Bash Tips and Tricks to use on CircleCI, and in life

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Agenda

- Why Bash?
- Talking to the internet with Bash
- Getting values out of functions
- Handling errors
- Bonus tips (time permitting)

Why Bash?

- It's in your terminal
- It's on your servers
- It speaks Unix
- It's good glue

In-Depth Example

- Talking to the internet with Bash
- Getting values out of functions
- Handling errors

Bonus Tip #1: Quote Everything!

```
kevin@mbp ~/test $ a="F00 BAR" touch $a
kevin@mbp ~/test $ ls
total 0
-rw-r--r-- 1 kevin staff
                             0B Mar 24 11:25 BAR
-rw-r--r-- 1 kevin staff
                             0B Mar 24 11:25 F00
kevin@mbp ~/test $ a="F00 BAR" touch "$a"
kevin@mbp ~/test $ ls
total 0
-rw-r--r-- 1 kevin staff
                             0B Mar 24 11:25 BAR
-rw-r--r-- 1 kevin staff
                             0B Mar 24 11:25 F00
                             0B Mar 24 11:25 F00 BAR
-rw-r--r-- 1 kevin staff
```

Bonus Tip #2: Even Quote "\$@"

```
1 #!/bin/bash
2
3 for arg in $@; do
4     echo "$arg"
5 done
```

```
1 #!/bin/bash
2
3 for arg in "$@"; do
4    echo "$arg"
5 done
```

```
kevin@mbp ~ $ ./test.sh foo "bar baz" qux
foo
bar
baz
qux
```

```
kevin@mbp ~ $ ./test.sh foo "bar baz" qux
foo
bar baz
qux
_
```

Bonus Tip #3: Use Double Brackets

```
kevin@mbp ~ $ [ $PATH && -z $FOOBAR ] && echo "true"
-bash: [: missing `]'
kevin@mbp ~ 2 $ [[ $PATH && -z $FOOBAR ]] && echo "true"
true
kevin@mbp ~ $
```

**Bonus Bonus tip: Use `man test` to quickly refer to all the test options

Bonus Tip #4: Use Bash on CircleCI!!

```
1 test:
2  post:
3   - echo "This can be any bash command"
4   - ./my-script.sh # You can run scripts too!
5   - python -m SimpleHTTPServer:
        background: true # Don't use "&" to background things
7   - "my funky: command" # Quote if required for YAML
```

References

GreyCat's Wiki (the source of all my power):

http://mywiki.wooledge.org/BashGuide and

http://mywiki.wooledge.org/BashFAQ

JQ (sed, awk, and grep for JSON):

https://stedolan.github.io/jq/

This talk:

https://github.com/bellkev/bash-talk

Questions?