

Setup

On your Windows 10 or Windows 11 device, ensure that you have VMware Workstation Pro or Workstation Player 16.2 or newer installed. To quickly download the latest free version of Player visit <https://vmware.com/go/getplayer-win>. Imager will use this hypervisor for orchestrating the creation of Windows 10 or Windows 11 images. All other requisite software will be downloaded automatically when building your first image.

Operation

After installing Imager, run “Imager” from the Start Menu or Desktop icon. Click “New” to start creating a new Windows 10 or 11 image. Each page of the configuration wizard represents data required for each stage of the imaging process.

Source Image

On the “Source Image” page you may select a Windows 10 or 11 installation media ISO or an existing Windows image (.wim file). Windows 10 or 11 ISOs can be created using the Windows Media Creation Tool or downloaded via one of the various subscription services provided by Microsoft, including Windows Insider and MSDN.

Virtual Machine

In selecting virtual machine settings, consider the specification of devices that will be hosting the VM. Selecting excessively high CPU or memory values might exceed the resources available on host device or server. It is recommended that total CPU cores (processors multiplied by cores per socket) does not exceed 8, and the memory to be set between 2GB and 8GB.

Operating System

The administrator credentials provided here are used to create a local administrator account in the VM for the duration of the imaging process. If you intend to keep the administrator account or log in to the VM during the imaging process, be sure to remember the password you configure here as there are no password recovery options.

The option to skip operating system updates is useful for speeding up the imaging process but not recommended for production purposes. Skipping updates will only skip and disable updates during the imaging process; the standard Windows features for checking and applying updates will be re-enabled after imaging is complete.

Provision

The option for provisioning software and common settings into the image is supported via provisioning packages (.ppkg files), a standard container format supported on Windows. The most common method for creating these is Microsoft’s [Windows Configuration Designer](#) tool, which is included for free in the [Windows ADK](#).

Optimize

Imager is now integrated with [VMware OS Optimization Tool \(OSOT\)](#) for optimizing Windows. This is commonly used for preparing golden images for use in Horizon desktop pools to provide significant performance, capacity and usability improvements.

This can be enabled simply by toggling “Optimize image” and selecting the pre-defined default template or uploading a custom template file created within the OSOT console

application. Using the default template does not require you to download or become familiar with OSOT. More template choices are planned for the next release.

Sysprep

This final stage ensures the image is sysprepped, generalized and ready for distribution to users. Imager will automate this process and perform any final clean-up and optimization tasks.

An unattend XML file (also known as a Windows Setup answer file) can be provided for automating the OOBE (out-of-box-experience) process when the VM is distributed to users and first booted. If no unattend file is provided, the user will need to follow the default OOBE flow which will ask all setup questions, including region, keyboard, and EULA acceptance, etc.

Starting the Build

After everything is set, you can click “Build Image” and allow the process to run to completion. This can take from 20 minutes to many hours depending on device performance, VM specification, what software packages will be installed, and whether OS updates will be installed. To significantly reduce build time and network usage, it is recommended to avoid old Windows installation media files that require many updates to be downloaded and installed to bring the image up to date.

A much faster build can be achieved by using the “Skip Updates” option on the Operating System page. However, this is not recommended for VMs with production usage.

Continuing a Build

For image builds that were stopped at a stage prior to sysprep, you may “continue” the build process later. This allows manual customizations of the image before running the later stages and finalizing the image.

Command-Line Usage

All functions available via the Imager UI application are available via the Imager command-line tool. The path to this tool is `%ProgramFiles%\VMware\Imager\imager.exe`.

To get version and help information:

```
cd %ProgramFiles%\VMware\Imager
imager version
imager help
```

To get help on a specific tool, such as build-image:

```
imager build-image help
```

For example, to build a VM from a Windows 11 ISO downloaded from Microsoft:

```
imager build-image --source \data\Windows11.iso --edition Professional \
--vmname MyWindows11 --skipupdates
```

If you want to view what editions are available in any Windows 10 or 11 ISO media file:

```
imager list-editions --source \data\Windows11.iso
```

```
Edition          Index Description
-----
```

| | | |
|--------------------|---|---------------------------------|
| Core | 1 | Windows 11 Home |
| CoreN | 2 | Windows 11 Home N |
| CoreSingleLanguage | 3 | Windows 11 Home Single Language |
| Education | 4 | Windows 11 Education |
| EducationN | 5 | Windows 11 Education N |
| Professional | 6 | Windows 11 Pro |
| ProfessionalN | 7 | Windows 11 Pro N |

To avoid being prompted for the password of the VM's local administrator, set the `IMAGER_ADMINPASSWORD` environment variable prior to building the image. For example:

```
set IMAGER_ADMINPASSWORD=some-password
imager build-image --source \data\Windows11.iso --edition Professional
```

To view the list of previously built images:

```
imager list-images
```

| ID | VMX file | Completed | Modified |
|----------|---|-----------|--------------------|
| 5be4ec81 | C:\VMs\Imager\MyWindows11-2\MyWindows11-2.vmx | Optimize | 28/06/2022 2:44 PM |
| 175881c1 | C:\VMs\Imager\MyWindows11\MyWindows11.vmx | Sysprep | 27/06/2022 2:38 PM |

To delete an image from your machine, use the ID in the first column of the images list:

```
imager delete-image --source 5be4ec81
```