Add and initialize an extra hard disk in Microsoft Hyper-V

In this guide we add and initialize an extra hard disk after the operating system has been installed.

Add new hard disk in Hyper-V



Make sure the virtual machine has been turned off, right click it and choose Settings

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WCU501		4 1 0
WSUSUI	~	
A Hardware	^	IDE Controller
M Add Hardware		You can add hard drives and CD/DVD drives to your IDE controller
BIOS		Select the type of drives you want to attack to the centroller and then didk Add
Memory		Select the type of drive you want to attach to the controller and then click Add.
2048 MB		DVD Drive
🗄 🔲 Processor		
4 Virtual processors	_	
IDE Controller 0		
Hard Drive		
IDE Controller 1		AGO
DVD Drive		You can configure a hard drive to use a virtual hard disk or a physical hard disk after
None		you attach the drive to the controller.
SCSI Controller		
🗄 🃮 Network Adapter		
LAN switch		
None		
T COM 2		
None		
Diskette Drive		
None		
× management	-	
WSUS01		
Integration Services		
All services offered		
Snapshot File Location		
Smart Paging File Location		
D:\Hyper-V\VM		
D Automatic Start Action		
Restart if previously running	~	

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		Settings for WSUS01 on JOHNH –
WSUS01	~	
 ★ Hardware ▲ Add Hardware ▲ BIOS Boot from CD ➡ Memory 2048 MB ➡ Processor 4 Virtual processors ➡ IDE Controller 0 ➡ Hard Drive WSUS01.vhdx ➡ Hard Drive <file></file> ➡ IDE Controller 1 	•	 Hard Drive You can change how this virtual hard disk is attached to the virtual machine. If an operating system is installed on this disk, changing the attachment might prevent the virtual machine from starting. Controller: Location: Location: IDE Controller 0 I (in use) Media You can compact or convert a virtual hard disk by editing the associated file. Specify the full path to the file. Virtual hard disk: New Edit Inspect Browse
DVD Drive None SCSI Controller SCSI Controller Network Adapter LAN switch COM 1 None COM 2 None COM 2 None Diskette Drive None Diskette Drive None Management Name WSUS01 Integration Services All services offered Snapshot File Location D:\Hyper-V\VM Smart Paging File Location D:\Hyper V\VM		Physical hard disk: If the physical hard disk you want to use is not listed, make sure that the disk is offline. Use Disk Management on the physical computer to manage physical hard disks. To remove the virtual hard disk, click Remove. This disconnects the disk but does not delete the associated file. Remove
erithe rite	~	<u>Q</u> K <u>C</u> ancel <u>Apply</u>

*	New Virtual Hard Disk Wizard	×
Before You B	egin	
Before You Begin Choose Disk Format Choose Disk Type Specify Name and Location Configure Disk Summary	This wizard helps you create a new virtual hard disk. Virtual hard disks provide storage for virtual machines and are stored on physical media as .vhd or .vhdx files.	
	Next > Einish Cance	I

*	New Virtual Hard Disk Wizard
Choose Disk	Format
Before You Begin Choose Disk Format Choose Disk Type Specify Name and Location Configure Disk Summary	 What format do you want to use for the virtual hard disk? VHD Supports virtual hard disks up to 2.040 GB in size. VHDX This format supports virtual disks up to 64 TB and is resilient to consistency issues that might occur from power failures. This format is not supported in operating systems earlier than Windows Server 2012.
	<u>N</u> ext > <u>F</u> inish Cancel

*	New Virtual Hard Disk Wizard
Choose Disk	Туре
Before You Begin Choose Disk Format Choose Disk Type Specify Name and Location Configure Disk Summary	 What type of virtual hard disk do you want to create? Fixed size This type of disk provides better performance and is recommended for servers running applications with high levels of disk activity. The virtual hard disk file that is created initially uses the size of the virtual hard disk and does not change when data is deleted or added. Dynamically expanding This type of disk provides better use of physical storage space and is recommended for servers running applications that are not disk intensive. The virtual hard disk file that is created is small initially and changes as data is added. Differencing This type of disk is associated in a parent-child relationship with another disk that you want to leave intact. You can make changes to the data or operating system without affecting the parent disk, so that you can revert the changes easily. All children must have the same virtual hard disk format as the parent (VHD or VHDX).
	<u>N</u> ext > <u>F</u> inish Cancel

*	New Virtual Hard Disk Wizard ×
Specify Nam	e and Location
Before You Begin Choose Disk Format Choose Disk Type Specify Name and Location Configure Disk Summary	Specify the name and location of the virtual hard disk file. Name: WSUS01_Disk02_vhdx Location: D:\Hyper-V\VD\ Browse
	<u>N</u> ext > <u>F</u> inish Cancel

The new disk will by default be located in the same path as other virtual disks, therefore a common name policy is recommended.

