



# **Wireless Software User's Manual**

Version 2.1 (May 2019)

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## FCC Notice

This equipment has been tested and found to comply with the limits for a Class-A 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. It may cause harmful interference to radio communications if the equipment is not installed and used in accordance with the instructions. 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.

**Caution:** Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

## CE Mark Warning

This is a Class-A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

## Industrial Ethernet Wireless APs

Software User Manual

This manual supports the following models:

- AMS-7131-AC
- AMS7131-AC-T
- AMS-7131
- AMS-7131-T
- AMS-2111
- AMS-2111-T

This manual supports the following software version:

- Release: r39711 (5/2/19)

Please check our website ([www.antaira.com](http://www.antaira.com)) for any updated manual or contact us by e-mail ([support@antaira.com](mailto:support@antaira.com)).

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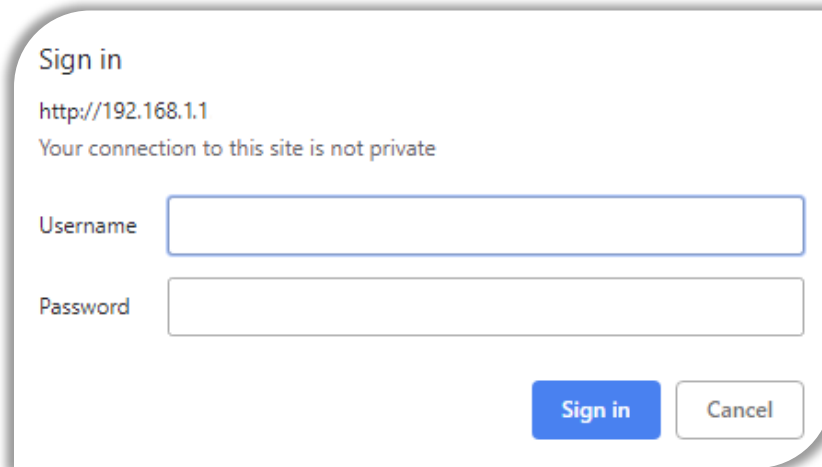
# 1. Access with Web Browser

## 1.1 Web GUI Login

All of Antaira's industrial managed devices are embedded with HTML web GUI interfaces. They provide user-friendly management features through its design and allows users to manage the devices from anywhere on the network through a web browser.

**Step 1:** To access the WEB GUI, open a web browser and type the following IP address: <http://192.168.1.1>

**Step 2:** The default WEB GUI login:  
Username: root  
Password: admin



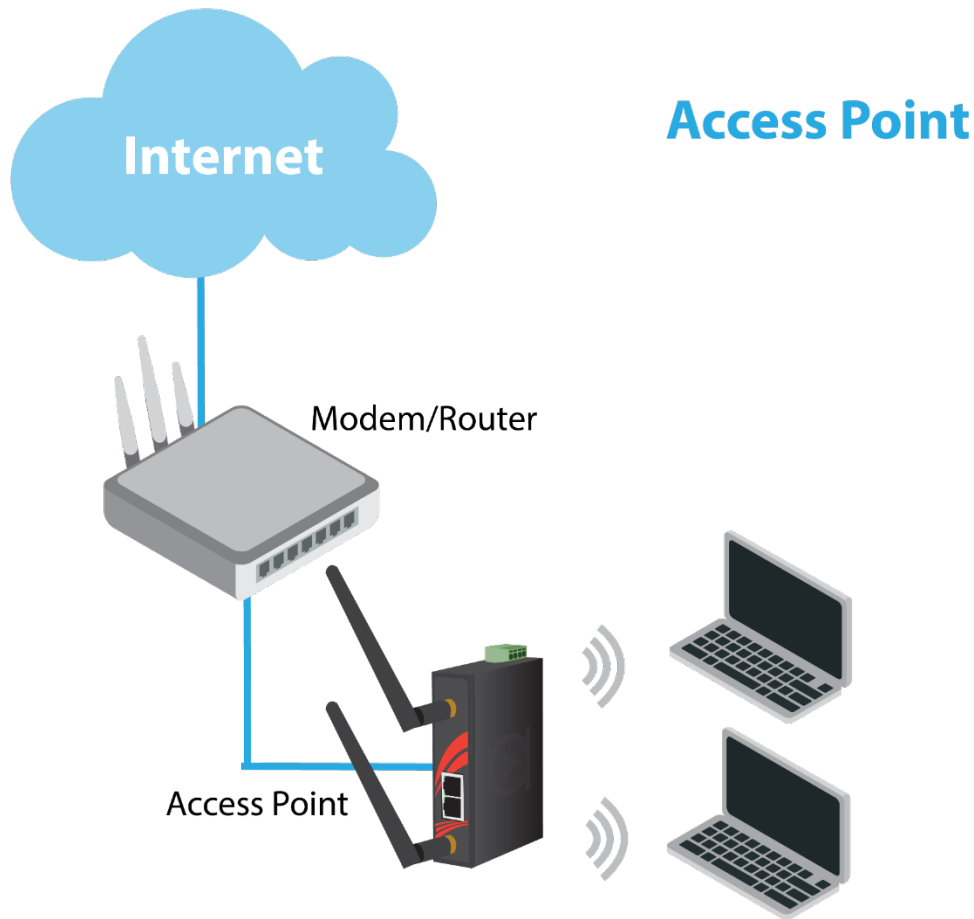
The image shows a browser sign-in dialog box with the following elements:

- Title: Sign in
- Address bar: http://192.168.1.1
- Warning: Your connection to this site is not private
- Username field: A text input box with the label "Username" to its left.
- Password field: A text input box with the label "Password" to its left.
- Buttons: A blue "Sign in" button and a white "Cancel" button with a grey border, located at the bottom right.

## 1.2 Operation Modes

### 1.2.1 Access Point

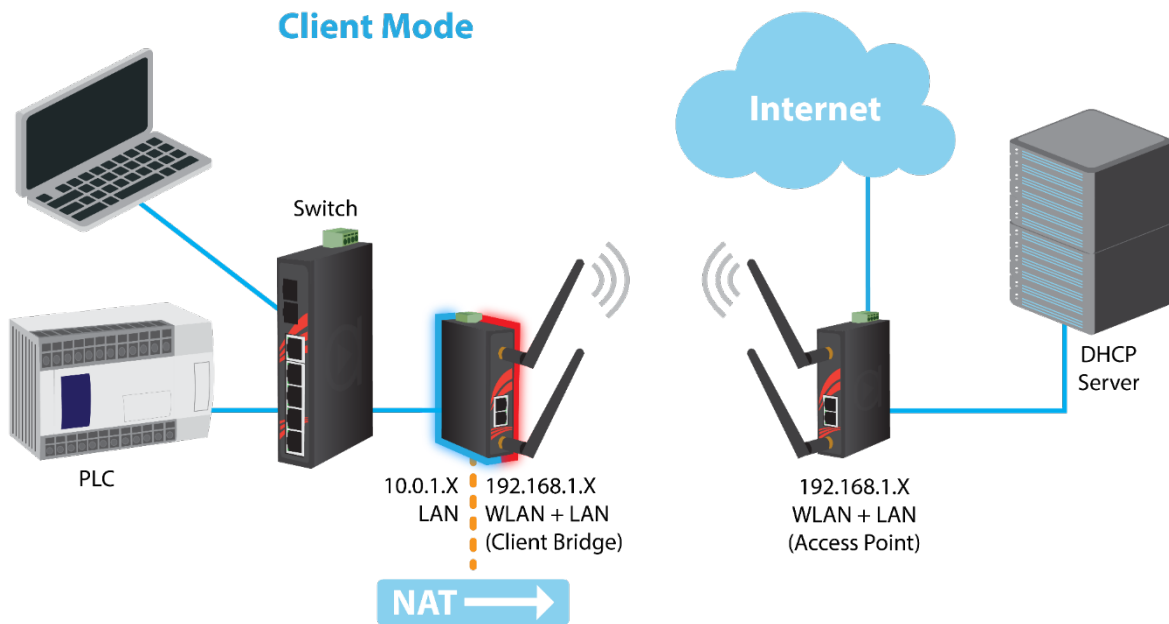
The access point mode allows Wi-Fi devices to connect to a wired network. In this mode, multiple wireless devices can be supported on a single wired local area network. In the example below, Internet is provided via the Modem/Router. The Access Point is connected directly to the Modem/Router by an Ethernet cable. Multiple devices can then connect to the access point's Wi-Fi and access the Internet.





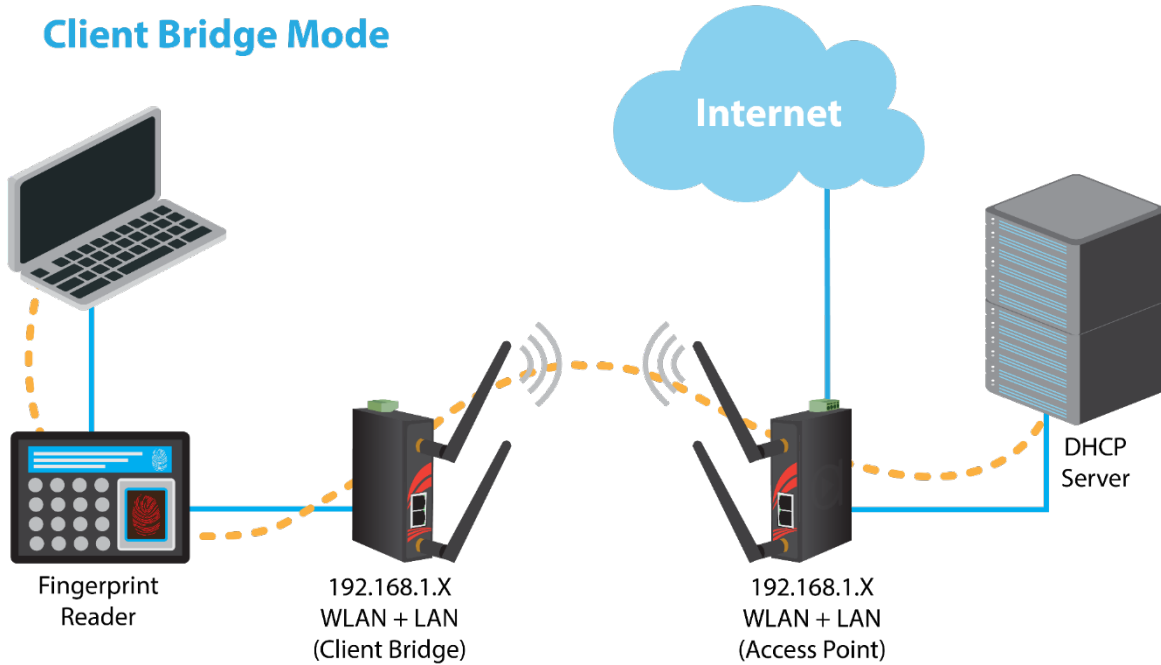
## 1.2.2 Client Mode

Client mode allows the router to connect to other access points as a client. This turns the Wireless Local Area Network (WLAN) portion of your router into the Wide Area Network (WAN). In this mode, the router will no longer function as an access point (does not allow clients), therefore, you will need to be wired to make configurations. In client mode, the WLAN and the LAN will not be bridged, allowing two different subnets. Port forwarding (from the WLAN to the LAN) will be necessary for FTP servers, VNC servers, etc that are located behind the client mode router. For this reason, most users choose to use Client Bridge Mode instead.



### 1.2.3 Client Bridge Mode

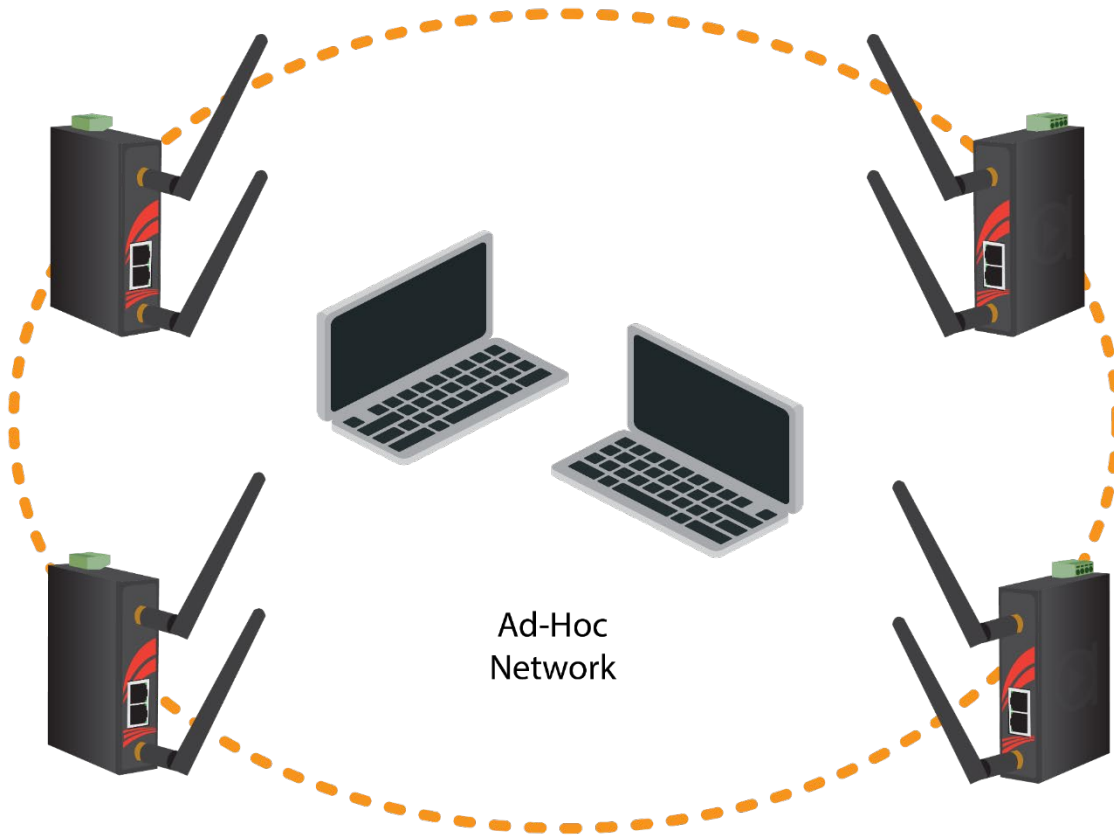
Client Bridge Mode is much like Client Mode, except the WLAN and LAN are on the same subnet. Consequently, NAT is no longer used and services such as DHCP will be able to work on the bridged network. Just as in client mode, the router will not accept wireless clients.



### 1.2.4 Ad Hoc Mode

Ad Hoc Mode allows the router to connect to other wireless devices that are also in ad hoc configuration. Think of this mode as a Client Mode that does not connect to infrastructure networks, but rather to other ad hoc configured devices. Ad hoc networks lack the central management that is typical of infrastructure-type networks.

