



Dell
Business Client
Imaging Recommendations
Dell Venue 10 Pro 5056 / 8 Pro 5855

Version: X00

28 FEB 2016

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1 Overview

The purpose of this document is to provide details for imaging Dell Venue 10 Pro 5056 and 8 Pro 5855 systems with the properly supported Microsoft Operating System and required drivers and applications.

Drivers and applications must be installed on Venue 10 Pro 5056 and 8 Pro 5855 in a prescribed order to ensure optimal functionality and performance. Dell provides drivers and applications that are not included in Microsoft Operating Systems. These drivers are required to enable the features of the Dell Venue 10 Pro 5056 and 8 Pro 5855 tablets. The needed drivers and their supporting applications can be retrieved from the following URLs:

Venue 10 Pro 5056:

<http://www.dell.com/support/home/us/en/19/product-support/product/dell-venue-10-pro-5056-tablet/drivers>

Venue 8 Pro 5855:

<http://www.dell.com/support/home/us/en/19/product-support/product/dell-venue-8-pro-5855-tablet/drivers>

2 Imaging

2.1 Supported Operating Systems

The following Microsoft operating systems have been validated for use with the Dell Venue 10 Pro 5056 and 8 Pro 5855 tablets:

- Windows 8.1 64 Bit (UEFI Mode Only)
- Windows 10 64 Bit (UEFI Mode Only)

2.2 Boot Capabilities

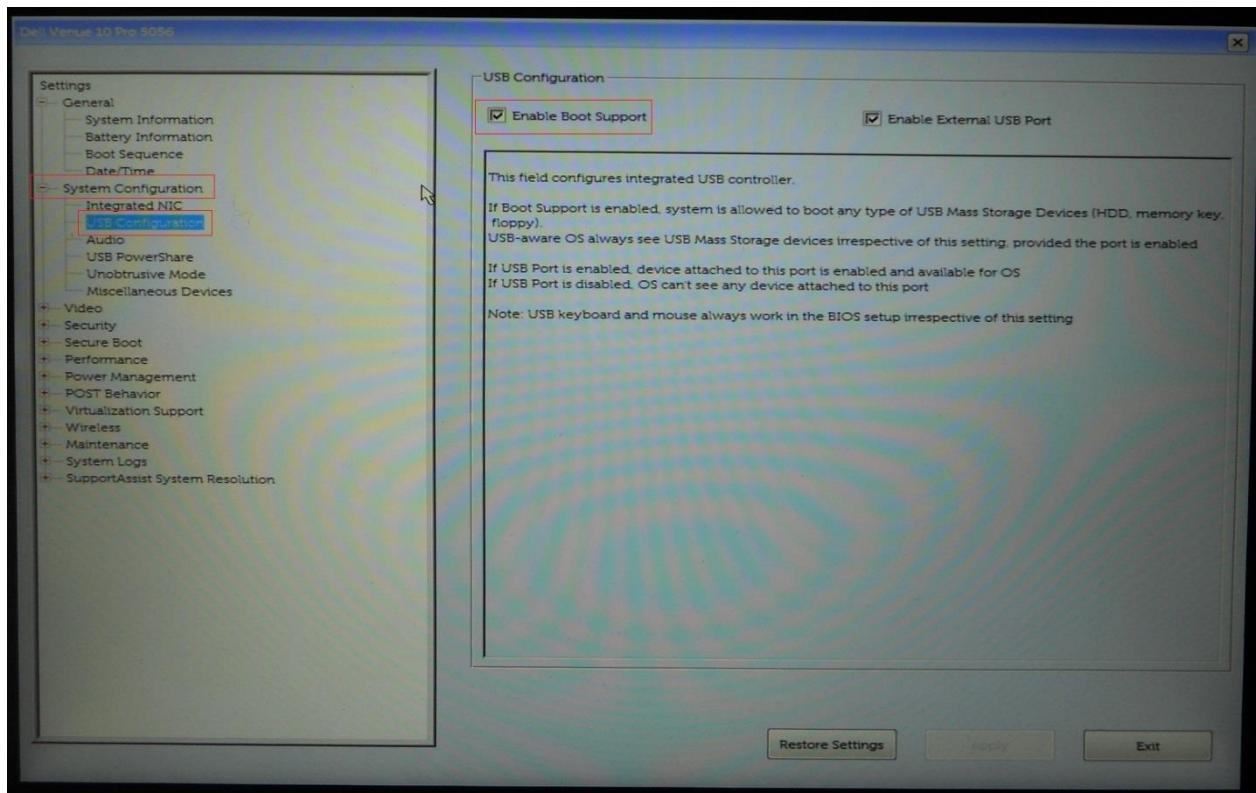
Venue 10 Pro 5056 and 8 Pro 5855 systems will only boot bit UEFI mode. Legacy or DOS boot is not supported.

2.3 OS Install

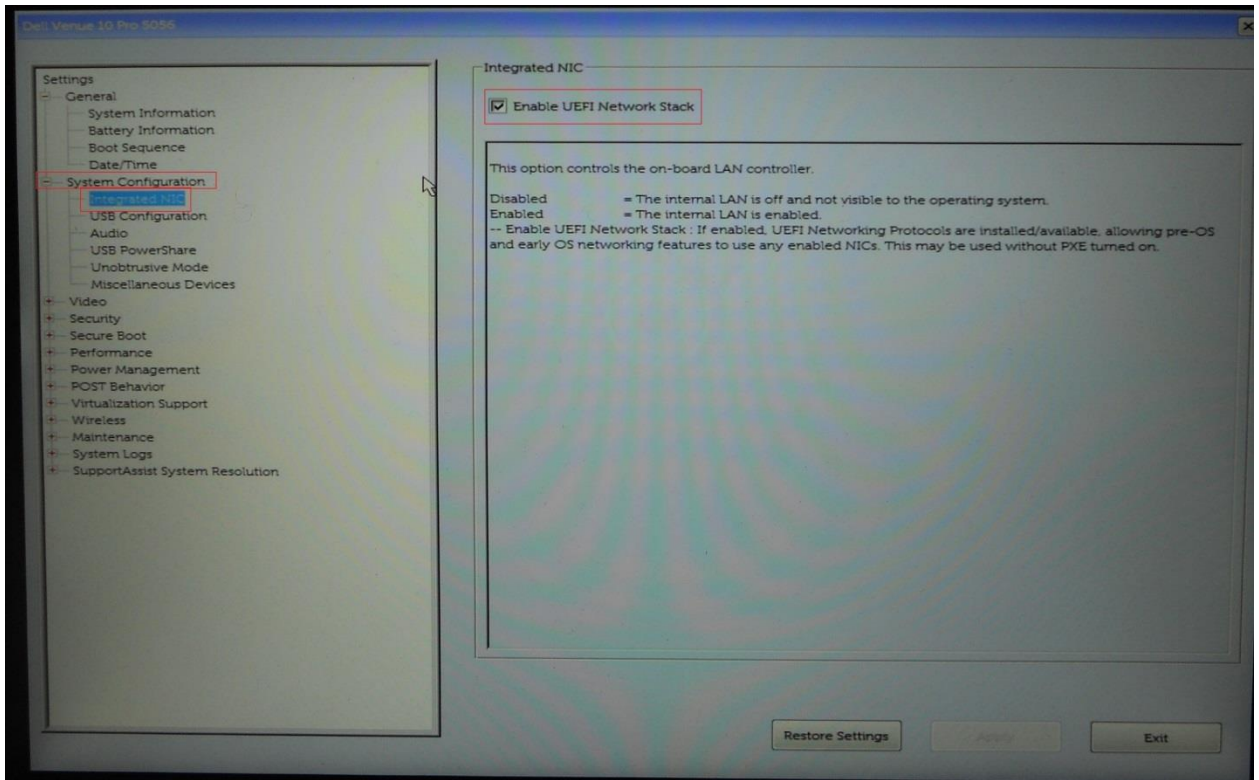
Note: Before beginning an image install, Dell first recommends that the system BIOS be updated to the latest version available and all BIOS settings are set correctly for the desired system operation. Also, drivers and supporting applications that are to be installed should be the latest available versions from the support pages.

