What can I do if the TP-Link Wireless Adapter is not achieving desired speed?

Problem:

When using a wireless adapter, the wireless speed is not achieving desired speed.

Causes and Solutions:

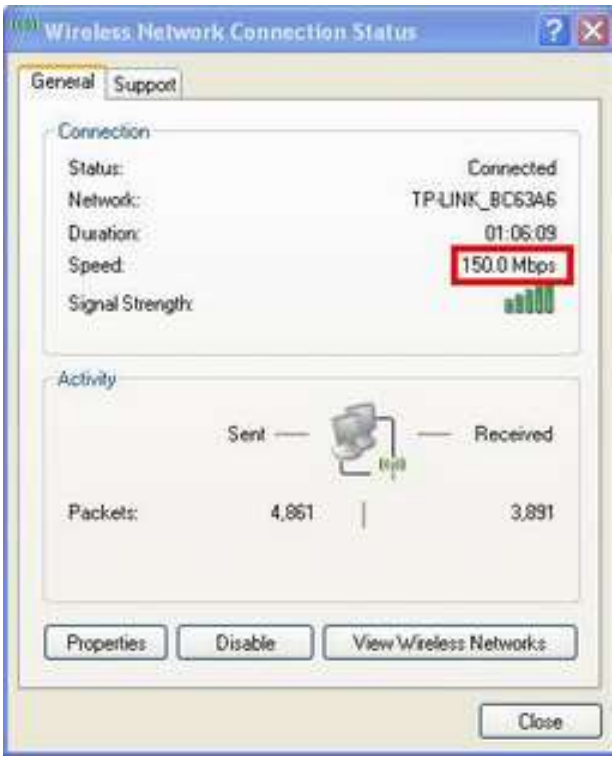
There are many factors that can affect the speed and connection of a wireless adapter, but there are also several solutions that can be tried.

Ⅰ. A low signal strength usually will result in low speed. Below are the options to get better signal strength:

1) **Adjust the location of the adapter.** Sometimes, moving closer to the main router,or changing your position in the room, can affect signal strength and wireless speeds.

2) **Get rid of obstacles**. If your router is inside a cabinet or otherwise obstructed, or if there are significant obstacles between the router and the device you are using with the adapter, try moving away these obstructions to improve your signal strength.

Ⅱ. Slow connection speed will affect the internet speed. On your computer, please right click Wireless Network Connection, click on Status, and check what the connection speed is.



For example, if the wireless router is capable of 300Mbps and the wireless adapter is also a 300Mbps device, normally the connection speed will show 300Mbps with Excellent signal strength. If the connection speed is not normal, here is what you can try:

1) **Check the wireless mode on the wireless router**.Make sure it is on 11n mode or 11b/g/n mixed mode, rather than 11b or 11g mode.11b mode will only have a maximum 11Mbps connection speed, 11g has 54Mbps.

2) **Check the wireless security encryption of your router**. Security encryption of a wireless network greatly affects the speed of the connection. Make sure your router is configured to use the correct security encryption so that you can maximize the speed your router is capable of. Usually it is suggested to use WPA/WPA2.

3) **Check the wireless channel and channel bandwidth of your router**. Different channels will have different performance.The more crowded the channel is, the poorer performance it will get.Channel Bandwidth is also important to the wireless connection, make sure it is set to the best value for your router.

Ⅲ. Cause of Router's firmware or adapter's driver.

Check for the latest updates and drivers for your devices. Make sure your router is running the latest firmware, as this will ensure a better performance and reliability. Please also update the wireless adapter's driver to the latest.

Ⅳ.Cause of the Computer itself.

If after all above steps, the speed is still slow.It is better to test the wireless adapter on another computer and see how it works.

What physical impediments can interfere with the wireless network?

As we know, wireless signal is transmitted through the air, it can be very unstable. There are many facts may affect the transmission.

1. Wall:

Inside a building, wall is the most common impediment that makes the signal weak. Usually, it is very hard for a wireless router to transmit three thick concrete walls.

2. Mirror and metal:

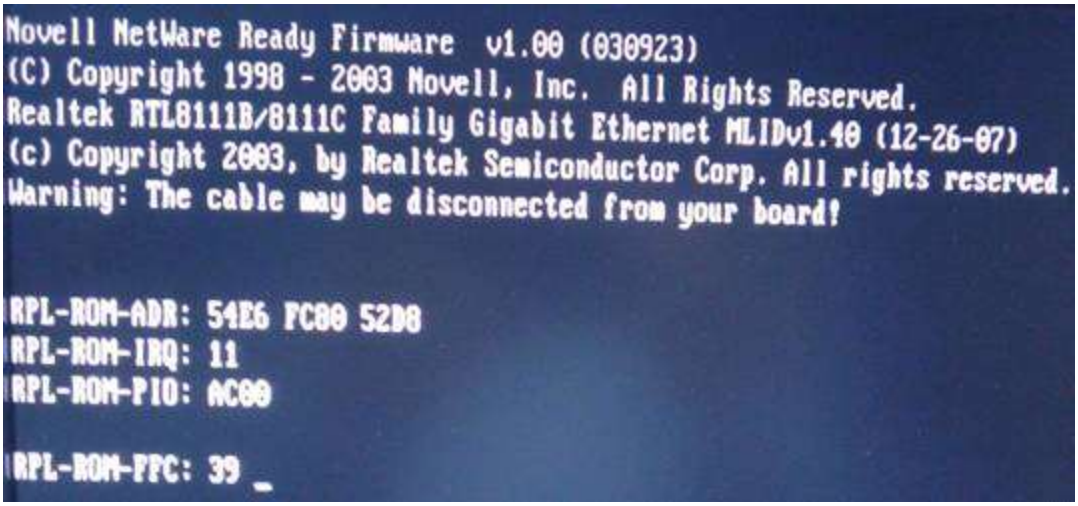
As we all, mirror can reflect the light, it can also reflect the wireless signal. Meanwhile Metal can totally block the transmission.

Please avoid such things when you place your wireless devices. If you find your wireless signal is weak and there are some places can't be cover, you can change a place or change the direction of the antenna. Or you can consider of our Range Extenders and Powerline devices to extend the coverage.

How to get rid of the waiting screen of TG-3468

Symptom:

You will see a waiting screen as below if you restart the computer after plugging TG-3468 into the PCI slot, and need to wait for a long time to start the system.

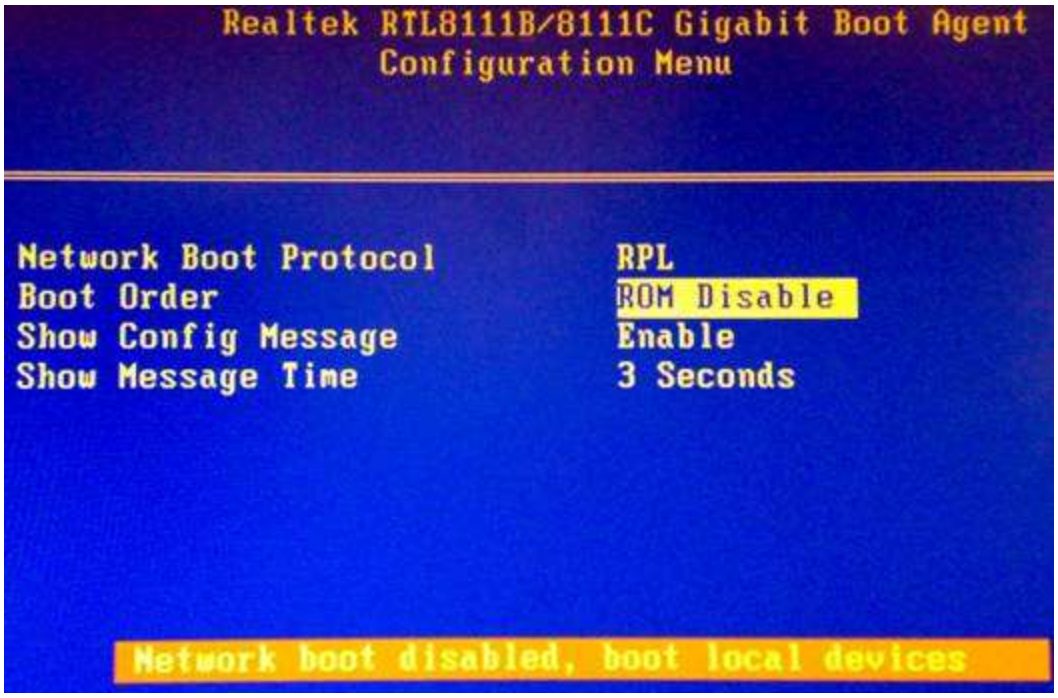


Why?

This is because the network root function is enabled as default on TG-3468. The adapter will begin to count down, searching and connecting to the LAN boot device. If it fails to find any LAN boot devices in the limited time, it just begins to root from local devices.

How to get rid of the waiting screen?

When computer is just starting and displaying some basic information, press "**Shift+F10**", then comes the Configuration Menu for the adapter TG-3468 shown as below.



Please choose "**ROM Disable**" for *Boot Order*, and then press **F4** to save the option. After this, the system will reboot normally without the waiting screen.

How to set up a Mobile Hotspot or Soft AP on Windows 10?

This Article Applies to:

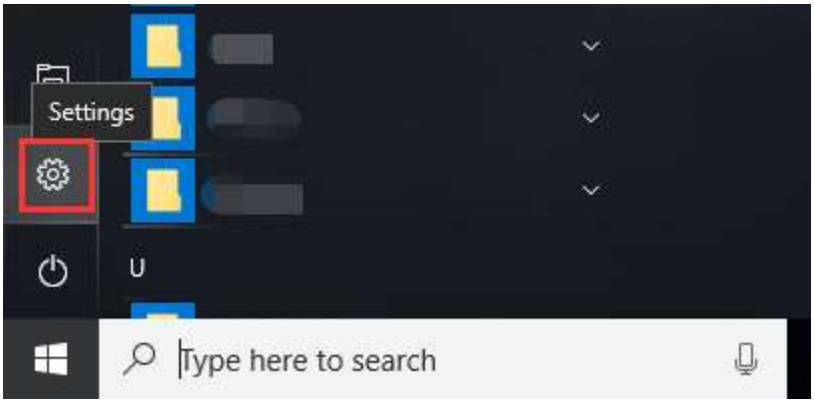
Starting with the Anniversary Update, Windows 10 users with mobile PCs and devices can quickly and easily enable mobile hotspot functionality, allowing you to share your Internet connection with up to 8 other devices.

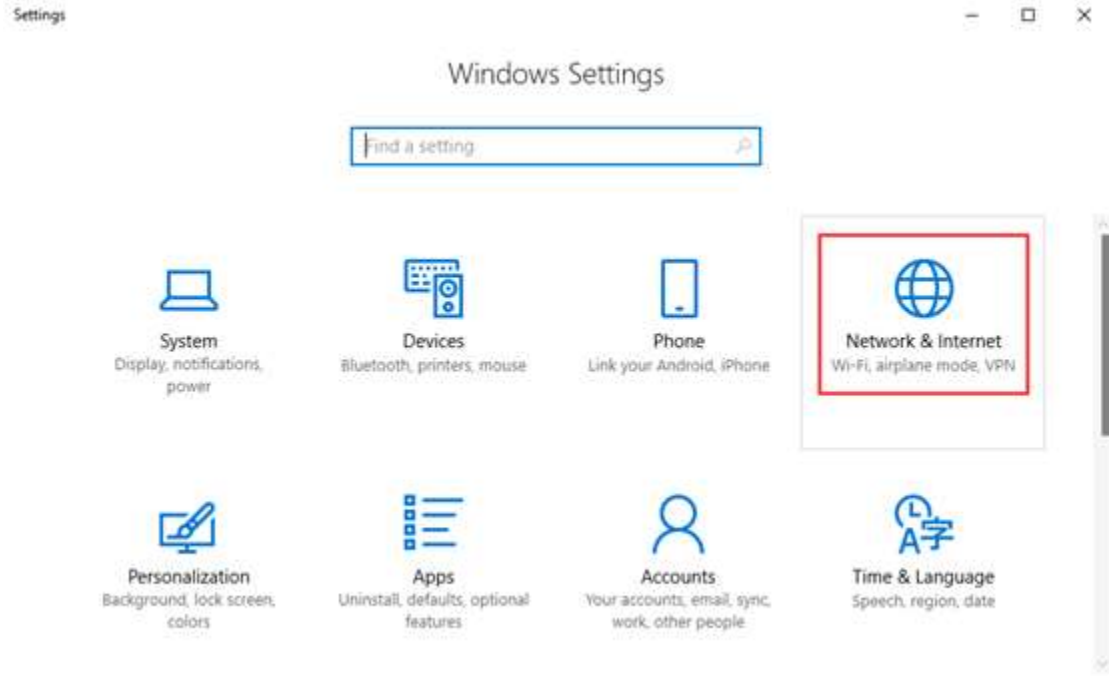
The shared network is a standard Wi-Fi network, and thus can be used by any device that has a Wi-Fi connection.

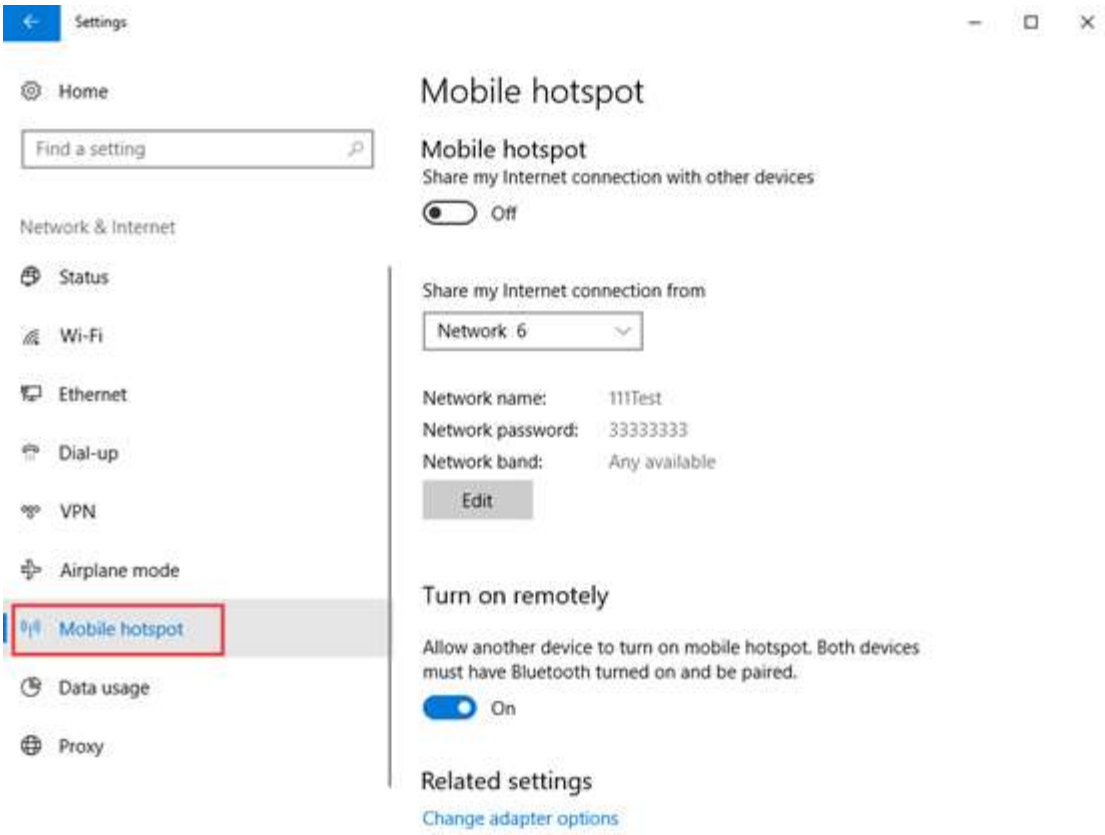
Note: You need a wireless adapter to share your connection, but the connection you're sharing can be an Ethernet (wired), Wi-Fi, or cellular connection.

Step 1 Plug in and enable your wireless adapter.

Step 2 Navigate to **Settings--Networking & Internet--Mobile hotspot**.

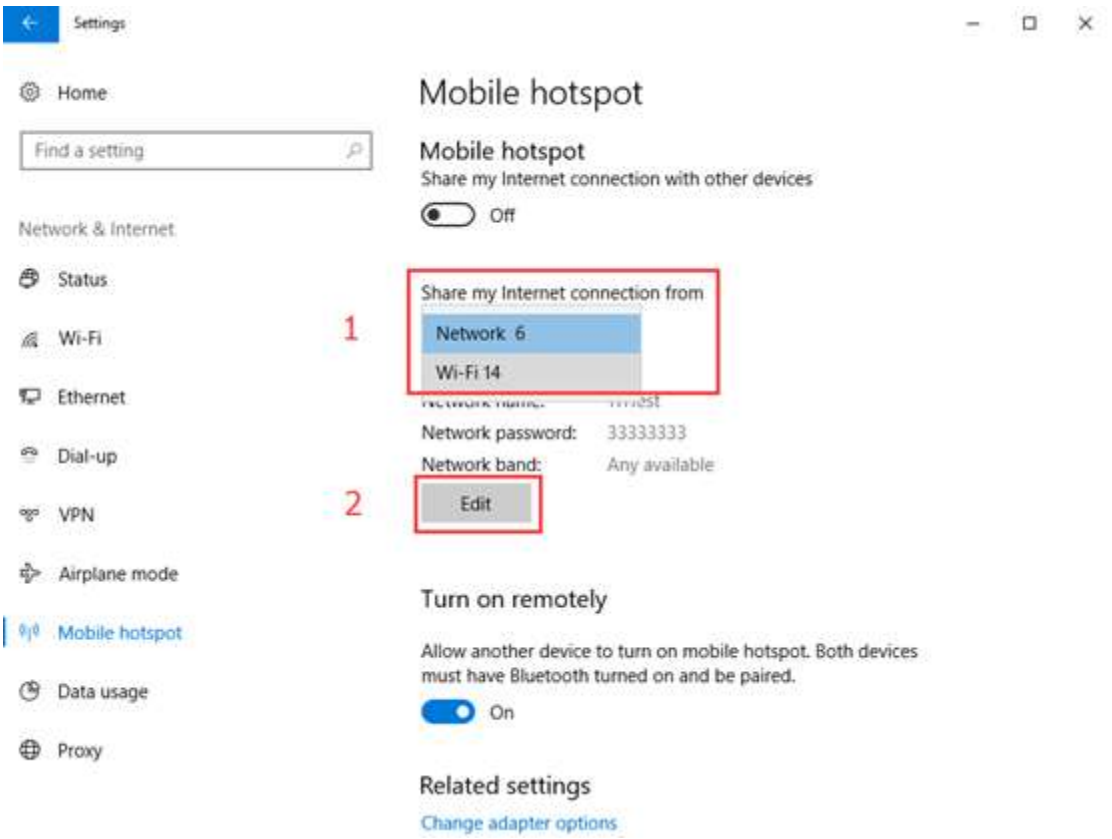

Settings
U
Type here to search

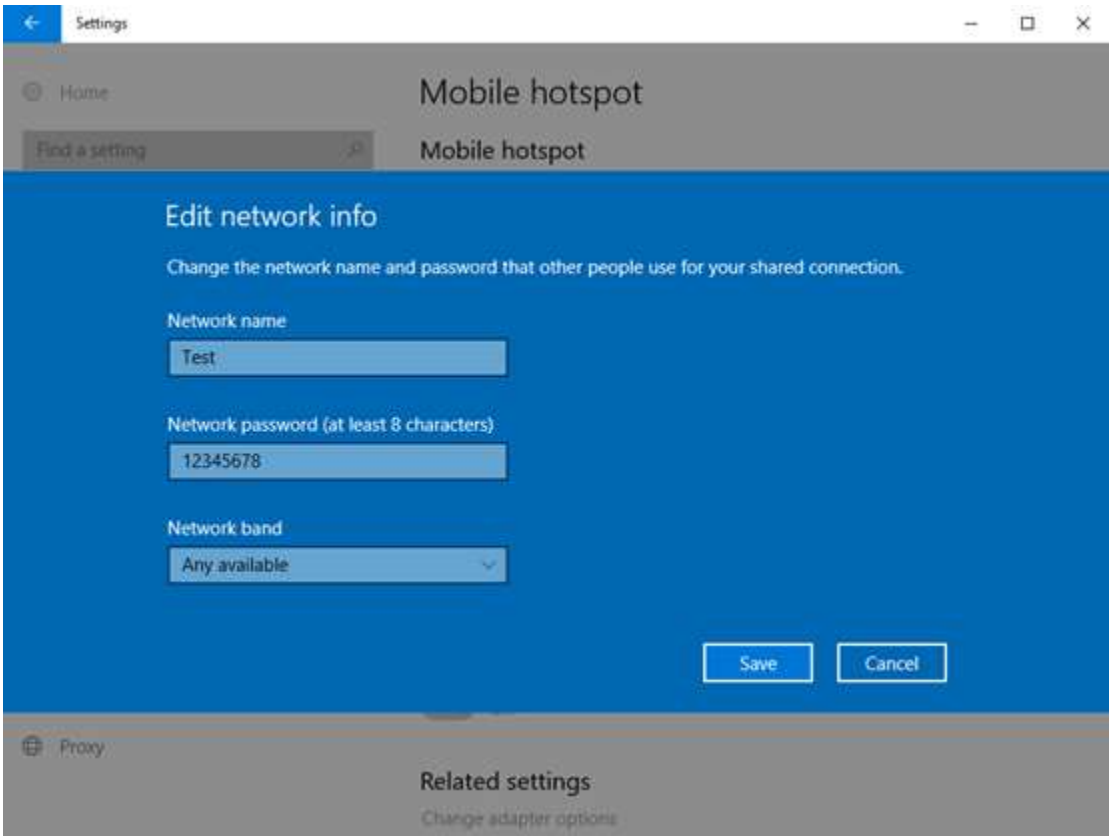

Settings
Windows Settings
Find a setting
System
Display, notifications, power
Devices
Bluetooth, printers, mouse
Phone
Link your Android, iPhone
Network & Internet
Wi-Fi, airplane mode, VPN
Personalization
Background, lock screen, colors
Apps
Uninstall, defaults, optional features
Accounts
Your accounts, email, sync, work, other people
Time & Language
Speech, region, date



