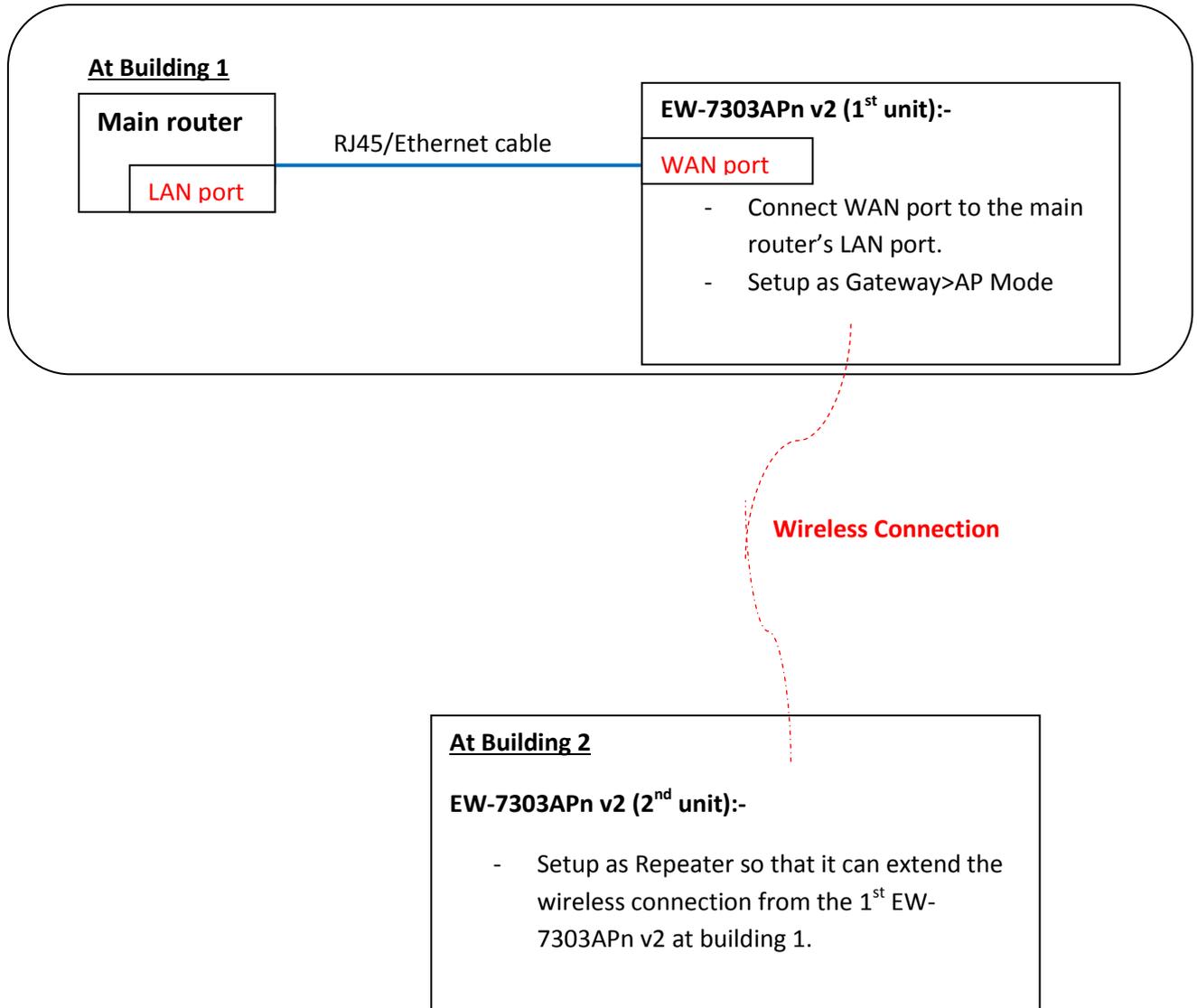


Edimax EW-7303APn v2 Wireless Access Point

How to extend the wireless connection using 2 units of EW- 7303APn v2?

