ImageAssist Dynamic
User’s Guide for Multiple Platforms
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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ImageAssist is a tool set that enables you to use Dell's Imaging services or ProDeploy to quickly create and maintain a custom cross-platform, ready-to-deploy Microsoft Windows image. Depending on your requirement, you can choose to install one of the following ImageAssist tools:

- ImageAssist Dynamic
- ImageAssist Static

Topics:

- ImageAssist Dynamic
- ImageAssist Static
- Choosing between ImageAssist Static and ImageAssist Dynamic
- Key features
- Supported operating systems and recommended frameworks

### ImageAssist Dynamic

The ImageAssist Dynamic tool enables you to capture a custom cross-platform, ready-to-deploy Microsoft Windows image during the image build process. The image that is created by using the ImageAssist Dynamic tool works on all current and future Dell business line of systems such as Dell OptiPlex, Dell Latitude, and Dell Precision. The images are also supported on certain Dell XPS, Dell Vostro, and Dell Venue Pro systems.

By default, in your Dell imaged laptops, necessary drivers, and your image are already installed from the factory. The ImageAssist Dynamic tool also enables a single restore image to work across multiple Dell models locally in your environment.

### ImageAssist Static

The ImageAssist Static tool enables you to capture a Microsoft Windows image for a single platform. When using ImageAssist Static, you must create multiple images to support multiple system types.

The image that is captured by using ImageAssist Static does not update drivers, install drivers, or modify settings within the captured static image.

1. **NOTE:** As a customer, you own responsibility for image content and testing of captured images.
1. **NOTE:** Some partition sizes or orders may be changed to work with the Dell factory process or to adhere to Microsoft guidelines.
1. **NOTE:** For more information about ImageAssist Static, see the *ImageAssist Static User's Guide for Single Platform* at Dell.com/ServiceabilityTools.

### Choosing between ImageAssist Static and ImageAssist Dynamic

The following table provides a comparison of the ImageAssist Dynamic and ImageAssist Static tool capabilities.

<table>
<thead>
<tr>
<th>Features</th>
<th>ImageAssist Dynamic</th>
<th>ImageAssist Static</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimized for Dell factory use</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Fast and easy</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>

Introduction
<table>
<thead>
<tr>
<th>Features</th>
<th>ImageAssist Dynamic</th>
<th>ImageAssist Static</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of Dell’s Imaging services or ProDeploy to create an image</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Designed to work across multiple Dell models or platforms</td>
<td>✔️</td>
<td>❌</td>
</tr>
<tr>
<td>Manages drivers and its updates on the new and future Dell business line of systems</td>
<td>✔️</td>
<td>❌</td>
</tr>
<tr>
<td>Allows for local restore of your custom image</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Creates a single restore USB drive for use locally across multiple systems</td>
<td>✔️</td>
<td>❌</td>
</tr>
<tr>
<td>Designed to be run after you have completed customizing your computer</td>
<td>❌</td>
<td>✔️</td>
</tr>
<tr>
<td>Used before and during your image build and customization</td>
<td>✔️</td>
<td>❌</td>
</tr>
</tbody>
</table>

**Key features**

ImageAssist Dynamic enables you to:
- Reduce the number of base images that you need to manage
- Reduce the time required to transition to new systems
- Provide a single image for factory installation of new systems and for refreshing existing systems within your environment

**Supported operating systems and recommended frameworks**

The following table lists the operating systems and recommended frameworks that support ImageAssist Dynamic.

**Table 2. Supported operating systems and recommended framework**

<table>
<thead>
<tr>
<th>Operating system</th>
<th>Edition</th>
<th>Recommended framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 10</td>
<td>Education, Enterprise, and Pro</td>
<td>Microsoft .NET Framework 4.6</td>
</tr>
<tr>
<td>Windows 8.1</td>
<td>Enterprise and Pro</td>
<td>Microsoft .NET Framework 4.5</td>
</tr>
<tr>
<td>Windows 7 Service Pack 1</td>
<td>Enterprise and Professional</td>
<td>Microsoft .NET Framework 4.0 and later (Recommended Microsoft .NET Framework 4.5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kernel-Mode Driver Framework version 1.11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>User-Mode Driver Framework version 1.11</td>
</tr>
</tbody>
</table>

**NOTE:**
- For the latest ImageAssist supported system models, see the system models that are listed in the Dell Family Driver Packs page at [Dell.com/FamilyPacks](http://Dell.com/FamilyPacks).
- For information about legacy/MBR, UEFI/GPT, NVMe solid-state drives, and the Intel Chipset, go to [Dell.com/NVMe-support](http://Dell.com/NVMe-support).
Choosing your build base

Choosing your build base

**NOTE:** Even though you can use a physical system as your build base, Dell recommends that you use a virtual machine (VM) as your build base.

Using a virtual machine

There are several advantages of using a VM as your build base:

- Reduction of development time
- Ability to create and use snapshots or checkpoints to test different configurations quickly
- Hardware issues do not occur
- Prevents the installation of other applications which may be installed as part of a driver installation
- Easy to navigate between lab, test, and production
- Easy to recapture an image even after modifications and additions to the operating system
- Minimum failures while removing drivers during the Validation Checker process

**NOTE:**

- ImageAssist Dynamic supports Hyper-V (Windows 10) and the two most recent versions of VMware Workstation. Other VM technology solutions may be supported, but have not been fully validated with ImageAssist Dynamic.
- For more information about installing and configuring various VM technologies on a client system, see the product documentation or consult your IT team.

Using a non-virtual machine

**NOTE:** Using a physical system as your build base results in extra development time because of hardware drivers that are installed during the process. If you are using a physical system as your build base, Dell recommends using Dell OptiPlex, Dell Latitude, and Dell Precision.
Downloading and installing ImageAssist Dynamic

Download ImageAssist Dynamic

Steps
1. Go to Dell.com/ImageAssist.
2. Click Download ImageAssist. The ImageAssist portal opens in a new web browser window.
3. Locate the download link, and click the DOWNLOAD link. Download of the ImageAssist installer package is initiated.

System setup instructions
Before you begin, select an operating system for your image. You can use the latest version of one of the following operating systems for your image:
• Microsoft Windows 10 (64-bit) Pro, Enterprise, or Education
• Windows 8.1 with Update 1 (32-bit and 64-bit) Pro or Enterprise
• Windows 7 SP1 (32-bit and 64-bit) Professional or Enterprise
For instructions to install the operating system on your build base, see the operating system documentation.
Ensure the following while you build your image:
• Document your image build. This document helps in troubleshooting your image, if necessary. Keep the document up-to-date whenever you make changes to your image.
• Update your build base to the latest version of BIOS which is available at Dell.com/support.