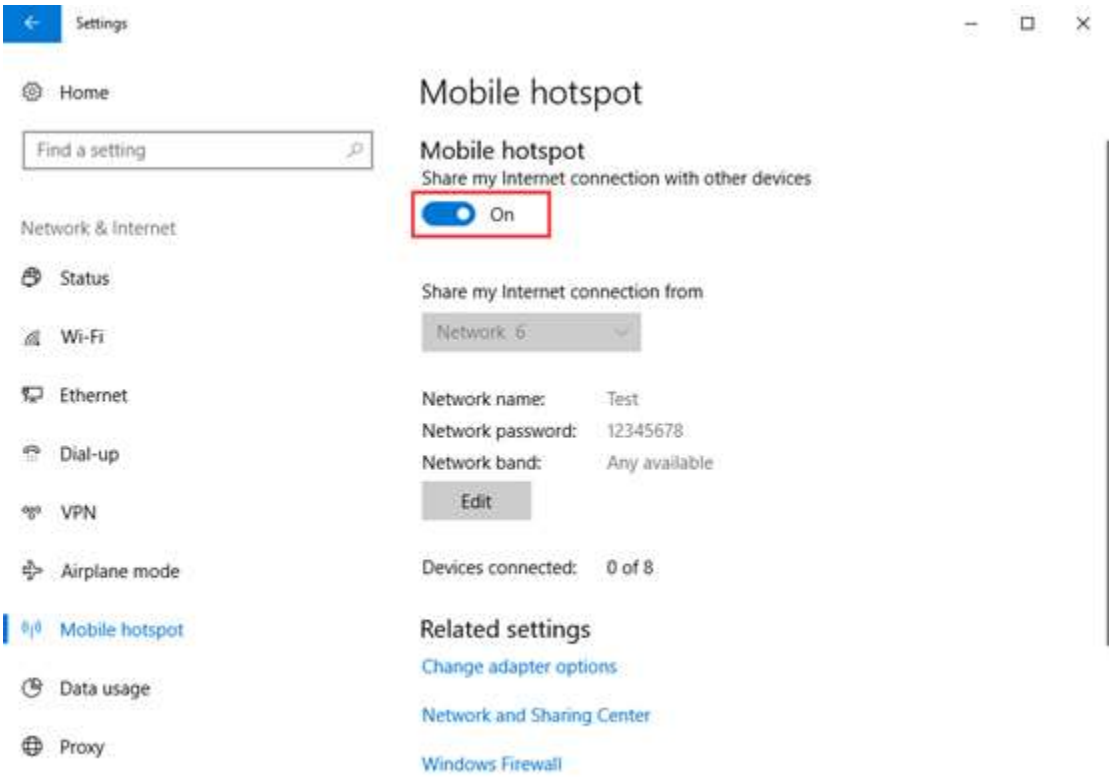
Step 3 Customize

1. Choose the connection to share your Internet
2. Click Edit and customize your wireless network


Settings
Home
Find a setting
Network & Internet
Status
Wi-Fi
Ethernet
Dial-up
VPN
Airplane mode
Mobile hotspot
Data usage
Proxy
Mobile hotspot
Mobile hotspot
Share my Internet connection with other devices
Off
Share my Internet connection from
Network 6
Wi-Fi 14
1
Network password: 33333333
Network band: Any available
2
Edit
Turn on remotely
Allow another device to turn on mobile hotspot. Both devices must have Bluetooth turned on and be paired.
On
Related settings
Change adapter options


Settings
Mobile hotspot
Mobile hotspot
Edit network info
Change the network name and password that other people use for your shared connection.
Network name
Test
Network password (at least 8 characters)
12345678
Network band
Any available
Save
Cancel
Proxy
Related settings
Change adapter options

Step 4 Turn on the hotspot



If you failed to connect to this Wi-Fi, you may turn to Microsoft for help: https://answers.microsoft.com/en-us/insider/forum/insider_wintp-insider_web/mobile-hotspot-connections-are-stuck-at-obtaining/365b496a-14db-4bec-951d-08726752ce98

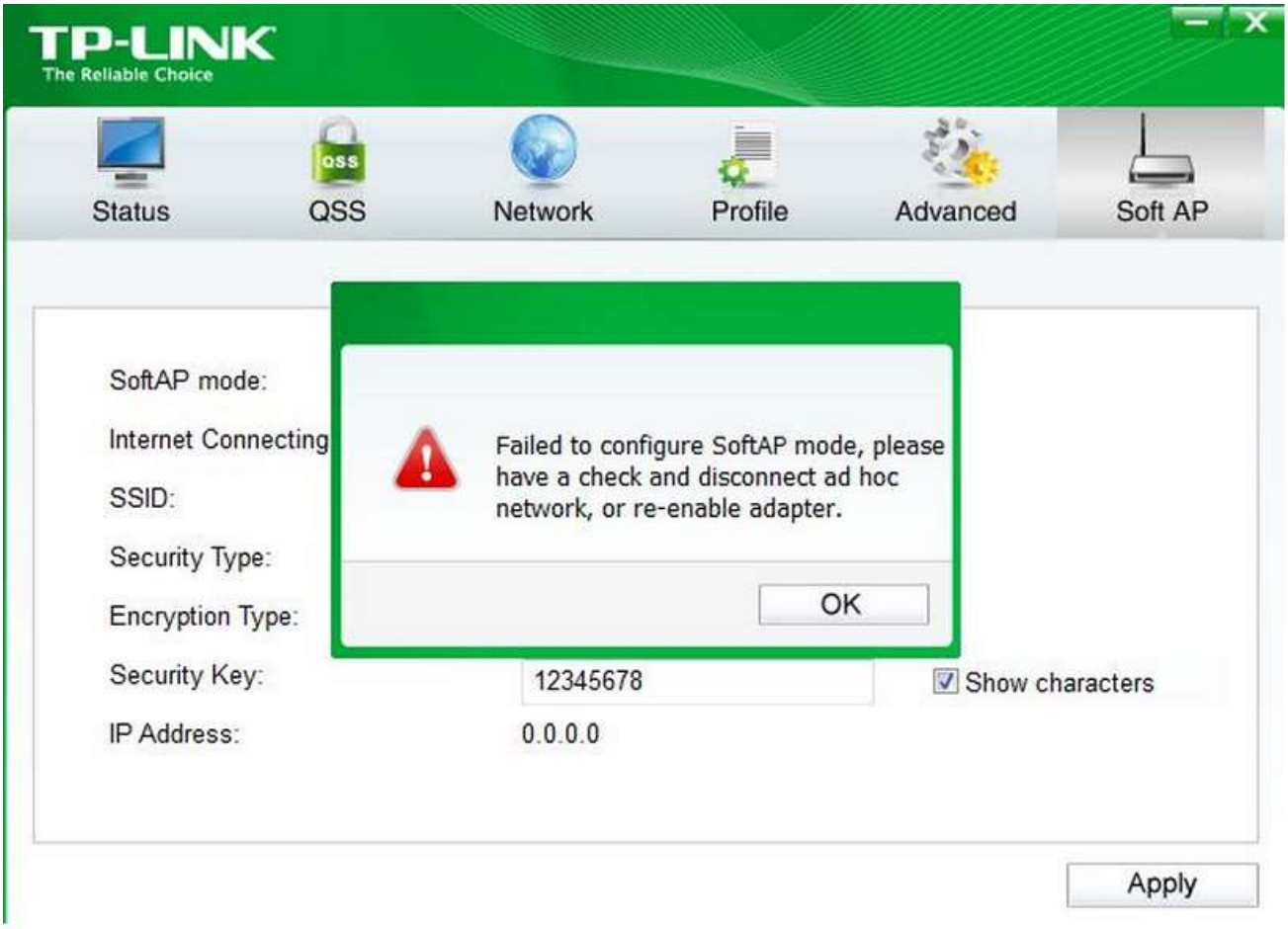
How to troubleshoot if I fail to start Soft AP when using TP-Link wireless configuration utility?

In Soft AP mode, the adapter will work as an AP. Suppose that only one computer in your house can access the Internet for various reasons like only one LAN port is available on your wired broadband router, however, other wireless-capable devices also want to share the Internet. Then the adapter can be configured as an AP under the Soft AP mode, saving you the trouble of having to get a separate access point or a router. With this feature, a computer can use a single physical wireless adapter to connect as a client to a hardware access point while at the same time acting as a software AP allowing other wireless-capable devices to connect to it.

Note: Some adapters support Soft AP on windows 7 and 8, but windows 10 doesn't support it.

Note: This article is applied in the following situation: You have already installed the driver for certain wireless adapter also TP-Link wireless configuration utility but fail to make Soft AP work and have seen the below errors.

Error 1: Failed to configure Soft AP Mode…



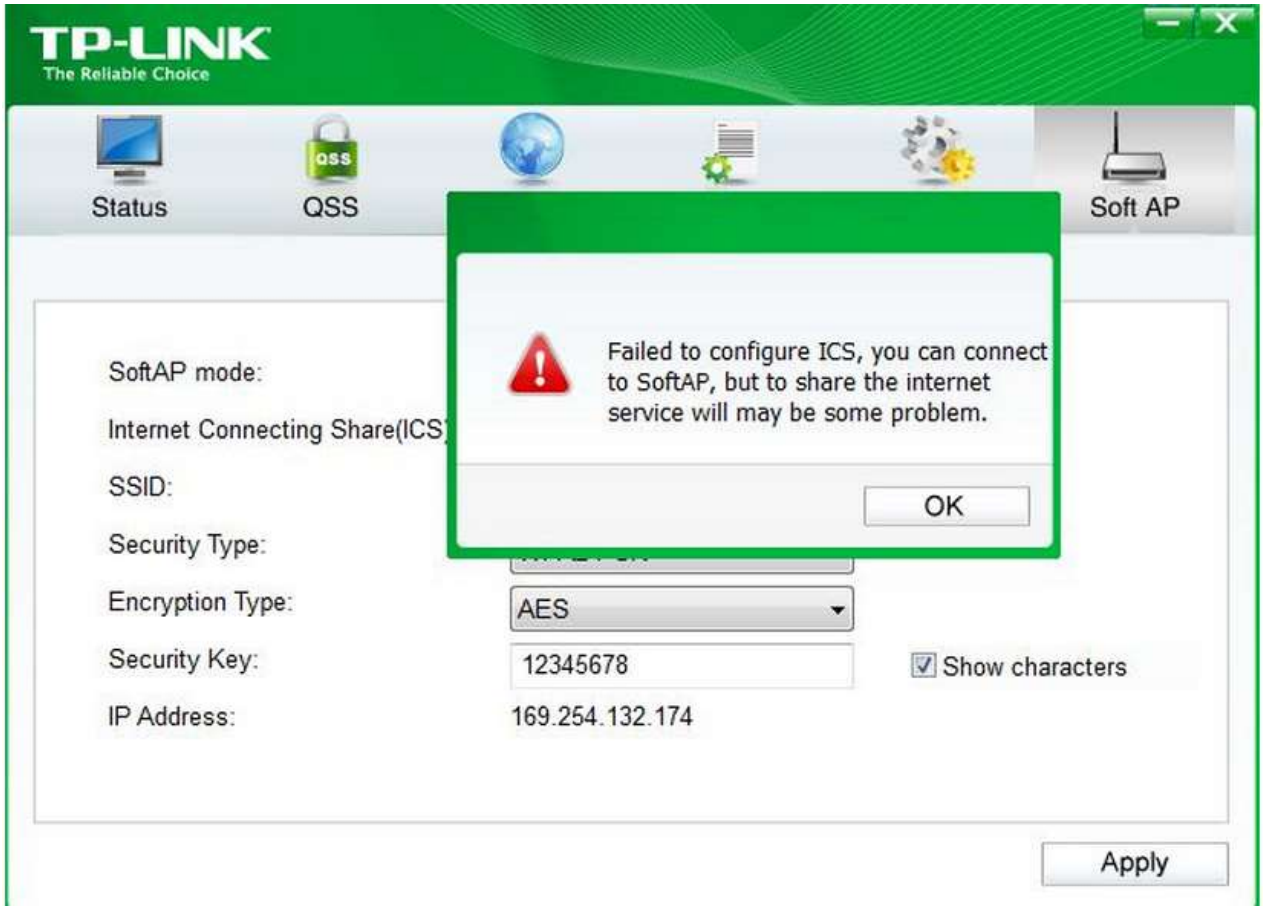
Reasons and Solutions:

1. Wireless network connection has been disabled, please enable it.

2. Installed the wrong driver for that adapter. For example, the PC is running windows 7, while you install the driver for windows vista. Please uninstall the wrong driver and install the correct one

3. The computer is already connected to a wireless network, please disconnect from the wireless network.

Error 2: Failed to configure ICS...

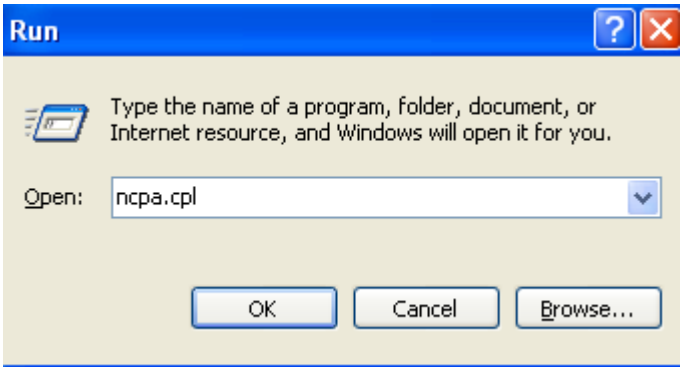


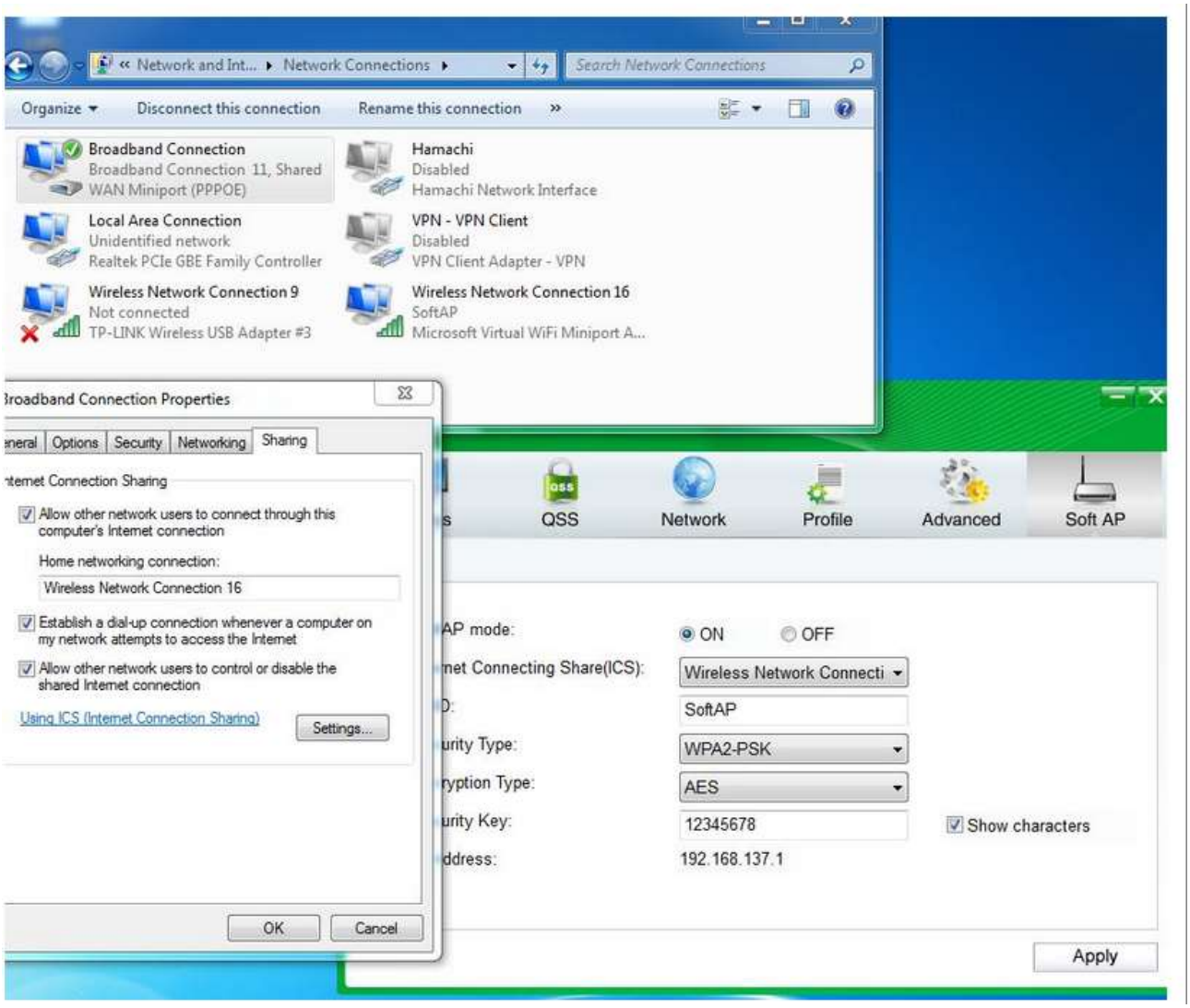
Reasons:

1. Network sharing is not enabled;

2. There may be an IP conflict. When you first setup the Soft AP, the IP address of it might be 192.168.0.1. And if your network is also in the range of 192.168.0.X, it may cause a problem.

Solutions: Press "**Windows** key  **+ R**", then there will be a "run" box,type in **ncpa.cpl** and press enter,it will open the **Network Connections** window.Find the **Local Area Conection** or **Ethernet**,right click on it --properties---sharing--tick ' Allow other users to connect through this computer's internet connection. And also choose a wireless network connection for the home network connection;





2. Change the IP address of your network to a different range to avoid the IP conflict. For example, your main router is using 192.168.0.X, then we change the IP address of your router to 192.168.2.X.(If you don't know how to do that, you can contact the support of your router to do that.)Here we take TP-Link routers as example:

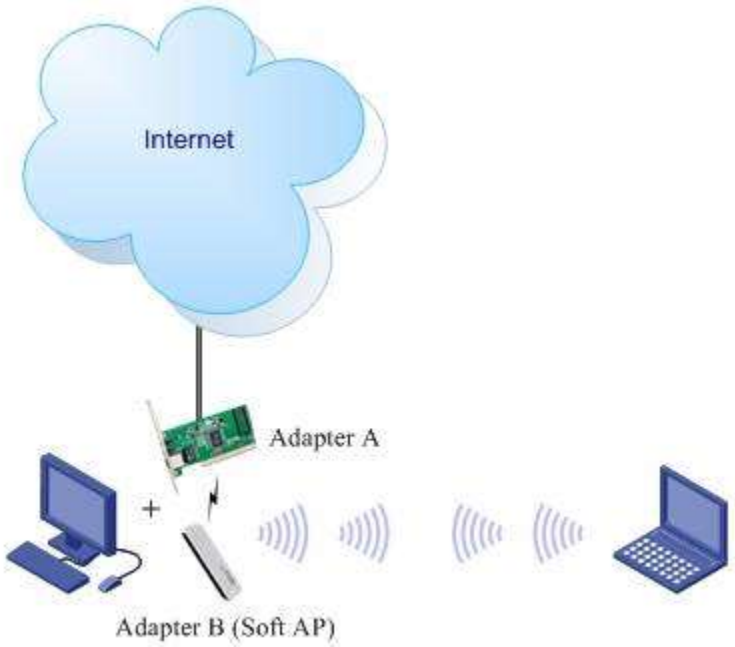
How do I change the IP address of TP-Link wireless router?

