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for your IP network

Quick Installation Guide

OWL500/510 V1.00

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Note

The respective FCC ID for This document serves only as a sample manual and QIG for this sample unit. The respective FCC ID for OWL500/OWL510 will be VZ9090003, application in progress in July 2009.

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Preface

The 802.11 b/g compliant **OWL500/510** is a Long Range Outdoor CPE/AP/Bridge device that can be used for dual purposes. First, it can be deployed as a traditional fixed wireless Access Point (AP). Secondly, it can be used as a Customer Premises Equipment (CPE) that connects to the outdoor wireless network of Wireless Internet Service Provider (WISP).

The metal sealed OWL500/510 is compact in size and weatherproof. Coming with a mounting kit, it can be mounted on a pole or wall. It is suitable for both indoor and outdoor usage with its 500mW output power, which is higher than a typical indoor AP (100mW).

This Quick Installation Guide (including FAQ Instruction Guide) provides instructions for getting started with OWL500/510.

Package Contents

1. OWL500/510 x 1
2. Quick Installation Guide (QIG) x 1
3. CD-ROM (with User's Manual and QIG) x 1
4. Power Sourcing Equipment (PSE) with AC cable x 1
5. Mounting Kit x 1

It is recommended to keep the original packing material for possible future shipment when repair or maintenance is required. Any returned product should be packed in its original packaging to prevent damage during delivery.

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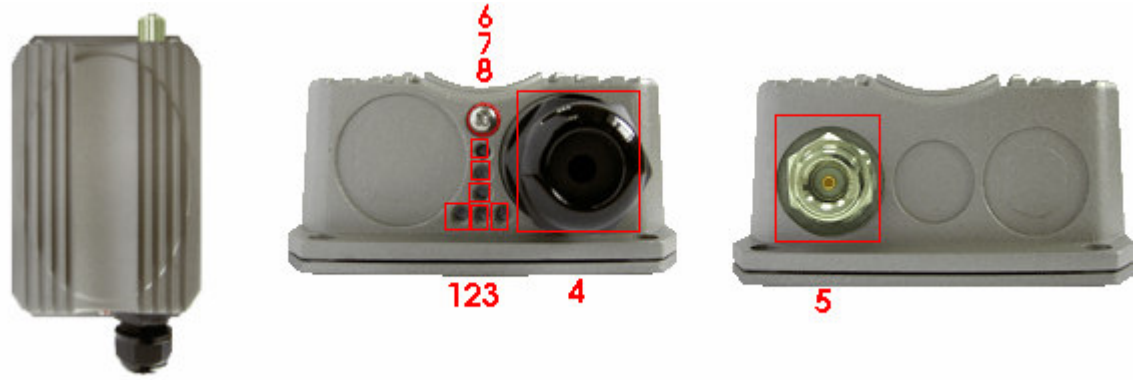
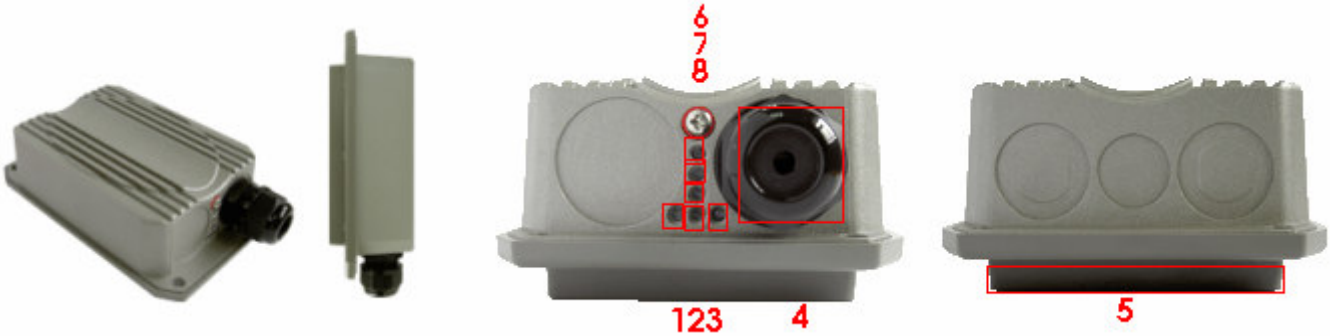
System Overview

OWL500



1	**WLAN**	Green LED **ON** indicates system ready
2	**Wireless Signal Strength**	For showing the signal strength situation
3	**Ethernet**	Green LED **ON** indicates connection, **OFF** indicates no connection, and **BLINKING** indicates transmitting data.
4	**PoE Connector**	For connecting to the Power Sourcing Equipment (PSE)
5	**N-type Connector**	For connecting to an antenna
6	**Power**	Red LED **ON** indicates power on, and **OFF** indicates power off
7, 8	**Wireless Signal Strength**	For showing the signal strength situation (7: Yellow; 8: Green)

OWL510



1	**WLAN**	Green LED **ON** indicates system ready
2	**Wireless Signal Strength**	For showing the signal strength situation
3	**Ethernet**	Green LED **ON** indicates connection, **OFF** indicates no connection, and **BLINKING** indicates transmitting data.
4	**PoE Connector**	For connecting to the Power Sourcing Equipment (PSE)
5	**Built-in patch antenna**	10 dBi (Horizontal: 110 degree; Vertical: 60 degree)
6	**Power**	Red LED **ON** indicates power on, and **OFF** indicates power off
7, 8	**Wireless Signal Strength**	For showing the signal strength situation (7: Yellow; 8: Green)

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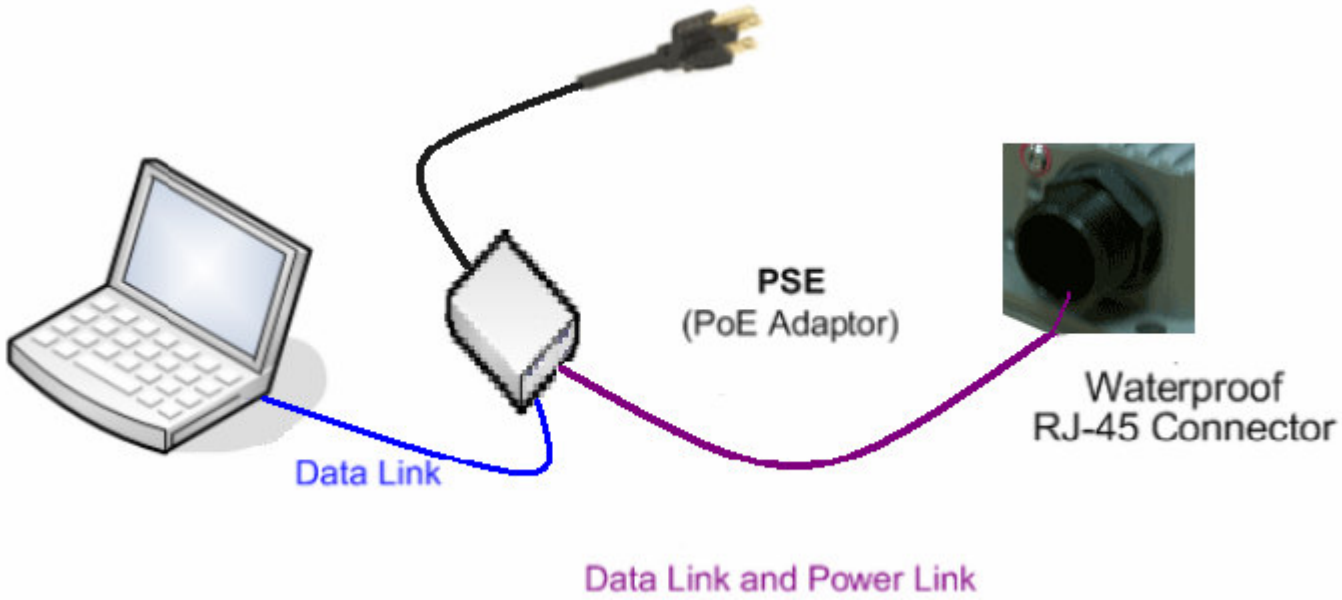
Hardware Installation

OWL500/510

The following diagram is a **basic network topology** which can be used for testing and configuring the OWL500/510.



