UniMax Access Points

Configuration Guide

Introduction

This document explains the step by step procedure for configuring the UniMax access points from Wifisoft. The guide covers both the indoor and outdoor models of the access points. UniMax variant of access points is designed for standalone version i.e. each access point has to be individually configured.

Installation

UniMax access points come in different variants like indoor and outdoor. Most of the models will provide two Ethernet ports on the backside of the access point. One of the them functions as a WAN port and the other functions as LAN port.

UniMax access points can be powered in two ways –

DC Power – You can power the AP using the DC power adapter. Please make sure that you use compatible power supply. Most APs require 12V – 2A power supply. Please check the datasheet of the respective model before using the DC power supply.

Warning: Providing wrong power supply, especially wrong voltage will damage the access point.

POE Power – You can use the POE injector to power the access point. The POE injector may be supplied for some model. In case, the POE injector is not supplied, you need to purchase a POE injector from the local store. Please check the POE power specifications to select the right injector. Most of the access point model support 48V POE injector and 802.3af or 802.3at standard.

Note: Please check the backside of the AP to find the right power rating needed for the access point.

Powering AP using POE

The photo below shows how to power the access point using POE injector.
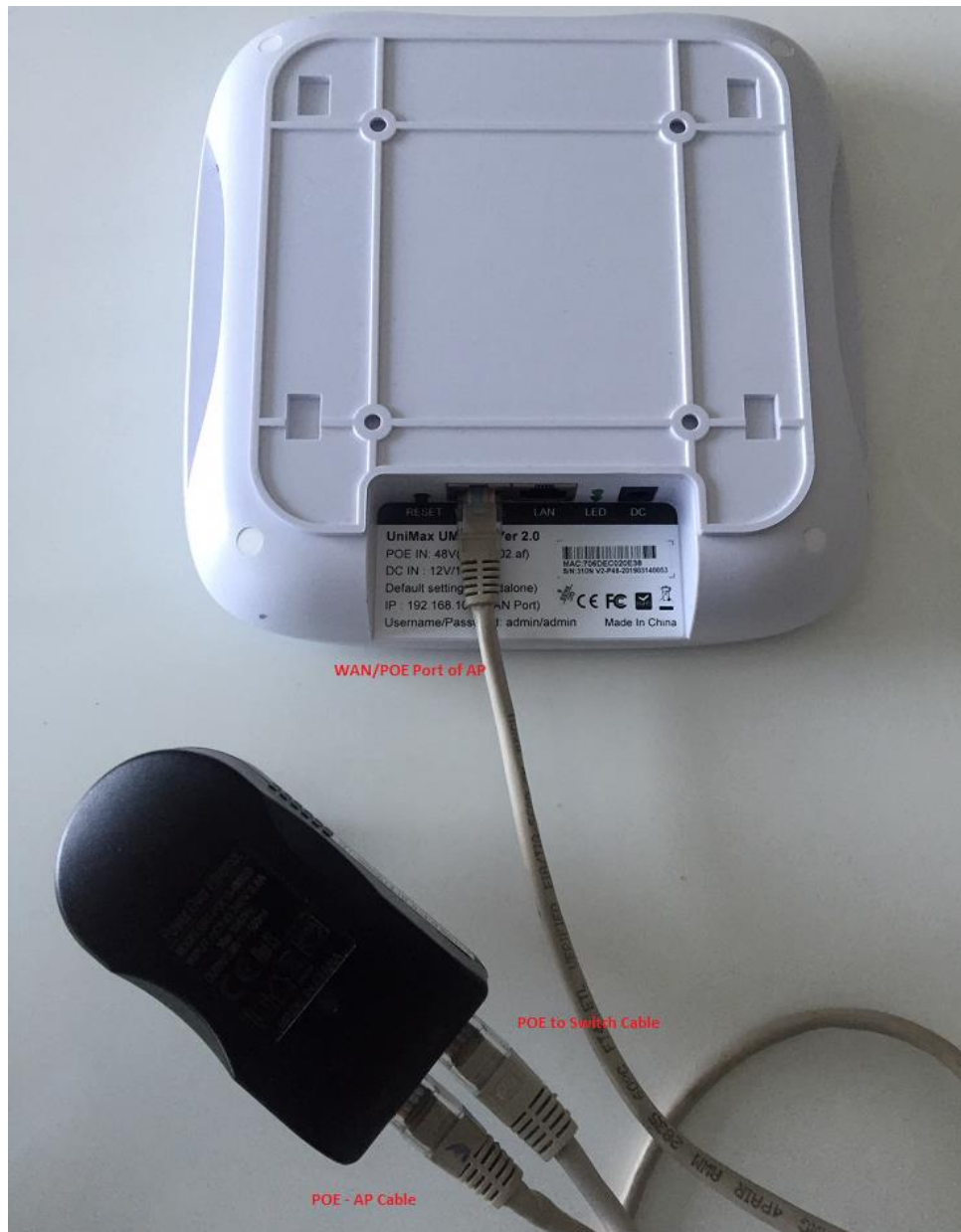
The POE injector has two ports – POE and LAN. The POE port needs to be connected to the WAN port of the access point using a CAT-5 or CAT-6 cable. The LAN port of the POE injector needs to be connected to the switch from where the AP will be get Internet connectivity.

