Installation of Apache OpenMeetings 3.0.x on Mac Yosemite OS X

It is tested with positive result. We will use the Apache's binary version OpenMeetings 3.0.6 stable, that is to say will suppress his compilation. It is done step by step.

28-5-2015

Starting....

1)

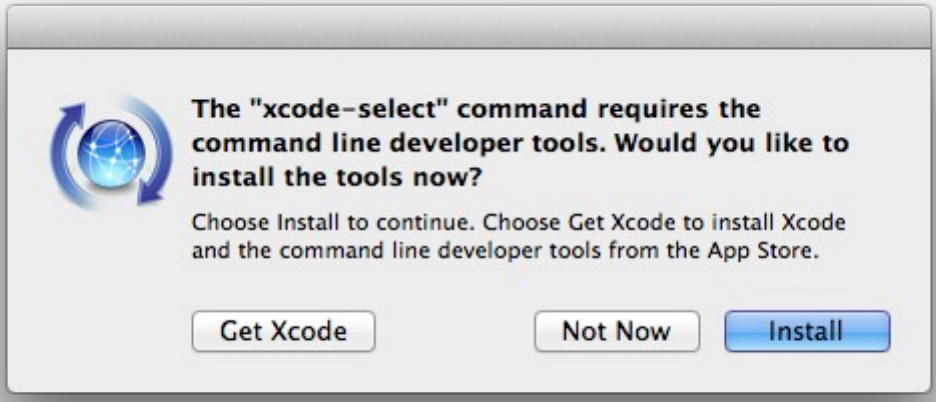
--------- Installation of Command line developer tools ----------

Should install in first place the developer tools, that will help us to compile the sources.

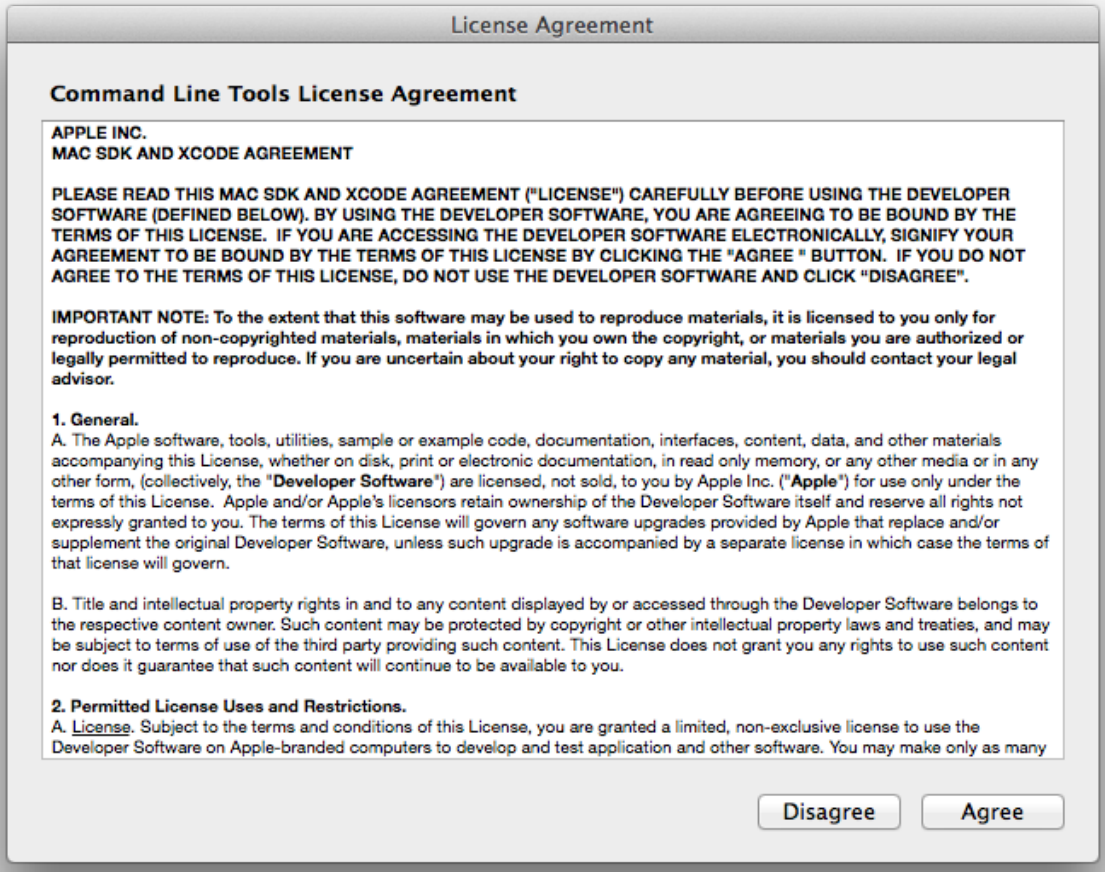
Run the shell as administrator, not as root, and install:

xcode-select –install

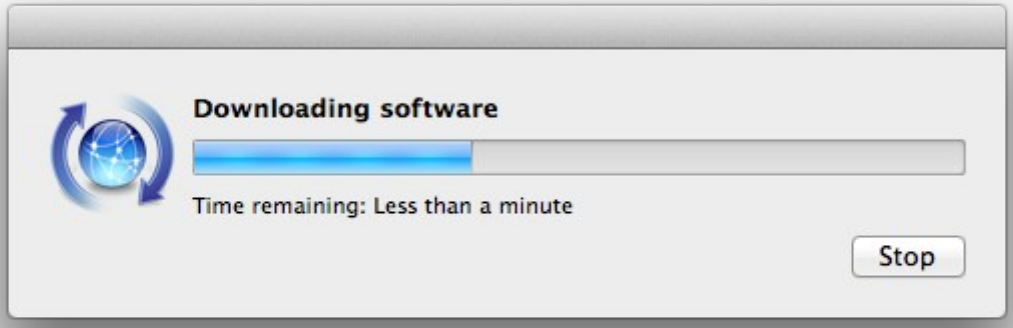
...will open a window informing:



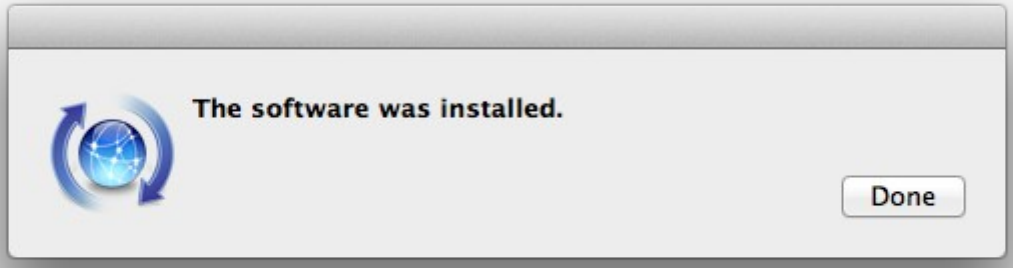
clic **Install** button only, and will open other window. clic **Agree** button



...and will download and install the software



...telling when it finished



...clic **Done**.

2)

--------- Installation of Homebrew ---------

Homebrew install software. It is on Mac the same that apt-get on Debian and yum on Centos or Fedora, for example. Should install it:

ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"

brew doctor

...and update:

brew update

3)

--------- Installation of need it software ---------

Will install wget to download files, and ghostscript:

brew install wget ghostscript

4)

--------- Installation of Oracle Java ----------

Java is need it to work with Apache OpenMeetings. Will install Oracle Java 1.8:

Please visit:

http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html?ssSourceSiteId=otnes

...clic on:

Agree and proceed

...check:

Accept License Agreement

...and download the file called:

jdk-8u45-macosx-x64.dmg

Once unloaded the file, double clic on it and follow the installation process by default.

5)

--------- Installation of OpenOffice ---------

OpenOffice is need it to convert the office files uploaded to pdf.

To download please visit:

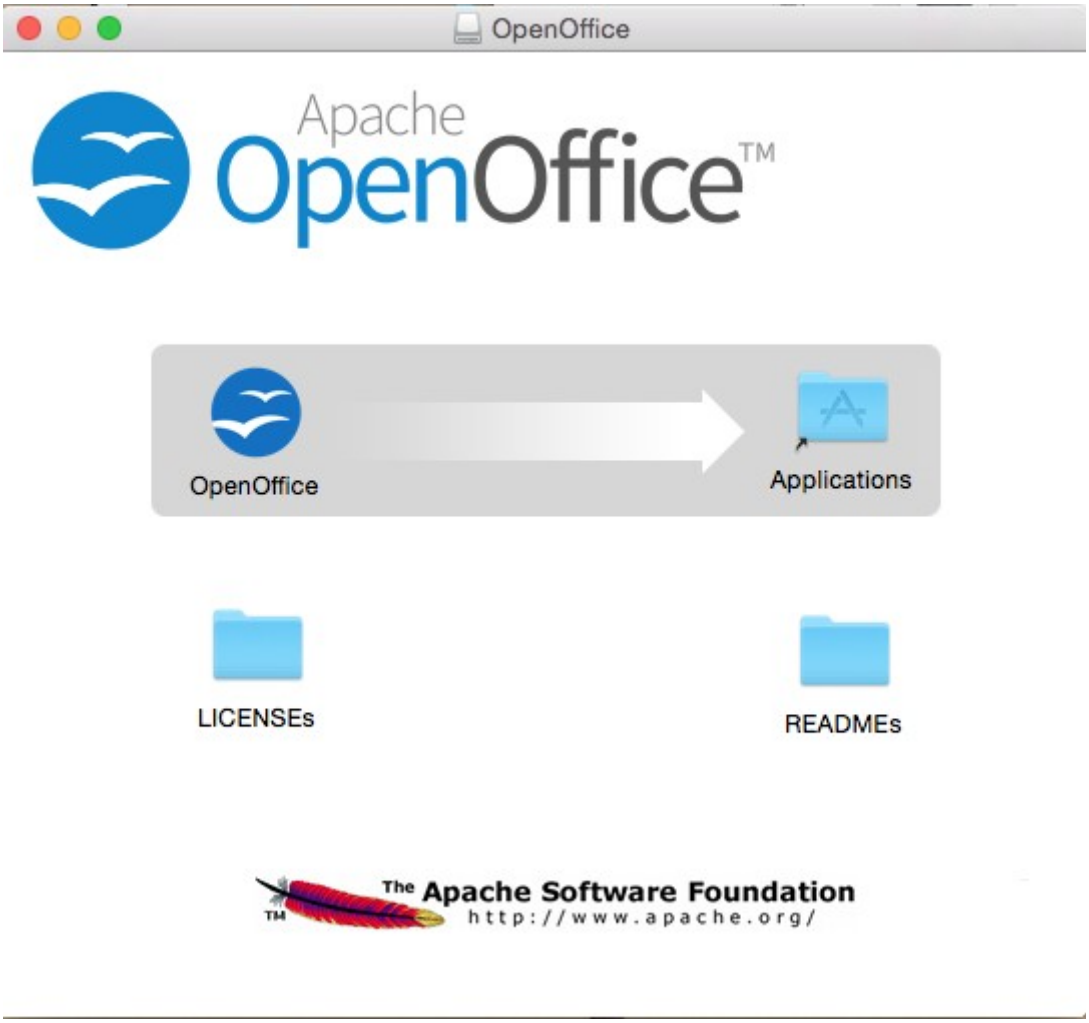
http://www.openoffice.org/download/

...select and download:

OS X 64-bit (x86-64) (DMG) language 4.1.1

Download full installation

Do double clic on the unloaded file: **Apache_OpenOffice_4.1.1_MacOS_x86-64_install**.... and will open this window:



...please, drop **OpenOffice** icon to right, to **Applications** folder icon.