Installation Steps:

Step 1. Connect an N-type antenna to the N-type connector (applicable for OWL500/510 only).

Step 2. Connect the PSE (POWER & DATA OUT) to the PSE 1 connector on the lower panel.

Step 3. Connect one end of an Ethernet cable to the PSE 2 connector on the lower panel and the other end to a computer.

Step 4. Connect the power cord to the PSE.

Step 5. Power on the PSE in order to supply power to the OWL500/510.

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Getting Started

4ipnet OWL500/510 supports web-based configuration. OWL500/510 is a dual-mode system, **AP Mode** as the default mode for the first time entering the system, which also can be configured as either an access point (**AP Mode**) or a gateway (**CPE Mode**) based on your needs. It is required to follow the respective installation procedures provided to properly set up the desired mode for this system.

- **Default IP Address of Web Management Interface:**

The default IP address and Subnet Mask for the AP mode and CPE mode are as follows:

Mode	AP Mode	CPE Mode
IP Address	192.168.1.1	192.168.1.1
Subnet Mask	255.255.255.0	255.255.255.0

- **Default User Name and Password:**

There is only one management account for AP mode, **root**. In addition, there are two system management accounts for CPE mode to maintain the system, **root** and **admin**, and each has different levels of management capabilities. The **root** account is empowered with full privileges while the **admin** account is with partial ones. The default user name and password for both the **root** and **admin** account are as follows:

Mode	AP Mode	CPE Mode	
Management Account	**Root Account**	**Root Account**	**Admin Account**
User Name	root	root	admin
Password	admin	admin	admin

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<AP Mode—Default Mode>

Step 1: IP Segment Setup for Administrator PC

Set a static IP address on the same subnet mask as OWL500/510 in TCP/IP of the administrator PC, such as the following example. Do not duplicate the IP address used here with the IP address of OWL500/510 or any other devices within the same network.

>> Example of IP Segment:

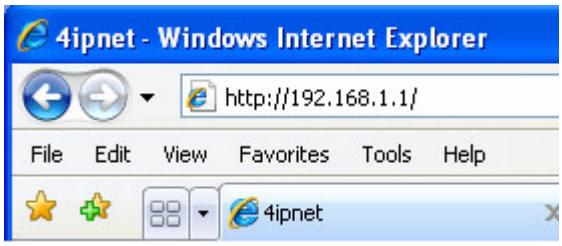
The valid range of IP address is 1 ~ 254. However, **1** must be avoided as it is already used by OWL500/510. Below depicts an example of using **100** (the underlined value can be changed as desired).

IP Address: 192.168.1.100

Subnet Mask: 255.255.255.0

Step 2: Launch Web Browser

Launch a web browser to access the web management interface of AP mode by entering the default IP address, **http://192.168.1.1/**, in the URL field, and then press ***Enter***.



Using an incorrect default IP address will result in no Login page shown in the web browser. Please make sure a correct IP address is used for the desired mode.

Step 3: System Login

The system manager Login Page will then appear.

Enter **"root"** in the ***User name*** field and **"admin"** in the ***Password*** field, and then click ***OK*** to log in.

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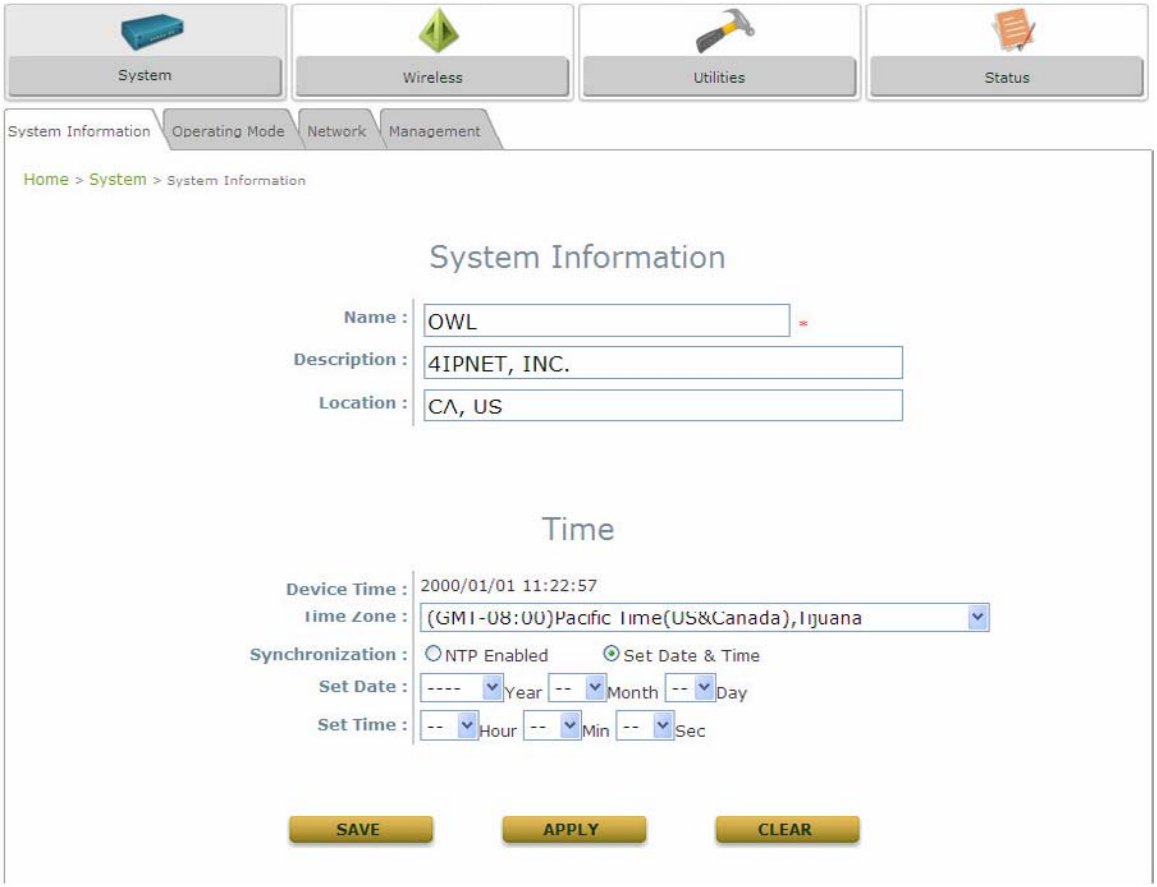
Step 4: Login Success

After a successful login to OWL500/510, a **System Overview** page of web management interface will appear, To logout, simply click on the ***Logout*** button at the upper right hand corner of the interface.



Note:

By default, AP mode is enabled. Therefore, the administrator must access the system via the AP mode login page for the first time. The administrator is then able to switch between modes afterwards.

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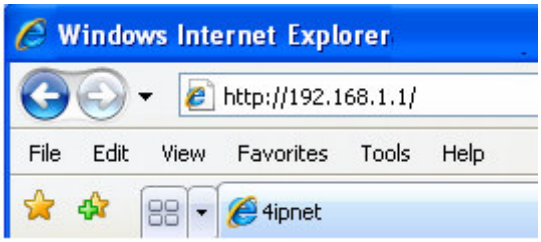
<CPE Mode>

Step 1: Launch Web Browser

Launch a web browser to access the web management interface of CPE mode by entering the default IP address, **http://192.168.1.1/**, in the URL field, and then press ***Enter***.



Step 2: System Login

The system manager Login Page will then appear.

Enter **"root"** in the ***User name*** field and **"admin"** in the ***Password*** field, and then click ***OK*** to log in. Below depicts an example of using the **root** manager account.