NOTE: If you are using POE switch then you don't need to use the POE injector. The POE switch will be responsible for powering the access point.

To configure UniBox, you need to connect your laptop from the LAN port of the Unibox to your laptop's Ethernet port.

By default, UniMax will issue DHCP lease to your laptop on the LAN port.

Open 192.168.10.1 in your browser and you will be prompted to login into the admin interface of UniMax access point.

Username: admin

Password: admin

Configuration

UniMax access points can be primarily configured in two modes –

- Bridge Mode
- AP Mode

In bridge mode, the access point functions as a bridge between wired and wireless network and just routes the traffic between different interface.

In AP mode, the AP will function as an access point and will be responsible for providing DHCP to the connected devices. It will also NAT the traffic going from the LAN/WLAN side to the WAN port.

Configuring UniMax in Bridge Mode

The section explains step by step instructions for configuring UniMax access point in bridge mode. Please note that you need another device to function as a DHCP server for the clients since UniMax AP will just bridge the traffic between the LAN/WLAN and WAN port.

Using the LAN port is optional.

Configuring WAN Interface

UniMax provides two interfaces – WAN and LAN.
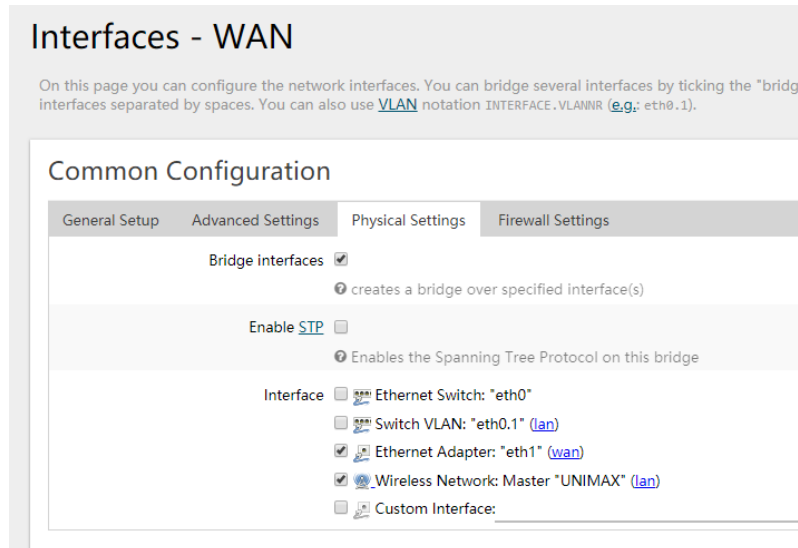
First you need to configure the WAN interface.

