

Advanced Wiki Gardening

Or MediaWiki: What your momma didn't tell you.

David Dwiggin

Dean's Fellow for Technology Support

Simmons College GSLIS

Dwiggin@simmons.edu

The guts

- GSLIS uses Mediawiki (just like Wikipedia)
- Runs on PHP/MySQL
- Configured using LocalSettings.php
 - This is hidden from you on our installations, but we can make changes if needed.







```
## To enable image uploads, make sure the 'images' directory
## is writable, then uncomment this:
$wgEnableUploads          = true;
$wgUseImageResize         = true;
$wgUseImageMagick = true;
$wgImageMagickConvertCommand = "/usr/bin/convert";
$wgFileExtensions = array( 'png', 'gif', 'jpg', 'jpeg', 'ppt', 'pdf', 'doc', 'xls', 'zip');
```

Wikis 2.0

- Spring 2006 - GSLIS builds its first “wiki farm”
- Summer 2007 - Wikis 2.0 project
 - Upgrade Mediawiki to current version
 - Increase central manageability of wikis
 - Add new extensions
 - Add more flexibility for end users
 - Incorporate “lessons learned”

New version of Mediawiki

- Old wikis: MediaWiki: 1.5.8
- New wikis: MediaWiki 1.10.2
 - Already behind!

News 	Current Versions 
<ul style="list-style-type: none">■ 2007-09-10: 1.11.0 new stable branch  Quarterly branch available, see Manual:Upgrading to 1.11.■ 2007-09-10: 1.10.2, 1.9.4, 1.8.5 security updates  Security updates available.■ 2007-09-05: 1.11.0 branch release candidate  MediaWiki 1.11.0rc1 release candidate available.■ 2007-07-23: MediaWiki 1.11.0 release will be held back until mid-August, after the Wikimania 2007 conference, to allow for better testing of new features.■ 2007-07-13: 1.10.1 bugfix release  MediaWiki 1.10.1 update■ Older news...	<p>1.11.0 · 2007-09-10 1.10.2 · 2007-09-10 1.6.10 · 2007-02-20</p> <p>Download</p>

Wikis 2.0: Can I has?

- Wikis 2.0 features now available on all wikis created after 8/25/2007.
- Older wikis will be migrated in coming months
- If you need a new feature now, let us know and we will investigate an early migration for your wiki.


New “Wikis 2.0” extensions

- A number of new extensions included by default -- others can be added upon request
- See Special:Version page for details
 - For example,
<http://gslis.simmons.edu/wikis/sandbox4/Special:Version>


Tables

```
{ |  
| A || B  
| -  
| C || D  
| }
```

```
{ | border="1"  
| A || B  
| -  
| C || D  
| }
```



```
A B  
C D
```



A	B
C	D

SimpleTable Extension

```
<tab border="1">  
Final 1 2 3 4 5 6 7 8 9 R H E  
Cleveland 1 0 0 0 0 0 1 0 1 0 3 8  
0  
Boston 1 0 4 0 3 2 0 0 X 10 12 0  
</tab>
```



Final	1	2	3	4	5	6	7	8	9	R	H	E
Cleveland	1	0	0	0	0	1	0	1	0	3	8	0
Boston	1	0	4	0	3	2	0	0	X	10	12	0

User Rights

- Mediawiki traditionally had limited rights management
 - “Wiki way” tradition
 - This is improving as more private organizations start using it
 - We have successfully set up limited access wikis, but requires shenanigans!
- Some of the things discussed in this workshop will require “Sysop” access

Special: User rights management

Manage user groups

Enter a username:

Edit user groups

Editing user **fisher1**

Member of:

Available groups:

- Bots
- Sysops
- Bureaucrats
- interwiki

Select groups you want the user to be removed from or added to. Unselected groups will not be changed. You can deselect a group with CTRL + Left Click

Reason for change:

