Tiki
Wiki+CMS+Groupware

A tightly-integrated, full-featured, open source, multilingual Web Content Management System

The Wiki Way to make software

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Confoo2010, Canada
What I'll talk about

• Mass collaboration and the Wiki Way
• Tiki Wiki+CMS+Groupware
• The Tiki Model

2 audiences

• When/why you should pick Tiki for your next project
• How you should look into the Wiki Way and the Tiki model to make your own project more collaborative
Mass collaboration

• What are the most important volunteer mass collaboration projects in the history of humankind?
• Wikipedia
• Documentation
• Collaboration > flexible, simple freeform project management
• Corporate Intranet or extranet
• Great for unstructured content, can be structured with categories and tags
• Effective document workflow
Why a wiki?

Give someone a fish and you feed them for a day.
Teach someone to fish and you feed them for a lifetime.

Add that knowledge to a wiki
And countless people will be able to learn on their own

And share their knowledge
And many will feed their families
Because email doesn’t scale

Source: http://www.wikinomics.com/blog/uploads/frowning_email.jpg
Wiki Way

Core Values

- It's About Us
- Assume Good Faith
- Real People
- Be a Builder

Other Values

- Radical Trust
- Include Everyone
- Transparency
- Change is Cheap
- Refactoring
- Suggested Edits
- Work Where You Want
- Do-ocracy
- Self Organize
- Barn Raising

Source: http://www.aboutus.org/IncludeEveryone
What happens when...

• ...you apply the **Wiki Way** to software development for over 7 years with over 225 core contributors?

• **dogfooding** is a core value?

• ...everyone collaborates on an **integrated** code base?
Tightly Integrated Knowledge Infrastructure
Combination CMS + Wiki + Groupware
Free source software (LGPL)
800 000+ downloads so far
Translated into 35+ languages
1000+ pages of documentation
Runs on standard PHP/MySQL making web hosting easy and inexpensive
Over a million lines of code (including 3rd party libraries)
A new code commit every two hours
“This is one of the largest open-source teams in the world, and is in the top 2% of all project teams on Ohloh.” source: http://www.ohloh.net/p/tikiwiki/factoids/
But mostly…
As far as we know, the Open Source Web application with the most built-in features. Other popular apps have a different model: small core + loads of functionality in 3rd party add-ons.

• Over 1000 settings/options in the admin panel!

http://doc.tikiwiki.org/Features
• **No hunting** around to find the best 3\textsuperscript{rd} party module

• No needing to **re-install 3\textsuperscript{rd} party modules** at every upgrade, *hoping* they all still work!

• Because, in Tiki, everything is built-in and developers **collaborate** on and **extend** features, instead of just **cooperating** around a core (when they are not just outright **competing**...). And **upgrades are easy**!

• Do you have two wiki pages for the same thing? No. Why would it be so for features?

• More later about the model, let’s describe some features!
- Users can be in any number of groups
- Groups can be included in groups
- Registration system
- Over 200 permissions, which can be:
  - System-wide (global)
  - by item (object)
  - by category (workspaces)
• Powerful wiki syntax
• Powerful version history and diff engine
• Book and table of content
• Email notification of changes
• Advanced plugins
• Advanced translation synchronization
Tracker & form generator & reports

• Create custom application
• Bug tracker, application forms, contact forms, etc.
• Can create reports in wiki pages
• Multilingual
• Can link to other trackers
• 20+ field types: text field, text area, checkbox, numeric field, drop down, radio buttons, user selector, date and time, image, category, email, auto-increment, Google Maps, computed field, attachment, etc.
• Several calendars
• iCal
• Recurring events
• RSS feeds
• Distinct permissions
• Several blogs
• Topics
• Tags & categories
• RSS feeds
• Permissions
• Can use wiki syntax
Discussion forums

- Threaded or flat forums
- Mailing list integration
- Can use wiki syntax
- File Attachment
- Email notification of replies
File & image galleries

- Hierarchical galleries
- Check-in/Check-out/lock
- Categories for files
- Permissions
- Watch (notification of change by email)
• Categories (top-down)
• Tags (Bottom-up)
• Watch by email (items & categories)
• RSS (in & out + aggregation)
• Comments
• Search
• Etc.
Multilingual

- Translated to 35+ languages
- Wiki has awesome i18n change tracking
- Wiki-translation.com
• **Value** of a free source project
  - Beyond code: the community and the experience
  - Combining the different features, producing new benefits never imagined by the authors
  - How to share this knowledge?

