Installation of Apache OpenMeetings 3.1.3 on macOS Sierra

It is tested with positive result. We will use the Apache's
binary version OpenMeetings 3.1.3 stable, that is to say
will suppress his compilation. It is done step by step.
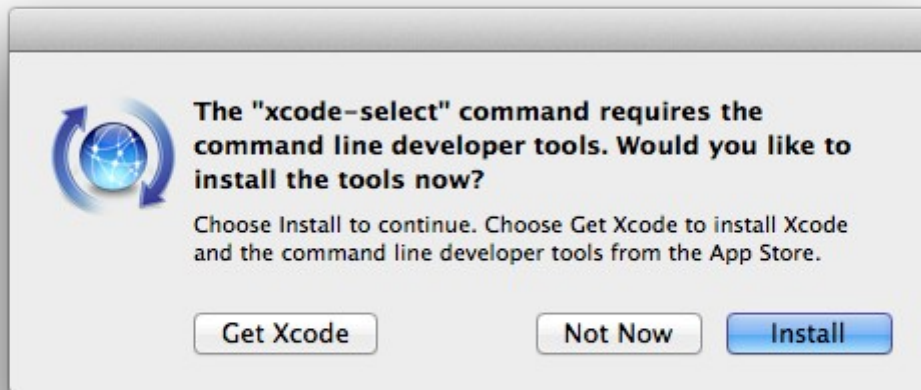
2-10-2016

Starting.…

1)

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

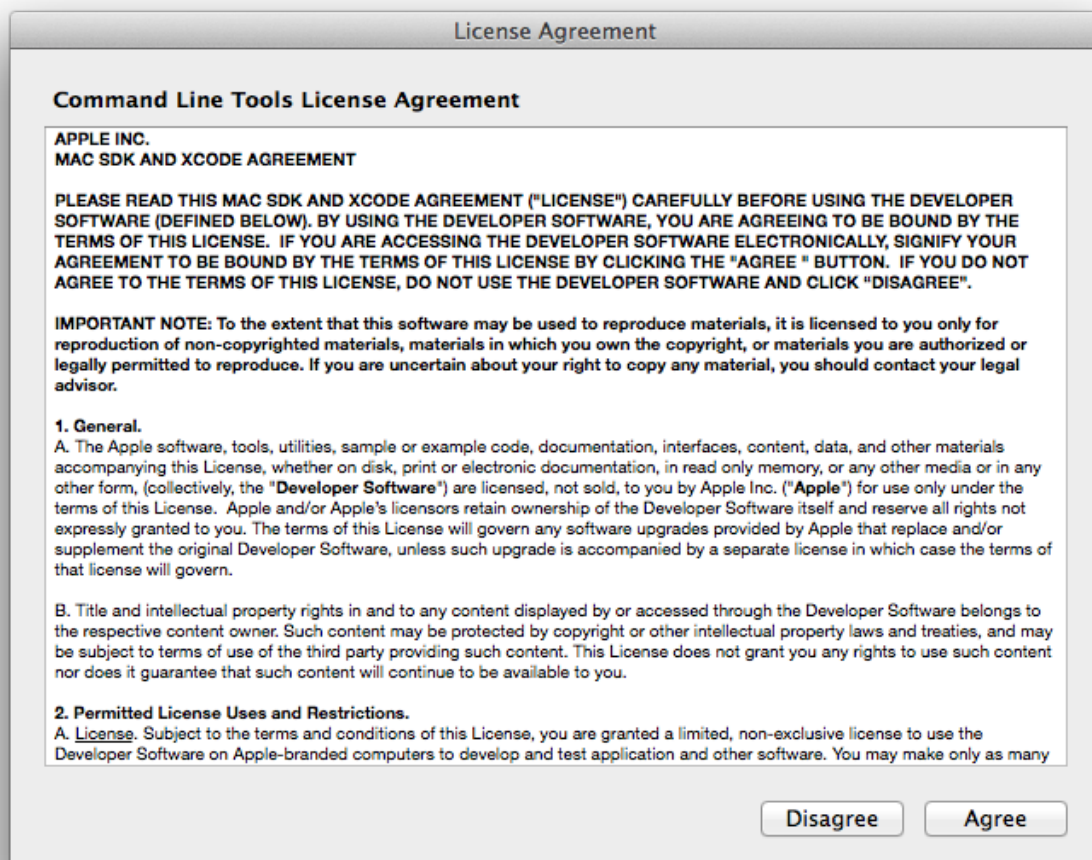We´ll install in first place the developer tools, that will help us to compile the sources.

