

VQWiki Documentation

for release 2.8.1

**Martijn van der Kleijn, NijiSoft
Gareth Cronin, Cronin Solutions
Marcello Teodori, JUG Milano
Tim Howland, Watchdog Systems, LLC**

VQWiki Documentation: for release 2.8.1

by Martijn van der Kleijn, Gareth Cronin, Marcello Teodori, and Tim Howland

VQWiki version 2.8.1 *VeryQuickWiki can be downloaded from <http://www.vqwiki.org/> . This application is a work in progress - contributions and corrections are welcome and may be sent to: <support@vqwiki.org>*

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Abstract

This book contains the complete documentation set for the VQWiki project. The VQWiki project is licensed under the LGPL and can be downloaded from <http://www.vqwiki.org/>.

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Preface

This manual is intended to assist with installing, administering, customizing, and using VQWiki software. This document is a work in progress. Please send corrections or suggestions to support@vqwiki.org [mailto:support@vqwiki.org] or Tim Howland [mailto:th@wdogsystems.com]

This manual is presented using DocBook ¹ - the open XML standard for technical writing - and is rendered to presentation formats using the XSL from the DocBook Open Repository Project ²

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Chapter 1. About VQWiki

Introduction

A Wiki [<http://c2.com/cgi/wiki?WikiHistory>] is software that allows users to create and edit Web page content using a Web browser. As a collaboration tool, Wiki's are unusual in that they allow the organization of content to be edited in addition to the content itself. The first Wiki engine was developed in 1995 by Ward Cunningham. Since then many Wiki engines [<http://c2.com/cgi/wiki?WikiEngines>], such as VQWiki, have been developed. The etymology of Wiki is described here [<http://c2.com/cgi/wiki?EtymologyOfWiki>]. You can learn more about Wiki usage at <http://www.wiki.org/wiki.cgi?WhatIsWiki> [<http://www.wiki.org/wiki.cgi?WhatIsWiki>].

"Very Quick Wiki" or "VQWiki" is a Wiki engine written using JSPs and servlets and is designed to run on Tomcat or any servlet container that supports Java Servlet 2.3 and JSP 1.2 specifications. Gareth Cronin is the original developer of the VQWiki. Thanks to the contributions of many, VQWiki has undergone numerous improvements. VQWiki supports hyperlinks, topic or text-based searching, email notifications, and utilizes a simple but powerful text syntax for creating topics and editing their content.

Conventions Used in this Manual

As with any manual, there are a number of abbreviations you should be aware of as you read:

Table 1.1. Conventions

{TOMCAT_HOME}	The directory where Tomcat (or other application server) is installed.
{wikiurl}	The base URL for accessing VQWiki, e.g. http://localhost:8080/vqwiki . With a WAR name of "vqwiki-2.8.1.war", the default local URL for Tomcat will be http://localhost:8080/vqwiki-2.8.1
{wikihome}	The wiki file system home. For users of the Microsoft Windows operating system, the wiki file system home is located at C:\WINDOWS\SYSTEM32\CONFIG\systemprofile\wiki

Features

Very Quick Wiki is a WikiWikiWeb clone based on Java Server Pages. It's goal is to be as lightweight but as functional as possible. It is deployed by dropping a single war file into any J2EE web container without any extra installation processes. It offers the standard features found in most Wiki systems, as well as many other capabilities. Features include:

- Support for multiple independent virtual wikis
- Localized versions available in Italian, Spanish, German, Swedish, Norwegian, Polish, French, Dutch, and English
- Built-in full-text search and indexing
- RSS Feeds for recent changes

- Email alerts for page notification
- Filesystem storage for smaller systems, database storage for larger wikis
- LDAP integration for authentication in corporate environments
- Custom functionality through plugins and lexers

VQWiki History

For questions or comments, please create an issue on JIRA of type "Support Request" on JIRA [<http://issues.vqwiki.org>]

Changes for version 2.8.1

See Release Notes on JIRA [<http://issues.vqwiki.org/secure/ReleaseNote.jspa?projectId=10000&styleName=Html&version=10030>]

Changes for version 2.8

See Release Notes on JIRA [<http://issues.vqwiki.org/secure/ReleaseNote.jspa?projectId=10000&styleName=Html&version=10020>]

Changes for version 2.7 UNRELEASED

Bug

- Improved removal of lockfiles
- Fixed minor screen layout issue
- Fixed issue with vqwiki.properties that could not be found

Improvement / Patch

- Using StyleSheet topic as CSS instead of vqwiki.css
- ExFormatLex has now support for macros (replace keywords with html snippets)
- Editor.jsp reworked
- Table of contents for headlines (default: switched off)
- Added resource message admin.caption.openextlinkinnewwindow
- Added property openExtLinkInNewWindow
- Added logging if lock file couldn't be deleted
- New version of fileupload (commons-fileupload 1.1 / commons-io 1.2)
- New QuickHelp special topic for edit screen
- Added russian translation
- Updated german translation
- Added strikethrough support that doesn't conflict with horizontal line
- Added new WikiHelp default topics

- Improved default LeftMenu and TopArea contents
- Removed vqwiki.css file deprecated, replaced by StyleSheet topic
- Removed source code is no longer included in war file, please get it from the repository

Changes for version 2.7.91

Bug

- Attach link in top menu bar was broken
- Attach functionality was broken
- Corrected url in vqwiki.css for external URL image
- Removed "--" for strike-through since it broke horizontal line ("----")

Improvement / Patch

- Updated Italian translation
- Changed RSS Servlet to produce RSS output that validates with feedvalidator.org (thanks Stuart)

Changes for version 2.7.9

Bug

- RSS feed doesn't work for wiki accessed via HTTPS
- Teach vqwiki that URLs can start with https as well as http
- Small error in ApplicationResources_nl.properties
- Mail.smtp.auth=true property assignment required for (E)SMTP auth

Improvement / Patch

- Support for strikethrough (--text--), superscript (^text^) and subscript (~text~)

Changes for version 2.7.8

Bug

- 'mentioned on' behavior changes when attachments are indexed
- Wrong special chars handling in RSSServlet
- Wrong special chars handling in search box
- Non localized messages in top navigation bar History page
- vqwiki.PluginManager cannot find file
- Lists break without spaces-to-tabs enabled
- System claims lock is taken by someone else even when it is not
- When I use [[UC 0002]] as an internal link it does not recognize it as a link
- Search engine index setConnectionTimeout (instead of setTimeout) causes deadlock

- set username accepts empty username
- Notifications: not possible in Oracle
- create_postgres.sql file missing in 2.7.7
- Export2HTML seems to be failing us
- Purge Deleted Topics not working with Oracle DB
- Purge Deleted Topics not working when using MySQL
- redirect: doesn't work with topic names surrounded by brackets ([[...]]) or backticks (`...`)
- Problem with function Export2HTML
- Diff.java license appears incompatible with LGPL
- Search in ExportHTML doesn't work
- Issue with generating membership confirmation email
- VQWiki crashes on first use on WebSphere 5 (used to work)
- Deleted topic remains on recent changes

Improvement / Patch

- A new security constraint was added to the web.xml file. This will implement basic authentication for VQWiki It is turned off by default. To turn it on, uncomment the security-constraint section in web.xml and restart the application. Functionality: Shows a basic authentication pop-up so users can be authenticated against third party system. (with auth-ldap for example) If it is turned off, the normal cookie method will be used.
- A new diff function was introduced. It uses stylesheet based layout, please also see the UPGRADE document.
- It is now possible to redirect to topics with spaces. If the first word in the content is redirect, the rest will be used as the destination topic.
- Passwords in the vqwiki.properties file can be encrypted now, see the admin screen.
- Full support of Lucene Query Syntax
- Adding prettylink in the form [http://www.vqwiki.org | the quicky wiki]
- Add style class to tables produced by ####
- Unsubscribe link in mail
- Spanish translation
- Passwords should be encrypted in property files
- Add topic name to emailed "topic changed" alert
- Add option to disable prepending numbers to attached file names
- Patch to add possibility of basic authentication support instead of cookie
- Lexer to implement MediaWiki Syntax
- Change "Jump to" - "Search" Buttons to "Search" - "Jump to"

- Clean up top menu
- Fix (?) database connection handling
- Standardize coding style
- `org.apache.log4j.Category` is deprecated

Changes for version 2.7.7

- Fixed bug in RSS feed where partial html codes in the description broke the feed
- Fixed URL and i8n problem due to URL being encoded in UTF-8 and Tomcat trying to decode as ISO-8859-1
- Fixed bug where a lock file is not deleted for topics with spaces (or other characters outside ASCII) in them
- Added Norwegian translation
- Added Polish translation
- Added Swedish translation
- Updated German translation
- Updated Dutch translation
- Added new documentation: the VQWiki Book, supplied in DocBook and HTML formats with the WAR file and downloadable as a PDF from the site. This new document replaces the old admin guide.

Changes for version 2.7.6

- Improvements to the admin screen for quicker deployment.
- Some fixes with regards to internationalization.

Changes for version 2.7.6

- Improvements to the admin screen for quicker deployment.
- Some fixes with regards to internationalization.

Changes for version 2.7.5

Bug

- [1029961] - edit.js missing
- [1205764] - Ordered list trouble
- [814653] - admin-guide: wrong path for linking.properties
- [1060306] - RSS plugin: Rss plugin's keep setting produces nullpointer?
- [837452] - Export2HTML Problem - worked 1 time
- [998848] - External link shows up in ToDo

Improvement / Patch

- Addition of a basic preview option, including admin screen setting. Default behaviour is not to use it.

Changes for version 2.7.2

Improvement / Patch

- Added support for spaces in display-name for link extender, e.g.: [c2:StartingPoints|C2 Starting Points] Will render the HTML:

```
<a href="http://c2.com/cgi/wiki?StartingPoints">C2 Starting Points</a>
```

Changes for version 2.7.1

Bug

- Fixed the plugin manager so that it does not require a context restart immediately after installing a plugin
- Fixed Resin-specific bug where redirect from logout link was redirecting to root context instead of virtual wiki context

Improvement / Patch

- Added support for actions to the plugin manager. Classes that implement `vqwiki.WikiAction` can be implemented and placed in plugin zips. The `WikiAction.doAction()` method supplies the servlet request and response so there is now no need to write new servlets and add mappings to `web.xml` to extend VQWiki functionality, they can be created as plugins rather than in the main code stream.
- Altered menu so that it picks up the "StartingPoints" link from the default topic setting in the admin console. If you choose another default topic it will link to that instead of StartingPoints.
- Added display-name behaviour to the link extender. A pipe after the section following the colon separates the display-name, e.g.: `c2:StartingPoints|C2` Will render the HTML:

```
<a href="http://c2.com/cgi/wiki?StartingPoints">C2</a>
```

- Added Amazon default link extension that uses the ISBN number, e.g.: `amazon:0201485672|Refactoring ...` will produce a link with the text "Refactoring" to the Amazon book details for "Refactoring" by Martin Fowler
- Added Internet Movie Database default link extension that uses the IMDB id number, e.g.: `imdb:0246578|DonnieDarko ...` will produce a link with the text "DonnieDarko" to the IMDB details for Donnie Darko :-)

Changes for version 2.7.0

Bug

- Fixed problem where Tomcat 5 gave file not found errors if there was a space in the webapp install path
- Fixed error in database mode about missing "FritzTextFormattingRules.txt"
- Added missing return statement in `SaveTopicServlet`
- Purging topics does not misreport the purging of pseudotopics (e.g. `SetUsername`)

Improvement / Patch

- Field on menu that can be used to jump straight to a topic by name, or to search for the given text using the usual search engine.
- Added "logout" link at bottom of topics to logout the current user. This is to enable virtual wiki switching when authentication realms have been added to separate virtual wikis. Link will only appear if there is an authenticated user principal is present.
- "Minor edit" checkbox to optionally exclude changes from recent changes.
- Added proper explanation for when less than two topics are selected in the arbitrary diff in history.
- The "print this and how many pages below" form on the printable page version is hidden after being submitted.

Changes for version 2.6.4

Bug

- Diffing of topics with spaces in the name
- Fixed some resources with no space
- Fixed encoding of topic names in menu item URLs
- Changed breadcrumb trail to display the resource name of the virtual wiki correctly
- Made read-only topic check case-insensitive
- Fixed failure to unlock topics with special characters in the name

Improvement / Patch

- Added proper back-link searching so that the "is mentioned on", OrphanedWikiTopics and ToDoWikiTopics are actually accurate, i.e. instead of an ordinary search being carried out, a lexer checks that the relationship is a proper link.
- Added admin option to set whether to send more than one email change notification per topic per day.
- Added admin console "panic" feature to delete all lock files and recent changes serializations in the event that locks are unable to be removed through the lock list.