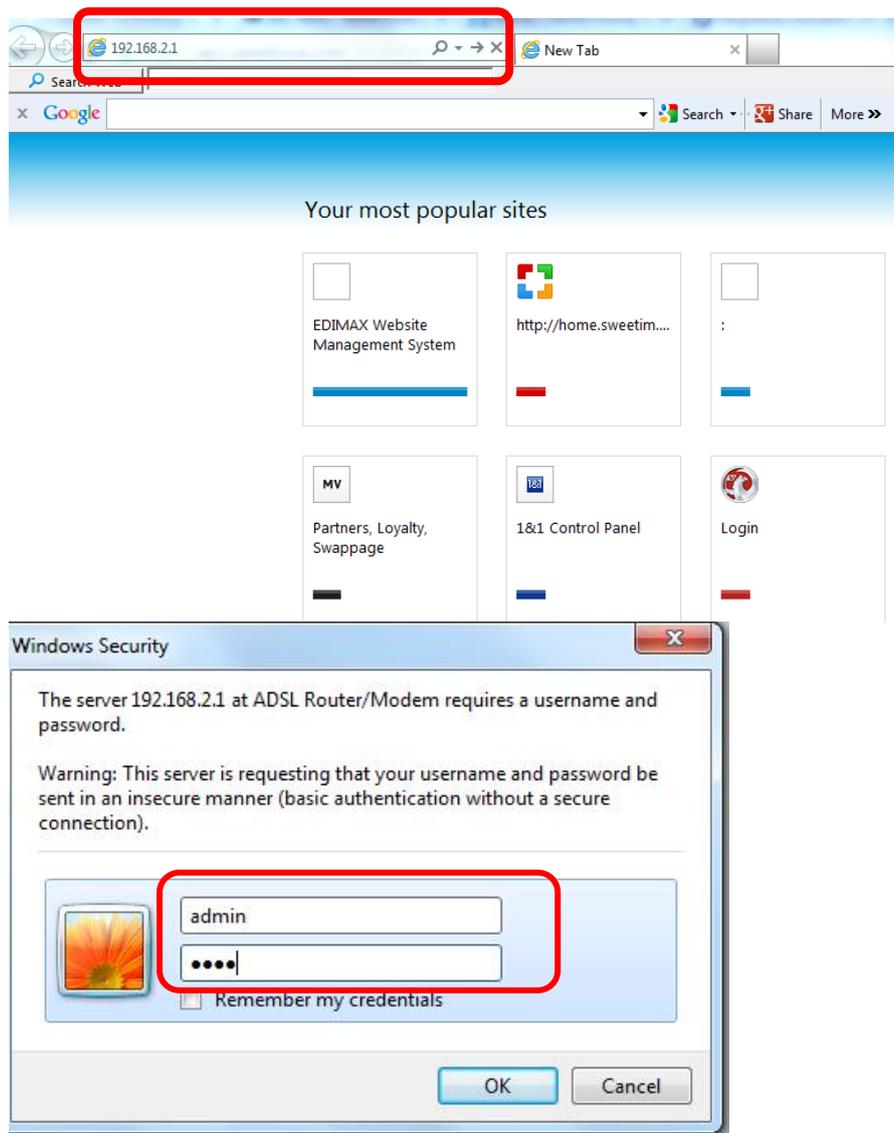
Application Diagram



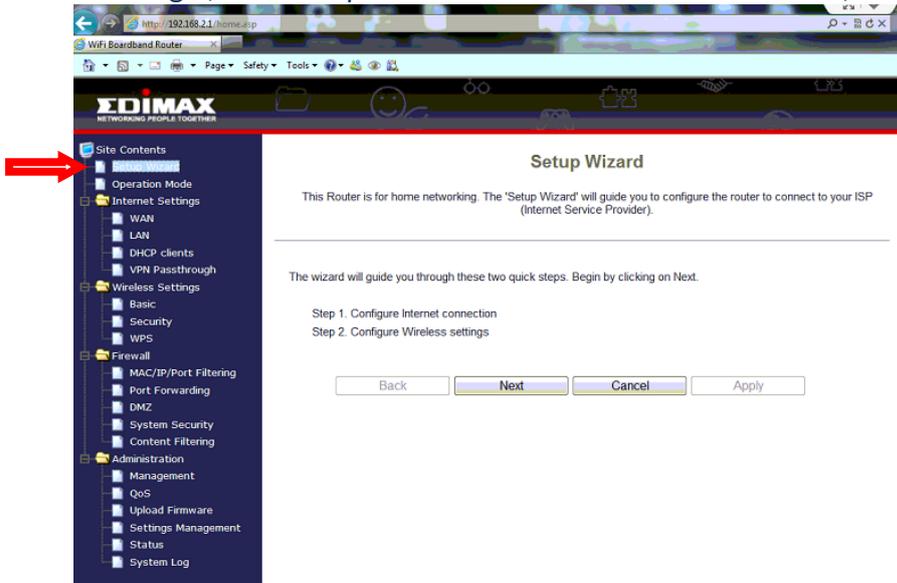
Note: The distance between Building 1 and Building 2 is depending on environment. For your information, a case study showed that the repeater is working fine with distance of 150 meters (without obstacles) in between the 2 buildings. Please note that EW-7303APn v2 comes with a 12dBi directional antenna, the front panel of EW-7303APn v2 must face each other.

Configuration/Setup

