WIZ630wi User Manual

(Version 0.93)

Regulatory Statements for WIZ630wi

USA-Federal Communications Commission (FCC)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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. If not installed and used in accordance with the instructions, it 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 tuning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna

-Increase the distance between the equipment and the receiver.

-Connect the equipment to 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 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.

Caution: Exposure to Radio Frequency Radiation.

To comply with FCC RF exposure compliance requirements, for mobile configurations, a separation distance of at least 20 cm must be maintained between the antenna of this device and all persons.
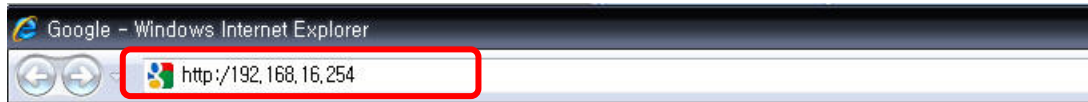
This device must

Connecting the Web page of WIZ610wi

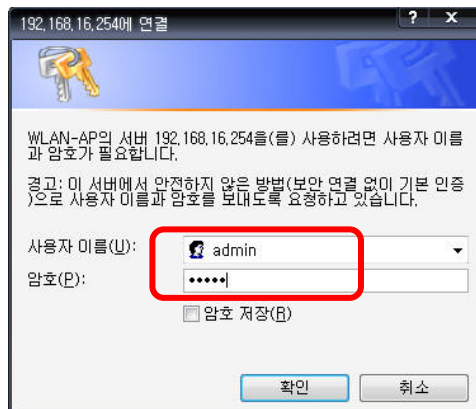◆ Some items may be not supported depending on the version.

Web address

◆ Open a web browser on user's PC. Input the default IP address of WIZ630wi, "192.168.16.254" and click Enter.

Web Login

◆ A pop up will request user to input User ID and Password

◆ User ID: admin / Password: admin

◆ The system's basic information, as shown below, will appear if successfully authenticated.

Type	Description
F/W Version	The firmware version of WIZ630wi is displayed.
System Up Time	System up time displayed.
Operation Mode	System operation mode displayed.
Internet Configuration	Information of the external network is displayed.
Local Network	Information of the Local network is displayed.
Ethernet Port Status	Link of LAN Port status is displayed.

Wireless Specifications

Type	Description
Wireless Standard	IEEE802.11b/g/n
Frequency Range	USA: 2.400 ~ 2.483GHz Europe: 2.400 ~ 2.483GHz Japan: 2.400 ~ 2.497GHz China: 2.400 ~ 2.483GHz
Operating Channels	USA/Canada: 11(1 ~ 11) Major Europe Countries: 13(1 ~ 13) France: 4(10 ~ 13) Japan: 14 for 802.11b(1 ~ 14), 13 for 802.11g(1 ~ 13) Korea/China: 13(1 ~ 13)
Output Power (Tolerance(+/-1dBm)	802.11b: 17dBm@11Mbps 802.11g: 14dBm@54Mbps 802.11n: 14dBm@150Mbps/72Mbps
Receive Sensitivity	802.11b: -89dBm@11Mbps 802.11g: -74dBm@54Mbps 802.11n(40MHz): -66dBm@150Mbps 802.11n(20MHz): -70dBm@72Mbps
Data Rates	802.11b: 1,2,5.5,11Mbps 802.11g: 6,9,12,18,24,36,48,54Mbps 802.11n(20MHz): 7,14.5,21.5,28.5,43.5,57.5,65,72Mbps 802.11n(40MHz): 29.5,86.5,115,130,144,150Mbps
Modulation Type	11g: OFDM(64QAM, 16QAM, QPSK, BPSK) 11b: DSS(CCK, DQPSK, DBPSK)

Operation Distance	802.11b
	  Outdoor: 150m@11Mbps, 300m@1Mbps
	  Indoor: 30m@11Mbps, 100m@1Mbps
	802.11g
	  Outdoor: 50m@54Mbps, 300m@6Mbps
	  Indoor: 30m@54Mbps, 100m@6Mbps
	802.11n
	  Outdoor: 30m@150Mbps, 250m@7Mbps
	  Indoor: 20m@150mbps, 100m@7Mbps

Dimension	33mm X 43mm X 4.5mm

1. Operation mode

◆ User can select the operation mode.

◆ The default setting of WIZ630wi is AP Mode. (DHCP Server Enabled)
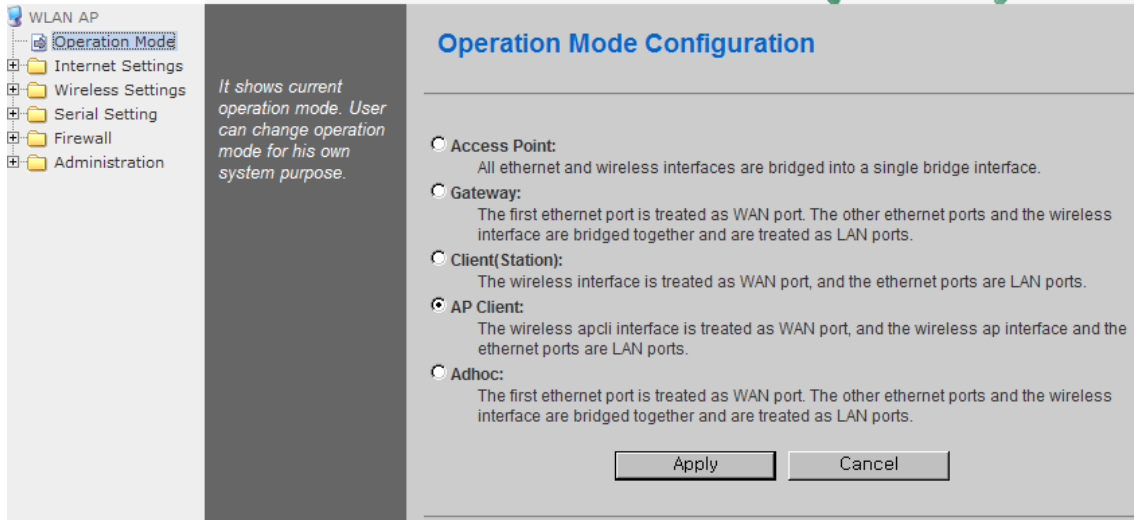
Access Point (Bridge)

In this mode, all Ethernet ports and wireless interface are bridged together. Wired/Wireless interface has the same IP address space with its top mesh. DHCP Server function is disabled and WIZ630wi does not assign an IP. Wireless (LAN Port included) sending periodic Broadcast Packet to Station and maintains a connection with Station.

Gateway (Router)

Operate in router mode. Interfaces are separated into WAN I/F (Top Internet Business Network), LAN I/F (Sub Private Network: 192.168.16.xxx), Wireless I/F (Sub Private Network: 192.168.16.xxx). Port # 0 will be assigned to the WAN Port. WIZ630wi periodically sends Broadcast Packet to Sub-LAN (LAN Port included) and maintains connection with Station.

Client (Station)

Wireless I/F is assigned as WAN Port and all Ethernet Ports are bound to LAN Port. Set the profile and the WIZ630wi is automatically connected to the AP when re-booting in the future. Devices that are connected through the LAN port are assigned a private IP. WIZ630wi periodically sends PING Packet to AP Gateway and maintains connection with AP.

