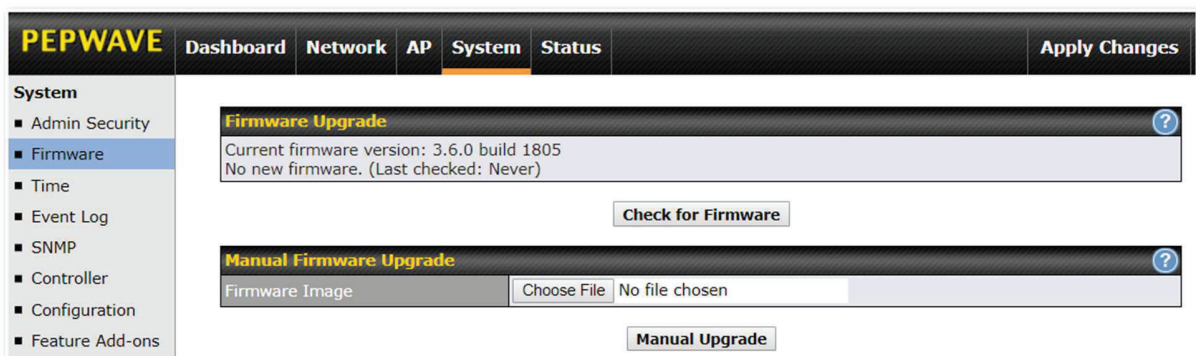


<b>Name</b>	
<b>Admin Password</b>	This field allows you to specify a new administrator password.
<b>Confirm Admin Password</b>	This field allows you to verify and confirm the new administrator password.
<b>Web Session Timeout</b>	A web login session will be logged out automatically when it has been idle longer than the Web Session Timeout Unlimited session timeout: 0 hours 0 minutes Default: 4 hours 0 minutes
<b>Security</b>	This option is for specifying the protocol(s) through which the web admin interface can be accessed: <ul style="list-style-type: none"> <li><input type="radio"/> HTTP</li> <li><input type="radio"/> HTTPS</li> <li><input type="radio"/> HTTP/HTTPS</li> </ul>
<b>Web Admin Port</b>	This field is for specifying the port number on which the web admin interface can be accessed.
<b>Allowed Source IP Subnets</b>	This option is for specifying the IP subnets through which the web admin interface can be accessed.
<b>Language</b>	Set language of the Web Interface

## 9.2 Firmware



The screenshot shows the PEPWAVE web interface. The top navigation bar includes 'Dashboard', 'Network', 'AP', 'System' (selected), and 'Status'. On the right of the navigation bar is an 'Apply Changes' button. The left sidebar menu is expanded to 'System', which includes 'Admin Security', 'Firmware' (selected), 'Time', 'Event Log', 'SNMP', 'Controller', 'Configuration', and 'Feature Add-ons'. The main content area displays the 'Firmware Upgrade' section with a 'Check for Firmware' button. Below it is the 'Manual Firmware Upgrade' section, which includes a 'Choose File' button and a 'Manual Upgrade' button.

There are two ways to upgrade the unit. The first method is through an online download. The second method is to upload a firmware file manually.

To perform an online download, click on the **Check for Firmware** button. The Access Point will check online for new firmware. If new firmware is available, the Access Point automatically

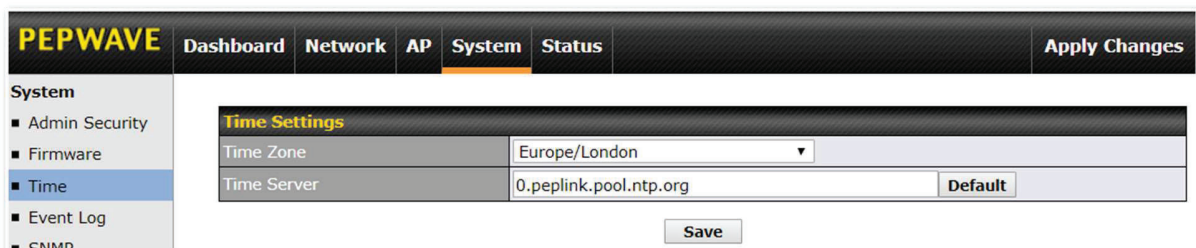
downloads the firmware. The rest of the upgrade process will be automatically initiated. You may also download a firmware image from the Peplink website and update the unit manually. To update using a firmware image, click **Choose File** to select the firmware file from the local computer, and then click **Manual Upgrade** to send the firmware to the Access Point. It will then automatically initiate the firmware upgrade process.

