



### Engage. Empower. Elevate.

Transitioning to work from home can be challenging during any time. But throw in the Covid-19 Virus, and it makes things more difficult because the state mandates we must adhere to social distancing orders. So, I'd like to offer some technical tips to make your new home office, more like what you're familiar with, and increase your "LTQ" (Langston Tech Quotient).

When most of us are working from home at the same time, internet speed is bound to be an issue. Your internet connection that worked perfectly, for streaming Netflix on the weekends or your kid's video games, may not be able to handle your new workspace.

As a foundation, think of internet connections as a pipe that has two sides of data flow. The upload or outbound, and download or inbound speed. The latter, download speed, is what's touted by the Internet Service Providers (ISP), like Spectrum, Frontier or AT&T, to lure you into buying from them. But the upload capability is generally a small fraction, like 10% of the download speed, unless you specify otherwise.

Being connected to the world through home internet can be frustrating when your connection is slower than the office. This can be for two reasons. Either, your ISP is just configured at a slower speed. Or, your home speed is reduced by a slow Wi-Fi conversion from that connection. The solution is two-fold. Well, maybe three-fold.

- First, determine what your upload and download home internet speed actually is, by running this free [SpeedTest](#) app. Make sure to install it on the actual devices you'll be using at home. Simply click Go, and it'll test both upload and download speeds to give you a baseline.
- Once you know the download speed, determine if that's sufficient for your needs by going to customary business websites and downloading files. If the performance is slower than expected, call your ISP and upgrade your internet speed. The costs have reduced substantially, so I'd recommend at least 300 to 500mbps (megabits per second), which costs about \$30 to \$40 a month.
- Then determine if your existing upload speed is sufficient by uploading large files or stream video content. If the performance is slower than expected, and it probably is, call your ISP and upgrade your upload internet speed. The costs would be bundled into your overall ISP price.
- Lastly, if you're using Wi-Fi as a primary source, understand that it is generally 60% of the wired ethernet speed the ISP delivers to the router (a box allowing internet connections to your devices). And the signal degrades as you move farther away from the router. So, the 60% could be further reduced to 10% in certain home configurations. The solution, extend your Wi-Fi signal at the same incoming router speed by installing a MESH system, made by ORBI or Nest. I bought an [ORBI](#) from BestBuy and it was very easy to install. Now, I know you're rolling your eyes. But it really was. And it gives me a relatively consistent Wi-Fi signal throughout the house.

These steps are designed to ultimately deliver the same quality of service your clients have come to expect, albeit remotely, and increase your LTQ. In future articles, I plan to discuss; how to improve your computer's performance, setting up a home video studio, and video conferencing. However, if you have other specific ideas for articles, please let me know. [Contact Mark J. McLaughlin at [mjm@cf-intl.com](mailto:mjm@cf-intl.com)]