Changes for version 2.6.3

Bug

- Fixed bug with new "redirect:" pages
- Fixed bug in option for separate title words on admin console
- Added _en ResourceBundle to fix problem with Safari displaying incorrect locale
- Fixed external linking breakage

Changes for version 2.6.2

Bug

- fixed backtick wiki-name match so that a pseudo-shortest-match occurs

Improvement / Patch

- Arbitrary diffing between versions on the history page.
- Added admin setting to enable/disable indexing of attachments when search engine indexing runs. We have *very* large PDFs as attachments and the indexing process was taking several hours.
- Admin option for making words in CamelCaps appear as separate words in the titles.

Changes for version 2.6.1

Bug

- RecentChanges failures in file mode
- OrphanedTopics failure

Changes for version 2.6.0

Bug

- typos in default topics and "is mentioned on".
- Code clean-up (some unused stuff)
- Fixed \n added in bottom of each file read, that was adding a
 in the bottom of each rendered page. (WikiBase.java)
- fixed unclosed table tags in admin.jsp

Improvement / Patch

- PostgreSQL added as a standard database type (thanks to Andre Gauthier for the info on the necessary script changes). Database type in admin console is now a combo box.
- Added option "RecentChangesRefreshInterval" : When the user request the page "Recent Changes", it takes long time to generate it. As this page is often requested by users, because it briefly resumes all the updates on the web site, it charges a lot the server CPU load processing always the same information and producing the same page for different users. With this option you can customize the lifetime of the RecentChanges page, so different users requesting this page will get a "cached version" of the page until it expires. This greatly reduces server CPU load, speeding up the site.
- DefaultLineBreaks is now by default set to 1.
- CSS are now editable by remote as any other wiki page.
- "Website-like" layout by Luigi. It's now possible to create a menu that will be displayed on the left side of each page, a "Top Area" (for the site logo and banner) and a "Bottom Area" (for sponsors etc.)
- "AdminOnlyTopics" special wiki topic contains a white-space separated list of topics that only admin should be allowed to read or edit. By default this includes AdminOnlyTopics, TopArea, BottomArea and LeftMenu.
- Back-porting of JFlex from VQWiki 3 Alpha to replace the ageing JLex based lexical analyser generation. This together with the addition of UTF-8 encoding by Martin Kuba for flat-file mode should clear up problems with non-Latin characters.
- Admin option to set the encoding scheme - if you're already using ISO-8859-1 (the default prior to using UTF-8) you'll need to set the admin option to ISO-8859-1 or convert your existing files to UTF-8.

- Czech translation by Martin Kuba.

Changes for version 2.5.5

Improvement / Patch

- Italian translation by Jacopo Giudici.
- Explicit wiki server hostname setting in admin console. This can be set to make the server sent out in email messages for the registration/notification system always appear as this server (useful if you use multiple URLs to access the same server).
- Database connection pooling (Jakarta Commons pooling) and DataSource support added by Ernst Jan Plugge. See CONNECTIONPOOL_README and/or DATASOURCE_README in the Wiki installation directory for details.
- Various stability improvements.

Changes for version 2.5.4

Bug

- spaces in key escaped in pseudotopics.properties

Improvement / Patch

- Proper Oracle support added by Ernst Jan Plugge. See the ORACLE_README in the Wiki installation directory under your webapps directory.

Changes for version 2.5.3

Bug

- search indexing instability in file mode fixed

Improvement / Patch

- Ability to set a target for external hyperlinks. This can be set in linking.properties, e.g. to make all links to pages outside the wiki open in a new window this can be added: hyperlinks.target=#blank

Changes for version 2.5.2

Bug

- purge deleted in database mode fixed (didn't work with some MySQL drivers)
- tag error when adding new members fixed
- fixes for Lucene search indexing
- bugs with cancel/save under German locale fixed

Improvement / Patch

- Tobias added new pseudotopic WikiStatistics that gives a breakdown of Wiki usage stats.

Changes for version 2.5.1

Bug

- append template failure fixed
- admin console now adds and removes read-only topics for the current virtual wiki
- text area in history is read-only

Changes for version 2.5.0

Bug

- orphaned topics now working again
- whitespace problem in search results resolved

Changes for version 2.5.0 RC 2

Bug

- nested tag upsetting Resin removed
- admin console login/logout failed redirection on Resin fixed
- history was still wrong, fixed properly this time
- table text font same as body text font
- Upgraded standard taglib to version 1.0.3, getting rid of the last edit date bug in the process.
- Font size in pre/code/tables same size as body (except it doesn't seem to be on Mozilla - does anyone know why fixed width font on Mozilla shows up smaller than sans serif?)

Changes for version 2.5.0 RC 1

Bug

- reserved word "user" changed to "wikiuser" for ANSI compliant database mode
- history was returning incorrect versions from main list and next/previous were the wrong way around
- clicking admin link defaults to admin username on login page
- breadcrumb trail respects virtual wiki boundaries (the trail gets reset on boundary)
- printable pages with depth > 0 do not include pseudo-topics (e.g. RecentChanges)
- Changed the heading lex behaviour to `^!.+[\n]! ^!!.+[\n]!!` etc.

Improvement / Patch

- I registered the domain name veryquick.org, so all the email addresses etc have been changed to reflect this. The old domain is still active though, so don't worry about updating existing links.
- Virtual wiki list: clicking on the "Wiki" part of the page header (the bit before the virtual wiki name) will show a list of virtual wikis that are available. This can be suppressed in the admin console if you don't wish all users to see all virtual wikis. The virtual wikis can now have friendly names set in WEB-INF/classes/ApplicationResources.properties. (Should the friendly name go in the page header??)
- Some further German translation by Tobias.

Changes for version 2.5.0 BETA 3

Bug

- fixed the RecentChanges problem where multiple virtual wikis were being displayed on the default virtual wiki's recent changes.
- Various other stability issues.

Improvement / Patch

- Changed the heading lex behaviour to `!.+[\n]! !!.+[\n]!!` etc.

Changes for version 2.5.0 BETA 2

Improvement / Patch

- Tobias Schulz-Hess implemented Lucene as the search engine - full query syntax, search term highlighting etc!! He has also added a breadcrumb trail.
- Tobias also created an RSS feed: e.g. <http://localhost:8080/wiki/jsp/Wiki?RSS>
- For developers: reorganized package structure thanks to J Carlsson's suggestion.
- For users: the lexers now have the logical names `vqwiki.lex.LinkLex` etc when setting them in the admin console. This means they will need setting on an upgrade, if you use your old properties file so set add the `.lex` bit to each of the lexers names (see UPGRADE for more lucid instructions).
- Placing a file called "wikiname.ignore" in WEB-INF/classes that contains a list of WikiNames (one per line) will mean that those names are not treated as WikiNames by the lexer (they won't be linked).
- Java2HTML upgrade - thankyou Markus Gebhard.

Changes for version 2.5.0 BETA 1

Bug

- Correct input and display of high unicode characters, e.g. Japanese, Chinese etc.

Improvement / Patch

- Improved performance of RecentChanges in file mode.
- "ANSI-fied" the SQL used to create tables and to search the database. This means that VQWiki should now work with most databases. Added an admin console option for "database type". This defaults to "mysql", but can be set to "ansi" to use the ANSI SQL.
- Topic redirection. To make one topic automatically redirect to another, simply make the contents of the topic "redirect:TopicName". Of course, this makes it rather difficult to undo a redirection, since any attempt to get to the topic will result in a redirection to "TopicName". So, there is a forced edit format: "edit:TopicName" will link directly to the edit of "TopicName".
- Internal security management. The web appliaction security context is no longer used for admin console authentication. The first time you run (or upgrade to 2.5.0) VQWiki you will be shown a password on the first topic you access. This is the admin password. The admin username is "admin".
- Added new link-lexer "LinkLexLoose" that allows WikiNames to be constructed from words with more than one consecutive uppercase letter, e.g. WiKiName. LinkLexLoose is not the default link-lexer, but it can be set from the admin console.

- Admin password change on the admin console.
- Default topic setting on admin console - the topic set here will be the one that greets users if they go to the base of the wiki context (index.jsp).
- Topic total on all, orphaned and todo topics pages.
- Lock list console with unlocking (requires admin login).
- Extensible "pseudo-topic" makes adding new special topic URLs easier when writing plugins.
- Templates are now appended to the topic while it is being edited, rather than appending on the topic save.
- Commencement of the internationalization of strings, titles, captions etc.
- Confirming membership by email doesn't require the username cookie to be on a machine already. If the cookie isn't there at confirmation time, it will be resent.

Changes for version 2.4.0

Bug

- Bug with env-entry explicit properties file setting fixed.
- Fix for bug with re-requesting membership confirmation in database mode.

Improvement / Patch

- Added _ to allow entry of double underscores (_ are normally the special character for no formatting).
- Three-spaces are not converted to tabs when inside a preformatted section.
- History in date descending order in file mode.

Changes for version 2.4.0 RC 3

Bug

- Fixed the way that the confirmation URL is produced when subscribing to email notifications. The confirmation URL is now always based on the URL the user subscribed from.

Improvement / Patch

- Re-introduced the "convert spaces to tabs" option on the edit page. Added admin setting to set the default for this.

Changes for version 2.4.0 RC 2

Bug

- fixed web.xml bad reference to /AdminServlet

Changes for version 2.4.0 RC 1

Bug

- Further fixes for international wiki names.

- Infinite looping during searching for plugins when no user directory found fixed.
- Removed dangling reference in CSS to background image.

Improvement / Patch

- If "force setting of username" is on, when the user is forced to set their name on an attempted edit, they are redirected back to the edit after setting it, rather than just left at the "thankyou" page.
- Images uploaded as attachments now appear inline in topics.

Changes for version 2.4.0 BETA 2

Bug

- Fixed database mode locking behaviour, backing out editing a topic and re-entering without using cancel now keeps the lock rather than acting as though the user has lost the lock.

Improvement / Patch

- Version browser - click the "history" menu item on any topic to see a list of the versions of that topic. Clicking a date in the list produces a display of both the marked up version and the original contents. The original contents can then be used to restore damaged topics.
- The history view has "next", "previous" and "current" menu options so it is possible to scroll through each version of a topic.
- Absolute URLs can be used for the customized logo.

Changes for version 2.4.0 BETA 1

Bug

- Truls Thirud's fixes to allow internationalized WikiNames.

Improvement / Patch

- New look'n'feel, courtesy of Joachim Lous. This includes the display/link-to of the current virtual wiki in the header (if more than one virtual wiki exists)
- Extensible lexer system including Java source code formatting as an example. Surround some Java code in [`<java>`] [`</java>`] to see the effects.
- Extensible lexer also provides full HTML include: surround HTML in [`<html>`] [`</html>`] and VQWiki will ignore the markup and output HTML exactly as entered.
- Much of the scriptlet code in the JSPs has been replaced with common taglib tags and custom VQWiki tags. This makes the JSPs a lot easier to debug and enhance.

Changes for version 2.3.6

Bug

- Occasional bug with security error on emailing fixed.
- The last character of the last cell in a table is not truncated.

Improvement / Patch

- Orion-specific fixes that enable correct operation of mail notification system and printable page feature.

- Combo-box to select the virtual wiki that you wish to purge deletes from.
- OrphanedTopics are alphabetised.

Changes for version 2.3.5

Bug

- Fixed SMTP authentication settings that weren't saving from the admin console.

Improvement / Patch

- Added attachment-type setting. Attachments can be delivered inline or as "attachments". Inline means they get opened by the browser (in a new window). "Attachment" means they become prompt for a download straight away.
- The admin console reports which files were deleted on a purge.

Changes for version 2.3.4

Bug

- Fixed content header delivery so the correct filename and type for the attachment is sent on viewing.
- Fixed IE-specific (it was working under Mozilla) file upload problem with full path names being appended to to upload directory instead of just the filename.
- Fixed problem with read-only topics not being deleted from the admin console when in file mode.
- Fixed SMTP authentication settings that weren't saving from the admin console.

Improvement / Patch

- Added the file upload size limit setting to the admin console.
- Included activation.jar (email notification dependency) and commons-logging.jar (file upload dependency) in the lib directory.

Changes for version 2.3.3

Improvement / Patch

- More rigorous save checking to avoid poorly written web crawlers saving blank topics.

Changes for version 2.3.2

Bug

- Numbered lists were not working, they are now.

Improvement / Patch

- A new line is appended if there is none on topic reads. This stops problems with unterminated tables and lists.
- A code tag in the same style as the FritzLex has been added to the default lexers: e.g. {{{here is some code}}}
- An admin option to turn off templates has been added (in case you wish to conserve screen real estate)

- Updated quick edit help.

Changes for version 2.3.1

Bug

- Fixed bugs in admin page - some settings not saving.

Improvement / Patch

- Switched to 3 pass parser: one for layout, one for format and one for linking. The 2 pass can not put bold, italic etc in tables and lists.

