

# Content Staging and Deployments in Drupal

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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

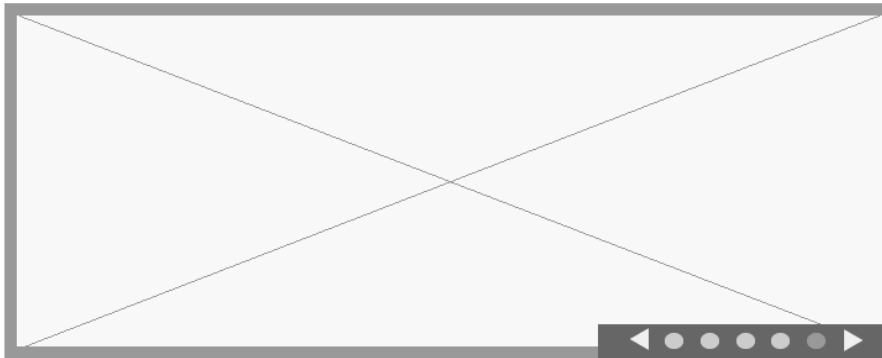
# The Content Deployment Problem

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.



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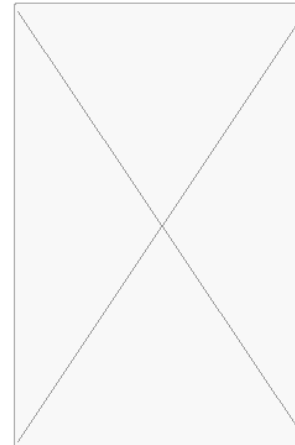
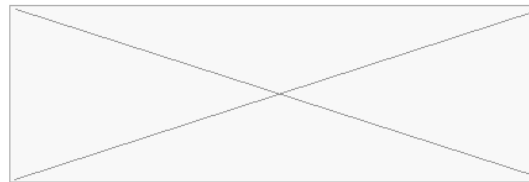
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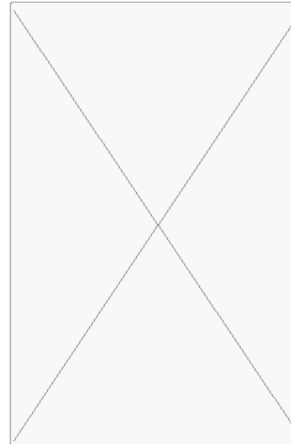
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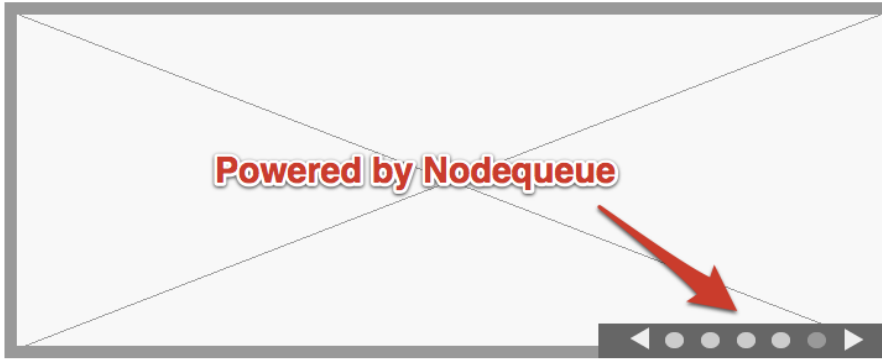


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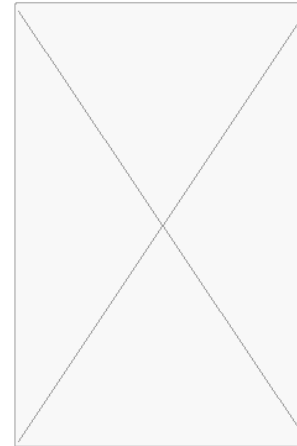
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# Ideal Workflow

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

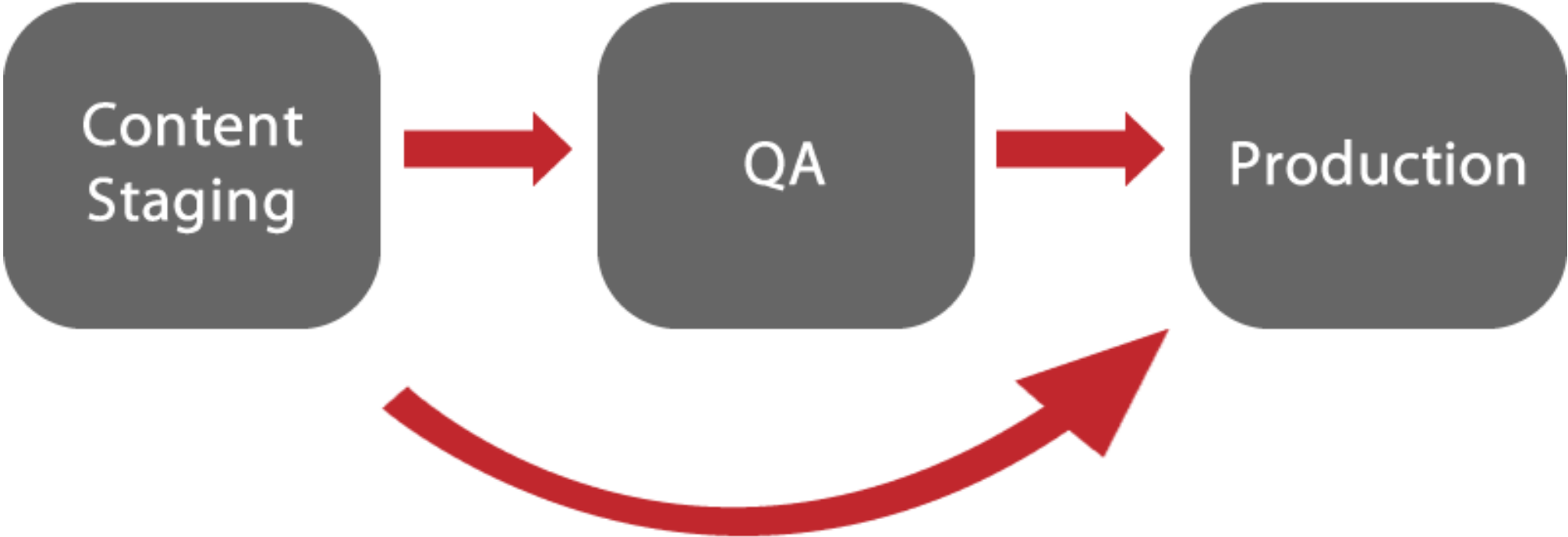
Content gets pushed to a **QA** environment. Anything that fails QA gets fixed in the Content Staging environment and pushed again to QA.

