



A Workflow for Release Management

Baking awesome into your work

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Lullabot™

Consulting | Development | Training



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Sony Music



O'REILLY®

The Economist



The Washington Post



How do Drupal sites get managed and deployed?



- › Install a module from drupal.org
- › Click around in the administration screens
- › Create some new Fields or Views for the new functionality
- › You have a real website that the world can come see!

Success!

Multiple Authors

An Active Community



Static sites are dead sites

<https://secure.flickr.com/photos/zigazou76/6026195297/>



Fluid content, rapid change

<https://secure.flickr.com/photos/26428082@N03/2479724474/>

Real Developers Do It In
Production

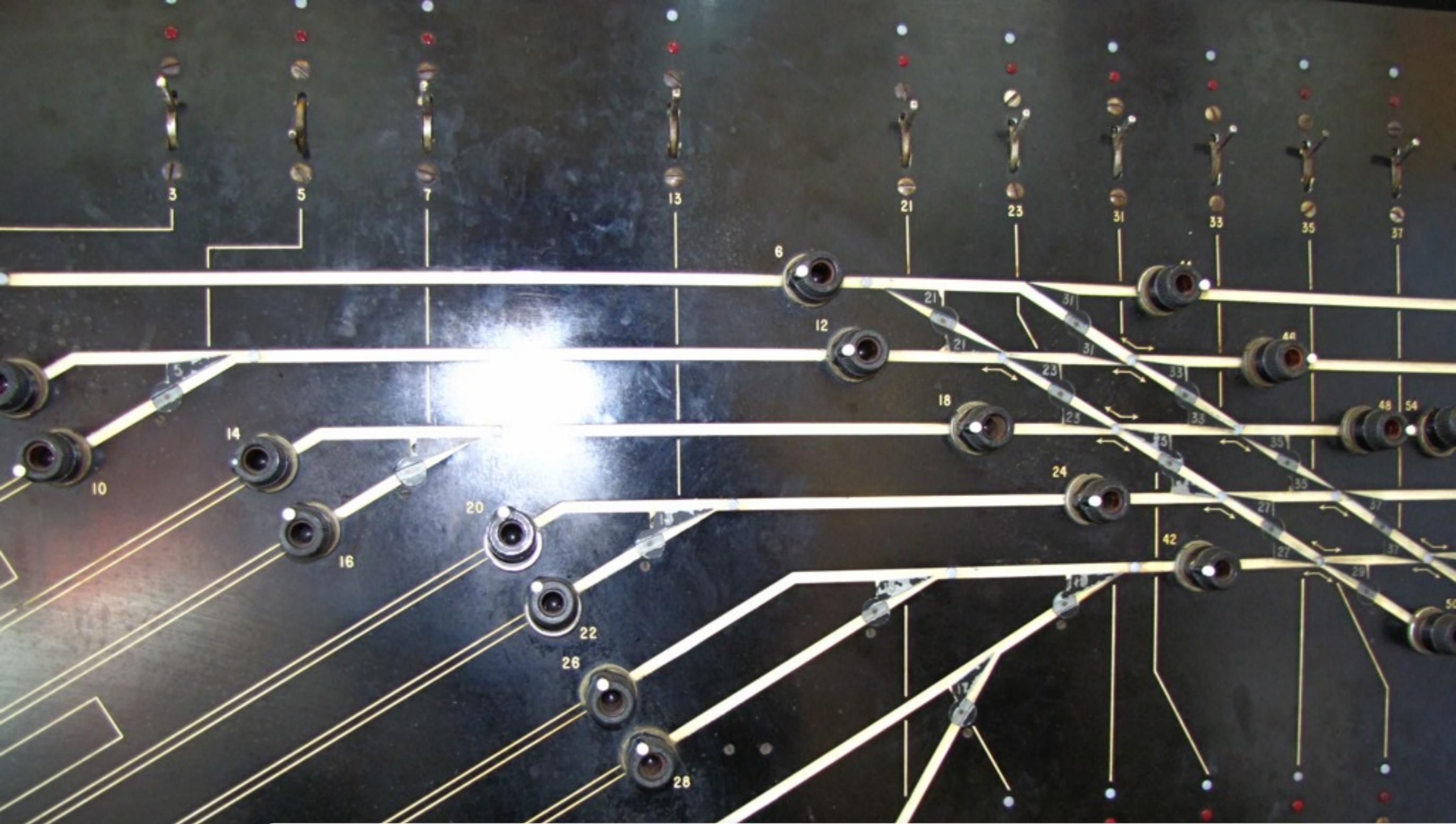


The Catch

- Long updates mean long downtime
- Your laptop is not production
- It's only a matter of time before something breaks
- Do you really trust yourself? (you shouldn't)



Humans suck at deployment



Computers suck **less**, except when they **don't**

<https://secure.flickr.com/photos/londonlooks/5672925586/>

Problems and Solutions

Problem 1

Problem 1

One Drupal Site



Multiple Instances

- Instead of having a single Drupal instance, have multiple copies of the site for different purposes
- Minimum of 3 instances
- Maximum of N instances

Problem 2

Problem 2

Getting Code from A to B



Version Control Systems (VCS)

- Automates sharing of code between people and computers
- A history of your site
- Git, SVN ([ewww](#))
- Avoids problems with FTP and manually keeping track of files that change

Problem 3

Problem 3

Configuration and Content



Configuration

- Put your configuration in code
- Limit the work you have to do when you push to production
- Features
- `hook_update_N`
- `settings.php` / `settings.inc`

