

Spectronus™ Windows 10 Upgrade

Overview: The purpose of this document is to guide a customer through the upgrade process of their Spectronus™ FTIR instrument. The upgrade of the operating system from Windows 7 to Windows 10 is necessary because of the withdrawal of Windows 7 updates and support from Microsoft as of January 2020 when it reached End-of-Life.

It is recommended that before any upgrade is attempted that the customer has backed up any configuration data and sampled data on their system.

The top-level data directory for Spectronus™ configuration and sample files is located in file folder:
C:\ProgramData\Ecotech\Spectronus

Ensure that Windows 7 has been updated with all available updates, this will make the upgrade to Windows 10 faster and easier. All Spectronus™ FTIR instruments were released with the Windows 7 Professional 32-bit operating system, this upgrade to Windows 10 will result in the Windows 10 32-bit operating system being installed. A move to Windows 10 64-bit would mean a new installation of the operating system and the associated Spectronus™ software packages.

Please ensure that the Spectronus™ FTIR has a reliable internet connection during the upgrade. An 'offline' installation is possible but will not be detailed in this document.

Step 1

Download the Windows 10 installation media from the Microsoft website, the link to obtain the installation media is <https://support.microsoft.com/en-au/help/15088/windows-10-create-installation-media>.

It is recommended that the upgrade installation media is run directly on the Spectronus™ FTIR computer. If for any reason this is not possible then a USB flash drive media installation can be produced, those steps will not be detailed here.

Download Windows 10

Create Windows 10 installation media

To get started, you will first need to have a license to install Windows 10. You can then download and run the media creation tool. For more information on how to use the tool, see the instructions below.

[Download tool now](#)

[Privacy](#)

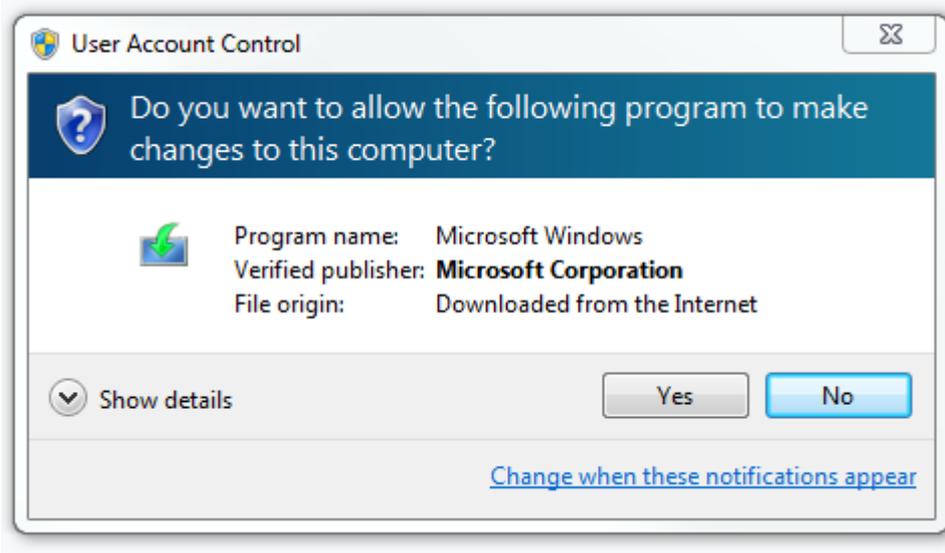


- [Using the tool to upgrade this PC to Windows 10 \(click to show more or less information\)](#)
- [Using the tool to create installation media \(USB flash drive, DVD, or ISO file\) to install Windows 10 on a different PC \(click to show more or less information\)](#)
- [More download options](#)

[Give feedback](#)

Step 2

Run the media creator installer.



Select Yes to continue with the installation by running the media creator installer.

Create installation media for Windows

Applies to: Windows 10, Windows 8.1, Windows 7

You can use installation media (a USB flash drive or DVD) to install a new copy of Windows, perform a clean installation, or reinstall Windows 10.

