpler way. (Please check section 3.1)
- Or you may click on “**Advanced Setup**” → for advanced settings. (Please check the section Administrator’s Main Menu.   each item from section 3.2)


WiFi Combo Broadband Gateway (R0.02)
ADMINISTRATOR's MAIN MENU
Status
Wizard
Advanced
Logout
Please Select the Operations
Enter

● Wizard

○ Advance Setup

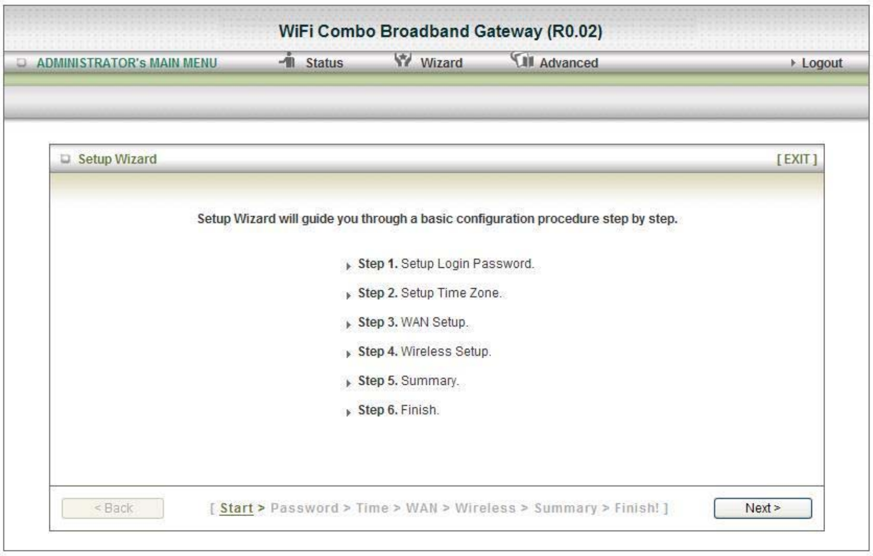
* This screen reminds you to configure until the Wizard is finished.

- **Click on “Enter” button to get start.**

With wizard setting steps, you could configure the gateway in a very simple way. This configuration wizard includes settings of

a. **Login Password**,
b. **Time zone**
c. **WAN Setup**
d. **Wireless Setup**,

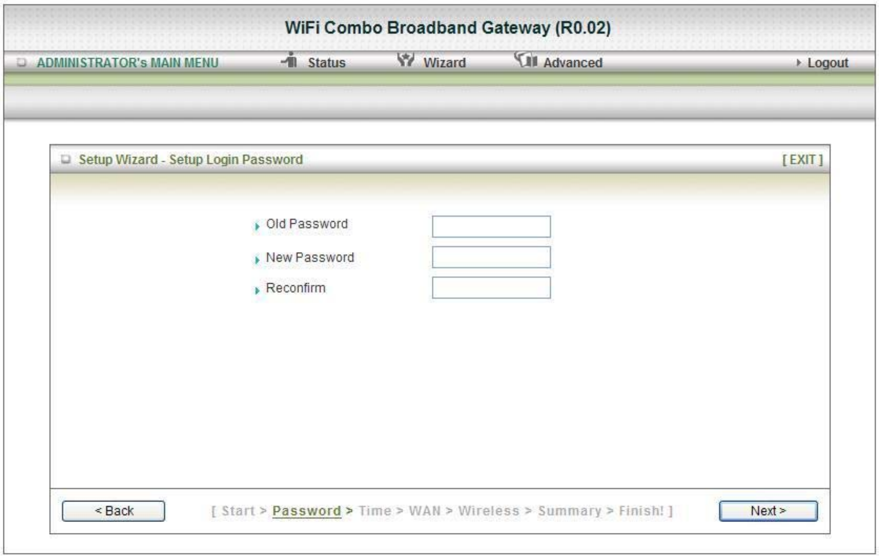
Press **“Next”** button to start configuration.


WiFi Combo Broadband Gateway (R0.02)
ADMINISTRATOR's MAIN MENU
Status
Wizard
Advanced
Logout
Setup Wizard
[ EXIT ]
< Back
[ Start > Password > Time > WAN > Wireless > Summary > Finish! ]
Next >

Setup Wizard will guide you through a basic configuration procedure step by step.

- **Step 1.** Setup Login Password.
- **Step 2.** Setup Time Zone.
- **Step 3.** WAN Setup.
- **Step 4.** Wireless Setup.
- **Step 5.** Summary.
- **Step 6.** Finish.

**Step 1: Allow you to change the system password.**


WiFi Combo Broadband Gateway (R0.02)
ADMINISTRATOR's MAIN MENU
Status
Wizard
Advanced
Logout
Setup Wizard - Setup Login Password
[ EXIT ]
< Back
[ Start > Password > Time > WAN > Wireless > Summary > Finish! ]
Next >

Old Password

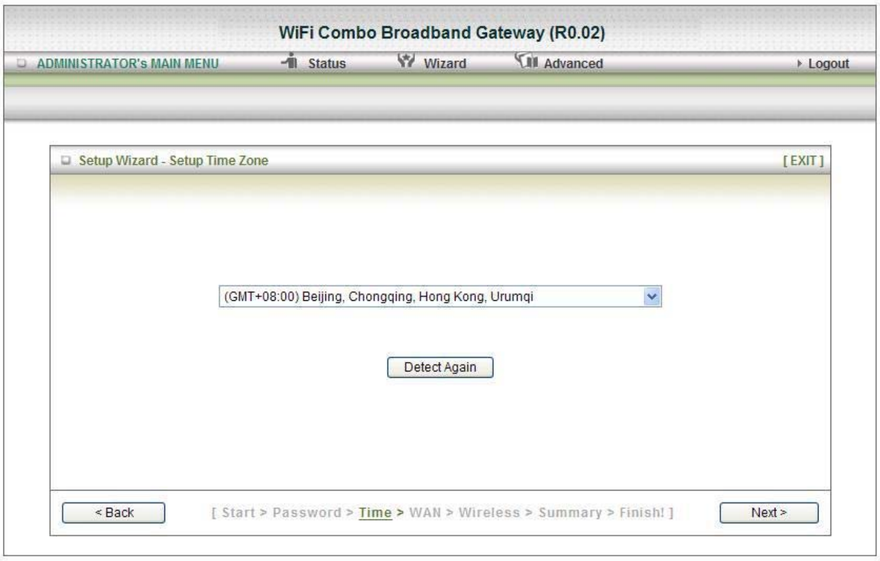
New Password

Reconfirm

You can change Password here.
It is recommended that you change the system password into the one you prefer to on the basis of security.

1. Key in your Old Password (if it is the first initiation, the “admin” will be the defaulted one.
2: Enter your New Password
3: Enter your Password again for confirmation; it must be the same as the New Password.
4. Then click on “Next” to get into next installation.

**Step 2: Allow you to change the Time Zone.**


WiFi Combo Broadband Gateway (R0.02)
ADMINISTRATOR's MAIN MENU
Status
Wizard
Advanced
Logout
Setup Wizard - Setup Time Zone
[ EXIT ]
Detect Again
< Back
[ Start > Password > Time > WAN > Wireless > Summary > Finish! ]
Next >

(GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi

You can change Time Zone here.
Or you can click the button "Detect Again", the Time Zone will be changed to same with your PC.

**Step 3: Select WAN Types will be used for Internet connection**
**Step3-1: Auto Detecting & Manually Setting WAN Type**

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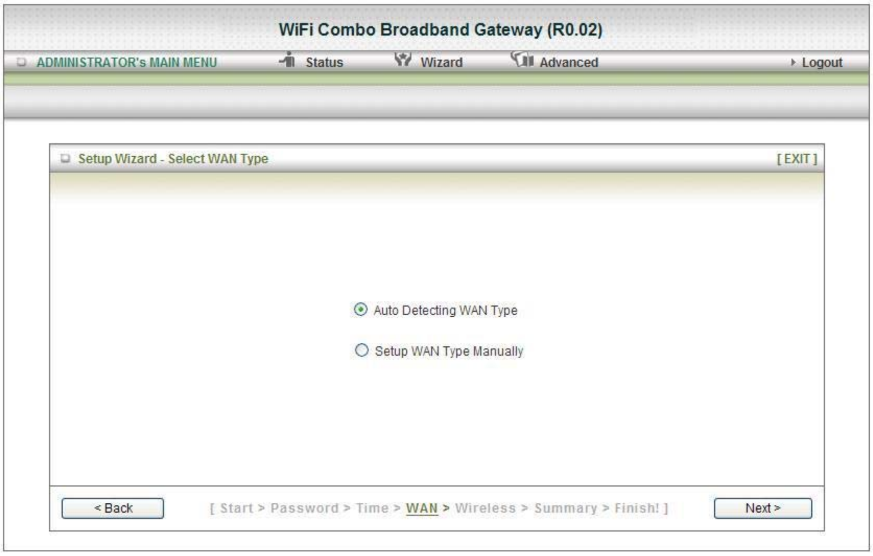
WiFi Combo Broadband Gateway (R0.02)
ADMINISTRATOR's MAIN MENU
Status
Wizard
Advanced
Logout
Setup Wizard - Select WAN Type
[ EXIT ]
< Back
[ Start > Password > Time > WAN > Wireless > Summary > Finish! ]
Next >

● Auto Detecting WAN Type
○ Setup WAN Type Manually

1. Reference **Section 2.1 Installation Considerations** to setup the environment
2. We are support the Dynamic & PPPOE WAN Type for Auto Detecting.
Click on "**Next**" button

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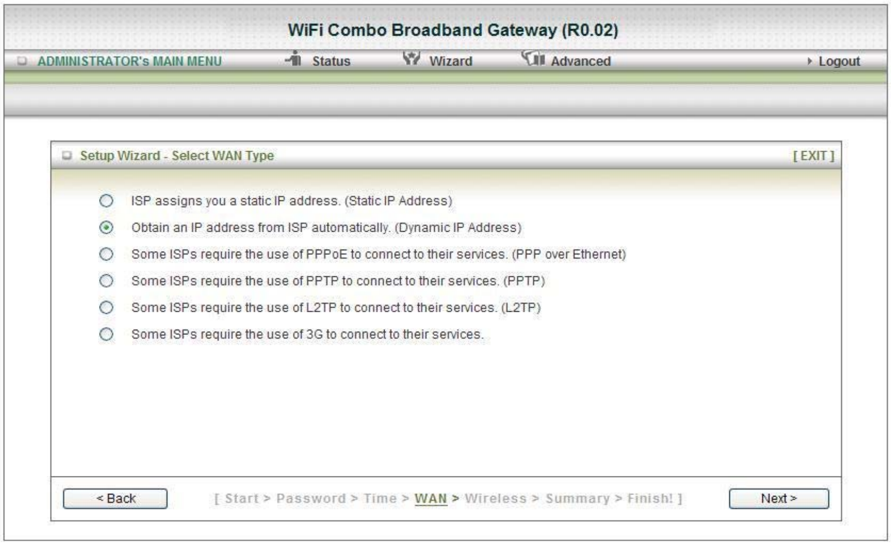
### Step3-2: Select WAN Type


WiFi Combo Broadband Gateway (R0.02)
ADMINISTRATOR's MAIN MENU
Status
Wizard
Advanced
Logout
[ EXIT ]
< Back
[ Start > Password > Time > WAN > Wireless > Summary > Finish! ]
Next >

Setup Wizard - Select WAN Type

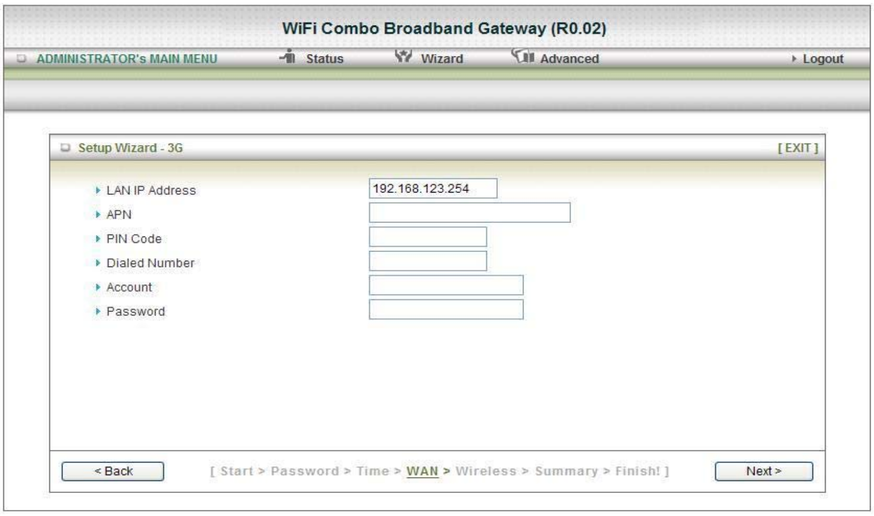
○ ISP assigns you a static IP address. (Static IP Address)
● Obtain an IP address from ISP automatically. (Dynamic IP Address)
○ Some ISPs require the use of PPPoE to connect to their services. (PPP over Ethernet)
○ Some ISPs require the use of PPTP to connect to their services. (PPTP)
○ Some ISPs require the use of L2TP to connect to their services. (L2TP)
○ Some ISPs require the use of 3G to connect to their services.

Pick up one of types you preferred to.
Click on “**Next”** button

**註解 [07]:** 加上 the
The types

You can select the Static, Dynamic, PPPOE, PPTP, L2TP and 3G WAN Types. We show you How to setup the 3G WAN Type only.
Reference the **Section 3.2.1.1 Primary Setup** for more information

### Step 3-3: Setup the 3G WAN will be used for Internet connection.


WiFi Combo Broadband Gateway (R0.02)
ADMINISTRATOR's MAIN MENU
Status
Wizard
Advanced
Logout
[ EXIT ]
< Back
[ Start > Password > Time > WAN > Wireless > Summary > Finish! ]
Next >

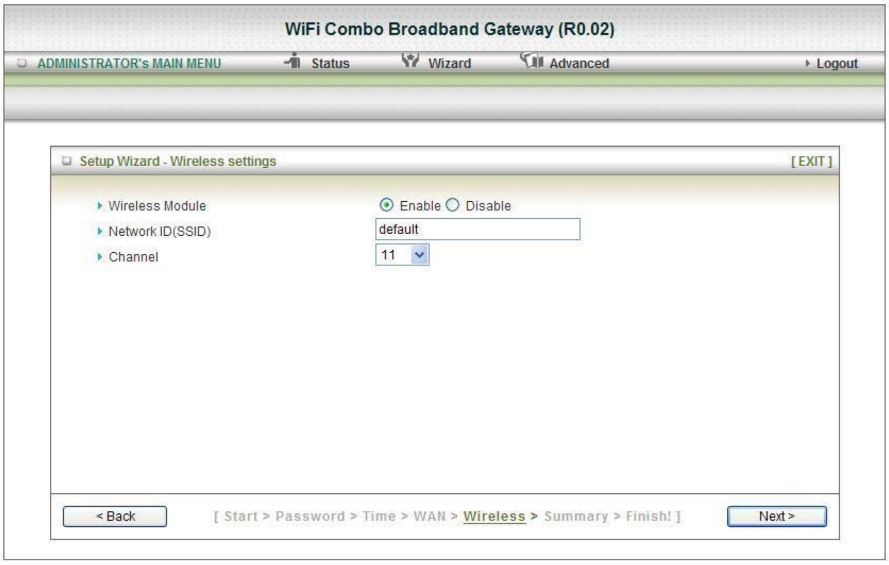
Setup Wizard - 3G

- LAN IP Address: 192.168.123.254
- APN:
- PIN Code:
- Dialed Number:
- Account:
- Password:

1. LAN IP Address: The IP address of the LAN interface. The default IP address is: 192.168.123.254
2. Enter the 3G Modem Card information by your 3G broadband service provider.

Click on “**Next”** button

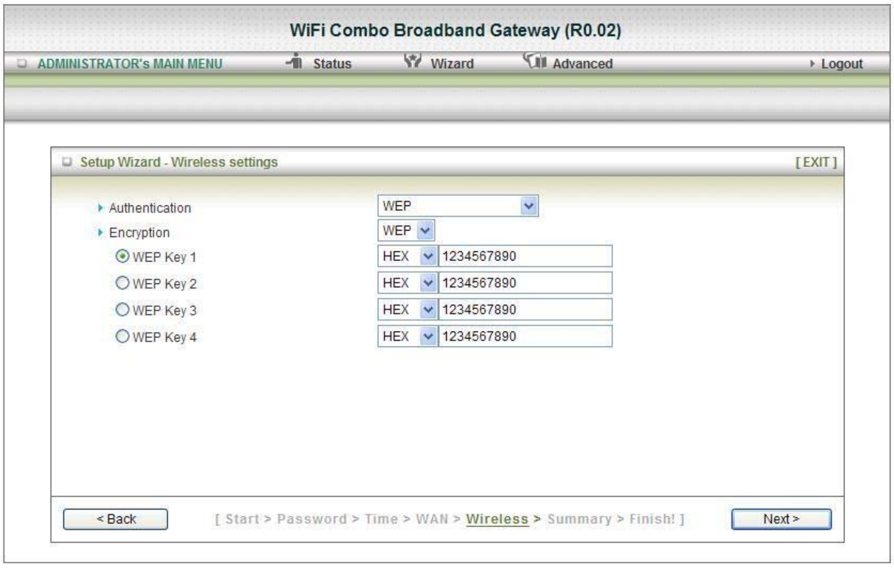
**Step 4: Configure the wireless settings.**


WiFi Combo Broadband Gateway (R0.02)
ADMINISTRATOR's MAIN MENU
Status
Wizard
Advanced
Logout
Setup Wizard - Wireless settings
[ EXIT ]
< Back
[ Start > Password > Time > WAN > Wireless > Summary > Finish! ]
Next >

- Wireless Module: ● Enable ○ Disable
- Network ID(SSID): default
- Channel: 11

1. Select “**Enable**” or “**Disable**”. The default setting is “**Enable**”.
2. Network ID (SSID) will be defaulted.
3. **Channel→** Select Wireless Channel matching to your local area for Wireless connection.
4. Click on “**Next**” to continue.

