Dell Pro 24 All-in-One

QC24251

Reimaging Guide for ThinOS 10

D&LL Technologies

Notes, cautions, and warnings

(i) **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

Installation overview

⚠️ **CAUTION: This reimaging guide is designed for system administrators. Do not attempt to reimage your computer if you are not an administrator or if you are unsure of the procedures. Failure to follow instructions may result in permanent data loss.**

ⓘ **NOTE:** The information that is provided in this guide is only applicable to computers with the ThinOS 10 operating system installed.

ⓘ **NOTE:** The minimum requirements for ThinOS 10 are 8 GB of RAM and 32 GB of storage. It does not support the I7 processor.

ⓘ **NOTE:** The Dell operating system recovery image is available for the original operating system that was shipped with the Dell computer.

ⓘ **NOTE:** Dell Technologies recommends that you download and install the device drivers from the Dell Drivers & Downloads website. Installing device drivers from a non-Dell website can cause computer performance issues or corrupt operating system files. It can also cause blue screen errors, unexpected shutdowns, or infect your computer with malicious software.

Use the Dell OS Recovery Tool to create a USB recovery drive that can be used to reinstall the version of operating system installed in the computer.

Introduction

⚠ **CAUTION: This reimaging guide is designed for system administrators. Do not attempt to reimage your computer if you are not an administrator or are unsure of the procedures. Failure to follow instructions may result in permanent data loss.**

ⓘ **NOTE:** The information that is provided in this guide is only applicable to computers with ThinOS 10 installed.

Reimaging is the process of removing all software on the computer and reinstalling the removed software. Reimaging is required when software in the computer is corrupted or damaged. It can also be used as a means of removing harmful and malicious software in your computer. This reimaging guide provides the steps that are required for reimaging your computer.

This guide assists you in installing Dell Technologies-recommended software stack and settings, drivers, and applications, which are tested and validated on the computer. The installation of the listed drivers and applications as described in the guide enhances the optimal performance of your computer.

Dell Technologies also provides drivers and applications that are not included with the operating system. These drivers are required to enable the following solid-state drives (SSDs):

- 256 GB PCIe SSD
- 512 GB PCIe SSD
- 1024 GB PCIe SSD
- 2048 GB PCIe SSD and larger capacity size PCIe SSDs

It is always recommended to reimage on a newly installed operating system and not from any previous image-build. Ensure that the BIOS settings, including SATA configurations and modes, are set appropriately and use the latest drivers and applications when reimaging the computer.

Updating or resetting the BIOS

Clearing CMOS settings

If flashing your computer with the latest BIOS update results in your computer being unable to boot, a BIOS reset is necessary. Clearing the CMOS settings will reset the BIOS to factory settings. For more information about clearing the CMOS settings, go to Dell Support Site and see your computer's *Owner's Manual*.

Trusted Platform Module (TPM) security

TPM must be enabled in the BIOS setup program for it to be deployed on the computer. Follow these steps to enable and configure the TPM:

1. Turn on or restart your computer.
2. Press F2 when the Dell Technologies logo is displayed on the screen to enter the BIOS setup program.
   The BIOS setup program is displayed.
3. On the left pane, select **Security**.
4. Select or clear any of the following options to enable or disable it, respectively:
   - **TPM state (Enabled or Disabled)**:
     - **Enabled**: The BIOS will enable the TPM during Power-On-Self-Test (POST), and it can be accessed by the operating system.
     - **Disabled**: The BIOS will not enable the TPM during Power-On-Self-Test (POST), and it cannot be accessed by the operating system.
   - **TPM 2.0 security On**: The TPM is enabled and activated.
   - **Clear**: The BIOS clears the information that is stored in the TPM.
5. Save the settings and exit.

Downloading and installing ThinOS 10 from a USB drive using the Dell OS Recovery Tool

1. Download Dell OS Recovery Tool.
2. Run the .exe file on the device to be used to create the USB drive. The Dell OS Recovery Tool Application installer opens.
3. Click **INSTALL**.
4. After the installation is complete, open Dell OS recovery Tool.
5. Select **SWITCH TO ADVANCED RECOVERY** displayed at the bottom of the tool.
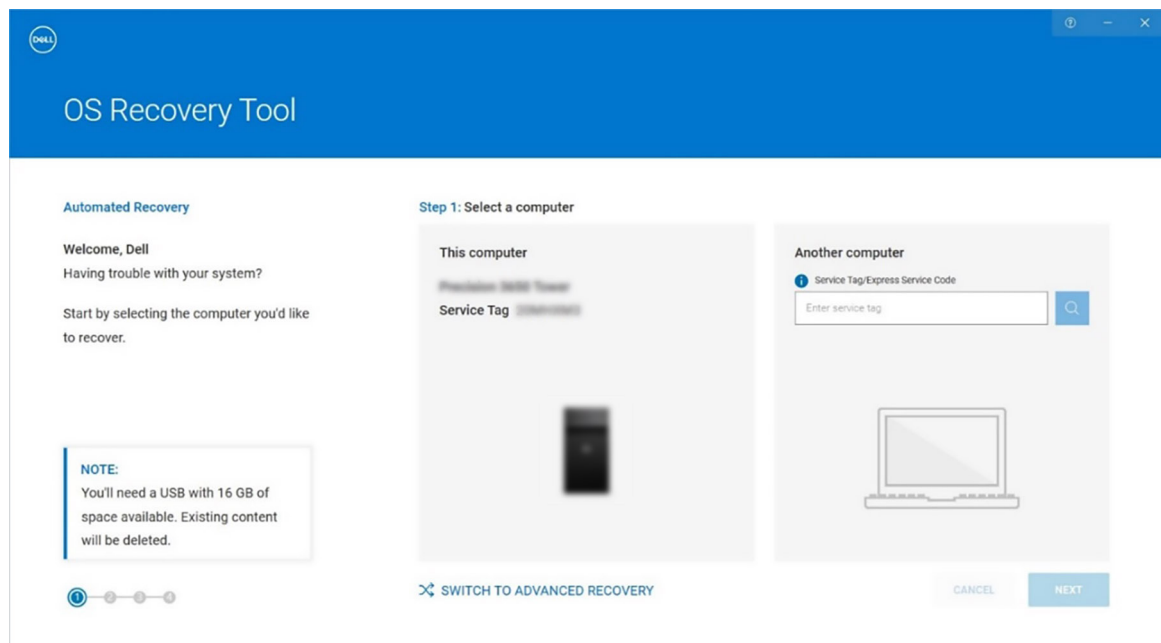

Figure 1. Dell OS Recovery Tool

6. In **Select an OS image**, browse to the ISO file that you downloaded from the DownloadThinOS ISO image section and click **NEXT**.
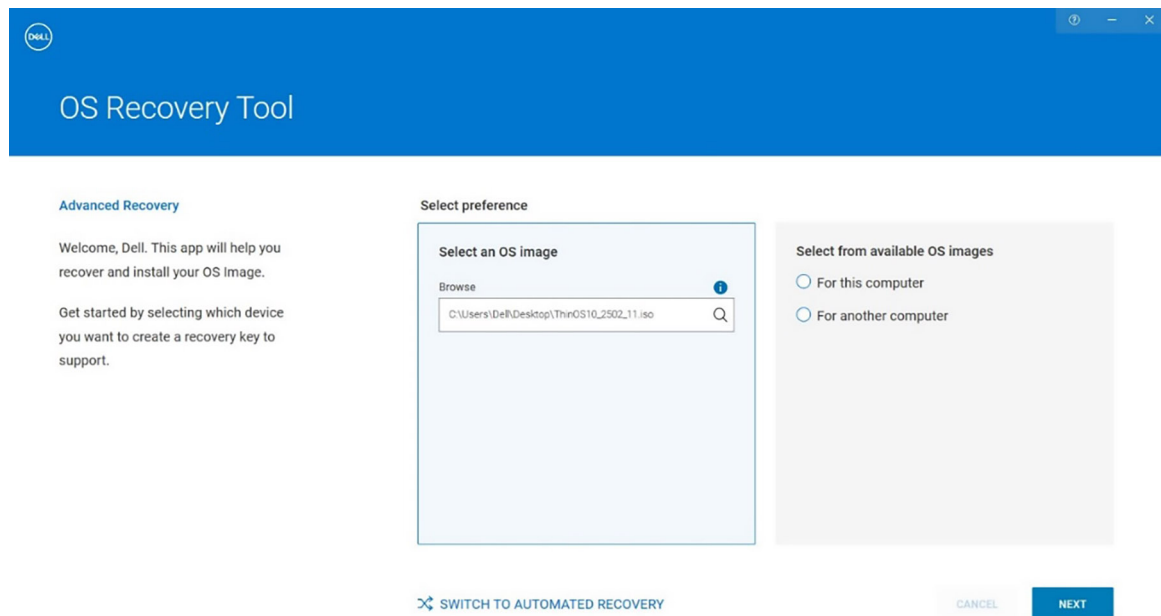
Figure 2. Upload the ISO file

7. Select the USB drive that you want to format from the **USB drive** dropdown.

   ⓘ **NOTE:** Some special USB drives do not support ThinOS ISO image by default. You can change the **Partition Style** and burn the operating system again.