To create installation media, go to the [software download website](#), where you'll find step-by-step instructions. On that website, you can select a version of Windows and create your own installation media using either a USB flash drive or a DVD. To go directly to one of the versions, select one of these links:

- [Windows 7](#)
- [Windows 8.1](#)
- [Windows 10 \(Then select Download tool now.\)](#)

Important

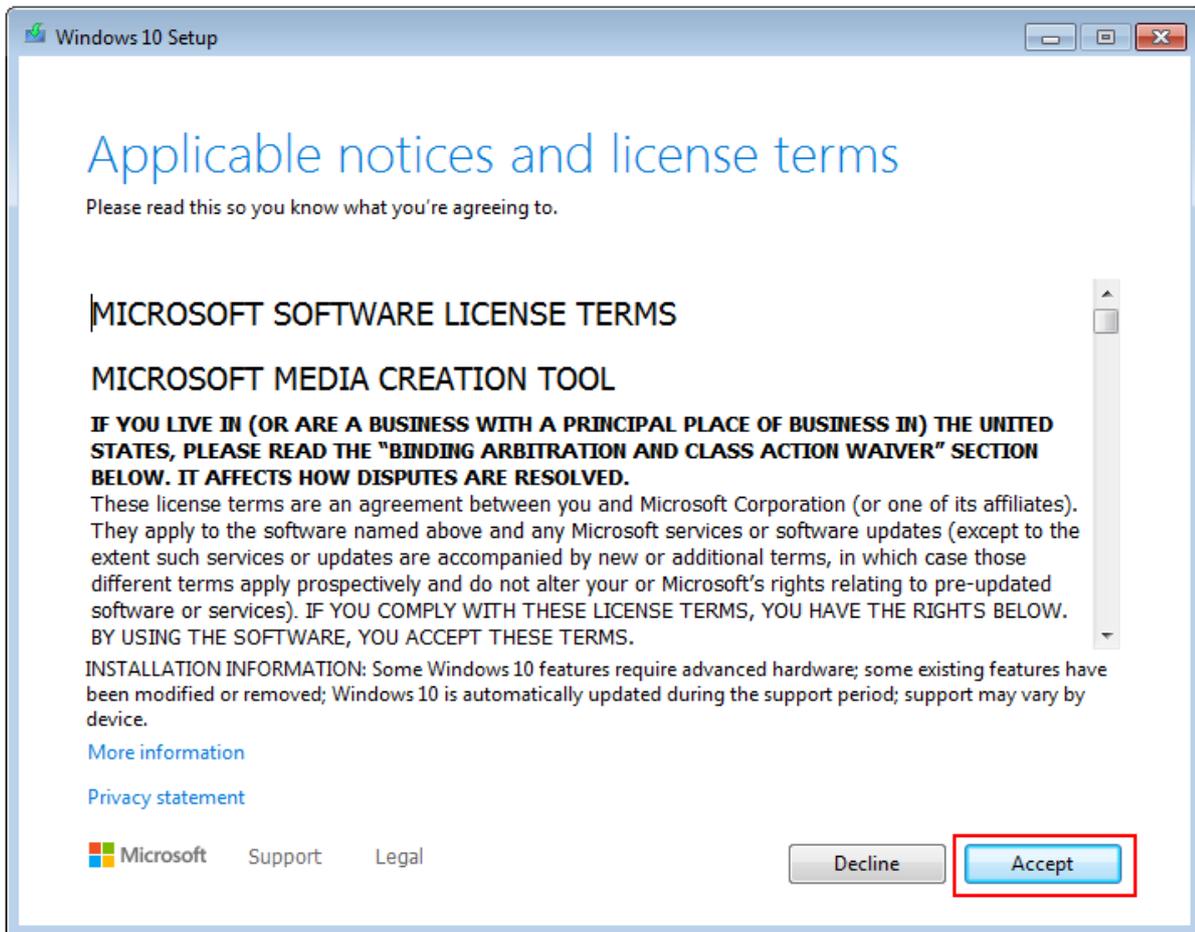
Back up your files before you install or reinstall Windows on your PC. Learn how for [Windows 10](#) or for [Windows 7](#) and [Windows 8.1](#).