By default, WAN port is configured as DHCP client. It gets IP address for the WAN port from the modem, gateway or router connected to the WAN port. You can change the WAN settings to use static IP or PPPoE settings as required.

To change the WAN settings, click on the Edit button on the WAN port.

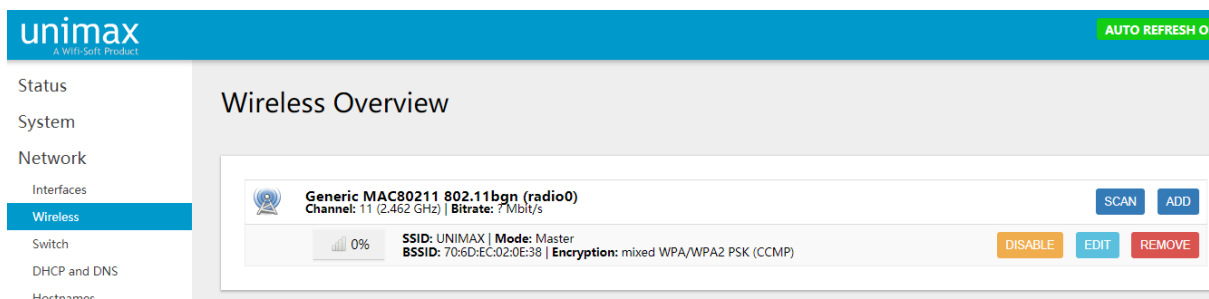Next you need to bridge the Wireless and WAN interfaces.

To bridge the two interfaces, please click on the Physical settings tab and enable the "Bridge Interface" option. You need to select the two interfaces shown below. The two interfaces will be bridged.
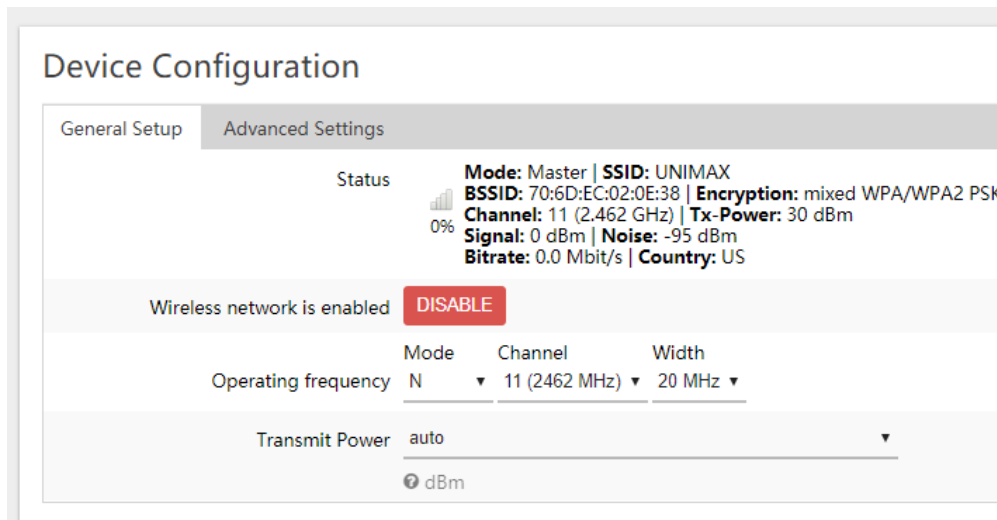

Configuring Wireless Settings

The next step is to configure the Wireless settings. To change the wireless settings, please click on the Wireless menu. UniMax will be shipped with a default SSID called UniMax. You need to edit this entry and change it to your desired SSID.

To edit the wireless settings for UniMax SSID, click on the Edit button.

