## What is VHDX File Format?

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VHDX is a new virtual hard disk file format which is introduced by Windows Server 2012 and Windows 8. VHDX file format is an upgrade from the current VHD format which is designed to handle current and future workloads considering growth in size and in performance of the virtual environments.

## Key benefits of VHDX File Format

Some key benefits of VHDX File format include

1. Larger capacity storage. The new VHDX file format provides Support for virtual hard disks larger than 2TB and up to 64TB.

2. Data corruption protection during power failures.

3. Improved performance on large-sector disks.

4. The new VHDX format have the capability to store custom metadata information of a file which user can or want to record, such as OS version or patches applied. You can find more detailed information here

## Converting VHD to VHDX with Hyper-V 3

Most of you will already have the virtual environment or infrastructure based on based on Microsoft Hyper-V. If you want to convert VHD files in to VHDX file format, hyper-V Manager console provides an easy way to do it. The way it works is it will create a new VHDX disk and copy the data from the existing VHD to the new disk. After it copies the data, you have two disks such as original VHD disk and new VHDX disk exactly with the same content. Once you confirm the newly generated VHDX disk is fully functional, you can opt for deleting old original VHD disk.

Now lets see how we can convert VHD to VHDX.

1. You cant convert a disk which is in use, so make sure you dont have any virtual machines accessing the disk.

2. Next step is to open the Hyper-V VM settings, go to the hard drive you want to convert. After selecting the disk which you want to convert, confirm it again. After confirming press Edit button.

3. Go to the Locate Disk tab and select or enter the name and location of the existing VHD file.

4. Then select a Choose Action tab and select Convert option as shown in screenshot below.

What do you want to do to the virtual hard disk?

Compact
This option compacts the file size of a virtual hard disk. The storage capacity of the virtual hard disk remains the same.
Convert
This option converts a virtual hard disk by copying the contents to a new virtual hard disk. The new virtual hard disk can use a different type and format than the original virtual hard disk.
Expand

This option expands the capacity of the virtual hard disk.

5. In next step as shown in the screenshot below select the VHDX file format and click Next.

ø2	Edit Virtual Hard Disk Wizard
Convert Virtual Hard Disk	
Before You Begin Locate Disk Choose Action	What format do you want to use for the converted virtual har VHD Supports virtual hard disks up to 2,040 GB in size.
Choose Disk Type Configure Disk Summary	VHDX This format supports virtual disks up to 64 TB and is resilie from power failures. This format is not supported in opera Server 2012.

6. Next step is to choose a disk type the new disk should be fixed size or dynamically expanding. Press Next to select the name and location of the new VHDX file format.

7. Review the configuration in Summary Tab. And do finish, it will start operation for creating new VHDX file. This makes exact copy of VHD file format as a new VHDX file. Now you can mount the new VHDX disk to the Hyper-V VM.

8. Once you are satisfied with operation of new VM with new VHDX disk, then you can safely delete old VHD disk.

9. You can use the same process to convert VHDX to VHD as converting VHD to V