1. Find out the IP address of your computer. Have your computer get on Internet as normally, without EW-7228APn turning on.

If you use a Windows XP computer, click on **Start** -> **Run**. Type in "**ncpa.cpl**" hit OK.

If your computer is Vista or Windows 7, click on **Start**, click on **Search**. Type in "**ncpa.cpl**" hit OK.
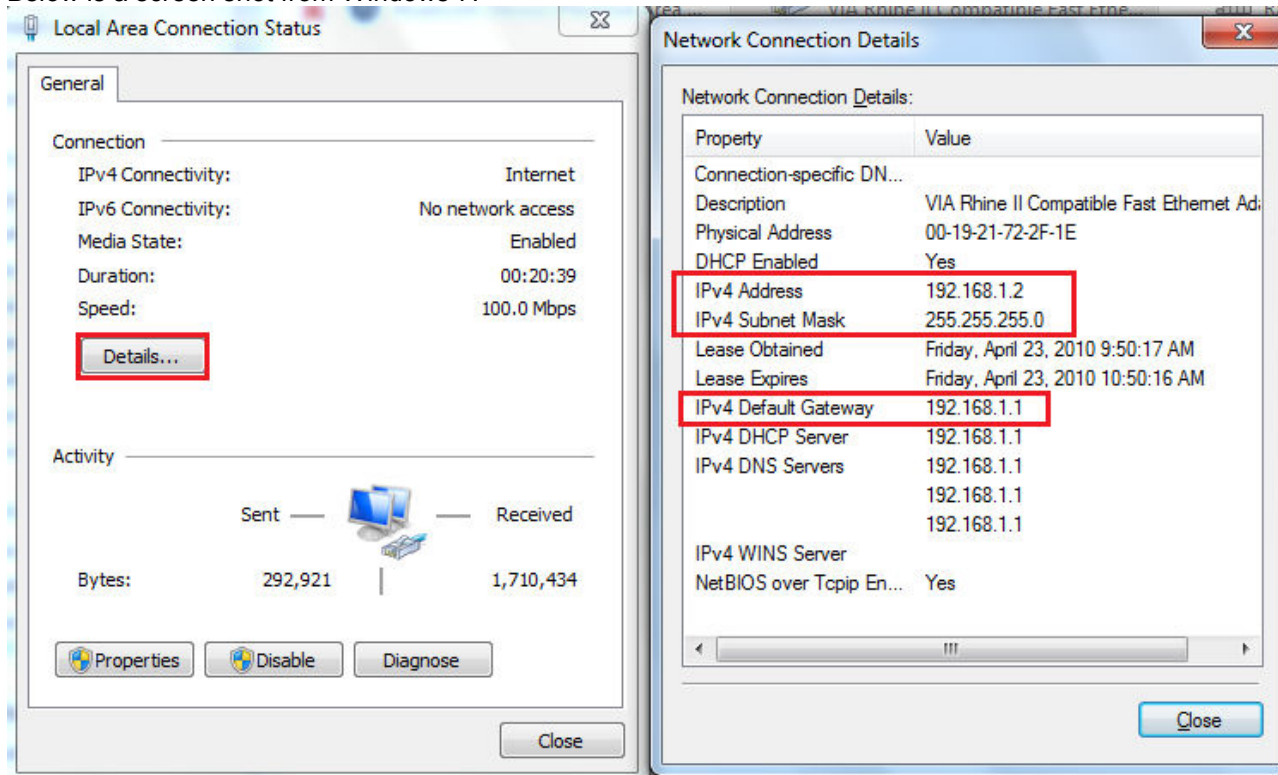

If your computer is Windows 8, please press the Windows key on keyboard to switch into the Windows Start Menu. Bring up the **search** function. In the **Apps** box, type in "**ncpa.cpl**" hit OK.

Inside the Search box, type in "**ncpa.cpl**" then click on it. The **Network Connection window** will show up and you should see the icon of **Local Area Connection** (**Ethernet** icon in Windows 8) or **Wireless Network Connection**. (**Wi-Fi** icon in Windows 8)

Depends on how your computer get on Internet, double click either on Local Area Connection or on Wireless Network Connection to get into "Status" Window. Click on "Details" button.
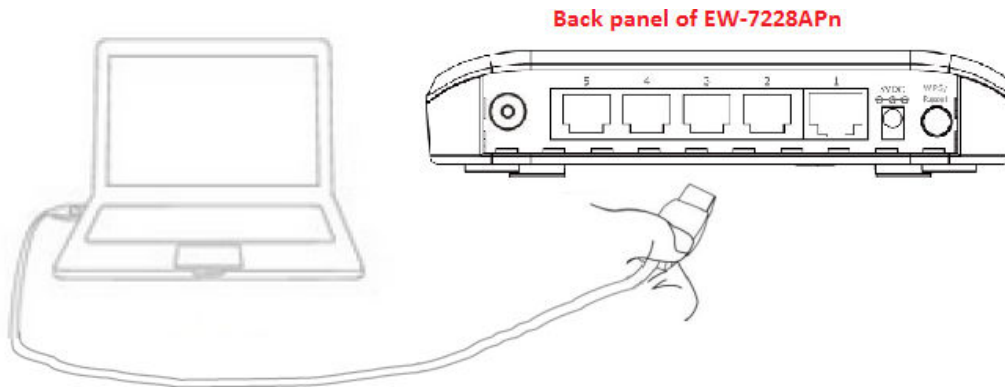
Below is a screen shot from Windows 7.