Changes for version 2.3

Improvement / Patch

- Printable page link in topic menus brings up a page with just the header and contents.
- The number of line breaks to insert in the HTML on a new line in the text can be set from the admin console. This means you can squeeze everything up a bit by setting it to "1" rather than "2" (which is what VQWiki has been using until now - the default is 2).
- Extensible links. "links.properties" now holds expansions for prefix:url format links. This makes it easy to add extra linking to other Wikis or internal web systems like WebCVS.
- Sublists. Use multiple groups of three spaces to create lists within lists.
- Improved attachment system. Special syntax for absolute path for uploads is not required. Content is delivered directly by servlet rather than having to place the attachment in a location relative to the JSP context. "mime.types" can be used to specify by-extension content types. SmartUpload is no longer used - now using Jakarta Commons upload.
- Improved text formatter. The lexing is now performed in two passes, this has meant fixes are possible (and have been implemented) for strange list and table behaviour. A unit test for the lexer has also been added to help with further lex enhancements.
- SMTP username and password added to admin console for users who require authentication on their SMTP servers.
- Templates are now available in file mode as well as database mode.

Changes for version 2.2.1

Bug

- Minor bug fix for issue with Apache/Tomcat delivering content to Mozilla/Netscape browsers. A content-type header is now added explicitly, previously the HTML source would be displayed instead of being interpreted when viewing pages from Apache/Tomcat with Mozilla-based browsers.

Changes for version 2.2

Bug

- Fixed "Last Edited" date in file mode.
- Fixed problem with list not working if started on the first line.

Improvement / Patch

- Email notification of topic changes is now implemented in file-mode and database-mode (the groundwork for this was all done by Robert Brewer).
- Maximum number of backlinks can be set (default = 20).
- In file-mode, RecentChanges are now serialized via JSX to XML, so there will no longer be a problem with upgrades making the binary file incompatible between versions. It will be simple to write a script to update the file to any new change version.

Changes for version 2.1

Improvement / Patch

- Clicking on a topic title searches for occurrences of that title.
- "Edit page" and "Attach" links no longer appear when a topic is marked read-only.
- Added "quick help" to edit page.
- Added "virtual wikis", more than one Wiki can now be run from the single server instance. All it requires is adding the name in the admin console and a single servlet mapping to the web.xml file. See VIRTUALWIKI_README for details.
- Added orphaned-topics search and all topics listing: "AllWikiTopics" and "OrphanedWikiTopics" respectively.
- Fixed database-mode search so that it searches on topic name as well as contents.
- Added WikiServlet so all topic requests are directed at "Wiki". Redirection occurs back to "Wiki" rather than forwarding, so the page can be refreshed after saving without causing re-saving to occur. Dynamic topic requests are now intercepted by the servlet rather than by the topic.jsp.
- The logo now features a French Orca by the name of "Wiki". :o)
- The Database support now uses a MySQL regular expression to do the searching, consequentially it database support will no longer (sort of) work with MS SQLServer or other non MySQL syntax platforms.
- Format-ignore character is now two underscores rather than one so the underscore can be used normally.
- Localised date formatting on "last edited" menu item.
- Tables markup using ##### and ##.
- Pre-formatted text markup using @ @ @ @.
- Menu at top and bottom of the page.
- Added supported for a deployer-defined logo image.

Changes for version 2.0 BETA 2

Bug

- Noel fixed database connections so a connection dropped by the database is reconnected.

Improvement / Patch

- Change from GPL to LGPL for licence on advice of many people. Particularly because of the inclusion of non-GPL library code in VQWiki (log4j).

- Added read-only topic support to database layer (previously only for flat-file mode).
- Improved default topic creation, default topics are now stored as text files in the class path rather than being hard-coded.
- Improved error handling.
- Added new enhanced text-formatter mode created by Fritz Freiheit. The new mode can be toggled from the admin console. A new default topic called FritzTextFormattingRules explains how to use the enhancements.
- Added entry for index.jsp to web.xml.
- Made initial config more robust so it is possible to reconfigure from admin console if in database mode and database connection fails.

Changes for version 2.0 BETA 1

Improvement / Patch

- MySQL database back-end support. The native file-system operates by default after installation, but database support can be setup and started from the admin console. See MYSQL_README.
- Added new escape sequence `__` that ignores any formatting inbetween.
- Made TextFormattingRules a normal Wiki topic.

Changes for version 1.8.2

Improvement / Patch

- Moved the properties file to the classpath, using the Log4j Loader to locate it. This will avoid problems with running the web container as an anonymous user with no home directory and limited access to the Tomcat directory. It can found in WEB-INF\classes.
- Made the Wiki file-system (home) directory changeable from the admin console. This can be changed on the fly, but it takes a few seconds for the web container's class loader to detect that the properties file has been modified and reload the handler... so an exception will occur if the home directory is changed while running and then a page is accessed too soon.
- Added an "allow back-tick" setting to the admin console. This means that the back-tick automagic WikiNames e.g. ``ACM`` can be disabled if required. Back-ticks are not a standard Wiki convention.

Changes for version 1.8.1

Bug

- Fixed lexer so that numbered lists appear correctly when preceded by a blank line.

Improvement / Patch

- Shawn created new locking mechanism where an error message is generated if the lock that a user editing a document times out. Now they can not overwrite the changes made by the person who acquired the timed-out lock.
- Automagic links to c2.com and Meatball wikis. E.g. `c2:StartingPoints`, `mb:RecentChanges`
- The topic names themselves are now indexed in the search engine.
- RecentChanges ordering is now most recent to least recent.

Changes for version 1.8.0

Bug

- Fixed search engine index rebuild to refresh table completely (oops).

Improvement / Patch

- Bill added switchable support for HTML, toggled from admin console.
- Added https as a protocol that automatically turns into a link.
- Switched to using proper lexical analyser for tokenizing into the search index so HTML tags are stripped and punctuation removed.
- Changed JSP comments so that they are not output to the browser.
- Added support for binary file uploads that produce an inline link of the form attach:filename.ext. This allows the attachment of files to topics.
- Added versioning cache to speed up finding where the previous revision is.
- Added log4j as the logging engine (<http://jakarta.apache.org/log4j>).
- Put all properties in a single properties file in the working directory.
- Added security constraints to web.xml to allow administrators to setup up security for allowing edit access to only some users. The constraints are commented out by default.

Changes for version 1.7.0

Improvement / Patch

- Custom wiki directory can be set by placing a properties file called "vqwiki.properties" in the working directory for the web container and setting a property "dir" to a directory name (the directory will be created by vqwiki on startup).
- Topics can be made read-only from the admin console.

Changes for version 1.6.3

Improvement / Patch

- Work-around for Tomcat 2.x and 3.x to prevent exception when saving. This problem should be fixed in the next released versions of Tomcat.

Changes for version 1.6.2

Bug

- Fixed text-formatter to handle Unicode so non-English alphabet characters can be used.

Changes for version 1.6.1

Bug

- Fix for problem with backtick sequence only allowing one match per line.
- Fix for terms with digits not being search-indexed correctly.

Changes for version 1.6

Improvement / Patch

- Diff capability.
- Username cookies.

Changes for version 1.5

Improvement / Patch

- Improved UI.

Changes for version 1.4

Improvement / Patch

- Admin console.
- Search engine.

Contributors

Project Lead	Marcello Teodori
Developers	Marcello Teodori, Bruno Bossola, Filippo Diotalevi, Gian Carlo Pace, Martijn van der Kleijn, Andreas Studer, Colin Jacobs, Tobias Schulz-Hess, Fritz Freiheit, Gareth Cronin
Documentation	Tim Howland
Translation Maintainers	
Czech	Sasha Kotlo
Dutch	Martijn van der Kleijn
English	Marcello Teodori
French	<position vacant>
German	Nico Jabin
Italian	Marcello Teodori
Norwegian	Erik
Polish	Michael (mindweb)
Spanish	Zapo (erzapö)
Swedish	Johan Lindell
Non-project Contributors:	Fabrizio Zellini, Fritz Kunstler

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About This Documentation

Document Structure

This document is intended to assist with all phases of installing, maintaining, and contributing to a site based on the VQWiki software. The documentation is divided into four major chapters:

- Chapter 1: About VQWiki - describes the project, this documentation, and the resources that are available to administrators and users.
- Chapter 2: Administrator's Guide - Covers how to install, configure, and maintain a VQWiki installation
- Chapter 3: User's Guide - Guide to Wikis in general, and specific features of VQWiki

Getting the latest version of this document

This document will be available from the VQWiki website at <http://www.vqwiki.org>.

Where to go for help

Mailing Lists

There are two lists available to support VQWiki users.

The Announcements list is a moderated low-volume list for new version announcements and bug fixes. Signup information and list archives are available at: <http://lists.sourceforge.net/lists/listinfo/veryquickwiki-announce> [<http://lists.sourceforge.net/lists/listinfo/veryquickwiki-announce>]

The VQWiki User's list is for support, questions, and discussion of proposed new features. Signup information and list archives are available at: <http://lists.sourceforge.net/lists/listinfo/veryquickwiki-users> [<http://lists.sourceforge.net/lists/listinfo/veryquickwiki-users>]

VQWiki Site

The VQWiki site is located at <http://www.vqwiki.org>. Resources there include a Wiki containing updated support information contributed from all users, the latest version of this document, additional plugins, issue tracking, and other items.

Chapter 2. Administrator's Guide

Wiki Functions

This section will touch on the major mechanisms available in VQWiki. The more complex mechanisms receive their own sections later on.

Editing

Any topic in a Wiki may be edited. The user clicks the "EditPage" link at the top or bottom of the page, makes changes, clicks the "Save" button and is redirected back to the page of the topic that the user has edited.

WikiNames

A WikiName consists of two or more words with initial capitals, run together. A WikiName appears as a word in "CamelCaps". The syntax of a WikiName is a

Uppercase letter

Lowercase letter(s)

Uppercase letter

Lowercase letter(s)

Examples of well-formed Wikinames are: WikiWord or GoodStyle. When you type a WikiName, you establish a hyperlink. It's as easy as that. VQWiki also allows topic-naming by surrounding a word or phrase in back-ticks, such as `Gareth Cronin`.

Linking

When you edit a page by typing a WikiName, the WikiName will appear with a question mark (?) link appended to the end of the WikiName. Click the question mark. You will then be directed to the edit function mode of the page that will be identified by the WikiName you created. Save the page. Now your WikiName will be displayed as a link to the new page any time the WikiName appears in the Wiki, thus making your WikiName a hyperlink. It's as easy as that.

Searching

Each page contains a text field for searching. The search button performs a full-text search based on the text in the text field and returns a list of topics where the text is found. If more than one search term is entered, the topics are ordered by relevance, i.e. the topics where *all* of the search terms were found are shown first. A search can also be performed by clicking on the title of any topic - this searches for the topic name itself.

Reserved Topics

Some topic names are reserved for redirection to Wiki features. For example, the topic WikiSearch will send the user to the search page.

Username Cookies

By using the SetUsername reserved topic, a user can set a username for herself/himself. This function sends a cookie to the browser to identify the user in the future. Usernames are displayed

in RecentChanges and are necessary for email notification. Wiki was never meant to be a secure, rights-based system, therefore, the support for auditing is very simplistic (a security extension is on the drawing board for future versions).

RecentChanges

The RecentChanges reserved topic displays a list of recently altered topics, together with the date and time it was altered and the username of the person who altered it (or their IP address if they did not set a username).

File Upload and Attachment

When writing Wiki topics it is often useful to be able to attach a file of some kind to the topic. A user can click the "Attach" link on any topic and be presented with a file upload page. Attached files can be referred to by a linking syntax (e.g. "att:myfile.txt"). VQWiki has its own MIME type mapping that can be customised to suit installations.

Email Notification

Users who have set usernames can register an email address and subscribe to topics. They are then notified by email when a topic they are interested in is changed.

Templates

Topics can be saved as templates. The template can then be appended to any topic. This allows for the creation of standard forms for input, such as requirements documents or contact details.

Versioning

Every change to a topic is written to a separate versioning copy. This acts as disaster-recovery and anti-vandalism backup and supports a "diff" facility, where the actual changes made to a topic can be identified. The history browser, accessible through the "History" link on the menu bar of each topic shows all the versions that exist.

Read Only Topics

Topics such as StartingPoints can be designated as read-only by the administrator.

Default Topics

Several topics are created by default the first time VQWiki is run, or when a new virtual wiki is accessed. These are TextFormattingRules (a description of the markup available by default), FritzTextFormattingRules (a description of the markup available in one of the other shipped lexers) and StartingPoints (a default start page).

Installation

Supported Systems

The VQWiki software runs on top of so-called application servers. These are pieces of middleware software that provide a set of functionality to hosted applications. The following software requirements are necessary for VQWiki:

- A servlet container that supports Java Servlet 2.3 and JSP 1.2 specifications.
- Any stable web browser such as Internet Explorer 5.x, Netscape 7.1, Mozilla 1.4 or Opera 7.11.
- Java SDK 1.4 or higher depending on the requirements of your servlet container.
- By default, VQWiki runs with flat-file persistence. But an easy to configure database connectivity option is available.