AP-Client mode

Wireless I/F is assigned as WAN Port and all Ethernet Ports are bound to LAN Port. This mode is similar to Station mode, however the difference is that the Wireless I/F will operate as client with AP simultaneously. WIZ630wi periodically sends Broadcast Packet to Sub-LAN (LAN Port included) and maintains connection with Station.

ad-hoc mode

This mode is similar to Gateway mode. The Wireless I/F operates as ad-hoc and connects to Station Point-to-Point. There is no communication between the LAN Port and Wireless I/F (ad-hoc).
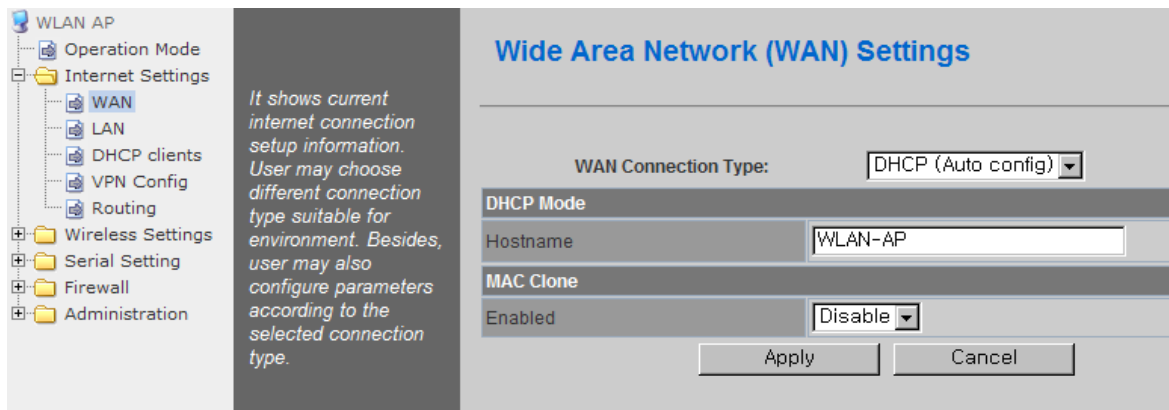
WAN ←→ ad-hoc: OK

WAN ←→ LAN: OK

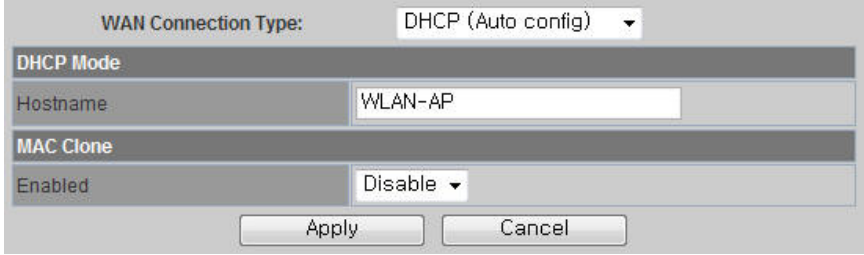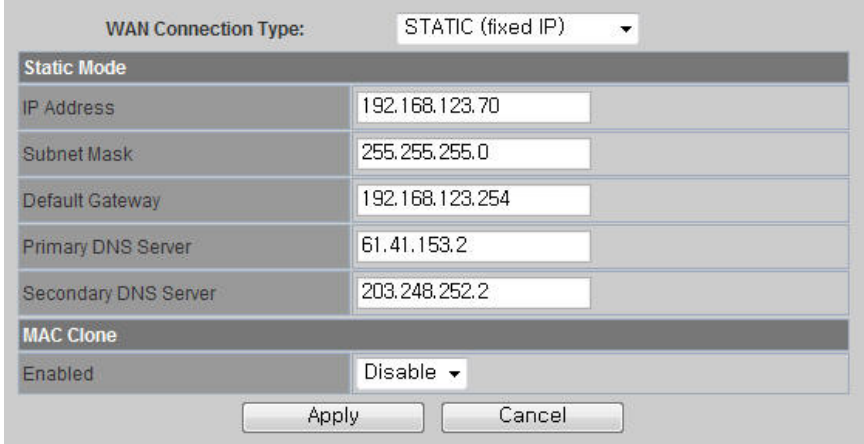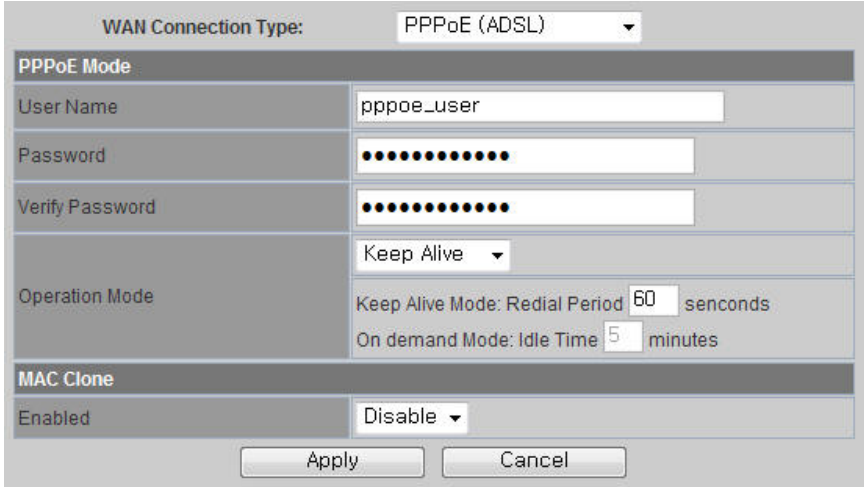ad-hoc ←→ ad-hoc: OK

ad-hoc ←→ LAN: No Communication

2. Internet Setting

3.1 Internet connection setting

◆ Select the internet service type and WIZ630wi can connect to the internet
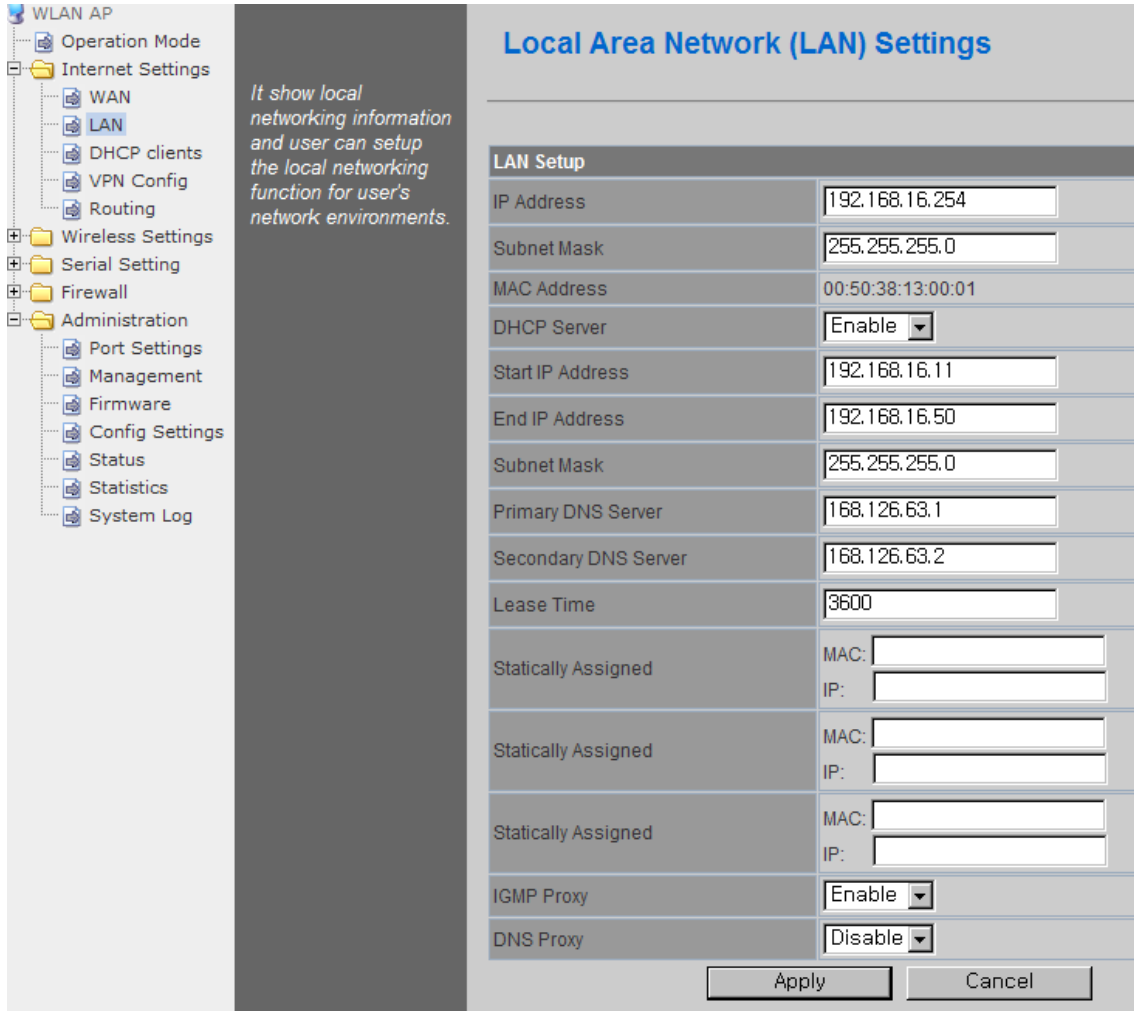
◆ If users would like to access to Internet, Gateway Mode should be selected.

