2018R CPE

2.4 GHz 802.11g Wireless Enhanced

Universal Range Extension SkyZhone Repeater

Users Manual

Version 1.1

JUL. 2007

Table of contents

Package Contents

The package you have received 5hould contain the following items:

Wirele55 LAN Repeater
One CD-R With U5er'5 Manual and Acrobat Reader 7.0
AC/DC Power Adapter
Detachable antenna with exten5ion cord
RJ-45 Ethernet cable
Quick In5tallation Guide

FCC STATEMENT

The SkyZhone Repeater complies with the part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interface
2. This device must accept any interface received, including interface that may cause undesired operation.

These limits are designed to provide reasonable protection against harmful interface in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used according to the instructions, may cause harmful interface to radio communication. However, there is no guarantee that interface will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which is found 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 or devices
Connect the equipment to an outlet other than the receiver's
Consult a dealer or an experienced radio/TV technician for assistance

FCC Caution: Any change or modification to the product not expressly approved by WLAN could void the user's authority to operate the device.

FCC RF 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. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Chapter

1

Installing Your SkyZhone Repeater

In this chapter, you'll learn how to connect your SkyZhone Repeater

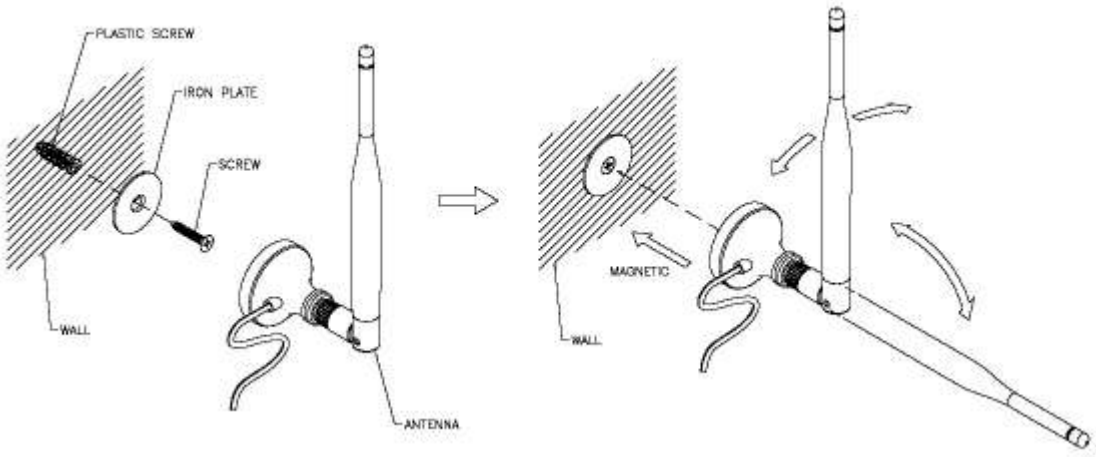
System Requirements

- One or more PCs (desktop or notebook) with Ethernet interface
- Broadband Internet access
- Ethernet cables
- Wireless interface (if planning to utilize wireless functions)

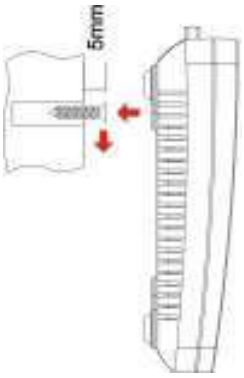
Installation Instructions

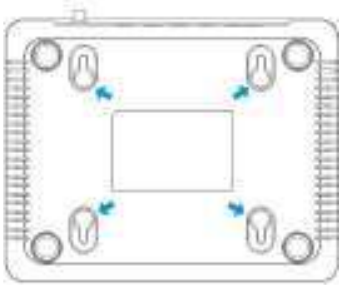
To connect the SkyZhone Repeater **HARDWARE**:

1. Make sure all equipments are turned off, including the SkyZhone Repeater and your PC(s)
2. Connect one or more client PCs to the LAN port (5). You can use Ethernet cable to connect to the router and PC, or use WLAN card to do the same thing after power on.
3. Install the antenna by either a) removing antenna from the magnetic base and attaching to the SkyZhone Repeater directly; or b) installing the wall-mount kit and attaching the antenna on it as shown below and connect the other end of the extension cord to the SkyZhone Repeater



4. Install wall-mount kit (optional) using provided tools.





5. Connect the power adapter (5VDC, 2.5A) to the power jack on the router. Then, plug the power cable into an outlet.

6. Turn on your PC(s). If this SkyZhone Repeater works correctly, you will notice that the PWR LED is lit; WLAN and LAN LEDs are flashing, till you power down the AP. The DIAG will be lit several seconds and then turn dark.

Chapter

2

Preparing Your Network

In this chapter, you'll learn what should be done first before configuring your SkyZhone Repeater

Bbefore you can configure your SkyZhone Repeater, you need to set up all the computers on your network for TCP/IP networking. You also need to know certain information from your ISP.

Configuring Windows for IP Networking

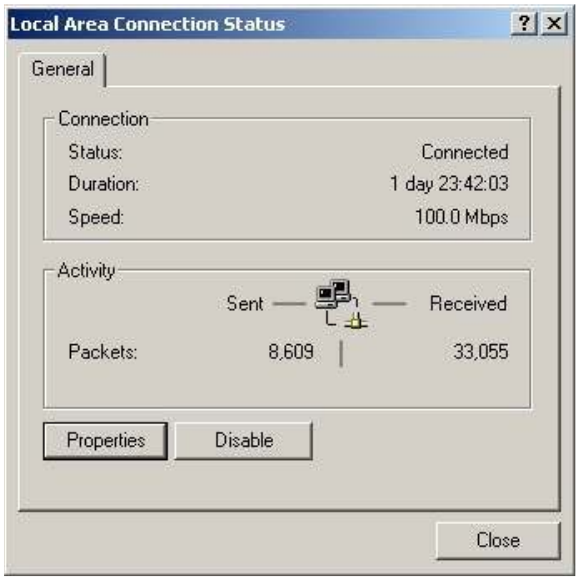
You need to configure each computer in your network for TCP/IP networking. If you plan to use the DHCP feature (recommended), you should configure each computer to receive an IP address automatically. See the procedure below for instructions.

If you don't plan to use DHCP, you'll need to manually assign an IP address to each computer. Refer to your Windows documentation for instructions on how to do this.

To CONFIGURE WINDOWS To RECEIVE DYNAMIC IP ADRESSES:

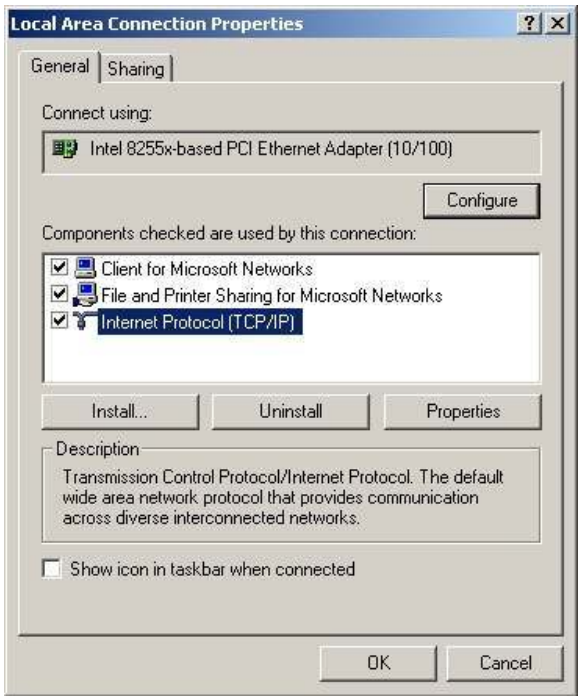
1. Click Start, and then choose Setting5 -> Network and Dial-up Connection5 -> [Name of your ISP connection].

