

FAQ No. 01998

How to install Windows 7 on VHD to implement multi OS on my laptop?

Q: I would like to have Windows 7 along with Windows 10 on my laptop through VHD. How to implement this?

A: Windows supports VHD tech since Windows 8. You can refer below steps to have Windows 7 on your system by VHD tech without killing Windows 10.

1. Before starting...

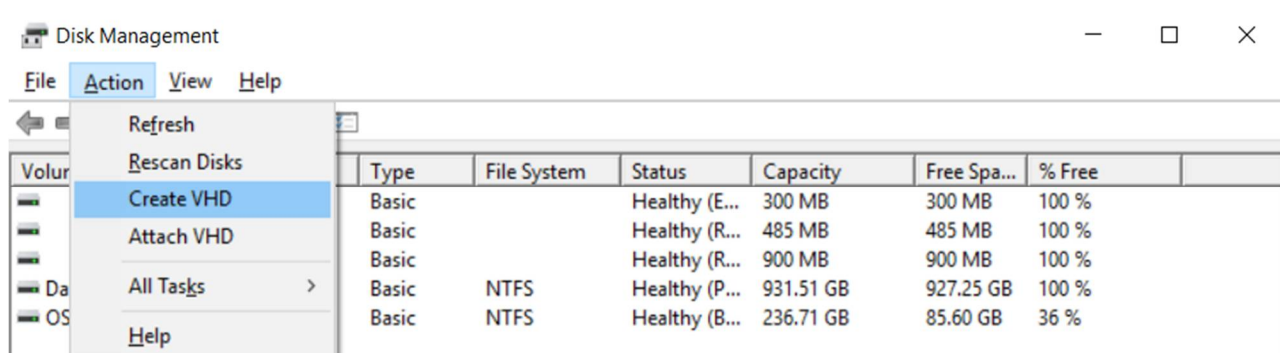
- A. Please change below BIOS setting
 - [Secure Boot] set as [Disabled]
 - [Boot Mode Selection] set as [UEFI With CSM]
- B. Check you storage devices

For best, it is recommend to be with SATA HDD/SSD or M.2 SATA SSD, and the origin OS runs as AHCI mode

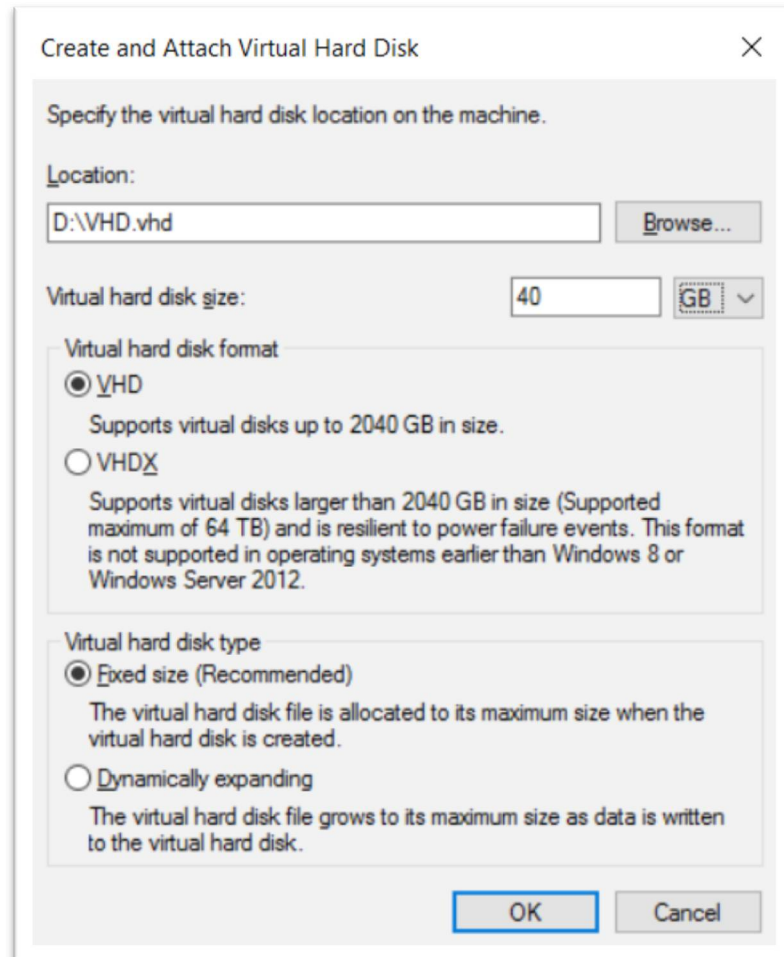
For other devices, you might need to add drivers for your new OS image.
- C. Get the Windows 7 installation CD ^{*1}

