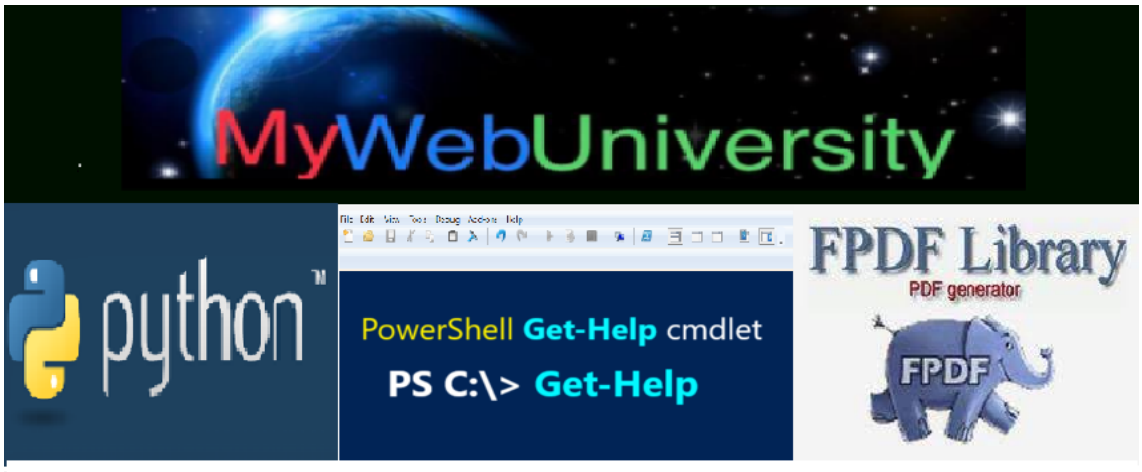

Full credit is given to all the above companies including the Operating System that this PDF file was generated!

Windows PowerShell Get-Help on Cmdlet 'Get-Disk'

PS:\>Get-HELP Get-Disk -Full

NAME

Get-Disk

SYNOPSIS

Gets one or more disks visible to the operating system.

> [!NOTE] > This cmdlet returns physical disk objects like basic disks and partitioned drive partitions. Dynamic disks can span multiple pieces of physical media, so

they will not be returned by Get-Disk. For more information, see Basic and Dynamic Disks (/windows/desktop/FileIO/basic-and-dynamic-disks).

SYNTAX

Get-Disk [-AsJob] [-CimSession <CimSession[]>] [-FriendlyName <String[]>] [-SerialNumber <String[]>] [-ThrottleLimit <Int32>] [<CommonParameters>]

Get-Disk [[-Number] <UInt32[]>] [-AsJob] [-CimSession <CimSession[]>] [-ThrottleLimit <Int32>] [<CommonParameters>]

Get-Disk [-AsJob] [-CimSession <CimSession[]>] [-Partition <CimInstance>] [-ThrottleLimit <Int32>] [<CommonParameters>]

Get-Disk [-AsJob] [-CimSession <CimSession[]>] [-Path <String[]>] [-ThrottleLimit <Int32>] [<CommonParameters>]

Get-Disk [-AsJob] [-CimSession <CimSession[]>] [-StorageJob <CimInstance>] [-ThrottleLimit <Int32>] [<CommonParameters>]

Get-Disk [-AsJob] [-CimSession <CimSession[]>] [-StorageNode <CimInstance>] [-ThrottleLimit <Int32>] [<CommonParameters>]

Get-Disk [-AsJob] [-CimSession <CimSession[]>] [-StorageSubSystem <CimInstance>] [-ThrottleLimit <Int32>] [<CommonParameters>]

Get-Disk [-AsJob] [-CimSession <CimSession[]>] [-ThrottleLimit <Int32>] [-UniqueId <String[]>] [<CommonParameters>]

Get-Disk [-AsJob] [-CimSession <CimSession[]>] [-ThrottleLimit <Int32>] [-VirtualDisk <CimInstance>] [<CommonParameters>]

Get-Disk [-AsJob] [-CimSession <CimSession[]>] [-ThrottleLimit <Int32>] [-iSCSIConnection <CimInstance>] [<CommonParameters>]

Get-Disk [-AsJob] [-CimSession <CimSession[]>] [-ThrottleLimit <Int32>] [-iSCSISession <CimInstance>] [<CommonParameters>]

DESCRIPTION

The Get-Disk cmdlet gets one or more Disk objects visible to the operating system, or optionally a filtered list.

PARAMETERS

-AsJob [<SwitchParameter>]

Runs the cmdlet as a background job. Use this parameter to run commands that take a long time to complete.

Required? false

Position? named

Default value False

Accept pipeline input? False

Accept wildcard characters? false

-CimSession <CimSession[]>

Runs the cmdlet in a remote session or on a remote computer. Enter a computer name or a session object, such as the output of a New-CimSession (https://go.microsoft.com/fwlink/p/?LinkId=227967) or [Get-CimSession](https://go.microsoft.com/fwlink/p/?LinkId=227966)cmdlet. The default is the current session on the local computer.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-FriendlyName <String[]>

Gets the disk with the specified friendly name. Enter a friendly name, or use wildcard characters to enter a name pattern.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-Number <UInt32[]>

Specifies the disk number for which to get the associated Disk object.

Required? false

Position? 0

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-Partition <CimInstance>

Accepts a Partition object as input. The Partition CIM object is exposed by the Get-Partition (https://technet.microsoft.com/library/85bb3c53-536e-408f-b159-28e91afeb1a1)cmdlet.