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

# Ideal Workflow



# Ideal Workflow



# 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"

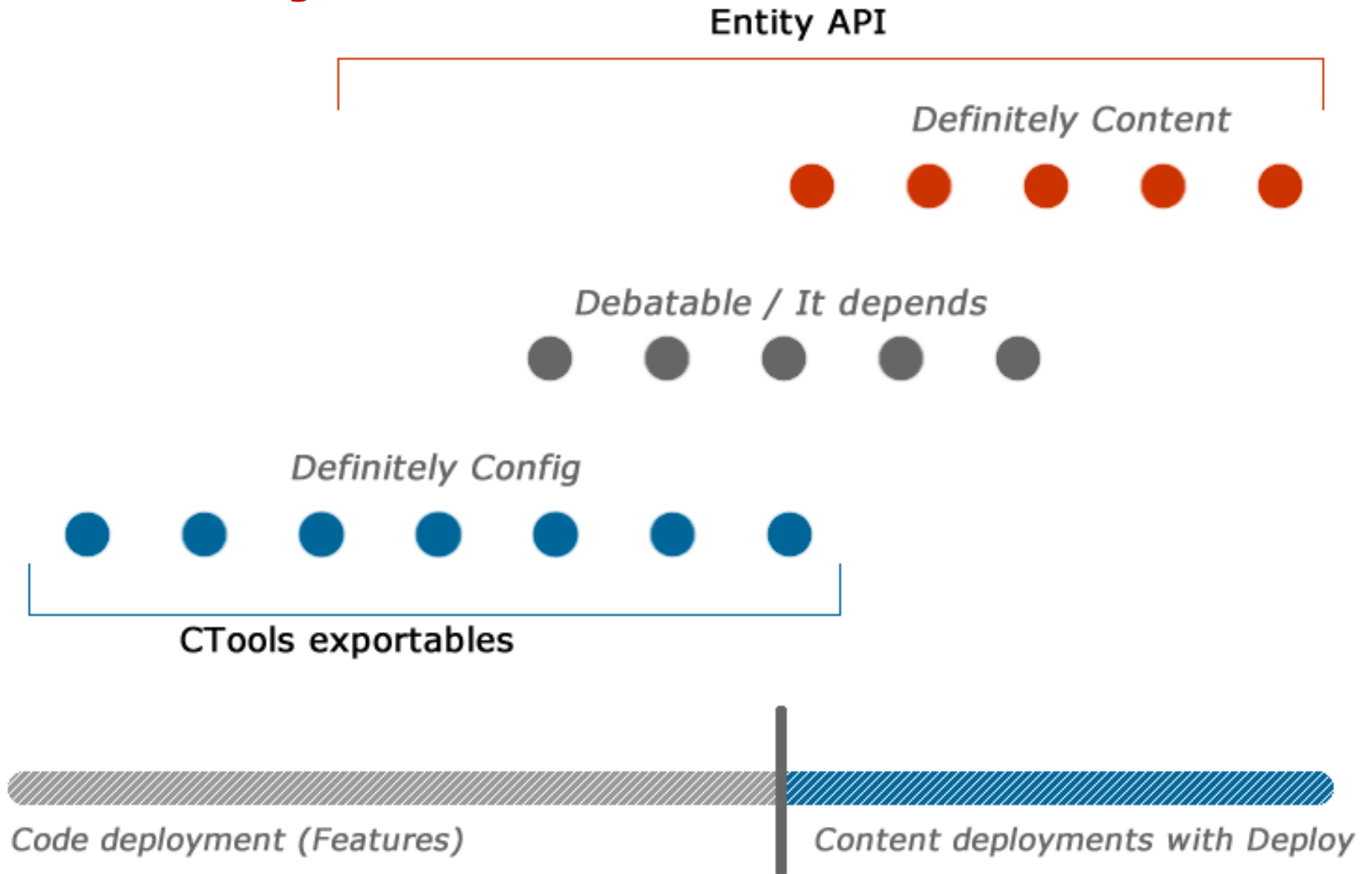


# Exportables in D7

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

Pushing deployment plan.

Pushing item 2 out of 3.

Now processing *Article: My Awesome Article*

66%

A horizontal progress bar is shown. The left portion is solid blue, representing 66% completion. The right portion is grey with diagonal hatching, representing the remaining 34%.

- 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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Katherine Bailey

- katbailey
- @katherinebailey

**Questions?**



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***THANK YOU!***