

Dell Wyse USB Imaging Tool

Version 2.1.4 User's Guide



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.

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Introduction

Dell Wyse USB Imaging Tool provides a simple USB imaging solution to help IT administrators to easily perform the pull or push operations using USB keys and drives.

The tool enables you to configure a bootable USB drive that you can plug into thin client devices and copy the operating system (OS) images from the systems, or push the OS images to the systems, thin clients, mobile clients, and appliances. USB Imaging Tool helps to quickly and easily image or reimage supported Dell Wyse thin clients.

New features

This section provides details about the new features introduced in this release.

- Supports the following new hardware platforms/operating systems:
 - Wyse 3040 thin client with ThinLinux
 - Wyse 5060 thin client with Win10 IoT
 - Latitude 3480 mobile thin client with Win10 IoT
 - Latitude 5280 mobile thin client with Win10 IoT
- Support for USB Keys with C-Type ports

Key features

USB Imaging Tool has the following key features:

- A simple and friendly user interface that enables you to perform the various operations with ease.
- All the available USB disks and drives connected to the thin client devices are listed for better view.
- Ability to configure a USB drive to copy or pull the OS image from source thin client devices. Only OS or only CMOS settings and BIOS can be pulled separately.
- Ability to configure a USB drive to update or push an OS image loaded on it to target thin client devices. Image push operation can be performed for only OS, or only CMOS settings and BIOS, or all three together. A single USB key can have multiple images of different platforms.
- Ability to clone an already configured USB drive containing the image that you want to push to target devices. Cloning helps to simultaneously update the OS on multiple thin client devices at the same time.
- Administrators can easily configure the Backup path and back up the data present in the USB key during configuration. After the device is configured, the Imaging tool restores the data back to USB key seamlessly.
- Support for 32–Bit, 64–Bit, and ARM architecture based OS platforms.
- Ability to configure different types of Dell Wyse Thin Clients.
- Support for both removable and fixed type USB keys/Hard Disk Drives (HDD).

Support matrix

The following table gives the list of embedded OS and the corresponding Dell Wyse thin clients that are supported by USB Imaging Tool.

Supported OS and thin clients

NOTE: For the thin clients, both Wyse and corresponding Dell names are mentioned in the following table under the Dell Wyse Thin Clients heading. The first part of the name represents the legacy Wyse name and the second part after the hyphen represents the Dell marketing name. For example, in D90D7 — Wyse 5010 thin client with WES7, D90D7 represents the Wyse Legacy name and Wyse 5010 thin client with WES7 represents the Dell marketing name.

Table 1. Operating systems and Dell Wyse thin clients

Operating Systems	Dell Wyse Thin Clients
Microsoft Windows Embedded Standard 2009 (WES 2009)	<ul style="list-style-type: none"> • D90DW • X90MW • Z90DW
Microsoft Windows Embedded Standard 7 (WES7)	<ul style="list-style-type: none"> • 3290 — Wyse 3030 thin client • D90D7 — Wyse 5010 thin client with WES7 • D90Q7 — Wyse 5020 thin client with WES7 • X90M7 • Z90D7 — Wyse 7010 thin client with WES7 • Z90DE7 — Wyse 7010 Extended Chassis thin client with WES7 • Z90Q7 — Wyse 7020 thin client with WES7
Microsoft Windows Embedded Standard 7P (WES7P)	<ul style="list-style-type: none"> • D90D7P • D90Q7P — Wyse 5020 thin client with WES7P • Wyse 5060 thin client with WES7P • X90M7P • Z90D7P • Z90DE7P • Z90Q7P — Wyse 7020 thin client with WES7P • 7490–Z90Qq7P — Wyse 7020 Quad Display thin client with WES7P • Wyse 7040 thin client • Latitude 3460 mobile thin client • Latitude E7270 mobile thin client
Microsoft Windows Embedded 8 Standard (32-bit) (WE8Sx)	<ul style="list-style-type: none"> • D90D8x • Z90D8x • Z90D8E
Microsoft Windows Embedded 8 Standard (64-bit) (WE8S)	<ul style="list-style-type: none"> • D90D8 — Wyse 5010 thin client with WE8S • D90Q8 — Wyse 5020 thin client with WE8S • Z90D8 — Wyse 7010 thin client with WE8S



Operating Systems	Dell Wyse Thin Clients
	<ul style="list-style-type: none"> • Z90Q8 — Wyse 7020 thin client with WE8S
Windows 10 IoT Enterprise (WIE10)	<ul style="list-style-type: none"> • 5490-D90Q10 — Wyse 5020 thin client with Win10 IoT • Wyse 5060 thin client with Win10 IoT • 7490-Z90Q10 — Wyse 7020 thin client with Win10 IoT • Latitude 3480 mobile thin client • Latitude 5280 mobile thin client
Wyse Enhanced SUSE Linux Enterprise v7	<ul style="list-style-type: none"> • D50D — Wyse 5010 thin client with Linux • D50Q — Wyse 5020 thin client with Linux • X50M • Z50D — Wyse 7010 thin client with Linux • Z50Q — Wyse 7020 thin client with Linux • Z50Qq — Wyse 7020 Quad Display thin client with Linux
Wyse ThinOS	<ul style="list-style-type: none"> • T10D — Wyse 3020 thin client with ThinOS • Wyse 3030 LT thin client with ThinOS • Wyse 3040 thin client with ThinOS • D10D — Wyse 5010 thin client with ThinOS • D10DP — Wyse 5010 thin client with PCoIP • 5212 — Wyse 5040 AIO thin client • 5213 — Wyse 5040 AIO thin client with PCoIP • Wyse 5060 thin client with ThinOS
Wyse ThinOS Lite	<ul style="list-style-type: none"> • T10D — Wyse 3020 zero client for Citrix • D00DX — Wyse 5010 zero client for Citrix
Wyse ThinLinux	<ul style="list-style-type: none"> • Wyse 3030 LT thin client with ThinLinux • Wyse 3040 thin client with ThinLinux • Wyse 5020 thin client with ThinLinux • Wyse 5060 thin client with ThinLinux • Wyse 7020 thin client with ThinLinux

NOTE: Wyse Enhanced Ubuntu Linux with 3010 (T50) is an End-of-Life (EOL) platform. Hence this platform is not supported by USB Imaging Tool v2.1.4. Existing customers of Wyse Enhanced Ubuntu Linux with 3010 (T50) platform must use USB Imaging Tool v2.1.3.

Supported types of USB drives

USB Imaging tool configures the following types of USB drives:

- USB drive less than 32 GB of disk space, Removable type
- USB drive greater than 32 GB of disk space, Removable type
- USB drive greater than 32 GB of disk space, Fixed type
- USB Hard Disk Drive (HDD) greater than 32 GB of disk space, Fixed type

NOTE:

- For USB drives greater than 32 GB of disk space and marked as Removable type, the following two partitions are created:
 - 32 GB with image
 - Remaining disk space is displayed as **Raw** or **Unused** when viewed using disk management tool
- For USB drives greater than 32 GB of disk space and marked as Fixed type, the entire drive can be formatted and is usable.
- Same USB drive cannot be used to store all the images (32-bit, 64-bit and ARM images). The drive can have only 32-bit or 64-bit or ARM image.
- USB Imaging Tool supports both FAT32 and NTFS file systems.
- USB Imaging Tool supports fixed USB drives up to 1 TB of disk space.

Supported USB drives

The following USB drives are successfully validated with USB Imaging Tool:

Table 2. Supported USB drives

USB Key	Size	Version	Type
Kingston DT G4 - Security Key	8 GB	3	Removable
Kingston Data Traveler G4	16 GB	3	Removable
Kingston DT G4	16 GB	3	Removable
Kingston Data Traveler 106	32 GB	2	Removable
Kingston DT microDuo 3C C-type	32 GB	3	Removable
Kingston Data Traveler G4	64 GB	3	Removable
Kingston Data Traveler SE9	64 GB	2	Removable
Kingston Data Traveler G4	64 GB	3	Removable
Kingston DT SE9	64 GB	2	Removable
Kingston Data Traveler 101 G2	128 GB	2	Removable
SanDisk Ultra	32 GB	3	Removable
SanDisk Ultra Micro C-type	32 GB	3	Removable
SanDisk Ultra	64 GB	3	Removable
Sandisk Extreme	32 GB	3	Removable
Sandisk Extreme	64 GB	3	Removable
Sandisk Extreme	64 GB	3	Fixed
Sandisk Extreme Pro	128 GB	3	Removable
Sandisk Cruzer Blade	64 GB	2	Fixed



USB Key	Size	Version	Type
Seagate Expansion	500 GB	3	Fixed
Seagate Expansion	1 TB	3	Fixed
Toshiba	1 TB	3	Fixed
Transcend	16 GB	2	Removable
Transcend	64 GB	2	Removable
Transcend	64 GB	3	Removable
Transcend JetFlash	128 GB	3	Removable

NOTE: USB drives from other manufacturers are not validated with USB Imaging Tool, and hence the supported USB drives are recommended.

Technical support

To access technical resources self-service portal, knowledge base, software downloads, registration, warranty extensions/ RMAs, reference manuals, contact information and so on, visit www.dell.com/wyse/support.



Installing Dell Wyse USB Imaging Tool

You can install USB Imaging Tool on any system including thin client devices that meet the operating system and disk space requirements.

[Pre-requisites to install USB imaging tool](#)

[Supported operating systems for USB Imaging Tool installation](#)

[Downloading USB imaging tool](#)

[Installing USB imaging tool](#)

[Uninstalling USB imaging tool](#)

Pre-requisites to install USB Imaging Tool

You can install USB Imaging Tool on any system that meets the following requirements:

- A minimum free disk space of 2 GB to download, extract, and install USB Imaging Tool.
- Microsoft .Net Framework 3.5 installed.

Supported operating systems for USB Imaging Tool installation

The following are the supported operating systems:

- Windows Server 2008 R2 Enterprise SP1
- Windows 7 Enterprise SP1 (32-bit and 64-bit)
- Windows 7 Ultimate SP1 (32-bit and 64-bit)
- Windows 8.1 Enterprise (32-bit and 64-bit)
- Windows 10 Enterprise Build 1511 (32-bit and 64-bit)
- Windows 10 Enterprise Build 1607 (32-bit and 64-bit)

Downloading USB Imaging Tool

USB Imaging Tool is available on the Dell Support site.