8. User can select **GPT** or **MBR** option in the **Partition Style**.
9. Check the box **"I understand that the selected drive will be reformatted, and existing data will be deleted".**
10. Click **BURN OS**.
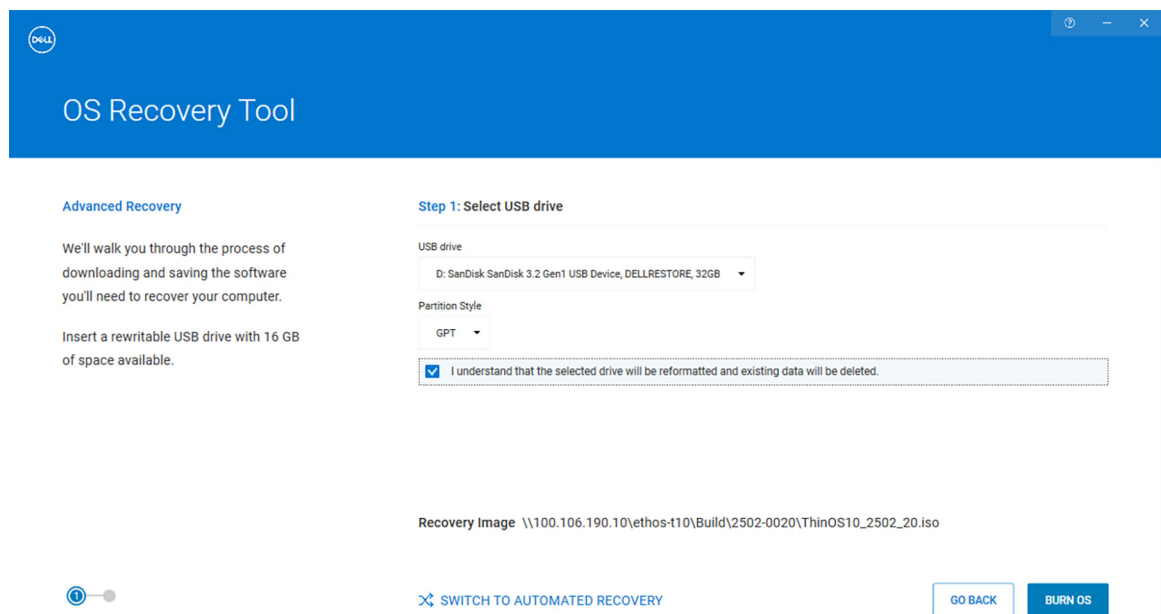
Figure 3. Selection of USB Drive and BURN OS

   ⓘ **NOTE:** Once the burn OS process is completed, the Build is stored in USB drive.

11. Remove the USB drive and connect it to the powered-off device, on which you plan to install ThinOS.
12. Switch on the computer and press F2 at boot up for BIOS page.

13. Most of the Dell devices have a password protected BIOS. Enter the BIOS password if prompted.
14. Click **UNLOCK** on the Admin Password button and input the required password (The default password for most Dell Thin client is "Fireport", but this will be different if device was enrolled to WMS and can be found in the WMS console).

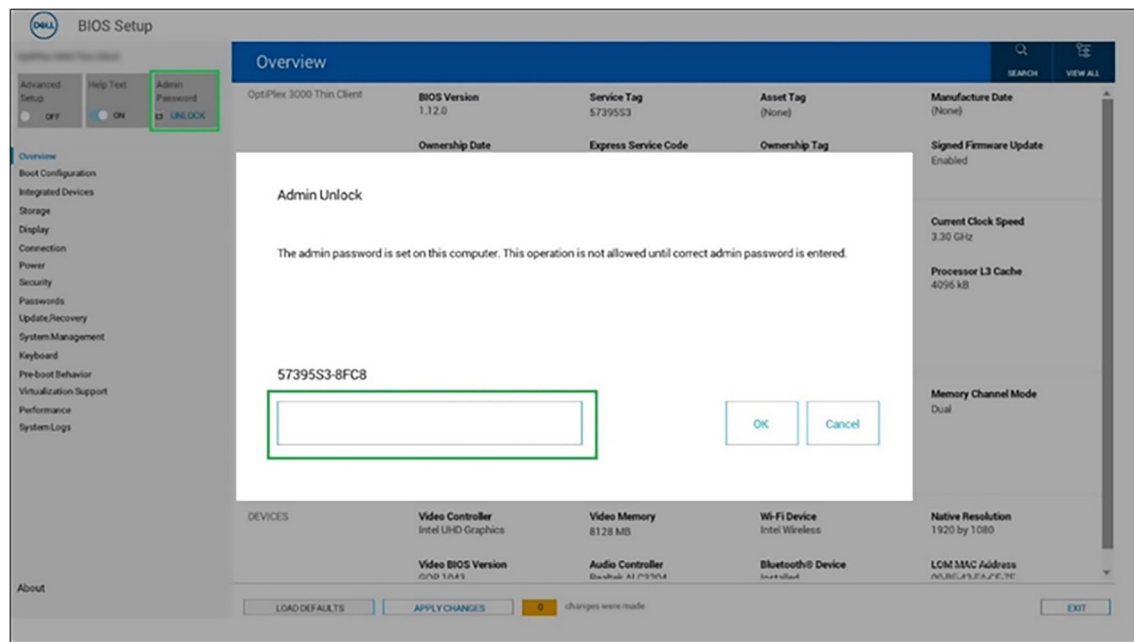> (i) **NOTE:** If no BIOS password is set, the "UNLOCK" option will not appear on the Admin Password button.