Please note that all devices can store two different firmware versions in two different partitions. A firmware upgrade will always replace the inactive partition. If you want to keep the inactive firmware, you can simply reboot your device with the inactive firmware and then perform the firmware upgrade.

Firmware Upgrade Status	
Status LED Information during firmware upgrade:	
● OFF	– Firmware upgrade in progress (DO NOT disconnect power.)
● Red	– Unit is rebooting
● Green	– Firmware upgrade successfully completed

Important Note
The firmware upgrade process may not necessarily preserve the previous configuration, and the behavior varies on a case-by-case basis. Consult the release notes for the particular firmware version before installing. Do not disconnect the power during the firmware upgrade process. Do not attempt to upload a non-firmware file or a firmware file that is not supported by Peplink. Upgrading the Peplink Balance with an invalid firmware file will damage the unit and may void the warranty.

### 9.3 Time



Time Settings	
Time Zone	Europe/London
Time Server	0.peplink.pool.ntp.org <span>Default</span>

The time server functionality enables the system clock of the Access Point to be synchronized with a specified time server. The settings for time server configuration are located at **System>Time**.

## 9.4 Event Log

Event log functionality enables event logging at a specified remote syslog server. The settings for configuring the remote system log can be found at **System>Event Log**.

Remote Syslog Settings	
<b>Remote Syslog</b>	This setting specifies whether or not to log events at the specified remote syslog server.
<b>Remote Syslog Host</b>	This setting specifies the IP address or hostname of the remote syslog server. Port: Default 514

## 9.5 SNMP

SNMP or simple network management protocol is an open standard that can be used to collect information about the Peplink Balance unit. SNMP configuration is located at **System>SNMP**.

SNMP Settings			
SNMP Device Name	AP-One-Enterprise-1335		
SNMP Port	161	Default	
SNMPv1	<input checked="" type="checkbox"/>		
SNMPv2c	<input checked="" type="checkbox"/>		
SNMPv3	<input type="checkbox"/>		
Save			

Community Name	Allowed Source Network	Access Mode	
public	0.0.0.0	Read Only	✘
Add SNMP Community			

SNMPv3 User Name	Authentication / Privacy	Access Mode	
No SNMPv3 Users Defined			
Add SNMP User			

SNMP Settings	
<b>SNMP Device Name</b>	This field shows the router name defined at <b>System&gt;Admin Security</b> .
<b>SNMP Port</b>	This option specifies the port which SNMP will use. The default port is <b>161</b> .
<b>SNMPv1</b>	This option allows you to enable SNMP version 1.
<b>SNMPv2</b>	This option allows you to enable SNMP version 2.
<b>SNMPv3</b>	This option allows you to enable SNMP version 3.