To download the tool:

- 1 Open a web browser and go to www.downloads.dell.com/wyse/USBFT/.
- 2 Click the directory path that displays the latest version of USB Imaging tool.
The download link for USB Imaging tool software along with relevant pdf files such as Release Notes and User's Guide are displayed on the Web page.
- 3 Click the download link (.exe file) for USB Imaging tool and navigate to the location where you want to save the self-extracting .exe file that contains USB Imaging Tool installer.
The file is downloaded in the location you have specified.



Installing USB Imaging Tool

If you are installing USB Imaging Tool on a thin client device, ensure that you disable the File-Based Write Filter (FBWF) on the device. To install USB Imaging Tool:

- 1 Log in as Administrator in to the system where you want to run the installation and extract the contents of the Dell Wyse USB Imaging Tool installer.
- 2 Navigate to the folder where you have extracted the installer and run **Dell Wyse USB Imaging Tool.exe**.
The Welcome screen is displayed.
- 3 Click the **Dell Application software EULA** link to read the license agreements.
- 4 Click **Next**.
The default installation path is displayed.
- 5 Click **Change** if you want to specify a custom installation path, and click **Next** after you specify the path.
- 6 Click **Next** to start the installation process.
The **Installation Complete** screen is displayed after the installation is complete.
- 7 Click **Exit** to close the installer window.

Uninstalling USB Imaging Tool

To uninstall USB Imaging Tool:

- 1 Go to **Control Panel**, and click **Programs and Features**.
- 2 From the programs list, select **Dell Wyse USB Imaging Tool**.
- 3 Click **Uninstall**.
The **Dell Wyse USB Imaging Tool Uninstallation** screen is displayed.
- 4 Click **Next**.
After the uninstallation is complete, the **Uninstallation Complete** message is displayed.
- 5 Click **EXIT** to close the **Uninstaller** window.

You can also uninstall USB Imaging Tool by using USB Imaging Tool installer file (.exe file).

- 1 Re-run the `Dell Wyse USB Imaging Tool.exe` file on your thin client.
The **Dell Wyse USB Imaging Tool Uninstallation** screen is displayed.
- 2 Click **Next**.
After the uninstallation is complete, the **Uninstallation Complete** message is displayed.
- 3 Click **EXIT** to close the **Uninstaller** window.



Using Dell Wyse USB Imaging Tool

Dell Wyse USB Imaging Tool allows you to prepare any USB key to perform various operations on source and target thin client devices. The tasks that you can perform are:

- **Image Pull**— Prepares the USB key to pull an operating system (OS) image or BIOS (including CMOS settings) configuration from a source device
- **Image Push**— Prepares the USB key to push an OS image or BIOS configuration to a target device.
- **Clone USB**— Creates a copy of a configured USB key that is configured for the pull or push operation.
- **Configure Backup Path**— Enables you to set the backup path to back up the contents of a USB key.

After you plug a USB drive to the thin client, and start Dell Wyse USB Imaging Tool, the following screen is displayed. The number of USB drives that are connected to your thin client are displayed on the **Home** screen.

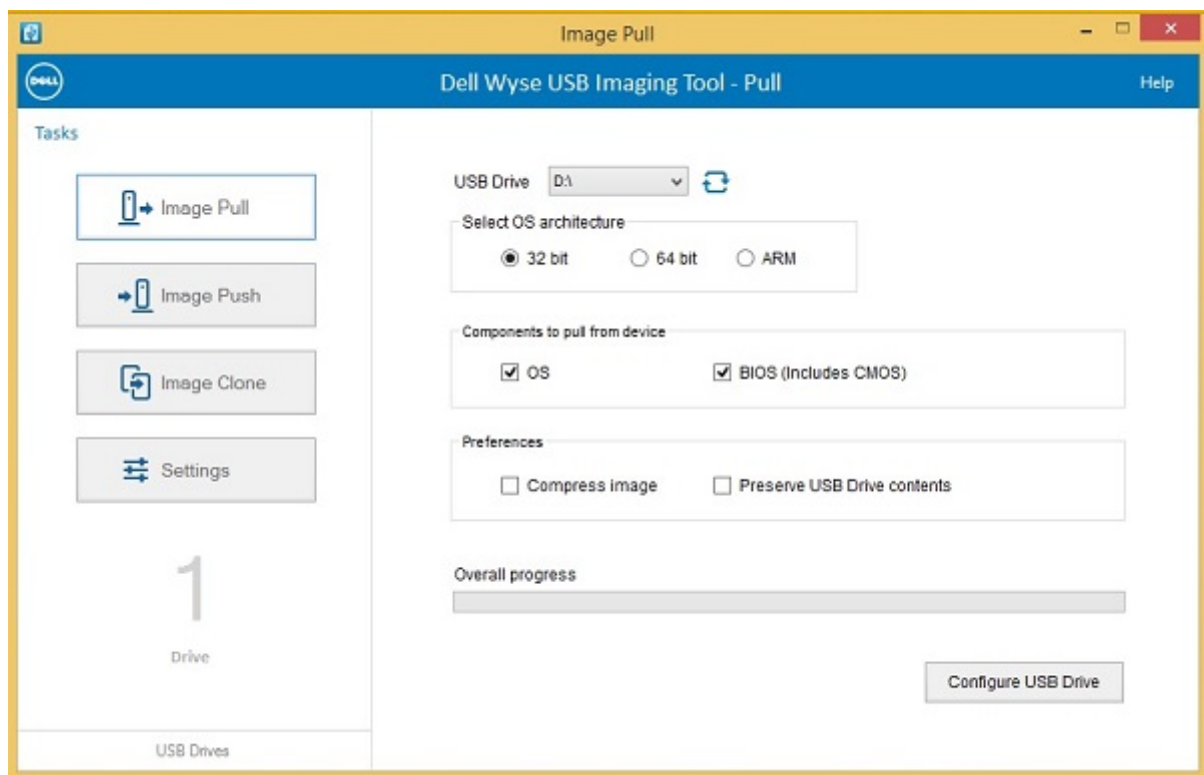


Figure 1. Home screen

In the left pane, click **USB Drives** to view your USB drives listed in the **Available Drives** section of the Home screen.

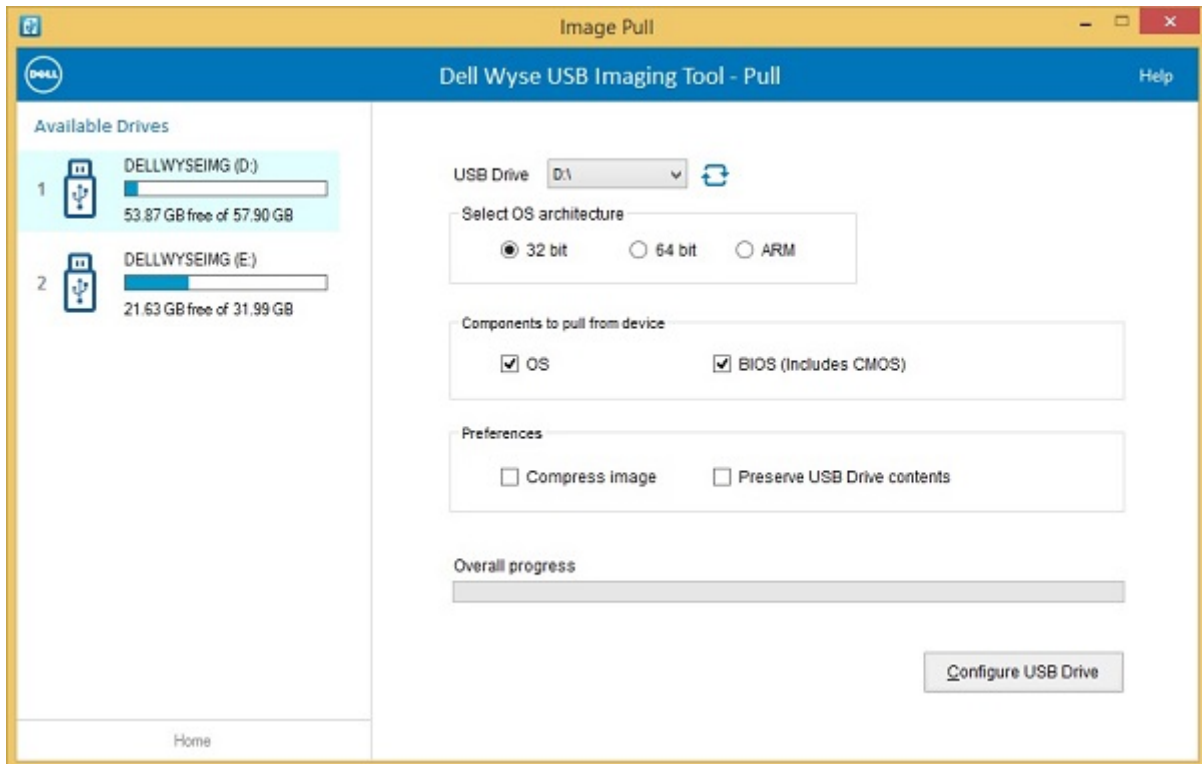


Figure 2. Available USB drives

Boot details for supported devices

The following table provides the guidelines for configuring the boot options on the supported thin client devices:

Table 3. Supported thin client devices and corresponding boot guidelines

Supported thin client devices	Boot guidelines
<p>Wyse 3020 zero client for Citrix (T00DX/Xenith 3) and Wyse 5010 zero client for Citrix (D00DX/Xenith Pro 2)</p> <p>Wyse 5010 thin client with Linux (D50D), X50M, Wyse 7010 thin client with Linux (Z50D), Z90DW, Wyse 7010 thin client with WES7 (Z90D7), Wyse 7010 Extended Chassis thin client with WES7 (Z90DE7), Wyse 7020 thin client with WE8S (Z90D8), and Wyse 7020 thin client with WE8S (Z90Q8)</p>	<p>To enter and use the one-time boot menu:</p> <ol style="list-style-type: none"> 1 Plug the configured USB drive to the thin client. 2 During boot, keep pressing the P key until the Boot menu appears. 3 Select the USB HDD option displaying your USB drive vendor name and press Enter. 4 Follow the process displayed on the screen.
<p>D90DW, Wyse 3030 LT thin client with ThinOS, and ThinLinux, Wyse 5010 thin client with WES7 (D90D7), Wyse 5020 thin client with WES7P (D90Q7P), Wyse 5010 thin client with WE8S (D90D8), and Wyse 5020 thin client with WE8S (D90Q8), Wyse 5060 thin client with WES7P, ThinOS, ThinLinux and Win10 IoT</p>	<p>If the Boot from USB option is already enabled, you can enter and use the one-time boot menu:</p> <ol style="list-style-type: none"> 1 Plug the configured USB drive to the thin client. 2 During boot, keep pressing the P key until the Boot menu appears. 3 Select the Boot from USB option and press Enter. 4 Follow the process displayed on the screen.

