

### Boost the Performance of your Wifi Router

Browsing at a snail's pace, the inability to stream dropped wifi signals, and wireless dead zones. All of these issues are aggravating in a world where getting online has become as important as breathing for some. If you live in a village and have <u>unlimited 4g internet</u> <u>service for home</u>, it will still not solve internet speed issues.

There are various programs available to test the speed of your internet. If you believe it has become sluggish. You can also attempt a few ways to troubleshoot your network issues. If standing next to your wireless router is the only way to get acceptable reception. These easy tips can help you optimize your network.



#### Update your security to prevent bandwidth leaks.

Internet bandwidth is depleted when additional users join your network. If you don't defend your wifi network, you're inviting intruders. That's why Wired recommended that all homeowners secure access to their routers using WPA2 and a difficult password.

Protecting your home wifi network from intruders becomes much more critical if your house is automated. When you have a lot of external devices linked to your network. Your automated home gadgets will have a hard time getting the bandwidth they require. And if you don't maintain a safe network, you risk giving strangers access to your coffee machine, air conditioner, and home security system.

#### Make sure your router settings are optimized.

By experimenting with different router settings, you can boost your home's signal and speed. When you're streaming or playing video games, some routers prioritize bandwidth for you. If you're trying to use this method while sharing a wifi connection with others, switch off the entertainment options first.

The RTS (Request to Send) limits on your router should be reset. Before sending data packets, the RTS threshold protocol clears a transmission channel of all other traffic. Setting your RTS threshold to a lower value on a crowded wifi network. such as an apartment complex, may improve wifi performance.

Fragmentation and RTS threshold settings on the router can both be changed. By lowering your fragmentation threshold, data packets will travel more quickly, and problems with network dependability will be alleviated. However, if your network is already stable, lowering the threshold to a smaller data packet size may result in decreased network performance.

### Change your wifi channel.

Try switching your router from a 2.4 GHz to a 5 GHz wifi channel to improve your internet speeds. As a result, you should have greater bandwidth and less interference.

Multiple internet transmission channels are available on both the 2.4 GHz and 5 GHz frequencies, although 2.4 GHz only has 14 overlapping channels while 5 GHz has 23 non-overlapping channels.

Data packets flowing back and forth on adjoining channels can interfere with one another due to channel overlap, clogging bandwidth, and slowing your connection. Some routers are only capable of using the 2.4 GHz frequency.

Choose channel 1, 6, or 11 if your router is limited to 2.4 GHz. These channels have the least amount of channel overlap, especially if you can convince your neighbors to only use channels 1, 6, or 11.

### Get a newer, higher-end router.

Your aged router could be the largest hindrance to your home's wifi connection. Fortunately, there are other benefits to buying a new router, so you'd be getting more than just higher internet connections.

A new router may also include enhanced home security capabilities and be compatible with a broader range of devices—additional security and interoperability benefit homeowners who want to automate their house or secure their network.

### Your router should be reset.

Resetting your router may seem straightforward, but it can help speed up your internet. Rebooting your wireless router can alleviate internet connection troubles and boost your speeds, just like restarting your computer can cure unexpected computer issues.

# One wifi antenna should be angled upwards, while the other should be angled to the side.



Wifi signals expand out perpendicular to your router. However, Verizon warns that when passing through walls at an angle, wifi signals degrade. Antennas aren't often included in wifi routers, such as all-in-one modems and router gateways.

If your router has antennas, you may angle them to help your wifi signal flow straight through walls while maintaining signal strength. Boost your wifi signal by angling one antenna vertically, allowing wifi signals to pass through walls directly side to side.

Wifi signals flow directly above and downward through the ceiling to other levels if the other antenna is angled horizontally.

## Antenna upgrades and omnidirectional antennas are available.

An update to your antenna is another option. Some router models come with a visible antenna, which means that high-speed internet users who have these types are in luck. Why? Because some third-party manufacturers make new antennas that are more powerful than those given by your cable and internet provider. It is because some antennas are

omnidirectional. Their placement isn't important for getting the most out of your hardware update – you won't even need to slant the antenna to improve your wifi signal.

### Place your wifi router in a high, open location.

The strength of your wifi router's signal is heavily influenced by its location. For best wifi signal results, place the device in a high, open space with few impediments. Signals go perpendicular to your router, as previously stated. Many of your wifi signals will go horizontally along the floor if your router is on the ground, reaching fewer portions of your home.

If you have a multi-level home, you may be able to strengthen the signal and increase your internet speeds by placing the router on the second floor. If you put your router too close to concrete or brick, it won't be able to broadcast to the rest of your house. The bigger the signal loss, the denser the items around your wireless router are.

### Set up a wifi repeater or buy one.

Using a wifi repeater to boost internet speeds in specific areas of your home could be as simple as that. A repeater extends the range of your wifi signal while maintaining the same SSID and password. The repeater is essentially a wireless router that picks up your existing wifi signal.

The stronger wifi signal is then amplified and transmitted to other devices in your home by another wireless router within the repeater. An extra router can also be used to create a repeater.

You can use a second router to convey your wireless signal by connecting it to your first router via its LAN ports and configuring the settings. This capability is built-in to some new routers as "access point" mode, eliminating the need to fiddle with the device's settings.

### Install a network extender.

A wifi extender, like a wifi repeater, boosts your internet connection to additional rooms. The benefit is that extenders are less likely to limit your bandwidth than wifi repeaters, and they provide a strong internet connection to connected devices.

A powerline Ethernet kit transmits wifi signals to other devices in your home via a wired connection to your router. It doesn't take more wifi bandwidth to communicate because it's wired.

A powerline Ethernet kit is a wonderful way to improve the internet for gaming equipment in the basement or devices in the garage. However, because it necessitates wiring, it is not the greatest internet booster for everyone.