   A Status dialog box will appear:



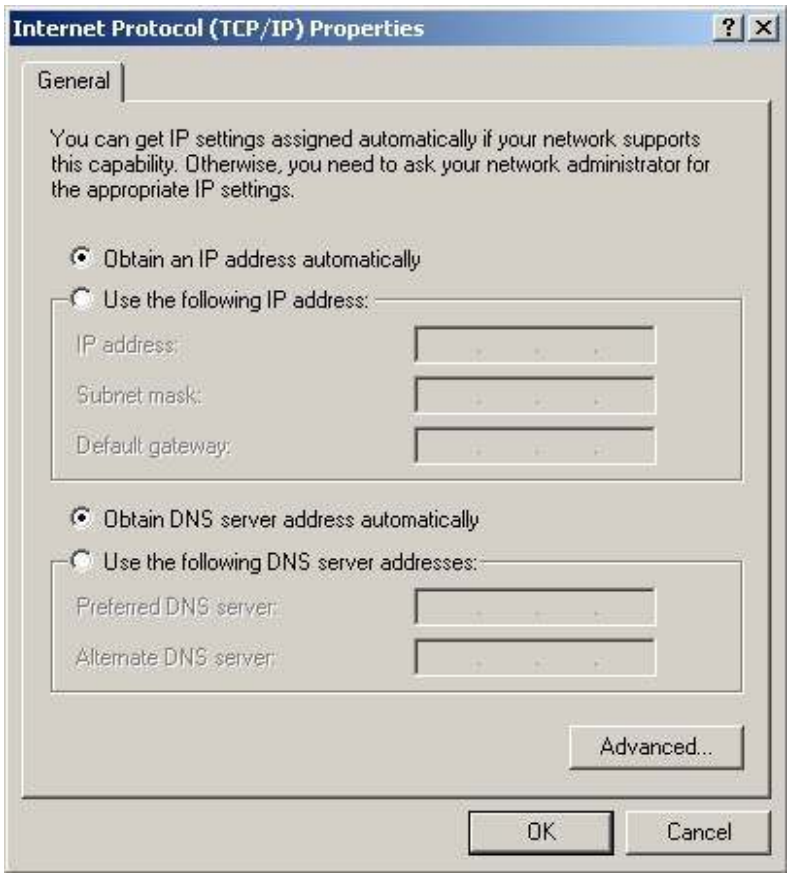
2. Click Propertie5.

   A Properties dialog box will appear:



3. Click Internet Protocol (TCP/IP), and then click Propertie5.

A TCP/IP Properties dialog box will appear:



4. Click obtains an IP addre55 automatically and obtains DNS 5erver addre55 automatically.

5. Click oK. You may need to restart your computer.

Note

This procedure applies to Windows 2000 operating systems only. For Windows 95/98/ME, Windows NT, or Windows XP, consults your Windows documentation.

Chapter 3

Functions

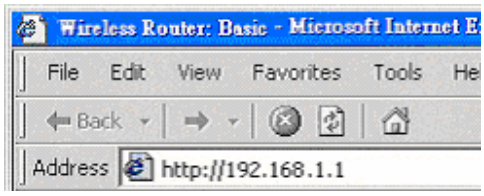
The SkyZhone Repeater comes with a web-based tool that you can use to set up and customize the router settings. You can access this tool from any computer on your network.

Note

For best results, use Microsoft Internet Explorer version 5.5 or later.

TO OPEN THE WEB-BASED ADMIN TOOL:

1. Open a browser on your PC.
2. Type http://192.168.1.1/ in the Addre55 field:



A logon page will appear:

3. Type in the Username and Password. The default values are both admin. If you login as a user (u5er/u5er), a read-only privilege will be granted.

   The SkyZhone Repeater Admin Tool will appear.

Note

The web-based Admin Tool will log you out after a certain period of idle time. If this happens, you will need to re-enter your username and password.

Basic

The Basic screen allows you to configure the basic operation of the

SkyZhone Repeater. The Basic screen is shown in the figure below.

Note

The graphics shown in this manual may differ slightly from your SkyZhone Repeater's screens.
The images that appear here are provided as examples only.

1. Admini5trator Name: The username used to login to the SkyZhone Repeater web page as anadministrator.

2. Admini5trator Pa55word: The password used to login to the SkyZhone Repeater web page as an administrator. Leave both fields blank to disable login authentication.

3. U5er Name: The username used to login to the SkyZhone Repeater web page as a user. User cannot perform any configuration modifications.

4. U5er Pa55word: The password used to login to the SkyZhone Repeater web page as a user. Leave both fields blank to disable login authentication.

5. SkyZhone Repeater Mode: Select SkyZhone Repeater to enable the SkyZhone Repeater related function; or Acce55 Point to act as AP only (No WAN interface/service, NAT, Firewall, DHCP server…etc).

Note

If the SkyZhone Repeater is selected, the Universal Range Extension (URE) feature is utilized as the Travel SkyZhone Repeater. In the other hand, select the Acce55 Point to utilize the URE as the SkyZhone Repeater. Please see Wirele55 page for more description.

6. Firewall: Select to enable/disable the firewall function.

7. WAN HTTP Port: Enter the port number of the SkyZhone Repeater's web page when accessed from the WAN port. Leave blank to deny remote access.

8. Time Zone: Select the time zone where the SkyZhone Repeater is operated.

9. NTP 5erver: The SkyZhone Repeater can synchronize its internal dock with the NTP 5erver (Internet time server) based on the time zone configured above.

10. Sy5log IP Addre55: The IP address of the Syslog server.

11. UPnP: Select to enable/disable UPnP (Universal Plug-n-Play).

12. Connection Logging: Select to enable/disable logging function of the SkyZhone Repeater web page access. Select Denied for failed login attempt only. Select accepted for successful login only. Select both for both login attempts. All logged record can be seen from the Statu5 page.

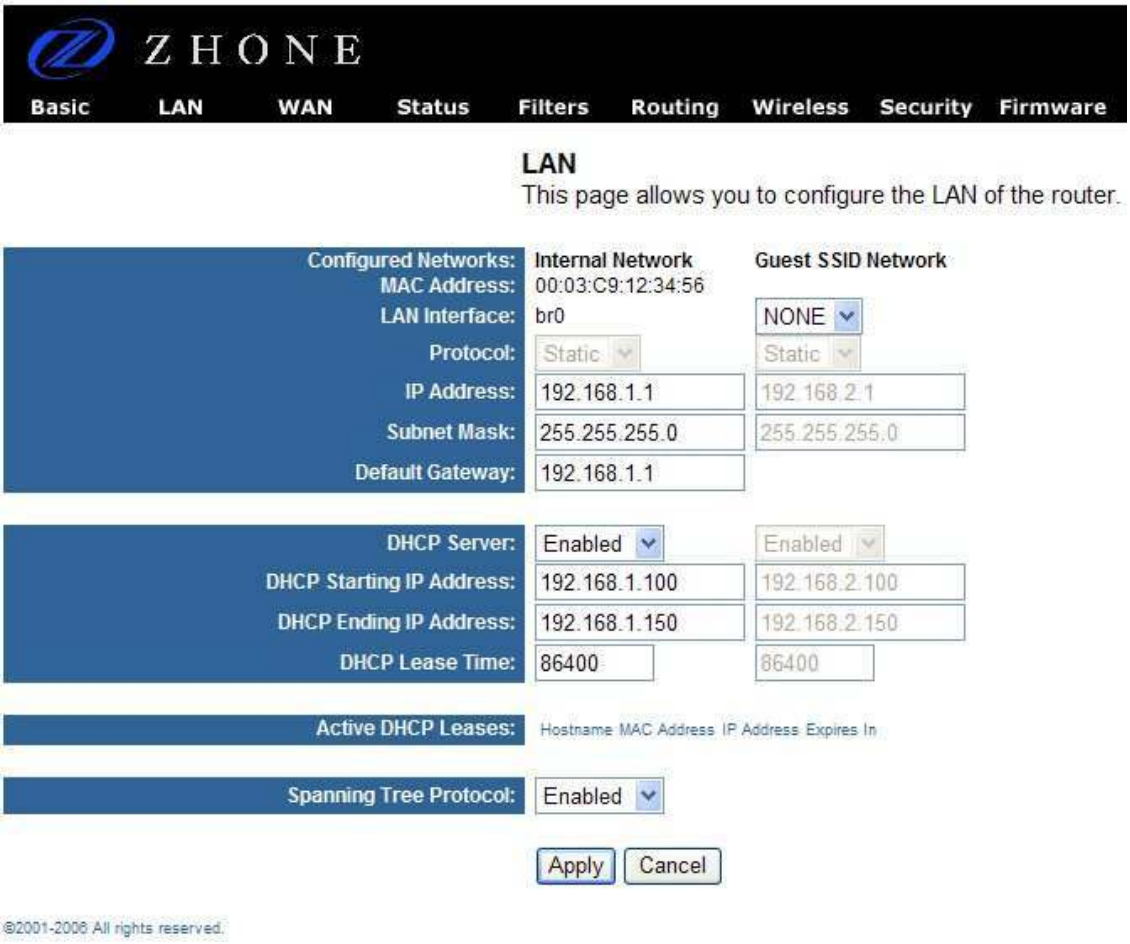
Click the Apply button to commit your settings.