Note: In the User Guide of the TP-Link adapter,you can find whether it supports Soft AP Mode or not and what systems are compatible with its Soft AP mode.User Guide can be downloaded from our official website:

http://www.tp-link.com/in/download-center.html

How to configure the TP-Link wireless adapter working as a Soft AP with new utility

A software access point is used when you want your computer to act as an access point for the local wireless network. It saves you the trouble of getting a separate wireless router.



In the above illustration, the Desktop is equipped with an Ethernet adapter (Adapter A) and a wireless adapter (Adapter B). Adapter B on the Desktop works as a soft AP, and it is NAT to adapter A. The Laptop can wirelessly connect to the Desktop (AP) as a client, and share the Desktop´s Internet connection.

Condition: You have a computer which can access to the internet through the Ethernet adapter or another wireless adapter, here we take the Ethernet adapter connection as an example.

Configuration steps:

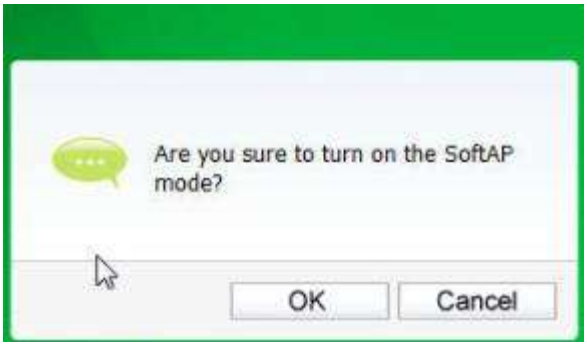
Note: Some adapters support Soft AP on windows 7 and 8, but windows 10 doesn't support it.

Step1: Install the **driver** and **TP-Link Wireless Configuration Utility** for the wireless adapter with adaminstrator rights on the computer.

Step 2: Open the **TP-Link Wireless Configuration Utility**.

Step 3: Go to **Advanced**: Select **On** for **SoftAP mode**

A window pops up and click on **OK**

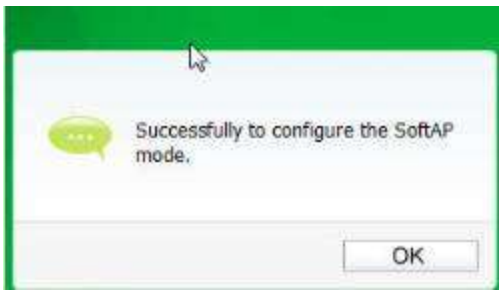


A Soft AP configuration Menu shows on the top of the Utility.

On the computer, an icon like 'Wireless Network Connection 21 '**for the Soft AP** shows (For windows 7 computer, you can see this icon under change adapter settings page):

Step 4: Go to **Soft AP**: Select the **Internet Connection Sharing** to **Local Area Connection.** Create a SSID you like, (Here set as **ABC**), make up your wireless Security Key**.** Normally, the **WPA2-PSK** is recommended for Security Type and set the Encryption Type as **AES**. If you have set a Security key, please remember it.

Click on **Apply,** a confirm window like below pops up:



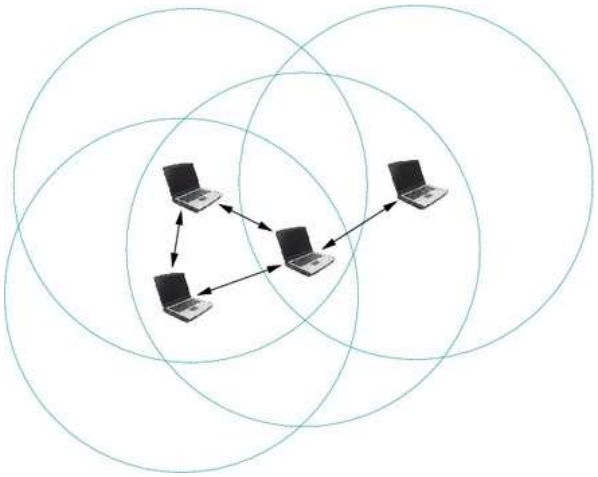
Click on **OK.** In the **IP address**, a valid IP address like **192.168.137.1** shows.

Test the result: Open the wireless function on the wireless devices, search for the wireless network name ABC, select it, type in the wireless security key and connect to it. Then you can access to the internet.

Get to know more details of each function and configuration please go to Download Center to download the manual of your product.

How to Setup an Ad Hoc Wireless Network with Windows Built-in Utility (Windows XP)

The Ad Hoc mode, also called peer to peer mode, allows nodes to communicate directly (point-to-point) without the need for an AP, as in the following Figure. There is no fixed infrastructure. Nodes need to be in range with each other in order to communicate. For more information about an Ad Hoc network, please refer to the interpretation from Wikipedia.



Ad Hoc mode

An Ad Hoc WiFi network should at least consist of 2 clients. In this tutorial, we also take just two computers for instance: computer A and computer B.

NOTE: Before we proceeding, please make sure the ***Windows Zero Configuration (WZC)*** service is started. If you are not sure about this, please click here to check the settings.

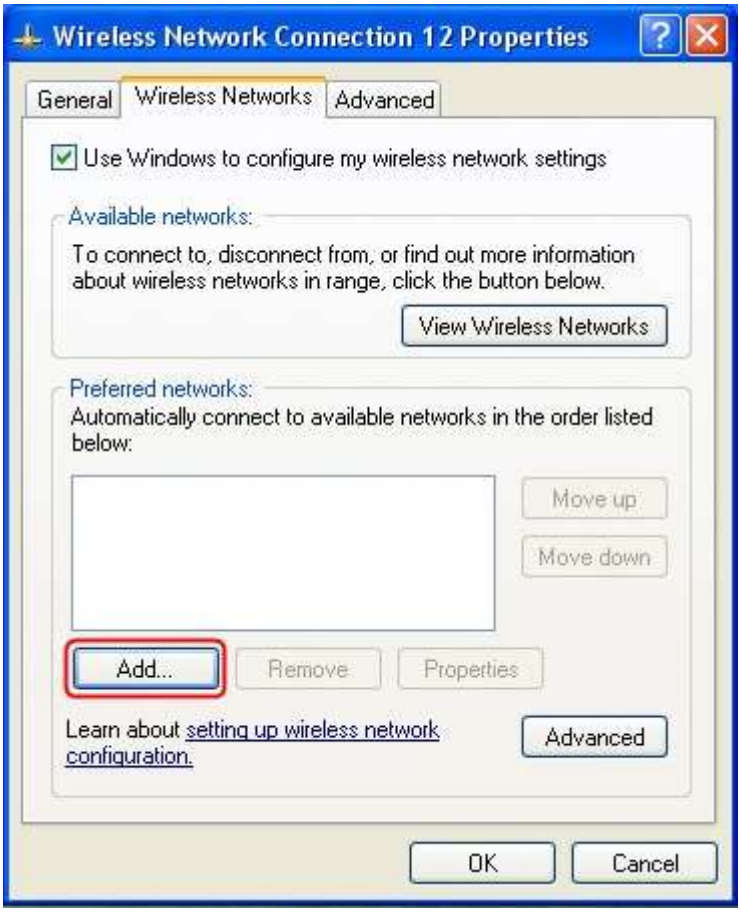
Part 1: Create an Ad Hoc network profile on computer A

Step 1

Go to **Control Panel** -> **Network Connections** and find **Wireless Network Connection**. Right click Wireless Network Connection and select **Properties**.

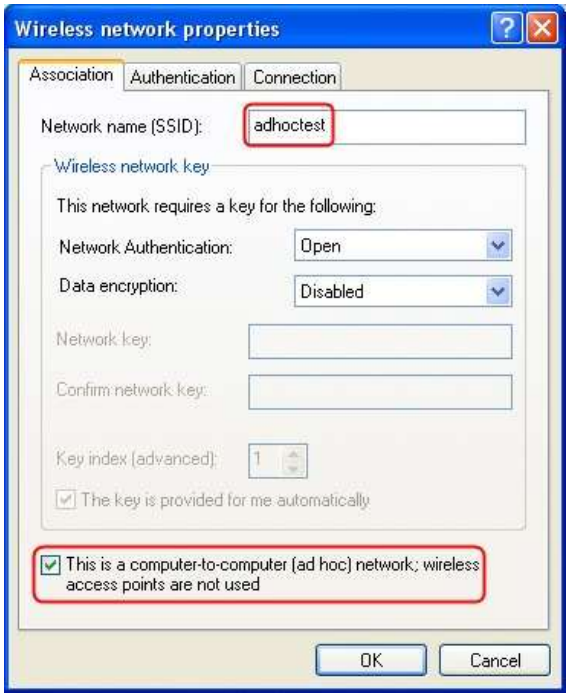
Step 2

On **Wireless Networks** tab, click **Add** button.



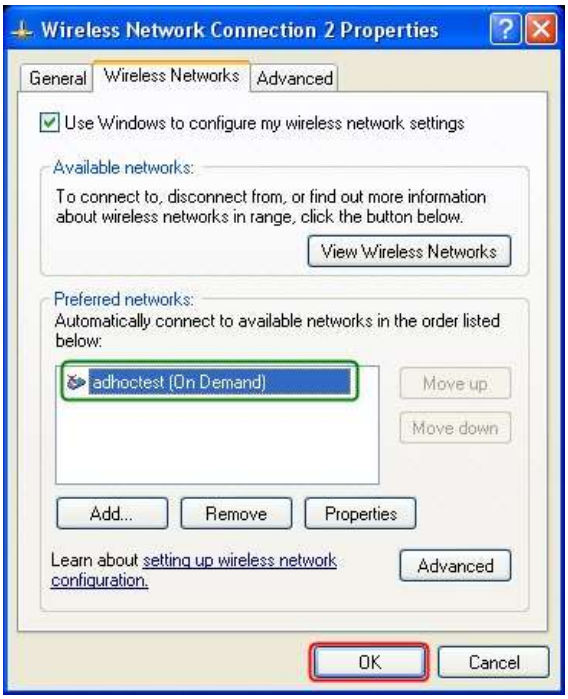
Step 3

On **Association** tab of **Wireless network properties** window, please type a phrase for **Network Name [SSID]**. In our scenario, we take *adhoctest* for example. Then go to the bottom and tick **This is a computer-to-computer [ad hoc] network; wireless access points are not used**. Then click **OK**.



Step 4

After Step 3, there should be a profile named **adhoctest** in **Preferred Networks**. Click **OK** to save all the settings.



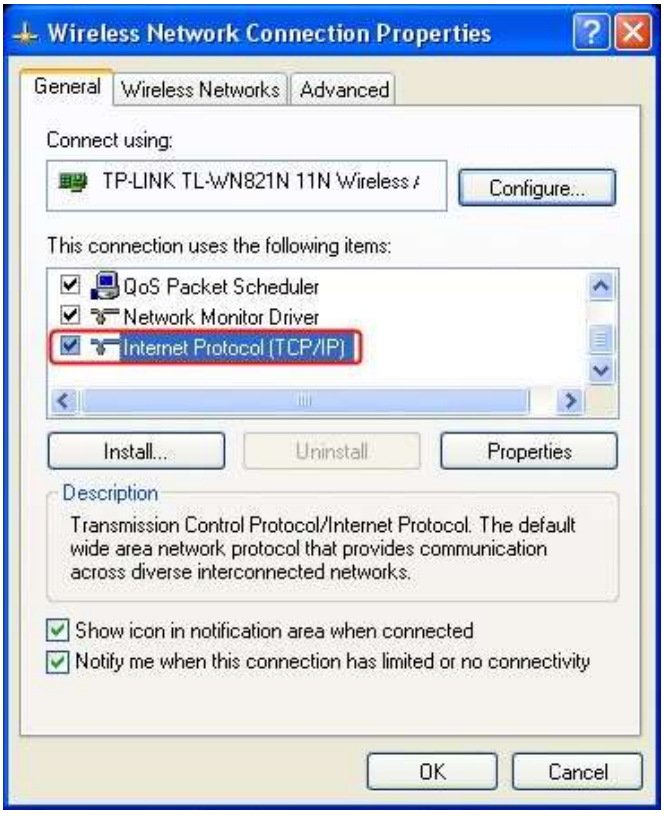
Part 2: Manually configure an IP address on computer A

Step 5

Right click **Wireless Network Connection** and select **Properties**.

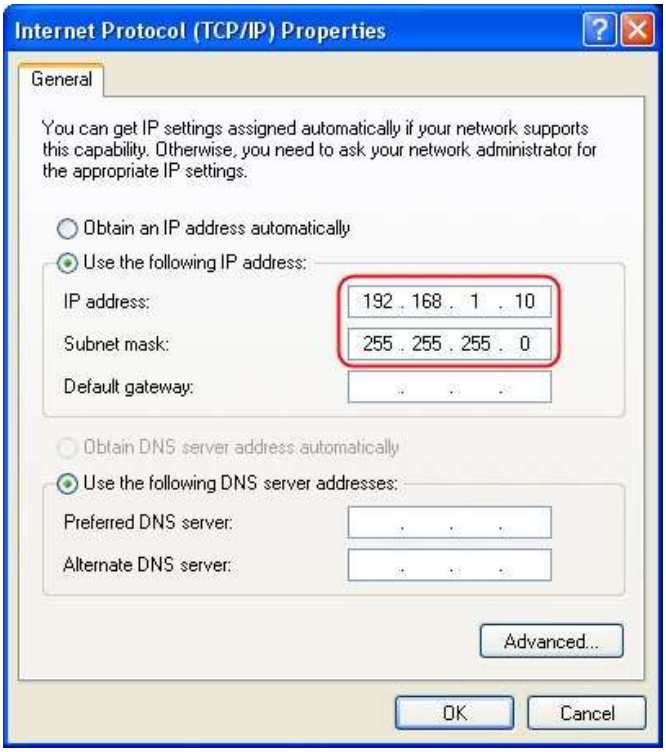
Step 6

On **General** tab, please double click **Internet Protocol (TCP/IP)**.



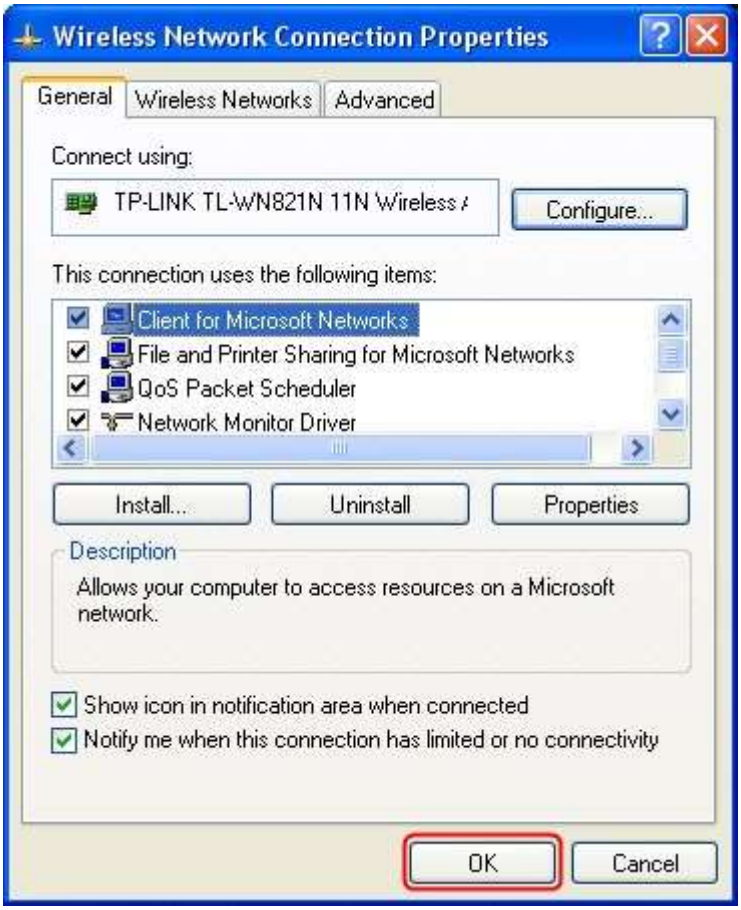
Step 7

Tick **Use the following IP address**, and input the **IP address** and **Subnet mask**. Then click **OK**.



Step 8

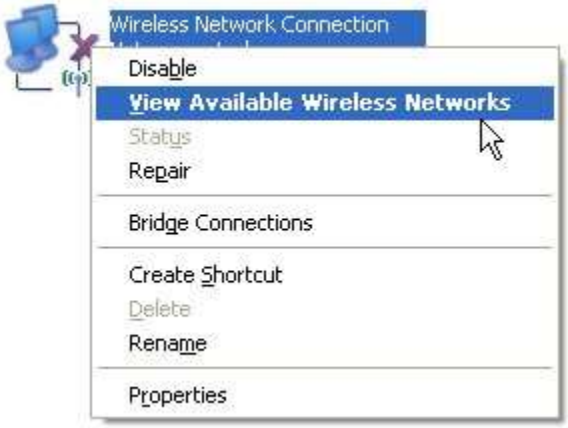
Click **OK** on **Wireless Network Connection Properties** window.



Part 3: Scan for Ad Hoc network on computer B

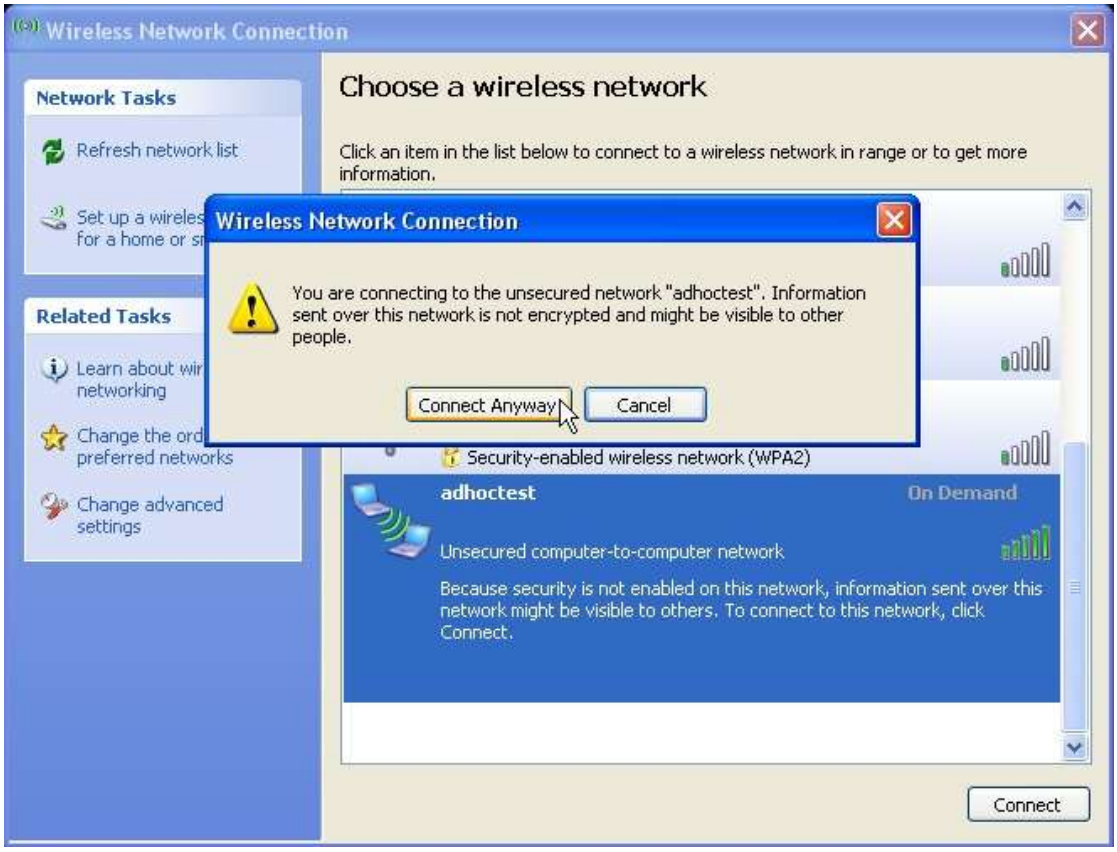
Step 9

Right click **Wireless Network Connection**, select View available wireless networks



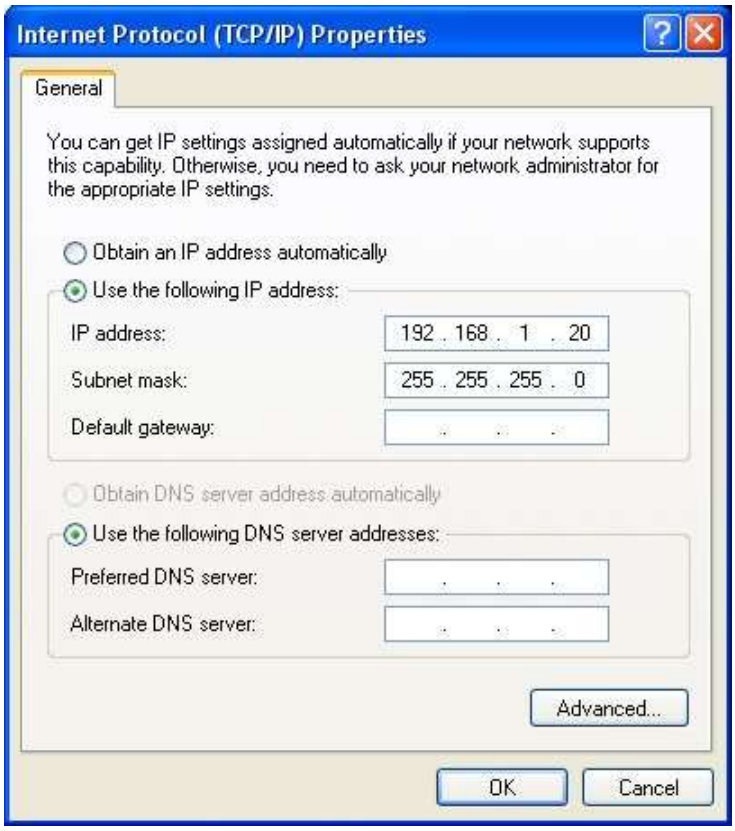
Step 10

Find **adhoctest**(which is set up on computer A) network in the scan window. Then double click it and click connect Anyway?