Recommend BIOS Settings:

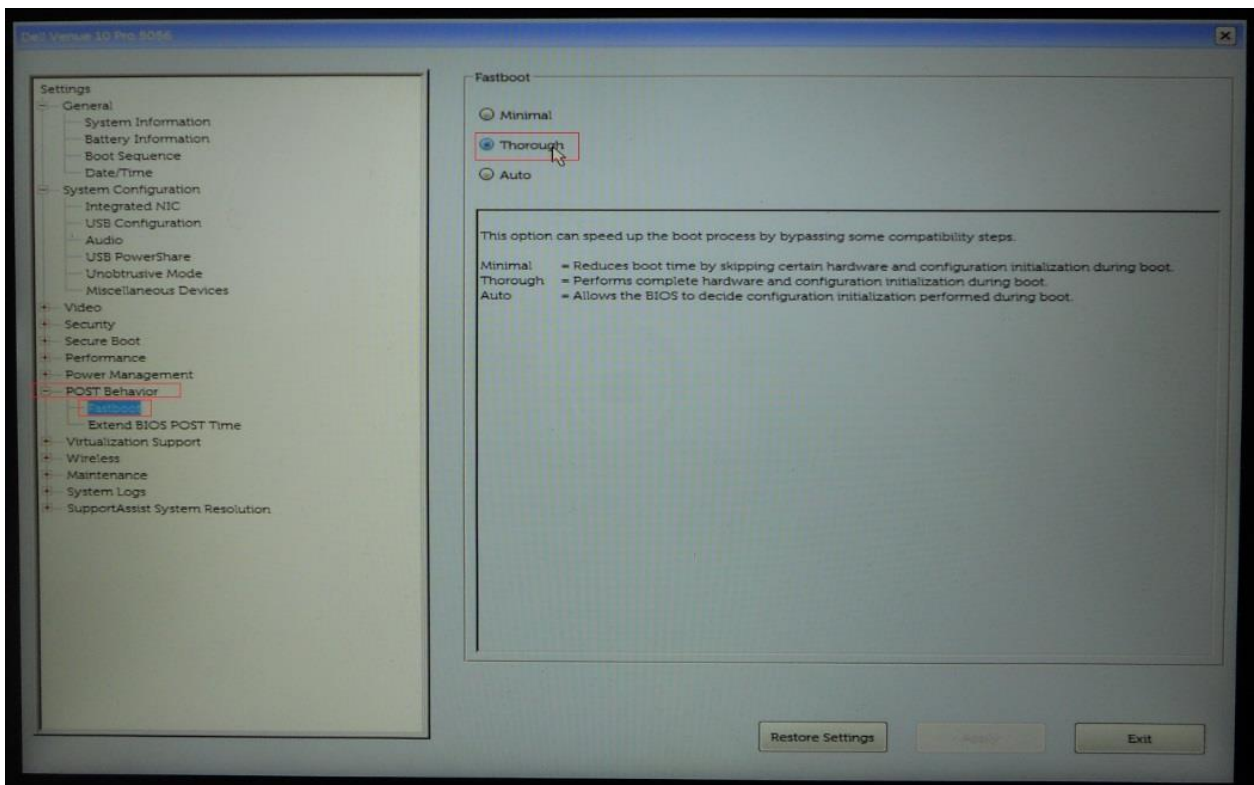
1. The system USB configuration must be set to allow for USB boot.
System Configuration->USB Configuration->Enable Boot Support - Enable



2. In order to boot to PXE from an Ethernet network device, the UEFI network stack must be enabled.
System Configuration->Integrated NIC->Enable UEFI Network Stack - Enable



3. In order for the system to detect and enumerate all the connected USB device, FastBoot mode must be set to "Thorough".
Post Behavior->Fastboot - Thorough



2.3.1 Two basic methods to install an OS image on the Venue 10 Pro 5056 and 8 Pro 5855 tablets.

1. Hand install from UEFI bootable USB flash drive that contains the OS install files.
2. Automated image install/deployment through Enterprise solutions such as Microsoft's SCCM.

2.3.1.1 Hand Install through USB Flash Drive

Microsoft™ has made it easier than ever to create USB flash drive install media. Just download the "Media Creation Tool" (MCT) available from these URLs for the desired OS.