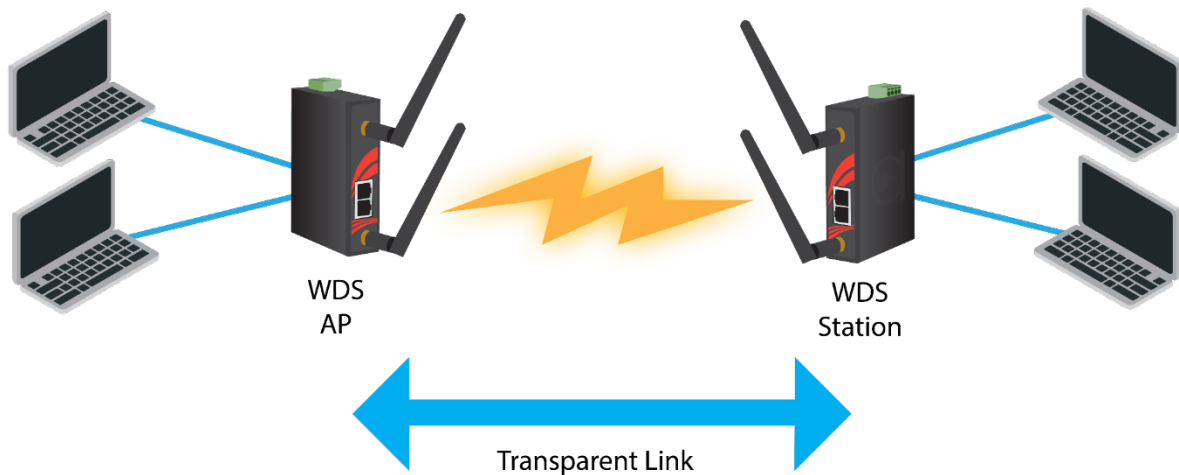
#### Ad-Hoc Mode



### 1.2.5 WDS Station/WDS Access Point

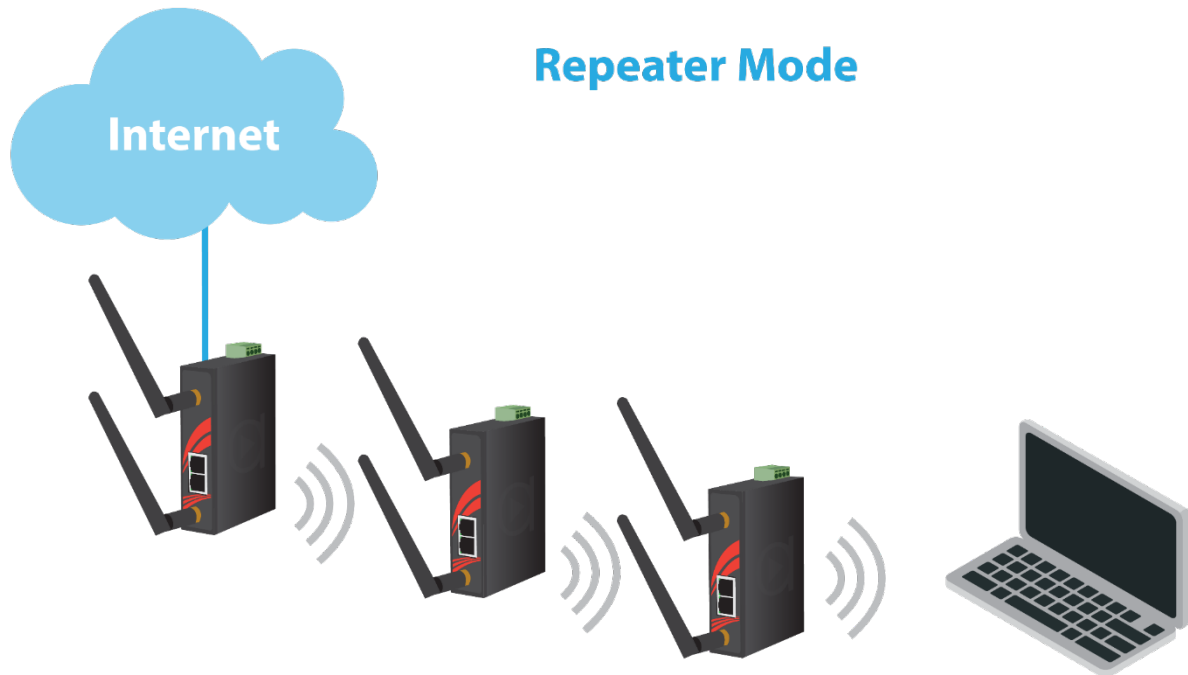
In a typical Access Point to Station/Client connection, whenever traffic is passed through the AP, the MAC address of the client packet changes to the MAC address of the AP. This can add overhead and latency. A Wireless Distribution System (WDS) allows one or more access points to connect wirelessly and share internet access across. WDS also preserves the MAC addresses of client frames across links between the WDS AP to WDS Stations, reducing the latency caused in typical wireless setups. WDS Stations can only be paired with WDS AP.

#### WDS AP/Client Mode



## 1.2.6 Repeater Mode

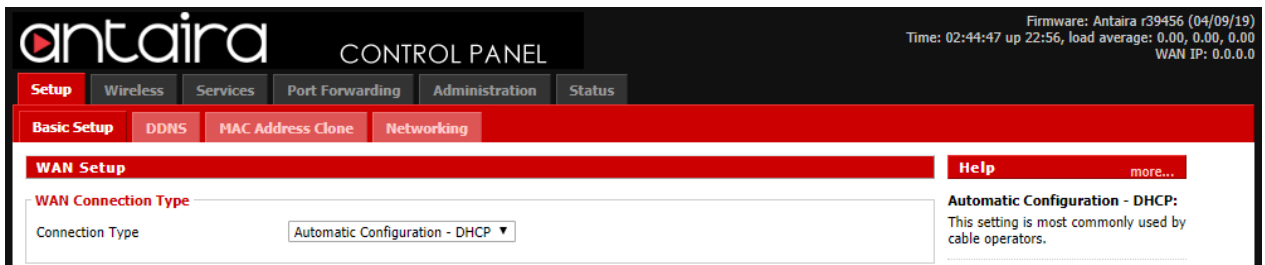
In Repeater Mode, the access point will act as a relay for another wireless signal. Repeater Mode takes an existing signal from a wireless AP or wireless router and rebroadcasts it. This mode is beneficial for extending the wireless range and coverage. The drawback is that the re-transmitted signal throughput is halved for every repeater used.



## 2. Setup

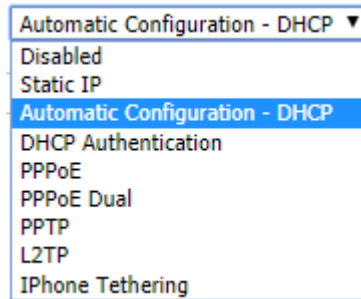
### 2.1 Basic Setup

The Setup Screen is the first screen you will see when accessing the router. After you have configured and made changes to these settings, it is recommended to set a new password for the router. This will increase security by protecting the router from unauthorized changes. All users who try to access the router's web interface will be prompted for the router's password.



[Setup > Basic Setup](#)

## 2.1.1 WAN Setup



[Setup > Basic Setup > WAN Setup](#)

WAN Connection Type	Description
<b>Disabled</b>	Disable the WAN port.
<b>Static IP</b>	A static IP address is used. <b>Required:</b> IP address, subnet mask, gateway, and server to be entered manually.
<b>Automatic Configuration -DHCP</b>	The WAN port will obtain its IP address from a DHCP server.
<b>PPPoE</b>	Configure as PPPoE Client. <b>Required:</b> Username and Password. <b>Advanced Options:</b> Service Name, T-Online VLAN 7 Support, PPP Compression, MPPE Encryption, Single Line Multi Link, and Connection Strategy.
<b>PPPoE Dual</b>	Allows users to set multiple paths of the WAN.
<b>PPTP</b>	Establishes a connection via PPTP. <b>Required:</b> Gateway, Username, Password, and encryption information.
<b>L2TP</b>	Establishes a connection via L2TP. <b>Required:</b> Gateway, Username, Password, and encryption information.
<b>iPhone Tethering</b>	Establishes a connection via iPhone tethering.

## 2.1.2 Optional Settings

**Optional Settings**

Router Name

Hostname

Domain Name

MTU Auto ▼

Shortcut Forwarding Engine  Enable  Disable

STP  Enable  Disable

[Setup > Basic Setup > Optional Settings](#)

Optional Settings	Description
<b>Router Name</b>	The desired name to appear for the router.
<b>Hostname</b>	Necessary for some ISPs and can be provided by the ISP.
<b>Domain Name</b>	Necessary for some ISPs and can be provided by the ISP.
<b>MTU</b>	Maximum Transmission Unit: Specifies the largest packet size permitted for Internet transmission. Auto will allow the device to select the best MTU for Internet connection. Manual values entered should be in the range 1200 – 1500.
<b>Shortcut Forwarding Engine</b>	Enable or disable this feature.
<b>STP</b>	Spanning Tree Protocol: Creates the best path between devices without creating loops.



### 2.1.3 Router IP

Enter the desired LAN side IP address, Subnet mask, Gateway, and Local DNS information.

Network Setup				
<b>Router IP</b>				
Local IP Address	192	168	1	1
Subnet Mask	255	255	255	0
Gateway	0	0	0	0
Local DNS	0	0	0	0

[Setup > Basic Setup > Network Setup](#)

## 2.1.4 Network Address Server Settings (DHCP)

**Network Address Server Settings (DHCP)**

DHCP Type: DHCP Server ▼

DHCP Server:  Enable  Disable

Start IP Address: 10.1.1. 100

Maximum DHCP Users: 50

Client Lease Time: 1440 min

Static DNS 1: 0 . 0 . 0 . 0

Static DNS 2: 0 . 0 . 0 . 0

Static DNS 3: 0 . 0 . 0 . 0

WINS: 0 . 0 . 0 . 0

Use DNSMasq for DNS:

DHCP-Authoritative:

Recursive DNS Resolving (Unbound):

Forced DNS Redirection:

[Setup > Basic Setup > Network Address Server Settings](#)

Network Address Server Settings	Description
<b>DHCP Type</b>	<p><b>Server:</b> This device will function as the DHCP server. If there is already a DHCP server on the network, select <b>Disable</b>.</p> <p><b>Forwarder:</b> Additional routers can be hardwired to the main router on the network. The additional routers will have the type set as Forwarder. Any devices connected to the additional routers will receive their DHCP information from the main router.</p>
<b>DHCP Server</b>	<b>Enable</b> if you want this router to provide DHCP addressing. Disable if there is an existing DHCP server on the network.
<b>Start IP Address</b>	A numerical value for the DHCP server to start its addressing with when assigning IP addresses. ****Do not start with the routers IP address. ****
<b>Maximum DHCP Users</b>	The maximum number of devices the router will assign IP address through DHCP.

<b>Client Lease Time</b>	The lease time of an IP address given by the DHCP server before it expires.
<b>Static DNS #</b>	The Domain Name System is how domain names are translated to IP addresses. The ISP provider will typically provide at least one unique DNS IP address.
<b>WINS</b>	Windows Internet Naming Services: Manages the PC's interaction with the Internet.

## 2.1.5 Time Settings

**Time Settings**

NTP Client  Enable  Disable

Time Zone

Server IP/Name

Manual assign

[Setup > Basic Setup > Time Settings](#)

Time Settings	Description
<b>NTP Client</b>	Network Time Protocol: Used for time synchronization between the client and the network time server.
<b>Time Zone</b>	Select time zone for the unit.
<b>Server Ip/Name</b>	Enter either the server's IP address or assigned domain name.
<b>Manual Assign</b>	Applies the browser's current date.

## 2.2 DDNS

The router offers a Dynamic Domain Name System (DDNS). The DDNS allows users to assign a fixed host and domain name to a dynamic internet IP address. This is useful when hosting a website or FTP server.

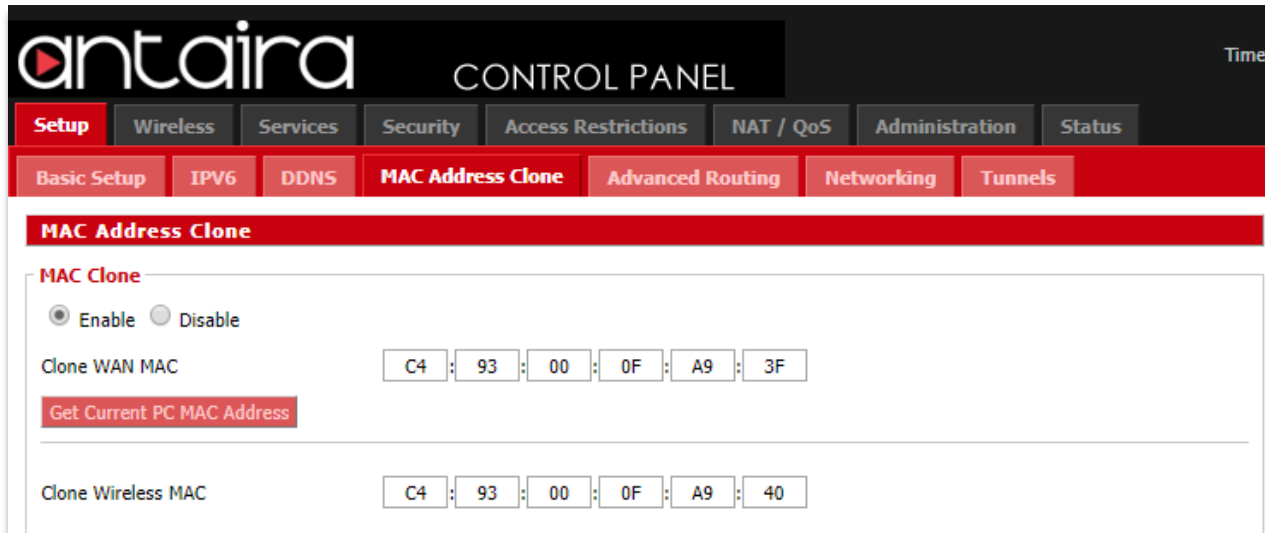


### [Setup > DDNS](#)

DDNS Settings	Description
<b>DDNS Service</b>	Sign up for a DDNS service through a DDNS service provider.
<b>Username</b>	Setup a Username through the DDNS service provider.
<b>Password</b>	Setup a Password through the DDNS service provider.
<b>Hostname</b>	Setup a Hostname through the DDNS service provider.
<b>Type</b>	<b>Dynamic:</b> Allows a hostname (chosen by the user through the DDNS service provider) to point to the users IP address.
	<b>Static:</b> Like Dynamic service, but the DNS host will not expire after 35 days without updates.
	<b>Custom:</b> Creates a managed primary DNS that provides the user more control over the DNS.
<b>Wildcard</b>	Enabling the Wildcard feature allows the user's host to be aliased to the same IP address and the DNS server.
<b>External IP Check</b>	Allows the DDNS function to pick up the WAN IP from the router instead of checking on an external site.
<b>Force Update Interval</b>	The number represents how often (in days) an update will be performed.

## 2.3 MAC Address Clone

By enabling the MAC address clone, the user is able to clone the MAC address of the network adapter onto the router.



### [Setup > MAC Address Clone](#)

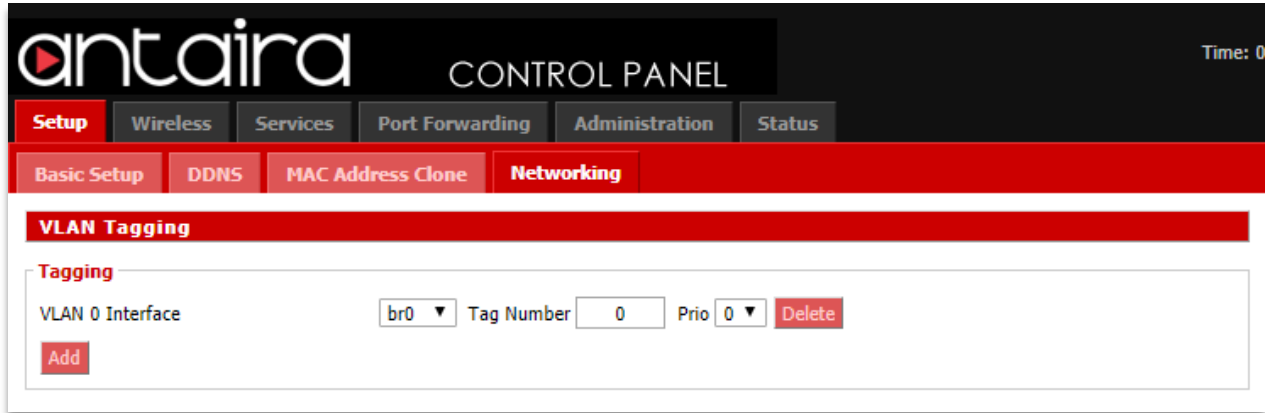
Enter the MAC address of the network adapter in the **Clone WAN MAC** section or click the **Get Current PC MAC Address** to fill in the MAC address of the PC currently connected. Get Current PC Mac is typically used when establishing a service with certain ISP providers.