VQWiki is tested with Apache Tomcat 5.5.27 and JDK 1.4.2 ¹

Known Configurations

Users have also reported successful implementation with the following servlet containers:

- Apache Tomcat 5.5.x e 6.0.x
- JBoss 4.x
- Orion 1.6
- Resin 2.1.9
- Allaire JRun 4.x
- BEA Weblogic 7.x
- IBM Websphere Application Server 5.1.x
- IBM Websphere Application Server 6.x
- Oracle 9i Application Server

Note: Tomcat 3.x or earlier is not recommended for use with VQWiki.

Quick start

The installation process is essentially the same as any other web application. The quickstart guide here assumes you will be working in a development or testing environment. For production systems, please consult the Basic Installation and Database-backed persistence sections, below.

- Shut down your application server
- Copy the WAR file to your web applications folder (on Tomcat, this will be {TOMCAT_HOME}/webapps)
- Restart your application server
- Browse to your application server and access the VQWiki URL: eg. <http://localhost:8080/vqwiki-2.8.1>
- As this is a first time installation, click on "StartingPoints" to retrieve the randomly generated administrator's password

The system should now be running correctly, with flat-file persistence. See the troubleshooting section (below) for assistance with common problems.

¹Apache Tomcat <http://jakarta.apache.org/tomcat> [<http://jakarta.apache.org/tomcat>]

IMPORTANT: Before deploying VQWiki to your production environment, be sure you review and understand the section below on Security Issues and Workarounds.

Basic Installation

VQWiki is designed to be a "drop and run" application. When you download VQWiki from a website, it will be available as a single "Web Archive File" or "WAR" for short. Most application servers (including Tomcat) are capable of automatically deploying an application directly from a WAR.

The following assumes you have installed Tomcat on a Windows machine at `{TOMCAT_HOME}` and that it is running with the default stand-alone port 8080. We will also assume that the VQWiki WAR file is named `vqwiki-2.8.1.war`. The name of the WAR file may be different in which case you should substitute your WAR file name for `vqwiki-2.8.1.war`. Finally, we will assume you have a Web browser available on the installation machine.

To install VQWiki, you should follow your application server instructions for deploying a WAR. Usually it's just a matter of moving the WAR file into the `webapps` directory. You may need to restart your application server if it does not recognize the new war file and install it. Once the file is installed, browse to `http://localhost:8080/vqwiki-2.8.1`, and that's it!

For the tomcat 4.X series, the process is:

- Shut down your application server
- Copy the WAR file to your web applications folder (on Tomcat, this will be `{TOMCAT_HOME}/webapps`)
- Restart your application server
- Browse to your application server and access the VQWiki URL: eg. `http://localhost:8080/vqwiki-2.8.1`

Now that VQWiki is installed, you should perform some basic configuration work. In order to do this, you'll need to retrieve the administrator's password from the system. On the opening screen, you'll see a list of links - the first one listed is `StartingPoints`. Choose `StartingPoints` to be directed to a special page where you will receive a password to access the administrative functions. Memorize this password!. If you miss the password, or you forget it, see the section on password recovery.

By default, VQWiki runs with flat-file persistence and other default options. Choose the "Admin" link at the bottom of any topic to access the administrative functions where you can customise VQWiki. The administrator username is "admin". In the chapters below we address setting up database persistence and other VQWiki options.

IMPORTANT: Before deploying VQWiki to your production environment, be sure you review and understand the section below on Security Issues and Workarounds.



The V

To modify this,
click: [LeftMenu](#)

[RecentChanges](#)

[TextFormattingRules](#)

[AllWikiTopics](#)

[OrphanedWikiTopics](#)

[ToDoWikiTopics](#)

[WikiLockList](#)

[RSS](#)

[Export2HTML](#)

[WikiSearch](#)

[SetUsername](#)

[VeryQuickWiki](#)

StartingPoints

Click "Edit Page" at the bottom of this page.
To delete a topic, just leave the word "del"
removed completely when your administrat

[RecentChanges](#) - what, when, who

[TextFormattingRules](#) - how to do emphasis,

[AllWikiTopics](#) - a list of all the topics in the

[OrphanedWikiTopics](#) - topics that have no l

[ToDoWikiTopics](#) - dangling topic links waitin

[WikiLockList](#) - currently locked topics

[RSS](#) - a RSS news stream of this Wiki

[Export2HTML](#) - export this wiki into a zip co

[WikiSearch](#) - search the Wiki

[SetUsername](#) - set a name to appear in the

Do you want to modify...

- ◆ the [TopArea?](#) [edit:TopArea](#)
- ◆ the [LeftMenu?](#) [edit:LeftMenu](#)
- ◆ the [BottomArea?](#) [edit:BottomArea](#)
- ◆ the [StyleSheet?](#) [edit:StyleSheet](#)

<http://veryquickwiki.veryquick.org>

If you have a spare moment, please let us

Upgrading

There are numerous combinations of old and new versions that it is possible to upgrade between. Here we try to cover the more typical scenarios.

Always make a backup of your wiki home or your wiki database (which ever you are using) before attempting any upgrades!

When upgrading, it is best to first try out the new version in its own context but pointing at your existing wiki home or wiki database. That way you can keep using the old version until you're happy that the new version is doing its job.

Upgrading from 2.8 to 2.8.1

Just backup you wiki directory and the `vqwiki.properties` file. For any file you might have modified or added in the expanded webapp content, also backup them, then start with the new WAR file and review them before copying them over.

Upgrading from 2.7.9 to 2.8

The MySQL JDBC driver is not included anymore in the distribution, you have to manually download it and install it within the VQWiki application or on your server. See the database persistence section for details

Upgrading from 2.7.7 to 2.7.9

The default StyleSheet contents changed. As such, it is necessary to update already existing StyleSheet topics with the following class:

```
.menuinactive {
    font-family: Trebuchet MS, Verdana, Helvetica, sans-serif;
    font-weight: bold;
    text-decoration: none;
    color: #aaaaaa;
}
```

If this is not be done, inactive menus might be the cause of "jumps" in the menu structure. There are also the following new CSS styles: How to display new topics, for example in red:

```
a.newtopic {
    color: #FF0000;
}
```

How to display external links, for example with an icon:

```
a.externallink:after {
    content: url("../images/external.png");
}
```

How to display tables generated by the wiki:

```
table.wikitable {
    color: red;
}
```

How to display author details:

```
.authordetails {
    width: 350px;
    border: 1px solid #8E9EAD;
}
```

```
padding: 3px;
float: right;
margin-right: 4%;
}
```

The following stylesheet entries were added to accomodate the new diff code:

```
/* diff page */

table.diff {
  border: 0;
  margin: 0;
  padding: 0;
  width: 100%;
}
td.diff-delete {
  background: #ee7777;
  font-weight: bold;
  padding: 0.1em;
  width: 49%;
}
td.diff-add {
  background: #77ee77;
  font-weight: bold;
  padding: 0.1em;
  width: 49%;
}
td.diff-unchanged {
  background: #dddddd;
  padding: 0.1em;
  width: 49%;
}
td.diff-indicator {
  font-weight: bold;
  padding: 0.1em;
  text-align: right;
  width: 1%;
}
td.diff-no-indicator {
  padding: 0.1em;
  width: 1%;
}
td.diff-line {
  padding: 0.5em 0.1em 0.1em 0.1em;
  font-weight: bold;
}
```

Upgrading from 2.7 to 2.7.7

If you had problems with lock files not being deleted, you can delete those manually if necessary. The layout of the RSS feed changed slightly, the font's color was removed for example, so you might want to update any applications listening to the feed.

Upgrading from 2.6 to 2.7

Search index changes sometimes render the temporary search index files useless. Delete these from your web container's temporary directories to reset the search index. E.g. on Tomcat delete your {TOMCAT_HOME}/work/{mode}/{host}/{wikicontext} directory.

Upgrading from 2.5 to 2.6

There is now a "website-like" layout. This consists of a TopArea, BottomArea and LeftMenu. Each of these is held as a wiki topic. So just edit the topics as given to change the content of the basic layout. The three topics are now locked down as admin-only topics. A list of topic names lives in a topic called AdminOnlyTopics. Removing topic names from this list will open them up to anyone.

Upgrading from 2.4 to 2.5

The package structure has changed, lexers are now in their own package called vqwiki.lex. This means that if you are using the same properties file for 2.5 as for earlier versions, you will need to go into the admin console and make the following changes:

1. LinkLexer: vqwiki.LinkLex becomes vqwiki.lex.LinkLex
2. FormatLexer: vqwiki.FormatLex becomes vqwiki.lex.FormatLex
3. LayoutLexer: vqwiki.LayoutLex becomes vqwiki.lex.LayoutLex

Upgrading from 2.2 to 2.4

File uploads are now stored and retrieved directly by a servlet, so they don't have to be in a directory relative to the JSPs. You will probably need to change your setting for the upload directory to an absolute path (but with no '@' in front of it). The default virtual wiki "jsp" uploads are now stored in a directory under the upload directory called "jsp". This will be created on the first upload, but you will need to shift any existing files in the root of your upload directory into the "jsp" folder.

The other major change is the way that the lexer (the thing that does the formatting from the Wiki markup and the automagic linking) operates. The lexer is now loaded dynamically to make it easier for people to create their own lexers. Previously you could select either "Standard" or "Fritz" from the admin console. Now if you wish to run the standard (it will default to this anyway) the settings are:

1. Format Lexer: vqwiki.lex.FormatLex
2. Link Lexer: vqwiki.lex.LinkLex

If you are using the Fritz lexer, then you need to change this to:

1. Format Lexer: vqwiki.lex.FritzLex
2. Link Lexer: nullx

The Fritz lexer only makes one pass, so the second pass is unnecessary.

Upgrading from 2.0 to 2.2

If you're using database persistence, as some additional fields were added to 2.2 to facilitate "virtual wikis", you'll need to run the following script on your MySQL database (don't forget to backup your database first):

```
ALTER TABLE Topic ADD COLUMN virtualwiki VARCHAR(100);
ALTER TABLE TopicVersion ADD COLUMN virtualwiki VARCHAR(100);
ALTER TABLE TopicChange ADD COLUMN virtualwiki VARCHAR(100);
ALTER TABLE TopicLock ADD COLUMN virtualwiki VARCHAR(100);
ALTER TABLE TopicReadOnly ADD COLUMN virtualwiki VARCHAR(100);
ALTER TABLE Topic DROP PRIMARY KEY;
ALTER TABLE Topic MODIFY virtualwiki varchar(100) NOT NULL;
```

```
ALTER TABLE Topic ADD PRIMARY KEY(name,virtualwiki);
UPDATE Topic SET virtualwiki = 'jsp' WHERE virtualwiki = NULL;
UPDATE Topic SET virtualwiki = 'jsp' WHERE virtualwiki = '';
```

Persistence - The Default File-System

VQWiki's major goal is to be as easy to deploy as possible, i.e. drop the WAR, start the server. It is for this reason that the default file system exists. The principles are very simple, but so is WikiWikiWeb, so it works:

- By default, the file-system is set up in the user's home directory, in a sub-directory named "vqwiki". This location can be changed from the admin console.
- Every topic gets written to one text file named as the topic with a ".txt" extension
- Versioning gets written to files with a timestamp in the filename in a versions sub-directory
- Locking is maintained by the creation of files named as the topic with a ".lock" extension
- Usernames, subscriptions and recent changes are serialized to XML files.

If you require higher performance than you would expect from the above system, that's where the MySQL database mode as described in the next chapter comes in.

Migrating to database-backed persistence

Overview

VQWiki is configured to use flat-file persistence by default. This means that it stores all wiki pages and assets directly on the filesystem. This is fine for smaller implementations, but there are performance issues around searching, indexing, and cross-linking new topics. VQWiki can be easily configured to use database persistence, which leads to much better performance for larger wikis. These directions are oriented toward MySQL which is the default database choice; see below for Oracle-specific notes.

General Steps

To use database persistence, you must have the the JDBC driver for your database installed in the classpath of your web container, or in the WEB-INF/lib directory of the VQWiki webapp. For MySQL you can download the latest version of the MySQL JDBC driver from: <http://www.mysql.com/products/connector/j/index.html> [<http://www.mysql.com/products/connector/j/index.html>].

You should then start by creating a database instance for vqwiki, as well as provisioning a username and password for the system to use.

If you are using MySQL, these steps would look something like:

- create database vqwiki;
- grant all on vqwiki.* to vqwiki@localhost identified by 'vqwiki';
- flush privileges;

This will create a database called vqwiki on the database machine, and will allow a user named 'vqwiki' full access to the system. Obviously, you may need to change the hostname from localhost to something else if you are running MySQL on a different machine to the one running the database, or if you have set MySQL to bind to an address other than the localhost loopback, e.g. if MySQL is

bound to a network card: `grant all on vqwiki.* to vqwiki@your-vqwiki-server identified by 'vqwiki';`

It's probably a good idea to change this password to something that is more difficult to guess, particularly if this is to be used in a production system, or if the wiki may contain sensitive information. The root MySQL user and password should not be used for security reasons.

VQWiki will generate its own tables and copy data into them, so once the database configuration is done, the remaining work can be performed within the VQWiki Admin console. Click on the "Admin" link on the bottom of the page, and enter your administrator's password to view this page.