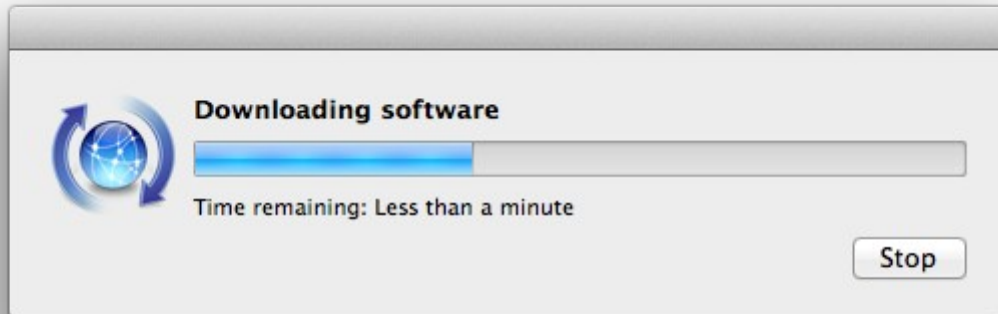Run the shell as administrator, not as root, and install:

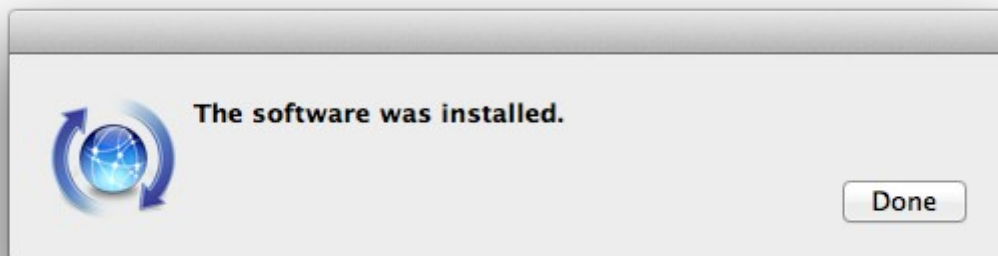xcode-select --install

...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 or Ubuntu, yum on Centos or dnf on Fedora, for example. 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 paquets ------

Will install wget to download files, and ghostscript. After the installation, will ask to run a commands. Attention!:

brew install wget ghostscript nmap

4)

------ Installation of Oracle Java 1.8 ------

Java **1.8** is need it to work OpenMeetings **3.1.3**. 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-8u102-macosx-x64.dmg   ...no 8u101. This is important.

Once unloaded the file, do 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 (version >= 10-7) (DMG)   language   4.1.2

Download full installation

Do clic on the unloaded file: **Apache_OpenOffice_4.1.2_MacOS_x86-64_install**....
and will open this window:

...please, drag **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. Install both:

brew install imagemagick sox

ImageMagick and Sox will be installed in: /usr/local/bin

Swftools. OpenOffice convert to pdf the uploaded office files, and Swftools convert these pdf to swf, flash files, that later will show in the white board. Also convert jpg2swf, png2swf, gif2swf, etc. Don´t install a newer version, maybe have not pdf2swf. Download from here:

https://storage.googleapis.com/google-code-archive-downloads/v2/code.google.com/flexpaper-desktop-publisher/swftools-0.9.2-1-osx10.6.dmg

...clic on swftools-0.9.2-1-osx10.6.dmg file unloaded and install by default.

