



Olympos

Chronos Web Tools

Installation guide 0.9.7

Author: Giuseppe Platania

Owner: Giuseppe Platania



Document History

Document Location

This is a snapshot of an on-line document. Paper copies are valid only on the day they are printed. Refer to the author if you are in any doubt about the currency of this document.

The source of the document will be found in the Subversion repository on Source Forge.

https://olympos.svn.sourceforge.net/svnroot/olympos/trunk/olympos/chronos/scr/applications/requirements/Chronos_Web_Modeller_Installation.pdf

Revision History

Date of this revision: 16/11/09	Date of next revision <i>TBD</i>
---------------------------------	----------------------------------

Revision Number	Revision Date	Summary of Changes
(#)	(-)	(Describe change)
0.1	18/12/08	created
0.2	03/02/09	Update installation steps
0.8.1	04/02/09	Update for 0.8.1
0.9	04/30/09	Update for 0.9
0.9.5	11/16/09	Update for 0.9.5
0.9.7	09/04/09	Update for 0.9.7
0.9.7.1		Review



Contents

1. Abstract.....	4
2. License	5
3. Requirements.....	6
3.1 Server hardware.....	6
3.2 Server Software stack.....	6
3.3 CWM Application Libraries.....	7
3.4 Client.....	7
3.4.1 Hardware.....	7
3.4.2 Software.....	8
Installation.....	9
3.5 Install the LAMP or WAMP stack.....	9
3.6 Configure PHP.....	9
3.7 Install phpMyAdmin.....	9
3.8 Create the CWM database.....	10
3.9 Install Java.....	11
3.10 Install OpenOffice.....	11
3.11 Test the access to the Metamodel.....	11
3.12 Deploy the CWM package.....	12
3.13 Configure the application.....	12
3.14 Configure the generator.....	12
3.15 give Apache rights to the generated folder.....	12
3.16 Install the standard Models and Users	13
4. Get started.....	14
4.1 Administrate users and roles.....	14
4.2 Test the CWM.....	14
4.3 Test the CWB.....	15

1. Abstract

This file helps to configure and install the **Chronos Web Tools**, including the **Chronos Web Modeller** and the **Chronos web Browser**. It is addressed to system administrators only. If you are an user start with the CWM online help.

You can download the most recent CWT version from: <http://sourceforge.net/projects/olympus/>

2. License

The **code** of the CWT and the accompanying materials are made available under the terms of the Eclipse Public License v1.0 which accompanies this distribution, and is available at <http://www.eclipse.org/legal/epl-v10.html>.

The **concept** of Chronos is made available under the Creative Common license.

You are free:

- * to Share — to copy, distribute and transmit the work
- * to Remix — to adapt the work

Under the following conditions:

- * Attribution. You must attribute the work in the manner specified by the author or licensor (but not in any way that suggests that they endorse you or your use of the work).
- * For any reuse or distribution, you must make clear to others the license terms of this work. The best way to do this is with a link to this web page.
- * Any of the above conditions can be waived if you get permission from the copyright holder.
- * Nothing in this license impairs or restricts the author's moral rights.

3. Requirements

Please consider the following list of requirements before installing the Chronos Web Modeler

3.1 Server hardware

Minimal configuration (development)

CPU	1x2,5 GHz
RAM	1 GB
HD	1 x 500 GB
RAID Level	0

Suggested (productive)

CPU	4 x 2,5 GHz
RAM	8 GB
HD	2 x 1000 GB
RAID Level	5

3.2 Server Software stack

The development was tested under Windows XP SP2, Linux Ubuntu Server 64 and Linux Debian (Etch 4.0 Kernelname: 2.6.18-6-686-bigmem). Other Linux distributions (like e.g SUSE or Redhat) should also work, but have not been tested .

The server requires the following components:

- Apache (2.2.11) [Linux]
- Apache (2.2.10) [Windows]
- MySQL (5.0.00)
- PHP (5.2.8) (with JSON library active)
- Java 1.6
- phpMyAdmin (3.1.1) [Linux]
- phpMyAdmin (3.1.0) [Windows]
- unzip
- OpenOffice

XAMPP for Linux or Windows, includes most of them.

