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

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

NAME

Add-AzVMDataDisk

SYNOPSIS

Adds a data disk to a virtual machine.

SYNTAX

Add-AzVMDataDisk [-VM] <Microsoft.Azure.Commands.Compute.Models.PSVirtualMachine> [[-Name] <System.String>] [[-Caching] {None | ReadOnly | ReadWrite}] [[-DiskSizeInGB] <System.Nullable`1[System.Int32]>] [-Lun] <System.Nullable`1[System.Int32]> [-CreateOption] <System.String> [[-ManagedDiskId] <System.String>] [[-StorageAccountType] <System.String>] [-DefaultProfile <Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>] [-DeleteOption <System.String>] [-DiskEncryptionSetId <System.String>] [-WriteAccelerator] [<CommonParameters>]

Add-AzVMDataDisk [-VM] <Microsoft.Azure.Commands.Compute.Models.PSVirtualMachine> [[-Name] <System.String>] [[-VhdUri] <System.String>] [[-Caching] {None | ReadOnly | ReadWrite}] [[-DiskSizeInGB] <System.Nullable`1[System.Int32]>] [-Lun] <System.Nullable`1[System.Int32]> [-CreateOption] <System.String> [[-SourceImageUri]

<System.String>] [-DefaultProfile <Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>] [-DeleteOption <System.String>]

[-DiskEncryptionSetId <System.String>] [<CommonParameters>]

DESCRIPTION

The Add-AzVMDataDisk cmdlet adds a data disk to a virtual machine. You can add a data disk when you create a virtual machine, or you can add a data disk to an

existing virtual machine.

PARAMETERS

-Caching <Microsoft.Azure.Management.Compute.Models.CachingTypes>

Specifies the caching mode of the disk. The acceptable values for this parameter are: - ReadOnly

- ReadWrite

- None

The default value is ReadWrite. Changing this value causes the virtual machine to restart. This setting affects the consistency and performance of the disk.

Required? false

Position? 3

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-CreateOption <System.String>

Specifies whether this cmdlet creates a disk in the virtual machine from a platform or user image, creates an empty disk, or attaches an existing disk. The

acceptable values for this parameter are: - Attach. Specify this option to create a virtual machine from a specialized

disk. When you specify this option, do not

specify the SourceImageUri parameter. The VhdUri is all that is needed in order to tell the Azure platform the location of the virtual hard disk (VHD) to attach

as a data disk to the virtual machine. - Empty. Specify this to create an empty data disk. - FromImage. Specify this option to create a virtual machine from a

generalized image or disk. When you specify this option, you must specify the SourceImageUri parameter also in order to tell the Azure platform the location of

the VHD to attach as a data disk. The VhdUri parameter is used as the location identifying where the data disk VHD will be stored when it is used by the virtual

machine.

Required? true

Position? 6

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

-DeleteOption <System.String>

Data Disk Delete Option. Specifies what action to perform on the disk after VM deletion. Options are: Detach, Delete.

Required? false

Position? named

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-DiskEncryptionSetId <System.String>

Specifies the resource Id of customer managed disk encryption set. This can only be specified for managed disk.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

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

Specifies the size, in gigabytes, of an empty disk to attach to a virtual machine.

Required? false

Position? 4

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

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

Specifies the logical unit number (LUN) for a data disk.

Required? true

Position? 5

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-ManagedDiskId <System.String>

Specifies the ID of a managed disk.

Required? false

Position? 8

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-Name <System.String>

Specifies the name of the data disk to add.

Required? false

Position? 1

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-SourceImageUri <System.String>

Specifies the source URI of the disk that this cmdlet attaches.

Required? false

Position? 7

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-StorageAccountType <System.String>

Specifies the storage account type of managed disk.

Required? false

Position? 9

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-VhdUri <System.String>

Specifies the Uniform Resource Identifier (URI) for the virtual hard disk (VHD) file to create when a platform image or user image is used. This cmdlet copies the

image binary large object (blob) to this location. This is the location from which to start the virtual machine.

Required? false

Position? 2

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-VM <Microsoft.Azure.Commands.Compute.Models.PSVirtualMachine>

Specifies the local virtual machine object to which to add a data disk. You can use the Get-AzVM cmdlet to obtain a virtual machine object. You can use the

New-AzVMConfig cmdlet to create a virtual machine object.

Required? true

Position? 0

Default value None

Accept pipeline input? True (ByPropertyName, ByValue)

Accept wildcard characters? false

-WriteAccelerator <System.Management.Automation.SwitchParameter>

Specifies whether WriteAccelerator should be enabled or disabled on a managed data disk.

