

Overview of Wikis: Explanation of Use/Editing & Tips

Outline

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|| Agenda

- Overview
- Wikitext
- Links
- Categories
- Shortcuts
- Useful Extensions
- Technical Specifications
- Making Backups
- Resources

|| Overview

Wiki: a Hawaiian word meaning “Fast”. A wiki can solve the primary challenges

documentation: ease of preparation, flexible maintenance, and rapid retrieval.

- Fast document creation using WikiText tags in plain ASCII text
- Fast construction of complex, interrelated knowledge set
- Fast retrieval of information
- Automatic version tracking

|| Logical Design

A **page** in the Wiki database has a **title** (up to 255 characters) that uniquely identifies it; titles cannot contain brackets, braces, colons, angle brackets, or vertical bars – all are reserved for use by the Wiki engine. Spaces are replaced with underscores.

The text field that can store almost any amount of ASCII text for each version of the page.

Another table contains the list of **categories** associated with the page. Categories are like titles – up to 255 characters, etc. The system uses categories to link related pages together for the user.

Non-text items are stored in the file system and, like pages, have a name that uniquely identifies them within the database.

|| Wikitext

(ref <http://www.mediawiki.org/wiki/Help:Formatting>)

- Simple markup language distantly related to HTML (CSS/HTML markup recognized as well) that provides:
 - Text formatting
 - Paragraph formatting
 - Headings
 - Tables
- Internal & External Links

Text Formatting

- Plain text: spaces, tabs, returns ignored, paragraphs separated by blank lines.
Use shift-enter, or
 or <p> to force a line break
- ''' bold '''
- '' italic ''

Paragraph Formatting

- *bullet
- # number. Number sequence continues until an unnumbered line is encountered
- :indented paragraph
Use multiple : for more indentation.
- <pre> </pre> for pre-formatted. Useful for program listings.

Headings

- Denoted with = signs
- First level enclosed in double-equals ==

- Additional levels just add more =
- Numbering automatically handled by Wiki “skin”

==Heading1==

===Heading2===

===Heading3===

Tables

- Start with {|, end with |}
- Each row starts with |-
- Each cell starts with |
 - {|
 - |-
 - |Name
 - |Date
 - |}
- Alternative syntax: all cells in a row can be stored in a single line:
 - |-
 - |Name||Date
- Table formatting can be added to the to Table Start tag {|
 - Add border=“1” in table start for visible lines
 - align=“center”
 - class=sortable
- Formatting of rows can be added to the Row Start tag |-
 - |- bgcolor=silver
- Formatting of single cells can be added as well.
 - |align=“center”|name||date

-

|| Links

All links are enclosed in at least one set of square brackets [].

- Reference to another page is by its name, within double brackets. The link will be displayed on the page, unless an alternate is provided via a bar-separator

[[link|This Is a Link]]

[[Application Development]]

- Reference to external web page

[http://www.rrc.com]

- Reference to file:

[file:///u:/info-sys/2007%20Schedule.xls]

Note: %20 must replace spaces in names

Sub-pages

- Putting a / in a page name means it is part of a hierarchy

[[Infinium/User Management]]

[[OIS/User Management]]

Use the reserved word {{PAGENAME}} to help create standardized subpages: [[{{PAGENAME}}/Primary Users]]

- Helps to logically relate pages
- Wiki automatically links up to upper page in hierarchy

Shows *back to OIS* on the top of the OIS/User management page

- Must be enabled in *LocalSettings.php* by adding

```
# Enable subpages in the main namespace
$wgNamespacesWithSubpages[NS_MAIN] = true;
```

Linked Graphics

Use IMAGE for a graphic that will be displayed on page

Uploads must be enabled in *LocalSettings.php* by uncommenting the line:

```
$wgEnableUploads = true;
```

[[image:rrccmmswhiteboard.jpg]]

- JPG and PNG preferred (many others also support)
- Modifiers (start with bar) :

|thumb - show thumbnail (~~*ImageMagick must be installed in the Wiki*~~)

|left - show image on left side of page (right & center as well)

|any caption text *must be last in tag*

Linked Non-Graphics

Any file can be stored using MEDIA tag `[[Media:ChangeRequest.doc]]` assuming that the type is on the permitted list for the Wiki. You must edit LocalSettings.php and add these two lines to be able upload files:

#Control of file types that can be uploaded

```
$wgFileExtensions = array('png','jpg','jpeg','ogg','doc','xls','ppt','mp3','sxc','pdf','nse');
```