Type	Description
WAN Connection Type	Select the communication ways for Internet's connection - Static(Fixed IP) - DHCP (Auto config) - PPPoE
Host Name	Settings about module's host name
Mac Clone	Some ISPs require that you register a MAC address. Users can directly enter MAC address or use the MAC Clone function.

Type	Description
DHCP(Auto config)	User should choose DHCP Mode when the user connects to the internet service such as FTTH, cable modems, VDSL, IP-ADSL.
Static(Fixed IP)	Static IP setting window. If user receives static IP from ISP, user should set the Fixed IP . Input the network information that got from ISP (such as IP, Subnet, Gateway, DNS)
PPPoE(ADSL)	 -. User Name: Setting the User Name received from ISP -. Password: Password assigned by the internet service company -. Operation Mode: This mode is used for re-connecting when connection is bad.

3.2 Local network setting

◆ WIZ630wi internal IP setting, DHCP server setting and DHCP.
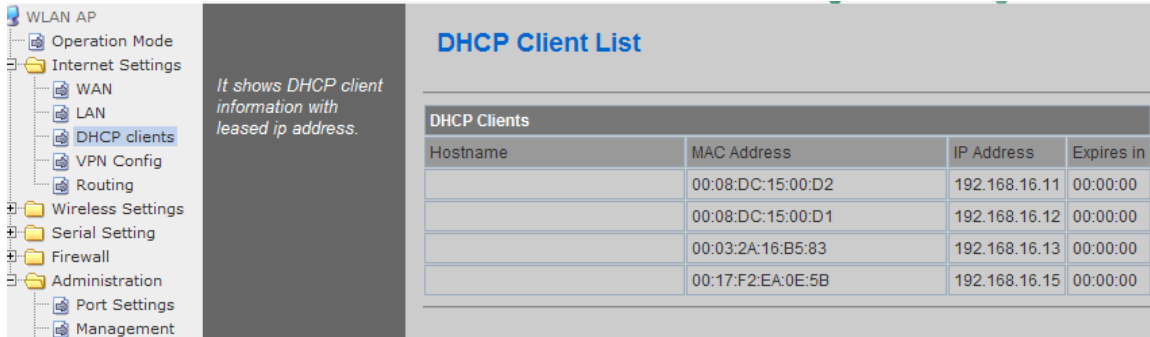
Type	Description
IP Address	Enter the module's IP. (Basic Value : 192.168.16.254)
Subnet Mask	Enter the module's Subnet Mask .
MAC Address	MAC Address of module's LAN port (Wireless included). (Read Only)
DHCP Server	Decide whether the module's DHCP server will be used.
Start IP Address	Set the start IP address that will be assigned from the DHCP server
End IP Address	Set the end IP address that will be assigned from the DHCP server.
Subnet Mask	Enter the value of subnet mask.
Primary DNS Server	Enter the primary DNS server address.
Secondary DNS Server	Enter the secondary DNS server.
Lease Time	Enter the lease time when IP address is assigned.
Statically Assigned	Maximum of three IP can be statically assigned when IP address is assigned.

3.3 DHCP Client Information

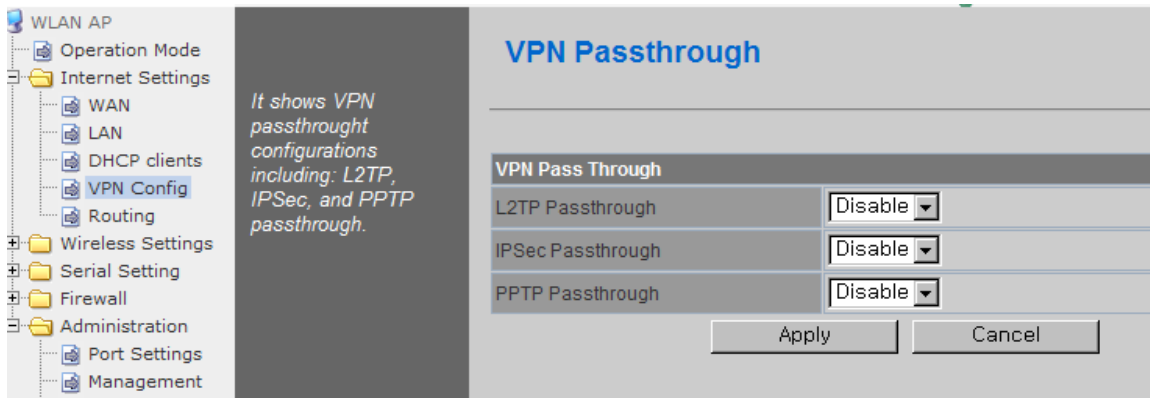◆ The IP information that is assigned from the DHCP server is shown.

Type	Description
Host name	Client's host name is shown
Mac Address	Client's MAC address is shown.
IP Address	Client's IP address is shown.
Expires in	The usable time of client's IP address is shown.

3.4 VPN setting

◆ This section will explain on VPN packet settings.

Type	Description
L2TP Pass-through	Enable : VPN L2TP packet is passed through WAN. Disable : VPN L2TP packet is not passed through WAN. (Default value)
IPSec Pass-through	Enable : VPN IPSec packet is passed though WAN. Disable : VPN IPSec packet is not passed through WAN. (Default value)
PPTP Pass-through	Enable : VPN PPTP packet is passed through WAN. Disable : VPN PPTP packet is not passed through WAN. (Default value)

3.5 Static Routing Setting

◆ User can modify the routing table at static routing settings.

◆ We do not recommend any modification.
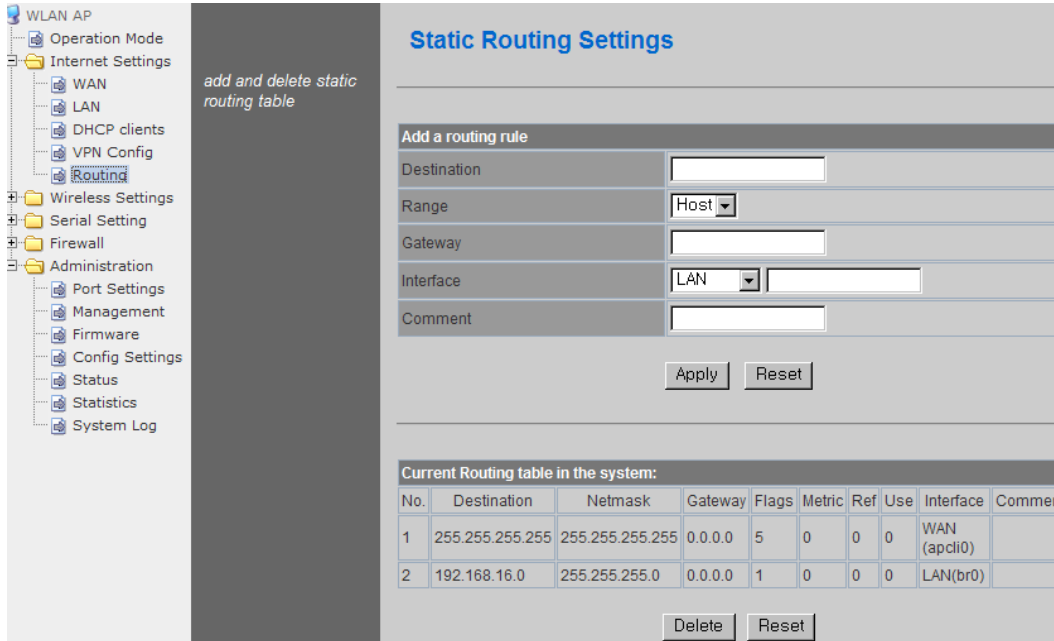
Type	Description
Destination	Enter the Target IP address or network address.
Range	Select whether the routing table is HOST or NETWORK
Netmask	If Range is NETWORK, enter subnet mask.
Gateway	Enter the gateway address to be passed when communicating with target.
Interface	Select whether the target is LAN or WAN.

3. Wireless setting

Basic settings

◆ This chapter is about basic setting for wireless LAN.

Type	Description
Radio On/Off	Decide radio on/off of wireless AP function.
Network Mode	11b/g/n mixed mode: 802.11b/g/n are supported. 11b/g mixed mode: 802.11b/g are supported. 11b only: only 802.11b is supported. 11g only: only 802.11g is supported. 11n only: only 802.11n is supported
SSID	Enter the name of the wireless network.
Channel	Select the channel that composes the wireless network.
Broadcast Network Name	AP or Wireless network status can be checked by notifying the SSID to the wireless device. AP cannot be searched if this function is disabled.
AP Isolation	The communication between stations that are connected to the identical SSID is blocked.
MBSSID AP Isolation	The communication between stations that are connected to different SSID is blocked.