Take a note about the IP address, subnet mask, and default gateway. The first three digits of the IP address and default gateway should be the <u>same</u>. For example, both addresses start with 192.168.1.x. Now you have some idea about the IP addressed used in your network. Later on, you can assign new IP address like 192.168.1.200 to Edimax extender.

Click on **Close** button to close "<u>Network Connection Details</u>" window. Click on **Close** button again to close the "<u>Status</u>" window. Leave the current **Network Connection Window** open.

2. Get an Ethernet cable. Plug one end of the Ethernet cable into your computer's Ethernet port. Plug the other end of the Ethernet cable into the Ethernet port on the back of the EW-7228APn.
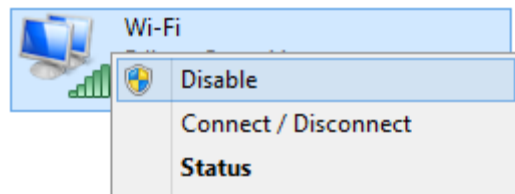

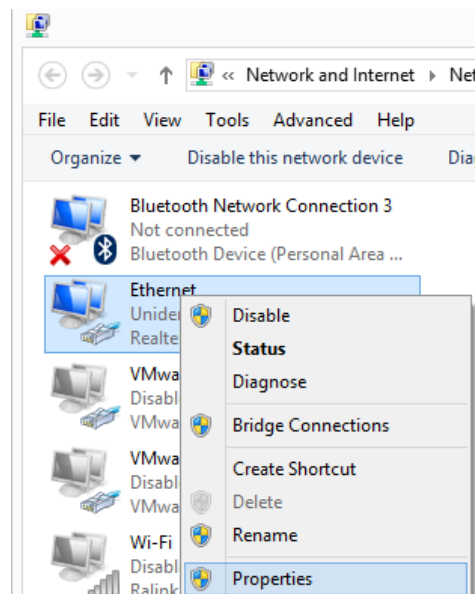**3.** Power on EW-7228APn. The Power LED and the Ethernet port should turn on.

4. Continue the **Network Connection window** left from the first step.

If your computer has wireless function available, you will have the <u>Wireless Network Connection</u> icon (<u>Wi-Fi</u> icon in Windows 8). Right click on the Wireless network connection icon. Click on <u>Disable</u>. We recommend you temporarily disable the wireless function of your computer.
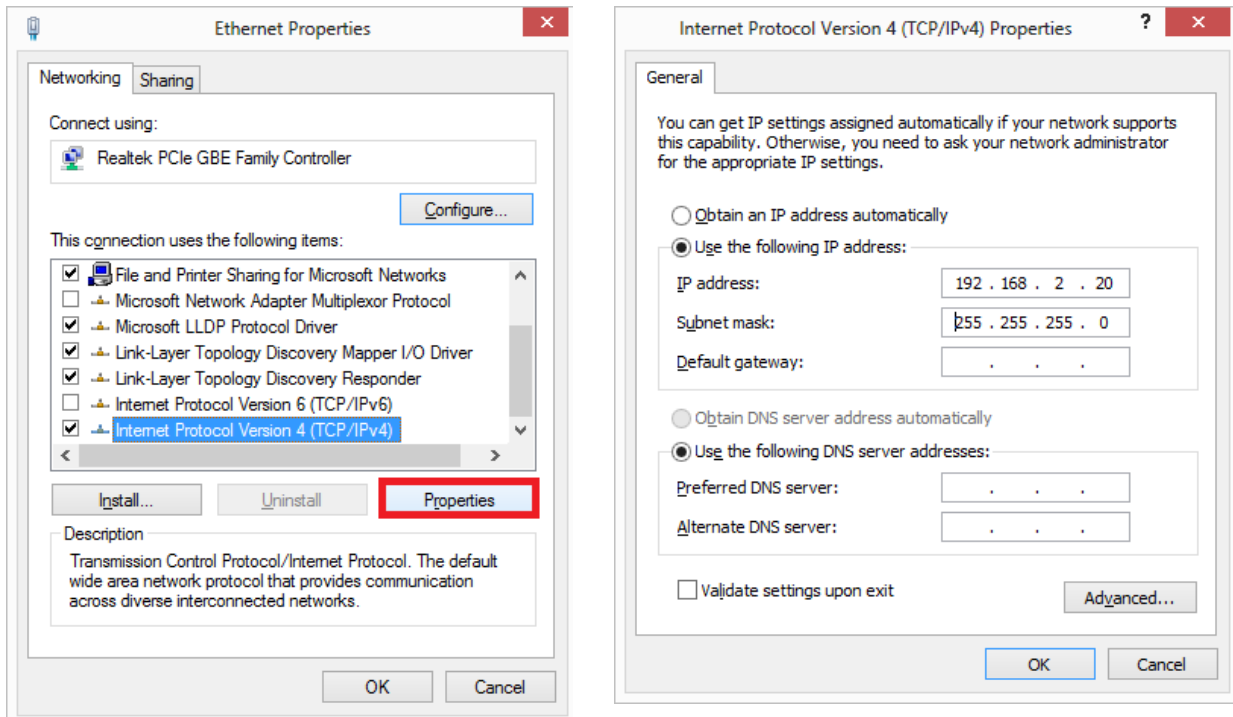
Below is a screen shot from Windows 8.

