

way of the hax0r
n00b to console punk

Appendix A

Command Comparisons

The same intent in each shell. Names that look alike do not share options or behavior; the chapter in the last column explains the differences.

Task	Bash/zsh	PowerShell	Command Prompt	Chapter
Print text	<code>echo text,</code> <code>printf '%s\n'</code> <code>text</code>	<code>Write-Output</code> <code>text</code>	<code>echo text</code>	2
Show the current directory	<code>pwd</code>	<code>Get-Location</code>	<code>cd</code>	3
List a directory	<code>ls -l, ls -a</code>	<code>Get-ChildItem,</code> <code>-Force</code>	<code>dir, dir /a</code>	3
Change directory	<code>cd path</code>	<code>Set-Location</code> <code>path</code>	<code>cd path, cd /d</code> <code>D:\path</code>	3
Go home	<code>cd</code>	<code>Set-Location</code> <code>\$HOME</code>	<code>cd /d</code> <code>"%USERPROFILE%"</code>	3
Create a directory	<code>mkdir -p a/b</code>	<code>New-Item</code> <code>-ItemType</code> <code>Directory a/b</code>	<code>mkdir a\b</code>	3
Create an empty file	<code>touch f</code>	<code>New-Item</code> <code>-ItemType File</code> <code>f</code>	<code>type nul > f</code>	3
Copy a file	<code>cp src dst</code>	<code>Copy-Item src</code> <code>dst</code>	<code>copy src dst</code>	3
Copy a tree	<code>cp -r src dst</code>	<code>Copy-Item src</code> <code>dst -Recurse</code>	<code>xcopy src dst</code> <code>/e /i</code>	3
Move or rename	<code>mv old new</code>	<code>Move-Item,</code> <code>Rename-Item</code>	<code>move, ren</code>	3
Remove a file	<code>rm f</code>	<code>Remove-Item f</code>	<code>del f</code>	3
Remove a tree	<code>rm -r d</code>	<code>Remove-Item d</code> <code>-Recurse</code>	<code>rd /s d</code>	3

Task	Bash/zsh	PowerShell	Command Prompt	Chapter
Preview a destructive command	-i, or list the pattern first	-WhatIf, -Confirm	list the pattern first	3
Print a file	cat f	Get-Content f	type f	6
Page through a file	less f	Get-Content f \\ Out-Host -Paging	more f	6
First or last lines	head -n 5 f, tail -n 5 f	Get-Content f -TotalCount 5, -Tail 5	more +N f	6
Count lines	wc -l f	(Get-Content f \\ Measure-Object -Line).Lines	find /c /v "" f	6
Find files by name	find . -name '*.md'	Get-ChildItem -Recurse -Filter *.md	dir /s /b *.md	6
Find text in files	grep -rn text .,rg text	Get-ChildItem -Recurse \\ Select-String text	findstr /s /n text *	6
Read a variable	"\$HOME"	\$HOME, \$env:PATH	%USERPROFILE%	2
Set a session variable	export NAME=value	\$env:NAME = 'value'	set NAME=value	2
Show PATH	echo "\$PATH"	\$env:PATH	echo %PATH%	2
What does a name run	type -a name	Get-Command name -All	where.exe name, help name	2
Get help	man cmd, help builtin	Get-Help cmd -Examples	help cmd, cmd /?	2
Search history	Ctrl+R	Ctrl+R	F7	4
Redirect output and errors	> f, 2> f, 2>&1	> f, 2> f, *> f	> f, 2> f, 2>&1	7
Pipe	a \\ b (text)	a \\ b (objects)	a \\ b (text)	7
Last exit status	\$?	\$?, \$LASTEXITCODE	%ERRORLEVEL%	7
Run if the previous succeeded	a && b	a && b (PowerShell 7)	a && b	7
Show permissions	ls -l	icacls f (Windows)	icacls f	8
Change permissions	chmod 755 f	icacls f /grant ...	icacls f /grant ...	8
Run elevated	sudo cmd	Start-Process pwsh -Verb RunAs	Run as administrator	8

Task	Bash/zsh	PowerShell	Command Prompt	Chapter
List processes	<code>ps aux</code>	<code>Get-Process</code>	<code>tasklist</code>	9
Stop a process	<code>kill PID, kill -KILL PID</code>	<code>Stop-Process -Id PID</code>	<code>taskkill /pid PID /f</code>	9
Run in the background	<code>cmd &</code>	<code>Start-Job { cmd }, Start-Process cmd</code>	<code>start /b cmd</code>	9
Define an alias	<code>alias ll='ls -aLF'</code>	<code>Set-Alias ll</code>	<code>doskey ll=dir</code>	10
Define a function	<code>f() { ...; }</code>	<code>Get-ChildItem</code> <code>function f { ... }</code>	<code>/a \$*</code> <code>call :label</code>	10, 11
Reload the startup file	<code>source ~/.bashrc</code>	<code>. \$PROFILE</code>	none	10
Start without configuration	<code>bash --norc, zsh -f</code>	<code>pwsh -NoProfile</code>	<code>cmd /d</code>	10
Script arguments	<code>\$1, \$#, "\$@"</code>	<code>param(), \$args</code>	<code>%1, %*</code>	11
Download a file	<code>curl -O url, wget url</code>	<code>Invoke-WebRequest url -OutFile f</code>	<code>curl -O url</code>	12
Connect to a machine	<code>ssh user@host</code>	<code>ssh user@host</code>	<code>ssh user@host</code>	12
Copy to a machine	<code>scp f host:~/, rsync -av d/ host:d/</code>	<code>scp f host:~/</code>	<code>scp f host:~/</code>	12
Pack a directory	<code>tar -czf d.tar.gz d, zip -r d.zip d</code>	<code>Compress-Archive d d.zip, tar -czf</code>	<code>tar -czf d.tar.gz d</code>	13
Unpack	<code>tar -xzf f, unzip f</code>	<code>Expand-Archive f dest, tar -xzf f</code>	<code>tar -xzf f</code>	13
Checksum	<code>sha256sum f, shasum -a 256 f</code>	<code>Get-FileHash f</code>	<code>certutil -hashfile f SHA256</code>	13
Record a change	<code>git add f && git commit -m msg</code>	same	same	14

References