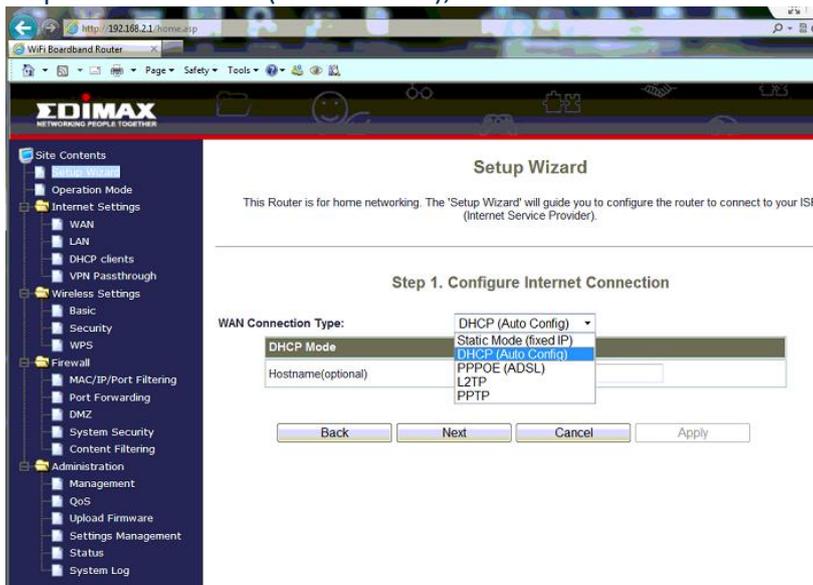
- 1) The 1st EW-7303APn v2 (at Building 1, 1st unit) that is wired with RJ45 to the main router, set it up as a Gateway>AP mode.
 - Connect router's LAN to the WAN port of EW-7303APn v2.
 - Connect a computer to the LAN port of EW-7303APn v2 using an Ethernet cable. Login to EW-7303APn v2 on 192.168.2.1. Open the Internet Explorer, at the address bar, type **192.168.2.1** and press Enter. Login with default username/password, **admin/1234**. Click OK.



