



python



PowerShell

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**PowerShell Get-Help on command 'New-StorageSubsystemVirtualDisk'**

**PS C:\Users\wahid> Get-Help New-StorageSubsystemVirtualDisk**

#### NAME

New-StorageSubsystemVirtualDisk

#### SYNOPSIS

Allows the creation of a VirtualDisk object on a storage subsystem that does not support creation of storage pools.

#### SYNTAX

```
New-StorageSubsystemVirtualDisk [-AsJob] [-CimSession <CimSession[]>]
[-FaultDomainAwareness {PhysicalDisk | StorageEnclosure | StorageScaleUnit |
StorageChassis | StorageRack}] [-FriendlyName <String>] -InputObject
<CimInstance[]> [-Interleave <UInt64>] [-IsEnclosureAware] [-NumberOfColumns
<UInt16>] [-NumberOfDataCopies <UInt16>] [-OtherUsageDescription <String>]
[-ParityLayout {NonRotatedParity | RotatedParity}] [-PhysicalDiskRedundancy
<UInt16>] [-ProvisioningType {Unknown | Thin | Fixed}]
[-RequestNoSinglePointOfFailure <Boolean>] [-Size <UInt64>] [-ThrottleLimit
<Int32>] [-Usage {Other | Unrestricted | ReservedForComputerSystem |
ReservedForReplicationServices | ReservedForMigrationServices |
LocalReplicaSource | RemoteReplicaSource | LocalReplicaTarget |
RemoteReplicaTarget | LocalReplicaSourceOrTarget | RemoteReplicaSourceOrTarget}
```

| DeltaReplicaTarget | ElementComponent | ReservedAsPoolContributer |  
CompositeVolumeMember | CompositeVirtualDiskMember | ReservedForSparing}]  
[-UseMaximumSize] [<CommonParameters>]

New-StorageSubsystemVirtualDisk [-StorageSubSystemFriendlyName] <String[]>  
[-AsJob] [-CimSession <CimSession[]>] [-FaultDomainAwareness {PhysicalDisk |  
StorageEnclosure | StorageScaleUnit | StorageChassis | StorageRack}]  
[-FriendlyName <String>] [-Interleave <UInt64>] [-IsEnclosureAware]  
[-NumberOfColumns <UInt16>] [-NumberOfDataCopies <UInt16>]  
[-OtherUsageDescription <String>] [-ParityLayout {NonRotatedParity |  
RotatedParity}] [-PhysicalDiskRedundancy <UInt16>] [-ProvisioningType {Unknown  
| Thin | Fixed}] [-RequestNoSinglePointOfFailure <Boolean>] [-Size <UInt64>]  
[-ThrottleLimit <Int32>] [-Usage {Other | Unrestricted |  
ReservedForComputerSystem | ReservedForReplicationServices |  
ReservedForMigrationServices | LocalReplicaSource | RemoteReplicaSource |  
LocalReplicaTarget | RemoteReplicaTarget | LocalReplicaSourceOrTarget |  
RemoteReplicaSourceOrTarget | DeltaReplicaTarget | ElementComponent |  
ReservedAsPoolContributer | CompositeVolumeMember | CompositeVirtualDiskMember  
| ReservedForSparing}] [-UseMaximumSize] [<CommonParameters>]

New-StorageSubsystemVirtualDisk [-AsJob] [-CimSession <CimSession[]>]  
[-FaultDomainAwareness {PhysicalDisk | StorageEnclosure | StorageScaleUnit |  
StorageChassis | StorageRack}] [-FriendlyName <String>] [-Interleave <UInt64>]  
[-IsEnclosureAware] [-NumberOfColumns <UInt16>] [-NumberOfDataCopies <UInt16>]  
[-OtherUsageDescription <String>] [-ParityLayout {NonRotatedParity |  
RotatedParity}] [-PhysicalDiskRedundancy <UInt16>] [-ProvisioningType {Unknown  
| Thin | Fixed}] [-RequestNoSinglePointOfFailure <Boolean>] [-Size <UInt64>]  
-StorageSubSystemName <String[]> [-ThrottleLimit <Int32>] [-Usage {Other |  
Unrestricted | ReservedForComputerSystem | ReservedForReplicationServices |  
ReservedForMigrationServices | LocalReplicaSource | RemoteReplicaSource |  
LocalReplicaTarget | RemoteReplicaTarget | LocalReplicaSourceOrTarget |  
RemoteReplicaSourceOrTarget | DeltaReplicaTarget | ElementComponent |  
ReservedAsPoolContributer | CompositeVolumeMember | CompositeVirtualDiskMember

| ReservedForSparing)] [-UseMaximumSize] [<CommonParameters>]