NOTE: If you are using a virtual machine (VM) as your build base, the BIOS update is not required.
• If network access is required, you can install the Dell driver for the Onboard Ethernet Network Controller. This driver does not have any impact on your cross-platform image.
• Do not install any of the software or Dell applets that are listed in Installation prerequisites.
• Do not install VMware Tools.
• Do not install any other drivers throughout the process of creating your image (including drivers and driver updates available from Windows Update).
• Always back up your work.
• The system must be configured with the minimum supported Windows screen resolution: 1024 x 768.

Installation prerequisites
Do not install any other drivers throughout the process of creating your image (including drivers and driver updates available from Windows Update).
Also, ensure that you do not install any of the following applications on your image before configuring your system. However, these applications can be installed post system configuration.

NOTE: If you install any of the following applications on your image, the image may not be processed successfully at the Dell factory. In this scenario, you may be required to resubmit a compliant image.
• Any type of remote control software that installs its own video driver such as Symantec pcAnywhere and Netop
• Modem dialing software that requires previously configured Dial-Up Networking (DUNS) connections
• Authentic, Energetic, Reflective, and Open (AERO) should be disabled on the build base
Install ImageAssist Dynamic

Prerequisites

If you have a previous version of ImageAssist installed on your system, uninstall it. For more information about uninstalling ImageAssist, see Uninstall ImageAssist Dynamic.

NOTE: While installing ImageAssist Dynamic on a virtual machine, ensure that you copy the installation files to the virtual machine before installation.

Steps

1. Right-click the ImageAssist installer package (.zip) and click Extract All.
   The Select the Destination and Extract Files window is displayed.
2. Select a folder for extracting the installer files and click Extract.
3. Browse to the folder where you extracted the files.
   The User Account Control dialog box is displayed.
5. Click Yes.
   The ImageAssist — End User License Agreement page is displayed.
6. Click I Agree and then click Next.
   The Installation Type? page is displayed.
7. To capture a Microsoft Windows image for multiple platforms, select ImageAssist Dynamic - (Recommended).
   NOTE: To capture a Microsoft Windows image for single platform, see the ImageAssist Static User’s Guide for Single Platform at Dell.com/ServiceabilityTools.
8. The default install path for ImageAssist is C:\Program Files\Dell. If you want to install ImageAssist on any other location, click Browse and select a folder.
   NOTE: Ensure that Check for Updates? and Launch tool after install? options are selected.
9. Click Install.
   The installation of ImageAssist is initiated. After the installation is complete, the ImageAssist Dynamic user interface is displayed. An ImageAssist shortcut icon is also created on the desktop.
ImageAssist Dynamic User Interface

The ImageAssist Dynamic user interface consists of three main sections:

- **Guide Me** — For more information on Guide Me, see [Guide Me](#) and Create your image by using the Guide Me path.
- **Defaults** — For more information on Defaults, see [Defaults](#) and Create your dynamic image by using the Defaults path.
- **Direct Tool Links** — For more information on Direct Tool Links, see [Direct Tool Links](#).

**NOTE:** The buttons in the ImageAssist user interface are displayed in blinking green or blue to suggest the most common use of the tools.

**Topics:**
- **Guide Me**
- **Defaults**
- **Direct Tool Links**

**Guide Me**

If you are new to ImageAssist, it is recommended that you use the Guide Me path.

The **Guide Me** path guides you through each step of the image creation process and also provides details about each step.

**Defaults**

The **Defaults** path helps you create an image by using preconfigured default selections. You can also review the selections and make changes, if necessary.

**NOTE:** Ensure that you run the validation checker before creating your image.

**Direct Tool Links**

The **Direct Tool Links** are recommended for system administrators and users familiar with ImageAssist.

The **Direct Tool Links** section contains the following applications:

- USB Drive Creator
- Unattend XML Creator
- Validation Checker
- Auto Capture Prep Tool
- WIM Splitter

**NOTE:** To view the applications, click the Direct Tool Links header, or click the arrow icon at the top-right of the Direct Tool Links section.

**USB Drive Creator**

The USB Drive Creator enables you to create a bootable ImageAssist USB drive. By booting a system to the ImageAssist USB drive, you can service the images that you have created. You can create the ImageAssist USB drive by using the **Guide Me** path or by accessing the USB Drive Creator tool from Direct Tool Links.
Unattend XML Creator

The Unattend XML Creator detects the system settings and helps in the creation of the Unattend.XML file. This Unattend.XML file enables you to customize the Windows installation, which eliminates the need to manually configure each system.

The following table describes the various fields and options available in the Unattend XML creator.

Table 3. Fields and description of Unattend XML Creator

<table>
<thead>
<tr>
<th>Fields</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name and Organization</td>
<td>Imports the values from the registry or allows you to enter new values.</td>
</tr>
<tr>
<td>Product Key</td>
<td>The key used to install and enable Windows.</td>
</tr>
<tr>
<td>Language Settings</td>
<td>Allows you to select the primary language settings of the operating system.</td>
</tr>
<tr>
<td>Architecture Type</td>
<td>Allows you to select the type of architecture (x64 [64-bit] or x86 [32-bit]).</td>
</tr>
<tr>
<td>Time Zone</td>
<td>Allows you to select the time zone.</td>
</tr>
<tr>
<td>Workgroup or Domain</td>
<td>Allows you to specify a workgroup or domain.</td>
</tr>
<tr>
<td>Computer Name</td>
<td>Allows you to create a computer name.</td>
</tr>
<tr>
<td>Administrator Password</td>
<td>Allows you to specify the administrator password required for autologon.</td>
</tr>
<tr>
<td>User Account Creation</td>
<td>Allows you to create additional user accounts.</td>
</tr>
<tr>
<td>System Restore</td>
<td>Allows you to disable the system restore process.</td>
</tr>
<tr>
<td>Local System Administrator Account</td>
<td>Allows you to enable the Local System Administrator Accounts and copy the profile of the Administrator to the default user profile.</td>
</tr>
<tr>
<td>User Account Control (UAC)</td>
<td>Allows you to select different User Account Control attributes.</td>
</tr>
<tr>
<td>Additional Synchronous Commands</td>
<td>Allows you to add commands that automatically run synchronously at the end of the setup process.</td>
</tr>
<tr>
<td>First Logon Commands</td>
<td>Allows you to configure Windows to automatically run a command the first time a user logs in.</td>
</tr>
</tbody>
</table>

**NOTE:** The Unattend XML Creator does not contain all the settings available in the Windows System Image Manager. If you require additional settings that are not available in the Unattend XML Creator, open the Unattend.XML in the Windows System Image Manager and configure any required additional settings.

