Fix Wi-Fi connection issues in Windows – Microsoft Support

Windows 11 · https://cleversupport.ca/docs/windows-11/fix-wi-fi-connection-issues-in-windows-microsoft-support/

If you can’t get email, browse the web, or stream music, chances are you’re not connected to your network and can’t get onto the internet. To fix the problem, here are some things you can try.

Windows 11

Things to try first

Try these things first to help you fix or narrow down the connection problem.

- Run **Get Help** to troubleshoot and fix common connection problems. Right click the network icon in the right side of the taskbar and select **Diagnose network problems** or open Get Help for Network & Internet
- Make sure Wi-Fi is turned on. Select the **No internet** icon on the right side of the taskbar, and make sure Wi-Fi is turned on. If it isn't, select it to turn it on. Also, make sure **Airplane mode** is turned off.
- Select **Manage Wi-Fi connections** (**>**) on the **Wi-Fi** quick setting, see if a Wi-Fi network you recognize and trust appears in the list of networks. If it does, select the Wi-Fi network, and they try to connect to it. If it says **Connected** underneath the network name, select **Disconnect**, wait a moment, and then select **Connect** again.
- Try connecting to a network on a different frequency band. Many consumer Wi-Fi routers broadcast at two different network frequency bands: 2.4 GHz and 5 GHz. These will appear as separate networks in the list of available Wi-Fi networks. If your list of available Wi-Fi networks includes both a 2.4 GHz network and a 5 GHz network, try connecting to the other network. To learn more about the differences between 2.4 GHz networks and 5 GHz networks, check out Wi-Fi problems and your home layout.
- Make sure the physical Wi-Fi switch on your laptop is turned on. (An indicator light usually shows when it's on.)

- Restart your modem and wireless router. This helps create a new connection to your internet service provider (ISP). When you do this, everyone that is connected to your Wi-Fi network will be temporarily disconnected. The steps you take to restart your modem and router can vary, but here are the general steps.

Note: If you have a cable modem/Wi-Fi router combo device, you only need to follow the steps for the single device.

1. Unplug the power cable for the router from the power source.
2. Unplug the power cable for the modem from the power source.

   Some modems have a backup battery. If you unplug the modem and lights stay on, remove the battery from the modem.
3. Wait at least 30 seconds or so.

   If you had to remove the battery from the modem, put it back in.
4. Plug the modem back into the power source. The lights on the modem will blink. Wait for them to stop blinking.
5. Plug your router back into the power source.

   Wait a few minutes for the modem and router to fully power on. You can usually tell when they're ready by looking at the status lights on the two devices.
6. On your PC, try to connect again.

Narrow down the source of the problem

Connection problems can be due to a variety of reasons—problems with the website, your device, the Wi-Fi router, modem, or your Internet Service Provider (ISP). Try the following steps to help narrow down the source of the problem.

1. If the "Wi-Fi connected" icon appears on the right side of the taskbar, visit a different website. If the website opens, there might be a problem with the specific website. If you can't connect to another website, go to the next step.

2. On another laptop or phone, try to connect to the same network. If you can connect, the source of the problem is likely due to your device—go to the section Network troubleshooting on your device. If you can't connect to the network on any device, continue to the next step.
3. Check to see if there is a problem with the connection to your Wi-Fi router. Do this by using a ping test.
   a. Select **Search** on the taskbar, and type **command prompt**. The **Command Prompt** button will appear. To the right of it, select **Run as administrator** > **Yes**.
   b. At the command prompt, type **ipconfig**, and then select **Enter**. Look for the name of your Wi-Fi network within the results, and then find the IP address listed next to **Default gateway** for that Wi-Fi network. Write down that address if you need to. *For example: 192.168.1.1*
   c. At the prompt, type **ping <DefaultGateway>** and then select **Enter**. *For example, type **ping 192.168.1.1** and select **Enter**.* The results should be something like this:

- *Reply from 192.168.1.1: bytes=32 time=5ms TTL=64*
- *Reply from 192.168.1.1: bytes=32 time=5ms TTL=64*
- *Reply from 192.168.1.1: bytes=32 time=5ms TTL=64*
- *Reply from 192.168.1.1: bytes=32 time=5ms TTL=64*
- *Ping statistics for 192.168.1.1: Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds: Minimum = 4ms, Maximum = 5ms, Average = 4ms*

If you see results like this and are getting a reply, then you have a connection to your Wi-Fi router, so there might be a problem with your modem or ISP. Contact your ISP or check online on another device (if you can) to see if there's a service outage.

If the results of the ping test indicate that you are not getting a reply from the router, try connecting your PC directly to your modem by using an Ethernet cable (if you can). If you can connect to the internet using an Ethernet cable, it confirms the connection problem is due to the Wi-Fi router. Make sure you've installed the latest firmware and see the documentation for your router.

Network troubleshooting on your device

Run network commands

Try running these network commands to manually reset the TCP/IP stack, release and renew the IP address, and flush and reset the DNS client resolver cache:

1. Select **Search** on the taskbar, and type **command prompt**. The **Command Prompt** button will appear. To the right of it, select **Run as administrator** > **Yes**.
2. At the command prompt, run the following commands in the listed order, and then check to see if that fixes your connection problem:
   - Type **netsh winsock reset** and select**Enter.**
   - Type **netsh int ip reset** and select **Enter**.
   - Type **ipconfig /release** and select **Enter**.
   - Type **ipconfig /renew** and select **Enter**.
   - Type **ipconfig /flushdns** and select **Enter**.