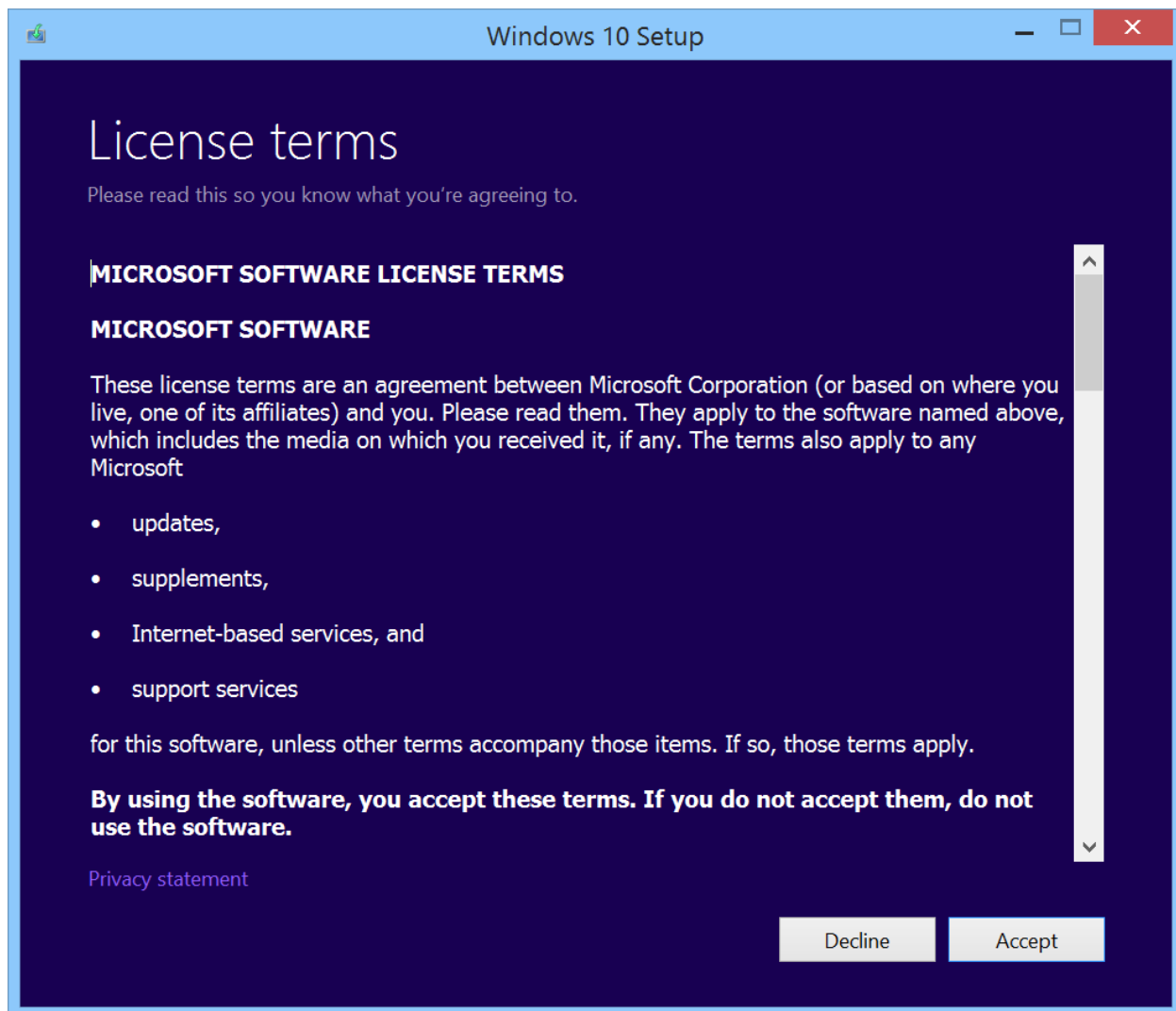
Windows 10 - 64 Bit - <https://www.microsoft.com/en-us/software-download/windows10>

Windows 8.1 - 64 Bit - <http://windows.microsoft.com/en-us/windows-8/create-reset-refresh-media>

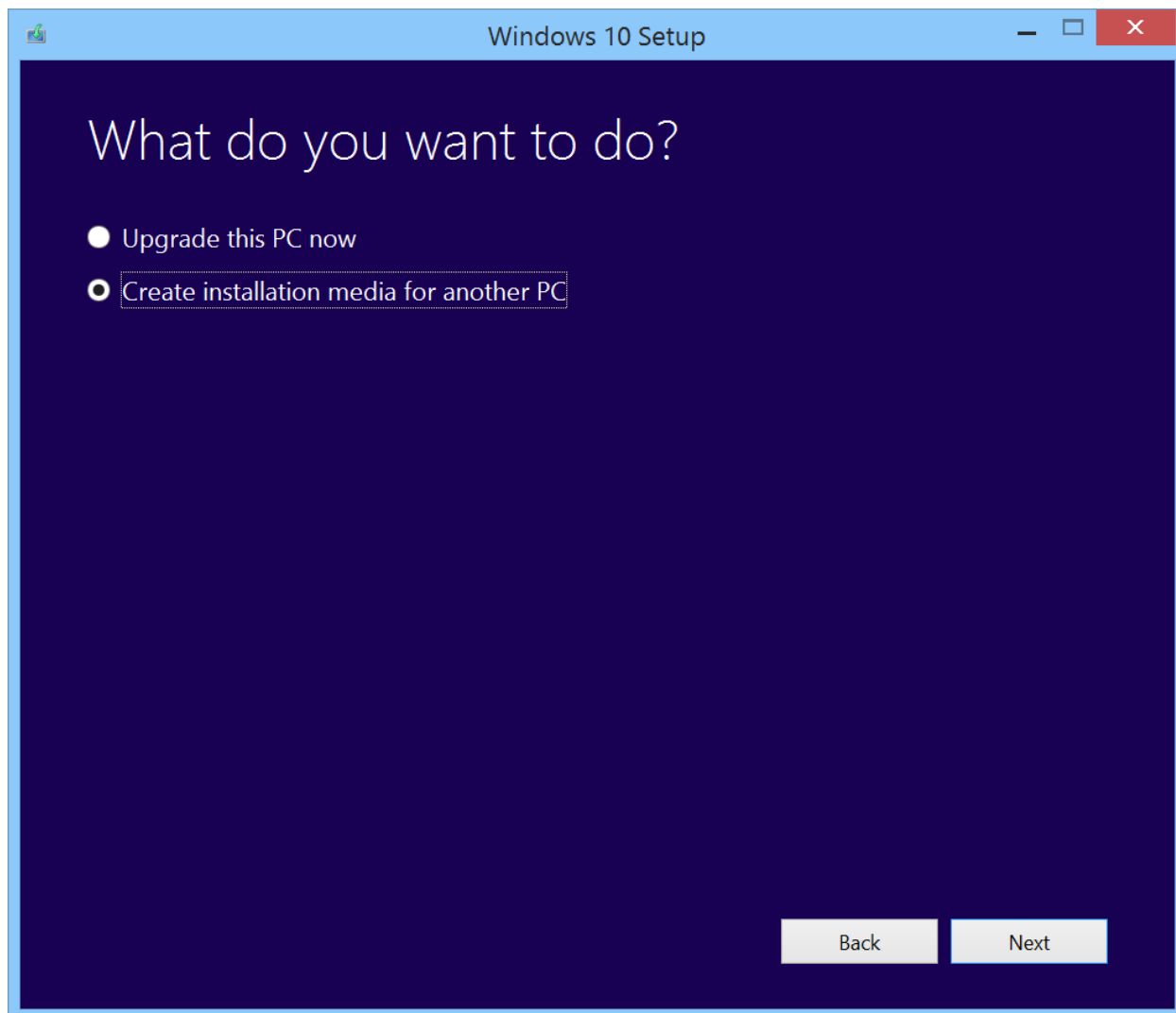
2.3.1.1.1 Windows 10 – USB install media creation

Download the Windows 10 MCT to any workstation running Windows 7 or higher. Run the tool as admin and follow the prompts.