**NOTE:** Ensure that you validate and test your Unattend.XML file before submitting your completed image to Dell.

**NOTE:**
- For more information about deploying Windows 7, see the documentation in the Windows 7 Windows Automated Install Kit (WAIK).
- For more information about deploying Windows 8.1, see the documentation in the Windows 8.1 Assessment and Deployment Kit (ADK).
- For more information about deploying Windows 10, see the documentation in the Windows 10 ADK.

When you click Build Unattend.XML, the Unattend.XML file is saved at %SYSTEMDRIVE%\Windows\Panther\Unattend.XML.

For more information about the Unattended installation settings, see [https://docs.microsoft.com/en-us/windows-hardware/customize/desktop/unattend/](https://docs.microsoft.com/en-us/windows-hardware/customize/desktop/unattend/).

Validation Checker

The Validation Checker is used to validate your software load for common build errors that would prevent Dell from successfully deploying your image in the factory.
NOTE: Ensure that you run the validation checker before creating your image.

The most common build errors that you may encounter are:

- Installed device drivers
- Operating system rearm limits
- Configured encryption software
- Errors in the Unattend.XML file

NOTE: If you are using a physical system as your build base and if you are using Windows 10 operating system, disconnect the network cable and/or disable the wireless device on the system. This enables you to prevent drivers from repeatedly reinstalling during the validation check.

The Validation Checker:

- Validates the list of items in the Installation prerequisites.
- Checks the following sections of the operating system:
  - Registry
  - Services
  - Files
  - Rearm
  - Software
  - Drivers
  - Policy
  - Unattend.xml file
- Checks for existence of the Unattend.XML file in C:\Windows\Panther directory. The Unattend.XML file is also checked for the existence of the required Unattend.XML entries in the Generalize Section. If the entries do not exist, they are automatically added to the Unattend.XML.

NOTE: Do not edit the registry, log file, or file location where the Validation Checker is validating. This may cause rejection of your image and may result in significant delays in your ImageAssist project.

Auto Capture Prep Tool

The Auto Capture Prep Tool enables you to capture a Windows Imaging Format (WIM) file.

The Auto Capture Prep Tool performs the following tasks:

1. Creating ImageAssist Environment folder
2. Copying ImageAssist Environment
3. Injecting Drivers into ImageAssist Environment
4. Setting up ImageAssist Environment to Boot
5. Sysprep

NOTE: The Auto Capture Environment folder is not captured within the final Gold image. If you select the default settings while running the Auto Capture Prep Tool, the Windows image, namely Dell_Captured_Image.wim, is saved on the local hard drive. After the WIM file is created, if necessary, you can copy the WIM file to an external hard drive.

WIM Splitter

The WIM Splitter enables you to split the WIM files into smaller SWM files. If your WIM file size is too large to store on a FAT32 USB drive, you can split the WIM file so that it can be stored on the USB drive.
Using ImageAssist Dynamic

Create your image by using the Guide Me path

About this task

The Guide Me path is recommended if you are new to ImageAssist Dynamic.

Steps

1. On the ImageAssist Getting Started tab, click Guide Me.
2. On the Configure tab, do one of the following:
   • To enable ImageAssist to create a sysprep answer file, click Run Unattend XML Creator.
   • To import your own sysprep answer file, click Import Unattend.XML file.
   
   **NOTE:** If you choose to import the Unattend.XML file manually, you must test the settings. ImageAssist Dynamic will not perform any further validation on the file.

3. Click Next.
4. On the Capture tab, select Run Auto Capture and click Next.
5. On the Test tab, select Create Bootable USB Drive if you want to create a bootable ImageAssist USB drive and click Next.
6. On the Software tab, select Install SupportAssist, if you want to include SupportAssist in your image.
   
   Dell SupportAssist automates support from Dell by proactively identifying hardware issues on Dell laptops, desktops, and tablets. Dell SupportAssist is recommended for devices with an active ProSupport or ProSupport Plus entitlement.
   
   **NOTE:** You can install SupportAssist option only on Windows 7, 8.1, or 10 operating systems. After installing SupportAssist, you must configure SupportAssist. For more information about configuring SupportAssist, see Dell.com/SupportAssistDeployment.

   **NOTE:** Dell ImageAssist version 8.7 does not support the installation of SupportAssist.

7. On the Summary tab, review and change the selections, if necessary.
8. Click Run Selections.
   
   The USB Drive Creator page is displayed. If a USB drive is not connected to the system, a message is displayed prompting you to connect a USB drive.
9. Connect the USB drive and click Rescan.
10. From the Selected Disk Name list, select a USB drive.

   **NOTE:** The Selected Disk Size field is detected automatically.

11. From the Disk Format list, select one of the following based on the preferred boot method:
   - FAT32 — To boot to UEFI or UEFI BIOS.
   - NTFS — To boot to Legacy or Legacy BIOS.
   
   A warning message is displayed stating that the selected USB drive will be formatted.
12. Click OK.
   
   The bootable ImageAssist USB drive is created and a confirmation message is displayed.
13. Remove the USB drive and then click OK.
   
   The Unattend XML Creator page is displayed.
14. On the Unattend XML Creator page, review and change the selections, if necessary.
15. Click Build Unattend XML.

   • A validation check is started.
   • After the validation check is complete, the Auto Capture process is started.
   • After the Auto Capture process is complete, the system is restarted and the Capture Tool page is displayed.
16. On the Capture Tool page, review and change the selections, if necessary.
17. Click **Capture** or wait until the capture process starts automatically. A dialog box is displayed stating that the capture process is complete.

18. Click **Shutdown** to turn off the system.

**NOTE:** The captured Windows image, `Dell_Captured_Image.wim`, is saved in the root directory of the Windows partition.

### Create your dynamic image by using the Defaults path

**Steps**

1. On the **ImageAssist Getting Started** tab, click **Defaults**. The **Summary** tab is displayed. By default, the **Run Unattend XML Creator** and **Run Auto Capture** options are selected.

2. On the **Summary** tab, perform the following depending on your requirement:
   - To create a bootable ImageAssist USB drive, select the **Create Bootable USB Drive** option.
   - To import your own sysprep answer file, click **Import Unattend.XML file**.

   **NOTE:** If you choose to import the Unattend.XML file manually, you must test the settings. ImageAssist Dynamic will not perform any further validation on the file.

   - To include SupportAssist in your image, select the **Install SupportAssist** option.

   Dell SupportAssist automates support from Dell by proactively identifying hardware issues on Dell laptops, desktops, and tablets. Dell SupportAssist is recommended for devices with an active ProSupport or ProSupport Plus entitlement.

