Installation of Apache OpenMeetings 4.0.4 on macOS High Sierra 10.13.4

It is tested with positive result. We will use the Apache's
binary version OpenMeetings 4.0.4 stable, that is to say
will suppress his compilation. It is done step by step.
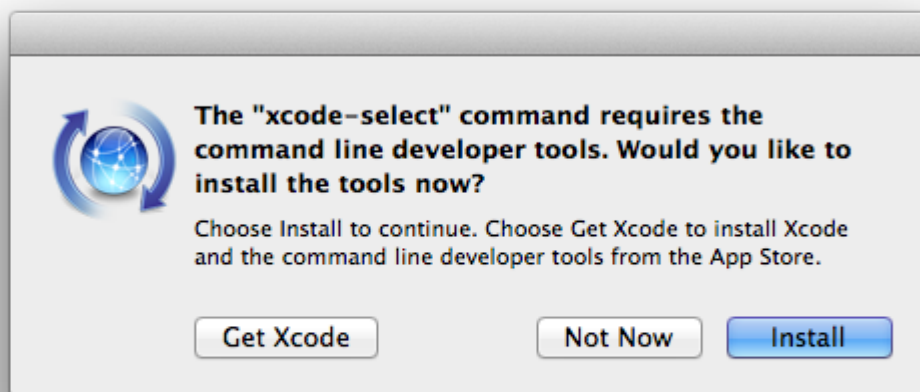
25-5-2018