Note

Clicking the Re5tore Default5 button restores the settings saved in the flash (Please see Save to Flash in Firmware page). The SkyZhone Repeater will return to factory default settings if Save to Fla5h has not been executed before.

LAN

The LAN screen allows you to configure the LAN interface of the SkyZhone Repeater



1. IP Addre55: The IP Address of the LAN interface.
2. Subnet Ma5k: The subnet mask of the LAN interface.
3. Default Gateway: The default gateway of the LAN interface.
4. DHCP Server: Select to enable/disable DHCP server functionality of the LAN. If you have already a DHCP Server in your network, or you don't want a DHCP Server, then please select the Di5abled radio button.

Note

If you change the LAN IP Address with the DHCP server running, you'll need to restart your client machines. If you change the LAN IP Address without the DHCP server running, you'll need to manually reconfigure your clients' IP addresses.

5. DHCP Starting/Ending IP Addre55: Enter the IP pool for the DHCP server. The address you specify will be the first/last IP address that can be assigned.

Example

If you choose 192.168.1.51 as the starting address and 192.168.1.100 as the ending address, the DHCP server will assign addresses to network clients that are between 192.168.1.51 and 192.168.1.100.

6. DHCP Lea5e Time: Enter the valid time (in seconds) of the DHCP leases. The default value is 86400, which equals to one day.

7. Active DHCP Lea5e: List all the DCHP lease related information, including DHCP client's MAC address, obtained IP address and expiration time.

8. Spanning Tree Protocol: Select to enable/disable the use of the Ethernet 802.1d Spanning Tree Protocol to eliminate bridging loops across the LAN interfaces.

WAN

The WWAN screen allows you to configure the Wireless WAN interface of the SkyZhone Repeater Two types
of the WAN protocols are supported: Static and DHCP. (The Wireless WAN interface only takes effect when you turn on the URE mode in the Wireless page.)

1. Connection: Select the specified WAN connection to use. Before you can do this, at least one WAN connection must be configured first. Click the New button to create additional WAN connections. To delete a WAN connection, select the specified WAN connection and then click the Delete button.

2. De5cription: Enter the description of the specified WAN connection.

3. Protocol: Select the desired WAN protocol or disable the WAN interface.

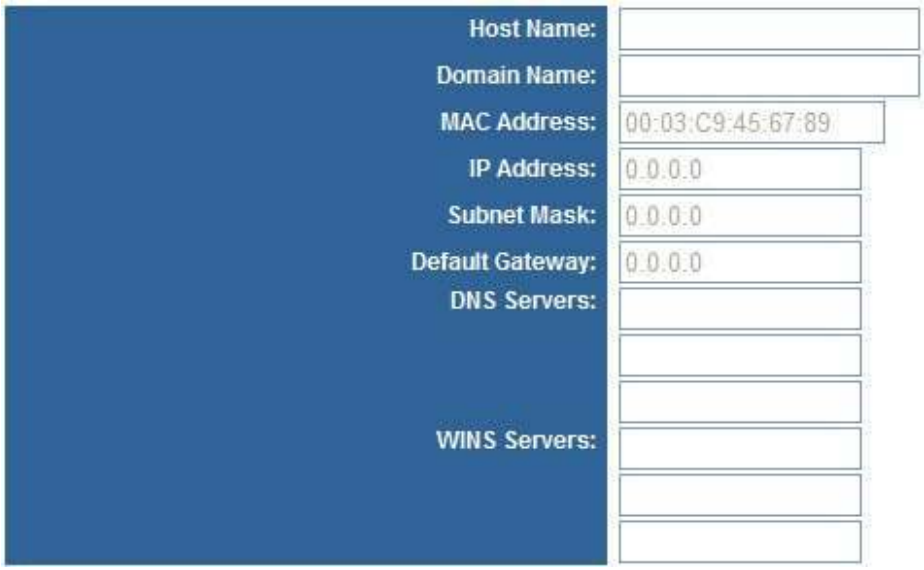
4. Primary: Only primary WAN connection is active. Other WAN connections will be disabled.

DHCP

Select DHCP from the Protocol list. The WAN interface will obtain all the necessary information, such as IP address, subnet mask and default gateway, from the DHCP server located in the network.

Static

You need to enter all the data manually to make your SkyZhone Repeater work properly.



1. Ho5t Name: Some ISPs require that a host name be provided when requesting an IP address through DHCP Server. You may have to check with your ISP to see if you're broadband Internet service has been configured with a host name. In most case, leaving the field blank will work.

2. Domain Name: Set the domain name to be provided to LAN clients who request an IP address through DHCP Server. You may have to check with your ISP to see if your broadband Internet service has been configured with a domain name. In most case, leaving the field blank will work.

3. MAC Addre55: Show the WAN MAC address.

Warning

Please don't change the default WAN MAC Address unless your ISP request you to do this action.

4. IP Addre55: Set the IP address of the WAN interface.

5. Subnet Ma5k: Set the IP mask of the WAN interface.

6. Default Gateway: Set the IP address of the default gateway on the WAN.

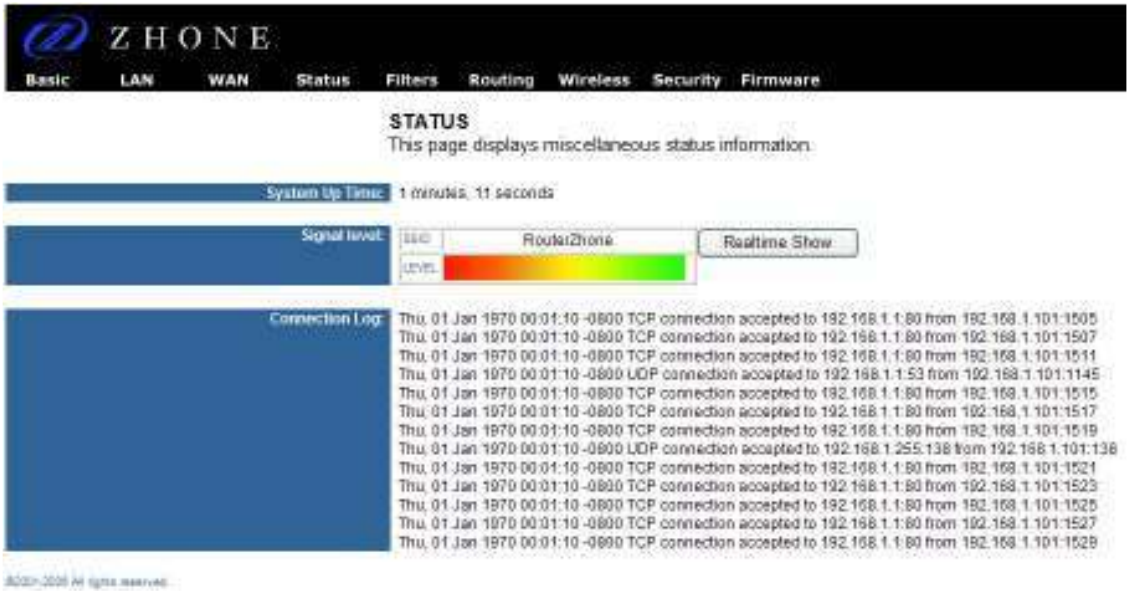
7. DNS Server5: The DNS (Domain Name System) is how the Internet translates domain or website names into Internet address or URLs. Your ISP will provide you with at least one DNS Server IP address. If you wish to use another one, type that IP address in one of these fields. You can type up to three DNS Server IP address here. The SkyZhone Repeater will use these for quicker access to functioning DNS servers.

