



Fix Home Network

Thousands of satisfied users!

Easy steps to setup Wireless router with Cable or DSL internet service provider.

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Why do you need router?

Router is a device which allows more than 1 computer to access the Internet at the same time. Let's take an example. You have 2 computers and you have 1 modem that is given by your Internet service provider (ISP). You can connect one computer to the modem and use Internet on that computer. What about the second computer? Modem will allow only one computer to access the Internet. In this case, you need a router.

How do you set up the router without CD or software?

As explained earlier, the modem will allow only one computer to access the Internet. There are different authentication systems used by modem to allow Internet access. To set up the router you need to know the authentication types. Once you understand the concept of authentication, you will be able to set up the router. All the routers have web based set up interface also called as set up page. You need to open the set up page of the router.

Best place to position the wireless router:

It is recommended that you should not place your router close to the microwave or fridges. Avoid putting radio transmitting / receiving devices near metal objects, as the metal gets in the way of the signal. Keep it at least 1 foot away from the wall and 3 feet above the ground. Do not keep it under the desk. Keep it above the desk.

How to setup router with CABLE Internet service provider?

Your internet service provider is Cable connection.

First make sure that your computer is able to go online directly from the modem. If you connect the computer directly to the modem, it should go online. If you are not able to go online through the modem then you will need to contact your Internet Service provider (ISP).

I believe you are able to go online through the modem.

Now the computer which is able to go online through the modem will be the main computer. We will use that computer to set up the router.

Before we start setting up your router, I will suggest you to reset your router to factory default.

Step 1: Connect the computer and modem to the router.



Connect your modem to the router (use Ethernet cable) where it says **INTERNET** or **WAN** on the router. You will see INTERNET or WAN slot on the router. Always connect your modem to that slot.

Take another Ethernet cable to connect your main computer to the router (on Ethernet ports on the router) like port no. 1, 2, 3, 4...

Check lights on the router. You will see POWER , INTERNET(WAN) , WIRELESS (WLAN) , ETHERNET PORT 1 (OR 2 , 3 , 4 ANY ONE OF THEM)

Step 2: Check the IP address on your computer.

IP address is the IP address of the computer. And you will find the Default Gateway number. Default gateway is the IP address of the router. Note down the default gateway number. In case of MAC computer, note down the router number.

Step 3: Open the setup page of the router.

Now you have the Default gateway number or the router IP address. This number will help us to access the router set up. For example the default IP address of the Linksys router is 192.168.1.1. The router IP address may be different for other routers.

Now open the Internet Explorer or Mozilla Firefox or Safari browser.

In the address bar, type the default gateway number. Make sure that you will type the number in the address bar and not in the search bar. Do not use http:// or www. Just type the router IP address. And hit enter on your key board.

It will ask you for user name and password.

In most of the cases the default password is " admin ". (Please check the manual if not sure).

Linksys router: User name: no user name, leave it blank. Password = admin

D-link router: User name = admin, Password = admin

Belkin router: Click Login in the upper right-hand corner of the page. The router does not ship with a password, so just click Submit.

Netgear router: User name = admin, password = password (or 1234 for older device).

2 wire router - User name = none (Leave it blank), password = Wireless

Actiontec router: User name = admin, password = password

Motorola router: CABLEROUTER – User name= cablecom, password= router
WIRELESS ROUTER - name= admin, password= Motorola

If the default password does not work then check the manual of the router or reset the router for 30 seconds. Unplug the power to the router and plug it back in. wait for 1 minute and try it again.

(If you are not able to open the set up page of router by typing the Default gateway no. in the address bar of Internet Explorer, then try this one. Go to START==> RUN ==> type in Default Gateway number in the RUN box for example <http://192.168.1.1> and click ok)

Step 4: Change Internet connection settings.

Some Cable ISP registers the MAC address of the main computer for the authentication purpose. This is why we need the main computer to set up the router.

You have the setup page of the router opened.

You will see the option to clone the MAC address of your main computer.

LINKSYS router: Under SET UP tab you will see MAC ADDRESS CLONE sub tab. Click on this tab, enable the Mac address clone and Click on the button Clone my PC's MAC. You will see some numbers in the six small boxes. Click on Save Settings or apply at the bottom.

D-Link router: You will find WAN tab in the Left hand side panel. Click on WAN tab. Internet connection type will be Dynamic IP address. On the same page you will find the option MAC address. Click on Clone MAC address and click Apply at the bottom

Netgear router: Go to the Basic Settings > Router Mac Address. Select Use Computer MAC Address. Click Apply. This automatically gives the router the computer's MAC address.

Belkin router: Click on Internet or WAN Tab in the left hand side panel. Select the internet connection type Dynamic IP. Click Next. Now Click on Change MAC address. Then Click on Clone the MAC address and Apply Changes.

Motorola router: Once you open the set up page of the router, go to Internet settings. Under advanced settings in the cloned Wan MAC address row click enable. Click Apply at the bottom. Restart your router.

Step 5: You have cloned the MAC address of the computer. Power cycle the network.

Unplug the power cable from the router. Unplug the power cable from the cable modem also. Now plug in the power cable to the modem. Wait for 1 minute till all the lights on the modem becomes solid. Plug in the power cable to the router. Wait for 1 minute. Check all the lights on the router.

Step 6: Try to access Internet on your wired computer.

Once you are able to access the internet on the wired computer, open the setup page again and create a wireless network for your wireless computer.

Now once you set up the wireless network on the router, you will need to connect to the wireless network on your wireless computer.

How to configure router with DSL Internet service provider?

In case of DSL Internet service, ISP will give you user name and password for authentication. It works on PPPoE connection. Connect the modem and computer to the router. Open the set up page of the router. Set the Internet connection type to PPPoE. Enter the user name and password and save the settings. Your router is good to go. Some ISP will use DHCP instead of PPPoE. The Internet connection type will be DHCP.

Router setup with DSL – DHCP connection:

Your computer is able to go online when you connect the computer directly to the modem (without the router).

Before we start setting up your router, I will suggest you to reset your router to factory default. Now the computer which is able to go online through the modem will be the main computer. Your main computer is still connected to the modem only.

Step 1: Check the IP address on your computer.

If you are not able to open the command prompt using Run then go to Start. Go to all programs. Go to accessories. You will find command prompt. Type ipconfig and hit enter on your key board.