Changing sidebar navigation

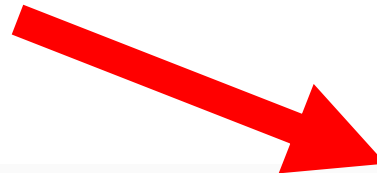
- Sysop can edit Mediawiki:Sidebar

Editing MediaWiki:Sidebar

Warning: You are editing a page which is used to provide interface text for the software. Changes to this page will affect the appearance of the user interface for other users.



```
* navigation
** mainpage | mainpage
** portal-url | portal
** currentevents-url | currentevents
** recentchanges-url | recentchanges
** randompage-url | randompage
** helppage | help
*custom links|
** Wiki Training Info | Wiki Training
```



navigation

- [Main Page](#)
- [Community portal](#)
- [Current events](#)
- [Recent changes](#)
- [Random page](#)
- [Help](#)

custom links

- [Wiki Training](#)

Categories

- A powerful organizational tool that allows you to group pages in different ways
 - Can be used for:
 - Workflow
 - Sorting
 - Improved navigation
 - Etc.

[Categories: Current events as of October 2007](#) | [Wikipedia articles needing clarification](#) | [All articles with unsourced statements](#) | [Articles with unsourced statements since October 2007](#) | [Articles with unsourced statements](#) | [Buildings and structures in Hubei](#) | [Dams in China](#) | [Hydroelectric power plants in China](#)

Creating Categories

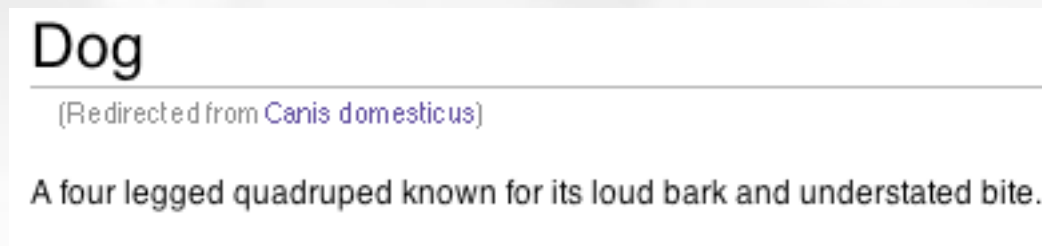
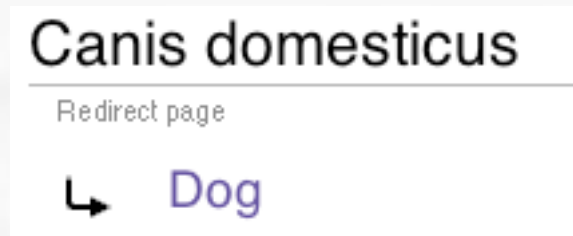
```
[[Category:Example Pages]]
```

Category: Example Pages

- Note that once you have created a category, it also has its own editable page
- Category pages include links to all pages in that category, and whatever additional content you want to add

Redirects

- Allow you to “bounce” people from one page address to another
 - Useful to correct for misspellings, upper/lower case, moved pages, or other ambiguities



Moving pages

- Requires Sysop privs
- Moves page and creates redirect

Move page

Using the form below will rename a page, moving all of its history to the new name. The old title will become a redirect page to the new title. Links to the old page title will not be changed; be sure to check for double or broken redirects. You are responsible for making sure that links continue to point where they are supposed to go.

Note that the page will **not** be moved if there is already a page at the new title, unless it is empty or a redirect and has no past edit history. This means that you can rename a page back to where it was just renamed from if you make a mistake, and you cannot overwrite an existing page.

WARNING! This can be a drastic and unexpected change for a popular page; please be sure you understand the consequences of this before proceeding.

Move page: **Dog**

To new title:

Reason:

Watch this page

Protecting pages

- Allows you to prevent editing of certain pages
- Requires “sysop” privileges

[article](#) [discussion](#) [edit](#) [history](#) [protect](#) [delete](#) [move](#) [watch](#) [refresh](#)

Confirm protection

(Protecting "Dog")

You may view and change the protection level here for the page **Dog**.