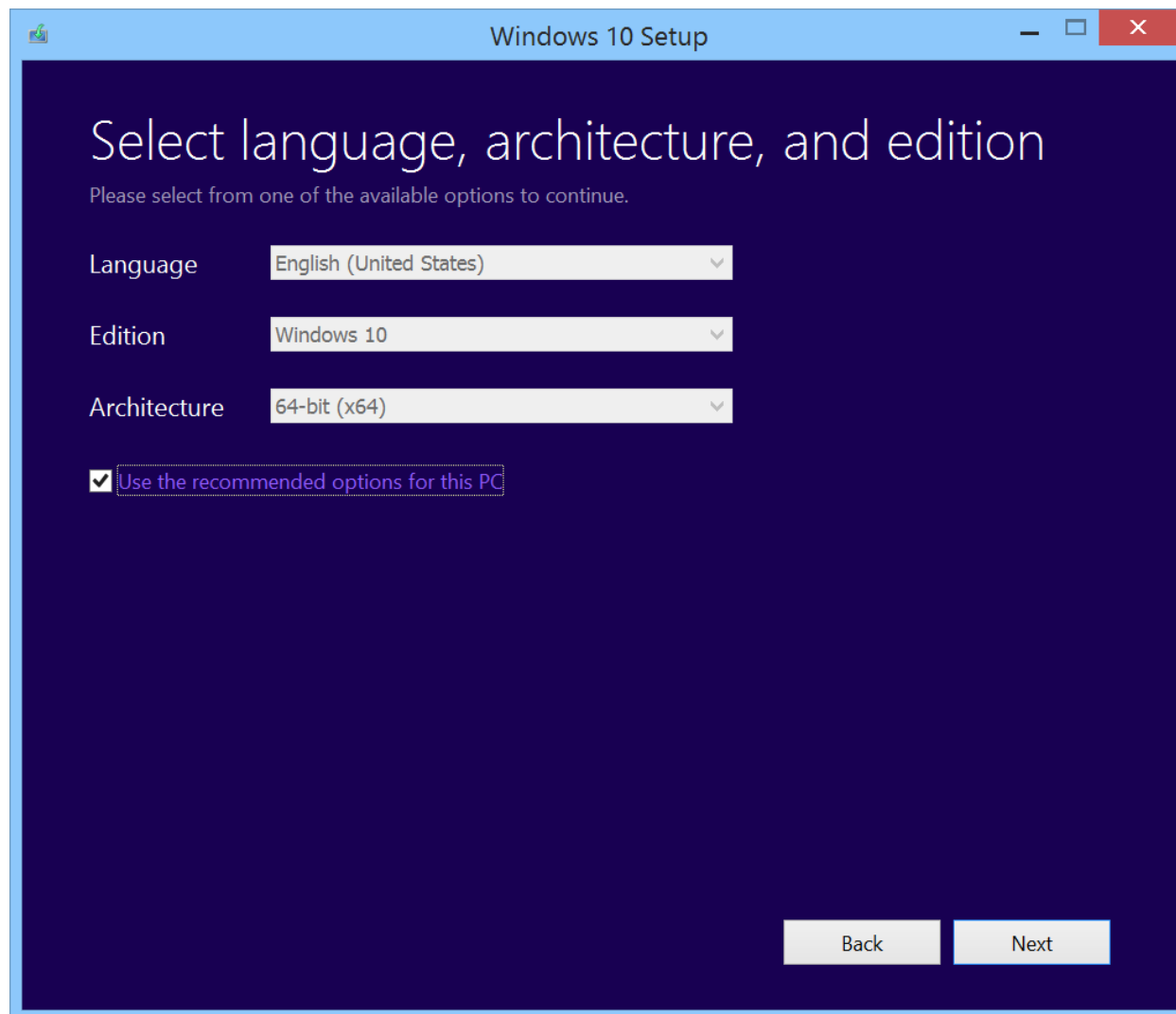
1. Accept the EULA.



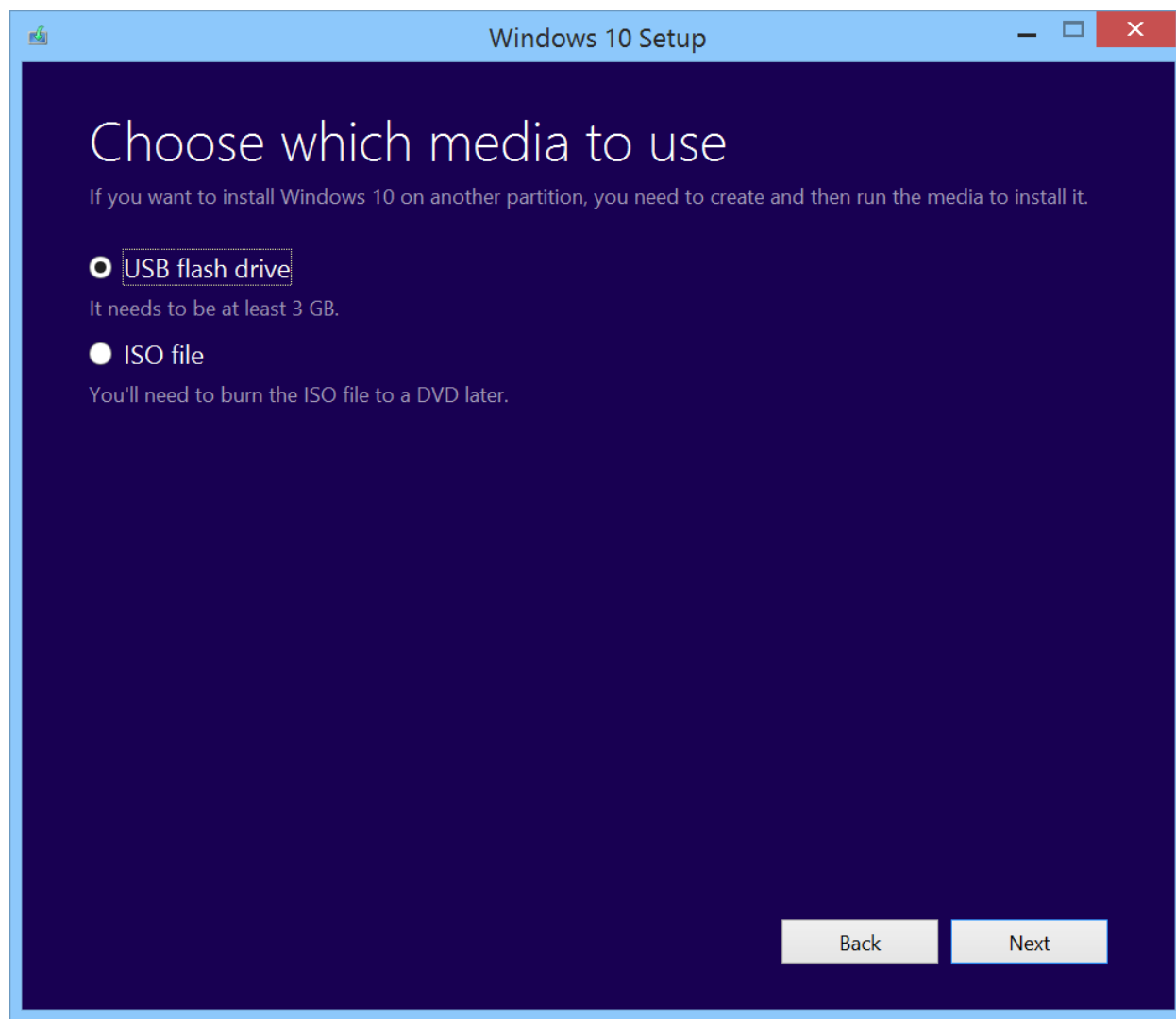
2. Select "Create installation media for another PC".



