



Windows PowerShell Get-Help on Cmdlet 'Stop-Process'

PS:\>Get-HELP Stop-Process -Full

NAME

Stop-Process

SYNOPSIS

Stops one or more running processes.

SYNTAX

Stop-Process [-Id] <System.Int32[]> [-Force] [-PassThru] [-Confirm] [-WhatIf] [<CommonParameters>]

Stop-Process [-InputObject] <System.Diagnostics.Process[]> [-Force] [-PassThru] [-Confirm] [-WhatIf]
[<CommonParameters>]

Stop-Process [-Force] -Name <System.String[]> [-PassThru] [-Confirm] [-WhatIf] [<CommonParameters>]

DESCRIPTION

The 'Stop-Process' cmdlet stops one or more running processes. You can specify a process by process name or process ID (PID), or pass a process object to

'Stop-Process'. 'Stop-Process' works only on processes running on the local computer.

On Windows Vista and later versions of the Windows operating system, to stop a process that is not owned by the current user, you must start PowerShell by using the

Run as administrator option. Also, you are not prompted for confirmation unless you specify the Confirm parameter.

PARAMETERS

-Force <System.Management.Automation.SwitchParameter>

Stops the specified processes without prompting for confirmation. By default, ``Stop-Process`` prompts for confirmation before stopping any process that is not owned by the current user.

To find the owner of a process, use the ``Get-CimInstance`` cmdlet to get a `Win32_Process` object that represents the process, and then use the `GetOwner` method of the object.

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

-Id <System.Int32[]>

Specifies the process IDs of the processes to stop. To specify multiple IDs, use commas to separate the IDs. To find the PID of a process, type ``Get-Process``.

Required?	true
Position?	0
Default value	None
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

-InputObject <System.Diagnostics.Process[]>

Specifies the process objects to stop. Enter a variable that contains the objects, or type a command or expression that gets the objects.

Required?	true
Position?	0
Default value	None
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

-Name <System.String[]>

Specifies the process names of the processes to stop. You can type multiple process names, separated by commas, or use wildcard characters.

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

-PassThru <System.Management.Automation.SwitchParameter>

Returns an object that represents the process. By default, this cmdlet does not generate any output.

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

-Confirm <System.Management.Automation.SwitchParameter>

Prompts you for confirmation before running the cmdlet.

Required?	false
Position?	named

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

-WhatIf <System.Management.Automation.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>).

INPUTS

System.Diagnostics.Process

You can pipe a process object to this cmdlet.

OUTPUTS

None

By default, this cmdlet returns no output.

System.Diagnostics.Process

When you use the PassThru parameter, this cmdlet returns a Process object representing the stopped process.

Windows PowerShell includes the following aliases for `Stop-Process`:

- `kill`

- `spps`

You can also use the properties and methods of the Windows Management Instrumentation (WMI) `Win32_Process` object in Windows PowerShell. For more information, see

`Get-CimInstance` and the WMI SDK.

- When stopping processes, realize that stopping a process can stop process and services that depend on the process. In an extreme case, stopping a process can stop Windows.

----- Example 1: Stop all instances of a process -----

```
PS C:\> Stop-Process -Name "notepad"
```

This command stops all instances of the Notepad process on the computer. Each instance of Notepad runs in its own process. It uses the `Name` parameter to specify the

processes, all of which have the same name. If you were to use the `Id` parameter to stop the same processes, you would have to list the process IDs of each instance of

Notepad.

----- Example 2: Stop a specific instance of a process -----

```
PS C:\> Stop-Process -Id 3952 -Confirm -PassThru
```

Confirm

Are you sure you want to perform this action?

Performing operation "Stop-Process" on Target "notepad (3952)".

[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend [?] Help

(default is "Y"):y

Handles	NPM(K)	PM(K)	WS(K)	VM(M)	CPU(s)	Id	ProcessName
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41	2	996	3212	31		3952	notepad
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This command stops a particular instance of the Notepad process. It uses the process ID, 3952, to identify the process.

The Confirm parameter directs PowerShell to

prompt you before it stops the process. Because the prompt includes the process name in addition to its ID, this is best practice. The PassThru parameter passes the

process object to the formatter for display. Without this parameter, there would be no display after a `Stop-Process` command.

--- Example 3: Stop a process and detect that it has stopped ---

```
calc
```

```
$p = Get-Process -Name "calc"
```

```
Stop-Process -InputObject $p
```

```
Get-Process | Where-Object {$_.HasExited}
```

This series of commands starts and stops the `Calc` process, and then detects processes that have stopped.

The first command starts an instance of the calculator.

The second command uses `Get-Process` gets an object that represents the `Calc` process, and then stores it in the `\$p` variable.

The third command stops the `Calc` process. It uses the InputObject parameter to pass the object to `Stop-Process`.

The last command gets all of the processes on the computer that were running but that are now stopped. It uses `Get-Process` to get all of the processes on the

computer. The pipeline operator (`|`) passes the results to the `Where-Object` cmdlet, which selects the ones where the value of the HasExited property is \$True.

HasExited is just one property of process objects. To find all the properties, type `Get-Process | Get-Member`. *Page 6/8*

--- Example 4: Stop a process not owned by the current user ---

```
PS> Get-Process -Name "lsass" | Stop-Process
```

Stop-Process : Cannot stop process 'lsass (596)' because of the following error: Access is denied

At line:1 char:34

```
+ Get-Process -Name "lsass" | Stop-Process <<<<
```

```
[ADMIN]: PS> Get-Process -Name "lsass" | Stop-Process
```

Warning!

Are you sure you want to perform this action?

Performing operation 'Stop-Process' on Target 'lsass(596)'

[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend [?] Help (default is "Y"):

```
[ADMIN]: PS> Get-Process -Name "lsass" | Stop-Process -Force
```

```
[ADMIN]: PS>
```

These commands show the effect of using Force to stop a process that is not owned by the user.

The first command uses `Get-Process` to get the Lsass process. A pipeline operator sends the process to `Stop-Process` to stop it. As shown in the sample output, the

first command fails with an Access denied message, because this process can be stopped only by a member of the Administrator group on the computer.

When PowerShell is opened by using the Run as administrator option, and the command is repeated, PowerShell prompts you for confirmation.

The second command specifies Force to suppress the prompt. As a result, the process is stopped without confirmation.

RELATED LINKS

Online

Version:

c_id=ps-gethelp

Debug-Process

Get-Process

Start-Process

Stop-Process

Wait-Process