   **NOTE:** You can install SupportAssist option only on Windows 7, 8.1, or 10 operating systems. After installing SupportAssist, you must configure SupportAssist. For more information about configuring SupportAssist, see Dell.com/SupportAssistDeployment.

   **NOTE:** Dell ImageAssist version 8.7 does not support the installation of SupportAssist.

3. Click **Run Selections**.
   If you had selected to create a bootable ImageAssist USB drive, the **USB Drive Creator** page is displayed. Follow the instructions on the screen to create the bootable ImageAssist USB drive. If a USB drive is not connected to the system, a message is displayed prompting you to connect a USB drive. After the USB drive is created, the **Unattend XML Creator** page is displayed.

4. On the **Unattend XML Creator** page, review and change the selections, if necessary.

5. Click **Build Unattend XML**.
   - A validation check is started.
   - After the validation check is complete, the Auto Capture process is started.
   - After the Auto Capture process is complete, the system is restarted and the **Capture Tool** page is displayed.

6. On the **Capture Tool** page, review and change the selections, if necessary.

7. Click **Capture** or wait until the capture process starts automatically. A dialog box is displayed stating that the capture process is complete.

8. Click **Shutdown** to turn off the system.

**NOTE:** The captured Windows image, `Dell_Captured_Image.wim`, is saved in the root directory of the Windows partition.

### Using ImageAssist Dynamic tools

This section provides information about using the following ImageAssist Dynamic tools:

- **USB Drive Creator** — To create a bootable ImageAssist USB drive, see Create a bootable ImageAssist USB drive.
- **Unattend XML** — To create the Unattend.XML file, see Create the Unattend.XML file.
- **Validation Checker** — To validate your system configuration, see Validate system configuration.
- **Auto Capture Prep Tool** — To capture a reference/maintenance image, see Capture reference image.
- **WIM Splitter** — To split a WIM file, see Split a WIM file.
Create a bootable ImageAssist USB drive

Steps
1. On the ImageAssist Getting Started tab, click Direct Tool Links.
2. Click the USB Drive Creator icon. The USB Drive Creator page is displayed. If a USB drive is not connected to the system, a message is displayed prompting you to connect a USB drive.
3. Connect the USB drive and click Rescan.
4. From the Selected Disk Name list, select a USB drive.
   
   **NOTE:** The Selected Disk Size field is detected automatically.
5. From the Disk Format list, select NTFS or FAT32, and click Create USB Drive. A warning message is displayed stating that the selected USB drive will be formatted.
6. Click OK. The bootable ImageAssist USB drive is created and a confirmation message is displayed.
7. Remove the USB drive and then click OK.

Create the Unattend.XML file

Steps
1. On the ImageAssist Getting Started tab, click Direct Tool Links.
2. Click the Unattend XML icon.
3. In the Name and Organization section, enter the registered name and registered organization.
4. In the Product Key section, enter the product key.
   
   **NOTE:**
   - For Multiple Activation Key (MAK) licensing, you must enter a product key.
   - For Original Equipment Manufacturer (OEM) licensing, Dell OEM media is required for Windows 7 and 8.1. For Windows 10, you must use Dell OEM media or Microsoft installation media created with the Microsoft Windows 10 Media Creation Tool. A product key is not required for OEM licensing.
   - For Key Management Server (KMS) licensing, you must have a Key Management Server at your location. A product key is not required for KMS licensing.
5. In the Language Settings section, select a language.
6. In the Architecture Type section, select the architecture type for the destination system.
7. In the Time Zone section, select a time zone for the destination systems.
8. In the Workgroup or Domain section, select Workgroup or Domain.
   
   **NOTE:** If you select Domain, you are prompted to enter the username and password of your domain.
9. In the Computer Name section, assign a name to the destination system.
10. In the Administrator Password section, specify a password for the administrator account on all destination systems.
11. In the User Account Creation section, select Prompt end user to create a local admin account and set password if you want to create a local admin account.
12. In the System Restore section, select DISABLE System Restore if you want to disable the system restore feature on the destination systems.
13. In the User Account Control section, select an appropriate option.
14. In the Additional Synchronous Commands section, add commands that you want to automatically run synchronously at the end of the setup process.
15. In the First Logon Commands section, add commands to configure Windows to automatically run a command the first time a user logs in.
16. Click Build Unattend XML.
   
   The Unattend.XML file is created and saved at the following location: %SYSTEMDRIVE%\Windows\Panther.
Validate system configuration

Steps
1. On the ImageAssist Getting Started tab, click Direct Tool Links.
2. Click the Validation Checker icon.
   - **NOTE:** The Software Check displays a Fail status if any of the tools listed in the Installation prerequisites are installed.

   The Validation Checker runs and verifies the registry, files, rearm/sysprep, software, driver, policy, and Unattend.XML.
3. If the Validation Checker encounters a **Fail** status for the **Software Check**, follow the instructions on the screen to start the uninstallation process.
4. When the uninstallation is complete, click Finish.
   - **NOTE:** You may be prompted to restart the system after the uninstallation.
5. To restart the system, click Yes.

Next steps
After the system restarts, the Validation Checker runs automatically to ensure that the verification is successful.

Capture reference image

About this task
- **NOTE:** The auto capture feature is not supported on Windows 7 or Windows 8.1 with UEFI configurations. For more information about capturing an image manually, see Capture an image manually.

Steps
1. On the ImageAssist Getting Started tab, click Direct Tool Links.
2. Click the Auto Capture Prep Tool icon.
3. Click Run to run the Auto Capture Prep Tool.
   After the Auto Capture process is complete, the system is restarted and the Capture Tool page is displayed.
4. On the Capture Tool page, review and change the selections, if necessary.
5. Click Capture or wait for the capture process to start automatically.
   A dialog box is displayed stating that the capture process is complete.
6. Click Shutdown to turn off the system.
   - **NOTE:** The captured Windows image, Dell_Captured_Image.wim, is saved in the root directory of the Windows partition.

Split a WIM file

Steps
1. On the ImageAssist Getting Started tab, click Direct Tool Links.
2. Click the WIM Splitter icon.
3. Click Browse and select the WIM file.
4. Click Split.
   The WIM file is split into multiple SWM files and saved in the same folder where the WIM file is available.
5. On the confirmation dialog box, click OK.
Using the ImageAssist Dynamic USB drive

The tools available in the bootable ImageAssist Dynamic USB drive are as follows:
- **Restore** — Enables you to test your WIM file by restoring it on your local hard drive.
- **Capture** — Enables you to capture your local hard drive as a WIM file.
- **Summary** — Enables you to create a detailed summary of your WIM file.
- **File Explorer** — Enables you to access drives and WIM files.