## 2.4 Networking

### 2.4.1 VLAN Tagging

VLAN Tagging allows the user to create new VLAN interfaces from the standard interfaces by filtering defined tag numbers.

**Tagging:** Allows you to create a new VLAN interface out of a standard interface by filtering the interface using a defined TAG number.



[Setup > Networking > VLAN Tagging](#)

## 2.4.2 Bridging

Bridging

**Create Bridge**

Name	STP	IGMP Snooping	Prio	MTU	Root MAC	
br0	Off ▼	Off ▼	32768 ▼	1500	04:F0:21:41:AF:AE	Delete

Add

**Assign to Bridge**

Assignment	Interface	STP	Prio	Path Cost	Hairpin Mode	
none ▼	eth0 ▼	Off ▼	128 ▼	100	<input type="checkbox"/>	Delete

Add

**Current Bridging Table**

Bridge Name	STP	Interface
br0	no	eth1

[Setup > Networking > Bridging](#)

Current Bridging Table: A table with all of the current bridges and their components can be seen in the Bridging section of the networking tab.

Create Bridge	Description
<b>Add</b>	Create a new network bridge.
<b>STP</b>	Spanning Tree Protocol. Turn on or off.
<b>IGMP Snooping</b>	Turn on or off IGMP Snooping.
<b>Prio</b>	Sets the bridge priority order. (Lower numbers are higher priority.)
<b>MTU</b>	Maximum Transmission Unit: Specifies the largest packet size permitted for Internet transmission. Auto will allow the device to select the best MTU for Internet connection. Manual values entered should be in the range 1200 – 1500.
<b>Root MAC</b>	The Root MAC address.

**Assign to Bridge:** Allows a user to assign an interface to a network bridge.

Assign to Bridge	Description
<b>Assignment</b>	Assign any valid interface to a network bridge.
<b>Interface</b>	Select the interface to assign to the bridge.
<b>STP</b>	Spanning Tree Protocol. Turn on or off.
<b>Prio</b>	Sets the priority order (Lower numbers are higher priority).

<b>Path Cost</b>	Set the path cost.
<b>Hairpin Mode</b>	Enables Hairpin routing.

### 2.4.3 IP Virtual Server

[Setup > Networking > IP Virtual Server](#)

Role	Description
Role	Select the role of the IP virtual server: Master or Backup.

### 2.4.4 Create Virtual Server

[Setup > Networking > Create Virtual Server](#)

Create Virtual Server	Description
<b>Server Name</b>	Enter a server name.
<b>Source IP</b>	Enter a source IP address.
<b>Source Port</b>	Enter a source port.
<b>Protocol</b>	Choose between TCP, UDP, or SIP protocol.
<b>Scheduler</b>	Select the scheduler from the drop-down menu.



## 2.4.5 Port Setup

Port Setup

**Port Setup**

WAN Port Assignment eth0 ▾

**Network Configuration eth1**

MAC Address C4:93:00:0F:55:8D

Label

TX Queue Length 1000

Multicast To Unicast  Enable  Disable

Bridge Assignment  Unbridged  Default

[Setup > Networking > Port Setup](#)

Port Setup	Description
<b>WAN Port Assignment</b>	Select a WAN Port.
<b>MAC Address</b>	MAC Address of the configured WAN port.
<b>Label</b>	Input a label if desired.
<b>TX Queue Length</b>	Set the TX-queue length.
<b>Bridge Assignment</b>	Select the bridge assignment: Unbridged or Default.

## 2.4.6 DHCPD

This feature allows you to configure a DHCP server on a specific port.

DHCPD

**Multiple DHCP Server**

DHCP 0 br0 ▾ On ▾ Start  Max  Leasetime  Delete

Add

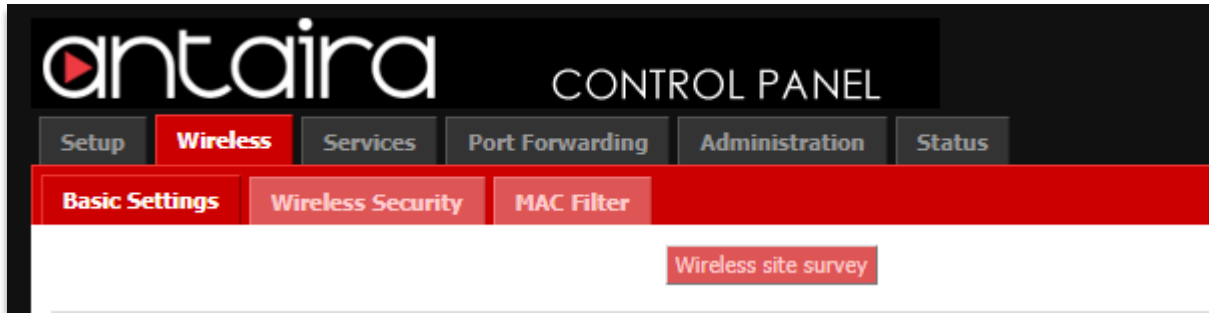
[Setup > Networking > DHCPD](#)

## 3. Wireless

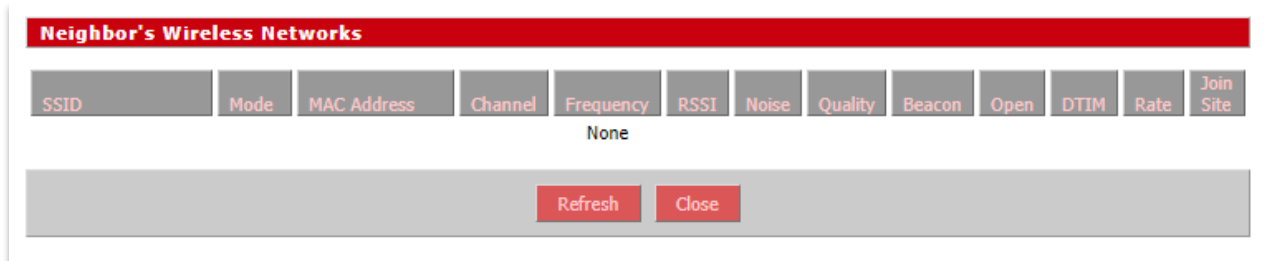
### 3.1 Basic Settings

All basic wireless settings can be configured here. Users can change the Wireless Mode, Network Mode, Channel Width, Wireless Channel, and SSID.

#### 3.1.1 Wireless Site Survey

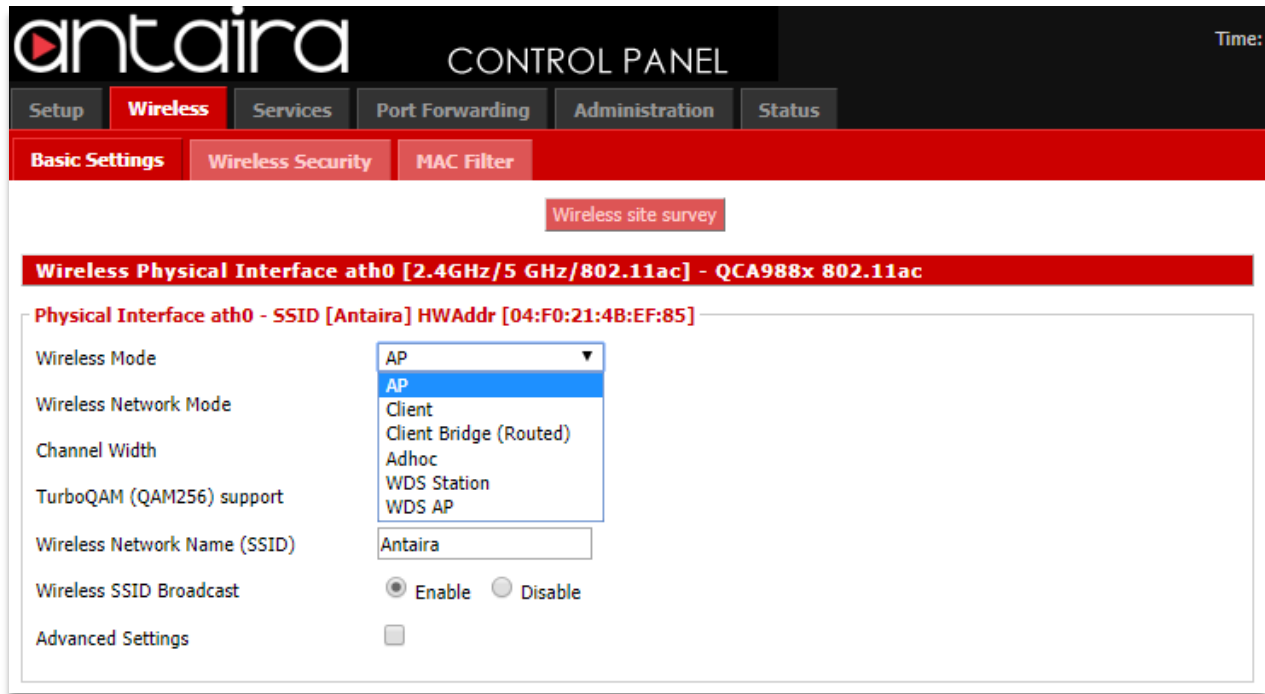


#### [Wireless > Basic Settings](#)



#### [Wireless > Basic Settings > Wireless Site Survey](#)

### 3.1.2 Wireless Mode



[Wireless > Basic Settings > Wireless Mode](#)

Basic Settings	Description
<b>Wireless Mode</b>	<b>AP:</b> The default settings. Access Point Mode will allow the router to act as a connection point for wireless client devices to connect with.
	<b>Client:</b> The radio interface is used to connect the Internet-facing side of the router (the WAN) as a client to a remote access point. NAT or routing are performed between WAN and LAN. Use this mode if your Internet connection is provided by a remote access point and you want to attach a subnet of your own to it.
	<b>Client Bridge (Routed):</b> The radio interface is used to connect the LAN side of the router to an access point. The LAN and access point will be in the same subnet (bridging two network segments). The WAN side of the router is unused and can be disabled. Use this mode to make the router act as a WLAN adapter for a device connected to one of its LAN Ethernet ports.
	<b>Adhoc:</b> A point-to-point communication that does not use access points. Devices in Adhoc Mode communicate directly with each other.
	<b>WDS Station:</b> Used to connect with a WDS AP. WDS Station

	functions like a Client, but multiple layer 2 devices can be connected to the WDS Station device.
	<b>WDS AP:</b> Functions as an access point that only WDS Station devices can connect to.

### 3.1.3 Wireless Network Mode

[Wireless > Basic Settings > Wireless Network Mode](#)

Basic Settings	Description
<b>Wireless Network Mode</b>	<b>Disabled:</b> Disables the wireless network mode.
	<b>Mixed:</b> If you have mixed b/g/n devices on your network.
	<b>B-Only:</b> IEEE 802.11b allows a maximum data rate of 11Mbps/s through 2.4GHz wireless connections. If only B-type wireless devices are on the network, use this mode.
	<b>G-Only:</b> IEEE 802.11g allows a maximum data rate of 54Mbps/s through 2.4GHz wireless connections. If only G-type wireless devices are on the network, use this mode.
	<b>BG-Mixed:</b> If B and G-type wireless devices are on the network, use this mode.
	<b>A-Only:</b> IEEE 802.11a allows a maximum data rate of 54Mbps/s through 5GHz wireless connections. If only A-

	type devices are on the network, use this mode.
	<b>NG-Mixed:</b> Mix band of 802.11b/g/b modes.
	<b>N-Only (2.4GHz):</b> N-Only wireless network mode.
	<b>NA-Mixed:</b> Mix band of 802.11n/a modes.
	<b>N-Only (5GHz):</b> Improved throughput for 5GHz devices.
	<b>AC/N-Mixed:</b> Mix band of 802.11ac/n modes.
	<b>AC-Only:</b> AC-Only wireless network mode.

### 3.1.4 Channel Width

The screenshot shows the Antaira Control Panel interface. The top navigation bar includes 'Setup', 'Wireless', 'Services', 'Port Forwarding', 'Administration', and 'Status'. Below this, there are sub-menus for 'Basic Settings', 'Wireless Security', and 'MAC Filter'. A 'Wireless site survey' button is visible. The main content area is titled 'Wireless Physical Interface ath0 [2.4GHz/5 GHz/802.11ac] - QCA988x 802.11ac'. Underneath, it specifies 'Physical Interface ath0 - SSID [Antaira] HWAddr [04:F0:21:4B:EF:85]'. The settings for this interface are as follows:

- Wireless Mode: AP
- Wireless Network Mode: Disabled
- Channel Width: Full (20 MHz) (selected)
- TurboQAM (QAM256) support: Enable (selected)
- Wireless Network Name (SSID): Antaira
- Wireless SSID Broadcast: Enable (selected)
- Advanced Settings:

[Wireless > Basic Settings > Channel Width](#)

Basic Settings	Description
<b>Channel Width</b>	Choose between: Full (20MHz), Additional options on the router version.
<b>Wireless Channel</b>	Select the appropriate channel from the list provided to correspond with your network settings (in North America between channel 1 and 11, in Europe 1 and 13, in Japan all 14 channels). All devices in your wireless network must use the same channel in order to function correctly. Try to avoid conflicts with other wireless networks by choosing a channel where the upper and lower three channels are not in use.

**TurboQAM Support:** Non-standard 256-QAM support on 2.4GHz 802.11n enabling a data rate of up to 200Mbps per spatial stream instead of 150Mbps with the standard 64-QAM.

### 3.1.5 Wireless Network Name (SSID)

The SSID is the Service Set Identifier used to identify the operator's wireless LAN. The SSID is set by the user in Access Point or Access Point WDS Mode. All of the client devices within the range of the access point will receive the broadcasted SSID. The SSID is case-sensitive and must not exceed 32 alphanumeric characters. Make sure this setting is the same for all devices connected to your wireless network.

**Wireless SSID Broadcast:** When disabled, the SSID of the access point will no longer be broadcasted. This means client devices will not see the SSID of the unit even though they are within range. A user wishing to connect with a client device to a hidden SSID will need to directly input the SSID and password information. The hidden SSID acts as an additional layer of security, making it harder for unwanted users to connect to the network.

### 3.1.6 Advanced Settings

By selecting the *Advanced Settings* box, the following options will become available.