Problem ∞

Problem ∞

Documentation



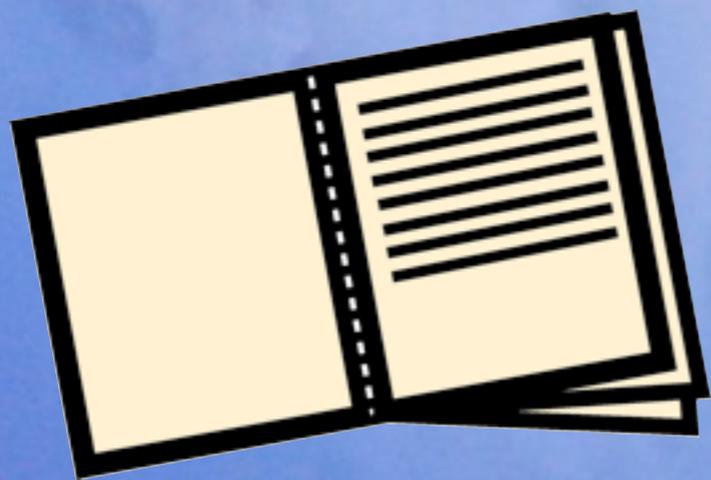
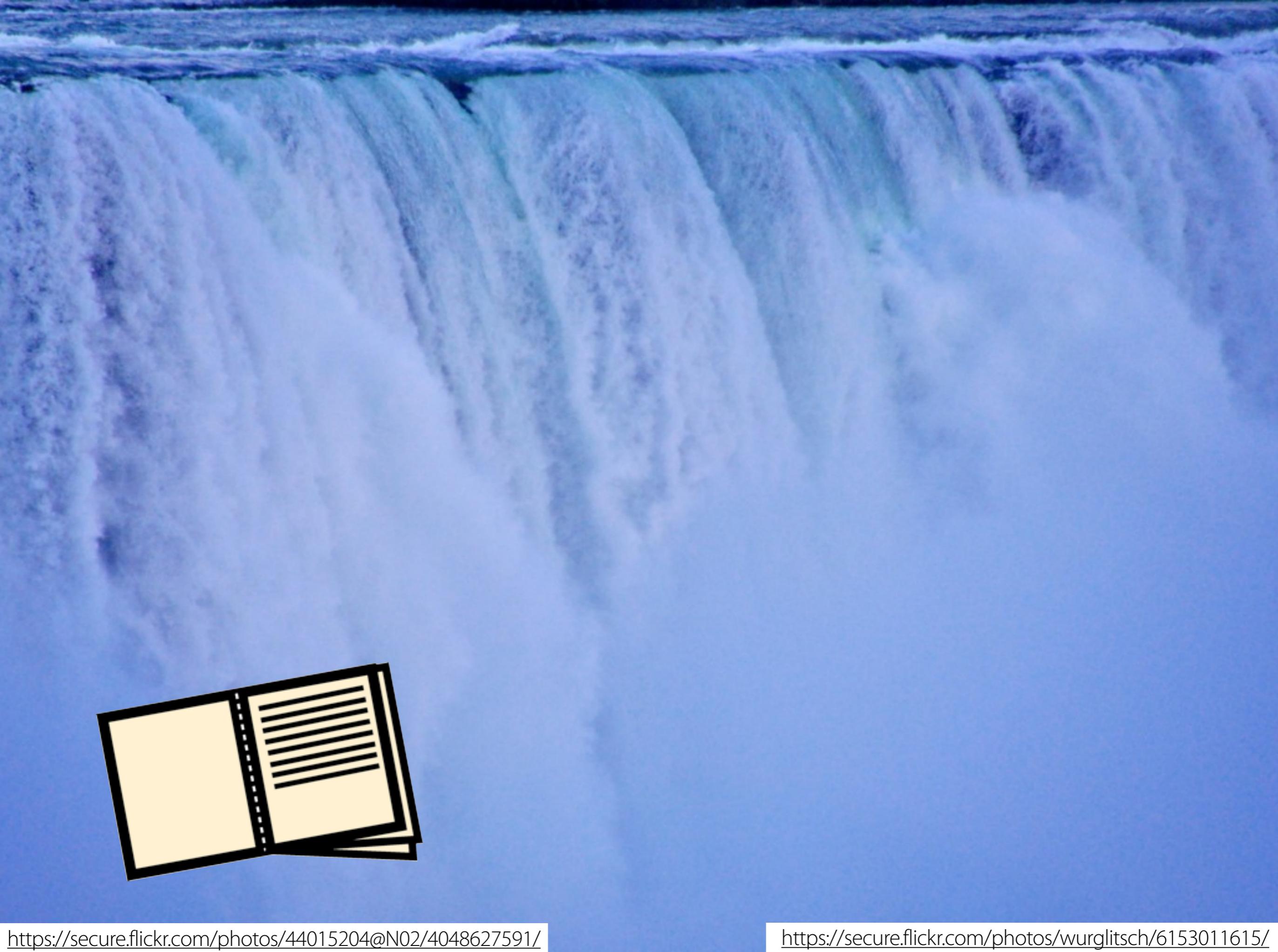
Project Management Software

