

Software made the Wiki Way

How the Wiki Way has lead Tiki to become the Free/Open Source Web Application with the most built-in features.

by Marc Laporte, Tiki Wiki CMS Groupware project Admin



What I'll talk about

- Who am I?
- What is Tiki Wiki CMS Groupware?
- How is it built?
 - The Tiki model Software made the wiki way



MarcLaporte.com

- Wiki & CMS consultant
- 100+ wiki implementations since 2001
- Co-founder of wiki-translation.com
- Project admin for Tiki Wiki CMS Groupware
 - Tiki is one of the most popular wiki engines



Tiki Wiki CMS Groupware

- Tightly Integrated Knowledge Infrastructure
- Combination CMS + Wiki + Groupware
- Free/Open Source software (LGPL)
- 950 000+ downloads
- Translated into 40+ languages
- 1000+ pages of documentation
- Runs on standard PHP/MySQL making web hosting easy and inexpensive
- "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/



Main use cases

- Collaboration
- Community / Social Networking
- Publishing / CMS
- Commerce/ Finance
- Productivity / Office suite (Spreadsheet, etc.)
- E-learning
- Support / CRM



Hundreds of built-in features

Action log Alert Articles & Submissions Backlinks Backup Banner Blog Bookmark Browser Compatibility Cache Calendar Category Charts Chat Comment Communication Center Compression (gzip) Contact Address book Contact us Content template Contribution Cookie Copyright Custom Home (and Group Home Page) Date and Time Debugger Console Directory (of hyperlinks) Documentation (Help System) DogFood Drawing Dynamic Content Dynamic Variable External Authentication FAQ Featured links File Gallery Forum Friendship Network (Community) Game Gmap Google maps Group Help System Hotword HTML Page i18n (Multilingual, I10n, Babelfish) Image Gallery Install Integrator Interaction Inter-User Messages InterTiki JS Calendar Karma Live Support Login Lost edit protection Mail-in Map with Mapserver Menu Meta Tag Mini-Calendar Mobile Tiki and Voice Tiki Mods Module Multimedia MultiTiki MyTiki Newsletter Newsreader Notepad OS independence (Non-Linux, Windows/IIS, Mac, BSD) PDF Performance Speed / Load Permission Poll Profile Manager Quicktags Quiz Rating Registration RSS Score Search Engine Friendly Search Security Semantic links Shadowbox Shoutbox Site Identity Slideshow Smarty Template Smiley Spam protection (Anti-bot CATPCHA) Spellcheck Spreadsheet Stats Survey System log Tags Task Tell a Friend + Social Bookmarking TikiTests Theme Trackers TRIM User Administration User Files User Menu Watch WebHelp Webmail Wiki 3D Wiki History, page rename, etc Wiki plugins extends basic syntax Wiki syntax text area, parser, etc Wiki structure (book and table of content) Workflow WYSIWYCA WYSIWYG XMLRPC

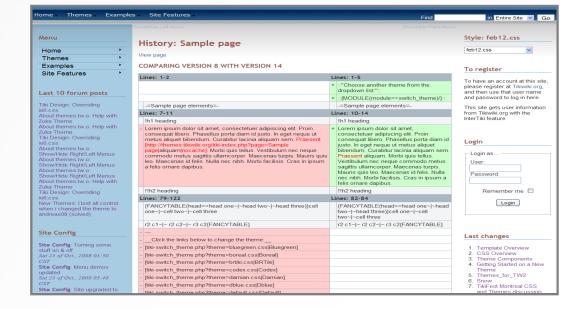
The Free/Open
Source Web
application with the
most built-in
features. Other
popular apps have a
different model:
small core + loads
of functionality in
3rd party add-ons.

•Over 1000 settings/options in the admin panel!



