Windows PowerShell Get-Help on Cmdlet 'Add-AzVhd'

PS:\>Get-HELP Add-AzVhd -Full

NAME

Add-AzVhd

SYNOPSIS

Uploads a virtual hard disk from an on-premises machine to Azure (managed disk or blob).

SYNTAX

Add-AzVhd [-ResourceGroupName] <System.String> [-Destination] <System.Uri> [-LocalFilePath] <System.IO.FileInfo> [[-NumberOfUploaderThreads]
<System.Nullable`1[System.Int32]>] [[-BaseImageUriToPatch] <System.Uri>] [[-OverWrite]] [-AsJob] [-DefaultProfile
<Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>] [-SkipResizing] [<CommonParameters>]

Add-AzVhd [-ResourceGroupName] <System.String> [-Location] <System.String> [-LocalFilePath] <System.IO.FileInfo> [[-NumberOfUploaderThreads]
<System.Nullable`1[System.Int32]>] [-AsJob] [-DataAccessAuthMode <System.String>] [-DefaultProfile
<Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>] [-DiskHyperVGeneration <System.String>] -DiskName <System.String>
[-DiskOsType {Windows | Linux}] [-DiskSku <System.String>] [-DiskZone <System.String[]>] [<CommonParameters>]

DESCRIPTION

The Add-AzVhd cmdlet uploads an on-premise virtual hard disk to a managed disk or a blob storage account.

The virtual hard disk being uploaded needs to be a .vhd file and in size N * Mib + 512 bytes. Using Hyper-V (https://learn.microsoft.com/en-us/windows-server/virtualization/hyper-v/hyper-v-technology-overview)functionality, Add-AzVhd will convert any .vhdx file to a .vhd file and resize before uploading. To allow this functionality, you will need to enable Hyper-V (https://learn.microsoft.com/en-us/windows-server/virtualization/hyper-v/get-started/install-the-hyper-v-role-on-windows-server). If you are using a Linux machine or choose to not use this functionality, you will need to resize the VHD file manually (https://learn.microsoft.com/en-us/azure/virtual-machines/linux/create-upload-generic?branch=pr-en-us-185925#resizing-vhds). Additionally, Add-AzVhd will convert dynamically sized VHD files to fixed size during upload. Use `-Verbose` to follow all the process.

For Default Parameter set (upload to blob), also supported is the ability to upload a patched version of an on-premises .vhd file. When a base virtual hard disk has already been uploaded, you can upload differencing disks that use the base image as the parent. Shared access signature (SAS) URI is supported also.

For Direct Upload to Managed Disk Parameter set, parameters: ResourceGroupName, DiskName, Location, DiskSku, and Zone will be used to create a new disk, then the virtual hard disk will be uploaded to it.

More information on using Add-AzVhd to directly upload to a managed disk (https://learn.microsoft.com/en-us/azure/virtual-machines/windows/disks-upload-vhd-to-managed-disk-powershell#use-add-azvhd).

For VHD files greater than 50 GB, we recommend using AzCopy

(https://learn.microsoft.com/en-us/azure/storage/common/storage-use-azcopy-v10?toc=/azure/storage/blobs/toc.json)for faster upload.

PARAMETERS

-AsJob <System.Management.Automation.SwitchParameter>

Run cmdlet in the background and return a Job to track progress.

Required? false

Position? named

Default value False

Accept pipeline input? False

Accept wildcard characters? false

-BaseImageUriToPatch <System.Uri>

Specifies the URI to a base image blob in Azure Blob Storage. An SAS can be specified as the value for this parameter.

Required? false

Position? 4

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-DataAccessAuthMode <System.String>

Additional authentication requirements when exporting or uploading to a disk or snapshot. Possible options are: "AzureActiveDirectory" and "None".

Required? false

Position? named

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-DefaultProfile <Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>

The credentials, account, tenant, and subscription used for communication with azure.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-Destination <System.Uri>

Specifies the URI of a blob in Blob Storage. The parameter supports SAS URI, although patching scenarios destination cannot be an SAS URI.

Required? true

Position? 1

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-DiskHyperVGeneration <System.String>

The hypervisor generation of the Virtual Machine. Applicable to OS disks only. Posssible values are: 'V1', 'V2'.

Required? false

Position? named

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-DiskName <System.String>

Name of the new managed Disk

Required? true

Position? named

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-DiskOsType <Microsoft.Azure.Management.Compute.Models.OperatingSystemTypes>

The Operating System type of the managed disk. Possible values are: 'Windows', 'Linux'.