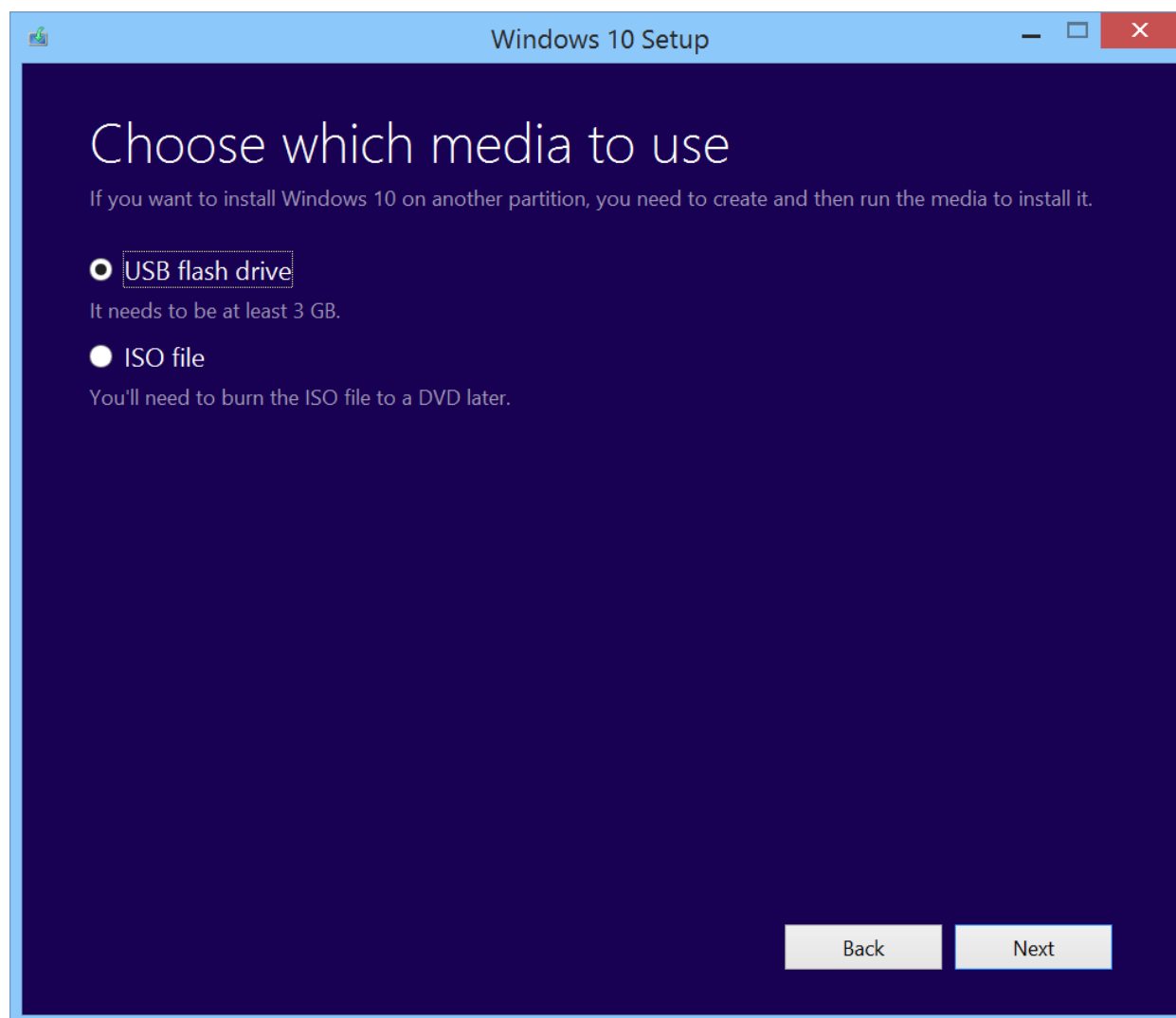
3. Select "Language, Edition and Architecture".



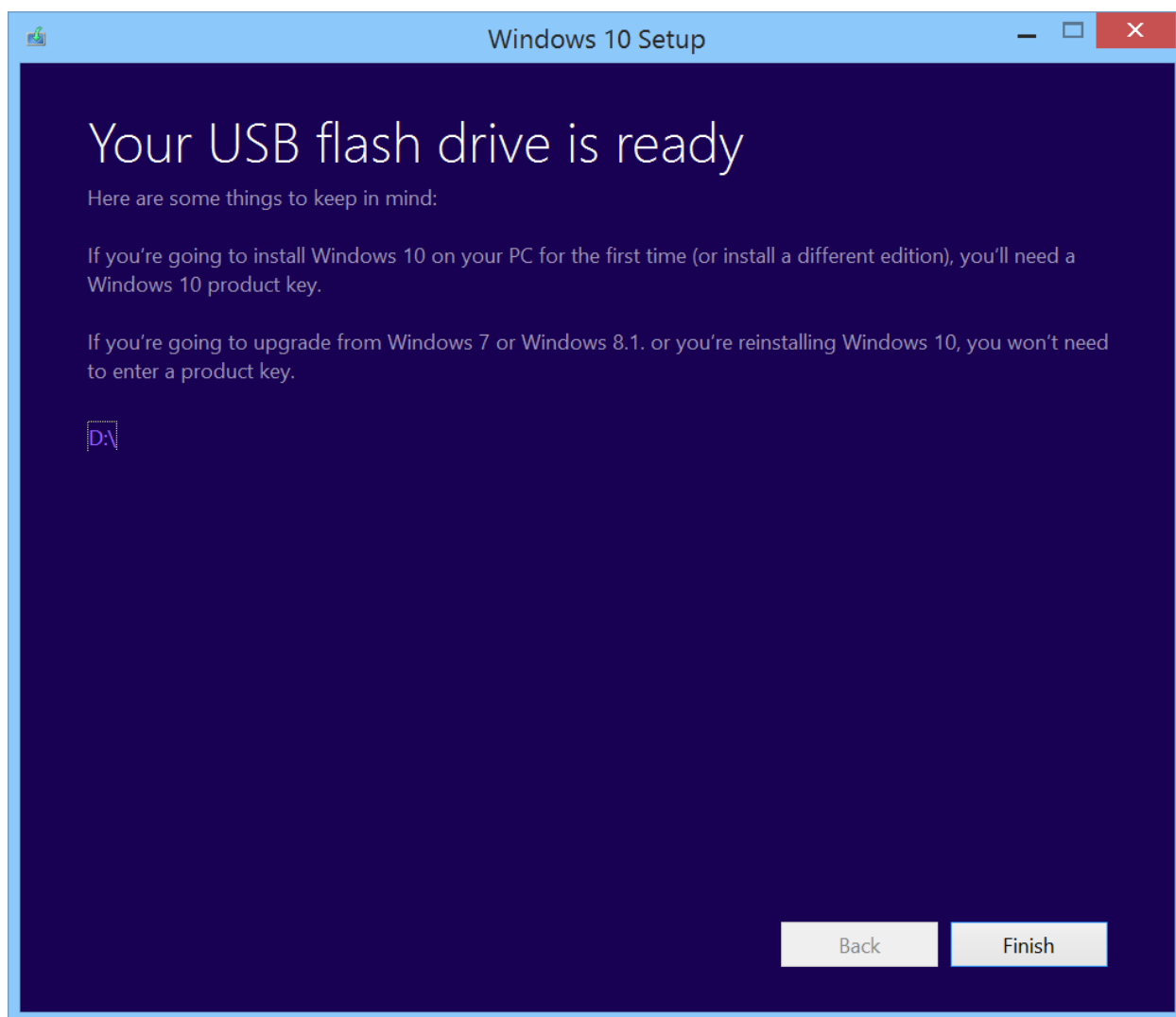
4. The MCT can create an ISO image or prepare a USB flash drive to boot the installer. Select “USB flash drive” and click next.