To add a community for either SNMPv1 or SNMPv2, click the **Add SNMP Community** button in the **Community Name** table, upon which the following screen is displayed:

**Settings**

Community Name	<input type="text"/>
IP Address	<input type="text" value="0.0.0.0"/>
IP Mask	<input type="text" value="0.0.0.0 (/0)"/> ▼
Access Mode	<input type="text" value="Read Only"/> ▼
Status	<input type="radio"/> Enable <input checked="" type="radio"/> Disable

SNMP Community Settings	
<b>Community Name</b>	This setting specifies the SNMP community name.
<b>IP Address &amp; IP mask</b>	This setting specifies a subnet from which access to the SNMP server is allowed. Enter subnet address here (e.g., <i>192.168.1.0</i> ) and select the appropriate subnet mask.
<b>Access Mode</b>	Choose between <b>Read Only</b> and <b>Read and Write</b>
<b>Status</b>	Enable or Disable SNMP community

To define a user name for SNMPv3, click **Add SNMP User** in the **SNMPv3 User Name** table, upon which the following screen is displayed:

Settings	
SNMPv3 User Name	<input type="text"/>
Authentication Protocol	HMAC-MD5 ▼
Authentication Password	<input type="password"/>
Confirm Authentication Password	<input type="password"/>
Privacy Protocol	None ▼
Access Mode	Read Only ▼
Status	<input type="radio"/> Enable <input checked="" type="radio"/> Disable

SNMPv3 User Settings	
<b>SNMPv3 User Name</b>	This setting specifies a user name to be used in SNMPv3.
<b>Authentication Protocol</b>	This setting specifies via a drop-down menu one of the following valid authentication protocols: <ul style="list-style-type: none"> <li><input checked="" type="radio"/> HMAC-MD5</li> <li><input type="radio"/> HMAC-SHA</li> </ul>
<b>Authentication Password</b>	Password for SNMPv3 authentication.
<b>Confirm Authentication Password</b>	Confirm password for SNMPv3 authentication.
<b>Privacy Protocol</b>	This setting specifies via a drop-down menu one of the following valid privacy protocols: <ul style="list-style-type: none"> <li><input checked="" type="radio"/> None</li> <li><input type="radio"/> CBC-DES</li> </ul> When CBC-DES is selected, an entry field will appear for the password.
<b>Access Mode</b>	Choose between Read Only and Read and Write.
<b>Status</b>	Enable or Disable SNMPv3 user

## 9.6 Controller

Option to choose the controller for the Access Point.  
The available options are:

Controller Management Settings	
<b>Controller Management</b>	Controller management is enabled when ticked, when unticked the Access Point is configured through the Web Admin GUI
<b>Controller Type</b>	<p>This setting specifies via a drop-down menu one of the following valid authentication protocols:</p> <ul style="list-style-type: none"> <li>● Auto - AP automatically assigned to active AP Controller</li> <li>● InControl - AP is controlled by InControl*</li> <li>● AP Controller - AP is controlled by Peplink Valance with AP controller feature</li> </ul>
<b>Privately Host InControl</b>	Privately host InControl Appliance. Check the box beside the "Privately Host InControl" and enter the IP Address or hostname of your InControl Appliance..
<b>Unreachable Action</b>	Switch the AP "Radio off" or take no action when the AP is unreachable.

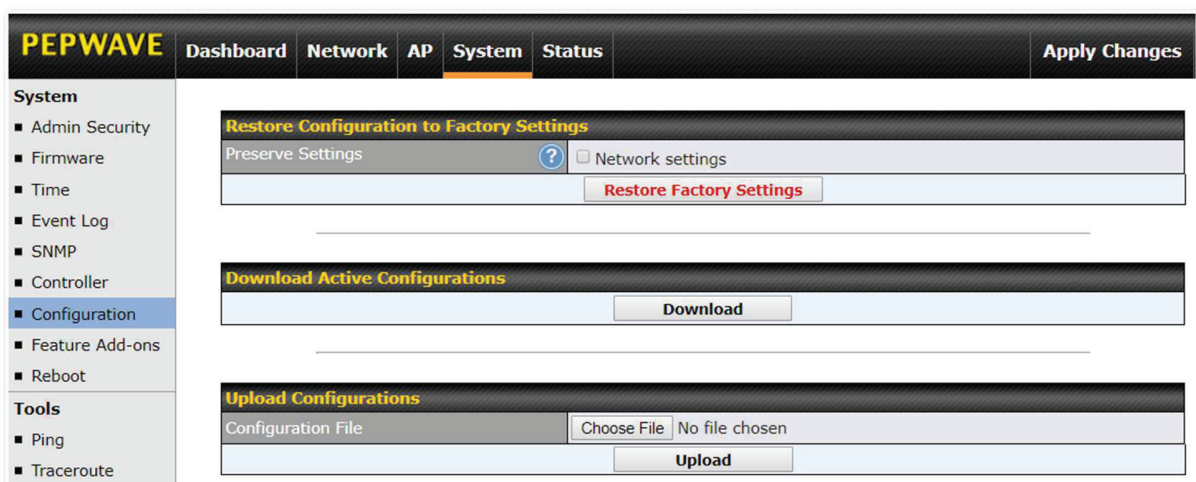
\*InControl is a cloud-based service which allows you to manage all of your Peplink and Pepwave devices with one unified system. With it, you can generate reports, gather statistics, and configure your devices automatically.

