

Increase in teleworking poses challenges for state VPN network

Most state agencies have rapidly shifted toward teleworking to keep employees safe and help slow the spread of coronavirus (COVID-19). This shift in how we do our jobs poses challenges for the state's network resources, so strategies are needed to mitigate impacts on those networks.

When we log onto our computers at work, we are logging onto the State Government Network (SGN), which provides us access to other computing resources we need to do our jobs (e.g. shared files, access to applications, etc.). When we're at work, we are connected to the SGN through the direct connections we have in our buildings.

When we're not at work, but are teleworking from a different location, we connect to the SGN through outside internet connections (public Wi-Fi, home Wi-Fi, mobile hotspots, etc.) using a WaTech service known as Virtual Private Network. VPN allows authorized users to connect securely to the SGN. VPN also encrypts all data passing through these outside internet connections between our computers and the SGN to protect that information from malicious intent.

The number of connections the state's VPN service can support at any given time (concurrent connections) is limited. As you might imagine, the increased need for teleworking spawned by the COVID-19 outbreak could push the VPN system to its limits. In the past, WaTech was able to support around 15,000 concurrent connections. But as teleworking has expanded rapidly across state government, WaTech has purchased more capacity and now can support about 40,000 concurrent connections.

Though this is a significant increase, it is important that we all do our part to limit the impact on the VPN environment during this time of increased teleworking.

When teleworking, do I need to be connected through VPN all the time?

It depends, but in many circumstances the answer is no.

Unless you have a need to be continuously connected to the SGN, don't stay connected. One common misconception is that you need to be connected through VPN to work on Word documents, Excel spreadsheets, PowerPoint presentations or other such items. If your files reside on your shared network drive or somewhere similar that is on "the network," the best practice would be to:

1. Connect through VPN
2. Access the file you need and save it "locally" to your computer, such as your documents folder
3. Disconnect VPN and work on your document offline

By doing this, you are now working on a "local" copy of the item. Once you are done and wish to save the item back to your shared folder (or other "on network" location) you would:

1. Connect through VPN
2. Save the file to the "on network" location, such as your shared folder
3. Disconnect VPN
4. Remember to delete the "local" copy of your document to avoid creating a separate public record.

What other circumstances do not require a constant VPN connection?

There are many and it depends on your specific need, but some examples would include:

- Watching videos for training. If you are accessing sites such as PluralSight or Lynda.com, it is not necessary to be connected through VPN as these sites are “cloud” sites, outside the SGN.
- Many Skype/GoToMeeting/WebEx/Zoom/etc. calls. Most of these types of calls can be accomplished without connecting through VPN. For example, VPN is not required for Teams Meetings. If an employee attempts to log into Teams Meetings from outside the SGN without a VPN connection, they will be prompted for authentication. But they will be able to get in by logging on manually, as opposed to automatically being signed in as they would at work.
- If you only need sporadic access to your email, you should only connect to VPN as needed for that. Also, if you have a state-issued work cell phone, you can access your email that way.

What are some circumstances where VPN is necessary?

In general, whenever you need to access resources that are “on the network,” you will need to connect through VPN. Examples include:

- Access to business applications such as HRMS, AFRS, etc.
- Training through the state’s Learning Management System (LMS), which sits on the SGN.
- Editing an agency website.
- If you do not have a state-issued work cell phone and require constant access to your email, then you will need to be connected to VPN.

As always, if you have questions concerning VPN usage, please contact your agency IT team.