È .	New Virtual Hard Disk Wizard	×
Configure	Disk	
Before You Begin Choose Disk Format Choose Disk T Specify Name and Location	You can create a blank virtual hard disk or copy the con Create a new blank virtual hard disk Size: 40 GB (Maximum: 64 TB) Copy the contents of the specified physical disk: 	itents of an existing physical disk.
Configure Disk Summary	Physical Hard Disk \\.\PHYSICALDRIVE0 \\.\PHYSICALDRIVE1 O Copy the contents of the specified <u>vi</u> rtual hard disk Path:	Size 167 GB 465 GB
		Next > Finish Cancel

New Virtual Hard Disk Wizard ×							
Completing	the New Virtual Hard Disk Wizard						
Before You Begin Choose Disk Format Choose Disk Type Specify Name and Location Configure Disk Summary	You have successfully completed the New Virtual Hard Disk Wizard. You are about to create the following virtual hard disk. Description: Format: VHDX Type: dynamically expanding Name: WSUS_Disk02.vhdx Location: D: \Hyper-V\VD Size: 40 GB To create the virtual hard disk and close this wizard, click Finish.						
	< Previlen Finish Cancel						

Finish and OK, then start the virtual machine.

_ 🗆 🗙 WSUS01 on JOHNH - Virtual Machine Connection 1 File Action Media Clipboard View Help 🕸 🔍 🖲 🕲 🕲 🔳 🐌 🏂 _ 0 X Server Manager • 🕲 I 🖡 Manage Tools Server Manager • Dashboard Help View WELCOME TO SERVER MANAGER Dashboard Local Server All Servers Configure this local server File and Storage Services 👂 2 Add roles and features 3 Add other servers to manage WHAT'S NEW 4 Create a server group Hide LEARN MORE Programs and Features Power Options **ROLES AND SERVER GROUPS** Event Viewer Roles: 1 | Server groups: 1 | Servers total: 1 System File and Storage Device Manager 1 Local Server Services Disk Management Manageability Computer Management Manageability Command Prompt Events Events Command Prompt (Admin) Performance Services <u>T</u>ask Manager BPA results Performance Control Panel BPA results File <u>Explorer</u> Search Run 22 04 2012 14.17 14:18 DAN 22-04-2013 Desktop ■ 8 ... Status: Running

Initialize a new disk in Server 2012

To initialize the new disk in Windows, press and hold the Windows key + X and choose Disk Management



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/olume	Lavout	Type	File System	Status	Canacity	Free Spa	% Free	1	
■ (C:)	Simple	Basic	NTFS	Healthy (B	39,66 GB	29,68 GB	75 %	1	
System Reserved	Simple	Basic	NTFS	Healthy (S	350 MB	109 MB	31 %		
Disk 0									
Basic 40.00 GB	System Reserver	ed			(C:) 39.66 GB NTES				
Online	Healthy (System	, Active, Prir	mary Partition)		Healthy (Boot,	Page File, Cras	h Dump, Primary	Partition)	
💷 Disk 1					,				
Disk 1	00 CB								
Disk 1	J,00 GB Unallocated								
Disk 1	0,00 GB Unallocated		New Simple Vo	olume					
Disk 1	0,00 GB Unallocated		New Simple Vo New Spanned	olume					
Disk 1	0,00 GB Unallocated		New Simple Vo New Spanned New Striped Vo	blume Volume					
Disk 1 Doline CD-ROM 0 DVD (D:) No Media	0,00 GB Unallocated		New Simple Vo New Spanned New Striped Vo New Mirrored	olume Volume Volume					
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Disk 1 Online CD-ROM 0 DVD (D:) No Media	00 GB Unallocated		New Simple Vo New Spanned New Striped Vo New Mirrored New RAID-5 Vo Properties	blume Volume blume Volume					
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Right click the unallocated space on disk 1 and choose New Simple Volume...