8. WINS Server5: The Windows Internet Naming Service (WINS) manages each PC's interaction with the Internet. If you use a WINS Server, enter that server's IP address here. Otherwise, leave this blank.

Status

The Status screen is a read-only display that gives you information about your SkyZhone Repeater. The data displayed may change depending on your current configuration.

The Status screen is shown in the figure below.



The displayed data may include:

Sy5tem up Time: Showing the duration since the SkyZhone Repeater last power up.

Signal level: Showing the AP signal level which our Wireless WAN connects to. And the "Real-time Show" button will open a popup window to update the signal level every 3 seconds.

Connection Log: Showing a log of recent connection attempted.

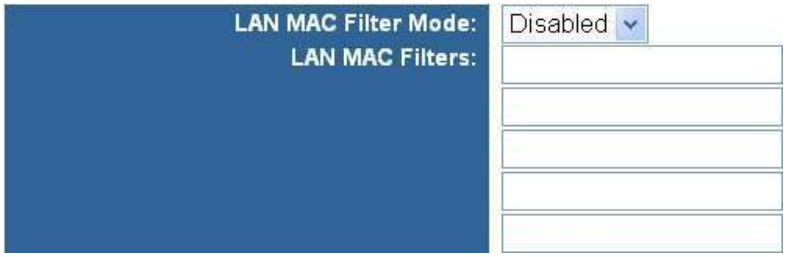
Filters

Use the Filters screen to create and apply filters that can selectively allow traffic to pass in and out of your network.

Warning

Overwriting the factory default filters may result in your network clients not being able to access the Internet. When you define new filters, we recommend that you choose an empty row.

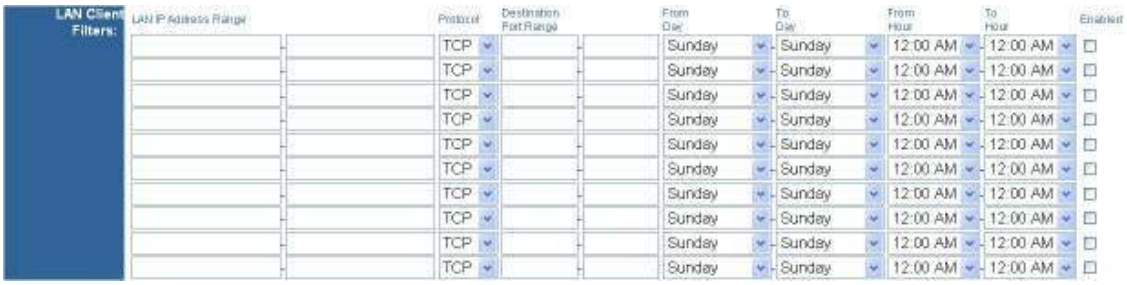
The Filters screen is shown in the figure below.



1. LAN MAC Filter Mode: Select whether clients with the specified MAC address are allowed or denied access to the SkyZhone Repeater.

2. LAN MAC Filter5: Filter packets from LAN machines with the specified MAC addresses. Enter the MAC address in the format of xx:xx:xx:xx:xx:xx.

After configuring filter mode and filtered MAC addresses, you must configure the conditions in the table below.



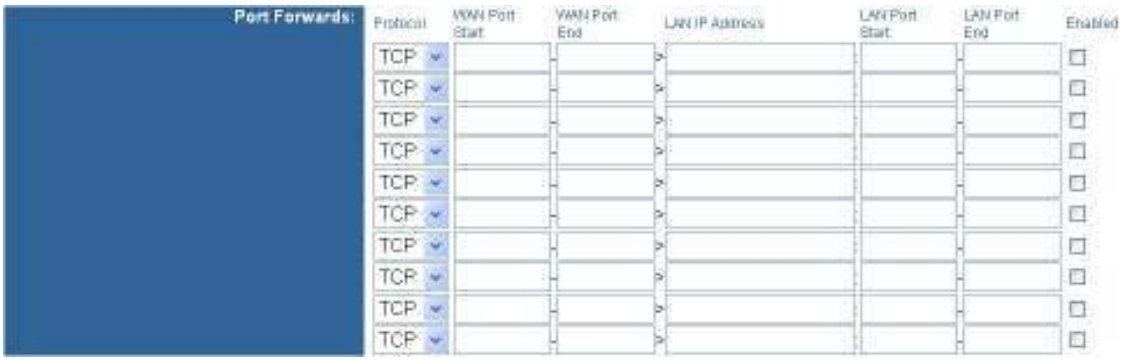
1. LAN Client Filter5: Filter packets from IP address destined to certain port ranges during the specified time.

Routing

Routing is the act of moving information across an Internet from a source to a destination. Along the way, at least one intermediate node typically is encountered. Routing is often contrasted with bridging, which might seem to accomplish precisely the same thing to the casual observer. The primary difference between these two are bridging occurs at Layer 2 (the link layer) of the OSI reference model, whereas routing occurs at Layer 3 (the network layer). This distinction provides routing and bridging with different information to use in the process of moving information from source to destination, so these two functions accomplish their tasks in different ways. The Routing screen is shown in the figure below.

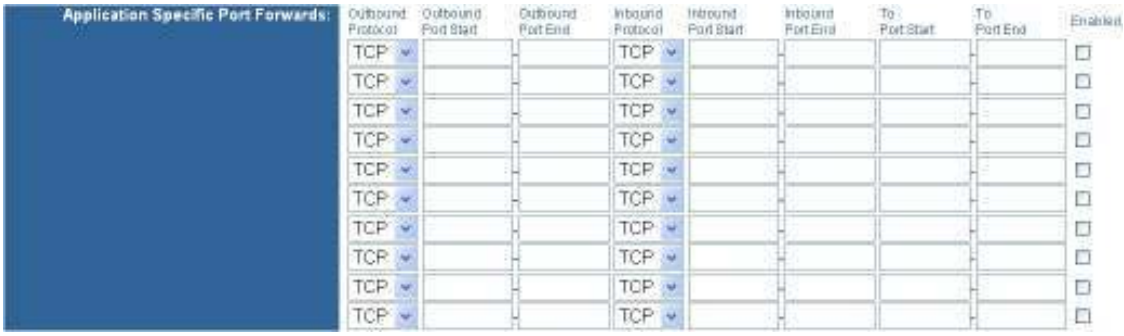
Port Forwards

Port forward, also called Virtual Server, forwards packets destined to ports in the first range to the LAN machine with the specified IP address. You may optionally specify a second range. (The range should not overlap the first range.)



