

Running multiple instance of MediaWiki on the Same Server using the Same Source Code?

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Sometime it might require for you to setup multiple MediaWiki site on the same server using the same source code. The reason behind using the same code base for multiple wiki is easy to maintain the changes. It is always easier to maintain a single thing rather than instances of the same thing. In order to accomplish this task you have to follow few simple methods.

1. Use same database server and same database with different tables or
2. Use same database server but different database or
3. Use different database server.

Before narrating the steps for achieving your target to setup multiple wiki using same source code, you have to know what will be the required things to consider before installing multiple wiki in a single server. First of all you need to separate the database configuration and other configuration (the configuration variables in LocalSettings.php file) into different files or separate them to work properly. The next important thing is to separate upload directory so that multiple wiki do not conflict in common files. Most of the time multiple wiki are required for multilingual purpose and in multilingual site same content is shown but in different language. There is a fair possibility that two wiki can have same image file name in use. In such case one will replace another. In order to avoid such unwanted circumstances, it is always better to separate the image folder for each wiki installation. The last thing to consider is the extensions that you are using for the existing wiki. You can make a common extension file and place all the extension to that file so that all the wiki instances share the common extensions. Now let me show you the ways you can make it work:

Let's make it work:

In chapter two of the book you have learned how to install MediaWiki at your server. You also learned the fact that you have to move the LocalSettings.php file in the root folder for the installation to work. Now here are steps to apply.

1. Rename your existing LocalSettings.php file to Wiki_one_settings.php or anything you want to.
2. Now open a browser window and type your URL location for the wiki. If your URL is <http://www.mywiki.com> then try to browse the <http://www.mywiki.com/config/>.

3. You will be taken to the installation page same as described in chapter 2. You have to follow the same steps until the database configuration section. As you know you can choose the same database but different prefix for new installation or you can choose a new database name for the new installation or even choose a new server located in some other place for the new installation. Here is the place you have to enter the database information.

Database config

Database type: MySQL

Database host:

If your database server isn't on your web server, enter the name or IP address here.

Database name:

DB username:

DB password: **Must not be blank**

DB password confirm:

If you only have a single user account and database available, enter those here. If you have database root access (see below) you can specify new accounts/databases to be created. This account will not be created if it pre-exists. If this is the case, ensure that it has SELECT, INSERT, UPDATE and DELETE permissions on the MediaWiki database.

Superuser account: Use superuser account

Superuser name:

Superuser password:

If the database user specified above does not exist, or does not have access to create the database (if needed) or tables within it, please check the box and provide details of a superuser account, such as **root**, which does.

MySQL specific options:

Database table prefix:

If you need to share one database between multiple wikis, or MediaWiki and another web application, you may choose to add a prefix to all the table names to avoid conflicts.
Avoid exotic characters; something like `aw_` is good.

Database charset: Select one:

- Backwards-compatible UTF-8
- Experimental MySQL 4.1/5.0 UTF-8
- Experimental MySQL 4.1/5.0 binary

EXPERIMENTAL: You can enable explicit Unicode charset support for MySQL 4.1 and 5.0 servers. This is not well tested and may cause things to break. **If upgrading an older installation, leave in backwards-compatible mode.**

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4. If you want to use the same database but different tables then we gave to add database table prefix in the colored region of the image. You can add any prefix for the new tables. If you wan to add new database then add database name in the database name field.
5. After putting all required information, click the install button to install new instance of MediaWiki. A new instance of the MediaWiki database has been added to the database server according to your chosen method and a new LocalSettings.php file is also created in the Config folder. Like you did in chapter two, you have to place this file in the root folder. But you have to play another

little trick here. Since it is used for second wiki, we have to rename the file as Wiki_two_settings.php (or any name that you want to) and then you can place it in the root folder.

6. Now you have two settings file Wiki_one_settings.php and Wiki_two_settings.php but no LocalSettings.php file. So you have to create a file named LocalSettings.php. You can have two scenarios over here:
 - a. First of all you can have wikis are in different directories or sub domains linked to the same directory on our server
 - b. We have different domains that link to one directory on your server

For the first scenario we have to write the following code and save it as LocalSettings.php.

```
<?php
$callingURL = strtolower($_SERVER['REQUEST_URI']); //the requesting url

if ( strpos( $callingURL, 'wikione' ) ) {
    require_once('Wiki_one_settings.php');
}
else if ( strpos( $callingURL, 'wikitwo' ) ) {
    require_once('Wiki_two_settings.php');
}
?>
```

For the second scenario we have to write the following code and save it as LocalSettings.php

```
<?php
$callingURL = strtolower($_SERVER['SERVER_NAME']);

$pos = strpos( $callingURL, 'firstwiki' ); //e.g. www.firstwiki.com

if ( $pos === false ) {
    require_once('Wiki_two_settings.php');
}
else
{
    require_once('Wiki_one_settings.php');
}
?>
```

Now you run the wiki and see the different wiki using the same source code. If your site address is www.mywiki.com then browse www.mywiki.com/wikione/ and also www.mywiki.com/wikitwo/ . You will find the difference by yourself.

Note: To link the sub domains to the server, you might need to edit the configuration file of the server or change the DNS configuration of the site.

Setting Different Image directory:

If you want to set different upload directory for each wiki installation, you can do that too. Just define the upload directory on each of the LocalSettings.php file for each wiki. First you have to make sure that the file upload option is enabled. Then add the following line at the end of the LocalSettings.php file.

For example for the first wiki you have to write the following line

```
$wgUploadDirectory    = "{$IP}/images";
```

And for the second wiki you can use different directory

```
$wgUploadDirectory    = "{$IP}second_/images";
```

Now save the file and access the pages. We are all done with setting different image directory for each wiki.

Sharing common resources:

Sometime it might be required for you to share files and extensions for your wiki installation. For creating a shared directory we have to write the following lines from DefaultSettings.php to LocalSettings.php file for each LocalSettings.php file.

```
$wgUseSharedUploads = true;  
$wgSharedUploadPath = 'http://yourwikiname/images';  
$wgSharedUploadDirectory = '(LOCALPATH)/Folder Name/images/';  
$wgHashedSharedUploadDirectory = true;
```

In order to share common extensions first you need to copy all the extensions inclusion to a common file. You can name the file anything you want to. Now include the common extension file in every LocalSettings.php file you have created. So if you need to add/remove any extension you just have to edit the common extension file not every settings file.

This way you can integrate multiple wiki using the same code base. You can play around with the LocalSettings.php file as you can put some kind of switching command instead of creating separate setting files. The way is shown and you can apply your knowledge for something better.

Note: if you are looking for more references then you can look at the following sites. They are very well explained.

<http://www.steverumberg.com/wiki/index.php/WikiHelp>

http://www.mediawiki.org/wiki/Manual:Wiki_family