Edit	Move
<input type="text" value="(default)"/> <input type="text" value="Block unregistered users"/> <input type="text" value="Sysops only"/>	<input type="text" value="(default)"/> <input type="text" value="Block unregistered users"/> <input type="text" value="Sysops only"/>

Unlock move permissions

Cascading protection - protect any pages included in this page.

Expiry

Reason for protecting

Protection log

- 04:51, 15 October 2007 [Dwiggins](#) ([Talk](#) | [contribs](#) | [block](#)) protected "Dog" (*Dogs are controver.* [*edit=sysop:move=sysop*]) ([change protection](#))

Deleting pages

- Requires Sysop
- Reversible, but only by sysop

Confirm delete

(Deleting "Dog")

Warning: The page you are about to delete has a history: [Page history](#)

You are about to permanently delete a page or image along with all of its history from the database. Please confirm that you intend to do this, that you understand the consequences, and that you are doing this in accordance with

[Project:Policy](#).

Reason for deletion:

Watch this page

Citations

- New Mediawiki supports Cite.php extension, which makes references easier to handle:

rapidly, due to the dam's preventing dispersal of [pollutants; algae bloom](#) increased, causing riverbank collapses and landslides.^[21] The report de
vernment officials and scholars said the dam could cause a "huge disaste
riously had defended the Three Gorges Dam project.^[23]

20. [^] ["300,000 more to be relocated from Dam region"](#), *China Daily*, October 3, 2006. Retrieved on 2007-01-28. 
21. [^] ["China's Three Gorges Dam Under Fire"](#), *Time*, October 12, 2007. 
22. [^] ["mwcnews.net/content/view/17341&Itemid=1"](#). 
23. [^] [Mary Ann Toy, The Age AU, "Three Gorges Dam 'could be huge disaster"](#), October 13, 2007, retrieved October 13, 2007. 
24. [^] [BBC News, "Millions forced out by China dam"](#), October 13, 2007, retrieved October 13, 2007. 

Creating a citation

```
According to scientists, the Sun is pretty big.<ref>E. Miller, The Sun, (New
York: Academic Press, 2005), 23-5.</ref>
The Moon, however, is not so big.<ref>R. Smith, "Size of the Moon", Scientific
American, 46 (April 1978): 44-6.</ref>

==Notes==
<references/>
```

According to scientists, the Sun is pretty big.^[1] The Moon, however, is not so big.^[2]

Notes

1. ↑ E. Miller, The Sun, (New York: Academic Press, 2005), 23-5.
2. ↑ R. Smith, "Size of the Moon", Scientific American, 46 (April 1978): 44-6.

Reusing a citation

```
According to scientists, the Sun is pretty big.<ref name="MillerSun">E. Miller,
The Sun, (New York: Academic Press, 2005), 23-5.</ref>
The Moon, however, is not so big.<ref>R. Smith, "Size of the Moon", Scientific
American, 46 (April 1978): 44-6.</ref>
|
The sun is also round. <ref name='MillerSun' />

==Notes==
<references/>
```

According to scientists, the Sun is pretty big.^[1] The Moon, however, is not so big.^[2]

The sun is also round. ^[1]

Notes

1. [↑] ^{1.0} ^{1.1} E. Miller, The Sun, (New York: Academic Press, 2005), 23-5.
2. [↑] R. Smith, "Size of the Moon", Scientific American, 46 (April 1978): 44-6.

More on citations

- Cite.php documentation
 - <http://www.mediawiki.org/wiki/Extension:Cite/Cite.php>

Namespaces

- A way to separate content into different “bins”
 - Mediawiki includes built-in namespaces
 - Main (default)
 - Talk (discussion pages)
 - Special (special pages)
 - Mediawiki (configuration pages)
 - etc.