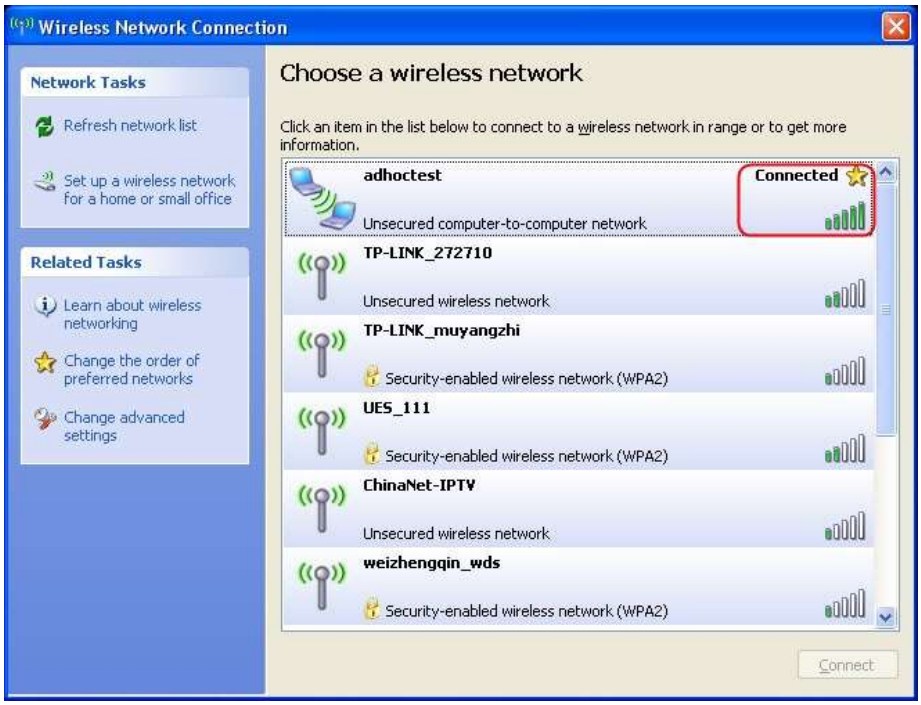


Part 4: Manually configure an IP address on computer B

The steps are the same as which were done on computer A (**Step 5** to **Step 8**). The point is that we need assign a different IP address for computer B, and it must be in the same subnet with computer A. In our scenario, we can take 192.168.1.20/255.255.255.0.



Here until, all the basic settings for building an Ad Hoc network have been finished. If we open the network scan window again, we can see the **adhoctest** network says **Connected**.



What should I pay attention to when choose antennas?

There are several things you need pay attention to:

1. The original antennas of the TP-link products comply with local regulations. Using some higher gain antennas, especially for outdoor products, may violate local law. Therefore, please consult the local authorities before you buy antennas.

2. High gain out-door directional antenna is usually used for long distance point-to-point transmission, while omni-directional antenna is for covering an area.

3. The connector type of the antenna. The connector type of TP-Link routers and APs is RP-SMA. Make sure your antenna has RP-SMA connector.

4. The impedance of the antenna. The impedance should be 50 Ohms. Impedance mismatch will not improve the signal quality, or even make the signal strength worse. Consult the vendor if you are not sure about it.

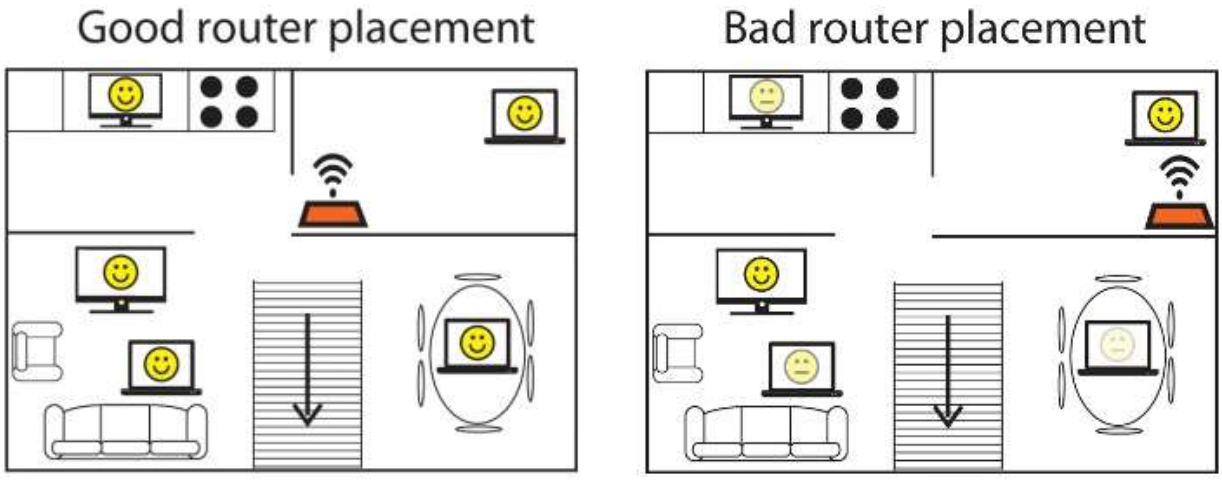
5. The frequency of the antenna. Make sure you choose antenna frequency according to the working frequency of the products.

6. For dual-band routers such as TL-WDR4300, TL-WDR3600 and TL-WDR3500 you need to replace the antennas with dual-band ones. Currently TP-Link does not provide such antennas.

7. For routers with more than 1 antenna, it is recommended to replace them all.

How to place your wireless device for optimal reception and performance?

The placement of your wireless device can impact the quality of your connection throughout your home.



Here are some tips for optimal modem placement:

Position your wireless device in a central location.

When possible, place your wireless device in a central location in your home. If your wireless device is against an outside wall of your home, the signal will be weak on the other side of your home.

Higher is better.

Finding a place for your wireless device that's higher up (e.g., bookcase, shelf, upstairs), gets you better coverage. Places that are centrally located are even better.

Avioding barriers.

Move your wireless device off the floor and away from walls and metal objects (such as metal file cabinets). Metal, walls, and floors will interfere with the wireless signals. The closer your wireless device is to these obstructions, the more severe the interference, and the weaker your connection will be.

Place your wirelss device's antennas.

Do not to place all the antennas straight upward but at an angle against the horizontal line.
The recommended angle is from 45 degrees to 60 degrees detailed as picture below if the products have two antennas. In case your router has 3 antennas you can place the middle antenna straight upward. Besides, please remember to place the antennas some distance away from walls or other obstacles.

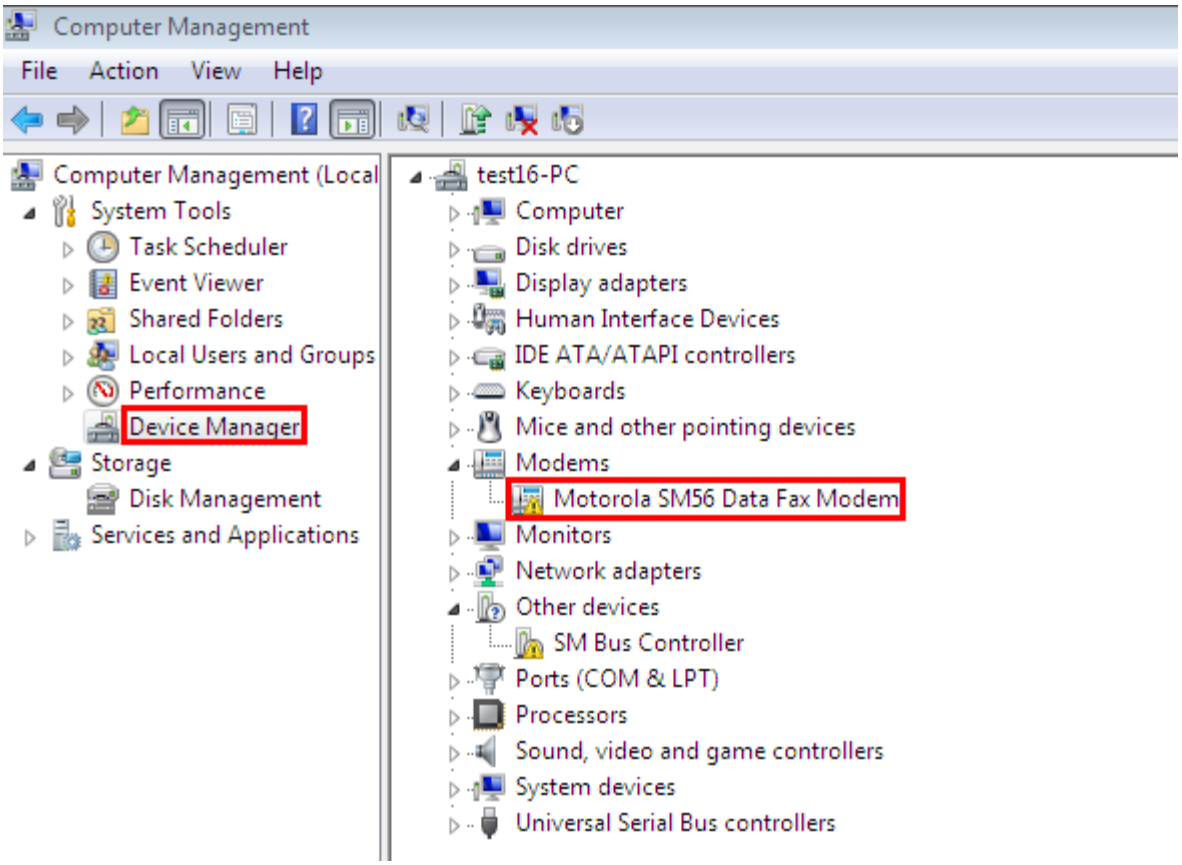
How to manually install Driver for TM-IP5600 in Windows 7 if auto-installation failed?

This Article Applies to:

Note: The TM-IP5600 must be plugged into the PCI slot before installing the driver.

In normal situation, when Windows 7 detects TM-IP5600, it would automatically search and attempt to install the driver for it. Below is a what-to-do guide in case Windows 7 failed to install it.

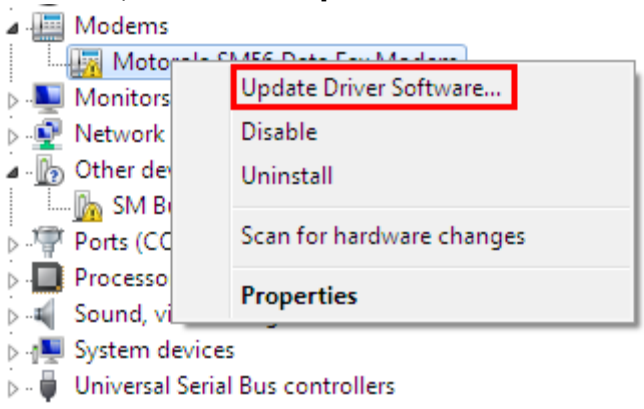
Firstly, Please go to the **Computer Management**->**Device Manager** and check the driver status for TM-IP5600. If the icon is shown as below (with yellow triangle with exclamation mark), that means the driver has not been installed correctly.



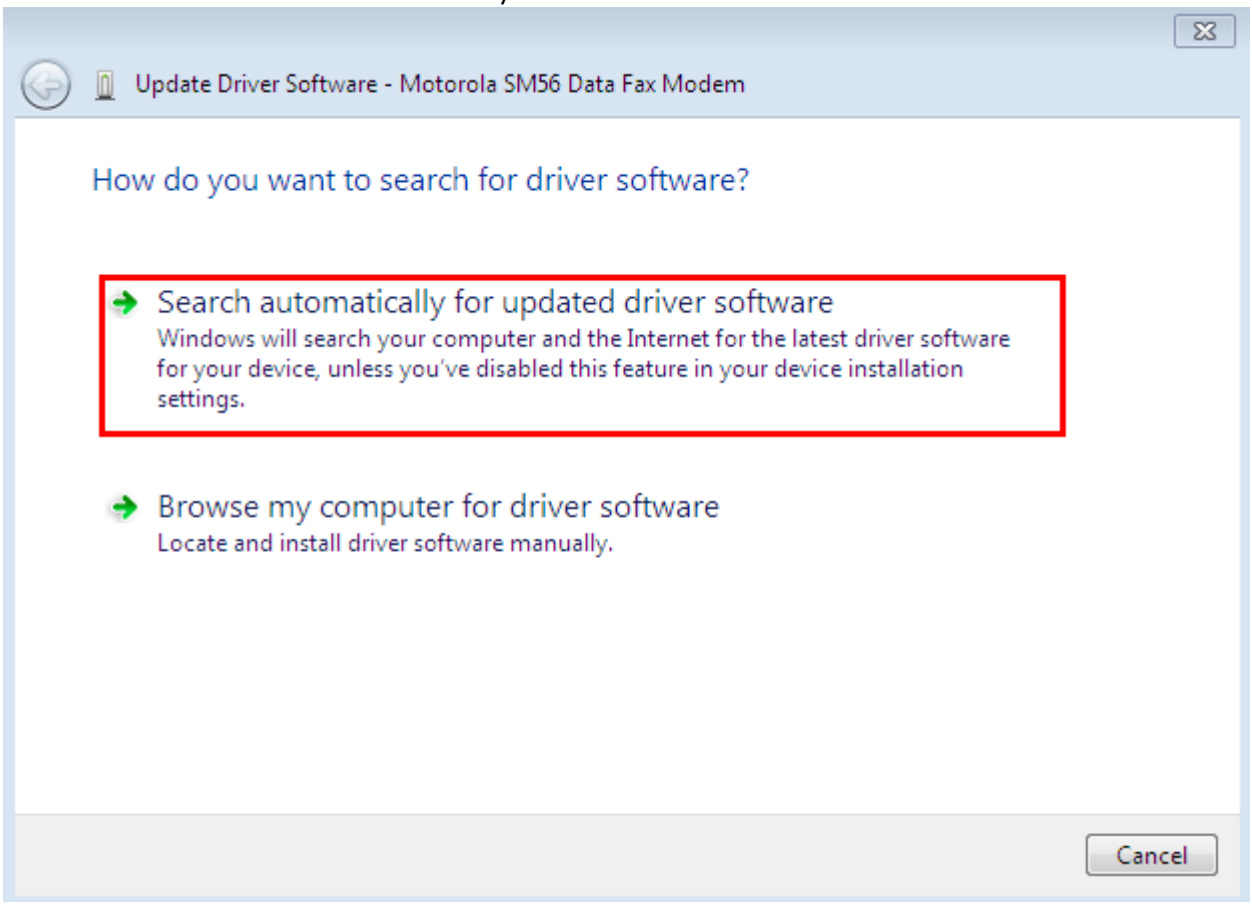
If so, Please perform the operations below to install the driver step by step.

Note: Before you install the driver, please make sure that your computer has connected to the Internet.

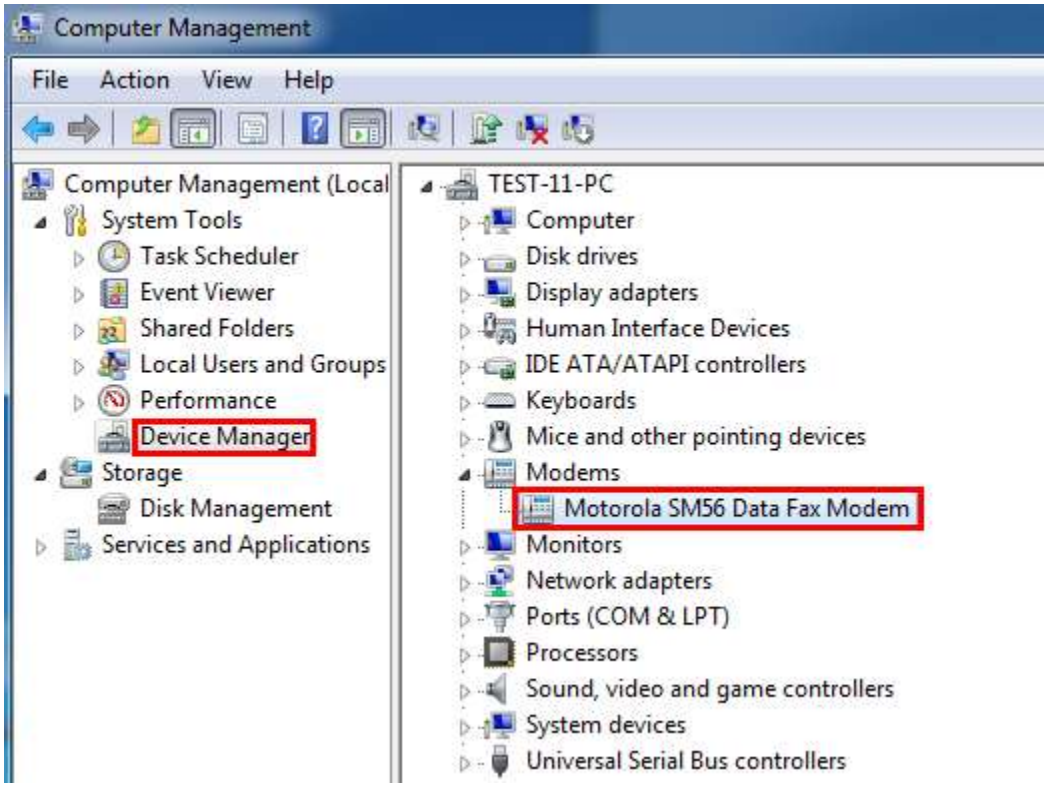
1. Please right click this icon, and select "**Update Driver Software**".



2. Please select "**Search automatically for updated driver software**", then the windows will install the driver automatically.



3. When finished, go to Device Manager and check the status of TM-IP5600. If successfully installed, the yellow triangle with exclamation mark would be gone and it would show "**Motorala SM56 Data Fax Modem**". (Sometimes you may have to restart the computer and then check the device status again.)



How to Install modem TM-IP5600 and configure it to connect to Internet in Windows 7？

This Article Applies to:

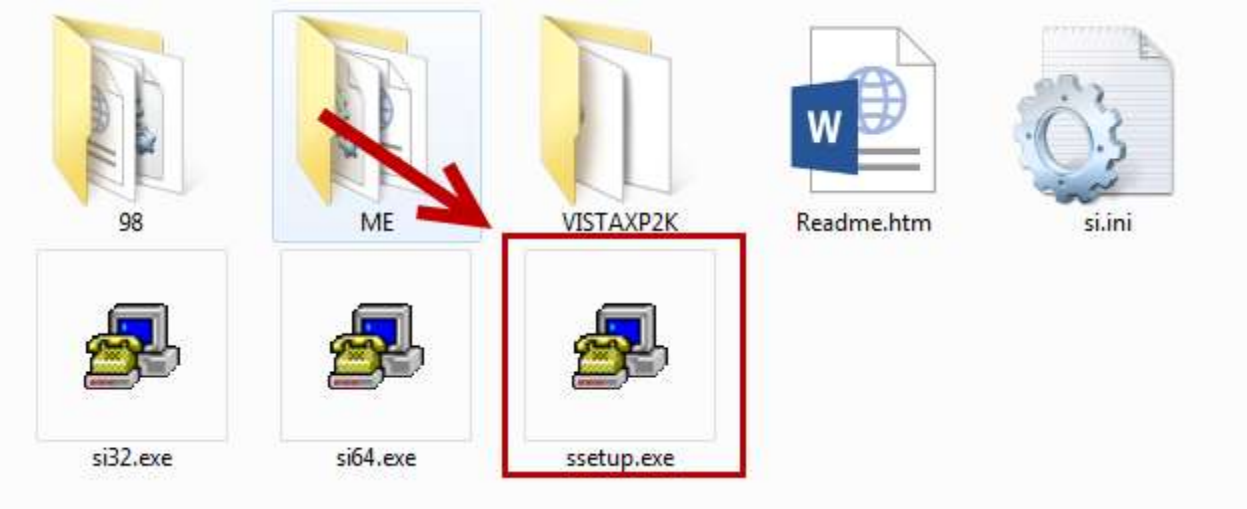
Before install the driver, please make certain that you had plugged the modem into your computer correctly, and your phone line is working properly and had been plugged into the **Line port of the modem**.