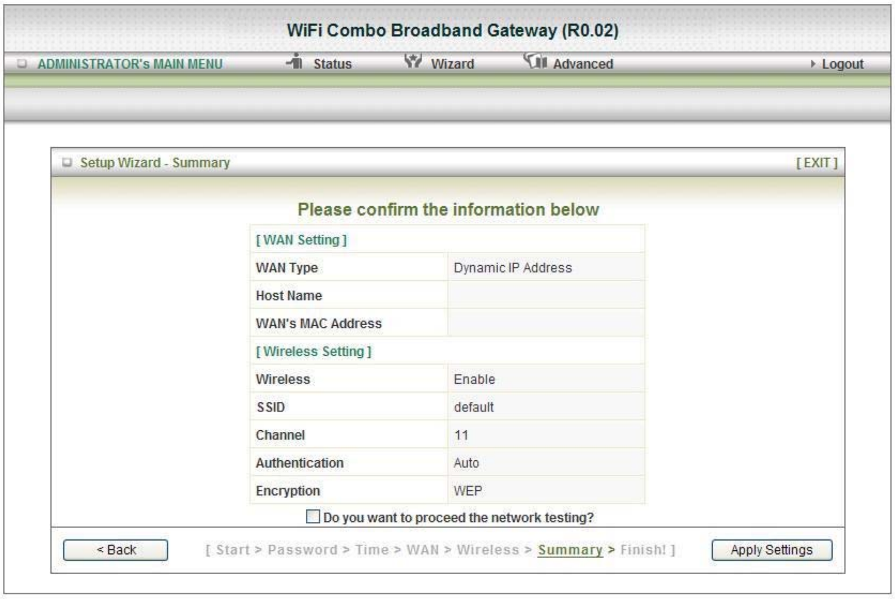
**Step 5: Select the Wireless security method of your wireless configuration.**


WiFi Combo Broadband Gateway (R0.02)
ADMINISTRATOR's MAIN MENU
Status
Wizard
Advanced
Logout
Setup Wizard - Wireless settings
[ EXIT ]
< Back
[ Start > Password > Time > WAN > Wireless > Summary > Finish! ]
Next >

- Authentication: WEP
- Encryption: WEP
- ● WEP Key 1: HEX 1234567890
- ○ WEP Key 2: HEX 1234567890
- ○ WEP Key 3: HEX 1234567890
- ○ WEP Key 4: HEX 1234567890

1. Select “WEP” Security type and enter the WEP key.
2. Click on “**Next**” to continue.

**Step 6: Summary**


WiFi Combo Broadband Gateway (R0.02)
ADMINISTRATOR's MAIN MENU
Status
Wizard
Advanced
Logout
Setup Wizard - Summary
[ EXIT ]
< Back
[ Start > Password > Time > WAN > Wireless > Summary > Finish! ]
Apply Settings

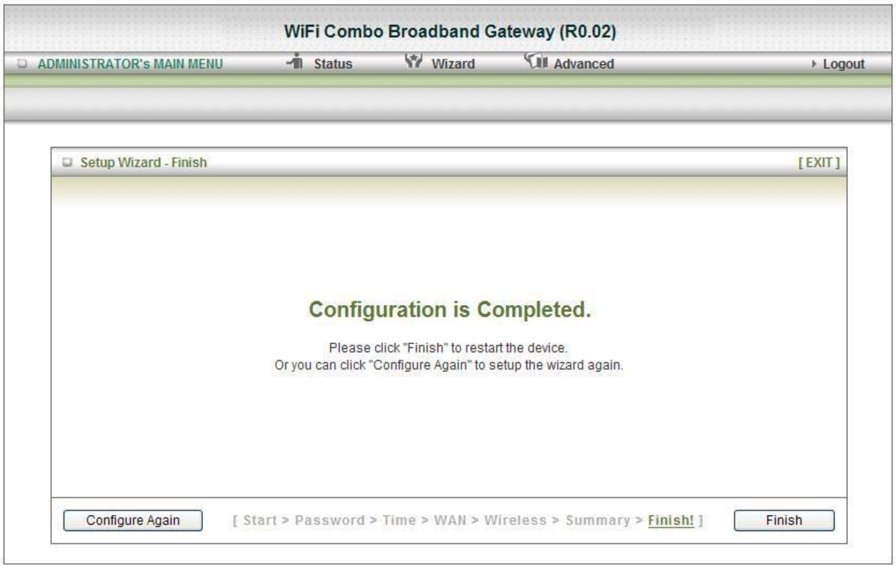
Please confirm the information below

| | |
|---|---|
| [ WAN Setting ] | |
| WAN Type | Dynamic IP Address |
| Host Name | |
| WAN's MAC Address | |
| [ Wireless Setting ] | |
| Wireless | Enable |
| SSID | default |
| Channel | 11 |
| Authentication | Auto |
| Encryption | WEP |

□ Do you want to proceed the network testing?

Click on the “**Apply Settings**” button

**Step 7: System is applying.**


WiFi Combo Broadband Gateway (R0.02)
ADMINISTRATOR's MAIN MENU
Status
Wizard
Advanced
Logout
Setup Wizard - Finish
[ EXIT ]
Configure Again
[ Start > Password > Time > WAN > Wireless > Summary > Finish! ]
Finish

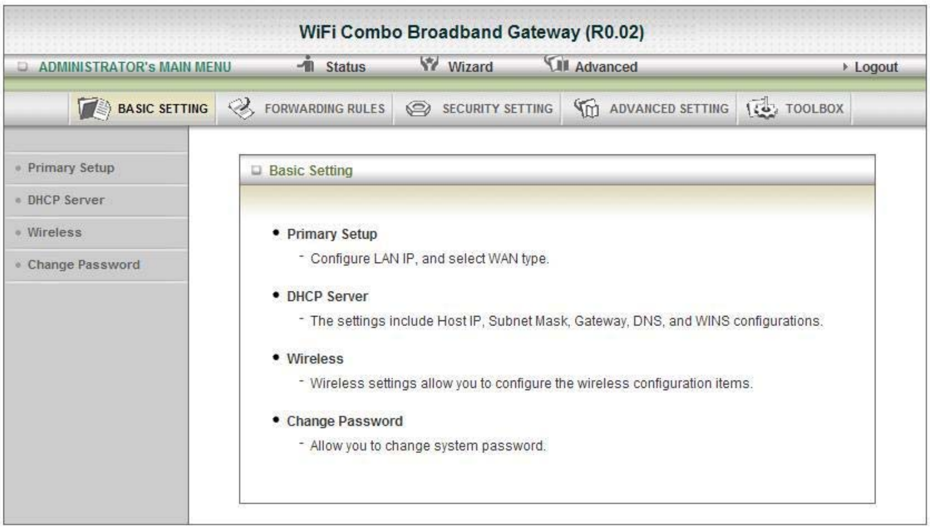
Configuration is Completed.

Please click "Finish" to restart the device.
Or you can click "Configure Again" to setup the wizard again.

Click “**Finish**” button to back the Status Page.

## 3.2. Administrator's Main Menu

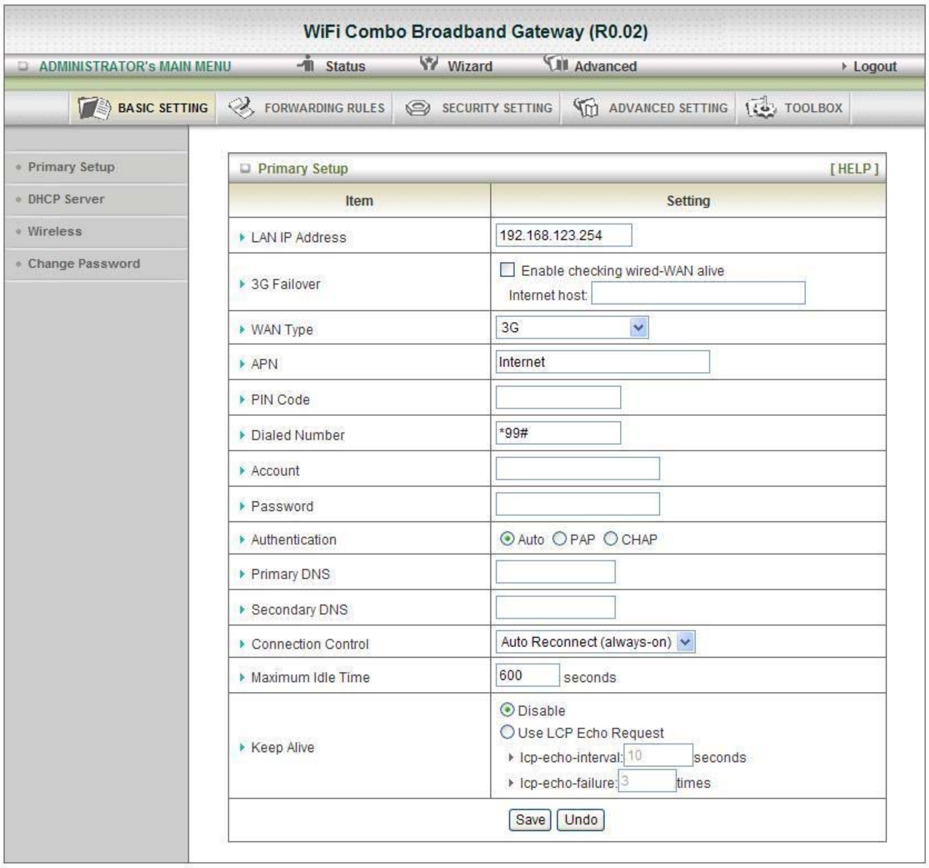
### 3.2.1 Basic Setting



Basic Setting

- Primary Setup
  - Configure LAN IP, and select WAN type.
- DHCP Server
  - The settings include Host IP, Subnet Mask, Gateway, DNS, and WINS configurations.
- Wireless
  - Wireless settings allow you to configure the wireless configuration items.
- Change Password
  - Allow you to change system password.

### 3.2.1.1 Primary Setup

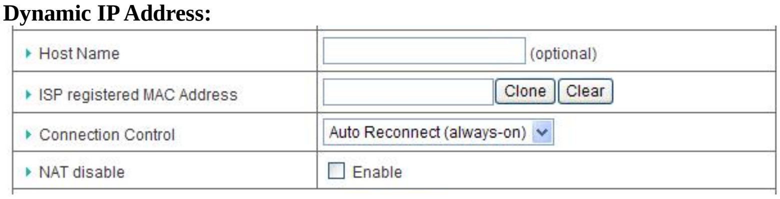


| Item | Setting |
|---|---|
| LAN IP Address | 192.168.123.254 |
| 3G Failover | ☐ Enable checking wired-WAN alive<br>Internet host: |
| WAN Type | 3G |
| APN | Internet |
| PIN Code | |
| Dialed Number | *99# |
| Account | |
| Password | |
| Authentication | ● Auto ○ PAP ○ CHAP |
| Primary DNS | |
| Secondary DNS | |
| Connection Control | Auto Reconnect (always-on) |
| Maximum Idle Time | 600 seconds |
| Keep Alive | ● Disable<br>○ Use LCP Echo Request<br>lcp-echo-interval: 10 seconds<br>lcp-echo-failure: 3 times |

1. **LAP IP Address:** the local IP address of this device. The computers on your network must use the LAN IP address of your product as their Default Gateway. You can change it if necessary.
2. **3G Failover:** The WAN type will be change to 3G automatically, if the internet host (to detect it by wired WAN) is defunct.
3. **WAN Type**: WAN connection type of your ISP. You can click WAN Type HSPA button to choose a correct one from the following options:

**Static IP Address:**
WAN IP Address, Subnet Mask, Gateway, Primary and Secondary DNS: enter the proper setting provided by your ISP.

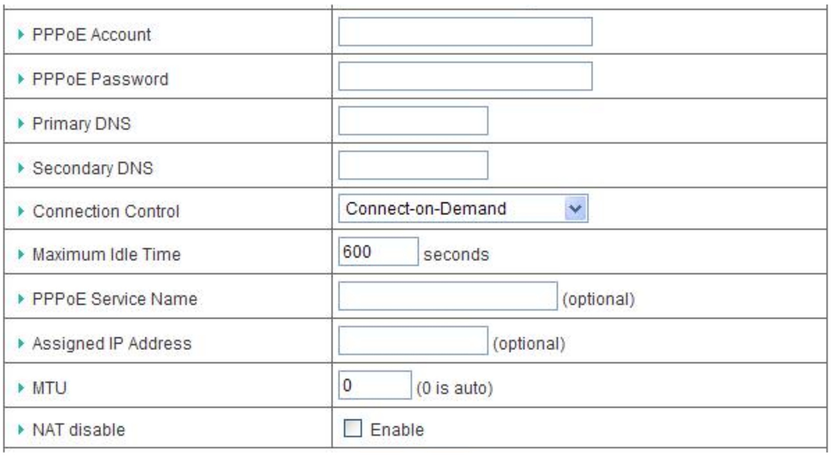
**Dynamic IP Address:**



| | |
|---|---|
| Host Name | (optional) |
| ISP registered MAC Address | Clone Clear |
| Connection Control | Auto Reconnect (always-on) |
| NAT disable | □ Enable |

1. Host Name: optional, required by some ISPs, for example, @Home.
2. ISP registered MAC address: You can change the WAN port MAC address, it is your ISP assigned to you.
3. Connection Control: There are 3 modes to select:
   Connect-on-demand: The device will link up with ISP when the clients send outgoing packets.
   Auto Reconnect (Always-on): The device will link with ISP until the connection is established.
   Manually: The device will not make the link until someone clicks the connect-button in the Status-page.
4. NAT disable: NAT disable is enabling, it can bridge data form WAN port to LAN port.

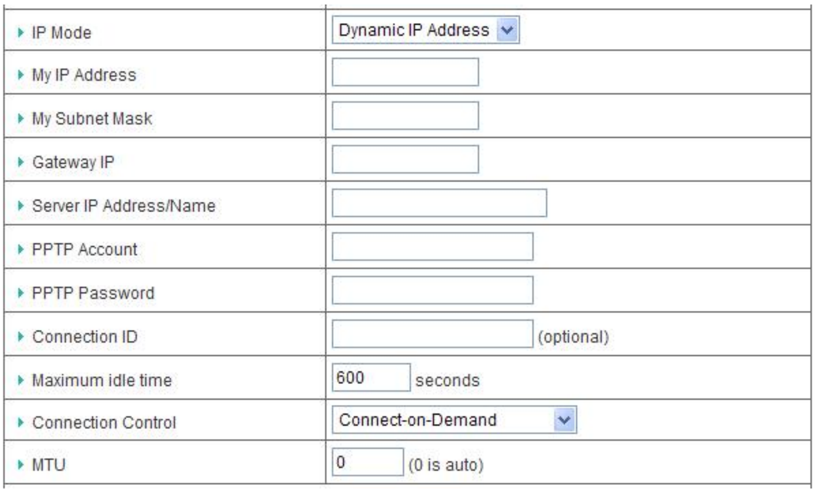
**PPP over Ethernet**



| | |
|---|---|
| PPPoE Account | |
| PPPoE Password | |
| Primary DNS | |
| Secondary DNS | |
| Connection Control | Connect-on-Demand |
| Maximum Idle Time | 600 seconds |
| PPPoE Service Name | (optional) |
| Assigned IP Address | (optional) |
| MTU | 0 (0 is auto) |
| NAT disable | □ Enable |

1. PPPoE Account and Password: the account and password your ISP assigned to you. For security, this field appears blank. If you don't want to change the password, leave it empty.
2. Connection Control: There are 3 modes to select:
   Connect-on-demand: The device will link up with ISP when the clients send outgoing packets.
   Auto Reconnect (Always-on): The device will link with ISP until the connection is established.
   Manually: The device will not make the link until someone clicks the connect-button in the Status-page.
3. Maximum Idle Time: the amount of time of inactivity before disconnecting your PPPoE session. Set it to zero or enable Auto-reconnect to disable this feature.
4. PPPoE Service Name: optional. Input the service name if your ISP requires it. Otherwise, leave it blank.
5. MTU (Maximum Transmission Unit): Most ISP offers MTU value to users. The default value is 0 (Auto).
6. NAT disable: NAT disable is enabling, it can bridge data form WAN port to LAN port.

**PPTP**

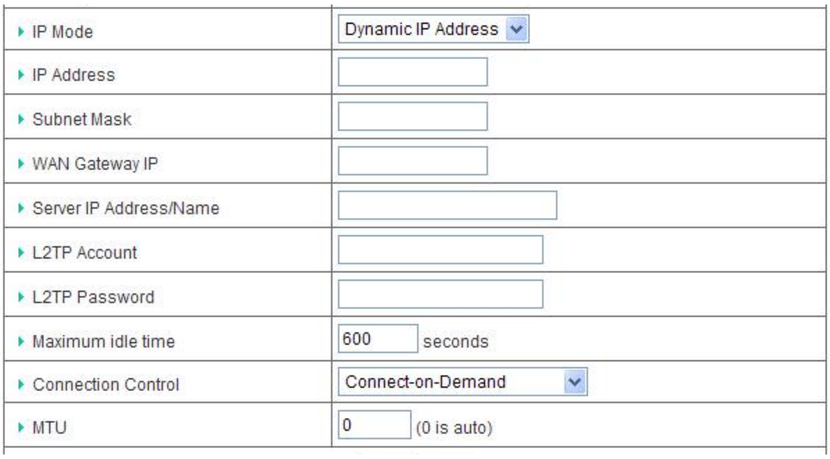


| | |
|---|---|
| IP Mode | Dynamic IP Address |
| My IP Address | |
| My Subnet Mask | |
| Gateway IP | |
| Server IP Address/Name | |
| PPTP Account | |
| PPTP Password | |
| Connection ID | (optional) |
| Maximum idle time | 600 seconds |
| Connection Control | Connect-on-Demand |
| MTU | 0 (0 is auto) |

First, please check your ISP assigned and Select Static IP Address or Dynamic IP Address. For example: Use Static, the private My IP address, My subnet mask and Gateway are your ISP assigned to you.

1. Server IP Address/Name: the IP address (or URL) of the PPTP server.
2. PPTP Account and Password: the account and password your ISP assigned to you. For security, this field appears blank. If you don't want to change the password, keep it empty.
3. Connection ID: optional. Input the connection ID if your ISP requires it.
4. Maximum Idle Time: the time of no activity to disconnect your PPTP session. Set it to zero or enable Auto-reconnect to disable this feature. If Auto-reconnect is enabled, this product will connect to ISP automatically, after system is restarted or connection is dropped.
5. Connection Control: There are 3 modes to select:
   Connect-on-demand: The device will link up with ISP when the clients send outgoing packets.
   Auto Reconnect (Always-on): The device will link with ISP until the connection is established.
   Manually: The device will not make the link until someone clicks the connect-button in the Status-page.
6. MTU (Maximum Transmission Unit): Most ISP offers MTU value to users. The default value is 0 (Auto).

**L2TP**



| | |
|---|---|
| IP Mode | Dynamic IP Address |
| IP Address | |
| Subnet Mask | |
| WAN Gateway IP | |
| Server IP Address/Name | |
| L2TP Account | |
| L2TP Password | |
| Maximum idle time | 600 seconds |
| Connection Control | Connect-on-Demand |
| MTU | 0 (0 is auto) |

First, please check your ISP assigned and Select Static IP Address or Dynamic IP Address. For example: Use Static, the private IP address, subnet mask and WAN Gateway IP are your ISP assigned to you.

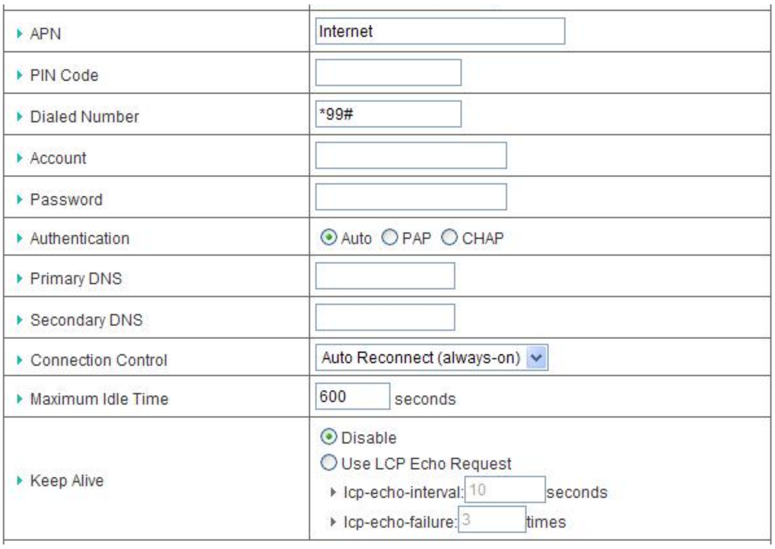
1. Server IP Address/Name: the IP address (or URL) of the L2TP server.
2. L2TP Account and Password: the account and password your ISP assigned to you. For security, this field appears blank. If you don't want to change the password, keep it empty.
3. Maximum Idle Time: the time of no activity to disconnect your L2TP session. Set it to zero or enable Auto-reconnect to disable this feature. If Auto-reconnect is enabled, this product will connect to ISP automatically, after system is restarted or connection is dropped.
4. Connection Control: There are 3 modes to select:

   Connect-on-demand: The device will link up with ISP when the clients send outgoing packets.

   Auto Reconnect (Always-on): The device will link with ISP until the connection is established.