Required? false

Position? named

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-DiskSku <System.String>

Sku for managed disk. Options: Standard_LRS, Premium_LRS, StandardSSD_LRS, UltraSSD_LRS

Required? false

Position? named

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-DiskZone <System.String[]>

The Logical zone list for Disk.

Required? false

Position? named

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-LocalFilePath <System.IO.FileInfo>

Specifies the path of the local .vhd file.

Required? true

Position? 2

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-Location <System.String>

Location of new Managed Disk

Required? true

Position? 1

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-NumberOfUploaderThreads <System.Nullable`1[System.Int32]>

Specifies the number of uploader threads to be used when uploading the .vhd file.

Required? false

Position? 3

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-OverWrite <System.Management.Automation.SwitchParameter>

Indicates that this cmdlet overwrites an existing blob in the specified destination URI, if one exists.

Required? false

Position? 5

Default value False

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-ResourceGroupName <System.String>

Specifies the name of the resource group of the virtual machine.

Required? true

Position? 0

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-SkipResizing <System.Management.Automation.SwitchParameter>

Skips the resizing of the VHD file. Users that wish to upload a VHD files that has its size misaligned (not N * Mib + 512 bytes) to a blob can use this switch

parameter.

Required? false

Position? named

Default value False

Accept pipeline input? False

Accept wildcard characters? false

<CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug,

ErrorAction, ErrorVariable, WarningAction, WarningVariable,

OutBuffer, PipelineVariable, and OutVariable. For more information, see

about_CommonParameters (https:/go.microsoft.com/fwlink/?LinkID=113216).

INPUTS

System.String

System.Uri

System.IO.FileInfo

System.Nullable`1[[System.Int32, System.Private.CoreLib, Version=4.0.0.0, Culture=neutral, PublicKeyToken=7cec85d7bea7798e]]

System.Management.Automation.SwitchParameter

OUTPUTS

Microsoft.Azure.Commands.Compute.Models.VhdUploadContext

NOTES

---------- Example 1: Add a VHD file to a blob ----------

Add-AzVhd -Destination "http://contosoaccount.blob.core.windows.net/vhdstore/win7baseimage.vhd" -LocalFilePath "C:\vhd\Win7Image.vhd"

This command adds a .vhd file to a storage account.

Example 2: Add a VHD file to a blob and overwrite the destination

Add-AzVhd -Destination "http://contosoaccount.blob.core.windows.net/vhdstore/win7baseimage.vhd" -LocalFilePath "C:\vhd\Win7Image.vhd" -Overwrite

This command adds a .vhd file to a storage account. The command overwrites an existing file.

Example 3: Add a VHD file to a blob with number of threads specified

Add-AzVhd -Destination "http://contosoaccount.blob.core.windows.net/vhdstore/win7baseimage.vhd" -LocalFilePath "C:\vhd\Win7Image.vhd" -NumberOfUploaderThreads 32

This command adds a .vhd file to a storage account. The command specifies the number of threads to use to upload the file.

- Example 4: Add a VHD file to a blob and specify the SAS URI -

Add-AzVhd -Destination "http://contosoaccount.blob.core.windows.net/vhdstore/win7baseimage.vhd?st=2013-01

-09T22%3A15%3A49Z&se=2013-01-09T23%3A10%3A49Z&sr=b&sp=w&sig=13T9Ow%2FRJAMmhfO%2FaP3HhKKJ6AY093SmveO SIV4%2FR7w%3D" -LocalFilePath

"C:\vhd\win7baseimage.vhd"

This command adds a .vhd file to a storage account and specifies the SAS URI.

---- Example 5: Add a VHD file directly to a managed disk. ----

Add-AzVhd -LocalFilePath C:\data.vhd -ResourceGroupName rgname -Location eastus -DiskName newDisk

This command create a managed disk with given ResourceGroupName, Location, and DiskName; and uploads the VHD file to it.

Example 6: Add a VHD file directly to a more configured disk.

Add-AzVhd -LocalFilePath C:\Data.vhdx -ResourceGroupName rgname -Location eastus -DiskName newDisk -Zone 1 -DiskSku Premium_LRS

This command will tried to convert vhdx file to vhd file first using Hyper-V. If Hyper-V is not found, it will return an error asking to use a vhd file. After

successful conversion, it will create a managed disk with provided parameters, then upload the vhd file.

RELATED LINKS

Online Version: https://learn.microsoft.com/powershell/module/az.compute/add-azvhd

Save-AzVhd