Application Specific Port Forwards

The function is used for special applications whose outbound ports differ from the inbound ports. For this feature, the SkyZhone Repeater will watch outbound data for specific port numbers. The SkyZhone Repeater will remember the IP address of the computer that sends a transmission requesting data, so that when
the requested data returns through the SkyZhone Repeater, the data is pulled back to the proper computer by
way of IP address and port mapping rules



DMZ IP Address

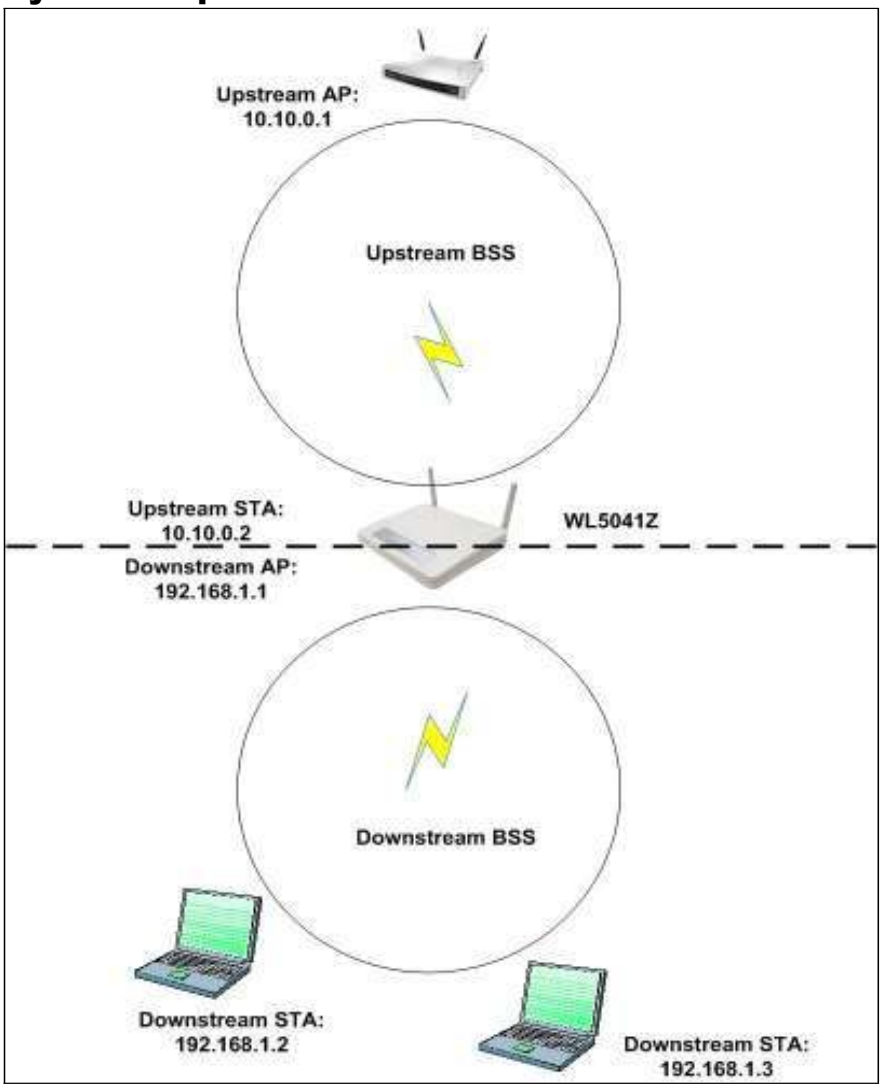
The DMZ feature allows one local user to be exposed to the Internet for use of a special-purpose service such as Internet gaming or video conferencing. DMZ forwards all the ports at the same

time to one PC. The Port Forwarding feature is more secure because it only opens the ports you want to have opened, while DMZ hosting opens all the ports of one computer, exposing the computer so the Internet can see it.

Wireless

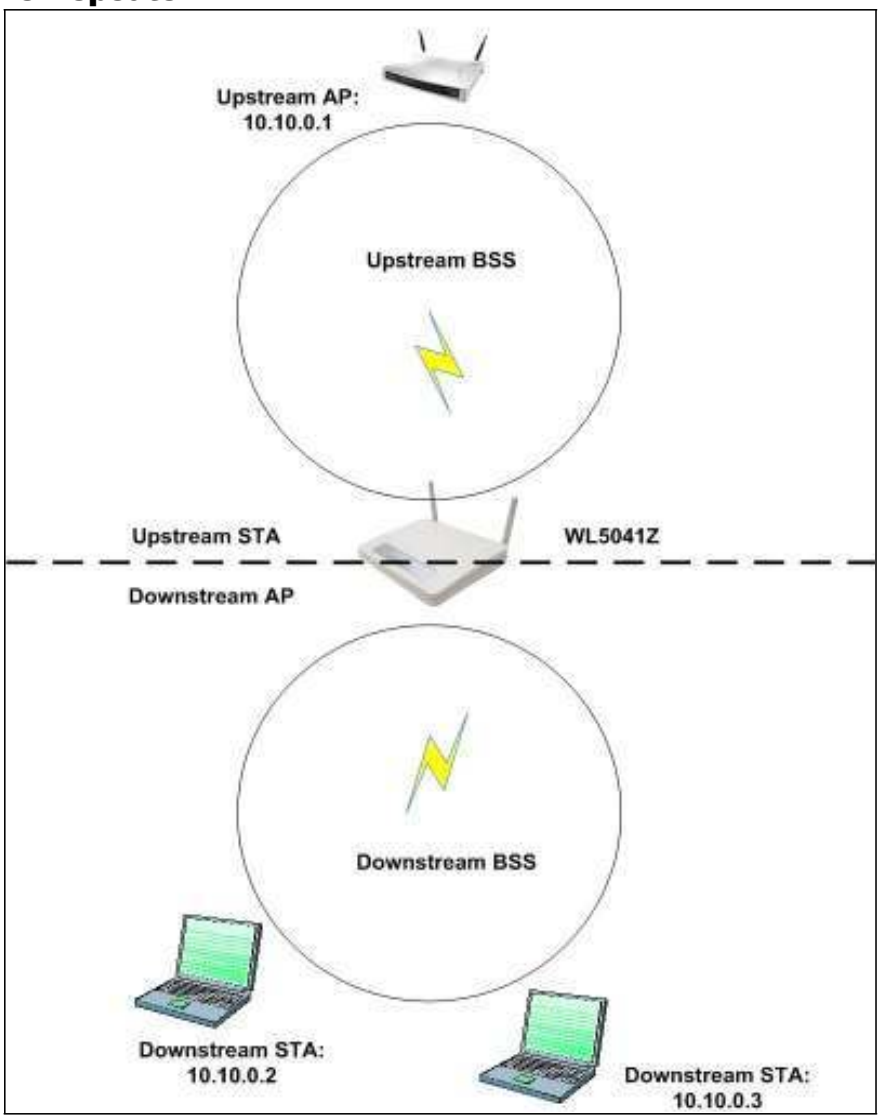
The 2018R CPE uses a single physical wireless 802.11 interface to provide the virtual interfaces which operate as both client station (STA) and access point (AP) simultaneously. The 2018R CPE is an AP with its own basic service set (BSS) which is called Down5tream BSS in this document. Also, it acts as a STA to another AP called Up5tream BSS. Depending on the SkyZhone Repeater configuration, the 2018R CPE URE feature can be used as two main sub-features: Travel SkyZhone Repeater and SkyZhone Repeater. In both cases, Upstream BSS and Downstream BSS must use the same channel.

Travel SkyZhone Repeater



To enable the Travel SkyZhone Repeater, the SkyZhone Repeater Mode in Ba5ic page must be set to SkyZhone Repeater. The
2018R CPE will do NAT between Upstream BSS and Downstream BSS.