In order to switch to database persistence mode, you will need to change the following settings:

- Persistence - change this from "Flat-File" to "Database". This will activate the additional fields you will need to configure.
- JDBC Driver Class - by default, this is the MySQL driver (`com.mysql.jdbc.Driver`). If you need to use a different driver, enter it here.
- Database type - select either `mysql`, `ansi`, `postgres`, or `oracle`.
- Database URL or JNDI Datasource name - This is dependent on your setup. By default, the URL is set to `jdbc:mysql://127.0.0.1/vqwiki`, which translates to "The database named vqwiki, installed on the mysql database that's running on the host with IP address 127.0.0.1". You may need to edit this URL to connect to a different host, or to use a different JDBC driver. You can also use this area to specify that your database configuration is managed by JNDI- see below.
- Database Username - this is the username for database access, as set above.
- Database Password - this is the password for database access, as set above.

Once the database persistence is set, select "Save Changes". This will connect to the database, create the tables, and verify that everything is working. If you see database connection errors, there are several items to try:

- Make sure that you are allowed to connect from the host that is running VQWiki to the host that is running the database. Most database systems are designed to be very restrictive about what hosts are allowed to connect with them. If you are using MySQL, try running it from the command line on the VQWiki host, as in: `mysql -u vqwiki -h localhost -p vqwiki`. If you cannot connect, then there may be a firewall or other issue that needs to be resolved before you can continue.
- Check you have put your database JDBC drivers into a location that VQWiki can access. For a development system, it may be simpler to download the JDBC drivers that are designed for your database, and copy them to `{installdir}/vqwiki-2.8.1/WEB-INF/lib`. You should also obtain the JDBC driver name and URL format from the documentation at the developer's website.

Once that the database is successfully tested, scroll to the bottom of the Admin console, and look for an entry that says "Import from File to Database". This will copy your Wiki topics from the local filesystem to the database system you created. Note that attachments and plugins will remain on your filesystem, and will not be copied into the database. Any backup system you deploy must backup the local files as well as the database files to avoid problems.

Please see the section on Connection Pool tuning to maximize your database performance.

Configuring JNDI Data Sources

VQWiki can use a J2EE style DataSource retrieved through JNDI as a source of database connections. The procedure is as follows:

Configure a JDBC DataSource in your container and make it available through JNDI. Consult your container's documentation for details. Note the JNDI name needed to look it up. VQWiki will look up the name from an InitialContext instance, so you'll probably have to prefix your JNDI name with "java:comp/env/". For example: "java:comp/env/jdbc/VQWikiDb".

In the administration console, configure VQWiki for database persistence as above, but with the following changes:

- The driver class name field can be left empty.
- All connection pool settings are ignored.
- Either configure a username and password in your DataSource, or specify a username/password pair in the admin servlet, but not both. I've only tried the former, but the latter should work if your DataSource and JDBC driver support it. Leave the username and password fields empty if your DataSource has the login credentials.
- Set the Database URL to the JNDI name. VQWiki distinguishes between the two by looking at the URL. If it starts with "jdbc:", it's assumed to be a JDBC URL, otherwise, it is assumed to be a JNDI name.

That's it. If you only want to use a DataSource to realize connection pooling/testing/recycling, consider using the builtin connection pooling support instead. See "Connection Pool Tuning" below for more details.

Connection Pool Tuning

VQWiki's Database persistence mode uses the Apache Commons DBCP (Database Connection Pooling) to provide robust database performance.

Nothing special needs to be configured to make this work, it's there out of the box. The default configuration should suffice for most situations, but all connection pool parameters are configurable from the administration page.

These options should be self-explanatory. For more details on the inner workings of DBCP, take a look at the DBCP and Pool homepages:

- <http://jakarta.apache.org/commons/dbcp/> [<http://jakarta.apache.org/commons/dbcp/>]
- <http://jakarta.apache.org/commons/pool/> [<http://jakarta.apache.org/commons/pool/>]

If you want to use a database type other than MySQL, you should pay close attention to the "validation query" parameter. This is a small query to be executed to test the validity of the connection. For MySQL, the query "SELECT 1" is appropriate, which is the default. No table is specified, because the fact that the query is received and processed by the server is enough to ensure the connection is still alive and well. For other database types, other queries are appropriate. For Oracle, "SELECT COUNT(*) FROM DUAL" is a useful validation query. The table "DUAL" is a special built-in table with a single row for exactly this kind of purpose.

If you use another database type, consult your database's documentation for details on what is a usable validation query for you.

Oracle Notes

In order to use Oracle as your persistence layer, you will need the classes12.zip Oracle JDBC Thin driver. Either include it in the WEB-INF/lib directory of the VQWiki webapp, or in a container-specific lib directory that is made available to your container's webapps. For Tomcat, that is {TOMCAT_HOME}/common/lib. In the case of Tomcat, rename the file to classes12.jar. The Tomcat classpath builder doesn't see zip files as libraries.

This code should also work with the OCI driver. However, you're on your own as to configuring the native code library so that the OCI JDBC driver can see it.

The classes12.zip can be downloaded from: http://www.oracle.com/technology/software/tech/java/sqlj_jdbc/index.html [http://www.oracle.com/technology/software/tech/java/sqlj_jdbc/index.html]

In the VQWiki Administration Console, specify the following:

- JDBC driver class: `oracle.jdbc.driver.OracleDriver`
- Database type: `oracle`
- Database URL: `jdbc:oracle:thin:@dbserver:port:dbname`
- Database Username: as appropriate
- Database Password: as appropriate
- Validation query: `SELECT COUNT(*) FROM DUAL`

Fill in the values for `dbserver`, `port` and `dbname` in as appropriate for your environment. Ask your database administrator.

VQWiki will automatically create the tables if it has the privileges to do so. If not, ask your database administrator to execute the `create_oracle.sql` script as the schema owner. This script is located in `{installdir}/WEB-INF/classes`.

VQWiki will try to recreate the tables every time it starts up. This will cause errors such as: `java.sql.SQLException: ORA-00955: name is already used by an existing object`. These can be safely ignored.

If you get "Table or view does not exist", even though the tables do exist, there is a database configuration problem. The database user must be able to see the tables without prefixing a schema name. You may need to create public synonyms for the tables if the schema owner is not the database user. Again, ask your database administrator to create public synonyms for the VQWiki tables if this is the case.

If VQWiki doesn't create the tables, check the log files. If there are messages about SQL syntax errors, check the `vqwiki.properties` file in `WEB-INF/classes` and the administration console to make sure the database-type is set to "oracle".

Configuration Settings

Admin Console Settings

The Admin Console can be accessed by clicking on the Admin link on any page and entering the Admin password. If the admin password has been lost, see the entry under "Administrator Password Reset" in the Troubleshooting section below.

VQWiki Admin

Log out from admin

Settings

Editing lock time-out (minutes)	<input type="text" value="10"/>
Number of days of RecentChanges	<input type="text" value="5"/>
Maximum number of backlinks	<input type="text" value="20"/>
Automatic indexing interval (minutes)	<input type="text" value="1440"/>
Include attachments when indexing for search engine	<input type="checkbox"/>
Recent Changes refresh interval (minutes)	<input type="text" value="1"/>
New line breaks	<input type="text" value="1"/>
Default topic	<input type="text" value="StartingPoints"/>
Use versioning	<input checked="" type="checkbox"/>
Use Templates	<input checked="" type="checkbox"/>
Use Preview	<input type="checkbox"/>
Allow HTML	<input type="checkbox"/>
Allow back-tick WikiNames	<input checked="" type="checkbox"/>
Force the setting of username	<input type="checkbox"/>
Allow virtual wiki list	<input checked="" type="checkbox"/>
Separate topic title words	<input type="checkbox"/>
Convert tabs by default	<input checked="" type="checkbox"/>

The Admin Console allows administrators to set the following system parameters:

		it deals with the requests, so you don't have to deal across different browsers.
File-system directory		In flat-file mode, this is where the files for the wiki topics will be stored.
Administrator's Guide		
SMTP host, username and password		This is the SMTP host name or IP address for the server that will handle outgoing email for topic change notifications. The username and password can be left blank for non-authenticating SMTP servers.
Table 2.1. Administrative Parameters		
Reply address		This is the address that will appear in the reply-to field for Wiki email notifications.
Persistence		This is where the persistence mode can be set - either the default "Flat-File", or "Database" to use a database as the back end. If you select "Database", you will be presented with further fields in which to enter the JDBC database driver name, the database name and a user and password. VQWiki does not ship with any JDBC driver, but the default JDBC configuration is for MySQL. See the chapter on MySQL for more information on getting the driver and setting this up.
Closed user group?		Normally, a wiki has no closed user group, but anybody is free to enter/modify text. However, in a controlled environment (e.g. inside a company) it may be a requirement, to clearly distinguish the people. Then you can have a closed user group. The wiki can query a data source for the names of that user group. With the selector, you select the type of data source you want to use. Currently, only LDAP is supported. Note: You must have "use versioning" and "Force the setting of username" switched on to see the effects.
Java Factory		This is the java factory, which is used for the user group. For LDAP choose "com.sun.jndi.ldap.LdapCtxFactory".
URL		The URL to connect to the data source server. For LDAP choose "ldap://your.ldap.server:389".
Username		The username you need to connect to the data source. Can be left empty.
Password		The password you need to connect to the data source. Can be left empty.
Search-String		The basic query string you need to query the datasource. For LDAP choose something like "ou=users,dc=yourcompany,dc=com".
Search restrictions		If you want to add additional restrictions to the search. Use a comma separated list. For LDAP you could do: "objectClass=person"
Name of field of user-id		The name of the field of the user identifier in the datasource. In LDAP it usually is "uid".
Name of field of full name		The name of the field of the full name in the datasource. In LDAP it usually is "cn".
Name of field of email address		The name of the field of the email address in the datasource. In LDAP it usually is "mail".
Detailview of user / author		A snippet of HTML code, which is shown on a wiki page to give more details about the author. The text is HTML code plus some placeholders. The placeholders are formatted like "@@cn@@" and are filled with the appropriate field (in the example: the field "cn") from the data source.

The admin console also allows the wiki administrator to perform certain key maintenance functions:

Table 2.2. Administrative Functions

Refresh Search Index	This forces the flat-file mode search indexer to run. As mentioned earlier, the indexer is run automatically at the interval specified above.
Purge Deleted Topics	This will delete any topics that contain only the word "delete".
Clear Edit Lock on Topic	To use this, enter a topic name and click the "Go" button, any lock that is held on the topic will be cleared.
Read-only Topics	Use this section to add and remove topics that should be read-only
Add virtual wiki	Entering a new virtual wiki name and clicking add will register the virtual wiki of that name. Note that if you want to customize its name in your language you must perform some additional actions. This is covered later in this manual.

Parameters in web.xml

The VQWiki application is constructed as a series of servlets. The mappings for these servlets is controlled by the web.xml file. For most sites, the relevant portion of this file is the portion that controls the provisioning of virtual wikis. See Administrative Tasks : Creating Virtual Wikis, below.

Parameters in properties files

vwiki.properties

The Admin Console writes the VQWiki system settings to a properties file called `vwiki.properties`. This file along with the other configuration files is located by default in `{installdir}/WEB-INF/classes`. If you edit this file directly, you should restart the vwiki application to avoid over-writing your updates from the Admin Console, or leaving the system in an inconsistent state.

This file does need to be edited to reset the administrator's password if it is lost. Please see the Administrator's Password Reset in the Troubleshooting section, below.

There are some application servers that don't like files being written to when they are resources. There is also the case that you may want to keep your properties file intact between Wiki upgrades. In these instances you can set a location for the properties file by adding an environment entry named "propertiesFile" to the web-app descriptor for your Wiki context, e.g.:

```
<Context path="/vwiki" docBase="c:/vwiki" debug="0" >
  <!-- the rest of your context information -->
  <env-entry>
    <description>VQWiki propertiesFile</description>
    <env-entry-name>propertiesFile</env-entry-name>
    <env-entry-value>c:/myproperties</env-entry-value>
    <env-entry-type>java.lang.String</env-entry-type>
  </env-entry>
</Context>
```

linking.properties

By default, VQWiki supports entries to make reference to the original C2 WikiWikiWeb, the Meatball Wiki and individual Microsoft Knowledge Base articles. The shorthand for these all take the form `prefix:detail`

You can add new external links by editing the file `{installdir}/WEB-INF/classes/linking.properties`. A comment in the file explains the straightforward syntax. In the case of the C2 Wiki, the entry is `c2=http://c2.com/cgi/wiki?${url}`. The `${url}` keyword is expanded to whatever the user puts after the colon when they create the link, e.g if they put `c2:StartingPoints, ${url}` will be expanded to "StartingPoints" creating the complete URL `http://c2.com/cgi/wiki?StartingPoints`

externallex.properties

From version 2.4.0 onwards, VQWiki supports external lexers. These lexers are triggered from the standard lexers using special markup. As an example, VQWiki is supplied with `vqwiki.lex.JavaLex` which uses the `java2html`[6] library to format Java source code into pretty HTML.