Supported thin client devices	Boot guidelines
Wyse 3040 thin client with ThinOS, and ThinLinux, Wyse 7040 thin client with WES7P, Latitude 3460 mobile thin client with WES7P, Latitude E7270 mobile thin client with WES7P, Latitude 3480 mobile thin client with Win10 IoT, and Latitude 5280 mobile thin client with Win10 IoT	To enter and use the boot menu: <ol style="list-style-type: none"> 1 Plug the configured USB drive to the thin client. 2 During boot, keep pressing the F12 key until the Boot menu appears. 3 Select the UEFI option displaying your USB drive vendor name and press Enter. 4 Follow the process displayed on the screen.

Performing an image pull operation

An image pull operation consists of two parts. In the first part, you configure the USB drive for the pull operation by using USB Imaging Tool. In the second part, you plug the USB drive to a source device and perform the pull operation.

NOTE: When you prepare the USB drive for a pull operation, it also gets prepared for a push operation. You can use the same key for a pull or push operation. However, if you use the same key for the push operation, ensure that the images you want to push are present on the key.

For more information, see

[Configuring USB drive for an image pull.](#)

[Pulling an image from a source device.](#)

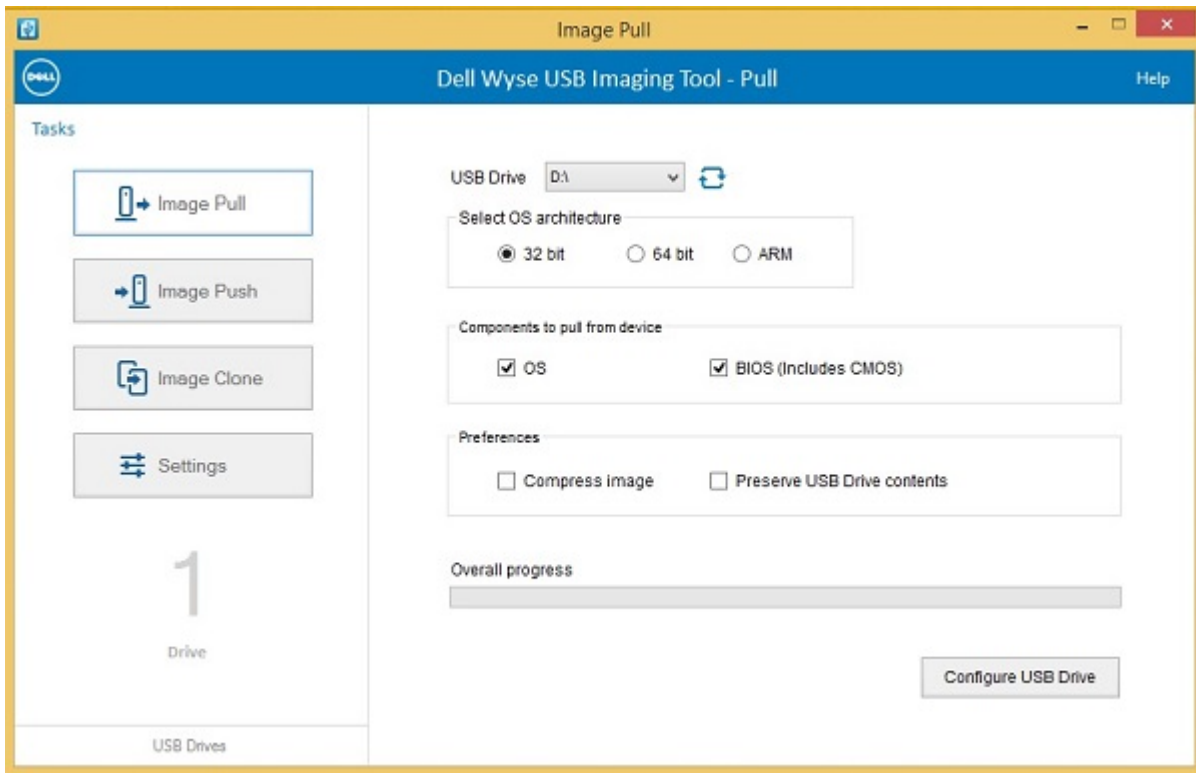
Configuring USB drive for pull operation

To configure the USB drive for an image pull operation:

- 1 Start USB Imaging Tool.
The tool displays the **Image Pull** screen by default.

Figure 3. Image Pull





- 2 Plug in the USB drive to the system running the USB Imaging Tool.
- 3 Click the **Refresh** button to populate the USB drives.
You can have multiple USB drives plugged to your system.
- 4 Select the USB drive from the drop-down list.
- 5 Select the OS architecture that you want to pull from the source device, and then select one of the following:
 - **32 bit**—Select this option to copy or pull the 32-bit architecture based OS from the source device.
 - **64 bit**—Select this option to copy the 64-bit architecture based OS from the source device.
 - **ARM**— Select this option to copy or pull the ARM architecture based OS from the source device.
- 6 Select the components that you want to pull from the source thin client device.
You can select either one or both of the following options:
 - **OS**— Select this option to pull the operating system image from the source device.
 - **BIOS (Includes CMOS)**— Select this option to pull only the BIOS and CMOS configuration from the source device.
- 7 To configure the USB drive, select the Preferences option.
You can select either one or both of the following options:
 - **Compress Image**— Select this option to pull the image from the source device in a compressed format.
 - **Preserve USB drive Contents**— Select this option to preserve all the data present in the USB drive before configuring it for an image pull operation.
- 8 Click **Configure USB drive**.
The USB drive is formatted and the overall progress of the procedure is indicated in the **Overall Progress** bar.

USB Imaging Tool formats the USB drive, copies the necessary files based on the selected OS architecture, and completes the configuration of USB drive for the image pull operation.

Pulling an image from a source device

Before you begin the pull operation, ensure that your device is configured to boot from the USB drive.

To pull an image from a source device:

- 1 Plug in the USB drive to the supported source device.
- 2 To access the boot menu, reboot the device, and keep pressing either **P** key or **F12** key during system reboot depending on your thin client model; To choose the boot menu function key (**P** or **F12**) for your thin client model, see [Boot details for supported devices](#).
The boot options are displayed and you can see either of the following boot menu screens depending on your thin client model.