6)

--------- Installation of ImageMagick, Sox, Swftools and Vlc ---------

ImageMagick work with the image files as png, jpg, gif, etc.

Sox work about sound.

Swftools convert images and pdf files to flash files (swf). These flash files will be showing in the whiteboard.

Vlc is the player for the video files we´ll recording.

brew install imagemagick sox swftools

All the installed files are in: /usr/local/bin

brew install Caskroom/cask/vlc

7)

--------- FFMPEG compilation ---------

Ffmpeg work about video.We´ll compile it. For it base on a script, an excellent work of Hunter at this url:

http://hunterford.me/compiling-ffmpeg-on-mac-os-x/

...as it is doesn´t works with OpenMeetings. Then i have modificated the script and now it works rightly. Also is updated.

So we´ll make the script file called **ffmpeg.sh**. This script will download, compile and install ffmpeg automatically.
Please respect the spaces between the text blocks when copy. Will ask for password during installation, **attention**!

nano /Users/**you-user**/ffmpeg.sh

...modify …/**you-user**/... by your real user name.

Copy **from here**:

```
# Create a temporary directory for sources.
SOURCES=$(mktemp -d /tmp/XXXXXXXXXX)
cd $SOURCES
```

```
# Download the necessary sources.
curl -#LO http://sourceforge.net/projects/opencore-amr/files/fdk-aac/fdk-aac-0.1.4.tar.gz
curl -#LO http://downloads.sourceforge.net/project/lame/lame/3.99/lame-3.99.5.tar.gz
curl -#LO http://downloads.xiph.org/releases/ogg/libogg-1.3.2.tar.gz
curl -#LO http://pkg-config.freedesktop.org/releases/pkg-config-0.28.tar.gz
curl -#LO http://downloads.xiph.org/releases/vorbis/libvorbis-1.3.5.tar.gz
curl -#LO http://downloads.xiph.org/releases/theora/libtheora-1.1.1.tar.bz2
# curl -#LO http://downloads.sourceforge.net/project/opencore-amr/vo-amrwbenc/vo-amrwbenc-
0.1.1.tar.gz
curl -#LO http://www.tortall.net/projects/yasm/releases/yasm-1.3.0.tar.gz
curl -#LO http://storage.googleapis.com/downloads.webmproject.org/releases/webm/libvpx-
1.4.0.tar.bz2
curl -#LO ftp://ftp.videolan.org/pub/x264/snapshots/last_x264.tar.bz2
curl -#LO http://downloads.xvid.org/downloads/xvidcore-1.3.3.tar.gz
# curl -#LG -d "p=ffmpeg.git;a=snapshot;h=HEAD;sf=tgz" -o ffmpeg.tar.gz http://git.videolan.org/
curl -#LO http://ffmpeg.org/releases/ffmpeg-2.6.3.tar.bz2

# Unpack files
for file in `ls ${SOURCES}/*.tar.*`; do
    tar -xzf $file
    rm $file
done

cd fdk-aac-*/
CFLAGS="-D__unix__" ./configure && make -j 4 && sudo make install; cd ..

cd lame-*/
./configure && make -j 4 && sudo make install; cd ..

cd libogg-*/
./configure && make -j 4 && sudo make install; cd ..

cd pkg-config-*/
./configure && make -j 4 && sudo make install; cd ..

cd libvorbis-*/
./configure --disable-oggtest --build=x86_64 && make -j 4 && sudo make install; cd ..

cd libtheora-*/
./configure --disable-oggtest --disable-vorbistest --disable-examples --disable-asm
make -j 4 && sudo make install; cd ..

# cd vo-amrwbenc-*/
# ./configure && make -j 4 && sudo make install; cd ..

cd yasm-*/
./configure && make -j 4 && sudo make install; cd ..

cd libvpx-*/
./configure --enable-vp8 --enable-pic && make -j 4 && sudo make install; cd ..
```

```
cd x264-*
CFLAGS="-I. -fno-common -read_only_relocs suppress" ./configure --enable-pic --enable-shared
&& make -j 4 && sudo make install; cd ..

cd xvidcore/build/generic
./configure --disable-assembly && make -j 4 && sudo make install; cd ../../..

# For Lion, we have to change which compiler to use (--cc=clang).
# If you're building on Snow Leopard, you can omit this flag so it defaults to gcc.
cd ffmpeg-*/
CFLAGS="-DHAVE_LRINTF" ./configure --enable-nonfree --enable-gpl --enable-version3
--enable-postproc --enable-swscale --enable-avfilter --enable-libmp3lame --enable-libvorbis
--enable-libtheora --enable-libfdk-aac --enable-libxvid --enable-libx264 --enable-libvpx --enable-
hardcoded-tables --enable-shared --enable-pthreads --disable-indevs --cc=clang && make -j 4 &&
sudo make install

# --enable-libvo-amrwbenc

# FFMpeg creates MP4s that have the metadata at the end of the file.
# This tool moves it to the beginning.
cd tools
gcc -D_LARGEFILE_SOURCE qt-faststart.c -o qt-faststart
sudo mv qt-faststart /usr/local/bin
```

….to here.

Once copyed and pasted, clic **Ctrl+X** and will ask to save, clic **Y** and after this clic **Return** (Enter**)** to exit.