   Manually: The device will not make the link until someone clicks the connect-button in the Status-page.
5. MTU (Maximum Transmission Unit): Most ISP offers MTU value to users. The default value is 0 (Auto).

**3G**



| | |
|---|---|
| APN | Internet |
| PIN Code | |
| Dialed Number | *99# |
| Account | |
| Password | |
| Authentication | ● Auto ○ PAP ○ CHAP |
| Primary DNS | |
| Secondary DNS | |
| Connection Control | Auto Reconnect (always-on) |
| Maximum Idle Time | 600 seconds |
| Keep Alive | ● Disable<br>○ Use LCP Echo Request<br>lcp-echo-interval: 10 seconds<br>lcp-echo-failure: 3 times |

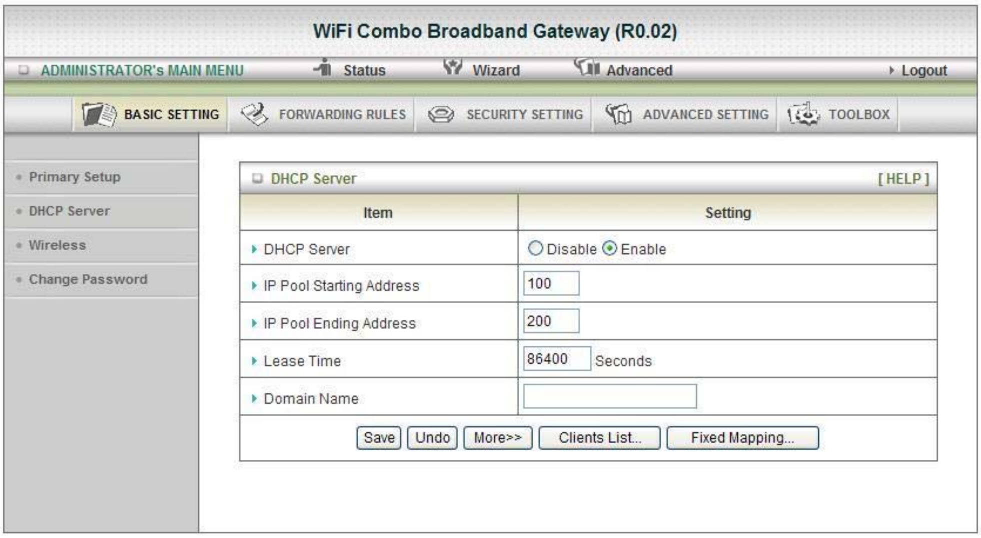
For 3G WAN Networking. The WAN fields may not be necessary for your connection. The information on this page will only be used when your service provider requires you to enter a User Name and Password to connect to the 3G network.

註解 **[08]:** For…, the WAN….

Please refer to your documentation or service provider for additional information.

1. APN: Enter the APN for your PC card here.
2. Pin Code: Enter the Pin Code for your SIM card
3. Dial-Number: This field should not be altered except when required by your service provider.
4. User Name: Enter the new *User Name* for your PC card here.
5. Password: Enter the new *Password* for your PC card here.
6. Primary DNS: This feature allows you to assign a Primary DNS Server（Optional）
7. Secondary DNS: This feature allows you to assign a Secondary DNS Server（Optional）
8. Connection Control: There are 3 modes to select:
   Connect on Demand: The device will link up with ISP when the clients send outgoing packets.
   Auto Reconnect (always-on): The device will link with ISP until the connection is established.
   Manually: The device will not make the link until someone clicks the connect-button in the Status-page.
9. Maximum Idle Time: The Connection will be broken when the idle time arrives.
10. Keep Alive: There are 2 modes to select:
    Disable / Use LCP Echo Request.

### 3.2.1.2 DHCP Server



DHCP Server [HELP]

| Item | Setting |
|---|---|
| DHCP Server | ○ Disable ● Enable |
| IP Pool Starting Address | 100 |
| IP Pool Ending Address | 200 |
| Lease Time | 86400 Seconds |
| Domain Name | |

Save | Undo | More>> | Clients List... | Fixed Mapping...

1. Press **“More>>”,** for more settings.
2. **DHCP Server:** Choose either **Disable** or **Enable.**
3. **IP Pool Starting/Ending Address:** Whenever there is a request, the DHCP server will automatically allocate an unused IP address from the IP address pool to the requesting computer. You must specify the starting / ending address of the IP address pool.
4. **Lease Time:** DHCP lease time to the DHCP client.
5. **Domain Name:** Optional, this information will be passed to the client
6. **Primary DNS/Secondary DNS:** Optional, This feature allows you to assign a DNS Servers
7. **Primary WINS/Secondary WINS:** Optional, this feature allows you to assign a WINS Servers
8. **Gateway:** Optional, Gateway Address would be the IP address of an alternate Gateway.

   This function enables you to assign another gateway to your PC, when DHCP server offers an IP to your PC.
9. **Clients List...**: Reference the next Page “DHCP Clients List”.
10. **Fixed Mapping...:** Reference the next page “DHCP Fixed Mapping”.

After you finish your selection then

Either Click on **“Save”** to store what you just pick or click “**Undo”** to give up

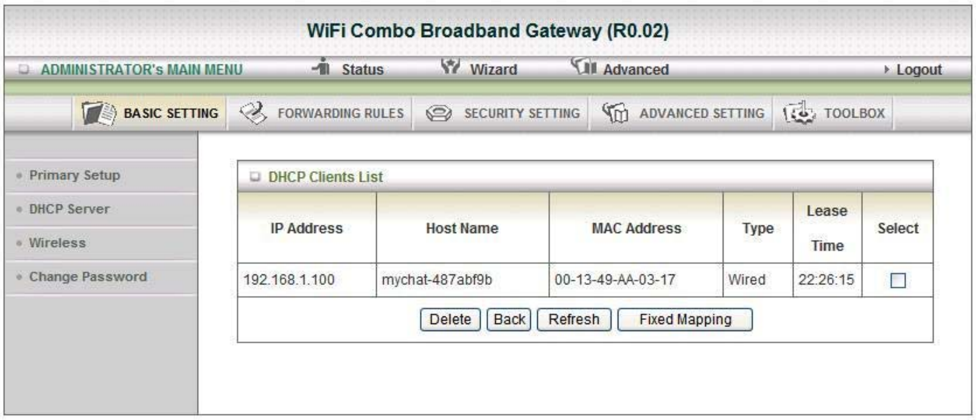
**註解 [09]:** 應改爲
Press… for more….

**註解 [010]:** 應該爲
Refer to…….

**註解 [011]:** 應該爲
Refer to….

**註解 [012]:** 應該爲
After…, then……

## DHCP Clients List



DHCP Clients List

| IP Address | Host Name | MAC Address | Type | Lease Time | Select |
|---|---|---|---|---|---|
| 192.168.1.100 | mychat-487abf9b | 00-13-49-AA-03-17 | Wired | 22:26:15 | □ |

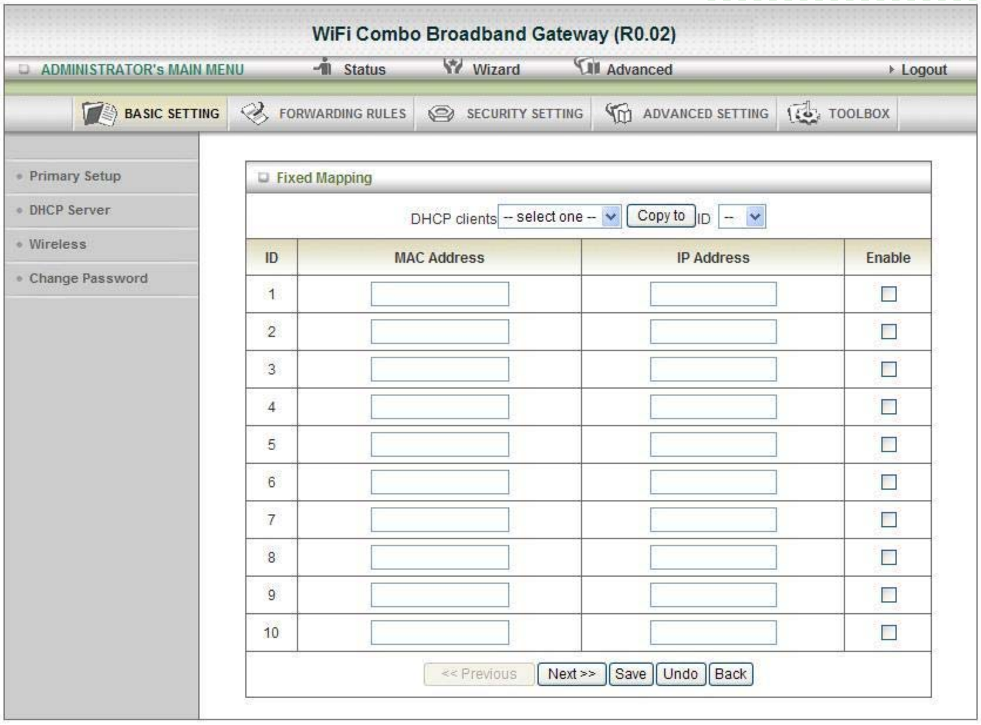
Delete: The selected items will be deleted.

Fixed Mapping: The selected items will be added to the Fix Mapping Table.

## DHCP Fixed Mapping

**The DHCP server will reserve the IP address for the Client, which have the MAC address.**

**註解 [013]:** 應該爲
has

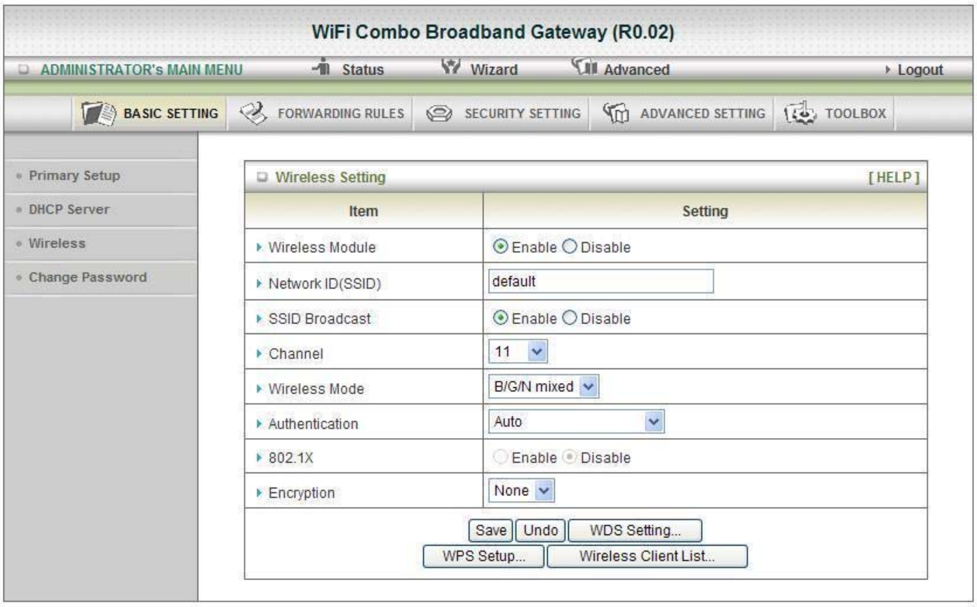


Fixed Mapping

DHCP clients -- select one -- Copy to ID --

| ID | MAC Address | IP Address | Enable |
|---|---|---|---|
| 1 | | | □ |
| 2 | | | □ |
| 3 | | | □ |
| 4 | | | □ |
| 5 | | | □ |
| 6 | | | □ |
| 7 | | | □ |
| 8 | | | □ |
| 9 | | | □ |
| 10 | | | □ |

### 3.2.1.3 Wireless Settings



| Item | Setting |
|---|---|
| Wireless Module | ● Enable ○ Disable |
| Network ID(SSID) | default |
| SSID Broadcast | ● Enable ○ Disable |
| Channel | 11 |
| Wireless Mode | B/G/N mixed |
| Authentication | Auto |
| 802.1X | ○ Enable ● Disable |
| Encryption | None |

Wireless settings allow you to set the wireless configuration items.

1. **Wireless:** *Enabled* is the default**.** Selecting this option will allow you to set your Wireless Access Point (WAP) settings.
2. **Network ID (SSID):** Service Set Identifier (SSID) is the name designated for a specific wireless local area network (WLAN). The SSID's factory default setting is *default*. The SSID can be easily changed to establish a new wireless network. (Note: SSID names may contain up to 32 ASCII characters).
3. **SSID Broadcast**: The gateway will broadcast beacons that have some information, including ssid so that wireless clients can know how many AP devices by scanning function in the network. Therefore, this function is disabled; the wireless clients can not find the device from beacons.
4. **Channel:** *Auto* is the default. Devices on the network must share the same channel. (Note: Wireless adapters automatically scan and match the wireless settings. You may also select the channel you wish to use).
5. **Wireless Mode:** Choose ***B/G Mixed, B only, G only, N only, G/N Mixed or B/G/N mixed.*** The factory default setting is ***B/G/N mixed***.
6. **Authentication:** You may select from nine kinds of authentication to secure your wireless network: Open, Shared, Auto, WPA-PSK, WPA, WPA2-PSK, WPA2, WPA-PSK/WPA2-PSK, WPA/WPA2.

**Open**

Open system authentication simply consists of two communications. The first is an authentication request by the client that contains the station ID (typically the MAC address). This is followed by an authentication response from the AP/gateway containing a success or failure message. An example of when a failure may occur is if the client's MAC address is explicitly excluded in the AP/gateway configuration.

**Shared**

Shared key authentication relies on the fact that both stations taking part in the authentication process have the same "shared" key or passphrase. The shared key is manually set on both the client station and the AP/gateway. Three types of shared key authentication are available today for home or small office WLAN environments.

**Auto**

The AP will Select the Open or Shared by the client’s request automatically.

**WPA-PSK**

Select Encryption and Pre-share Key Mode
If you select HEX, you have to fill in 64 hexadecimal (0, 1, 2…8, 9, A, B…F) digits.
If you select ASCII, the length of pre-share key is from 8 to 63.
Fill in the key, Ex 12345678

**WPA**

Check Box was used to switch the function of the WPA. When the WPA function is enabled, the Wireless user must **authenticate** to this gateway first to use the Network service. RADIUS Server IP address or the 802.1X server’s domain-name.
Select Encryption and RADIUS Shared Key
If you select HEX, you have to fill in 64 hexadecimal (0, 1, 2…8, 9, A, B…F) digits
If you select ASCII, the length of pre-share key is from 8 to 63.
Key value shared by the RADIUS server and this gateway. This key value is consistent with the key value in the RADIUS server.

**WPA-PSK2**

WPA-PSK2 user AES and TKIP for Same the encryption, the others are same the WPA-PSK.

**註解 [014]:** 應改爲
are same with

**WPA2**

WPA2 add uses AES and TKIP for encryption, the others are same the WPA.

**WPA-PSK/WPA-PSK2**

Another encryption options for WPA-PSK-TKIP and WPA-PSK2-AES, the others are same the WPA-PSK.

**註解 [015]:** 應改爲 are same with

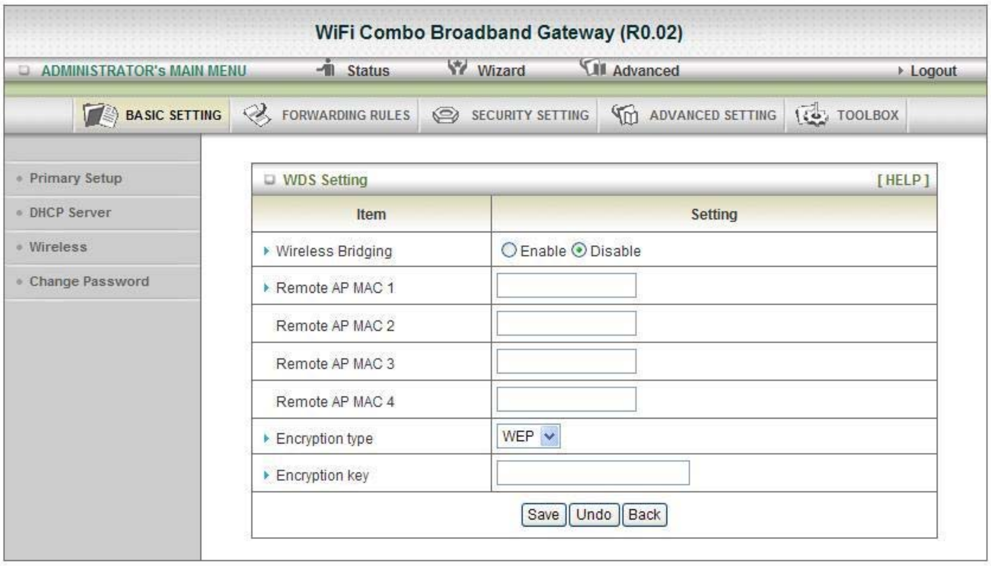
**WPA/WPA2**

Another encryption options for WPA-TKIP and WPA2-AES, the others are same the WPA.

**註解 [016]:** 應改爲
are same with

**WDS (Wireless Distribution System) Setting**

WDS operation as defined by the IEEE802.11 standard has been made available. Using WDS it is possible to wirelessly connect Access Points, and in doing so extend a wired infrastructure to locations where cabling is not possible or inefficient to implement.

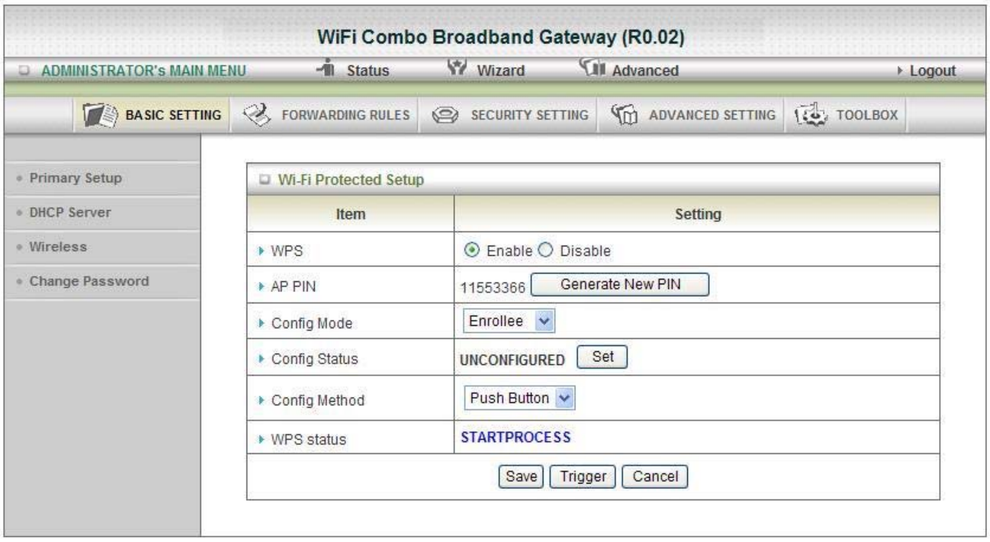


WDS Setting

| Item | Setting |
|---|---|
| Wireless Bridging | ○ Enable ● Disable |
| Remote AP MAC 1 | |
| Remote AP MAC 2 | |
| Remote AP MAC 3 | |
| Remote AP MAC 4 | |
| Encryption type | WEP |
| Encryption key | |

**WPS (Wi-Fi Protection Setup)**

WPS is Wi-Fi Protection Setup which is similar to WCN-NET and offers safe and easy way in Wireless Connection.