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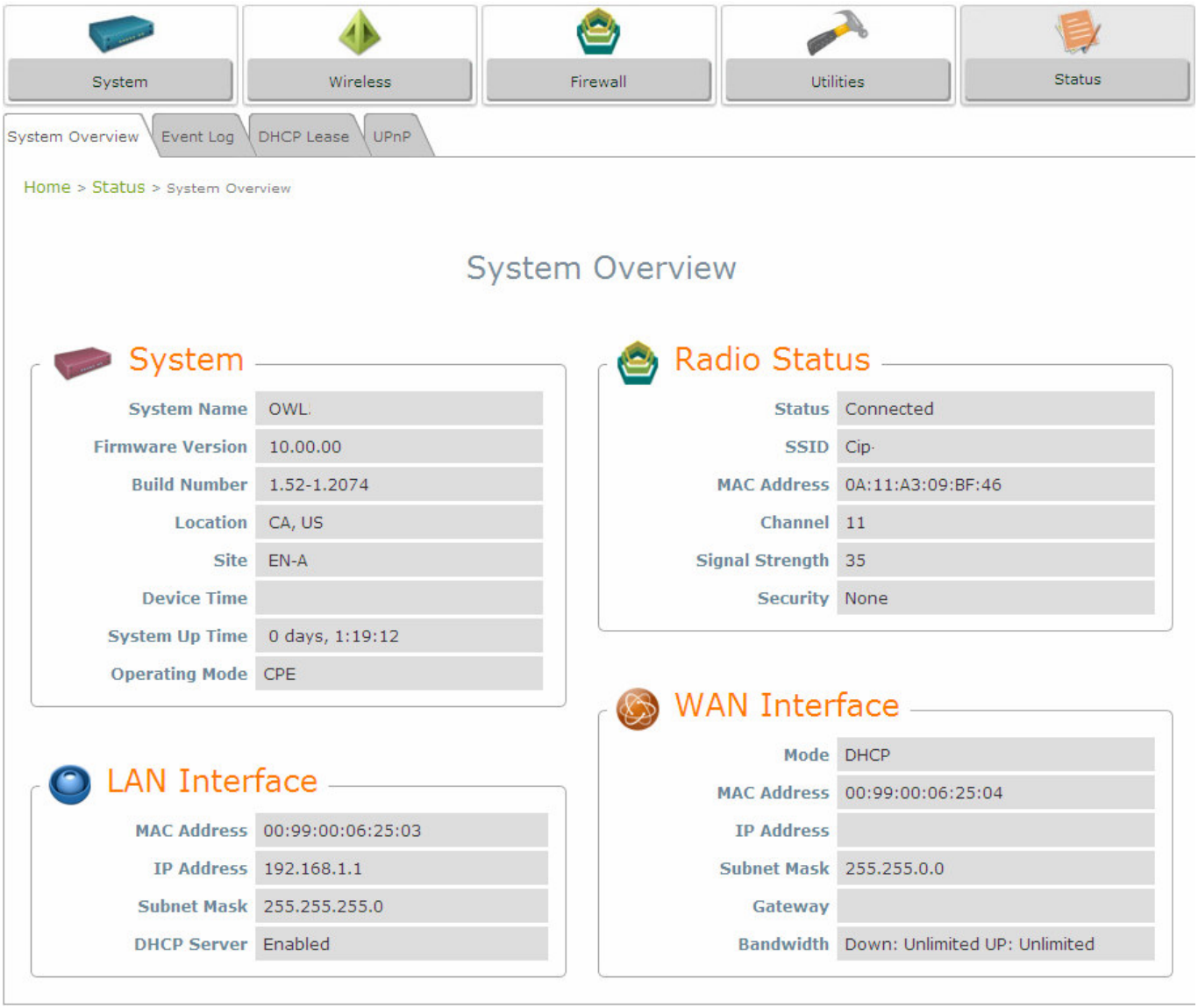
Step 3: Login Success

After a successful login to OWL500/510, a **System Overview** page of web management interface will appear. To logout, simply click on the ***Logout*** button at the upper right hand corner of the interface.



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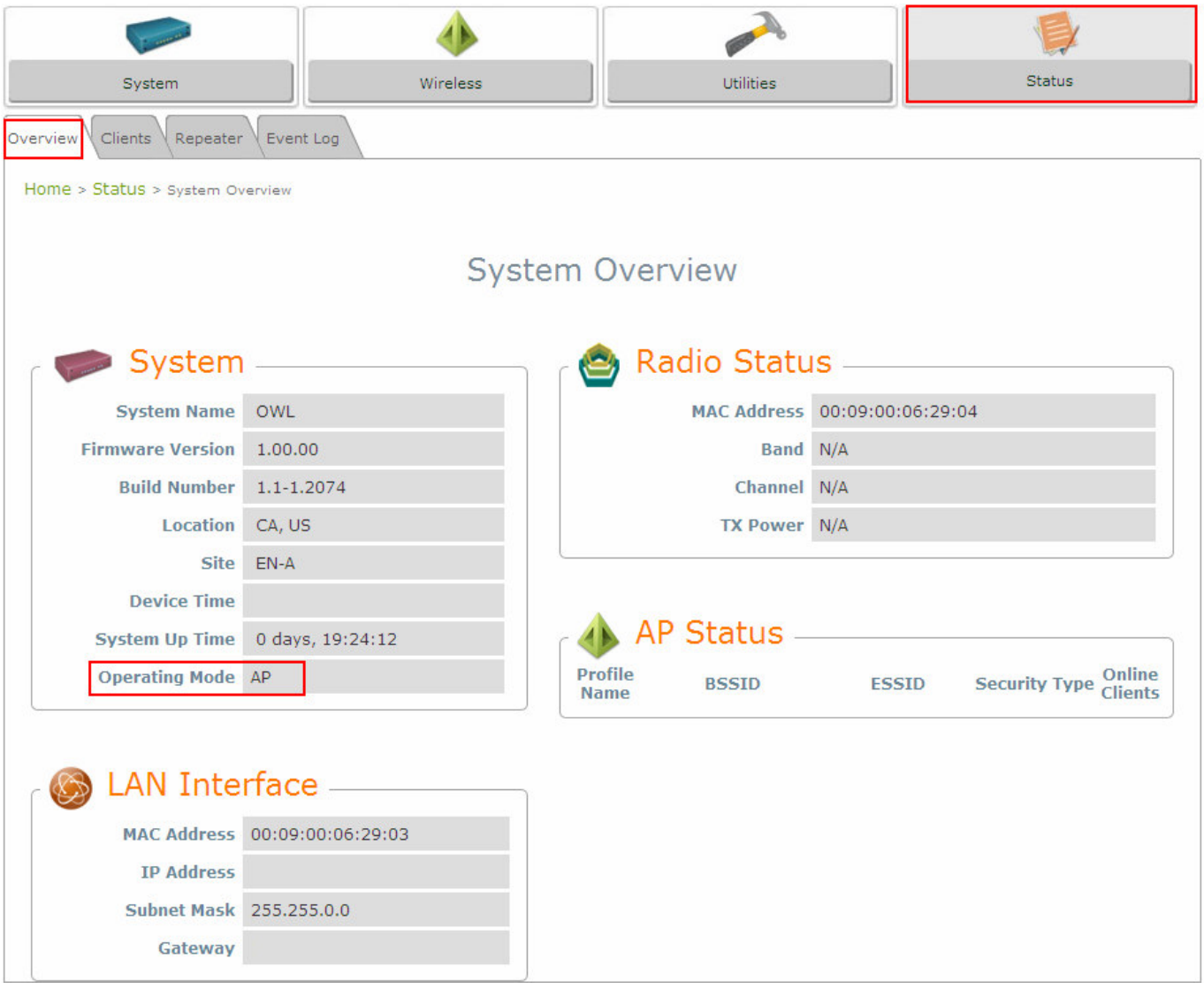
Common Settings

<AP Mode – Default Mode>

Step 1: Mode Confirmation



- Ensure the ***Operating Mode*** is currently in **AP** mode.
- Click on the **Status** button and then select the **System Overview** tab. The ***Operating Mode*** is at the **System** section on the **System Overview** page.