Download and install XAMPP for Linux or Windows from
<http://www.apachefriends.org/en/xampp.html>

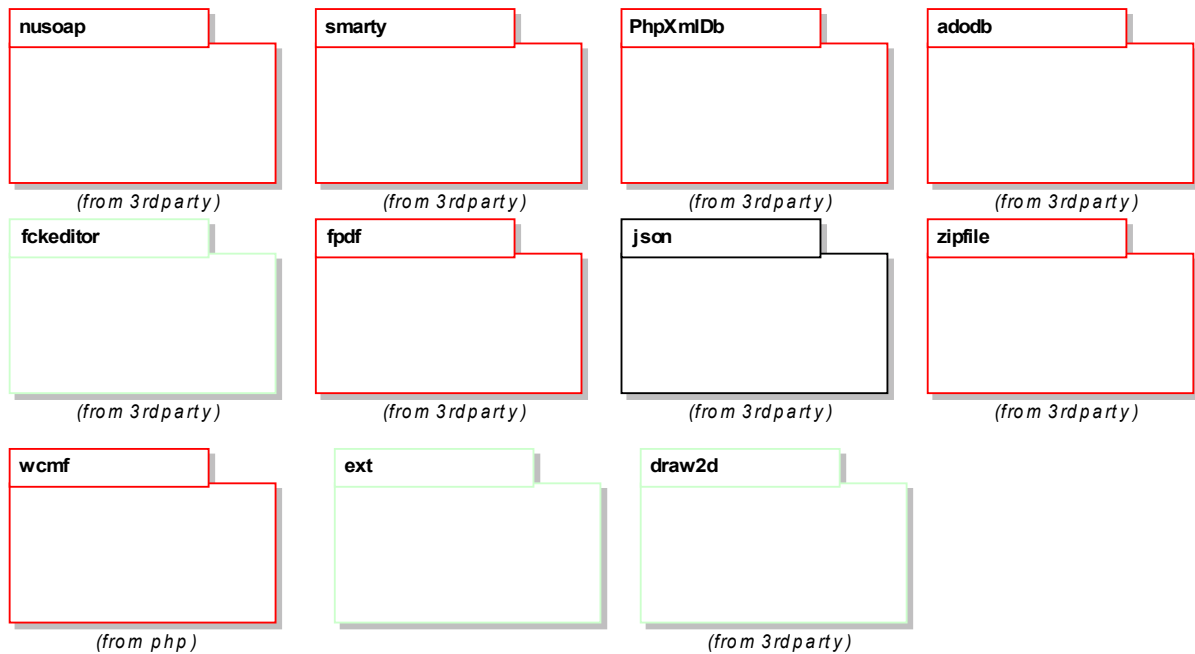
3.3 CWM Application Libraries

The CWM application uses the libraries depicted below:

Name: CWM 3rd party libraries
 Package: uwm
 Version: 1.0
 Author: Giuseppe Platania

Legend

Java script
 PHP



3.4 Client

The client need to be able to run a supported browser.

3.4.1 Hardware

Minimal :

Key	Value
CPU	Celeron 900 MHz Class
RAM	752 MB
Monitor	15"

Suggested:

Key	Value
CPU	CORE2 2 GHz class
RAM	2 GB
Monitor	21"

3.4.2 Software

The client runs in following browsers with activated JavaScript:

- Firefox 3 or better (*Preferred*)
- Google Chrome 2

Not (yet) supported:

- Opera
- IE 8

Installation

The installation of the CWM needs following steps:

1. Install the LAMP or WAMP stack.
2. Configure PHP.
3. Install phpMyAdmin.
4. Create the CWM database.
5. Install Java.
6. Install OpenOffice
7. Deploy the CWM package.
8. Configure the application.

This document is oriented to a productive installation under Linux.

3.5 Install the LAMP or WAMP stack

Follows the specific installation instruction of your Operating System or distribution.

3.6 Configure PHP

Configure the resource limit for PHP

find the position of your php.ini

edit php.ini as following:

```
;;;;;;;;;;
; Resource Limits ;
;;;;;;;;;;
max_execution_time = 600
max_input_time = 300
memory_limit = 512M

;;;;;;;;;;
; Fopen wrappers ;
;;;;;;;;;;
...
default_socket_timeout = 300
```

3.7 Install phpMyAdmin

Phpmyadmin is a supported package in many Linux distribution.

Under Ubuntu you can install it by using the following command:

```
sudo apt-get install phpmyadmin
```

3.8 Create the CWM database

- Only in case of a new installation
- Open PHPMyAdmin by browsing to <http://localhost/xampp/>
- Create a Database name “cwm”:
-

Actions

MySQL localhost

Create new database ?

cwm utf8_unicode_ci Create

MySQL connection collation: utf8_general_ci ?

- Create an user with name “cwm” for the new created “cwm” database
- set the password to “cwm” all lowercase for this user

Databases SQL Status Variables Charsets Engines Privileges Processes Export

Import


User overview

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [Show all]

	User	Host	Password	Global privileges ¹	Grant	
<input type="checkbox"/>	Any	%	--	USAGE	No	
<input type="checkbox"/>	Any	localhost	No	USAGE	No	
<input type="checkbox"/>	pma	localhost	No	RELOAD, SHUTDOWN, PROCESS	No	
<input type="checkbox"/>	root	127.0.0.1	No	ALL PRIVILEGES	Yes	
<input type="checkbox"/>	root	localhost	No	ALL PRIVILEGES	Yes	


Check All / Uncheck All

Add a new User

 **Add a new User**


Login Information

User name:

Use text field: 


cwm

Host:

Local 

localhost

Password:

Use text field: 

...

