Building Drupal sites using CCK, Views and Panels

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Agenda

- Introduction
- CCK (Content Construction Kit)
- Views
- Panels
- Demo of all of them together
- Questions, discussion

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About 2bits.com

- Based in Waterloo, Ontario
- Active member of the Drupal community since 2003
- Member of security and infrastructure teams
- 24+ modules on drupal.org (adsense, userpoints, profile CSV, feedback, nodevote, sitemenu, ...etc.)
- Listed on Drupal.org's service providers section
- Clients mainly in USA and Canada
- Subcontracting development projects
- Customization, development, installation, upgrades, performance optimization

Before CCK

- Drupal core
  - Has limited number of predefined content types (page, story, blog, forum, book)
  - Fields are: Title and Body

- Contributed modules
  - Can define their own types (image, job, weblink, ...etc.)
  - Programming knowledge needed

Flexinode

- First attempt at admin-defined content types, without programming

- Did the job it was set to do

- Scalability and performance issues (joins for every field)

- Will not be available from 5.x onwards

Content Construction Kit

- Started by Jonathan Chaefer [JonBob]

- Current maintainers
  - Yves Chedemois [yched]
  - Karen Stevenson [KarenS]
  - Darryl O'Pry [dopry]
  - Wolfgang Ziegler [fago]

CCK features

- More extensible

  - API to define fields

- Exposes fields to views

- Reusable fields

  - define a field once and reuse it in many content types)

- Different storage model (see Resources and Links)

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Fields by modules

- Extensibility means that you can write modules that implement new types

- Examples
  - date
  - phone numbers (USA, France)
  - image
  - taxonomy
  - email

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Theming CCK nodes

- Several ways
  - node-content_*type*.tpl.php
  - contemplate module (web based)

Drawbacks?

- Added complexity, needed for functionality (always a tradeoff)

- Some performance overhead (extra database tables insert/select/join)

- Extra theming effort (again functionlity)

- Like with all contributed modules, watch out for longevity of CCK fields implemented by modules

Future of CCK

- CCK is destined for core

- Phased approach
  - In 5.x, we have the ability to create content types, but not fields
  - Discussed currently in the community
  - Not likely for 6.x (3 months to code freeze)

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Views

- Written by Earl Miles (merlinofchaos)
- Really powerful module, allows all sorts of magic
- Customized Node listing
    - creating custom blocks from any content type
    - creating custom lists from any content type
    - On selected fields
    - Filters
    - Sorting
    - Arguments

Views (cont'd)

- Basic info
  - Visibility (by role)
  - URL
- View type
  - Page
    - Can be list, table, teasers, ...etc.
  - Block
  - Provide Menu?
- Headers and footer
  - Your own HTML or PHP

Views (cont'd)

- Fields
  - Modules can expose fields to views, e.g. image module exposes the image, thumbnail, ...etc.
  - All CCK fields are exposed, and that is where the power is

- Sorting
  - Ascending/Descending
  - On one or more fields

Views Filters

- Filters
  - Can be on one or more fields (e.g. published, in moderation, content type, taxonomy, ...etc.

- Exposed Filters
  - Any filter can be exposed, so users can select it.
  - Very useful feature
  - In lieu of searching

Views (cont'd)

- Can be exported

  - Easier test -> production move

- Arguments

  - Can change the view

  - Allows PHP code for views

Theming views

- Theme wizard built-in

- Provides a good headstart

- Tells you where it goes as a tpl.php

Drawbacks?

- More database queries, means increased load, so watch out for performance and scalability

- Should not be a concern for small to medium sites

- Caching in the works

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Panels

- Custom grouping of nodes, blocks, HTML and everything

- Suitable for a site's front page, or section pages

- Provides several pre-defined layouts

- You can add your own layout as a module (HTML + CSS)

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Panels (cont'd)

- Each panel has a URL (like views), as well as a title and CSS id.

- Content areas

  - Predefined in the panel, or module

  - Each can contain

    - One or more nodes
    - One or more views
    - One or more blocks
    - Custom content (HTML and/or PHP)

Panels Scalability

- Pressflow Preempt

- Caching module for panels.

Seeing it all in action

Let us do it ...

Resources and Links

- CCK
  - http://drupal.org/project/cck
  - http://drupal.org/node/101723

- Views
  - http://drupal.org/project/views
  - http://drupal.org/handbook/modules/views

- Panels
  - http://drupal.org/project/panels

Resources and Links (cont'd)

- ## What is CCK, Robert Douglass

  – A more technical discussion on the internal of the CCK
    http://lullabot.com/articles/an_introduction_to_the_content_construction_kit

- ## Build a CCK module, Karen Stephenson

  – http://2007.oscms-summit.org/node/190

Conclusions

- Questions?

- Comments?

- Discussions?

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