To create the installation media, here's what you'll need:

- A PC with a reliable internet connection. The download time will vary, depending on your internet connection.
- A USB flash drive or DVD. A blank USB flash drive with at least 8 GB of space, or a blank DVD (and DVD burner). We recommend using a blank USB or blank DVD because any content on it will be deleted. When burning a DVD from an ISO file, if you're told the disc image file is too large, you'll need to use dual layer (DL) DVD media.
- A product key. Your 25-character product key (not required for digital licenses). For help finding it, go to [Find your Windows product key](#).

After you've created the installation media, you can reset or reinstall Windows. To learn more, go to [Recovery options in Windows 10](#).

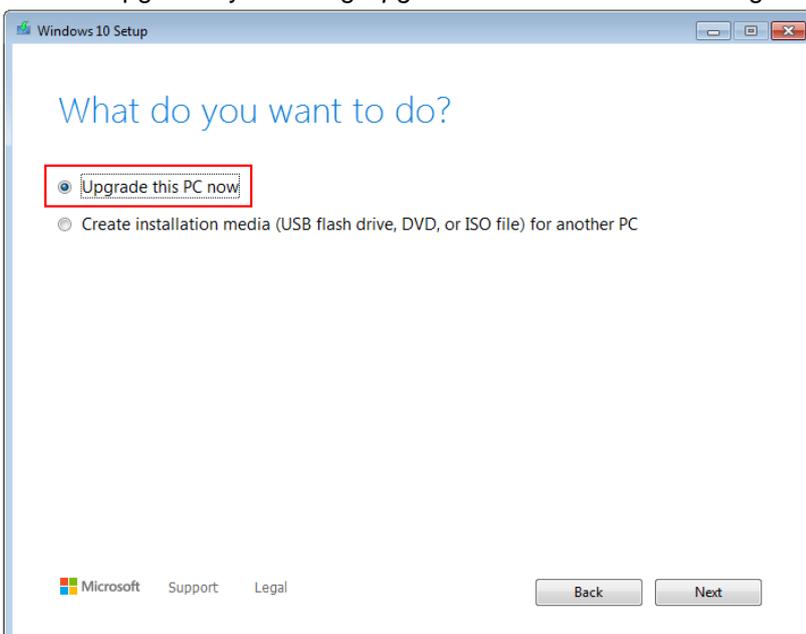
Select the *Windows 10* download.



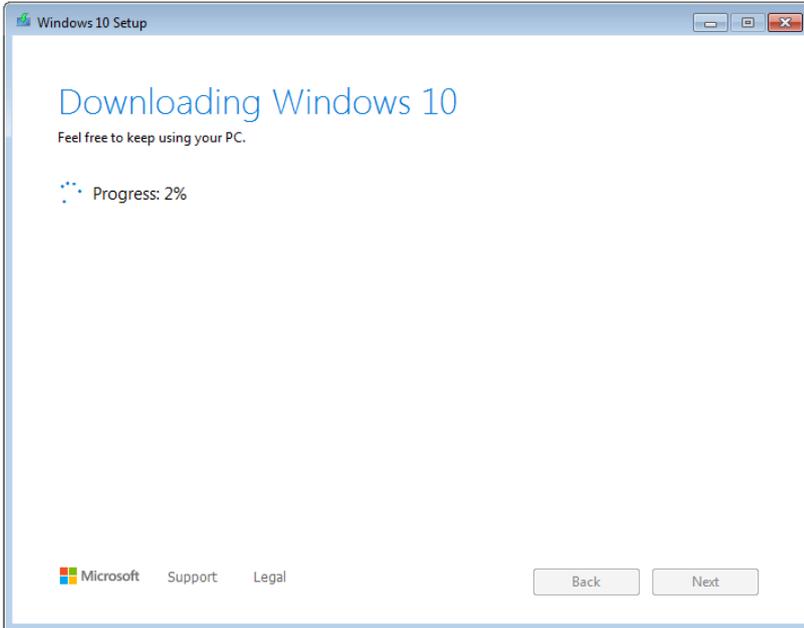
Accept the terms and conditions to continue.