5. Still in the **Network Connection window.** Right click on "Local Area Connection" icon (**Ethernet** icon in Windows 8), click on <u>Properties</u>
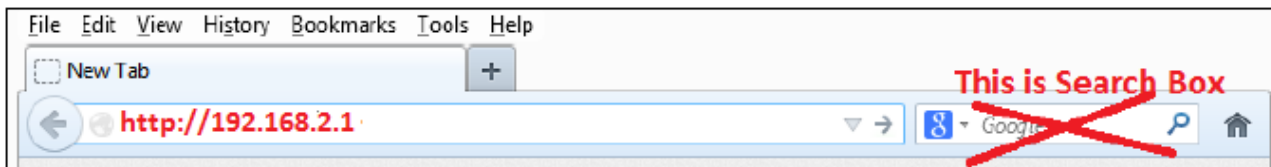
.

6. In the <u>Local Area Connection properties</u>, select Internet Protocol version 4. Click on <u>Properties</u>.

Select the option of "Use the following IP address". Enter the IP address as 192.168.2.20. The subnet mask would be 255.255.255.0. Click on **OK**. Click **OK** button to save the setting and exit the Local Area Connection Properties.

Leave the **Network Connection** Window open.

7. Open Internet Explorer or other web browser.   Inside the address bar, type **http://192.168.2.1** and press Enter.
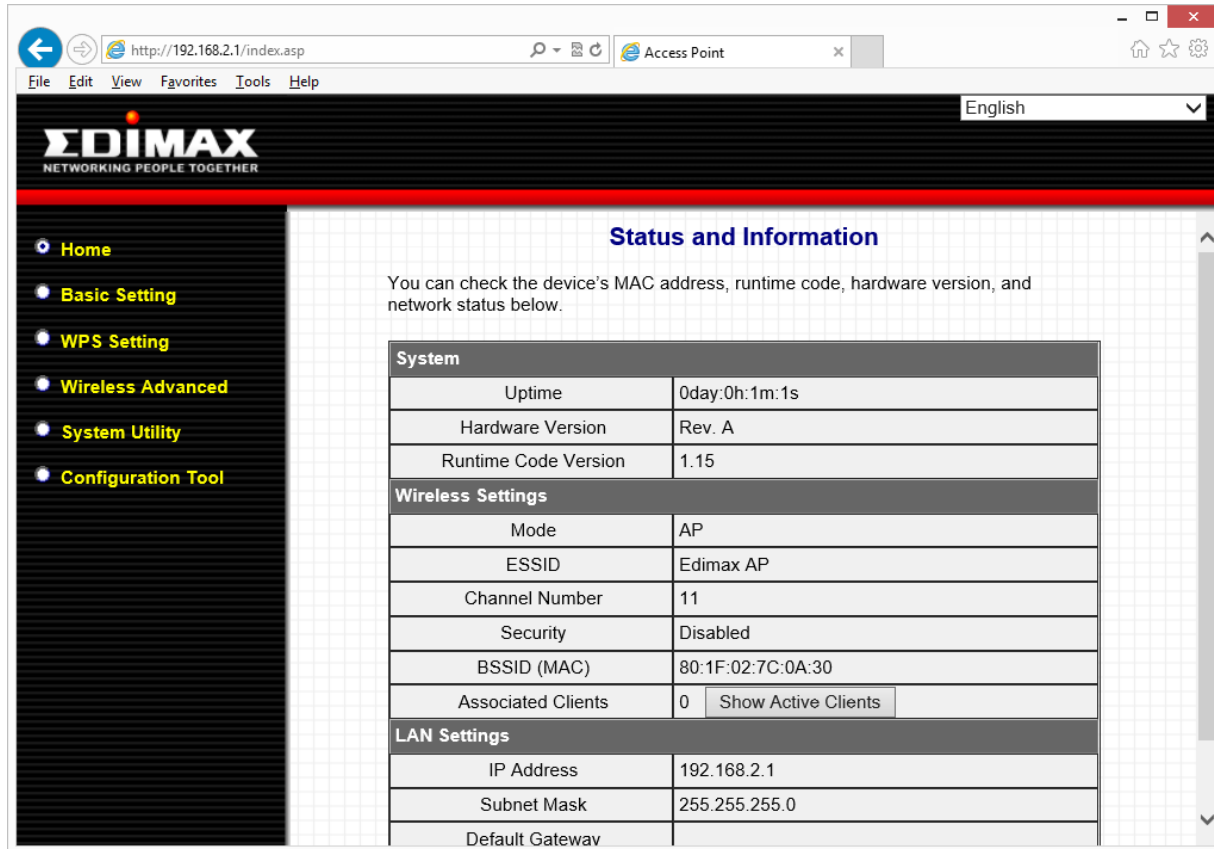
A window prompts and asks for login username and password.   Enter the username : **admin.** Enter password as **1234**.   Click on **OK** or **Login** button.

8. You should get into the setup page of the extender.

If you can not get into the page, you may reset the EW-7228APn to factory default by holding its Reset button for 20 seconds. That will erase all the setting and restore the factory default settings.

In the setup page, you will find the Runtime code version which is the firmware version. If you have an older firmware, you may want to upgrade the firmware under the <u>Configuration Tool</u> settings. The latest firmware file can be found on our web site http://us.edimax.com.
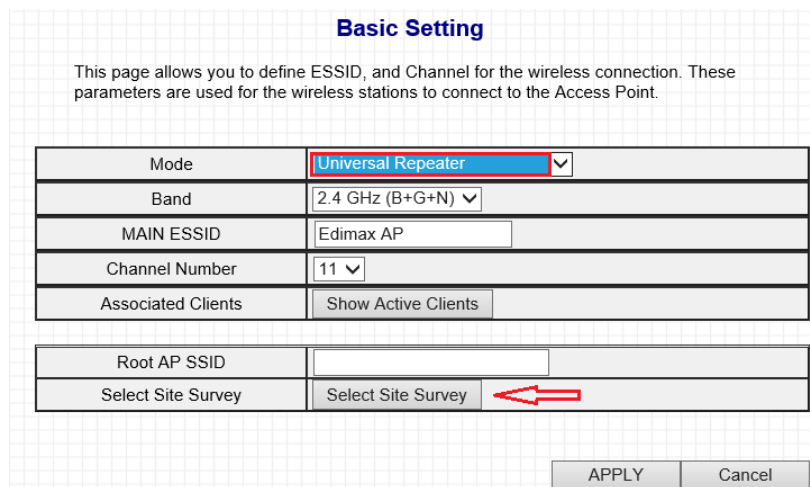
Below is a screen shot from firmware v1.15 for EW-7228APn.