Creating Namespaces

- You can add “custom” namespaces in Localsettings.php
 - Normally create in pairs so that there is a discussion and a regular namespace
 - We can do this for you in the Tech Lab

```
$wgExtraNamespaces[100] = "NicaVideo";  
$wgExtraNamespaces[101] = "NicaVideo_talk";
```

Search in these namespaces by default: _____

(Main) Talk User User talk Simmons International Relations Simmons International Relations talk Image Image talk MediaWiki MediaWiki talk Template Template talk Help Help talk Category Category talk NicaVideo NicaVideo talk

Building Templates

- Templates allow you to pre-build pages and include them in other pages.
 - Simplest example:

```
{{Disclaimer}}
```

Places the content of Template:Disclaimer onto the current page

The diagram consists of three main elements: a code block on the top left containing the template call `{{Disclaimer}}`, a callout box on the right containing the text 'Places the content of Template:Disclaimer onto the current page', and a template definition box on the bottom left. Two red arrows originate from the code block: one points to the callout box, and the other points to the template definition box. The callout box is a light blue oval with a black border.

Disclaimer

You have the right to remain silent. Anything you say can and will be used against you. You have the right to an attorney. You have the right to a peach-berry smoothie before bed. If you cannot afford a peach-berry smoothie, one will be provided for you.

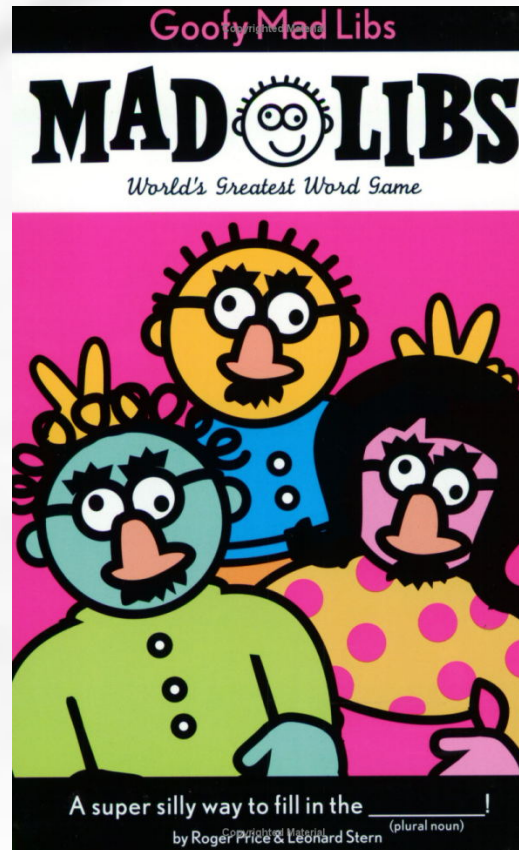
[\[edit\]](#)

Templates

- Templates allow you to create reusable content that can be pulled into multiple places on the wiki
- Advanced templates allow “fill in the blanks” customization

Confused about templates?

- Well, remember these?



A simple template

Template:Dogs

This is a template for types of dogs. For example, a {{{1}}} or a {{{2}}}.

```
{{ Dogs | Beagle | Cockapoo }}
```



This is a template for types of dogs. For example, a Beagle or a Cockapoo.

Templates with named parameters

```
==Poetry==  
  
{{limerick  
|place=Leeds  
|bodypart=rump  
|seat=stump  
|result=bleeds  
|plant=cacti  
|thing=weeds  
}}
```

Template:Limerick

There once was a man from {{{place}}},
who pulled up a whole lot of {{{thing}}}.
He sat on a {{{seat}}},
and then scratched his {{{bodypart}}},
and said "Ow! Those were {{{plant}}}! It {{{result}}}!"

Poetry

There once was a man from Leeds,
who pulled up a whole lot of weeds.
He sat on a stump,
and then scratched his rump,
and said "Ow! Those were cacti! It bleeds!"

Getting fancy: conditionals

- Using conditionals, it is possible to create very complex templates that behave differently in different situations
- Rely on “Parser Functions” extension
 - <http://meta.wikimedia.org/wiki/Help:ParserFunctions>

```
{{ #ifexist: Template:Cats|There is now a cat template!|There is no [[Template:Cats|Cats Template]].  
You should make one! }}
```

There is no **Cats Template**. You should make one!

There is now a cat template!