- Modifiers (start with bar):

|any caption

Filling In Linked Files

- Clicking a page link creates a page
- Clicking an Image or Media link automatically starts the upload utility

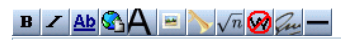
|| Categories

- Wiki tag can appear anywhere in page
[[category:Tuesday Meeting]]
- Unlimited number of categories per page
- Index of pages for each category automatically generated by Wiki
- Link to index automatically added to each page

|| Shortcuts

- Editing toolbar inserts wikitext markup at cursor
- Create templates

Editing ARRC2006



Named template:*pagename*

Support parameters for substitution

By order: {{Request|user|finance|may 10, 2007}}

Parameters values are shown in template source page as {{{1}}}, {{{2}}},

etc.

By name: {{Request|type=user|dept=finance|date=may 10, 2007}}

The template would then reference {{{type}}}

Can be inserted directly into a page

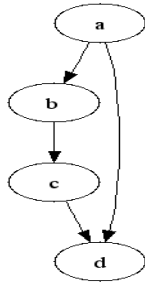
{{subst SR}}

-

Wiki Extensions

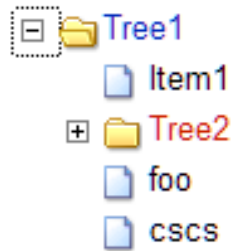
- Open source and good design encourages development of enhancements
- GraphViz – create graphs from text

```
<graphviz>
digraph Test {
a->b;
b->c;
a->d;
c->d;
}
</graphviz>
```



- TreeView – visualize outlines as trees

```
{#{tree:
*Tree 1
**Item 1
**Tree2
***[[phone list]]
**foo
**cscs
}}}
```



- Parserfunctions – add basic logic & math

Eg: {{=5*35}},

|| Technical Specifications

- Based on LAMP: L/inux A/pache web server M/y sql dbms P/hp language
- Total software cost: \$0
- Server hardware can be as little as 800mhz Celeron, 256M, 20G
- Wiki-On-A-Stick: fully Wiki on usb memory stick (512 minimum size).

Note: configuration/customization is made in a file named LocalSettings.php. For example, restricting anonymous editing/viewing is controlled by the \$wgGroupPermissions variable. See MediaWiki.org, search for localsettings.

|| Making Backups

The wiki data is split between content, stored in a MySQL database, and uploaded media that is stored as files in the directory hierarchy.

Backing up the database:

```
mysqldump wiki -u wikiuser --password=wikipass --skip-opt |  
gzip -cq9 > /backup/wiki.sql.gz
```

The user i.d. & password can be found in the Localsettings.php file in the wiki directory. This command exports the entire database to an text file, including all the table definitions, then zips the result up into a file named wiki.sql.gz in the /backup directory.

Backing up media

```
tar zcvf /backup/wikiappdata.tgz /srv/www/htdocs/wiki_apps
```

This command creates a compressed “tarball” (eg, save file) of the everything associated with the wiki except the database entries.

|| Resources

- AS400/Systemi/5i Wiki
wiki.midrange.com
- MediaWiki homepage
www.mediawiki.org
- Localsettings.php reference
http://www.mediawiki.org/wiki/Manual:LocalSettings.php#Standard_settings
- MoWes – super simple installation WAMPP that runs on windows
<http://www.chsoftware.net/en/mowes/mowesportable/mowes.htm>
- Installing MediaWiki on Ubuntu step-by-step
http://meta.wikimedia.org/wiki/Help:Running_MediaWiki_on_Ubuntu
- Comparison of Wiki software:
http://en.wikipedia.org/wiki/Comparison_of_wiki_software
- Running MediaWiki on an AS400/i5/Systemi
<http://www.zend.com/forums/index.php?t=msg&th=3134&start=0&S=599faa378e1f618b087364839aa11791>
Michael Mondoux, mmondoux@seawaymarinetransport.com
- Ubuntu homepage
www.ubuntu.com

These are the modifications made to LocalSettings.php necessary for today's demonstration:

```
#Set site name
$wgSitename      = "COMMON 2010";
# Enable subpages in the main namespace
$wgNamespacesWithSubpages[NS_MAIN] = true;
#Change the logo
$wgLogo= "{$wgScriptPath}/common.jpg";
#Control of file types that can be uploaded
$wgFileExtensions =
array('png','jpg','jpeg','ogg','doc','xls','ppt','mp3','sxc','pdf','nse');
```