Step 3

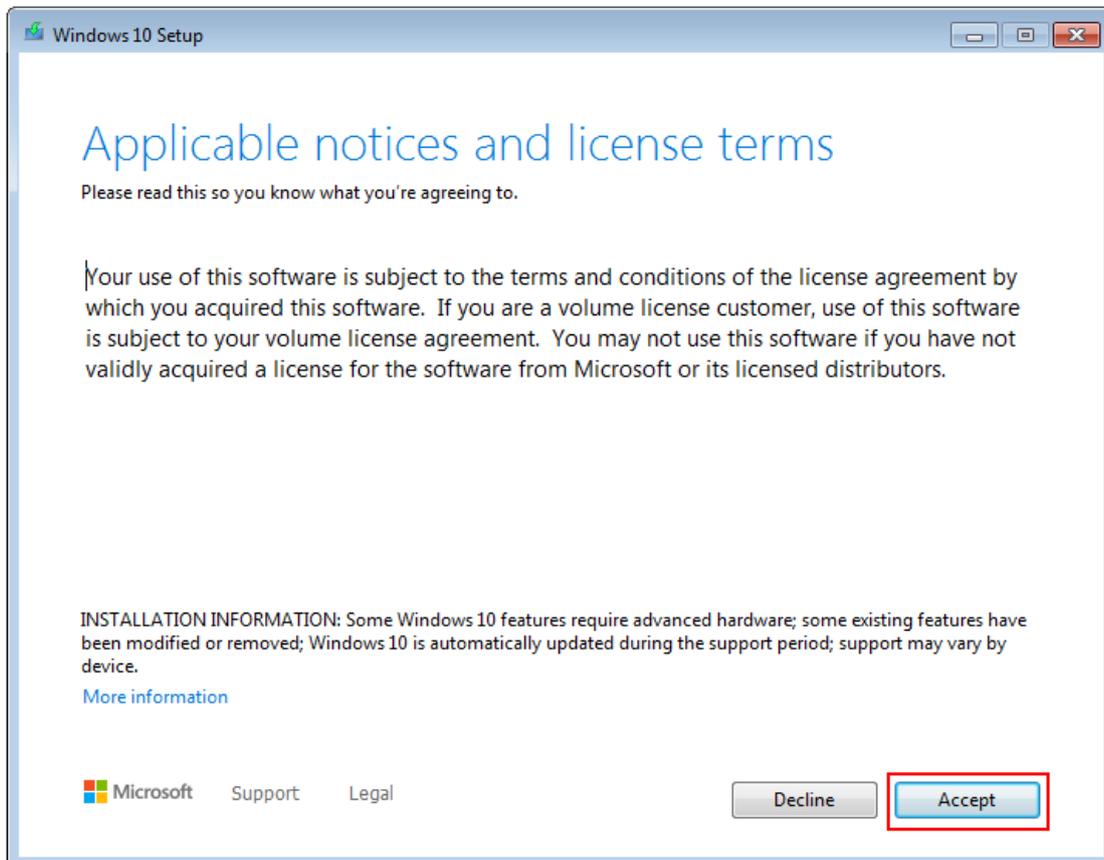
Start the upgrade by selecting *Upgrade this PC now* and clicking *Next*.

