Windows 10 IoT Enterprise LTSC 2021 Operating System

Recovery Guide

July 2023
Rev. A00

Notes, cautions, and warnings

NOTE: A NOTE indicates important information that helps you make better use of your product.

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

Contents

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Steps to configure USB key for ISO Imaging

Step 1: Pre-requisites:

Steps

1. Download the appropriate Windows 10 IoT Enterprise LTSC 2021 operating system ISO image from Dell Support page.
2. Download and install the Dell OS Recovery Tool (available for Microsoft Windows only).
3. USB flash drive with at least 32 GB of free space.
4. Administrator user rights and at least 64 GB of available hard drive space to download the Dell operating system recovery image.
5. A wired network connection for network stability is recommended.
6. It is recommended to disable any anti-virus software during the download.

Step 2: Download and install the Dell OS Recovery Tool

Steps

1. Launch the downloaded Dell OS Recovery Tool and click **INSTALL**.

Figure 1. Dell USB Recovery Tool Application

2. Click **CLOSE** and launch the application from the desktop shortcut.

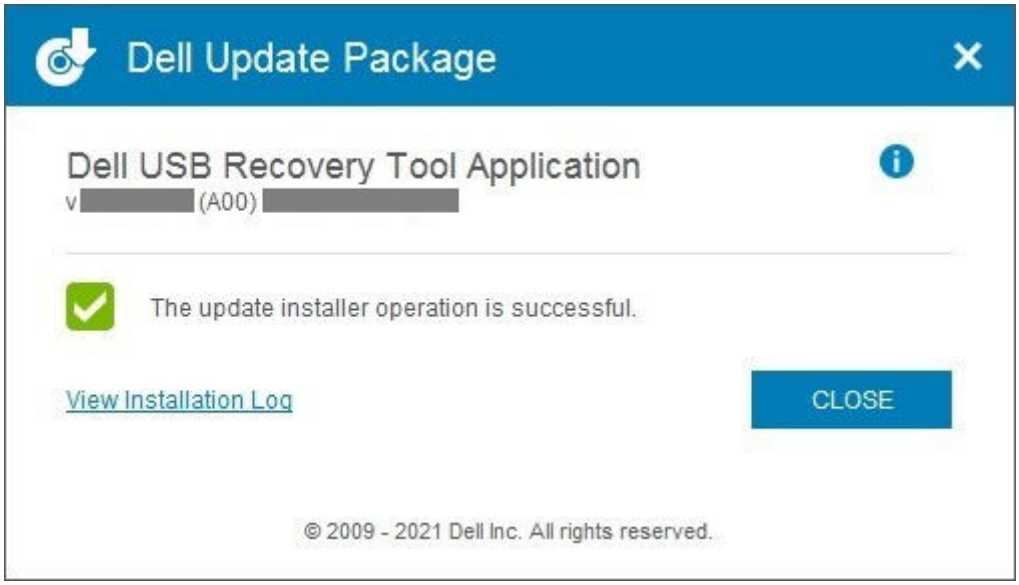

Figure 2. Dell USB Recovery Tool Application

3. Click **SWITCH TO ADVANCED RECOVERY**.