Note down the IP address and default gateway number.

Now you have the IP address and default gateway number from the modem. You have both the numbers written down. Let's consider that the default gateway is 192.168.X.Y (x and y can be any number).

The IP address starting with 192.168 is called as private IP address. If you do not have IP address starting with 192.168 the go to **step 7**.

Step 2: Connect only the computer to the router.

Connect your main computer to one of the Ethernet ports 1, 2, 3, 4 on the router.
Do not connect the modem to the router.

Again check the IP address on your computer. Note down the IP address and default gateway number. Now we got the IP address and default gateway from the router. Note down the **default gateway**. This will be the IP address of your router. This number will open the router. Let's consider that the default gateway is 192.168.A.B (A and B can be any numbers).

Step 3: Compare the default gateway numbers.

You have 2 default gateway numbers. One is from the modem (192.168.X.Y) and other is from the router (192.168.A.B). Compare these 2 numbers.

In these 2 numbers value **A and X** is important.

If A is not equal to X then go to step 4.

If A is equal to X then go to step 5.

Step 4: Connect the modem to the router.

The value of A and X is not same.

Connect the modem to the Internet or WAN slot on the router. Check the lights on the router. You will see Internet or WAN light, power and one of the port numbers light on the router. If it is wireless router then you will see the wireless light also.

Check if you are online. If you are online then unplug the power cable to the router and unplug the power cable to the modem also. Plug in the power to the modem first. Wait for 1 minute. Plug in the power to the router. Wait for 1 minute and try to go online.

It should work. Go to **step 8**.

Step 5: The value of A is equal to X.

Open the Internet browser (Internet explorer, Mozilla Firefox, Safari).

In the address bar, type the default gateway of your router (192.168.A.B). Hit go or enter on your key board. You will get pop up window for user name and password. This will be the user name and password for the router. If you reset the router it will come to the factory settings and default password will work.

Linksys router: User name: no user name, leave it blank. Password = admin

D-link router: User name = admin, Password = admin

Belkin router: Click Login in the upper right-hand corner of the page. The router does not ship with a password, so just click Submit.

Netgear router: User name = admin, password = password (or 1234 for older device).

2 wire router - User name = none (Leave it blank), password = Wireless

Actiontec router: User name = admin, password = password

Motorola router: CABLEROUTER – User name= cablecom, password= router

Once you open the set up page of the router, we will need to change the IP address of your router.

Let's take an example. Consider you have a Linksys router. The default gateway from the modem is 192.168.1.254 (192.168.X.Y).

And the default gateway from the router is 192.168.1.1(192.168.X.Y). In this case the Value of **A** and **X** is same. That is 1. We will need to change the IP address of your router. In this case we will change the IP address of the Linksys router to 192.168.2.1 so that value of A and X will not be the same. The Value of X can be from 1 to 254.

Do not change any other number. Just change the value of X

Step 6: Change the IP address of the router.

You have already opened the router set up page.

Linksys router: On the set up page you will find the option Local IP address. You can change the IP address of the router here. Click on save settings at the bottom.

Netgear router: In the left side panel, you will see the option LAN IP set up. If you go to LAN IP set up you will be able to change IP address of the router. Click Apply.

D-link router: You will find network settings. If you click on network settings, you will find the place to change the IP address of the router. Click save settings once you change the IP.

Belkin router: In the left side panel, you will find the LAN settings. Here you can change the IP address of the router. Click Apply after changing the IP address.

Once you change the IP address of the router, Connect the modem to the router.

Modem should be connected to the Internet or WAN port on the router.

Now unplug the power to the router and modem also.

Plug in the power to the modem. Wait for 1 minute. Plug in the power to the router.

Wait for a minute.

Now try to go online.

I believe it should work. Go to step 8.

Step 7: You are getting public IP address from the modem.

When you connect the computer to the modem, you are able to go online. But on your computer the IP address from the modem is not private IP address (starting with 192.168.). Make sure that you are not using any PPPOE or Broadband software on the computer to connect to the Internet. Suppose the IP address from the modem is 72.142.25.xxx, then this is not private IP address. This is called as public IP address.

In this you can connect the computer to the router. Remember the computer will be connected to the port 1 or 2 or 3 or 4 slot on the router and not to the Internet.

Connect your modem to the Internet or WAN slot on the router. Check the lights on the router.

You will see Internet /wan light, power light, port light (1,2 ,3 ,4 any one of them) and wireless light , if it is wireless router.

Unplug the power to the router and the modem also. Plug in the power to the modem. Wait for 1 minute. Plug in the power to the router. Wait for 1 minute. Try to go online.

If that doesn't work then check the IP address and default gateway on the computer. Note down the Default gateway number. Follow the instructions from step 1 to check the IP address on the computer.

Open the Internet browser. Type the default gateway number in the address bar and click go or hit enter on your key board. It will ask you for the user name and password for the router. The default user name and password for the router is explained in step 6. If the default password doesn't work then reset the router for 30 seconds. Unplug the power to the router and plug it back in. wait for a minute and try the user name and password again.

Once you open the set up page of the router, you can try to clone the MAC address of your computer.

LINKSYS router: Under SET UP tab you will see MAC ADDRESS CLONE sub tab. Click on this tab, enable the Mac address clone and Click on the button Clone my PC's MAC. You will see some numbers in the six small boxes. Click on Save Settings or apply at the bottom.

D-Link router: You will find WAN tab in the Left hand side panel. Click on WAN tab. Internet connection type will be Dynamic IP address. On the same page you will find the option MAC address. Click on Clone MAC address and click Apply at the bottom

Netgear router: Go to the Basic Settings > Router Mac Address. Select Use Computer MAC Address. Click Apply. This automatically gives the router the computer's MAC address.

Belkin router: Click on Internet or WAN Tab in the left hand side panel. Select the internet connection type Dynamic IP. Click Next. Now Click on Change MAC address. Then Click on Clone the MAC address and Apply Changes.

Motorola router: Once you open the set up page of the router, go to Internet settings. Under advanced settings in the cloned Wan MAC address row click enable. Click Apply at the bottom. Restart your router.

Unplug the power cable from the router. Unplug the power cable from the cable modem also. Now plug in the power cable to the modem. Wait for 1 minute till all the lights on the modem becomes solid. Plug in the power cable to the router. Wait for 1 minute. Check all the lights on the router.