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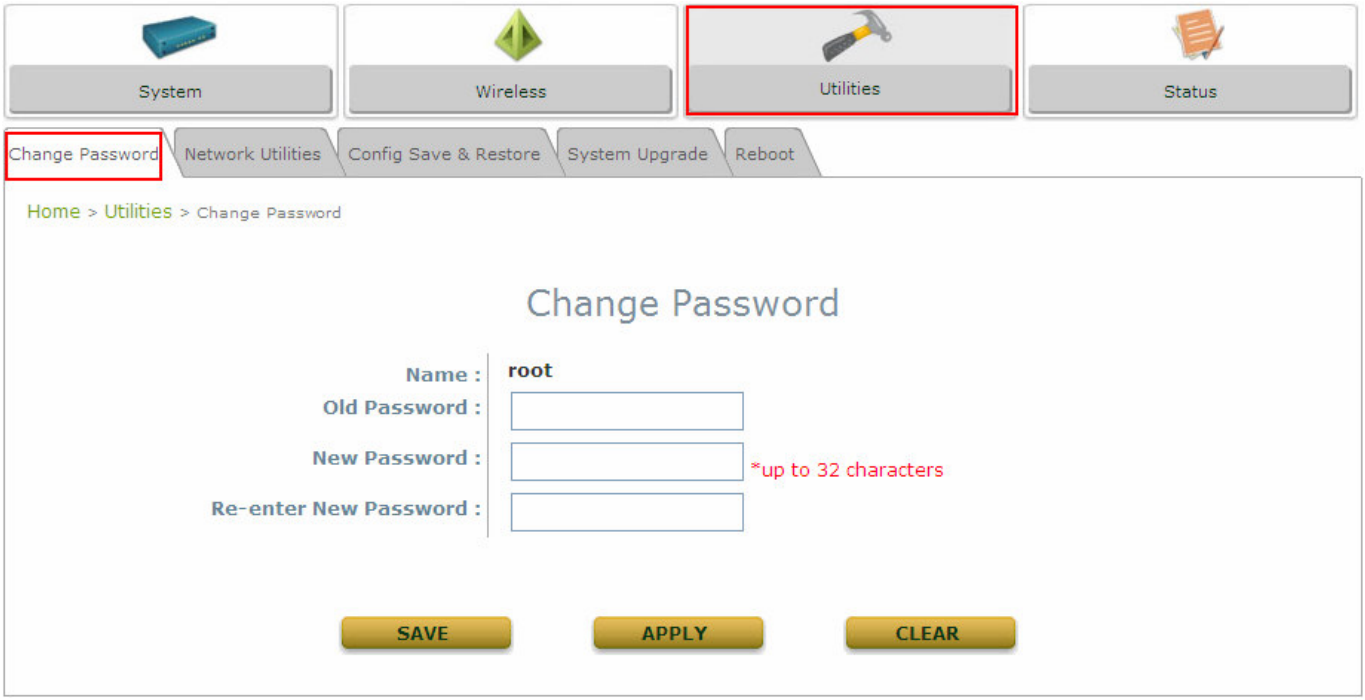
Step 2: Change Password



- Click on the **Utilities** button and then select the **Password** tab.
- Enter a new password in the ***New Password*** field and retype it in the ***Re-enter New Password*** field.
- Click ***Save*** to save the changes.

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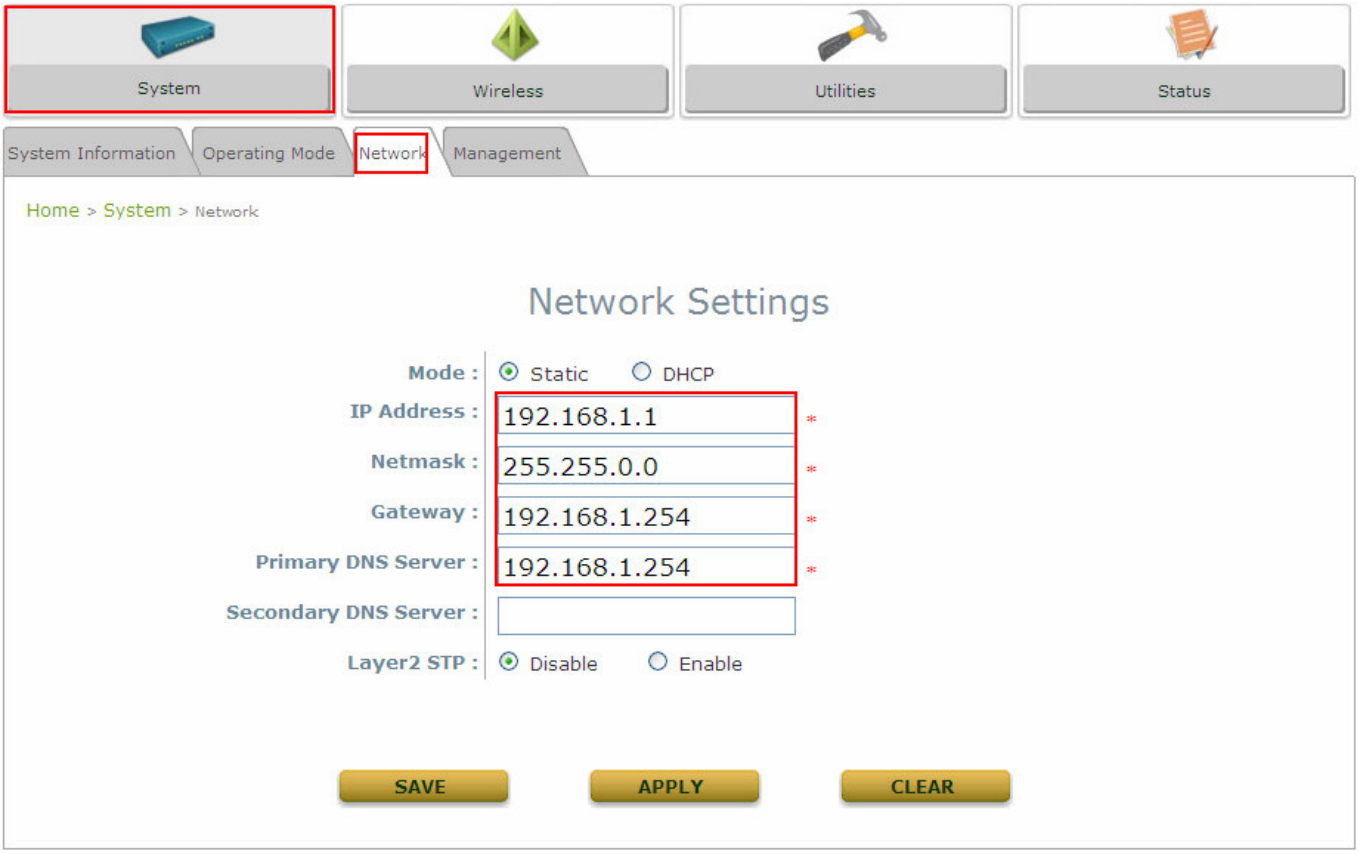
Step 3: Network Settings



【Settings here are for example only】

- Click on the **System** button and then select the **Network** tab.
- Enable ***Static***, and then enter the related information in the fields marked with red asterisks.
- Click ***Save*** to save the settings.