Extension: Google Maps



Creating a Google Map

- Coding

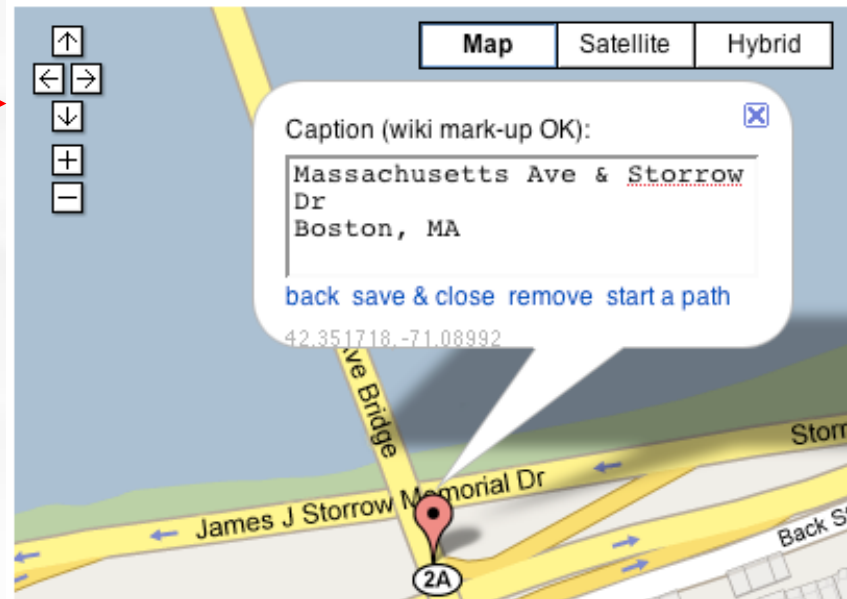
```
<googlemap lat="42.34405" lon="-71.102185" type="map" zoom="15">  
42.339329, -71.100214, [[Simmons College]], Boston, MA 02115, USA  
42.341925, -71.104975, [[Simmons College Residence Campus]] is right here.  
</googlemap>
```

- Toolbar helper



Click the map to add a point, or jump to a city, country, address or business:

Massachusetts Ave and Storrow Drive, Boston, MA [Search](#)