**Topics:**
- Boot to the ImageAssist Dynamic USB drive on computers
- Boot to the ImageAssist Dynamic USB drive on tablets
- Capture an image manually
- Restore an image
- Create a System Summary
- Service an image

**Boot to the ImageAssist Dynamic USB drive on computers**

**Steps**
1. Connect the ImageAssist Dynamic USB drive to the system.
2. Turn on the system.
3. When the Dell logo is displayed, press the F12 key.
   - The boot menu is displayed.
4. Use the arrow keys to select the USB boot device and then press Enter.

**Boot to the ImageAssist Dynamic USB drive on tablets**

**Steps**
1. Connect the ImageAssist Dynamic USB drive to the tablet.
2. Press and hold the volume up button while you press the power button to turn on the tablet.
   - The boot menu is displayed.
3. Use the volume buttons to select the USB boot device.

**Capture an image manually**

**About this task**

**NOTE:** In a virtual environment, you can take a snapshot of the virtual machine instead of creating a backup image.

**Steps**
1. Boot to the ImageAssist Dynamic USB drive.
2. On the **ImageAssist Selector** screen, click the **Capture** icon.

   **NOTE:** If you want to change location where you want to save the WIM file, click **Browse**.

   The **Capture Tool** screen is displayed.

3. Click **Capture**.

   When the capture is complete, a confirmation dialog box is displayed.

4. Click **Shutdown** to turn off the system.

   **NOTE:** The captured Windows image, Dell_Captured_Image.wim, is saved in the root directory of the Windows partition.

## Restore an image

### Steps

1. Boot to the ImageAssist Dynamic USB drive.

2. On the **ImageAssist Selector** screen, click the **Restore** icon.

   The **Restore Tool** screen is displayed.

3. Click **Browse** and select the WIM file that you want to restore.

   The **Browse for WIM File** window is displayed.

4. Select the Dell_Captured_Image.wim file and click **OK**.

5. To add a driver package file that matches with the model of the system you are restoring to, click **Add Driver Package**.

   **NOTE:** You do not have to manually select the driver package file if you have placed it in the **Dell_Driver_Packs_Local** folder that is located on your ImageAssist Dynamic USB drive.

   **NOTE:** If you want to restore the image to multiple systems, you can add the applicable driver package files to **Dell_Driver_Packs_Local** folder. Ensure that you do not unzip the driver packages.

6. If you want to manually select the driver package files, click **Browse**, select the driver package files, and then click **OK**.

7. To check the supported models for the driver package, select the driver package, and then click **Check Supported Models**.

   The **Selected Models** window is displayed.

8. Click **Add Selected** and then click **Finished**.

9. Click **Restore**.

   When the image is restored, a confirmation dialog box is displayed.

10. On the **Restore Complete** dialog box, perform one of the following:

    - Click **Shutdown** to turn off the system.
    - Click **Reboot** to immediately restart the restored WIM file.

## Create a System Summary

### Steps

1. Boot to the ImageAssist Dynamic USB drive.

2. On the **ImageAssist Selector** screen, click the **System Summary** icon.

3. Click **Browse**, select a WIM file, and click **OK**.

4. Click **Browse**, select a location where you want to save the summary file, and click **OK**.

5. Click **Output**.

   The summary_summary.xml file is saved.

6. Click **OK** and click **Finished** to exit the **System Summary** screen.

   **NOTE:**

   - To view the summary file, browse to the location where you saved the file and select edit. You can see information about the image, including passwords, operating system information, partitioning, bit architecture, and so on.
On images that have sysprep run and are validated, the System Summary tool runs automatically and appends a Summary_IA index with the System_Summary.xml file in it.

Service an image

To service either the operating system or a Windows image offline:

Steps

1. Boot to the ImageAssist Dynamic USB drive.
2. On the ImageAssist Selector screen, click the File Explorer icon.
3. Click Mount WIM.
4. Click Browse, select the WIM file, and click OK.

   NOTE:
   - To service the computer's operating system, you can also open the Command Line Interface and the Task Manager, if necessary.
   - You can also mount an image that is available on a network drive or a USB drive. If the USB drive is not connected, you can connect the USB drive and click Redetect drives to view the USB drive details.

After the image is mounted, the details of the image are displayed in the dell_temp_mount folder.

5. To select the mounted image, click Snap to Mounted WIM.
   You can copy, edit, or delete files to the mounted image.
6. After you complete editing the mounted image, click Commit WIM, and then click Finish.

   NOTE: If you do not click Commit WIM, all your changes are discarded.

The image is unmounted with the changes.
Advantages of using a virtual machine

The recommendation is to choose a virtual machine (VM) technology as the build base for creating your reference/maintenance image. There are several advantages of using a VM as your build base:

- Reduction of development time
- Ability to create and use snapshots or checkpoints to test different configurations quickly
- Hardware issues do not occur
- Prevents the installation of other applications which may be installed as part of a driver installation
- Easy to navigate between lab, test, and production
- Easy to recapture an image even after modifications and additions to the operating system
- Minimum failures while removing drivers during the Validation Checker process

**NOTE:**
- ImageAssist supports Hyper-V (Windows 10) and the two most recent versions of VMware Workstation. Other VM technology solutions may be supported, but have not been fully validated with ImageAssist.
- For more information about installing and configuring various VM technologies on a client system, see the product documentation or consult your IT team.

Key features of virtual machines

<table>
<thead>
<tr>
<th>Key features</th>
<th>VMware Workstation</th>
<th>Hyper-V</th>
<th>VMware Player</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version</td>
<td>The two most recent versions</td>
<td>Latest</td>
<td>Latest</td>
</tr>
<tr>
<td>UEFI support</td>
<td>Yes</td>
<td>Yes*</td>
<td>No</td>
</tr>
<tr>
<td>Native USB support</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Snapshot capability</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Validated with ImageAssist</td>
<td>Yes</td>
<td>Limited</td>
<td>Limited</td>
</tr>
</tbody>
</table>

* Windows 7 32-bit operating systems are not supported with UEFI in Hyper-V.

Create your image by using a virtual machine

**Steps**

1. Document your image build. This document helps in troubleshooting your image, if necessary. Keep the document up-to-date when you change the image.
2. Select a virtual machine (VM) technology as your build base.

**NOTE:** If you choose not to use a VM to create your reference/maintenance image, you can use any currently shipping or legacy Dell Latitude, Dell OptiPlex, Dell Precision, Dell XPS, or Dell Venue Pro system as your build base, provided the system supports Microsoft Windows 10, Windows 8.1 Update 1, and Windows 7 SP1.
3. Create your Windows 10, Windows 8.1 with Update, or Windows 7 SP1 image.
4. If network access is required, you can install the Dell driver for the Onboard Ethernet Network Controller. This driver does not have any impact on your cross-platform image.