You can sign up for an InControl account at <https://incontrol2.peplink.com>. You can register your devices under the account, monitor their status, see their usage reports, and receive offline notifications.



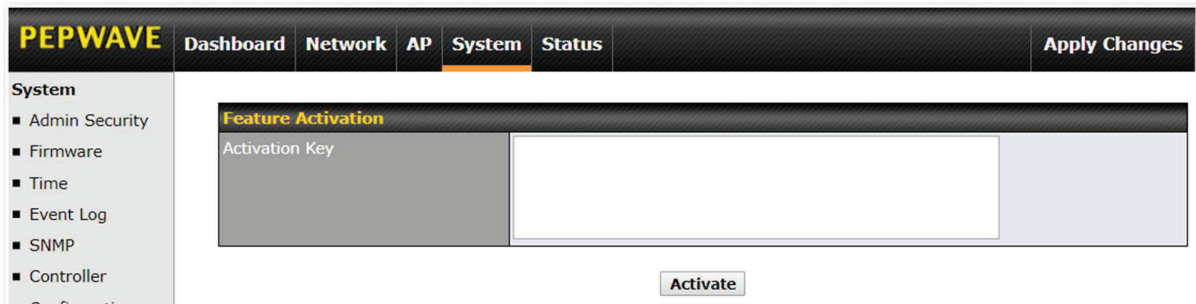
## 9.7 Configuration

Backing up your Pepwave Access Point settings immediately after successful completion of the initial setup is strongly recommended. The functionality to download and upload Pepwave Access Point settings is found at **System>Configuration**.



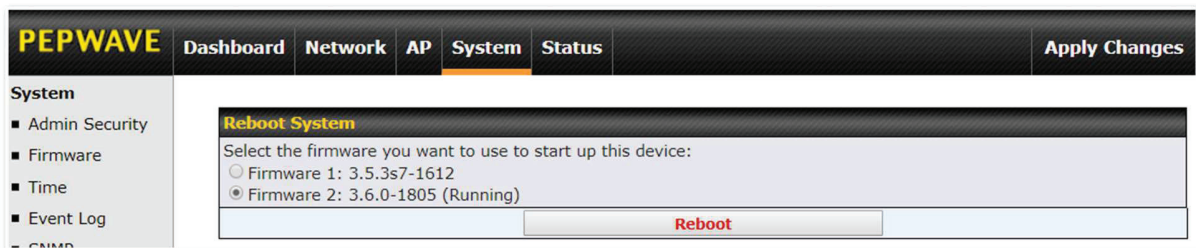
Configuration	
<h3>Restore Configuration to Factory Settings</h3>	<p>The <b>Restore Factory Settings</b> button is to reset the configuration to factory default settings. After clicking the button, you will need to click the <b>Apply Changes</b> button on the top right corner to make the settings effective.</p> <p>Tick the <b>Network Settings</b> option to include the IP Address, Subnet Mask, Default Gateway, DNS Server and Management VLAN ID</p>
<h3>Download Active Configurations</h3>	<p>Click <b>Download</b> to backup the current active settings.</p>
<h3>Upload Configurations</h3>	<p>To restore or change settings based on a configuration file, click <b>Choose File</b> to locate the configuration file on the local computer, and then click <b>Upload</b>. The new settings can then be applied by clicking the <b>Apply Changes</b> button on the page header, or you can cancel the procedure by pressing <b>discard</b> on the main page of the web admin interface.</p>