Concede execution permission:

chmod +x /Users/**you-user**/ffmpeg.sh

...remember modify …/**you-user**/....by your real user name

...and execute the script to download, compile and intall ffmpeg:

cd /Users/**you-user**

./ffmpeg.sh

...be patience and wait untill is finished. Some times will look it is stoped...don´t touch anything and wait.

Once finished, the installed files are in /usr/local/bin

8)

--------- Installation of Adobe Flash Player ---------

Flash Player even is need it to Conference Rooms. Install it:

brew install Caskroom/cask/flash-player

...during the installation will ask for administrator password.

9)

--------- Installation of Jodconverter ---------

Jodconverter work to convert uploaded files.

cd /Users/**you-user**

wget http://jodconverter.googlecode.com/files/jodconverter-core-3.0-beta-4-dist.zip

unzip jodconverter-core-3.0-beta-4-dist.zip

10)

--------- Installation of MySQL ---------

We´ll use MySQL as data server. Install it:

brew install mysql

Once finished, run it:

mysql.server start

...and give a password to root of MySQL:

mysql -u root mysql

...modify your_new_password by the password you like it:

mysql> update user set password=PASSWORD('your_new_password') where user='root';

mysql> flush privileges;

...and out:

mysql> quit

11)

--------- Make a data-base for OpenMeetings ---------

Should make a data.base for OpenMeetings.

Run MySQL if not:

mysql.server start

...accede:

mysql -u root -p

...will ask for the password just we made it, and now we´ll make our data-base:

mysql> CREATE DATABASE open306 DEFAULT CHARACTER SET 'utf8';

...also we make an user with a password for this data-base:

(One line only with a space between both)

mysql> GRANT ALL PRIVILEGES ON open306.* TO 'openmeetings'@'localhost'
IDENTIFIED BY '123456' WITH GRANT OPTION;

mysq> quit

- open306 … is the data-base name
- openmeetings … is the name of the user for this data-base
- 123456 … is the password of openmeetings user.

If you like it can modify these data, but remember it!

12)

--------- Installation of OpenMeetings ---------

Well, we are at the installation of OpenMeetings. We´ll do it in:

/Users/**you-user**/red5306

...then make the folder:

mkdir /Users/**you-user**/red5306

...remember always modify …/**you-user**/... by your real user name.

Download Apache-OpenMeetings file to the installation folder:

cd /Users/**you-user**/red5306

wget http://apache.rediris.es/openmeetings/3.0.6/bin/apache-openmeetings-3.0.6.zip

unzip apache-openmeetings-3.0.6.zip

...save the unloaded file moving it to your home:

mv apache-openmeetings-3.0.6.zip /Users/**you-user**

Download and install the connector file between OpenMeetings and MySQL:

cd /Users/**you-user**

wget http://repo1.maven.org/maven2/mysql/mysql-connector-java/5.1.35/mysql-connector-java-5.1.35.jar

...and copy it to his place:

(In only one line with a space between both)

cp /Users/**you-user**/mysql-connector-java-5.1.35.jar /Users/**you-user**/red5306/webapps/openmeetings/WEB-INF/lib

13)

--------- Configuration of the data-base on OpenMeetings ---------

We´ll configure the file that do connect OpenMeetings with MySQL.

cd /Users/**you-user**/red5306/webapps/openmeetings/WEB-INF/classes/META-INF

mv persistence.xml persistence.xml-ori

mv mysql_persistence.xml persistence.xml

(In only one line without space between both)

nano /Users/**you-user**/red5306/webapps/openmeetings/WEB-INF/classes/META-INF/persistence.xml

...**modify the line**:

, Url=jdbc:mysql://localhost:3306/openmeetings

...to

, Url=jdbc:mysql://localhost:3306/open306

...is the name of our data-base we made.

...**modify the line**:

, Username=root

...to

, Username=openmeetings

...is the user name we made for our data-base.

...**modify the line**:

, Password=" />

...to

, Password=123456" />

...is the password we made for the user called “openmeetings”.

If you have choose any other name for the user, password or data-base, here is where to type it.

clic **Ctrl+X**, will ask to save, clic **Y** and to exit clic **Retutn** (Enter.)

Protect the file:

(In only one line without space between both)

chmod 640 /Users/**you-user**/red5306/webapps/openmeetings/WEB-INF/classes/META-INF/persistence.xml

...remember modify **…/you-user/...**by your real user name.

14)

--------- Script to run red5-OpenMeetings ---------

Now we´ll make a script to run red5-OpenMeetings.

nano /Users/**you-user**/red5

...copy and paste the text, but remember to modify on it you-user by your real user name.
Copy **from here**:

```
#
#!/bin/sh -e
#
# Startup script for Red5
export RED5_HOME=/Users/you-user/red5306
start_red5="$RED5_HOME/red5.sh start"
stop_red5="$RED5_HOME/red5-shutdown.sh stop"
start() {
echo -n "Starting Red5: "
${start_red5} &
echo "done."
}
stop() {
echo -n "Shutting down Red5: "
${stop_red5}
echo "done."
}
case "$1" in
start)
start
;;
stop)
stop
;;
restart)
stop
sleep 10
start
;;
*)
```

```
echo "Usage: $0 {start|stop|restart}"
esac
exit 0
```

...to here.

Once copyed and pasted, clic **Ctrl+X** and will ask to save, clic **Y** and after this clic **Return** (Enter**)** to exit.

We´ll copy the script to /opt

```
sudo su
```

...will ask for administrator password:

```
cp /Users/you-user/red5 /opt
```

...concede execution permission:

```
chmod +x /opt/red5
```

...and out from sudo su:

```
exit
```

15)

Begin with the interface of OpenMeetings.