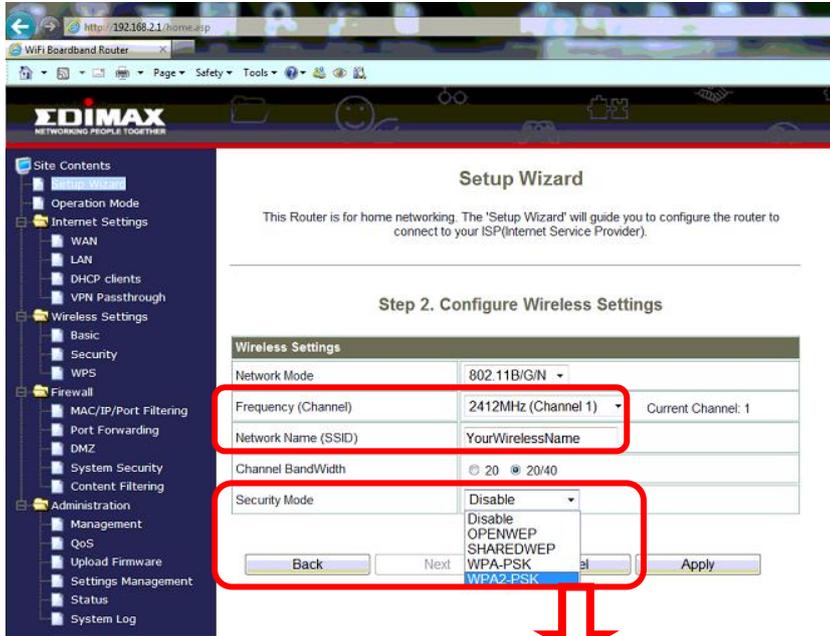
- Once login, click Setup Wizard at the left hand menu> Then, click Next.



- Step 1: Select DHCP (Auto Comfit), leave host name blank> Click Next.



- Step 2: Configure Wireless setting> enter your **SSID** (wireless network name of the 1st EW-7303APn v2), select an unused channel number in that environment. Security mode: select WPA2-PSK (AES), enter your wireless password/key* into Pre-Shared key. Click Apply to finish.



Step 2. Configure Wireless Settings

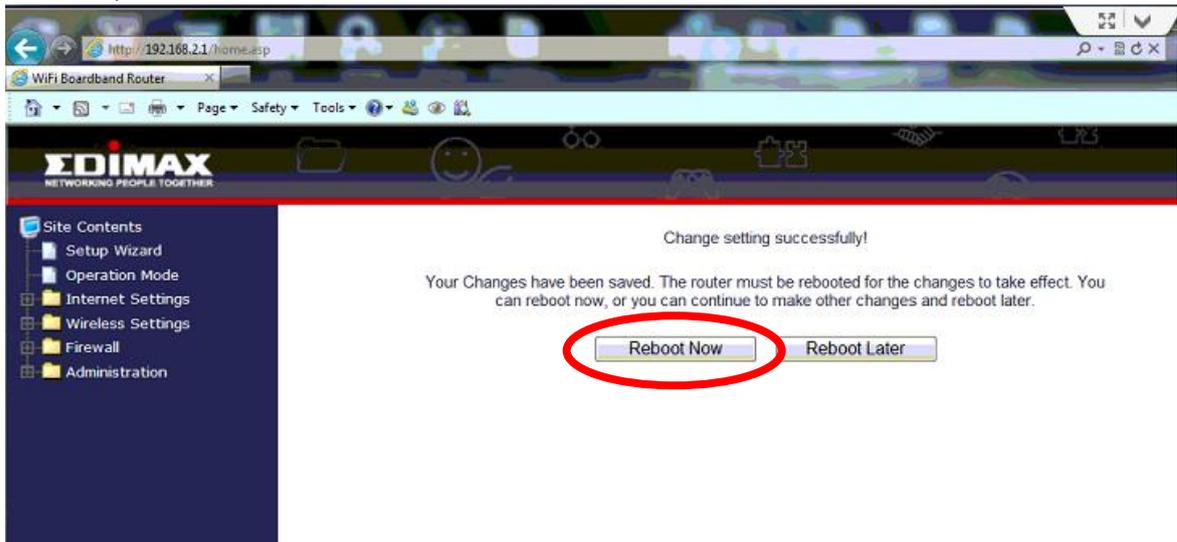
Wireless Settings	
Network Mode	802.11B/G/N
Frequency (Channel)	2412MHz (Channel 1) Current Channel: 1
Network Name (SSID)	YourWirelessName
Channel BandWidth	<input type="radio"/> 20 <input checked="" type="radio"/> 20/40
Security Mode	WPA2-PSK
Pre-Shared Key	<input type="text"/>