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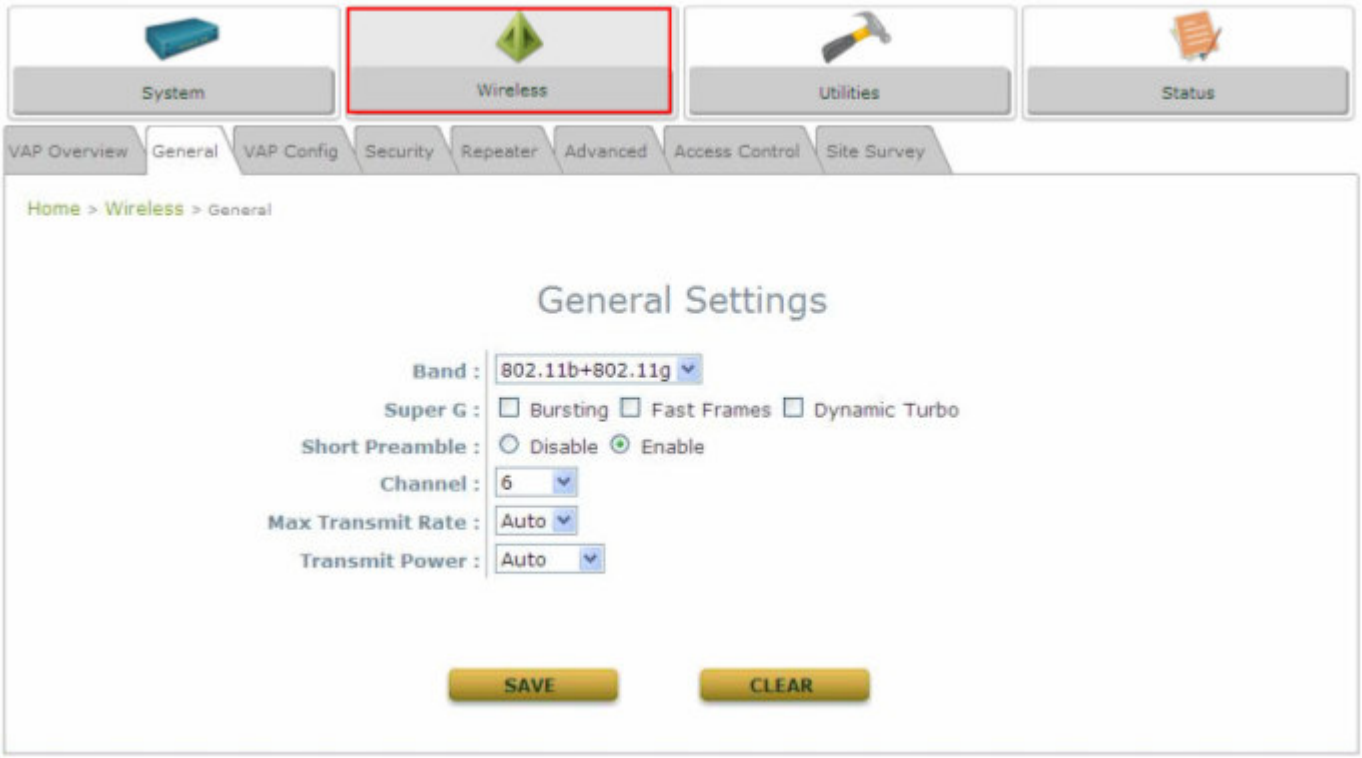
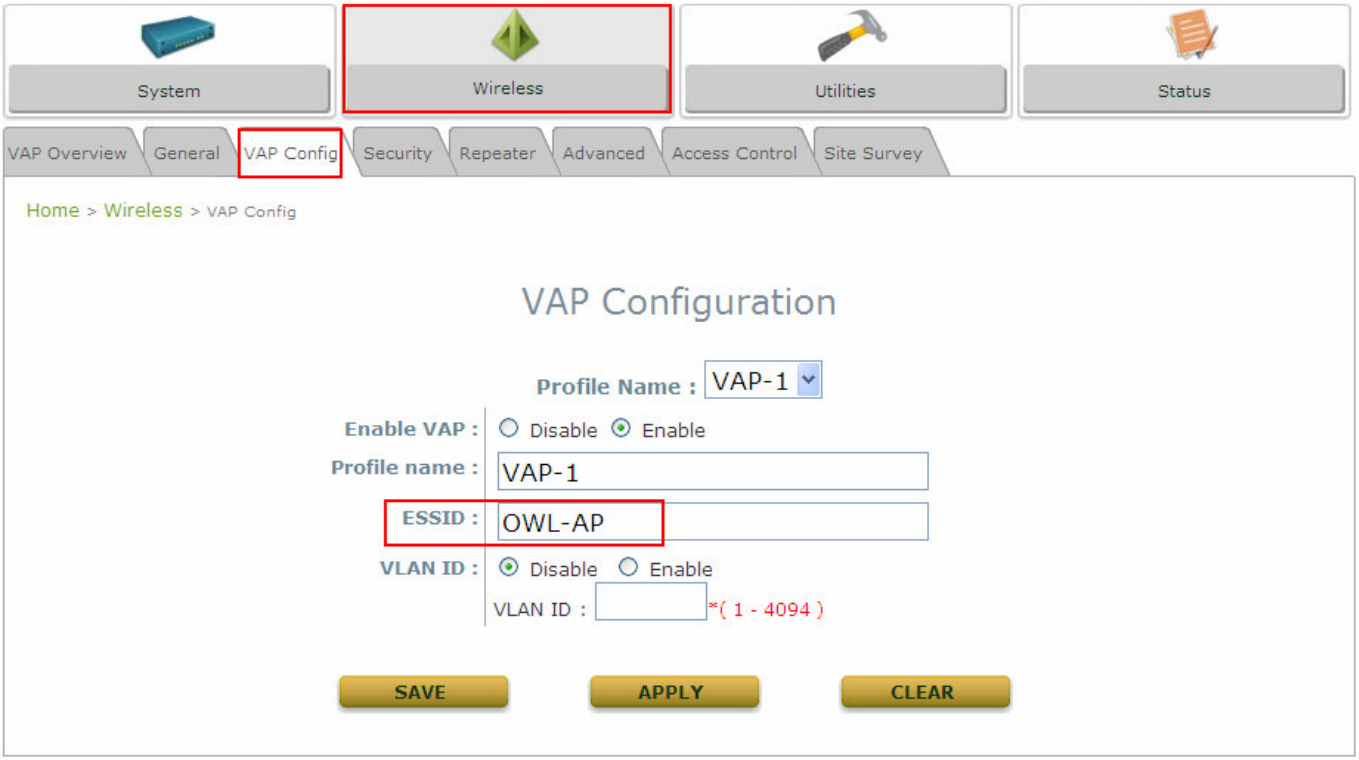
Step 4: SSID Settings



- Click on the **Wireless** button and then select the **General** tab.
- **Band:** Select an appropriate band from the drop-down list box.



- Click on the **Wireless** button and then select the **General** tab.
- **Band:** Select an appropriate band from the drop-down list box.
- **SSID:** Enter a SSID for the system in the ***SSID*** field or use the default. **SSID** (**S**ervice **S**et **Id**entifier) is a unique identifier used for networking devices to get associated with OWL500/510.