5. The MCT will show a list of USB flash drives that it has detected, select the drive to be used as the install device from the list and click next. It is recommended that the USB flash drive have storage space of 4GB or greater. The MCT will download the Windows 10 install files and create a bootable USB flash drive. The process will take several minutes.



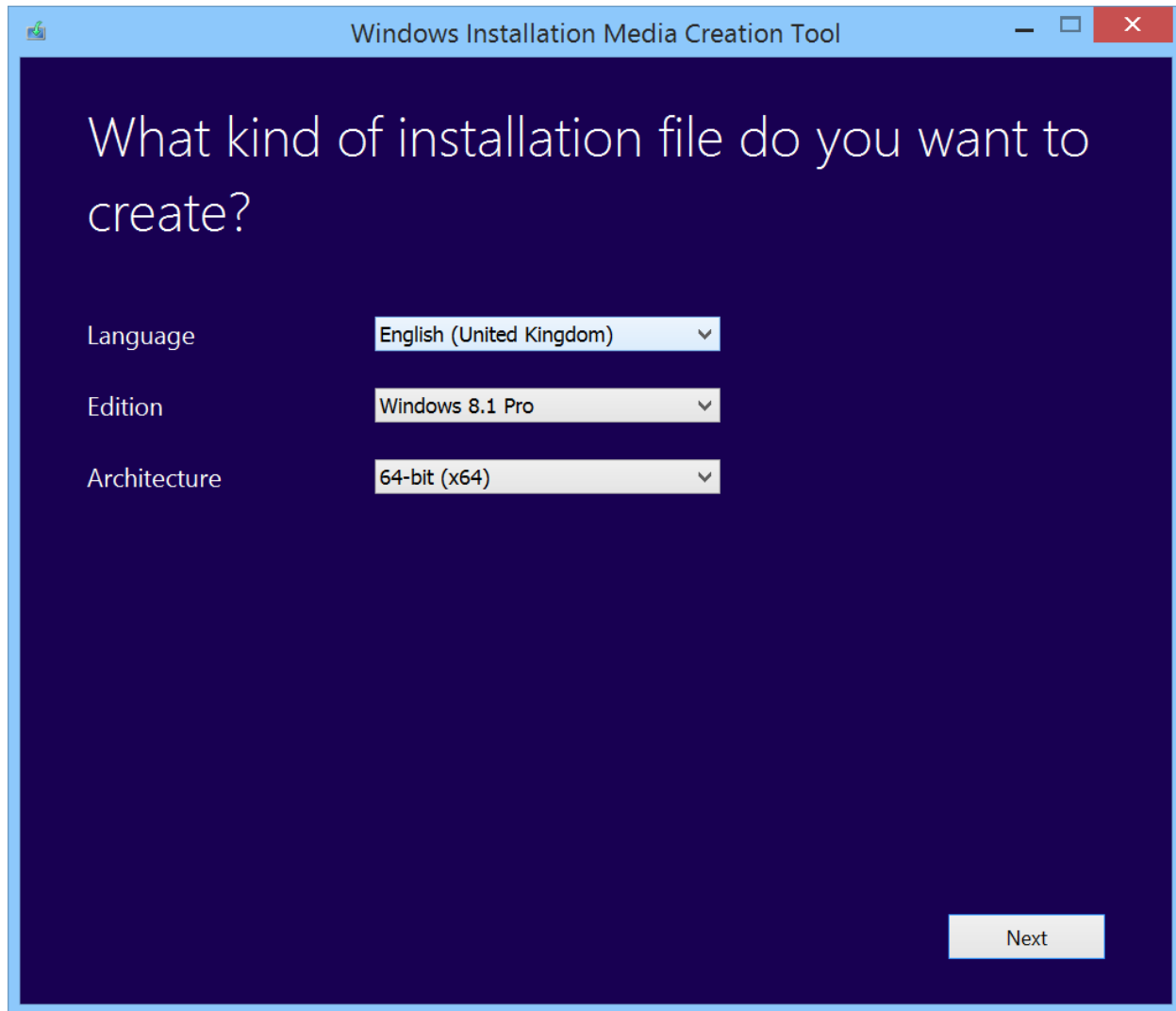
6. When the MCT has completed, select Finish. The USB flash drive is now ready to boot the Windows 10 installer.