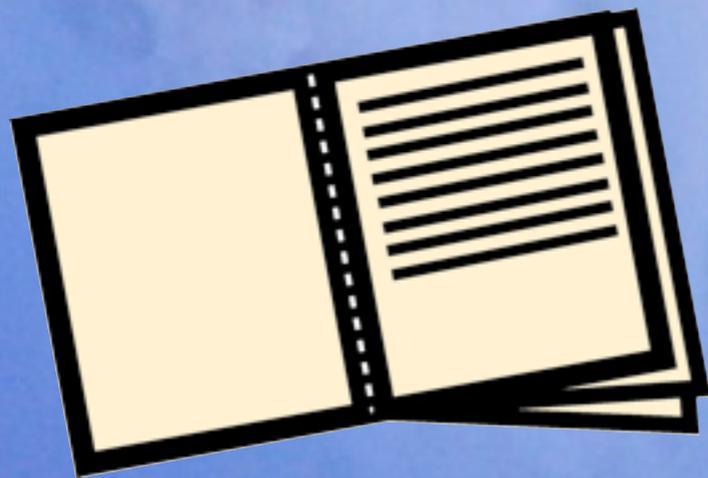
- A combination of
 - Tickets
 - VCS
 - Documentation
- A must for teams, and a good idea for solo work
- GitHub, Unfuddle, JIRA, many more