Figure 4. Unlock BIOS screen

15. Navigate to the **Integrated Devices** section on the BIOS menu and ensure that **Enable USB Boot Support** is enabled.
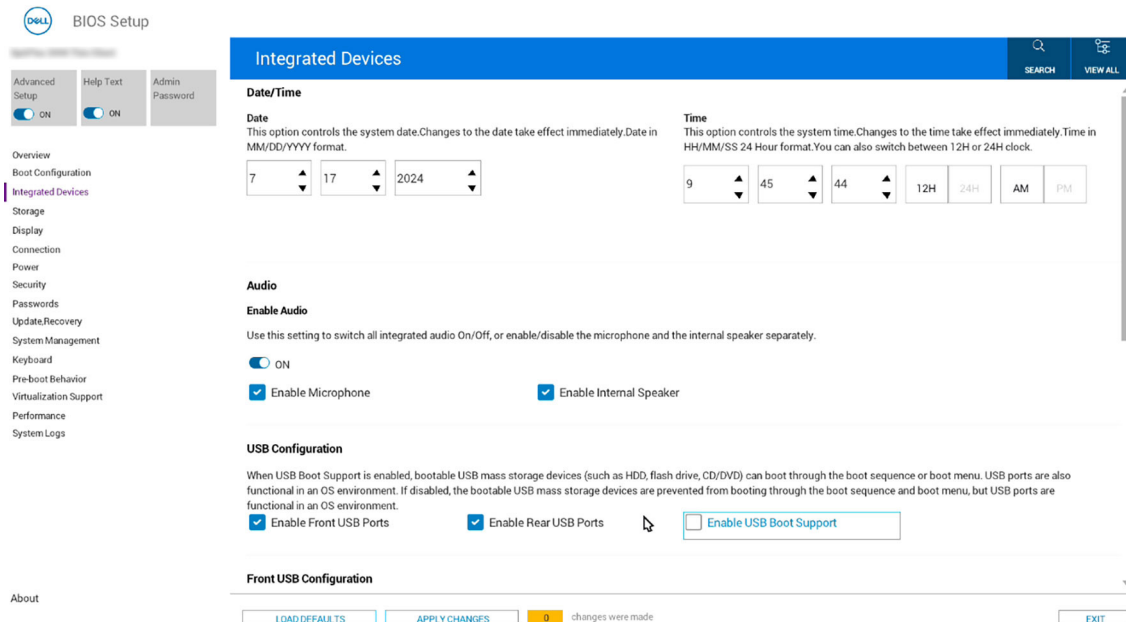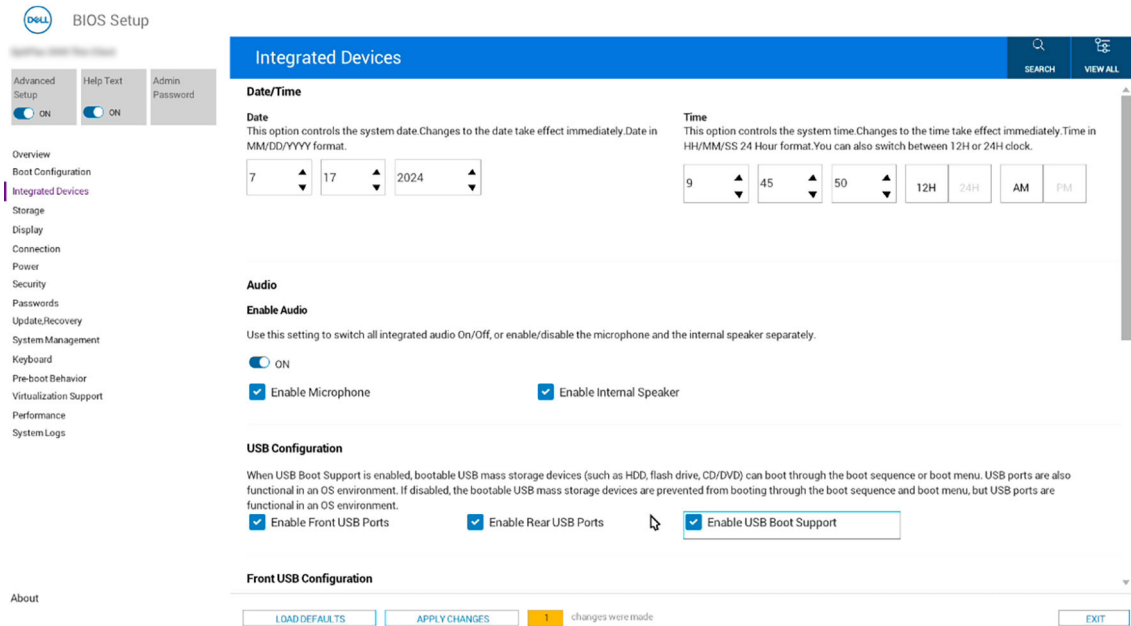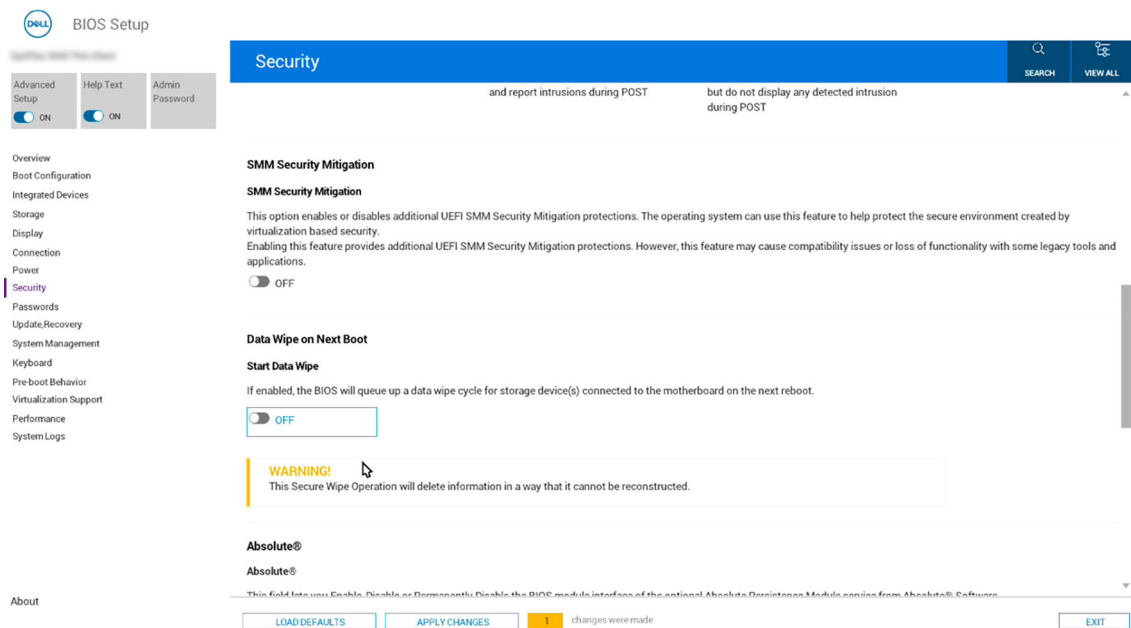

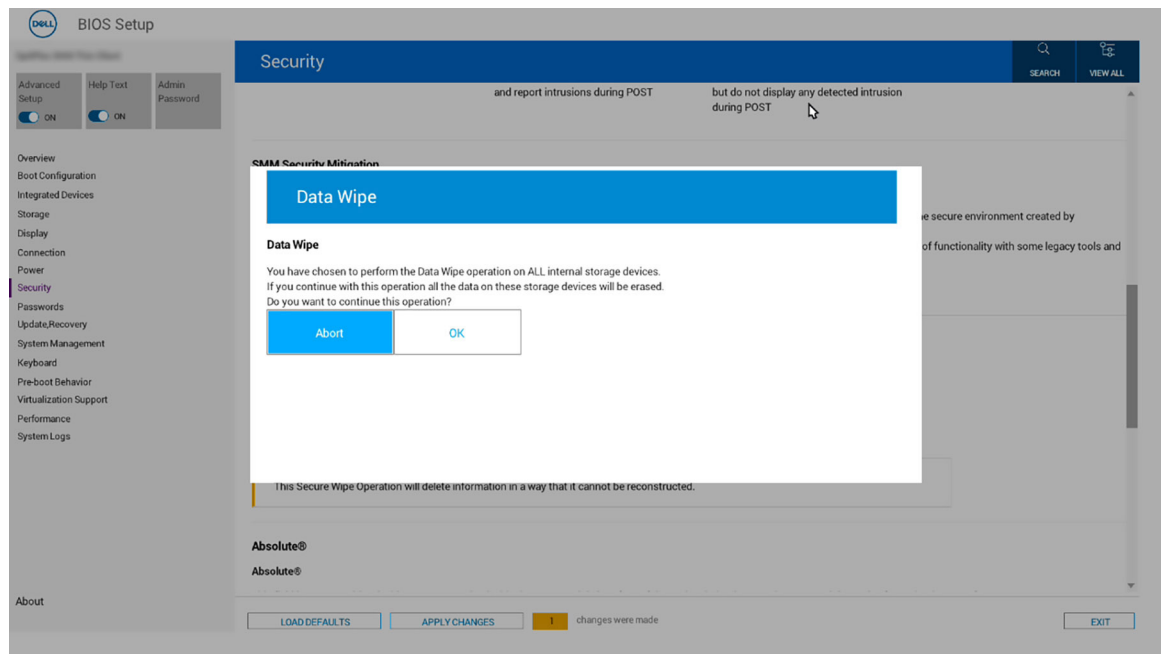**Figure 5. USB Boot Support option is not Enabled**