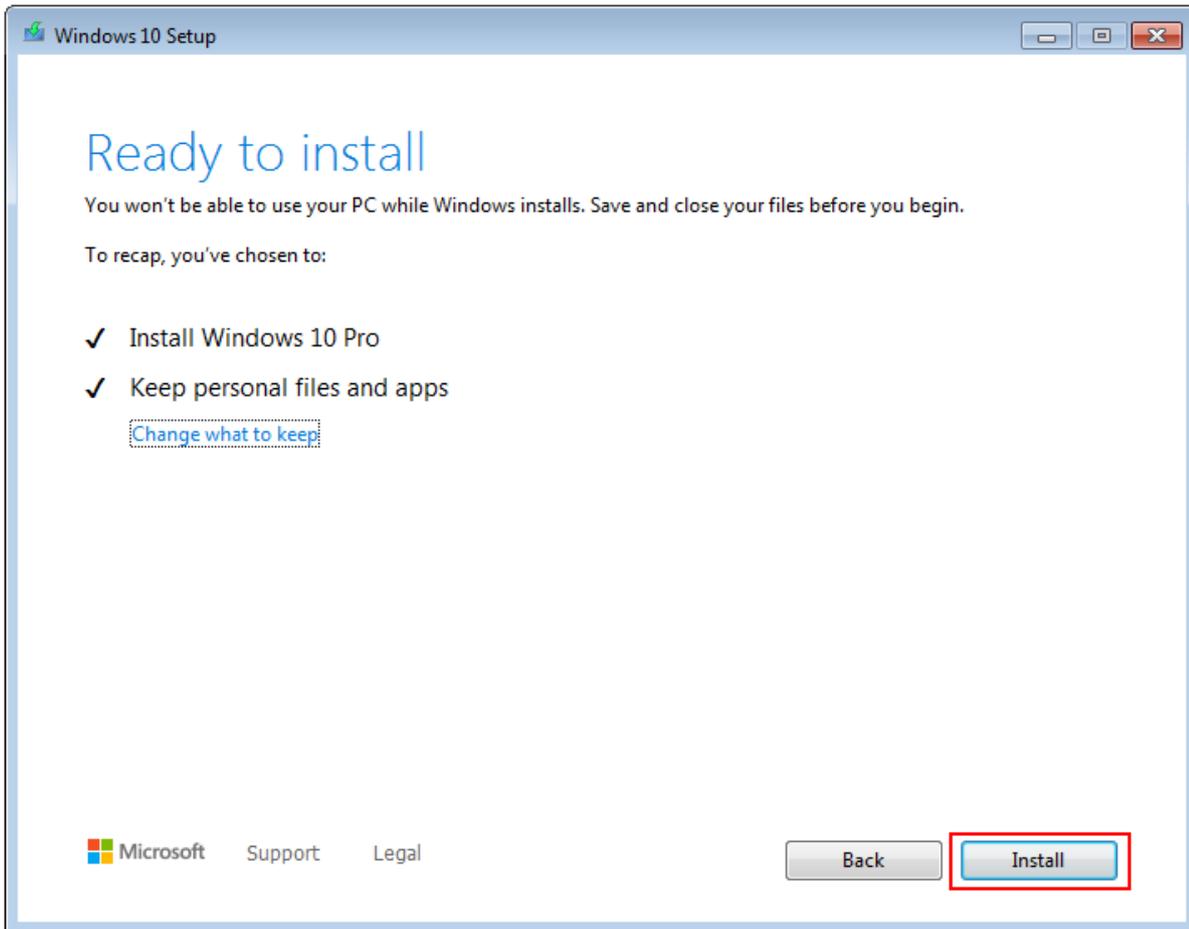


The Windows 10 media will be downloaded and the duration will vary depending on your internet connection.