Run MySQL, if not:

```
mysql.server start
```

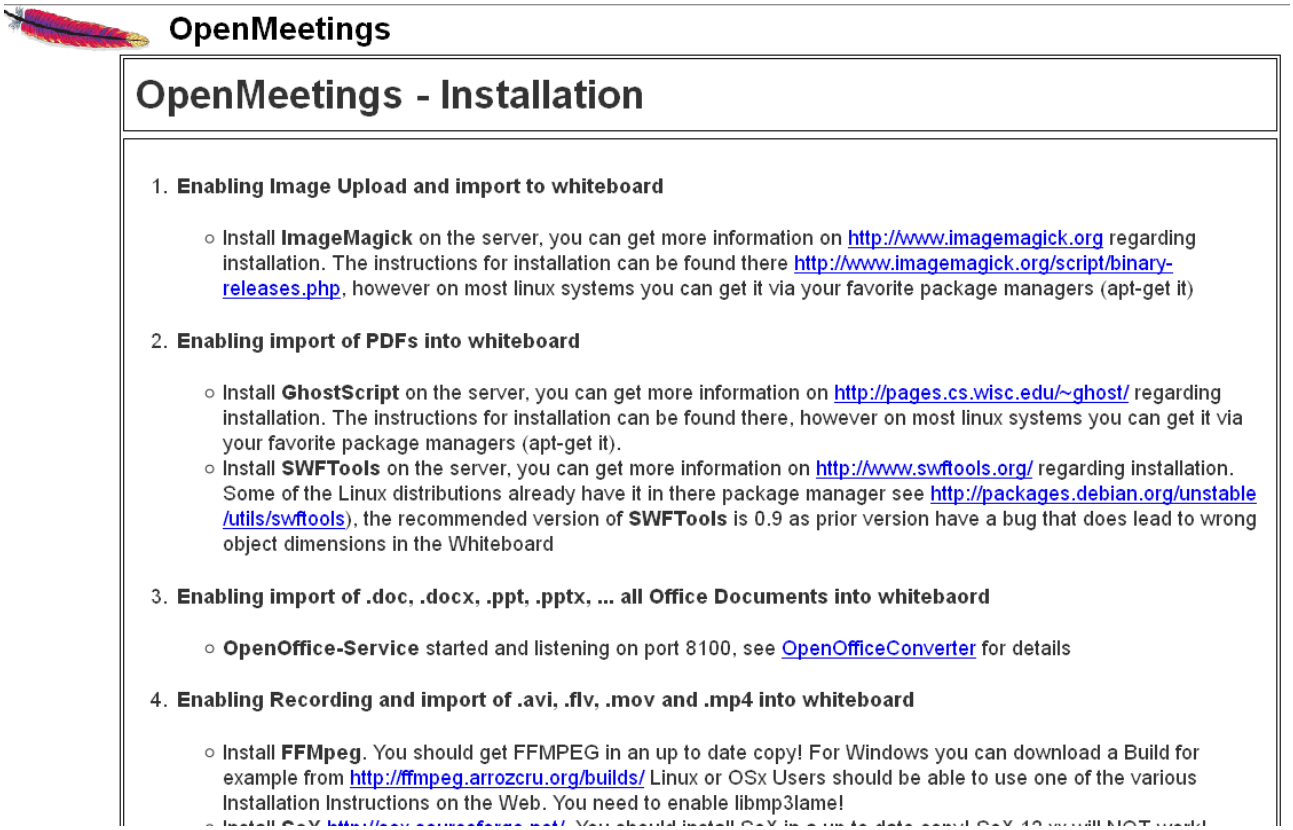
...and run red5-OpenMeetings:

```
/opt/red5 start
```

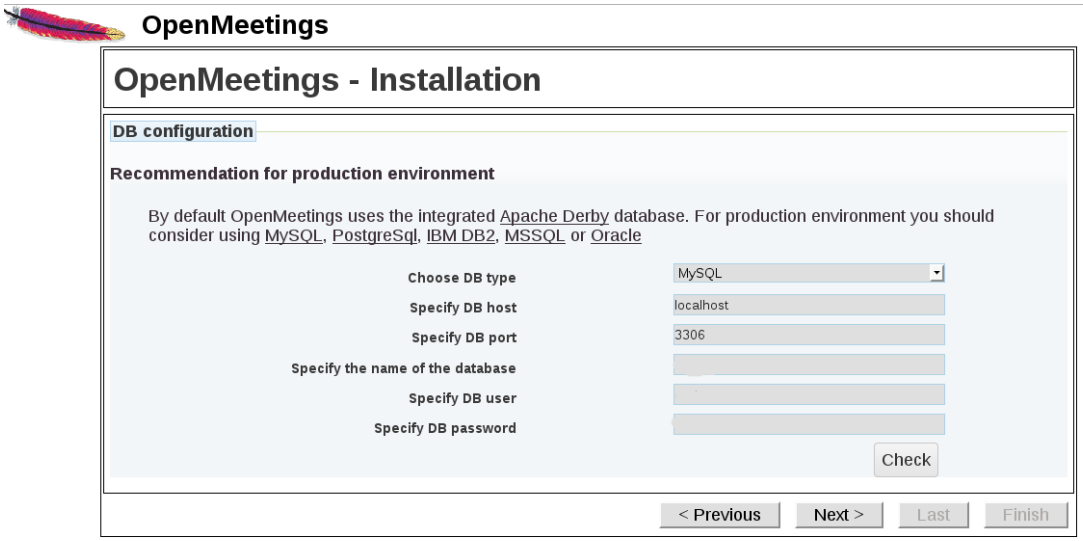
...wait a seconds untill is completely running, and after this, with the browser go to:

