

Getting Started with Bash and the Z Shell

FIRST STEPS



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Overview



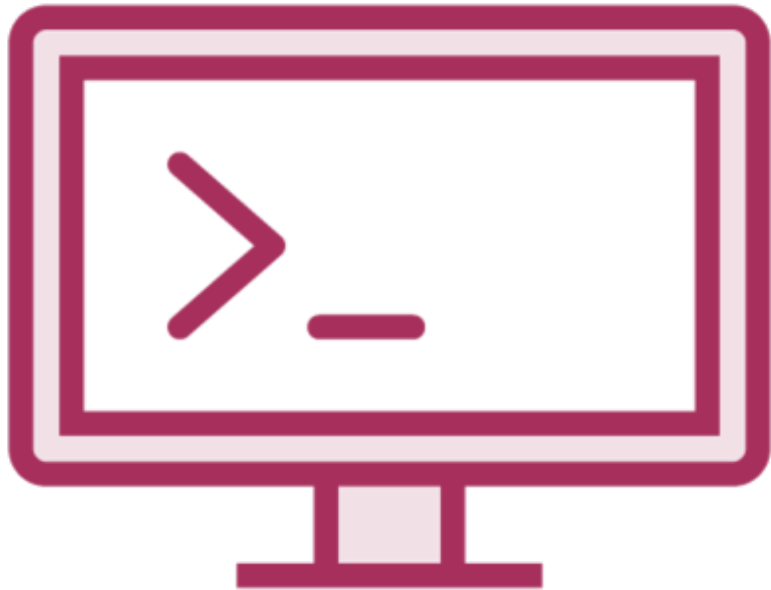
Introducing concepts

- Shell, command line, terminal
- Zsh, bash

Start a command line session

Run a command





What is a shell?

- Run programs by typing commands
- Text based UI: *command line*
- Powertool for almost every task

Bash and zsh are popular shells

UNIX

- Huge ecosystem of commandline tools

Great for automation



Who Needs the Shell?

File Management

**Software
Development**

Remote Access

**System
Administration**

**Data Filtering,
Transform, etc.**

Scripting





The shell comes in many flavours

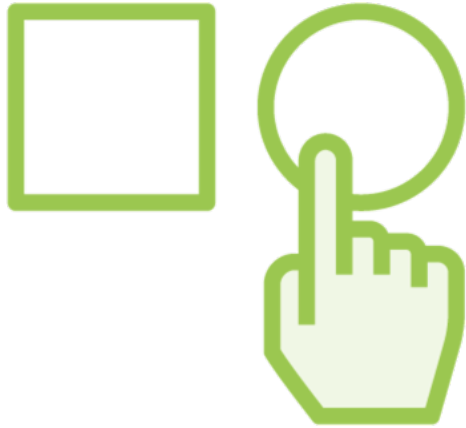
UNIX, Linux, Mac OS

- sh, ksh, csh, tcsh, and many more
- Bash is most popular
- Zsh is default on Mac since Catalina

Windows

- Cmd, Powershell
- Linux subsystem runs bash/zsh

Bash vs Z Shell



Bash is most popular

Z Shell

- Similar to bash
- More configurable, more features
- <https://ohmyz.sh/>

You can configure your default shell

The command line is a
powertool.

There is no undelete and no
undo.



Preventing Problems



Read your input twice before executing

System resources are usually protected

Set up a safe environment

- Virtual Machine, or
- Unprivileged user account



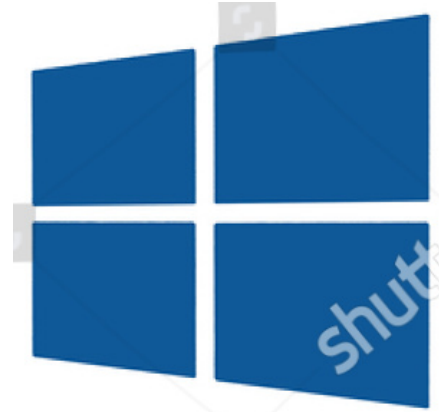
Starting the Shell



Linux
Default: Bash



Mac OS
Default: Zsh
(since Catalina)



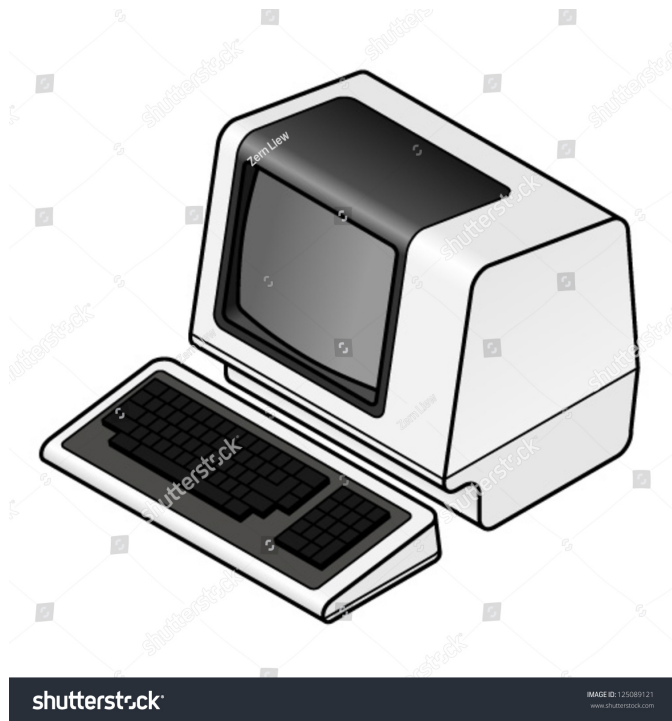
Windows
Use Linux subsystem
to run bash/zsh

General

We don't start the shell directly but run a *terminal emulator* instead.



The Shell and the Terminal



Shell is mostly limited to text

- Enter and edit text
- Return text output

We run the shell in a terminal emulator

- Translate keystrokes for the shell
- Supports fonts, colors

The Prompt

Shell is waiting for input
Very configurable

```
reindert@codesensei-mac:~ |⇒
```



First Session Review

```
cd                # move to home directory
cd folder-name   # move into folder-name
cd ..            # move one level up (don't forget the space!)

pwd.              # Show path to current working directory

ls                # Show path to current working directory
```



Up Next:

Navigating the File System