Step 1

Download the latest driver for it from our web site, Click here to open the download page, and then extract the downloaded file.

Step2

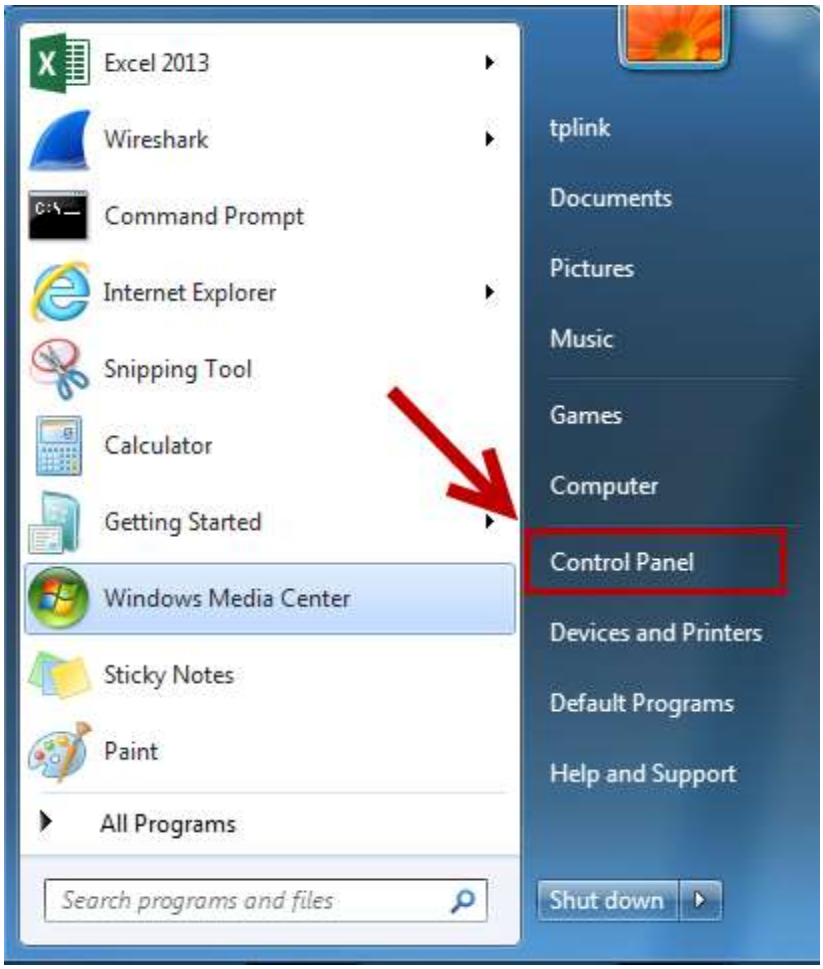
If you had installed old driver for it, please uninstall the old driver firstly, and then open the driver folder and double click **setup** program to install the driver.



Then the driver will install into your computer automatically.

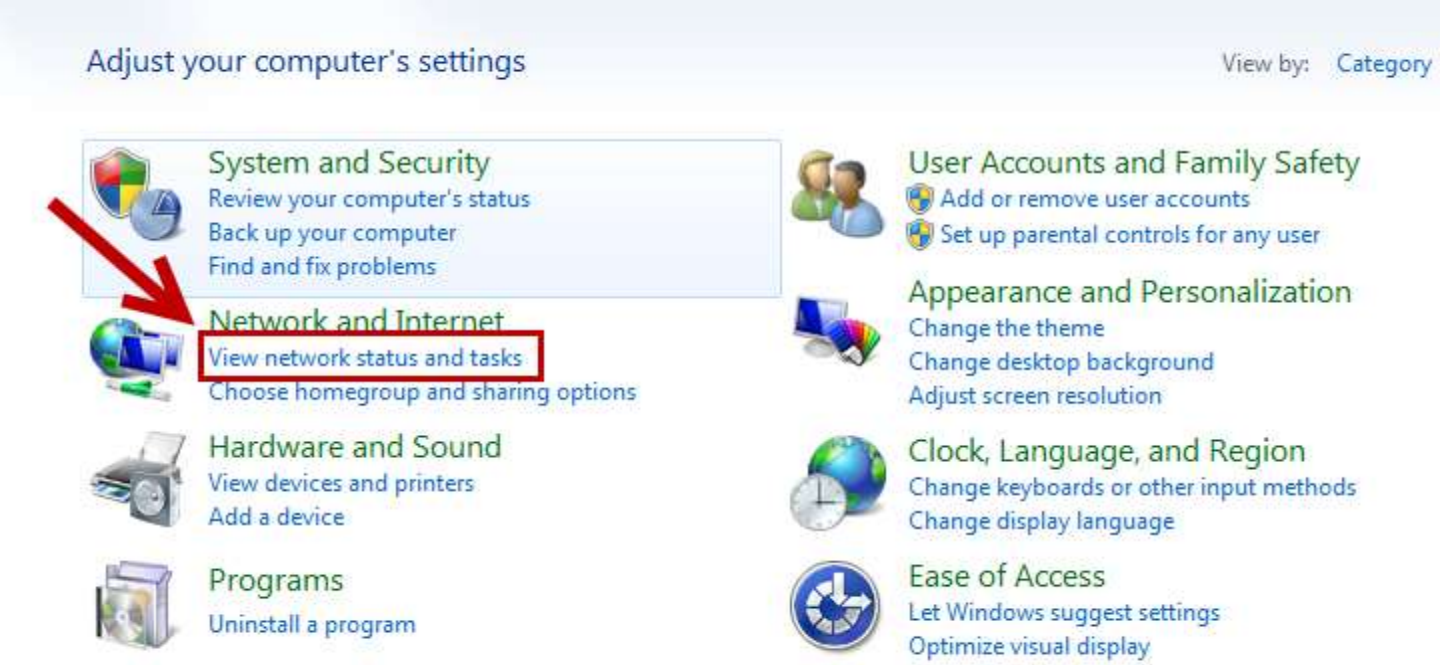
Step 3

After the driver installation completed, click on **Start->Control Panel**,



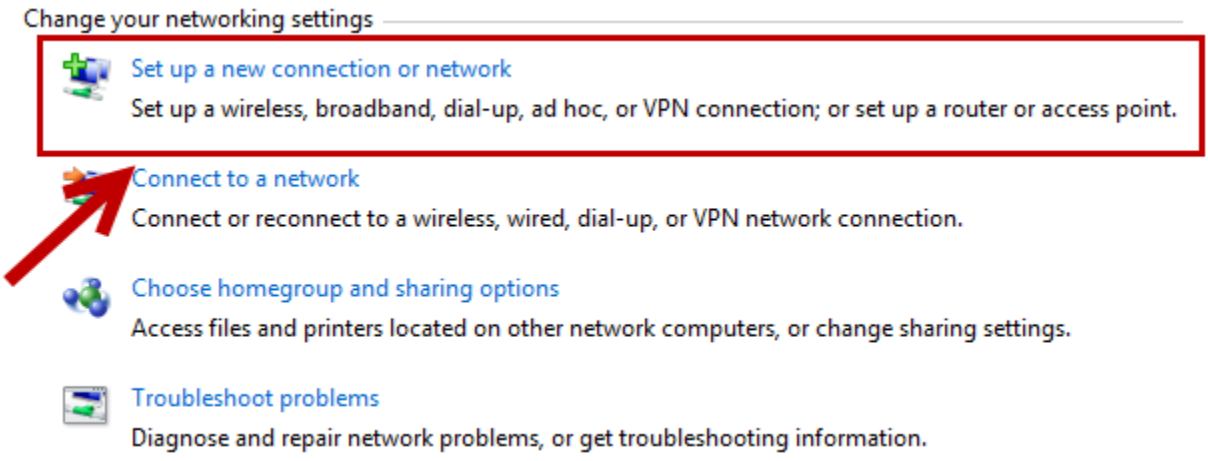
Step 4

Click on **View network status and tasks.**



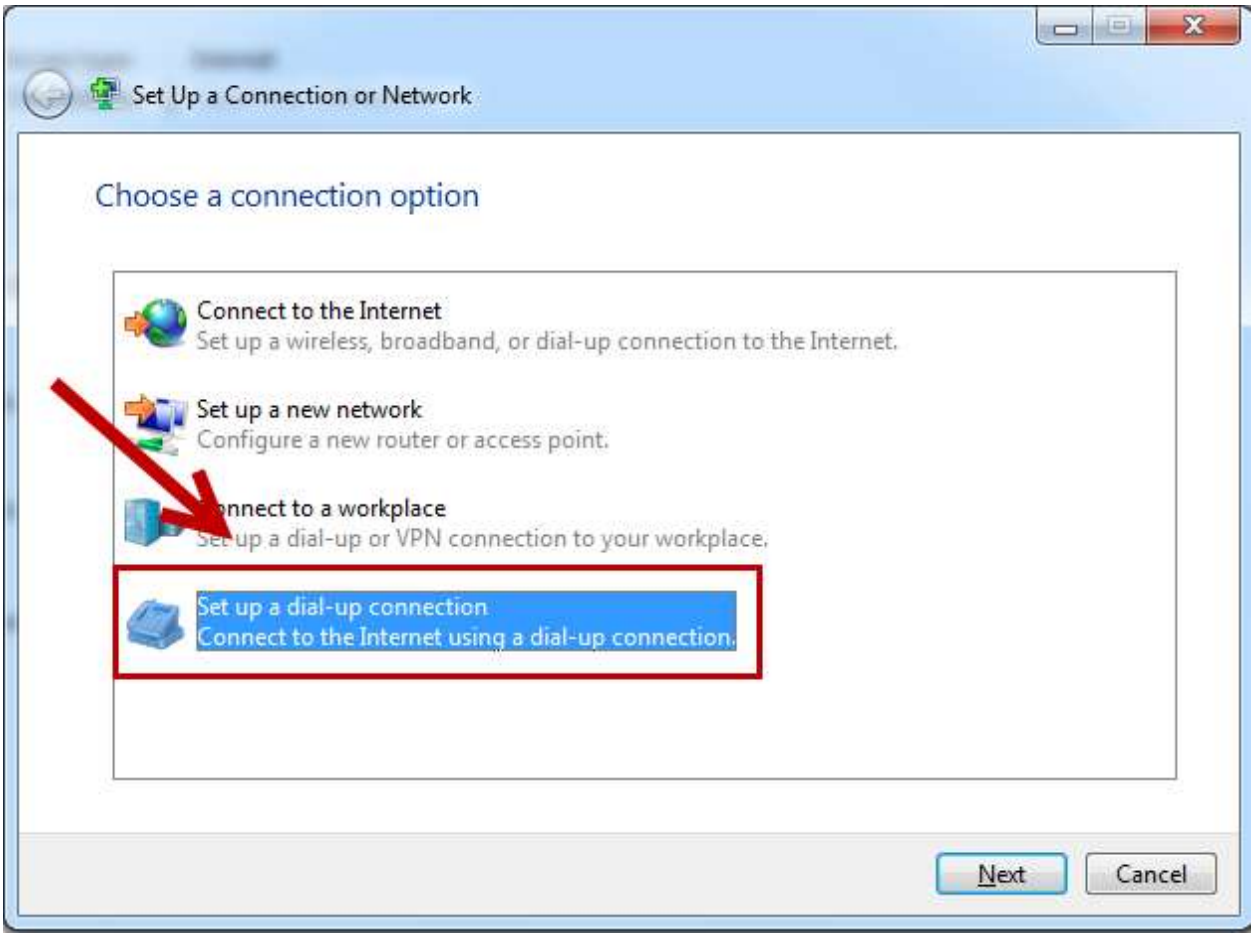
Step 5

Click on **Set up a new connection or network.**



Step 6

Click on **Set up a dial-up connection.**



Step 7

Enter the Dial-up Phone number, User name and Password which provided by your ISP for dial-up. Then click on **Create.**

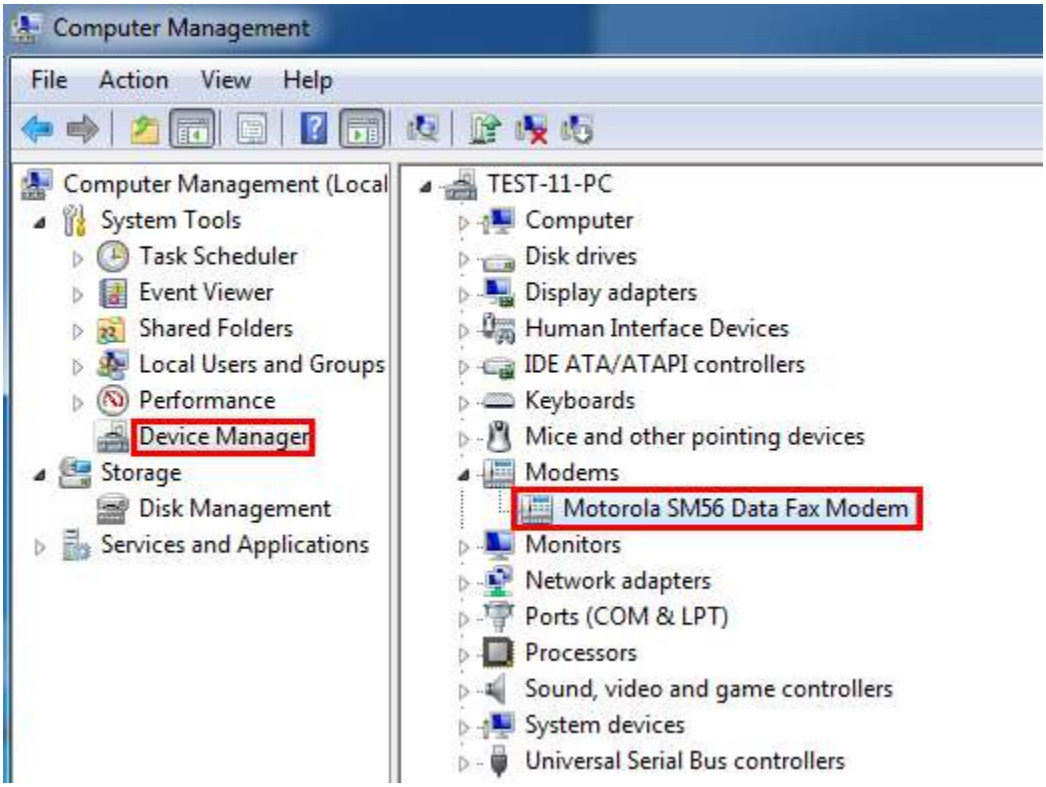
After done the above steps, you can dial up to Internet by using this connection.

How to Send or Receive a Fax by TM-IP5600 in Windows 7?

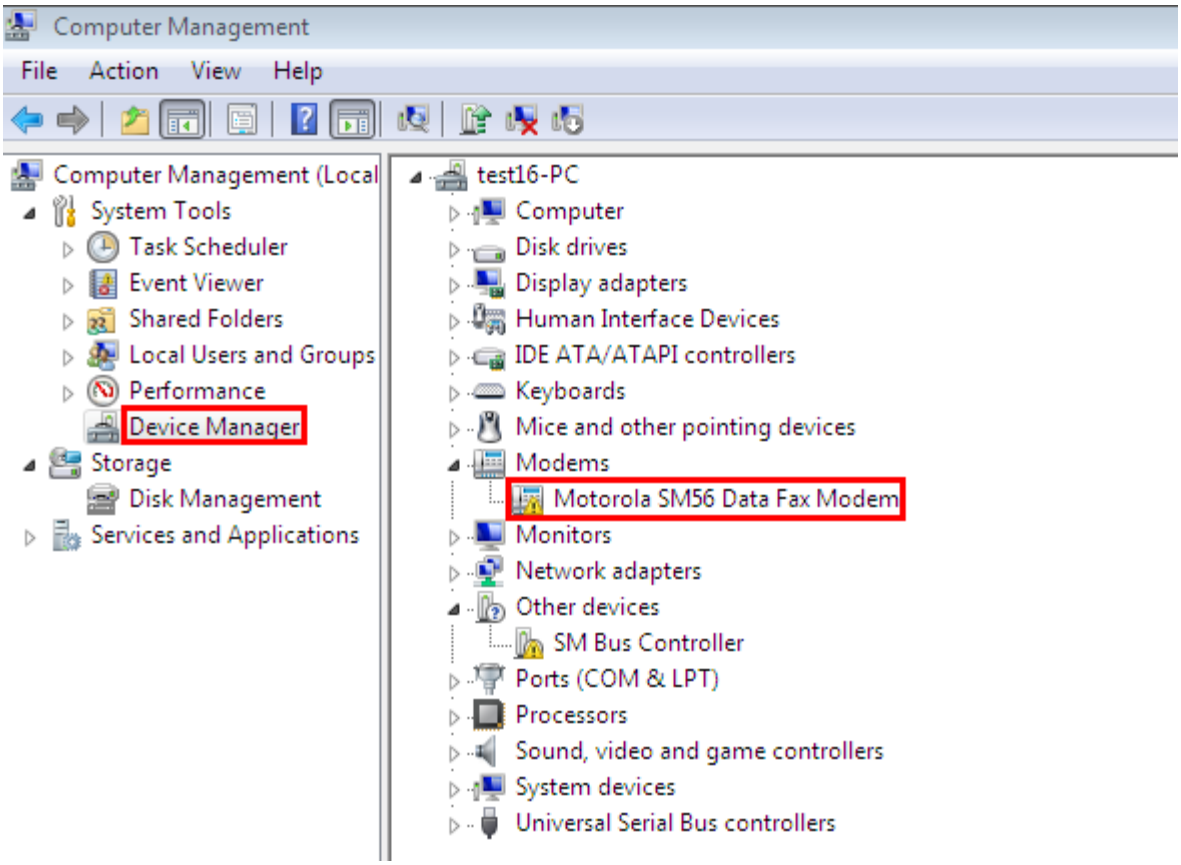
This Article Applies to:

Note: The TM-IP5600 must be plugged into the PCI slot before installing the driver.

Step 1: Please go to the **Computer Management**->**Device Manager** and check whether the driver for the modem have been installed successfully.



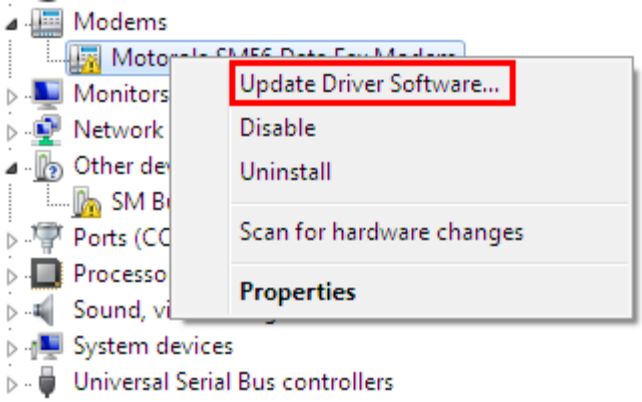
If the icon is showed as below, that means the driver has not been installed correctly.