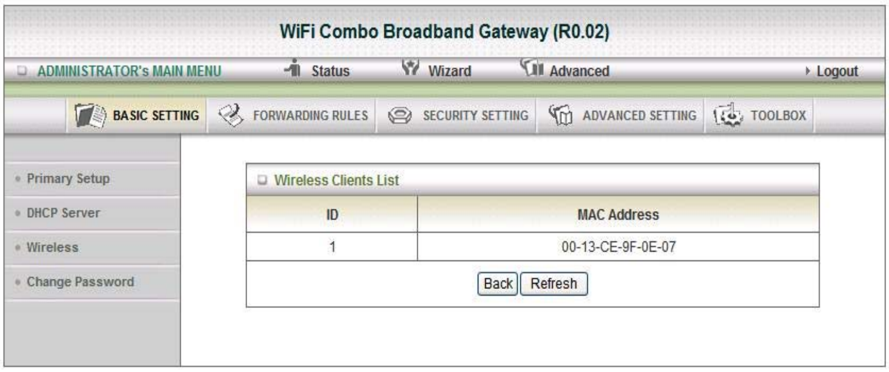
Wi-Fi Protected Setup

| Item | Setting |
|---|---|
| WPS | ● Enable ○ Disable |
| AP PIN | 11553366 |
| Config Mode | Enrollee |
| Config Status | UNCONFIGURED |
| Config Method | Push Button |
| WPS status | STARTPROCESS |

**Wireless Client List**

The list of wireless client is shows here.

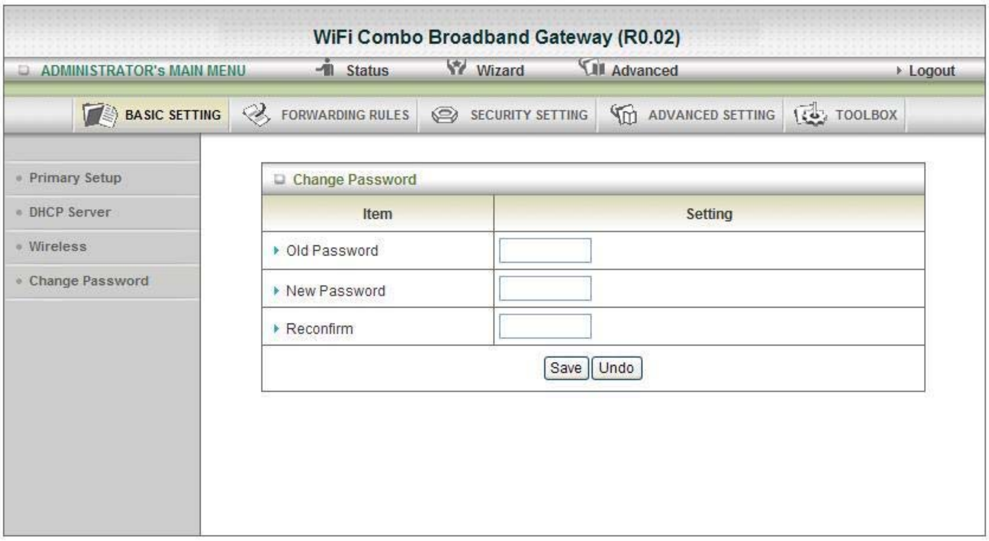
註解 [017]: 應改爲 shown



Wireless Clients List

| ID | MAC Address |
|---|---|
| 1 | 00-13-CE-9F-0E-07 |

### 3.2.1.4 Change Password



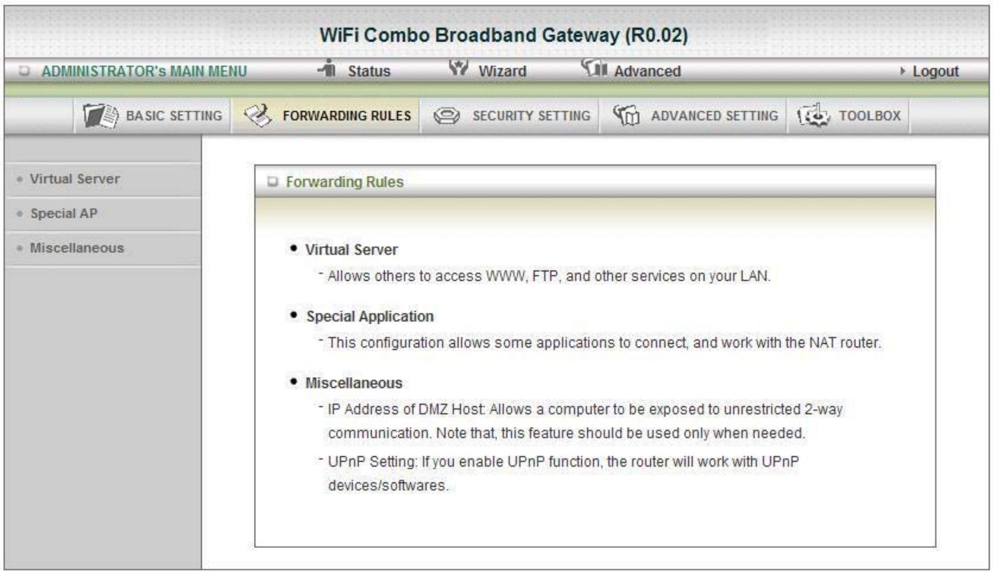
Change Password

| Item | Setting |
|---|---|
| Old Password | |
| New Password | |
| Reconfirm | |

You can change Password here. We **strongly** recommend you to change the system password for security reason.

**Click on "Save" to store what you just select or "Undo" to give up**

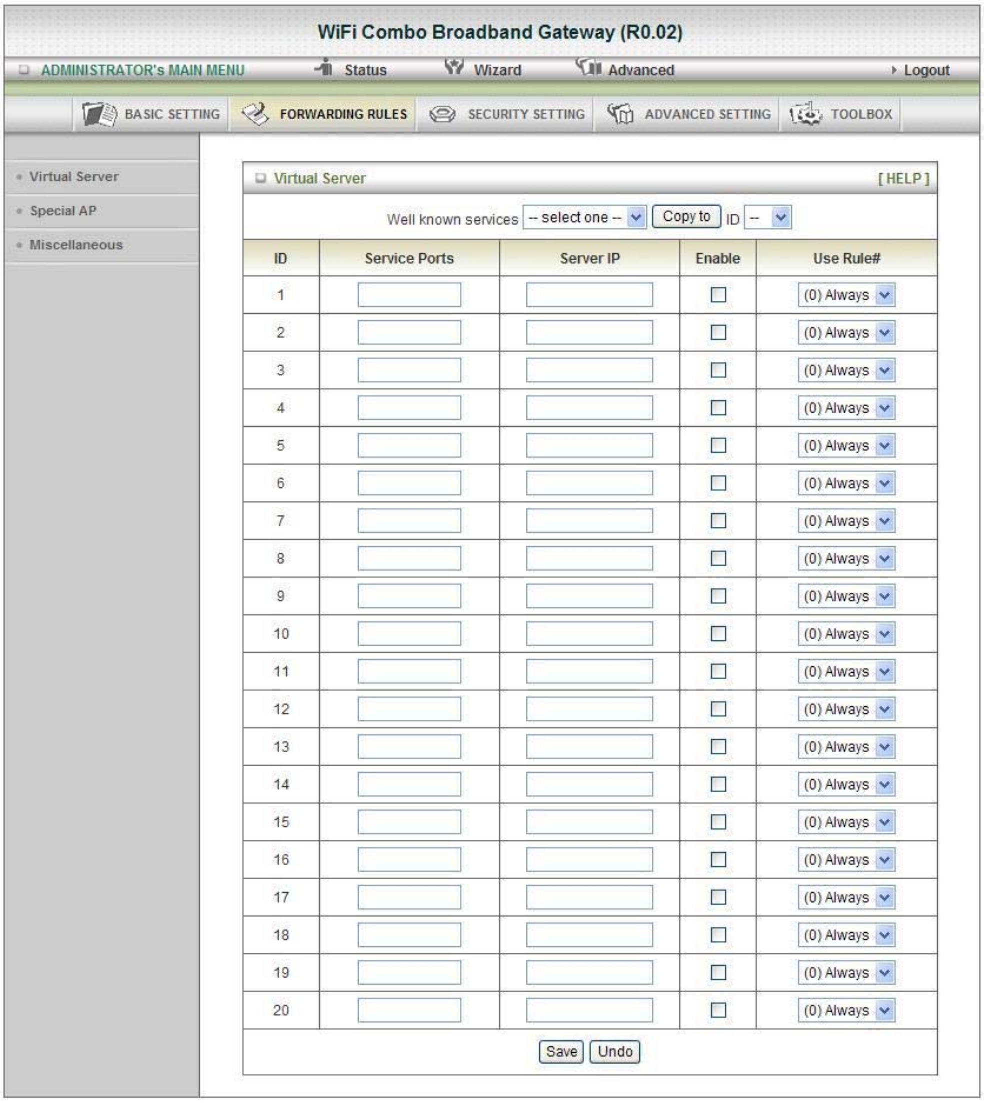
### 3.2.2 Forwarding Rules



Forwarding Rules

- Virtual Server
  - Allows others to access WWW, FTP, and other services on your LAN.
- Special Application
  - This configuration allows some applications to connect, and work with the NAT router.
- Miscellaneous
  - IP Address of DMZ Host: Allows a computer to be exposed to unrestricted 2-way communication. Note that, this feature should be used only when needed.
  - UPnP Setting: If you enable UPnP function, the router will work with UPnP devices/softwares.

### 3.2.2.1 Virtual Server



Well known services -- select one -- Copy to ID --

| ID | Service Ports | Server IP | Enable | Use Rule# |
|---|---|---|---|---|
| 1 | | | □ | (0) Always |
| 2 | | | □ | (0) Always |
| 3 | | | □ | (0) Always |
| 4 | | | □ | (0) Always |
| 5 | | | □ | (0) Always |
| 6 | | | □ | (0) Always |
| 7 | | | □ | (0) Always |
| 8 | | | □ | (0) Always |
| 9 | | | □ | (0) Always |
| 10 | | | □ | (0) Always |
| 11 | | | □ | (0) Always |
| 12 | | | □ | (0) Always |
| 13 | | | □ | (0) Always |
| 14 | | | □ | (0) Always |
| 15 | | | □ | (0) Always |
| 16 | | | □ | (0) Always |
| 17 | | | □ | (0) Always |
| 18 | | | □ | (0) Always |
| 19 | | | □ | (0) Always |
| 20 | | | □ | (0) Always |

This product's NAT firewall filters out unrecognized packets to protect your Intranet, so all hosts behind this product are invisible to the outside world. If you wish, you can make some of them accessible by enabling the Virtual Server Mapping.

A virtual server is defined as a Service Port, and all requests to this port will be redirected to the computer specified by the Server IP. Virtual Server can work with Scheduling Rules, and give user more flexibility on Access control. For Detail, please refer to Scheduling Rule.

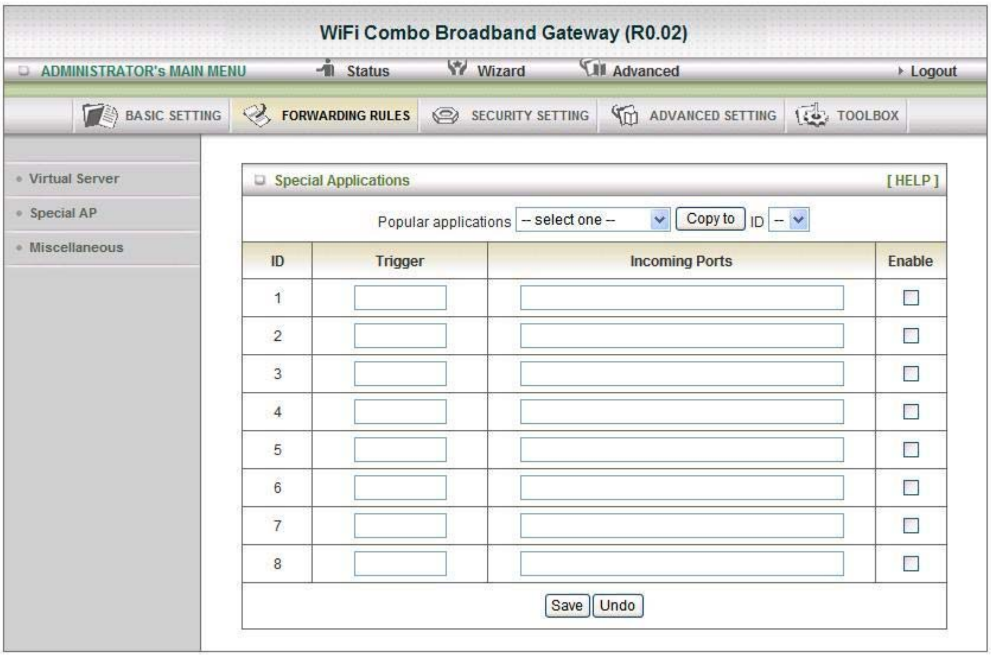
**註解 [018]:** 字尾加上 s

For example, if you have an FTP server (port 21) at 192.168.123.1 and Scheduling Rule(0), a Web server (port 80) at 192.168.123.2 and Scheduling Rule(1), a VPN server at 192.168.123.6 and Scheduling Rule(2), then you need to specify the following virtual server mapping table:

| Service Port | Server IP | Enable | Scheduling Rule |
|---|---|---|---|
| 21 | 192.168.123.1 | V | 0 |
| 80 | 192.168.123.2 | V | 1 |
| 1723 | 192.168.123.6 | V | 2 |

**Click on “Save” to store what you just select or “Undo” to give up**

### 3.2.2.2 Special AP



| ID | Trigger | Incoming Ports | Enable |
|---|---|---|---|
| 1 | | | □ |
| 2 | | | □ |
| 3 | | | □ |
| 4 | | | □ |
| 5 | | | □ |
| 6 | | | □ |
| 7 | | | □ |
| 8 | | | □ |

Some applications require multiple connections, like Internet games, Video conferencing, Internet telephony, etc. Because of the firewall function, these applications cannot work with a pure NAT router. The Special Applications feature allows some of these applications to work with this product. If the mechanism of Special Applications fails to make an application work, try setting your computer as the DMZ host instead.

1. **Trigger:** the outbound port number issued by the application.
2. **Incoming Ports**: when the trigger packet is detected, the inbound packets sent to the specified port numbers are allowed to pass through the firewall.

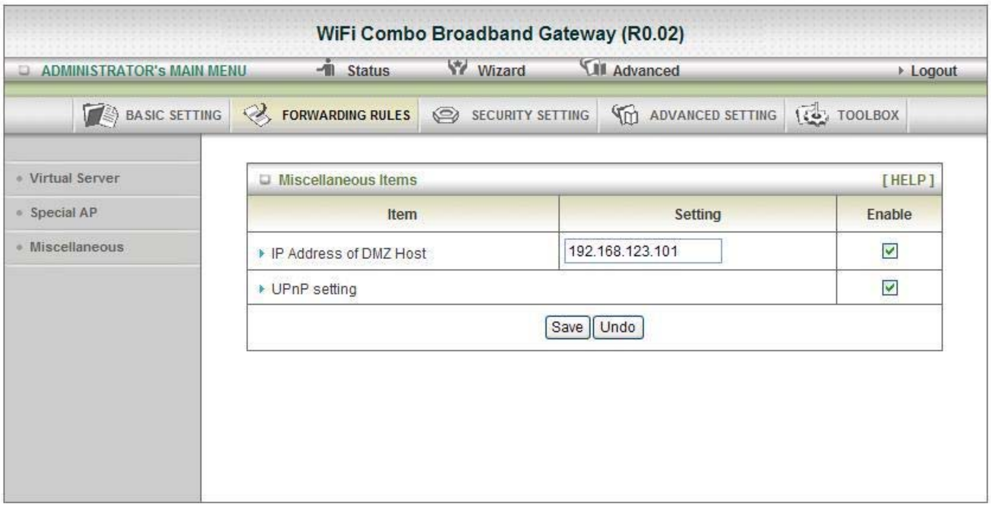
This product provides some predefined settings.

1. Select your application and
2. Click "**Copy to"** to add the predefined setting to your list.

Note! At any given time, only one PC can use each Special Application tunnel.

**Click on "Save" to store what you just select or" Undo" to give up**

### 3.2.2.3 Miscellaneous

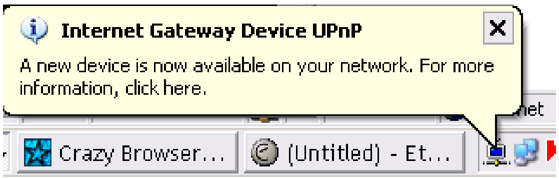

WiFi Combo Broadband Gateway (R0.02)

Miscellaneous Items [ HELP ]

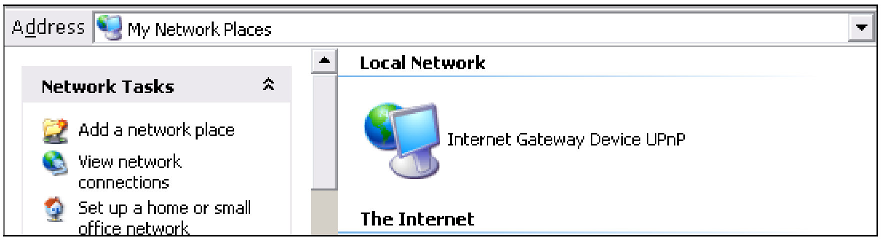
| Item | Setting | Enable |
|---|---|---|
| IP Address of DMZ Host | 192.168.123.101 | ☑ |
| UPnP setting | | ☑ |

1. **IP Address of DMZ Host**
   DMZ (Demilitarized Zone) Host is a host without the protection of firewall. It allows a computer to be exposed to unrestricted 2-way communication for Internet games, Video conferencing, Internet telephony and other special applications.
2. **UPnP Setting**
   The device also supports this function. If the OS supports this function enable it, like Windows XP. When the user gets IP from Device and will see icon as below:

**註解 [019]:** 刪除 and 改爲…., they

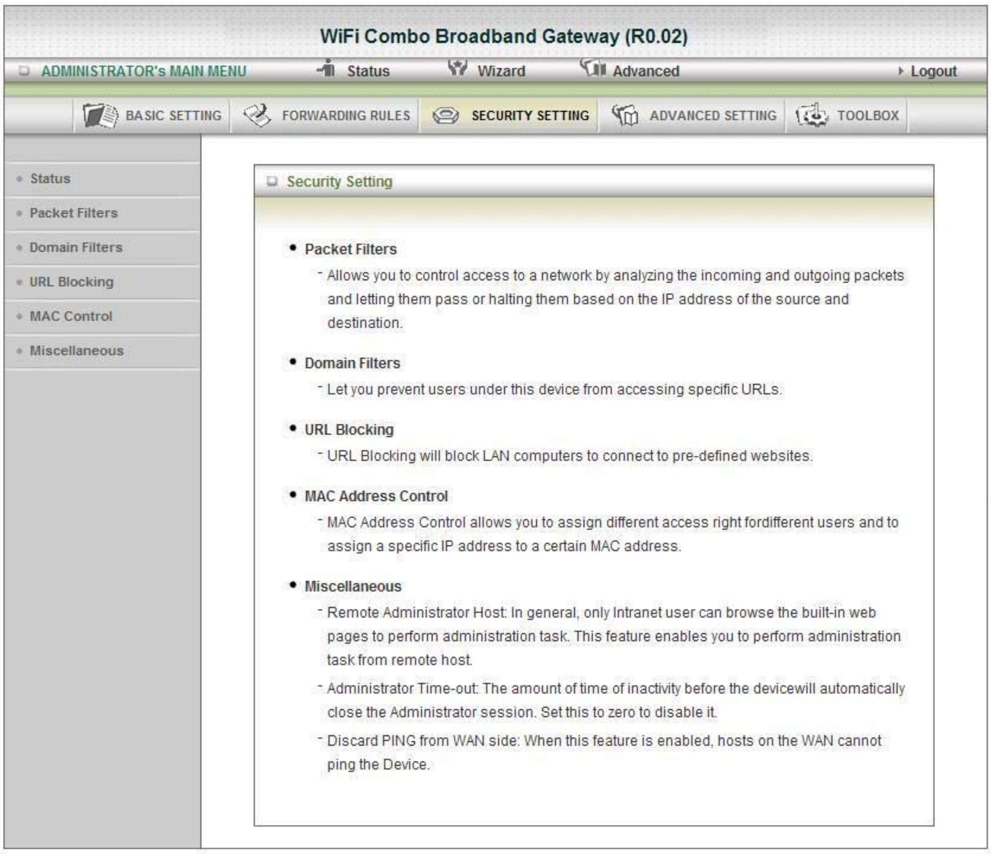

Internet Gateway Device UPnP

A new device is now available on your network. For more information, click here.