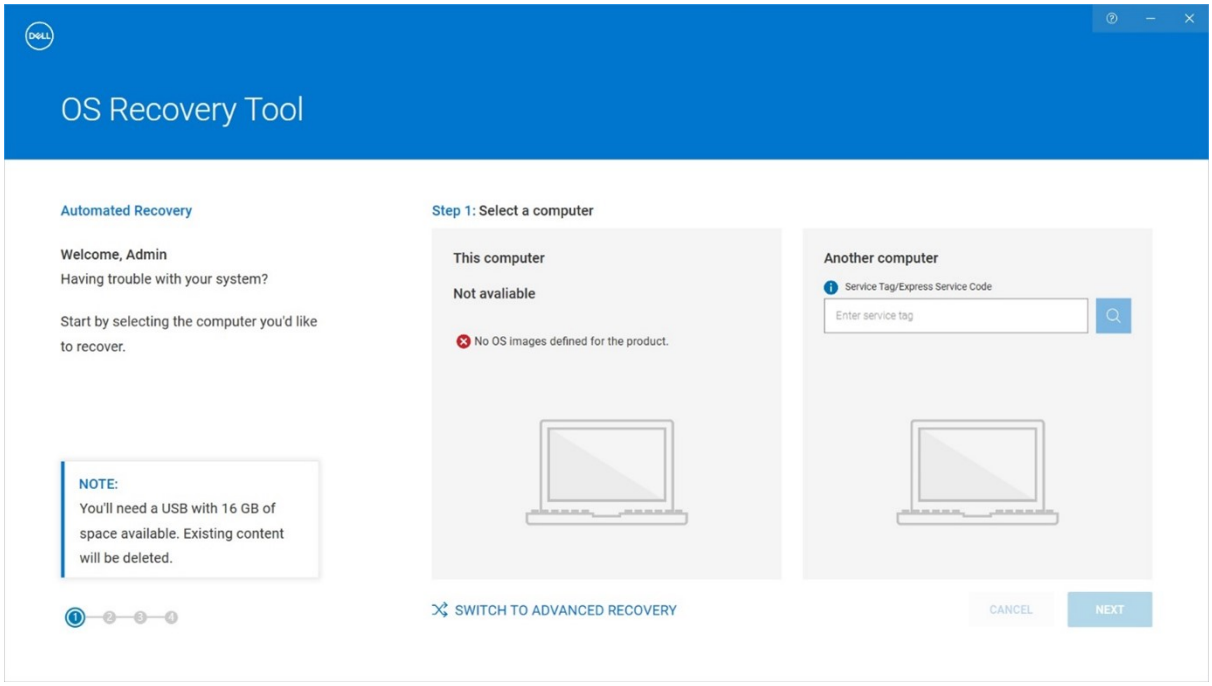

Figure 3. OS Recovery Tool

4. Browse to and select the appropriate downloaded ISO image and click **NEXT**.

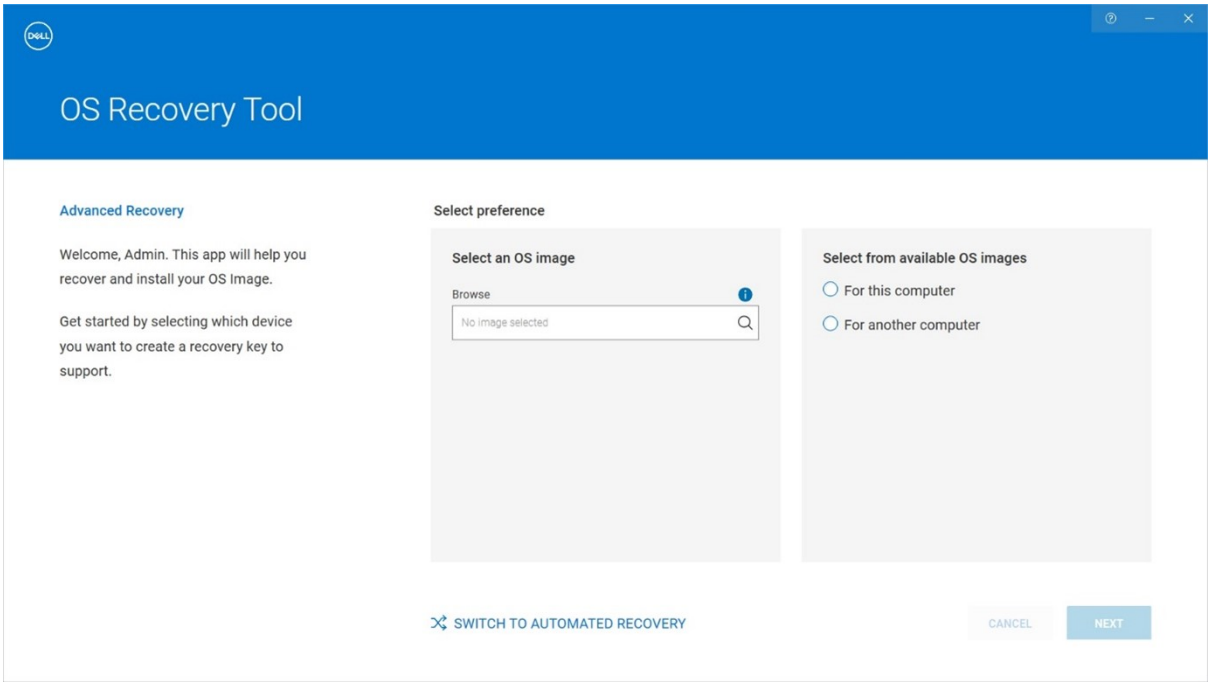

Figure 4. OS Recovery Tool

5. Click **BURN OS**.

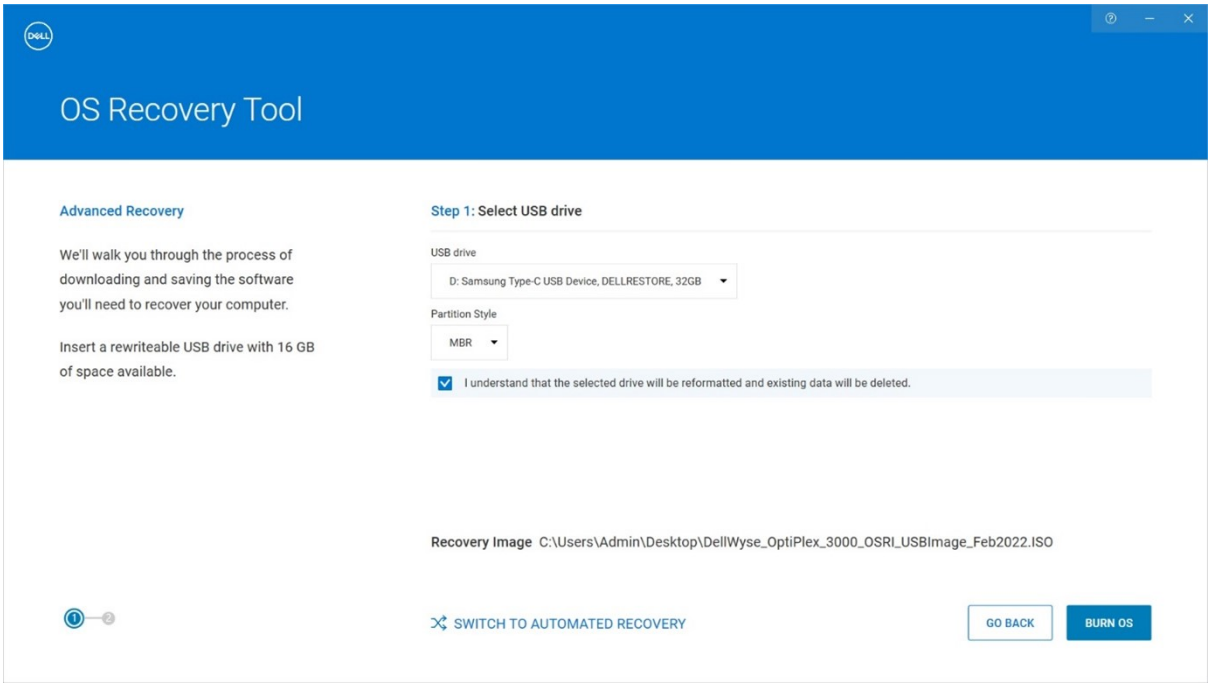

Figure 5. OS Recovery Tool

6. Wait for image registration to complete and click **Close**.

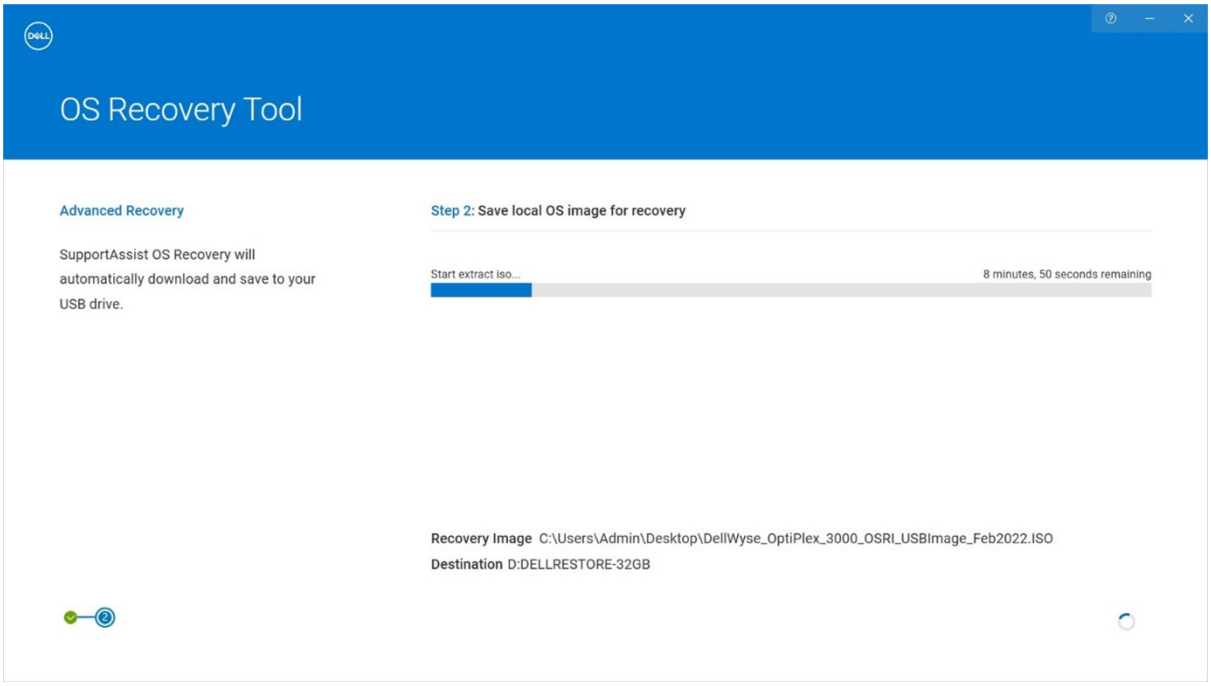

Figure 6. OS Recovery Tool

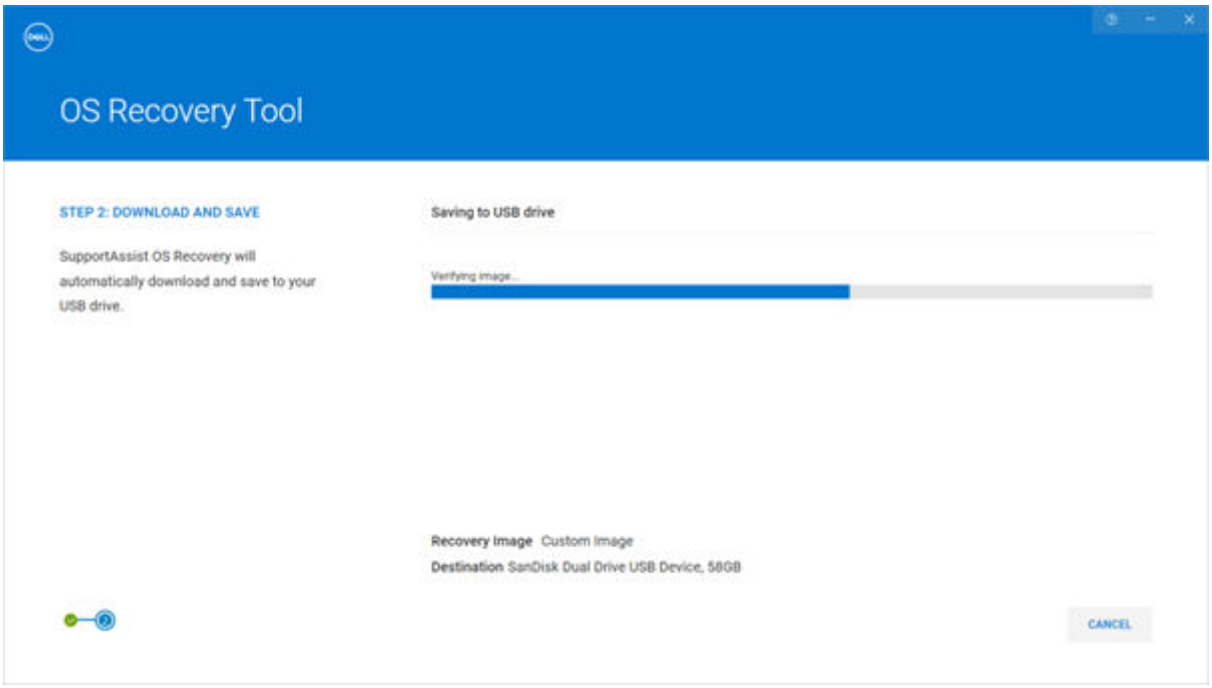

Figure 7. OS Recovery Tool

7. Remove the USB drive.
   This completes the Recovery USB drive creation.

2

Re-Imaging or Deploying the recovery image created in a USB drive

Steps

1. Insert the **Windows 10 IoT OS Recovery USB Key** created into the USB port of the appropriate device.
2. Power on the device.
3. Press **F2** to enter **BIOS setup**.
4. Enter the BIOS admin password to unlock the BIOS for any required changes. Dell default password is **`Fireport`**.

   NOTE: The screenshots depict an example of the BIOS screen in a Latitude 3440 device. The version information differs based on the application that you use to install. The screens may differ slightly based on the BIOS version on your device. The BIOS options that are mentioned will be similar, and must be checked and updated as per the requirements.