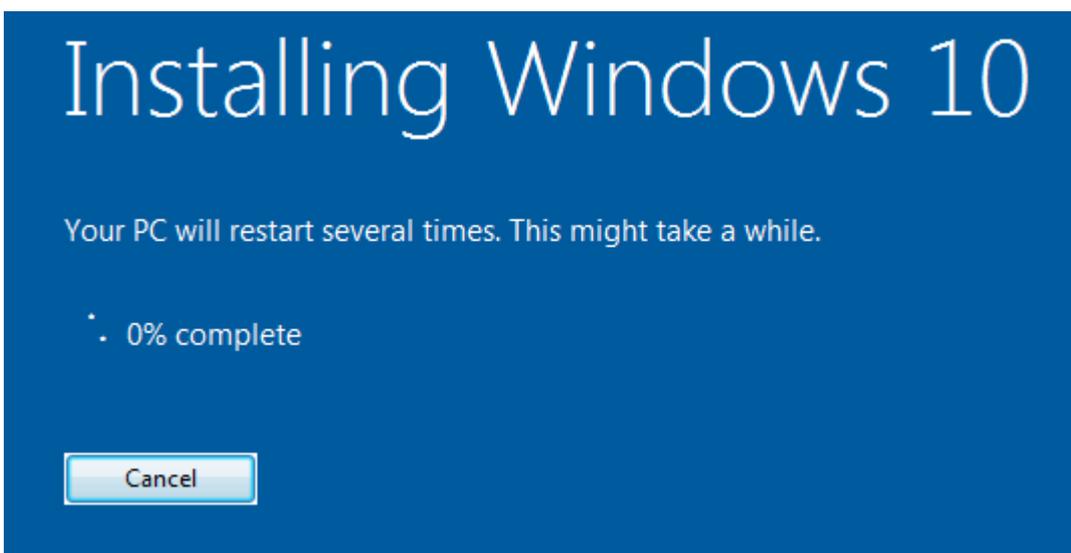
Once downloaded accept the Terms and Conditions to proceed.





Once ready to install the default option of keeping all personal data and apps is selected by default, there is no need to change this setting.

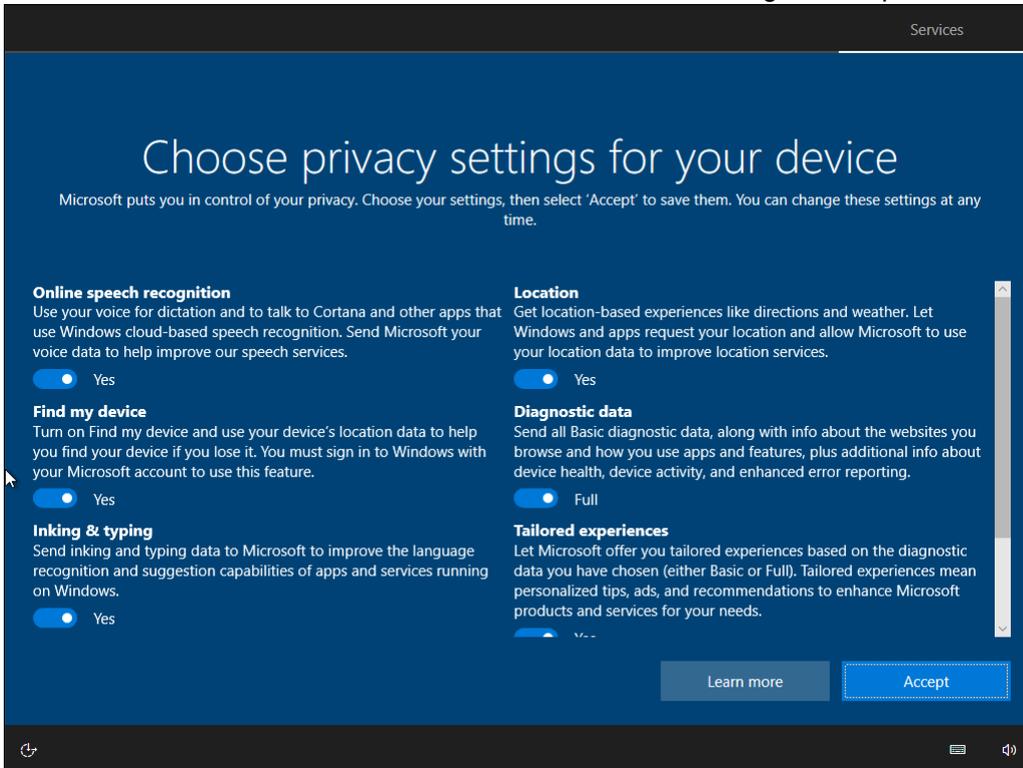
Click on the *Install* button to proceed with the upgrade.



