

Bash Shell Scripting 101

Workshop

You will learn

(WIIFM)

- bash scripting basics
- Run bash scripts
- Practice vi (a lot)!!!

Requirements

- Basic knowledge of Linux
- Basic knowledge of VI

System Requirements

- Linux environment

Agenda

- What Bash Is?
- Display text
- Environment Variables
- Variables
- Command substitution
- Math
- Comparison
- Logical Operations



BASH

THE BOURNE-AGAIN SHELL

Bash - Bourne Again Shell

A command interpreter

Allows execution of commands

Environment Variables

Used to pass information into processes that are spawned from the shell

```
vagrant@ubuntu-xenial:~$ env  
vagrant@ubuntu-xenial:~$ echo $LOGNAME
```

Popular environment variables:

PATH

PWD

LOGNAME

HOME

HOSTNAME

Command: Date

Get system date/time

```
vagrant@ubuntu-xenial:~$ date  
vagrant@ubuntu-xenial:~$ date +"%d-%m-%Y"  
vagrant@ubuntu-xenial:~$ date +"%H-%M-%S"
```


Command: printf

Formats and prints data

```
vagrant@ubuntu-xenial:~$ printf "Name:\t%s\nID:\t%04d\n" "Yaara" "24"  
vagrant@ubuntu-xenial:~$ printf "Name:\t%s\nID:\t%04d\n" "Arie" "125"  
vagrant@ubuntu-xenial:~$
```

Best Practices

- Naming convention: Use extension 'sh'
- Shebang line

Exercise

- Define two variables: today and time
- Print the current user logged in and the current date/time in the following format:

```
vagrant@ubuntu-xenial:~$ ./exercise.sh  
Current User:    vagrant  
Date:           13-06-2018 @ 20:16:55
```