Wiki engine

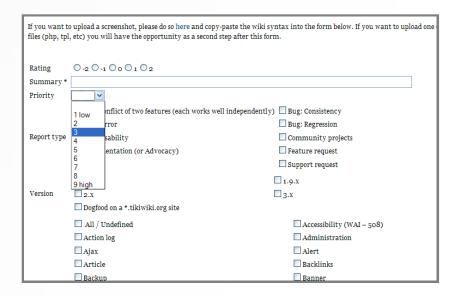
- Powerful wiki syntax
- Powerful version history and diff engine
- Book and table of content
- Email notification of changes
- Advanced plugins
- Advanced translation synchronization

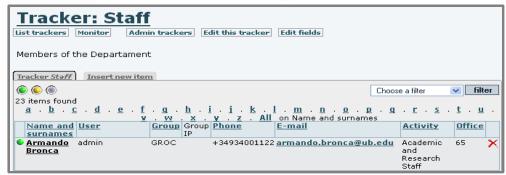




Tracker & form generator & reports

- 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, autoincrement, Google Maps, computed field, attachment, etc.

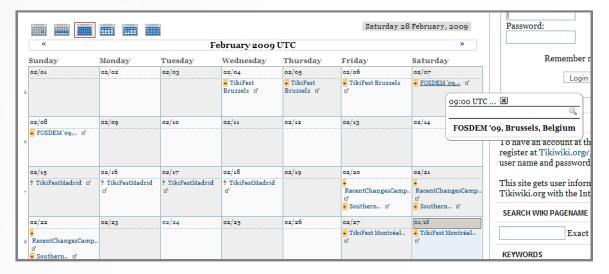






Calendar

- Several calendars
- · iCal
- Recurring events
- RSS feeds
- Distinct permissions





Discussion forums

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





Blog & news articles

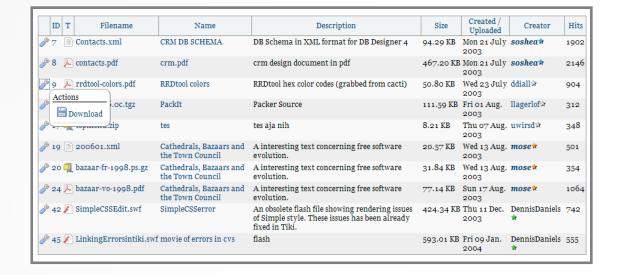
- Several blogs
- Topics
- Tags & categories
- RSS feeds
- Permissions
- Can use wiki syntax

Completing Theme-o-rama module Posted by marclaporte* on Mon 20 of Aug., 2007 12:54 CST	
greenmetal.css & jello.css were missing from Theme-o-rama module	
and Gary added BRTiki.css lately	
I just removed vidiki.css because it's being pulled out of Tiki. (broken & unmaintained)	
Permalink	
Php Layers Menu now in heavy testing! Posted by marclaporte* on Mon 20 of Aug., 2007 12:37 CST	
Hi!	
I spent several hours making sure we could access/test all menu types with all the themes on this site.	
We have 4 menu types:	
Basic menu Tree menu Dynamic vertical menu Dynamic horizontal menu	
On this site, we have	



File & image galleries

- Hierarchical galleries
- Check-in/ Check-out/lock
- Categories for files
- Permissions
- Watch (notification of change by email)



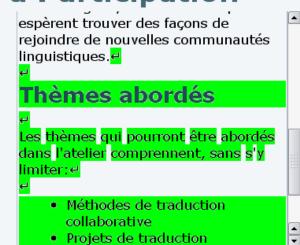


Multilingual

- Translated to 35+ languages
- Wiki has awesome i18n change tracking
- Wikitranslation.com

Update 'Call for Participation' based on 'Appel à Participation'

espèrent trouver des façons de rejoindre de nouvelles communautés linguistiques. Le financement est confirmé pour les participants ayant besoin d'aide avec les coûts de transport.



Note: This edit session will expire in 24 minutes. **Preview** or **Save** your work to restart the edit session timer.

Edit:

| Babel Wiki Workshop: Cross-Language Collaboration |
| Workshop Goal |
| The goal of this workshop is to explore how wikis and |