Swftools will be installed in: /opt/local/bin

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

brew install Caskroom/cask/vlc

7)
------ Installation of Adobe Flash Player ------

Flash Player even is need it for rooms. Download and install it:

http://fpdownload.macromedia.com/pub/flashplayer/latest/help/install_flash_player_osx.dmg

...clic on the install_flash_player_osx.dmg file and install it by default.

8)
------ Installation of Jodconverter ------

Jodconverter participate in the process to convert uploaded files.
Remember modify **you-user** by your real user name.

cd /Users/**you-user**

(Only one line without space between both)

wget https://storage.googleapis.com/google-code-archive-downloads/v2/code.google.com/jodconverter/jodconverter-core-3.0-beta-4-dist.zip

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

9)

------ FFmpeg compilation ------

FFmpeg work about video.We´ll compile it. For it base on this url:

https://trac.ffmpeg.org/wiki/CompilationGuide/MacOSX

...to wich i´ve added x265. Don´t build a script, because the number of steps it is minimum.
The result of any recording we do in OpenMeetings, will be in avi, flv, mp4 and ogg formats.
Install some paquets and libraries:

(Only one line with space between both)

brew install automake fdk-aac git lame libass libtool libvorbis libvpx opus sdl shtool texi2html theora wget x264 xvid yasm x265

We place at our home. Attention, modify **you-user** by your real username:

cd /Users/**you-user**

git clone --depth 1 git://source.ffmpeg.org/ffmpeg

cd ffmpeg

(Only one line with space between each one)

./configure --prefix=/usr/local --enable-gpl --enable-nonfree --enable-libass --enable-libfdk-aac --enable-libfreetype --enable-libmp3lame --enable-libopus --enable-libtheora --enable-libvorbis --enable-libvpx --enable-libx264 --enable-libxvid --enable-libx265

make   (spend about 10 minutes)

sudo make install   (will ask for the user password)

...ffmpeg it is installed in /usr/local/bin

10)

------ Installation of MariaDB data server ------

Our data server will be MariaDB. We install it:

brew install mariadb

Once the installation is finished, run it:

mysql.server start

...and give a root MariaDB password. Please, modify **new-password** by one of your whish:

mysqladmin -u root password **new-password**

11)
------ Build a data-base for OpenMeetings ------

Make a data.base for OpenMeetings.

Run MariaDB, 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:

MariaDB [(none)]> CREATE DATABASE open313 DEFAULT CHARACTER SET 'utf8';

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

(One line only with a space between both)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON open313.* TO 'hola'@'localhost'
IDENTIFIED BY '123456' WITH GRANT OPTION;

...and leave MariaDB:

MariaDB [(none)]> quit

* open313 ………. is the data-base name
* hola …............. is the name of the user for this data-base
* 123456 ……….. is the password of that user.

If you like it can modify these data, but remember it! Will need it later.

12)

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

Well, we are at the installation of OpenMeetings. We´ll do it in: (Remember modify you-user)

/Users/**you-user**/red5313

...then make the folder:

mkdir /Users/**you-user**/red5313

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

Download Apache-OpenMeetings file to the installation folder:

cd /Users/**you-user**/red5313

wget http://ftp.cixug.es/apache/openmeetings/3.1.3/bin/apache-openmeetings-3.1.3.zip

unzip apache-openmeetings-3.1.3.zip

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

mv apache-openmeetings-3.1.3.zip /Users/**you-user**

Download and install the connector file between OpenMeetings and MySQL:

cd /Users/**you-user**

                              (Only one line without space between both)

wget http://repo1.maven.org/maven2/mysql/mysql-connector-java/5.1.39/mysql-connector-java-5.1.39.jar

...and copy it to his place:

                              (Only one line with a space between both)

cp /Users/**you-user**/mysql-connector-java-5.1.39.jar /Users/**you-user**/red5313/webapps/openmeetings/WEB-INF/lib

13)

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

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

<div align="center">(Only one line without space between both)</div>

nano /Users/**you-user**/red5313/webapps/openmeetings/WEB-INF/classes/META-INF/mysql_persistence.xml

Modify line 71:

, Url=jdbc:mysql://localhost:3306/openmeetings_3_1?