Type	Description
Operation Mode	Decide whether the PHY mode is going to be Mixed Mode or Green Field Mode.
Channel Bandwidth	Fix bandwidth channel to 20MHz. . Use 40MHz as bandwidth in case connection with wireless station that supports 11n channel bonding.
Guard Interval	Long: 800nsec, Short: 400nsec
MCS	Control link rate. Set link rate to auto considering any interruptions.
RDG	The wireless performance can be improved using Reverse Direct Grant, 11n's RDG technology.
Extension Channel	Setting for the other 20MHz area when channel bandwidth is set to 40MHz.
STBC	STBC is supported when the value of MCS is 0-7.
A-MSDU	Decide whether numerous MSDUs inside one MPDU will transmit.
Auto Block ACK	Decide whether Block ACK will be transmitted automatically.
Decline BA Request	Decide whether user wants to decline Block ACK request.
HT Disallow TKIP	Decide whether to operate in 802.11g, if using TKIP.
HT TxStream	Setting for number of Tx antennas of 2T2R system.
HT RxStream	Setting for number of Rx antennas of 2T2R system.

4.1 Advanced Wireless Settings

◆ This chapter is about higher-level setting for wireless LAN

Type	Description
BG Protection	Setting for wireless communication when using both 11b and 11g LAN cards. Recommended for automatic settings in general.
Beacon Interval	Controls the interval of sending beacon. The setting range is 20~999 and 100ms is usually used
DTIM	Controls the data rate of beacon being sent. The setting range is 1~255 and 1ms is usually used.
Fragmentation Threshold	When a data that is larger than the threshold size, it is fragmented and sent. Smaller threshold size may enable more stable wireless communication; however the maximum speed is lower. Smaller threshold size is recommended in case of many interruptions from surrounding signals. The setting range is 256~2346.

|	
RTS Threshold	When a data that is larger than the threshold size, it can be sent RTS/CTS. Smaller threshold size may enable more stable wireless communication; however the maximum speed is lower. Smaller threshold size is recommended in case of more wireless stations are connected at the same time. The setting range is 1~2347.
Tx Power	Controls the range of wireless radio being sent. The range of wireless radio being sent gets larger as the value is larger.
Short Preamble	If user enables Short Preamble, performance might slightly improve. However, the compatibility with wireless LAN card when connecting could decrease. It is recommended to disable Short Preamble for best compatibility.
Short Slot	The performance of wireless station connected to 11g can be improved by enabling Short Slot. However, it is recommended to disable Short Slot if there is a wireless station with unstable connection.
Tx Burst	The wireless speed can be maximized by enabling this function. However, it is recommended to disable this function for stable connection when numerous stations are connected together.
Pkt_Aggregate	Numerous packets can be transmitted in one MPDU by enabling this function.
Country Code	Setting for country code. Example: KR(Republic of Korea), US(United State), FCC(Europe), JP(Japan), FR(France), ES(Spain)
WMM	Decide to whether or not use WMM function.
APSD	Decide to whether or not use Power Saving Mode.
DLS	Decide whether or not use DLS (Direct Link Setup) function.
WMM Parameter	If WMM is enabled, set the value for WMM Parameter.
Multicast-to-Unicast	Decide whether or not use Multicast function.

4.2 Wireless Security

◆ This chapter is about settings for wireless network security.
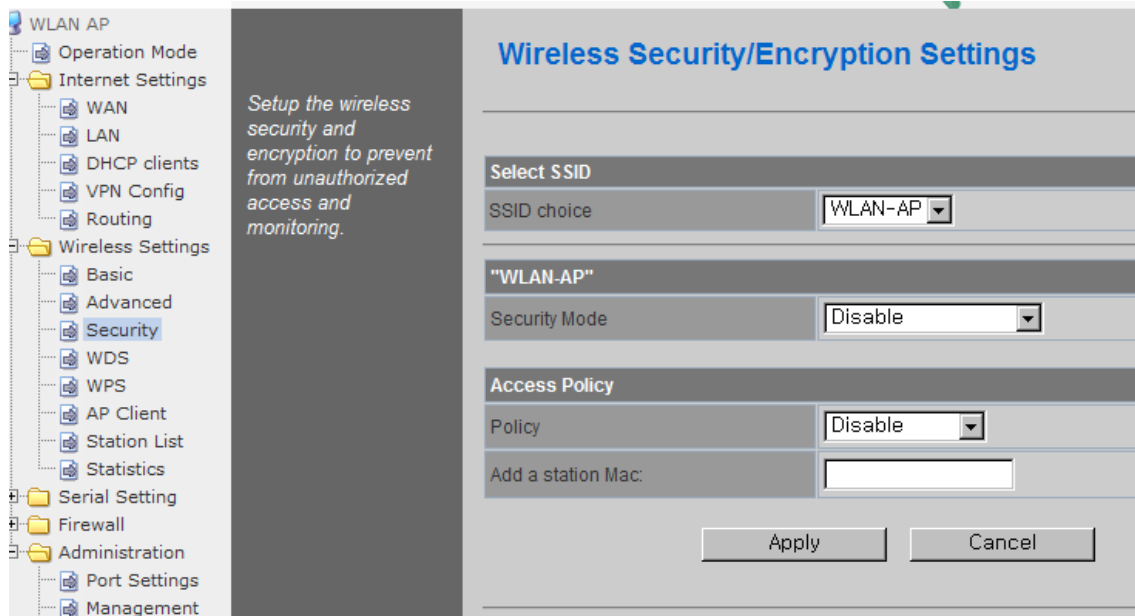
Type	Description
SSID choice	If multiple SSID are in use, choose the corresponding SSID for security.
Security Mode	Select security mode.
Access Policy	Disable : Access Control function will be disabled.. Allow Listed : allows communication with listed MAC client. Reject Listed: blocks communication with listed MAC client.
Add a station MAC	Enter the client's MAC address for controlling.

4.3.1. Wireless Security setting

◆ Authentication settings
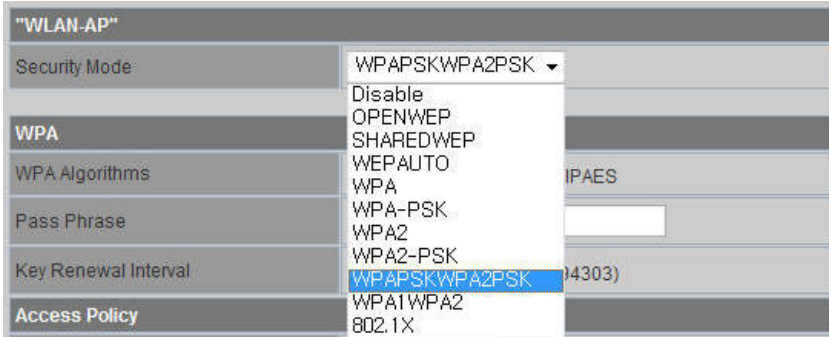
Type	Description
OPENWEP	All users are authorized.
SHAREDWEP	Users only with correct network key are authorized.
WEPAUTO	OPEN/SHARED Mode is selected automatically.
WPA-PSK	WPA certified standard with improved security.
WPA2-PSK	Improved WPA certified standard
WPAPSKWPA2PSK	Both WPZ-PSK and WPZ2-PSK are supported.
WPA	WPA certified standard including 802.1x.
WPA2	Improved WPA certified standard.
WPA1WPA2	Both WPA and WPA2 are supported.
802.1x	Radius authentication through WEP Key.

4.3.2. Wireless Authentication Setting

Encryption	Type	Description
WEP64	SHARED/	WEP encryption algorithm is used with 64bit key.
WEP128	WEPAUTO/802.1x	WEP encryption algorithm is used with 128 bit key.
TKIP	WPA/WPA2/	More complex encryption algorithm than WEP Is used.
AES	WPA-PSK/	New encryption algorithm is used.
TKIP/AES	WPA2-PSK/ WPA1WPA2/ WPAPSKWPA2PSK	Support TKIP/AES simultaneously

5.3.2.1. WEP

◆ Enter key for WEP64 or WEP128 network.

◆ Use either character string or hex character when entering key.

◆ Select 1~4 for 'Default Key..

◆ Enter at least one WEP Key.