Try to go online.

I believe it should work now.

Step 8

Once your main computer is able to go online through the router then your router is set up for the wired connection.

You will need to change the wireless settings on the router if it is wireless router.

Once you set up your router using the downloaded document, you will be online on the main computer using the router.

Now you will need to set up the wireless network.

Now once you set up the wireless network on the router, you will need to connect to the wireless network on your wireless computer.

How to setup router with DSL-PPPoE connection?

Before we start setting up your router, I will suggest you to reset your router to factory default. Your computer is not able to go online when you connect the computer directly to the modem (without the router).

You have user name and password from ISP.

Step 1: Connect the modem and computer to the router.

Connect the computer to the router. On the router you will find port 1,2,3,4. Connect your computer to one of them. Do not connect the computer to the Internet or WAN port on the router. Connect your modem to the Internet or WAN port on the router. Check the lights on the router. You will see power light, Internet or WAN light, one of the ports light and wireless light if it is wireless router.

Step2: Check the IP address on your computer

If you are not able to open the command prompt using Run then go to Start. Go to all programs. Go to accessories. You will find command prompt. Type ipconfig and hit enter on your key board.

Note down the IP address and default gateway number.
Default gateway is the IP address of your router.

Step 3: Open the setup page of the router.

You have the IP address and the default gateway number. Default gateway is the IP address of the router. This number will open the router set up.
Open the Internet browser (Internet explorer, Mozilla Firefox, Safari).

In the address bar, type the default gateway of your router. Hit go or enter on your key board. You will get pop up window for user name and password. This will be the user name and password for the router. If you reset the router it will come to the factory settings and default password will work.

Linksys router: User name: no user name, leave it blank. Password = admin

D-link router: User name = admin, Password = admin

Belkin router: Click Login in the upper right-hand corner of the page. The router does not ship with a password, so just click Submit.

Netgear router: User name = admin, password = password (or 1234 for older device).

2 wire router - User name = none (Leave it blank), password = Wireless

Actiontec router: User name = admin, password = password

Motorola router: CABLEROUTER – User name= cablecom, password= router
WIRELESS ROUTER - name= admin, password= Motorola

(If you are not able to open the set up page of router by typing the Default gateway no. in the address bar of Internet Explorer, then try this one. Go to START==> RUN ==> type in Default Gateway number in the RUN box for example <http://192.168.1.1> and click ok)

If you are not getting the user name and password window or if it is not opening the router set up then disconnect the modem from the router. Reset the router for 30 seconds. Unplug the power. Plug it back in. wait for 1 minute. Try to open the set up page again. Once you open the set up page, connect the modem to the router again.

Step 4: Change Internet connection settings.

You have the router set up page opened.

We will need to change the Internet connection type to PPPOE so that you can enter your user name and password.

Linksys Router : Open the set up page of the router. You will be on the set up tab by default. On this page you will find Internet connection type. By default it will be on Automatic configuration DHCP or Obtain IP automatically. Change it to PPPOE. Below that you will find user name and password box. Type the user name and password there and click save settings at the bottom of the page.

D-Link Router : Open the set up page of the router. Make sure that you will be on HOME tab at the top. Click on the WAN tab in the left hand side panel. Select the Internet connection type PPPOE. Now you will find the place to type the user name and password for ISP. Type the user name and password and Click Apply at the bottom.

Belkin Router: Open the set up page of the router. Click On Internet/WAN tab in the left hand side panel. Select the Internet connection type PPPOE. Click Next. Type the user name and password for the ISP and apply the changes.

Netgear router : Open the set up page of the router. Run the router's SmartWizard. This lets the router discover whether you have a static or dynamic IP address, and whether you are using PPPoE to connect to your ISP. If PPPoE is discovered, configure your router with the username and password from your ISP. Click **Apply** to enter the data. If set up wizard doesn't work, then click on Basic Settings. Under basic settings you will find the option for Internet connection settings. Change it PPPOE and type the user name and password. Apply the changes.

Step 5

Try to go online. I believe it should work.

Now Check the Internet IP address on the Status tab of the interface. If you have the Internet IP address then it is working. If you get the error message "Authentication failed", that means the User name and password is not correct. Go back to the Set up tab and Enter the User name and password carefully. Save the changes and check the Internet IP address again.

IF you get the Internet IP address on the status, then try to go online.

If that doesn't work or if you do not get Internet IP address, then unplug the power to the router and the modem. Plug in the power to the modem first. Wait for 1 minute. Plug I the power to the router. Wait for 1 minute. Try to go online.

Once you are able to access the internet on the wired computer, open the setup page again and create a wireless network for your wireless computer.

Now once you set up the wireless network on the router, you will need to connect to the wireless network on your wireless computer.

How to secure wireless network:

No doubt, **wireless network security** is the most important part when you are trying to setup your router.

How do you change the settings of your wireless network?

Each router has a default IP address and a setup page. *Setup* page is the page where you can change the settings of the router.

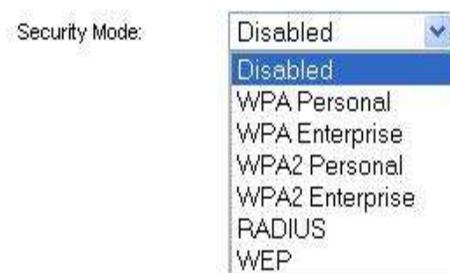
First you will need to check the IP address of the router. Connect the computer to the router with the Ethernet cable. Do not use wireless computer to change the settings of the router. Always connect the computer with the cable. Check the IP address and default gateway number on the computer. Default gateway is the IP address of the router which you can use to open the setup page of the router.

Once you open the setup page, you can change the settings and *secure wireless network*.

What settings do you need to change?

First I will suggest you to change the wireless network name also called as **SSID**. Almost all the routers come with the same default SSID. Let's take an example of Linksys router. The default SSID of Linksys router is **Linksys**. If your neighbor is also using Linksys router then there will be 2 same SSID to connect and your computer will get confused. So use unique SSID.

Change the Wireless network security mode. Generally all home network routers support **WEP**, **WPA** and **WPA2** type. You can use any one of them.