1 | **NOTE:** Do not install any other drivers throughout the image build process.

5. Install all required applications.

1 | **NOTE:** Do not install any applications that are listed in Installation prerequisites.

6. Create your Unattend.XML file with the Unattend XML Creator or import your own Unattend.XML file when prompted.

1 | **NOTE:** If you are using a physical system as your build base and if you are using Windows 10 operating system, disconnect the network cable and/or disable the wireless device on the system. This enables you to prevent drivers from repeatedly reinstalling during the validation check.

7. Create an image using the ImageAssist Auto Capture tool.
8. Test your image before submitting it to Dell.
9. Submit your image to Dell for deployment in the factory.

---

**Using VMware Workstation**

You can use the latest version of VMware Workstation to build your image.

Before installing the latest VMware workstation:

- Do not install VMware Tools on the operating system.
- Do not install any other drivers throughout the reference/maintenance image build process.

1 | **NOTE:** ImageAssist supports the two most recent versions of VMware Workstation. Other VM technology solutions may be supported, but have not been fully validated with ImageAssist.

The following are some of the best practices when using VMware Workstation:

- Document your image build. This helps in troubleshooting your image, if necessary. Keep the document up-to-date when you change the image.
- Do not install any of the software or Dell applets that are listed in Installation prerequisites.
- Always back up your work.
- The system must be configured with the minimum supported Windows screen resolution: 1024 x 768.
- It is recommended that you allocate 2 GB RAM or more, and two processors with two cores each for the virtual machines.

---

**Create a new virtual machine**

**Steps**

2. Click Next.
3. On the Guest Operating System Installation page, select one of the following:
   - Installer disc
   - I will install the operating system later
   - Installer disc image file (ISO)
4. Click Next. The Select the Guest Operating System page is displayed.
5. Select the Guest Operating System and then from the Version list, select the version of the operating system.
6. Click Next. The Name the Virtual Machine page is displayed.
7. Enter a name for the virtual machine, and then click Browse and select a location to save the virtual machine.
8. Click Next.
9. On the Specify Disk Capacity page, enter a value for the maximum disk size.
10. Click Store virtual disk as a single file, and then click Next.
11. Click Finish.

### Edit the virtual machine settings

**Steps**

1. On the VMware Workstation home page, click **Edit virtual machine settings**.
2. On the **Hardware** tab:
   a) Click **Memory** and change the value of **Memory for this virtual machine** from 1024 MB to 2048 MB.
   b) Click **Processors** and change the value of **Number of processor** from 1 to 2.
   c) Click **Processors** and change the value of **Number of cores per processor** from 1 to 2.
   d) Click **Sound Card** and clear **Connect at power-on**, if it is selected.
   e) Click **Printer** and clear **Connect at power-on**, if it is selected.

   ![NOTE: No changes are required for the Hard Disk (SCSI), CD/DVD (SATA), Network Adapter (NAT), USB Controller, and Display attributes.]

### Boot from a CD or DVD ISO file

**Steps**

1. On the **Virtual Machine Settings** page, click **CD/DVD (SATA)**.
2. Select **Use ISO image file** and click **Browse**.
3. Navigate to the location of the operating system DVD ISO image file.
4. Click **Open** and then click **OK**.

### Install Windows 10 Enterprise x64 UEFI

**Steps**

1. On the VMware Workstation home page, click **Edit virtual machine settings** and then click the **Options** tab.
2. Click **Advanced settings**, and select **Boot with EFI instead of BIOS**, and then click **OK**.
3. On the Windows 10 Enterprise x64 (uEFI) page, click **Power on this virtual machine**. The **Windows Setup** page is displayed.
4. Enter your language, select other preferences, and click **Next**.
5. Click **Install Now**. The **License terms** page is displayed.
6. Select **I accept the license terms** and then click **Next**.
7. Click **Custom install Windows only (advanced)** and then click **Next** to complete the installation.

### Connect a USB drive to VMware Workstation

**Steps**

1. On your virtual machine desktop, click **Player**, hover over **Removable devices** > **USB device** > **Connect (Disconnect from host)**.
2. Click **OK**.

   ![NOTE: Ensure that the USB drive is connected to the host.]

   The USB drive is attached to the host. You can now copy data to and from the USB drive.
Using Hyper-V

Enable Hyper-V Manager on Windows 10

Steps
1. Go to Control Panel > Program > Program and Features.
2. Click Turn Windows features on or off.
   The Windows Features window is displayed.
3. Select Hyper-V and click OK.
   The system restarts to enable Hyper-V.
4. Open Hyper-V Manager.
   Hyper-V Manager is enabled and your system name is displayed below the Hyper-V Manager title.

Results

NOTE: The system name is not displayed below the Hyper-V Manager title if the virtual machine is not enabled. This happens if you have an older version of Hyper-V installed on your system. To enable Hyper-V Manager again, clear the Hyper-V option in the Windows Features window, and restart your system. After restart, perform the preceding steps again to enable the Hyper-V Manager.

Install Windows 10 Enterprise x64 UEFI

Steps
1. On the Hyper-V Manager page, click New in the Action pane.
2. Click Virtual Machine.
   The New Virtual Machine Wizard window is displayed.
3. On the Before you Begin page, click Next.
4. On the Specify Name and Location page, enter the name of the guest operating system and click Next.
5. On the Specify Generation page, select Generation 2 and then click Next.
6. On the Assign Memory page, increase the Startup memory to 2048 MB, clear Use Dynamic Memory for this Virtual Machine if it is selected, and then click Next.
7. On the Configure Networking page, select the Connection status to Not Connected and click Next.
8. On the Connect Virtual Hard Disk page, reduce the Size of the virtual hard disk from 127 GB to 40 GB and then click Next.
10. Click Next.
12. Hover over the title of the virtual machine, right-click to view the options, and then click Settings.
13. On the Settings pane, perform the following:
   a) Click Security, clear Enable Secure Boot if it is selected, and then click Apply.
   b) Click Processor, change the Number of virtual processors to 2, and then click Apply.
   c) Click Integration Services, select Guest Services, and then click OK.

Connect the physical system hosts' hard drive and USB to the virtual machine

About this task

NOTE: Hyper-V does not support the creation of bootable USB drives.
Steps

1. On the Hyper-V Manager page, hover over the title of the virtual machine, right-click to view the options, and then click Connect.
2. In the window that is displayed, click Start.
   Connection to the virtual machine is initiated.
3. Click the Show Options arrow, click the Local Resources tab, and then click More.
4. Select Drives and Other Supported Plug and Play (PnP) devices, and expand the list to verify if all the options are selected.
5. Click OK and click Connect.
6. In the physical system, verify if the hard drive, USB, and other drivers are connected to virtual machine.

