

¿Qué es un cmdlet de PowerShell?

PowerShell tiene comandos que ayudan al usuario a realizar operaciones y obtener resultados, los comandos en PowerShell se conocen como cmdlets.

Los comandos en PowerShell se consideran objetos, el resultado a la hora de ejecutar un cmdlet no es un texto sino un objeto.

Cada cmdlet se puede utilizar por separado pero la principal potencia radica en enlazar varios cmdlets para realizar tareas complejas.

Hay cmdlets básicos y también se pueden crear nuevos.

Cmdlet que sirve para listar todos los cmdlets soportados

Get-Command

```

Windows PowerShell ISE
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Sin título1.ps1* X
1 Get-Command

PS C:\Users\juan> Get-Command

CommandType      Name                                          Version      Source
-----
Alias             Add-PefMessageProvider                    1.1.0.0      PEF
Alias             Add-ProvisionedAppxPackage                3.0          Dism
Alias             Apply-WindowsUnattend                    3.0          Dism
Alias             Begin-WebCommitDelay                     1.0.0.0      WebAdministration
Alias             Disable-PhysicalDiskIndication            2.0.0.0      Storage
Alias             Disable-StorageDiagnosticLog              2.0.0.0      Storage
Alias             Enable-PhysicalDiskIndication             2.0.0.0      Storage
Alias             Enable-StorageDiagnosticLog               2.0.0.0      Storage
Alias             End-WebCommitDelay                       1.0.0.0      WebAdministration
Alias             Flush-Volume                             2.0.0.0      Storage
Alias             Get-DiskSNV                              2.0.0.0      Storage
Alias             Get-PhysicalDiskSNV                      2.0.0.0      Storage
Alias             Get-ProvisionedAppxPackage                3.0          Dism
Alias             Get-StorageEnclosureSNV                  2.0.0.0      Storage
Alias             Initialize-Volume                        2.0.0.0      Storage
Alias             Move-SmbClient                           2.0.0.0      SmbWitness
Alias             Remove-ProvisionedAppxPackage              3.0          Dism
Alias             Write-FileSystemCache                     2.0.0.0      Storage
Function          A:
Function          Add-BitLockerKeyProtector                 1.0.0.0      BitLocker
Function          Add-DnsClientNrptRule                     1.0.0.0      DnsClient
Function          Add-DtcClusterTMMapping                   1.0.0.0      MsDtc
Function          Add-EtwTraceProvider                      1.0.0.0      EventTracingManagement
Function          Add-InitiatorIdToMaskingSet               2.0.0.0      Storage
Function          Add-MpPreference                         1.0          Defender
Function          Add-NetEventNetworkAdapter                1.0.0.0      NetEventPacketCapture
Function          Add-NetEventPacketCaptureProvider          1.0.0.0      NetEventPacketCapture
Function          Add-NetEventProvider                      1.0.0.0      NetEventPacketCapture
Function          Add-NetEventVFPPProvider                  1.0.0.0      NetEventPacketCapture
Function          Add-NetEventVmNetworkAdapter              1.0.0.0      NetEventPacketCapture
Function          Add-NetEventVmSwitch                     1.0.0.0      NetEventPacketCapture
Function          Add-NetEventVmSwitchProvider              1.0.0.0      NetEventPacketCapture
Function          Add-NetEventWFPCaptureProvider             1.0.0.0      NetEventPacketCapture
Function          Add-NetIPHttpsCertBinding                 1.0.0.0      NetworkTransition
Function          Add-NetLbfoTeamMember                     2.0.0.0      NetLbfo
Function          Add-NetLbfoTeamNic                       2.0.0.0      NetLbfo
  
```

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Alias

gcm

Parámetros y alias de los parámetros

```

Name           {}
Verb           {}
Noun           {}
Module         {PSSnapin}
FullyQualifiedModule {}
CommandType    {Type}
TotalCount     {}
Syntax         {}
ShowCommandInfo {}
ArgumentList   {Args}
All            {}
  