Buttons: Back, Next, Cancel, Apply

Enter your wireless key* here. This is the wireless key you use when you connect to your EW-7303APn v2 wirelessly.

*You choose your own wireless password/key, it must be in between 8-63 characters. After configuring the wireless key, the wireless connection of EW-7303APn v2 is secured by your own wireless password/key.

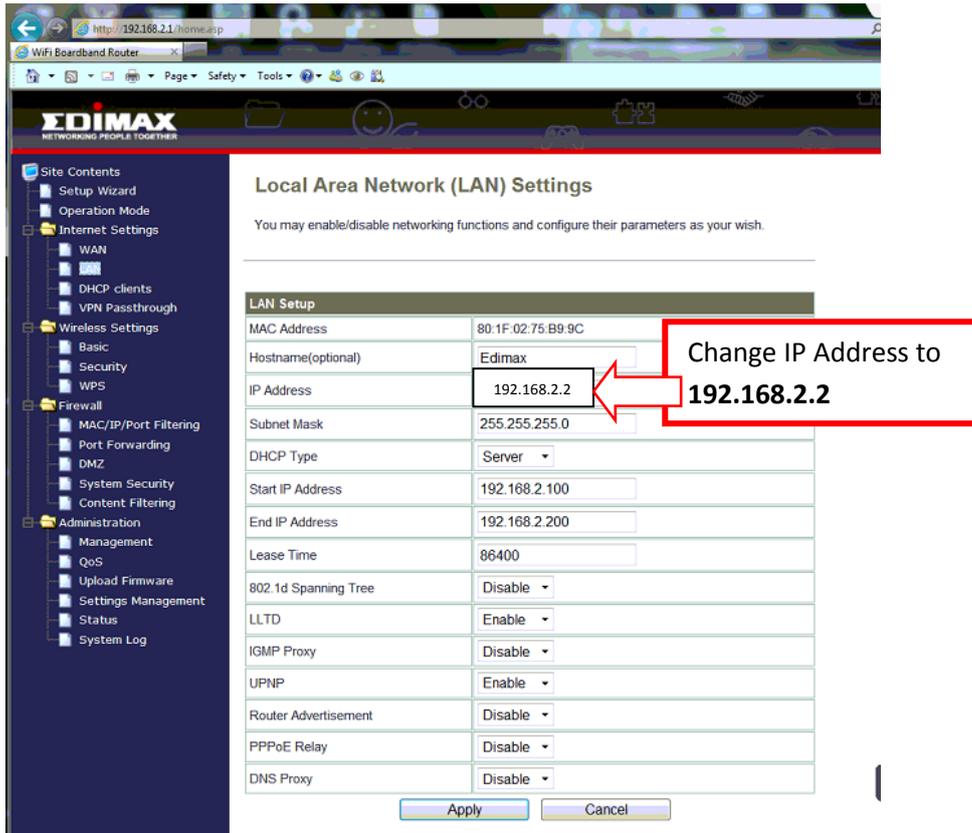
- Then, select Reboot Now.



