# VPN Slowing Down Your Internet Speed? Here's the Truth and Simple Tips to Speed up Your Internet

by Mary Wecker

A Virtual Private Network (VPN) is an easy-to-use tool to protect your online security and privacy and hide your real geographical location so that all your online activities can be perfectly hidden from spying eyes or hackers.

However, it's usually asked that "Will VPN slow down my Internet?" or "Does using a VPN have an effect on the Internet speed?". Sometimes, it seems that once a VPN is connected, the Internet will run slowly. Is that true?

Well, as a VPN is used on your device, it possibly seems that your Internet becomes slower since a VPN server is in a way from your device to the Internet. However, the truth is there's no direct connection between using VPN and slow Internet. Then, **what on earth leads to a slow Internet** through a VPN connection? In this article, we'll show you why your Internet speed is slow, and **how to speed up your Internet with a VPN used**.
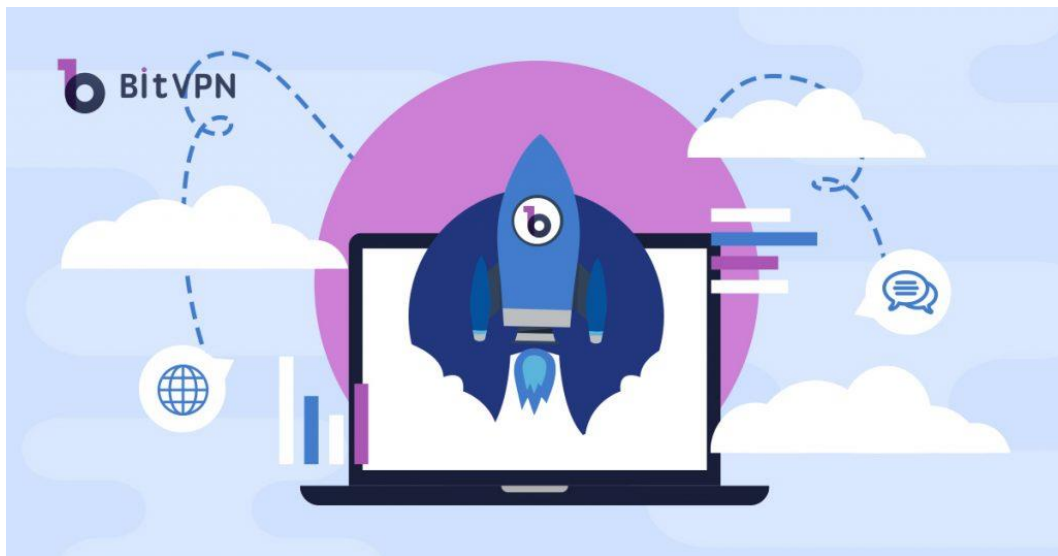
Let's Define Two Types of Slow VPNs

To clarify this discussion, it's necessary to define what is a "slow VPN".

Slow VPNs can be understood from two dimensions. On one hand, a slow VPN refers to a VPN that takes a longer time to be connected with a VPN server. On the other hand, a slow VPN refers to a VPN that seems to slow down your Internet as soon as the VPN gets connected.

For the former situation, it is mostly correlated with the performance of a VPN service. If a VPN is slow to connect, it's time to drop it. For the latter situation, it's always complained about by VPN users. Therefore, whether a VPN causes a slow Internet is what is to be discussed below.

Does a VPN Cause a Slower Internet Connection?

In short, it shouldn't. But it possibly can.

First of all, **a VPN is not created to slow down your connection**. Contradictorily, it aims to boost your internet connection by avoiding bandwidth throttling and deploying more efficient routing.

Avoiding Bandwidth Throttling

Your bandwidth is limited by your Internet Service Provider (ISP). That's a fact, no matter what they claim in their advertising. As soon as you use the Internet, your ISP will track you. Perhaps they don't intentionally do but they really can.

Your ISP can monitor your bandwidth usage, looking for extraordinarily high levels of data transmission as you stream video, download large files, torrent, or play online games. Most of the time, you'll stay within your allowance, but if you want to do more than one of those things at a time or have multiple users hooked up, you can easily exceed it. Instantly, your ISP will know and throttle your bandwidth, causing videos to switch to the low-resolution mode or to suffer from buffering and video games to lag. When a VPN is used for your Internet connection, however, your ISP cannot check your bandwidth usage. And that means you'll slip right past their bandwidth throttling measures.

So, **a VPN connection doesn't genetically slow down your Internet speed** while it provides you unlimited bandwidth and accelerates it.

How routing works, and how to make it more efficient

Routing is an automated process of selecting the path of traffic in a network or across multiple networks. When it comes to the Internet, ISPs distribute traffic to different servers in different places.

VPNs allow you to use any server around the world to get connected to the Internet. Connecting to another VPN location can completely change the path your traffic takes, and if the new path is more efficient, you can increase your internet speed dramatically.

So, **different VPN server locations lead to different Internet speeds** and don't make a conclusion too quickly when only a slow VPN server is met.

Can a VPN Slow Down Internet Connection?

It probably can. However, your Internet speed is affected by multiple elements even though a VPN isn't used.