**Click on "Save" to store what you just select or "Undo" to give up**

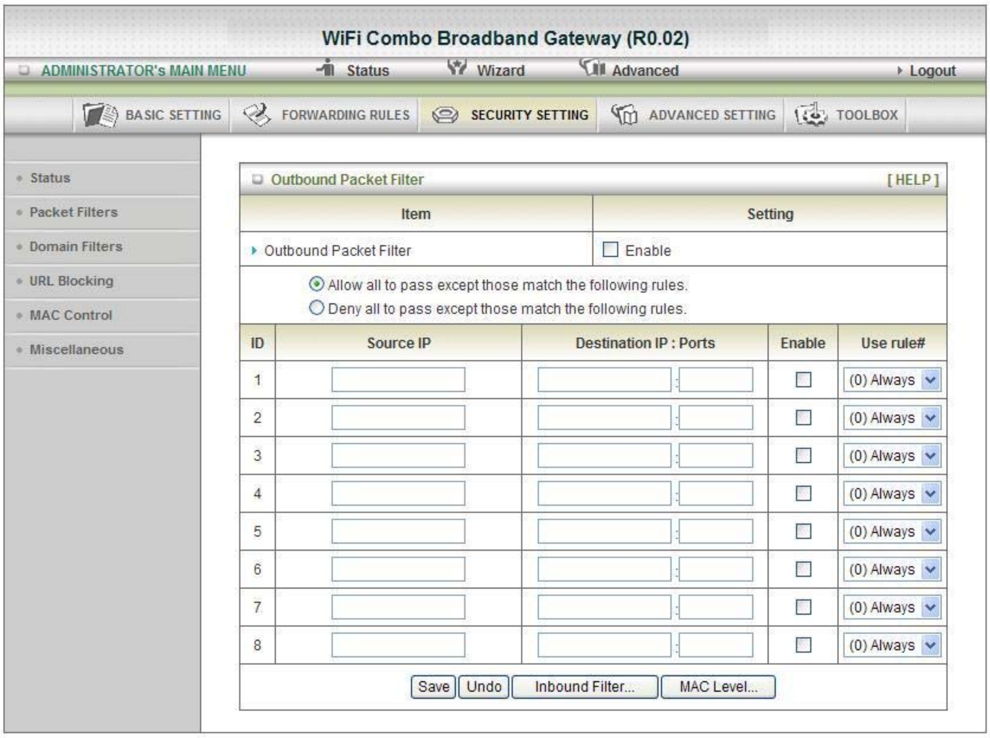
### 3.2.3 Security Setting



Security Setting

- Packet Filters
  - Allows you to control access to a network by analyzing the incoming and outgoing packets and letting them pass or halting them based on the IP address of the source and destination.
- Domain Filters
  - Let you prevent users under this device from accessing specific URLs.
- URL Blocking
  - URL Blocking will block LAN computers to connect to pre-defined websites.
- MAC Address Control
  - MAC Address Control allows you to assign different access right fordifferent users and to assign a specific IP address to a certain MAC address.
- Miscellaneous
  - Remote Administrator Host: In general, only Intranet user can browse the built-in web pages to perform administration task. This feature enables you to perform administration task from remote host.
  - Administrator Time-out: The amount of time of inactivity before the devicewill automatically close the Administrator session. Set this to zero to disable it.
  - Discard PING from WAN side: When this feature is enabled, hosts on the WAN cannot ping the Device.

### 3.2.3.1 Packet Filters (Outbound & Inbound))



Outbound Packet Filter [ HELP ]

| Item | Setting |
|---|---|
| Outbound Packet Filter | ☐ Enable |

● Allow all to pass except those match the following rules.
○ Deny all to pass except those match the following rules.

| ID | Source IP | Destination IP : Ports | Enable | Use rule# |
|---|---|---|---|---|
| 1 | | : | ☐ | (0) Always |
| 2 | | : | ☐ | (0) Always |
| 3 | | : | ☐ | (0) Always |
| 4 | | : | ☐ | (0) Always |
| 5 | | : | ☐ | (0) Always |
| 6 | | : | ☐ | (0) Always |
| 7 | | : | ☐ | (0) Always |
| 8 | | : | ☐ | (0) Always |

Packet Filter includes both outbound filter and inbound filter. And they have same way to setting. Packet Filter enables you to control what packets are allowed to pass the gateway. Outbound filter applies on all outbound packets. However, inbound filter applies on packets that destined to Virtual Servers or DMZ host only. You can select one of the two filtering policies:

**註解 [020]:** 應改爲 the same

1. Allow all to pass except those match the specified rules
2. Deny all to pass except those match the specified rules

You can specify 8 rules for each direction: inbound or outbound. For each rule, you can define the following:

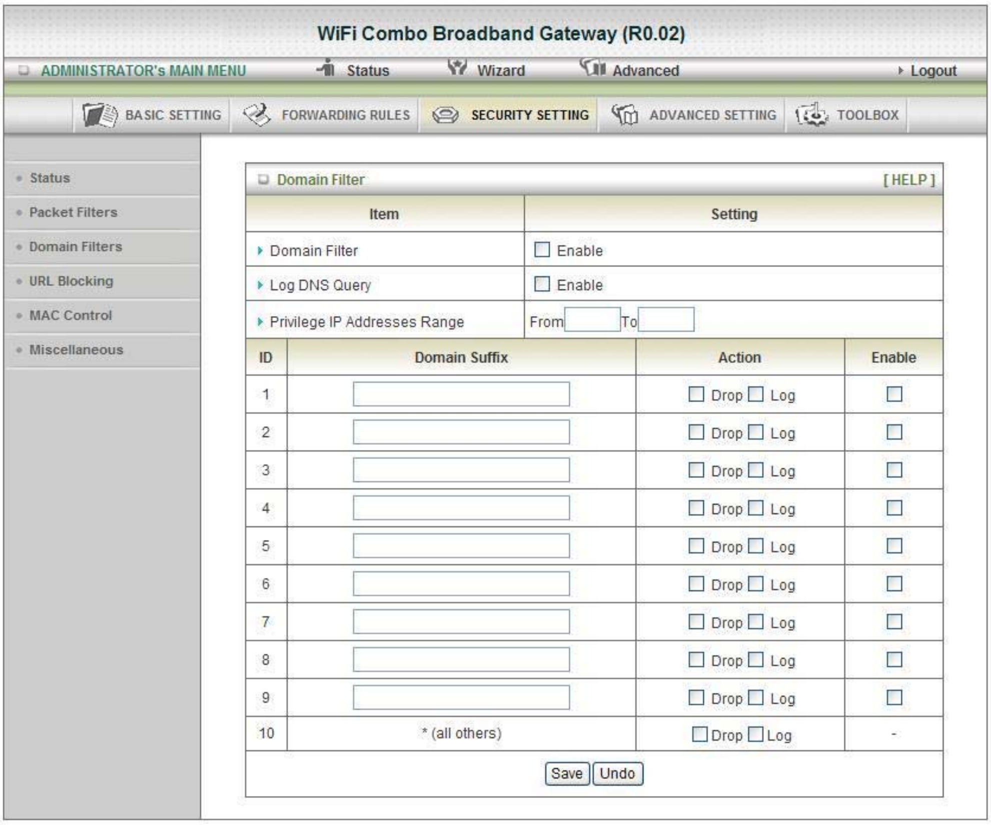
- Source IP address
- Source port
- Destination IP address
- Destination port
- Protocol: TCP or UDP or both.
- Use Rule#

For source or destination IP address, you can define a single IP address (4.3.2.1) or a range of IP addresses (4.3.2.1-4.3.2.254). An empty implies all IP addresses.
For source or destination port, you can define a single port (80) or a range of ports (1000-1999). Add prefix "T" or "U" to specify TCP or UDP protocol. For example, T80, U53, U2000-2999, No prefix indicates both TCP and UDP are defined. An empty implies all port addresses. Packet Filter can work with Scheduling Rules, and give user more flexibility on Access control. For Detail, please refer to Scheduling Rule.

Each rule can be enabled or disabled individually.

**Click on “Save” to store what you just select or “Undo” to give up**

### 3.2.3.2 Domain Filters



Domain Filter

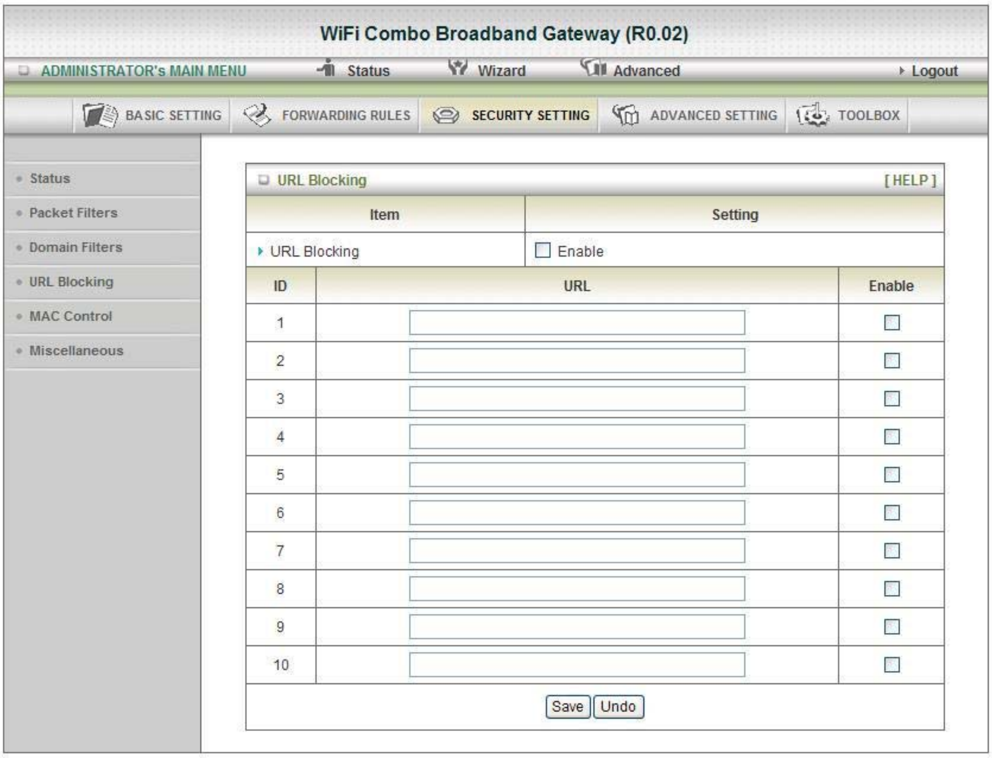
| Item | Setting |
|---|---|
| Domain Filter | □ Enable |
| Log DNS Query | □ Enable |
| Privilege IP Addresses Range | From ____ To ____ |

| ID | Domain Suffix | Action | Enable |
|---|---|---|---|
| 1 | ____ | □ Drop □ Log | □ |
| 2 | ____ | □ Drop □ Log | □ |
| 3 | ____ | □ Drop □ Log | □ |
| 4 | ____ | □ Drop □ Log | □ |
| 5 | ____ | □ Drop □ Log | □ |
| 6 | ____ | □ Drop □ Log | □ |
| 7 | ____ | □ Drop □ Log | □ |
| 8 | ____ | □ Drop □ Log | □ |
| 9 | ____ | □ Drop □ Log | □ |
| 10 | * (all others) | □ Drop □ Log | - |

1. **Domain Filter**
   Let you prevent users under this device from accessing specific URLs.
2. **Domain Filter Enable**
   Check if you want to enable Domain Filter.
3. **Log DNS Query**
   Check if you want to log the action when someone accesses the specific URLs.
4. **Privilege IP Address Range**
   Setting a group of hosts and privilege these hosts to access network without restriction.
5. **Domain Suffix**
   A suffix of URL can be restricted, for example, ".com", and “xxx.com".
6. **Action**
   When someone is accessing the URL met the domain-suffix, what kind of action you want.
   Check drop to block the access. Check “log” to log these access.
7. **Enable**
   Check to enable each rule.

**Click on “Save” to store what you just select or “Undo” to give up**

### 3.2.3.3 URL Blocking



| Item | Setting |
|---|---|
| URL Blocking | □ Enable |

| ID | URL | Enable |
|---|---|---|
| 1 | | □ |
| 2 | | □ |
| 3 | | □ |
| 4 | | □ |
| 5 | | □ |
| 6 | | □ |
| 7 | | □ |
| 8 | | □ |
| 9 | | □ |
| 10 | | □ |

URL Blocking will block LAN computers to connect to pre-define Websites. The major difference between “Domain filter” and “URL Blocking” is Domain filter require user to input suffix (like .com or .org, etc), while URL Blocking require user to input a keyword only. In other words, Domain filter can block specific website, while URL Blocking can block hundreds of websites by simply a keyword.

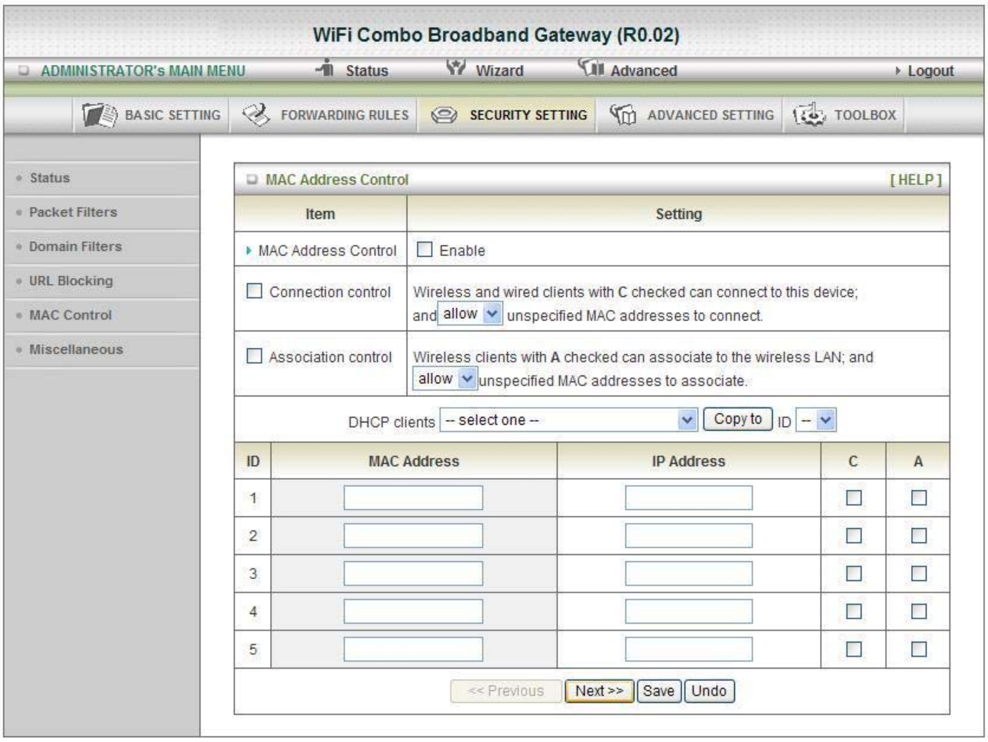
1. **URL Blocking Enable**
   Check if you want to enable URL Blocking.
2. **URL**
   If any part of the Website's URL matches the pre-defined word, the connection will be blocked. For example, you can use pre-defined word "sex" to block all websites if their URLs contain pre-defined word "sex".
3. **Enable**
   Check to enable each rule.

**註解 [021]:** 字尾加上 s

**註解 [022]:** 刪除 s

**Click on “Save” to store what you just select or “Undo” to give up**

### 3.2.3.4 MAC Control



MAC Address Control [ HELP ]

| Item | Setting |
|---|---|
| MAC Address Control | □ Enable |
| □ Connection control | Wireless and wired clients with C checked can connect to this device; and allow unspecified MAC addresses to connect. |
| □ Association control | Wireless clients with A checked can associate to the wireless LAN; and allow unspecified MAC addresses to associate. |

DHCP clients -- select one -- Copy to ID --

| ID | MAC Address | IP Address | C | A |
|---|---|---|---|---|
| 1 | | | □ | □ |
| 2 | | | □ | □ |
| 3 | | | □ | □ |
| 4 | | | □ | □ |
| 5 | | | □ | □ |

MAC Address Control allows you to assign different access right for different users and to assign a specific IP address to a certain MAC address.

1. **MAC Address Control**

   Check “Enable” to enable the “MAC Address Control”. All of the settings in this page will take effect only when “Enable” is checked.

2. **Connection control**

   Check "Connection control" to enable the controlling of which wired and wireless clients can connect to this device. If a client is denied to connect to this device, it means the client can't access to the Internet either. Choose "allow" or "deny" to allow or deny the clients, whose MAC addresses are not in the "Control table" (please see below), to connect to this device.