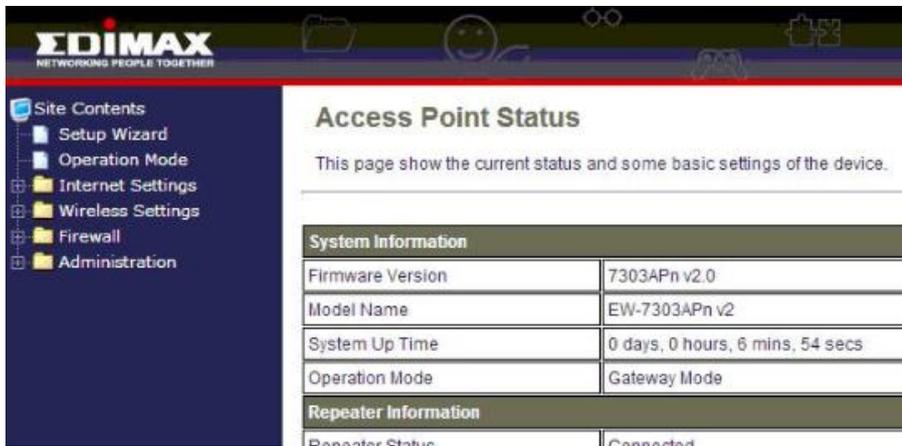
- After rebooted, configuration of the 1st EW-7303APn v2 is done.

2) For the 2nd EW-7303APn v2 (at Building 2, 2nd unit), set it up using repeater mode.

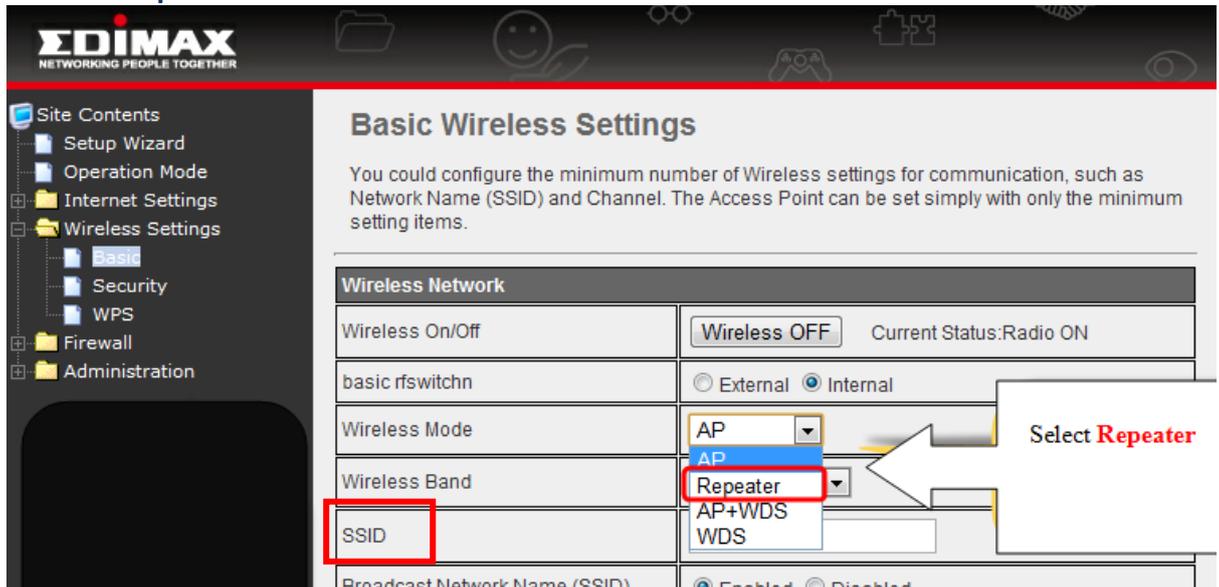
- Connect a computer (use a standalone computer, do not connect this computer to any other network while setting this up) to the LAN port of EW-7303APn v2 using an Ethernet cable. Do not connect EW-7303APn v2 to any other devices/router.
- Change the IP address of the 2nd EW-7303APn v2 from 192.168.2.1 to 192.168.2.2, so that it won't cause conflict with the 1st unit. To do this, login to EW-7303APn v2 on 192.168.2.1. Open the Internet Explorer, at the address bar, type 192.168.2.1 and press Enter. Login with default username/password, admin/1234. Once login, click **Internet Settings>LAN>** change IP address to 192.168.2.2, Click Apply to save the setting.



