## Why you should be using Drush make (and why you're probably not)

J-P Stacey, 23/11/13, DCNW

#### What I'll talk about



### The good bits

How to use Drush make more

The bad bits (a case study)

How to fix the bad bits

### One extreme of my audience...



### Think you know more than me?

You probably do

But there'll be a case study, architecting, scripting & a duck

#### ... And the other



#### Quick show of hands:

# Never used Drush make? Don't know what it is? Don't know what Drush is?



### What is Drush (make)?

#### Drush is command-line Drupal

```
drupal7-jpstacey
/var/www/drupal7-jpstacey
  drupal7-jpstacey drush status
Drupal version
                                    7.22
Site URI
                                    http://default
Database driver
                                    mysql
Database username
                                    d6
                                    jps7localdb
Database name
Database
                                    Connected
                                    Successful
Drupal bootstrap
Drupal user
                                    Anonymous
Default theme
                                    barthes
Administration theme
                                    seven
PHP executable
                                    /usr/bin/php
PHP configuration
                                    /etc/php5/cli/php.ini
PHP 0S
                                 : Linux
Drush version
                                    6.0-rc4
Drush configuration
                                    /home/jp/.drush/drushrc.php
Drush alias files
                                     /home/jp/.drush/aliases.drushrc.php
                                    /var/www/drupal7-jpstacey
Drupal root
Site path
                                    sites/default
File directory path
                                    sites/files/jps
```

/tmp

Temporary file directory path

#### **Drush make is...**



# A Drush command that builds a codebase from a text 'makefile'

### An example makefile (top)



```
; Required: Drush make API version
api = 2
; Required: Drupal core
core = 7.x
; Optional: Drupal / Pressflow / Backdrop? version
projects[drupal][version] = "7.22"
; Modules
projects[views bulk operations][version] = "3.1"
projects[better formats][version] = "1.0-betal"
projects[ctools][version] = "1.3"
projects[cck][version] = "2.x-dev"
projects[date][version] = "2.6"
projects[ds][version] = "2.2"
projects[email][version] = "1.2"
projects[entity][version] = "1.0"
projects[field group][version] = "1.1"
projects[media][version] = "1.3"
projects[filefield sources][version] = "1.7"
projects[filter perms][version] = "1.0"
projects[geshifilter][version] = "1.2"
projects[google analytics][version] = "1.3"
projects[libraries][version] = "2.1"
```

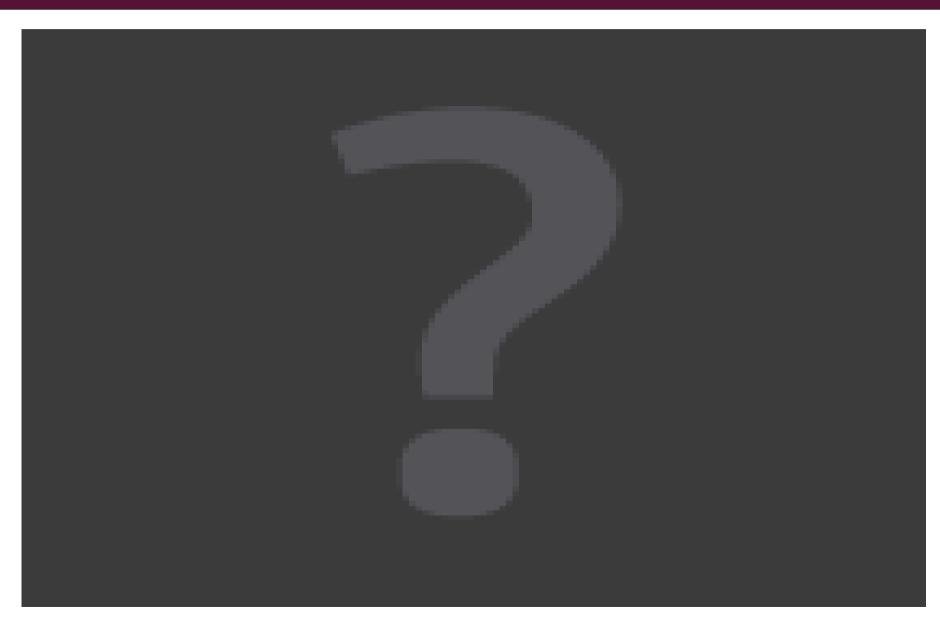
### An example makefile (bottom)



```
: Libraries
libraries[geshi][download][type] = "get"
libraries[geshi][download][url] = "http://sourceforge.net/projects/geshi/files/g
eshi/GeSHi%201.0.8.4/GeSHi-1.0.8.4.zip/download"
libraries[geshi][directory name] = "geshi"
libraries[geshi][type] = "library"
libraries[tinymce][download][type] = "get"
libraries[tinymce][download][url] = "http://sourceforge.net/projects/tinymce/fil
es/TinyMCE/3.2.7/tinymce 3 2 7.zip/download"
libraries[tinymce][directory name] = "tinymce"
libraries[tinymce][type] = "library"
libraries[jquery.ui][download][type] = "get"
libraries[jquery.ui][download][url] = "https://jquery-ui.googlecode.com/files/jq
uery.ui-1.6.zip"
libraries[jquery.ui][directory name] = "jquery.ui"
libraries[jquery.ui][type] = "library"
libraries[phpmailer][download][type] = "git"
libraries[phpmailer][download][url] = "https://github.com/PHPMailer/PHPMailer"
libraries[phpmailer][directory name] = "phpmailer"
libraries[phpmailer][type] = "library"
```

