Doctors Technology Office (DTO): Technical Bulletin
Win10 Settings to Improve Performance

DTO TB - #16-004	**Objective:** To understand which default applications can be set so that they do not automatically launch upon computer boot-up and the benefits of leaving your computers turned on 24/7.

Brief Description (Non-Technical):

Windows 10 updates and upgrades continue to impact clinics, most noticeably first thing in the morning:
- Many features you may not need or want are turned on automatically by default.
- These features are taking up valuable systems and network resources.
- Computers on a wireless network possess unique challenges during downloads and updates.

Potential Impact:

When limited computer resources such as memory and processing power are being unnecessarily used or reserved for unneeded applications, both network performance and workflow will be impacted. At best, a patient file will take that extra few seconds to load, or an appointment will take a bit longer to save as well as certain search or print jobs will require more time to complete. At worst, the computer or a network connection may be totally unresponsive.

Solutions to reduce computer and network resources:

- Turn off unnecessary applications.
    - o Turn them on when you really need them.
- Reduce the number of browsers that are opened.
- Leave your computers on overnight - *** turn off HIBERNATION or SLEEP features ***
    - o Off load required updates to non-business hour as much as possible.
        - ▪ Software applications such as Java, Acrobat, and Anti-virus can also update during non-business hours.
- Update laptops at home before connecting them into your office network first thing in the morning, perhaps. (Additional details are in the technical section on page 2.)

Background:

Many computers were/are automatically upgraded to Win10 once the minimum systems requirements are satisfied. A minimum requirement is exactly what you'll get after the upgrade - minimum performance. In addition, to improve user experience, Windows 10 automatically launches many applications upon boot-up. These applications running in the background are instantly available when needed; however, for those who do not need these applications, they are a waste of resources. These applications may also communicate with Microsoft via your network taking up valuable bandwidth that

should be allocated for your electronic medical record (EMR) software program.

Details and Additional Information (Technical):

Do you need your webcam on, do you use OneDrive or are you using Skype? Should Microsoft Store, Xbox or Twitter be running? Do you want Microsoft to track your usage so they can better tailor advertisements to you? The answer may be Yes or No. Either way, limited computer resources are being used up.

How to locate a list of these applications and services?

- Start reviewing the following list of services from:
  - < Windows> key – <Settings >– <Privacy> – <Background Apps>
- Continue to review from:
  - <Windows> key – <Settings >– <Privacy> – <Background Apps> – <Background Apps>

How to address the windows update over a wireless network issue – at your clinic.
A wireless update can potentially cripple your computer – during the process. Turn on metering, *for your OFFICE wireless network*, to better control bandwidth utilization and more. Setting your Wi-Fi to metered is site specific, network specific. *You MUST turn it on for any/all access points to avoid large download updates.* Priority security updates will still download as they become available.

- <Windows Key>—<Settings> – <Network and Internet> – <Wi-fi >– <Connected Icon> / <Metered (set to 'ON')>
  - Turning it on for your office wireless network connection does NOT mean you have turned it on for your wireless home connection.
  - With metering on, you can control WHEN and WHAT you want to download.

Key Item: (Large Cloud Storage CAN/ WILL at times saturate your network)

Microsoft Onedrive, similar to Dropbox, generally used via a "virtual Internet location".
- It can and will saturate your network, if a large amount of data is stored there.
- Consider turning it off if it is not needed.

Note:
Clinics are encouraged to contact their local IT to identify unnecessary applications before turning them off.

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