Advanced Settings	<input checked="" type="checkbox"/>	
Regulatory Domain	UNITED_STATES	
TX Power	20	dBm
Antenna Gain	0	dBi
Noise Immunity	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable
Protection Mode	None	
RTS Threshold	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable
Short Preamble	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable
Short GI	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable
TX Antenna Chains	1+2	
RX Antenna Chains	1+2	
AP Isolation	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable
Beacon Interval	100	
DTIM Interval	2	
Airtime Fairness	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable
Frame Compression	Disabled	
WMM Support	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable
Radar Detection	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable
ScanList	default	
Sensitivity Range (ACK Timing)	2000	(Default: 2000 meters)
Max Associated Clients	256	(Default: 256 Clients)
<b>Drop Clients with Low Signal</b>		
Minimum Signal for authenticate	-128	
Minimum Signal for connection	-128	
Poll Time for signal lookup	10	
Amount of allowed low signals	3	
Network Configuration	<input type="radio"/> Unbridged	<input checked="" type="radio"/> Bridged

[Wireless > Basic Settings > Advanced Settings](#)

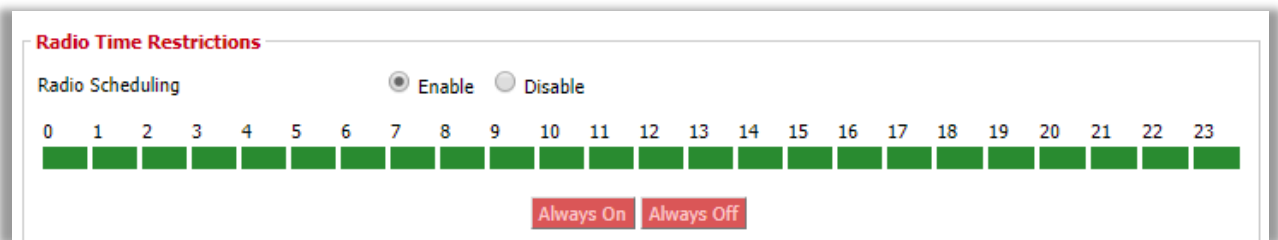
Basic Settings	Description
<b>Regulatory Domain</b>	Select a regulatory domain from the drop-down menu.
<b>TX Power</b>	Enter a value for the transmit power is dBm.
<b>Antenna Gain</b>	The antenna's ability to direct radio frequency energy.

<b>Noise Immunity</b>	Enable or disable this feature.
<b>Protection Mode</b>	CTS (Clear to Send) protection allows multiple client devices to send data simultaneously to a single access point. The CTS protection is able to set an order of what device gets to transmit, preventing the access point from discarding packets.
<b>RTS Threshold</b>	Specifies the maximum size for a packet before data is fragmented into multiple packets.
<b>Short Preamble</b>	Default is Long Preamble. A short preamble can be used but communication issues might occur when communicating with IEEE 802.11b devices.
<b>Short GI</b>	Enable or disable this feature.
<b>TX Antenna Chains</b>	Used based on external antennas to provide optimum performance.
<b>RX Antenna Chains</b>	Used based on external antennas to provide optimum performance.
<b>AP Isolation</b>	Disabled by default. If enabled, wireless clients are isolated and access to and from other wireless clients is stopped.
<b>Beacon Interval</b>	Set the beacon interval.
<b>DTIM Interval</b>	Set the STIM interval.
<b>Airtime Fairness</b>	Enable or disable this feature.
<b>Frame Compression</b>	Enable or disable this feature.
<b>WMM Support</b>	Enable or disable this feature.
<b>Radar Detection</b>	Looks for airport or military pulses from radars to prevent unintended interference between equipment.
<b>ScanList</b>	
<b>Sensitivity Range (ACK Timing)</b>	Default is 2000 meters. The sensitivity range is a timing adjustment based on the distance between linking devices. When the time needed to transmit is greater than the amount of time sender waits before resending the same packet. Typically, the ACK time should be 2 times the distance between devices (measured in meters). If the ACK time is too low, information can be lost. 0 disables ACK timing completely.
<b>Max Associated Clients</b>	Number of clients that can be connected to the access point.
<b>Minimum Signal for Authenticate</b>	Set the minimum signal for authentication.
<b>Minimum Signal for</b>	Set the minimum signal for connection.



<b>Connection</b>	
<b>Poll Time for Signal Lookup</b>	Set the poll time for signal lookup.
<b>Amount of Allowed Low Signals</b>	Set the amount of allowed low signals.
<b>Network Configuration</b>	<b>Bridged</b> shares the wireless interface and LAN port (same network). <b>Unbridged</b> allows the separation between the Wireless interface and LAN.

### 3.1.7 Radio Time Restrictions



[Wireless > Basic Settings > Radio Time Restrictions](#)

### 3.1.8 Virtual Interfaces

**Virtual Interfaces**

**Virtual Interfaces ath0.1 SSID [antaira\_vap]**

Wireless Mode AP ▼

Wireless Network Name (SSID) antaira\_vap

Wireless SSID Broadcast  Enable  Disable

Advanced Settings

[Wireless > Basic Settings > Virtual Interfaces](#)

Basic Settings	Description
<b>Wireless Mode</b>	Choose between Access Point or WDS Access Point for the wireless mode of the virtual interface.
<b>Wireless Network Name (SSID)</b>	Enter a SSID for the virtual interface.
<b>Wireless SSID Broadcast</b>	Enable or disable broadcasting of the SSID.

### 3.1.9 Advanced Settings

Advanced Settings

Protection Mode None ▼

RTS Threshold  Enable  Disable

Frame Compression Disabled ▼

WMM Support  Enable  Disable

AP Isolation  Enable  Disable

Max Associated Clients 256 (Default: 256 User)

DTIM Interval 2

**Drop Clients with Low Signal**

Minimum Signal for authenticate -128

Minimum Signal for connection -128

Poll Time for signal lookup 10

Amount of allowed low signals 3

[Wireless > Basic Settings > Virtual Interfaces > Advanced Settings](#)

Basic Settings	Description
<b>Protection Mode</b>	Choose between None, CTS, RTS/CTS.
<b>RTS Threshold</b>	Specifies the maximum size for a packet before data is fragmented into multiple packets.
<b>Frame Compression</b>	Enable or disable this feature.
<b>WMM Support</b>	Enable or disable this feature.
<b>AP Isolation</b>	Disabled by default. If enabled, wireless clients are isolated and access to and from other wireless clients is stopped.
<b>Max Associated Clients</b>	Number of clients that can be connected to the access point. Default max is 256 users.
<b>DTIM Interval</b>	Set the DTIM interval.
<b>Minimum Signal for Authenticate</b>	Set the minimum signal for authentication.
<b>Minimum Signal for Connection</b>	Set the minimum signal for connections.
<b>Poll Time for Signal Lookup</b>	Set the poll time for signal lookup.
<b>Amount of Allowed Low Signals</b>	Set the amount of allowed low signals.

### 3.1.10 Network Configuration

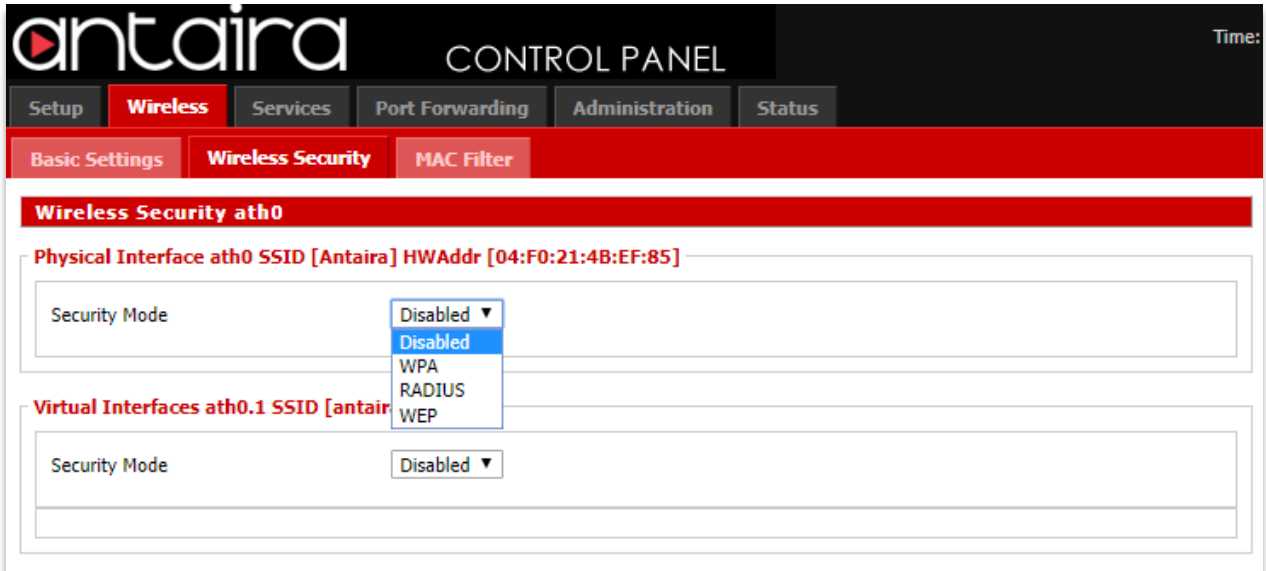


[Wireless > Basic Settings > Virtual Interfaces > Advanced Settings > Network Configuration](#)

Basic Settings	Description
<b>Network Configuration</b>	<b>Bridged</b> shares the Wireless interface and LAN port (same network). <b>Unbridged</b> allows the separation between the Wireless interface and LAN.

## 3.2 Wireless Security

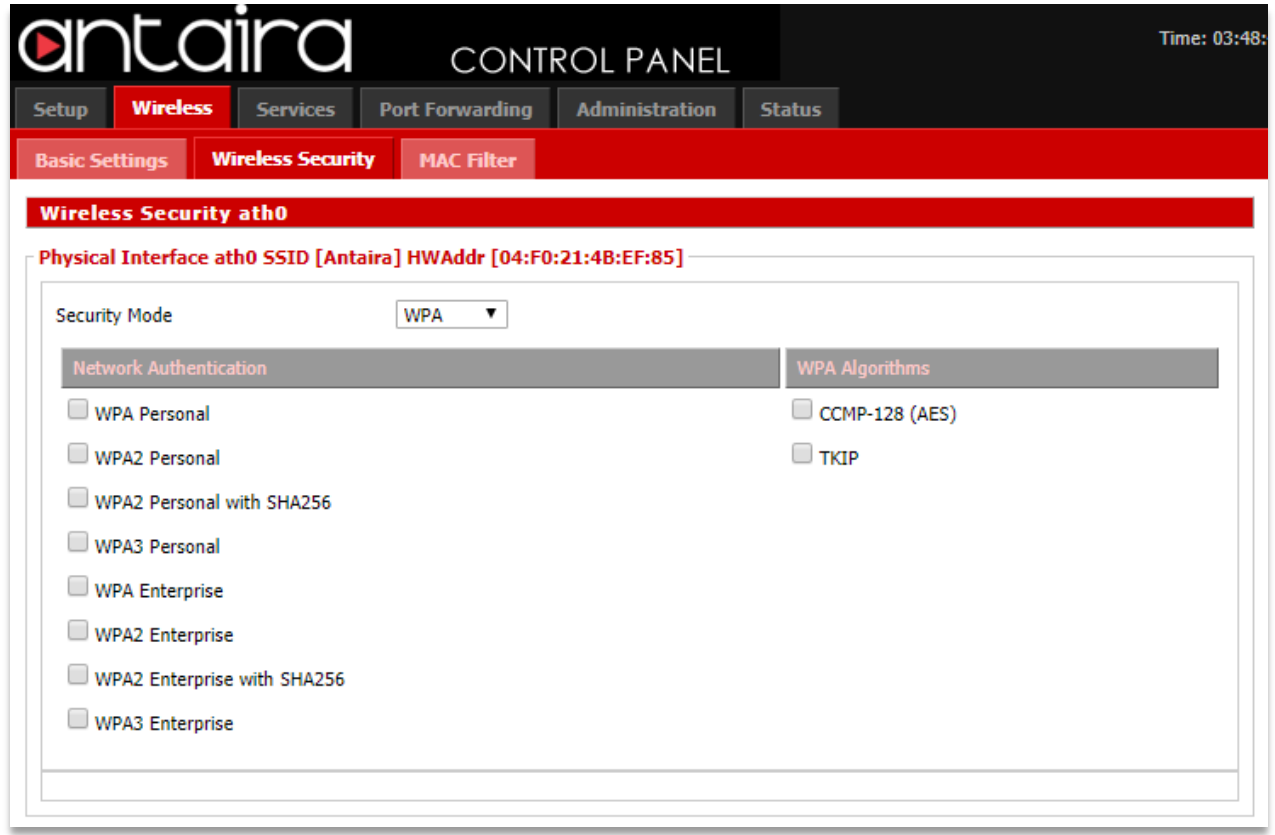
The Antaira router supports different types of security settings for your network: WiFi Protected Access (WPA), WPA2, WPA3, Remote Access Dial In User Service (RADIUS), and Wires Equivalent Privacy (WEP), which can be selected from the list next to Security Mode. To disable security settings, select *Disabled*.



[Wireless > Wireless Security > Security Mode](#)

Wireless Security	Description
<b>Security Mode</b>	<b>Disabled:</b> Uses no wireless security.
	<b>WPA:</b> Uses WPA for wireless security. Additional options and settings will appear when selected.
	<b>RADIUS:</b> Uses RADIUS for wireless security. Additional options and settings will appear when selected.
	<b>WEP:</b> Uses WEP for wireless security. Additional options and settings will appear when selected.

### 3.2.1 WPA



[Wireless > Wireless Security > Security Mode > WPA](#)

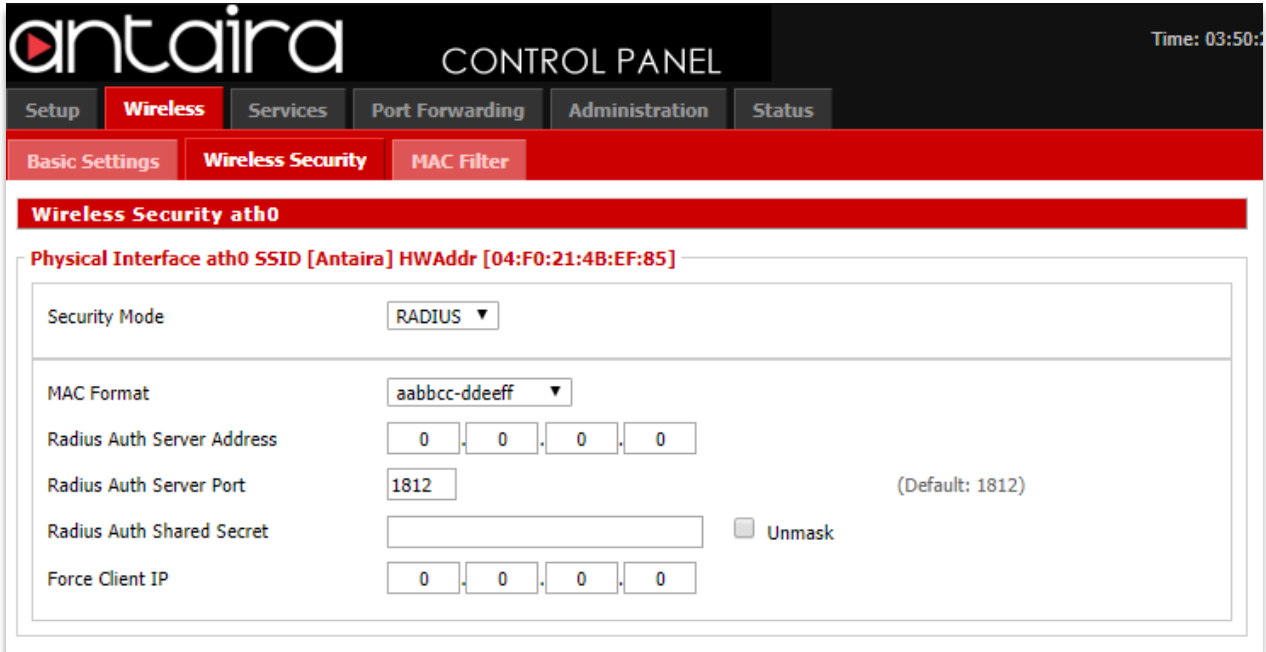
Wireless Security	Description
<b>Network Authentication</b>	Choose the network authentication method.