To see it in action, try entering the following into a Wiki topic: `[<java>] class Test{ public void test(); } [</java>]`

You should see neatly formatted Java source code. The special tag format asks VQWiki to process all the text inside the tags using the class named as the value for "java" in the `{installdir}/WEB-INF/classes/externallex.properties` file. The default entry in this file is: `java=vqwiki.lex.JavaLex`.

To write your own external lexer, write a class that implements `vqwiki.lex.ExternalLex` interface (it's only one method) and put an entry with an appropriate tag name in the `externallex.properties` file.

E.g. you might write a class called `vqwiki.mylexers.CLex` for formatting C code. You could then make an entry in the properties file of the form `c=vqwiki.mylexers.CLex`. Anything between the tags `[<c>]` `[</c>]` would then be passed to the `process(String text)` method in the class `vqwiki.mylexers.CLex`.

ApplicationResources.properties

Locale-specific language strings. This includes the mail messages to be sent on email notification of topic changes.

mime.types

This file controls what Internet media types are sent to the client for each given file extension(s). Sending the correct media type to the client browser is important so they know how to handle the content of the file. The file follows the format of the standard Apache `mime.types` file.

This file is primarily useful if you need to support an unusual type of file as an attachment for your Wiki. Simply add the extension and the file type to the end of this file and restart your application.

pseudotopics.properties

This contains key-value mapping of topic names that are not really editable topics to redirect URLs to carry out special actions, e.g. `RecentChanges`

actions.properties

This contains key-value mapping of action names to class names of classes that implement `vqwiki.WikiAction`. Plugins place mappings in this file.

Lexers

As mentioned earlier, the format lexer is the class responsible for tokenizing the user input and formatting it appropriately - e.g. bold, italics, lists and tables. The link lexer is responsible for the automatic linking as described earlier. It is possible to write a single lexer that does both, in which case the link lexer should be set to "null".

VQWiki is distributed with three default lexers: `vqwiki.lex.FormatLex` and `vqwiki.lex.LinkLex` are designed to work together and should be adequate for most purposes.

A third lexer `vqwiki.lex.FritzLex` (written by Fritz Freiheit) does not require a separate link lexer, so the link lexer should be set to "null" in the admin console to use it. This lexer supports a wider range of heading styles than the default lexers.

Another lexer shipped with VQWiki duplicates the syntax used by the popular Mediawiki software (see <http://meta.wikimedia.org/wiki/Help:Editing> [<http://meta.wikimedia.org/wiki/Help:Editing>]). To use this lexer the Format lexer value should be set to `vqwiki.lex.MediaWikiSyntax`, the layout lexer should be set to `vqwiki.lex.MediaWikiHTML`, and the link lexer should be set to "null".

The lexers that come with VQWiki are generating using the JFlex ² tool. However, you can write your lexer in any way you choose - so long as it implements the `vqwiki.lex.Lexer` interface.

Administrative Tasks

Creating Virtual Wikis

VQWiki supports multiple independent wikis on a single webapp instance. These "Virtual Wikis" allow the support of multiple independent content stores. Common applications include public / private wikis, project-specific wikis, and client-specific wikis in a consulting environment. To provision and configure a virtual wiki:

- Access the admin console
- Scroll down to the "add virtual wiki" box, enter a name (one word, no spaces), for example "other" and click add
- Optionally set a "friendly name" for the virtual wiki in `{installdir}/WEB-INF/classes/ApplicationResources.properties`. The entry should be in the format: `virtualwiki.other.name=Other` Where "Other" is the name that will appear in the virtual wiki list.
- You have then to restart the vqwiki webapp to make the "friendly name" visible.

Integrating with LDAP

Normally, a wiki allows anybody to enter and modify text. However, this can create issues in a controlled environment (e.g. inside a company). In order to clearly distinguish the people who are posting, VQWiki supports LDAP connectivity. In order to configure LDAP, access the Admin console, and set the following parameters:

- Use Versioning - must be checked
- Force the setting of username - must be checked
- Closed user group - set to LDAP

² JFlex - The Fast Scanner Generator for Java jflex.de [<http://jflex.de>]

- Java Factory - set to `com.sun.jndi.ldap.LdapCtxFactory`
- URL - The URL to connect to the LDAP server. Should be something like `"ldap://your.ldap.server:389"`
- Username - The Username to connect to the LDAP server, if required. Can be left blank.
- Password - The Password to connect to the LDAP server, if required. Can be left blank.
- Search-String - The basic query string you need to query the datasource. For LDAP choose something like `"ou=users,dc=yourcompany,dc=com"`.
- Search restrictions - If you want to add additional restrictions to the search. Use a comma separated list. For LDAP you could do: `"objectClass=person"`
- Name of field of user-id - The name of the field of the user identifier in the datasource. In LDAP it usually is `"uid"`.
- Name of field of full name - The name of the field of the full name in the datasource. In LDAP it usually is `"cn"`.
- Name of field of email address - The name of the field of the email address in the datasource. In LDAP it usually is `"mail"`.
- Detailview of user / author - A snippet of HTML code, which is shown on a wiki page to give more details about the author. The text is HTML code plus some placeholders. The placeholders are formatted like `"@@cn@@"` and are filled with the appropriate field (in the example: the field `"cn"`) from the data source.

Maintenance Tasks

Rebuild Search Index

This is only required when using flat-file persistence. Selecting this from the Admin console will trigger a special run of the indexing utility. This is a way to manually run the indexer; it will usually just be allowed to run automatically, as configured by the Automatic Index Interval parameter.

Purge Deleted Topics

Over time, it may be necessary to reorganize and delete outdated topics. This is a two step process:

- Navigate to the topics to be purged. Edit each topic, replacing all content with the word `"delete"`.
- Access the Admin Console and select `"Purge Deleted Topics"`.

Note that this deletes the content permanently, and that the historical versions of the file and diffs cannot be recovered after it is performed.

Setting Read-only Topics

VQWiki allows the administrator to set certain topics as read-only. This is useful for controlling key pages (main navigation nodes, etc), or for controlling pages that are subject to frequent vandalism. To mark a page as read only:

1. Access the Admin Console and log in
2. Scroll down to `"Read-only Topics (jsp)"`

3. Enter the topic name and select "Add"

Troubleshooting

Panic Reset

In the unlikely event that VQWiki begins to misbehave in a significant way, you can attempt a "panic reset" by navigating to the Admin console, logging in, and selecting "Panic Reset" at the bottom of the page.

This effectively stops and restarts the application, which may affect whatever users are doing on the system.

If this fails, try restarting the application context, or the application server itself.

Administrator Password Reset

If you misplace the admin password, you can force VQWiki to generate a new one and display it to you on the first topic browsed to (as with initial installation). Use a text editor to edit the `{TOMCAT_HOME}/webapps/vqwiki-2.8.1/WEB-INF/classes/vqwiki.properties` file (or another location if you have overridden the default) and change the key-value pair that reads `firstuse=false` to `firstuse=true`. Restart the application context or the application server and browse to StartingPoints. You will be shown the new admin password.

Clearing Locks

When a user clicks the edit link, an exclusive lock is set on the topic they are editing. While this lock is present, any other users attempting to edit the topic will receive an error message asking them to try again later. This prevents conflicts occurring where one user inadvertently overwrites another user's changes.

If a user spends longer editing a topic than specified in the edit-lock timeout setting, the lock will be revoked when another user edits that topic. If the user who originally obtained the lock attempts to save, they will receive an error message telling them that their lock has expired. It is then up to user whose lock expired to merge the changes they took too long over into the new user's changes, once that user has finished editing their version.

Of course, if a user edits beyond their timeout and no one else tries to edit the same topic during that time, they may continue to save as normal. On an average size Wiki, this is almost always the case.

The administrator can unlock a topic manually by going to the "WikiLockList" topic. This topic displays a list of current locks with an "unlock" link beside each one. If you have not already logged in as an administrator, you will be prompted to log in upon clicking an unlock link.

Customizing Look and Feel

Using a Custom Logo

The custom logo image feature works as follows:

By default, we use `{installdir}/images/logo.jpg`. If the user specifies the URL of an alternate image in the deployment metadata, that image will be used instead. In this case, a "Powered by VQWiki" image will be displayed on the footer of all pages that use the custom logo.

E.g., in `Tomcat server.xml`, it would look like this (note the override attribute):

```
<Context      path=""      docBase="vqwiki-classic"      debug="0">
<env-entry>      <description>logoImageName</description>      <env-
entry-name>logoImageName</env-entry-name> <env-entry-value>/images/
tomcat-power.png</env-entry-value>      <env-entry-
type>java.lang.String</env-entry-type> </env-entry> </Context>
```

or

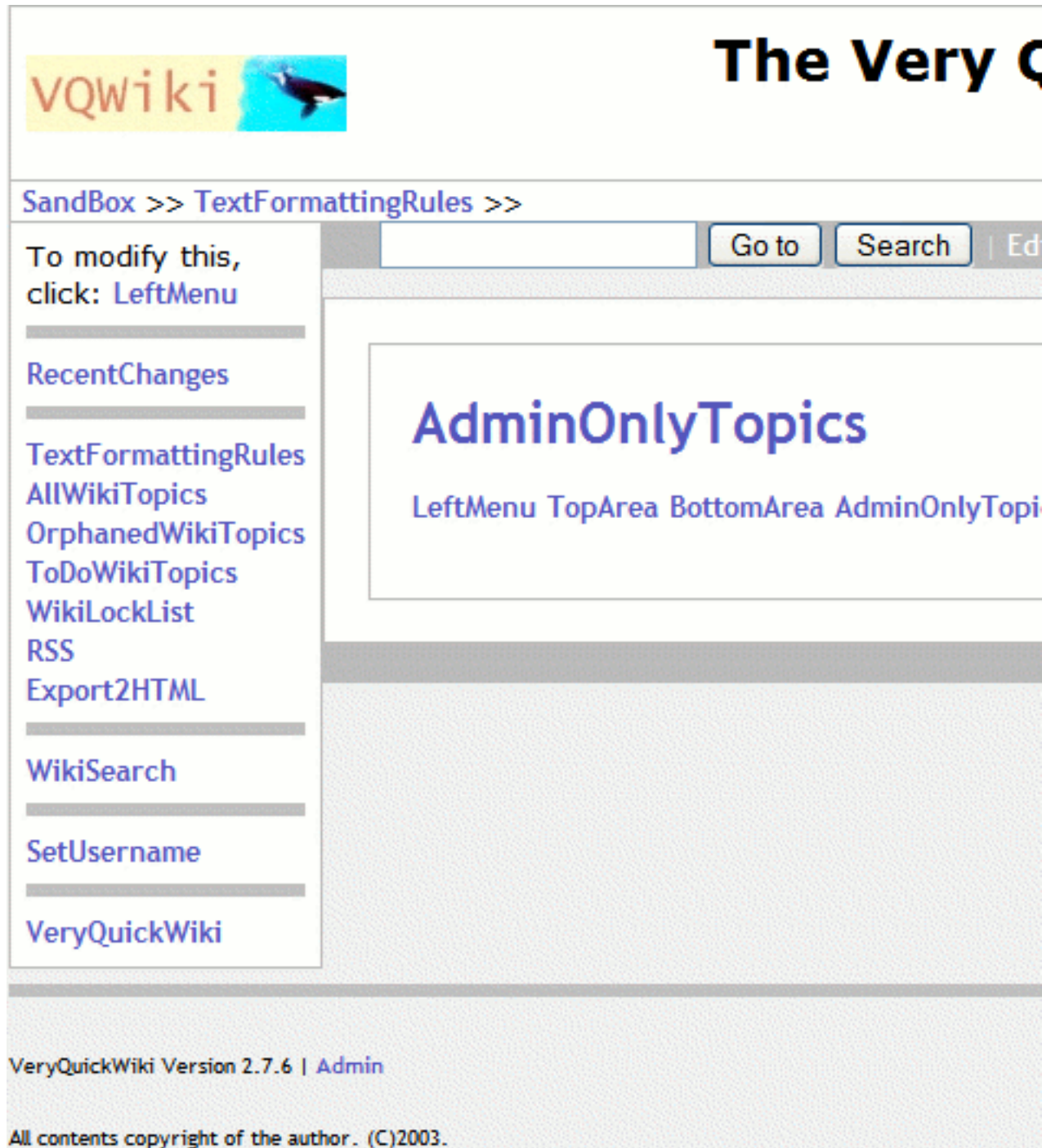
```
<Context      path="/vqwiki/mikewiki"      docBase="vqwiki-classic"
debug="0"      >      <Environment      name="logoImageName"
type="java.lang.String"      value="http://images.sourceforge.net/
head_bg_new.gif" override="false"/> </Context>
```

The index page and admin console still display the VQWiki logo, as always.

Customizing Page Layouts

VQWiki allows the site administrator to edit the look and feel of the site directly through the application. The governing CSS files as well as the top, left, and bottom menus are all directly editable within the system.