## 9.8 Feature Add-Ons



Some Pepwave Access Points models have features that can be activated upon purchase. Once the purchase is complete, you will receive an activation key. Enter the key in the Activation Key field, click Activate, and then click Apply Changes.

## 9.9 Reboot

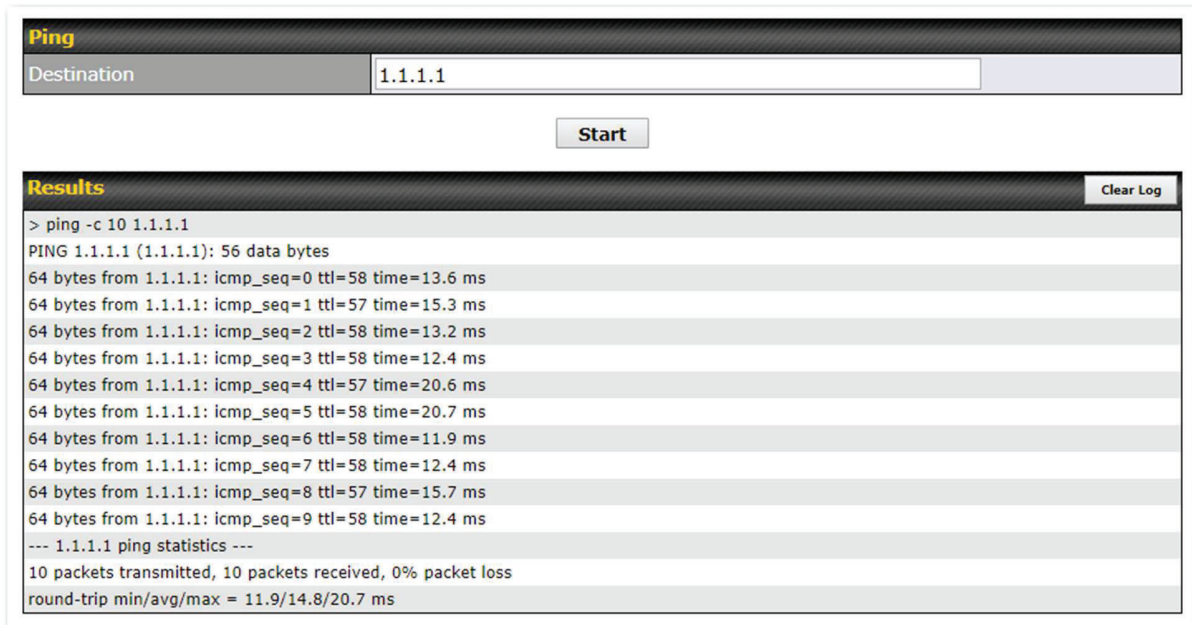


Restart the Access Point with the **Reboot** button. For maximum reliability, the Pepwave Access Point can contain two copies of firmware; each copy can be a different version. You can select the firmware version you would like to reboot the device with. The firmware marked with **(Running)** is the current system boot up firmware.