9. Click on **Basic Settings**.

There are different operating modes available for EW-7228APn.

Select the option of <u>Universal Repeater</u>.

10. Click on **Select Site Survey** button. "Wireless Site Survey" window displays all available wireless networks. You should see your original Wi-Fi network. It also shows you the Encryption and Signal of your Wireless Network. Please note that the extender may not have a reliable wireless connection if the signal from your Wi-Fi router is less than 40.

Wireless Site Survey

This page provides tool to scan the wireless network. If any Access Point or IBSS is found, you could choose to connect it manually when client mode is enabled.

Select	SSID	BSSID (MAC)	Band	Channel	Security Type	Encryption	Signal
○	EdimaxCorp	14:5b:d1:e7:dd:f0	(B+G+N)	11	AP	WPA2-PSK	91
○	Edimax2	40:b7:f3:dd:ae:b0	(B+G+N)	6	AP	WPA-PSK/WPA2-PSK	90
●	HomeNetwork	80:1f:02:13:59:ee	(B+G+N)	6	AP	WPA2-PSK	88
○	Stumm	30:46:9a:43:16:be	(B+G+N)	1	AP	WPA-PSK/WPA2-PSK	86
○	kpk1503	00:21:91:0d:99:5b	(B+G+N)	3	AP	WPA2-PSK	84
○	DIRECT-iLSCX-3400	02:15:99:d5:2e:ae	(G)	10	AP	WPA2-PSK	80

| Refresh | Done | Close |

Click on the **Select circle** to select your Wi-Fi network. Click on **Done**. The "Wireless Site Survey" window will be closed.

11. Back to the setup page of Universal Repeater mode . Please verify the mode is Universal Repeater. The Main ESSID is Edimax AP by default. The Main ESSID will be used as the network name for the extender network. You can change it to any name you like. For example, *HomeNetwork-extender*. Click on **Apply**.

Mode	Universal Repeater
Band	2.4 GHz (B+G+N)
MAIN ESSID	Edimax AP
Channel Number	6
Associated Clients	Show Active Clients

Root AP SSID	HomeNetwork
Select Site Survey	Select Site Survey

| APPLY | Cancel |

12. Click on **Continue**.

Settings saved successfully!

Click CONTINUE to continue other configuring settings, or click APPLY to restart the system and make the changes take effect.

| CONTINUE | APPLY |

13. Click on **Wireless Advanced**. Select **Enabled** for WMM. Click on **Apply**.

14. Click on **Continue**.

15. Click on **Security.**. If your primary Wi-Fi network has wireless security password, you need to enter the same wireless security password into the Edimax extender. From step 10, you saw the type of your encryption.

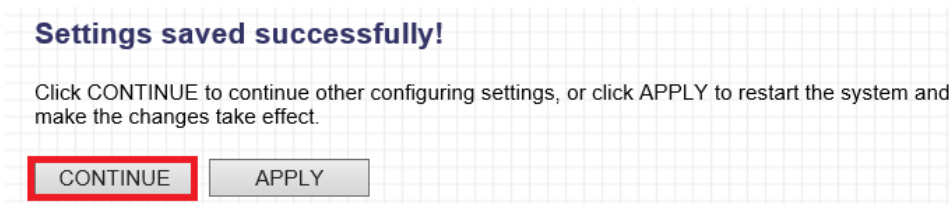In our example, we use WPA2-PSK. Select the Encryption of **WPA Pre-share key**.

If your primary network use WPA TKIP, then you choose the circle of WPA(TKIP). If your primary network supports WPA2 AES, then you choose the option of WPA2(AES).

