

The farmers**wife** system runs on our own proprietary databases (current45.efdb and fwd.db3).

The WIFE Server application also has a MySQL data interface option (MySQL v5.1 on Windows and Mac and 5.0 on Linux are supported). This can be used by you to extract information from armers**wife** to integrate with other systems.

The SQL database is sort of a mirror of armers**wife**'s internal database. That means it's not the original source of the data, just a replica of it. It also does not contain all data - only certain tables.

When the WIFE Server is upgraded to a new version, or when the database is missing, it does a so-called "Full Dump". Then it deletes/re-creates all the tables in the MySQL database and fills them with the up-to-date data from WIFE's internal database(s).

When the "Full Dump" is done and the server runs as usual, rows are only updated when they are modified. In other words, when someone modifies a Project, the server writes that Project out to MySQL. It does this by replacing the whole row for that Project, not by updating single columns in that row.

A default character set is not set. This means the default configured character set on your installed MySQL is being used. This is typically "Latin-1". In WIFE Server > Setup > General > MySQL section you can force to use UTF-8 (this is slower and only recommended if non-Latin-1-supported characters are being used within WIFE).

Always start using it first on a separate **TEST** installation.

## A proper WIFE Test installation works like this:

Install the WIFE Server application on your TEST machine.

Copy at least the "system" folder from your WIFE "in-production" Server to within your WIFE Test Server installation. If you have the time and disk space, feel free to also copy the "files" folder; and if you've customized anything within the "html\_templates" or "/lib/scripts", copy these \_specific\_ folders as well. Refer to the separate Upgrade Instructions for more info on this topic.

Create a file called server.cfg within your TEST WIFE Server's "system" folder.

**Note:** On Windows this is easy: you just create a .txt file and on saving it you simply name it "server.cfg". On Mac this is a bit trickier; this lengthy explanation is painful: [http://support.apple.com/kb/HT4850?viewlocale=en\\_US](http://support.apple.com/kb/HT4850?viewlocale=en_US). Here we count on your system administrator skills to keep it short: <http://www.dragosroua.com/how-to-create-a-text-file-on-a-mac/> is a lot more helpful.

Start the WIFE Server, to flush your existing configuration into the file.

Edit the server.cfg file with a text editor application within your TEST WIFE Server's "system" folder and set at least these variables to "0", like this:

```
MAIL_OK 0
USE_EXCHANGE 0
APNS_ENABLED 0
```

**IMPORTANT:** If these 3 settings are not set to 0, then your new TEST installation will most likely interfere with your PRODUCTION WIFE.

Save the server.cfg file.

Start your TEST WIFE Server application.

Repeat the beginning of these steps, for any upgrade or repeated update of the "system" folder on your Test WIFE Server.

## Enable the MySQL data dump

You configure it in WIFE Server > Setup > General > Use MySQL = Yes ... and by adding the connection details to your running MySQL installation.

WIFE needs a user in your MySQL installation and requires read, write and create table permissions.

Use the "Select Tables" button to only populate the needed tables; select all "twigs" within a specific table "branch" of this "SQL-dump-tree", as some data might require to be populated in other tables.

**Note:** Booking information is populated in the "CBS" (Class Bookings) tables; the "Bookings" tables only contain info from Farmers WIFE Classic up to version 4.9.

On the first time you "Use SQL = Yes", or when the WIFE Server is upgraded to a new version, or when the database is out of sync, a so called "Full Dump" is performed. Then table information is dropped and re-created.

After the initial Full Dump, the data is updated on a near-real-time basis (after a few milliseconds).

Only modified information is then updated. In other words, when someone modifies a Project, the WIFE Server writes that Project out to MySQL. It does this by replacing the whole row for that Project, not by updating single columns in that row.

## How to stop the MySQL data dump

There are 3 main different ways to stop the SQL dump.

- 1) Go into WIFE Server > Setup > General > Use MySQL = No
- 2) While the WIFE Server starts up, be quick take focus with the mouse on the app, and press the "s" key on your keyboard until you see the info in the Server's Log window "SQL Disabled By User On Startup"
- 3) Modify the server.cfg file by changing the variable "USE\_SQL 1" to "USE\_SQL 0". Save the server.cfg file and the start the WIFE Server application.

## Separately available information in FWandMySQL\_DataDefinition.zip

The information contained within this zip is a bit older and it is not actively maintained. But it's still up to date in most areas.

We don't plan updating it. It has worked for many of our customers in the past; a seasoned "SQL developer" with access to a WIFE test installation will easily find her/his way through it.

It contains in alphabetical order:

**1) FW\_MySQL\_com.html**

Description on how to communicate via the MySQL interface with WIFE split into these chapters: Wife Ids, SQL used datatypes, SQL used statements, Rates / money, and booking start and stop time, SQL booleans, The com table, SQL com table commands and Commands.

**2) FW\_MySQL\_data\_appendix.xls**

This document contains information about Appendix No., Link Fields and Condition

**3) FW\_MySQL\_data\_definition.xls**

This file contains more info as above 2), it contains a description of most tables and covers more detailed information on Column Name, Data Type, Length, Allow Nulls, Description and Link Appendix.

**4) My\_MySQL\_setup\_410.png**

This is a screen shot of the WIFE Server > Setup > General tab's MySQL configuration settings since version 4.10.

**5) My\_MySQL\_setup\_before410.png**

This is a screen shot of the WIFE Server > Setup > General tab's MySQL configuration settings BEFORE version 4.10.

**6) MySQL\_Tables\_description.pdf**

This PDF contains information about Table, Description, Primary Key and Foreign Keys.

**VERY IMPORTANT:** the use of SQL Bidirectional functionality is dangerous and could end up in a corruption of the Farmers WIFE database. This needs to be first tested separately before enabling this on the "Production" WIFE Server.

If this info has not been provided to you already, please request the "FWandMySQL\_DataDefinition.zip" from [support@farmerswife.com](mailto:support@farmerswife.com).