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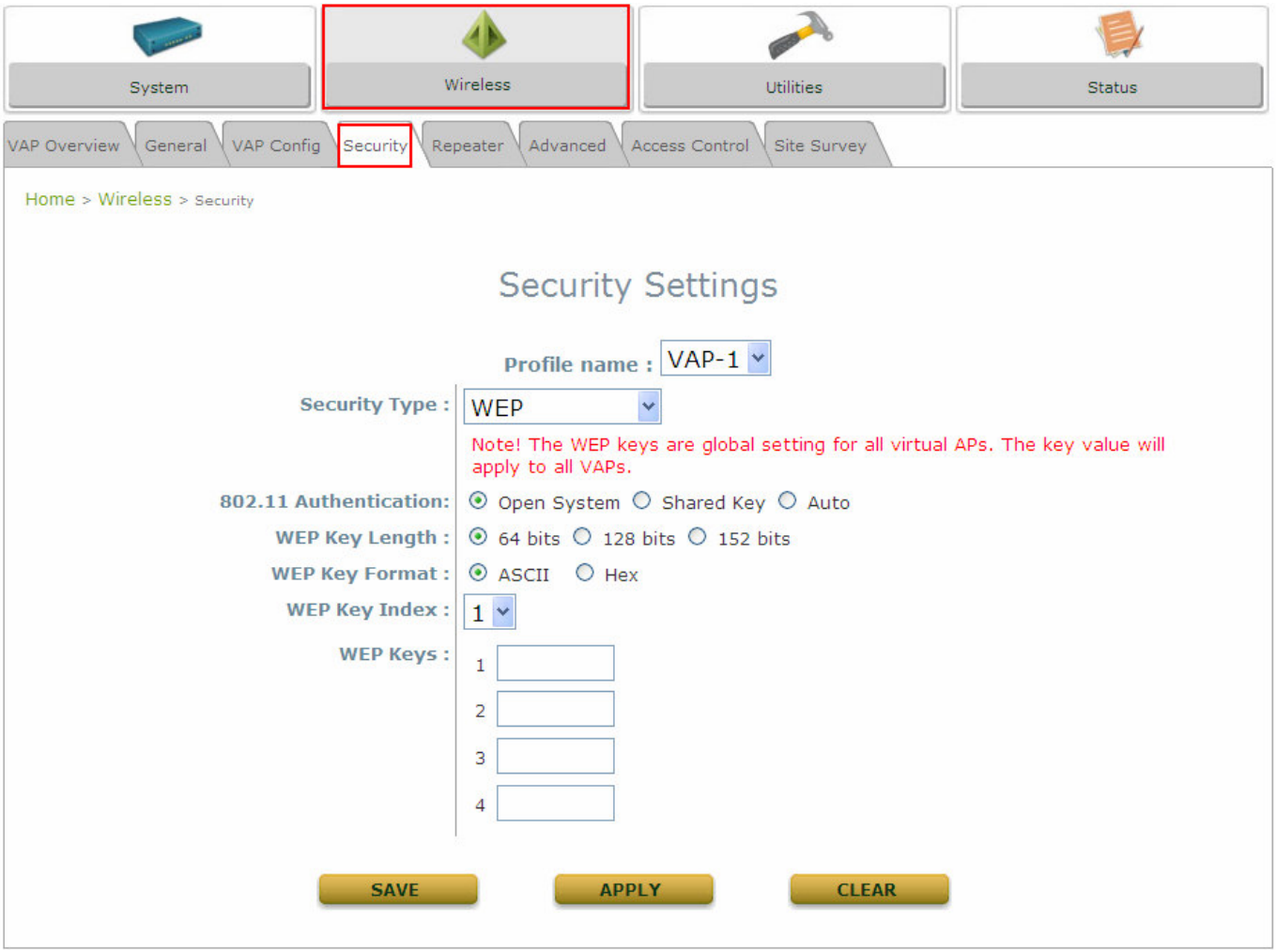
Note: **Band** and **SSID** are required; other fields are optional.

➢ Click ***Save*** to save the settings.

Step 5: Security Settings



➢ Click on the **Wireless** button and then select the **Security** tab.

➢ Select the desired ***VAP Profile and Security Type*** from the drop-down list boxes. The above figure depicts an example of selecting VAP-1 and **WEP**.

➢ Enter the information required in the blank fields.

You must use the same information provided here to configure the network devices that are to be associated with OWL500/510.

➢ Click ***Apply*** to activate all settings configured so far.

Congratulations!

The AP mode is now successfully configured.

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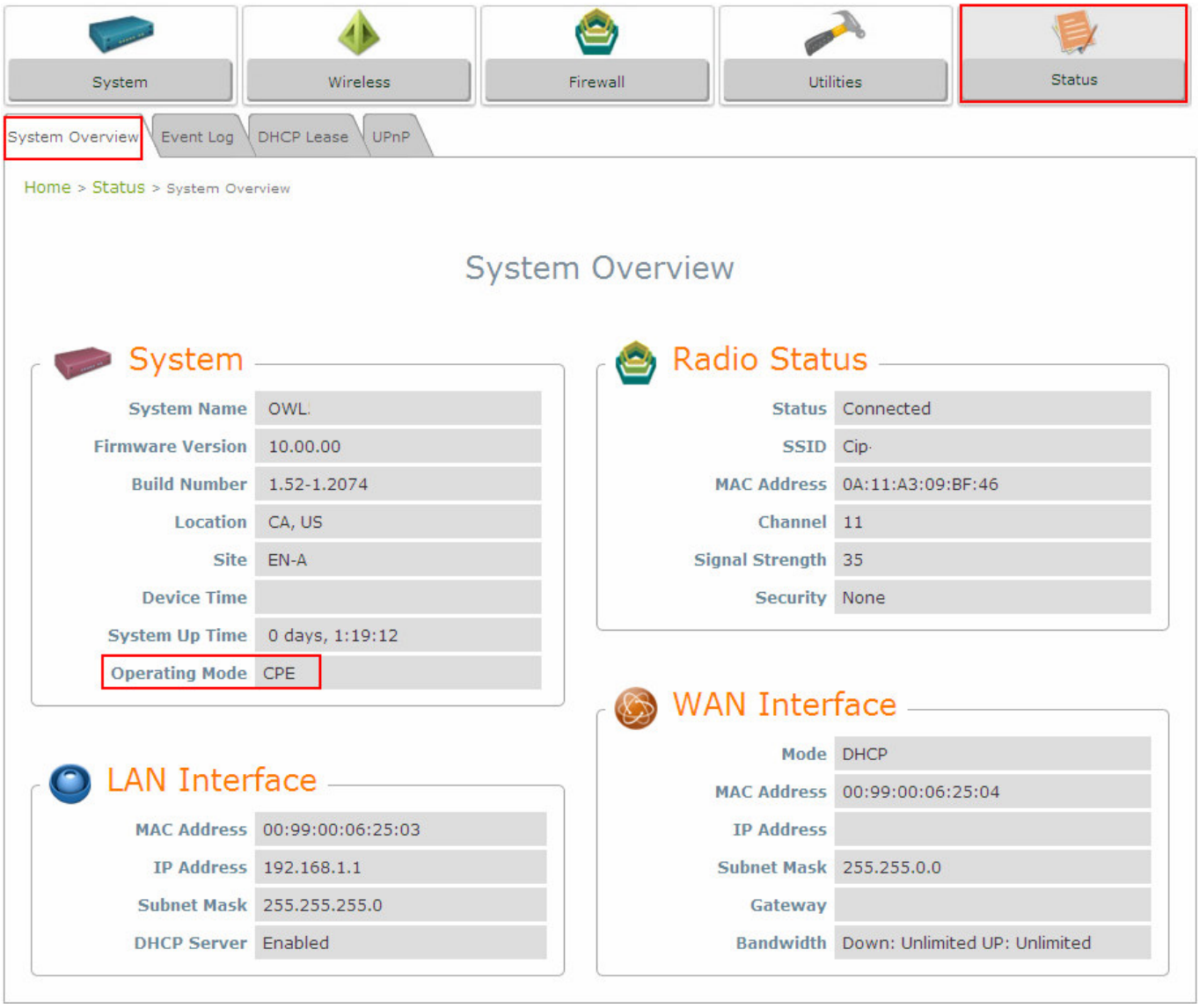
<CPE Mode>

Step 1: Mode Confirmation



- Ensure the ***Operating Mode*** is currently in **CPE** mode.
- Click on the **Status** button and then select the **System Overview** tab. The ***Operating Mode*** is at the **System** section on the **System Overview** page.