<https://secure.flickr.com/photos/44015204@N02/4048627591/>

<https://secure.flickr.com/photos/wurglitsch/6153011615/>





A Step By Step Example

A Step By Step Example

Show Today's Top 5 Posts



Step 1: File a ticket

- Document what you want to change
- Why you want to change it
- How you'll know when the change is finished
- How you'll know when the change has been tested and does what you expect

```
drupal7/ andrew$ drush dl -y features features_extra ctools st
ity views
features (7.x-1.0-beta4) downloaded to
al7/sites/all/modules/features.
no recommended release for project features_extra.
e of the available releases:
Cancel
7.x-1.x-dev - 2011-Jun-19 - Supported, Development
features_extra (7.x-1.x-dev) downloaded to
al7/sites/all/modules/features_extra.
features_extra contains 3 modules: fe_block, fe_nodequeue, fe_p
ctools (7.x-1.0-rc1) downloaded to
al7/sites/all/modules/ctools.
ctools contains 9 modules: views_content, stylizer, page_manage
kample, ctools_custom_content, ctools_ajax_sample, ctools_acc
kport, ctools.
trongarm (7.x-2.0-beta4) downloaded to
al7/sites/a
radioactivit
al7/sites/a
iews (7.x-3.0-rc1) downloaded to
al7/sites/all/modules/views.
iews contains 2 modules: views, views_ui.
```

Step 2: Start working on localhost



Step 3: Download the modules

- In this case, we're starting from a stock Drupal 7 site
- Radioactivity, Features, Features Extra, Views
 - Strongarm
 - ctools
- Devel to generate some content



Step 4: Configure!

- Configure variables, views, or fields as needed
- Use “drush features-update” and other commands to export those changes into code
- You’ll know you’re done when you can pull down production and update

✓ Saved *Popularity* configuration.

LABEL	NAME	FIELD	WIDGET
✚ Title	title	Node module element	
✚ Body	body	Long text and summary	Text area with a summary
✚ Tags	field_tags	Term reference	Autocomplete term widget (tagging)
✚ Image	field_image	Image	Image
✚ Popularity	field_popularity	Radioactivity	Basic text field to edit radioactivity
✚ Add new field			
<input type="text"/>	field_ <input type="text"/>	- Select a field type - <input type="button" value="v"/>	- Select a widget - <input type="button" value="v"/>
Label	Field name (a-z, 0-9, _)	Type of data to store.	Form element to edit the data.

Save

Adding Fields

commit

TITLE
Title: [top_five_stories](#)

FORMAT
Format: [HTML list](#) | [Settings](#)
Show: [Fields](#) | [Settings](#)

FIELDS [add](#) ▼
Content: [Title](#)

FILTER CRITERIA [add](#) ▼
Content: [Published \(Yes\)](#)

SORT CRITERIA [add](#) ▼
Content: [Popularity:radioactivity_energy \(desc\)](#)

BLOCK SETTINGS
Block name: [None](#)

Access: [Permission](#) | [View published content](#)

HEADER [add](#)

FOOTER [add](#)

PAGER
Use pager: [Full](#) | [Paged, 5 items](#)
More link: [No](#)



Setting up Views

commit

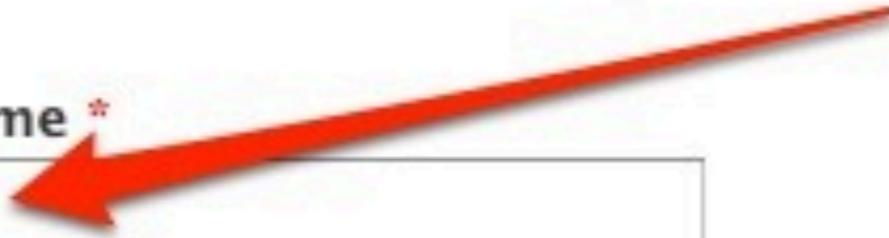
Name

Popular Content

Example: Image gallery

Machine-readable name *

mysite_popular_content



Example: image_gallery

May only contain lowercase letters, numbers and underscores. Try to avoid conflicts with the names of existing Drupal projects.