#### WPA Algorithms

Wireless Security	Description
<b>WPA Algorithms</b>	<b>CCMP-128 (AES):</b> Advanced Encryption System (AES) utilizes a symmetric 128-Bit block data encryption and MIC.
	<b>TKIP:</b> Temporal Key Integrity Protocol (TKIP) which utilizes a stronger encryption method than WEP and incorporates Message Integrity Code (MIC) to provide protection against packet tampering.

### 3.2.2 RADIUS

RADIUS utilizes either a RADIUS server for authentication or WEP for data encryption. To utilize RADIUS, enter the IP address of the RADIUS server and its shared secret. Select the desired encryption bit (64 or 128) for WEP and enter either a passphrase or a manual WEP key.



[Wireless > Wireless Security > Security Mode > RADIUS](#)

Wireless Security	Description
<b>MAC Format</b>	When sending the authentication request to the RADIUS server, the wireless client uses the MAC address as the username. This would be received by the RADIUS server in the following format: aabbcc-ddeeff , aabbccddeeff , aa-bb-cc-dd-ee-ff.
<b>Radius Auth Server Address</b>	The RADIUS server IP address.
<b>Radius Auth Server Port</b>	The RADIUS server TCP port.
<b>Radius Auth Shared Secret</b>	The RADIUS shared secret.
<b>Force Client IP</b>	Enter a force client IP address if desired.

### 3.2.3 WEP

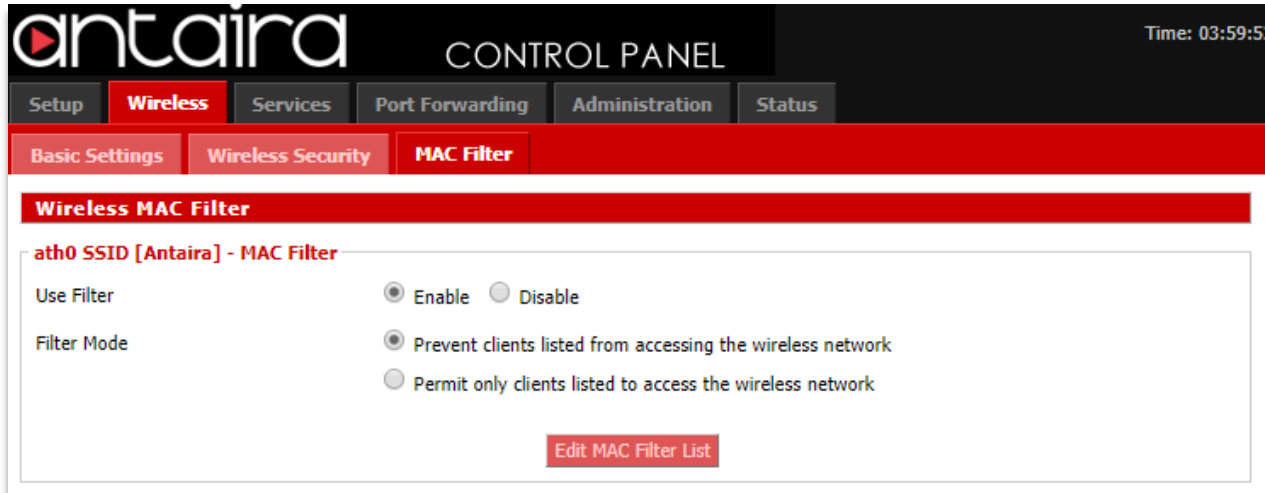
The screenshot shows the 'Wireless Security' configuration page for interface 'ath0'. The 'Security Mode' is set to 'WEP'. Under 'Authentication Type', 'Open' is selected. 'Default Transmit Key' is set to '1'. 'Encryption' is set to '64 bits 10 hex digits'. There is a 'Passphrase' field with a 'Generate' button next to it. Below are four input fields labeled 'Key 1', 'Key 2', 'Key 3', and 'Key 4'.

[Wireless > Wireless Security > Security Mode > WEP](#)

Wireless Security	Description
<b>Authentication Type</b>	Select Open or Shared Key for Authentication Type.
<b>Default Transmit Key</b>	Set the Default Transmit Key (1-4).
<b>Encryption</b>	Select the Encryption method.
<b>Passphrase</b>	Enter a Passphrase or generate one.
<b>Key #</b>	Enter key(s).

### 3.3 MAC Filter

The Wireless MAC Filter allows you to control which wireless-equipped PCs may or may not communicate with the router depending on their MAC addresses.



[Wireless > MAC Filter](#)

MAC Filter	Description
Use Filter	Enable or disable Wireless MAC Filter.
Filter Mode	<p><b>Prevent Clients Listed from Accessing the Wireless Network:</b> If you want to block specific wireless-equipped PCs from communicating with the router, use this setting.</p> <p><b>Permit Only Clients Listed to Access the Wireless Network:</b> If you want to allow specific wireless-equipped PCs to communicate with the router, use this setting. Click the <i>Edit MAC Filter List</i> button and enter the appropriate MAC addresses into the MAC fields.</p> <p><b>Note:</b> The MAC Address should be entered in this format: xxxxxxxxxxxx (the x's represent the actual characters of the MAC address).</p> <p>Click the <i>Save Settings</i> button to save your changes. Click the <i>Cancel Changes</i> button to cancel your unsaved changes. Click the <i>Close</i> button to return to the previous screen without saving changes.</p>



### 3.3.1 Edit MAC Filter List

**MAC Address Filter List**

Enter MAC Address in this format : xx:xx:xx:xx:xx:xx

Wireless Client MAC List

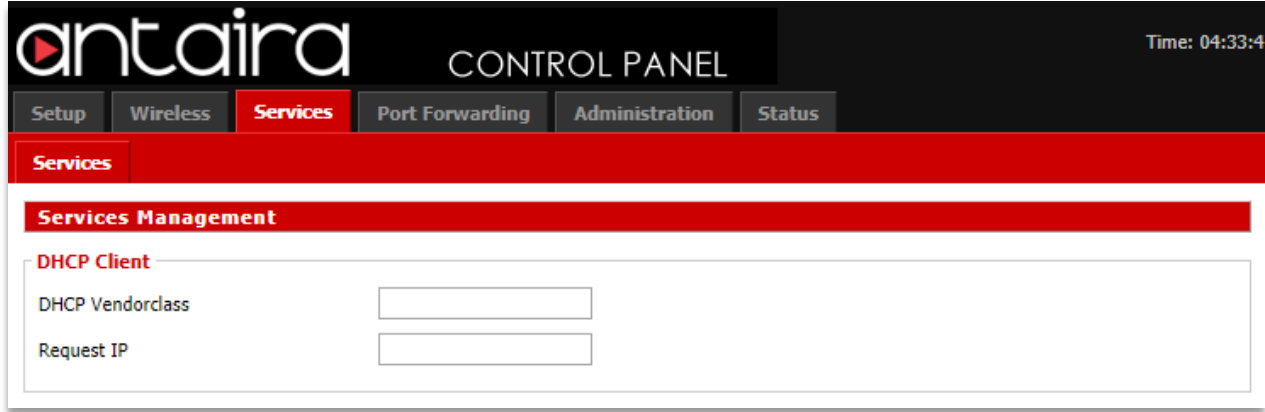
Table 1		Table 2	
MAC 001 :	<input type="text"/>	MAC 065 :	<input type="text"/>
MAC 002 :	<input type="text"/>	MAC 066 :	<input type="text"/>
MAC 003 :	<input type="text"/>	MAC 067 :	<input type="text"/>
MAC 004 :	<input type="text"/>	MAC 068 :	<input type="text"/>
MAC 005 :	<input type="text"/>	MAC 069 :	<input type="text"/>
MAC 006 :	<input type="text"/>	MAC 070 :	<input type="text"/>
MAC 007 :	<input type="text"/>	MAC 071 :	<input type="text"/>
MAC 008 :	<input type="text"/>	MAC 072 :	<input type="text"/>
MAC 009 :	<input type="text"/>	MAC 073 :	<input type="text"/>
MAC 010 :	<input type="text"/>	MAC 074 :	<input type="text"/>
MAC 011 :	<input type="text"/>	MAC 075 :	<input type="text"/>
MAC 012 :	<input type="text"/>	MAC 076 :	<input type="text"/>
MAC 013 :	<input type="text"/>	MAC 077 :	<input type="text"/>
MAC 014 :	<input type="text"/>	MAC 078 :	<input type="text"/>
MAC 015 :	<input type="text"/>	MAC 079 :	<input type="text"/>
MAC 016 :	<input type="text"/>	MAC 080 :	<input type="text"/>
MAC 017 :	<input type="text"/>	MAC 081 :	<input type="text"/>
MAC 018 :	<input type="text"/>	MAC 082 :	<input type="text"/>
MAC 019 :	<input type="text"/>	MAC 083 :	<input type="text"/>
MAC 020 :	<input type="text"/>	MAC 084 :	<input type="text"/>
MAC 021 :	<input type="text"/>	MAC 085 :	<input type="text"/>
MAC 022 :	<input type="text"/>	MAC 086 :	<input type="text"/>
MAC 023 :	<input type="text"/>	MAC 087 :	<input type="text"/>
		MAC 129 :	<input type="text"/>
		MAC 130 :	<input type="text"/>
		MAC 131 :	<input type="text"/>
		MAC 132 :	<input type="text"/>
		MAC 133 :	<input type="text"/>
		MAC 134 :	<input type="text"/>
		MAC 135 :	<input type="text"/>
		MAC 136 :	<input type="text"/>
		MAC 137 :	<input type="text"/>
		MAC 138 :	<input type="text"/>
		MAC 139 :	<input type="text"/>
		MAC 140 :	<input type="text"/>
		MAC 141 :	<input type="text"/>
		MAC 142 :	<input type="text"/>
		MAC 143 :	<input type="text"/>
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		MAC 145 :	<input type="text"/>
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		MAC 147 :	<input type="text"/>
		MAC 148 :	<input type="text"/>
		MAC 149 :	<input type="text"/>
		MAC 150 :	<input type="text"/>
		MAC 151 :	<input type="text"/>
		MAC 193 :	<input type="text"/>
		MAC 194 :	<input type="text"/>
		MAC 195 :	<input type="text"/>
		MAC 196 :	<input type="text"/>
		MAC 197 :	<input type="text"/>
		MAC 198 :	<input type="text"/>
		MAC 199 :	<input type="text"/>
		MAC 200 :	<input type="text"/>
		MAC 201 :	<input type="text"/>
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		MAC 208 :	<input type="text"/>
		MAC 209 :	<input type="text"/>
		MAC 210 :	<input type="text"/>
		MAC 211 :	<input type="text"/>
		MAC 212 :	<input type="text"/>
		MAC 213 :	<input type="text"/>
		MAC 214 :	<input type="text"/>
		MAC 215 :	<input type="text"/>

[Wireless > MAC Filter > Edit MAC Filter List](#)

# 4. Services

## 4.1 Services

### 4.1.1 DHCP Client

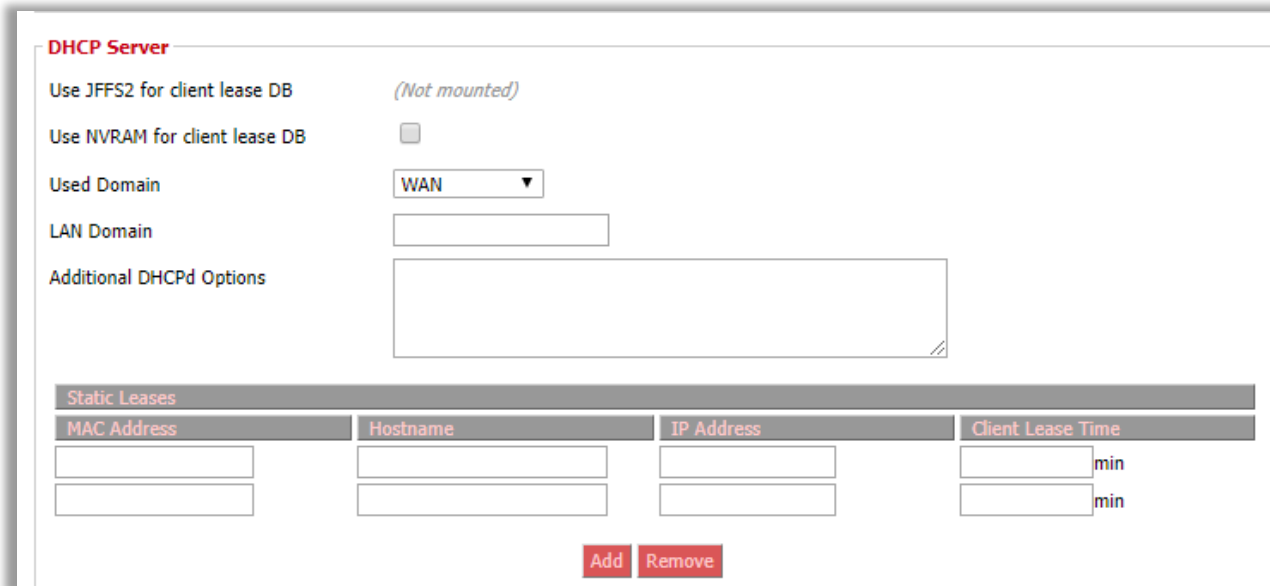


[Services > Services > DHCP Client](#)

DHCP Client	Description
Set Vendorclass	Enter a vendorclass.
Request IP	Enter a request IP.

### 4.1.2 DHCP Server

A DHCP server assigns IP addresses to your local devices.



[Services > Services > DHCP Server](#)

DHCP Server	Description
<b>Use NVRAM for Client Lease DB</b>	Enable or disable this feature.
<b>Used Domain</b>	Select which domain the DHCP clients should get as their local domain. This can be the WAN domain set on the Setup screen of the LAN domain which can be set here.
<b>LAN Domain</b>	Define your local LAN domain here. This is used as the local domain for dnsmasq and DHCP service if chosen above.
<b>Additional DHCPd Options</b>	Enter any additional DHCPd options here.
<b>Static Leases</b>	If you want to assign certain hosts a specific address then you can define them here. This is also the way to add hosts with a fixed address to the router's local DNS service (dnsmasq).

### 4.1.3 Dnsmasq

Dnsmasq is a local DNS server. It will resolve all host names known to the router from DHCP as well as forwarding and caching DNS entries from remote DNS servers.

**Dnsmasq**

Dnsmasq  Enable  Disable

Cache DNSSEC data  Enable  Disable

Validate DNS Replies (DNSSEC)  Enable  Disable

Check unsigned DNS replies  Enable  Disable

Local DNS  Enable  Disable

No DNS Rebind  Enable  Disable

Query DNS in Strict Order  Enable  Disable

Add Requestor MAC to DNS Query  Enable  Disable

RFC4039 Rapid Commit support  Enable  Disable

Additional Dnsmasq Options

[Services > Services > Dnsmasq](#)

Dnsmasq	Description
Dnsmasq	Enable or disable this feature.
Cache DNSSEC data	Enable or disable this feature.
Validate DNS Replies (DNSSEC)	Enable or disable this feature.
Check Unsigned DNS Replies	Enable or disable this feature.
Local DNS	Enables DHCP clients on the LAN to resolve static and dynamic DHCP hostnames.
No DNS Rebind	Enable or disable this feature.
Query DNS in Strict Order	Enable or disable this feature.
Add Requestor MAC to DNS Query	Enable or disable this feature.
Additional Dnsmasq Options	Enter any additional options here.