...to

, Url=jdbc:mysql://localhost:3306/open313?

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

Modify line 76:

, Username=root

...to

, Username=hola

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

Modify line 77:

, Password=" />

...to

, Password=123456" />

...is the password we made for the user called "hola".

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.)

Now, protect the file:
<div align="center">(Only one line without space between both)</div>

chmod 640 /Users/**you-user**/red5313/webapps/openmeetings/WEB-INF/classes/META-INF/mysql_persistence.xml

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

14)
------ Script to run red5-OpenMeetings ------

I suppress to leave here the text script because copy and paste will give errors.
So please download the script to run-stop red5-OpenMeetings.

cd /Users/**you-user**

wget https://cwiki.apache.org/confluence/download/attachments/27838216/red5-mac

It is necessary to modify something inside the script. We edit it:

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

...modify the line:

export RED5_HOME=/Users/**you-user**/red5313

….change /you-user/ by your real user name.

Press **Ctrl+x,** will ask to save, press **Y** and **Return** (Enter).

We copy it to /opt:

sudo su

cp /Users/**you-user**/red5-mac /opt

...concede execution permission:

chmod +x /opt/red5-mac

...and leave as superuser:

exit

15)

------ Run red5-OpenMeetings ------

Begin with the interface of OpenMeetings.

Run MariaDB, if not:

mysql.server start

...and run red5-OpenMeetings from other window terminal. Please, be connected to Internet:

/opt/red5-mac start

...wait till the text "**clearSessionTable: 0**" it is the last in the shell. Then, go with the browser to:

http://localhost:5080/openmeetings/install

...there will appear a page similar to this one:

OpenMeetings

1. **Enabling Image Upload and import to whiteboard**

   - Install **ImageMagick** on the server, you can get more information on http://www.imagemagick.org regarding installation. The instructions for installation can be found there http://www.imagemagick.org/script/binary-releases.php, however on most linux systems you can get it via your favorite package managers (apt-get it)

2. **Enabling import of PDFs into whiteboard**

   - Install **GhostScript** on the server, you can get more information on http://pages.cs.wisc.edu/~ghost/ regarding installation. The instructions for installation can be found there, however on most linux systems you can get it via your favorite package managers (apt-get it).
   - Install **SWFTools** on the server, you can get more information on http://www.swftools.org/ regarding installation. Some of the Linux distributions already have it in there package manager see http://packages.debian.org/unstable/utils/swftools), the recommended version of **SWFTools** is 0.9 as prior version have a bug that does lead to wrong object dimensions in the Whiteboard

3. **Enabling import of .doc, .docx, .ppt, .pptx, ... all Office Documents into whitebaord**

   - **OpenOffice-Service** started and listening on port 8100, see OpenOfficeConverter for details

4. **Enabling Recording and import of .avi, .flv, .mov and .mp4 into whiteboard**