Figure 6. Enable USB Boot Support

16. Navigate to the **Security** section on the BIOS menu and ensure that **Start Data Wipe** option under **Data Wipe on Next Boot** is set to **ON**.
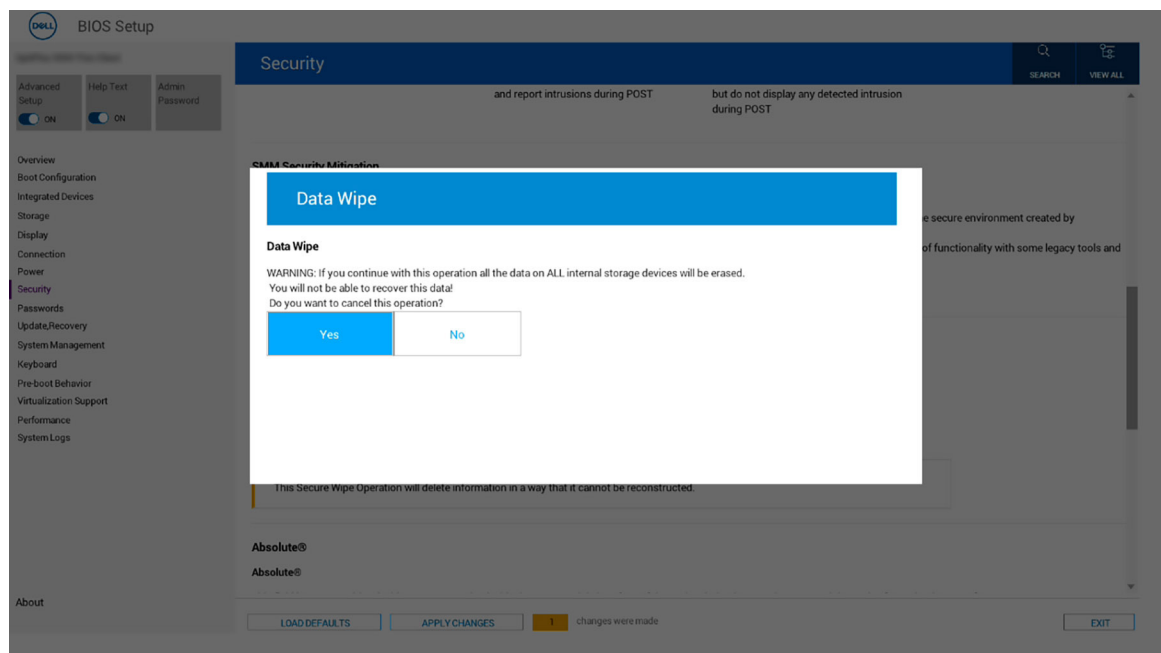

Figure 7. Data Wipe Screen (ON)

17. A pop-up message appears on the BIOS screen to confirm if you want to wipe the data. Select **OK**.

Figure 8. Data Wipe Screen (Select OK)

18. The Data Wipe pop-up message asks if you want to cancel or proceed with the operation. Select **NO**.

Figure 9. Data Wipe Screen (Select NO)