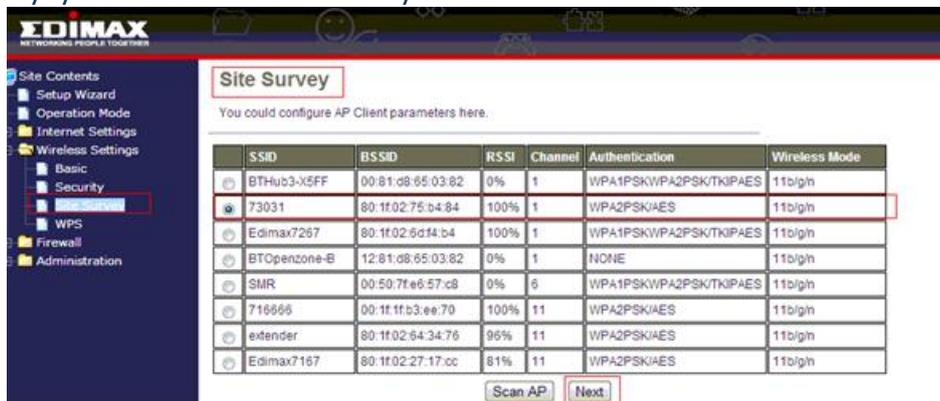
- After clicking Apply, wait until the screen automatically change to the main status screen as below.



- Then, continue the configuration. Click Wireless Settings> Basic>change Wireless Mode to **Repeater**.



- You can change the **SSID**. This SSID is the wireless network name of the 2nd EW-7303APn v2. We recommend you to use a **different SSID** so that you can identify the 1st and 2nd unit. However (if you wish), you can use the same SSID in both EW-7303APn v2 as long as you are not confused. Click Apply and click 'Reboot later'.
- After that you will see a **Site Survey** option under Wireless Settings> Click Site Survey>you will see the Site Survey table.



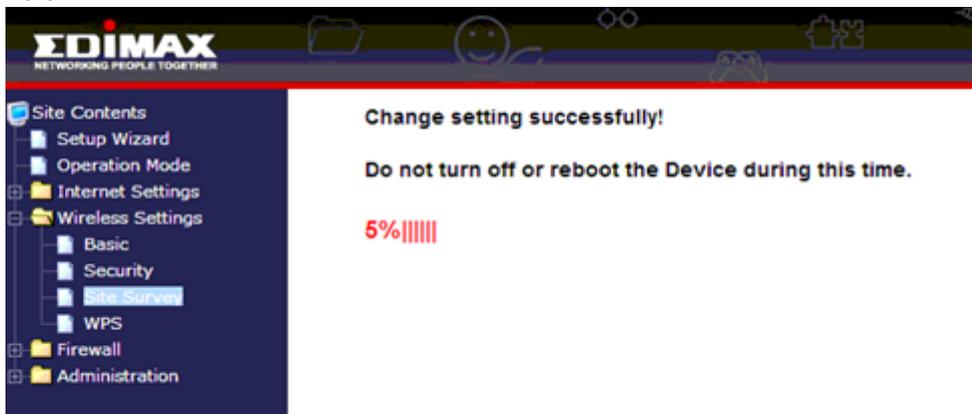
- On the table, you will see all wireless networks available in the environment> choose the 1st EW-7303APn v2 you want to repeat from. Check the signal strength (RSSI), make sure it's on 50% or above. Please note that if the signal strength is lower than 50%, the repeater won't be connected. Click Next.

