



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

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

NAME

Initialize-Disk

SYNOPSIS

Initializes a RAW disk for first time use, enabling the disk to be formatted and used to store data.

SYNTAX

```
Initialize-Disk [-AsJob] [-CimSession <CimSession[]>] [-Confirm] [-FriendlyName <String[]>] [-PartitionStyle {Unknown | MBR | GPT}] [-PassThru] [-ThrottleLimit <Int32>] [-WhatIf] [<CommonParameters>]
```

```
Initialize-Disk [-AsJob] [-CimSession <CimSession[]>] [-Confirm] -InputObject <CimInstance[]> [-PartitionStyle {Unknown | MBR | GPT}] [-PassThru] [-ThrottleLimit <Int32>] [-WhatIf] [<CommonParameters>]
```

```
Initialize-Disk [-Number] <UInt32[]> [-AsJob] [-CimSession <CimSession[]>] [-Confirm] [-PartitionStyle {Unknown | MBR | GPT}] [-PassThru] [-ThrottleLimit <Int32>] [-WhatIf] [<CommonParameters>]
```

```
Initialize-Disk [-AsJob] [-CimSession <CimSession[]>] [-Confirm] [-PartitionStyle {Unknown | MBR | GPT}] [-PassThru]
-Path <String[]> [-ThrottleLimit <Int32>]
[-WhatIf] [<CommonParameters>]
```

```
Initialize-Disk [-AsJob] [-CimSession <CimSession[]>] [-Confirm] [-PartitionStyle {Unknown | MBR | GPT}] [-PassThru]
[-ThrottleLimit <Int32>] -Uniqueid <String[]>
[-WhatIf] [<CommonParameters>]
```

```
Initialize-Disk [-AsJob] [-CimSession <CimSession[]>] [-Confirm] [-PartitionStyle {Unknown | MBR | GPT}] [-PassThru]
[-ThrottleLimit <Int32>] [-VirtualDisk
<CimInstance>] [-WhatIf] [<CommonParameters>]
```

DESCRIPTION

The Initialize-Disk cmdlet initializes a Disk object with the RAW partition style to either the MBR or GPT partition styles. The default partition style is GPT. Disks must be initialized before they can be formatted and used to store data.

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`

[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

-Confirm [<SwitchParameter>]

Prompts you for confirmation before running the cmdlet.

Required?	false
Position?	named
Default value	False
Accept pipeline input?	False
Accept wildcard characters?	false

-FriendlyName <String[]>

Specifies the friendly name of the disk to initialize.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

-InputObject <CimInstance[]>

Specifies the input object that is used in a pipeline command.

Required?	true
Position?	named
Default value	None

Accept pipeline input? True (ByValue)

Accept wildcard characters? false

-Number <UInt32[]>

Specifies the disk number of the disk to initialize.

Required? true

Position? 0

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-PartitionStyle <PartitionStyle>

Specifies the type of the partition. The acceptable values for this parameter are: MBR or GPT . The disk must be set to read-write (`IsReadOnly \$false`) before this cmdlet will work.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-PassThru [<SwitchParameter>]

Sends items from the interactive window down the pipeline as input to other cmdlets. By default, this cmdlet does not generate any output.

To send items from the interactive window down the pipeline, click to select the items and then click OK. Shift-click and Ctrl-click are supported.

Required? false

Position? named
Default value False
Accept pipeline input? False
Accept wildcard characters? false

-Path <String[]>

Specifies the path of the disk to initialize.

Required? true
Position? named
Default value None
Accept pipeline input? True (ByPropertyName)
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 PowerShell 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[]>

Specifies the UniqueID of the disk to initialize

Required? true
Position? named
Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-VirtualDisk <CimInstance>

Specifies the VirtualDisk object for which you want to initialize the associated Disk object. The Virtual Disk CIM object is exposed by the Get-VirtualDisk cmdlet.

Required? false

Position? named

Default value None

Accept pipeline input? True (ByValue)

Accept wildcard characters? false

-WhatIf [<SwitchParameter>]

Shows what would happen if the cmdlet runs. The cmdlet is not run.

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

INPUTS

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

You can pipe an MSFT_VirtualDisk object to the VirtualDisk parameter.

You can pipe an MSFT_Disk object to the InputObject parameter.

OUTPUTS

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

If you specify the Passthru parameter, this cmdlet returns an object representing the newly initialized disk.

NOTES

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

----- Example 1: Initialize a disk using default values -----

```
PS C:\>Initialize-Disk -Number 1
```

This example initializes the first disk in the computer (disk number 1), using the default values, which initializes the disk using the GPT partition style.

-- Example 2: Initialize a disk using the MBR partition style --

```
PS C:\> Initialize-Disk -Number 1 -PartitionStyle MBR
```

This example initializes a disk using the MBR partition style.

----- Example 3: Initialize a virtual disk -----

```
PS C:\>Initialize-Disk -VirtualDisk (Get-VirtualDisk -FriendlyName UserData)
```

This example uses the VirtualDisk parameter with the Get-VirtualDisk cmdlet to get a virtual disk with the friendly name UserData, and initialize the Disk object associated with the virtual disk.

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

Clear-Disk

Get-Disk

Get-Partition

Set-Disk

Update-Disk