Windows PowerShell Get-Help on Cmdlet 'Set-StorageTier'

PS:\>Get-HELP Set-StorageTier -Full

NAME

Set-StorageTier

SYNOPSIS

Modifies a storage tier.

SYNTAX

Set-StorageTier [-AsJob] [-CimSession <CimSession[]>] [-ColumnIsolation {PhysicalDisk | StorageEnclosure | StorageScaleUnit | StorageChassis | StorageRack}]

[-FaultDomainAwareness {PhysicalDisk | StorageEnclosure | StorageScaleUnit | StorageChassis | StorageRack}] -InputObject <CimInstance[]> [-Interleave <UInt64>]

[-MediaType {HDD | SSD | SCM}] [-NumberOfColumns <UInt16>] [-NumberOfDataCopies <UInt16>] [-NumberOfGroups <UInt16>] [-PhysicalDiskRedundancy <UInt16>]

[-ResiliencySettingName <String>] [-ThrottleLimit <Int32>] [<CommonParameters>]

Set-StorageTier [-FriendlyName] <String> [-AsJob] [-CimSession <CimSession[]>] [-ColumnIsolation {PhysicalDisk | StorageEnclosure | StorageScaleUnit | StorageChassis

| StorageRack}] [-FaultDomainAwareness {PhysicalDisk | StorageEnclosure | StorageScaleUnit | StorageChassis | StorageRack}] [-Interleave <UInt64>] [-MediaType {HDD |

SSD | SCM}] [-NumberOfColumns <UInt16>] [-NumberOfDataCopies <UInt16>] [-NumberOfGroups <UInt16>] [-PhysicalDiskRedundancy <UInt16>] [-ResiliencySettingName <String>]

[-ThrottleLimit <Int32>] [<CommonParameters>]

Set-StorageTier [-AsJob] [-CimSession <CimSession[]>] [-ColumnIsolation {PhysicalDisk | StorageEnclosure | StorageScaleUnit | StorageChassis | StorageRack}]

[-FaultDomainAwareness {PhysicalDisk | StorageEnclosure | StorageScaleUnit | StorageChassis | StorageRack}] [-Interleave <UInt64>] [-MediaType {HDD | SSD | SCM}]

[-NumberOfColumns <UInt16>] [-NumberOfDataCopies <UInt16>] [-NumberOfGroups <UInt16>] [-PhysicalDiskRedundancy <UInt16>] [-ResiliencySettingName <String>]

[-ThrottleLimit <Int32>] -UniqueId <String> [<CommonParameters>]

Set-StorageTier [-AsJob] [-CimSession <CimSession[]>] [-Description <String>] -InputObject <CimInstance[]> [-ThrottleLimit <Int32>] [<CommonParameters>]

Set-StorageTier [-FriendlyName] <String> [-AsJob] [-CimSession <CimSession[]>] [-Description <String>] [-ThrottleLimit <Int32>] [<CommonParameters>]

Set-StorageTier [-AsJob] [-CimSession <CimSession[]>] [-Description <String>] [-ThrottleLimit <Int32>] -UniqueId <String> [<CommonParameters>]

Set-StorageTier [-FriendlyName] <String> [-AsJob] [-CimSession <CimSession[]>] [-NewFriendlyName <String>] [-ThrottleLimit <Int32>] [<CommonParameters>]

Set-StorageTier [-AsJob] [-CimSession <CimSession[]>] -InputObject <CimInstance[]> [-NewFriendlyName <String>] [-ThrottleLimit <Int32>] [<CommonParameters>]

Set-StorageTier [-AsJob] [-CimSession <CimSession[]>] [-NewFriendlyName <String>] [-ThrottleLimit <Int32>] -UniqueId <String> [<CommonParameters>]

DESCRIPTION

The Set-StorageTier cmdlet modifies a storage tier. Use this cmdlet to change the name and description of a storage tier,

and to change the media type that is

associated with storage tier.