Your Network Speed

No matter how fast a VPN connects, it's always limited by the speed of the network that is used to get access to the VPN server. If you have only a network speed of 10mbps, you cannot expect a VPN-based internet connection speed reaching or exceeding 50mbps.

Geological Distance

Geological distance is one of the leading causes to slow down the internet speed. It sounds obvious, but a longer distance makes data travel farther and for a longer time to the target server, meaning that uploading and downloading will be slower and the more time it takes the data to travel. A VPN with a poor choice of server locations could mean your data is traveling further, slowing you down.

Server Bandwidth

How crowding the VPN servers are directly determines how fast servers can react. If 100 people share a server with 1000mbps, the average bandwidth each individual can obtain can't exceed 10mbps. And that's a very slow connection! If the VPN server has a higher bandwidth, then 100 people can easily use it and receive a high speed.

Server Load

The bandwidth of a VPN server determines how many people can use it at the same time. And a high server load – that's basically a large number of people doing data-intensive activities – will slow down the connection. And they could even break it. That's not a VPN exclusive problem, it's a problem with any internet connection.

Encryption Extent

One of the great things about VPNs is that they provide data security through high-level encryption. However, encryption insertion needs processing time. Both encryption and decryption need more processing time on either the device or VPN server. The higher the level of encryption that is performed, the slower the internet connection will possibly be.

VPN Protocol

This gets a little complicated, but VPNs can use two types of protocols. One is TCP, which is a connection-oriented protocol. The other is UDP, which is a connection-less protocol. The

former establishes a connection between the sender and the receiver before any data is transmitted. The latter establishes a connection before sending data. Which protocol your VPN uses directly affects encryption extent and will slow down the internet connection. UDP protocol is usually faster than TCP protocol because the former won't force servers to verify the receiving of all the data packages and to retransmit lost data packages.

How to Increase the Speed of Internet Speed with a VPN Used

Opt for Higher Bandwidth Speed

As is discussed above, if you have a slow network speed, even if the fastest VPN is used, you can hardly expect a high speed of internet connection. Therefore, it's fundamental to opt for a network service with a high speed, based on which, a high VPN connection speed can be expected.

Carefully Check Your Network Connection

Make sure your WiFi connection runs smoothly. If you have weak WiFi signals, your VPN won't work as well. In fact, the internet connection in general won't work well even without a VPN. Stay close to your WiFi router for optimal connections.

Choose a Decentralized VPN

A decentralized VPN is based on blockchain technology that covers a wide range of nodes on the Internet. The nodes share their extra bandwidth to help VPN users to transmit their data. Moreover, a decentralized VPN features the most security than a centralized VPN due to its "DNA". Users' data won't get leaked under a decentralized structure.

Change to Nearer and Faster Servers

Choose the servers that are close to your geological location and you'll get a faster connection to the internet due to low delay. Moreover, changing to another server with higher bandwidth possibly allows you to avoid the crowding issue.
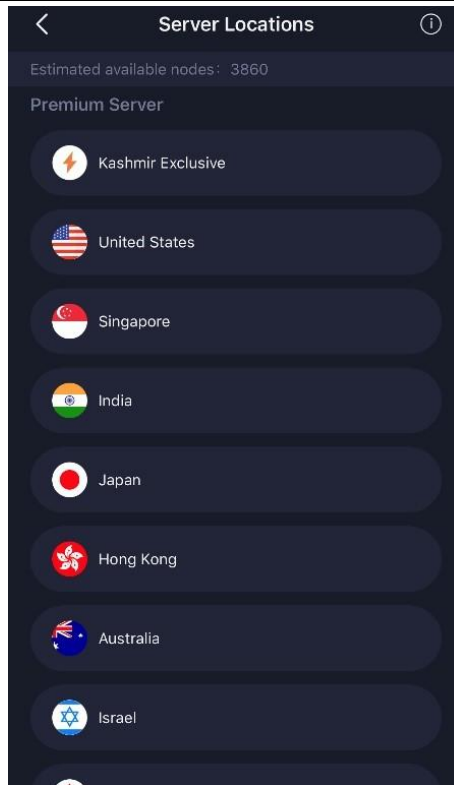
Select Specialized Servers

The best VPNs provide different types of VPN servers classified into different categories to deal with specialized connection requirements. Therefore, it's a good idea to connect to a specialized server based on your unique demands. For example, on the list of SkyVPN servers, there are UK-Netflix and US-Netflix servers. Certain VPN servers should be used based on your location and purpose. Another example is a Kashmir Exclusive server developed especially by BitVPN to fight against the lock-down situation in Kashmir. The specialized VPN servers definitely bring forward higher connection speed to the internet.

Change VPN Protocol

VPN software gets you to access the internet through particular protocols, UDP, or TCP as discussed. Some networks limit the speed of some protocols. Therefore, protocols can be modified if you suffer from the low-speed connection until an optimal connection can be achieved with the highest connection speed.

Use a Wired Connection

Your internet connection speed may be limited by Wi-Fi connection because wireless connection depends on shared channels and data is transmitted between multiple devices, which will possibly lead to delays and low connection speed. Wire connection usually supports higher speed than a WiFi connection.