Best practices: How to Optimize Internet Speed

A strong internet connection.

- Ethernet wired cable connection is preferred (if possible)
- Options like USB Wifi adapters and Wireless Range Extenders can help extend wireless signals.
    - there is a certain optimal range that the wireless signal can travel

How fast is your internet speed?

- Check what internet speed package you have with your Internet provider
- Check your speed with https://www.speedtest.net/ on your computer
    - For example if you have Verizon Fios 200mbps plan but only getting 100mbps, you can check the following suggestions below.

Update Your Router Firmware

- Perhaps your router just needs an update. Router manufacturers are always tweaking software to eke out a bit more speed. How easy—or how hard—it is to upgrade your firmware depends entirely on your device manufacturer and model.
    - You can find your router admin credentials on the actual router as well.
    - How to access your router's settings

Placement and Setup

- You need to consider where you'll place your router. Finding an open space toward the center of your residence is the best way to ensure optimal coverage. Be aware that walls and floors will impede Wi-Fi signals, so the more obstructions you have between your devices and your router, the weaker (and potentially slower) the signal will be. Try to avoid proximity with large metal, glass, brick, or concrete objects.

What's your frequency?

- If you have a dual-band router, you'll likely get better throughput by switching to the 5GHz band instead of using the more common 2.4GHz band.
    - Not only does 5GHz offer faster speeds, but you'll likely encounter less interference from other wireless networks and devices, because the 5GHz frequency is not as commonly used. (It doesn't handle obstructions and distances quite as well, though, so it won't necessarily reach as far as a 2.4GHz signal does.)
    - 5GHz has a shorter range than 2.4GHz