To access these files, Click on the Admin link in the page footer, and login as the administrator. Then, return to the StartingPoints page, and type "AdminOnlyTopics" (without the quotes) into the search box. Click the "Go To" button to see the list of AdminOnlyTopics.



This list should have five elements:

- LeftMenu - controls the sidebar on the page
- TopArea - controls the page header area
- BottomArea - controls the page footer
- AdminOnlyTopics - controls which topics are editable only by the administrator
- StyleSheet - the global cascading style sheet in use at the site

Sitewide CSS

The sitewide CSS file can be edited by accessing the AdminOnlyTopics area, as above, and then navigating to the StyleSheet topic. Selecting "Edit" will bring up the page in an editor. It's recommended that you cut and paste the contents from the editor into an external CSS editor, and then reopen the topic once they are completed. This is to avoid inadvertently leaving the wiki in an unusable state while you are working on it.



The Very Q

[SandBox](#) >> [TextFormattingRules](#) >> [AdminOnlyTopics](#) >>

To modify this,
click: [LeftMenu](#)

[RecentChanges](#)

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[VeryQuickWiki](#)

| [EditPage](#)

StyleSheet

```
body {  
  font-family: Trebuchet MS, Verdana, Helvetica, sans-serif;  
  background-color: #f0f0f0;  
  font-size: smaller;  
}
```

```
a {  
  font-family: Trebuchet MS, Verdana, Helvetica, sans-serif;  
  font-weight: bold;  
  text-decoration: none;  
  color: #5555bb;  
}
```

```
a:hover{ text-decoration: underline;}
```

```
.contents {  
  font-family: Verdana, Helvetica, sans-serif;  
  background: #ffffff;  
  margin-right: 0%;  
  margin-left: 0%;  
  padding: 1.5em;  
  border: 1px solid;  
  border-color: #bbbbbb;  
}
```

```
.title {  
  background: #ffffff;  
}
```

```
.leftMenu {  
  font-family: Verdana, Helvetica, sans-serif;  
  background: #ffffff;  
  margin-right: 0%;  
  margin-left: 0%;
```

The CSS file has many class selectors that you can override and edit. Here are some of the most useful:

- .contents - the main content area of the site
- .title - the main title area
- .leftMenu - the sidebar
- .pageHeader - the name of this topic (within the content area)
- .navBar - the cookie crumb links at the top of the page
- .menu - the fixed references above and below the main content area
- .logo - controls the appearance of the Logo image
- .searchResult - controls the highlight color of search results

Page headers, footers, left navigation

The left sidebar, page headers, and footers can also be directly edited in the VQWiki environment. Please be cautious; it is possible to make your wiki inoperable if you insert badly formed HTML. In particular, make sure that all HTML is well formed, and that any table or div tags are self-contained and closed.

To edit these files, access them from the AdminOnlyTopics page, as above. Then select the area you are interested in editing, and click the "Edit" button.

The TopArea and BottomArea files are wrapped in special "<html></html>" tags. There should be one at the beginning of the file and one at the end. These tags are used to signal VQWiki that the following content should be treated as literal HTML. If these tags are not added, then VQWiki will translate the html characters and the raw HTML source will be displayed.

The LeftMenu file is not wrapped in these tags (unless you add them)- this is so the links to pages within the wiki are shown correctly.

Plugins

Plugins add extra functionality to the VQWiki system. A list of plugins is available at <http://vqwiki.org/downloads.php>. As of this writing, plugins exist to incorporate external RSS feeds and HTML, generate charts, and pretty-printers for HTML and SQL.

Installing Plugins

To install a new plugin in your environment:

1. Identify your VQWiki file-system directory. This should be set by the "File-system directory" parameter on the admin console.
2. Stop your vqwiki web application.
3. Open the file-system directory and look at the files inside. There should be a folder called "plugins".
4. Place the new downloaded plugin file (as a zip archive) in the plugins folder
5. Start your vqwiki web application back up

When vqwiki starts up again, the plugins will be unzipped and installed correctly. See the plugin's documentation for specific directions on how to invoke it.

Developing Plugins

If you wish to distribute an external lexer as a plugin, or add new actions, it is possible to package them as one zip with a single XML file to describe the external lex properties entry. If the zip is placed in the `{wikihome}/plugins`, its file structure will be automatically unzipped into the `{installdir}` on startup. If the plugin filename is "myplugin", then a file called `myplugin.xml` should be placed inside the zip in the `WEB-INF/classes` path.

The `myplugin.xml` file can contain an entry of the form

```
<plugin>
  <external-lex tag="mytag" class="mypackage.MyLexClass"/>
  <action name="myaction" class="mypackage.MyAction" pseudotopic="MyTopic"/>
</plugin>
```

This entry will be translated into an entry in `externallex.properties` and an entry in `actions.properties`. If a URL is requested from the Wiki controller with an "action" parameter, the value of the action parameter will be looked up as the action name. If a mapping exists, the action class will be instantiated and the HTTP request and response will be forwarded to the action. E.g. `http://myserver/wiki/jsp/Wiki?action=myaction` will trigger the action in the example above.

The pseudotopic entry on the action element is optional. If present it will associate a pseudotopic with the action. In the case above, going to the topic "MyTopic" will trigger the action, e.g. by navigating to `http://myserver/wiki/jsp/Wiki?MyTopic`. This is useful if you wish to have the action triggered from a LeftMenu entry for example.

So the entire zip file structure for `myplugin.zip` should look like:

- `WEB-INF/classes/myplugin.xml`
- `WEB-INF/classes/mypackage/MyLexClass.class`
- `WEB-INF/classes/mypackage/MyAction.class`

Security Issues and Workarounds

VQWiki File Storage Issues

Tomcat UserID

VQWiki stores all files (at least initially) on the local filesystem. If an installation transitions to database persistence, VQWiki continues to use the filesystem for images and other uploaded attachments. This has important security ramifications.

All file access and the initial directory creation are performed as the user that tomcat (or your application server) is running under. This means that if you are running tomcat as root, users will be able to upload files by default to the `/root` partition, which can be a significant issue on some systems, depending on your partitioning scheme (many systems do not make root subject to disk quotas). Also, files will be assigned to Root ownership, and may be set with root's `umask`. In a poorly configured system, this could lead to a security breach. *It is strongly recommended that you do not run tomcat as root or other privileged user.*

The directory that VQWiki writes to is controlled by the parameter "File-system directory" on the Admin console. This directory must be writable by the user that your application server is running under.

Disk Utilization

On a public wiki, a malicious user could create a denial of service attack by uploading many files. At some point, the system will run out of disk space or inodes. In order to prevent this, either set the "File-system directory" parameter on the Admin Console to a location on a separate partition with additional space (eg `/var` on a unix based system), or implement a disk quota system that will prevent the tomcat user from using more space than is planned for your implementation. This should be done with either a database or flat-file persistence system, as images and other attachments are stored on this server.

Archiving Content

Your archiving strategy depends on whether you have configured flatfile or database persistence.

For flatfile users, simply back up your VQWiki file-system directory. This should be set by the "File-system directory" parameter on the admin console.

For database users, you must back up this directory as well as the contents of your database, as the filesystem is used for attached images and other files.

Additionally, it is probably wise to create a snapshot backup of the contents of your `{TOMCAT_HOME}/webapps/vqwiki-2.8.1` folder as it will contain configuration settings that may be annoying to replicate at a later time.

Restricting Access

ReadOnly Topics

If a topic is frequently vandalized, it may be advisable to mark it read only. This can be accomplished by an administrator, through the Administrator's console. Please see the section marked "Setting a topic read only" in the "Maintenance Tasks" section, above.

LDAP Authentication

VQWiki allows integration with an external LDAP store. This can be configured so that users are required to authenticate against LDAP before they are allowed to edit topics in the system. Note that anonymous users are still able to view the content on the site. To prevent this, you could try to implement an Apache module like `auth_ldap` or `mod_auth_ldap` to look at the same ldap store as VQWiki. In this case, the `auth_ldap` module in Apache would either allow or disallow viewers and the VQWiki installation itself would either allow or disallow edits.

Note: both Apache and the `auth_ldap` and `mod_auth_ldap` modules are not part of the VQWiki installation and as such will not be supported by the project.

LDAP Integration instructions are covered in the LDAP Integration section, above.

Apache Authentication

In order to prevent anonymous users from browsing the content on the site, an authentication system should be enabled at the web tier. If the Apache httpd server is in use, there are a variety of modules that can be used to provide authentication services. While these services will not be directly integrated with VQWiki - an authenticated user will be given access, but no special recognition by the system - they can be used to provide sophisticated access control to the wiki.

A possible usefull method is to use either the `auth_ldap` or `mod_auth_ldap` Apache modules to integrate with an LDAP store. See the LDAP Authentication section above.

Detailed Apache documentation is available from <http://httpd.apache.org/docs/2.0/howto/auth.html> [<http://httpd.apache.org/docs/2.0/howto/auth.html>].

Chapter 3. User's Guide

This chapter is a brief overview of VQWiki from a user's perspective.

What is a Wiki?

Wiki's are loosely organized websites that are designed to make it simple for users to add and edit content on the site. Unlike most websites, Wikis are usually run with very loose permissions; virtually any site user is allowed to come along and edit any page, or to add new pages.

The original Wiki was developed by Ward Cunningham, and called WikiWikiWeb [<http://c2.com/cgi/wiki?WelcomeVisitors>]. He based the name [<http://c2.com/doc/etymology.html>] on the Hawaiian word "WikiWiki", meaning "Quick". Wikis have grown in popularity, and have been put into use in many different contexts. Within corporations, they are used to allow teams to collaborate more efficiently, and there are a variety of Wikis used to provide documentation for open source software. The most successful wiki is the wikipedia [<http://en.wikipedia.org/wiki/Wikipedia>] project, which was started to provide a comprehensive encyclopedia using Wiki technologies.

VQWiki Basics

This is what the main VQWiki page looks like when the system is first installed:



The V

To modify this,
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[AllWikiTopics](#)

[OrphanedWikiTopics](#)

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[Export2HTML](#)

[WikiSearch](#)

[SetUsername](#)

[VeryQuickWiki](#)

StartingPoints

Click "Edit Page" at the bottom of this page.
To delete a topic, just leave the word "del"
removed completely when your administrat

[RecentChanges](#) - what, when, who

[TextFormattingRules](#) - how to do emphasis,

[AllWikiTopics](#) - a list of all the topics in the

[OrphanedWikiTopics](#) - topics that have no l

[ToDoWikiTopics](#) - dangling topic links waitin

[WikiLockList](#) - currently locked topics

[RSS](#) - a RSS news stream of this Wiki

[Export2HTML](#) - export this wiki into a zip co

[WikiSearch](#) - search the Wiki

[SetUsername](#) - set a name to appear in the

Do you want to modify...

- ◆ the [TopArea?](#) [edit:TopArea](#)
- ◆ the [LeftMenu?](#) [edit:LeftMenu](#)
- ◆ the [BottomArea?](#) [edit:BottomArea](#)
- ◆ the [StyleSheet?](#) [edit:StyleSheet](#)

<http://veryquickwiki.veryquick.org>

If you have a spare moment, please let us

Editing a topic

Every individual page in VQWiki is called a "topic". In order to edit a topic, simply navigate to it and look for the link at the bottom of the page titled "EditPage". Clicking on this link will bring up the same topic, with all of the text in a big editable box. Your administrator may have set up the system to require you to provide your name before editing; if your system is set up this way, you'll need to provide your name before continuing.



edit Sandbox

Append this template:



This is the sandbox. Mess around.

```
'''c2:GoodStyle'''
mb:InformationVisualization
edit:StartingPoints
amazon:020171499X
mskb:256986
imdb:0086856
```

```
__`ignore me please `__
    * good times
    * really good times
```

TestTemplate

Append this template:

Save contents as a template named

instead:

[Quick Editing Help](#)

Text Emphasis

To make text... Surround text with...

Italic

Double apostrophes (not dou

Simply make your changes inside the box and select "Save" to save your changes. Select Cancel if you don't want to change the topic after all. A few general pointers:

- Don't press the enter key at the end of a line- let it wrap naturally. People using the Wiki will have their browsers set to different widths, so it's better to let the computer figure out how wide to make each line.
- Use the enter key to make paragraph breaks
- The system will make links clickable automatically. Enter in the whole URL (including the http:// part), and the system will make it clickable.
- If you put in a URL to a graphic (GIF or JPEG), it will be directly included at that point on the page.