```

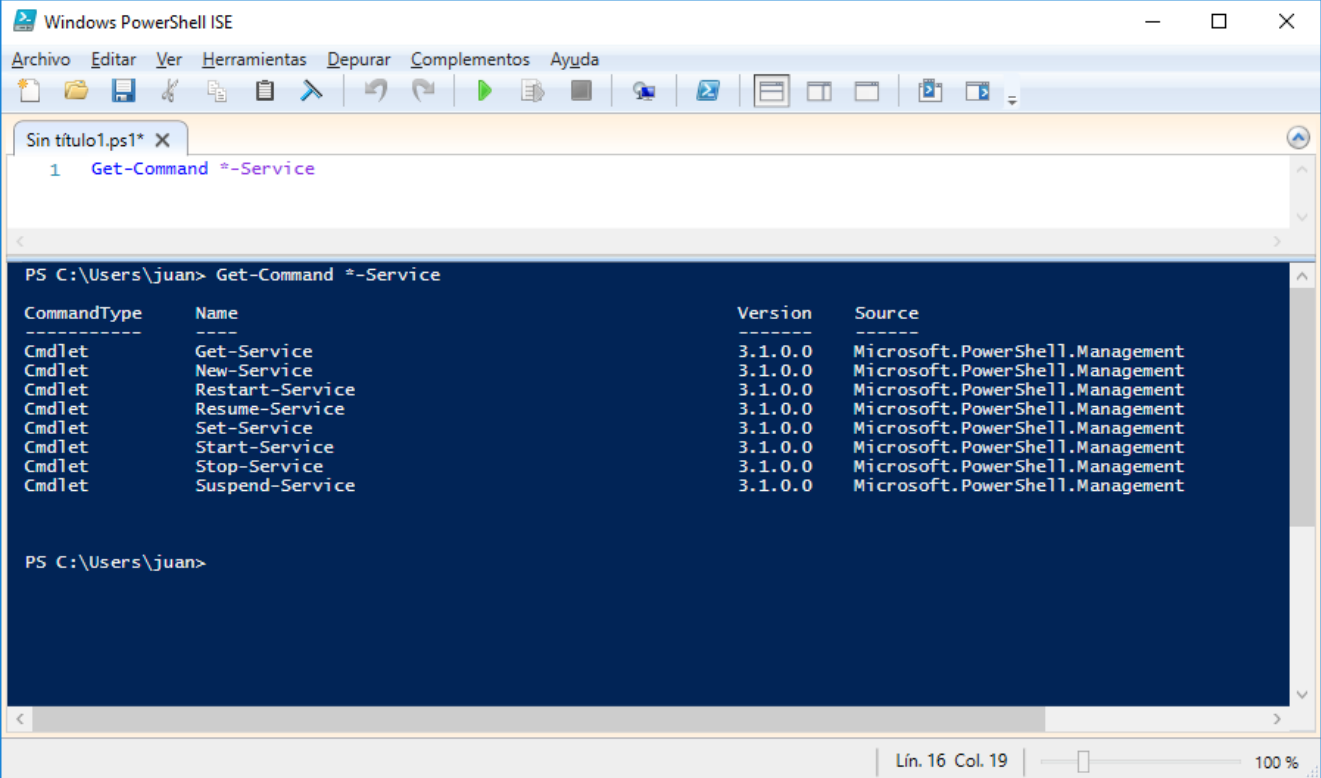
```

ListImported      {}
ParameterName     {}
ParameterType     {}
Verbose           {vb}
Debug             {db}
ErrorAction       {ea}
WarningAction     {wa}
InformationAction {infa}
ErrorVariable     {ev}
WarningVariable   {wv}
InformationVariable {iv}
OutVariable       {ov}
OutBuffer         {ob}
PipelineVariable  {pv}

```

Descubrir cmdlets

Get-Command -Name *-Service



The screenshot shows the Windows PowerShell ISE interface. The command `Get-Command *-Service` has been entered in the script editor and executed in the console. The output is a table listing various service-related cmdlets.