### 4.1.4 PPPoE Relay

**PPPoE Relay**

Relay  Enable  Disable

[Services > Services > PPPoE Relay](#)

### 4.1.5 SES/AOSS/EZ-SETUP/WPS Button

**SES / AOSS / EZ-SETUP / WPS Button**

Turning off radio  Enable  Disable

Turn radio off at boot  Enable  Disable

[Services > Services > SES/AOSS/EZ-SETUP/WPS Button](#)

### 4.1.6 SNMP

The Simple Network Management Protocol (SNMP) is an application layer protocol that facilitates the exchange of management information between network devices. SNMP enables network administrators to manage network performance, find and solve network problems, and plan for network growth.

**SNMP**

SNMP  Enable  Disable

Location

Contact

Name

RO Community

RW Community

[Services > Services > SNMP](#)

SNMP	Description
SNMP	Enable or disable SNMP.
Location	Enter location information.

<b>Contact</b>	Enter contact information.
<b>Name</b>	Enter a name.
<b>RO Community</b>	Enter a Read-Only Community string.
<b>RW Community</b>	Enter a Read/Write Community string.

### 4.1.7 Secure Shell

Enabling SSH allows you to access the Linux OS of your router with an SSH client (Putty for example).

**Secure Shell**

SSHd  Enable  Disable

SSH TCP Forwarding  Enable  Disable

Password Login  Enable  Disable

Port  (Default: 22)

Authorized Keys

[Services > Services > Secure Shell](#)

Secure Shell	Description
<b>SSHd</b>	Enable or disable SSH.
<b>SSH TCP Forwarding</b>	Enable or disable this feature.
<b>Password Login</b>	Allow login with the router password (Username is <i>root</i> ).
<b>Port</b>	Change the SSH port. Default is port 22.
<b>Authorized Keys</b>	Enter authorized keys is applicable.

### 4.1.8 System Log

System Logging is a messaging standard for logging on a network. Logging is useful to monitor the health of your network, help diagnose problems, intrusion

**System Log**

Syslogd  Enable  Disable

Klogd  Enable  Disable

Remote Server

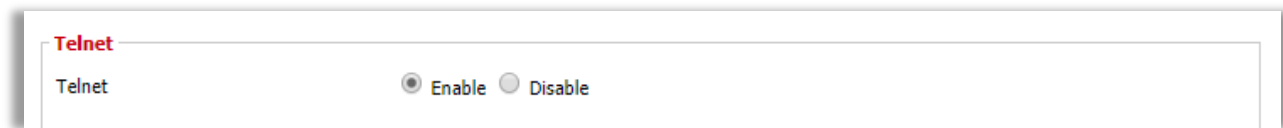
detection, and intrusion forensics.

[Services > Services > System Log](#)

System Log	Description
Syslogd	Enable or disable syslogd.
Klogd	Enable or disable Klogd.
Remote Server	Enter the remote server IP address to receive syslogs.

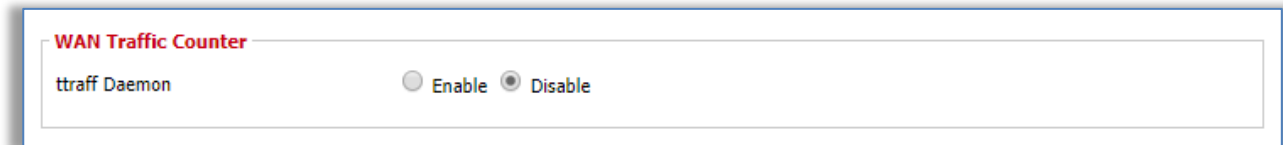
### 4.1.9 Telnet

Enable or disable Telnet.



[Services > Services > Telnet](#)

### 4.1.10 WAN Traffic Counter

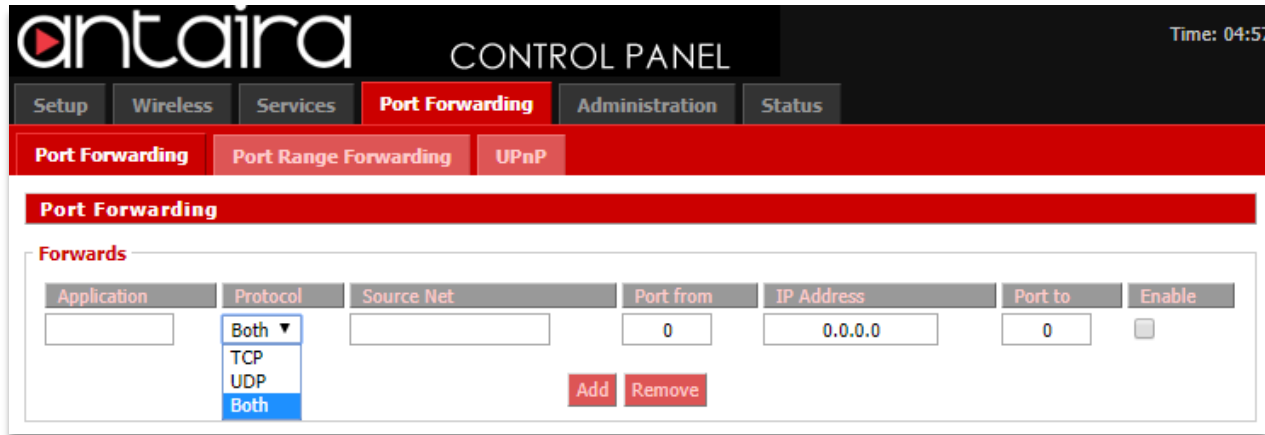


[Services > Services > WAN Traffic Counter](#)

# 5. Port Forwarding

## 5.1 Port Forwarding

Port Forwarding allows you to set up public services on your network, such as a web server, FTP server, or other specialized Internet applications. Any PC whose port is being forwarded must have a static IP address assigned.



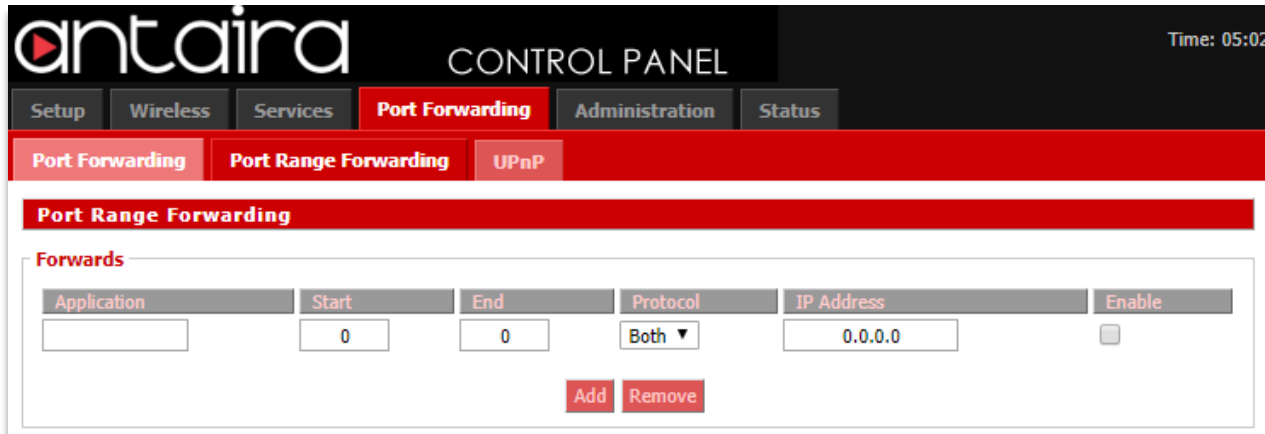
[NAT/QoS > Port Forwarding](#)

Port Forwarding	Description
<b>Application</b>	Enter the name of the application in the file provided.
<b>Protocol</b>	Choose the right protocol TCP, UDP, or both. Set this to what the application requires.
<b>Source Net</b>	Forward only if sender matches this IP/Net ( <i>example: 192.168.1.0/24</i> ).
<b>Port From</b>	Enter the number of the external port (the port number seen by users on the Internet).
<b>IP Address</b>	Enter the IP address of the PC running the application.
<b>Port To</b>	Enter the number of the internal port (the port number used by the application).
<b>Enable</b>	Enable port forwarding for the application.



## 5.2 Port Range Forwarding

Port Range Forwarding allows you to set up public services on your network, such as a web server, FTP server, or other specialized Internet applications. Any PC whose port is being forwarded must have a static IP address assigned.



### [NAT/QoS > Port Range Forwarding](#)

Port Range Forwarding	Description
<b>Application</b>	Enter the name of the application in the field provided.
<b>Start</b>	Enter the number of the first port of the range you want to be seen by users on the Internet and forwarded.
<b>End</b>	Enter the number of the last port of the range you want forwarded.
<b>Protocol</b>	Choose the right protocol <i>TCP</i> , <i>UDP</i> , or <i>both</i> . Set this to what the application requires.
<b>IP Address</b>	Enter the IP address of the PC running the application.
<b>Enable</b>	Enable port forwarding for the application.

## 5.3 UPnP

Universal Plug and Play (UPnP) is a set of computer network protocols. This allows devices to connect seamlessly and to simplify the implementation of networks.

UPnP achieves this by defining and publishing UPnP device control protocols built upon open, Internet-based communication standards.

The screenshot shows the antaira CONTROL PANEL interface. The 'Port Forwarding' section is active, and the 'UPnP' sub-tab is selected. The main heading is 'Universal Plug and Play (UPnP)'. Under 'Forwards', there is a table with columns: Description, Enabled, From (WAN), To (LAN), IP Address, Protocol, and Delete. The table content is '- None -'. Below the table are buttons for 'Delete All' and 'Auto-Refresh is On'. The 'UPnP Configuration' section has two options: 'UPnP Service' (radio buttons for Enable and Disable, with Disable selected) and 'Clear port forwards at startup' (radio buttons for Enable and Disable, with Disable selected).

[NAT/QoS > UPnP](#)

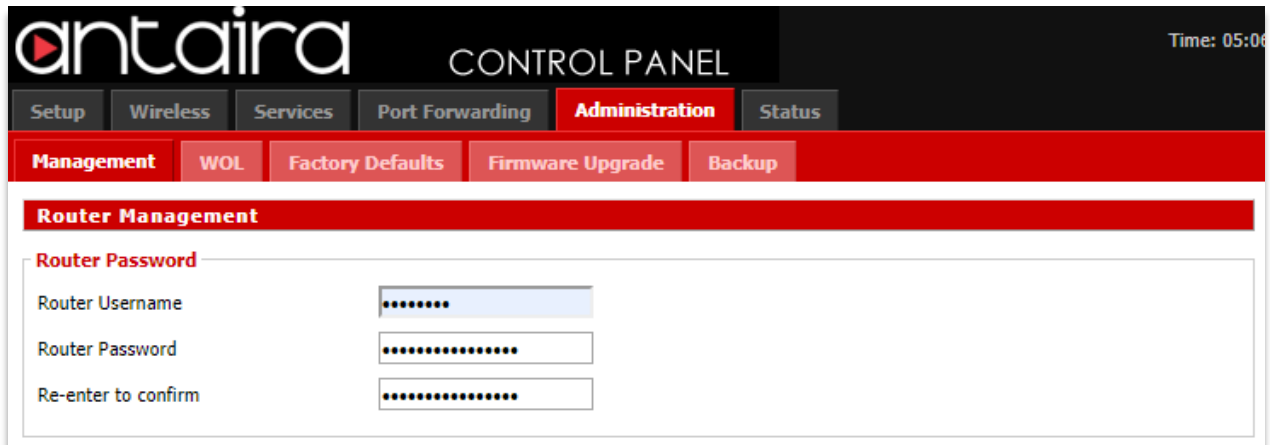
Universal Plug and Play (UPnP)	Description
<b>Forwards</b>	The UPnP forwards table shows all open ports forwarded automatically by the UPnP process.
<b>UPnP Service</b>	Enables UPnP service.
<b>Clear Port Forwards at Startup</b>	If enabled, a presentation URL tag is sent with the device description. This allows the router to show up in <i>Window's My Network Places</i> . You may need to reboot your PC when enabling this option.

## 6. Administration

The Administration tab allows you to change the router's settings. On this page you will find most of the configurable items of the router code.

### 6.1 Management

#### 6.1.1 Router Password



[Administration > Management > Router Password](#)

Router Password	Description
Router Username	Enter the router's username.
Router Password	Enter the router's password. New password must not exceed 32 characters in length and must not include any spaces.
Re-enter to Confirm	Enter the new password to confirm it.

## 6.1.2 Web Access

**Web Access**

Protocol  HTTP  HTTPS

Auto-Refresh (in seconds)

Enable Info Site  Enable  Disable

Info Site Password Protection  Enabled

Info Site MAC Masking  Enable  Disable

[Administration > Management > Web Access](#)

Web Access	Description
<b>Protocol</b>	Manage the router using either HTTP protocol or HTTPS protocol. If you choose to disable this feature, a manual reboot will be required.
<b>Auto-Refresh (seconds)</b>	Set the auto-refresh time of the web page.
<b>Enable Info Site</b>	Activate the router information web page.
<b>Info Site Password Protection</b>	Password protect the router information web page.
<b>Info site MAC Masking</b>	Allows you to truncate MAC addresses in the web interface.

## 6.1.3 Remote Access

This feature allows you to manage the router from a remote location, via the Internet. When enabled, use the specified port (*default is 8080*).

**Remote Access**

Web GUI Management  Enable  Disable

SSH Management  Enable  Disable

Telnet Management  Enable  Disable

Allow Any Remote IP  Enable  Disable

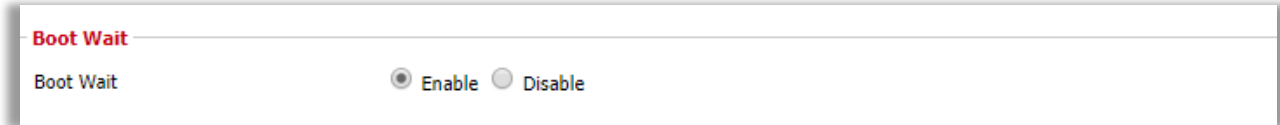
[Administration > Management > Remote Access](#)

Remote Access	Description
<b>Web GUI</b>	Enable or disable remote access the web interface.

<b>Management</b>	
<b>SSH Management</b>	Enable SSH remote access. Note that the SSH daemon needs to be enabled in the <i>Services</i> page.
<b>Telnet Management</b>	Enable Telnet remote access.
<b>Allow Any Remote IP</b>	Allow any remote IP access or specify a range or IPs.

### 6.1.4 Boot Wait

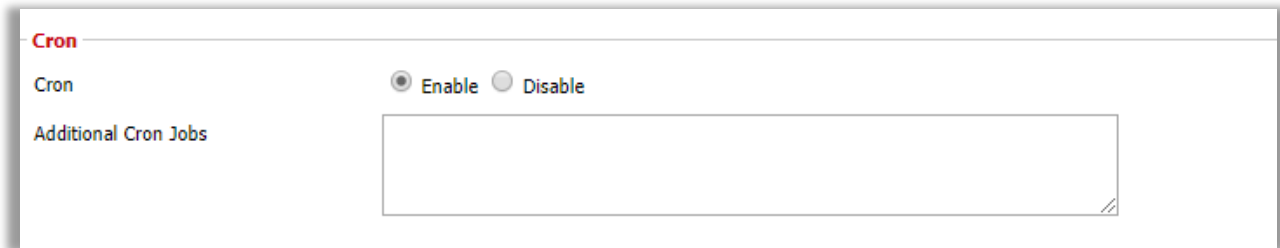
Boot Wait is a feature that introduces a short delay while booting (5 seconds). During this delay you can initiate the download of a new firmware if the one in flash rom is not broken. This is only necessary if you can no longer reflash using the web interface because the installed firmware will not boot.