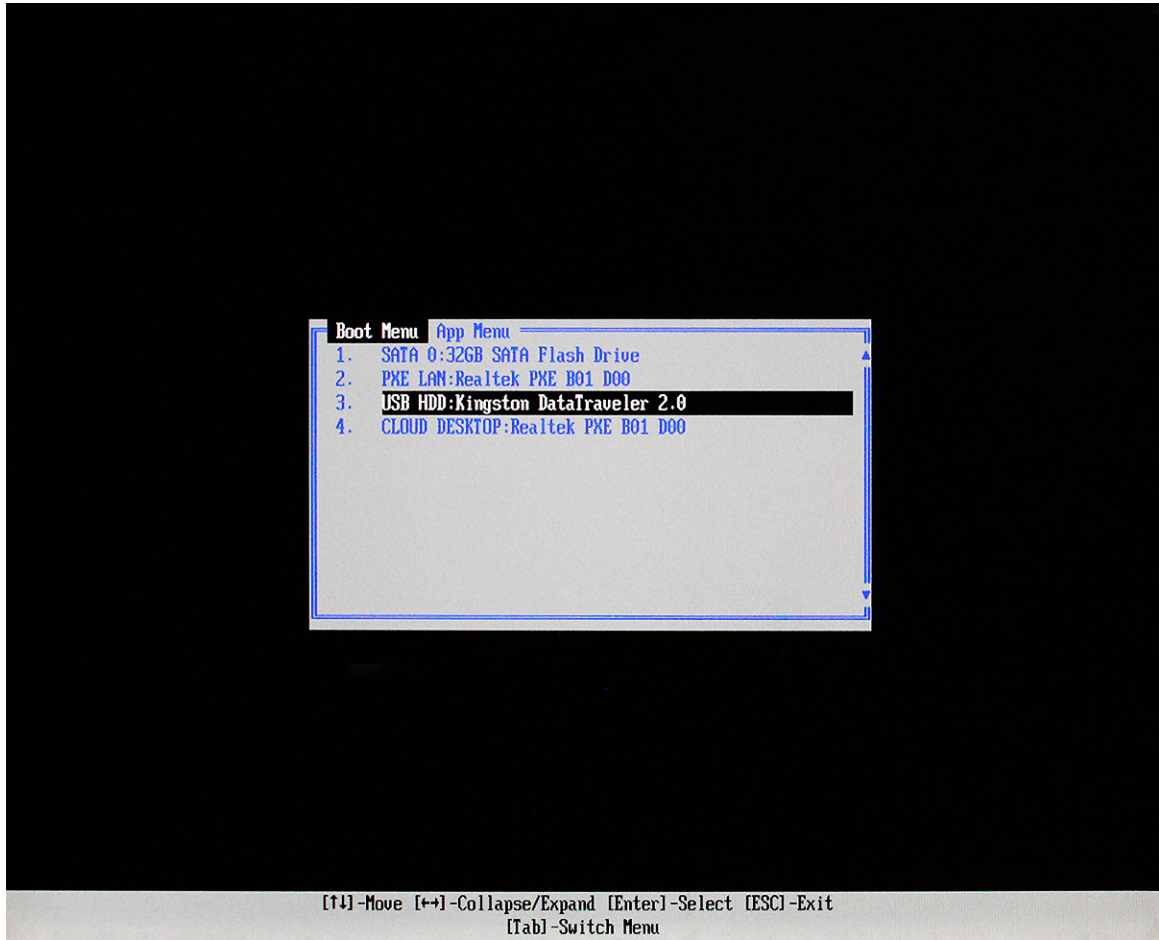


Figure 4. Boot Menu

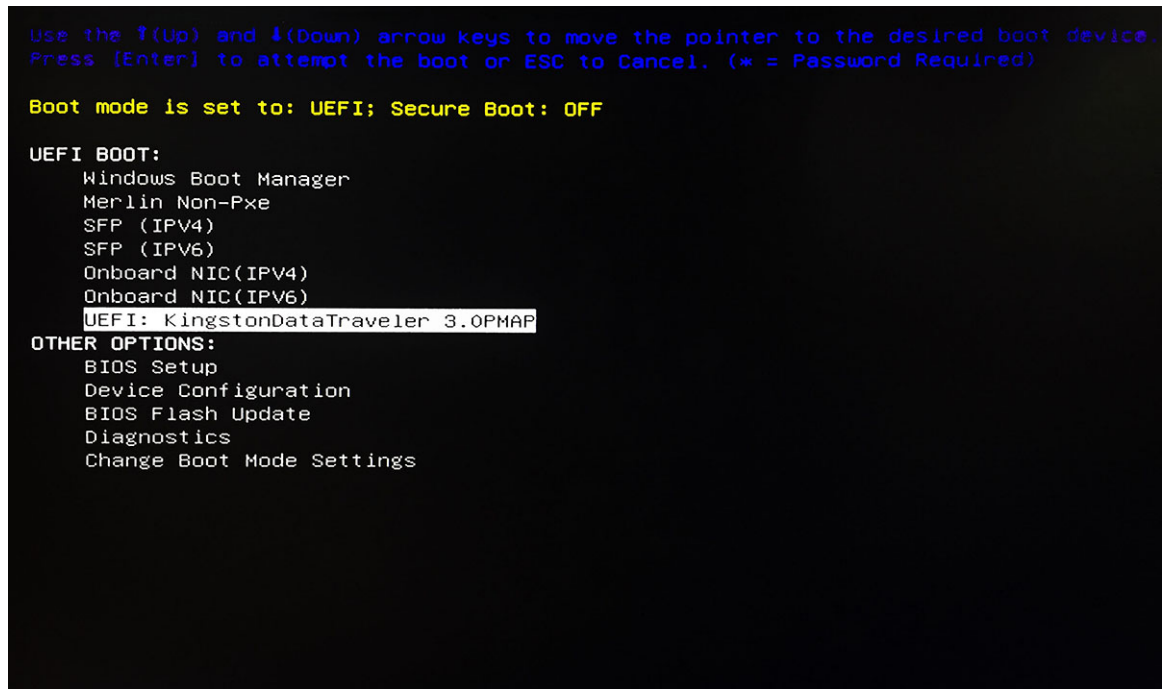


Figure 5. Boot menu

- 3 Select the USB option displaying your USB drive vendor name and press **Enter**.
The device reboots from the USB drive and the following screen is displayed.

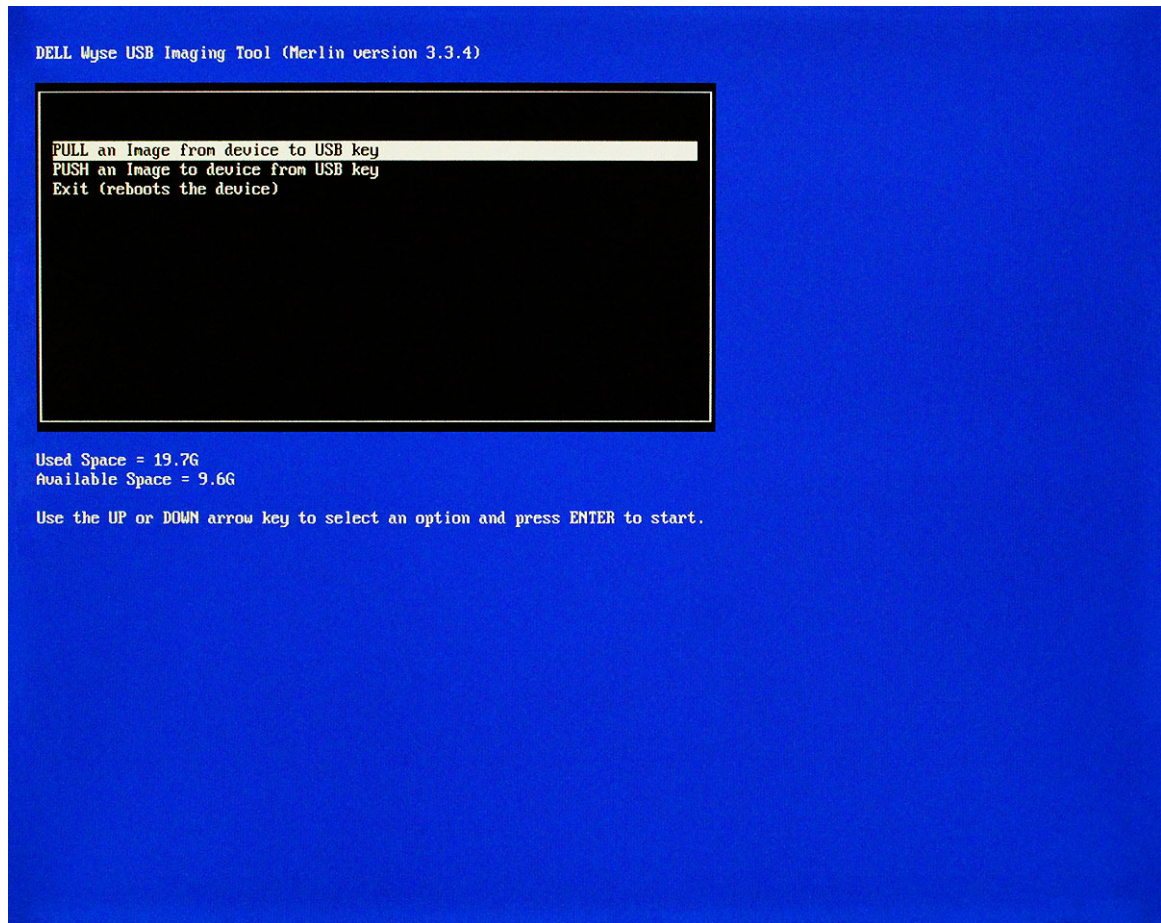


Figure 6. Pull an Image

- 4 Select the **Pull an Image from device to USB key** option and press **Enter**.
The next screen is displayed.

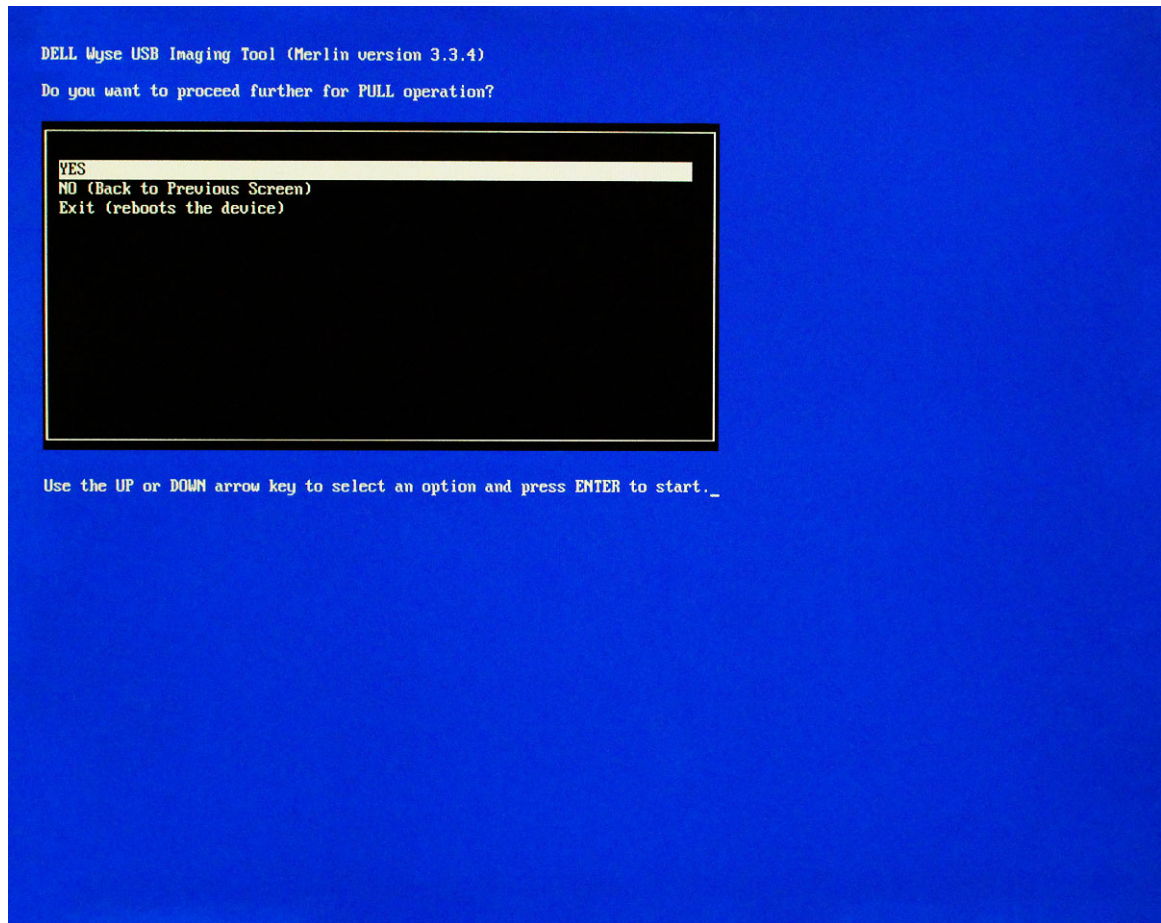


Figure 7. Pull operation

5. Select **Yes** and press **Enter**.
The image pull operation begins and the progress is displayed on the right side of the screen.