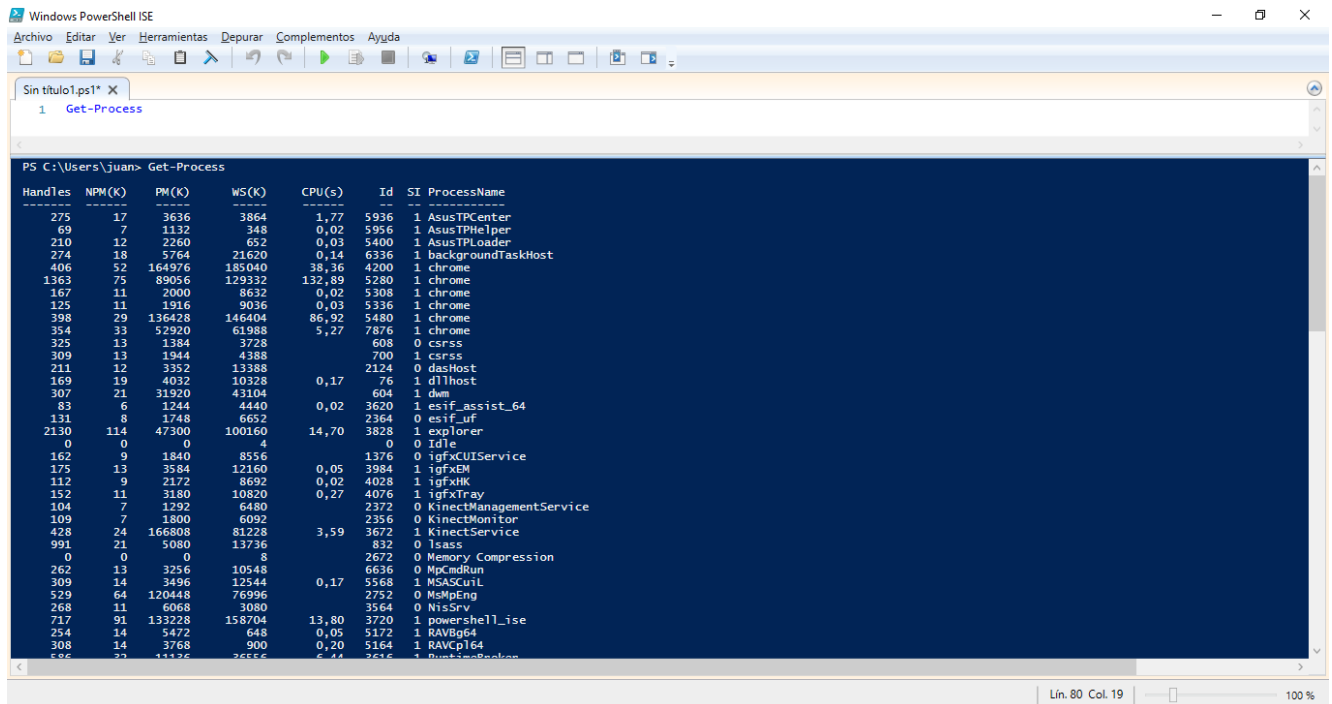
CommandType	Name	Version	Source
Cmdlet	Get-Service	3.1.0.0	Microsoft.PowerShell.Management
Cmdlet	New-Service	3.1.0.0	Microsoft.PowerShell.Management
Cmdlet	Restart-Service	3.1.0.0	Microsoft.PowerShell.Management
Cmdlet	Resume-Service	3.1.0.0	Microsoft.PowerShell.Management
Cmdlet	Set-Service	3.1.0.0	Microsoft.PowerShell.Management
Cmdlet	Start-Service	3.1.0.0	Microsoft.PowerShell.Management
Cmdlet	Stop-Service	3.1.0.0	Microsoft.PowerShell.Management
Cmdlet	Suspend-Service	3.1.0.0	Microsoft.PowerShell.Management

Los cmdlets se pueden ejecutar y verificar el resultado de la ejecución para saber si se ha ejecutado correctamente o no.