http://localhost:5080/openmeetings/install

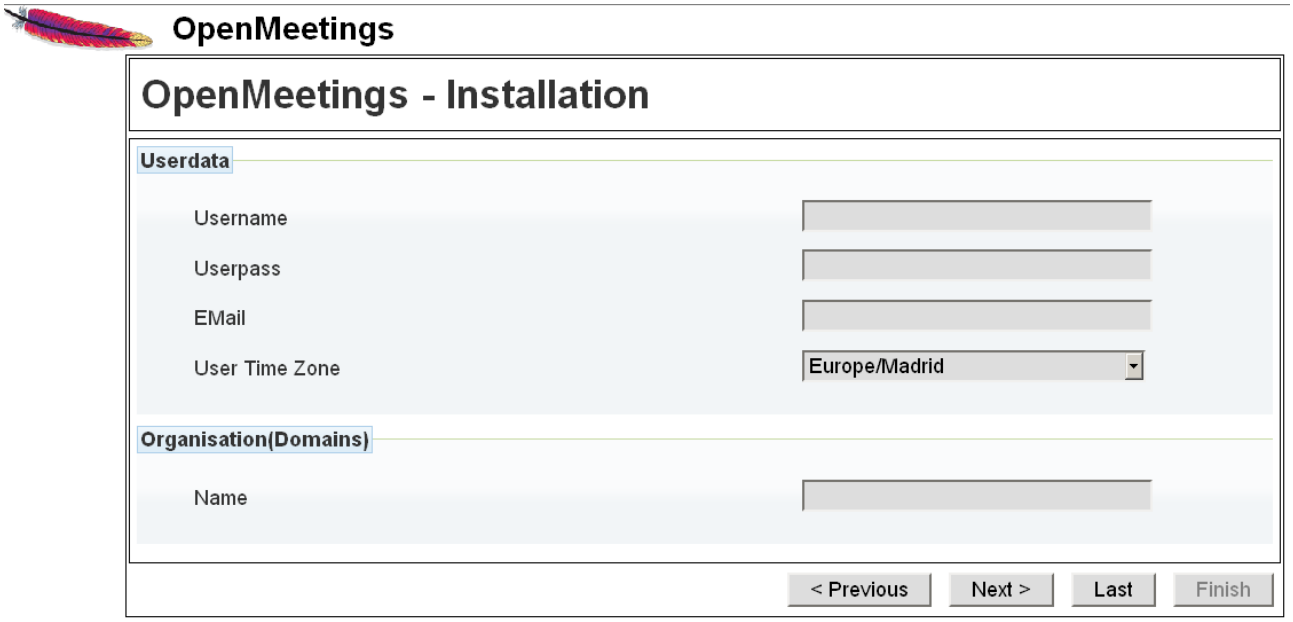
...will show this window:



...clic **Next** (bottom page) and show the base.data configuration we made in step 10, page 9:



...clic **Next** and will appear this other page:



...here we must to introduce necessarily, to be able to continue, the following:

Username = a-name ...this user will be administrator.

Userpass = password ...for the previous user.

Email = email-adress ...of the previous user.

User Time Zone = Country where is this server

Organisation(Domains)

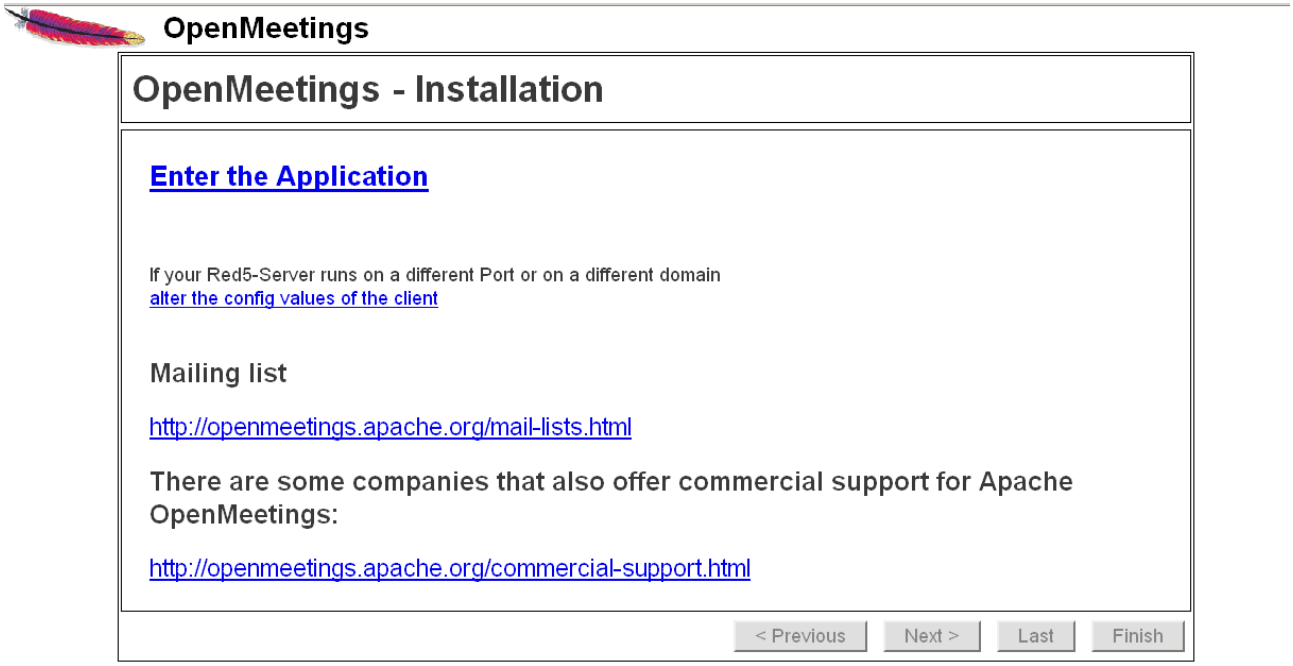
Name = example-openmeetings ...group name to choose.