Uninstall the network adapter driver and restart

If the previous steps didn’t work, try to uninstall the network adapter driver, and then restart your computer. Windows will automatically install the latest driver. Consider this approach if your network connection stopped working properly after a recent update.

Before uninstalling, make sure you have drivers available as a backup. Visit the PC manufacturer’s website and download the latest network adapter driver from there. If your PC can't connect to the internet, you'll need to download a driver on a different PC and save it to a USB flash drive so you can install the driver on your PC. You’ll need to know the PC manufacturer and model name or number.

1. Select **Search** on the taskbar, type **device manager**, and then select **Device Manager** from the list of results.
2. Expand **Network adapters**, and locate the network adapter for your device.
3. Select the network adapter, press and hold (or right-click), and then select **Uninstall device** > check the **Attempt to remove the driver for this device** check box > **Uninstall**.
4. After uninstalling the driver, select **Start** > **Power** > **Restart** .

After your PC restarts, Windows will automatically look for and install the network adapter driver. Check to see if that fixes your connection problem. If Windows doesn't automatically install a driver, try to install the backup driver you saved before uninstalling.

Check if your network adapter is compatible with the latest Windows Update

If you lost your network connection immediately after upgrading to or updating Windows 11, it's possible that the current driver for your network adapter was designed for a previous version of Windows. To check, try temporarily uninstalling the recent Windows Update:

1. Select **Start** > **Settings** >**Windows Update** > **Update history** > **Uninstall updates** .
2. Select the most recent update, then select **Uninstall**.

If uninstalling the most recent update restores your network connection, check to see if an updated driver is available:

1. Select **Search** on the taskbar, type **device manager**, and then select **Device Manager** from the list of results.
2. Expand **Network adapters**, and locate the network adapter for your device.
3. Select the network adapter, press and hold (or right-click), then select **Update driver** > **Search automatically for updated driver software**, and then follow the instructions.
4. After installing the updated driver, select **Start** > **Power** > **Restart** if you're asked to restart, and see if that fixes the connection issue.

If Windows can’t find a new driver for your network adapter, visit the PC manufacturer’s website and download the latest network adapter driver from there. You’ll need to know the PC manufacturer and model name or number.

Do one of the following:

- If you couldn’t download and install a newer network adapter driver, hide the update that’s causing you to lose your network connection. To learn how to hide updates, see Hide Windows Updates or driver updates.
- If you could successfully install updated drivers for your network adapter, then reinstall the latest updates. To do this, select **Start** > **Settings** > **Windows Update** > **Check for updates**.

Use network reset

Using network reset should be the last step you try. Consider using it if the steps above don’t help to get you connected.

This can help solve connection problems you might have after upgrading from Windows 10 to Windows 11. It can also help to fix the problem where you can connect to the internet, but can't connect to shared network drives. Network reset removes any network adapters you have installed and the settings for them. After your PC restarts, any network adapters are reinstalled, and the settings for them are set to the defaults.

1. Select **Start** > **Settings** > **Network & internet** > **Advanced network settings** > **Network reset**.
   Open Network & Internet Status settings
2. On the **Network reset** screen, select **Reset now** > **Yes** to confirm.

Wait for your PC to restart, and see if that fixes the problem.

Notes:

- After using network reset, you might need to reinstall and set up other networking software you might be using, such as VPN client software or virtual switches from Hyper-V (if you're using that or other network virtualization software).
- Network reset might set each one of your known network connections to a public network profile. In a public network profile, your PC is not discoverable to other PCs and devices on the network, which can help make your PC more secure. However, if your PC is used for file or printer sharing, you'll need to make your PC discoverable again by setting it to use a private network profile. To do this, select **Start** > **Settings** > **Network & internet** > **Wi-Fi** . On the **Wi-Fi** screen, select **Manage known networks** > the network connection you want to change. Under **Network profile type**, select **Private**.

Additional troubleshooting steps

Check your Wi-Fi settings

Wi-Fi adapter manufacturers might have different advanced settings you can change based on your network environment or connection preferences.

Check the Wireless Mode setting for your network adapter and make sure it matches the capabilities of the network you're trying to connect to. If it doesn't match, you won't be able to connect, and the network might not appear in the list of available networks. The Wireless Mode will often be set to Auto or something similar by default, which enables connection for every kind of network that's

supported.

To find the wireless mode setting

1. In Device Manager, select **Network adapters**, and then double-click the network adapter name.
2. Select the **Advanced** tab and look for a **Wireless Mode** setting. Make sure it’s set to the mode your network is using.

Wi-Fi profile settings

Windows uses the Wi-Fi profile to save the settings that are needed to connect to a Wi-Fi network. These settings include the network security type, key, network name (SSID), and so on. If you can’t connect to a Wi-Fi network that you could connect to before, it’s possible that the network settings might have changed or the profile is corrupted.

To fix this, remove (or "forget") the network connection, then reconnect to the network. When you forget a network connection, it removes the Wi-Fi network profile from your PC.

To forget a network

1. Select **Start** > **Settings** > **Network & internet** .
2. Select **Wi-Fi** , then select **Manage known networks**.
3. Select the network you want to forget, then select **Forget**.

Afterwards, select the **Wi-Fi** icon on the taskbar and try to reconnect to the network to renew the network connection.

Check your home layout

Your Wi-Fi network might be affected by the network's frequency band, channel congestion, and/or signal strength. For more info, see Wi-Fi problems and your home layout.

Check for additional symptoms for the "No internet connection" icon.

There may be additional troubleshooting steps you can try, depending on which symptoms you're having. To view these steps, check out Wi-Fi connection icons and what they mean.