Ejemplo: mostrar algunos cmdlets de PowerShell

Get-Process

#Ver procesos que se están ejecutando en el sistema



Windows PowerShell ISE

Sin título1.ps1* X

```
1 Get-Process
```

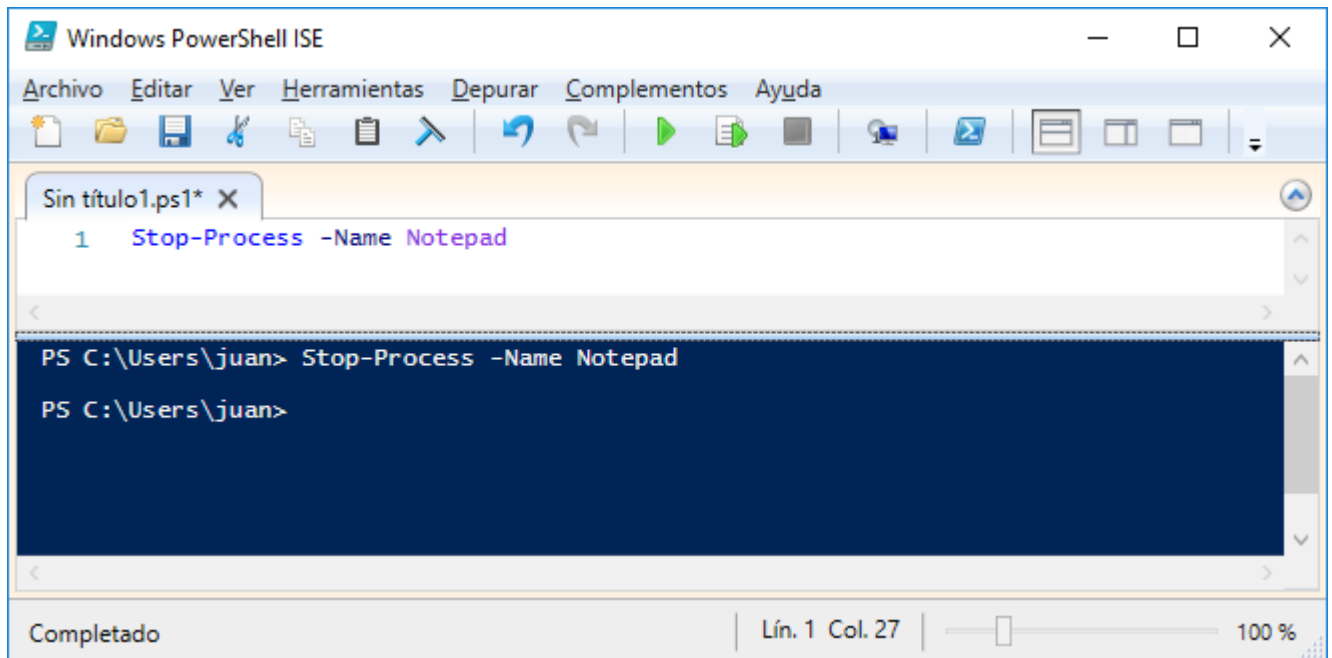
PS C:\Users\juan> Get-Process

Handles	NPM(K)	PM(K)	WS(K)	CPU(s)	Id	SI	ProcessName
275	17	3636	3864	1,77	5936	1	AsusTPCenter
69	7	1132	348	0,02	5956	1	AsusTPHelper
210	12	2260	652	0,03	5400	1	AsusTPLoader
274	18	5764	21620	0,14	6336	1	backgroundTaskHost
406	52	164976	185040	38,36	4200	1	chrome
1363	75	89056	12932	132,39	5280	1	chrome
167	11	2000	8632	0,02	5308	1	chrome
125	11	1916	9036	0,03	5336	1	chrome
398	29	136428	146404	86,92	5480	1	chrome
354	33	52920	61988	5,27	7876	1	chrome
325	13	1384	3728		608	0	csrss
309	13	1944	4388		700	1	csrss
211	12	3352	13388		2124	0	dasHost
169	19	4032	10328	0,17	76	1	dllhost
307	21	31920	43104		604	1	dwm
83	6	1244	4440	0,02	3620	1	esif_assist_64
131	8	1748	6652		2364	0	esif_uf
2130	114	47300	100160	14,70	3828	1	explorer
0	0	0			4	0	Idle
162	9	1840	8556		1376	0	igfxCUIService
175	13	3584	12160	0,05	3984	1	igfxEM
112	9	2172	8692	0,02	4028	1	igfxHK
152	11	3180	10820	0,27	4076	1	igfxTray
104	7	1292	6480		2372	0	KinectManagementService
109	7	1800	6092		2356	0	KinectMonitor
428	24	166808	81228	3,59	3672	1	KinectService
991	21	5080	13736		832	0	Lsass
0	0	0	8		2672	0	Memory Compression
262	13	3256	10548		6636	0	MpCmdRun
309	14	3496	12544	0,17	5568	1	MSAScuiL
529	64	120448	76996		2752	0	MsmEng
268	11	6068	3080		3564	0	NisSrv
717	91	133228	158704	13,80	3720	1	powershell_lise
254	14	5472	648	0,05	5172	1	RAVb64
308	14	3768	900	0,20	5164	1	RAVCp164
586	23	11126	26556	6,44	2616	1	RuntimeBroker