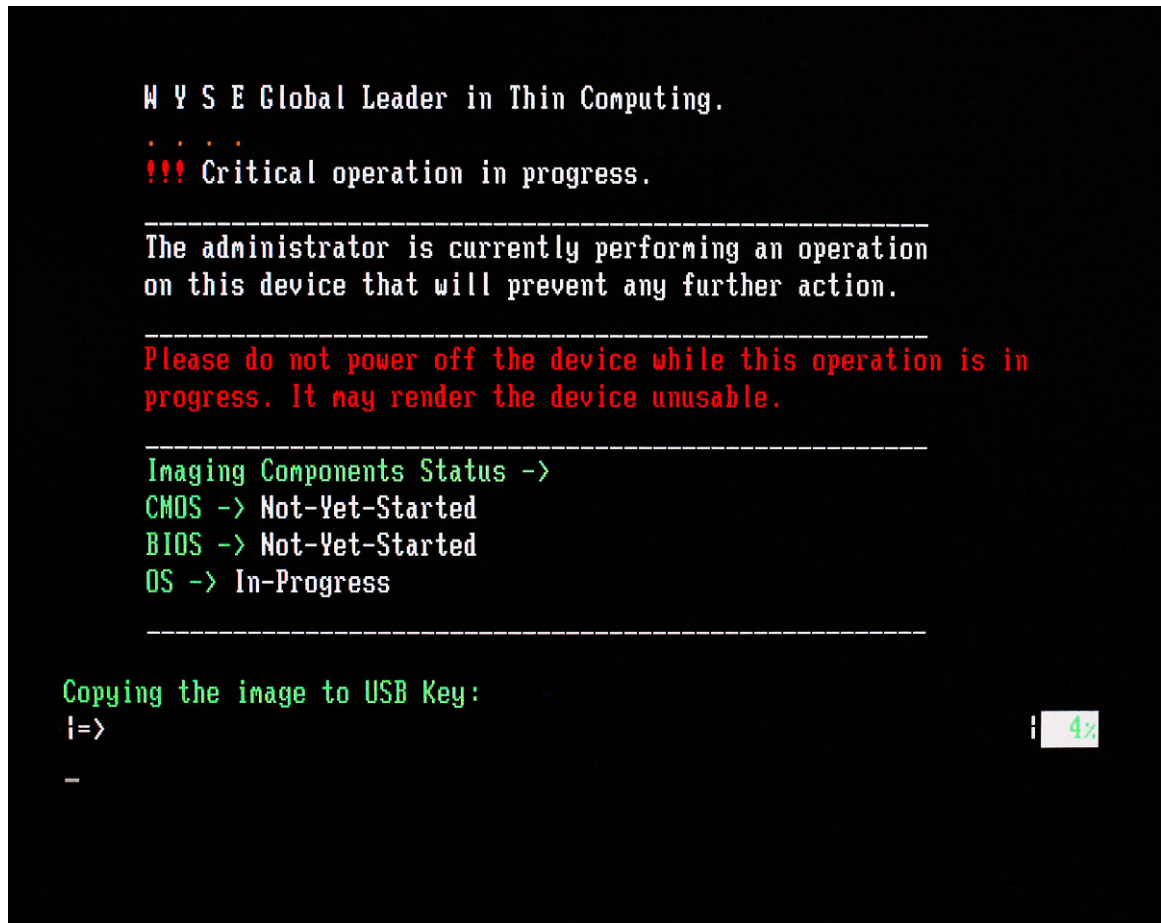


Figure 8. Copying the image to USB key

① **NOTE:** The pull operation pulls the OS image, or the BIOS configuration, or both depending on the options you have selected in the Image Pull screen of USB Imaging Tool. If you have selected the Compress Image option, then the image is pulled in a compressed format.

- 6 After the pull operation is complete, remove the USB drive from the source device when prompted. The source device automatically restarts.

Performing an image push operation

Similar to the image pull operation, the image push operation also consists of two parts. In the first part you prepare the USB drive to perform an image push operation. In the second part you push the OS or BIOS images on to the target devices. You can add multiple images on a single USB drive.

For more information, see

[Configuring USB drive for an image push.](#)

[Pushing an image to a target device.](#)



Configuring USB drive for an image push operation

To configure the USB drive, do the following:

- 1 Start USB Imaging Tool.
The tool displays the **Image Pull** screen by default.
- 2 Click **Image Push** to display the **Image Push** screen.

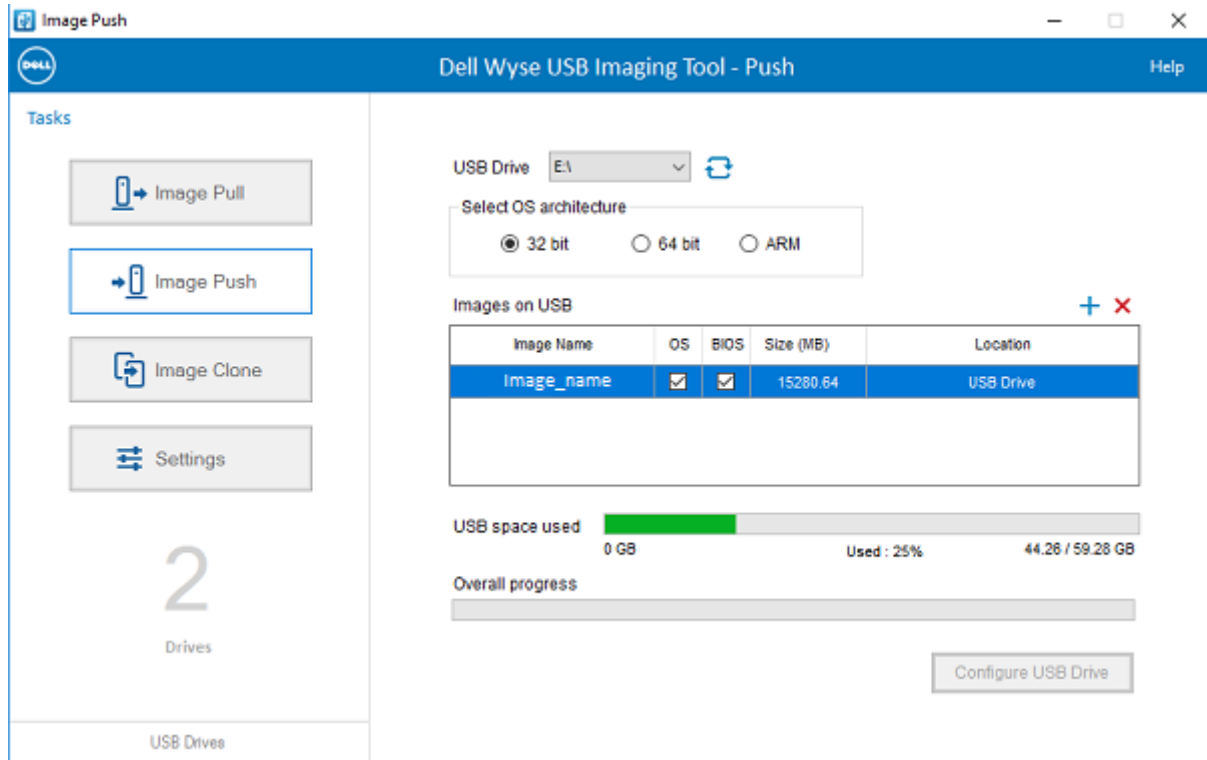


Figure 9. Image push

- 3 Plug in the USB drive to the system running USB Imaging Tool.
- 4 Select the USB drive from the drop-down list.
If your USB drive contains other images, the screen displays the images in the **Images on USB** section.
- 5 Select the OS architecture that you want to push to the target device. Select one of the following:
 - **32 bit**— Select this option to push the 32 bit architecture based OS to the target device.
 - **64 bit**— Select this option to push the 64 bit architecture based OS to the target device.
 - **ARM**— Select this option to push the ARM architecture based OS to the target device.
- 6 Select one of the following options:

Option	Description
Add a new Image on the USB drive	<p>Perform the following steps:</p> <ol style="list-style-type: none"> To add an image from a different location, click the + icon. Navigate to the location where you have saved the image files. Select the .rsp file from the image folder. You can also select the Command XML file. For this, select the Command XML option from the drop-down against File Name, and navigate to the commandsXML file location. This file is located under a sub-folder that has the same name as the OS image folder. Click OK to add the image to the table. The image is displayed in the table.

Option	Description
Delete existing Images on the USB drive	<p>Perform the following steps:</p> <ol style="list-style-type: none"> Select the images displayed in the table and click the X icon. The images are deleted from the table but are only marked for deletion in the USB drive. To add an image from a different location, click the + icon. If the image you select has the same naming convention as the image on the disk, you are prompted to either overwrite the image or retain it. Select the appropriate option.

You can view the **OS** and **BIOS** check boxes selected or cleared as per the contents of the image files you have chosen. For example, if the image file contains only the BIOS configuration, only the BIOS check box is selected for that image.

If both the **OS** and **BIOS** check boxes are selected and you clear one of the check box, then that image component is not added on the USB drive.

7 Click **Configure USB Drive**.

The system displays the following options:

- **Update (Recommended)**— Select this option to add or delete images to an existing configured USB drive.
- **Format and Update**— Select this option if your USB drive is corrupted or not configured. This option will back up contents, initialize the drive and add or delete the selected image.

Select the appropriate button and proceed with the preparation.

The progress is indicated on the **Overall Progress** bar.

Pushing an image to a target device

Before you begin the pull operation, ensure that your device is configured to boot from the USB drive.

To push an image to a target device:

- 1 Plug in the USB drive to the supported source device.
- 2 To access the boot menu, reboot the device, and keep pressing either **P** key or **F12** key during system reboot depending on your thin client model; To choose the boot menu function key (P or F12) for your thin client model, see [Boot details for supported devices](#).

The boot options are displayed and you can see either of the following boot menu screens depending on your thin client model.