Basic Formatting and Markup tags

The Wiki is intended to be quick and easy, so you don't have to learn HTML or a special language to use it. However, there are a few tags you can use to dress up your text:

- Double Apostrophes (not quotes!) surrounding a word will make it *"italic"*.
- Triple Apostrophes surrounding a word will make it **'''bold'''**.
- Triple Plus Double Apostrophes (which is five apostrophes) will make it both **""bold and italic""**.
- To insert a section of code, wrap the code with `{{{three curly braces on each side}}}`.
- To underline, put `===Three Equal Signs===` around your text.
- Double Colons `::Center The Text::`
- If you have a headline, put `!!!Three Exclamation Points!!!` around it
- If you have a subhead, put `!!Two Exclamation Points!!` around it
- If you have a sub-sub-head, put `!One Exclamation Point!` around it
- A dividing line is created with four consecutive dashes `---`

Creating a new topic

Creating a topic is a two-part process. First, navigate to a part of the site that should contain a link to your new content. Then, edit that page, and include a link.

A VQWiki link is specified in two ways- either as a CamelCasedWord (a word with embedded capital letters and no spaces), or as a text label surrounded by BackTicks. To insert a link to my page about my model rocket collection, I can either add the text `MyModelRockets` to the page, or I can add the text ``My Model Rockets``.

Once the page containing your new link is saved, you'll see the new text displayed with a question mark at the end- something like `"MyModelRockets?"`. The question mark is actually a hyperlink; clicking on it will bring up a blank page in the text editor, so you can type in your content. After you hit save, the question mark will disappear, and the whole link will become clickable.

Attaching a file or graphic to a topic

If you want to share a document or add an image to a topic, simply navigate to the topic you are interested in, and select "Attach" from the top menu. This will bring up a dialog box that allows you


to upload as many as three files at a time. Click on the Browse button to find the files you want to upload, and click on "Save" when you're done. Your administrator probably limited the size of the files that you are allowed to upload, so try to keep them manageable.

Once the file is uploaded, it will appear within the topic's content. If you uploaded an image, the image will be directly included. If you uploaded a document, it will appear as a hyperlink with the same name as the document.

If you want to reference the same image or file in another topic, simply click on "edit this page", and copy the text that linked to the image. It will probably say something like "attach:some_graphics_file.jpg". If you paste this text into another part of the site, it will appear there as well.

Looking at a topic's history

Since a Wiki is usually an environment that anyone can edit, there is significant potential for mischief. In order to fight this, the Wiki stores a copy of each version of each topic when it's saved, so it's easy to revert back to an older version of a given topic. This can also be useful to track the changes that a topic has been through as people contribute to it.



The Very Q

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History for SandBox

Jan 20, 2006 10:40:14 PM ☐

Jan 20, 2006 10:29:46 PM ☐

Jan 20, 2006 10:25:58 PM ☐

Jan 20, 2006 9:59:58 PM ☐

Jan 20, 2006 9:58:05 PM ☐

Jan 20, 2006 9:55:07 PM ☐

Jan 20, 2006 9:50:15 PM ☐

Jan 20, 2006 9:48:59 PM ☐

Jan 20, 2006 9:45:33 PM ☐

Diff Selected

To see the history of a particular topic, first navigate to the topic, and then click on the history item on the page footer. This will bring up a list of the different revisions of the topic. You can see what changed between any versions by selecting their checkboxes, and clicking on the "Diff Selected" button.

Reverting a topic to a previous version

To revert a topic to a previous version, navigate to the topic's main page, and select the History button. Click on the version you are interested in restoring. This will bring up the window in two parts- the top part is the preview of the page, and the bottom part is the raw text. Select and copy the raw text.

Then, select the current version link. Once you see the page you wish to replace, click on edit page. Delete the text and replace it with the raw text you copied from the old version of the page.

Advanced VQWiki

VQWiki has many additional features for advanced users. You don't need to know any of this to contribute to the Wiki, but they can definitely help you find information in your wiki, and will allow you to extend the basic functionality of the system.

Special Pages

One of the core concepts in VQWiki is "Special Pages". These look like regular pages in the Wiki, but actually map to functions of the underlying software. This section is a review of each of these special pages. In a default VQWiki installation, these special pages are accessible from links on the left sidebar.

Recent Changes

This is a list of the topics that have been recently changed in the wiki, and either the IP address or the name of the person who performed the modification. Clicking on the link will bring up the page. On a public wiki, it's a good idea to check this periodically, to help prevent abuse- or, to revert it once it happens.

AllWikiTopics

This is a comprehensive list of all of the topics in the Wiki- this includes topics that are used by the administrator to control the look and feel of the wiki. This is a good way to get a feel for the size of the content on your wiki.

Orphaned Wiki Topics

An "orphaned" topic is a topic that doesn't have any other topics that link to it. This means that a user will be unable to navigate through the wiki to find this page- it will only be available through searching the wiki, or through typing the topic name directly. The "AdminOnlyTopics" should probably stay as an orphan, as it is a list of the topics that the local administrator uses to control the look and feel of the system.

ToDoWikiTopics

The Wiki automatically creates links when it encounters a word in CamelCase, or a word surrounded by backticks. This is considered a "to-do" item- it's been labeled as a link, but the topic behind it hasn't been created. If you are responsible for the content of the wiki, it is probably a good idea to keep an eye on this page and fill in the blanks where possible- even with simple article stubs. This may inspire other contributors to elaborate- and nothing is more maddening than a wiki that is actually just a bunch of twisty narrow passages, all alike.

Wiki Lock List

As users edit topics on the wiki, individual pages will be locked. You can use this to see how many topics are currently locked and in process of being edited.

Export2HTML

You can save the entire wiki to a set of HTML files and download them for local archiving. The contents of the wiki will appear as a single large ZIP archive, which you can then save to your local hard drive.

Templates

Templates allow you to set up standard text that users can later automatically include in the topics they are editing.

An example would be a software company, that had decided to use VQWiki to keep track of some of their old projects. They want to add a quick description to the wiki for each of their projects. They want to capture standard information for each one, plus whatever additional information team members wanted to add. They start by editing a topic, and simply inserting labels for the information they want to add in: Project Name, Client, Start Date, End Date, Description. Instead of saving the topic, they enter in a name like "project_info" into the box labeled "Save Contents as Template: ". They save the template.

Now when they add a new topic, they can just go to the box labeled "Append Template:", select the "project_info" template, press the Append button. The contents of the template will be copied into the editing area. Now the users have the information we want them to add, the wiki looks more consistent, and they don't have to type it all in again for each project they add.

To change an existing template, append it to a blank topic, edit it as necessary, and simply save it as a template again, using the same name.

Advanced Formatting

VQWiki supports a reasonably rich set of formatting controls. There are some fairly complex controls that only rarely come into play.

- To create a bulleted list, put in three spaces and an asterisk (*) before each item in the list.
- To create a numbered list, put three blank spaces and an octothorpe(#) before each item in the list.
- If you need to create a sub list, put in six spaces, and then either an asterisk or an octothorpe. Keep using multiples of three if you need to continue indenting.
- If you need to display some characters that the wiki software would read as formatting code, wrap it with two underline characters (for example, `__`Backticks that aren't special`__` .
- On the other hand, if you need to display two underlines in a row for some reason, and you don't want them to turn off your formatting code, escape them with a backslash (like `__`).
- If you wish to display preformatted code (like a code sample) and you don't want to use the java pretty-printer described below, insert four "@" signs in a row, followed by your text, followed by a blank line.
- If you need words to appear in a monospace font inline, wrap them with three braces: `{ { {your text here} } }` .

Links

Any fully qualified URL will be turned into a hotlink. VQWiki contains a number of shortcuts for adding external links to your site.

To use each shortcut, enter in the shortcut, followed by a :, and then the topic you are linking to. For instance, to use the Amazon shortcut, enter in "amazon:020171499X", where "020171499X" is the ISBN number of the book you are linking to. Your administrator can easily define additional shortcuts; many organizations use them to link to bug reports, documents on the internal network, or intranet resources. The default set of shortcuts that comes with VQWiki is:

Shortcut	Example	Destination
c2:<topic>	c2:GoodStyle	<topic> on Ward Cunningham's original wiki

Shortcut	Example	Destination
mb:<topic>	mb:InformationVisualization	<topic> on the UseMod Meatball Wiki
mskd:<number>	mskb:256986	Displays article <number> in Microsoft's Knowledge Base
edit:<topic>	edit:StartingPoints	Brings up <topic> in the edit window in this VQWiki installation
redirect:<topic>	redirect:StartingPoints	Redirects user from one topic to another. Must be the only thing in the body of a topic.
amazon:<isbn>	amazon:020171499X	Links to the book with the specified <isbn> on amazon.com
imdb:<number>	imdb:0086856	Brings up the movie with the specified <number> on the internet movie database.

Embedding HTML

You can put any arbitrary HTML code into a page by simply wrapping it with special [<html>].... [</html>] tags. For example:

```
[<html>
```

```
<input type="button" value="say hello!" onclick="alert('hello world!')">
```

```
[</html>]
```

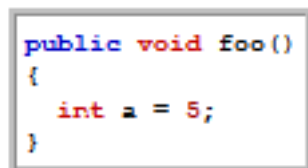
Obviously, adding in bad HTML (failing to close a table or div tag) could make it very difficult to edit or repair your page. If that happens, use the page history function to revert to a previous version.

Administrators can disable HTML posting to prevent cross-site scripting attacks through the Administrative control panel.

Embedding Java

You can also embed java code snippets, and the system will format and colorize them appropriately. It works the same way as the html tags above, but with [<java>]... [</java>] tags instead.

```
[<java>]public void foo() { int a = 5; }[</java>]
```



Using Plugins

There are a variety of downloadable plugins available for VQWiki. While an administrator must install them, they provide useful features to site authors. Each plugin has it's own documentation, so you are encouraged to review them for yourself. This list is probably out of date; please check <http://www.vqwiki.org/downloads.php> for updates [???]. As of this writing, known VQWiki plugins included:

Plugin Name	Location	Description
Include	http://www.vqwiki.org/plugins/include.zip [http://www.vqwiki.org/plugins/include.zip]	Include one topic's content in another.
GetHTML	http://www.vqwiki.org/plugins/sqlsrc.zip [http://www.vqwiki.org/plugins/sqlsrc.zip]	Include external web page content in a topic.
SQL Source	http://www.vqwiki.org/plugins/sqlsrc.zip [http://www.vqwiki.org/plugins/sqlsrc.zip]	Pretty-print SQL source code in a topic.
HTML Source	http://www.vqwiki.org/plugins/htmlsrc.zip [http://www.vqwiki.org/plugins/htmlsrc.zip]	Pretty-print HTML source code in a topic.
RSS	http://www.vqwiki.org/plugins/rss.zip [http://www.vqwiki.org/plugins/rss.zip]	Include External RSS feeds in topics.
Chart	http://www.vqwiki.org/plugins/chart.zip [http://www.vqwiki.org/plugins/chart.zip]	Easily draw line graphs, bar graphs and pie charts inline in a topic.
BeanShell	http://www.vqwiki.org/plugins/beanshell.zip [http://www.vqwiki.org/plugins/beanshell.zip]	Evaluate Java expressions inline in a topic.
Stats	http://www.vqwiki.org/plugins/stats.zip [http://www.vqwiki.org/plugins/stats.zip]	Show simple statistics of changes made by users since server was started. - Intended as a demo of writing a topic listener plugin.
HelloWorld	http://www.vqwiki.org/plugins/helloworld.zip [http://www.vqwiki.org/plugins/helloworld.zip]	Show text output from an action - Intended as a demo of writing an action plugin.

Deleting a Topic

Deleting a topic is very simple; simply replace the contents of the topic with the word "delete". As part of routine maintenance, the administrator will run a cleanup function that will permanently remove the topic from the system.

Elements of Wiki Style

Each Wiki tends to develop its own flavor and personality over time. However, there are a few things that are useful in helping to encourage people to use the system:

- When working on a topic, review it for opportunities to link to other topics in the system. Users will navigate from link to link, and the richer the link density is, the more rewarding the experience will be.
- Don't go insane. If every word is a link, nobody is going to have the patience to read through it.

- Don't leave gaps. If you've created a link, try to at least put in a stub with a preliminary sketch of the subject matter. It's more useful to get a skeleton up and trust to later visitors to put flesh on its bones.
- Be polite. Don't call people idiots, especially if they are. The Wiki will keep all the old versions of your intemperate outburst available for time immemorial, and your IP address is logged automatically. Reasonable people can and will disagree on almost any topic, and a wiki rewrite war is a huge waste of everyone involved's time.
- Don't get hung up on formatting. Try to get the information onto the page. The Wiki isn't about creating perfect, polished marketing websites- it's about creating a quick tool for collaboration.
- Avoid deletions. Instead, if a page is obsolete, consider using a redirect tag to move people to a page that is more relevant. If the topic was created in the first place, there may be external links pointing to it. It's easier on your remote visitors to bring them somewhere useful instead of a confusing blank page.
- Don't get hung up on structure. A wiki is amorphous, and it will change its shape over time.
- Watch how users work on the site, and try to come up with templates that they can use to speed up the time it takes to enter new information. It will improve the consistency of the information the wiki captures
- Use the Minor Edit checkbox if you are correcting typos or other small-scale changes. This stops people getting notifications when no real changes have happened.

Appendix A. GNU Free Documentation License

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MA 02110-1301
USA

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Version 1.2, November 2002

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