• **Profiles** to configure your Tiki
  - On wiki pages (collaborative, version history, etc.)
  - Can be used not just at install, but **at any time** and can be **combined**
  - Not just for settings, but also for **data**
  - Since there is no extra code, can be designed for very specific, long tail uses

• We can have **hundreds of profiles** for an **out-of-the-box experience**, with a single code-base!
Use Cases

- Online community / association / club / special interest group / NGO (A)
- International, multilingual project (A)
- Advanced portal / news site (A)
- Corporate web site (A)
- Groupware Wiki / Corporate Wiki / Corporate Intranet / Team project (A)
- Public Wiki (A)
- Group knowledge base / Knowledge Management (KM) / institutional memory (A)
- Product or software documentation and support (A)
- Customer extranet (A)
- Multilingual wiki (A)

- A is better, Ratings factoring in the necessary effort to configure.
Use Cases (part 2)

- Personal site / family site (B)
- Simple portal / news site (B)
- Writing a book (B)
- Personal knowledge base / manage my life (B)
- Wiki-based Project Management (PM) (B)
- Glossary / Dictionary / Encyclopedia (B)
- Framework / Activity Workflow / Specialized web Application (B)
- Document Workflow (B)
- Bug or Issue tracker (B)
- Collaborative research (B)
- Voice-enabled wiki and mobile applications (B)
- Geo CMS (B)
- Blog (several authors) (B)

- A is better, Ratings factoring in the necessary effort to configure.
• Event Management, Conference Management & planning (C)
• Blog (one author) (C)
• Document Management System (DMS) (C)
• SourceForge / Gforge type site (C)
• E-commerce / Shopping cart (C)
• E-democracy (C)
• E-learning / Learning Management System (LMS) / classroom / course management system (CMS) (D)
• Customer / Contact / Constituent relationship management (CRM) (D)
• Bibliography (D)
• Traditional Project Management (PM) with Gantt charts, etc (D)
• Social networking / Job board / Dating site / hospitality exchange / Car Pooling (D)
• Enterprise resource planning (ERP) / Accounting (D)

• E is worst, Ratings factoring in the necessary effort to configure.
Major enhancements in 3

- Webservices
- Semantic wiki links and mind mapping
  - Tiki Remote Instance Manager (TRIM) (for wikifarms)
- Revamp of install and upgrade scripts
- Profiles for easy configuration
- JQuery added as experimental
- Zend Framework
- Has been picked as Long Term Support (LTS)

- Release date: May 2009
  http://doc.tikiwiki.org/Tiki3
Major enhancements in 4

- Google Summer of Code 2009
  - Workspaces & Perspectives
  - Kaltura integration (Collaborative video editing)
  - MediaWiki convertor
- JQuery added as default
- Revamp of edit interface
- PDO as default
- GroupMail
- Memcached
- Multi-domain support

- Release date: November 2009 http://doc.tikiwiki.org/Tiki4
• Shopping Cart & payments
• WebDAV support
• Spreadsheet upgraded to jQuery
• jQueryS5 Slideshow
• Searchable admin panels (!)
• Token Access
• MySQL replication
• Advanced Rating & Metrics Dashboard
• Performance enhancements (front & back-end)

• Release date: April 2010 http://doc.tikiwiki.org/Tiki5
Major enhancements in 6

• HTML5 (Canvas, etc)
• Integration with BigBlueButton (Chat/Voice/video/screensharing)
• Improved CRM and Shopping Cart (started in Tiki5)
• Smarty 3?

• What do you want to see?

• http://dev.tikiwiki.org/Roadmap
• Release date: October 2010 http://doc.tikiwiki.org/Tiki6
The Tiki model

• Wiki community
• Wiki way participation to the code
• All-in-one codebase
  • Inherent synchronized releases
• Lots of features, but no duplication
• Dogfood
• Scheduled releases (twice per year)

• tikiwiki.org/Model
• “In later discussions Torvalds explained the reasons for its choice: a fully modular architecture, like the one adopted for HURD, would have posed problems to a degree of complexity that it could have compromised the accomplishment of the project. To avoid such risks and keep the degree of complexity of the project as low as possible, Torvalds decided to design a monolith and he actually wrote all the architectural specs himself, avoiding all the problems related to collective projects (e.g. division of labor, coordination, communication). On the other hand, the HURD micro–kernel, a project in direct competition with the Linux kernel, has paid for the choice of pursuing a fully modular approach from the beginning in terms of the continuous delays that have plagued its development. Nowadays, it is still under active development and still lacks the stability and performance assured by the Linux kernel.”

Source: Modular Design and the Development of Complex Artifacts: Lessons from Free/Open Source Software  
http://dev.tikiwiki.org/Modularity
Benefits & challenges

• Offers **benefits**
  - Tons of features, without duplication, excellent code re-use and code review, more collaboration, tight integration, easy upgrades, excellent interaction between features, etc.
  - Permits huge changes between versions **because** we don’t have to worry about breaking 3\textsuperscript{rd} party extensions.

• But does bring **challenges**
  - Huge code base to maintain
  - Admin panels
    - hundreds of features
    - with a total of over 1000 settings/options! (we had to add a search!)
  - Learning curve: 1000+ pages of documentation
  - What should be sensible defaults?
3 things...

• ...I want you to remember about this talk in 6 months

  • The Wiki Way is not just for Wikipedia
  • Tiki is an all-in-one solution
  • The Tiki community eats its own DogFood, and welcomes you.
Questions?

- TikiWiki.org
- Wiki-translation.com
- marc@marclaporte.com

- Doubts about the Tiki model?
  - TikiWiki.org/Model

- But mostly:
  - TikiWiki.org/Download
Thank you