### **Drush make in action**







### Why should you use Drush make?

#### **Advantages of Drush make 1/8**



### 1. It's a d.o community supported project

### **Advantages of Drush make 2/8**



### 2. Single lines of text, not megabytes of PHP

#### **Advantages of Drush make 3/8**



### 3. Avoid forking third-party code

### **Advantages of Drush make 4/8**



### 4. Track, apply, roll back, submit patches

#### **Advantages of Drush make 5/8**



### 5. Supports non-d.o projects: git, svn, tgz etc.

#### **Advantages of Drush make 6/8**



### 6. Version and include third-party libraries

#### **Advantages of Drush make 7/8**



### 7. Drush (make) works (almost) everywhere

#### **Advantages of Drush make 8/8**



### 8. Enforce best practice across a team

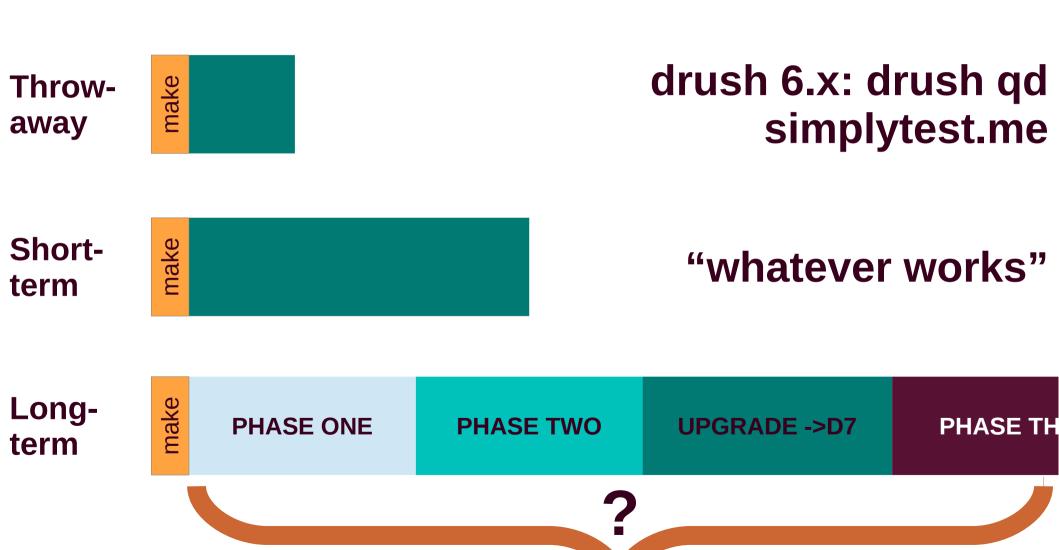


### Why isn't everyone using it more?



### The tragedy of Drush make

### Make-powered codebase timelines





### Drush make as tool for long term?



### Case study: agency with many clients

- How we used to build codebases
- Drupal core
- d.o projects
- 3rd party libraries
- Custom projects
- Hacks/patches
- Local settings
- Uploaded files

- → Repository
- → Same repository
- → Same repository
- → Same repository
- → Same repository
- → Edits on production?
- → Somewhere in sites/default, maybe ignored by VCS?