Go bottom page and clic the **Finish** button.

Clic **Last** button and in the new page clic **Finish.**

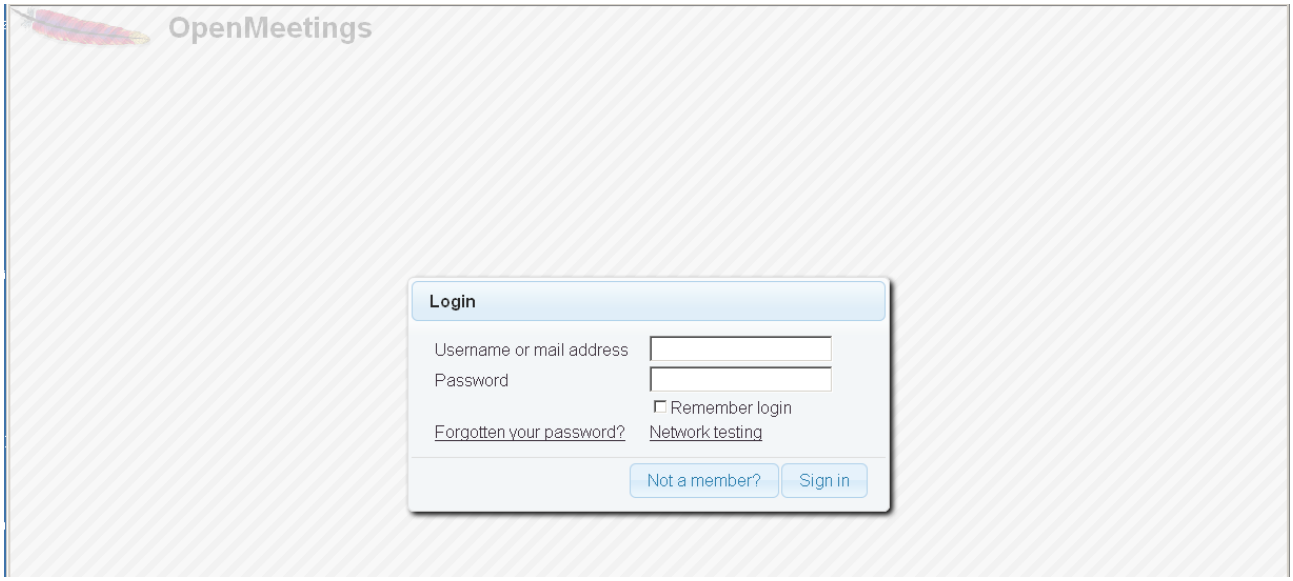
...wait until is finished...

...and will appear this page:



Clic on **Enter the Application**

...and will take you to the enter of OpenMeetings:



Introduce the user's name and the password that you have chosen during the installation and...

Congratulations!

The next time that you likes to accede OpenMeetings will be:

http://localhost:5080/openmeetings

Remember to open in the server these three ports:

5080 1935 8088

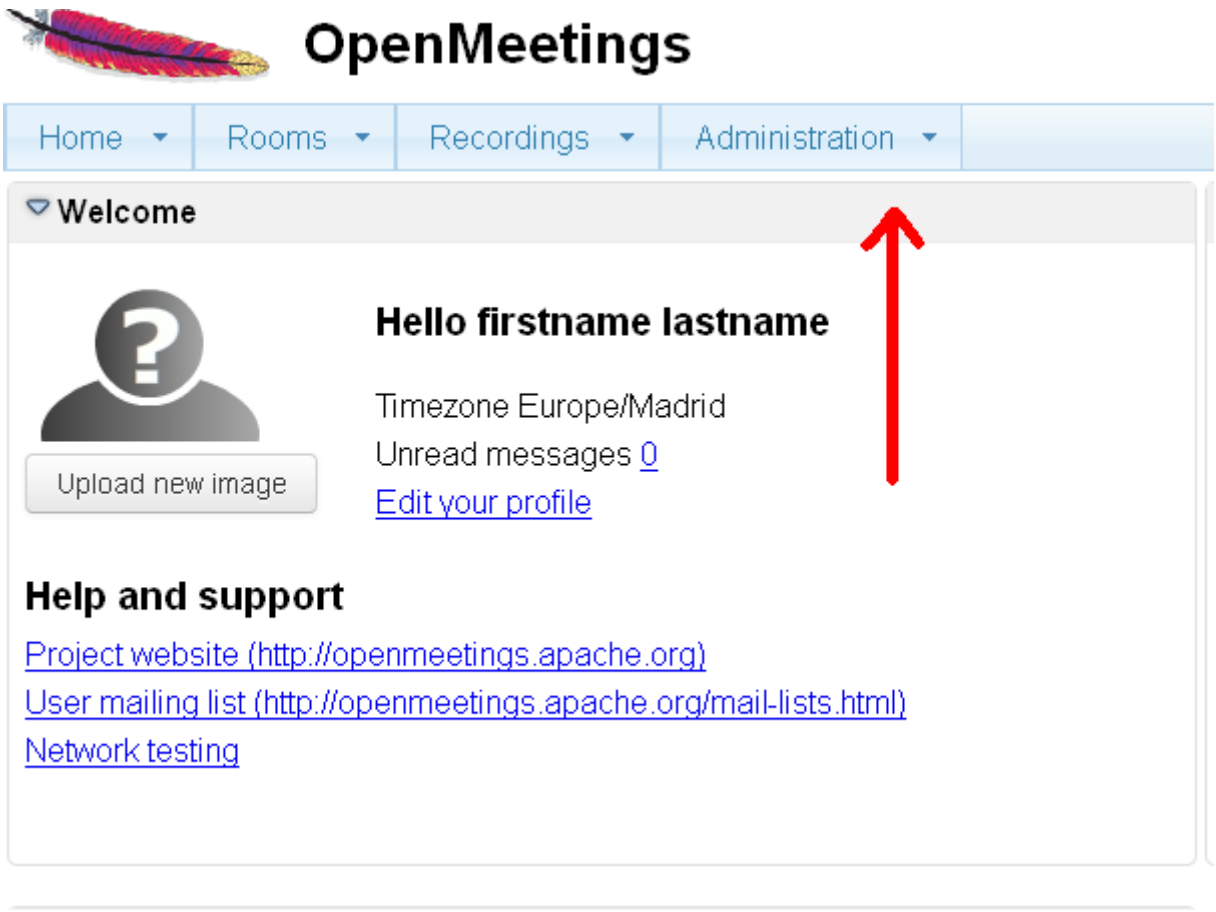
...in order that it could accede to OpenMeetings from other machines.