Extension: Videoflash

- Allows embedding of video from popular sharing services such as YouTube

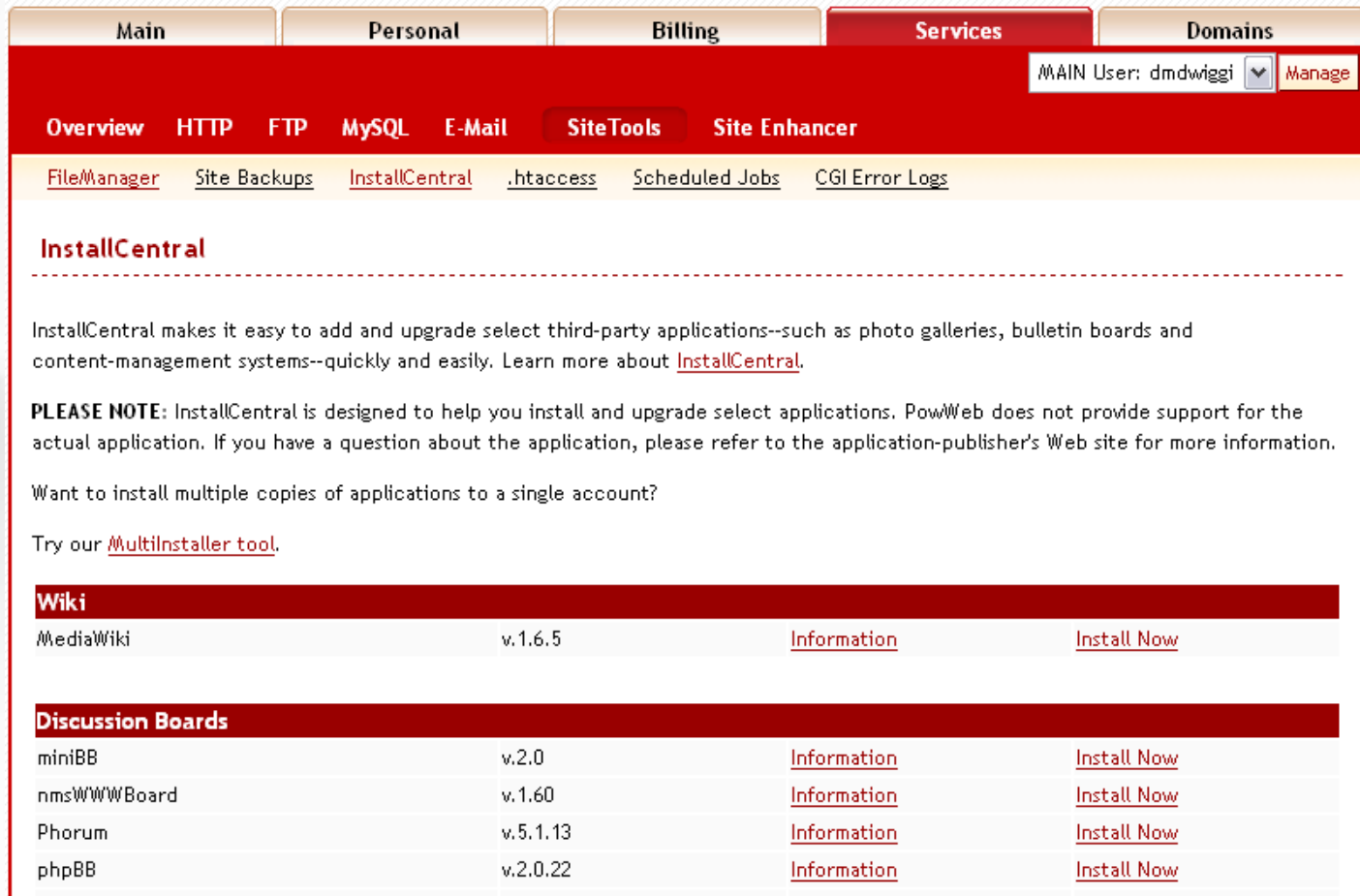
```
<videoflash>Cp67L-enZP8</videoflash>
```



Installing Mediawiki

But wait...

- Does your web provider already offer it?



The screenshot shows a web provider's control panel with a red header and navigation tabs. The 'Services' tab is active, and the 'InstallCentral' link is highlighted in the sub-navigation. The main content area features a red header for 'InstallCentral', a dashed line, and a paragraph explaining the service. A 'PLEASE NOTE' section follows, and a link to a 'Multinstaller tool' is provided. Below this are two tables: one for 'Wiki' applications and one for 'Discussion Boards'.

Wiki			
MediaWiki	v.1.6.5	Information	Install Now

Discussion Boards			
miniBB	v.2.0	Information	Install Now
nmsWWWBoard	v.1.60	Information	Install Now
Phorum	v.5.1.13	Information	Install Now
phpBB	v.2.0.22	Information	Install Now

Create a MySQL database

- This varies a bit depending on your web provider

You are using 1 of 5 available databases.

Add New Database
Database Name:
Database Login:
Password:
Confirm Password:

Database: dwigwiki		View Backups									
Privileges:		Select	Insert	Update	Delete	Create	Drop	Index	Alter	Tmp	Lock
dwiglogin		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Administer Password Delete		Revoke	Revoke	Revoke	Revoke	Revoke	Revoke	Revoke	Revoke	Revoke	Revoke
Login:	<input type="text"/>	<input type="button" value="Add Login"/>		<input type="button" value="Drop Database"/>							
Database is on dmdwiggi.powwebmysql.com											