#### What does that lead to?



**Big repositories** That get bigger over time Hacked/forked modules Licensing issues No motivation to share code (on d.o or between clients)

#### How to build smarter?



Workflow management

Putting files on disk

**Version** control

Jenkins Drush Deploy Fabric

Drush make?

git, hg, svn



### Disadvantages that we discovered

### Disadvantages of Drush make 1/3

### 1. Drush make has a scorched-earth policy





# Drupal core Modules and themes 3rd party libraries ... and that's it

#### You need a solid architecture



#### **Drupal core**

#### sites/

all/

d.o projects libraries

managed by Drush make

default/

custom code for this site

managed as one small repo

files/

uploaded resources

managed by Drupal

(and everything else in core, managed by Drush make)

### Disadvantages of Drush make 2/3

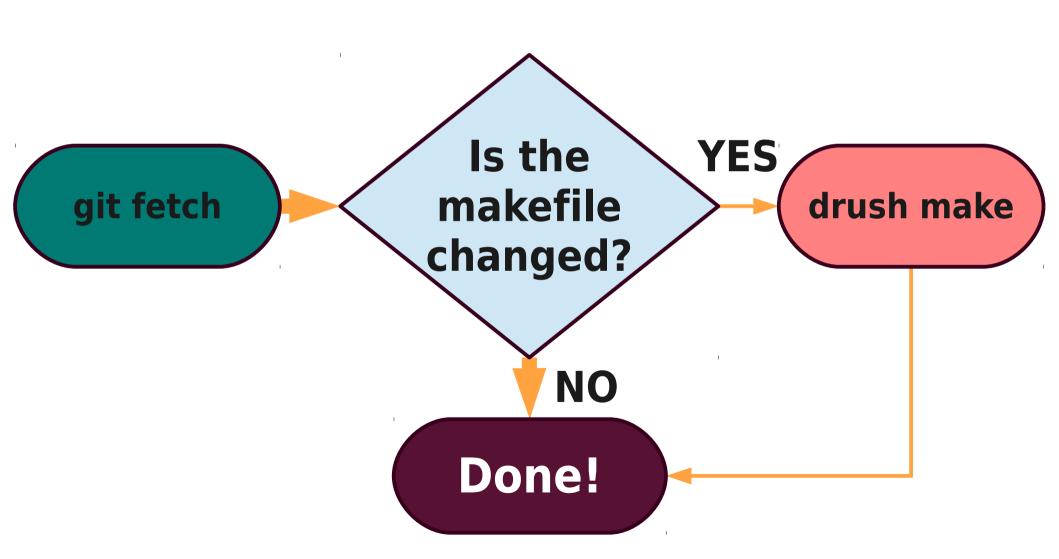
### 2. Downloading everything, every time, takes time

### Take advantage of cacheing





### Most changes don't change much



### Disadvantages of Drush make 3/3

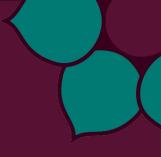
### 3. Drush make does only a few (big) tasks

#### Remember the scorched earth?



**Drupal core** Modules, themes & libraries sites/default one small repo Local custom settings **Uploaded files Directory permissions** Swap new build into place

### **Embed building in scripting?**



Wrote some scripts (Bash)

**Built a framework (Python)** 

Other people (rpm, deb, C#)

Finally...



### Just build it in Drush already!





#### **Embeds Drush make**

Performs all finishing tasks

Configured by site aliases

Unit test coverage



### Drush make + instance works!



### Is it really worth using Drush make?

### Yes! But you need to remember:



Best embedded in workflows

Infrastructure & process help

#### After all, we've common problems...



"I'm trying to optimise my drupal development workflow what are the best ways to keep track of all site dependencies e.g. contrib, modified/patched modules, custom and libraries?"

#drupal-uk, 1 week ago

#### ... Make solved them for Torchbox...



CLIC Sargent The King's
Fund Love Food, Hate Waste
Migration Observatory The
Nuffield Trust Oxford Today
Quality Watch Torchbox
UK-GBC WRAP UK

... +2 more D7 sites in 2013

#### ... And Make solves them for d.o...









# All distributions on drupal.org are built with Drush make









### ... So, just maybe, you should:





#### Thank you!



#### Questions/demos?

I've just started freelancing! Hire me! twitter:jpstacey | work@jpstacey.info | jpstacey.info