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File Action Media Clipboard	d View Help								
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File Action View Help									
Volume Layout	Type File System Status	Capacity	Free Spa % Fr	ree					
	New Simple Volume Wizard	×	29,68 GB 75 % 109 MB 31 %	%					
	Welcome to the New Sim Volume Wizard This wizard helps you create a simple volur A simple volume can only be on a single dia To continue, click Next.	nple ne on a disk. sk.							
B 4 C B 4 C			ge File, Crash Dum	np, Primary Partition)					
e D	Next	> Cancel							
No Media									
Unallocated Primary partition									
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Status: Running									

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Volume	Layout	Туре	File System	Status	Capacity	Free Spa	% Free				
	N	ew Simple '	Volume Wizar	d	×	29,68 GB	75 % 31 %				
Ch	fy Volume Size loose a volume size that	is between the	maximum and minin	num sizes.			51.75				
Ma	aximum disk space in MB	k:	40957								
C Mir	nimum disk space in MB:		8								
4 Sin C	nple volume size in MB:		40957 ^			ge File, Crash	Dump, Primary	Partition)			
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e D	-			> Next >	Cancel						
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Disk	_ 0 X							
File Action View Help								
Volume Layout Type File System Status Capaci	ty Free Spa % Free							
New Simple Volume Wizard	× 29,68 GB 75 %							
Assign Drive Letter or Path For easier access, you can assign a drive letter or drive path to your partition.								
Assign the following drive letter:								
B Browse								
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Uo not assign a drive letter or drive path	ge rile, Crash Dump, Primary Partition)							
В								
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Unallocated Primary partition								
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Disk M	anagement	_ 🗇 X
File Action View Help		
Volume Layout Type File System Status Capacity	Free Spa % Free	
New Simple Volume Wizard	29,68 GB 75 % 109 MB 31 %	
Format Partition To store data on this partition, you must format it first.	_	
Choose whether you want to format this volume, and if so, what settings you want to use.		
Format this volume with the following settings:		
B File system: NTFS ✓		
C Allocation unit size: Default	ge File, Crash Dump, Primary Partition)	
Volume label: DATA		
Perform a quick format		
4 Enable file and folder compression C		
G Next > Cancel		
No Media		
Unallocated Primary partition		
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A volume label is optional.

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Volume Layout	Type File System Statu	is Capacity	Free Spa % Free				
	New Simple Volume Wizard	x	29,68 GB 75 %				
	Completing the New Sin Volume Wizard You have successfully completed the Net Wizard. You selected the following settings: Volume type: Simple Volume Disk selected: Disk 1 Volume size: 40957 MB Drive letter or path: E: File system: NTFS Allocation unit size: Default Volume label: DATA Oxish Komst: Yao	nple v Simple Volume	ge File, Crash Dump, Pri	imary Partition)			-
C B 4	To close this wizard, click Finish.						2
E D No Media	Fin	sh Cancel					
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Volume	Layout	Туре	File System	Status	Capacity	Free Spa	% Free				
(C:)	Simple	Basic	NTFS	Healthy (B	39,66 GB	29,68 GB	75 %				
DATA (E:)	Simple	Basic	NTES	Healthy (P	40,00 GB	39,90 GB	21 %				
System Reserved	Simple	Dasic	1411.5	rieatiny (5	330 100	105 100	31.76				
Disk 0											
Basic 40.00 GR	System Reserv	ved			(C:)						
Online	Healthy (Syster	n. Active. Prir	mary Partition)		Healthy (Boot, Pa	age File. Crash	Dump, Priman	(Partition)			
						2 1					
Disk 1											
Disk 1 Basic 40.00 GB	DATA (E:)										
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Disk 1 Basic 40,00 GB Online	DATA (E:) 40,00 GB NTFS Healthy (Prima	ry Partition)	-								
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CD-ROM 0 DVD (D-) No Media	Primary partition	ry Partition)							P 9 4	DAN	14:21 22-04-2013

When the quick format has finished the disk should be in a state of **Healthy** and the disk is ready for use.