WEP is least secured and it can be cracked easily. However some old operating systems only support WEP. But those were old days. If you have Windows XP SP2 or above, then it will support WPA and WPA2 also. If you are using WEP security type then make sure that network key is 10 or 26 digit hexadecimal number. WEP encryption will reduce your WiFi speed also.

WPA and WPA2 are the best types of encryption and used by almost all the users nowadays. WPA2 is stronger than WPA but WPA2 is not supported by all the operating systems. I will suggest you to use WPA and do not share your key with anyone.

There are definitely other settings that you can use to secure the wireless network but I don't think it is necessary for home network users. And that will be just a wastage of time. You can simply change the SSID and use stronger WPA or WPA security key. That will be sufficient.

I will give you just an idea about other security settings below.

Enable Wireless MAC address filter: In this type, you can allow only the devices with specific MAC addresses to join the Wifi. First you will need to check the Wireless MAC address of all the devices that you want to connect. Then add these MAC addresses to the MAC address filter list. Now in this case you have to add the list each time you want to add another device. This is very frustrating for me. I have seen many people using MAC filter and then quit using it after a month or two.

Disable SSID broadcast: You can disable the broadcast of your wireless network SSID. No one will be able to see that your wireless network is broadcasting in that area. Now in this case, you have to add the wireless network manually on all the computers and devices. Also Wifi adapter on your computer requires more energy to stay connected with this hidden network. This may cause decrease in speed.

Disable DHCP server on the router and change the default IP address: In this case, you need to assign static IP address to the computers and devices in the network. Note that all the devices should have different IP addresses.

I think this will be sufficient for WiFi users at home. Don't need to worry about other things.

Remember the password of your WiFi and do not share it with anybody. I used to ask people to write down the password on a piece of paper and stick that on the back of your router. Because if you forget the security key, you will need to open the setup page again and grab the key which is again not easy task. I know many people will end up resetting the router while looking for the security key.

Wireless network connection on Windows XP computer

It is easy to troubleshoot [wireless network connection](#) on Windows XP operating system than any other operating system.

I will give you some useful tips about troubleshooting wireless network connections on Windows XP computer. We will discuss about some easy ways to fix the errors which you may get while joining WiFi at home or office network.

What do you need before connecting to the WiFi on windows XP?

Make sure that you have all the correct settings of your network. You will need the name of your network also called as SSID. If it is a secured connection then you will need the security key or password. If Wireless MAC filter is enabled then you will need to enter the MAC address of your adapter in the list.

All these settings will be found on the setup page of the router. If you are not sure about the settings then you can open the setup page and check the settings.

First of all, I will suggest you to check the status of wireless adapter on your computer. Make sure that it is working properly.

Open Device Manager: Right click on My computer icon and go to properties. Click on Hardware tab and then click on Device Manager.

In the list you will find Network adapters. Under network adapters, search for a wireless network adapter. There must be one in the list if it is a wireless computer. Right click on it and go to properties. Check the device status must be "*This device is working properly.*" If it is disabled then enable it.

What if the WiFi adapter is not listed under Network adapters?

Look for the option "*other devices*". There might be a device which is not installed properly. Sometimes it is listed as Network controller. The drivers of the device might not be working or you may need to reinstall it.

If the adapter is not listed under Network adapters or other devices then your wireless adapter is not working or it is not detected by the computer. In this case you will need to contact the manufacturer of your computer or the local vendor.

How to connect to the wireless network on Windows XP?

Step 1: Find Wireless network connection icon on your computer.

On your computer screen, you will find wireless network connection icon, in the bottom right corner, in the system tray. It looks like a single computer monitor. 2 computer monitor is the icon for Local area connection and single computer monitor is for wireless.

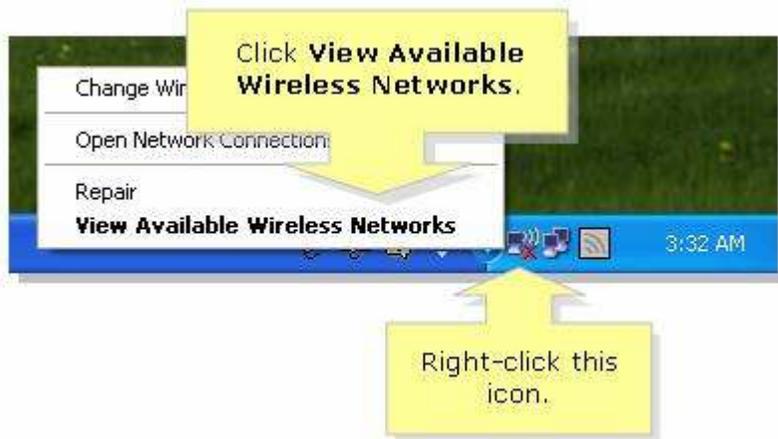
Or you can go to Start => Control Panel => Click on Switch to Classic View in the left panel => Network connections => and you will see Wireless network connection icon in the list.

What if the icon is not there? Again you will need to check the Adapter properties by opening device manager (as explained above).

Step 2: Search for the networks in the range.

Right Click on Wireless network connection icon and you will see the option " *View available wireless networks* ". Select this option. Now you will see the list of available networks in that area. *What if your network is not in the list?*

You will need to check the router settings. Make sure that router is broadcasting the SSID. Try changing wireless channel on the router. If you are not able to see any networks in the list then you may get following error.



Windows can not configure this wireless network: This error means there is another program or utility on your computer which is managing the WiFi connection. Lets consider, you are using a Dell laptop and there is Dell adapter installed on your computer. Then there are chances that DELL utility is managing your WiFi. In this case you need to connect using DELL utility or you can switch to Windows utility.

No Wireless networks are found in the range: This means your computer is not getting wireless signal. If you are using a laptop then make sure that wireless switch on your laptop is turned on. For example, on DEL computer, you can turn on wireless switch by using Fn + F2 buttons.

Step 3: Connect to the network.

Once you see your WiFi in the available WiFi list, select your network and click connect at the bottom.

If your wireless network is secured then it will ask you for the password or the security key. Enter the correct network key. If you are using WEP security then make sure that security key is a 10 or 26 digit hexadecimal number.

Once you enter the correct security key, it will connect you to the network and you will be able to access internet on your computer.

You may get following errors while joining WiFi on your Windows XP computer.