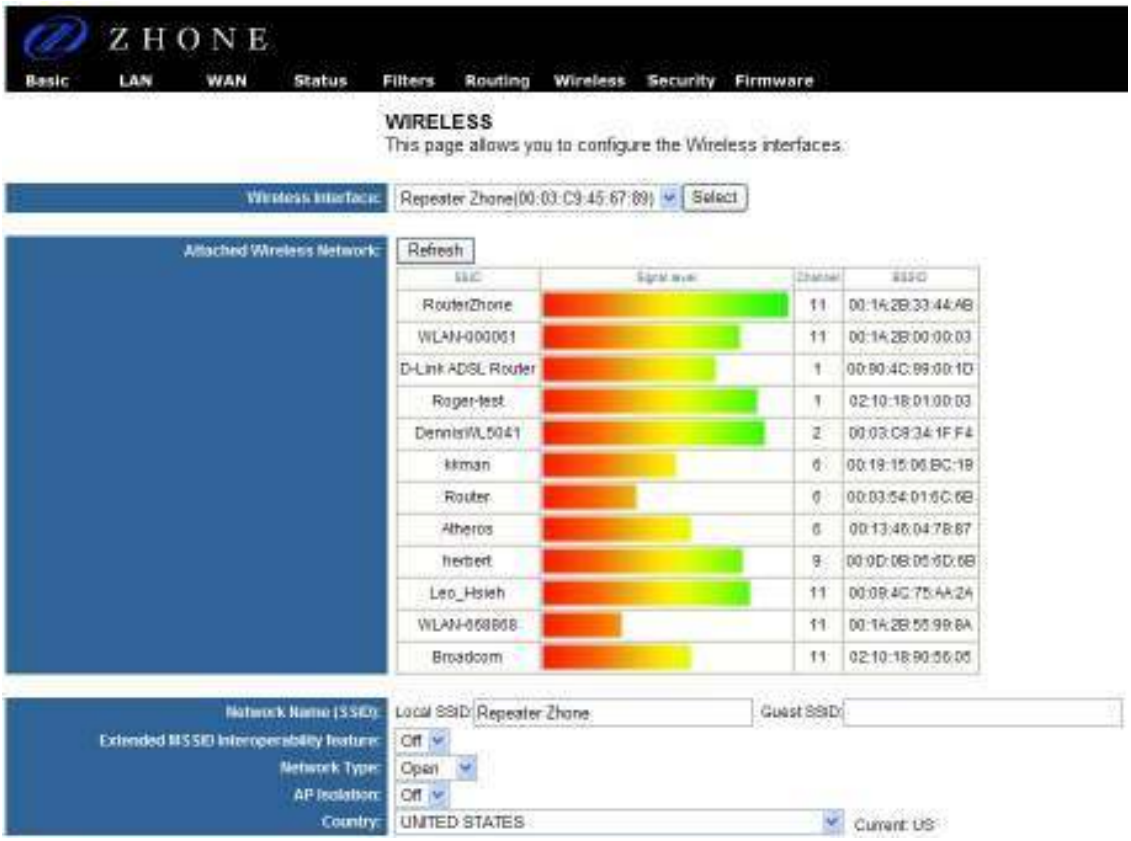
SkyZhone Repeater



To enable the SkyZhone Repeater, the SkyZhone Repeater Mode in Ba5ic page must be set to Acce55 Point.
The 2018R CPE will do layer 2 bridging between the Upstream BSS and Downstream BSS. In this case, both BSS remain in the same subnet. This is useful when extending range is needed but the existing AP is not WDS-capable device.

Other Configurations:

Basic Settings:



1. Wirele55 Interface: Shows the wireless interface SSID and MAC address.

2. Attached Wirele55 Network: All available APs will be displayed here. Click the Refresh to refresh the list.

3. Network Name (SSID): When URE mode is OFF, the Local SSID field is the downstream AP's SSID and the Gue5t SSID field allows you to create a guest network rather than the original local network. (After creating the guest network, you can configure this network in the LAN page. Usually, we may not use the guest network, and leave this field as blank.) In this mode, the WL5041 will act as a pure AP. The SSID must be identical for all devices in the wireless network. It is case- sensitive and must not exceed 32 alphanumeric characters, which may be any keyboard character.

When the URE mode is ON, the Network Name is like the uper picture. The remote AP's SSID must be entered in the Remote SSID field (Upstream AP) and put your downstream AP's SSID in the Local SSID field.

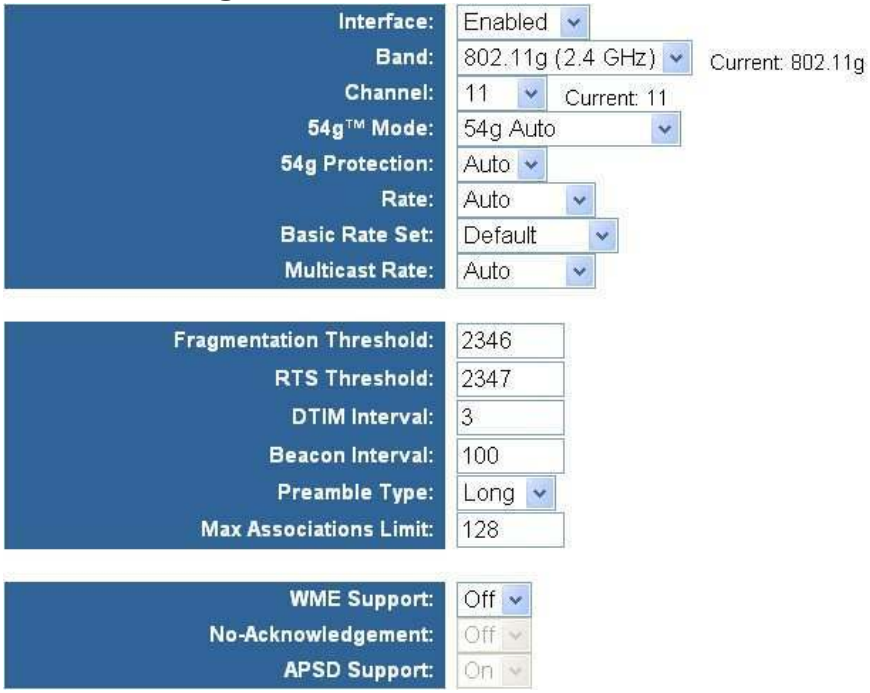
4. Extended MSSID Interoperability feature: This is a feature which can reduce the interoperability problem when multiple SSID are used.

5. Network Type: When wireless clients survey the local area for wireless networks to associate with, they will detect the SSID broadcast by the SkyZhone Repeater. To broadcast the SkyZhone Repeater's SSID, keep the default value Open. If you do not want to broadcast the SkyZhone Repeater's SSID, then select Closed.

6. AP I5olation: This is used to isolate wireless clients who connect to different APs.

7. Country: Restrict the channel set based on country requirements.

Advanced Settings:



1. Interface: Select to enable/disable the wireless interface.

2. Band: Select the wireless radio band to use.

3. Control Channel: Select the appropriate channel from the list provided to correspond with your network settings; or select Auto to allow AP to decide. All devices in your wireless network must use the same channel in order to function correctly.

4. 54g Mode: Select the mode to 54g Auto for the widest compatibility. Select the mode to 54g Performance for the fastest performance among 54g certified equipment. Set the mode to 54g LRS if you are experiencing difficulty with legacy 802.11b equipment.

5. 54g protection: In Auto mode the SkyZhone Repeater will use RTS/CTS to improve 802.11g performance in mixed 802.11g/802.11b networks. Turn protection off to maximize 802.11g throughput under most conditions.

6. Rate: Select the transmitting rate in 11b/g network. The range is from 1 to 54Mbps. The rate of data transmission should be set depending on the speed of your wireless network. You can select from one transmission speed, or keep the default setting, Auto, to have the SkyZhone Repeater automatically use the fastest possible data rate.

7. Ba5ic Rate Set: Select the basic rate that wireless clients must support.

8. Multica5t Rate: Select the transmitting rate for the multicast/broadcast packets.

9. Fragmentation Thre5hold: This value should remain at its default setting of 2346. The range is 256-2346 bytes. It specifies the maximum size for a packet before data is fragmented into multiple packets. If you experience a high packet error rate, you may slightly increase the Fragmentation. Setting the Fragmentation too low may result in poor network performance. Only minor modifications of this value are recommended.

10. RTS Thre5hold: This value should remain at its default setting of 2347. The range is 0-2347 bytes. Should you encounter inconsistent data flow, only minor modifications are recommended. If a network packet is smaller than the preset RTS threshold size, the RTS/CTS mechanism will not be enabled. The SkyZhone Repeater sends Request to Send (RTS) frames to a particular receiving station and negotiates the sending of a data frame. After receiving an RTS, the wireless station responds with a Clear to Send (CTS) frame to acknowledge the right to begin transmission.

11. DTIM Interval: The default value is 3. This value, between 1 and 255 milliseconds, indicates the interval of the Delivery Traffic Indication Message (DTIM). A DTIM field is a countdown field informing clients of the next window for listening to broadcast and multicast messages. When the SkyZhone Repeater has buffered broadcast or multicast for associated clients, it sends the next DTIM with a DTIM Interval value.
Its clients hear the beacons and awaken to receive the broadcast and multicast message.

12. Beacon Interval: The default value is 100. Enter a value between 1 and 65535 milliseconds The Beacon Interval value indicates the frequency interval of the beacon. A beacon is a packet broadcast by the SkyZhone Repeater to synchronize the wireless network.