   - Install **FFMpeg**. You should get FFMPEG in an up to date copy! For Windows you can download a Build for example from http://ffmpeg.arrozcru.org/builds/ Linux or OSx Users should be able to use one of the various Installation Instructions on the Web. You need to enable libmp3lame!
   - Install **SoX** http://sox.sourceforge.net/. You should install SoX in a up to date copy! SoX 12.xx will NOT work!
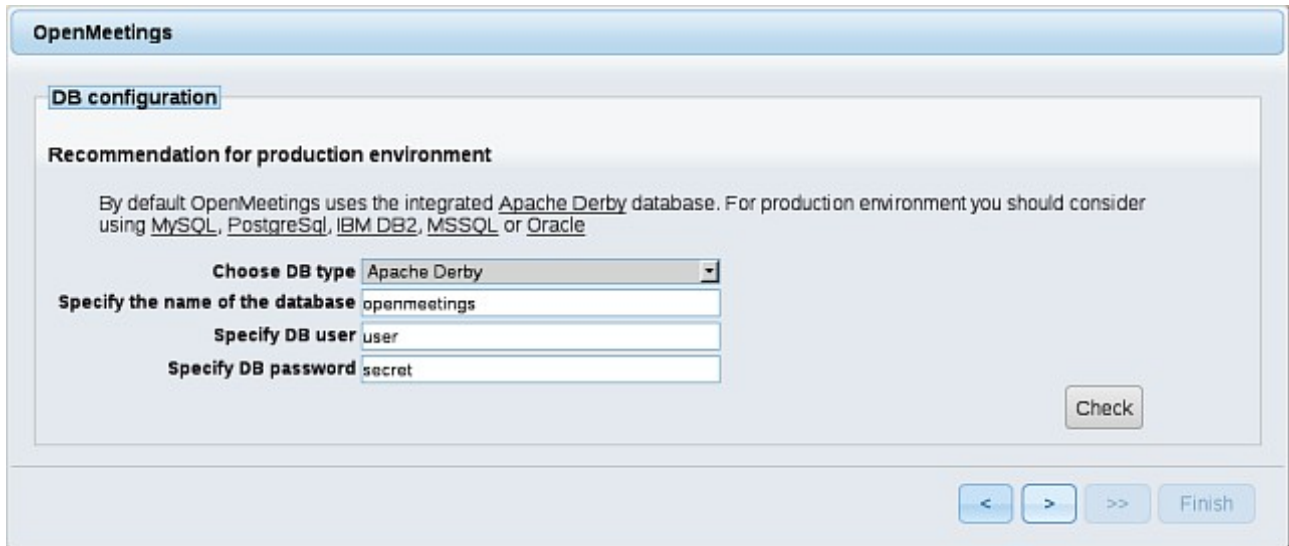
If you have further questions or need support in installation or hosting:

Community-Support:

Mailing lists

Commercial-Support:

...push on [>] (bottom), and will show the default database configuration with Derby, but we

employ MySQL (MariaDB):
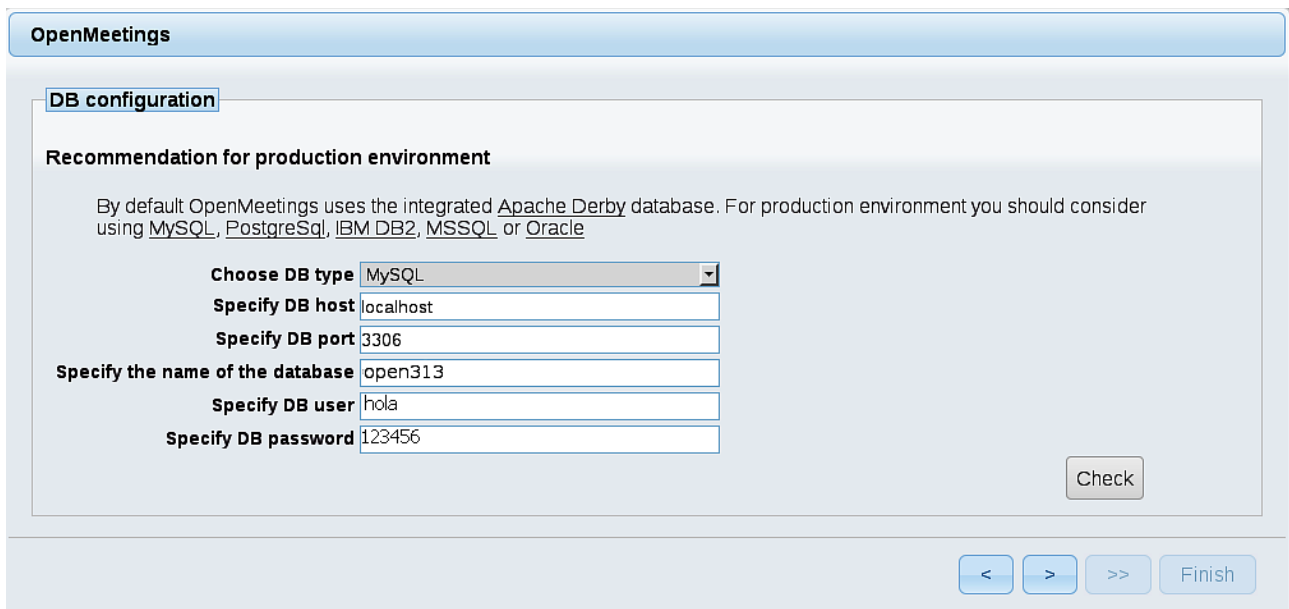
...so, scroll and **Choose DB type** to MySQL:

...will show the data base configuration we made in step 13, or with your own modifications.

Please, push [>] button, and will go to:

Now we must introduce the followings data:

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

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

When the installation be finished, we´ll configure the rest.

Go to bottom and push the button >> (double arrow). Will show this window:

Push **Finish** button ...wait a seconds untill the tables are fill in the database.

When has concluded, this another page will appear. Don´t clic on **Enter the Application**.

First is need it to restart red5. Open a new terminal, and run this command (connected Internet):

/opt/red5-mac restart
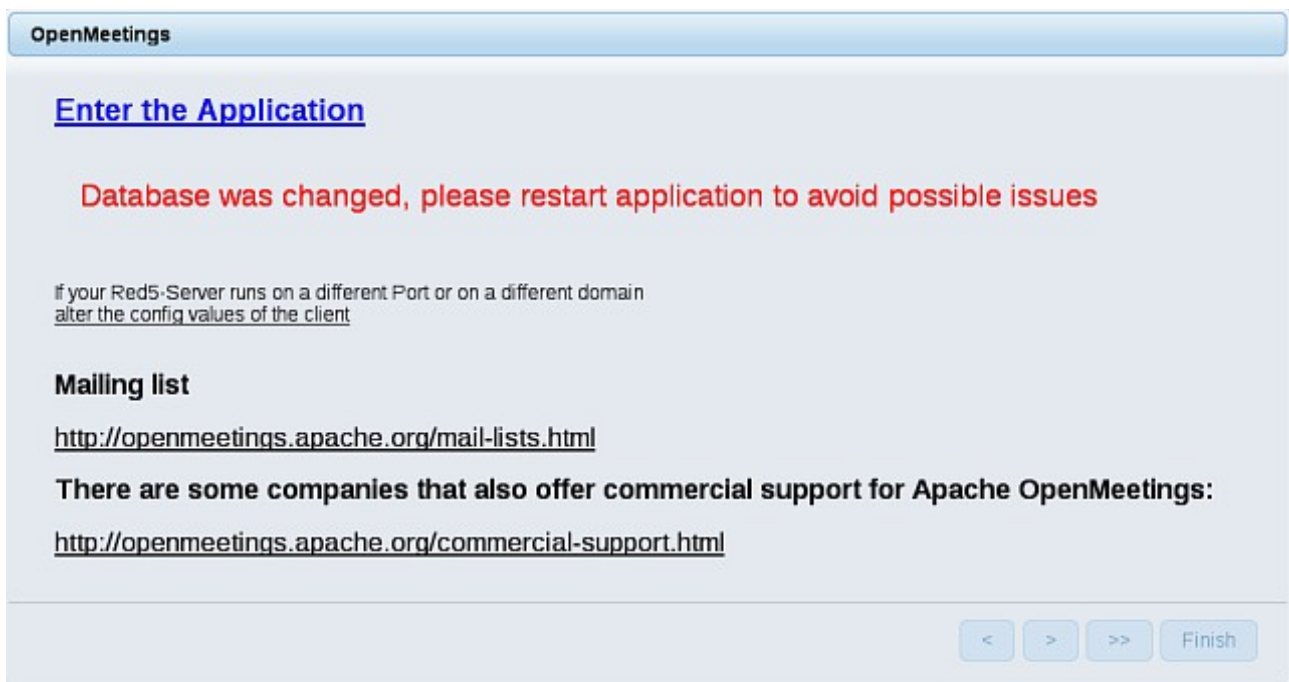
Now yes, you can clic on **Enter the Application**, or go with your browser to:

http://localhost:5080/openmeetings

...and will take us to the entry of OpenMeetings:

    Introduce the user's name and the password that you have chosen during the installation, push **Sign in** button and...

        ...**Congratulations!**

The next time that you like accese to OpenMeetings, will be:

http://localhost:5080/openmeetings

Remember to open in the server the two following ports:
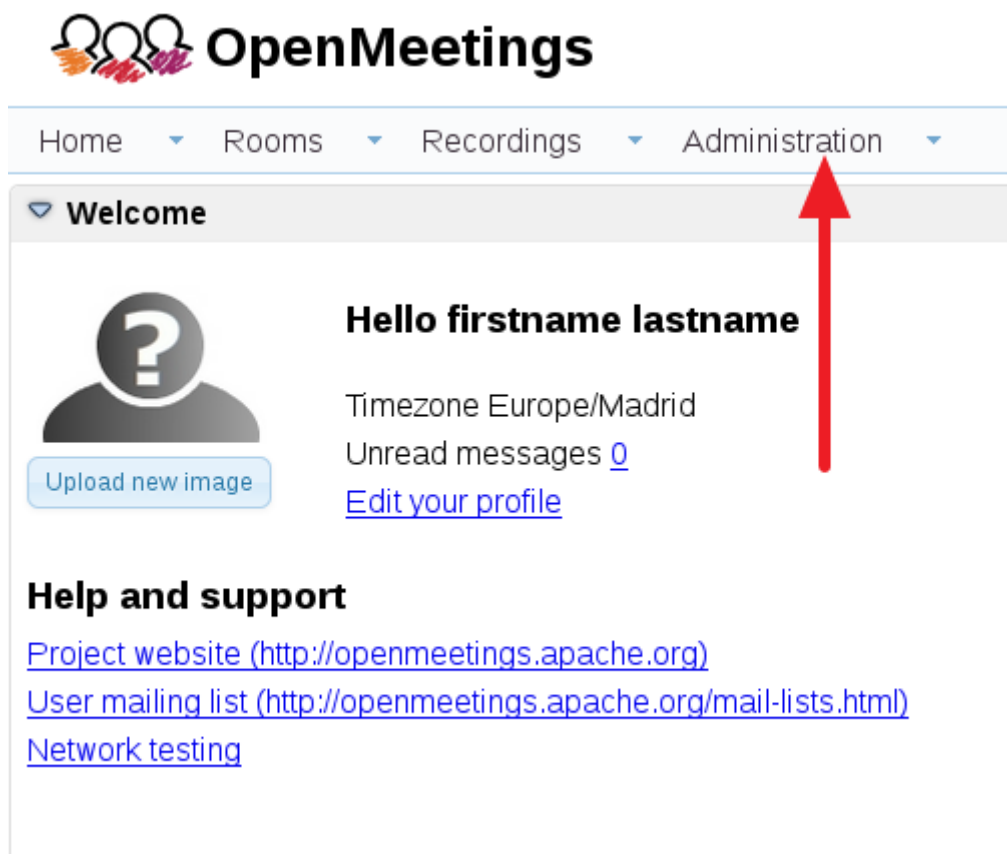
1935   5080

...in order that it could accede to OpenMeetings from other machines, in Lan or Internet.

16)

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

Once you accede to OpenMeetings, please go to:

Administration → Configuration

...introduce the parameters for the conversion of files, the audio and the video:

Clic on: **swftools_path**...and to right in **Value** type: /opt/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 :)

Remember save after each change (arrow number **3**, in the up screenshot).

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