Required? false

Position? named

Default value None

Accept pipeline input? True (ByValue)

Accept wildcard characters? false

-Path <String[]>

Contains valid path information.

Required? false

Position? named

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-SerialNumber <String[]>

Specifies an array of serial numbers associated with disks that this cmdlet gets.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-StorageJob <CimInstance>

Specifies a storage job object that is associated with disks that this cmdlet gets. To obtain a storage job, use the Get-StorageJob cmdlet.

Required? false

Position? named

Default value None

Accept pipeline input? True (ByValue)

Accept wildcard characters? false

-StorageNode <CimInstance>

Required? false

Position? named

Default value None

Accept pipeline input? True (ByValue)

Accept wildcard characters? false

-StorageSubSystem <CimInstance>

Specifies the storage subsystem from which this cmdlet gets disks. To obtain a StorageSubsystem object, use the Get-StorageSubSystem cmdlet.

Required? false

Position? named

Default value None

Accept pipeline input? True (ByValue)

Accept wildcard characters? false

-ThrottleLimit <Int32>

Specifies the maximum number of concurrent operations that can be established to run the cmdlet. If this parameter is omitted or a value of `0` is entered, then

Windows PowerShellr calculates an optimum throttle limit for the cmdlet based on the number of CIM cmdlets that are running on the computer. The throttle limit

applies only to the current cmdlet, not to the session or to the computer.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-UniqueId <String[]>

Gets only the disks with the specified IDs. Type one or more IDs (separated by commas).

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-VirtualDisk <CimInstance>

Accepts a VirtualDisk object as input. The Virtual Disk CIM object is exposed by the Get-VirtualDisk (https://technet.microsoft.com/library/0eeba53f-6468-485f-a680-49260b4c83f0)cmdlet.

Required? false

Position? named

Default value None

Accept pipeline input? True (ByValue)

Accept wildcard characters? false

-iSCSIConnection <CimInstance>

Accepts an iSCSIConnection object as input. The iSCSI Connection CIM object is exposed by the Get-IscsiConnection (https://technet.microsoft.com/library/e566d297-76ad-48d0-b5af-11674f23b080)cmdlet.

Required? false

Position? named

Default value None

Accept pipeline input? True (ByValue)

Accept wildcard characters? false

-iSCSISession <CimInstance>

Accepts an iSCSISession object as input. The iSCSI Session CIM object is exposed by the Get-IscsiSession cmdlet.

Required? false

Position? named

Default value None

Accept pipeline input? True (ByValue)

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.Management.Infrastructure.CimInstance#ROOT/Microsoft/Windows/Storage/MSFT_IscsiConnection

You can pipe an iSCSIConnection object to the iSCSIConnection parameter.

Microsoft.Management.Infrastructure.CimInstance#ROOT/Microsoft/Windows/Storage/MSFT_IscsiSession

You can pipe an iSCSISession object to the iSCSISession parameter.

Microsoft.Management.Infrastructure.CimInstance#ROOT/Microsoft/Windows/Storage/MSFT_Partition

You can pipe a Partition object to the Partition parameter.

Microsoft.Management.Infrastructure.CimInstance#ROOT/Microsoft/Windows/Storage/MSFT_VirtualDisk

You can pipe a VirtualDisk object to the VirtualDisk parameter.

OUTPUTS

Microsoft.Management.Infrastructure.CimInstance#ROOT/Microsoft/Windows/Storage/MSFT_Disk

This cmdlet outputs one or more objects representing disks.

NOTES

* The `Microsoft.Management.Infrastructure.CimInstance` object is a wrapper class that displays Windows Management Instrumentation (WMI) objects. The path after

the pound sign (`#`) provides the namespace and class name for the underlying WMI object. Some objects such as disks might include trailing spaces in their

friendly names. If you suspect that an object name could have trailing spaces, you can use a wildcard at the end of the name, for example Disk , or use the Match

parameter to instruct Windows PowerShell to include all strings that include the specified characters, instead of only strings that include only the specified

characters. * When used in Failover Cluster, cmdlets from the Storage module operate on cluster level (all servers in the cluster).

---------- Example 1: Get all disks ----------

PS C:\>Get-Disk

This example gets all disks visible to the operating system.

---------- Example 2: Get a disk by disk number ----------

PS C:\>Get-Disk -Number 6

This example gets disk 6.

---------- Example 3: Get all USB disks ----------

PS C:\>Get-Disk | Where-Object -FilterScript {$_.Bustype -Eq "USB"}

This example gets all disks attached via the USB bus by piping the output of Get-Disk to the Where-Object cmdlet, and filtering by the USB value of the Bustype

property.

---- Example 4: Get the iSCSI sessions for all iSCSI disks ----

PS C:\>Get-Disk | Where-Object -FilterScript {$_.BusType -Eq "iSCSI"} |

Get-IscsiSession | Format-Table

This example gets all disks attached via the iSCSI bus by piping the output of Get-Disk to the Where-Object cmdlet, and filtering by the iSCSI value of the Bustype

property. It then passes the Disk objects in the pipeline to the Get-IscsiSession cmdlet, which gets the associated iSCSI sessions, and then pipes the output to the

Format-Table cmdlet for simplified display.

RELATED LINKS

Online Version: https://learn.microsoft.com/powershell/module/storage/get-disk?view=windowsserver2022-ps&wt.mc_id=ps-gethelp

Where-Object https://go.microsoft.com/fwlink/p/?LinkID=113423

Clear-Disk

Get-Partition

Get-StorageJob

Get-StorageSubSystem

Initialize-Disk

Set-Disk

Update-Disk