# Reduce Network Overhead When Working Remotely

Having network connections on your computer *that it cannot find* causes your computer to perform very poorly. If your computer is performing tasks very slowly or you are having trouble getting logged onto Always on VPN with a network connection, it may be because your computer has too many connections to the network that aren't available. Reducing the number of those connections will help – read on.

Symptoms of network overload include:

- Inability to connect using Always on VPN.
- No F: drive showing in the File Explorer under This PC – you may see only OSDisk (C:).
- The File Explorer displays a blank screen with a green progress bar creeping across the address field.
- The computer "freezes" in the middle of commands and makes you wait for 30 seconds before continuing.
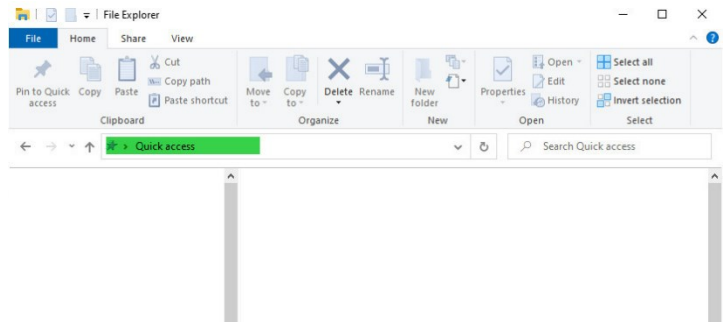
Remove Mapped Drives and Replace with Shortcuts in a Desktop Folder

If you have drive letters that are mapped to servers or other computers, your computer is busy trying to make those connections when it should be logging you on! Disconnect mapped drive letters after F: and replace them with shortcuts. Leave the F: drive alone – the logon script (when operating correctly) will map your F: drive.

Here's how: Open the File Explorer and wait until it displays the contents of This PC. Take a screenshot of your mapped drives or record them in a document saved on your desktop. Then, right-click on every mapped drive letter after F: (leave C: through F: alone!) and choose Disconnect from the right-click menu. When you re-open the File Explorer, it will open more quickly. Replace any previously mapped drive with a shortcut inside a folder on your desktop (see the next section).
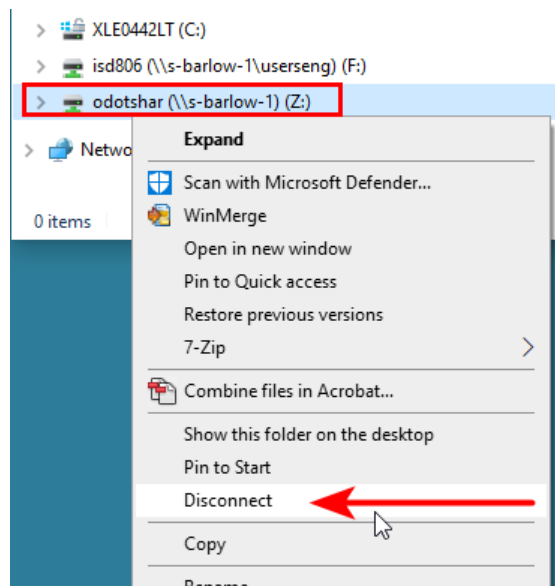
Please contact the ODOT Computer Support Desk when you get connected if you need assistance creating shortcuts from your screenshot.

Move Desktop Network Shortcuts into a Desktop Folder

Shortcuts on your desktop that access the network, are communicating with the network *while you are logging on*! When they can't find the network, that constant communication drastically slows your computer down. Moving the network shortcuts into a folder, essentially hides them from your computer during log on.
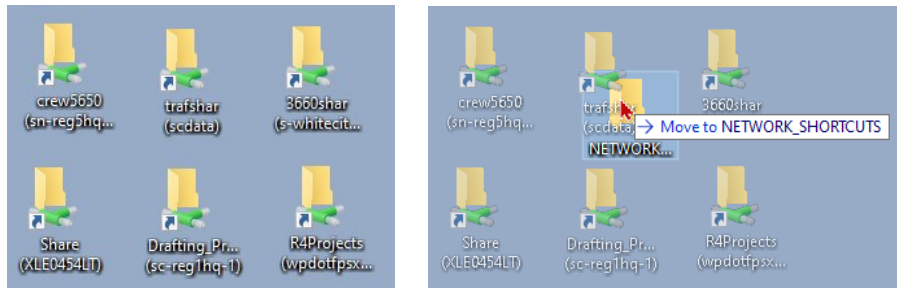
Drag any network shortcut into a folder, perhaps named NETWORK_SHORTCUTS.

Create new shortcuts from your previously mapped drive locations, but inside the NETWORK_SHORTCUTS folder. Your system will not allow you to create a shortcut to a location your computer can't connect to.

Unpin Quick Access Pins to Network Locations

Quick Access Pins to server locations may also slow your computer down during log on. If you have a network location pinned to Quick Access, you may see the File Explorer display a green progress bar as it attempts to resolve Quick Access locations first. Locations that point to your own C: drive will not cause slowness when working remotely. Create shortcuts in your NETWORK_SHORTCUTS folder on your desktop and pin only the NETWORK_SHORTCUTS folder to Quick Access. "Unpin from Quick Access" is on the right-click menu for removing any network pins.