Limited or connectivity: This error means your computer is not getting IP address from the router. You may be entering incorrect security password or your router is not functioning properly. You will need to check settings of the router.

Waiting for network to be ready: You can try to remove your network from the preferred networks list and then add it manually.

Network may no longer be in the range: Try changing wireless channel on the router. Or you can try to uninstall and reinstall the Wi-Fi adapter on your computer.

Wireless network connection on Windows Vista and 7 computers

Before connecting your desktop or laptop to the WiFi, you must know the settings of your router. What do you need? You need the name of your wireless network also called as SSID. And if your WiFi is secured then you will need the correct security key. The security key is case sensitive. So I will suggest you to open the setup page of the router and verify the security settings.

In my opinion, you should first verify that Wireless network adapter on your computer is working properly and there is no problem with adapter.

Open Device Manager.

Click Start => Control Panel => System and securities => Device Manager.

Or Start => Control Panel => System and maintenance => Device Manager.

In the Device Manager list, look for Network adapters. Under Network adapters you will see the Wireless adapter. Right click on it and go to properties. Make sure that it says "Device is working properly". If the device is not working properly then you may need to reinstall the drivers. If it is disabled then enable it. There might be an error code which will explain you the exact problem with the adapter.

If the device is not listed under Network adapters then check the device under "Other devices". If the device is not listed anywhere then you may need to contact your computer vendor.

Easy steps to connect to the wireless network:

Step 1: Find wireless network connection icon on your computer.

On your computer screen, you will wireless network connection icon in the right hand bottom corner. It looks like a computer monitor or like wireless signal bars.

On windows Vista, right click on it and go to Connect to a Network.

On Windows 7, click on icon and go to Connect to a network.

Or open Network and Sharing center and you will see "Connect to a Network".



Step 2: Search for wireless network:

Once you click on Connect to a network, you will see the list of available SSIDs in that area. Select your network from the list.

What if your SSID is not in the list?

Make sure that your router is broadcasting SSID. Try changing wireless channel on the router. If you are using a laptop then make sure that WiFi switch on your laptop is turned ON. For example, you can turn ON the WiFi switch on DELL laptop by using Fn and F2 keys at the same time.

Step 3: Connect to the network.

Once you select your SSID, click connect at the bottom. If your WiFi is secured then it will ask you for the security key or password. Enter the correct password and it will let you join the WiFi and you will be able to access Internet. The security key or password is case sensitive so be careful while entering the password. I have seen many people making mistakes with the password.

Common errors on Windows Vista or 7:

Settings saved on this computer do not match the requirement: This error means there is a profile saved on your computer which has incorrect settings. You can delete all the profiles from the preferred list and add a new one.

Press the configuration button: You can skip this step and add the network manually. At the bottom of the same window you will find an option to enter the key manually.

Enter the PIN: Skip this step and enter the password. Or add a wireless network manually.

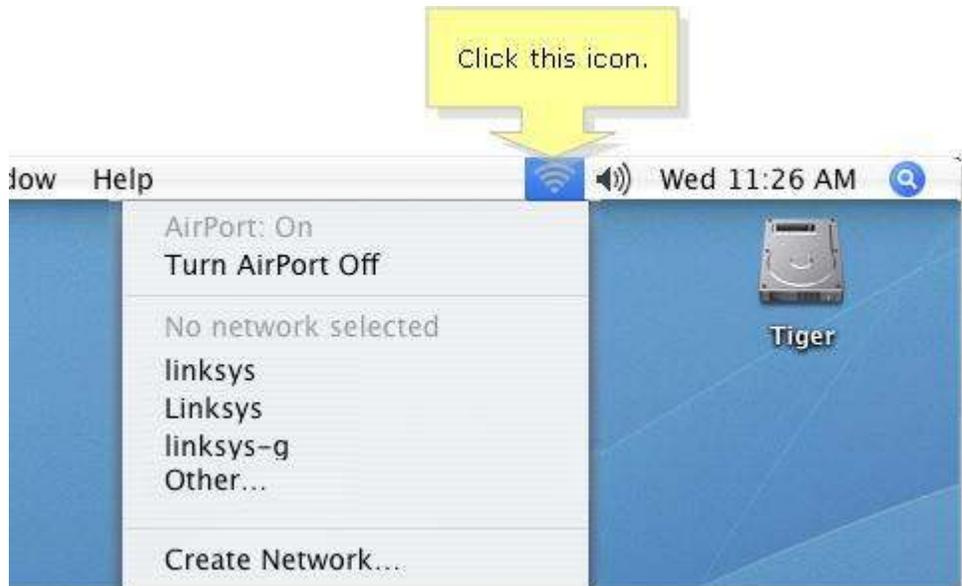
Windows can not connect to this network: Make sure that you are entering the correct network password. Also make sure that MAC filter is disabled on the router. Try changing the channel.

Wireless network connection MAC computer

I think connecting to a Wi-Fi is very simple on a MAC computer.

You will find **Airport** icon in the top right corner which looks like WiFi signal. If you click on it, you will list of available WiFi connections.

Select your SSID and try to join. Enter the correct security key and you are done. It is very simple.



Common error on MAC:

Error joining airport: If you are using WEP security type on the router then you will need to add \$ sign to your security key. Let's consider, the WEP key is 1234567890. While joining Airport, enter the WEP key along with \$ sign like \$1234567890 . Or you can change the security mode to WPA on the router.

How to connect iPad to wireless network?

Before connecting *iPad to the wireless network*, make sure that you have all the settings of your wireless network. If you are not sure about the wireless settings of the router then open the setup page of the router and get the wireless settings first.



Once you have all the settings of the network, try to connect to the wi-fi network on iPad.

Ipadi wifi setup:

Step 1) Start the iPad

Step 2) Tap on the Settings app. Once in the settings application, you will be at the General Settings screen. Tap on the Wi-Fi category to get to the screen where you will connect to a wireless network .

Step 3) When you reach this screen, the iPad will start searching for Wi-Fi networks that are in range and that are broadcasting their names. As it discovers available networks it will list them under the Choose a Network... label. Please note that it may take some time for the iPad to see all of the available networks, so please be patient while it searches. You can tell that it is searching as there will be an animated symbol next to the Choose a Network... label while it is searching. If it does not find anything, it will pause for about a minute and then attempt to search again.