13. Preamble Type: Set whether short or long preambles are used. Short preambles improve throughput but all clients in the wireless network must support this capability if selected.

14. Max A55ociation5 Limit: Enter the client number which can associate to this AP.

15. WME Support: Select to enable/disable WME.

16. No-Acknowledgment: Select off to save bandwidth; or select on to send out acknowledgment.

17. APSD: Select to enable/disable APSD (Automatic Power Save Delivery).

URE Settings:

1. Mode: Select Access Point to operate as a normal AP.

2. URE Mode: Select on to operate as the Travel SkyZhone Repeater or SkyZhone Repeater

WDS Settings:

1. Bridge5: Enter the peer access point MAC addresses to form the wireless distribution system (WDS).

2. Bridge Re5triction: Select Di5abled to disable wireless bridge restriction. Any wireless bridge (including the ones listed in Bridge5) will be granted access. Select Enabled to enable wireless bridge restriction. Only those bridges listed in Bridge5 will be granted access.

3. Bridge Link Detection Interval: Sets the Wireless bridge link detection interval in seconds. Leave blank or set to zero to disable the detection.

MAC Restriction

The MAC Re5triction is used to control wireless client devices access based on their MAC addresses. You can choose to allow or deny the specific MAC addresses.

1. MAC Re5trict Mode: Select the clients with the specified MAC address are allowed or denied wireless access.

2. MAC Addre55e5: To allow or denies wireless access for clients with the specified MAC addresses. Leave all entries blank to allow access for any client

Authentication Status:

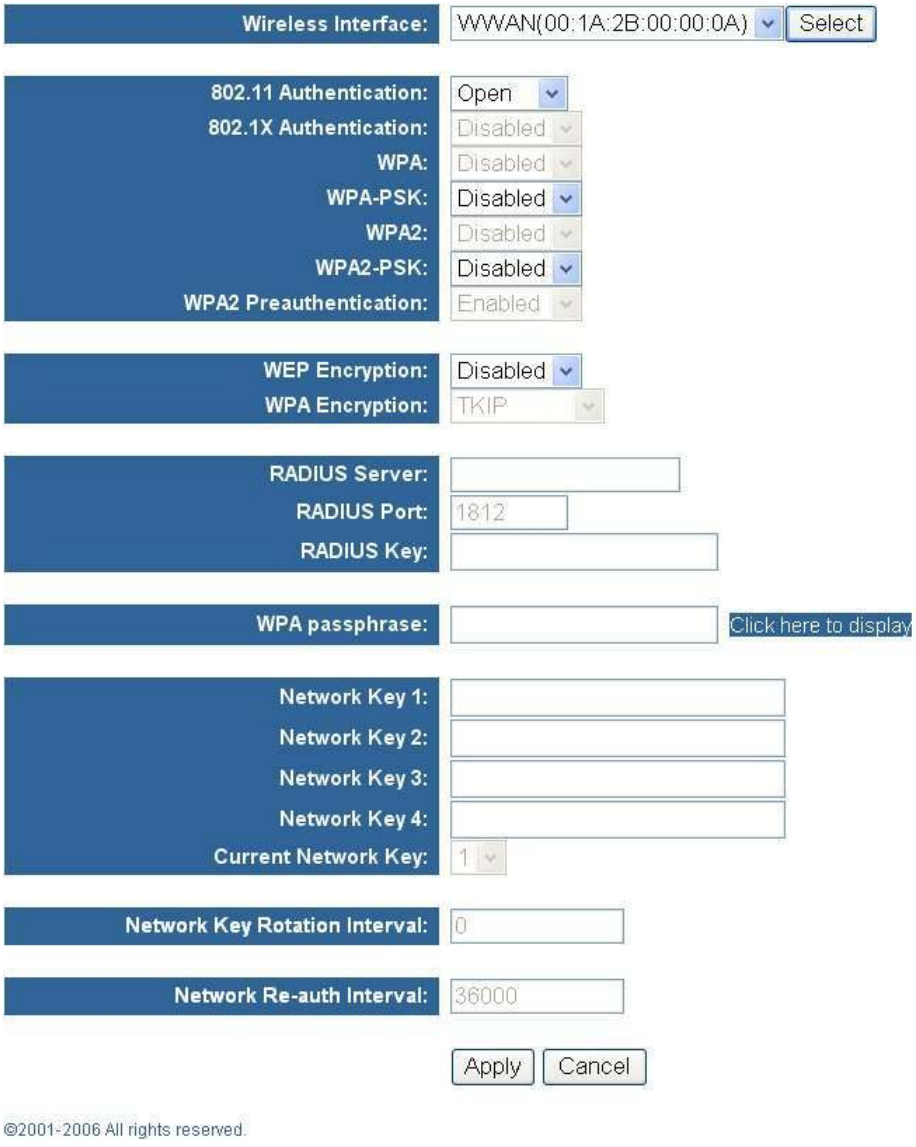
All STAs currently authenticated to this AP will be displayed here including the remote AP (if URE is enabled and the connection is on).

Security

The SkyZhone Repeater's wireless security options include WEP, 802.1x, WPA, WPA-PSK (Pre- Shared Key), WPA2, WPA2-PSK. But only WEP, WPA-PSK and WPA2-PSK are available when URE is enabled.

Note

You can use different security methods on the Downstream and Upstream BSS. But you must configure their settings separately (select specified BSS from the Wirele55 Interface and then configure its settings below).



WEP

WEP, short for Wired Equivalent Privacy, is a protocol for wireless LANs or local area networks. This WEP is defined in the 802.11 Standard. WEP is designed so security levels are maintained at the same level as the wired LAN. WEP's aim is to provide security by encrypting data over radio waves. WEP protects data as it's transmitted from one end point to another. WEP is used at the two lowest layers, the data link and physical layer. WEP is designed to make up for the inherent security in wireless transmission as compared to wired transmission.

Use the following steps to configure WEP:

1. Select Network Authentication type from the 802.11 Authentication drop-down list. (Shared is better than open)

2. Select Enabled from the WEP Encryption drop-down list.

3. Specify the encryption key from the Current Network Key drop-down list.

4. Enter the key into the Network Key field 1~4. (Enter 5 ASCII characters or 10 Hexadecimal digits for a 64-bit key. Enter 13 ASCII characters or 26 Hexadecimal digits for a 64-bit key.)

5. Click the Apply button to apply settings.

802.1X

802.1X is the IEEE standard for access control for wireless and wired LANs, 802.1X provides a means of authenticating and authorizing devices to attach to a LAN port. This standard defines the Extensible Authentication Protocol (EAP), which uses a central authentication server to authenticate each user on the network. A RADIUS server is required for authentication.

Use the following steps to configure 802.1X:

1. Select Network Authentication type from the 802.11 Authentication drop-down list. (Shared is better than open)

2. Select Enabled from the 802.1X Authentication drop-down list.

3. Enter your RADIUS 5erver IP address, Port and Key.

4. Configure WEP Encryption (see above for detail).

5. Click the Apply button to apply settings.

WPA/WPA2

Wi-Fi Protected Access was designed to provide improved data encryption, perceived as weak in WEP, and to provide user authentication, largely nonexistent in WEP.
To take full advantage of WPA, a RADIUS server is needed in your network to authenticate users. For most home or SOHO users, WPA-PSK is the easiest way to implement and provides adequate protection for your wireless network.

Use the following steps to configure WPA/WPA2:

1. Select open from the 802.11 Authentication drop-down list.
2. Select Enabled from the WPA/WPA2 drop-down list.
3. Select encryption method from the WPA Encryption drop-down list. Select TKIP for WPA; select AES or TKIP+AES for WPA2.
4. Enter your RADIUS 5erver IP address, Port and Key.
5. Click the Apply button to apply settings.