**Please note that a firmware upgrade will always replace the inactive firmware partition.**



## 9.10 Tools > Ping



**Ping**

Destination: 1.1.1.1

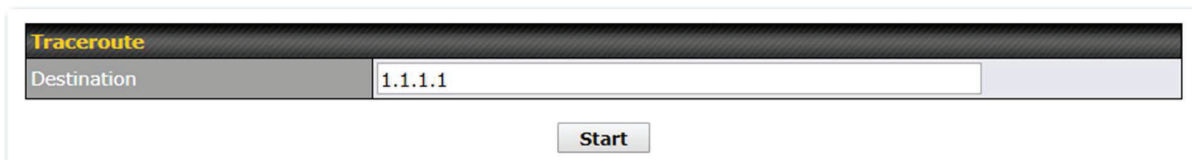
Start

**Results** Clear Log

```
> ping -c 10 1.1.1.1
PING 1.1.1.1 (1.1.1.1): 56 data bytes
64 bytes from 1.1.1.1: icmp_seq=0 ttl=58 time=13.6 ms
64 bytes from 1.1.1.1: icmp_seq=1 ttl=57 time=15.3 ms
64 bytes from 1.1.1.1: icmp_seq=2 ttl=58 time=13.2 ms
64 bytes from 1.1.1.1: icmp_seq=3 ttl=58 time=12.4 ms
64 bytes from 1.1.1.1: icmp_seq=4 ttl=57 time=20.6 ms
64 bytes from 1.1.1.1: icmp_seq=5 ttl=58 time=20.7 ms
64 bytes from 1.1.1.1: icmp_seq=6 ttl=58 time=11.9 ms
64 bytes from 1.1.1.1: icmp_seq=7 ttl=58 time=12.4 ms
64 bytes from 1.1.1.1: icmp_seq=8 ttl=57 time=15.7 ms
64 bytes from 1.1.1.1: icmp_seq=9 ttl=58 time=12.4 ms
--- 1.1.1.1 ping statistics ---
10 packets transmitted, 10 packets received, 0% packet loss
round-trip min/avg/max = 11.9/14.8/20.7 ms
```

The ping test tool tests connectivity pinging the specified destination IP address. The ping utility is located at **System>Tools>Ping**.

## 9.11 Tools > Traceroute



**Traceroute**

Destination: 1.1.1.1

Start

The traceroute test tool traces the routing path to the specified IP address. The traceroute test utility is located at **System>Tools>Traceroute**.

## 9.12 Tools > Nslookup

**Nslookup**

Destination

**Results**

```
> nslookup bbc.co.uk
Server: one.one.one.one
Address: 1.1.1.1
Name: bbc.co.uk
Addresses: 151.101.64.81, 151.101.128.81, 151.101.192.81, 151.101.0.81
```

The nslookup tool is used to test DNS name servers. The nslookup utility can be found at **System>Tools>Nslookup**.

## 10 Status

The displays available on the **Status** tab help you monitor device data, client activity, rogue device access, and more.

### 10.1 Device

PEPWAVE
Dashboard
Network
AP
System
Status
Apply Changes

**Status**

- Device
- Client List
- WDS Info
- Portal
- Rogue AP
- Event Log

**System Information**

Device Name	AP-One-Enterprise- [REDACTED]
Model	AP One Enterprise
Hardware Revision	2
Location	site1
Serial Number	[REDACTED]
Firmware	3.6.0 build 1805
Host Name	ap-one-enterprise- [REDACTED]
Uptime	0 day 0 hour 13 minutes
System Time	Tue Oct 23 13:38:58 GMT 2018
Diagnostic Report	<a href="#">Download</a>
Remote Assistance	<a href="#">Turn on</a>

Interface	MAC Address
WAN	00:1A [REDACTED]
Radio 2.4GHz	00:1A [REDACTED]
Radio 5GHz	00:1A [REDACTED]