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

-ColumnIsolation <FaultDomainType>

Specifies at which level columns within a virtual disk should be isolated from each other. We recommend omitting this parameter and using the defaults. The

acceptable values for this parameter are:

- PhysicalDisk

- StorageScaleUnit

- StorageChassis

- StorageEnclosure

- StorageRack

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-Description <String>

Specifies a description for the storage tier.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-FaultDomainAwareness <FaultDomainType>

Specifies at what level you want the storage tier to be fault tolerant. The acceptable values for this parameter are:

- PhysicalDisk

- StorageScaleUnit

- StorageChassis

- StorageEnclosure

- StorageRack

For example, specify StorageScaleUnit to store data copies on separate nodes of a Storage Spaces Direct cluster. This cmdlet refers to nodes of a Storage Spaces

Direct cluster as storage scale units because you can expand the scale of the cluster by adding more nodes.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-FriendlyName <String>

Specifies the friendly name of the storage tier to modify.

Required? true

Position? 0

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

-Interleave <UInt64>

Specifies the interleave value to use during the creation of a virtual disk. The interleave value represents the number of bytes that is written to a single

physical disk. Therefore, `Interleave * NumberOfColumns` yields the size of one stripe of user data.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-MediaType <MediaType>

Specifies the media type of the storage tier. The acceptable values for this parameter are:

- SSD

- SCM

- HDD

Use SCM for storage-class memory such as NVDIMMs.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-NewFriendlyName <String>

Specifies a new friendly name for the storage tier.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-NumberOfColumns <UInt16>

Specifies the number of columns to use when allocating the storage tier.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-NumberOfDataCopies <UInt16>

Specifies the number of data copies to create. Specify 2 to create a two-way mirror, or 3 to specify a three-way mirror or for dual-parity.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-NumberOfGroups <UInt16>

Specifies the number of groups used by Local Reconstruction Coding (LRC) with a dual parity virtual disk. We recommend omitting this parameter and using the

defaults.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-PhysicalDiskRedundancy <UInt16>

Specifies the physical disk redundancy value to use during the creation of a virtual disk. This value represents how many failed physical disks the virtual disk

can tolerate without data loss. The redundancy values are as follows:

- For two-way mirror spaces, the virtual disk can tolerate 1 failed physical disk without data loss.

- For three-way mirror spaces, the virtual disk can tolerate 2 failed physical disks without data loss.

- For single-parity spaces, the virtual disk can tolerate 1 failed physical disk without data loss.

- For dual-parity spaces the virtual disk can tolerate 2 failed physical disks without data loss.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-ResiliencySettingName <String>

Specifies the resiliency setting, or storage layout, to use for the virtual disk. Acceptable values vary by storage subsystem.

Allowed values for the Windows Storage subsystem are: Simple, Mirror, or Parity. By default, when you specify Mirror, Storage Spaces creates a two-way mirror, and

when you specify Parity, Storage Spaces creates a single-parity space.

To create a three-way mirror space, specify 3 for the NumberofDataCopies parameter or 2 for the PhysicalDiskRedundancy parameter.

To create a dual-parity space, specify 2 for the PhysicalDiskRedundancy parameter and Fixed provisioning for the ProvisioningType parameter.

Required? false

Position? named

Default value None

Accept pipeline input? False

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>

Specifies the unique ID of the storage tier to modify.

Required? true

Position? named

Default value None

Accept pipeline input? True (ByPropertyName)

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_StorageSubsystem

You can use the pipeline operator to pass an array of MSFT_StorageTier objects to the InputObject parameter.

OUTPUTS

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

This cmdlet returns an MSFT_StorageTier object that contains details about the tier such as tier friendly name, media type and size.

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.

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

--------- Example 1: Change the name of a storage tier ---------

PS C:\> Set-StorageTier -UniqueId '{49dde1c4-5c34-11e2-8441-00155de88701}' -NewFriendlyName "FastTier"

This command changes the friendly name of the storage tier that has the specified ID.

----- Example 2: Change the description of a storage tier -----

PS C:\> Get-StorageTier -FriendlyName "FastTier" | Set-StorageTier -Description "This tier denotes fast media in the

system"

This command uses the Get-StorageTier cmdlet to get the storage tier named FastTier, and then passes the storage tier to the Set-StorageTier cmdlet by using the

pipeline operator. The Set-StorageTier cmdlet changes the description of the storage tier to the specified string.

RELATED LINKS

Online Version:

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

Get-StorageTier

Get-VirtualDisk

New-StorageTier

Remove-StorageTier

Resize-StorageTier