

PowerShell Basics



Michael Bender

Content Creator | Community Leader

@Michaelbender | learn.microsoft.com



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Overview

Command basics

Anatomy of a PowerShell command

Help in PowerShell or 3 commands to rule the shell

Other helpful commands and techniques



Command Basics

Verb-Noun

Do something-To something

Get-Verb



```
PS> Get-Service -Name Spooler -RequiredServices
```

Parameters

Used to pass information into PowerShell commands

All parameters are called with a dash (-)

Some require values and some do not



Exploring PowerShell verbs and parameters



Types of Commands in PowerShell

Cmdlet

Function

Script





Anatomy of a Command



Anatomy of a Command

Wildcards are
accepted use

PS:> Get-Service -Name P* -ComputerName Client1,Client2

Command name

First parameter

Second Parameter



Anatomy of a Command

All parameters start with a dash.

Wildcards are accepted use

```
PS:> Get-Service -Name P* -ComputerName Client1,Client2
```

A space separates parameter names and values

Pass multiple values with a comma-separated list



Anatomy of a Command

Positional parameters allow the use of the value without the parameter name when used in order

PS:> Gsv P* -Comp Client1,Client2

An alias is a “nickname” for a command

All parameter names can be truncated



Anatomy of a Command

Spaces act as separators for parameters and values

PS:> Get-Service -Name B* -ComputerName Client1,Client2

Command name

First parameter

Second Parameter



Demo: Walk through anatomy of command and running basic commands



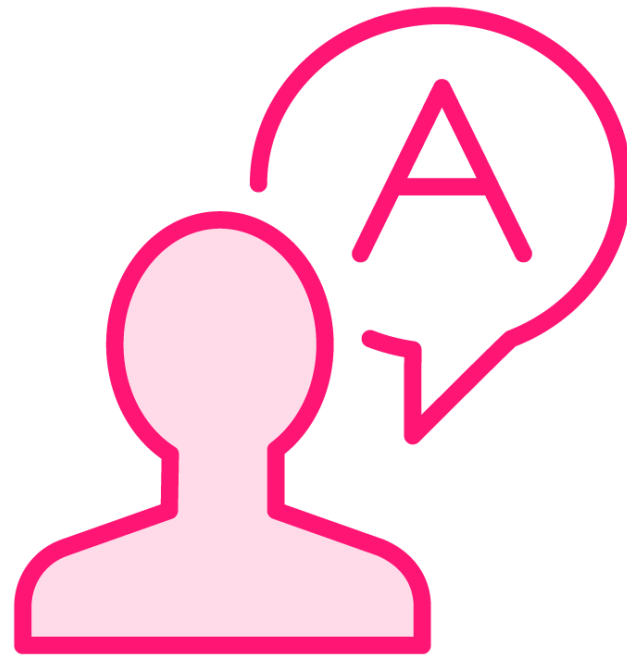
Working with get-history and get-alias



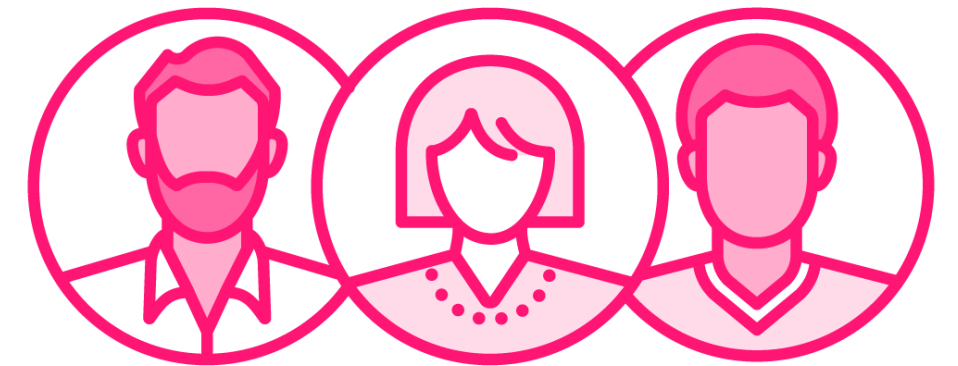
3 Important Commands



Get-Command



Get-Help



Get-Member

```
PS> Get-Command -Verb Get -Noun *DNS*
```

```
PS> Get-Command -Name *Firewall* -CommandType Function
```

Get-Command

Used to search installed commands



```
PS> Get-Help -Name Get-Command -Detailed
```

```
PS> man -Name Get-Command -Detailed
```

```
PS> Help about_command_syntax
```

```
PS> Get-Help -Name *DNS*
```

Get-Help

Displays 'how-to' information for commands

Similar to man in UNIX/Linux

Can be used for searching PowerShell commands



Finding answers with PowerShell

- Get-Help
- Get-Command



```
PS> Get-Service | Get-Member
```

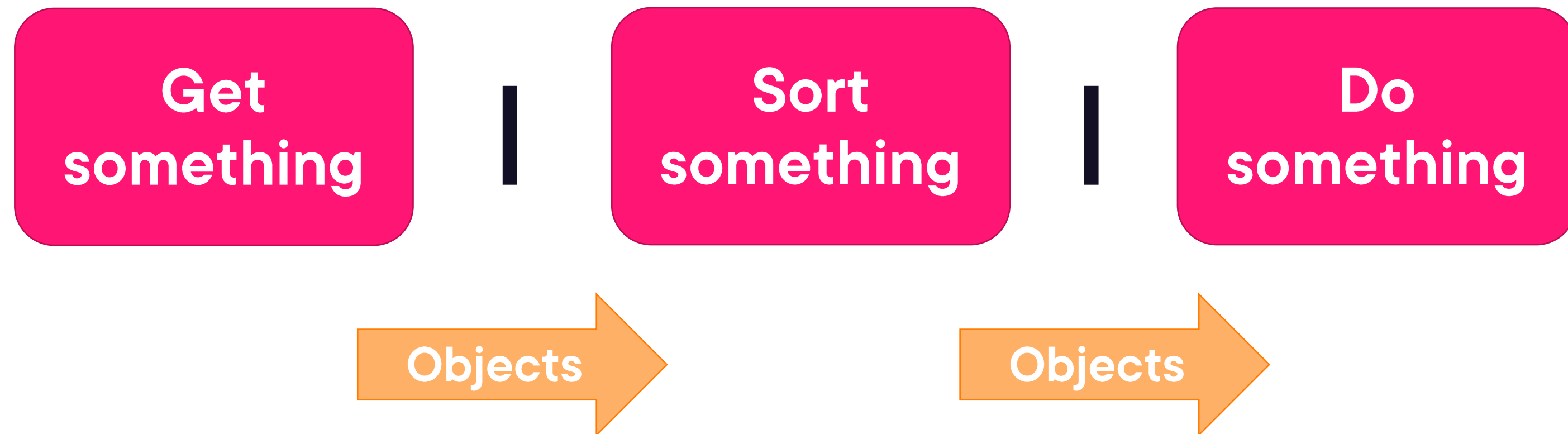
Get-Member

Gets properties and methods of objects

Used to see what makes up an object



Pipelining in PowerShell



```
get-service | where-object status -eq "Stopped" | start-  
service
```

Pipelining in PowerShell



Wrap up

Anatomy of a command

Find answers with Get-Help and Get-Command

Intro to the pipeline



Up Next:

Working in the pipeline

