# WikiGateway: A Toolbox for Making Software that Reads and Writes Wikis

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## Categories and Subject Descriptors

D.2 [**Software engineering**]: Interoperability
; H.5.3 [**Information Interfaces and Presentation**]: Group and Organization Interfaces; H.4 [**Information systems applications**]: Communications Applications

## General Terms

Standardization, Design

## Keywords

wiki, interwiki, interoperability, WikiGateway, client-side wiki, WikiClient, middleware, Atom, WebDAV, WikiRPCInterface, wiki XMLRPC

WikiGateway is an open-source suite of tools that allows you to write programs that read from and write to remote wiki servers. WikiGateway provides a unified interface to different types of wiki engines. Your programs can access the remote wiki server using any of these modalities:

- Command-line client
- Python module
- Perl module
- WikiRPCInterface protocol
- Atom protocol
- WebDAV protocol

The type of wiki server on the other end must be supported. WikiGateway currently supports these wiki engines:

- OddMuse
- UseMod
- MoinMoin
- MediaWiki
- (more will be added to this list by conference time)
- Or any WikiRPCInterface-supporting server

Due to its modular design, it is relatively simple to extend WikiGateway to support other types of wiki engines. All you need to do is to write a short Python "driver" that tells WikiGateway how to talk to the new wiki engine.

In addition to its other functions, WikiGateway allows you to add DAV, Atom, or XMLRPC capabilities to any supported wiki server. Using it this way does not require you to write any code. Note that this allows wikis to interoperate with other standards-compliant tools, such as tools that mount DAV resources as a filesystem.

Developers can use WikiGateway to hide the differences between wiki engines and build client-side applications which interoperate with many different wiki engines. WikiGateway aims to serve as the foundation of client-side tools for wiki users.

Demo applications include a wiki copy command, a spam-cleaning bot, and a tool to recursively upload text files inside a directory structure as wiki pages.

In the future, other applications could include a wiki client, a WikiRefactoringBrowser, wiki page interchange between different types of wiki engines, an offline wiki editor, and more.

The WikiGateway project is housed at http://interwiki.sf.net.

### *Presenter*

Bayle is interested in software for collaboration, decision-making, and information retrieval. Bayle is a grad student at UCSD. See his wiki homepage at http://communitywiki.org/BayleShanks for more information.

## Sample invocations of the command-line interface

InterWiki prefixes are resolved using a file ".intermap" in the user's home directory.

```
$ echo This is a test. | wikiclient --type=usemod1 \
  write http://www.usemod.com/cgi-bin/mb.pl:SandBox \
  --summary="just a test"

$ wikiclient --type=usemod1 read \
  http://www.usemod.com/cgi-bin/mb.pl:SandBox
This is a test.

$ wikiclient --type=usemod1 read \
  MeatBall:SandBox
This is a test.

$ wikiclient --type=usemod1 rc MeatBall | \
  head -n 7
URL=http://www.usemod.com/cgi-bin/mb.pl
link: http://www.usemod.com/cgi-bin/mb.pl?SandBox
comment: just a test
lastModified: 2005-09-09T05:28:23+00:00
version: 3091
name: SandBox
author: user-10cmeae.cable.mindspring.com




$ wikiclient --type=usemod1 allpages MeatBall \
  | head -n 4
AGroupIsItsOwnWorstEnemy
AalbertTorsius
AbandonPage
AbbeNormal

$ wikiclient --type=usemod1 info \
  MeatBall:SandBox --version=3080
comment: [WikiSpam: This is a sandbox, so all editing is, \
basically, spam. Plus, it covers the
occasional spam reversion.]
date: 2005-09-01 00:22:00.00
version: 3080
author: p5496371E.dip0.t-ipconnect.de

$ echo This is a DIFFERENT test | \
  wikiclient --type=usemod1 \
  write http://www.usemod.com/cgi-bin/mb.pl:SandBox \
  --summary="just a test 2"

$ wikiclient --type=usemod1 read \
  http://www.usemod.com/cgi-bin/mb.pl:SandBox
This is a DIFFERENT test

$ wikiclient --type=usemod1 read \
  http://www.usemod.com/cgi-bin/mb.pl:SandBox \
  --version=3091
This is a test.
```

The demo will also present the Python module interface.