In the box of KEY, <u>type in the same wireless security password of your original Wi-Fi network</u>. Click on **Apply**.
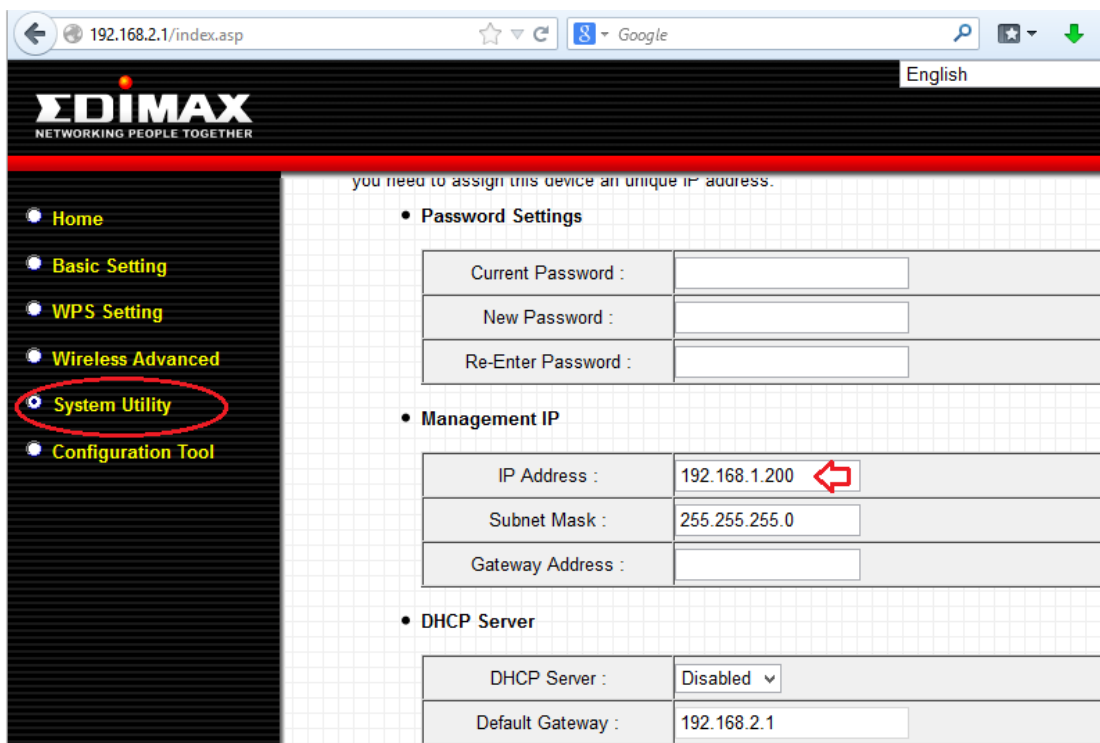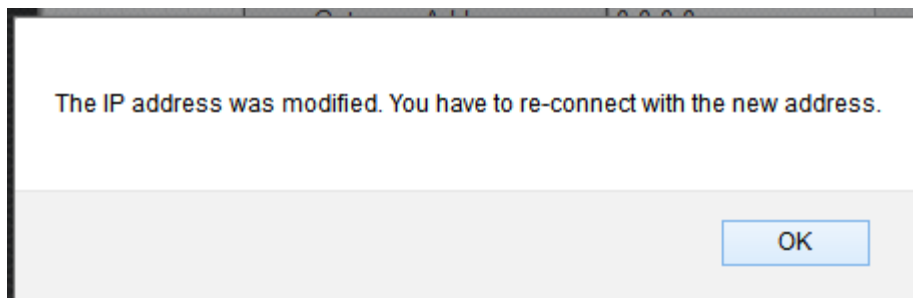
16. Click on **Continue**.

17. Click on **System Utilities**. This step is optional but recommended. In the first step, you have checked the IP address used in your own network. You can assign a new IP address to the extender so the extender can be in the same subnet with your network. If you are not sure about this, you can skip this and just go to next step.

Computers in the same network has to have the same first three numbers of their IP address. Only the 4th number is different. For example, your Wi-Fi router could have IP address 192.168.1.1 while ethernet desktop uses 192.168.1.100 and iPhone uses 192.168.1.102...etc.. You can assign an address like 192.168.1.200 to the extender.
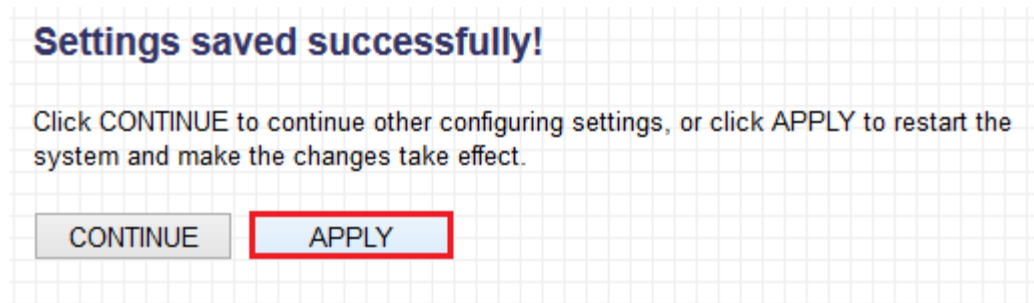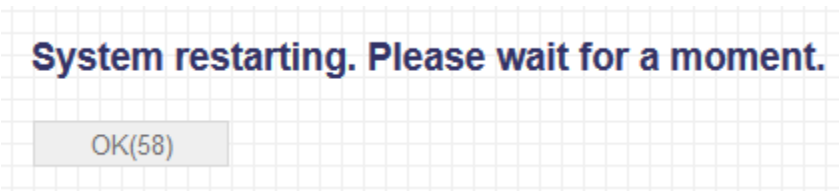

18. Click on **Apply**.

If you modified the IP address of the extender, you will get a reminding prompt. Click on **OK**.

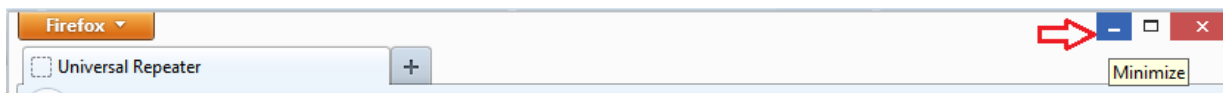**19.** Click on **Apply**. We have finished the setup.

Settings saved successfully!

Click CONTINUE to continue other configuring settings, or click APPLY to restart the system and make the changes take effect.

CONTINUE   APPLY

20. The extender saves the setting and reboots. This will take 60 seconds.

System restarting. Please wait for a moment.