◆ The entered WEP key is used for connection from wireless terminal

5.3.2.2. TKIP/AES authentication

◆ Enter at least 8 characters of character string for the network key value.

5.3.2.3. Wireless 802.1x authentication

◆ Enter the value for linking with the Radius Server.

◆ The values related to the Radius Server are provided by the internet service company.
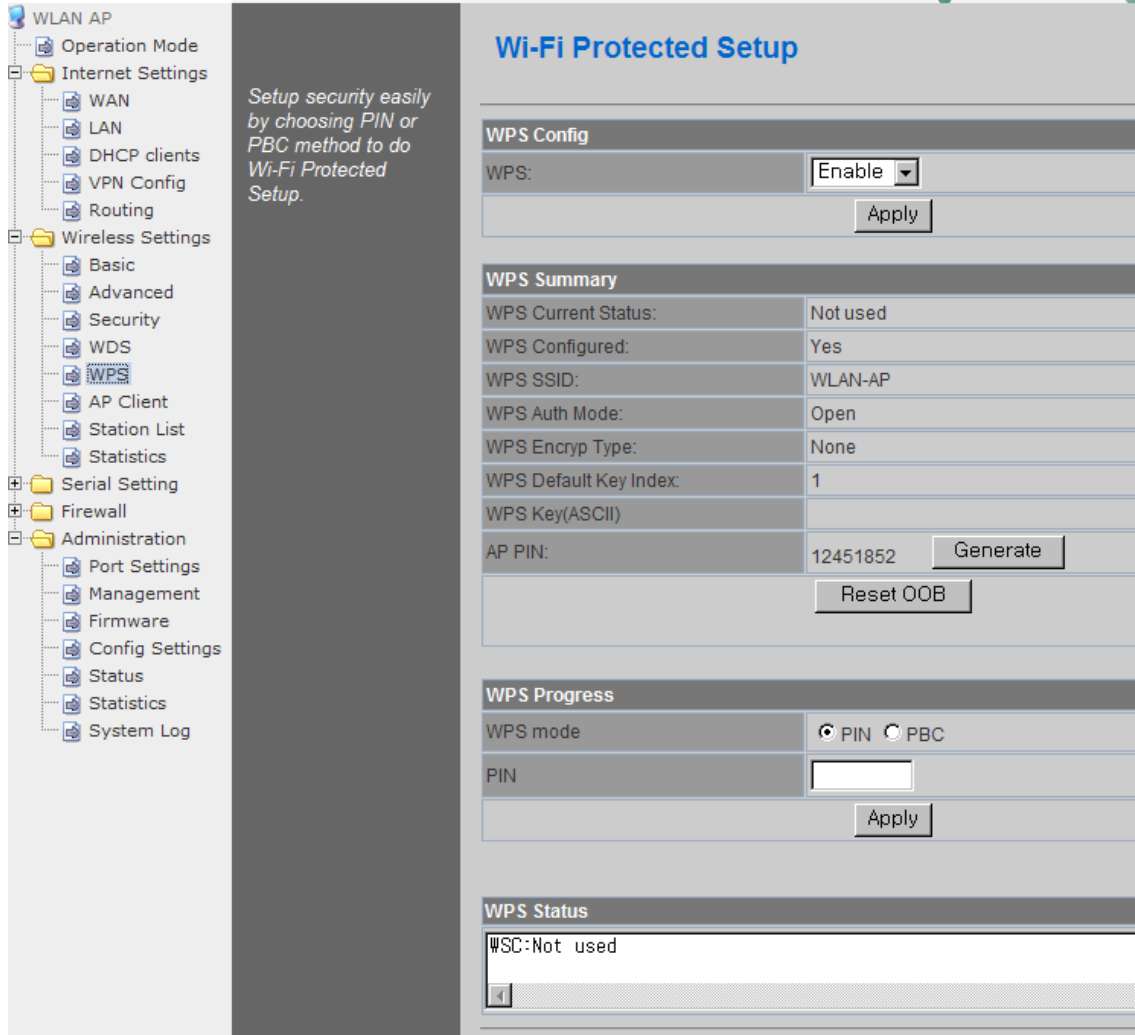

4.3 WDS Setting

◆ Connection with different AP is possible with WDS (Wireless Distribution System) function.

◆ Maximum of four APs can connect through WDS function.

◆ 2 APs must use the same channel and authentication / encryption method.
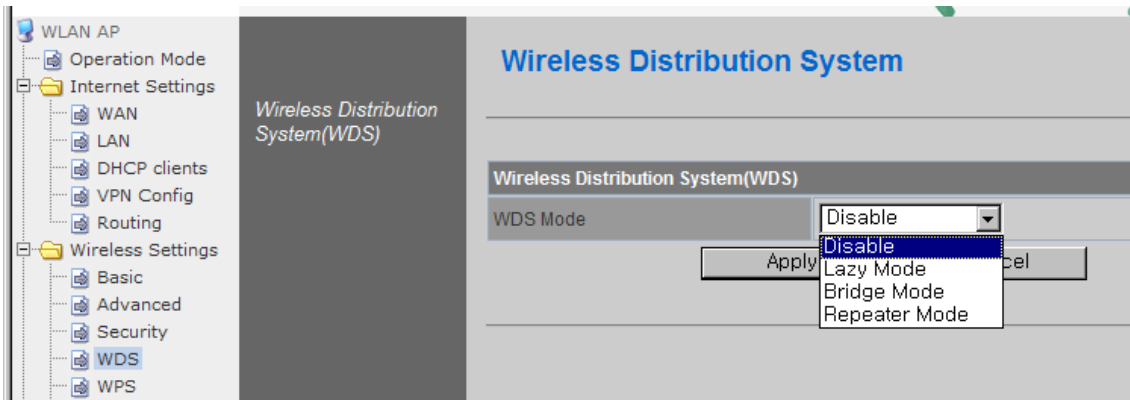
Type	Description
Disable	WDS function is not used. (Default disable)
Lazy Mode	Do not register the MAC of AP to be connected. Connect the AP's MAC to the registered AP. AP function is provided.
Bridge Mode	Register the MAC of AP to be connected. Connect the registered MAC to the AP. AP function is not provided.
Repeater Mode	Register the MAC of AP to be connected. Connect the registered MAC to the AP. AP function is provided. (The performance of WDS is best in Repeater Mode.)

4.4 WPS Setting

◆ The WDS function enables easier wireless network setting..

Item	Description
WPS	Enable / Disable WPS.
WPS Current Status	Shows whether WPS is used or not for the connection with station.
WPS Configured	Shows whether WPS is configured or not.
WPS SSID	Shows the SSID connected to the station.
WPS Auth Mode	Shows the authentication used with WPS.
WPS Encryp Type	Shows the Encryption used with WPS.
WPS Default Key Index	Shows the default key ID used with WPS.
WPS Key(ASCII)	Shows the WPS Key.
AP PIN	Shows the PIN value used when connecting to station.
WPS Mode	Select PIN or PBC.

4.5 Wireless network status

◆ The status of the station that is connected to WIZ630wi is shown.

◆ The surrounding wireless AP's status are shown..

Type	Description
Channel	Channel information of AP
SSID	SSID of AP
BSSID	MAC address of AP
Security	Encryption method of AP
Signal	Signal strength with AP
W-Mode	Wireless mode of AP
Type	Network Type of finding AP In: Infrastructure, Ad: ad-hoc

4.6 AP Wireless Statistics

◆ The Statistics of wireless communication is shown.

Type	Description
Tx Success	Number of successfully transmitted frames
Tx Retry Count	Number of retransmitted frames
Tx Fail after retry	Number of failed frames
RTS Successfully Receive CTS	Number of frames that successfully received CTS
RTS Fail To Receive CTS	Number of frames that failed to receive CTS
Frames Receive Successfully	Number of frames successfully received
Frames Received With CRC Error	Number of frames that failed due to CRC error
SNR	Receiving signal strength

4. Serial to LAN(Wired and Wireless)

◆ Individual settings for serial #1 / serial #2 are possible.

◆ Set the serial parameters for serial to wireless (ethernet) function.

◆ Set two channels (Main connection, Aux connection) for each serial port

◆ Setting management of Serial #1 and #2 (Main connection, Aux connection)

WLAN Gateway Module....