2. Create a Virtual Hard Disk (VHD)

- A. Open the Disk Management in the host OS.
- B. Click on any disk drive then select the option "Create VHD" in action menu.

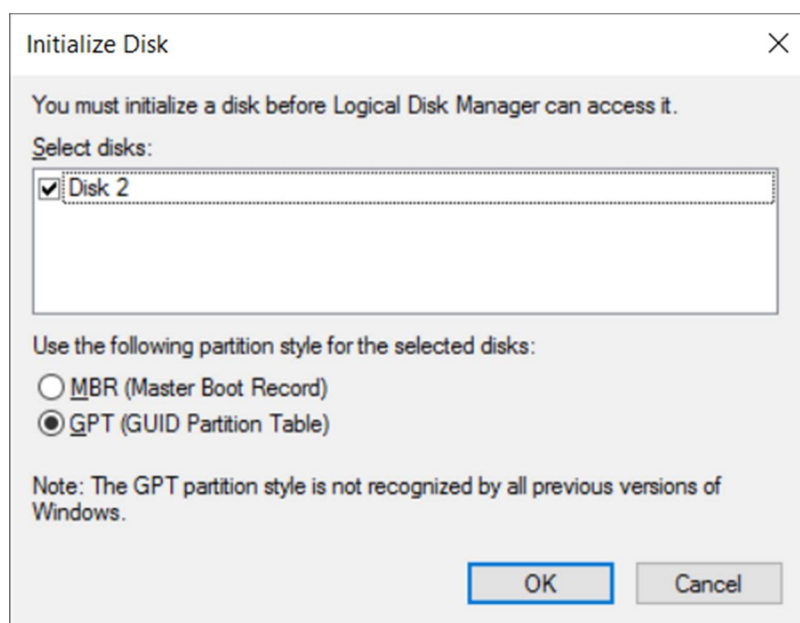


- C. Assign the location of the VHD file, the size of VHD and disk type, then press OK button and wait for the process done. Here we set as 40GB VHD and fixed size.

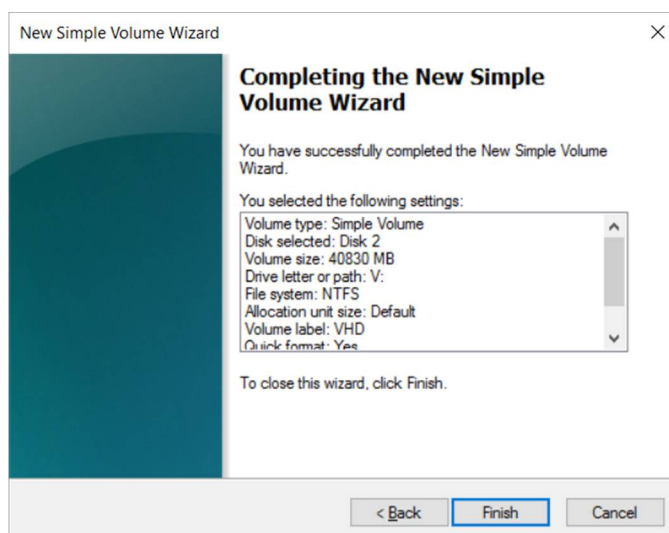
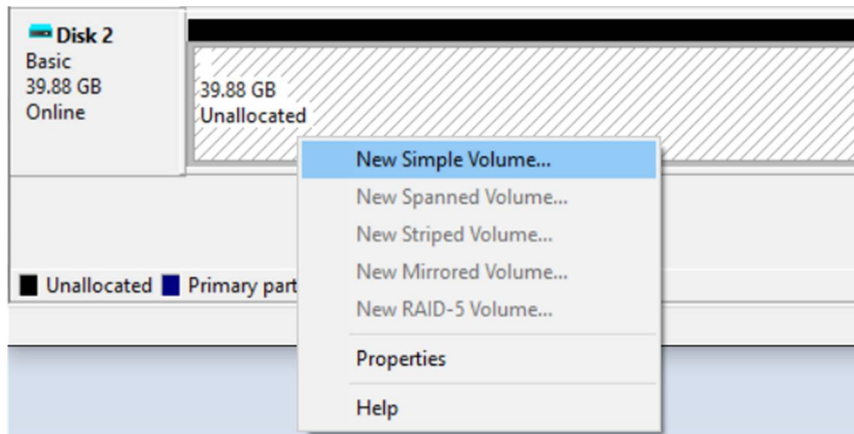