19. In the **Security** section on the BIOS menu, enable the **TPM Clear** option if disabled. Then select **Yes**.
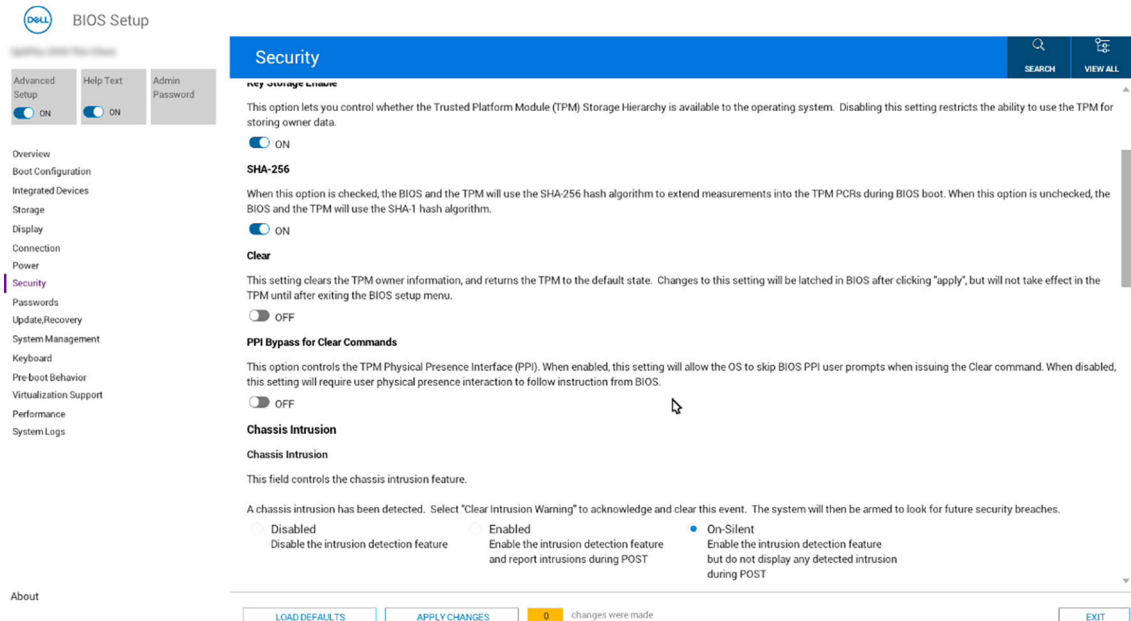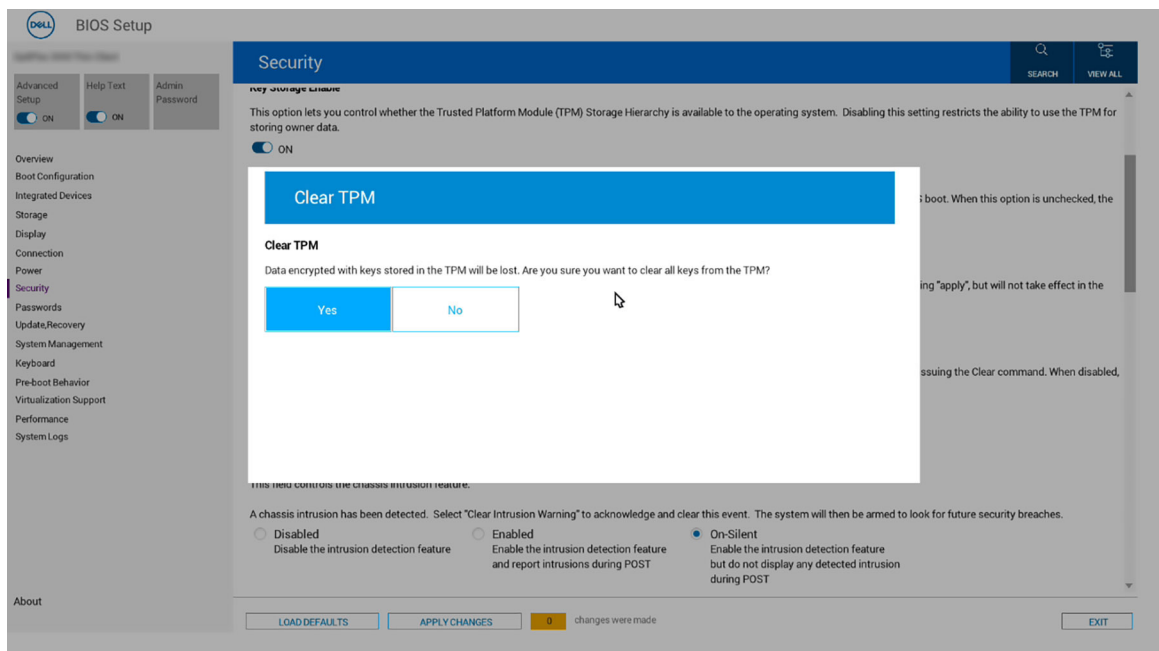
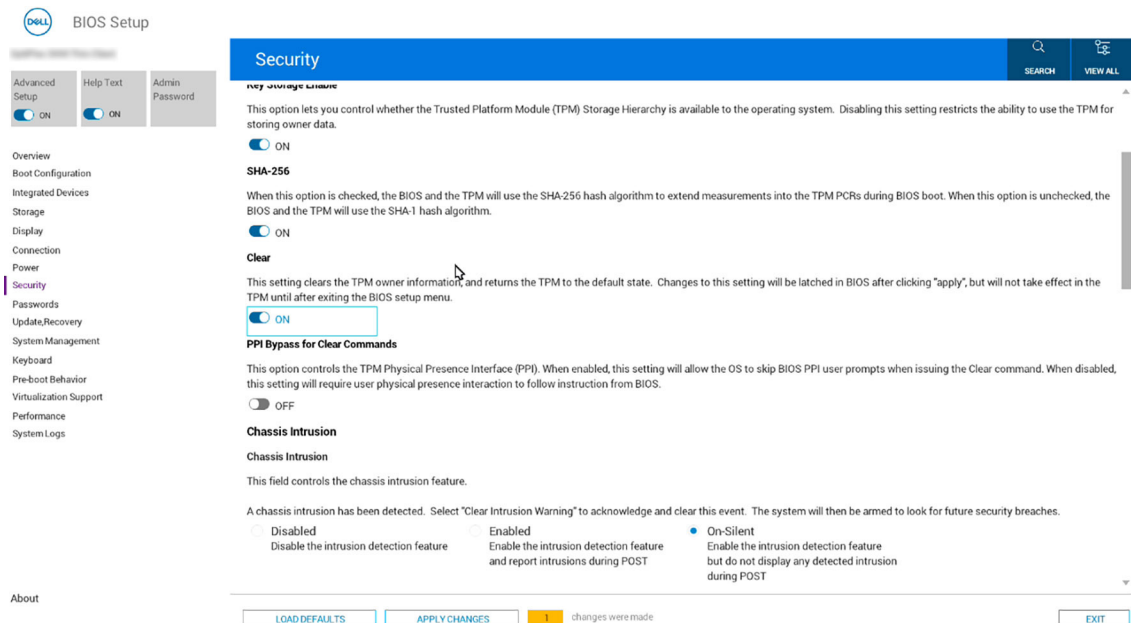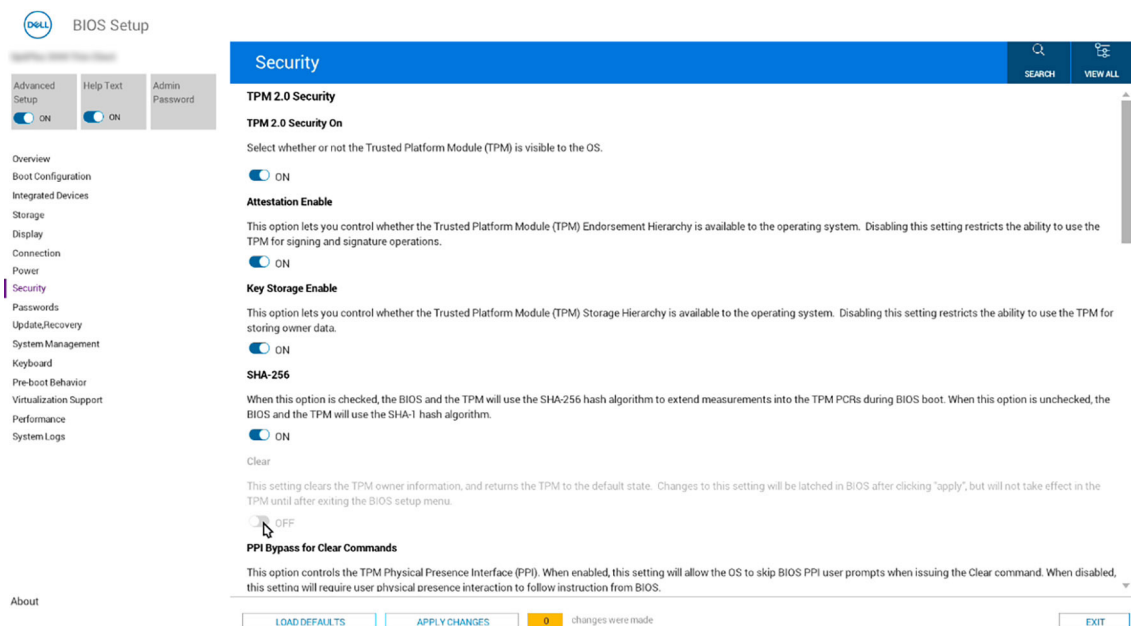**Figure 10. TPM Clear option is available**

**Figure 11. Enable TPM Clear option**

Figure 12. TPM Clear is enabled

20. If the **TPM Clear** option is grayed out in the BIOS, it indicates that Intel Platform Trust Technology (PTT) is enabled by default. Only one of these trust technologies (TPM or PTT) can be active at a time. Please go to the next step.
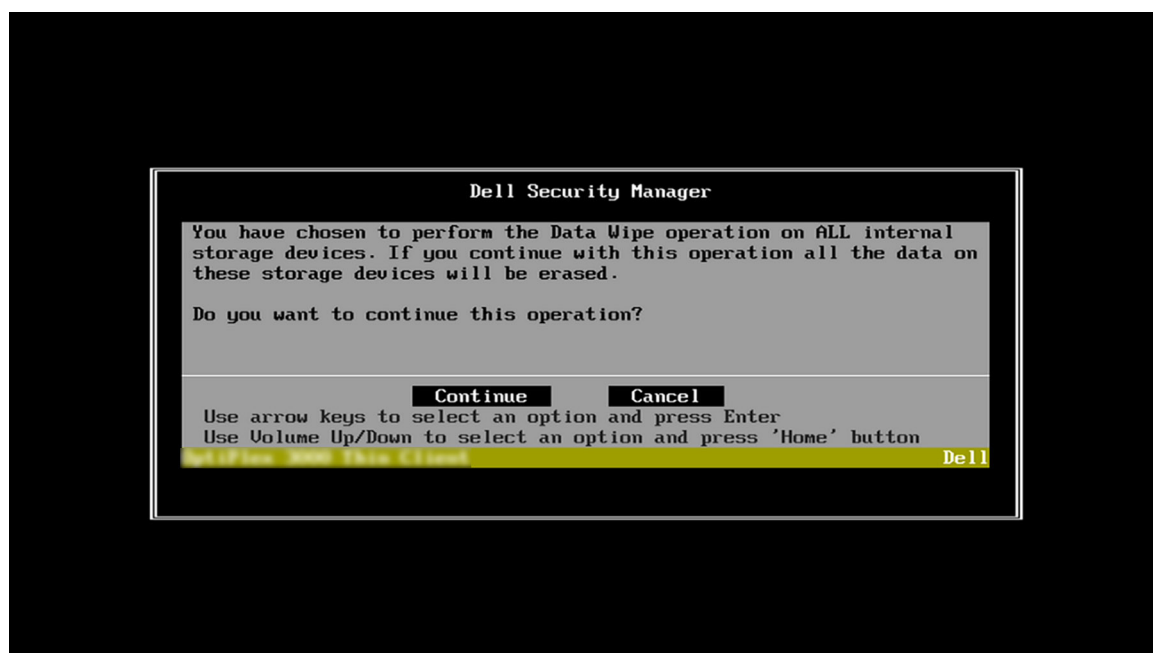

