

PowerShell Cheat Sheet v1.0



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Common Aliases	
%, ForEach	ForEach-Object
?, Where	Where-Object
Cat, gc, type	Get-Content
Cd	Set-Location
Clear, cls	Clear-Host
Compare, diff	Compare-Object
Copy, cp	Copy-Item
Curl, iwr, wget	Invoke-WebRequest
Dir	Get-ChildItem
Echo	Write-Output
Erase, rm, del	Remove-Item
Fl	Format-List
Ft	Format-Table
Gcm	Get-Command
Gm	Get-Member
Gwmi	Get-WMIObject
H, history	Get-History
Icm	Invoke-Command
lex	Invoke-Expression
Kill	Stop-Process
Move, mv	Move-Item
Ogv	Out-GridView
Pwd	Get-Location
Ren, rni	Rename-Item
Select	Select-Object
Sort	Sort-Object

Basics	
Cmdlets	Commands built into the shell written in .NET
Functions	Commands written in PowerShell
Parameter	Arguments to a cmdlet/function/script
Alias	Shortcut for a cmdlet or function
Scripts	Text files with .ps1 extension
Pipelines	Sends objects from one command to the next
Ctrl + C	Interrupt current command
Ctrl + left / right	Navigate one word at a time
Home /End	Move to start / end of a line
Up /down	Move up and down through the history

Assignment, Logical, & Comparison Operators	
=, +=, -=, ++, --	Assign to a variable
+=, -=	Appends to variable
++, --	Variable iteration
-and, -or, -not, !	Connect expressions / statements
-eq, -ne	Equal, Not Equal
-gt, -ge	Greater than, greater than or equal
-lt, -le	Less than, less than or equal
-replace	Replace one for one
-match, -notmatch	Regular expression match
-like, -notlike	Wildcard matching
-contains, -notcontains	Check if value in array
-in, -notin	Reverse of contains, notcontains

Parameters	
-Confirm	Prompt user to take action
-Whatif	Displays what the command would do

Writing output and reading data	
"Hello, I am a string"	String written directly to output
Write-Host "some text" -ForegroundColor Blue	Displays text as blue
\$day = Read-Host "Enter day"	Sets \$day variable to input from user
Get-Process Out-GridView	Displays processes in an Excel-like output

Variables	
\$var = "string"	Assigns variable (string)
[int]\$var = 7	Assigns variable as int
\$a = \$b = \$c = 11	Assigns each variable with 11

Arrays and Objects	
\$array = 1, 2, 3, 4	Array of integers
\$array = "a","b","c"	Array of strings
\$array = @()	Empty array
\$array[3]	Fourth array element
\$array[-5..-1]	Last three array elements
(Get-Process).name	Name property of object

Help	
Get-Help <cmdlet>	Gets helps for cmdlet
Help <cmdlet> -examples	Gets examples for cmdlet
Get-Command -module ABC	Lists all commands in the ABC module
Get-Command	Get a list of all commands
Get-Command Get-*	Lists all commands starting with "get-"
Get-Service Get-Member	Get-members of the object
Get-Service Format-List *	List of all properties

Scripts	
Set-ExecutionPolicy - ExecutionPolicy Unrestricted	Allows scripts to run
.\script.ps1	Runs script
C:\script.ps1	Runs script
\$profile	Your personal profile that runs at launch

Importing, Exporting, & Converting	
Convert-ToCliXML	Convert-ToHTML
Convert-ToCSV	Convert-FromCSV
Export-CSV	Import-CSV
Export-CliXML	Import-CliXML

Comments & Escape Characters	
# Comment	Comment
<# Comment #>	Multiline comment
""Escape""	Escapes ` character
`n	New line
`r	Carriage return
`t	Horizontal tab
`v	Vertical tab
`	Line continue

Flow Control
If(){ Elseif(){ Else{}
While(){}
Do{ } while()
ForEach(\$thing in \$things){}
For(\$i=0; \$i -gt 0; \$i--){}
1..10 ForEach{\$_}

Cmdlets	
Set-Location	Add-Content
Get-Content	Set-Content
Out-File	Out-String
Copy-Item	Remove-Item
Move-Item	Set-Item
New-Item	Get-Date
Get-Eventlog	Get-WinEvent
Start-Sleep	Compare-Object
Test-Connection	Test-Path
Get-ADUser	Get-SMBShare
Get-WMIObject	