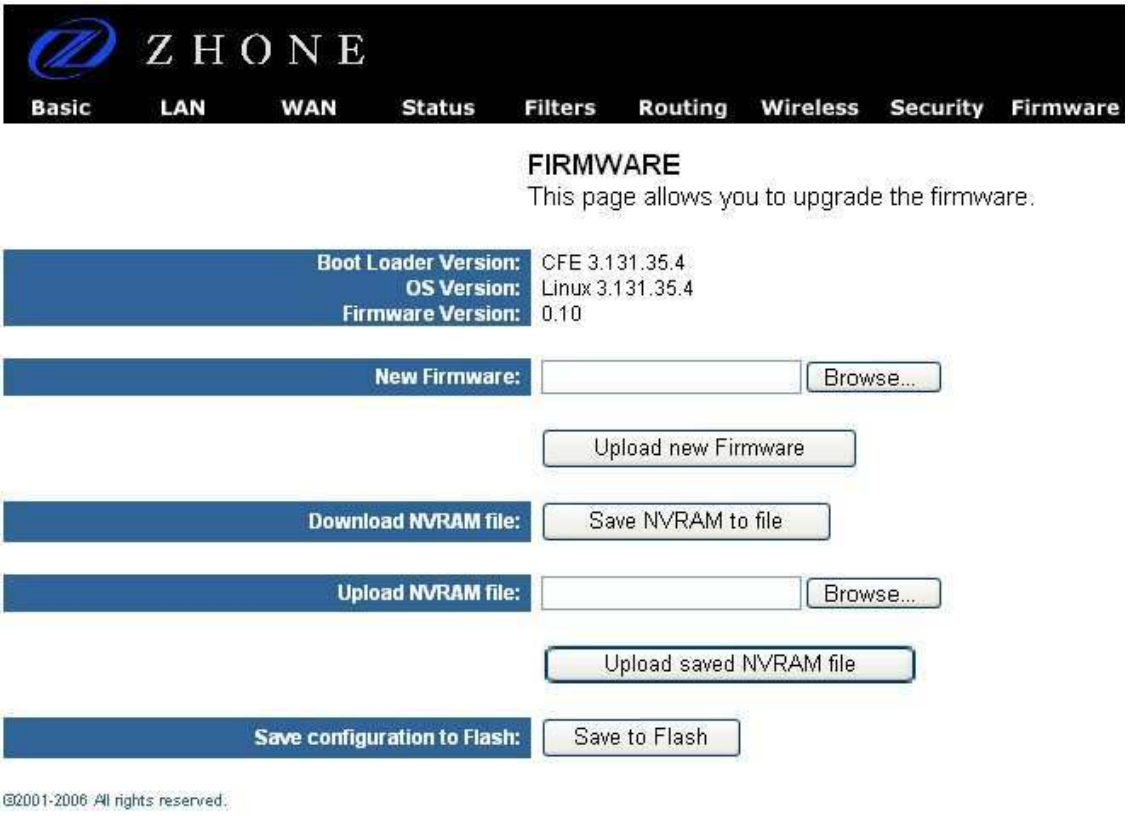
WPA/WPA2-PSK

Use the following steps to configure WPA/WPA2:

1. Select open from the 802.11 Authentication drop-down list.
2. Select Enabled from the WPA/WPA2-PSK drop-down list.
3. Enter 8~63 ASCII characters in the WPA pa55phra5e filed.
4. Click the Apply button to apply settings.

Firmware

The SkyZhone Repeater's firmware version is shown here. And you can also perform firmware upgrade and configuration file save/restore in this page.

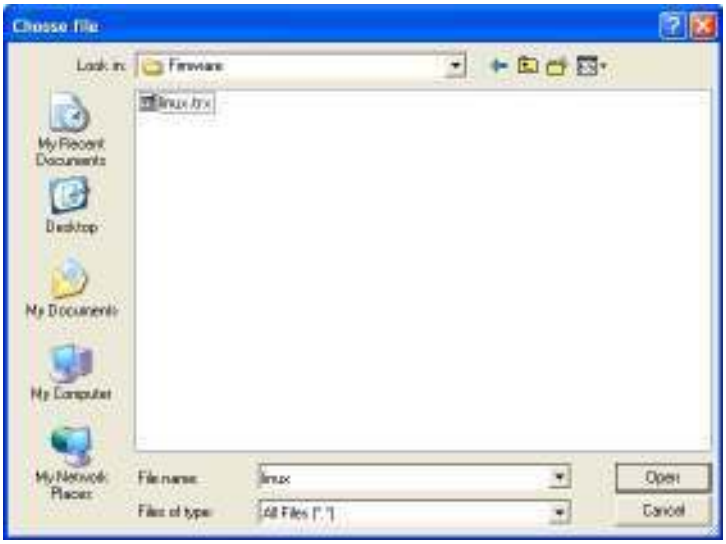


Upgrade Firmware

The following steps show you how to upgrade firmware form local PC:

1. Download the latest firmware image file from the vendor's website and save it to your PC's hard drive. Make sure to write down the file location.

2. Type the filename and path location directly into the New Firmware field, or click the Brow5e… button to launch the Choo5e file dialog box.



3. Locate the saved firmware and click the Open button.

4. Click the Upload New Firmware button. The SkyZhone Repeater will start firmware upgrade process and reboot after completion.

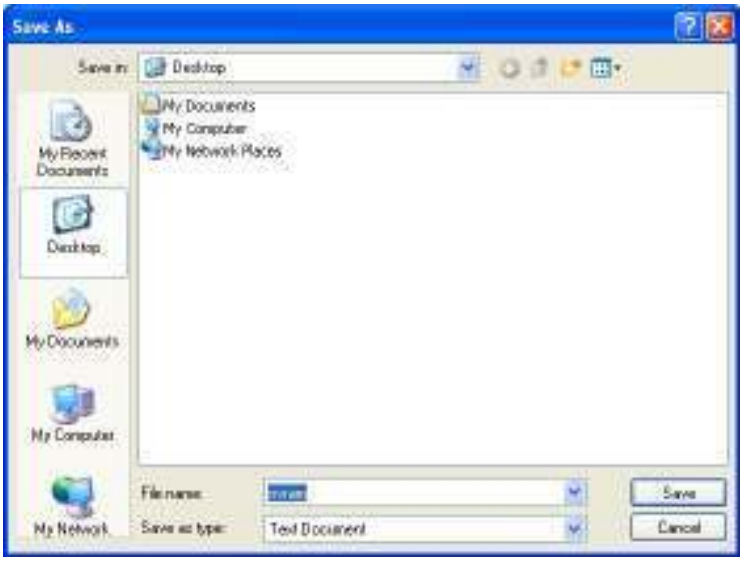
> **Warning**
>
> Upgrading the firmware process takes several minutes. Do not power off the SkyZhone Repeater while the firmware upgrade operation is in progress.

Save the Configuration File

All the configurations made to the SkyZhone Repeater can be saved as a text file. You can always restore the configuration back if any unwanted modification has been made.

The following steps show you how to save the configuration file to the local PC:

1. Click the Save NVRAM to file button to launch the Save A5 dialog box.



2. Browse to the specified folder and rename the file (optional).

3. Click the Save button to save the configuration file to the specified location.

Restore the Configuration File

Use the following steps to restore the saved configuration file:

1. Click the Brow5e…button in the Upload NVRAM file field to launch the Choo5e file dialog box.

2. Locate the saved file and click the open button.

3. Click the Upload Saved NVRAM file button. The SkyZhone Repeater will start uploading configuration file process and reboot after completion.

Save the Configuration File to Flash

You can also save the configuration file to the SkyZhone Repeater's flash instead of your local PC hard drive. Just click the Save to Fla5h button and then the SkyZhone Repeater will save the current settings to its flash and reboot.

Reset to Default

Reset to User Defined Default

This device has a reset button that can return to the original setting. You can find this button in the rear panel of the device. The reset steps are shown as below:

1. Power on the device and wait for booting completion.
2. Press the reset button for 8 ~ 10 seconds.
3. Release button.
4. The device will restart and return to its default settings.

You can also reset to user defined default settings from the SkyZhone Repeater Admin Tool. Go to the Ba5ic page and you'll find the Re5tore Default5 button in the page bottom.

Reset to Factory Default

This device has a reset button that can return to the factory default setting. You can find this button in the rear panel of the device. The reset steps are shown as below:

1. Power on the device.
2. Press the reset button for 30 seconds.
3. Release button.
4. The device will restart and return to its factory default settings.