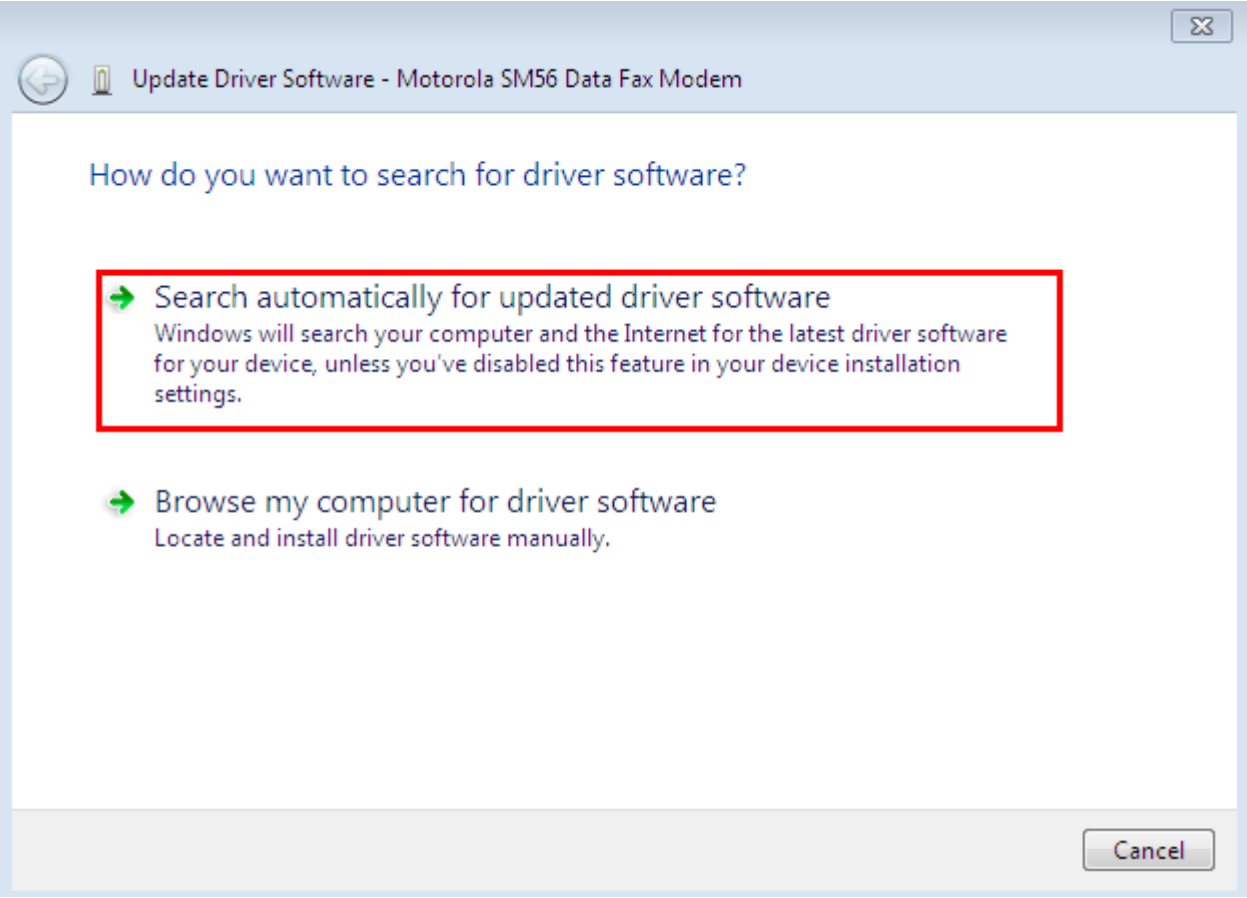
Please perform the operations below to install the driver step by step.

Note: Before you install the driver, please make sure that your computer has connected to the Internet.

1. Please right click this icon, and select "**Update Driver Software**".

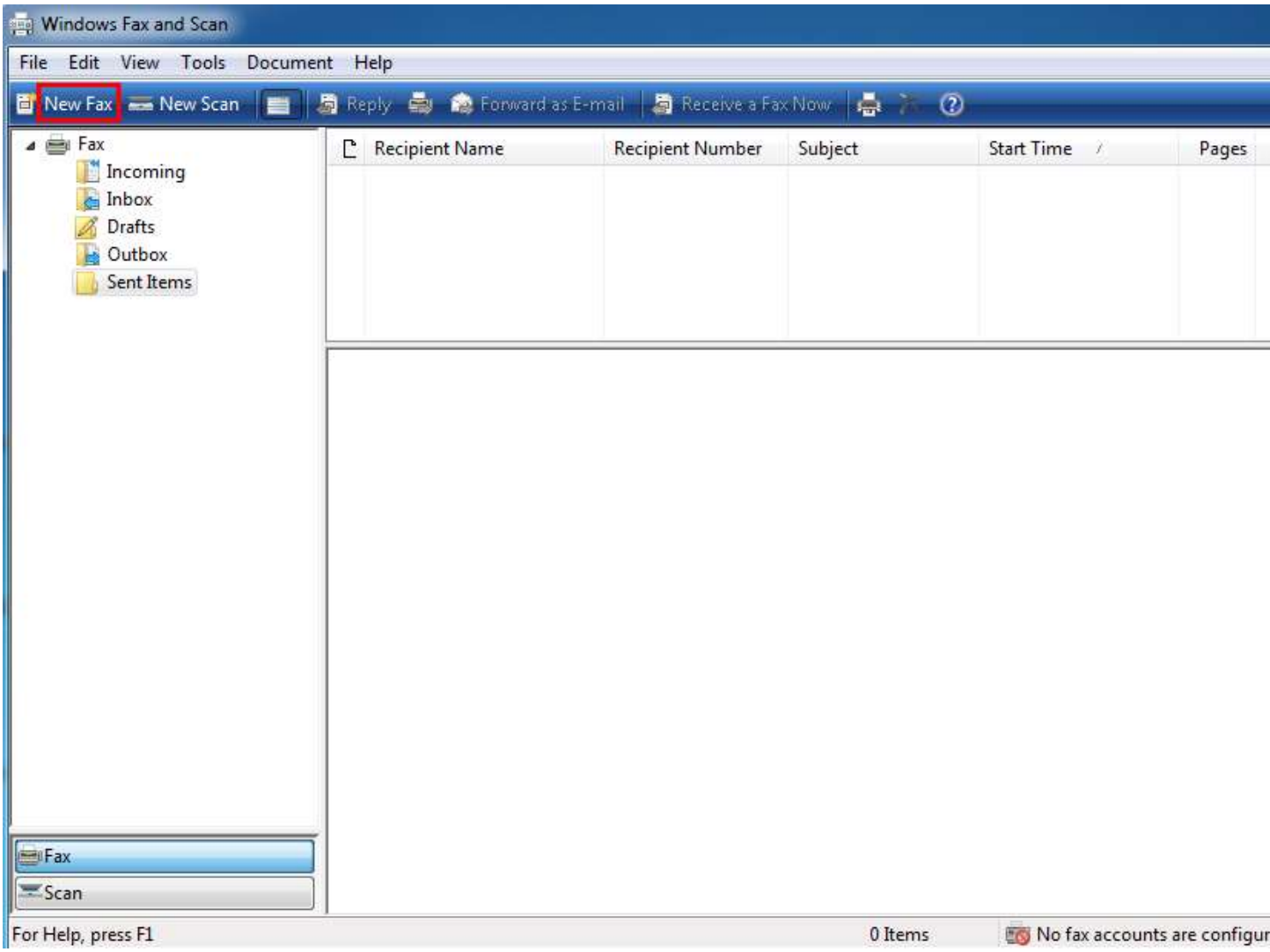


2. Please select "**Search automatically for updated driver software**", then the windows will install the driver automatically.

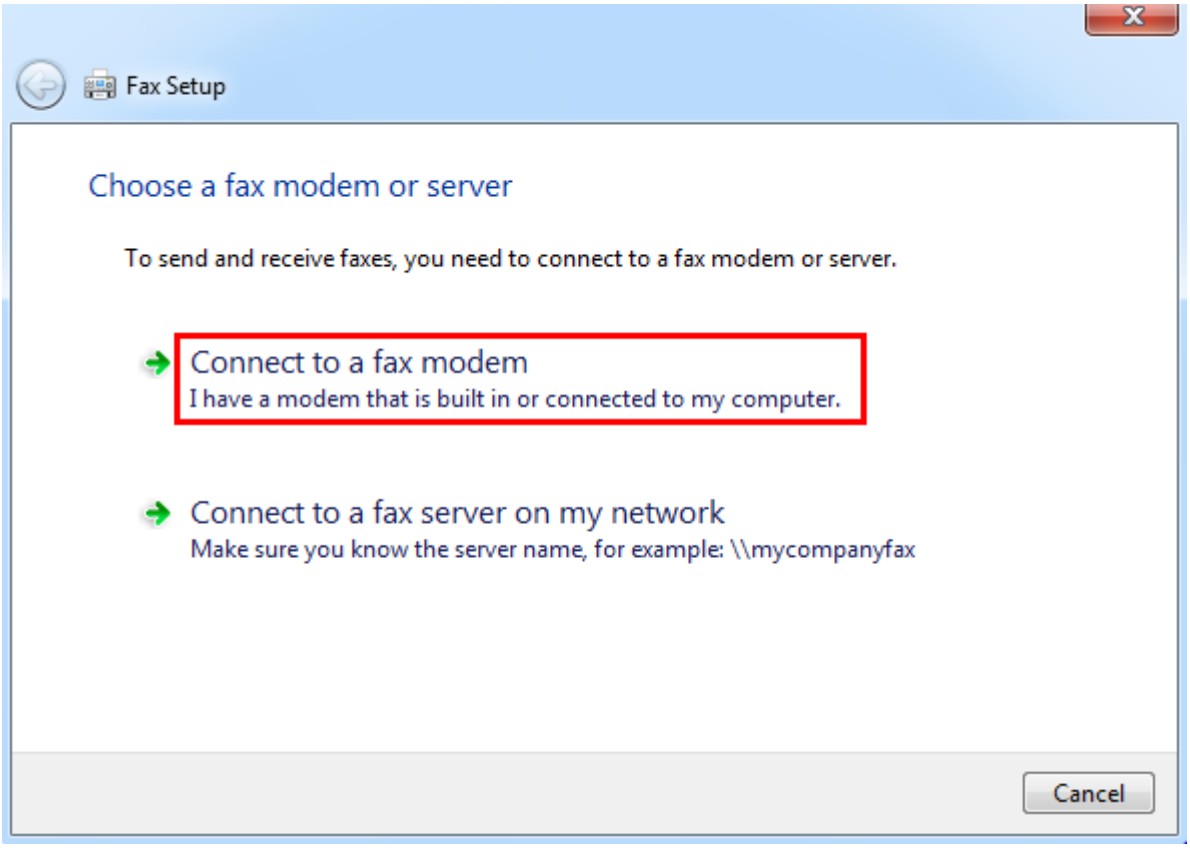


Step 2: After you have ensured that the driver has been installed, Please click **Start**->**All Programs**->**Windows Fax and Scan**.

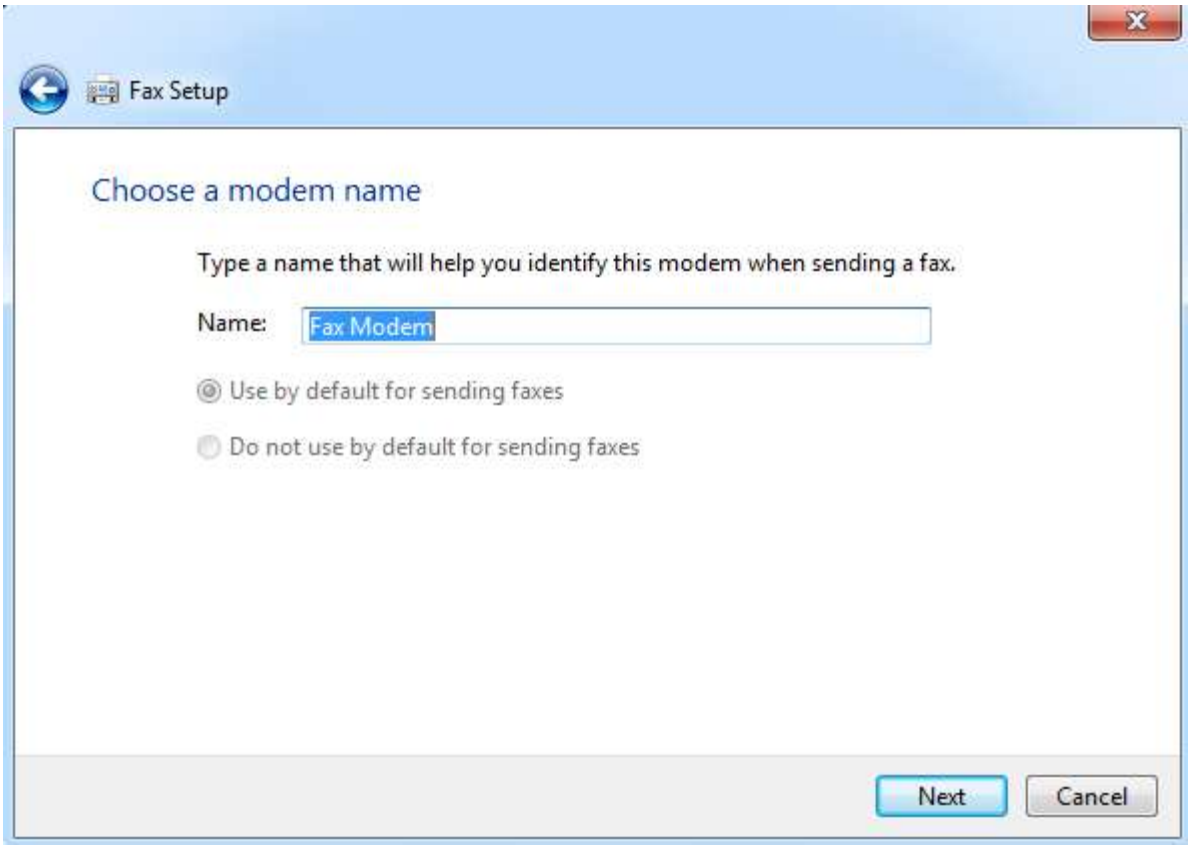
Step 3: Click **New Fax**.



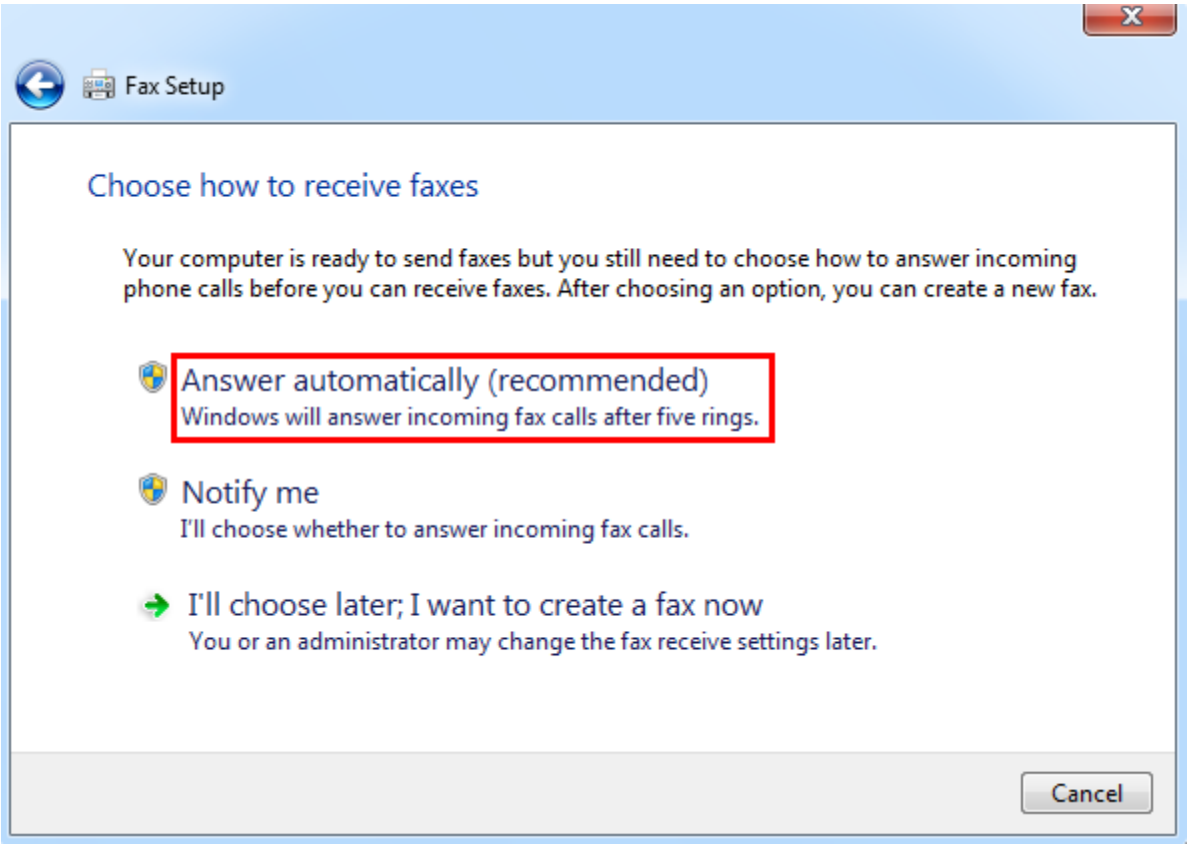
Step 4: Select "**Connect to Fax modem**".



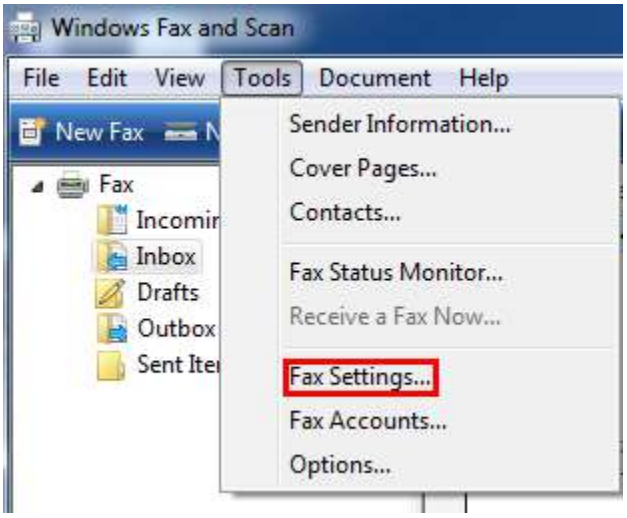
Step 5: Type in a name that will help you identify this modem when sending a fax, here we use "Fax Modem" for example. Click **Next**.



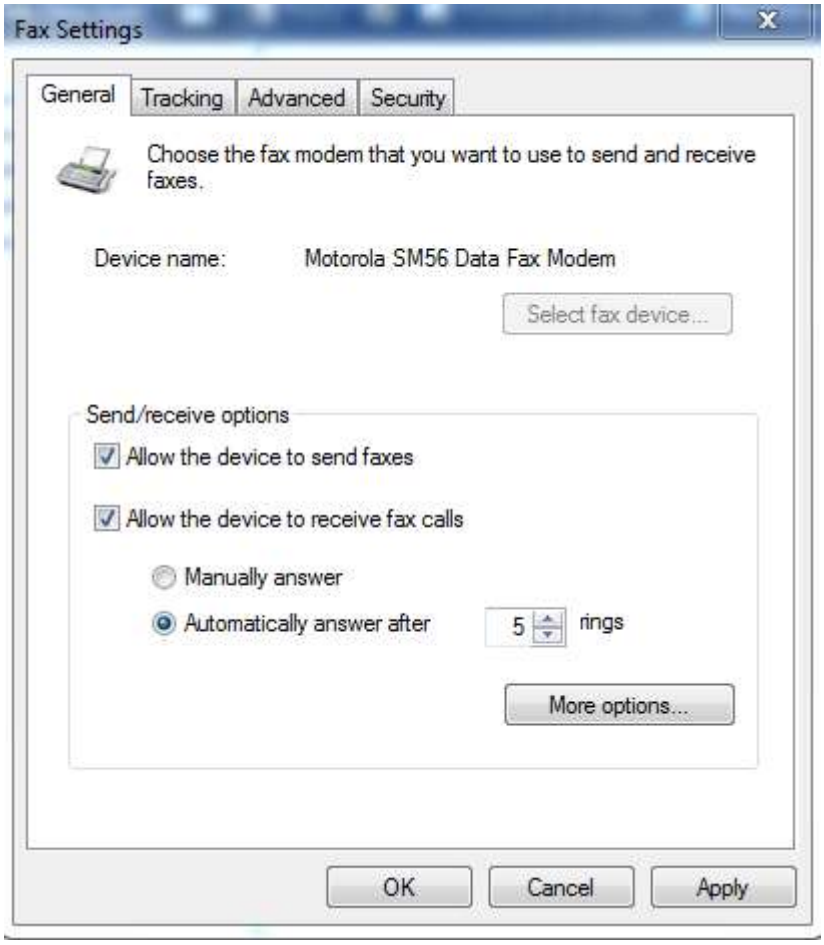
Step 6: In the new page, you need to choose how to receive faxes. If you choose "**Answer automatically**", the windows will answer incoming fax calls automatically; if you choose "**Notify me**", you need to choose whether to answer incoming fax calls manually. Here we select "Answer automatically" for example.