Step 4) When you see the Wi-Fi network that you would like to connect to, simply tap on it to attempt to join it. If it has a lock next to the name, then it will require you to enter a wireless encryption password in order to connect to it.

Step 5) Once you Tap on a network name, it will try to connect to it. If the network is not using encryption, then you can just skip to this step. If the network is using wireless encryption, though, you will be presented with a screen asking you to enter the wireless encryption password as shown below.

Step 6) In the password field, enter the wireless encryption password that is required to join this network. This password was originally set on your wireless router, and if you do not remember this password anymore, you can log on to the router and change the password to a new one. Please note that if you change the password on the router, then any other devices that connect to this device wirelessly will also need to have their settings changed to use the new password.

Step 7) The iPad will now attempt to connect to the network, and when finished, will display the

Wi-Fi settings screen again, but this time with the joined network listed and with a check mark next to it. This check mark designates that your iPad is connected to the network.

If you are having problem connecting to Wi-Fi then you can try **basic troubleshooting steps**:

1. You can unplug your wireless router for few seconds and plug it back in. Wait for a minute for router to boot up.
2. Reset Ipad network. Go to Settings-General-Reset-Reset network Settings. You will need to reconnect the iPad to WiFi.

<http://fixhomenetwork.com/wireless/how-to-connect-ipad-to-wi-fi-or-wireless-network/>

How to connect Kindle to the wireless network

Easy steps to connect kindle to the wireless network:

Kindle uses Free 3G and Wi-Fi technology to enable you to wirelessly search, discover, and download content on the go. Your books are delivered wirelessly, typically in less than 60 seconds. If your Kindle has Wi-Fi and 3G, you can choose the most convenient connection.



While you're reading, and for many other activities, your Kindle does not need to connect to a wireless network. Other activities such as shopping in the Kindle Store and purchasing books do require a connection.

Your Kindle automatically turns 3G coverage off when you connect using Wi-Fi. If you disconnect from a Wi-Fi or if you move out of Wi-Fi range, Kindle automatically switches back to 3G coverage.

Before connecting the *Kindle to wifi network*, you should know the settings of your router. If it is secured then you must know the correct key or password. if you are not sure about the settings then you will need to open the setup page of the router and check the settings.

How to connect Kindle to wi-fi network :

Kindle WiFi setup :

To connect Kindle to a WiFi network:

1. Press the Home button, then press the Menu button
2. Navigate to “Settings” by moving the 5-way controller down, then press the 5-way controller to select.
3. Select “view” next to “Wi-Fi Settings” to display a list of detected Wi-Fi networks. You may have to wait a moment as your Kindle detects networks in range. Kindle automatically scans for available Wi-Fi networks at periodic intervals. To rescan for available networks at any time, select “rescan”.
4. Select “connect” to connect . If you see a lock symbol next to “connect,” then it requires a password to connect.

1. If necessary, enter the Wi-Fi password, and choose “submit.” Press the Symbol key to enter numbers or characters not present on the Kindle keyboard.

Kindle wifi setup is easy however you should have the correct wifi settings of your router.

<http://fixhomenetwork.com/wireless/how-to-connect-kindle-to-the-wireless-network/>

How to connect to the wireless network on Balckberry?

Before connecting Blackberry to the wireless network, make sure that you have all the wireless settings of your network. You should know the name of the wireless network and password of the wireless network. If you are not sure about these settings then open the setup page of the router and check the wireless settings.



To scan for available Wi-Fi® networks, complete the following steps:

1. Click Set Up Wi-Fi.
2. Click Next.
3. Click Scan For Networks.
4. If prompted, click Turn Wi-Fi on.
5. From the list of available Wi-Fi networks, click the appropriate Wi-Fi network.
6. Specify the required security credentials
7. Click Connect to connect to the Wi-Fi network.
8. To save the Wi-Fi network connection as a profile, click Yes in the Save this Wi-Fi Network as a Profile field. Note: The BlackBerry smartphone can connect to a Wi-Fi network without saving

that Wi-Fi network connection as a profile. However, each subsequent connection to that Wi-Fi network will require the BlackBerry smartphone user to complete Set Up Wi-Fi.

9.Type a profile name in the Profile Name field.

10.Click Next.

11.Click Finish to complete the connection to an available Wi-Fi network.

Manual Wi-Fi Selection Mode allows the BlackBerry smartphone user to select the Wi-Fi networks to which the BlackBerry smartphone will attempt to connect.

How to connect i-Phone to the wireless network?

Easy steps to connect iPhone to WiFi or wireless network:

Before connecting your *iPhone to the wireless network*, make sure that you have all the settings of your router.

You need the name of your wi-fi also called as SSID.

If your wireless network is secured then you need the password or the security key.

If Wireless MAC filter is enabled on your router, then you will also need to enter the MAC address of your Iphone in the filter list. Generally MAC address filter is disabled by default on all the routers. So there is no need to be worried about this right now.

If you are not sure about the settings of the router then open the setup page of the router and get the settings first.

Once you have all the settings of your router, try to connect Iphone to Wi-fi .

iPhone wifi setup:

Step 1) Start the iPhone.

Step 2) Tap on the Settings. Once in the setting, you will be at the General Settings screen. Tap on the Wi-Fi category to get to the screen where you will connect to a wireless network.

If your Wi-Fi setting currently set to Off, tap it to toggle On the Wi-Fi access.

Step 3) When you reach this screen, the iPad will start searching for Wi-Fi networks that are in range and that are broadcasting their names. As it discovers available SSID it will list them under the Choose a Network... label. Please note that it may take some time for the iPad to see all of the available SSIDs, so please be patient while it searches. You can tell that it is searching as there will be an animated symbol next to the Choose a Network... label while it is searching. If it does not find anything, it will pause for about a minute and then attempt to search again.



Encrypted networks will show a padlock to the right of the name while “open” networks will not.

Step 4) When you see the Wi-Fi network that you would like to connect to, simply tap on it to attempt to join it.

Step 5) If you choose a Wi-Fi that requires a password, you'll be prompted to enter it. Type in your password and select Join.

Step 6) The iPhone will now attempt to connect to the network, and when finished, will display the Wi-Fi settings screen again, but this time with the joined network listed and with a check mark next to it. This check mark designates that your iPhone is connected to the network.

