



Why Does My Internet Connection Appear to be Slow?

Speed vs. Bandwidth
Device Factors
Online Activity Factors

Following is the Video Script for [Why Does My Internet Connection Appear to be Slow?](#)

Have you ever wondered why your internet speed is slower sometimes and faster others?

- Let's start with the basics to better understand what could be causing the appearance of a speed slow down.
 - Internet Speed is how fast data can travel to a single device connected to your network.
 - Bandwidth is the total set amount of data that can travel through network to multiple devices at any one time.

Think of Speed and Bandwidth as cars on a highway.

All "vehicles" or "data" travel at a fixed speed down a single lane road. One car can travel from point A to point B at maximum speed.

If you increase the traffic on that road, things slow down. If you have a wider road, essentially more lanes, more cars can travel at a faster speed.

Let's say a one lane road is equal to 1 Mbps (megabytes per second) of data speed. If you are trying to download an image / that is 5 mb in size / it would take 5 seconds to download that image on a 1 Mbps bandwidth.

Now, let's say you are trying to download the same image with a 5 Mbps of bandwidth per second. Essentially a five lane highway, it would now take just one second to get your image.

What if you are using multiple devices on your network? Think of it like driving in rush hour traffic as opposed to off peak traffic. The more traffic on the road, the slower you go or in this case, the slower you are able to download data. It's only with less traffic or having a wider road that you can increase your travel speed.

The same is true for data traveling across your internet connection. Either you need to limit how much data you are attempting to send and receive in other words limit the number of devices that are connected as well as limit what those devices are doing or you need to increase the "road size" the bandwidth size that your data is traveling across.

What factors can affect your internet speed?

- **The number of connected devices**
 - As with a congested highway, the more vehicles traveling on that road, the slower you go. It is the same with your bandwidth. If you have five devices with each one running multiple applications all of them pulling from the same minimal internet source then you will begin to experience a data backup resulting in buffering, long wait times and freezing.
- **What types of connected devices can affect your network and cause the appearance of slower speeds**
 - Cell Phones and tablets for starters. Mobile devices continually search for updates even when you are not actually using them. That background activity requires bandwidth.
 - Gaming Devices like Playstation, X-Box and Wii can also continually use bandwidth if left connected to the Internet.
 - Video and TV streaming devices like
 - Smart TVs, DVD Players, Roku or Amazon Fire systems can also continually use bandwidth even if you're not watching TV.And of course and connected desktop or laptop computers will also have an impact.
- **What speeds are recommended for certain online activities?**
 - When it comes to video and TV streaming, to get the best results Netflix, Amazon or Hulu need a minimum of 5 mb of internet speed. They want a dedicated 5 mb of bandwidth that is not being shared with any other device or application to insure that you don't experience buffering or freezing.
 - These streaming applications are beginning to require increased bandwidth speeds due to more and more movies being displayed in HD.
- **When running Remote Access Applications like Team Viewer, Remote Utilities or UltraVNC you will need more bandwidth**
 - It is recommended to have a minimum of 6 mb per second to run Team Viewer without any other application sharing that bandwidth.
 - Team Viewer's running ability will also be affected by the internet speed on the other end - if the PC you're remoting into has a slow connection you will experience lag on your end too.
- **What other factors can have a negative impact on your internet experience?**
 - The signal strength of your wifi can make a huge difference when downloading or streaming. A weak wifi signal do to distance from the router or physical obstructions like walls or furniture can reduce the signal and slow the flow of data.
 - A weak wifi signal can also occur do to materials used to construct your house. Steel sidings and IFC walls often have a negative impact.
 - The age of your device can have an impact. Older devices with outdated software and hardware components do not properly connect to newer routers that operate with newer technology.
 - Devices that are infected with viruses also can cause the appearance of slower speeds.

To determine your actual internet speed, you need to take all of these things into consideration.

Keep in mind when it comes to trouble shooting internet issues, every single household is different.

If you are experiencing internet issues, go through the following check list.

1. How many devices are running on your network?
2. What is each device attempting to do?
3. Try using another device to see if it the problem is the network or just that device?
4. Move your wifi connected device closer to the router to see if the signal strength or speed increases.
5. Run a speed test using speedtest.net or speakeasy.net/speedtest on multiple devices to determine if it is your device or the actual internet connection.

You can find a quick link to speedtest.net at the bottom of the Sytek website.

Our goal at Sytek is to provide excellent internet service.

If you have tried all the troubleshooting methods in the checklist and still feel your internet is running slower than it should, please call our office at 320-573-1390 or send an email to sytek@sytekcom.com so we can know about it.

If we don't know there is a problem, we can't fix it!

Sytek ~ We never forget we are working for you.