Boot from a CD or DVD ISO file

Steps

2. Click Next.
   The Hyper-V Manager page is displayed.
4. Click Start and then click Connect in the Action pane.

Using the VMware Player

Create a new virtual machine

Steps

1. On the VMware Workstation home page, click Create a New Virtual Machine.
   The New Virtual Machine Wizard page is displayed.
2. Click Next.
3. On the Guest Operating System Installation page, select one of the following:
   - Installer disc
   - I will install the operating system later
   - Installer disc image file (ISO)
4. Click Next.
   The Select the Guest Operating System page is displayed.
5. Select the Guest Operating System and then from the Version list, select the version of the operating system.
6. Click Next.
   The Name the Virtual Machine page is displayed.
7. Enter a name for the virtual machine, and then click Browse and select a location to save the virtual machine.
8. Click Next.
9. On the Specify Disk Capacity page, enter a value for the maximum disk size.
10. Click Store virtual disk as a single file, and then click Next.
11. Click Finish.

Edit the virtual machine settings

Steps

1. On the VMware Workstation home page, click Edit virtual machine settings.
2. On the Hardware tab:
   a) Click Memory and change the value of Memory for this virtual machine from 1024 MB to 2048 MB.
   b) Click Processors and change the value of Number of processor from 1 to 2.
c) Click **Processors** and change the value of **Number of cores per processor** from 1 to 2.
d) Click **Sound Card** and clear **Connect at power-on**, if it is selected.
e) Click **Printer** and clear **Connect at power-on**, if it is selected.

**NOTE:** No changes are required for the Hard Disk (SCSI), CD/DVD (SATA), Network Adapter (NAT), USB Controller, and Display attributes.

## Boot from a CD or DVD ISO file

### Steps
1. On the **Virtual Machine Settings** page, click **CD/DVD (SATA)**.
2. Select **Use ISO image file** and click **Browse**.
3. Navigate to the location of the operating system DVD ISO image file.
4. Click **Open** and then click **OK**.

## Connect a USB drive to VMware Player

### Steps
1. On your virtual machine desktop, click **Player**, hover over **Removable devices > USB device > Connect (Disconnect from host)**.
2. Click **OK**.

**NOTE:** Ensure that the USB drive is connected to the host.

The USB drive is attached to the host. You can now copy data to and from the USB drive.
ImageAssist Dynamic limitations

- Customized modifications to static IP addresses, DNS, or WINS information settings in your image are changed back to the default settings after completion of the sysprep process.
- For an OEM image, the local administrator account is renamed to Administrator after completion of the sysprep process. However, for a non-OEM image, ImageAssist restores the initial name that is provided by the user.
- The auto capture feature is not supported for Windows 7 UEFI configurations. For more information about capturing an image manually, see Capturing an image manually.
- ImageAssist Dynamic does not support the following:
  - Images such as SCCM, MDT, KACE, and WinPE
  - Windows Server operating systems
  - Upgraded versions of Windows 7 and Windows 8.1 operating systems. However, upgraded versions of Microsoft Windows 10 to version 1607 or higher are supported. For more information, see System Preparation Overview.
  - Embedded Windows 7 Service Pack 1, Windows 8.1, and Windows 10 operating systems
  - Dell applets installed on the system
Uninstall ImageAssist Dynamic

Steps
1. Navigate to the Control Panel and double-click Programs.
2. Click Programs and Features.
3. Right-click ImageAssist, and then click Uninstall.
4. Click Uninstall.
Related documents and resources

In addition to this guide you can access the following documents that provide more information about ImageAssist.

Table 5. Related documents

<table>
<thead>
<tr>
<th>Document title</th>
<th>How to access the document</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family Pack Downloader User’s Guide</strong></td>
<td>2. Click ImageAssist.</td>
</tr>
<tr>
<td>for Dell ImageAssist Users</td>
<td></td>
</tr>
</tbody>
</table>

Video tutorials

You can access the following video tutorials to learn about the features of ImageAssist. To access the video tutorials, go to the Dell TechCenter Channel.

- ImageAssist Dynamic - Introduction
- ImageAssist Dynamic - Best Practices
- Installing ImageAssist Dynamic
- Installing ImageAssist Static
- ImageAssist Static - Creating a Bootable USB Drive
- ImageAssist Static - Capture a Static Image
- ImageAssist Static - Restore a Static Image
- ImageAssist Dynamic - Validate Configuration
- ImageAssist Dynamic - Guide Me
- ImageAssist Dynamic - Create USB Drive
- ImageAssist Dynamic - Create Unattend XML
- ImageAssist Dynamic - Auto Capture Image
- ImageAssist Dynamic - USB Tools
- ImageAssist Dynamic - Capture Backup Image
- ImageAssist Dynamic - Restore Image
- ImageAssist Dynamic - Create Summary
- ImageAssist Dynamic - Service Image
- ImageAssist Dynamic - Splitting a WIM File into Multiple Files

ImageAssist support

For additional guidance on ImageAssist, contact the Dell support team by using the following details:

Table 6. ImageAssist support

<table>
<thead>
<tr>
<th>Region</th>
<th>Email support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americas</td>
<td><a href="mailto:US_OSImaging@dell.com">US_OSImaging@dell.com</a></td>
</tr>
<tr>
<td>Europe, Middle East, and Africa</td>
<td><a href="mailto:EMEA_OSImaging@dell.com">EMEA_OSImaging@dell.com</a></td>
</tr>
<tr>
<td>Australia</td>
<td><a href="mailto:ANZ_OSImaging@dell.com">ANZ_OSImaging@dell.com</a></td>
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<tr>
<td>South Asia</td>
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<td>Japan</td>
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</tr>
<tr>
<td>Latin America, Brazil</td>
<td><a href="mailto:LATAM_SOImagenes@dell.com">LATAM_SOImagenes@dell.com</a></td>
</tr>
</tbody>
</table>
Frequently asked questions

1. How many WIM images should I capture for my ImageAssist project?
   You can capture as many images as you want. However, it is recommended that you capture a minimum of two images.
   - Reference/maintenance image — This is the image that is captured before the sysprep process.
   - Gold image — This is the image that is captured after the sysprep process.

2. Can I use the Capture and Restore tools on a system where ImageAssist is installed?
   No, the Capture and Restore tools can only be used to capture and restore WIM images on systems that do not have ImageAssist installed. However, you can use the tools if you had used ImageAssist to capture the image in the first instance.