5. Go to **Integrated Devices** and enable the **Enable USB boot support** option. This option is enabled by default.

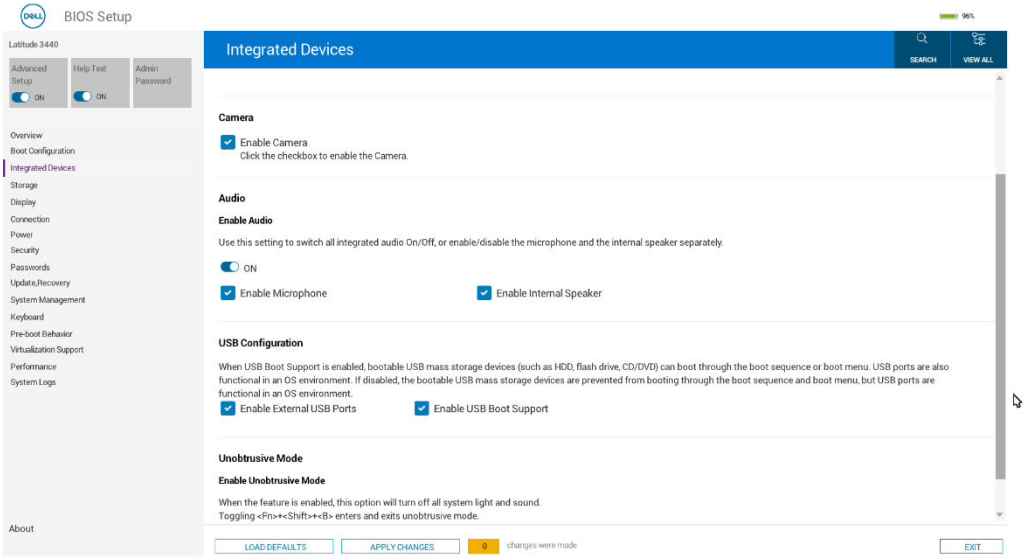

Figure 8. Integrated Devices

6. Go to **Storage, SATA/NVMe Operations** and enable the **ACHI/NVMe** option. This option is enabled by default.

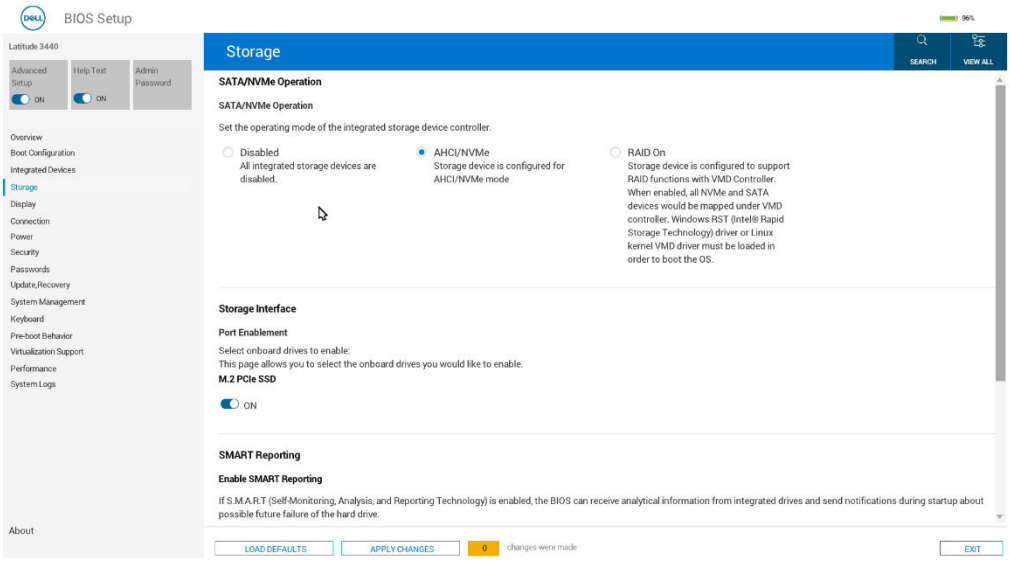

Figure 9. Storage, SATA/NVMe Operations

7. Go to **Virtualization Support**, set **Enabler Pre-Boot DMA Support** to **OFF**, set **Enable OS Kernel DMA Support** to **OFF**.