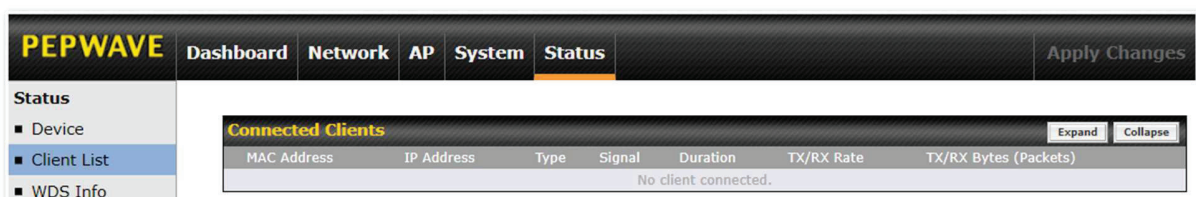
System Information	
<b>Device Name</b>	This is the name specified in the <b>Router Name</b> field located at <b>System&gt;Admin Security</b> .
<b>Model</b>	This shows the model name and number of this device.
<b>Hardware Revision</b>	This shows the hardware version of this device.
<b>Serial Number</b>	This shows the serial number of this device.
<b>Firmware</b>	This shows the firmware version this device is currently running.
<b>Host name</b>	This shows the hostname of the device.
<b>Uptime</b>	This shows the length of time since the device has been rebooted.
<b>System Time</b>	This shows the current system time.
<b>Diagnostic Report</b>	The <b>Download</b> link is for exporting a diagnostic report file required for system investigation.
<b>Remote Assistance</b>	Click <b>Turn on</b> to enable remote assistance.

The second table shows the MAC address of each LAN/WAN?Radio interface connected.

### Important Note

If you encounter issues and would like to contact the Peplink Support Team (<https://contact.peplink.com/secure/create-support-ticket.html>), please download the diagnostic report file and attach it along with a description of your issue.

## 10.2 Client List



The screenshot shows the PEPWAVE web interface with the 'Status' tab selected. On the left, there is a sidebar menu with 'Client List' highlighted. The main content area displays a table titled 'Connected Clients' with columns for MAC Address, IP Address, Type, Signal, Duration, TX/RX Rate, and TX/RX Bytes (Packets). The table currently shows 'No client connected.' and has 'Expand' and 'Collapse' buttons.

The **Client List** displays all currently connected clients. Use the **Expand** and **Collapse** buttons

to control the amount of data displayed.

### 10.3 WDS Info

	2.4GHz	5GHz
Local MAC Address	00:1A	00:1A
Current Channel	0	0

WDS Clients					
Peer MAC Address	Encryption	Type	Signal	TX/RX Bytes (Packets)	
No WDS.					

Here you can monitor the status of your wireless distribution system (WDS) and track activity by MAC address. This section will display information for both the 2.4GHz and 5GHz radios.

### 10.4 Portal

MAC Address	IP Address	User Name	Status	Last Login Time	Remaining Quota
No portal user connected.					

If you've turned on your access point's captive portal, client connection data will appear here. Use the **Expand** and **Collapse** buttons to control the amount of data displayed.

### 10.5 Rogue AP

BSSID	SSID	Channel	Signal	Encryption	Last Seen
00:1A:		132	-38dBm	WPA & WPA2	0 minutes ago
00:1A:		112	-27dBm	WPA & WPA2	0 minutes ago
00:1B:		48	-59dBm	WPA2	2 minutes ago

This section displays a list of nearby suspected rogue access points.

## 10.6 Event Log

The screenshot shows the PEPWAVE web interface. The top navigation bar includes 'Dashboard', 'Network', 'AP', 'System', and 'Status' (which is highlighted). On the left, a 'Status' sidebar contains a tree view with 'Event Log' selected and a 'Logout' button. The main content area displays the 'Device Event Log' with a table of events. The table has columns for time, event type (WLAN or System), and event details. An 'Auto Refresh' checkbox is checked in the top right of the log area. A 'Clear Log' button is located at the bottom left of the log area.