3. Can I use a virtual machine to build my image?
   Yes, it is recommended to use a virtual machine to build an image. For more information, see ImageAssist — Best practices for building your image in a Virtual Machine.

4. Can I use the default image that is on my computer from the Dell factory to build my image?
   No, Dell factory installed operating systems are not supported by ImageAssist Dynamic. You must format the hard drive and rebuild the image using your operating system media.

5. Can Dell Venue tablets be used as a build base?
   Yes, as long as the image is used on a tablet of the same architecture.

6. What is the use of the USB Capture tool?
   The USB Capture tool provides a Graphical User Interface (GUI) for capturing an image.

7. When building an image, what backups should I capture along the process?
   You can capture the following:
   - Base — This backup is the starting point for your image. It is the operating system installed with custom profile changes. It also includes the Windows updates (without drivers).
   - Base + Apps — This backup may include multiple images or snapshots as you test certain functionality of scripts that may have to be processed for first logon or to run synchronous commands.
   - Reference/Maintenance — This backup is the image that is configured before you install ImageAssist. This snapshot can be used for updating the image periodically.

8. What languages is the ImageAssist user interface available in?
   The ImageAssist user interface is available in the following languages:
   - German
   - Dutch
   - English
   - Spanish
   - French
   - Italian
   - Japanese
   - Korean
   - Brazilian Portuguese
   - Chinese Simplified
   - Chinese Traditional
   All Microsoft operating system languages can be used with ImageAssist. However, if ImageAssist is installed on an operating system with a language in which ImageAssist is not available, the user interface is displayed in English. The `English` switch can be used on any operating system to display the ImageAssist user interface in English.

9. Where are the driver packs for ImageAssist located?
   The driver packs for ImageAssist can be found at Dell Family Driver Packs.

10. Can ImageAssist be used to create an Unattend.XML file without completing the sysprep process?
    Yes, using the Direct Tool Links, you can run the Unattend XML Creator.

11. How do I check if my build contains drivers or software that are not compatible with ImageAssist?
    The Validation Checker verifies if your build base contains incompatible drivers or software. You can run the Validation Checker from Direct Tool Links.
12. Why should I run the Auto Capture Prep tool from Direct Tool Links?
If the Auto Capture Prep tool is run directly, it captures the reference/maintenance image. If this tool is run as part of the process, then sysprep is run first and then the Auto Capture Prep tool reboots into a locally stored PE to capture your sysprep image ready for the Dell factory deployment.

13. Where can I find more information about ImageAssist?
For more information about ImageAssist, see Dell.com/ImageAssist.

14. Why are there more recent drivers on Dell.com/support?
Drivers used during the development process are tested and qualified by our Dell Product Group for both platform and factory integration. At times, newer drivers are provided by vendors. To get the vendor-provided drivers to customers quickly, the drivers are validated and posted online at Dell.com/support.

15. Are there known issues with some USB drives during restore?
Yes. It is observed that some manufacturers’ drives perform poorly with read or write functionality. If you come across problems during creation, booting, capturing, or restoring, try a different drive and/or a different USB port.

16. Can I move my user profiles to a different drive or to a different location?
No, Sysprep and DISM require your user profiles to remain in the default Windows location.

17. Can I create an ISO version of the ImageAssist USB Drive?
Yes. You can create an ISO version of the ImageAssist USB drive by using the /ISO switch from the command prompt. The ImageAssist ISO file Dell_RESTORE_ISO_1.iso is saved at the root of the C:\ drive.
To create the ISO file, perform the following:
1. Open the terminal emulator.
2. Open the USB Drive Creator by using the /ISO switch. For example, type C:\WINDOWS\system32>C:\Program Files\Dell\ImageAssist\USB_Driver_Creator.exe /iso, and press Enter.
The ImageAssist ISO file Dell_RESTORE_ISO_1.iso is created and saved at the root of the C:\ drive.

18. Is WIMBOOT supported?
No, WIMBOOT is not supported.

19. When I boot from the USB PE key in UEFI mode, why does the display not align properly? Or why do the text boxes in Windows PE not align properly, some text is cut off, or the window appears to be slightly skewed off to one side?
Windows PE supports the base VGA display settings. On some systems, video cards, monitors, or Windows PE may not be able to display full resolution graphics. For additional information, see Technet.microsoft.com.

20. How do I fix the Missing Bootmgr or Invalid Partition table error which is displayed when I restored my image?
You must update the BIOS to reflect the image type you restored: MBR or UEFI. This should be automatically addressed on Latitude, OptiPlex, and the Dell Precision systems. On Venue and XPS systems, you must manually set the BIOS to the correct type.

21. Where can I download Hyper-V?
Hyper-V is built into Windows as an optional feature. There is no Hyper-V download. For more information about how to enable Hyper-V Manager on Windows 10, see Enable Hyper-V Manager on Windows 10.
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image</td>
<td>The image of a desktop or other computing device is a file encapsulating the operating system, software, and settings configured on the device.</td>
</tr>
<tr>
<td>Reference Build</td>
<td>A fully configured operating system, customized for reimaging a system.</td>
</tr>
<tr>
<td>Reference/maintenance Image</td>
<td>When you prepare your reference build (installing an operating system, running Windows update, configuring your desktop, making custom changes to policies, installing and customizing applications, favorites, shortcuts, and so on), a lot of work is performed to get this state. Eventually, you will want to make future changes to the state of this image, such as adding more Windows updates, updating certain applications, and making new policy changes. To save time from building a new image each time, take a backup of the state it is in, before you run ImageAssist Dynamic on that system. This image is called as the reference/maintenance image. The reference/maintenance image is the image that you maintain when you want to make updates to your gold image.</td>
</tr>
<tr>
<td>Gold Image</td>
<td>Gold image is the image that is produced at the end of the ImageAssist Dynamic process. The image is used in the Dell factory for shipping with dynamically updated drivers. It is also used to reimagine your systems on-site using the bootable USB drive created by ImageAssist Dynamic.</td>
</tr>
<tr>
<td>Auto Capture</td>
<td>ImageAssist Dynamic provides a feature that automatically captures a WIM image of the system state. The Auto Capture tool can be used either to capture the gold image or the reference/maintenance image. ImageAssist Dynamic also provides a restore tool for restoring images.</td>
</tr>
<tr>
<td>Unattend.XML</td>
<td>The Unattend file is an XML-based file that contains setting definitions and values to use during Windows Setup. In this file, you specify various setup options, including time zone, default language, domain-specific settings, the product key to apply, organization name, and computer name. You can also specify values that apply to the Windows installation, such as scripts that you want to run at first logon and how many times to autologon as the local administrator.</td>
</tr>
</tbody>
</table>