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Stop-Process -Name notepad

#Parar el proceso Bloc de notas



Windows PowerShell ISE

Sin título1.ps1* X

```
1 Stop-Process -Name Notepad
```

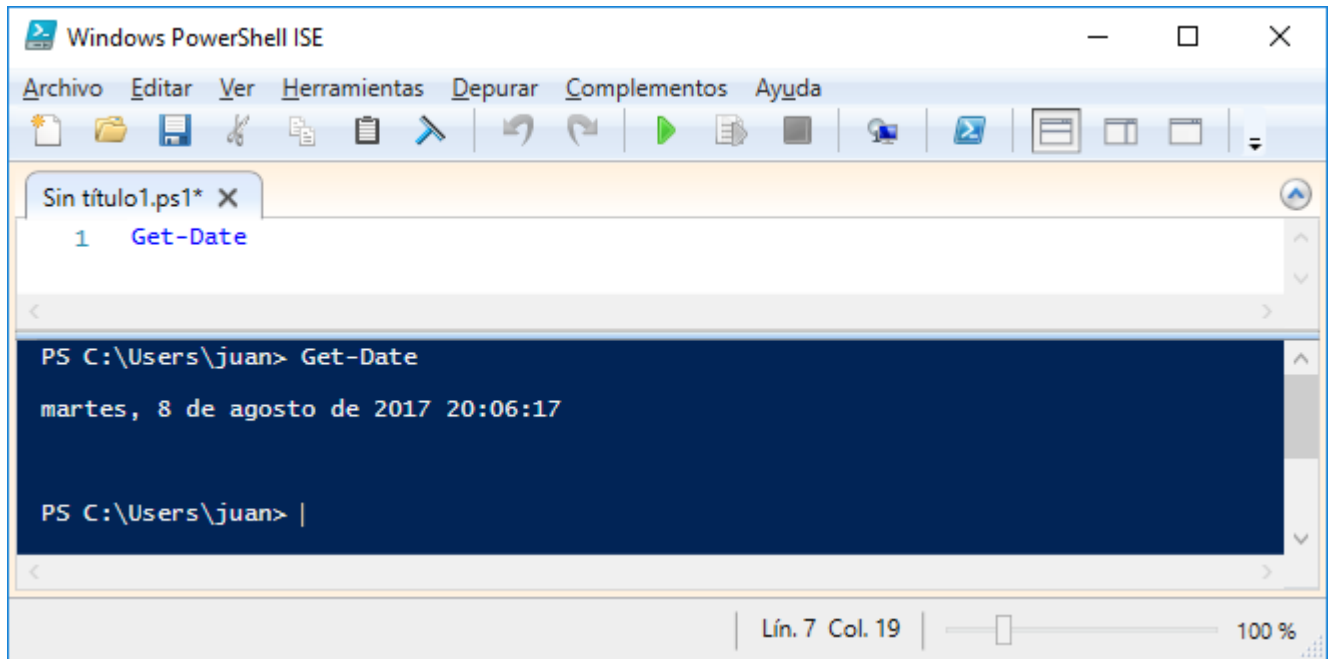
PS C:\Users\juan> Stop-Process -Name Notepad

PS C:\Users\juan>

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Get-Date

#Ver la fecha actual



The image shows a screenshot of the Windows PowerShell ISE (Integrated Scripting Environment) window. The title bar reads "Windows PowerShell ISE". The menu bar includes "Archivo", "Editar", "Ver", "Herramientas", "Depurar", "Complementos", and "Ayuda". The toolbar contains various icons for file operations, editing, and execution. A single script file is open, titled "Sin título1.ps1* X". The script contains one line of code: `1 Get-Date`. The console output shows the command being executed: `PS C:\Users\juan> Get-Date`, followed by the result: `martes, 8 de agosto de 2017 20:06:17`. The prompt `PS C:\Users\juan> |` is visible on the next line. The status bar at the bottom indicates "Lín. 7 Col. 19" and a zoom level of "100 %".

```
Windows PowerShell ISE
Archivo Editar Ver Herramientas Depurar Complementos Ayuda
Sin título1.ps1* X
1 Get-Date
PS C:\Users\juan> Get-Date
martes, 8 de agosto de 2017 20:06:17
PS C:\Users\juan> |
Lín. 7 Col. 19 100 %
```