



Windows PowerShell Get-Help on Cmdlet 'Update-StorageProviderCache'

PS:\>Get-HELP Update-StorageProviderCache -Full

NAME

Update-StorageProviderCache

SYNOPSIS

Updates the cache of the service for a particular provider and associated child objects.

SYNTAX

Update-StorageProviderCache [-AsJob] [-CimSession <CimSession[]>] [-DiscoveryLevel {Level0 | Level1 | Level2 | Level3 | Full}] -InputObject <CimInstance[]>

[-PassThru] [-RootObject <PSReference>] [-ThrottleLimit <Int32>] [<CommonParameters>]

Update-StorageProviderCache [[-Name] <String[]>] [-AsJob] [-CimSession <CimSession[]>] [-DiscoveryLevel {Level0 | Level1 | Level2 | Level3 | Full}] [-Manufacturer

<String[]>] [-PassThru] [-RootObject <PSReference>] [-ThrottleLimit <Int32>] [<CommonParameters>]

Update-StorageProviderCache [-AsJob] [-CimSession <CimSession[]>] [-DiscoveryLevel {Level0 | Level1 | Level2 | Level3 | Full}] [-Manufacturer <String[]>] [-PassThru]

[-RootObject <PSReference>] [-ThrottleLimit <Int32>] [-URI <Uri[]>] [<CommonParameters>]

```
Update-StorageProviderCache [-AsJob] [-CimSession <CimSession[]>] [-DiscoveryLevel {Level0 | Level1 | Level2 |  
Level3 | Full}] [-PassThru] [-RootObject <PSReference>]  
[-StorageSubSystem <CimInstance>] [-ThrottleLimit <Int32>] [<CommonParameters>]
```

```
Update-StorageProviderCache [-AsJob] [-CimSession <CimSession[]>] [-DiscoveryLevel {Level0 | Level1 | Level2 |  
Level3 | Full}] [-PassThru] [-RootObject <PSReference>]  
[-ThrottleLimit <Int32>] [-Uniqueld <String[]>] [<CommonParameters>]
```

DESCRIPTION

The Update-StorageProviderCache cmdlet updates the cache of the service for a particular provider and associated child objects.

Note: Using the Full value for the DiscoveryLevel parameter without using additional parameters to limit the scope to particular storage providers or storage

subsystems causes all accessible storage providers to enumerate and report all state information, which can be extremely time intensive in large environments.

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

-DiscoveryLevel <DiscoveryLevel>

Defines the level (or depth) of discovery that should be performed. Increasing levels are cumulative; the storage providers will discover objects starting from

Level0 and continuing to the highest level specified. Acceptable values are:

Full, which discovers all objects on all accessible storage providers. This is the same as a Level3 discovery.

Level0, which discovers storage provider and storage subsystem objects.

Level1, which performs a Level0 discovery and then discovers storage pools, resiliency settings, target ports, target portals, and initiator identifiers.

Level2, which performs a Level1 discovery and then discovers virtual disk and masking set objects.

Level3, which performs a Level2 discovery and then discovers physical disk objects. This is the same as a Full discovery.

All storage providers perform a Level0 or higher level discovery when loaded by Windows.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	False
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

-Manufacturer <String[]>

Specifies the storage provider cache to update by manufacturer name. Enter a manufacturer string, or use wildcard characters to enter a pattern.

Required? false

Position? named

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-Name <String[]>

Specifies the name of the storage provider cache to update.

Required? false

Position? 0

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-PassThru [<SwitchParameter>]

Specifies that the cmdlet should output an object representing the storage provider it updated. By default, this cmdlet does not generate any output.

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

-RootObject <PSReference>

Specifies a reference to the object from which you want to begin discovering associated objects. When the DiscoveryLevel parameter is not specified, well-defined

actions will be taken depending on the type of object reference specified:

StorageSubsystem: All associated objects will be discovered.

StoragePool: The pool, along with any associated resiliency settings, virtual disks, and physical disks will be discovered.

MaskingSet: The masking set, along with any associated target ports, initiator identifiers, and virtual disks will be discovered.

For all other objects, only the specified object will be discovered or refreshed.

Required? false
Position? named
Default value None
Accept pipeline input? False
Accept wildcard characters? false

-StorageSubSystem <CimInstance>

Updates all storage subsystems managed by the storage provider associated with the StorageSubsystem object you specify. Enter a StorageSubsytem CIM object, which is exposed by 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 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

-URI <Uri[]>

Specifies the URI of the storage provider whose cache should be updated.

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

-Uniqueld <String[]>

Specifies the ID of the storage provider cache to update. Type one or more IDs, with each ID enclosed in quotes, and multiple IDs separated by commas. The ID persists through restarts.

Required? false

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

INPUTS

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

You can pipe an MSFT_StorageSubsystem object to the StorageSubsystem parameter to perform the update on the storage provider for the specified subsystem.

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

You can pipe an MSFT_StorageProvider object to the InputObject parameter to perform the update on the specified storage provider.

OUTPUTS

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

By default the Update-StorageProviderCache cmdlet does not return any objects. If you specify the PassThru parameter, this cmdlet returns an object representing the storage provider it updated.

NOTES

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

----- Example 1: Perform a Full update of all objects -----

```
PS C:\>Update-StorageProviderCache -DiscoveryLevel Full
```

This example performs a Full update of the storage provider cache on all accessible storage providers, rescanning all associated physical disks and reporting the

state. This operation can be extremely time intensive in large or enterprise environments; instead use parameters to scope the update.

Example 2: Update PhysicalDisk objects for a particular storage provider

```
PS C:\>Update-StorageProviderCache -StorageSubSystem (Get-StorageSubSystem -FriendlyName "StorageArray*")  
-DiscoveryLevel Level3
```

This example uses the StorageSubsystem parameter in association with the Get-StorageSubSystem cmdlet to get a particular storage subsystem and then perform a Level3

update on its associated storage provider, discovering all associated PhysicalDisk objects.

-- Example 3: Update all objects for a specific storage pool --

```
PS C:\>Update-StorageProviderCache -Name "StorageArray" -RootObject ([ref](Get-StoragePool "Storage pool"))
```

This example uses the Name parameter to specify the storage provider to update, and uses the RootObject parameter to specify the specific storage pool for which to

update objects. Because RootObject takes PSReference objects as input, you need to prepend the object call with `[ref]` to get a reference to the object instead of the object itself.

RELATED LINKS

Online

Version:

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

Get-StoragePool