- D. Right click on the new VHD and choose "Initialize Disk". Here we choose GPT format.





- E. Right click on the unallocated disk and choose “New Simple Volume...” to create new volume and assign drive letter. Here we use full space and assign driver letter V:

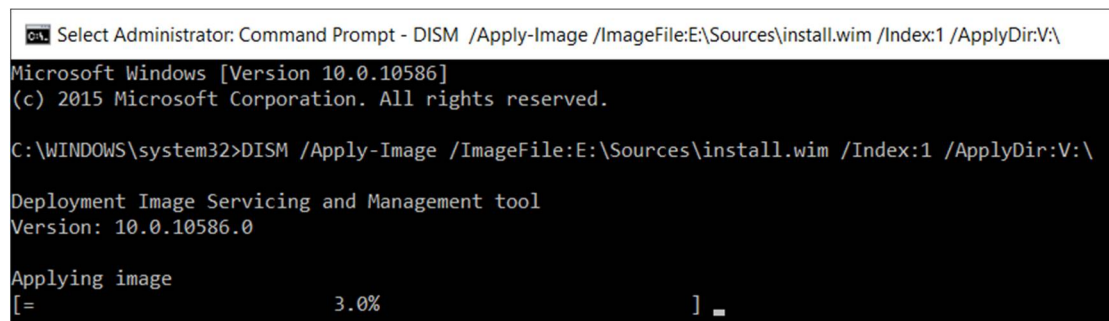


3. Install the OS

- A. Insert your OS installation CD on mount the image. In the FAQ, the drive letter will be *E:*. If you got other drive letter, please replace the *E:* in below command to your actual drive letter.
- B. Make sure you can see the drive letter of the VHD in "This PC" . If it' s not there, please go to the folder where it locates and double click on the VHD file to mount the drive.

- C. Run command line and run below command:

DISM /Apply-Image /ImageFile:E:\Sources\install.wim /Index:1 /ApplyDir:V:



```

Select Administrator: Command Prompt - DISM /Apply-Image /ImageFile:E:\Sources\install.wim /Index:1 /ApplyDir:V:\
Microsoft Windows [Version 10.0.10586]
(c) 2015 Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>DISM /Apply-Image /ImageFile:E:\Sources\install.wim /Index:1 /ApplyDir:V:\

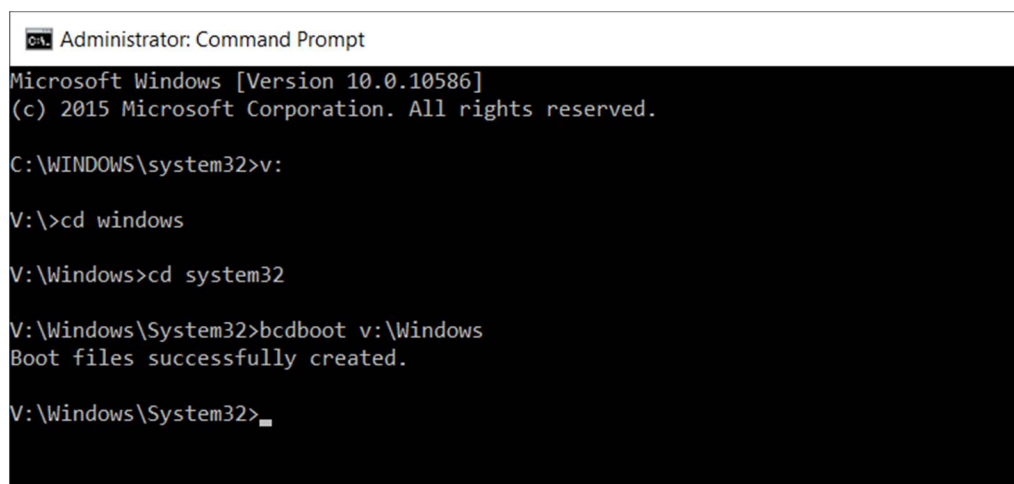
Deployment Image Servicing and Management tool
Version: 10.0.10586.0

Applying image
[=                               ] 3.0%

```

- D. After the installation done, please run command line with administrator right. Switch the folder to *V:\Windows\System32* And run below command. It shall show "Boot files successfully created."