Figure 13. TPM Clear option is greyed out

21. Exit the BIOS settings. Select **Yes** to save the changes.
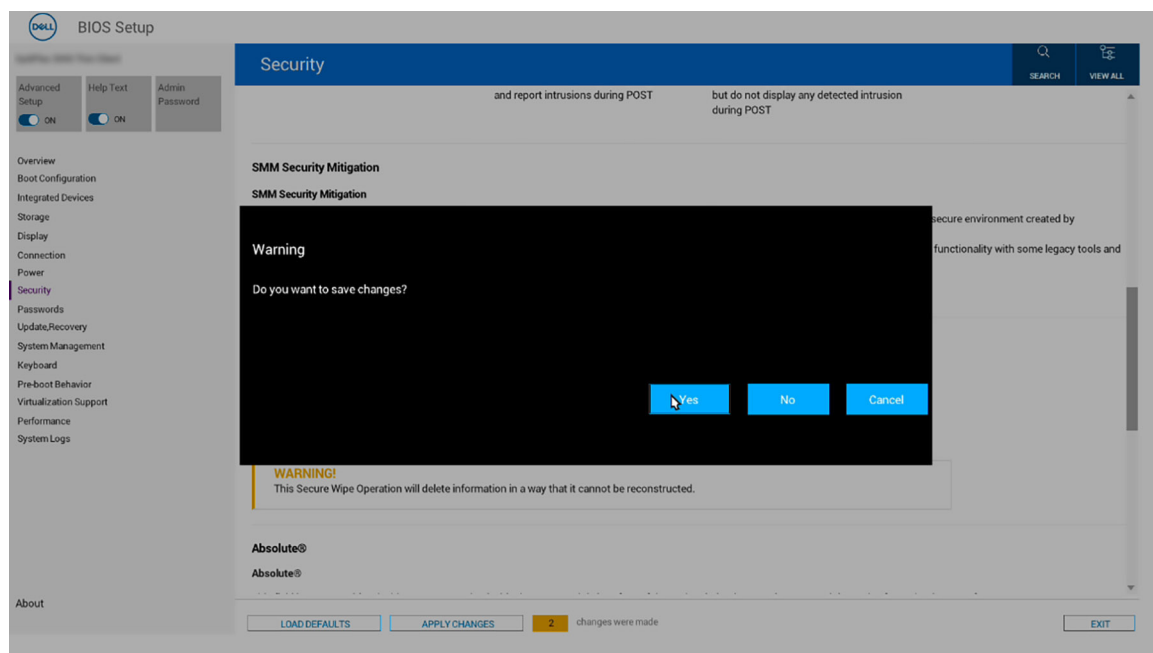
Figure 14. Exit the BIOS settings

22. Dell Security Manager screen is displayed. Select **Continue** to erase the data.

Figure 15. Erase the data

23. In the Dell Security Manager screen, select **ERASE** to erase the data.
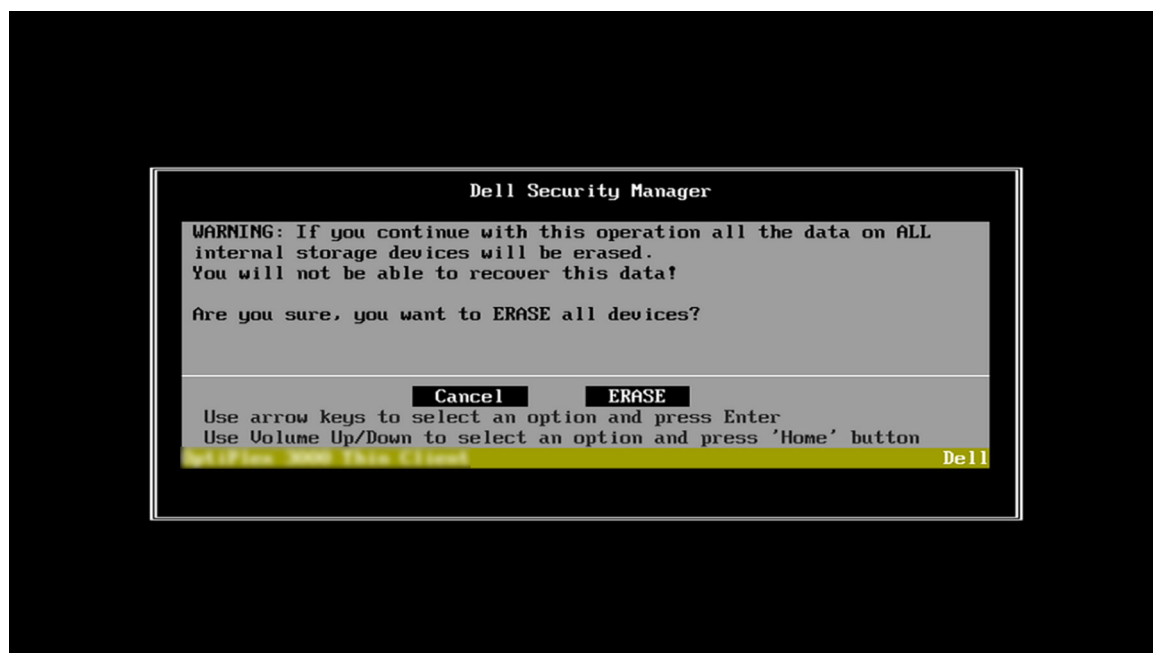
Figure 16. Select Erase

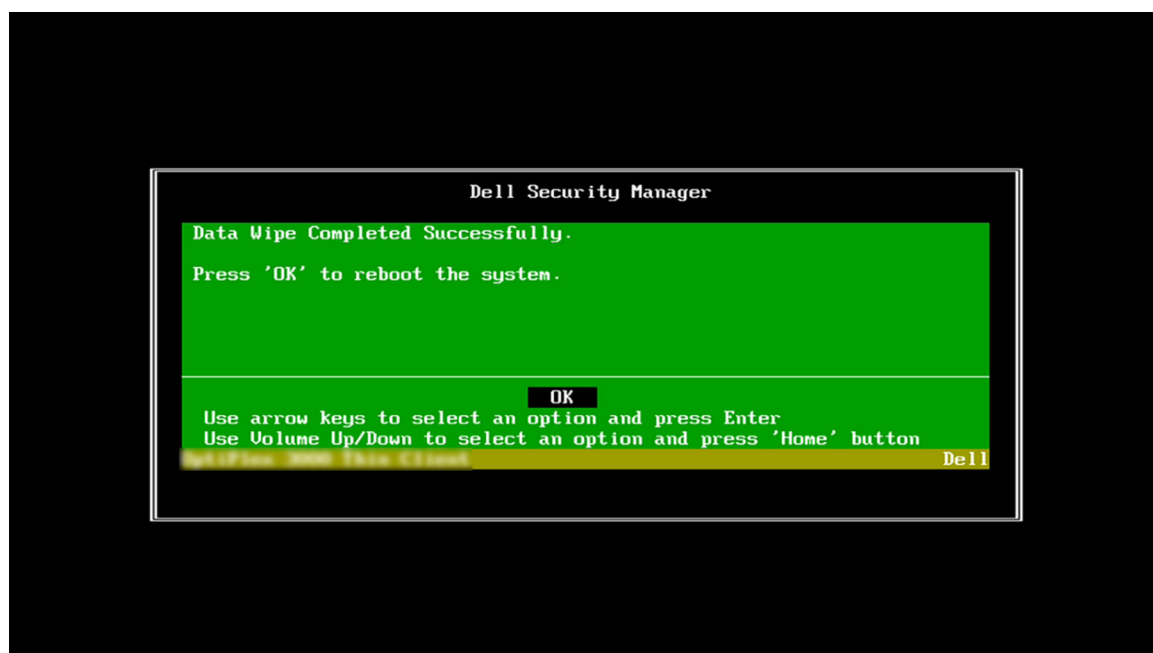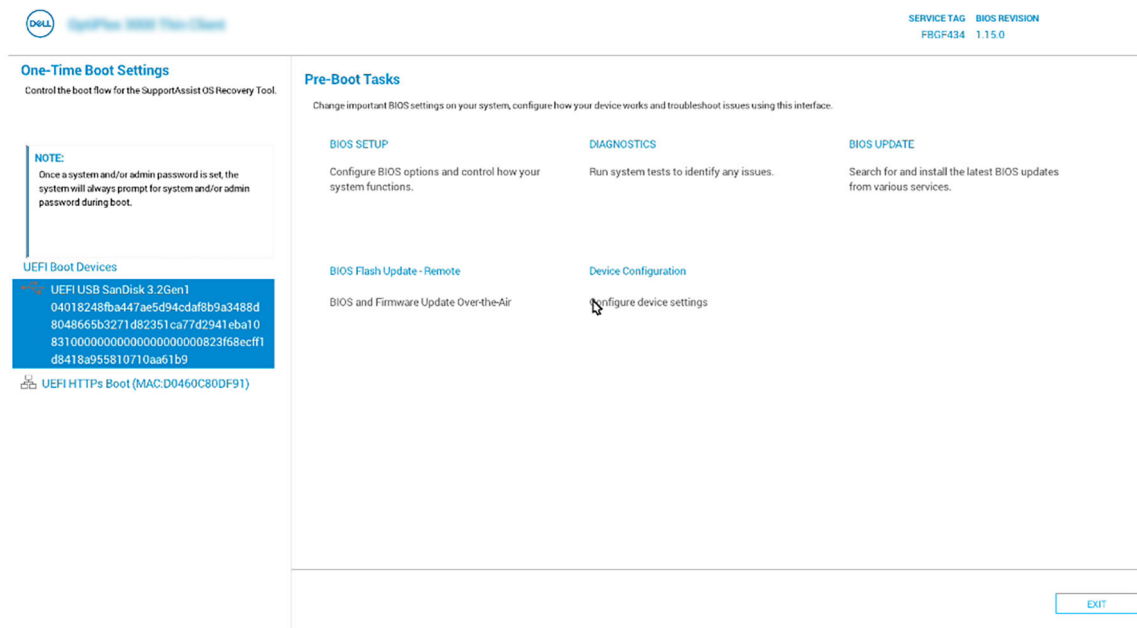24. Select **OK** to reboot the computer.