WLAN AP
- Operation Mode
- Internet Settings
  - WAN
  - LAN
  - DHCP Clients
  - VPN Config
  - Routing
  - QoS(802.1p)
  - VLAN(802.1q)
- Wireless Settings
  - Basic
  - Advanced
  - Security
  - WDS
  - WPS
  - Station List
  - Packet Statistics
- Serial Setting
  - Serial Port#1
  - Serial Port#2
- Firewall
- Managements

It shows current Serial to LAN conguration for serial port #1. user can change it.

Serial-to-Ethernet(Serial #1)

Main Connection Configuration

Status:	☑ Enable
Protocol:	○ UDP ⦿ TCP
Mode:	○ Server ⦿ Client ○ Mixed
Server IP:	255 . 255 . 255 . 123 or
Server Port:	5000
Reconnect Interval:	10 Seconds(1-30, default: 10)
Connection Option:	⦿ System BootUp ○ Serial Data In
Baudrate:	38400
Databits:	8
Parity:	None
Stopbits:	1
Flowcontrol:	None

Aux Connection Conficuration

Status:	☐ Enable
Protocol:	⦿ UDP ○ TCP
Mode:	⦿ Server ○ Client
Server IP:	255 . 255 . 255 . 123 or
Server Port:	5050

Data Packing Condition

Time:	0 milli-second(100-5000, default: 0)
Size:	0 Bytes(0-1500, default: 0)
Char:	00 Hexacode(00-ff, default: 0)
Inactivity Time:	0 Seconds(00-60, default: 0)
Command Mode:	☐ Enable(Enable: H/W GPIO Used)

Ethernet Data Tagging Option

Status:	☐ Enable
Main Port:	!MAIN! string(1-16 chars)
Aux Port:	!AUX! string(1-16 chars)

[Save]

5.1 Main Connection settings

Type	Description
Status	Enable checked : Serial to LAN is used. Enable un-check: Serial to LAN is not used.

Protocol	Protocol used in Serial to LAN communication
	    -TCP
	    -UDP

Mode	Serial to LAN operation mode. (Client Mode recommended)
	    - Server : waits for connection.
	    - Client : connected to the remote server of WIZ630wi
	    - Mixed : not recommended

Server IP	Enter the IP address for WIZ630wi setting.
Server Port	Enter the port number for remote serial data server host PC.
Reconnect Interval	Interval of TCP reconnection.
Connection	WIZ630wi의 Serial LAN의 connection Type(TCP Only) System Bootup : connected to the remote server upon bootup. Serial Data In : once serial data comes in, connect to remote server. (end connection after inactive time)
Baud rate	Select the serial communication speed.
Databits	Select the databits.
Parity	Select the method for parity check.
Stopbits	Select the stopbits.
FlowControl	Select the method for flow control. (Option: none, Xon/Xoff, RTS/CTS)

5.2 Aux Connection Settings

Type	Description
Status	Select whether to enable serial port or not.
Protocol	Protocol used in Serial to LAN communication.
Mode	Select Server or Client Mode.
Server IP	Enter the IP address for WIZ630wi setting.
Server Port	Enter the port number for remote serial data server host PC.

5.3 Packing Condition (Incoming serial data packing condition)

Type	Description
Time	Data packing until the set time and then sent to server after the set time.
Size	Data packing until the set size and then sent to the server.
Character	Data packing until the set character and then sent to the server.
Inactivity Time:	TCP/IP connection is discontinued if there is neither serial data nor network data during the set time.
H/W CMD switch	-. Enable/Disable the H/W CMD switch pin. -. H/W CMD switch pin is the switch for sending commands from CPU to WIZ630wi.

5.4 Ethernet Data Tagging Option

This option is used to help serial device to identify who is the received serial data's source: the received serial data comes from Main Port or Aux Port.
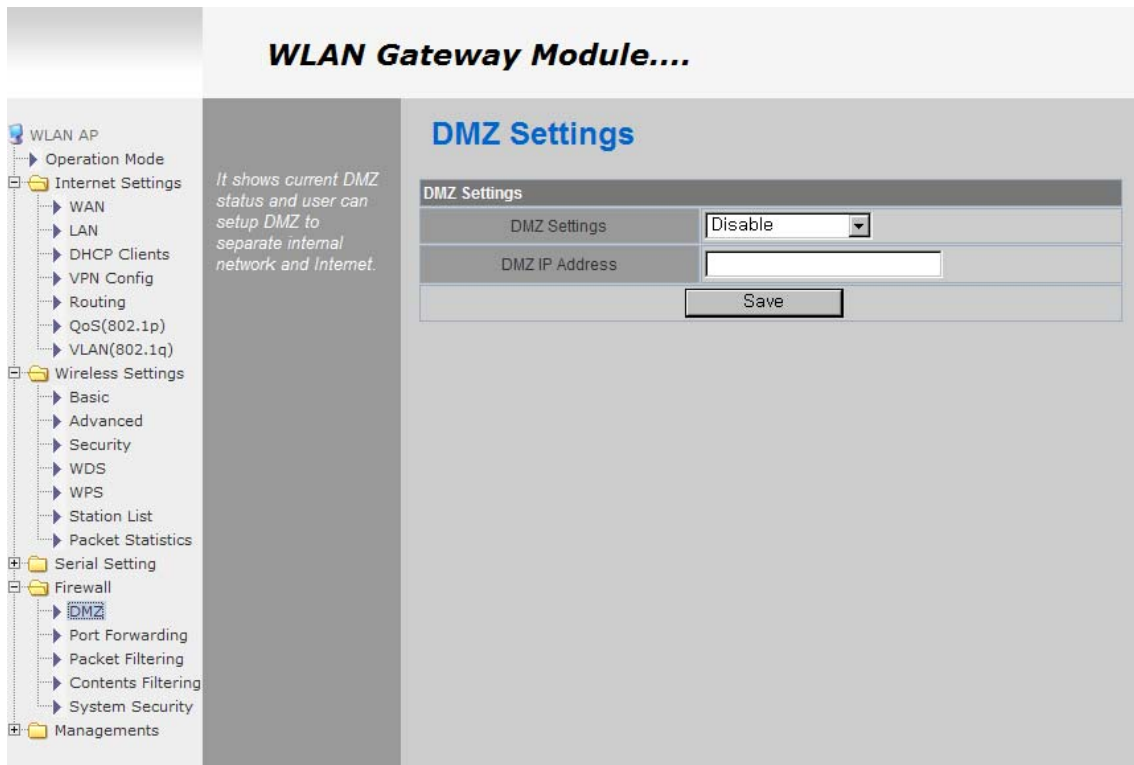
Type	Description
Status	Enable or disable this option (Checked : Enable, Un-Check : Disable)
Main Port	Before sending data from Main port to serial port, WIZ630wi added a TAG in the front of payload. For example: In-come LAN Data : "abcdegf" Output data to Serial Port : "!MAIN!abcdegf"
Aux Port	Before sending data from Aux port to serial port, WIZ630wi added a TAG in the front of payload. For example: In-come LAN Data : "abcdegf" Output data to Serial Port : "!AUX!abcdegf"

5. Firewall settings

◆ Only work at the Gateway Mode

6.1 DMZ

◆ Enable/Disable DMZ function

◆ A DMZ allows a single computer on your LAN to expose ALL of its unused ports to the Internet. When doing this, the exposed computer is no longer behind the firewall.

◆ Sometimes TCP/IP applications require very specialized IP configurations that are difficult to set up or are not supported by your router. In this case, placing your computer in the DMZ is the only way to get the application working.

Type	Description
DMZ Settings	Disable/Enable DMZ
DMZ IP Address	Input the IP address that you would like to expose all of its unused ports to the Internet

6.2 Port forwarding

When a computer on the internet sends data to the external IP address of the router (WIZ630wi), the router (WIZ630wi) needs to know what to do with the data. Port Forwarding simply tells the WIZ630wi which computer on the local area network to send the data to. When you have port forwarding rules set up, your router takes the data off of the external IP address:port number and sends that data to an internal IP address:port number. Port Forwarding rules are created per port. So a rule set up for port 53 will only work for port 53.