Download and uncompress

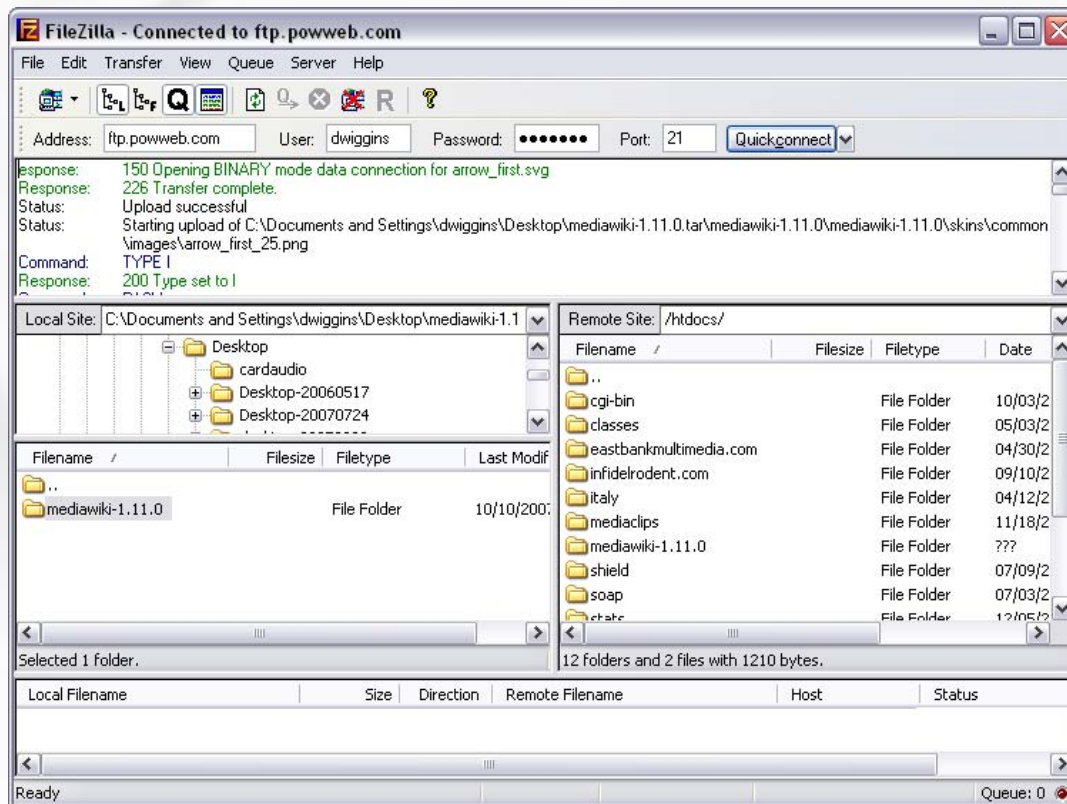
- <http://www.mediawiki.org>
 - Files will be in the tar.gz format. You will need to uncompress.
 - Mac: StuffIt Expander
 - PC: 7-Zip, <http://www.7-zip.org/>
 - You will end up with a folder full of files



