



python



PowerShell

FPDF Library
PDF generator

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

PowerShell Get-Help on command 'Get-Acl'

PS C:\Users\wahid> Get-Help Get-Acl

NAME

Get-Acl

SYNOPSIS

Gets the security descriptor for a resource, such as a file or registry key.

SYNTAX

```
Get-Acl [-AllCentralAccessPolicies] [-Audit] [-Exclude <System.String[]>]
[-Filter <System.String>] [-Include <System.String[]>] -InputObject
<System.Management.Automation.PSObject> [-UseTransaction] [<CommonParameters>]
```

```
Get-Acl [-AllCentralAccessPolicies] [-Audit] [-Exclude <System.String[]>]
[-Filter <System.String>] [-Include <System.String[]>] [-LiteralPath
<System.String[]>] [-UseTransaction] [<CommonParameters>]
```

```
Get-Acl [[-Path] <System.String[]>] [-AllCentralAccessPolicies] [-Audit]
[-Exclude <System.String[]>] [-Filter <System.String>] [-Include
<System.String[]>] [-UseTransaction] [<CommonParameters>]
```

DESCRIPTION

The `Get-Acl` cmdlet gets objects that represent the security descriptor of a file or resource. The security descriptor contains the access control lists (ACLs) of the resource. The ACL specifies the permissions that users and user groups have to access the resource.

Beginning in Windows PowerShell 3.0, you can use the `InputObject` parameter of `Get-Acl` to get the security descriptor of objects that do not have a path.

PARAMETERS

`-AllCentralAccessPolicies <System.Management.Automation.SwitchParameter>`

Gets information about all central access policies that are enabled on the computer.

Beginning in Windows Server 2012, administrators can use Active Directory and Group Policy to set central access policies for users and groups. For more information, see [Dynamic Access Control: Scenario Overview \(/windows-server/identity/solution-guides/dynamic-access-control--scenario-overview\)](#).

This parameter is introduced in Windows PowerShell 3.0.

`-Audit <System.Management.Automation.SwitchParameter>`

Gets the audit data for the security descriptor from the system access control list (SACL).

`-Exclude <System.String[]>`

Omits the specified items. The value of this parameter qualifies the `Path` parameter. Enter a path element or pattern, such as `*.txt`. Wildcards are permitted.

`-Filter <System.String>`

Specifies a filter in the provider's format or language. The value of this

parameter qualifies the Path parameter. The syntax of the filter, including the use of wildcards, depends on the provider. Filters are more efficient than other parameters, because the provider applies them when getting the objects, rather than having PowerShell filter the objects after they are retrieved.

`-Include <System.String[]>`

Gets only the specified items. The value of this parameter qualifies the Path parameter. Enter a path element or pattern, such as ``*.txt``.

Wildcards are permitted.

`-InputObject <System.Management.Automation.PSObject>`

Gets the security descriptor for the specified object. Enter a variable that contains the object or a command that gets the object.

You cannot pipe an object, other than a path, to ``Get-Acl``. Instead, use the `InputObject` parameter explicitly in the command.

This parameter is introduced in Windows PowerShell 3.0.

`-LiteralPath <System.String[]>`

Specifies the path to a resource. Unlike `Path`, the value of the `LiteralPath` parameter is used exactly as it is typed. No characters are interpreted as wildcards. If the path includes escape characters, enclose it in single quotation marks. Single quotation marks tell PowerShell not to interpret any characters as escape sequences.

This parameter is introduced in Windows PowerShell 3.0.

`-Path <System.String[]>`

Specifies the path to a resource. ``Get-Acl`` gets the security descriptor of the resource indicated by the path. Wildcards are permitted. If you omit the `Path` parameter, ``Get-Acl`` gets the security descriptor of the

current directory.

The parameter name ("Path") is optional.

`-UseTransaction <System.Management.Automation.SwitchParameter>`

Includes the command in the active transaction. This parameter is valid only when a transaction is in progress. For more information, see `about_Transactions`

(`../Microsoft.PowerShell.Core/About/about_Transactions.md`).

`<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>).

----- Example 1- Get an ACL for a folder -----

```
Get-Acl C:\Windows
```

----- Example 2 - Get an ACL for a folder using wildcards -----

```
Get-Acl C:\Windows\s*.log | Format-List -Property PSPATH, Sddl
```

The command uses the ``Get-Acl`` cmdlet to get objects representing the security descriptors of each log file. It uses a pipeline operator (``|``) to send the results to the ``Format-List`` cmdlet. The command uses the `Property` parameter of ``Format-List`` to display only the `PsPath` and `SDDL` properties of each security descriptor object.

Lists are often used in PowerShell, because long values appear truncated in tables.

The SDDL values are valuable to system administrators, because they are simple text strings that contain all of the information in the security descriptor.

As such, they are easy to pass and store, and they can be parsed when needed.

----- Example 3 - Get count of Audit entries for an ACL -----

```
Get-Acl C:\Windows\s*.log -Audit | ForEach-Object { $_.Audit.Count }
```

It uses the Audit parameter to get the audit records from the SACL in the security descriptor. Then it uses the `ForEach-Object` cmdlet to count the number of audit records associated with each file. The result is a list of numbers representing the number of audit records for each log file.

----- Example 4 - Get an ACL for a registry key -----

```
Get-Acl -Path HKLM:\System\CurrentControlSet\Control | Format-List
```

The Path parameter specifies the Control subkey. The pipeline operator (|) passes the security descriptor that `Get-Acl` gets to the `Format-List` command, which formats the properties of the security descriptor as a list so that they are easy to read.

----- Example 5 - Get an ACL using ****InputObject**** -----

```
Get-Acl -InputObject (Get-StorageSubSystem -Name S087)
```

REMARKS

To see the examples, type: "get-help Get-Acl -examples".

For more information, type: "get-help Get-Acl -detailed".

For technical information, type: "get-help Get-Acl -full".

For online help, type: "get-help Get-Acl -online"