Type	Description
Port Forwarding	Disable/Enable Port Forwarding
IP Address	Internal IP address
Service Port	External ports range
Protocol	Supports TCP and UDP
Internal Port	Internal port

6.3 Packet filtering

◆ WIZ630wi can accept or block Internet packets according to pre-defined MAC or IP address

◆ First, please do basic settings

Type	Description
Source MAC	Pre-defined source MAC address for MAC filtering function
Dest IP Address	Destination IP address
Source IP Address	Source IP address
Protocol	Supports TCP, UDP, ICMP
Dest Port Range	Destination port range
Source Port Range	Source port range
Action	Enable/Disable MAC/IP/Port filtering function

6.4 Contents filtering

◆ Used to block certain websites (IP or domain names)

Type	Description
URL Filter	Block all the websites whose domain is the input text For example, if you input "sex", the websites like www.sex.com is blocked. But www.sexgood.com is not blocked. If you would like to block all the websites whose domain name contains the input text, please use Host Filter function
Host Filter	Block all the websites whose domain name contains the input text. For example, if you input "game", the websites like www.hangame.com, www.hangame.co.kr are blocked

6.5 System Security

◆ Defense of external attack.

Type	Description
Remote management	Settings about accessing methods from WAN to WIZ630wi's embedded web server
Telnet management	Settings about accessing methods from WAN to WIZ630wi's telnet
Ping from WAN Filter	Disable/Enable the WIZ630wi's Ping response
Broadcast Storm filter	Block/Accept the Broadcast packets
Block Port Scan	Block WIZ630wi's port-scan function
Block SYN Flood	Block SYN flood

6. Managements

7.1 System Management

Type	Description
Language	Select language in the list
Administrator	Pre-defined ID/Password for webpage or Telnet login
NTP	Set NTP server
Green AP	Low power consumptive AP
DDNS	Once the DDNS server registers yours MAC address, your device can connect to the internet regardless of your address. DDNS service can be provided by DynDNS, freeDNS, zoneedit, no-ip. To use DynDNS, users should go to www.dyndns.org to create user name and domain name. And then, set related configurations by using WIZ630wi's webpage. Similarly, to use freeDNS zoneedit, or no-ip,users should go to their homepage first to create user name and domain name. And then, set related configurations by using WIZ630wi's webpage.
DDNS Provider	DynDNS, freeDNS, zoneedit, no-ip
Account	ID for DDNS.
Password	Password for DDNS
DDNS	Host name for DDNS

7.2 Firmware

◆ Upgrade firmware and bootloader. Now WIZ630wi doesn't support upgrading by Remote URL.

7.3 Config Settings

◆ Save the setting value of WIZ630wi to the PC,
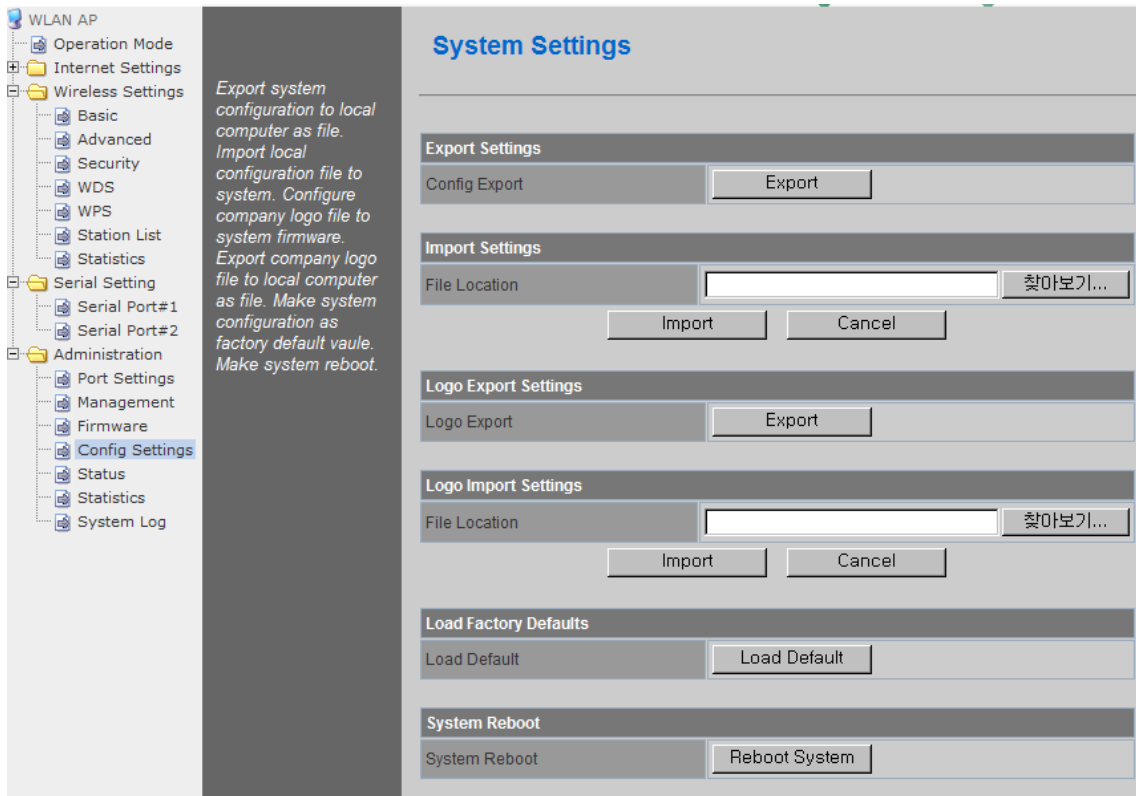
Type	Description
Export Settings	The setting files from the PC file are applied to the module.
Import Settings	The system's setting information is saved as a file in the PC.
Logo Export Settings	User's company logo file is saved in the PC.
Logo Import Settings	User's company logo from the PC is applied to the system. (GIF file size : 10K , 126x42)
Load Factory Defaults	Change the module's setting to default setting.
Reboot	Reboots the system.

7.4 Port Setting

◆ Settings about wired port. In case of Gateway Mode, WAN port is set here

◆ In case of Gateway Mode, it is better to use the default WAN port number (Port #0)

◆ If you are not administrator, we do not recommend you do this change.
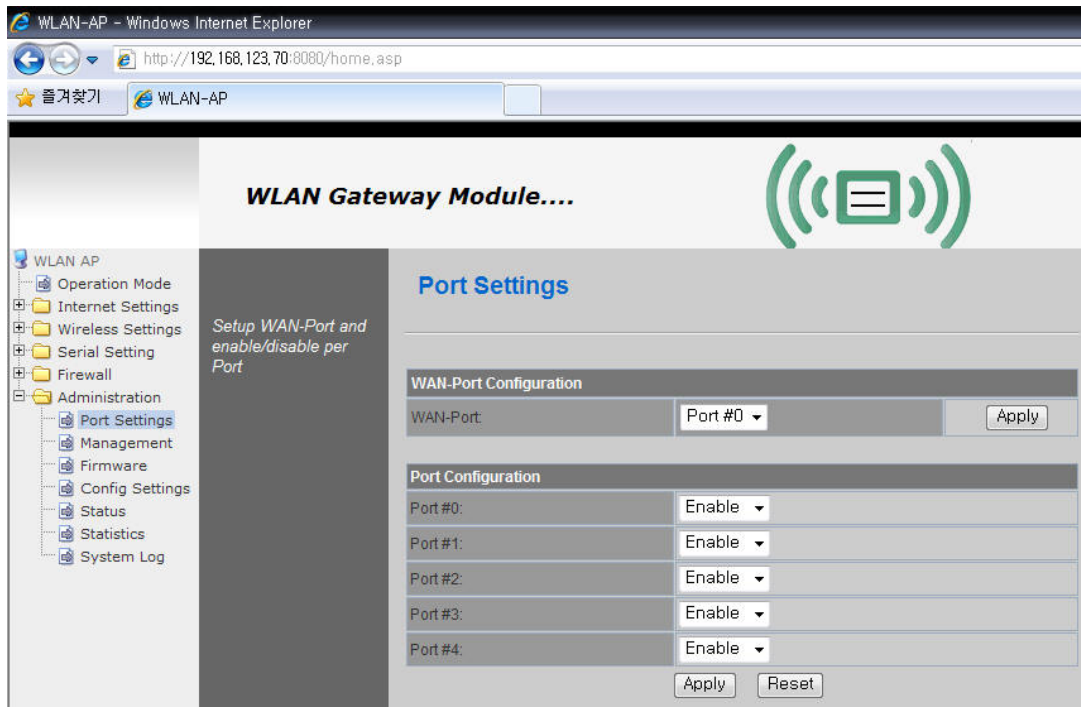
Type	Description
WAN Port	Select the WAN Port in case of Gateway Mode.
Port #0	Enable / Disable Port #0.
Port #1	Enable / Disable Port #1.
Port #2	Enable / Disable Port #2.
Port #3	Enable / Disable Port #3.
Port #4	Enable / Disable Port #4.