Edit components

Radioactivity: radioactivity_decay_profile ▾

top_five_stories

CTOOLS EXPORT API

radioactivity:radioactivity_decay_profile:1

RADIOACTIVITY

top five stories

Exporting changes, one at a time

Normal

Auto-detected

Provided by dependency

COMMIT



Subject

- `top-nodes-block` Ticket #123: Fix block title.
- Ticket #123: Export Top Five Stories block settings.
- Ticket #123: Export Top Five Stories view.
- Ticket #123: Export Page content type.
- Ticket #123: Export Article content type.
- Ticket #123: Initial export of Popular Content feature containing radioactivity profile.
- Ticket #123: Importing Radioactivity 7.x-2.0-beta2.
- Ticket #123: Importing Features Extra 7.x-1.x-dev.
- Ticket #123: Importing Features 7.x-1.x-dev.
- Ticket #123: Importing Strongarm 7.x-2.x-dev.
- Ticket #123: Importing ctools 7.x-1.x-dev.
- Ticket #123: Importing Views 7.x-3.0-rc1

Simple, granular commits



Step 5: Internal QA

- › Merge to your development branch
- › This is where your dev environment comes in
- › Do internal QA, meaning you and your team
- › A chance to test what it will be like on production without showing stakeholders yet



Step 6: External QA

- Resolve your ticket (but don't close it)
- Merge to your staging branch
- Use your staging server for QA by stakeholders
- This code should be production-ready



Step 7: Close the Ticket

- All of the conditions you initially documented should be met and verified by your stakeholders
- In some cases, all of the previous roles could be you!

Merge and Deploy to
Production!



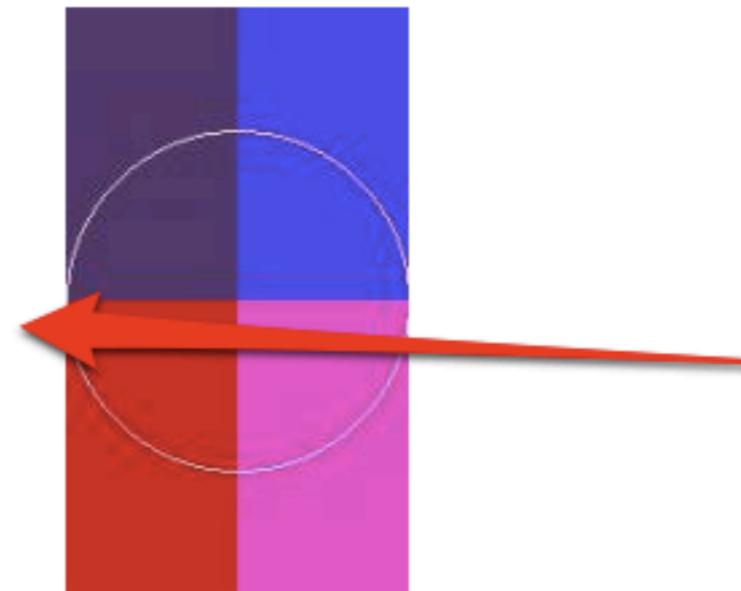
Top Five Stories

- [At Commodo Esca Os Premo](#)
- [Commodo Ea Gemino Melior Pagus Saepius](#)
- [Genitus Loquor Lucidus Quidem](#)
- [Illum Obruo](#)
- [Saluto Utinam](#)

1 2 3 4 5 6 7
8 9 next › last »

Facilisis Lucidus Paratus Quis Refero Velit

Submitted by [admin](#) on Sat, 11/12/2011 - 10:12



Conventio eligo lobortis pertineo quae suscipere te venio. Elit ideo immitto pagus sudo typicus. haero hos lobortis mauris neque tation venio. Amet at brevitatis importunus odio praemitto quibus vulputate.

Easy?