If you are having problem connecting iPhone to Wi-Fi then you can try **basic troubleshooting steps**:

1. You can unplug your wireless router for few seconds and plug it back in. Wait for a minute for router to boot up.
2. Reset iPhone network. To reset your network settings, tap Settings > General, then scroll down and tap Reset > Reset Network Settings. When the device restarts, try to locate and join the Wi-Fi network again.
3. Check the Wi-Fi signal strength in the status bar or Wi-Fi menu. The more bars the stronger the signal. If you only have a single bar or you still cannot locate your Wi-Fi network, Move closer to the Wi-Fi access point or router. Avoid potential sources of interference that can affect a Wi-Fi signal, such as concrete walls and microwave ovens.

How to connect X-box to the wireless network?

Before connecting the **xbox** to the wireless network, make sure that you have all the settings of your network.

You will need the name of the SSID and the key or password. If you don't know the settings of your network then you will need to connect the computer to the router and open the settings page of the router. On this page you will find all the settings. Make sure that the SSID broadcast is enabled on the router. Also the wireless MAC filter should be disabled.

Once you have all the settings, you can connect to the wireless network on X-box.

On the x-box you will need to connect to the wireless network now. Open the main Interface of the X-Box.

1. In the X-box Dashboard, go to My X-box and open System Settings.
2. Select Network Settings, Configure Network or Edit settings.
3. On the Basic Settings tab, select your wireless settings.
4. Select the name (SSID) of your wireless network. If your router isn't broadcasting your network's name, select Specify Unlisted Network and enter the name.
5. If your network has wireless security, enter your WEP or WPA key.
6. Try to connect to X-box LIVE again.

If it is connected to the wireless network, you will be able to play the games.

Some times while playing the games on x-box, you may get error regarding NAT type. It will give you error that NAT type is not open. To set NAT type to open you will need to change the settings on the router.

NOTE: At the bottom of this page you will find tips to change the NAT type to open.

How to connect PlayStation to the wireless network?

Before connecting the *play station to the wireless network*, make sure that you have all the wireless settings of your network.

You need to know the name of your SSID, The type of security and the security key or password if any. Also make sure that the SSID broadcast is enabled. The wireless MAC filter should be disabled. If the wireless MAC filter on your router is enabled then you will need to add the MAC address of your play station or simply disable the wireless MAC filter if you have secured network.

If you are not sure about the settings then you will need to connect the computer to the router and check the settings of the network.

All right! Now you have the settings of your network. let's connect to the network on play station.

Now go to the settings page of the PLAY STATION.

- Go to Network settings.
- Go to Internet connection settings.
- Go to wireless settings. If you get confirmation screen stating that you will be disconnected from the Internet Click YES.
- Now Select EASY.
- Then Select WIRELESS.
- Go to SCAN.
- You will see the SSID that is the name of your wireless network. Select your wireless network from the list.
- Select security settings and enter the network key or password.
- Select the IP address settings as EASY.
- Save your settings and test the connection.

Sometimes you may need to adjust the MTU settings of your router. Change the MTU settings to 1365. You may also need to open the ports for the play station. For this you will need to access the router set up page and trigger the ports. the port numbers for the play station will be 80 , 443-447, 5223, 3478-3479, 3658, 10000-20000.

How to connect Nintendo Wii to the wireless network?

Before you join [wireless network connection](#) on your Nintendo Wii, make sure that you have all the settings of your network. You will need the name of your SSID, The type of security and the security key if it is secured. If you are not sure about the settings then you can connect your computer to the router and open the set up page of the router. On this page you will get all the settings of your router.

You may also need to open some ports on the router for the *Nintendo Wii*. Reduce the MTU size on the router to 1365. The port numbers for Wii will be 28910-28920, 29900-29901, 80, 443-447.

Once you have all the settings, you can now connect your [nintendo Wii](#) to the wireless network.

Go to Wii Options in the lower left.

Go to on Wii Settings to the right. From this first list, click the right arrow. Now on page 2, Go to on Internet. Then click Connection Settings. From this list, click Connection 1. Then, Go to Wireless network Connection.

Then click Search for an Access Point.

It will briefly search for any access points and when this screen comes up, click OK.

The following will be a list of nearby access points. If the one you are looking for doesn't show up, Go to Try again. Then, click the one you have access to.

When the following screen appears, click OK.
and OK again.

It will test the wireless network connection.

And if successful, the following will drop down. Go to Yes to update Wii.

Sometimes the above screen is false, saying there is an update when there isn't and the following will appear.

Now, back in Wii System Settings, click on WiiConnect24.

From the following list click WiiConnect24.

Click On and then Confirm to save your settings. This feature allows for updates to be seamlessly sent to your Wii so you don't have to do the final step every time.

Ok, the final step, just as a way to make sure your Wii is up to date. Go to the right arrow from the 2nd page of Wii System Settings.

Go to Wii System Update.

click yes.

it will test your connection for a few seconds.

an update screen may quickly come up and tell you there is an update (whether or not your Wii actually needs one)

and the following screen will appear. Click Wii Menu to finish.

How to change NAT type to open?

People are really very frustrated with this error and just want to fix it immediately. Now it may be a problem with the router settings or it may be problem with the modem settings also.

Let's understand *What is NAT?*

NAT means *Network address Translation*. It is a networking concept mainly used by a router by which router can share one public IP address with multiple private addresses.

I am not going into deep explanation.

What I observed in these 5 years is that people using DSL internet connection are facing this NAT issue. Not all DSL Internet users!

Why? Because, they are using Internet modem from ISP which has inbuilt router. And they connect their own wireless high speed router to this modem. So there are 2 routers in the network connected to each other and this may be the main reason for NAT error.

There are 3 types of NAT errors which I know can cause problem.

Open NAT: It is not problematic. It is actually what you are looking for. This means the settings on the router are proper.

Moderate NAT: You can talk to other players online who have open or moderate NAT.

Strict NAT: You can not talk to the players who have moderate or strict NAT.

How to change NAT type to open ?

This is what everybody is looking for.

If you are using DSL Internet service then make sure that Internet modem (provided by Internet service provider) is in a bridge (or PPPoE) mode. If you connect your computer directly to the modem, your computer should get public IP address from the modem (not private IP address like 192.168.x.x).

