

Taking Your Home Network to the Next Level

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The work-from-home environment has placed additional mental and technological stress on lawyers as they try to effectively practice law remotely. Video conferencing has been a huge help in staying connected with clients and colleagues. Accessing cloud services allows attorneys to avoid trips to the office and access client data from the comfort of their own homes.

Having adequate network speed is critical for the success of remote computing. One major challenge during the pandemic is how to maintain sufficient network bandwidth. Typically, we connect to the Wi-Fi network and hope our video doesn't freeze while participating in a virtual hearing. In addition, we're competing for bandwidth with our spouse, children and other family members as they also work remotely or remotely attend school.

What are our options for improving network speed? The first suggestion is to get off Wi-Fi and directly connect to your router via Ethernet. Not everyone has hard wired Ethernet in their residence. There are options there too. If you are not too far from your router, you can purchase a long Ethernet patch cord to connect to your computer. Just make sure the cable isn't a tripping hazard.

If you do decide to have Ethernet cabling instead within the walls of your residence, make sure the cable specification is at least category 5e or higher. 5e or higher cable will be able to support gigabit Ethernet connections. Hopefully, your router has gigE Ethernet ports and not the much slower and older 10/100 Mbps Ethernet ports.

Another alternative is to purchase Ethernet over Powerline adapters such as the TP-Link AV1000. You can get a set of adapters from Amazon for around \$50. Basically, you plug one adapter in an electrical outlet near the router and connect a patch cord from the adapter to a router port. Plug the second adapter in an electric outlet near your computer and connect a patch cord from the adapter to the Ethernet port on your computer. The adapters communicate with each other over the electrical wiring in your house.

If you decide to go with another manufacturer instead of the recommended TP-Link model, make sure the adapters support 10/100/1000 Mbps connections. Don't get one that only supports 10/100 Mbps connections as those will most likely be slower than your already congested Wi-Fi network.

We have had many people tell us that using an Ethernet over Powerline adapter "changed their lives." Even though Ethernet over Powerline adapters work very well for most installations, it is not guaranteed to improve your network speed. You can always return the adapters if they don't work with your wiring. For \$50 you really can't go wrong.

A more expensive alternative to increase your network speed is to upgrade your Wi-Fi network. Replace your Wi-Fi router with a Wi-Fi 6 device. Wi-Fi 6 has improved security, greater capacity (can handle more connected devices) and speed. If you're looking to improve the coverage area for your Wi-Fi network, investigate upgrading to a mesh network. We did – and it made a world of difference!

If you have tried our various suggestions and are still “bandwidth challenged,” you may need to increase the speed of your internet connection to the outside world. Depending on where you live, your options may be limited. There are still parts of the country that are limited to DSL or dial-up access. You are not going to be very successful with either type of connection.

Hopefully, you have some form of broadband access. Internet via your cable provider is very common. Some cable providers can now achieve gigabit (or something very close) speeds. One caveat. The advertised speeds from cable providers are for download speeds. In other words, if you upgrade your internet connection to a 500 Mbps service, you can expect to get up to 500 Mbps for your downloads. However, upload speeds are significantly slower. Your 500 Mbps connection may only support 35 Mbps upload speed. Big difference.

If available, an alternative is to go with the Fios service from Verizon. Fios is close to the same speeds up and down. Fios is also delivered to your router over fiber optic cable instead of the coaxial cable used by cable companies. The gigabit offering from Verizon is up to 940 Mbps download speeds and 880 Mbps upload.

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