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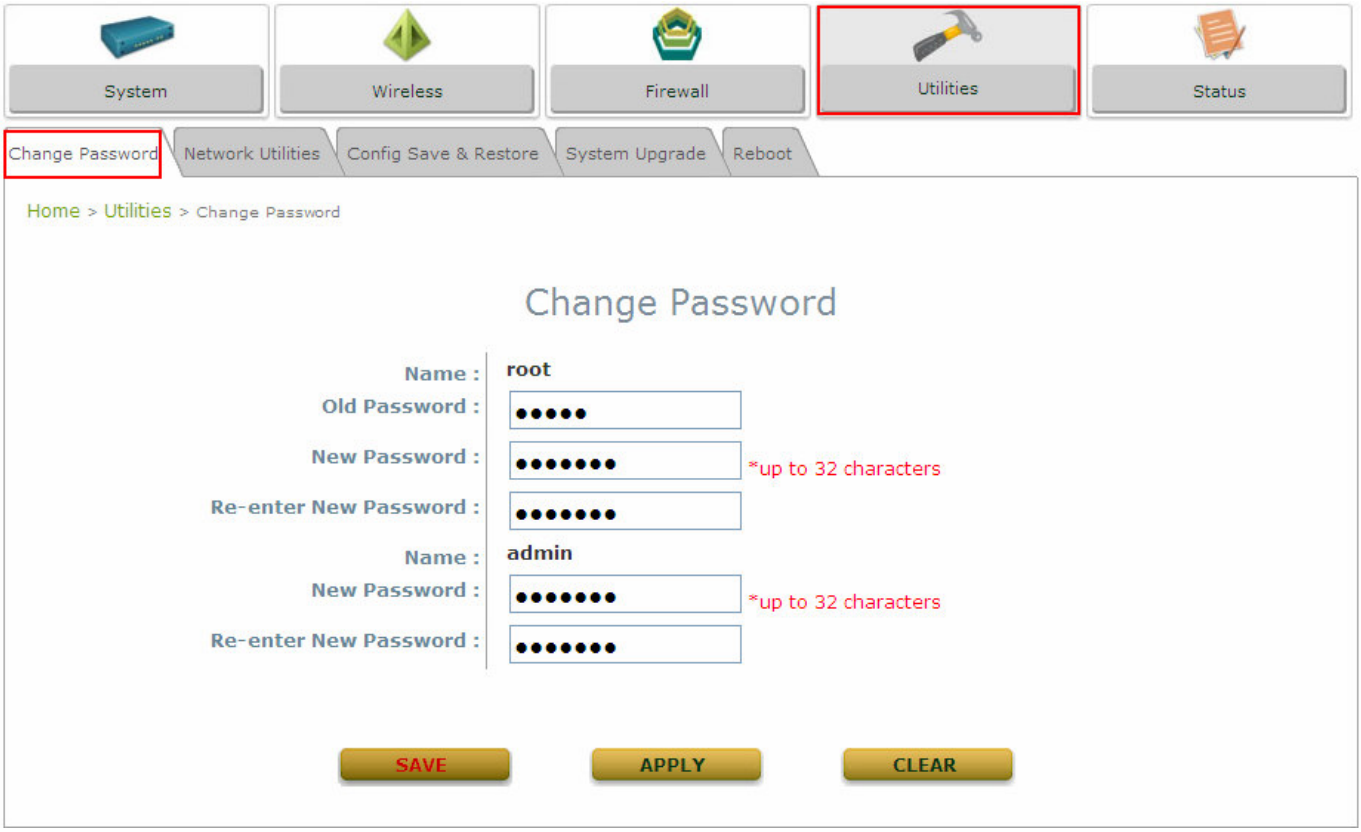
Step 2: Change Password



- Click on the **Utilities** button and then select the **Password** tab.
- **Change Root Account Password**
  - Enter the old password in the ***Old Password*** field; default password is **"admin"**.
  - Enter a new password in the ***New Password*** field and retype it in the ***Re-enter New Password*** field.
- **Change Admin Account Password**
  - Enter a new password in the ***New Password*** field and retype it in the ***Re-enter New Password*** field.
- Click ***Save*** to save the changes.

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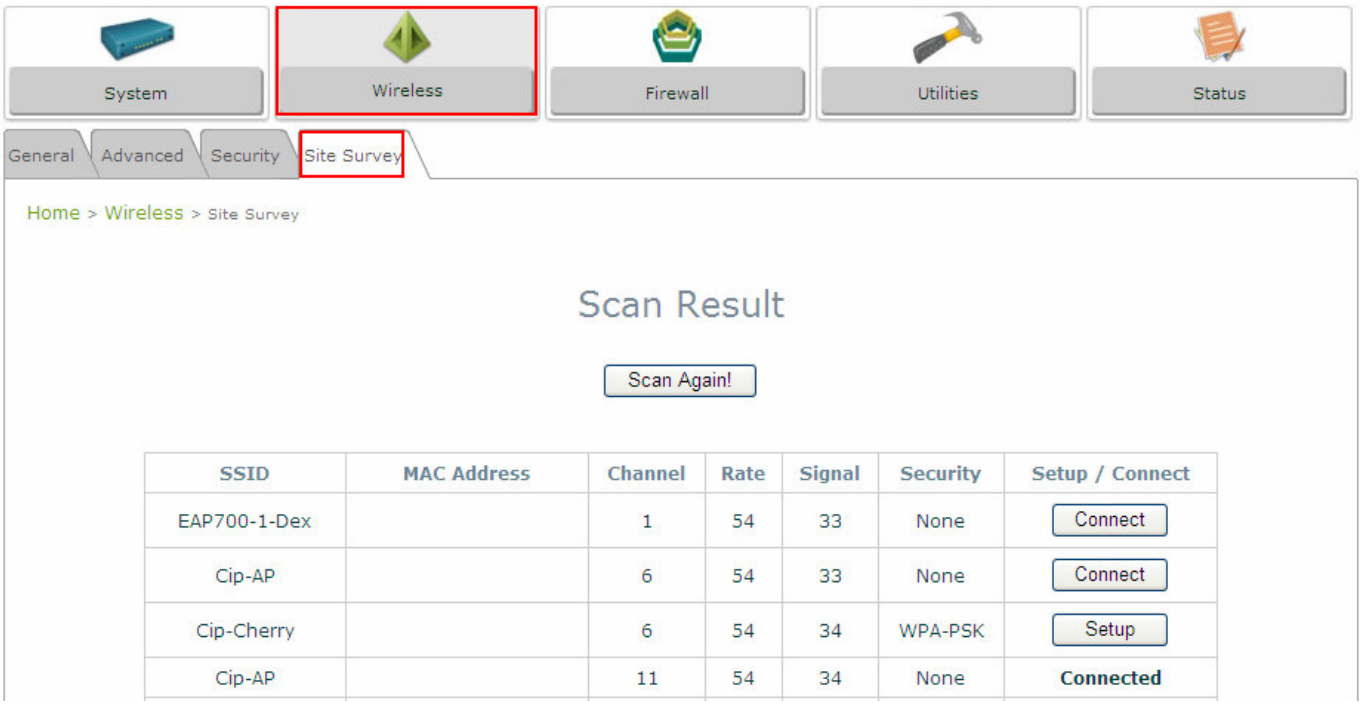
Step 3: Site Survey



SSID	MAC Address	Channel	Rate	Signal	Security	Setup / Connect
EAP700-1-Dex		1	54	33	None	Connect
Cip-AP		6	54	33	None	Connect
Cip-Cherry		6	54	34	WPA-PSK	Setup
Cip-AP		11	54	34	None	**Connected**

【The scan result displayed here is an example only.】

- Click on the **Wireless** button and then select the **Site Survey** tab.
- The system will automatically scan and display all APs in its coverage area.
- Click ***Scan Again*** if the APs to be associated with are not listed on the **Scan Result** list.

Step 4: Select AP to be Associated

- Select an AP to be associated with from the **Scan Result** list provided in **Step 3**.