OK(58)
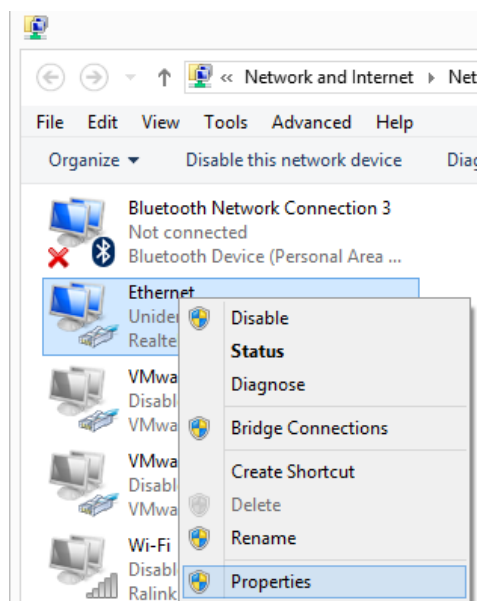
Click on **OK** while it is available.   You may get the message saying the page is not available.

21. Minimize the browser.

Firefox ▼

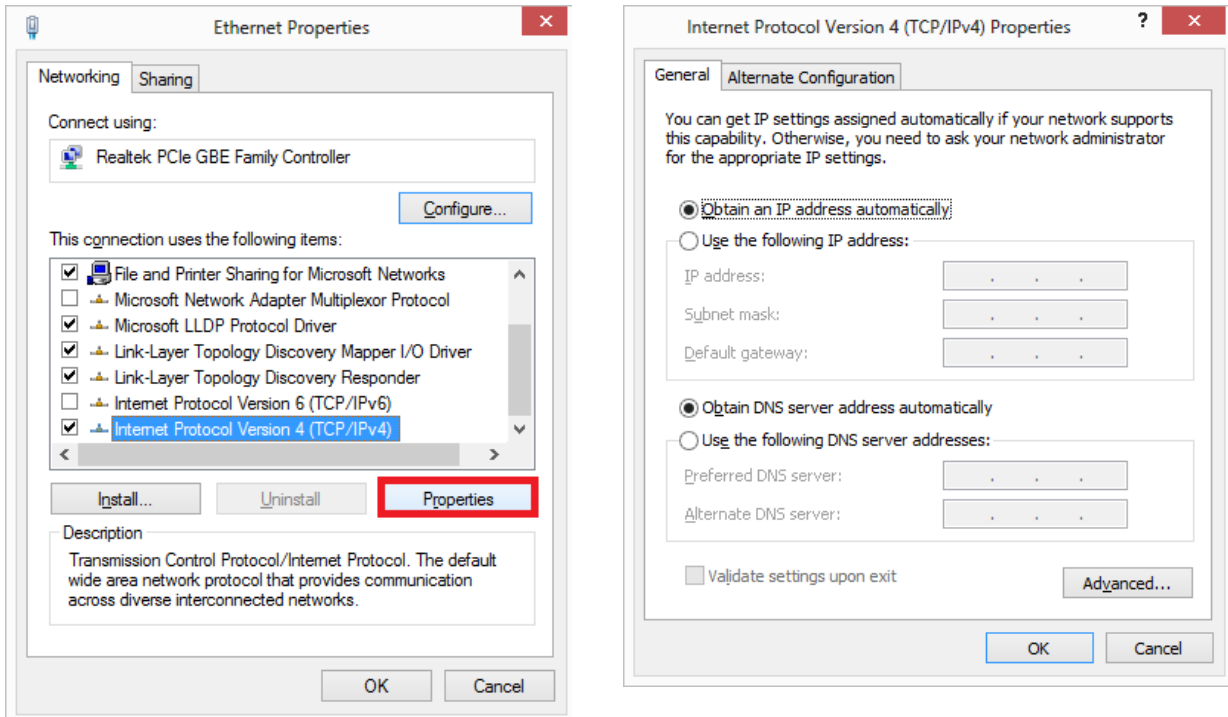Universal Repeater   +   Minimize

22. Back to the **Network Connection** window on step 6. Right click on "Local Area Connection" icon (**Ethernet** icon in Windows 8), click on Properties

<< Network and Internet ▶ Net

File   Edit   View   Tools   Advanced   Help

Organize ▼   Disable this network device   Diac

Bluetooth Network Connection 3
Not connected
Bluetooth Device (Personal Area ...

Ethernet
Unide   Disable
Realte
                Status
VMwa
Disabl   Diagnose
VMwa
                Bridge Connections
VMwa
Disabl   Create Shortcut
VMwa   Delete
Wi-Fi   Rename
Disabl
Ralink   Properties