mediawiki-1.11.0

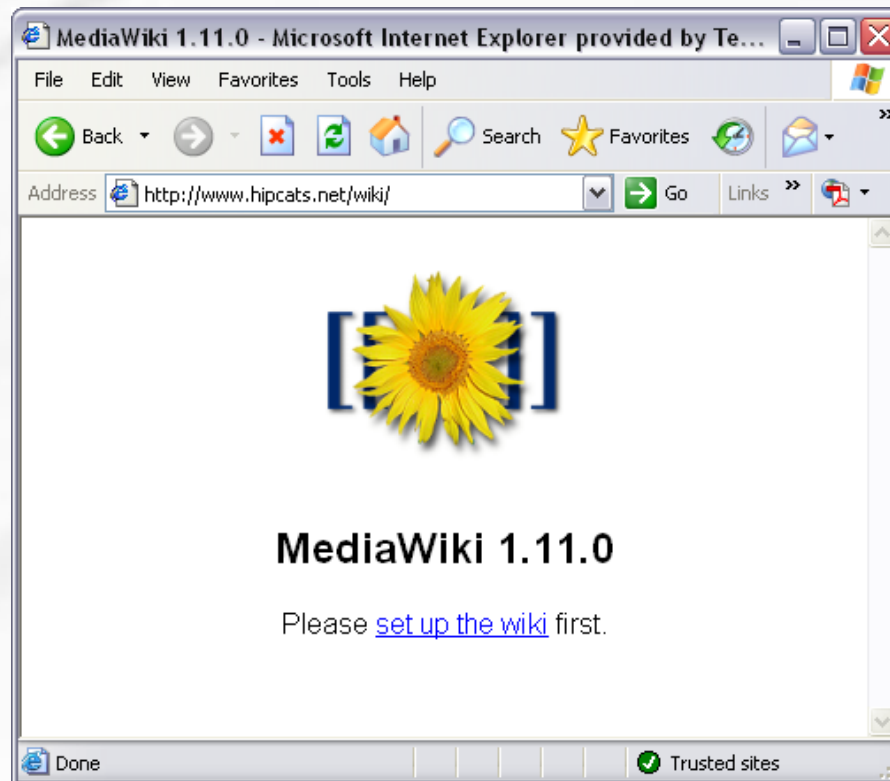
Upload to web root

- Use FTP client (I'm using FileZilla)
- Rename directory to make prettier URL



Run installer

- Mediawiki basically installs itself from this point



Not as scary as it looks...



- MediaWiki home
- Readme
- Release notes
- Documentation
- User's Guide
- FAQ

MediaWiki is Copyright ©
2001-2007 by Magnus
Manske, Brian Verner, Lee
Daniel Croder, Tim Starling,
Erik Möller, Gabriel Wicke
and others.

MediaWiki 1.11.0 Installation

- Don't forget security updates! Keep an eye on the low-traffic release announcements mailing list.

Checking environment...

Please include all of the lines below when reporting installation problems.

- PHP 5.2.1 installed
- Found database drivers for: MySQL
- Warning: PHP's register_globals option is enabled. Disable it if you can.**
MediaWiki will work, but your server is more exposed to PHP-based security vulnerabilities.
- PHP server API is cgi, using ugly URLs (`index.php5?title=Page_Title`)
- Have XML / Latin1-UTF-8 conversion support.
- Warning: Your session.save_path value (`/var/php_sessions`) appears to be invalid or is not writable.** PHP needs to be able to save data to this location for correct session operation.
- PHP's `memory_limit` is 12M. Attempting to raise limit to 20M... ok.
- Couldn't find Turck MMCache, eAccelerator, APC or XCache; cannot use these for object caching.
- Found GNU diff3: `/usr/bin/diff3`.
- Found ImageMagick: `/usr/bin/convert`; image thumbnailing will be enabled if you enable uploads.
- Found GD graphics library built-in.
- Installation directory: `/hermes/web08/b1272/pow.dmdwigg1/htdocs/wiki`
- Script URI path: `/wiki`
- Installing MediaWiki with php5 file extensions
- Environment checked. You can install MediaWiki.**

Site config

Wiki name: **Must not be blank or "MediaWiki"**

Preferably a short word without punctuation, i.e. "Wikipedia".
Will appear as the namespace name for "meta" pages, and throughout the interface.

Contact e-mail:

Displayed to users in some error messages, used as the return address for password reminders, and used as the default sender address of e-mail notifications.

Language:

Select the language for your wiki's interface. Some localizations aren't fully complete. Unicode (UTF-8) is used for all localizations.

- Copyright/license:
- No license metadata
 - GNU Free Documentation License 1.2 (Wikipedia-compatible)
 - A Creative Commons license - [choose](#)

A notice, icon, and machine-readable copyright metadata will be displayed for the license you pick.

Not as scary as it looks...

- Name
- E-mail
- Database information
- Administrator login
- Most of the rest is optional

Move config file

- The installer writes a configuration file, but you must manually move it to the right place.
- After you do this, the wiki should work!

Now what?

- Lots more documentation online:
 - http://www.mediawiki.org/wiki/User_hub
- Stop by the lab – we'll do our best to help
- E-mail me: [dwiggins@simmons.edu](mailto:dwiggin@simmons.edu)