3. **Association control**

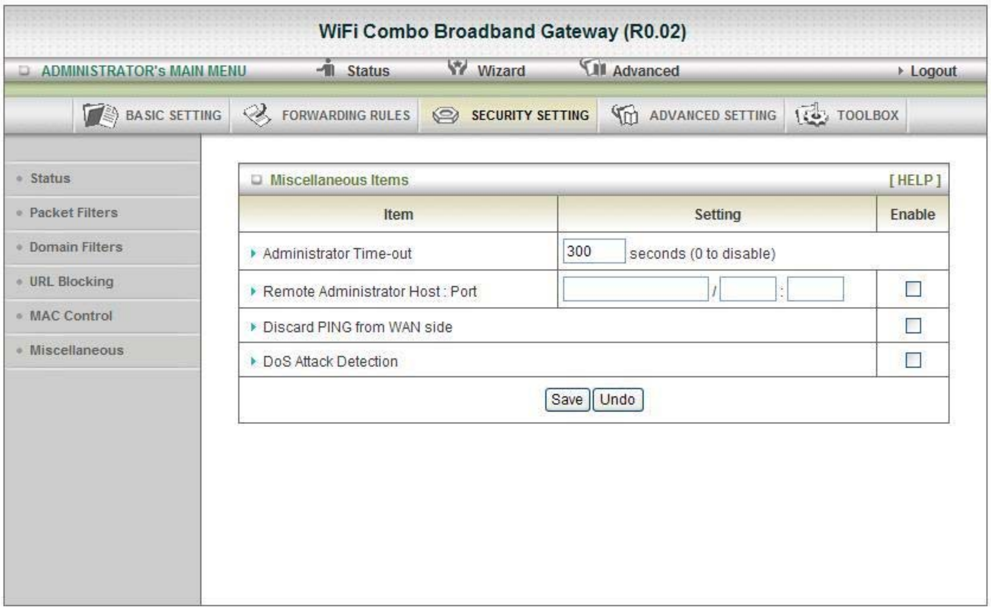
   Check "Association control" to enable the controlling of which wireless client can associate to the wireless LAN. If a client is denied to associate to the wireless LAN, it means the client can't send or receive any data via this device. Choose "allow" or "deny" to allow or deny the clients, whose MAC addresses are not in the "Control table", to associate to the wireless LAN

**Click on “Save” to store what you just select or “Undo” to give up**
**Click on “Next Page” to go down or “Previous page” back to last page**

**註解 [023]:** 刪除逗點且應該爲小寫 choose

**註解 [024]:** 應改爲 controllable

### 3.2.3.5 Miscellaneous



Miscellaneous Items [ HELP ]

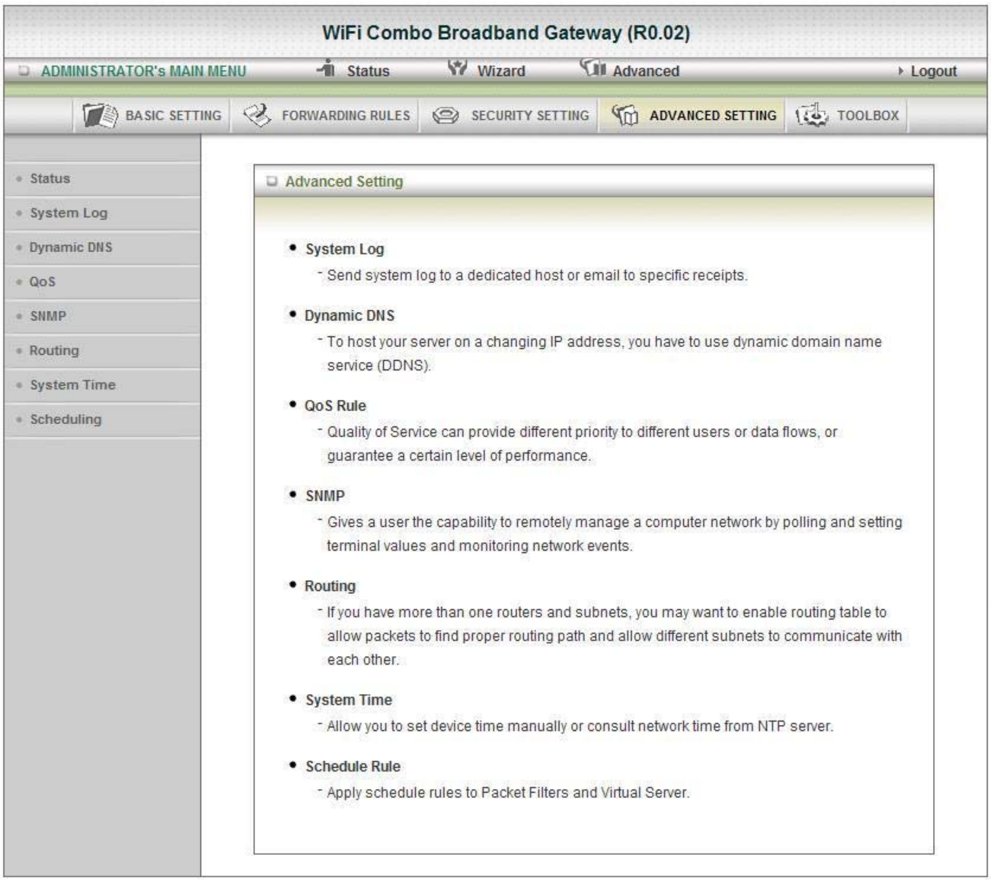
| Item | Setting | Enable |
|---|---|---|
| Administrator Time-out | 300 seconds (0 to disable) | |
| Remote Administrator Host : Port | / : | □ |
| Discard PING from WAN side | | □ |
| DoS Attack Detection | | □ |

1. **Administrator Time-out**
   The time of no activity to logout automatically, you may set it to zero to disable this feature.
2. **Remote Administrator Host/Port**
   In general, only Intranet user can browse the built-in web pages to perform administration task. This feature enables you to perform administration task from remote host. If this feature is enabled, only the specified IP address can perform remote administration. If the specified IP address is 0.0.0.0, any host can connect to this product to perform administration task. You can use subnet mask bits "/nn" notation to specified a group of trusted IP addresses for example, "10.1.2.0/24".
   NOTE: When Remote Administration is enabled, the web server port will be shifted to 80. You can change web server port to other port, too.
3. **Discard PING from WAN side**
   When this feature is enabled, any host on the WAN cannot ping this product.
4. **DoS Attack Detection**
   When this feature is enabled, the gateway will detect and log the DoS attack comes from the Internet. Currently, the gateway can detect the following DoS attack: SYN Attack, Win Nuke, Port Scan, Ping of Death, Land Attack etc.

**註解 [025]:** 應改爲 coming

**Click on “Save” to store what you just select or” Undo” to give up**

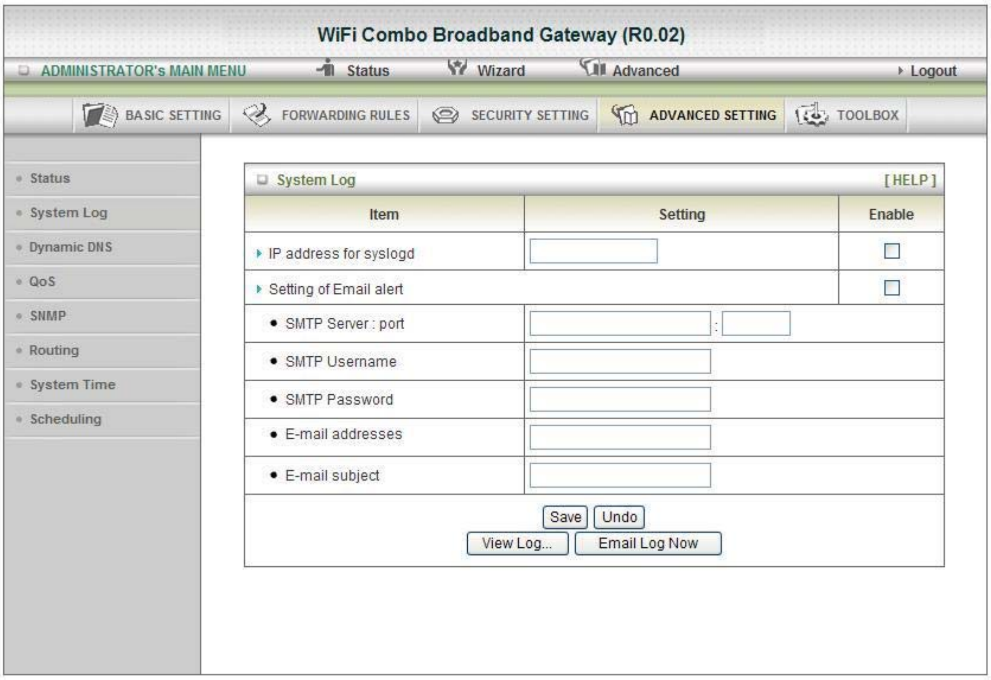
### 3.2.4 Advanced Setting



Advanced Setting

- System Log
  - Send system log to a dedicated host or email to specific receipts.
- Dynamic DNS
  - To host your server on a changing IP address, you have to use dynamic domain name service (DDNS).
- QoS Rule
  - Quality of Service can provide different priority to different users or data flows, or guarantee a certain level of performance.
- SNMP
  - Gives a user the capability to remotely manage a computer network by polling and setting terminal values and monitoring network events.
- Routing
  - If you have more than one routers and subnets, you may want to enable routing table to allow packets to find proper routing path and allow different subnets to communicate with each other.
- System Time
  - Allow you to set device time manually or consult network time from NTP server.
- Schedule Rule
  - Apply schedule rules to Packet Filters and Virtual Server.

### 3.2.4.1 System Log



System Log [ HELP ]

| Item | Setting | Enable |
|---|---|---|
| IP address for syslogd | | □ |
| Setting of Email alert | | □ |
| • SMTP Server : port | : | |
| • SMTP Username | | |
| • SMTP Password | | |
| • E-mail addresses | | |
| • E-mail subject | | |

This page supports two methods to export system logs to specific destination by means of syslog (UDP) and SMTP (TCP). The items you have to setup including:

**註解 [026]:** 應改爲

1. **IP Address for Syslog**
   Host IP of destination where syslog will be sent to.
   Check **Enable** to enable this function.
2. **E-mail Alert Enable**
   Check if you want to enable Email alert (send syslog via email).

   A. **SMTP Server IP and Port**
   Input the SMTP server IP and port, which are concated with ':'. If you do not specify port number, the default value is 25.
   For example, "mail.your_url.com" or "192.168.1.100:26".

   B. **SMTP Username/Password**
   The username and password login the SMTP server.

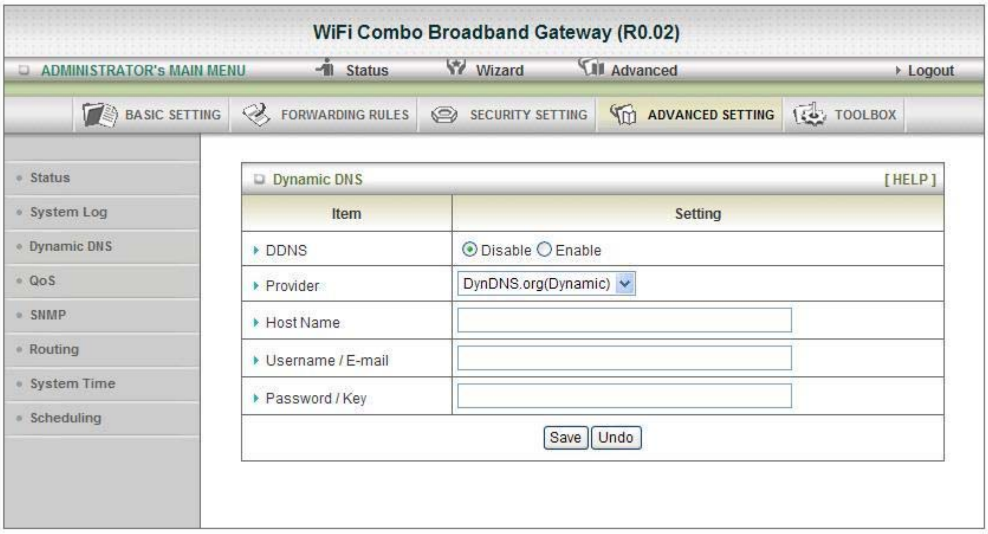
   C. **E-mail address**
   The recipients who will receive these logs, you can assign more than 1 recipient, using ';' or ',' to separate these email addresses.

   D. **E-mail Subject**
   The subject of email alert, this setting is optional.
3. **View Log...:**
   Reference the **Section 3.2.5.1 System Info.**

**註解 [027]:** 應改爲

**Click on “Save” to store what you just select or “Undo” to give up**

### 3.2.4.2 Dynamic DNS



| Item | Setting |
|---|---|
| DDNS | ● Disable ○ Enable |
| Provider | DynDNS.org(Dynamic) |
| Host Name | |
| Username / E-mail | |
| Password / Key | |

To host your server on a changing IP address, you have to use dynamic domain name service (DDNS). So that anyone wishing to reach your host only needs to know the name of it. Dynamic DNS will map the name of your host to your current IP address, which changes each time you connect your Internet service provider.

**註解 [028]:** 應改爲 Therefore,

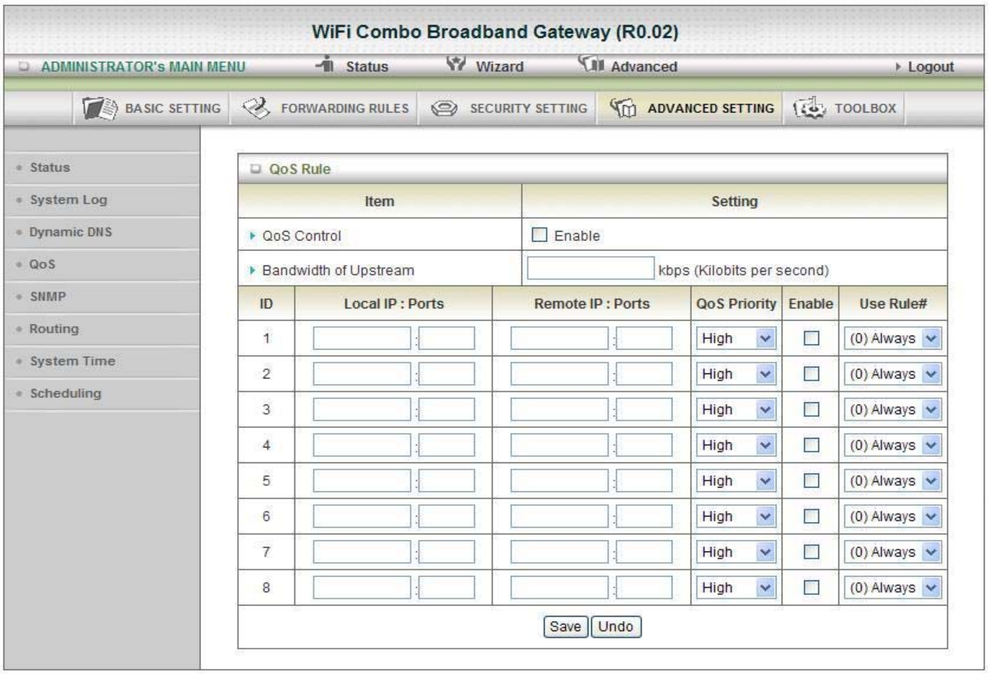
Before you enable Dynamic DNS, you need to register an account on one of these Dynamic DNS servers that we list in provider field.
To enable Dynamic DNS click the check box next to Enable in the DDNS field.
Next you can enter the appropriate information about your Dynamic DNS Server.

You have to define:
Provider
Host Name
Username/E-mail
Password/Key

You will get this information when you register an account on a Dynamic DNS server.

**Click on “Save” to store what you just select or “Undo” to give up**

### 3.2.4.3 QOS



QoS Rule

| Item | Setting |
|---|---|
| QoS Control | □ Enable |
| Bandwidth of Upstream | kbps (Kilobits per second) |

| ID | Local IP : Ports | Remote IP : Ports | QoS Priority | Enable | Use Rule# |
|---|---|---|---|---|---|
| 1 | : | : | High | □ | (0) Always |
| 2 | : | : | High | □ | (0) Always |
| 3 | : | : | High | □ | (0) Always |
| 4 | : | : | High | □ | (0) Always |
| 5 | : | : | High | □ | (0) Always |
| 6 | : | : | High | □ | (0) Always |
| 7 | : | : | High | □ | (0) Always |
| 8 | : | : | High | □ | (0) Always |

Provide different priority to different users or data flows, or guarantee a certain level of performance.

1. **Enable**

   This Item enables QoS function or not.

註解 [029]: 刪除

2. **Bandwidth of Upstream**

   Set the limitation of upstream speed.

3. **Local: IP**

   Define the Local IP address of packets here.

4. **Local: Ports**

   Define the Local port of the packets in this field.

5. **Remote: IP**

   Define the Remote IP address of packets here.

6. **Remote: Ports**

   Define the Remote port of the packets in this field.

7. **QoS Priority**

   This defines the priority level of the current Policy Configuration. Packets associated with this policy will be serviced based upon the priority level set. For critical applications High or Normal levels are recommended. For non-critical applications select a Low level.

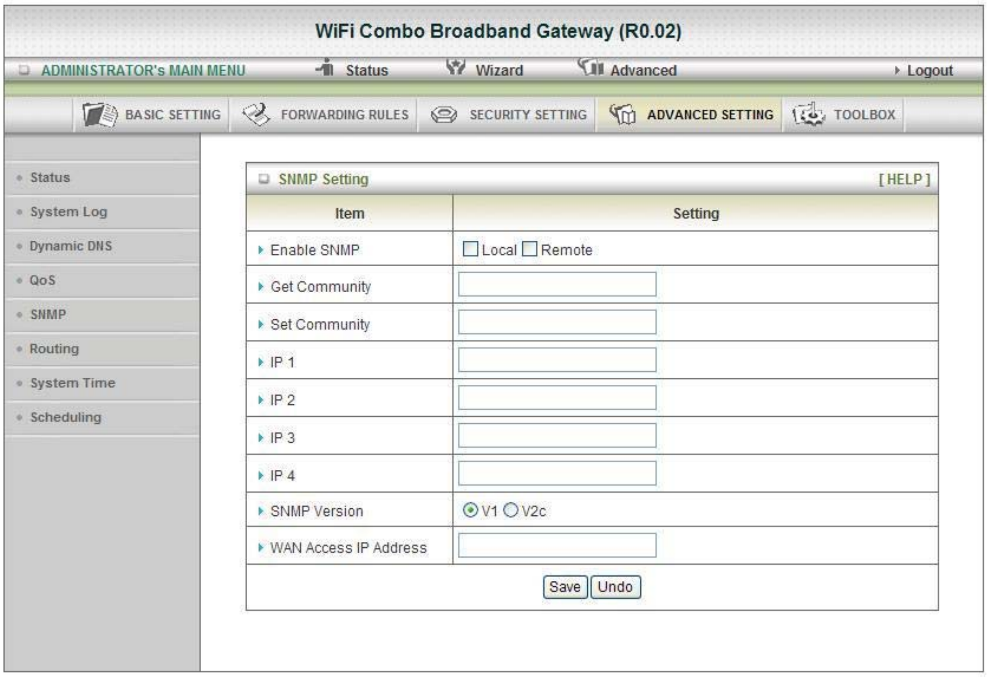
8. **User Rule#**

   The QoS item can work with Scheduling Rule number#. Please reference the section 4.7.7 schedule.

註解 [030]: 應改爲 refer to

**Click on "Save" to store what you just select or "Undo" to give up**

### 3.2.4.4 SNMP



SNMP Setting

| Item | Setting |
|---|---|
| Enable SNMP | ☐ Local ☐ Remote |
| Get Community | |
| Set Community | |
| IP 1 | |
| IP 2 | |
| IP 3 | |
| IP 4 | |
| SNMP Version | ● V1 ○ V2c |
| WAN Access IP Address | |

In brief, SNMP, the Simple Network Management Protocol, is a protocol designed to give a user the capability to remotely manage a computer network by polling and setting terminal values and monitoring network events.

1. **Enable SNMP**

   You must check Local, Remote or both to enable SNMP function. If Local is checked, this device will response request from LAN. If Remote is checked, this device will response request from WAN.

2. **Get Community**

   Setting the community of Get Request your device will response.

3. **Set Community**

   Setting the community of Set Request your device will accept.

   IP 1, IP 2, IP 3, IP 4

   Input your SNMP Management PC's IP here. User has to configure to where this device should send SNMP Trap message.

4. **SNMP Version**

   Please select proper SNMP Version that your SNMP Management software supports.

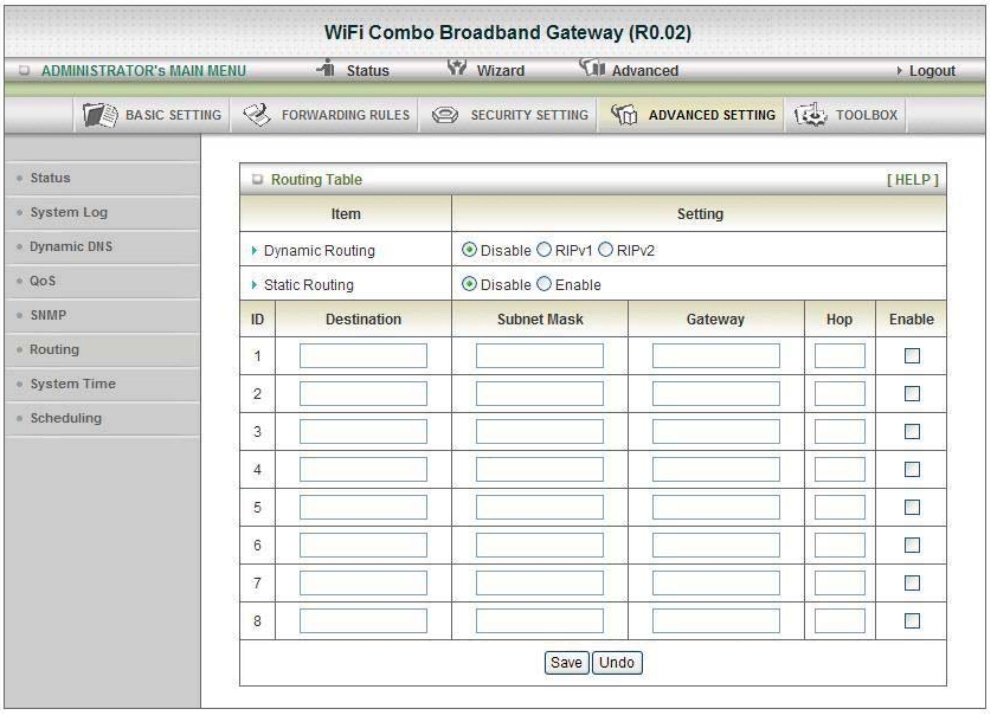
5. **WAN Access IP Address**

   If the user wants to limit to specific the IP address to access, please input in the item. The default 0.0.0.0 and means every IP of Internet can get some information of device with SNMP protocol.