BCDboot V:\Windows



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Administrator: Command Prompt
Microsoft Windows [Version 10.0.10586]
(c) 2015 Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>v:

V:\>cd windows

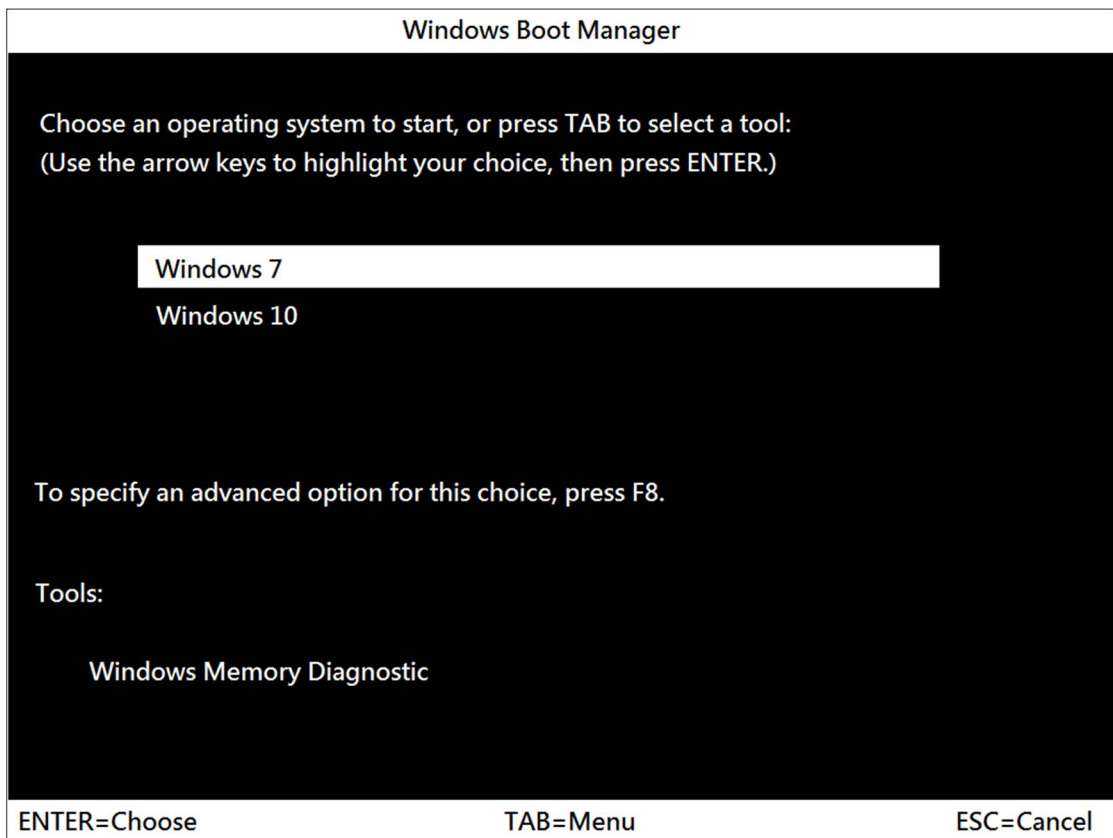
V:\Windows>cd system32

V:\Windows\System32>bcdboot v:\Windows
Boot files successfully created.

V:\Windows\System32>

```

- E. Reboot your system and you shall see Windows Boot Manager page.



Reference

Enable Boot to VHD with BIOS and GPT

- <https://technet.microsoft.com/en-us/windows/dn858566.aspx>

Note

1. For Windows 7, only Ultimate and Enterprise versions support boot on VHD.