



Support Note

10 SEPTEMBER 2020

TRIMBLE RANGER 7 DATA COLLECTOR AND TRIMBLE TSC7 CONTROLLER: MANAGING MICROSOFT WINDOWS 10 UPDATES

Background Information

Microsoft® releases updates for Windows® 10 on a regular basis and every 6 months they will release a major update. These updates normally occur automatically when the device is connected to the Internet and can take a significant amount of time to download and install on the system. The Trimble® Ranger® 7 data collector / TSC7 controller can take 8 hours or more to complete a major update.

These updates can be an interruption to normal day-to-day work, but are required to ensure the ongoing security and reliability of the operating system. There are several options available within the OS that allow you to manage how and when the OS updates are installed, so that the updates can be installed at a convenient time.

Affected Units

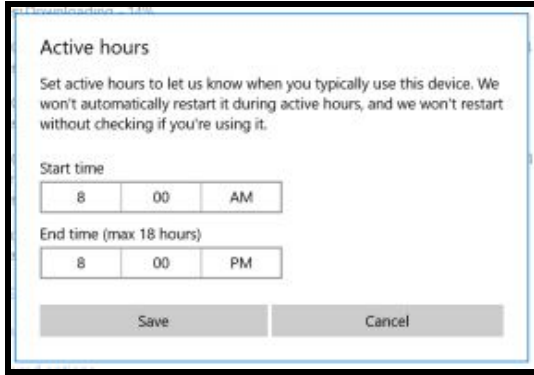
This support note applies to all Trimble Ranger 7 and TSC7 devices.

Windows Update Settings

The following instructions are based on the Windows 10 Pro 2004 release (also known as the May 2020 Update or codename 20H1). Other versions of the Windows 10 operating system may have slightly different options from what is outlined below. For more information, go to the Microsoft Support site (see links at the end of this support note).

Set Active Hours

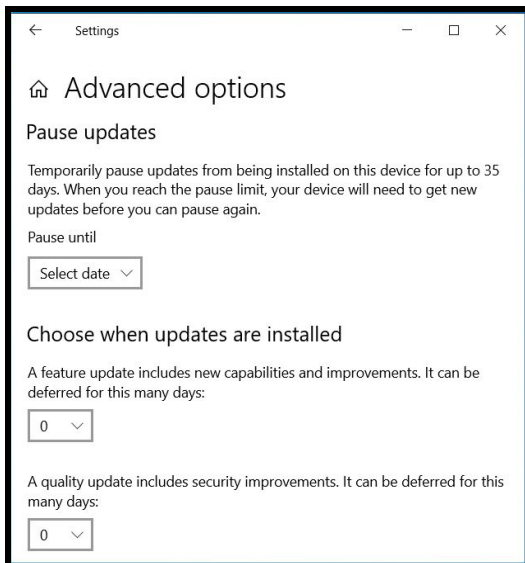
Navigate to **Settings > Update & Security > Windows Update > Change active hours** to set the time to when the device is typically in use. This will prevent the device from automatically restarting during those hours.



Delay Installation of Updates

There are several settings in **Advanced options** that allow you to delay the installation of updates. By delaying updates, and then manually forcing an update when it is convenient, you can better plan when the update is downloaded and installed, for example, over a weekend. Trimble recommends that updates are installed at least once every month. Be aware that many Windows 10 updates require a manual restart of the device to complete the installation, and it may take some time to install the updates after a restart.

To set advanced update options, navigate to **Settings > Update & Security > Windows Update > Advanced options**.

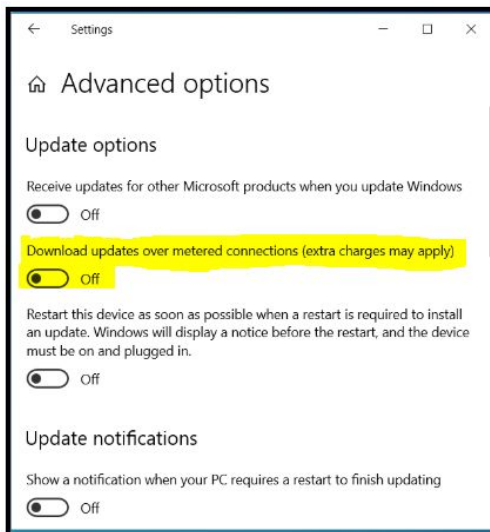


- **Pause Updates** – Temporarily pause updates from being installed for up to 35 days. When you reach the pause limit, your device will need to get new updates before you can pause again.
 - Select a date from the menu if you would like to temporarily pause updates
- **Choose when updates are installed**
 - **Feature Updates** are non-critical updates which include new capabilities and improvements that improve the overall user experience of Windows 10. These can be delayed by up to 365 days.
 - Choose the number of days you would like to defer updates from the drop down menu
 - **Quality Updates** include security improvement updates, and can be delayed by up to 30 days.
 - Choose the number of days you would like to defer updates from the drop down menu

Prevent Updates From Occurring

It is possible, though not always recommended, to prevent automatic updates from occurring by setting all the network connections as metered connections. A metered connection is an Internet connection that has a data limit associated with it. If your Internet provider limits the data you can use, or if you want to prevent Windows from consuming your bandwidth, especially on slower connections, make sure metered connections is turned **Off** in **Advanced Options**:

- Navigate to **Settings > Update & Security > Windows Update > Advanced options**.
- Make sure **Download updates over metered connections** is set to **Off**.



Setting a connection as metered disables automatic downloading of most Windows Updates as well as app updates from the Windows Store. It is recommended to set the connection to metered if you:

- have a SIM card installed in the Trimble device, and are using a cellular data connection.
- are tethering your Trimble device to a mobile hotspot for network access.

- have an Internet service provider which has bandwidth caps or limits data during peak hours of the day.
- have a slow Internet connection such as satellite or dial up.
- want to control updates and downloads and install them on your own schedule outside of working hours.

On devices such as the Ranger 7 / TSC7 with an integrated SIM, Windows 10 will automatically set the cellular data connections as metered. However, Wi-Fi, Ethernet and Mobile Hotspot network connections are not set to metered by default. Some apps might work differently on a metered connection to help reduce your data usage.

To set a Wi-Fi network connection as metered:

- Go to **Settings > Network & Internet > Wi-Fi > Manage known networks**.
- Select the **Wi-Fi network** name from the list of known networks.
- Select **Properties**.
- Toggle **Set as metered connection** to **On**.
- You may also set other types of network connections such as dial up or mobile hotspot as metered under **Settings > Network & Internet**.

Note that these settings only affect the current data connection; if you connect to a different network later on, you will need to set each new network as a metered connection. When the device is connected to an unmetered connection, the download will start automatically. Since the default setting for Wi-Fi is unmetered, downloads will start as soon as the device is connected to a new Wi-Fi network.

If you use this option, Trimble strongly recommends that updates are manually downloaded on a regular basis. Failing to do so means that critical updates, such as security updates, will not be installed, and the system will be more vulnerable to security threats.

While on a metered connection, Windows 10 will still search for updates, and these will be listed under **Settings > Update & Security > Windows Update** with a status of **Pending Download**, with an option to download over the metered connection. (Network fees may apply, especially with cellular connections. For this reason it is recommended that updates be installed when on a Wi-Fi connection, at your convenience.)

More Information

Contact your Trimble Regional Sales Manager or local Trimble Distribution Partner for more information.

For more information on Windows 10 updates go to:

<https://support.microsoft.com/en-nz/help/12373/windows-update-faq>

For more details on setting up the Windows 10 operating system, go to:

<https://support.microsoft.com/en-us/products/windows?os=windows-10>