

Wikis with Wiki::Toolkit

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Architecture

- ▶ Storage
- ▶ Formatter(s)
- ▶ Plugins
- ▶ Search
- ▶ Glue

Wiki::Toolkit Setup

```
my $store = new Wiki::Toolkit::Store::MySQL(dbname => 'wiki',  
      dbuser => 'wiki',  
      dbpass => 'wikisecret');  
  
my $formatter = new Wiki::Toolkit::Formatter::UseMod;  
  
my $search = new Wiki::Toolkit::Search::DBIxFTS(dbh => $store->dbh);  
  
my $wiki = new Wiki::Toolkit(store => $store,  
      formatter => $formatter,  
      search => $search,  
);
```

Basic Methods

create node

```
$wiki->write_node($name, $text, undef, \%metadata);
```

retrieve and display node

```
my %node = $wiki->retrieve_node({name => $name, version => $version})  
my $output = $wiki->format($node{content}, $node{metadata});
```

update node

```
$wiki->write_node($name, $text, $node{checksum}, \%metadata);
```

Storage Backends

- ▶ MySQL
- ▶ PostgreSQL
- ▶ SQLite

Storage Setup

```
#!/usr/bin/perl
```

```
use Wiki::Toolkit::Setup::MySQL;
```

```
my $dbname = 'wiki';
```

```
my $dbuser = 'wiki';
```

```
my $dbpass = 'wikisecret';
```

```
my $dbhost;
```

```
Wiki::Toolkit::Setup::MySQL::setup($dbname,  
                                     $dbuser,  
                                     $dbpass,  
                                     $dbhost);
```

Storage Tables

[content](#) Nodes

[metadata](#) Metadata

[internal_links](#) Page Links

[schema_info](#) Schema Version

Metadata

```
# store metadata
my %metadata = { country => 'USA',
                 state => 'Florida',
                 city => 'Orlando' };

$wiki->write_node($node, $content, $checksum, \%metadata);

# retrieve metadata
my %node = $wiki->retrieve_node('Perl_Oasis');

for (keys %{$node{metadata}}) {
    print "Metadata_$_:$_{$node{$metadata}->{$_}->[0]\n";
}
```


Methods

```
my $html = $formatter->format($content);
```

```
my @links = $formatter->find_internal_links($content);
```

Constructor Options

```
my $formatter = Wiki::Toolkit::Formatter::Default->new(  
    extended_links => 0,  
    implicit_links => 1,  
    allowed_tags   => [qw(b i)],  
    macros         => {},  
    node_prefix    => 'wiki.cgi?node=' );
```

Macros

```
macros => { qr /(^|\b)\@SEARCHBOX(\b|$)/ =>
  qq(<form action="wiki.cgi" method="get">
    <input type="hidden" name="action" value="search">
    <input type="text" size="20" name="terms">
    <input type="submit"></form>) }
```

Formatters in CPAN

- ▶ MediaWiki
- ▶ UseMod
- ▶ MarkDown
- ▶ POD

Multiple Formatters

```
my $fmt_usemod = new Wiki::Toolkit::Formatter::UseMod;  
my $fmt_mediawiki = new Wiki::Toolkit::Formatter::MediaWiki;  
  
my $fmt = new Wiki::Toolkit::Formatter::Multiple (  
    usemod => $fmt_usemod,  
    mediawiki => $fmt_mediawiki,  
    _DEFAULT => $fmt_usemod,  
);  
  
...  
  
my $output = $wiki->format($text, {formatter => 'mediawiki'});
```

Multiple Formatters

```
my $fmt_usemod = new Wiki::Toolkit::Formatter::UseMod;  
my $fmt_mediawiki = new Wiki::Toolkit::Formatter::MediaWiki;  
  
my $fmt = new Wiki::Toolkit::Formatter::Multiple (  
    usemod => $fmt_usemod,  
    mediawiki => $fmt_mediawiki,  
    _DEFAULT => $fmt_usemod,  
);  
  
...  
  
my $output = $wiki->format($text, {formatter => 'mediawiki'});
```

Multiple Formatters

```
# write node
$metadata{formatter} = 'mediawiki';
$wiki->write_node($name, $text, $checksum, \%metadata);

# retrieve node
%node = $wiki->retrieve_node($name);

# display node
$wiki->format($node{content}, $node{metadata});
```

Writing Formatters

- ▶ Wiki::Toolkit::Formatter::Foo
- ▶ format() method
- ▶ Text::WikiFormat

Search Backends

- ▶ Wiki::Toolkit::Search::SII
- ▶ Wiki::Toolkit::Search::DBIxFTS

Search Setup

```
#!/usr/bin/perl
```

```
use Wiki::Toolkit::Setup::DBIxFTSMYSQL;
```

```
my $dbname = 'wiki';
```

```
my $dbuser = 'wiki';
```

```
my $dbpass = 'wikisecret';
```

```
my $dbhost;
```

```
Wiki::Toolkit::Setup::DBIxFTSMYSQL::setup($dbname,  
                                           $dbuser,  
                                           $dbpass,  
                                           $dbhost);
```

Search Example

first time setup

```
Wiki::Toolkit::Setup::DBIxFTSMYSQL::setup($dbname, $dbuser, $dbpass,
```

```
my $store = new Wiki::Toolkit::Store::MySQL(dbname => 'wiki',  
      dbuser => 'wiki',  
      dbpass => 'wikisecret');
```

```
my $search = new Wiki::Toolkit::Search::DBIxFTS(dbh => $store->dbh);  
my %oasis_nodes = $search->search_nodes('oasis');
```

Plugins

```
my $plugin = new Wiki::Toolkit::Plugin::Diff;  
$wiki->register_plugin(plugin => $plugin);  
%diff = $plugin->differences(node => 'FrontPage',  
    left_version => 101,  
    right_version => 105);
```

Plugins in CPAN

Diff format differences between versions

Categorizer category management

JSON recent changes as JSON

Locator::Grid manage co-ordinate data

Ping ping various services on node updates

RSS::Reader retrieve feeds for node inclusion

The End

CPAN <http://search.cpan.org/perl/doc?Wiki::Toolkit>

Website <http://www.wiki-toolkit.org/>

Talk <http://www.linuxia.de/talks/opw2010/wiki-toolkit-opw2010-beamer.pdf>

Questions ???