## Remove Printer Connections that are on the Network

If you have network printers that your computer is trying to connect to, those can also interfere with your ability to log on. Open your **Printers & scanners** dialog, select printers that begin with "PR" or "PL" and click [Remove Device]. While it is not necessary to remove all network printers, it is more efficient to leave only one network printer attached after ensuring that it does not report that it is offline or has errors. Offline printer connections slow your computer more than just about anything! Make your Default printer a digital printer, like Microsoft Print to PDF.
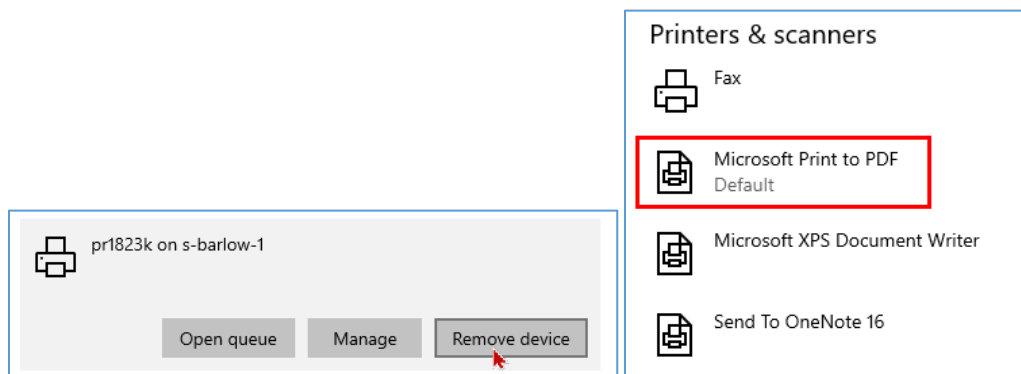

Outlook Web Access Instead of the Outlook Client

It is recommended to use Outlook Web Access instead of the Outlook program when working remotely. The Outlook client may maintain network connections to files in your personal server share and can put

unneeded stress on your network bandwidth. In addition, applications that open during your log on process can have a high impact on your computer's performance and cause difficulties and delays in making network connections. It is recommended that when working remotely you use Outlook Web Access as much as possible to stay connected via email, and only open Outlook if you require access to personal folders stored on your F: drive.
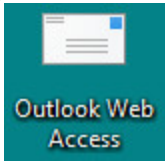
The Outlook Web Access shortcut (https://outlook.com/owa/odot.state.or.us) will connect you through your network browser (Edge or Chrome) to your Mailbox, Calendar, Contacts, and Tasks.
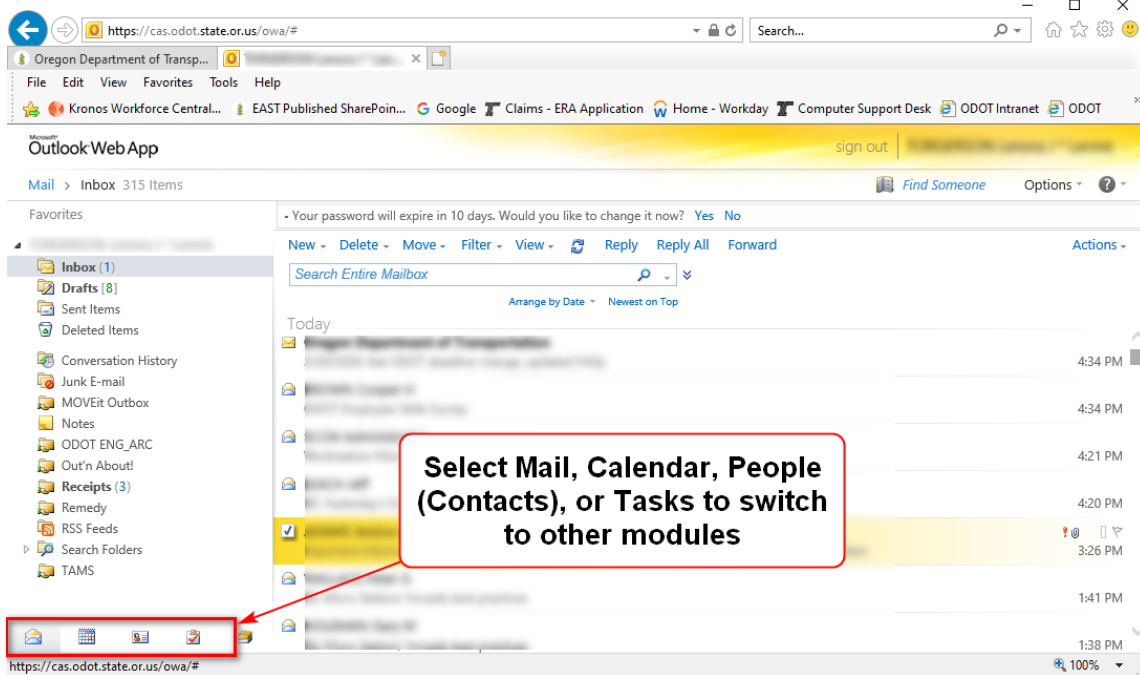
Outlook Client

If the Outlook program is set to open automatically, right after you log in, i.e., you have placed an Outlook shortcut in your "Startup" folder in your Windows profile, chances are good that it is adversely affecting your remote log in. Open File Explorer and type, or copy and paste, the following line into the address bar to open the Startup folder:

%AppData%\Microsoft\Windows\Start Menu\Programs\Startup

Delete the Outlook shortcut in your Startup folder, as shown in the picture below. Launch the Outlook client from your desktop shortcut only when you need access to personal folders stored on your F: drive.