Slow Internet Experiences Will *Never* Go Away
## *No Matter How Much Bandwidth You Pay For*

It's one of life's aggravating moments - waiting for a web page to load as you watch your browser's progress bar crawl across the screen at a snail's pace. You think to yourself, *"if only I had more bandwidth, this wouldn't happen."*

Everyone has had experiences with slow internet, but do you know what can cause them?

Slow internet does not always mean you need to buy more bandwidth, although that's often a simple explanation that Internet Service Providers (ISPs) default to **so they can charge you more**. In reality, your internet connection's bandwidth is only one of many factors that can cause a momentary or prolonged slowdown in internet speed.

Every time you access something on the internet, a signal is sent from your device, over your Local Area Network (LAN), across your internet connection to your ISP's equipment, through a network of servers and switches broadly referred to as "the internet", where it is handed off to the content provider's ISP, and finally to the content provider's servers where the information (voice/video/data) you were trying to access resides. Amazingly, when everything is working smoothly, this all happens within milliseconds.

Here are ten points along your internet path - an issue with any one of which will cause a slow internet experience:

Your Local Area Network (LAN)		The Public Internet	Host Server
Inside Your Building		Outside Your Building	
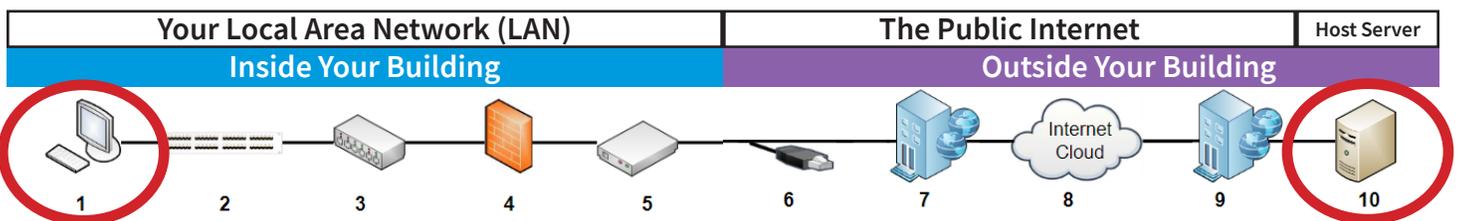
Your Local Area Network (LAN)
1. **Computer**
   - Too many programs running
   - Infected with malware
   - Inefficient or improper configurations
   - Not enough processor/memory resources
2. **LAN Cabling**
   - Damaged cable or jacks
   - Loose or faulty connections
3. **Ethernet Switches**
   - Inefficient or improper configuration
   - Not enough processor resources
4. **Firewall**
   - Inefficient or improper configuration
   - Inadequate processor/memory resources
   - Overly aggressive anti-virus settings
5. **Router**
   - Inefficient or improper configuration
   - Inadequate processor/memory resources

The Public Internet
6. **Your Internet Connection**
   - Not enough bandwidth
   - Errors on copper, cable, or fiber loops
   - Unreliable connections
7. **Your Internet Service Provider (ISP)**
   - ISP's processor overloads
   - ISP's overly aggressive virus/SPAM filtering servers
   - ISP's other customers consuming large amounts of bandwidth
8. **The Public Internet**
   - Processor overloads
   - Congested paths
   - Data packet paths can vary by time of day
9. **Content Provider's ISP**
   - Content filtering servers overloaded
   - Other customers spiking bandwidth

Content Host's Server
10. **Host Content Provider's Server**
   - Processors, operating system, or application overload
   - Configuration not efficient