Content Staging and Deployments in Drupal

Introducing the new Drupal 7 release of Deploy module
About Us

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Agenda

• Overview of the problem
• The ideal workflow
• Drupal-specific problems
• How this relates to the configuration mgmt problem
• How it works for Drupal 6
• How it works for Drupal 7
• The new API for Drupal 7
• Demo
• The future
The Content Deployment Problem

Move content from the environment in which it is created/edited (and sometimes also QA'd) to the production environment...
The Content Deployment Problem

Move content from the environment in which it is created/edited (and sometimes also QA'd) to the production environment...

... because these should not be the same environment.
New content could show up in all kinds of places
Ideal Workflow

Content producers create and edit content in a **content staging** environment.

Content gets pushed to a **QA** environment. Anything that fails QA gets fixed in the Content Staging environment and pushed again to QA.

Once everything passes QA it gets pushed to **production**.
Ideal Workflow

Content Staging → QA → Production
Ideal Workflow

Content Staging ➔ QA ➔ Production

Feedback loop: Production ➔ QA ➔ Content Staging
Content Deployment in Drupal

Problems to overcome:

• actual deployment mechanism
• authentication
• identifying content across environments
• need a standard CRUD API
The meta problem

What constitutes *content* in Drupal?

Where is the line drawn between *content* and *configuration*? (Is there one?)
D8 Config. Management Initiative

Line drawn in sand:

* If it is an Entity it is content, if not it is configuration *

(- heyrocker)
The Plan

Proper configuration management

A robust entity API and UUIDs in core

Drupal 8 Content Staging Initiative?
Back in D7 Land...

There is no line between content and configuration.

Examples:
The contents of a nodequeue
The contents of a block

Possible definitions of what is content:
"If it's an entity, it's content"
"If it's something my content producers make changes to on the site and want to deploy via the UI, it's content"
Exportables in D7

2 options for providing exportable configuration:

• CTools exportables
• Entity API module
Flexibility...
The Best of All Possible Worlds?

"If we can flag what is content (meaning from a workflow perspective controlled on the live site) and what is configuration (meaning for the ordinary workflow that the code will expect to override the on-site configuration[...]) on a per-bundle basis i think we get the best of all possible worlds :-)"

- Benjamin Melançon

http://drupal.org/node/938368#comment-4286326
How it Works for Drupal 6

• From your source site, set up a target site to deploy to
• Create a deployment plan
• Add items (nodes, taxonomy terms etc.) to your plan
• Push the plan to the target site
• Make an offering to the Deployment Gods
Incremental Deploy

Ability to deploy "whatever has changed since the last deployment"

Ability to deploy nodequeue contents, nodewords
How it Works for Drupal 7

- Plan management
- Multiple different deployment workflows to multiple endpoints
- Focuses on Drupal content only
- Leaves configuration to other solutions like Features
- Deployment dashboard
The New API for Drupal 7

• Rebuilt from scratch on UUID, CTools and Entity API

• Plans can be triggered in different ways
  ◦ Manually
  ◦ Rules
  ◦ Drush
  ◦ ...

• Different types of plugins
  ◦ Aggregators
  ◦ Processors
  ◦ Authenticator
  ◦ Services
Aggregators

- Responsible for aggregating content for deployment
- Passes on an iterator that figures out dependencies, to the processor
- Example: A view of all latest articles
- Example: Hand picked content with the Plan Manager
Processors

• Responsible for processing and batching up the deployment

• Can happen directly or queued for later processing

• Example: Batch API (the shiny progress bar)

• Example: Queue API for big heavy deployments
Authenticator

- Responsible for authenticating the deployment
- Example: OAuth
- Example: Basic HTTP
Services

• Responsible for doing the actual deployment

• Doesn't need to be *push*

• Example: REST with JSON or XML (push)

• Example: Atom feed with PubSub support (pull or push-ish)

• Example: File based with Git (push or pull)
Demo!
Alternative Use Cases

- Network of sub sites
- Multi-master database setup
The Future

• Come discuss with us in our BoF in room 334 at 2:45 PM

• Get involved in the "Configuration Management Initiative"
  http://groups.drupal.org/drupal-initiatives

• Get UUID in Drupal 8 core (http://drupal.org/node/1252486)
Thanks!

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Questions?
What did you think?

Locate this session on the DrupalCon London website:  
http://london2011.drupal.org/conference/schedule

Click the “Take the survey” link

THANK YOU!