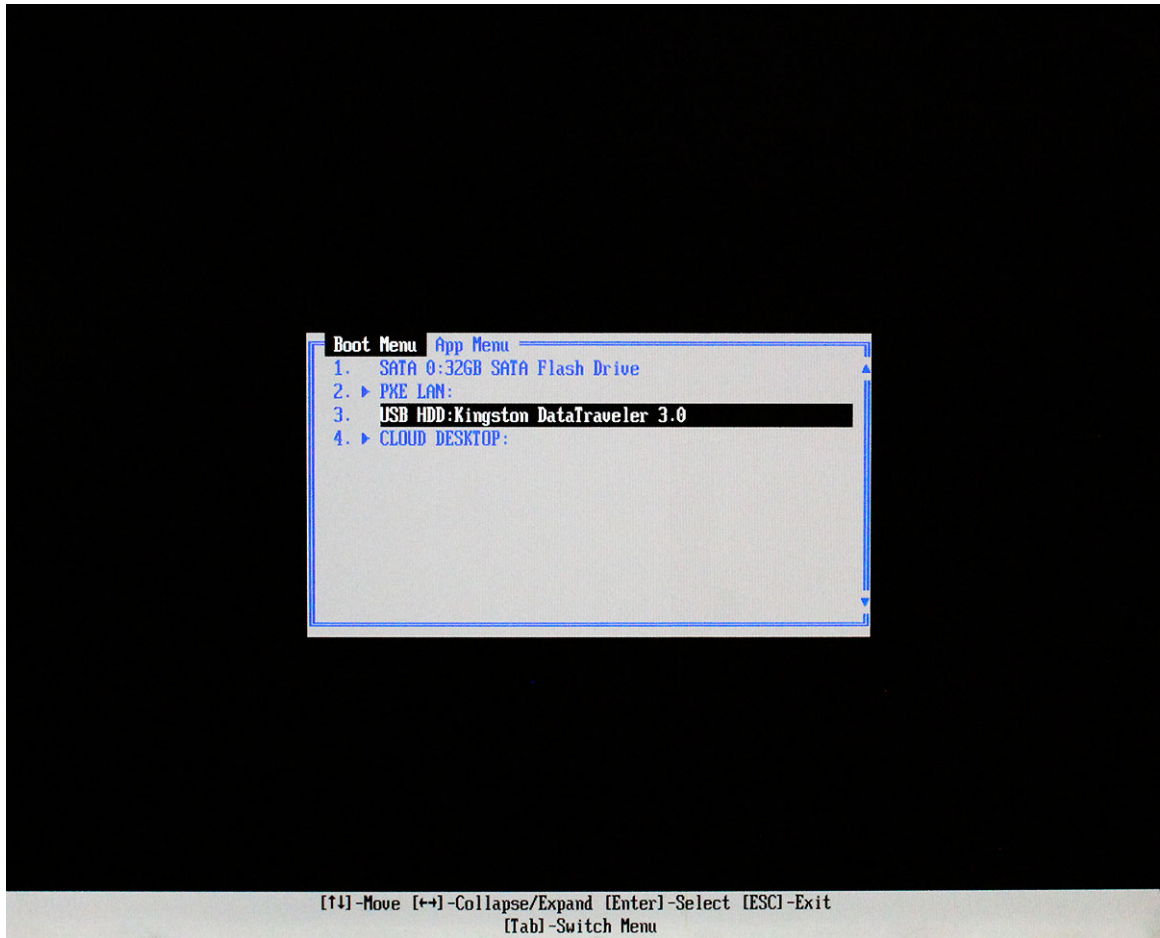


Figure 10. Boot menu

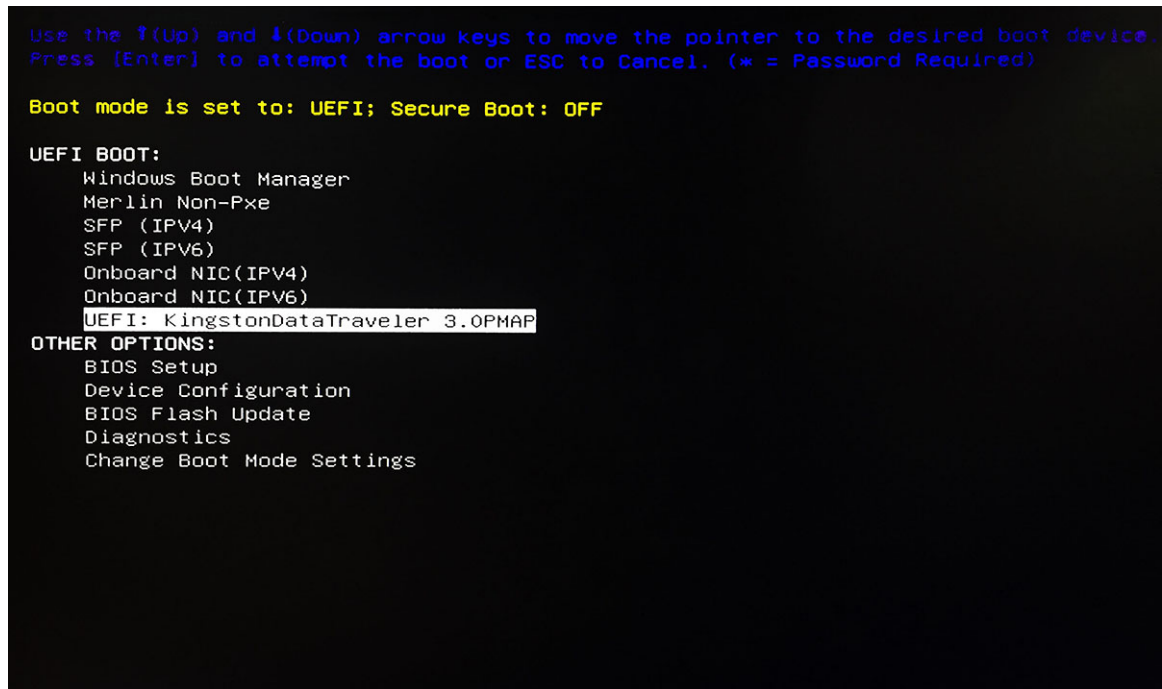


Figure 11. Boot menu

- 3 Select the USB option displaying your USB drive vendor name and press **Enter**.
The device reboots from the USB drive and the following screen is displayed.

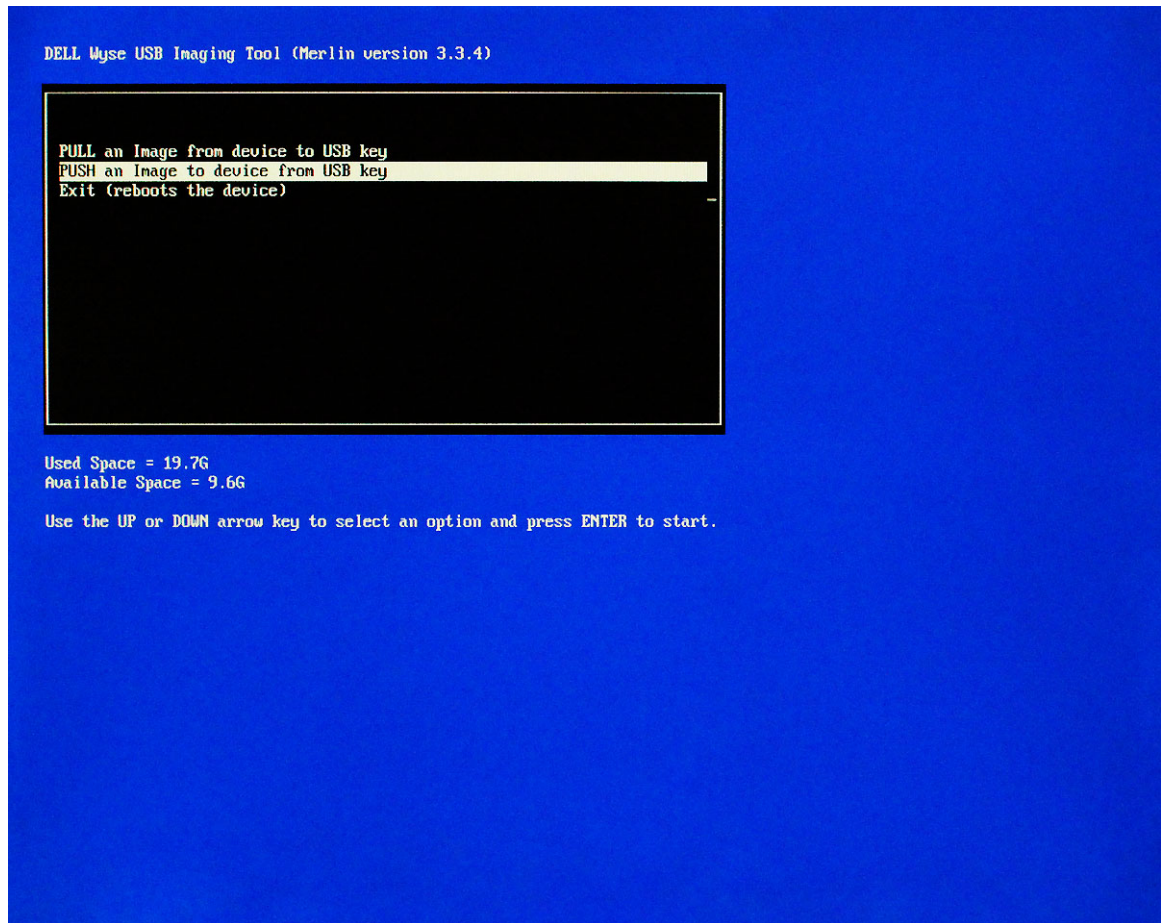


Figure 12. Push an image to device

- 4 Select the **Push an Image to device to USB drive** option and press **Enter**.
The next screen displays all the images on the USB drive. When you select any one of the displayed image, the contents are displayed on the right side.