Re-type:

...

Generate Password:

Generate

Copy

Database for user

☐ None

☒ Create database with same name and grant all privileges

☐ Grant all privileges on wildcard name (username_%)

3.9 Fill the database

Only in case of a new installation:

- execute on the created CWM database the provided `cwm.sql.gz`. This will install the default users and roles as well as the standard models.

Server: localhost Database: cwm

Structure SQL Search Query Export Import Operations

Privileges Drop

Import

File to import

Location of the text file (Max: 2,048 KiB)

Character set of the file:

Imported file compression will be automatically detected from: None, gzip, bzip2, zip

Partial import

☒ Allow interrupt of import in case script detects it is close to time limit. This might be good way to import large files, however it can break transactions.

Number of records(queries) to skip from start

Format of imported file

☒ SQL

Options

SQL compatibility mode

Illustration 1:

3.10 Install Java

- Check if the correct java version is installed: type in a console "java -version"
- If 1.6 is not available, install java 1.6 or better

3.11 Install OpenOffice

Install the package

openoffice.org

the version number must be 2.0.4 or better.

- Type in a bash shell:

```
soffice -headless -accept="socket,host=localhost,port=8100;urp;"
-nofirststartwizard
```

Note: if you receive the error "X11 error: Can't open display:" when running the above command, then you may need to install the "headless" OpenOffice.org package from your Linux distribution. On Ubuntu/Debian, this package is called **openoffice.org-headless**.

3.12 Test the access to the Metamodel

To be able to export the CWM need to dynamically read the Metamodel that in this version is under:

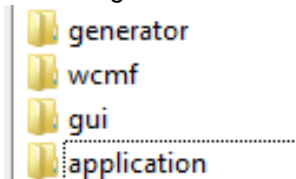
<http://cwm.nikostotz.de/chronos.profile.uml>

check that your server or firewall can access to this file by typing

```
wget http://cwm.nikostotz.de/chronos.profile.uml
```

3.13 Deploy the CWM package

- The CWT are provided as single zip file.
 - ◆ **NOTE Optional in case of Upgrade only**
 - remove the `server.ini` file from `/cwm/application/include` before unzip the file to avoid overwrite your actual configuration.
- Unzip the package (e.g. `cwm0.9.7.zip`) in the apache http directory e.g. `/var/www` directory
- following structure is created:



3.14 Configure the application

Only in case of a new installation:

- Browse to `cwm\application\include`
- Open with an editor the `server.ini` file
- Edit the section `[database]` with your DB information

```
[database]
dbType = mysql
dbHostName = localhost
dbName = cwm
dbUserName = cwm
dbPassword = cwm
```

3.15 Configure the standard Model language

in the same file

application/include/server.ini

configure your default language for the backend model. Use the 2 letter international code (en for English, de for German, it for Italian,)

```
[i18n]
defaultLanguage = de
```

now browse to

gui/js/uwm/Config.js :

to configure the front end model language.

```
...
/**
 * The default modelling.
 *
 * @type String
 */
uwm.Config.defaultLanguage = 'de';
```

3.16 Configure the generator

Only in case of a new installation:

- on the same file `server.ini` modify the `[generator]` section to point to the position of your `wCMFGenerator.jar`.

```
...
[generator]
executable = /var/www/cwm/wcmf_generator/wCMFGenerator.jar
```

3.17 give Apache rights to the generated folder

From the version 0.9.7 the CWM can generate a complete application.

Give the Apache all the right for:

```
/var/www/cwm/generated/
chmod 666 /var/www/cwm/generated/
```

3.18 Install the standard Models and Users

In case of Upgrade:

- Open Firefox 3 and browse to <http://localhost/cwm/application>
- Click on upgrade to upgrade your database

4. Get started

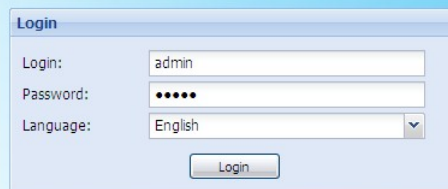
4.1 Administrate users and roles

- Click on start application to start the backend application
- Use the standard user:admin with the password:admin to login
- Click on Administration to manage users and roles
- Change immediately the password for the user admin
- Create so many users and roles as necessary.

4.2 Test the CWM

- Browse to <http://localhost/cwm/gui/>
- Login
- welcome to the CWM!!!

CHRONOS WEB MODELER

A screenshot of a web browser showing a login form titled "Login". The form has three input fields: "Login:" with the text "admin" entered, "Password:" with five dots (•••••) entered, and "Language:" with a dropdown menu showing "English". Below these fields is a "Login" button.

4.3 Test the CWB

- Browse to <http://localhost/cwm/Browser>
- Login
- welcome to the CWB!!!