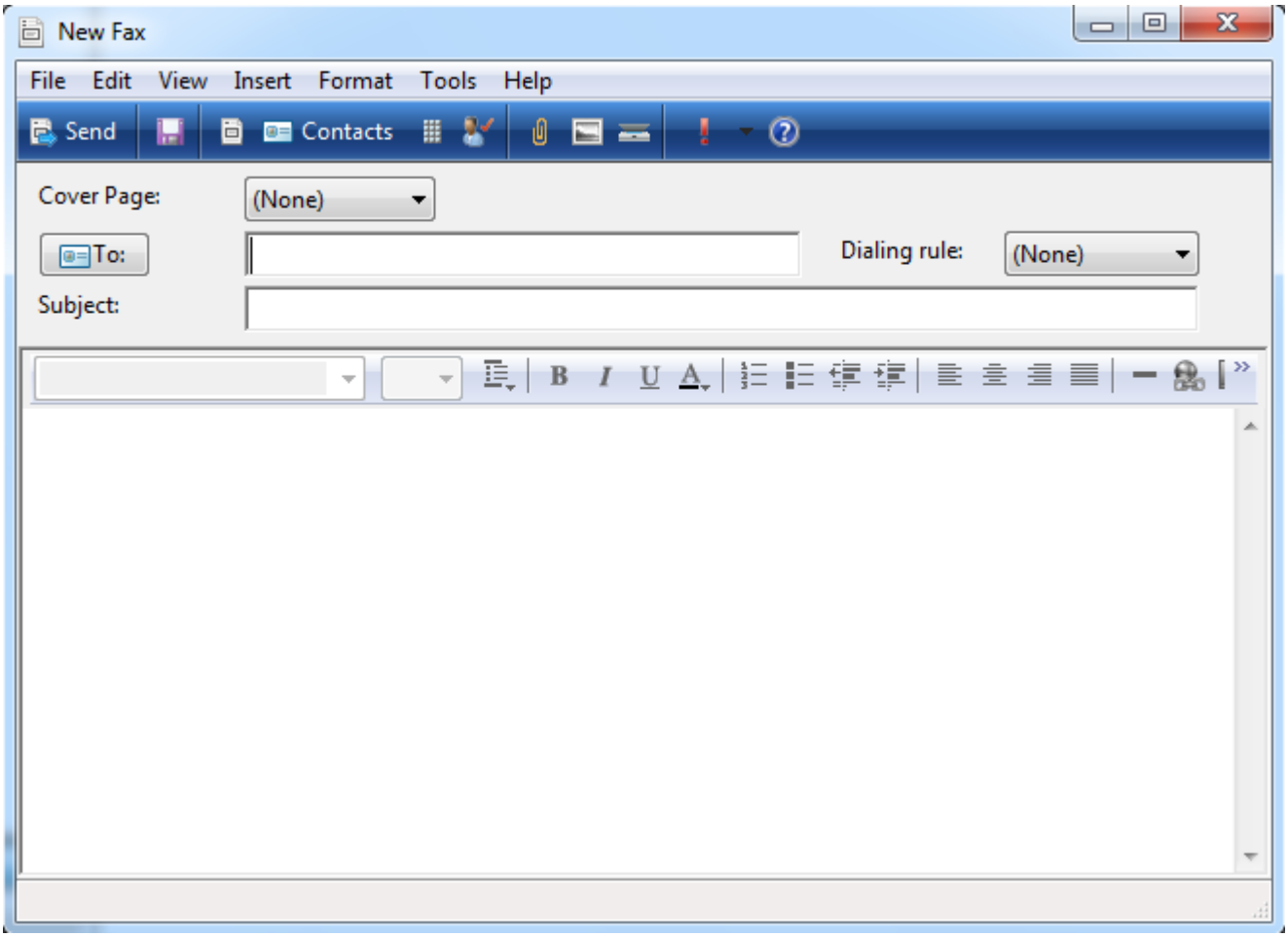
Note: If you can't decide now, you can select the last one "**I'll choose later; I want to create a fax now**". After you make up your mind, please go to **Tools**->**Fax Settings**->**General** to set it.



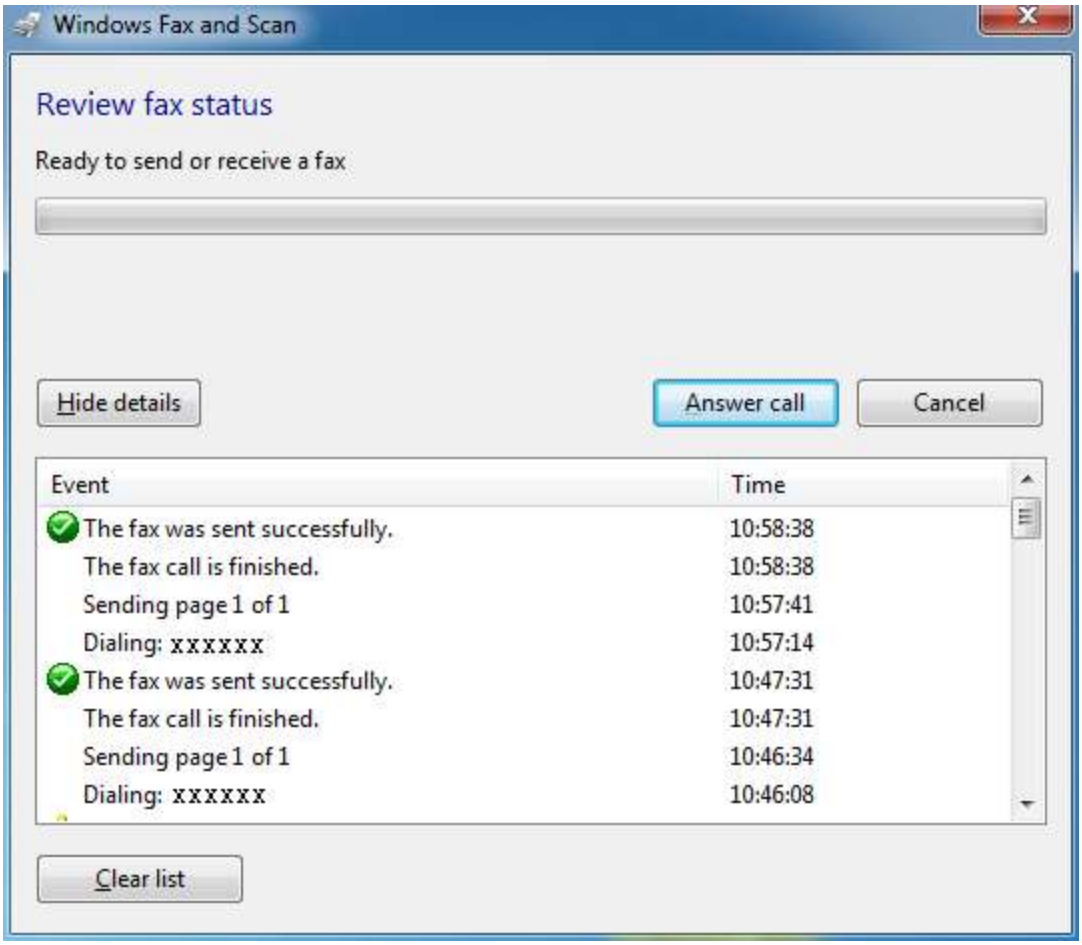
In the **General** page, you can also set the rings to answer, it's "5 rings" by default.



Step 7: After all the above settings, you can send a fax now.



In general, you will see the following process when you send a fax successfully.



How to send or receive a Fax by TM-IP5600 in Windows XP

This Article Applies to:

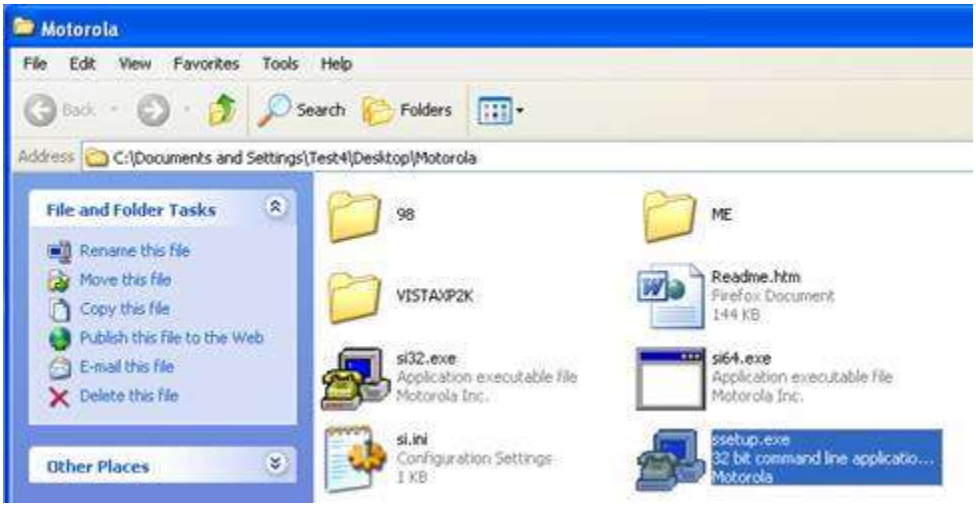
***Note: The TM-IP5600 must be pluged into the PCI slot before installing the driver.**

1. Driver Installation

Install the "**Ssetup.exe"** program in the provided CD, this program is applicable to Windows XP & Vista.

For Windows 7, the driver of TM-IP5600 and Fax program will be automatically installed by the operating system.

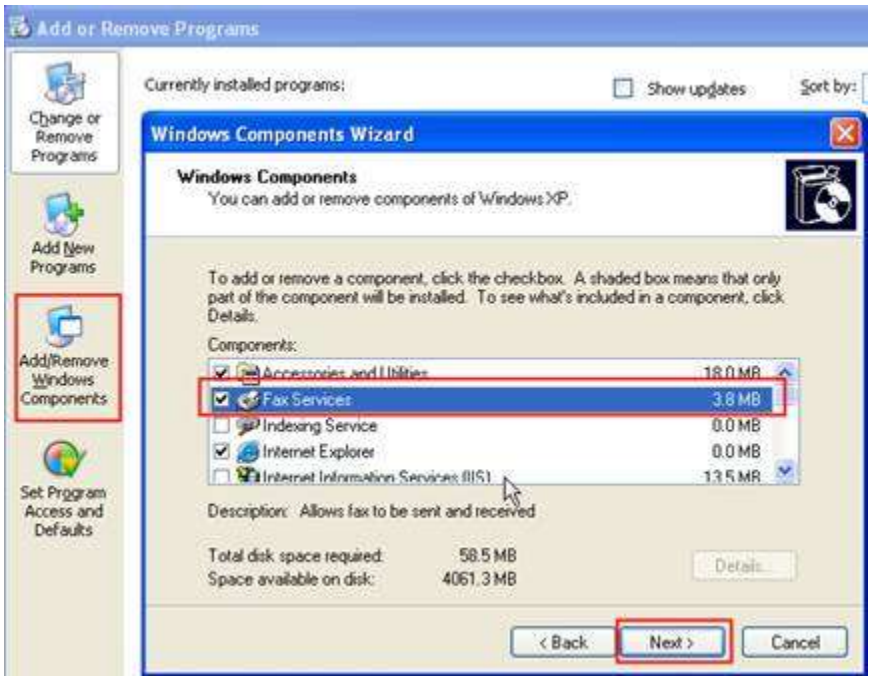
You can also install the driver manually, refer to the FAQ 180 for more details.



2. Enable Fax Component

Step1 To fax with windows built in fax program, you need to install the Fax Services first. Go to **Control Panel**->**Add or Remove Programs**, then click **Add/Remove Windows Components**, check the box of **Fax Services** and go to next.

Note: The process needs the installer of Windows (Installation CD).

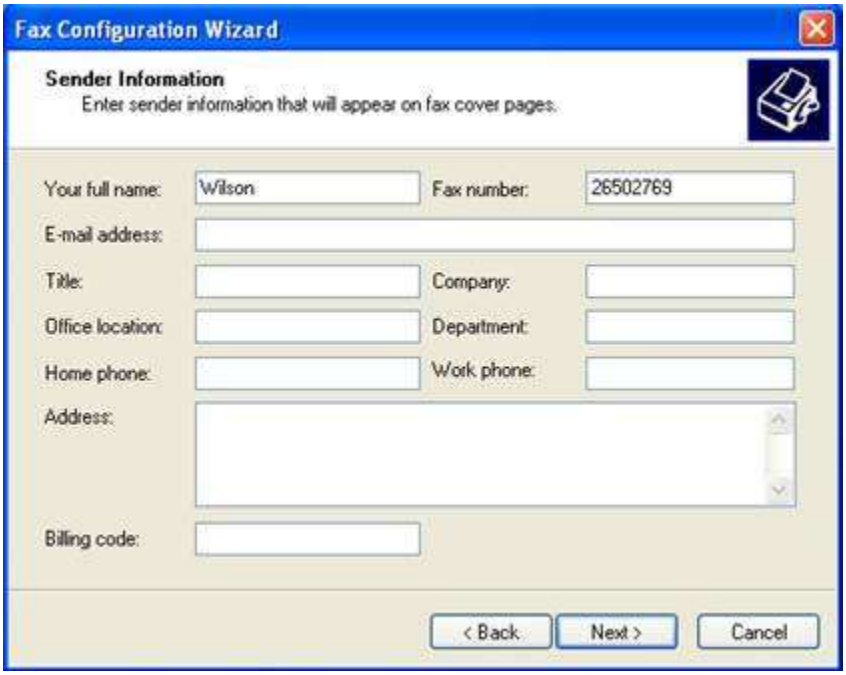


Step2 Click **OK** button and then click **Browse** button to choose the file in the Windows XP CD. At last, click **OK** button again to install the component.

3. Configure the Fax Console

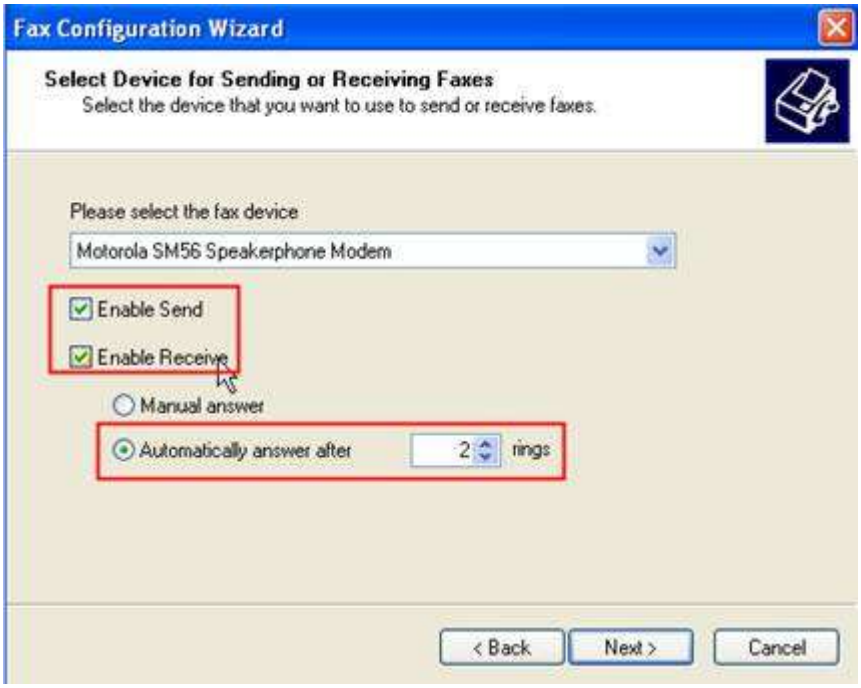
Step1 Go to **Start** ->**All programs** ->**Accessories** ->**Communications** ->**Fax** ->**Fax Console** to open the fax console.

Step2 Put your Fax information in the window, and then click **Next**.

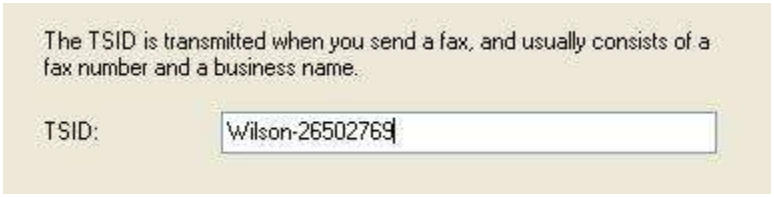


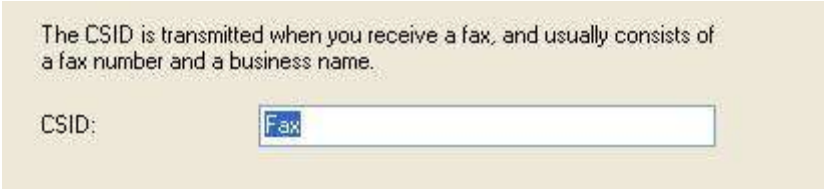
Step3 Select the correct modem (TM-IP5600 will be recognized as Motorola SM56 Speaker Modem), check the boxes of **Enable Send** and **Enable Receive**.

Please do check the box of **Automatically answer** the Fax after 2 or 3 rings, then click **Next** button again.



Step4 Enter your **TSID** and **CSID** then click **Next**. You can leave them as default values.





Step5 Tick the **Routing Options** as the Fax output option, then click **Next**.

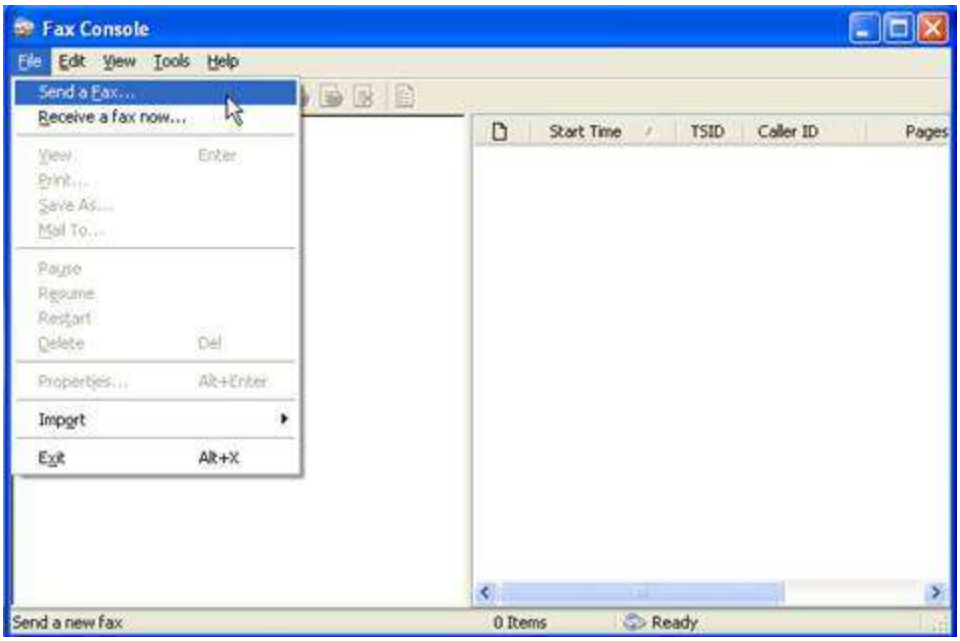
Step6 Click **Finish** to complete the configuration.

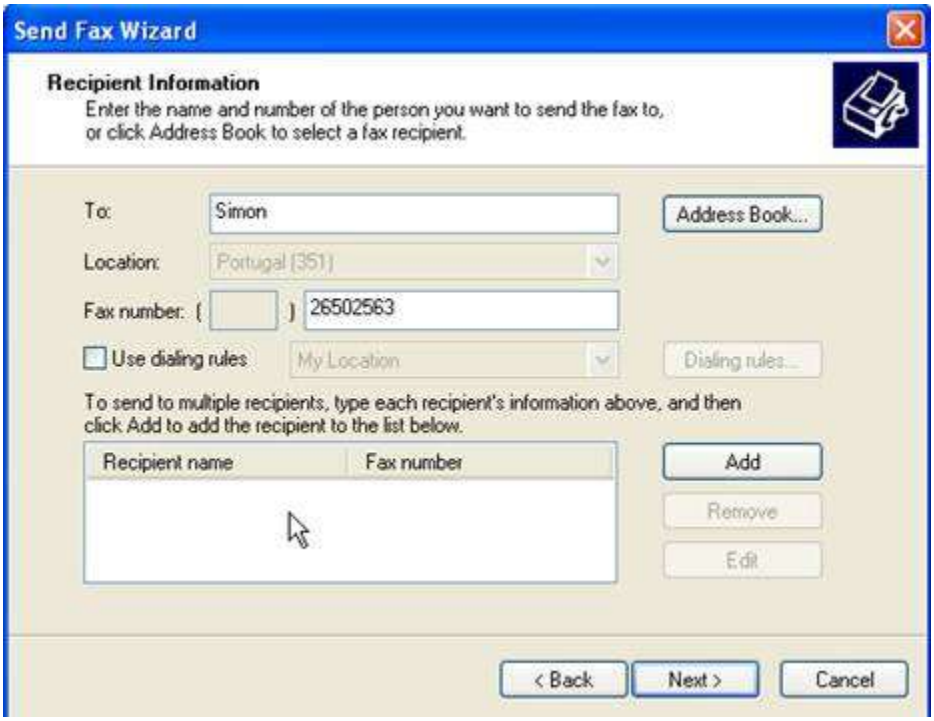
Note: The Fax Configuration Wizard only appears in the first time configuration. After finished all the configuration, there will be a device named **Fax** in **Control Panel**->**Printers and Faxes**.