Figure 17. Select OK to reboot

25. During reboot, press F12 at boot up and hold it until the Dell logo appears and **Preparing one-time boot menu...** is displayed in the top-right corner. The boot menu will then open.
26. In the boot menu, select the USB drive from the **UEFI Boot Devices** list.

Figure 18. UEFI Boot Devices – USB (Select)

27. After selecting the USB key, the device will reboot automatically, and the installation will begin.

Figure 19. Dell ThinOS 10 installation

28. After Installation, the OOBE screen is displayed. Click **->** button to proceed to the next page.

   ⓘ **NOTE:** If a network cable is connected, the page will automatically advance once the IP address is obtained.

   ⓘ **NOTE:** If WMS (Wyse Management Suite) discovery is configured, the device will check in automatically, and the OOBE screen will not be displayed.

29. In the Dell Technologies page, click the **->** to go to the Review License Agreement page.
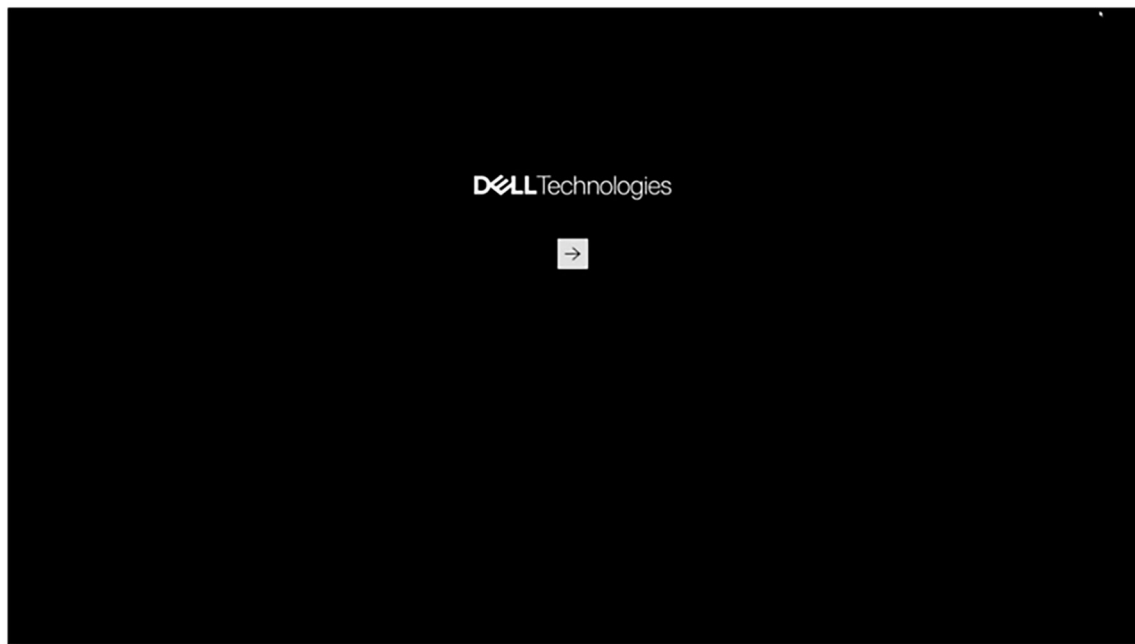
Figure 20. Dell Technologies screen

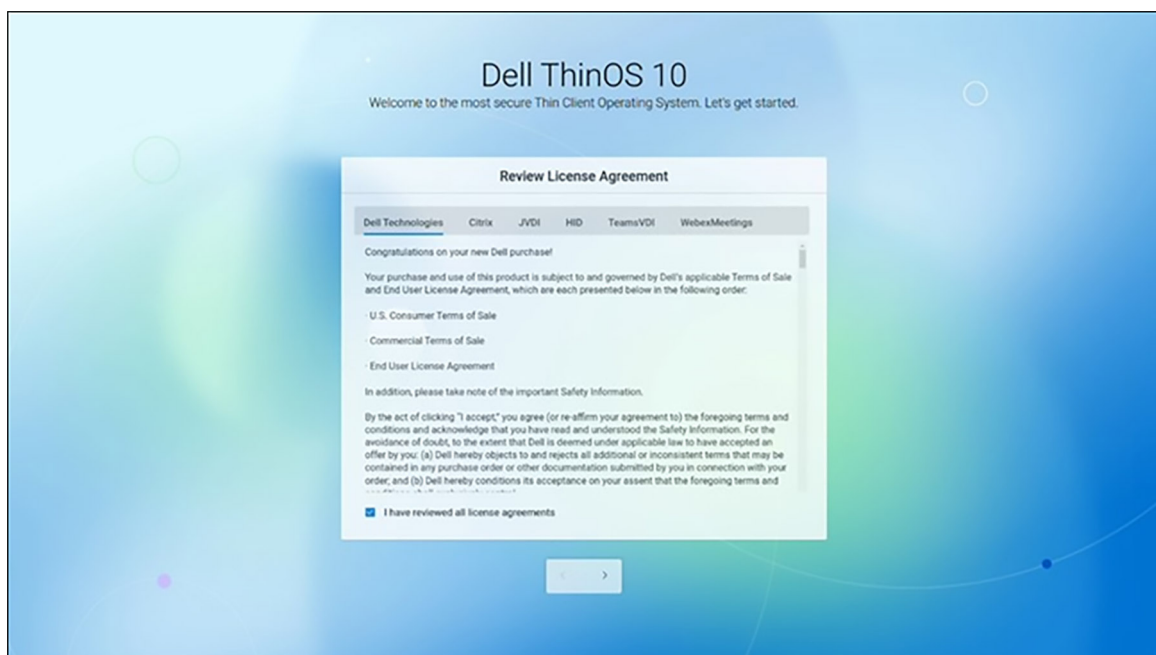30. In the Review License Agreement page, select **I have reviewed all license agreements** and then click **>** button to proceed to the next page.