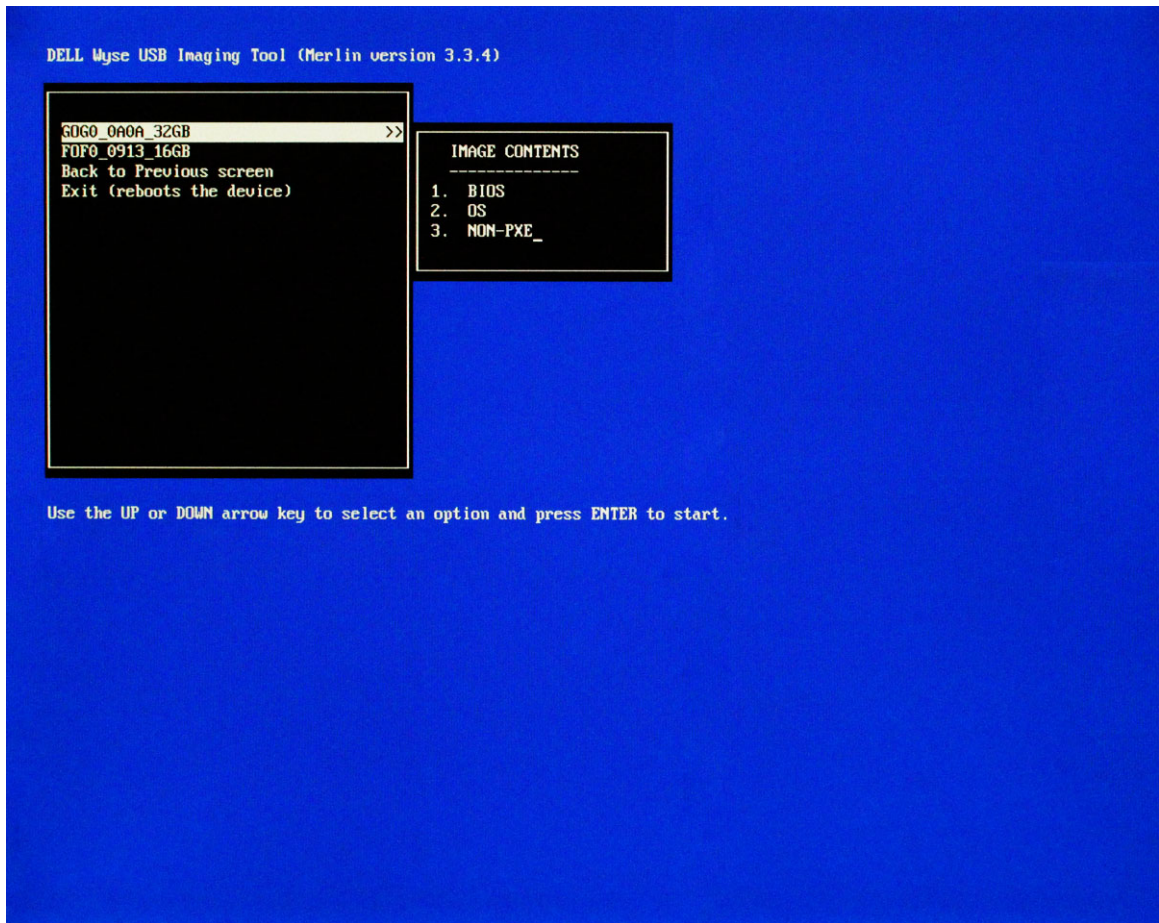


Figure 13. Displays all available images

5. Select the appropriate image and press **Enter**.
The next screen is displayed with the question **Do you want to proceed further for Push Operation with <selected image name> image?**

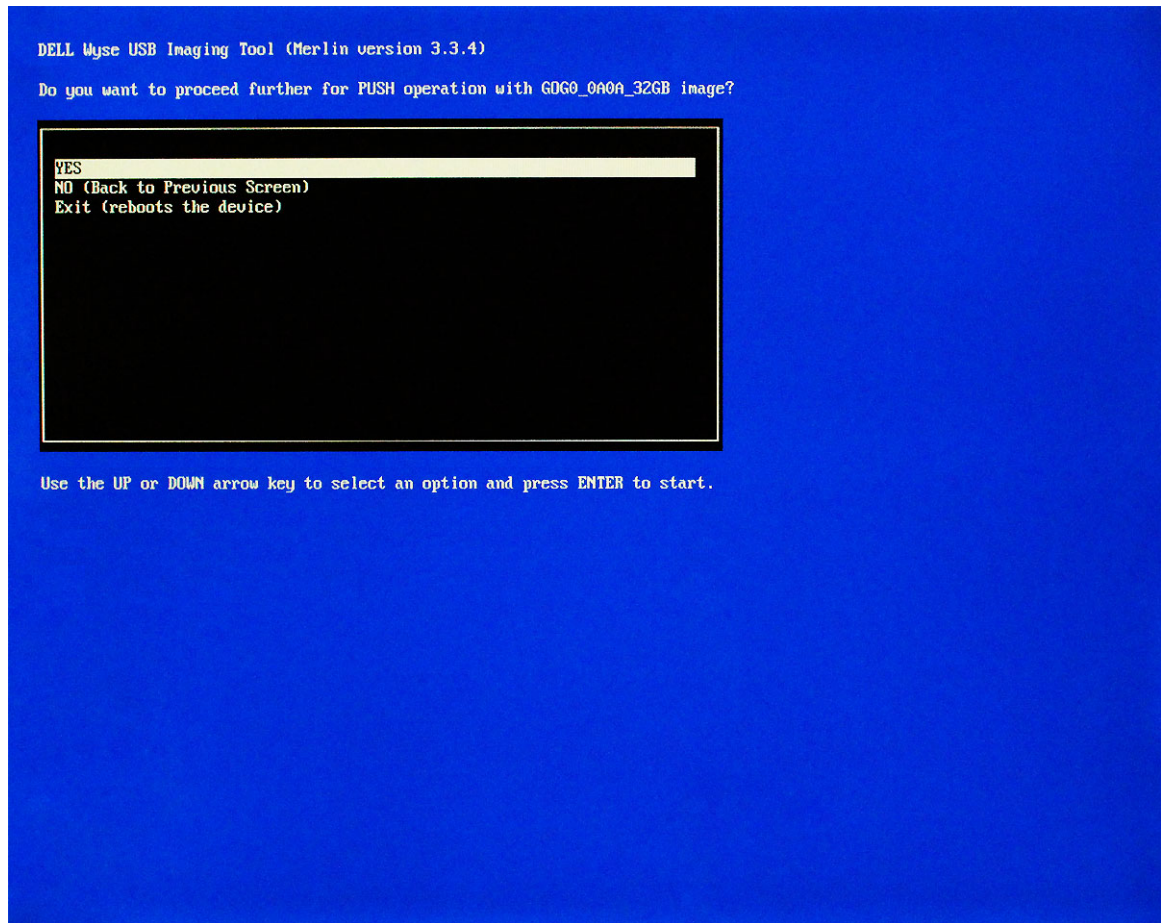


Figure 14. Push operation

- 6 Select **Yes** and press **Enter**.
 - If you select a wrong image, then the push operation fails and the system prompts you to remove the USB drive and reboots automatically.
 - If you select a right image, the push operation begins and the progress is indicated on the screen.

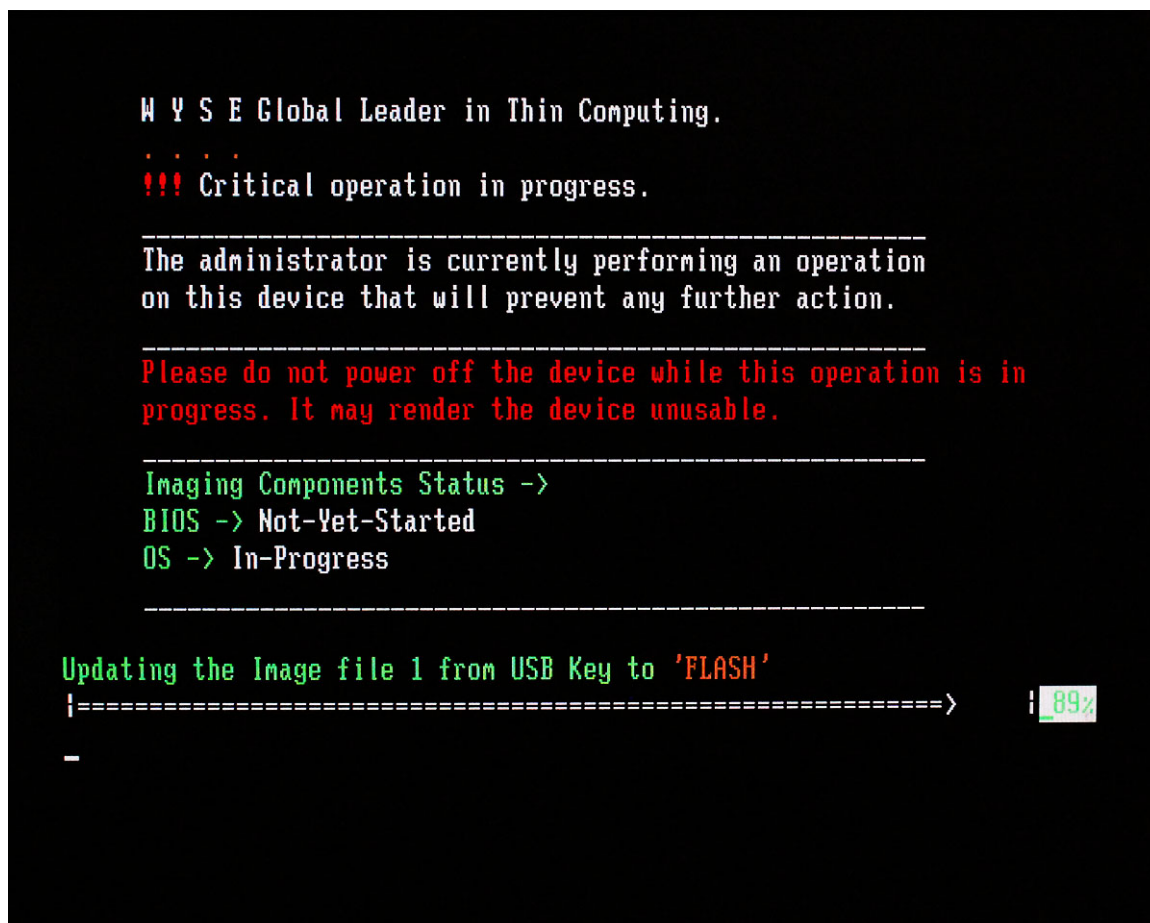


Figure 15. Updating the Image file

- 7 After both OS and BIOS push operations are complete, remove the USB drive from the target device when prompted. The target device automatically restarts and the thin client desktop is ready to use.

Cloning a USB drive

You can clone or duplicate a configured USB drive that is currently ready to push an image. Clone operation can be performed only when you have a configured USB drive for a push operation or you have a valid image. You can create as many clones or duplicates as you need to simultaneously perform the push operation on multiple devices at the same time.