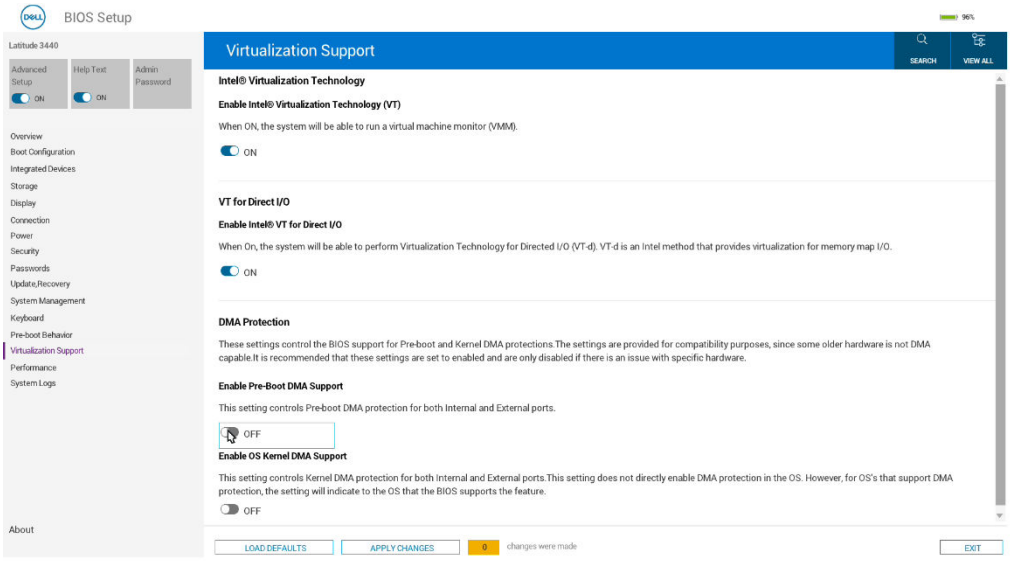

Figure 10. Vitalization Support

8. Click **Save** and then click **Exit**.
9. When the device reboots, press **F12** to trigger the **Boot Menu** and select the bootable **Windows 10 IoT OS Recovery USB Key** and press **Enter**.

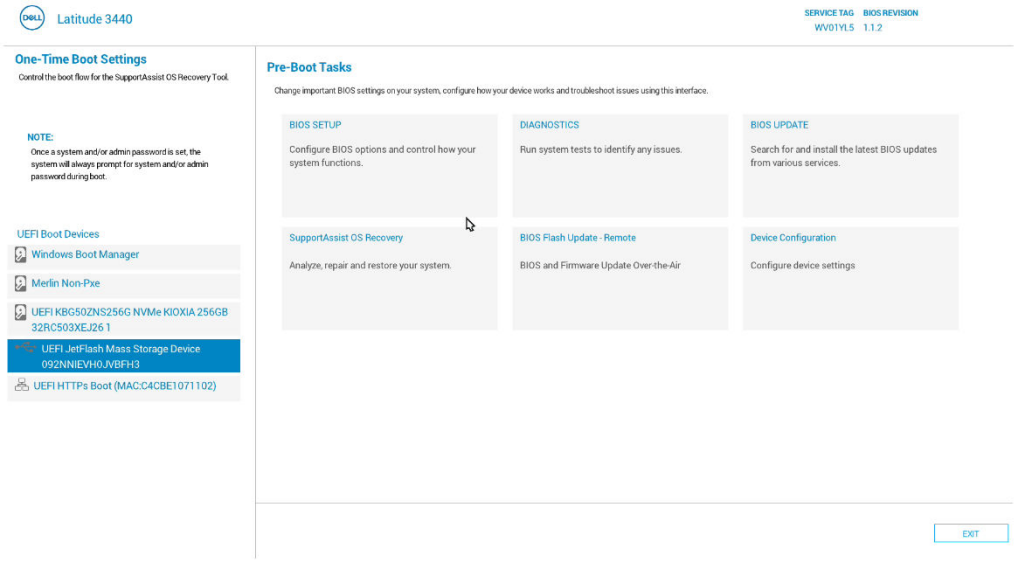

Figure 11. Boot Menu

10. Select the operating system image and click **OK**.
    The installation process starts.

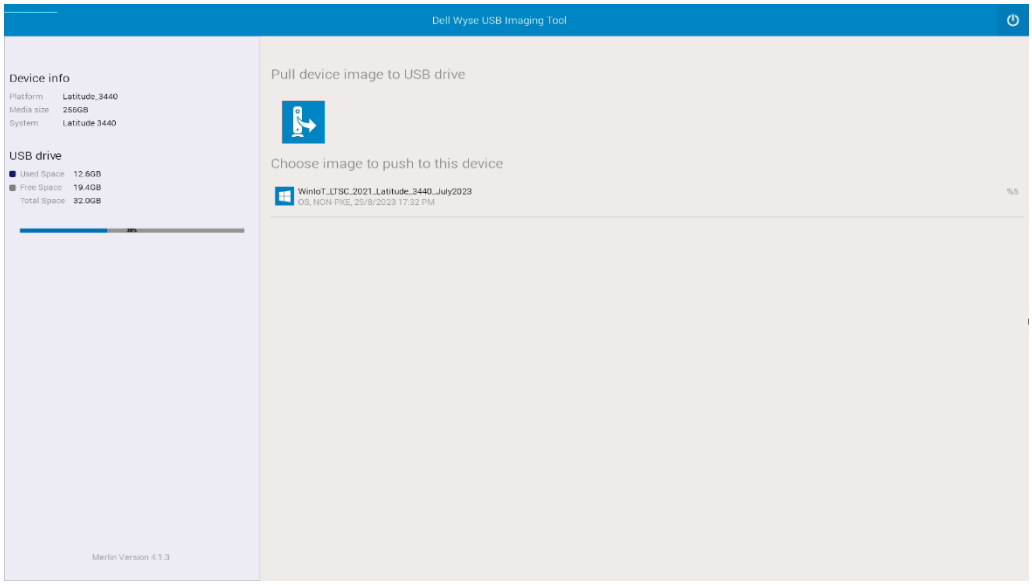

Figure 12. USB Imaging tool

The image that is shown above is an example image. The screen reflects the image that you created in the USB pen drive.