16)

--------- Configuration of OpenMeetings ---------

Once you are in OpenMeetings please go to:

Administration → Configuration



...introduce the differentes path parameters:

Clic on: **swftools_path**...and to right in Value type: **/usr/local/bin**

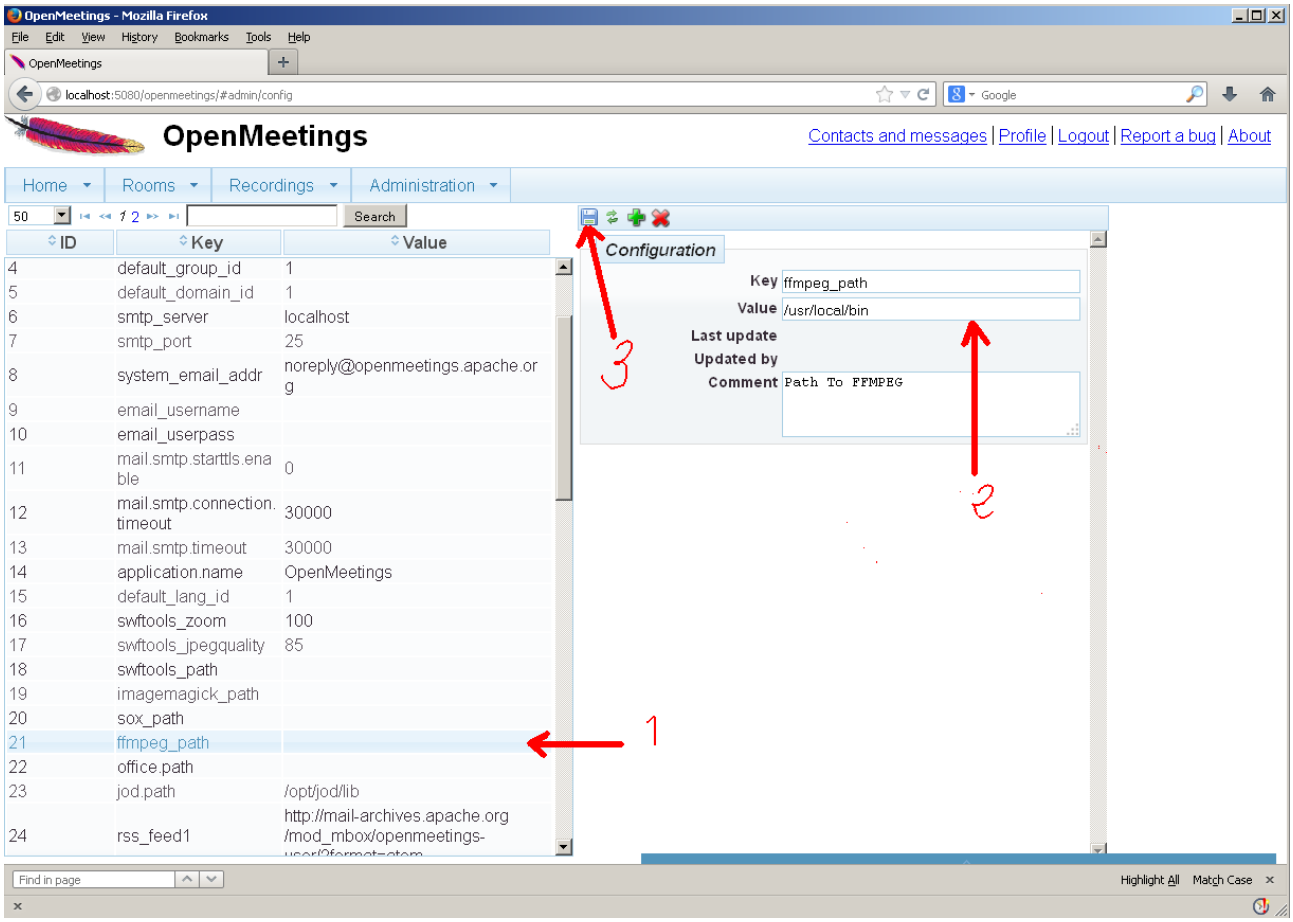
Clic on: **imagemagick_path**...and to right in Value type: **/usr/local/bin**

Clic on: **sox_path**...and to right in Value type: **/usr/local/bin**

Clic on: **ffmpeg_path**...and to right in Value type: **/usr/local/bin**

Clic on: **office.path**...and to right in Value type : **/Applications/OpenOffice.app/Contents**

Clic on: **jod.path**...and to right in Value type: **/Users/**you-user/**jodconverter-core-3.0-beta-4/lib**
….remember modify …/you-user/... by your real user name :)



Now there is OpenMeetings ready to work rightly.

And this is all.

If you have some doubt or question, please raise it in the Apache OpenMeetings forums:

http://openmeetings.apache.org/mail-lists.html

Thank you

Alvaro Bustos