Ensure that the source and target USB drives contain the same disk space, or the target contains more disk space than the source. To clone a USB drive:

- 1 Plug in a USB drive that is configured for a push operation to the system running USB Imaging Tool.
- 2 Plug in another USB drive for which you want to replicate the source USB drive.
- 3 Start USB Imaging Tool and click **Image Clone**.
The **Image Clone** page is displayed.

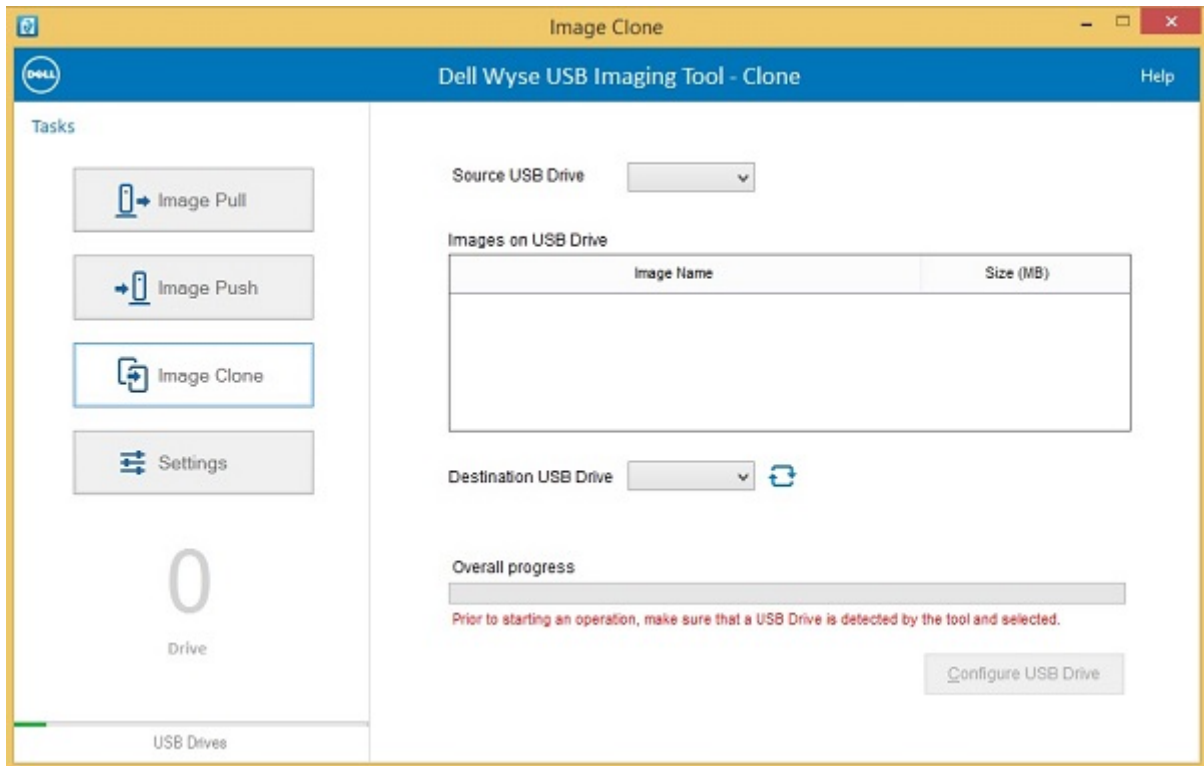


Figure 16. Image clone

- 4 Select the configured USB drive from the **Source USB drive** drop-down list. The contents of the USB drive are displayed in the **Images on USB** section.
- 5 Select the target USB drive from the **Destination USB Drive** drop-down list.
- 6 Click **Configure USB Drive**.
USB Imaging Tool formats the destination USB drive, and then copies the necessary boot loader files based on the OS architecture configured in the Source drive. The tool copies the OS Images from the source drive to destination drive.

The overall progress is displayed on the **Overall Progress** bar.

After the cloning is complete, you can verify the contents of both the drives. The contents remain the same.

Configuring USB Imaging Tool settings

The **Settings** page enables you to set the backup path to back up the contents of a USB drive. To configure the USB Imaging Tool settings:

- 1 In the left pane, click the **Settings** tab.
The **Settings** page is displayed. This page allows you to change the configurable USB Imaging Tool settings.

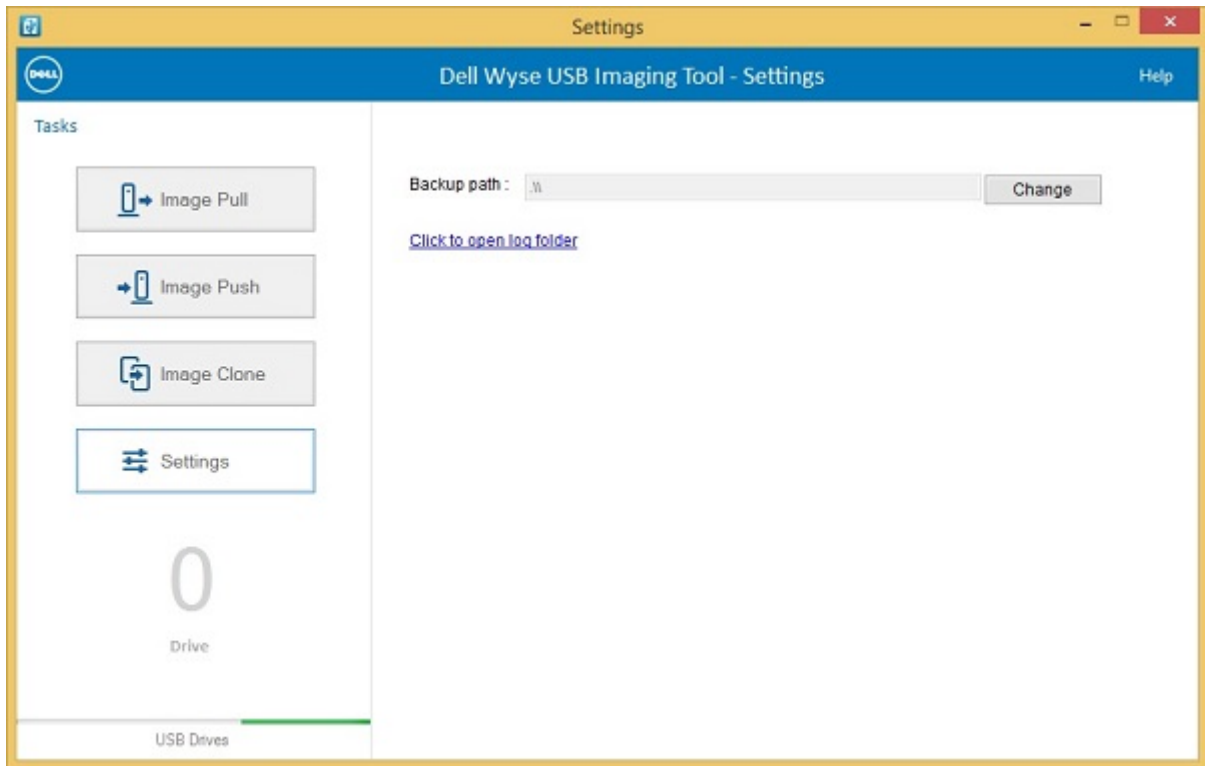


Figure 17. Settings

- 2 To change the location for your backup files, click **Change**.
- 3 To view the log files stored on the thin client, click the **Open Log Folder** link.

NOTE: On the upper-right corner of the page, click **Help > About** to view the copyright information and the latest Dell Wyse USB Imaging Tool version.

Troubleshooting

When you perform the pull or push operations on thin client devices, you may experience problems with the USB keys. This section describes some basic troubleshooting that you can implement when you experience any problem.

Boot issues on USB drives

There are different manufacturing processes on USB drives and all the brands have not been tested on USB Imaging Tool. If you experience problems booting from a configured USB drive, Dell recommends that you try a different brand of USB drive. For a list of USB drives that are successfully tested with USB Imaging Tool, see [Support matrix](#).

Partition issues on SanDisk Cruiser flash drives

SanDisk Cruiser Flash Drives come with support for U3. For more information on U3, see www.sandisk.com. When you use these drives, you must select the drive usage from one of the following options:

- Apps and Storage
- Storage

If you select **Apps and Storage**, the drive creates two partitions, one of which is identified as a CD and is a **Read-only** partition. This partition sometimes prevents USB Imaging Tool to properly prepare the USB drive for a pull or push operation. To resolve this problem, you can do one of the following:

- Go to www.sandisk.com, click the **Support** tab, search in the SanDisk Knowledge Base for document **2550**, and then follow the instructions in the documentation.
- Go to www.sandisk.com, and do the following:
 - a Click the **Support** tab.
 - b From the **BROWSE A PRODUCT CATEGORY** list, select **Flash Drives**.
 - c Type **U3 Launchpad Remover** in the search bar, and click **Search All Answers**.
 - d Click the U3 Launchpad Remover documentation and follow the instructions.

MBR not found error message

When you plug in a USB drive to a device to perform an image push operation and boot the device, the device may display the **MBR not found** error message on the screen. This error is displayed when the partition table and the boot record structure of the USB drive are corrupted due to frequent use of the key. You must format the USB drive again.

To reformat the USB drive:

- 1 Plug in the USB drive to a system running any one of the supported operating systems.
- 2 When the USB drive is displayed on the Explorer, right-click and select **Format**.
- 3 On the **Format** page, select the **Quick Format** check box, and then click **Start**.

 **NOTE:** Do not alter the default values under **File System** and **Allocation unit size**.

After the format is complete, prepare the USB drive for a pull or push operation. For more information, see [Configuring USB drive for an image pull](#) and [Configuring USB drive for an image push](#).

USB drive less than 1 GB error message

When you are configuring a USB key for a pull or push operation, the following error message is displayed:

USB drive size is less than 1GB, please insert a higher capacity drive.

Dell recommends not to use USB drive less than 1 GB of disk space.

Failed to format USB drive error message

While you configure the USB drive for image pull or push operation, either of the following error messages may be displayed:

- Failed to format USB drive. Invalid Partitions. Please check logs
- Failed to finalize the USB Drive

Workaround: Close the USB Imaging tool application. Format the USB drive using Diskpart or Windows Disk management tool, and then use the USB drive for image push or pull operation.