2.3.1.1.2 Windows 8.1 – USB install media creation

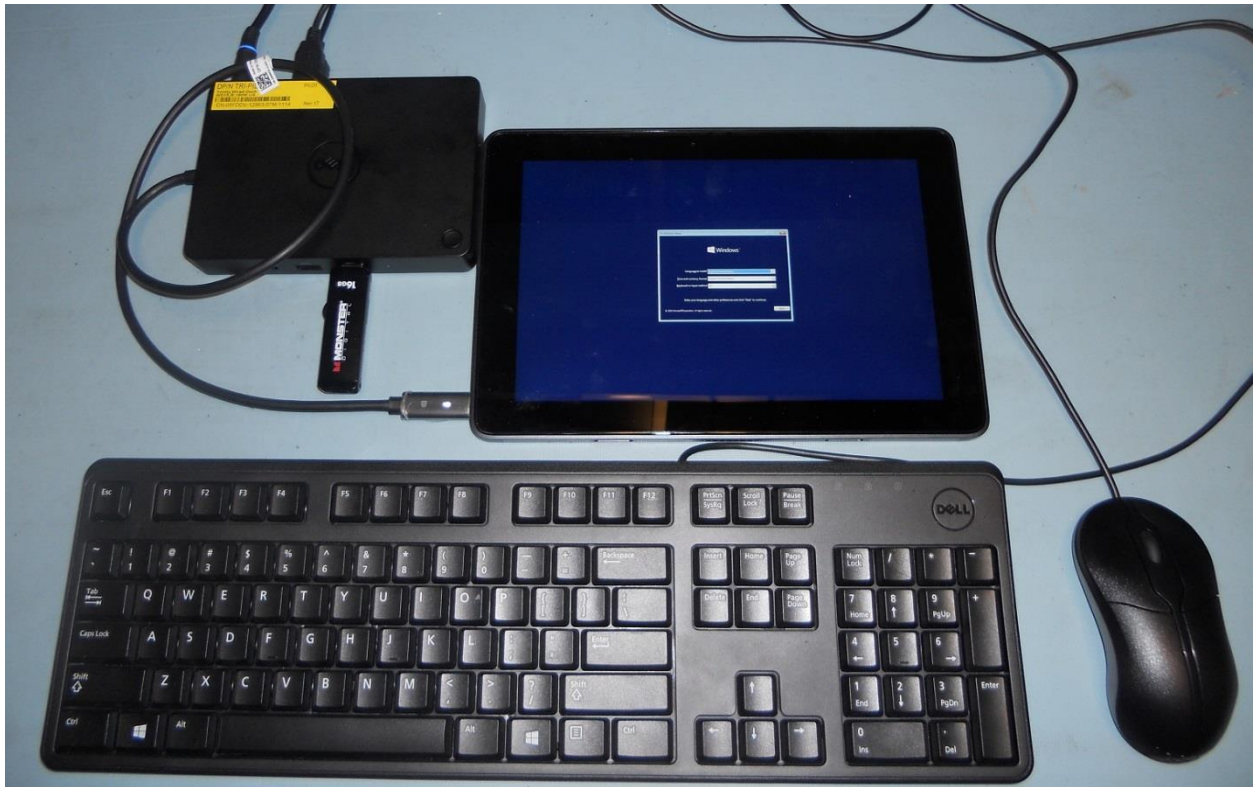
Download the Windows 8.1 MCT to any workstation running Windows 7 or higher. Run the tool as admin and follow the prompts.

1. When 1st run, the tool prompts for selection of Language, OS edition and Architecture. Select the required settings and then click next. The rest of the process is similar to the process previously outlined for Windows 10.



Dell Venue 10 Pro 5056 / 8 Pro 5855 Imaging Recommendations

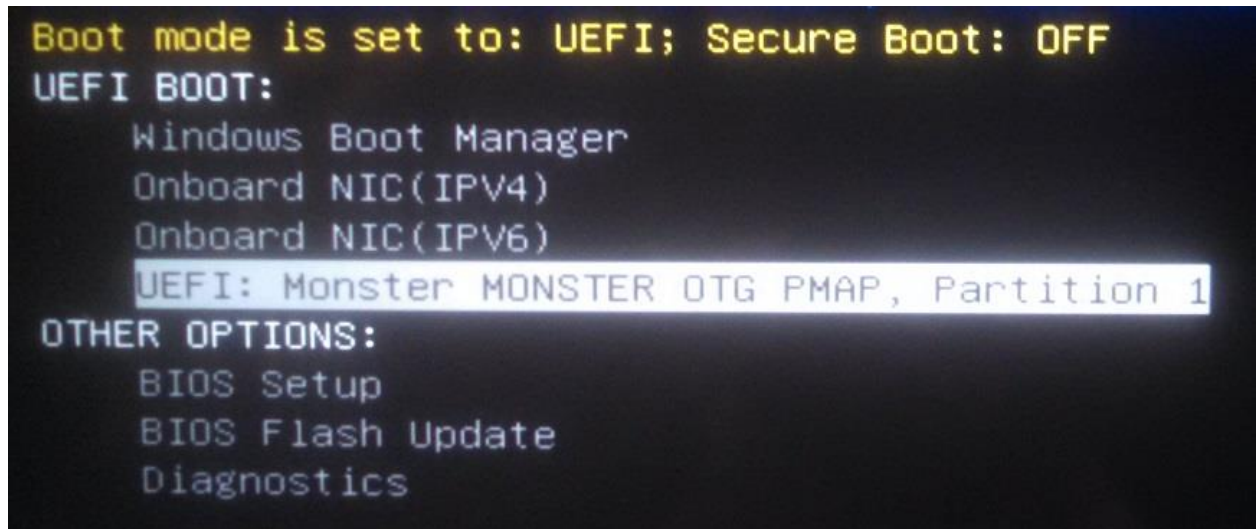
This method will work for both the Venue 10 Pro 5056 and is the best option for 8 Pro 5855 since it only has the single USB-C port.



With the Venue Pro 5056, if a USB-C docking unit is not available, another method possible is to use a USB-C charging adapter with a USB3.0 or 2.0 hub on the system's external USB port to provide connection for the keyboard, mouse and USB flash installer.



After making the necessary connections and powering on the tablet, as soon as the Dell splash screen is displayed, press the F12 on the keyboard or hold the Volume-Up button to bring up the one-time boot selection menu.



Use the arrow keys or system Volume-Up bottom to highlight the second “USB Storage Device” then press enter on the USB keyboard or press the Volume-Down button the system.

After pressing enter or the Volume-Down button, the system will then boot to the USB flash drive and start the OS installer. Follow the OS installer prompts to complete the OS install process.

After the OS is installed, the device drivers and supporting application must be installed to provide full system functionality. Required drivers and supporting applications for the Dell Venue 10 Pro 5056 and 8 Pro 5855 tablets can be located at these URLs:

Venue 10 Pro 5056:

<http://www.dell.com/support/home/us/en/19/product-support/product/dell-venue-10-pro-5056-tablet/drivers>

Venue 8 Pro 5855:

<http://www.dell.com/support/home/us/en/19/product-support/product/dell-venue-8-pro-5855-tablet/drivers>

The recommended install order for device drivers and apps is outlined below in paragraph “2.3.3 Venue 10 Pro 5056 and 8 Pro 5855 Recommended Install Order for Drivers/Apps”

2.3.2 Installation through Microsoft's SCCM

2.3.2.1 PXE Boot Setup

The Venue 10 Pro 5056 and 8 Pro 5855 both support PXE network booting for connection to automated install and deployment servers. It is recommended to use the network capabilities of the docking unit to provide PXE boot and network support for the system.

The PXE boot image provided by the PXE server must be a WinPe boot.wim that boots UEFI mode. In order for WinPe to connect to the network image server after startup, the boot wim image file must include the drivers for the docking unit's network adapter.

Important: Standard PXE DOS (syslinux / initrd) boot images are not supported.

With the Venue 10 Pro 5056, the PXE boot and install process can be run with the travel/dock keyboard connected to the tablet and the Ethernet connection to the WD15 docking.