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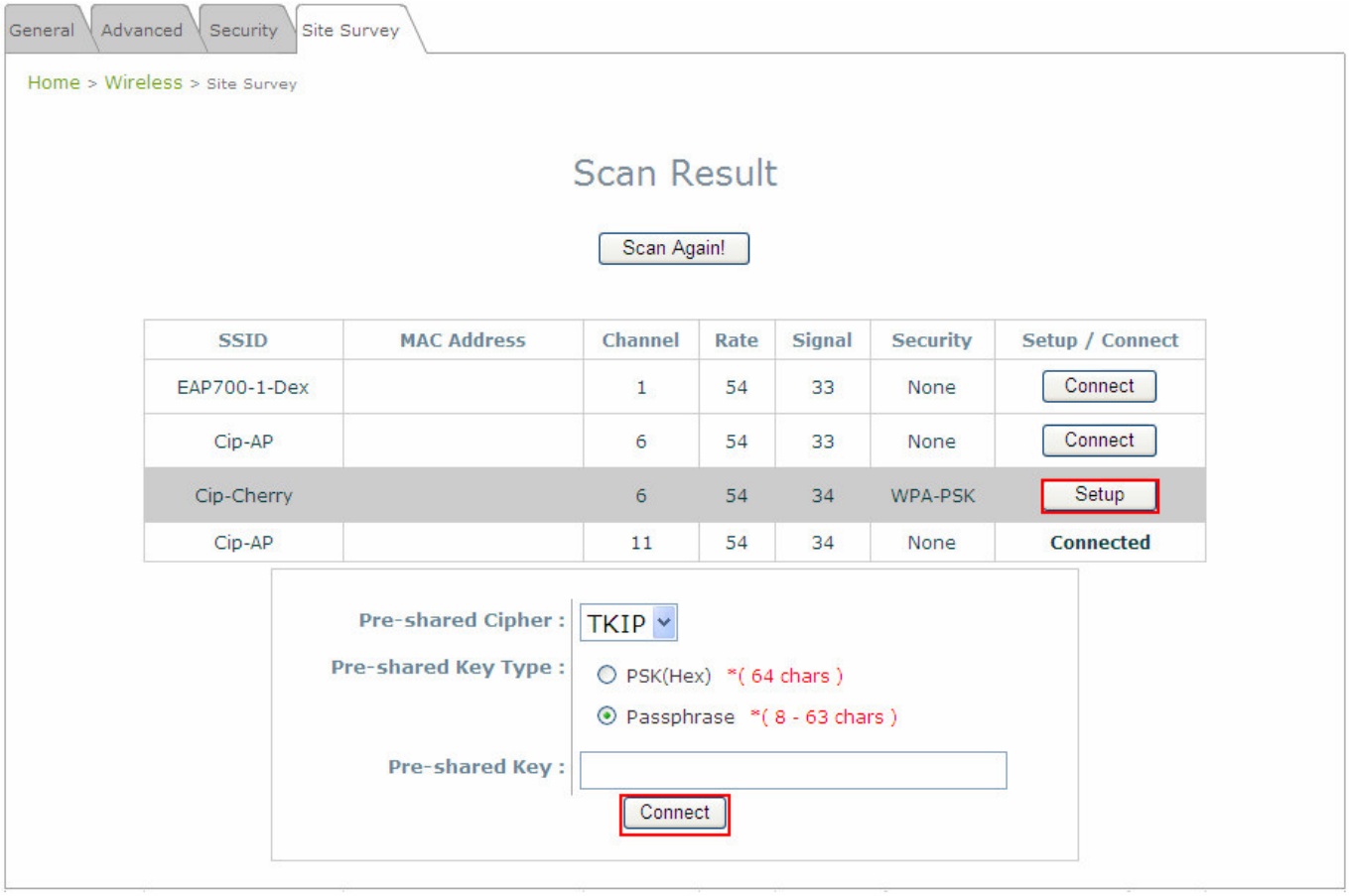
Step 5: Security Settings



- The above figure depicts an example of selecting **AP2** (encrypted via WEP security type).
- Click ***Setup*** of **AP2**, and then a related encryption configuration box will appear.
- Enter the information required in the configuration box. Information to be entered must be exactly the same as configured in this **AP2**.
- Click ***Save*** to save the settings.

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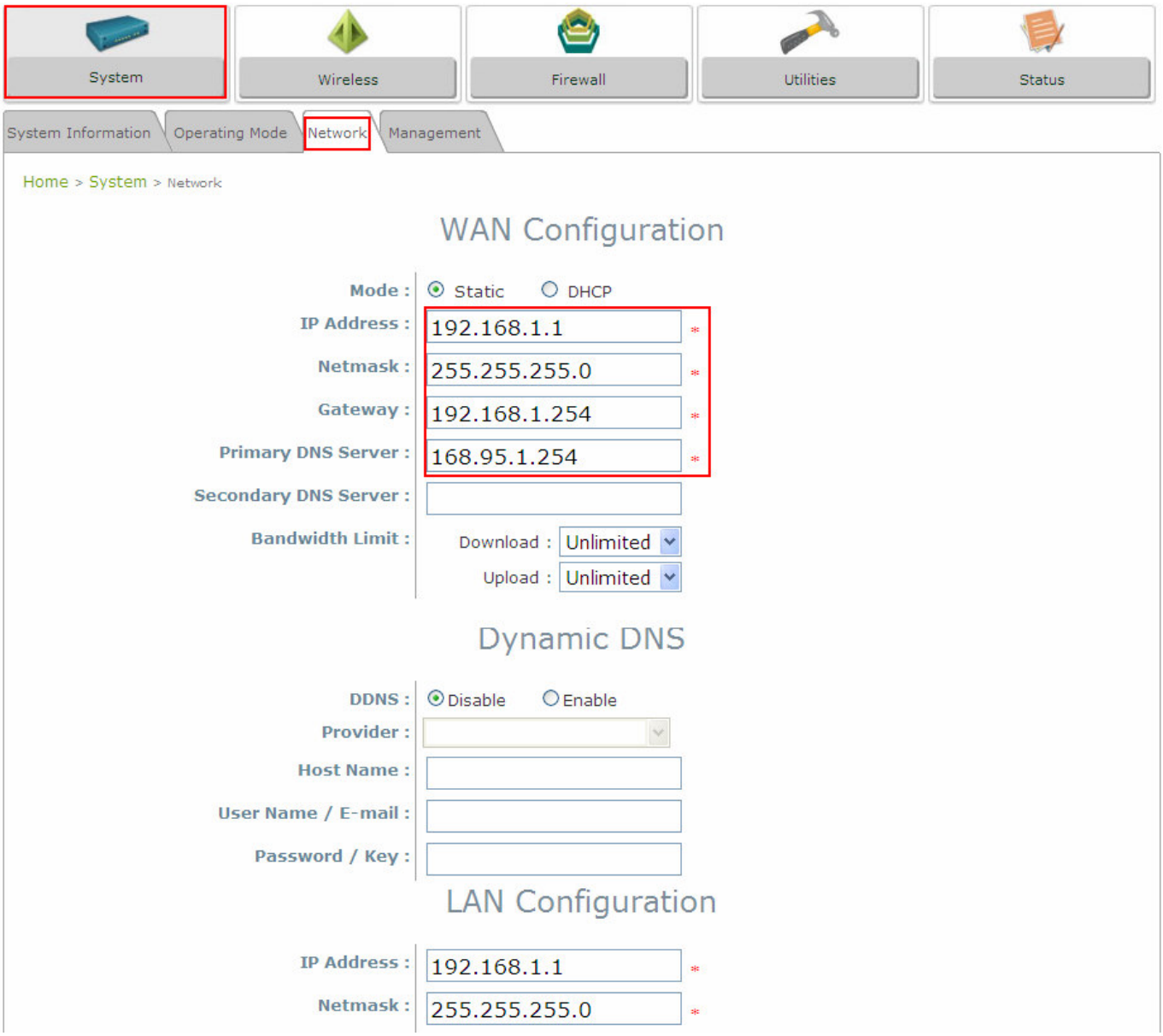
Step 6: Network Interface Configuration



【Settings here are for example only】

- Click on the **System** button and then select **Network** tab.
- Enable ***Static***, and then enter the related information in the fields marked with red asterisks.
- Click ***Save*** to save the settings.

Step 7: LAN Configuration

- Click on the **System** button and then select the **Network** tab.
- The **LAN Configuration** section is on the same page as the **WAN Configuration** section.
- Enter the ***IP Address*** and ***Netmask*** of the LAN port.
- Click ***Apply*** to activate all settings configured so far.

Congratulations!

The CPE mode is now successfully configured.

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After OWL500/510's network configuration completes, please remember to change the IP Address of your PC Connection Properties back to its original settings in order to ensure that your PC functions properly in its real network environments.

- ***It is strongly recommended to make a backup copy of configuration settings.***
- ***For further configuration and backup information, please refer to the User's Manual.***

P/N: V10020090920

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