Time	Event Type	Event Details
Oct 23 13:31:17	WLAN:	Client (Mac: 00:00:00:00:00:00) disconnected from WLAN (SSID: PEPWAVE) [RX:50]
Oct 23 13:27:03	System:	Power on (Mac: 00:00:00:00:00:00)
Oct 23 13:26:14	System:	Power on (Mac: 00:00:00:00:00:00) [S-Connect]
Jan 01 00:00:51	System:	Power on (Mac: 00:00:00:00:00:00)
Jan 01 00:00:42	WLAN:	Client (Mac: 00:00:00:00:00:00) disconnected from WLAN (SSID: PEPWAVE) [RX:14]
Oct 23 10:25:38	WLAN:	Client (Mac: 00:00:00:00:00:00) disconnected from WLAN (SSID: PEPWAVE) [RX:14]
Oct 23 10:20:52	WLAN:	Client (Mac: 00:00:00:00:00:00) disconnected from WLAN (SSID: PEPWAVE) [RX:18]
Oct 23 09:39:00	WLAN:	Client (Mac: 00:00:00:00:00:00) disconnected from WLAN (SSID: PEPWAVE) [RX:18]
Oct 23 09:34:33	WLAN:	Client (Mac: 00:00:00:00:00:00) disconnected from WLAN (SSID: PEPWAVE) [RX:18]
Oct 23 09:24:45	WLAN:	Client (Mac: 00:00:00:00:00:00) disconnected from WLAN (SSID: PEPWAVE) [RX:23]
Oct 23 09:24:45	WLAN:	Client (Mac: 00:00:00:00:00:00) disconnected from WLAN (SSID: PEPWAVE) [RX:23]
Oct 23 09:23:54	WLAN:	Client (Mac: 00:00:00:00:00:00) disconnected from WLAN (SSID: PEPWAVE) [RX:47]
Oct 23 09:23:24	WLAN:	Client (Mac: 00:00:00:00:00:00) disconnected from WLAN (SSID: PEPWAVE) [RX:47]
Oct 23 09:23:17	WLAN:	Client (Mac: 00:00:00:00:00:00) disconnected from WLAN (SSID: PEPWAVE) [RX:47]
Oct 23 08:23:46	WLAN:	Client (Mac: 00:00:00:00:00:00) disconnected from WLAN (SSID: PEPWAVE) [RX:56]
Oct 23 08:23:45	WLAN:	Client (Mac: 00:00:00:00:00:00) disconnected from WLAN (SSID: PEPWAVE) [RX:56]
Oct 23 08:22:21	WLAN:	Client (Mac: 00:00:00:00:00:00) disconnected from WLAN (SSID: PEPWAVE) [RX:56]

The **Event Log** displays a list of all events associated with your access point. Check **Auto Refresh** to refresh log entries automatically. Click the **Clear Log** button to clear the log.

## 11 Restoring Factory Defaults

To restore the factory default settings on a Pepwave AP One router, follow the steps below:

1. Locate the reset button on the front or back panel of the Pepwave AP One router.
2. With a paperclip, press and keep the reset button pressed.

Note: There is a dual function to the reset button.

Hold for 5 seconds for admin password reset (Note: The LED status light blinks in RED 2 times and release the button, green status light starts blinking)

Hold for 5 seconds for factory reset (Note: The LED status light blinks in RED 3 times and release the button, all WAN/LAN port lights start blinking)

After the Pepwave AP One router finishes rebooting, the factory default settings will be restored.

### Important Note



All previous configurations and bandwidth usage data will be lost after restoring factory default settings. Regular backup of configuration settings is strongly recommended.

## 12 Appendix

1. The device supports time division technology
2. Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

Operations in the 5.15-5.25GHz band are restricted to indoor usage only.

### IMPORTANT NOTE

#### FCC Radiation Exposure Statement


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

**The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination.**



**Restriction Statement:**

The 5150 - 5250 MHz Band is allocated for indoor use only in EU member countries.



BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT	CY	LV
LT	LU	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

**The availability of some specific channels and/or operational frequency bands is country dependent and is firmware programmed at the factory to match the intended destination.**

**2.4GHz ( 2412 – 2472 MHz ) : 15.35 dBm**

**5GHz ( 5150 - 5250 MHz ) : 18.15 dBm**