Change the General Settings under Device Configuration section.

Change the Operating Mode to N or AC depending on your model.

Change the operating Channel to the desired one. You can leave the settings to Auto in case you want UniMax to automatically select the right channel for you. For 2.4 GHz, keep the Channel Width to 20 MHz.

Keep the transmit power to auto or change it to desired level. Please note that every AP model will have maximum transmit power. You can set the value of transmit power based on the AP model. Please refer to the respective AP datasheet to find the maximum transmit power.

Next change the Country Code settings in the Advanced Tab. Leave the other settings to default values if you don't want to change these settings.

The next step is to change the SSID of the desired name of your network. Leave the other settings as shown.

If you want to enable wireless security, click on the Wireless Security tab. For WPA2 security key, select the WPA2-PSK option and enter the WiFi password.

Lastly, if you want to enable client isolation on the access point, click on the Advanced Settings option and enable the Isolate Clients option.

Save and apply the above settings.

Configuring UniMax in AP Mode

This section will explain how to configure UniMax in AP or Natted mode. In this mode, the UniMax access point is responsible for Natting the traffic from the wireless interface to the WAN interface. UniMax will be required to run its own DHCP server in this setup.

Use this mode when you want to run UniMax in stand-alone configuration without any gateway or router.

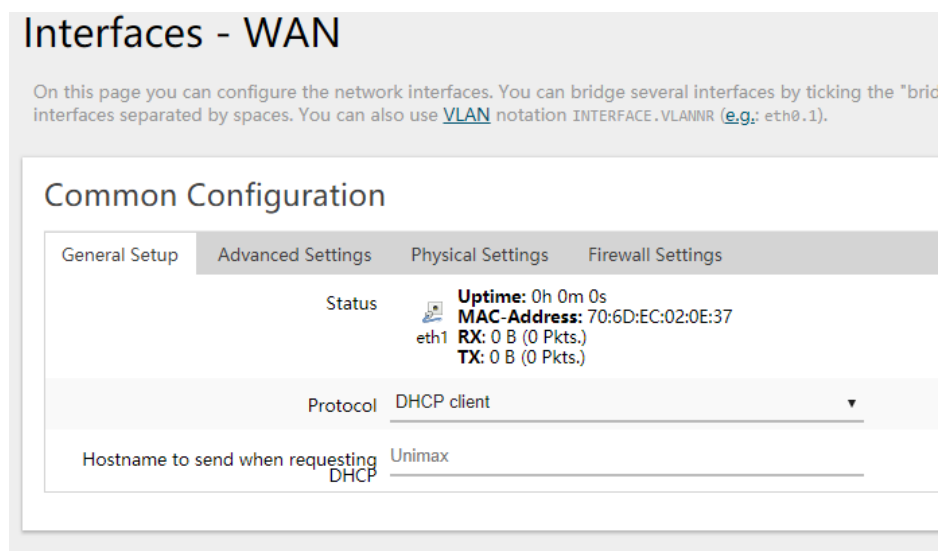**NOTE: This mode is not compatible when installing UniMax with UniBox controller.**

Configuring WAN Interface

UniMax provides two interfaces – WAN and LAN.

First you need to configure the WAN interface.

By default, WAN port is configured as DHCP client. It gets IP address for the WAN port from the modem, gateway or router connected to the WAN port. You can change the WAN settings to use static IP or PPPoE settings as required.

To change the WAN settings, click on the Edit button on the WAN port.

Configuring LAN Interface

Next you need to setup the LAN interface of the AP. To edit LAN settings, click on the Edit button for the LAN port in the Interface section.

Set the LAN port settings as shown below. You can change the LAN port IP to the one you desire. The default LAN port IP is 192.168.10.1 and the subnet is 255.255.255.0.

Next you need to make sure that the LAN and Wireless interfaces are bridged as shown below.

