

# COMPUTER GURU

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Technology Lab Programs sponsored by: Novi Wealth Partners

## Your Internet Connection

Now that the world has moved online, it may be time to revisit your internet service.

Until now, most of us have relied on the internet primarily to import information from websites, receive email, and stream video from YouTube and Netflix. If you can watch an online video without your computer pausing the action every few minutes, your internet service probably has reasonably fast download speed—at least twenty-five megabits per second.

On the other hand, most folks don't usually upload a lot of data. When you browse Amazon for a new doo-dad, you want Amazon to show you lots of different doo-dads quickly, and that requires a fast download speed. Selecting and ordering the doo-dad doesn't require a fast upload speed because you're not sending a lot of information to Amazon.

Then you started using Zoom, and maybe even hosting zoom meetings. You turned on your computer camera and microphone and started uploading lots of data to the Zoom servers so others could see and hear you.

And sometimes it didn't work. Maybe the other Zoom participants couldn't hear you, or your voice sounded like a chipmunk. Or your picture seemed to freeze on their screens.

Videos are among the most data-intensive of all internet services, and you need a fast upload speed to reliably support your participation in Zoom meetings. If others tell you that your presence in Zoom meetings is less than "smooth," there are three things you need to check: 1. The location of your WiFi router, 2. Your internet service speed—both upload and download, and 3. The speed of your computer.

### 1. WiFi Equipment

If you're using a laptop or mobile device, then you're using a wireless (WiFi) network in your home to connect those devices to the internet, and it's critical that your WiFi router not be hidden behind other equipment or inside a cabinet. Ideally, your WiFi router should be as near your mobile devices as practical and easily visible. On top of a bookshelf or your desk or table are ideal locations.

### 2. Your Internet Speed

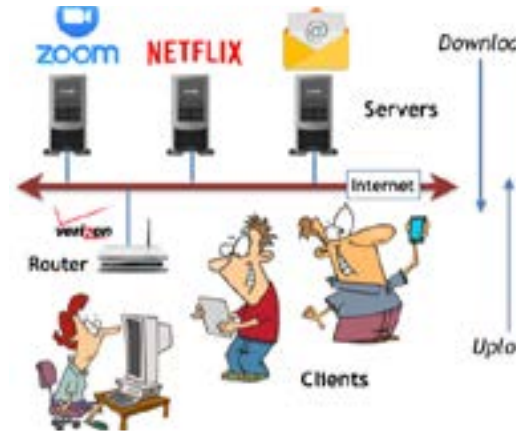
To check your internet speed, I suggest using the Ookla test site at [www.speedtest.net](http://www.speedtest.net), which will measure both your download and upload speeds. Zoom claims you don't need more than a two megabit interconnection, but I don't agree. Twenty-five megabits for both download and upload is probably closer to what you need, and probably higher if you are sharing your internet connection with others in your household. If you are using WiFi, then you should conduct this test next to the router and again wherever your computer or mobile device is usually located. The difference will tell you whether you need to move your router.

### 3. Computer Speed

Computer speed is a tricky thing to test without using a "benchmarking" program that most folks don't have. (I don't.) My general rule of thumb is that you need at least a quad-core processor and 4 gigabytes of random access memory. We can help you figure this out.

If you need technical help, please contact us at [princetonsenior.org/psrc-tech-resources/](http://princetonsenior.org/psrc-tech-resources/).

To check your Internet speed, go to the [Ookla test site](https://www.speedtest.net).



*Most internet service emphasizes download speed because we normally don't upload much data to a server. Until Zoom entered our lives.*