In the Local Area Connection properties, select Internet Protocol version 4. Click on Properties.
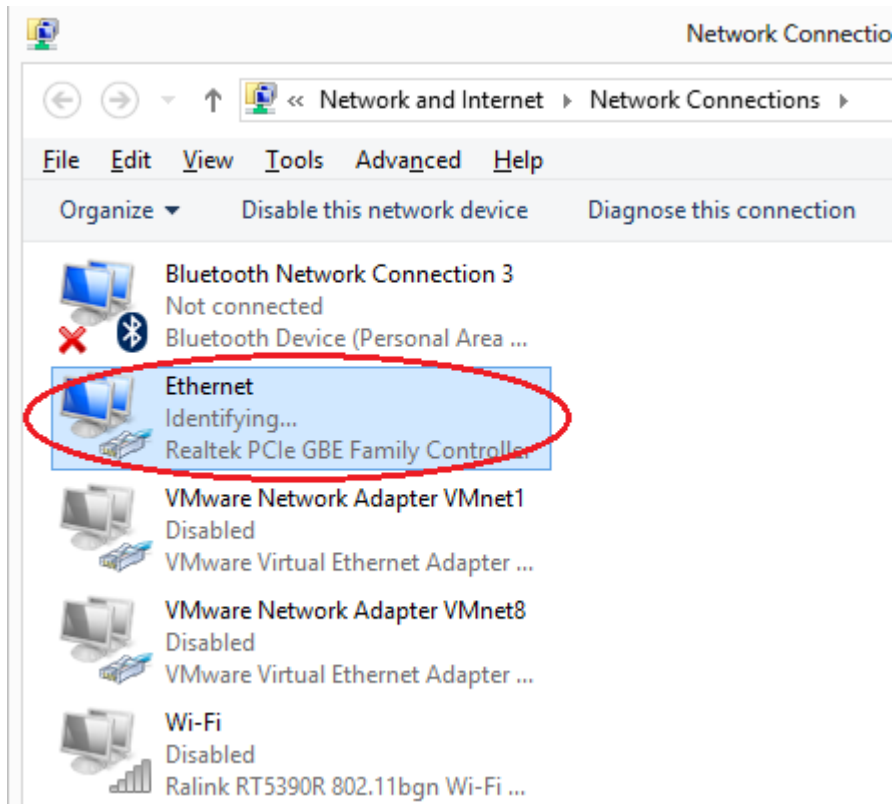

Select the option of Obtain an IP address automatically and the option of Obtain DNS sever address automatically.
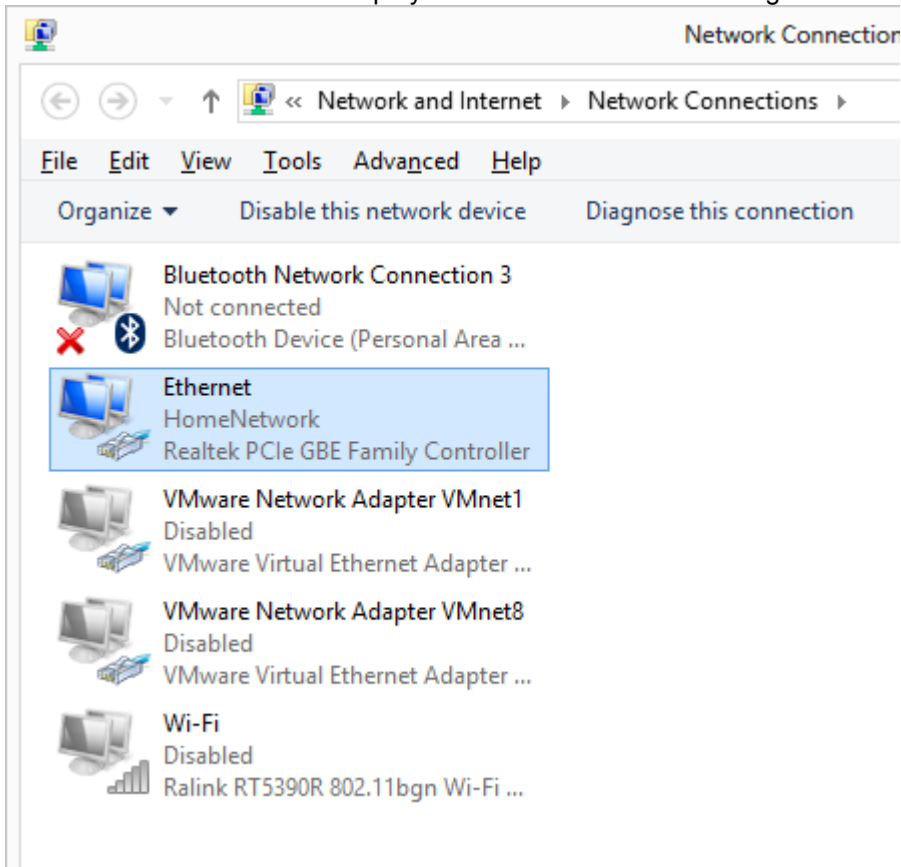
Click on **OK** to close the Internet Protocol version 4 properties.

23. Click on **OK** to close the Local Area Connection Properties.

 The Local Area Connection (or Wi-Fi) shows Identifying.

24. The Local Area Connection displays the network name of the original network. It means the connection is successful.

25. You can open your web browser to verify you can get on Internet.   The extender is setup successfully.
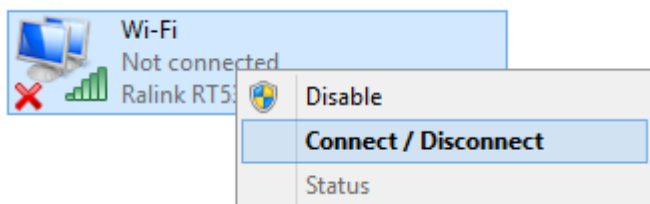
If your computer has wireless function, continue the following.