4. Send a Fax

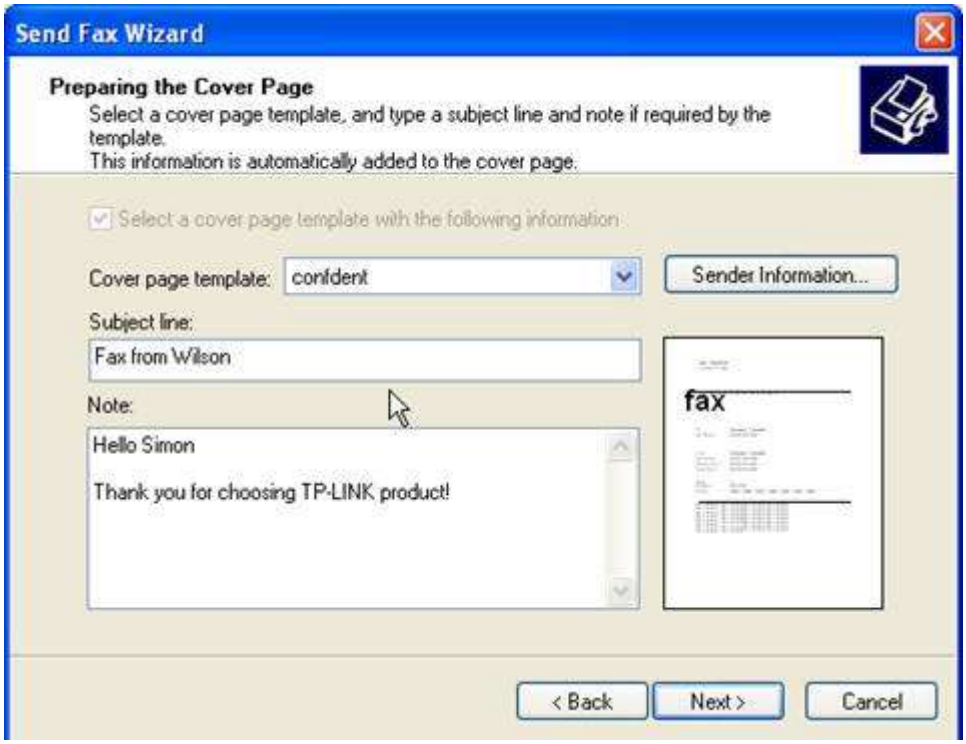
A. By Fax Console:

Step1 Click **File** ->**Send a Fax**. Enter the name and fax number of the receiver then click **Next** button.





Step2 Enter the information of Cover Page and click **Next** button.

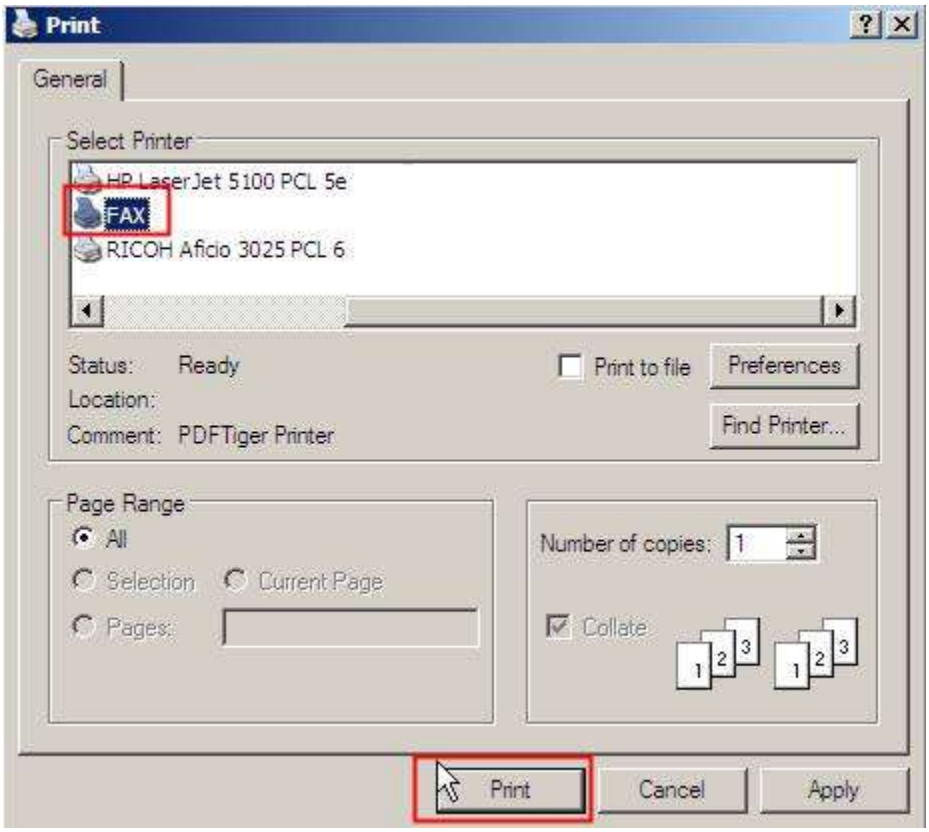


Step3 Configure the **Schedule** and click the **Next** button.

Step4 Click **Finish** button to send the fax.

B. By Printing:

Step1 Here we take TXT file as an example. Open the file and try to print it. In the printer selecting box, choose the **Fax** and click **Print** button, another window will come out .



Step2 Put in the **Fax Number** and **Subject**, click the **Send** button. Your fax will be sent successfully.

How to Install modem TM-IP5600 and configure it to connect to Internet in Windows XP?

This Article Applies to:

Before install the driver, please make certain that you had plugged the modem into your computer correctly, and your phone line is working properly and had been plugged into the **Line port of the modem**.

Step 1

Download the latest driver for it from our web site, Click here to open the download page, and then extract the downloaded file.

Step2

If you had installed old driver for it, please uninstall the old driver firstly, and then open the driver folder and double click **setup** program to install the driver.

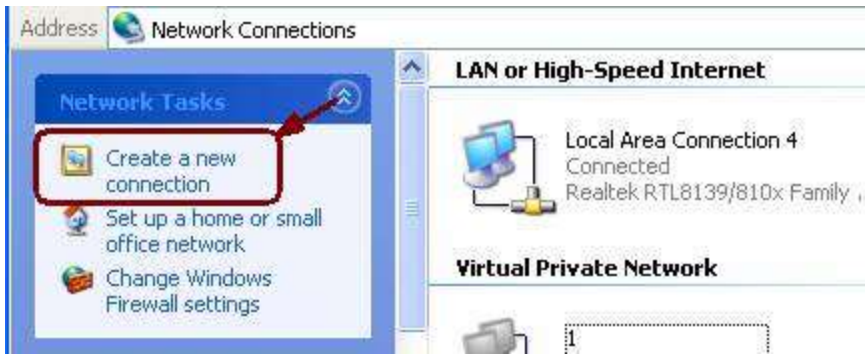
Then the driver will install into your computer automatically.

Step 3

After the driver installation completed, click on **Start->Control Panel**, and then double click on **Network Connection**.

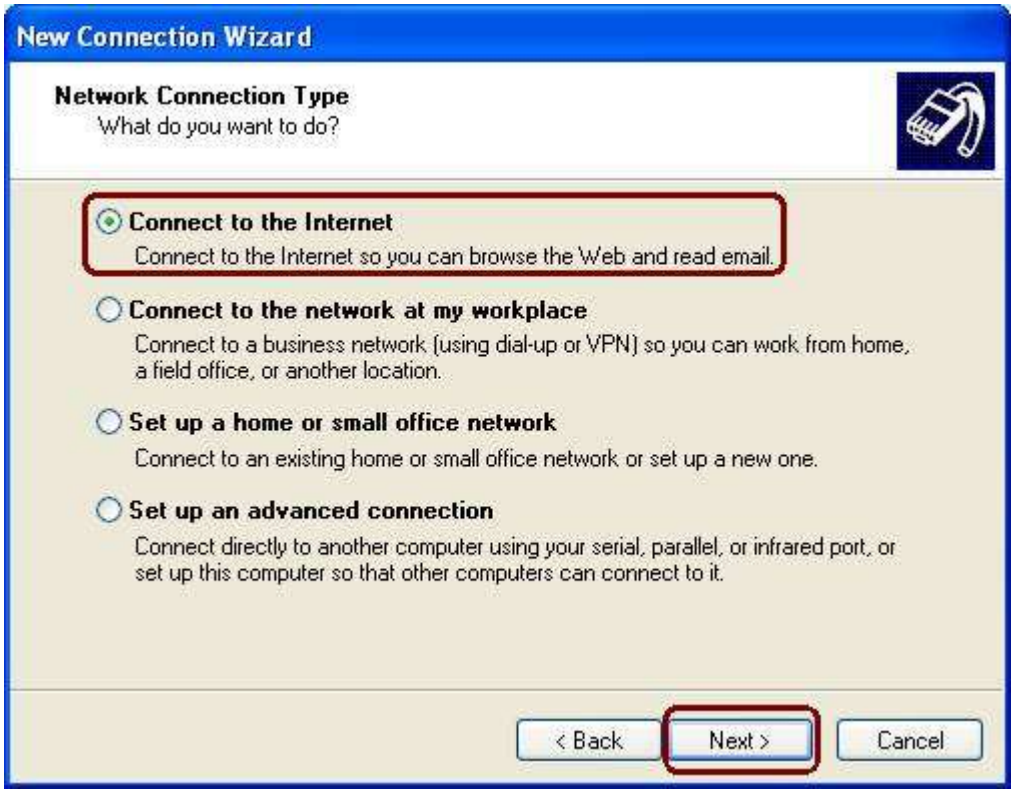
Step 4

Click **Create a new connection.**



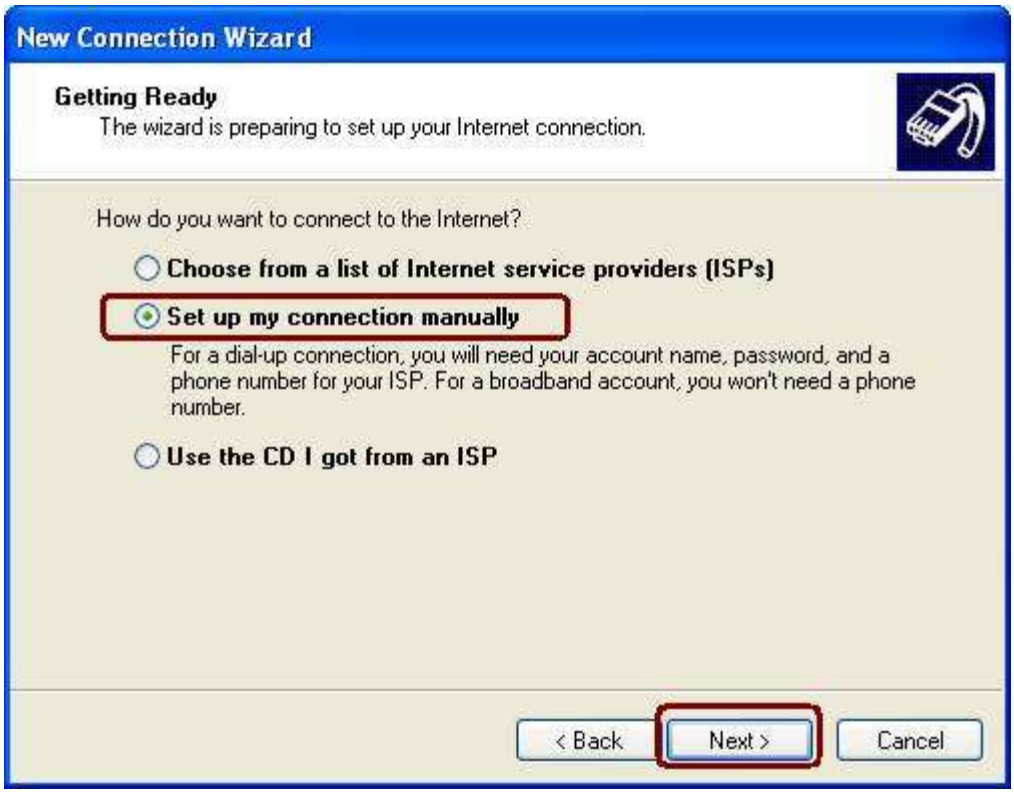
Step 5

When the **New Connection Wizard** appears, click on **Next**. And then select **Connect to the Internet** and Click on **Next**.



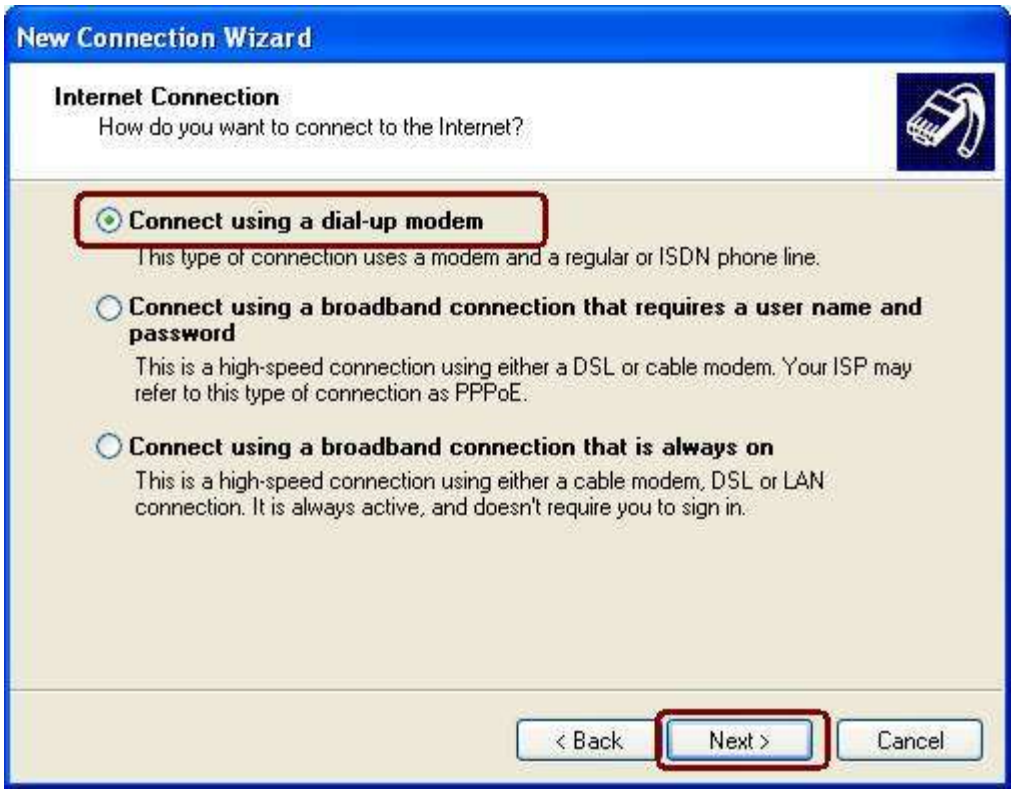
Step 6

Select **Set up my connection manually** and then click on **Next**.



Step 7

Select **Connect using a dial-up modem** and click on **next.**

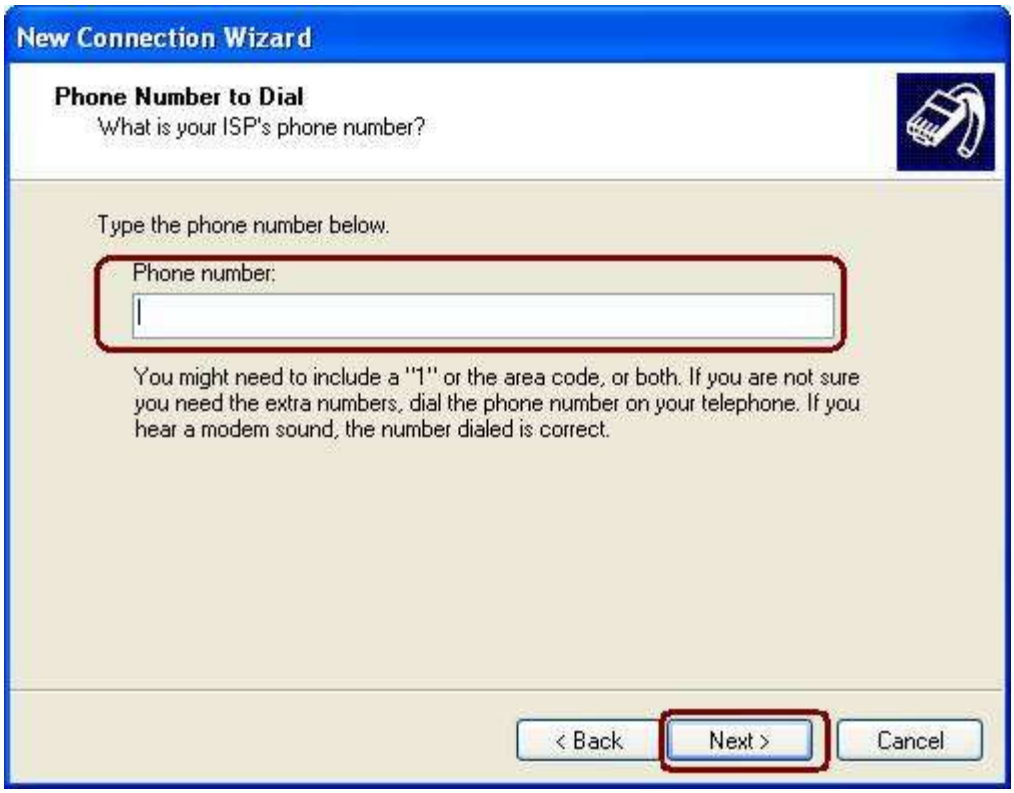


Step 8

Enter your ISP Name and click on **Next**.

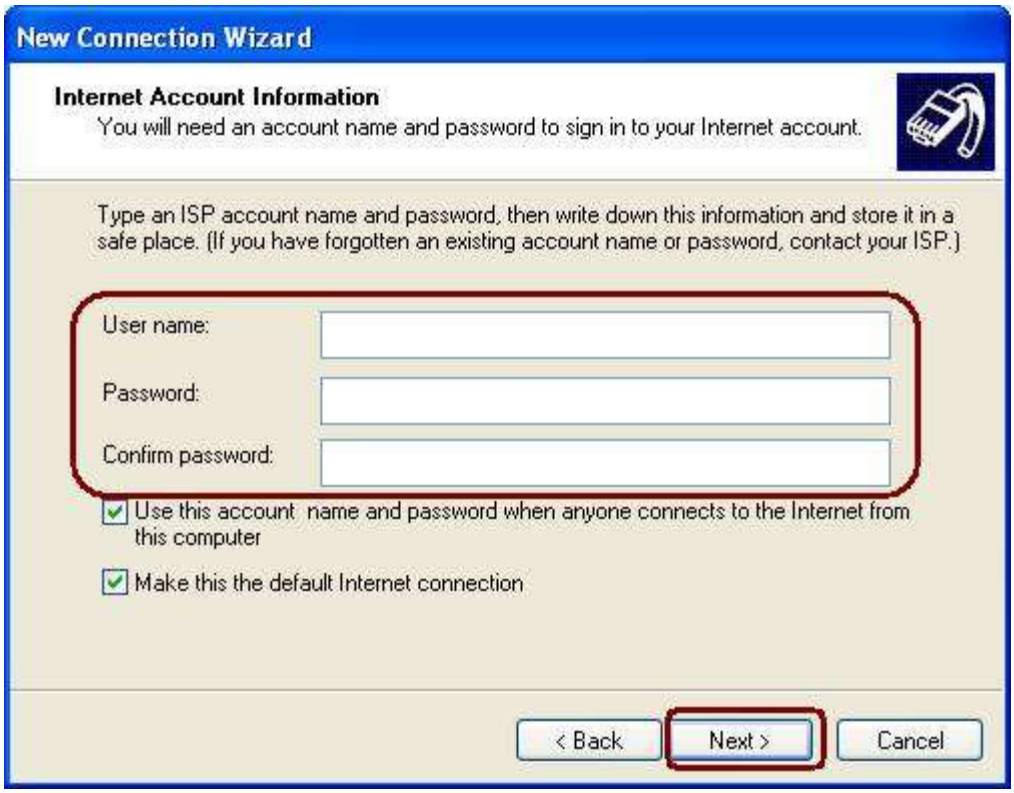
Step 9

Enter the dial-up Phone number, this number is provided by your ISP, please contact with them to check it. Then click on **Next**.



Step 10

Enter the User name and Password which provided by your ISP for dial-up. Then click on **Next.**



Step 11

Click on **Finish** to complete the New Connection Wizard.

After done the above steps, you can dial up to Internet by using this connection.