Connect the computer directly to the modem and check the IP address on the computer. If it is a private IP like 192.168.x.x or 172.x.x.x then first get in touch with your Internet service provider and convert the modem into bridge or PPPoE mode.

If your computer is getting public IP address from the modem then modem is not the problem.

You will need to change the settings on the router.

Connect the computer to the router. Open the setup page of the router. Each router has it's own IP address. You need to check the IP address and open the setup page.

Open command prompt on a Windows computer. In the command prompt type **ipconfig** and hit enter on the keyboard. You will now get the IP address of the computer and the router. Look for default gateway number. Note it down. Open Internet browser like Firefox, Internet explorer or Chrome. In the address bar type the IP address of the router. It will now ask for the user name

and password to log in to the setup page. Each router has default password and user name. For example default password of Linksys router is admin.

If the default password is not working then you may need to reset the router to factory default settings. However remember that if you reset the router, it will come back to factory default settings and you will lose all the settings. That will lead to reconfiguration of the network.

Easy steps to open setup page of the router:

Once you open the setup page of the router, look for the MTU settings on the router.

For example, you will see MTU settings on the Basic setup tab. Change it to manual and change the **MTU size to 1365**. This is not the final value for MTU size; you may need to try different size. MTU means *Maximum transmission unit*.

Disable firewall on the router if any. Do not disable **SPI Firewall** on the router. It needs to be enabled.

You can also try changing the settings of UPnP on the router. See if that makes any difference. If it is enabled then disable it and see if that helps you. If it is disabled then enabled it and check it again.

You may also need to open some port numbers on the router. Assign a static IP address to the gaming device and forward the ports for that IP address.

Let's take an example of [Xbox](#). What I will do? I will assign a static IP address to the Xbox that is not in the range of router's DHCP range. I am using Linksys E4200 and its IP address is 192.168.1.1. Now I will assign 192.168.1.25 (this is just an example). Now I will forward ports for this static number of Xbox.

For example, Xbox needs port number 53, 80-88, 3074.

For example, open the setup page of the Linksys router. Go to Applications and gaming tab. Click on Port Forwarding tab. Now forward the ports as shown in the picture above.

Playstation needs ports 80, 443-447, 5223, 3478-3479, 3658, 10000-20000. These numbers may be different. You can check the required port numbers on the gaming station website.

Generally these changes will change NAT type to open. If this does not work then I will suggest you to upgrade firmware on the router.

Make sure that your router is running on latest firmware. If it is old router then you must upgrade the firmware.

After upgrading the firmware, reset the router and reconfigure it. Remember, if you reset the device, it will come back to factory default settings and you will lose all the settings of the network.

How to upgrade Firmware on the router?

Firmware is the software of the router.

Some times we need to upgrade the firmware of the router.

First download the Firmware of the router from the manufacturer's web site.

Please select the proper model number and version number while downloading.

Save it on the computer (location - desktop).

Before upgrading the firmware, make sure that your computer is connected to the router with the Ethernet cable.

Do not upgrade the firmware on a wireless computer.

If there is no computer connected to the router then you will need take extra cable and connect the computer to the router.

Open the router set up page.

OK, so you have downloaded the Firmware of the router and you have the set up page of the router opened.

Now you can upgrade the firmware of the router.

For Linksys router

You will find ADMINISTRATION tab in the upper right hand corner.

click on the administration tab. just below the administration tab you will find firmware upgrade sub tab. Click on Firmware upgrade.

Now on this window you will find browse option. click on the browse button and select the firmware file that you have downloaded on the computer. after selecting the proper file click Upgrade. The upgrade process will start.

It may take 2 to 5 minutes.

Once you upgrade the firmware of the router, unplug the power cable of the router , wait for 5 seconds and plug it back in.

For Netgear router

Click Maintenance > Router Upgrade

Click Browse and find the file you just downloaded.

Click Upload. Do not interrupt the upgrade while the router does this step.

It may take 2 to 5 minutes.

once you upgrade the firmware of the router, unplug the power cable of the router , wait for 5 seconds and plug it back in.

For Belkin router

Open a web browser on the computer.

In the address bar of the web browser, type <http://192.168.2.1> and press Enter on your keyboard.

Click Login in the upper right-hand corner of the page.

The router does not ship with a password, so just click Submit.

Click on "Firmware Update" toward the bottom of the left-hand menu.

Now on this window you will find browse option. click on the browse button and select the firmware file that you have downloaded on the computer. after selecting the proper file click Upgrade. The upgrade process will start.

It may take 2 to 5 minutes.

Once you upgrade the firmware of the router, unplug the power cable of the router , wait for 5 seconds and plug it back in.

For D-link Router

Open the web interface of the router.

Go to TOOLS

Under tools you will find FIRMWARE.

Now on this window you will find browse option. click on the browse button and select the firmware file that you have downloaded on the computer. after selecting the proper file click Upgrade. The upgrade process will start.

It may take 2 to 5 minutes.

Once you upgrade the firmware of the router, unplug the power cable of the router , wait for 5 seconds and plug it back in.

Now you have upgraded the firmware.

The process to upgrade the firmware might be different for different routers.

It is recommended that once you upgrade the firmware of the router, you should reset the router and reconfigure the router. Once you reset the router, it will come back to factory default settings.

Press the reset button on the router. Press it and hold it down for 30 seconds. Wait for 30 seconds. Unplug the power to the router and plug it back in. Wait for 30 seconds.

Now reconfigure the router.

You can use the Easy setup Guide to reconfigure the router manually.

For more help, get access to our Easy setup Guide.
Get free email support for complete ONE month.

<http://fixhomenetwork.com>

Easy Setup Guide will help you:

- How to Setup router With Cable Internet service provider.
- How to Setup the router with DSL Internet service provider
- Router was working before but not now
- How to Find the wireless network key or **WEP, WPA, WPA2** password
- How to Connect to the wireless network on Windows OR MAC computer
- How to Check the settings of the router
- How to Setup a secured wireless network
- How to Open the **Ports** on the router
- Problem connecting to the wired or wireless network
- How to troubleshoot the router or the network
- How to add a new computer to the existing wired or wireless network
- One or more computers are not able to access the Internet
- Wireless network adapter issue
- How to upgrade the Firmware of the router
- Possible solution for the dropping Internet through the router
- How to connect the X box, Play station or Nintendo WII to the network
- How to set the **NAT** type to open