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

Microsoft.Azure.Commands.Compute.Models.PSVirtualMachine

System.String

Microsoft.Azure.Management.Compute.Models.CachingTypes

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

OUTPUTS

Microsoft.Azure.Commands.Compute.Models.PSVirtualMachine

Microsoft.Azure.Commands.Compute.Automation.Models.PSVirtualMachineScaleSetVM

NOTES

------ Example 1: Add data disks to a new virtual machine ------

```
$VirtualMachine = New-AzVMConfig -VMName "VirtualMachine07" -VMSize "Standard_A1"
$DataDiskVhdUri01 = "https://contoso.blob.core.windows.net/test/data1.vhd"
$DataDiskVhdUri02 = "https://contoso.blob.core.windows.net/test/data2.vhd"
$DataDiskVhdUri03 = "https://contoso.blob.core.windows.net/test/data3.vhd"
$VirtualMachine = Add-AzVMDataDisk -VM $VirtualMachine -Name 'DataDisk1' -Caching 'ReadOnly' -DiskSizeInGB 10
-Lun 0 -VhdUri $DataDiskVhdUri01 -CreateOption Empty
$VirtualMachine = Add-AzVMDataDisk -VM $VirtualMachine -Name 'DataDisk2' -Caching 'ReadOnly' -DiskSizeInGB 11
-Lun 1 -VhdUri $DataDiskVhdUri02 -CreateOption Empty
$VirtualMachine = Add-AzVMDataDisk -VM $VirtualMachine -Name 'DataDisk3' -Caching 'ReadOnly' -DiskSizeInGB 12
-Lun 2 -VhdUri $DataDiskVhdUri03 -CreateOption Empty
```

The first command creates a virtual machine object, and then stores it in the $VirtualMachine variable. The command assigns a name and size to the virtual machine.

The next three commands assign paths of three data disks to the $DataDiskVhdUri01, $DataDiskVhdUri02, and $DataDiskVhdUri03 variables. This approach is only for

readability of the following commands. The final three commands each adds a data disk to the virtual machine stored in $VirtualMachine. The command specifies the name

and location for the disk, and other properties of the disk. The URI of each disk is stored in $DataDiskVhdUri01, $DataDiskVhdUri02, and $DataDiskVhdUri03.

```
-- Example 2: Add a data disk to an existing virtual machine --

$VirtualMachine = Get-AzVM -ResourceGroupName "ResourceGroup11" -Name "VirtualMachine07"
                  Add-AzVMDataDisk -VM $VirtualMachine -Name "disk1" -VhdUri
"https://contoso.blob.core.windows.net/vhds/diskstandard03.vhd" -LUN 0 -Caching ReadOnly -DiskSizeinGB 1
-CreateOption Empty
Update-AzVM -ResourceGroupName "ResourceGroup11" -VM $VirtualMachine
```

The first command gets the virtual machine named VirtualMachine07 by using the Get-AzVM (./Get-AzVM.md)cmdlet. The command stores the virtual machine in the

$VirtualMachine variable. The second command adds a data disk to the virtual machine stored in $VirtualMachine. The final command updates the state of the virtual

machine stored in $VirtualMachine in ResourceGroup11.

Example 3: Add a data disk to a new virtual machine from a generalized user image

```
$VirtualMachine = New-AzVMConfig -VMName "VirtualMachine07" -VMSize "Standard_A1"
$DataImageUri = "https://contoso.blob.core.windows.net/system/Microsoft.Compute/Images/captured/dataimage.vhd"
$DataDiskUri = "https://contoso.blob.core.windows.net/test/datadisk.vhd"
$VirtualMachine = Add-AzVMDataDisk -VM $VirtualMachine -Name "disk1" -SourceImageUri $DataImageUri -VhdUri $DataDiskUri -Lun 0 -DiskSizeinGB 10 -CreateOption FromImage
```

The first command creates a virtual machine object and stores it in the $VirtualMachine variable. The command assigns a name and size to the virtual machine. The next two commands assign paths for the data image and data disks to the $DataImageUri and $DataDiskUri variables respectively. This approach is used to improve the readability of the following commands. The final commands adds a data disk to the virtual machine stored in $VirtualMachine. The command specifies the name and location for the disk and other properties of the disk.

Example 4: Add data disks to a new virtual machine from a specialized user image

```
$VirtualMachine = New-AzVMConfig -VMName "VirtualMachine07" -VMSize "Standard_A1"
$DataDiskUri = "https://contoso.blob.core.windows.net/test/datadisk.vhd"
$VirtualMachine = Add-AzVMDataDisk -VM $VirtualMachine -Name "dd1" -VhdUri $DataDiskUri -Lun 0 -DiskSizeinGB 10 -CreateOption Attach
```

The first command creates a virtual machine object and stores it in the $VirtualMachine variable. The command assigns a name and size to the virtual machine. The next commands assigns paths of the data disk to the $DataDiskUri variable. This approach is used to improve the readability of the following commands. The final command add a data disk to the virtual machine stored in $VirtualMachine. The command specifies the name and location for the disk, and other properties of the disk.

RELATED LINKS

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

Remove-AzVMDataDisk

Get-AzVM

New-AzVMConfig