7.5 Packet Statistics

◆ System Statistics shows the system's memory information and system's data transmission size.

Type	Description
Memory Total	System Memory Size
Memory left	System Free Memory
Rx Packet	Rx Packets counts
Rx Byte	Rx Bytes Counts
Tx Packet	Tx Packet Counts
Tx Byte	Tx Bytes Counts

7.6 System Status

◆ System Status shows the status of the system, status of the system's network information, and the link status of LAN port.

Type	Description
F/W Version	Shows the firmware version.
System Up Time	Shows the system up time.
Operation Mode	Shows the operation mode currently being used.
Internet Configuration	Shows the internet configuration information.
Local Network	Shows the local network information.

7.7 System Log
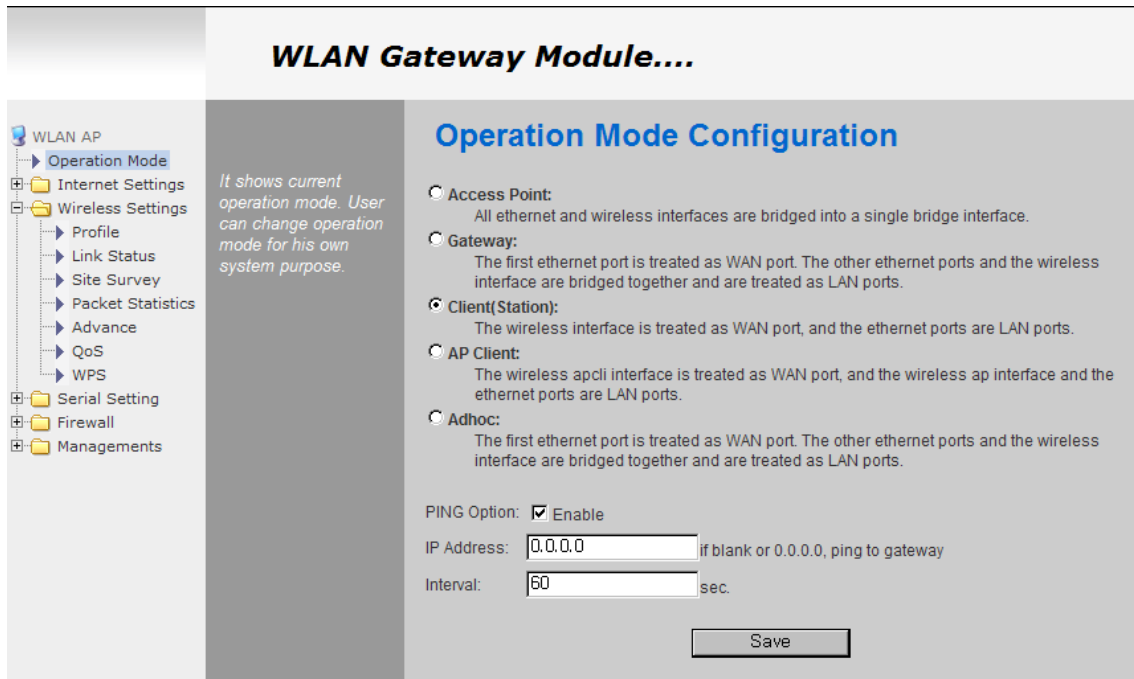
◆ The operation history of WIZ630wi can be checked by using System Log.

◆ If the system log exceeds 24Kbyte, more recent log record are added..
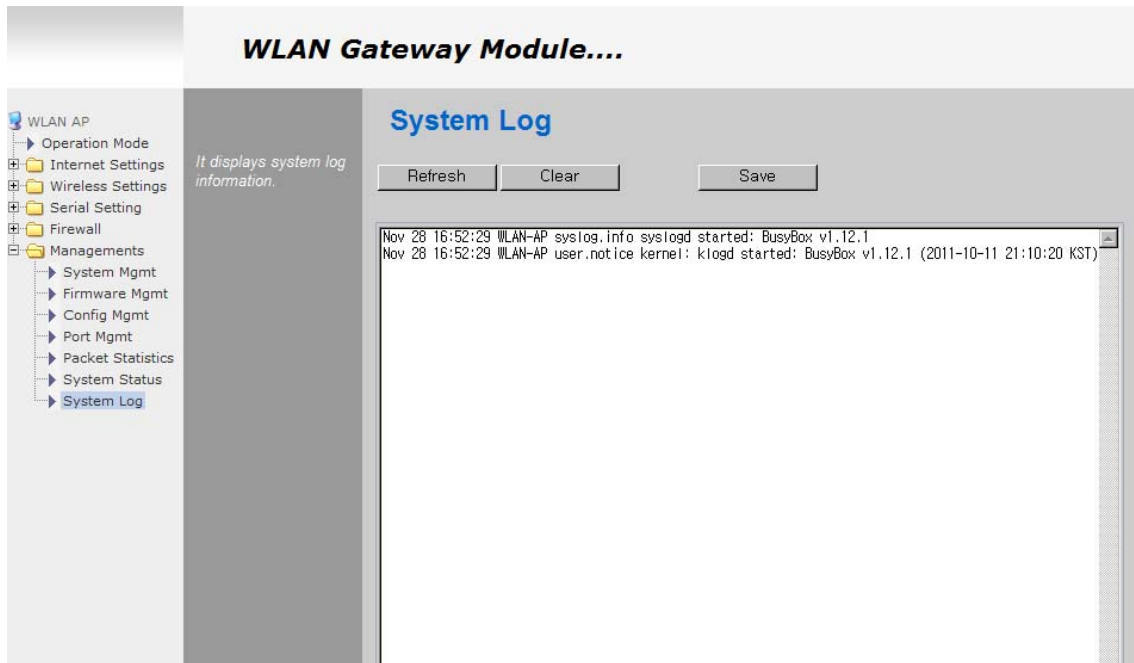
7. Client(Station) Mode setting

◆ WIZ630wi works as a WiFi client(station) which is always paired with a WiFi AP.

◆ Users can take Client Mode as an opposite of Gateway Mode

8.1 Client Mode Setting

WLAN Gateway Module....

Operation Mode Configuration

WLAN AP
▸ Operation Mode
⊞ Internet Settings
⊟ Wireless Settings
▸ Profile
▸ Link Status
▸ Site Survey
▸ Packet Statistics
▸ Advance
▸ QoS
▸ WPS
⊞ Serial Setting
⊞ Firewall
⊞ Managements

It shows current operation mode. User can change operation mode for his own system purpose.

○ **Access Point:**
 All ethernet and wireless interfaces are bridged into a single bridge interface.

○ **Gateway:**
 The first ethernet port is treated as WAN port. The other ethernet ports and the wireless interface are bridged together and are treated as LAN ports.

◉ **Client(Station):**
 The wireless interface is treated as WAN port, and the ethernet ports are LAN ports.

○ **AP Client:**
 The wireless apcli interface is treated as WAN port, and the wireless ap interface and the ethernet ports are LAN ports.

○ **Adhoc:**
 The first ethernet port is treated as WAN port. The other ethernet ports and the wireless interface are bridged together and are treated as LAN ports.

PING Option: ☑ Enable

IP Address: [0.0.0.0] if blank or 0.0.0.0, ping to gateway

Interval: [60] sec.

[Save]

Type	Description
Client(Station)	Client mode setting
Ping Option	Send Ping data to top connected AP by using any time unit
IP Address	If IP is 0.0.0.0, send Ping data to top connected AP.
Interval	Ping Interval setting (time unit: second)

8.2 Profile

◆ Shows the profile of the connected AP.   The profile information can be manually input.   By using "Site Survey", it is very convenient to find and connect with an AP.

◆ Administration of maximum of two AP is possible after adding to profile

◆ The module automatically connects to the active AP (selected AP) upon booting

Type	Description
Profile	Profile Name
SSID	SSID of AP to be connected
Channel	Channel information of AP to be connected. Channel information is needed only when connecting with ad-hoc.
Authentication	Authentication method of AP to be connected.
Encryption	Encryption method of AP to be connected.
Network Type	Select AP / ad-hoc.

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FCC Statement

Caution : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
This 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.

NOTE: The manufacturer is not responsible for any radio or TV interference
caused by unauthorized modifications to this equipment. Such modifications
could void the user's authority to operate the equipment.
NOTE: This equipment has been tested and found to comply with the limits for
a Class B digital device, pursuant to part 15 of the FCC Rules. These limits
are designed to provide reasonable protection 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.

WARNING: This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.