New-StorageSubsystemVirtualDisk [-AsJob] [-CimSession <CimSession[]>]  
[-FaultDomainAwareness {PhysicalDisk | StorageEnclosure | StorageScaleUnit |  
StorageChassis | StorageRack}] [-FriendlyName <String>] [-Interleave <UInt64>]  
[-IsEnclosureAware] [-NumberOfColumns <UInt16>] [-NumberOfDataCopies <UInt16>]  
[-OtherUsageDescription <String>] [-ParityLayout {NonRotatedParity |  
RotatedParity}] [-PhysicalDiskRedundancy <UInt16>] [-ProvisioningType {Unknown  
| Thin | Fixed}] [-RequestNoSinglePointOfFailure <Boolean>] [-Size <UInt64>]  
-StorageSubSystemUniqueId <String[]> [-ThrottleLimit <Int32>] [-Usage {Other |  
Unrestricted | ReservedForComputerSystem | ReservedForReplicationServices |  
ReservedForMigrationServices | LocalReplicaSource | RemoteReplicaSource |  
LocalReplicaTarget | RemoteReplicaTarget | LocalReplicaSourceOrTarget |  
RemoteReplicaSourceOrTarget | DeltaReplicaTarget | ElementComponent |  
ReservedAsPoolContributer | CompositeVolumeMember | CompositeVirtualDiskMember  
| ReservedForSparing)] [-UseMaximumSize] [<CommonParameters>]

## DESCRIPTION

The New-StorageSubsystemVirtualDisk cmdlet allows the creation of a VirtualDisk object on a storage subsystem that does not support creation of storage pools, or if its storage pool does not support virtual disk creation.

## PARAMETERS

-AsJob [<SwitchParameter>]

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

-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/?LinkId=227967>) or

[Get-CimSession](<https://go.microsoft.com/fwlink/?LinkId=227966>) cmdlet.

The default is the current session on the local computer.

-FaultDomainAwareness <FaultDomainType>

Specifies the default fault domain for new virtual disks created in this storage pool. The fault domain specifies at what level you want to be fault tolerant. The acceptable values for this parameter are:

- PhysicalDisk

- StorageScaleUnit

- StorageChassis

- StorageEnclosure

- StorageRack

-FriendlyName <String>

Specifies a friendly name for a virtual disk. The friendly name may be defined by a user and is not guaranteed to be unique.

-InputObject <CimInstance[]>

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

-Interleave <UInt64>

Specifies the interleave value to use during the creation of a storage tier. 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.

-IsEnclosureAware [<SwitchParameter>]

Specifies that the enclosure supports SCSI Enclosure Services (SES), which

is utilized for providing things like Slot location for a physical disk, as well as to manage LEDs on the disks for visual identification.

-NumberOfColumns <UInt16>

Specifies the number of columns to create.

-NumberOfDataCopies <UInt16>

Specifies the number of data copies to create.

-OtherUsageDescription <String>

Specifies the usage of this object.

-ParityLayout <ParityLayout>

Specifies the parity layout to be used with the virtual disk to be created.

-PhysicalDiskRedundancy <UInt16>

Specifies the physical disk redundancy value to use during the creation of a virtual disk.

-ProvisioningType <ProvisioningType>

Specifies the type of provisioning. The acceptable values for this parameter are: Unknown, Fixed, or Thin.

-RequestNoSinglePointOfFailure <Boolean>

Requests that the virtual disk is created on hardware that has path redundancy to provide resilience to storage path faults. This cannot be guaranteed.

-Size <UInt64>

Specifies the size of the partition to create. If not specified, then the number will default to Bytes . The acceptable values for this parameter are: Bytes , KB , MB , GB , or TB . The size may be defined by a user.

-StorageSubSystemFriendlyName <String[]>

Specifies the friendly name of the storage subsystem. The friendly name may be defined by the user.

-StorageSubSystemName <String[]>

Specifies the name of the storage subsystem provided by the Storage Management.

-StorageSubSystemUniqueId <String[]>

Specifies an ID used to uniquely identify the storage subsystem in the system. The ID persists through reboots.

-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.

-Usage <Usage>

Specifies the intended usage.

-UseMaximumSize [<SwitchParameter>]

Uses the maximum allowable size for this virtual disk.

<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>).

```
PS C:\> $stsubsys = (Get-StorageSubsystem)  
PS C:\> New-StorageSubsystemVirtualDisk -StorageSubsystemUniqueId  
$stsubsys.UniqueId -FriendlyName "VirtualDisk01" -Size "5GB" -ProvisioningType  
Fixed
```

This example creates a Virtual Disk named VirtualDisk01 on the provided StorageSubsystem without the use of a Storage Pool

#### REMARKS

To see the examples, type: "get-help New-StorageSubsystemVirtualDisk -examples".

For more information, type: "get-help New-StorageSubsystemVirtualDisk -detailed".

For technical information, type: "get-help New-StorageSubsystemVirtualDisk -full".

For online help, type: "get-help New-StorageSubsystemVirtualDisk -online"