11. After the installation is completed, the device reboots.
12. Remove the operating system Recovery USB drive.
13. Press **F12** to trigger the **Boot Menu** and select **SSD/HDD storage where Win 10 IOT OS is installed**.
14. Press **Enter**.
    Windows IoT boots to the desktop.

3

Capturing image to the created USB drive

Steps

1. Insert the **Windows 10 IoT OS Recovery USB Key** created into the USB port of the appropriate device.
2. Power on the device.
3. When the device reboots, press **F12** to trigger the **Boot Menu** and select the bootable **Windows 10 IoT OS Recovery USB Key**.
4. Press **Enter**.

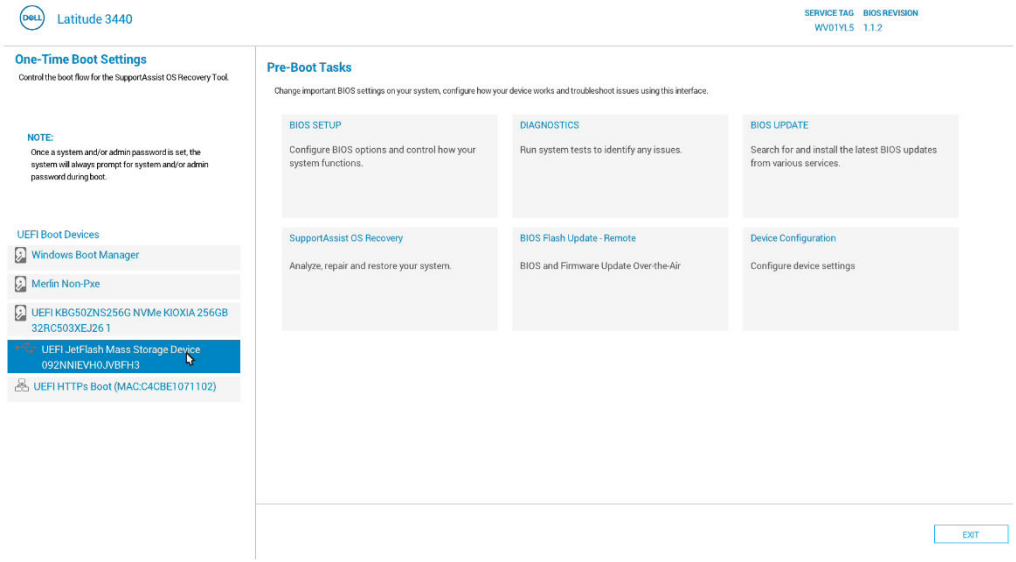

Figure 13. Pre-Boot tasks

5. Select **Pull Device Image to USB Drive**.

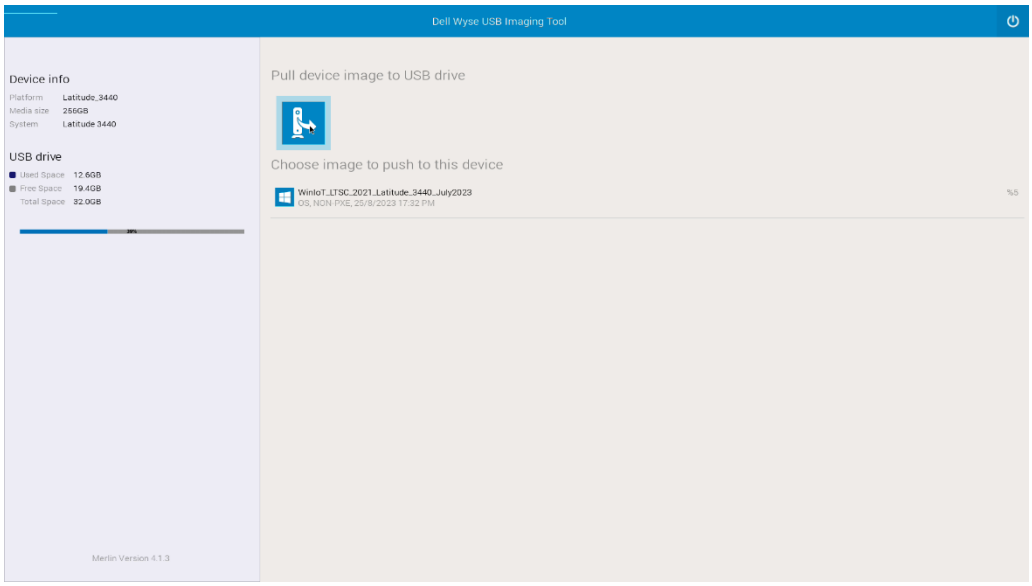

Figure 14. Pull Device Image to USB Drive

6. Click **OK** on the **Compressing and Pulling Image to USB drive** screen.

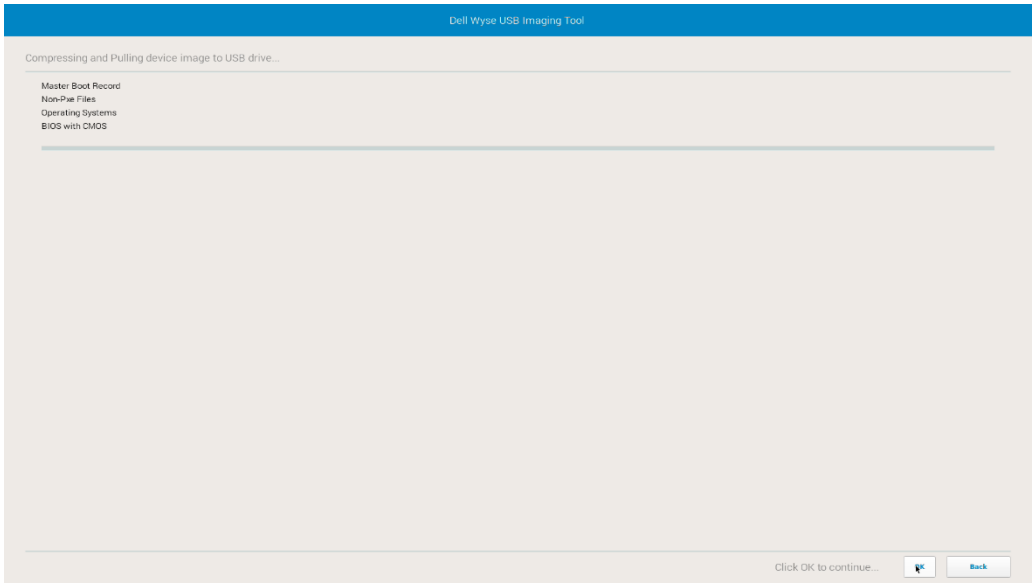

Figure 15. Compressing and Pulling Image to USB drive

Image Capturing starts and displays the progress screen.

7. After the image capture is completed, remove the bootable **Windows 10 IoT OS Recovery USB Key** and click **Restart**.

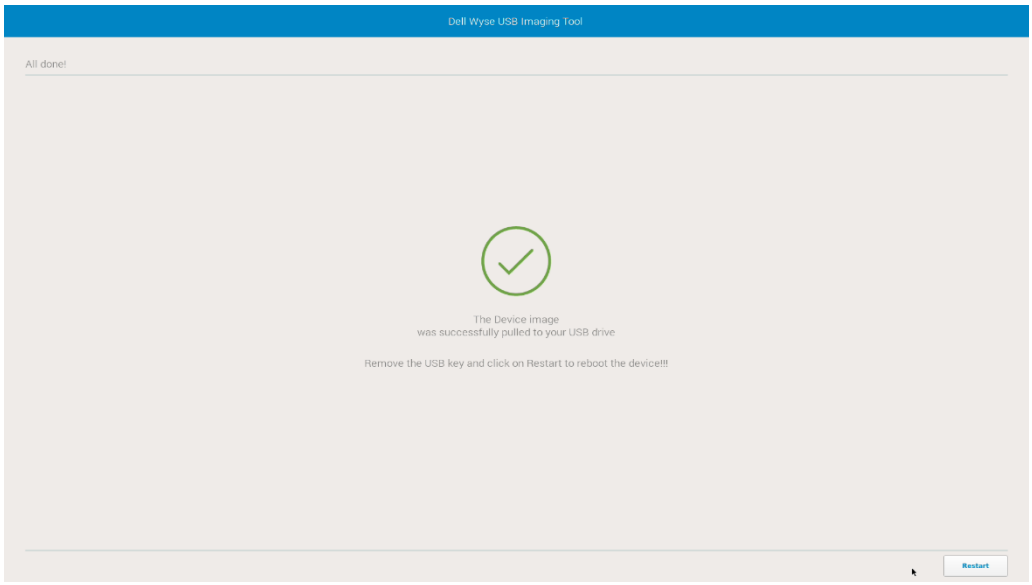

Figure 16. USB Imaging tool screen