Unplug the Ethernet network cable from your computer

Right click on Wireless Network Connection (Wi-Fi for Windows 8), click on **Enable**.
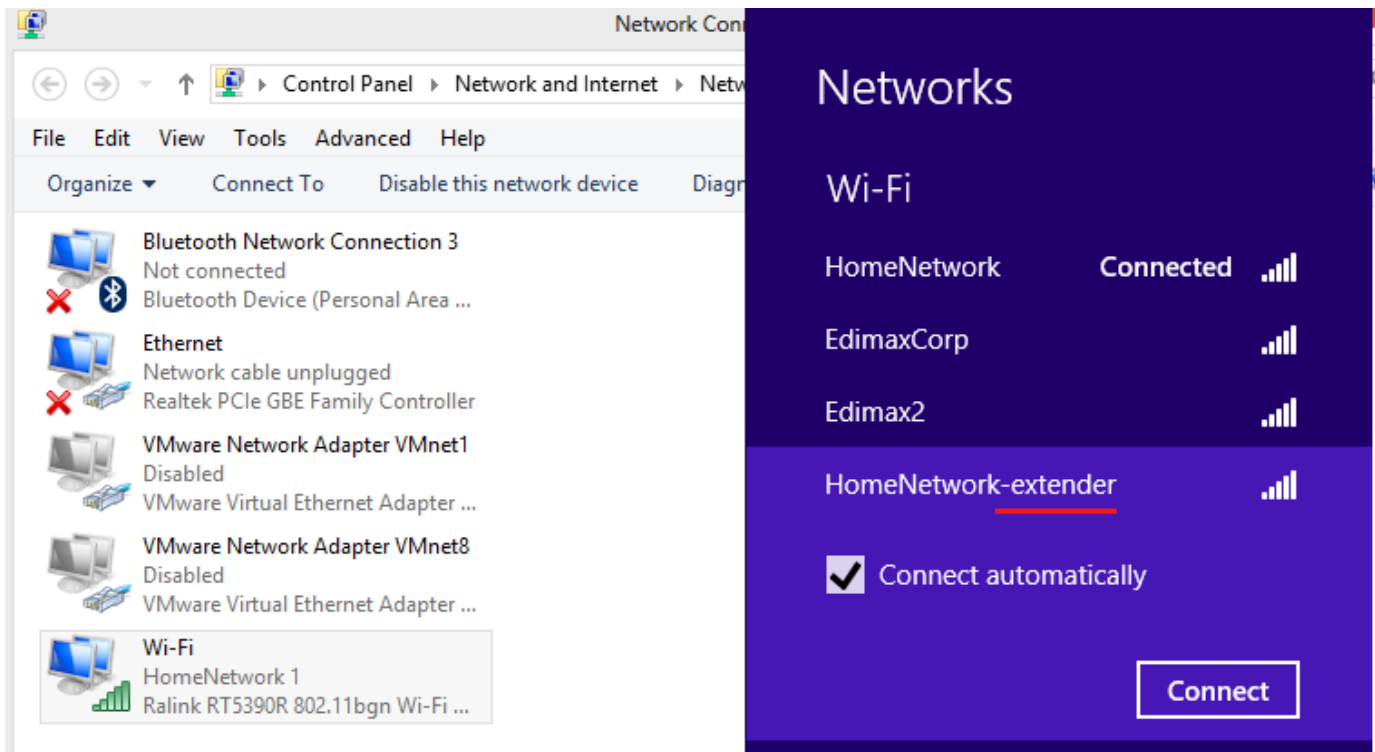

Right click on Wireless Network Connection (Wi-Fi for Windows 8), click on **Connect / Disconnect**
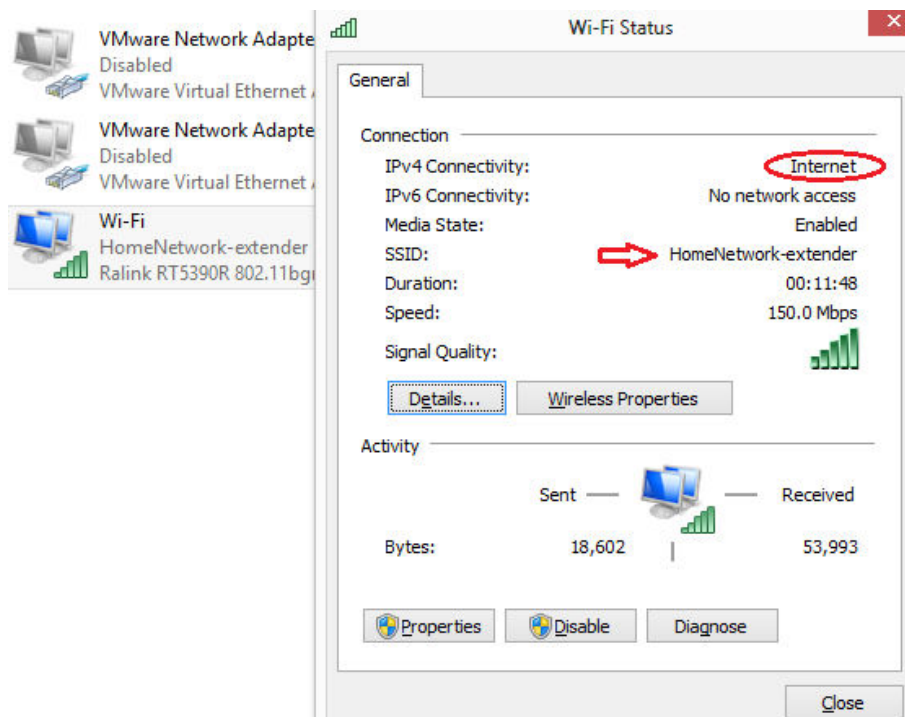
Select the Extender network. Click on Connect.

Below screen is from Windows 8. You may find it different with Windows 7 and Windows Vista.

Type in your wireless security password of the original Wi-Fi network. Click on **Connect**.

You may double click on the Wireless Network Connection to verify the connection status and the SSID is the extender.

If the extender has been setup successfully, you can go ahead move the extender to another room.