Lastly, you need to configure the DHCP server settings on the LAN interface. To configure the DHCP settings, scroll below and set the DHCP Server settings. Change the settings as per your network configuration. Please make sure that the Start IP of DHCP server should not be 1 since this IP is assigned to LAN port of the AP.

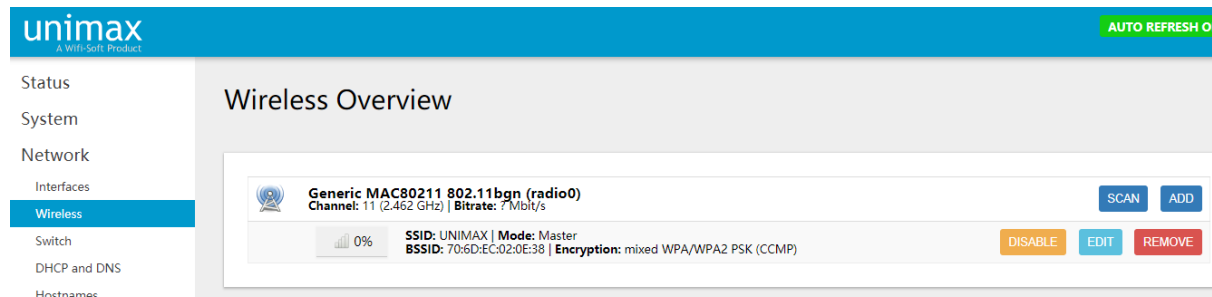Save and apply the above settings.
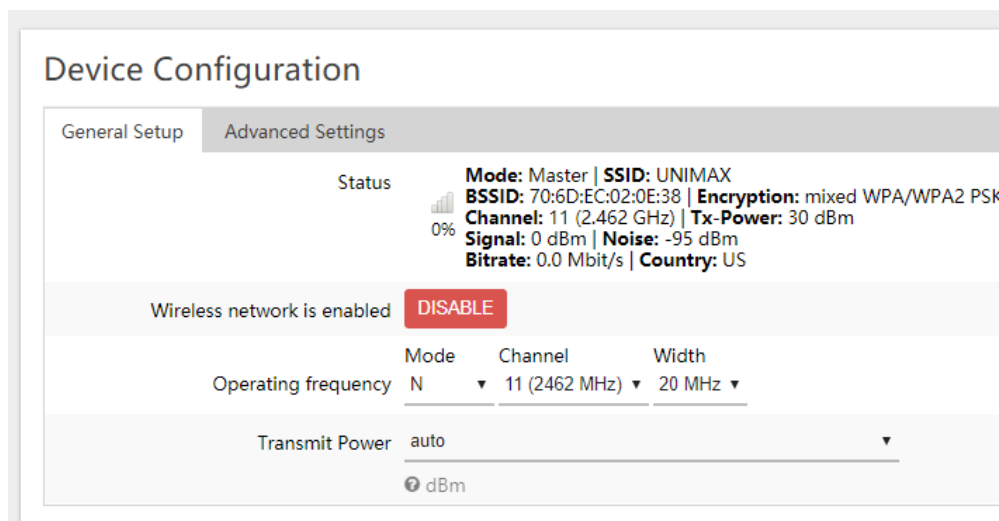
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Keep the transmit power to auto or change it to desired level. Please note that every AP model will have maximum transmit power. You can set the value of transmit power based on the AP model. Please refer to the respective AP datasheet to find the maximum transmit power.

Next change the Country Code settings in the Advanced Tab. Leave the other settings to default values if you don't want to change these settings.

The next step is to change the SSID of the desired name of your network. Leave the other settings as shown.

If you want to enable wireless security, click on the Wireless Security tab. For WPA2 security key, select the WPA2-PSK option and enter the WiFi password.

Lastly, if you want to enable client isolation on the access point, click on the Advanced Settings option and enable the Isolate Clients option.

Save and apply the above settings.