

Getting Started with Shell Scripting for Bash and the Z Shell

CREATING AND RUNNING A SHELL SCRIPT



Reindert-Jan Ekker

@rjekker www.codesensei.nl



Overview



What is a shell script

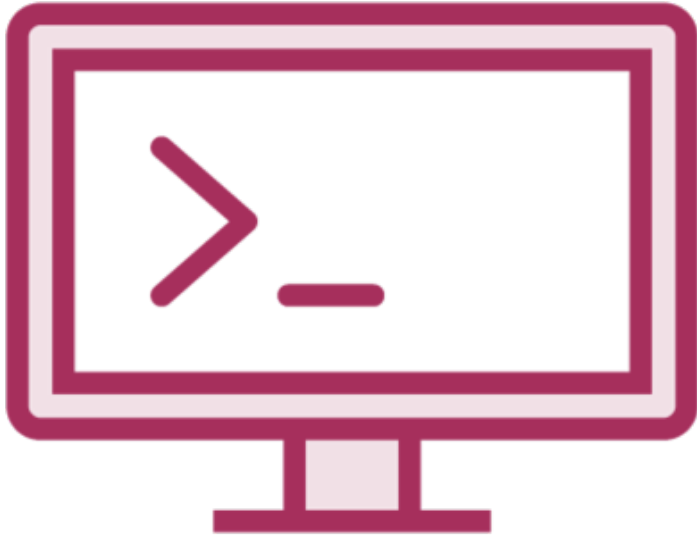
- And why use them

Creating a script

- Setting permissions
- Running



Shell Scripts



File containing shell commands

- Automate task

Complete programming language

- If statements
- Loops
- Variables
- Functions, etc.



Strengths and Weaknesses



File system operations
Managing processes
Working with text
(Remote) system administration



Complex calculations
Complex (binary) data
Graphical user interface

Which Shell?

bash

Most popular

Runs almost
everywhere

Probably a good
choice

zsh

Has some nice
extras

Use for personal
projects

sh

Most portable

Less functionality

Harder to code for



Creating a Script



Text file containing code

- Run by an interpreter
- Our interpreter will be bash or zsh
- Run each command in the file in order



Making Your Script Executable

Executable for owner only

```
chmod u+x filename
```

Executable for everyone

```
chmod a+x filename
```

Remove executable permission

```
chmod a-x filename
```

For more about permissions see <http://goo.gl/3TcY73>



```
#!/bin/bash
```

```
# Unsure where shell is located?
```

```
#!/usr/bin/env zsh
```

```
#!/usr/bin/env bash
```

Shebang

First line of file, starts with `#!`

Specifies which interpreter should run the code, with optional arguments



Calling Your Script

If the script is not on your PATH: include the directory

`./myscript`

`/home/reindert/myscript`

If it is on your PATH: call it like a regular command

`myscript`



Up Next:
Using Shell Variables