   **Click on "Save" to store what you just select or "Undo" to give up.**

**註解 [031]:** 刪除 and

### 3.2.4.5 Routing



Routing Table [ HELP ]

| Item | Setting |
|---|---|
| Dynamic Routing | ● Disable ○ RIPv1 ○ RIPv2 |
| Static Routing | ● Disable ○ Enable |

| ID | Destination | Subnet Mask | Gateway | Hop | Enable |
|---|---|---|---|---|---|
| 1 | | | | | □ |
| 2 | | | | | □ |
| 3 | | | | | □ |
| 4 | | | | | □ |
| 5 | | | | | □ |
| 6 | | | | | □ |
| 7 | | | | | □ |
| 8 | | | | | □ |

Save Undo

1. **Routing Tables**

   Allow you to determine which physical interface address to use for outgoing IP data grams. If you have more than one routers and subnets, you will need to enable routing table to allow packets to find proper routing path and allow different subnets to communicate with each other.

   Routing Table settings are settings used to setup the functions of static and dynamic routing.

2. **Dynamic Routing**

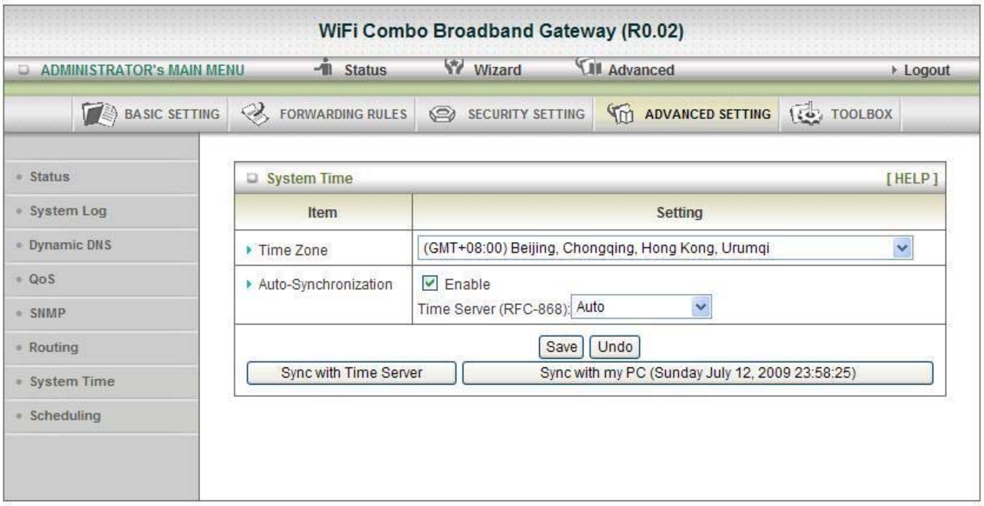
   Routing Information Protocol (RIP) will exchange information about destinations for computing routes throughout the network. Please select RIPv2 only if you have different subnet in your network. Otherwise, please select RIPv1 if you need this protocol.

3. **Static Routing**

   For static routing, you can specify up to 8 routing rules. You can enter the destination IP address, subnet mask, gateway, hop for each routing rule, and then enable or disable the rule by checking or un-checking the Enable checkbox.

**Click on “Save” to store what you just select or “Undo” to give up.**

### 3.2.4.6 System Time

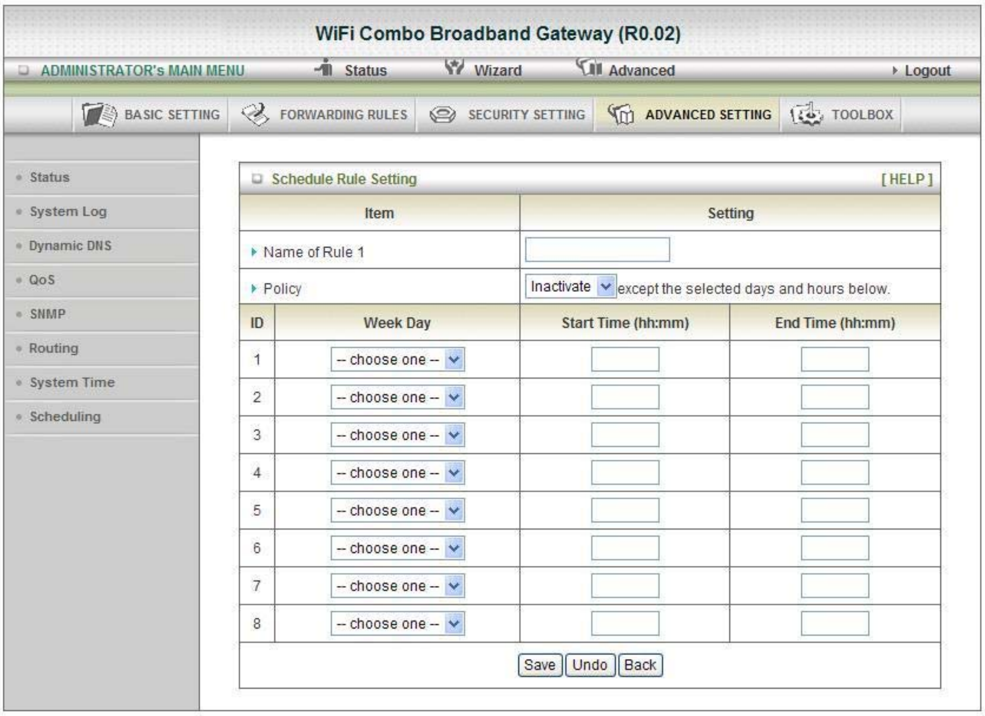


| Item | Setting |
|---|---|
| Time Zone | (GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi |
| Auto-Synchronization | ☑ Enable<br>Time Server (RFC-868): Auto |

1. **Time Zone**
   Select a time zone where this device locates.
2. **Time Server**
   Select a NTP time server to consult UTC time
3. **Auto-Synchronization**
   Select the “Enable” item to enable this function.
4. **Sync with Time Server**
   Select if you want to set Date and Time by NTP Protocol.
5. **Sync with my PC**
   Select if you want to set Date and Time using PC’s Date and Time

**Click on “Save” to store what you just select or “Undo” to give up.**

### 3.2.4.7 Scheduling



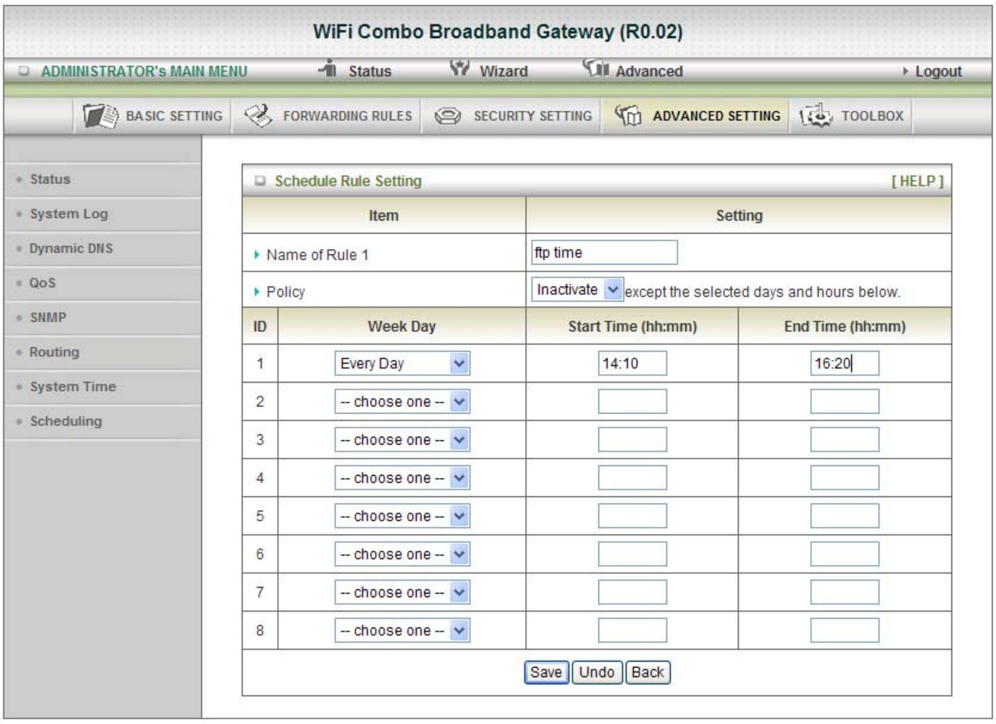
Schedule Rule Setting [ HELP ]

| Item | Setting |
|---|---|
| Name of Rule 1 | |
| Policy | Inactivate except the selected days and hours below. |

| ID | Week Day | Start Time (hh:mm) | End Time (hh:mm) |
|---|---|---|---|
| 1 | -- choose one -- | | |
| 2 | -- choose one -- | | |
| 3 | -- choose one -- | | |
| 4 | -- choose one -- | | |
| 5 | -- choose one -- | | |
| 6 | -- choose one -- | | |
| 7 | -- choose one -- | | |
| 8 | -- choose one -- | | |

You can set the schedule time to decide which service will be turned on or off.
Select the "Enable" item. Press "Add New Rule" You can write a rule name and set which day and what time to schedule from "Start Time" to "End Time".
The following example configure "ftp time" as "The ftp Protocol can be run everyday 14:10 to 16:20".

**Click on "Save" to store what you just select.**

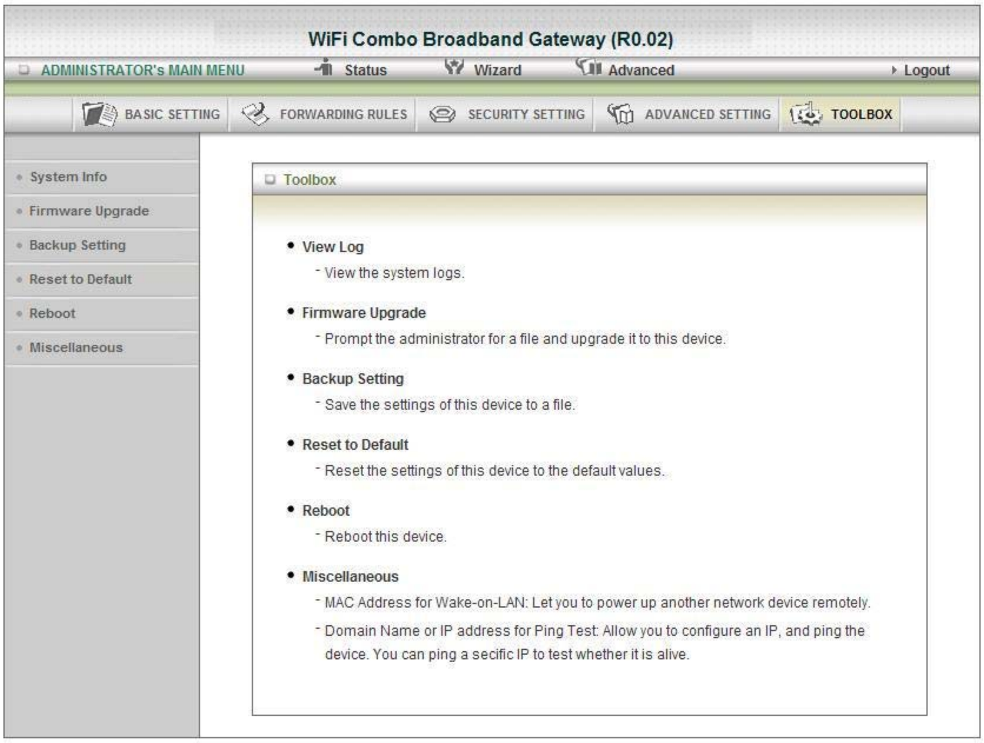


Schedule Rule Setting

| Item | Setting |
|---|---|
| Name of Rule 1 | ftp time |
| Policy | Inactivate except the selected days and hours below. |

| ID | Week Day | Start Time (hh:mm) | End Time (hh:mm) |
|---|---|---|---|
| 1 | Every Day | 14:10 | 16:20 |
| 2 | -- choose one -- | | |
| 3 | -- choose one -- | | |
| 4 | -- choose one -- | | |
| 5 | -- choose one -- | | |
| 6 | -- choose one -- | | |
| 7 | -- choose one -- | | |
| 8 | -- choose one -- | | |

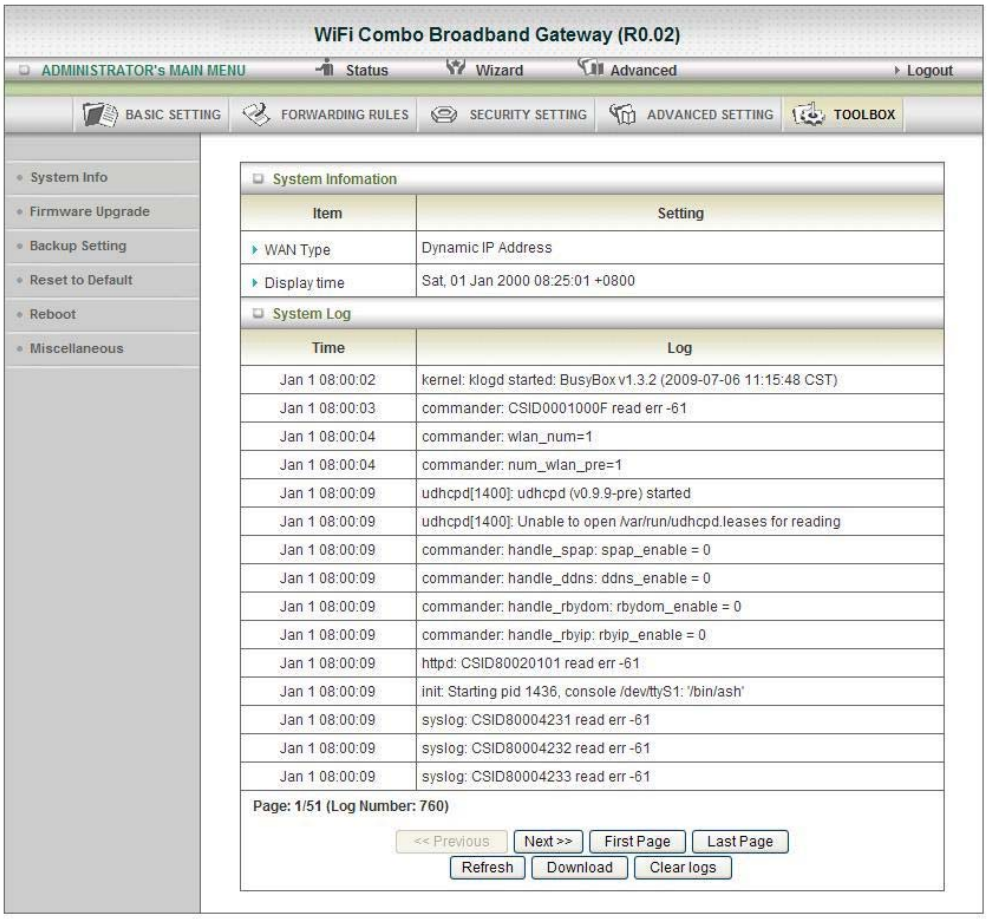
### 3.2.5 Tool Box



Toolbox

- View Log
  - View the system logs.
- Firmware Upgrade
  - Prompt the administrator for a file and upgrade it to this device.
- Backup Setting
  - Save the settings of this device to a file.
- Reset to Default
  - Reset the settings of this device to the default values.
- Reboot
  - Reboot this device.
- Miscellaneous
  - MAC Address for Wake-on-LAN: Let you to power up another network device remotely.
  - Domain Name or IP address for Ping Test: Allow you to configure an IP, and ping the device. You can ping a secific IP to test whether it is alive.

### 3.2.5.1 System Info



System Infomation

| Item | Setting |
|---|---|
| WAN Type | Dynamic IP Address |
| Display time | Sat, 01 Jan 2000 08:25:01 +0800 |

System Log

| Time | Log |
|---|---|
| Jan 1 08:00:02 | kernel: klogd started: BusyBox v1.3.2 (2009-07-06 11:15:48 CST) |
| Jan 1 08:00:03 | commander: CSID0001000F read err -61 |
| Jan 1 08:00:04 | commander: wlan_num=1 |
| Jan 1 08:00:04 | commander: num_wlan_pre=1 |
| Jan 1 08:00:09 | udhcpd[1400]: udhcpd (v0.9.9-pre) started |
| Jan 1 08:00:09 | udhcpd[1400]: Unable to open /var/run/udhcpd.leases for reading |
| Jan 1 08:00:09 | commander: handle_spap: spap_enable = 0 |
| Jan 1 08:00:09 | commander: handle_ddns: ddns_enable = 0 |
| Jan 1 08:00:09 | commander: handle_rbydom: rbydom_enable = 0 |
| Jan 1 08:00:09 | commander: handle_rbyip: rbyip_enable = 0 |
| Jan 1 08:00:09 | httpd: CSID80020101 read err -61 |
| Jan 1 08:00:09 | init: Starting pid 1436, console /dev/ttyS1: '/bin/ash' |
| Jan 1 08:00:09 | syslog: CSID80004231 read err -61 |
| Jan 1 08:00:09 | syslog: CSID80004232 read err -61 |
| Jan 1 08:00:09 | syslog: CSID80004233 read err -61 |

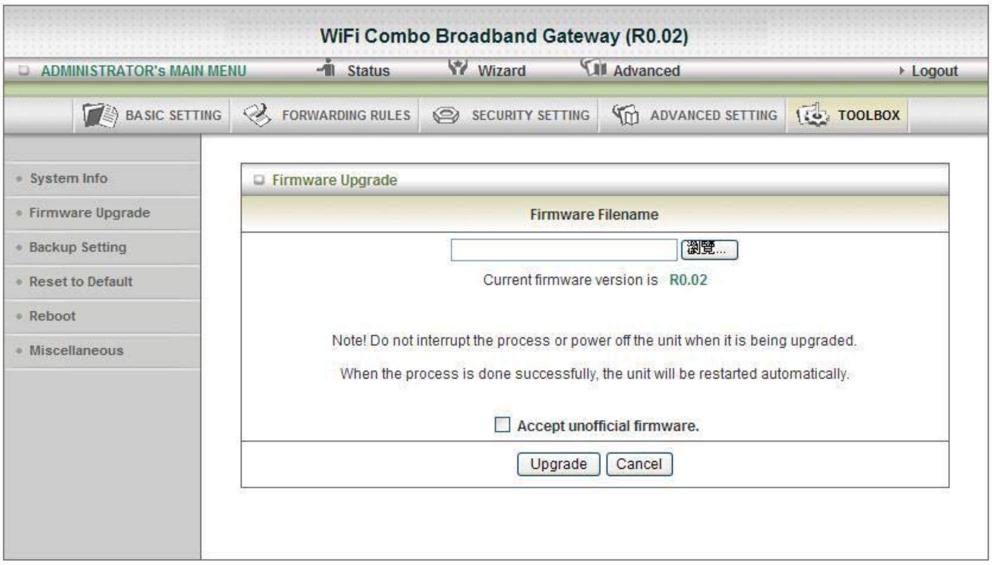
Page: 1/51 (Log Number: 760)

**You can view the System Information and System log.**
**And download/clear the System log, in this page.**

註解 [032]: 刪除逗號

#### 3.2.5.2 Firmware Upgrade

You can upgrade firmware by clicking “Upgrade” button.