- Enter the Wireless Security key of the 1st EW-7303APn v2 into 'Pass Phrase'. Click Apply.

The screenshot shows the EDIMAX web interface with the 'Site Survey' page selected in the left-hand menu. The main content area is titled 'Site Survey' and contains a form for configuring AP Client parameters. The 'Pass Phrase' field is highlighted with a red box. Below the form are three buttons: 'Scan AP', 'Back', and 'Apply', with the 'Apply' button also highlighted by a red box.

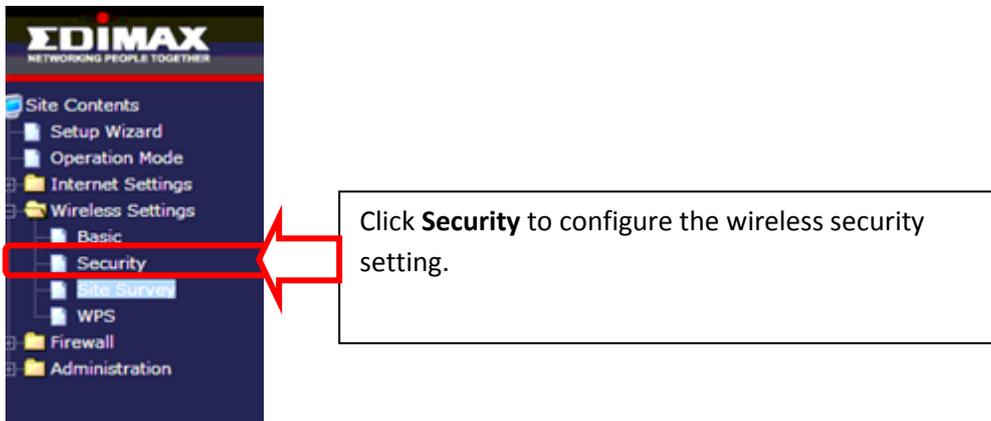
AP Client parameters	
SSID	73031
MAC Address(Optional)	80:1f:02:75:b4:84
Frequency(Channel)	2412MHz (Channel 1) <small>Current Channel: 1</small>
Security Mode	WPA2PSK
Encryption Type	AES
Pass Phrase	[Redacted]
LAN interface Setup	
DHCP Type	Disable
IP Address	192.168.4.189

- The repeater settings will be saved. The EW-7303APn v2 will reboot automatically. Please wait.



- Once rebooted, the 2nd EW-7303APn v2 will be connected to the 1st EW-7303APn v2 wirelessly.

- Lastly, click on Wireless Settings>Security>This is the wireless security setting of the 2nd EW-7303APn v2. By default the wireless security of the 2nd EW-7303APn v2 is unsecured. You may want to secure it with your own password/key. You can use the same wireless security setting of the 1st unit or setup a different one.



- Once done, any devices connected to the 2nd EW-7303APn v2 wirelessly or wired will be connected to the internet.

FAQ:

- 1) Question: Inside Building 2, the wireless signal is weak because the front panel of the 2nd EW-7303APn v2 is facing Building 1, how can I allow wireless connection inside Building 2?

Answer: You can setup another Wireless Access Point inside Building 2. For example, use a EW-7416APn v2 or EW-7228APn, set it up as Access Point mode, connect it using an Ethernet cable to the LAN port of the EW-7303APn v2 in Building 2. Put EW-7416APn v2/EW-7228APn in the room where you require wireless connection in Building 2. Any devices connected wirelessly or wired to EW-7416APn v2/EW-7228APn will be connected to the internet automatically.

- 2) Question: Is the bandwidth (network/internet speed) in the 2nd Building same as the 1st Building?

Answer: No. Normally, you will find that the bandwidth in the 2nd Building is lower than the 1st Building using the Repeater. The differences are depending on environment factors. Therefore, testing must be carried out to ensure you have sufficient bandwidth in the 2nd Building for your applications, especially if you use devices for video streaming.