Permissions & groups

- 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)

tiki_p_forums_report			
	forums	Can report msgs to moderator	
▼ tiki_p_forum_post	forums	Can post in forums inherited inherited from Registered	
▼ tiki_p_forum_read	forums	Can read forums inherited from Anonymous	
tiki_p_forum_vote	forums	Can vote comments in forums	
	forums	Can start threads in forums inherited inherited from Registered	
☐ tiki_p_forum_edit_own_posts	forums	Can edit own forum posts	
	freetags	Can browse freetags inherited from Anonymous	
	freetags	Can tag objects inherited from Anonymous	
tiki_p_admin_freetags	freetags	Can admin freetags	
tiki_p_unassign_freetags	freetags	Can unassign tags from an object	
tiki_p_admin_games	games	Can admin games	
tiki_p_play_games	games	Can play games	
tiki_p_hw_teacher	homework	Can create new homework assignments, see student names and grade assignments	
tiki_p_hw_student	homework	Can do homework assignments	
tiki_p_hw_grader	homework	Can grade homework assignments	
tiki_p_hw_admin	homework	Can adminsiter homework	
tiki_p_edit_html_pages	html pages	Can edit HTML pages	
tiki_p_view_html_pages	html pages	Can view HTML pages	
	image galleries	Can admin Image Galleries	



The Tiki model

- Open Wiki community (do-ocracy)
- Wiki Way participation to the code
- Scheduled releases
- All-in-one codebase
- No feature duplication
- Dogfood

tiki.org/Model



Open Wiki community

- Do-ocracy (vs other *cracies)
- Sort of like Wikipedia but for software instead of content

 Pure play FOSS project : open source and open development.



What is a wiki?

- It's just a web site, but easy to edit for everyone
 - Simply click edit and save
- Invented in 1995 by Ward Cunningham
 - 1st generation: text only
 - 2[™] generation: permissions, workspaces, structured data, rich media, etc.
- Means "Quick" in Hawaiian
- Usage is growing fast (incl. in the enterprise)
- Wikis in Plain English http://www.youtube.com/watch?v=-dnL00TdmLY



Wiki Way

Traditional

Propose and seek approval

Change is "expensive"

Risk averse

"Need to know" basis

Wiki Way

Do, and revert if problem

Change is cheap

Get it done

All info is open by default



Wiki Way participation to the code

- Everyone who asks for commit access gets it
 - No significant issues in 9 years
- 490+ with full write access to the complete code base
 - 250 have contributed code
- A new code commit every two hours

"Commit early, commit often"



Scheduled releases

- 2 major releases per year (October and April)
- With Long Term Support version
 - Every 3rd version
 - Great for the enterprise
- Benefits of predictability
 - commercial eco-system
 - Encourages collaboration (work in trunk)

In such a diverse community, it's more realistic to agree on a date than a feature-list.



All-in-one codebase

- No core vs module debate
- All developers are core developers
- All features and languages in the same download
- Each feature is optional
- Inherent synchronized releases (all features have to be ready at the same time)
- Reduces risk of module lock-in



No feature duplication

- In a wiki, similar/related content is merged, so the same is applied to features
- Solves the plugin chaos & dependency hell problem found in many applications.

Tiki is the Free/Open Source Web Application with the most built-in features.



Dogfood

 Dogfooding: "an expression that comes from the idea that companies should eat their own dog food, or use their own products."

Tiki is a community recursively developing a community management system



Coping with complexity

- Doesn't this add more complexity?
- Tiki 7.1 contains 11348 files (1M LoC)
- Half the code is NIH (Smarty, Zend Framework, jQuery, etc.), so we maintain about 6000 files (incl. image files)
- •Sounds like a lot?



Putting things in perspective

- The Tiki community maintains about 6000 files
 - Joomla! has 8097 "extensions"
 - Drupal has 11406 "modules"
 - WordPress has 16066 "plugins"
- Thus, they have more extensions to maintain than we have files!
 - and since they can't possibly maintain them all, it leads to dead-end extensions and disappointed end-users
- Just about any project you could do with Joomla!, WordPress or Drupal, you could also do it with Tiki with less overall complexity -> https://tiki.org/Coping+with+Complexity



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 3rd party extensions.

But does bring challenges

- Admin panels: with a total of over 1000 settings/options! (we had to add a search and basic/advanced/experimental filters!)
- Learning curve for users and devs: 1000+ pages of documentation
- What should be sensible defaults?
- Trade-off of innovation and upgradeability



Tiki Suite

- Going beyond PHP/MySQL
- Integrated Web and desktop suite

Phone system, XMPP chat, etc

http://suite.tiki.org/



Questions?

- Tiki.org
- Wiki-translation.com
- marc@marclaporte.com
- About the Tiki model:
 - Tiki.org/Model
- But mostly:
 - Tiki.org/Download





Thank you!