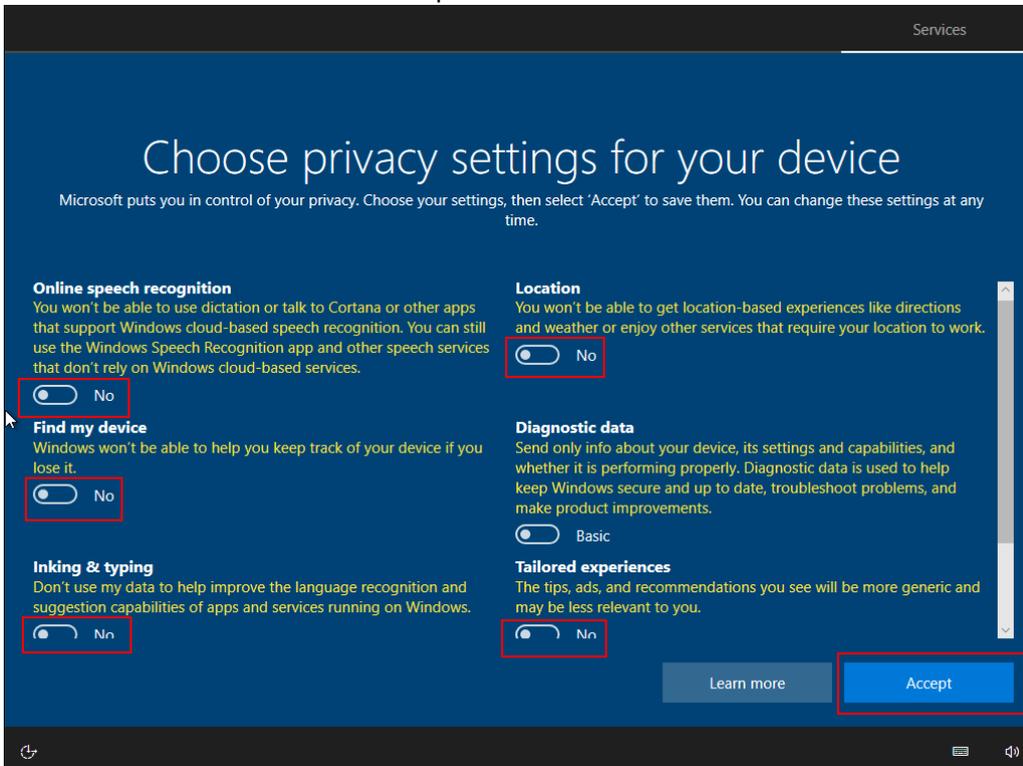
The installation of Windows 10 will take a while to complete and the computer will reboot a number of times.

Step 4

Windows installation. Once installed a number of Windows configuration options will be presented:



It is recommended that all of these options are set to *No* or *Basic*.



Then click *Accept* to continue. This should conclude the basic upgrade of Windows 7 to Windows 10.

Step 5 Licencing

As the Windows 7 Professional operating system was already licenced this upgrade should provide a full Windows 10 Professional operating system licence out-of-the-box.

Navigate to *Settings*→*Update & Security*→*Activation* to check the status. Note that the computer **must** be connected to the internet in order to automatically activate the licence.

Step 6 Windows Updates.

Check for Windows 10 updates and apply them before continuing.

Configure Windows updates options. Windows 10 is difficult to stop from automatically updating and ECOTECH do not condone attempting to turn off Windows updates altogether. There are a number of documented ways of stopping the updates for a period of time, each with their own risks, drawbacks and level of success. Windows updates will not be downloaded and applied when running with a metered internet connection, this needs turning on explicitly.

It is recommended that before an instrument is sent out on campaign that all available Windows updates are applied prior to the instrument's departure. While connected to the internet through a company network the updates can be paused for up to 35 days. It is recommended that this option is chosen, and updates applied monthly as a matter of routine.

The settings for pausing the updates can be found in the *Settings*→*Update & Security*→*Windows Update* →*Advanced options* menu item.

Step 7

Check software and settings. Check the LAN settings configuration, as detailed in the Spectronus™ hardware manual, are as they were before the upgrade.

Start the Spectronus™ and OPUS applications and check that they run up correctly. Check that the modules tab displays the module communications working correctly with no backlog of messages on the ports.