[Administration > Management > Boot Wait](#)

### 6.1.5 Cron

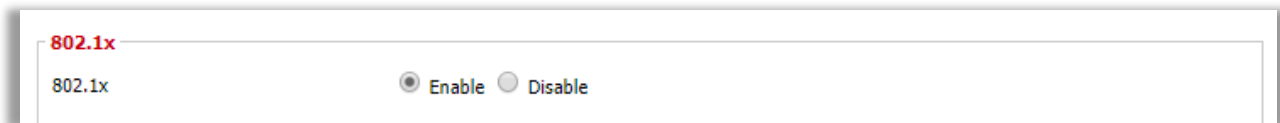
The cron subsystem schedules execution of Linux commands. You will need to use the command line or startup scripts to do this.



[Administration > Management > Cron](#)

### 6.1.6 802.1x

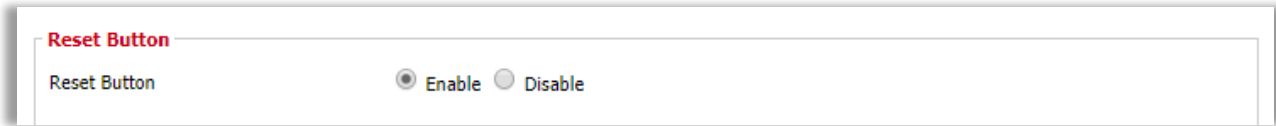
A limited 802.1x server needed to fulfil WPA handshake requirements to allow Windows XP clients to work with WPA.



[Administration > Management > 802.1x](#)

### 6.1.7 Reset Button

This feature controls the reset button process. The reset button initiates actions depending on how long you press it.

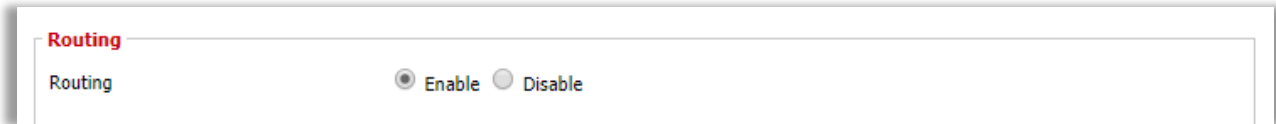


[Administration > Management > Reset Button](#)

- Short press – Reset the router (reboot)
- Long press (>5s) – Reboot and restore the factory default configuration.

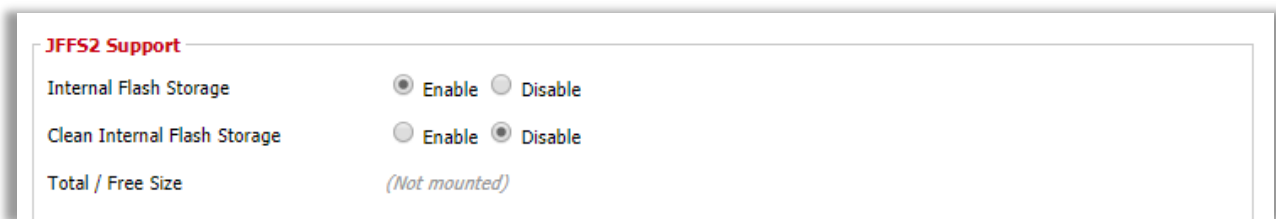
### 6.1.8 Routing

Routing enables the OSPF and RIP routing daemons if you have set up OSPF or RIP in the *Advanced Routing* page.



[Administration > Management > Routing](#)

### 6.1.9 JFFS2 Support



[Administration > Management > JFFS2 Support](#)

### 6.1.10 Language Selection

Select the language presented on the router.

[Administration > Management > Language Selection](#)

### 6.1.11 IP Filter Settings

If you have any peer-to-peer applications running on your network, please increase the maximum ports and lower the TCP/UDP timeouts. This is necessary to maintain router stability because peer-to-peer applications open many connections and do not close them properly.

[Administration > Management > IP Filter Settings](#)

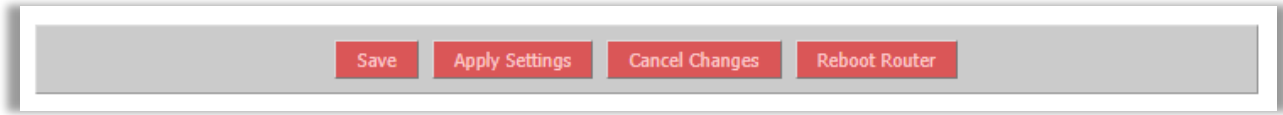
### 6.1.12 Router GUI Style

Select the graphical style of the router.

[Administration > Management > Router GUI Style](#)

### 6.1.13 Router Reboot

You may reboot the router under this page as well.



[Administration > Management > Router Reboot](#)



## 6.2 Wake on LAN (WOL)

This page allows you to Wake Up hosts on your local network.

The screenshot shows the 'Administration > WOL' page in the Antaira Control Panel. The top navigation bar includes 'Setup', 'Wireless', 'Services', 'Port Forwarding', 'Administration' (selected), and 'Status'. Below this is a secondary navigation bar with 'Management', 'WOL' (selected), 'Factory Defaults', 'Firmware Upgrade', and 'Backup'. The main content area is titled 'Wake-On-LAN' and contains four sections:

- Available Hosts:** A table with columns for MAC Address, Hostname, IP Address, and Enable WOL?. It currently shows '- None -'.
- WOL Addresses:** A table with columns for MAC Address, Hostname, Net Broadcast, and Remove. It also shows '- None -'. Below the table are input fields for MAC Address, Hostname, and Net Broadcast, and an 'Add Host' button.
- Manual WOL:** Fields for MAC Address(es), IP Address, and UDP Port, with a 'Manual Wake Up' button.
- Automatic Wake-On-LAN:** A section titled 'Wake-On-LAN daemon' with radio buttons for 'Enable' (selected) and 'Disable'. It includes fields for Interval (in seconds) set to 86400 (with a note: '(Default: 86400, Range: 1 - 86400)'), Hostname, SecureOn Password, and MAC Address(es).

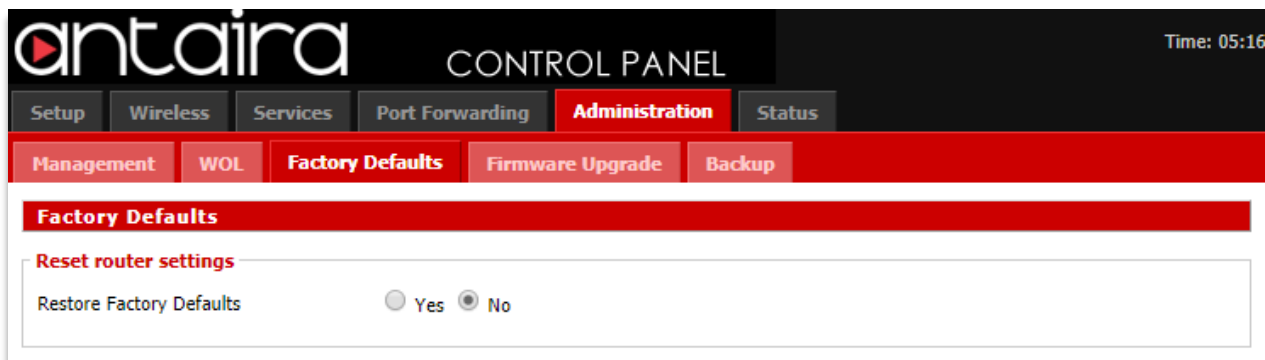
### [Administration > WOL](#)

Wake on LAN	Description
<b>Available Hosts</b>	The available hosts section provides a list of hosts to add/remove from the WOL address list. This list is a

	combination of any defined static hosts or discovered DHCP clients.
<b>WOL Addresses</b>	The WOL addresses section allows individual hosts in the WOL list ( <i>stored in the wol_hosts NVRAM variable</i> ) to be Woken Up. The list is a combination of selected ( <i>enabled</i> ) available hosts and manually added WOL hosts.
<b>Manual WOL</b>	The manual WOL section allows individual or a list of hosts to be woken up by clicking Wake Up to send it the WOL magic packet.
<b>WOL daemon</b>	Besides attempting to Wake Up the manually specified hosts, clicking the <b>WOL daemon</b> button will save the MAC addresses, Network Broadcast, and UDP port values into the manual_wol_mac, manual_wol_network, and manual_wol_port NVRAM variables and commits them to memory.
<b>Hostname</b>	Enter a hostname for the WOL daemon.
<b>SecureOn Password</b>	Enter a password.
<b>MAC Addresses</b>	Fill the MAC address(es) ( <i>either separated by spaces or one per line</i> ) of the computer(s) you would like to wake up.

### 6.3 Factory Defaults

If you are having problems with your router, you can restore the factory default configurations here. Any settings you have saved will be lost when the default settings are restored. After restoring the router, it will be accessible under the default IP address **192.168.1.1** and the default password **admin**.



[Administration > Factory Defaults](#)

### 6.4 Firmware Upgrade

New firmware versions are available at [www.antaira.com](http://www.antaira.com). When you upgrade the

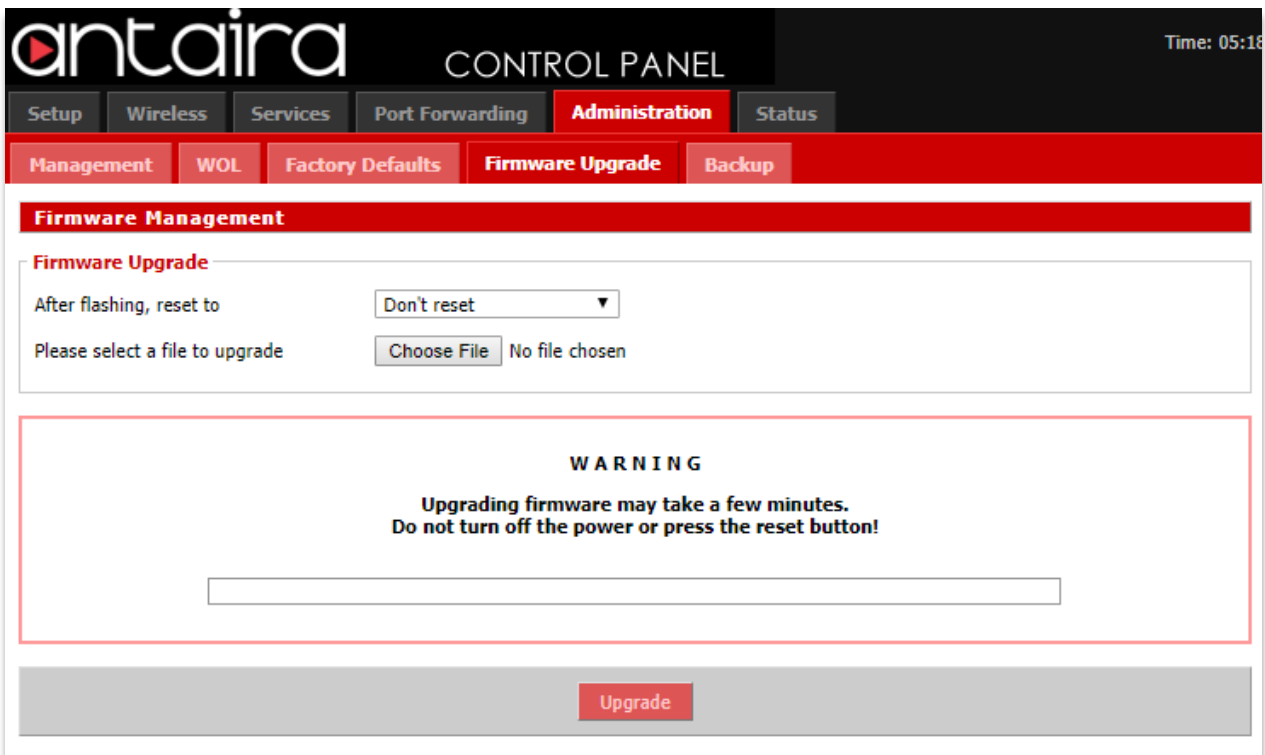
router's firmware, you may lose its configuration settings, so make sure you write down the router settings before you upgrade its firmware.

To upgrade the router's firmware:

1. Download the firmware upgrade file from the website.
2. Click the **Choose File** button and choose the firmware to upgrade.
3. Click the **Upgrade** button and wait until the upgrade is finished and the router has rebooted.

Do not power off the router, press the reset button, or interrupt the browser window while the firmware is being upgraded.

If you want to reset the router to the default settings for the firmware version you are upgrading to, select the **Reset to default settings** option.



[Administration > Firmware Upgrade](#)

## 6.5 Backup

You may backup your current configurations in case you need to reset the router back to its factory default settings. Click the **Backup** button to download your current router configurations to your PC.

To restore settings, click the **Choose File** button to browse for the configuration file that you saved on your PC. Click **Restore** to overwrite all current configurations with the ones in the configuration file.

antaira CONTROL PANEL Time: 05:20

Setup Wireless Services Port Forwarding Administration Status

Management WOL Factory Defaults Firmware Upgrade Backup

**Backup Configuration**

**Backup Settings**

Click the "Backup" button to download the configuration backup file to your computer.

**Restore Configuration**

**Restore Settings**

Please select a file to restore  No file chosen

**WARNING**

Only upload files backed up using this firmware and from the same model of router.  
Do not upload any files that were not created by this interface!

[Administration > Backup](#)

# 7. Status

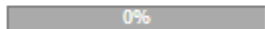
## 7.1 Router

The Status screen displays the router's current status and configuration. All information is read-only.


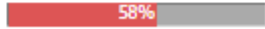
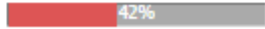
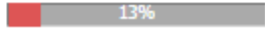
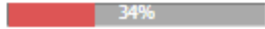
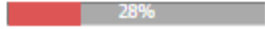
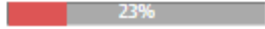
**Router Information**

Router Name	Antaira
Router Model	Industrial Access Point
Firmware Version	Antaira r39456 (04/09/19)
Kernel Version	Linux 3.18.138 #37814 Tue Apr 9 15:03:13 CEST 2019 mips
MAC Address	<u>C4:93:00:0F:55:8F</u>
Hostname	
WAN Domain Name	
LAN Domain Name	
Current Time	Wed, 27 Jan 2010 05:24:36
Uptime	1 day, 1:36

**CPU**

CPU Model	Qualcomm Atheros QCA9533 ver 2 rev 1.0 (0x0160)
CPU Cores	1
CPU Features	MIPS32r1 MIPS32r2 MIPS16
CPU Clock	650 MHz
Load Average	0.00, 0.00, 0.00 
Temperatures	Not available

**Memory**

Total Available	60952 kB / 65536 kB	
Free	35624 kB / 60952 kB	
Used	25328 kB / 60952 kB	
Buffers	3240 kB / 25328 kB	
Cached	8548 kB / 25328 kB	
Active	7200 kB / 25328 kB	
Inactive	5948 kB / 25328 kB	

## 7.2 WAN

The screenshot displays the antaira CONTROL PANEL interface. At the top, the 'Status' tab is selected, and the 'WAN' sub-tab is active. The 'Configuration Type' section shows the connection type as 'Automatic Configuration - DHCP'. Below this, a table lists various network parameters, all of which are currently set to 0.0.0.0 or 'Not available'. At the bottom of this section are 'DHCP Release' and 'DHCP Renew' buttons. The 'Traffic' section shows 'Total Traffic' with both incoming and outgoing values at 0. Below this is a 'Traffic by Month' bar chart for April 2019, which shows zero traffic for all days of the month. The chart is titled 'April 2019 (Incoming: 0 MB / Outgoing: 0 MB)' and includes 'Previous Month' and 'Next Month' navigation buttons.