This technique will work for the Venue 10 Pro 5056 and is best the approach for the Venue 8 Pro 5855.



The Venue 10 Pro 5056 and 8 Pro 5855 both have PXE code included in the UEFI BIOS that can boot the following USB-C network devices.

USB-C/Thunderbolt to Ethernet Controller
Dell P/N: D59GG (USB-C to Gigabit Ethernet)
Dell P/N: 5FDDV (Dell Dock WD15)

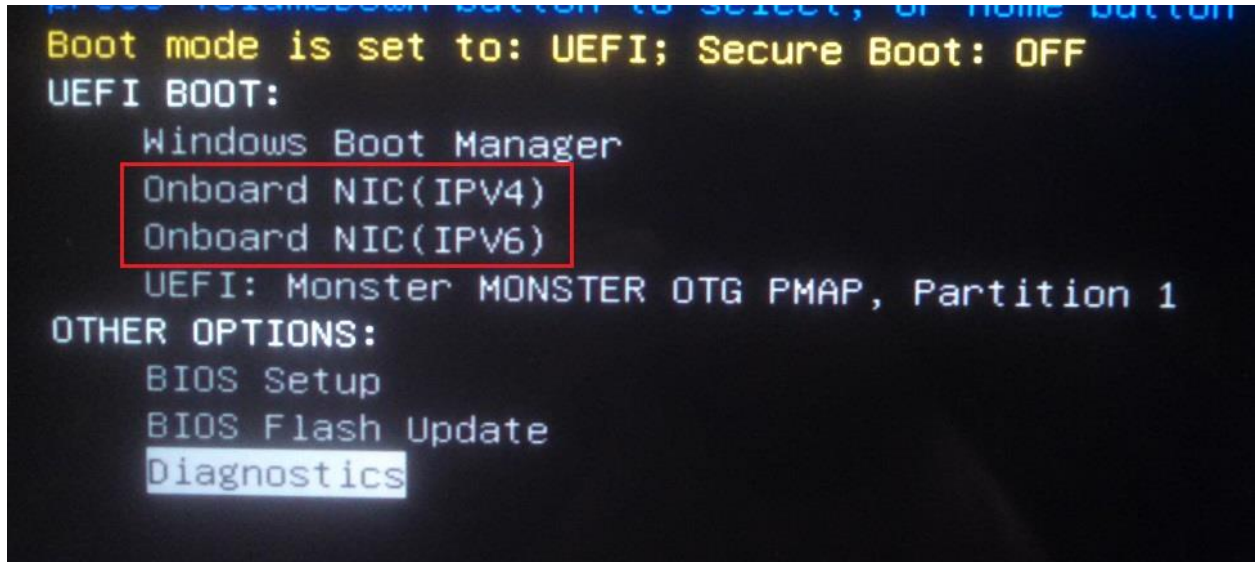
2.3.2.1.1 Booting the system to PXE

To PXE boot the tablet, make the necessary USB and network connections then power up the system.

As soon as the Dell splash screen is displayed, press the F12 on the attached keyboard or hold the Volume-Up button on the system to bring up the one-time boot selection menu.

If the network topology is IPv4: Use the keyboard arrow keys or the system's Volume-Up button to highlight, "Onboard NIC (IPv4)" then press Enter or press the Volume-Down button on the tablet.

If the network topology is IPv6: Use the keyboard arrow keys or the system's Volume-Up button to highlight, "Onboard NIC (IPv6)" then press Enter or press the Volume-Down button on the system.



2.3.2.2 Device Drivers / Apps

Dell provides pre-packaged driver and app Cab files for OS deployment through SCCM or other deployment services. The Cab files can be downloaded from:

Venue 10 Pro 5056:

Driver Cabs:

<http://www.dell.com/support/home/us/en/19/Drivers/DriversDetails?driverId=6XFM6&fileId=3504978136&osCode=WT64A&productCode=dell-venue-10-pro-5056-tablet&languageCode=en&categoryId=SM>

For the Venue 10 Pro 5056, Dell also provides an Integration Suite for SCCM 12 that extends Configuration Manager and system management support.

<http://www.dell.com/support/home/us/en/19/Drivers/DriversDetails?driverId=MM5R4&fileId=3509277181&osCode=WT64A&productCode=dell-venue-10-pro-5056-tablet&languageCode=en&categoryId=SM>

Venue 8 Pro 5855:

Driver Cabs:

<http://www.dell.com/support/home/us/en/19/Drivers/DriversDetails?driverId=XXFDC&fileId=3508287306&osCode=WT64A&productCode=dell-venue-8-pro-5855-tablet&languageCode=en&categoryId=SM>

2.3.2.3 SCCM System Drive Partition Setup

The Dell Venue 10 Pro 5055 / 8 Pro 8055 do not support legacy boot options. All disk setup configurations must be setup for UEFI function.

A typical Windows 10 will use this partitioning/volume scheme on a GPT formatted SSD.

Volume #	LTR	Label	File System	Size	Info
0	C		NTFS	Remaining %	Boot / OS
1		Recovery	NTFS	450 MB	Hidden
2			FAT32	100 MB	System - EFI

Follow Microsoft's recommended drive partition guidelines for UEFI based systems located at this URL,

[https://msdn.microsoft.com/en-us/library/windows/hardware/dn898510\(v=vs.85\).aspx](https://msdn.microsoft.com/en-us/library/windows/hardware/dn898510(v=vs.85).aspx)

The guideline includes a "Diskpart" script example for creating the required OS partitions.

More information with respect to capturing and applying Windows, System, and Recovery Partitions can be found here:

[https://msdn.microsoft.com/en-us/library/windows/hardware/dn898498\(v=vs.85\).aspx](https://msdn.microsoft.com/en-us/library/windows/hardware/dn898498(v=vs.85).aspx)

2.3.2.4 **Other Useful Information:**

Deploying Windows 10 through SCCM:

[https://technet.microsoft.com/en-us/library/mt297520\(v=vs.85\).aspx](https://technet.microsoft.com/en-us/library/mt297520(v=vs.85).aspx)

Deploying Windows 8.1 through SCCM:

<https://technet.microsoft.com/en-us/library/dn744284.aspx>

2.3.2.5 **SCCM Driver Install Step Sequence**

Dell recommends installing the Venue 10 Pro 5056 / 8 Pro 5855 system device drivers and supporting applications in the install order outlined below.

2.3.3 Venue 10 Pro 5056 and 8 Pro 5855 Recommended Install Order for Drivers/Apps

Required drivers/updates:

1. BIOS updates
2. Chipset
3. FW updates (for docking units as required)
4. Docking unit Ethernet driver (as required)
5. System WWAN drivers
6. System WLAN drivers (as applicable)
7. Docking unit Audio driver (Optional during system OS install/deployment)
8. System Audio driver
9. System Management utilities/applications (as required)
10. System security utilities/applications (as required)
11. User space applications