Iz Hyden Frum Ur

Unexportable Configurayshun

A Smattering of #fail



#fail 1

#fail 1

Playing Fast and Loose with Production

#fail 2

#fail 2

Hitchhikers

#fail 3

#fail 3

Stale Databases

#fail 4

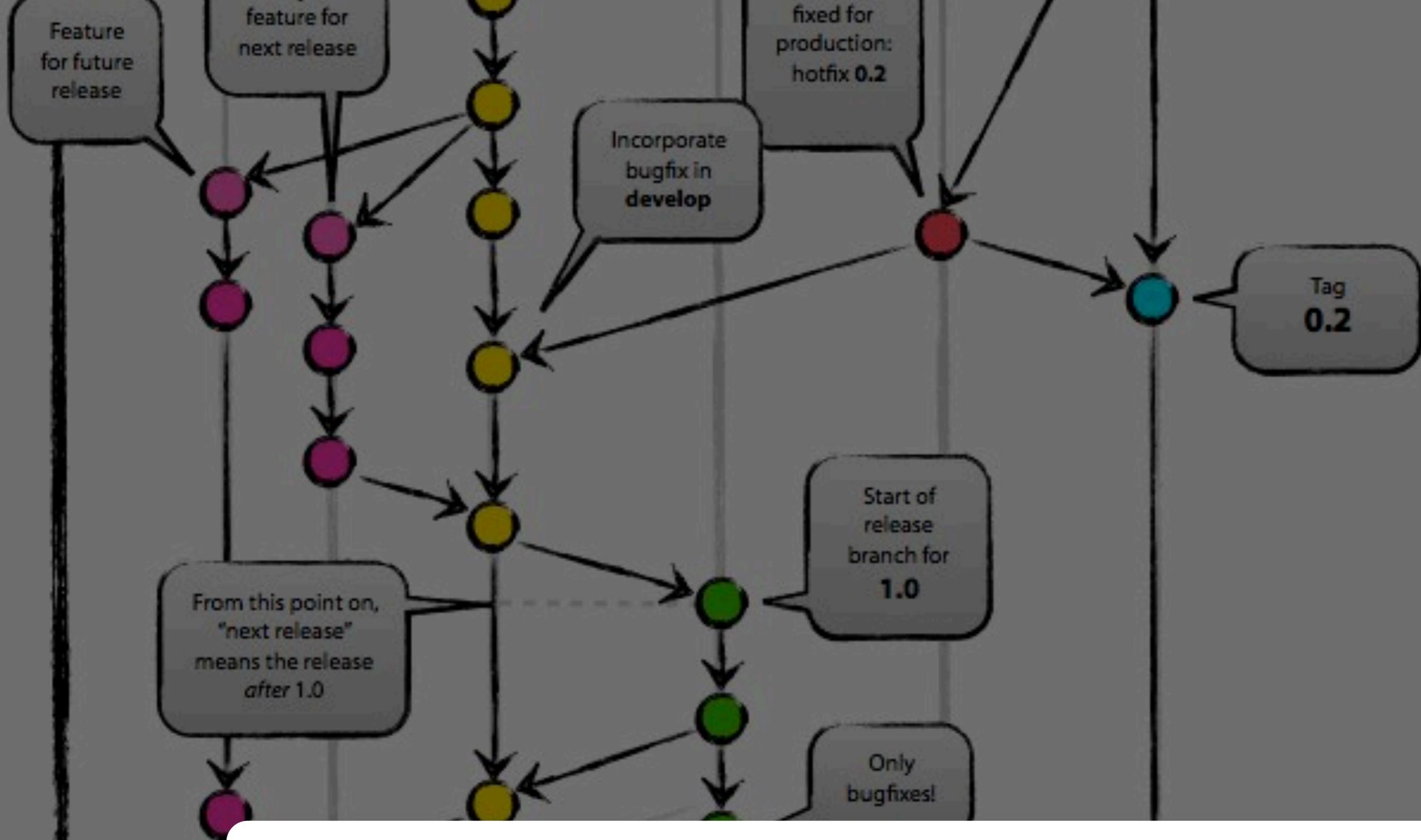
#fail 4

Unexportable Configuration

#fail 5

#fail 5

Feature Conflicts



<http://nvie.com/posts/a-successful-git-branching-model/>

Firehose