

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





About 2bits



- Based in Waterloo, Ontario
- Active member of the Drupal community since 2003
- Member of security and infrastructure teams
- 24+ modules on drupal.org
- Listed on Drupal.org's service providers section
- Maintain modules that run on drupal.org (donations, feature, lists)
- Google Summer of Code mentoring (2005, 2006, 2007)





2bits Services



- Clients mainly in USA and Canada
- Subcontracting development projects
- Customization of existing modules
- Development of new modules
- Installation, upgrades
- Automated backups
- Performance tuning and optimization





About Khalid



- Developing for computers for way too long (22 years), Drupal since 2003
- Core contributions
 - Site maintenance feature
 - Logging and alerts in Drupal 6
 - Several patches
- Member of
 - Drupal security team
 - webmasters team
 - infrastructure team
- Co-founder of 2bits
- Blog at <http://baheyeldin.com>
- Contributed modules
 - Adsense
 - Userpoints
 - Nodevote
 - Job search
 - Favorite nodes
 - Flag content
 - Stock API and module
 - Custom Error
 - Currency
 - Image watermark
 - Site menu
 - Email logging and alerts
 - Second Life
 - Technorati
 - Click thru
 - Referral





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 **abits**

- 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)





Fields by modules



- Extensibility means that you can write modules that implement new types
- Examples
 - date
 - phone numbers (USA, France)
 - image
 - taxonomy
 - email





Theming CCK nodes



- Several ways
 - `node-content_type.tpl.php`
 - contemplate module (web based, hence “thru the web [TTW]”)





Drawbacks?



- Added complexity, needed for functionality (always a tradeoff)
- Some performance overhead (extra database tables insert/select/join)
- Extra theming effort (again functionality)
- 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)





Views



- Written by Earl Miles (merlinofchaos)
- Really powerful module: 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 (list, teaser, table, ...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





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)





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.





Hands On



Let us see it all in action ...





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 (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>





Conclusion



- Questions?
- Comments?
- Discussions?