Current firmware version is R0.02

Note! Do not interrupt the process or power off the unit when it is being upgraded.

When the process is done successfully, the unit will be restarted automatically.

□ Accept unofficial firmware.

#### 3.2.5.3 Backup Setting

You can backup your settings by clicking the “**Backup Setting”** button and save it as a bin file.
Once you want to restore these settings, please reference the **Section 3.2.5.2 Firmware Upgrade**.

**註解 [033]:** 應改爲 refer to

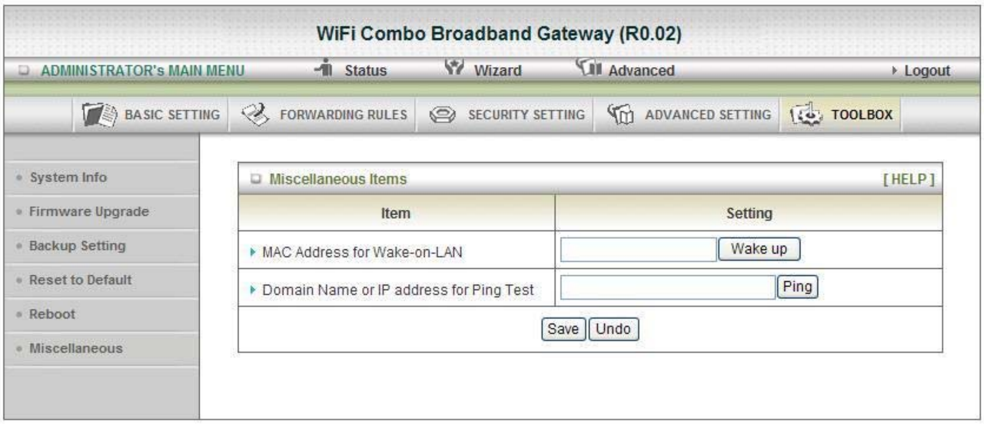
#### 3.2.5.4 Reset to Default

You can also reset this product to factory default by clicking the **Reset to default** button.

#### 3.2.5.5 Reboot

You can also reboot this product by clicking the **Reboot** button.

### 3.2.5.6 Miscellaneous



| Item | Setting |
|---|---|
| MAC Address for Wake-on-LAN | Wake up |
| Domain Name or IP address for Ping Test | Ping |

1. **MAC Address for Wake-on-LAN**

   Wake-on-LAN is a technology that enables you to power up a networked device remotely. In order to enjoy this feature, the target device must be Wake-on-LAN enabled and you have to know the MAC address of this device, say 00-11-22-33-44-55. Clicking "Wake up" button will make the gateway to send the wake-up frame to the target device immediately.

**註解 [034]:** 應改爲 saying

2. **Domain Name or IP address for Ping Test**

   You can key in URL or IP address, and then click the “Ping” button for test.

# Troubleshooting

This section provides an overview of common issues, and possible solutions for the installation and operation of the WiFi Combo Broadband Gateway.

**1. Unable to access the Configuration Menu when I use my computer to configure the gateway. Why?**
**Note:** It is recommended that you use an Ethernet connection to configure the

**註解 [035]:** 沒有句點

Ensure that the **Ethernet LED** on the WiFi Combo Broadband Gateway is **ON**.
If the **LED** is **NOT ON**, check to see if the cable for the Ethernet connection is securely inserted.

> **Note:** Ensure that the **IP Address** is in the same range and subnet as the WiFi Combo Broadband Gateway. The IP Address of the WiFi Combo Broadband Gateway is 192.168.123.254. All the computers on the network must have a unique IP Address within the same range (e.g., 192.168.123.x). Any computers that have identical IP Addresses will not be visible on the network. All computers must also have the same subnet mask (e.g., 255.255.255.0).

Do a **Ping test** to make sure that the WiFi Combo Broadband Gateway is responding.

Go to **Start** > **Run**.

1: Type **cmd**.
2: Press **Enter.**
3: Type “**ping 192.168.123.254”.** A successful ping shows four replies.

> **Note:** If you have changed the **default** IP Address, ensure you ping the correct IP Address assigned to the WiFi Combo Broadband Gateway.

Ensure that your Ethernet Adapter is working properly, and that all network drivers are installed properly.

> **Note:** Network adapter names will vary depending on your specific adapter. The installation steps listed below are applicable for all network adapters.

1. Go to **Start > My Computer > Properties**.
2. **Select** the **Hardware Tab**.
3. Click **Device Manager**.
4. Double-click on “**Network Adapters”**.
5. Right-click on **Wireless Card bus Adapter**, or **your specific network adapter**.
6. Select **Properties** to ensure that all drivers are installed properly.
7. Look under **Device Status** to see if the device is working properly.
8. Click “**OK”**.

2**: Why my wireless client can NOT access the Internet?**
**Note:** Establish WiFi Connection. As long as you select either **WEP** or **WPA-PSK** encryption, ensure encryption settings match your WiFi settings. Please refer to your WiFi adapter documentation for additional information.

Ensure that the wireless client is associated and joined with the correct Access Point.
To check this connection, follow the steps below:

1. **Right-click** on the **Local Area Connection icon** in the taskbar.
2. Select **View Available Wireless Networks in Wireless Configure**. The **Connect to Wireless Network** screen appears. Ensure you have selected the correct available network.

Ensure the IP Address assigned to the wireless adapter is within the same subnet as the Access Point and gateway. The WiFi Combo Broadband Gateway has an IP Address of **192.168.123.254.** Wireless adapters must have an IP Address in the same range (e.g., 192.168.123.x). Although the subnet mask must be the same for all the computers on the network, no two devices may have the same IP Address. Therefore, each device must have a unique IP Address.

To check the **IP Address** assigned to the wireless adapter, follow the steps below:
1. Enter ipconfig /all in command mode
2. Enter ping 192.168.123.254.to check if you can access the WiFi Combo Broadband Gateway.

**3. Why does my wireless connection keep dropping?**
**You may try following steps to solve.**

- Antenna Orientation.
  1: Try different antenna orientations for the WiFi Combo Broadband Gateway.
  2: Try to keep the antenna at least 6 inches away from the wall or other objects.
- Try changing the channel on the WiFi Combo Broadband Gateway, and your Access Point and Wireless adapter to a different channel to avoid interference.
- Keep your product away (at least 3-6 feet) from electrical devices that generate RF noise, like microwaves, monitors, electric motors, etc.

**4. Why I am unable to achieve a wireless connection?**

**註解 [036]:** 應改爲 am I

**Note:** An Ethernet connection is required to troubleshoot the WiFi Combo Broadband Gateway.
If you have enabled Encryption on the WiFi Combo Broadband Gateway, you must also enable encryption on all wireless clients in order to establish a wireless connection.

- For 802.11g, the encryption settings are: 64 or 128 bit. Ensure that the encryption bit level is the same for both the WiFi Combo Broadband Gateway, and your Wireless Client.
- Ensure that the SSID (Service Set Identifier) on the WiFi Combo Broadband Gateway and the Wireless Client are exactly the same.
  If they are not, your wireless connection will not be established.
- Move the WiFi Combo Broadband Gateway and the wireless client into the same room, and then test the wireless connection.
- Disable all security settings such as **WEP**, and **MAC Address Control**.
- Turn off the WiFi Combo Broadband Gateway and the client.
  Turn the WiFi Combo Broadband Gateway back on again, and then turn on the client.
- Ensure that all devices are set to **Infrastructure** mode.
- Ensure that the LED indicators are indicating normal activity. If not, ensure that the AC power and Ethernet cables are firmly connected.
- Ensure that the IP Address, subnet mask, gateway and DNS settings are correctly entered for the network.
- If you are using 2.4GHz cordless phones, X-10 equipment, or other home security systems, ceiling fans, or lights, your wireless connection may degrade dramatically, or drop altogether.

To avoid interference, change the Channel on the WiFi Combo Broadband Gateway, and all devices in your network.

- Keep your product at least 3-6 feet away from electrical devices that generate RF noise.

Examples include: microwaves, monitors, electric motors, and so forth.

### 5. I just do not remember my encryption key. What should I do?

- If you forgot your encryption key, the WiFi card will be unable to establish a proper connection. If an encryption key setting has been set for the WiFi Combo Broadband Gateway, it must also be set for the WiFi card that will connect to the WiFi Combo Broadband Gateway.

**註解 [037]:** 應在 be 動詞後面

To reset the encryption key(s), login to the WiFi Combo Broadband Gateway using a wired connection. (Please refer to “Basic > Wireless (Security–No Encryption)” on page 10, for additional information).

### 7. How do I reset my WiFi Combo Broadband Gateway to its factory default settings?

If other troubleshooting methods have failed, you may choose to **Reset** the WiFi Combo Broadband Gateway to its factory default settings.
To hard-reset the WiFi Combo Broadband Gateway its factory **default** settings, follow the steps listed below:

1. Ensure the WiFi Combo Broadband Gateway is powered on
2. Locate the **Reset** button on the back of the WiFi Combo Broadband Gateway.
3. Use a paper clip to press the **Reset** button.
4. Hold for 10 seconds and then release.
5. After the WiFi Combo Broadband Gateway reboots, it is reset to the factory **default** settings.
   **Note:** Please note that this process will take a few minutes.

### 8. What is VPN?

- VPN stands for “Virtual Private Networking.” VPNs create a "tunnel" through an existing Internet connection using PPTP (Point-to-Point Tunneling Protocol) or IPSec (IP Security) protocols with various encryption schemes including Microsoft Challenge Handshake Authentication Protocol (MS-CHAP).
- This feature allows you to use your existing Internet connection to connect to a remote site with added security. If your VPN connection is not functional, verify that your VPN dial-up configuration is correct.

**Note:** This information should be provided to you from your VPN provider.
Pressing the Reset Button restores to its original factory **default** settings.

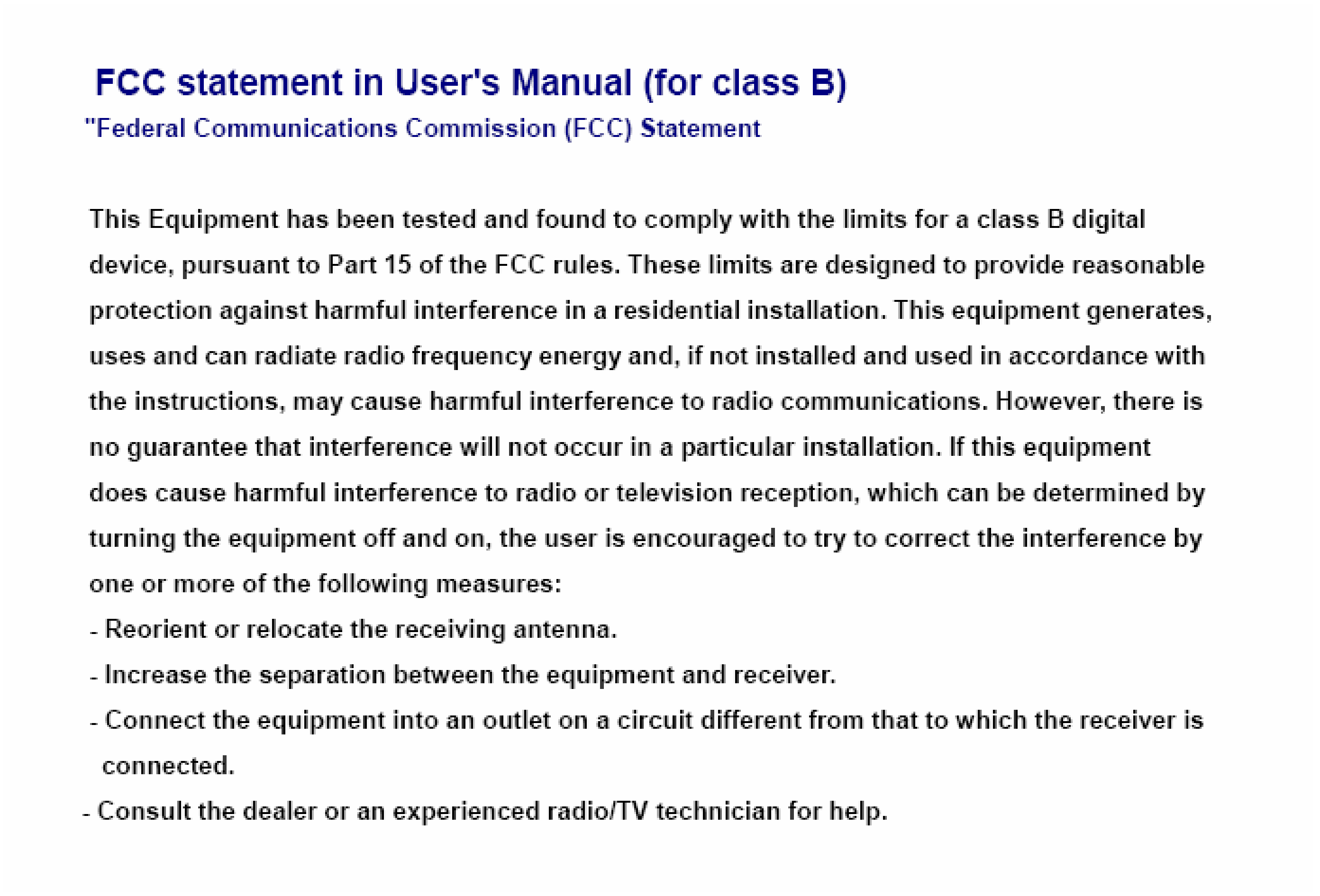
### 9. What can I do if my Ethernet cable does not work properly?

- First, ensure that there is a solid cable connection between the Ethernet port on the gateway, and your NIC (Network Interface Card).
- Second, ensure that the settings on your NIC adapter are “Enabled,” and set to accept an IP address from the DHCP.
- If settings appear to be correct, ensure that you are *not* using a crossover Ethernet cable.

Although the WiFi Combo Broadband Gateway is MDI/MDIX compatible, not all NICs are. Therefore, it is recommended that you use a patch cable when possible.

## 4. Technical Specifications

| | |
|---|---|
| 3G Access | USB port |
| Standards | IEEE 802.11b/g<br>IEEE 802.3<br>IEEE 802.3u |
| Wireless | |
| Standard | IEEE 802.11 B\G\N |
| Data Rate | 11B: 11, 5.5, 2, 1 Mbps<br>11G: 54, 48, 36, 24, 18, 12, 9, and 6 Mbps<br>11N: Max physical rate up to 150Mbps |
| Frequency | 2.4 – 2.462 GHz, CCK / OFDM modulation |
| Range Coverage | Indoors approx. 30-50 meters;<br>Outdoors up to 80-100 meters |
| # of Channels | 1-11 for N. America (FCC);1-11 for Canada (DOC)<br>1-13 Europe (Except Spain and France) (ETSI)<br>1-14 Japan (TELEC); |
| Security | 64-bit and 128-bit WEP Encryption; WPA encryption |
| Antenna | PIFA Antenna. |
| Firewall | IP Filtering<br>NAT (Network Address Translation) with VPN Pass through<br>MAC Filtering |
| Supported WAN type | 3G,Static IP, Dynamic IP, PPPoE,PPTP,L2TP |
| Connection Scheme | Connect-on-demand, Auto-Disconnect |
| NAT function | Class C ;One-to-Many; Max 253 Users; Virtual Server; DMZ Host |
| VPN | PPTP, L2TP and IPSec Pass Through |
| Config.& Management | Web-Based IE, Navigator browser and SNMP |
| IP assignment | DHCP Server and Client |
| Working Environment | Temperature: 0~40$^o$C, Humidity 10%~90% non-condensing |
| OS supported | Windows 95/98/ME/NT/2000/XP; Linux |
| Power | Full range(100-240V), Switching 5V 2.0A |

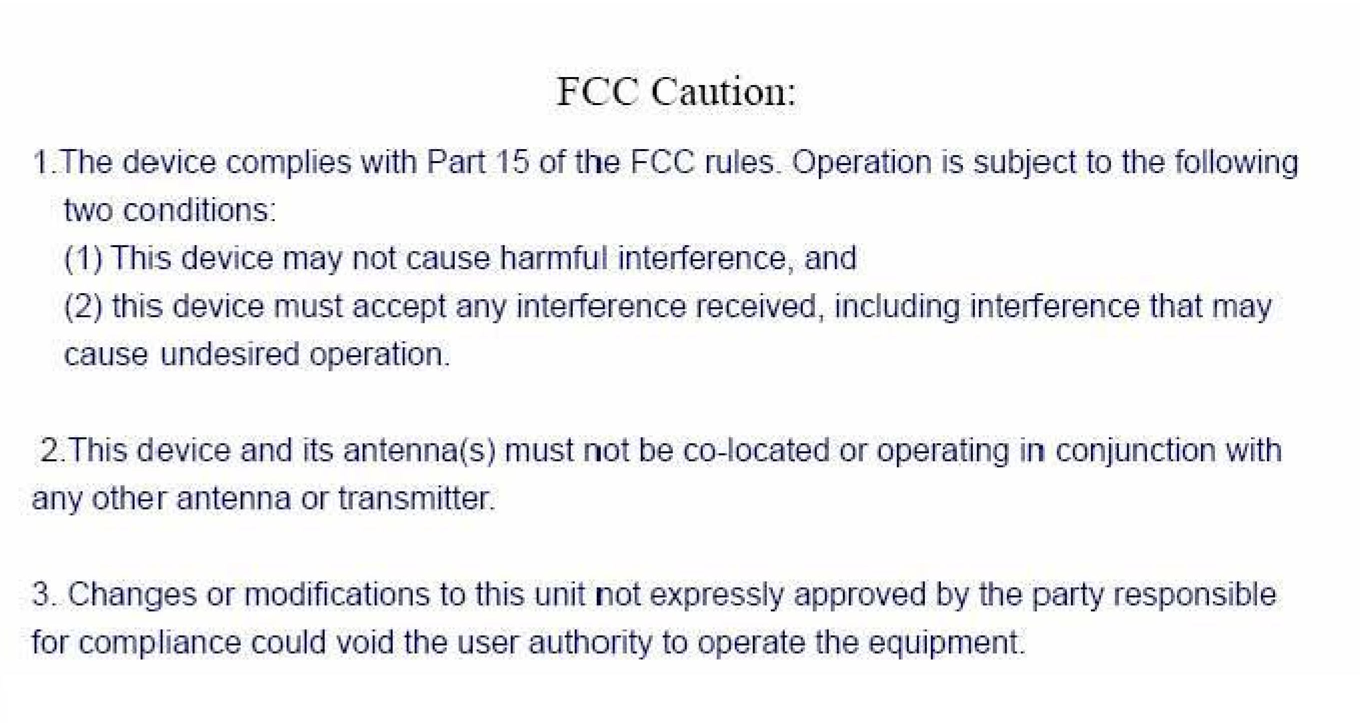


## FCC statement in User's Manual (for class B)

"Federal Communications Commission (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.



## 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

(2) this device must accept any interference received, including interference that may cause undesired operation.

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

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

**IMPORTANT NOTE:**
**FCC Radiation Exposure Statement:**
**This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.**