**Configuration Type**

Connection Type	Automatic Configuration - DHCP
Connection Uptime	Not available
IP Address	0.0.0.0
Subnet Mask	0.0.0.0
Gateway	0.0.0.0
DNS 1	
DNS 2	
DNS 3	
Remaining Lease Time	0 days 00:00:00

[DHCP Release](#) [DHCP Renew](#)

**Traffic**

**Total Traffic**

Incoming (MBytes)	0
Outgoing (MBytes)	0

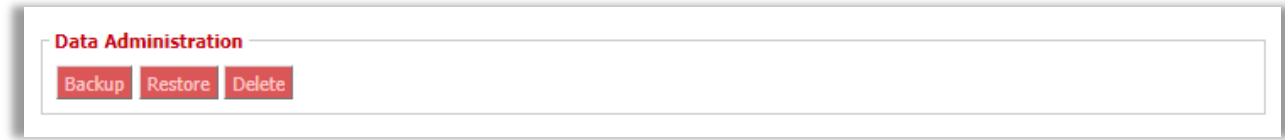
**Traffic by Month**

April 2019 (Incoming: 0 MB / Outgoing: 0 MB)

[Previous Month](#) [Next Month](#)

[Status > WAN](#)

## Data Administration



[Status](#) > [WAN](#) > [Data Administration](#)

## 7.3 LAN

The screenshot displays the antaira CONTROL PANEL interface. At the top, there are navigation tabs for Setup, Wireless, Services, Port Forwarding, Administration, and Status. Below these are sub-tabs for Router, WAN, LAN, Wireless, and Bandwidth. The LAN sub-tab is selected, showing the following sections:

- Local Network**
  - LAN Status**

MAC Address	04:F0:21:4B:EF:85
IP Address	10.1.1.251
Subnet Mask	255.255.255.0
Gateway	0.0.0.0
Local DNS	0.0.0.0
  - Active Clients**

Hostname	IP Address	MAC Address	Interface	Connections	Ratio [4096]
*	10.1.1.2	B0:5A:DA:5B:51:DF	br0	4	0%
  - Dynamic Host Configuration Protocol**
    - DHCP Status**

DHCP Server	Enabled
Start IP Address	10.1.1.100
End IP Address	10.1.1.149
Client Lease Time	1440 min
    - DHCP Clients**

Hostname	IP Address	MAC Address	Client Lease Time	Delete
- None -				

[Status > LAN](#)



## 7.4 Wireless

The screenshot shows the Antaira Control Panel interface. At the top, there is a navigation bar with tabs for Setup, Wireless, Services, Port Forwarding, Administration, and Status. Below this is a sub-navigation bar with tabs for Router, WAN, LAN, Wireless, and Bandwidth. The main content area is titled "Wireless" and contains three sections:

- Wireless Status:** A table showing configuration details for the ath0 interface. The radio is currently off.
- Wireless Packet Info:** A summary of network activity showing 0 OK packets received and transmitted, with 100% success rates for both.
- Wireless Nodes:** A section for monitoring connected clients, currently showing no active nodes.

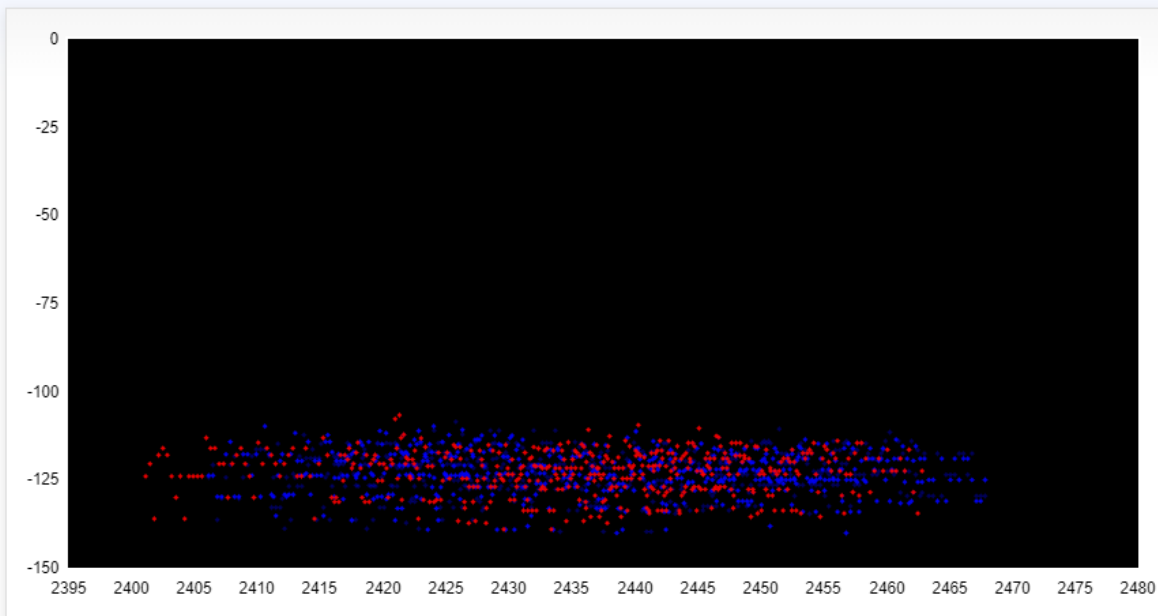
At the bottom of the page, there are three buttons: Spectrum, Site Survey, and Wiviz Survey.

[Status > Wireless](#)

## Spectrum

The spectral scan will show which frequencies have a lot of interference across either the 2.4GHz or 5GHz. No channel numbers are provided in the scan window. The x-axis represents frequencies in Hertz (Hz). The y-axis represents power drop in dB for noise. The higher numbers are better. Blue dots represent all of the samples taken while the red dots are averaged out over a certain time.

### Spectral Scan



Time between updates:  milliseconds

[Status > Wireless > Spectral Scan](#)

## Site Survey

**Neighbor's Wireless Networks**

SSID	Mode	MAC Address	Channel	Frequency	RSSI	Noise	Quality	Beacon	Open	DTIM	Rate	Join Site
None												

Refresh
Close

[Status > Wireless > Site Survey](#)

## Channel Survey

**Channel Survey and Qualities**

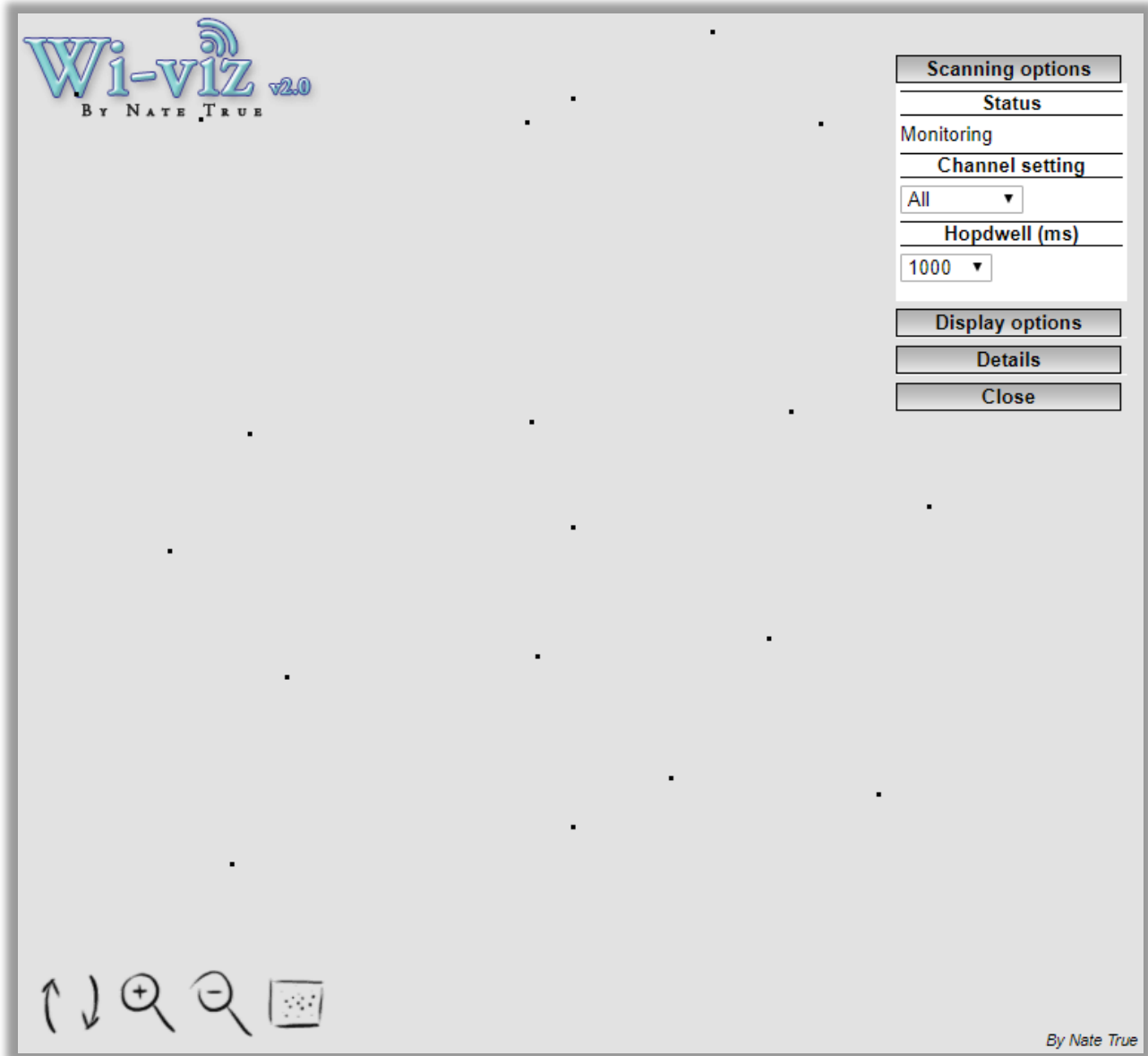
Frequency	Channel	Noise	Quality	Active Time	Busy Time	Receive Time	Transmission Time
2412	1	-105	99	284	3		
2417	2	-105	100	284	2		
2422	3	-105	100	284	1		
2427	4	-105	99	284	3		
2432	5	-105	99	284	5		
2437	6	-104	100	284	1		
2442	7	-104	100	284	0		
2447	8	-104	75	284	71		
2452	9	-105	93	284	20		
2457	10	-105	92	284	24		
2462	11	-104	95	284	17		
5180	36	-103	100	292	0		
5200	40	-102	91	292	29		
5220	44	-101	97	292	10		
[5240]	48	-104	97	813003	26141	422	817
5260	52	-100	100	292	0		
5280	56	-98	100	292	0		
5300	60	-95	71	292	85		
5320	64	-97	100	292	0		
5500	100	-85	100	292	0		
5520	104	-85	100	292	2		
5540	108	-85	100	292	1		
5560	112	-85	100	292	0		
5580	116	-88	100	292	0		
5600	120	-88	96	292	14		
5620	124	-90	100	292	0		
5640	128	-91	100	292	1		
5660	132	-92	100	292	0		
5680	136	-94	100	292	0		
5700	140	-94	100	292	0		
5720	144	-96	100	292	0		
5745	149	-98	99	292	4		
5765	153	-99	100	292	0		
5785	157	-101	100	292	1		
5805	161	-102	100	292	0		
5825	165	-100	100	292	0		

Refresh
Close

[Status > Wireless > Channel Survey](#)

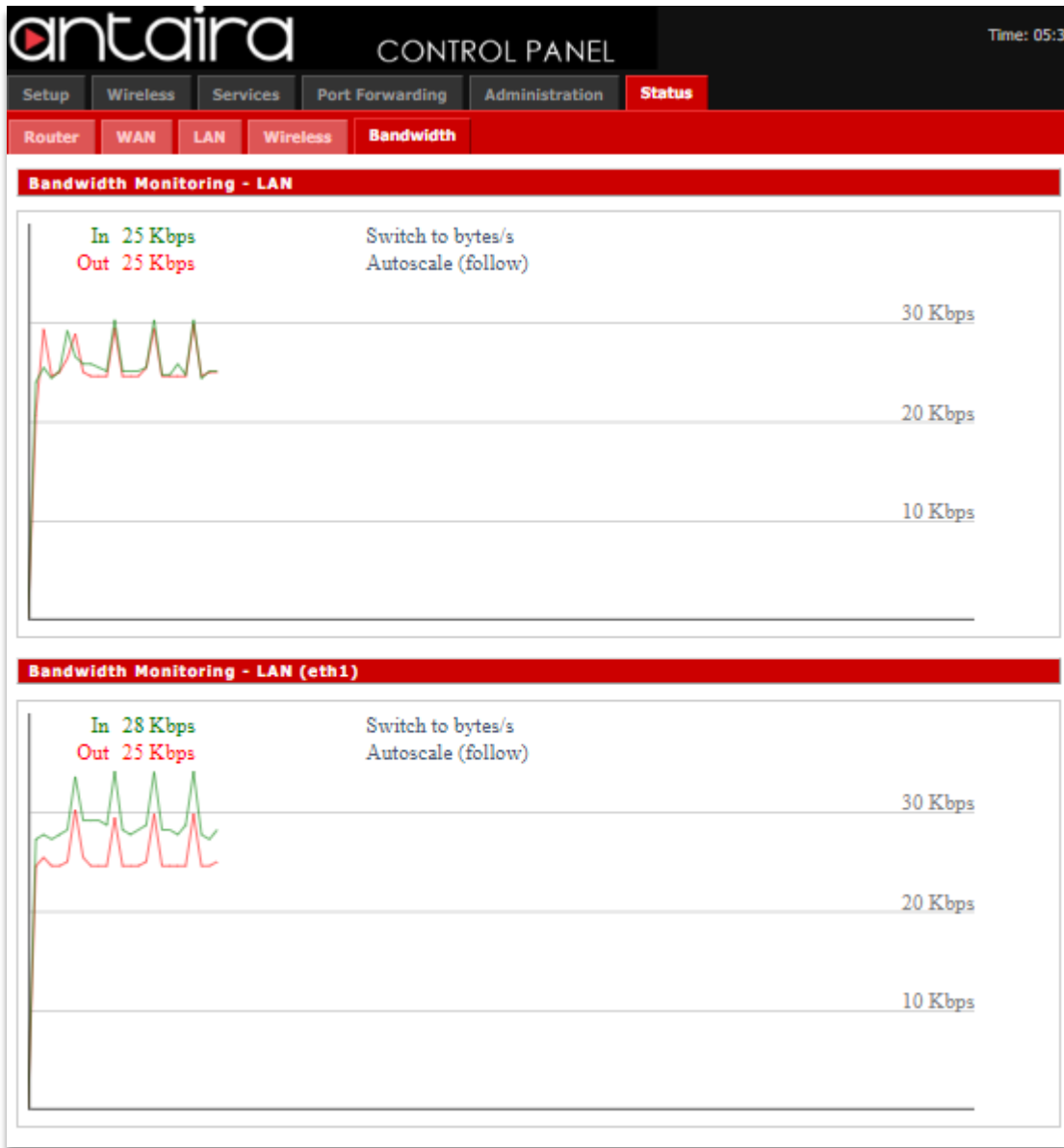
## Wiviz Survey

Wiviz is an open source GPL project that allows you to use your router to see other networks. The interface scans for networks and shows signal strength and effects of antenna adjustment in real time.



[Status > Wireless > Wiviz Survey](#)

## 7.5 Bandwidth



[Status > Bandwidth](#)