Figure 21. OOBE Screen

31. The QR Code Scan page is displayed.
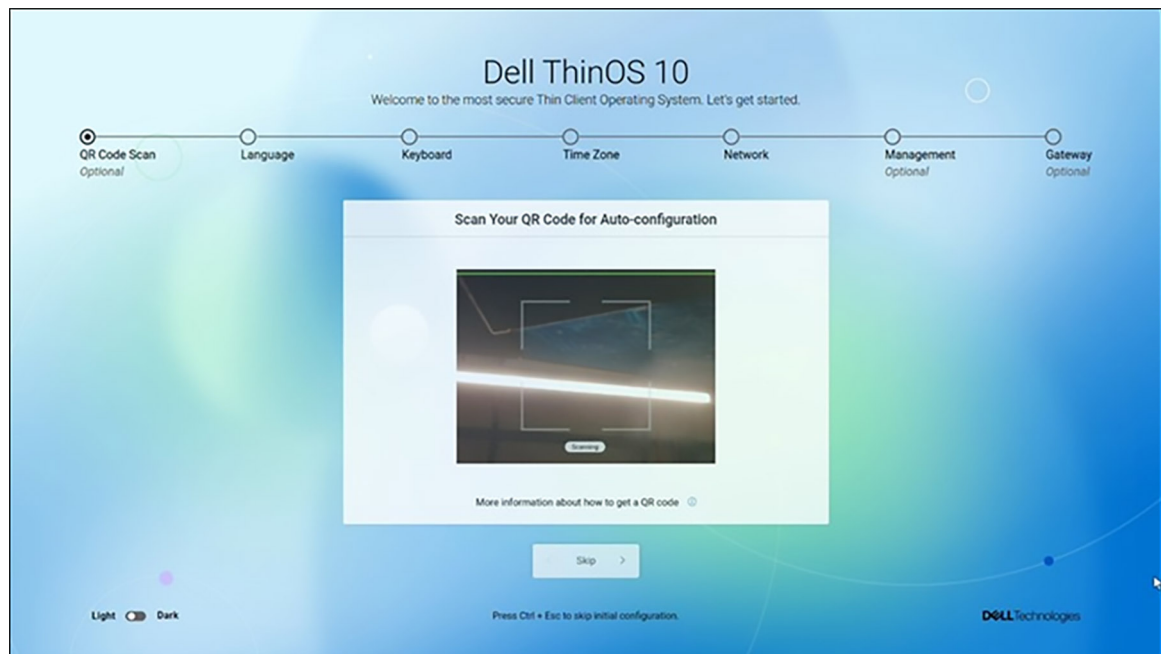
Figure 22. OOBE Screen

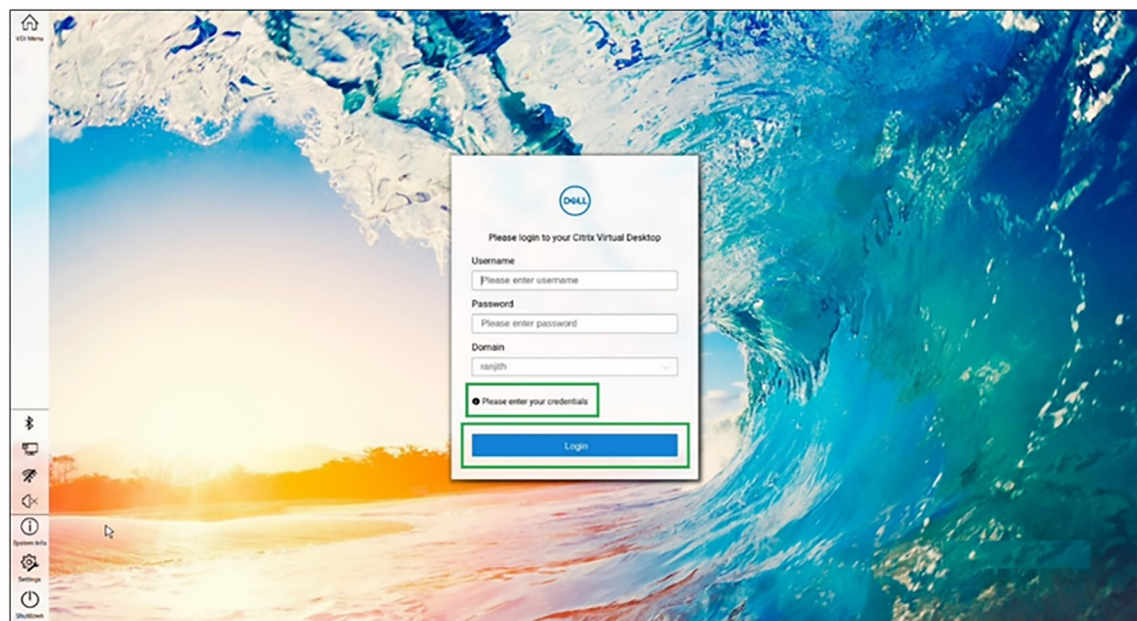32. Press **Ctrl + ESC** to enter the computer.

Figure 23. Desktop Screen (ThinOS 10)

WMS Configuration

Once the device is registered to WMS, push the policy from ThinOS 10.X configuration.

Figure 24. WMS configuration

Known behavior

1. If the device does not go to the installation screen after selecting the USB (and instead boots to HTTPS or encounters a security error), disable the **Secure Boot** in the BIOS.
2. After a successful installation, if the device fails to boot into ThinOS 10 (and instead boots to HTTPS or encounters a security error), disable the **Secure Boot** in the BIOS.
3. Devices with an integrated graphics card may experience UI distortion issues after installation.
4. Installation time is 10 to 15 minutes for legacy platforms.

5

Reinstalling drivers and applications

Drivers and applications are software that enable operating systems to communicate with the hardware devices and software in your computer. Devices such as video and sound cards require drivers to function correctly, and enable users to adjust hardware settings.

Device-specific drivers may have to be downloaded and installed separately. Dell Technologies recommends that you download the device drivers for your Dell Technologies computer from Drivers & Downloads.

Applications must be downloaded and installed separately. Dell Technologies recommends that you download the required applications for your Dell Technologies computer from the Dell Download Center.

Displaying drivers and applications on your computer

1. Turn on your computer.
2. Go to Dell Support Site.
3. In the **Search support** field, enter the Service Tag, Serial Number, Service Request, Model, or Keyword of your computer, and then click **Search**.

   ⓘ **NOTE:** If you do not have the Service Tag, Serial Number, Service Request, Model, or Keyword, use the SupportAssist feature to automatically identify your computer. You can also click **Browse all products** to manually browse for your computer.

4. Click **Drivers & downloads**.
5. In the **Operating system** drop-down, select the operating system that is installed on your computer to get a list of the drivers and applications available for your computer.

Getting help and contacting Dell

Self-help resources

You can get information and help on Dell products and services using these self-help resources:

Table 1. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	Dell Site
Tips	
Contact Support	In Windows search, type `Contact Support`, and press Enter.
Online help for operating system	Windows Support Site Linux Support Site Windows IoT Enterprise
Access top solutions, diagnostics, drivers and downloads, and learn more about your computer through videos, manuals, and documents.	Your Dell computer is uniquely identified using a Service Tag or Express Service Code. To view relevant support resources for your Dell computer, enter the Service Tag or Express Service Code at Dell Support Site. For more information about how to find the Service Tag for your computer, see Locate the Service Tag on your computer.
Dell knowledge base articles	1. Go to Dell Support Site. 2. On the menu bar at the top of the Support page, select **Support** > **Support Library**. 3. In the Search field on the Support Library page, type the keyword, topic, or model number, and then click or tap the search icon to view the related articles.

Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see Dell Support Site.

(i) **NOTE:** Availability of the services may vary depending on the country or region, and product.

(i) **NOTE:** If you do not have an active Internet connection, you can find contact information in your purchase invoice, packing slip, bill, or Dell product catalog.