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.
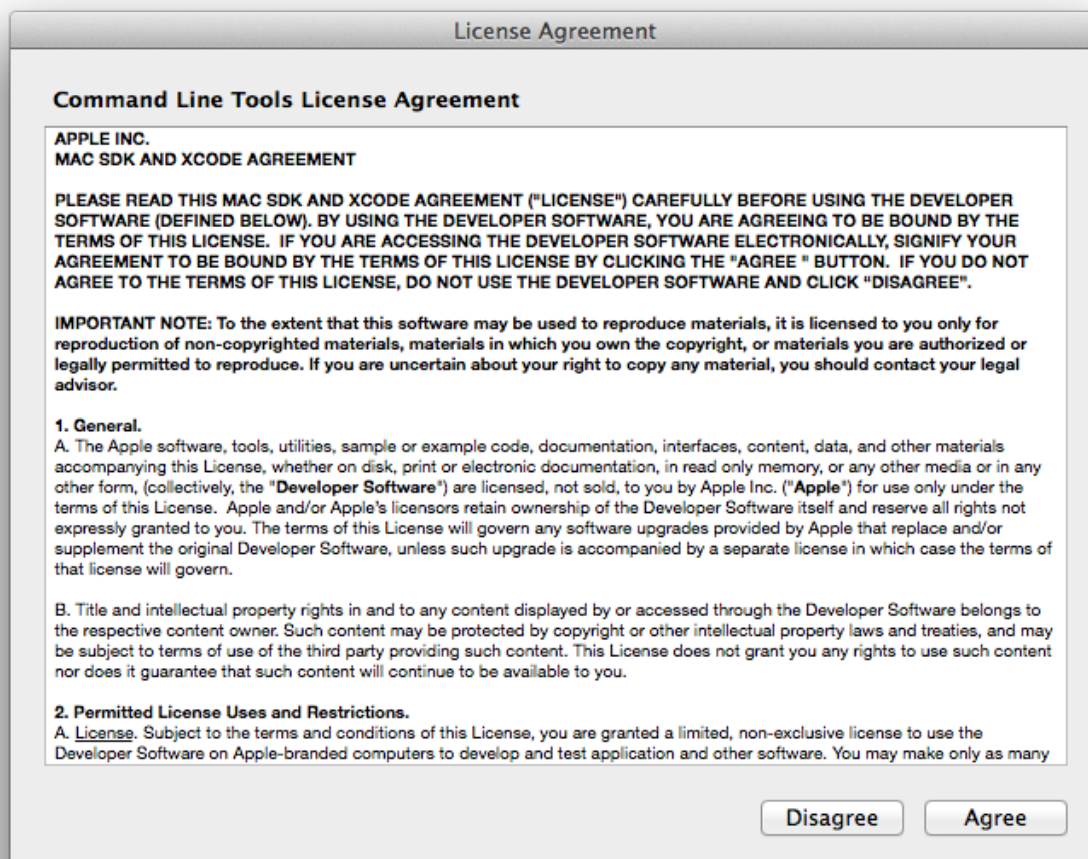
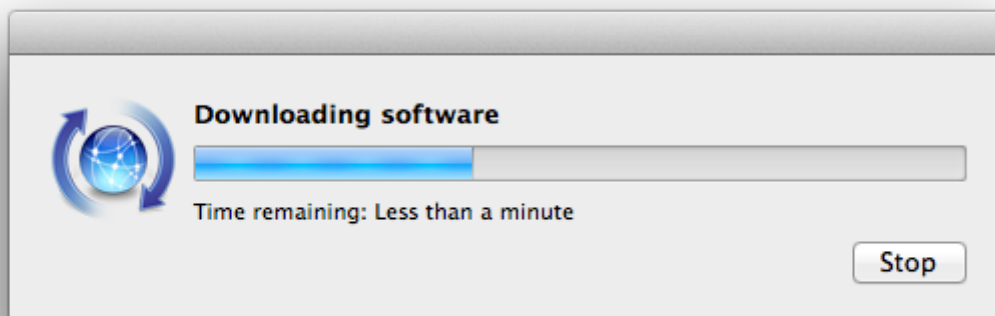Run the shell as administrator, not as root, and install:
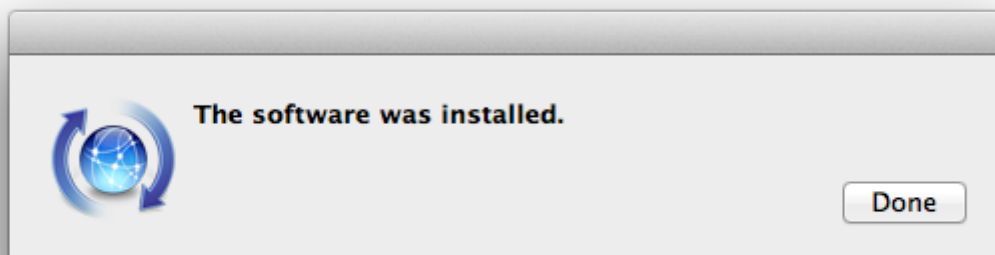
xcode-select --install

...will open a window informing:

The "xcode-select" command requires the command line developer tools. Would you like to install the tools now?

Choose Install to continue. Choose Get Xcode to install Xcode and the command line developer tools from the App Store.

Get Xcode   Not Now   Install

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

License Agreement

Command Line Tools License Agreement

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A. License. Subject to the terms and conditions of this License, you are granted a limited, non-exclusive license to use the Developer Software on Apple-branded computers to develop and test application and other software. You may make only as many

Disagree   Agree

...and will download and install the software

Downloading software
Time remaining: Less than a minute
Stop

...telling when it finished

The software was installed.
Done

...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 needed 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 **4.0.4**. Will install Oracle Java 1.8.

Please, visit:

http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2140451.html

...clic on:

Agree and proceed

...check:

Accept License Agreement

...and download the file called:

jdk-8u172-macosx-x64.dmg

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   4.1.5

Download full installation

Do clic on the unloaded file: **Apache_OpenOffice_4.1.5_MacOS_x86-64_install**....
and will open this window:
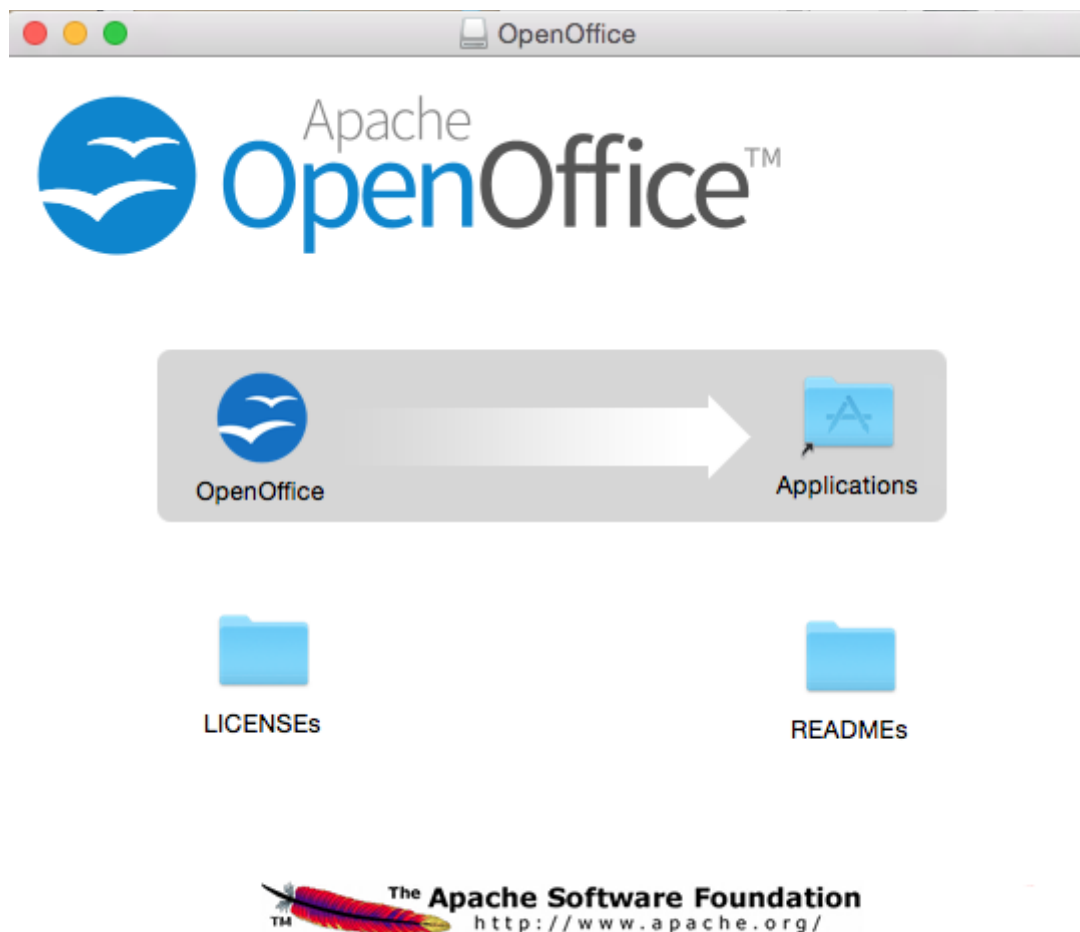
...please, drag **OpenOffice** icon to right, to **Applications** folder icon.

6)

------ **Installation of ImageMagick, Sox 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

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 cam. 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)

------ **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 mp4 format.
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

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

./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

9)

<div align="center">------ **Installation of MariaDB data server** ------</div>

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**

10)

<div align="center">------ **Building a database for OpenMeetings** ------</div>

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 open404 DEFAULT CHARACTER SET 'utf8';

...now we create a user with all permission on this open404 database. User password must be of 8 digits minimum:

(One line only with a space between both)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON open404.* TO 'hola'@'localhost' IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;

...and leave MariaDB:

MariaDB [(none)]> quit

* open404 ………. is the data-base name
* hola …............. is the name of the user for this data-base
* 1a2B3c4D …… is the password of that user.

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

11)

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

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

/Users/**you-user**/red5404

...then make the folder:

mkdir /Users/**you-user**/red5404

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

Download Apache-OpenMeetings file to the installation folder:

cd /Users/**you-user**/red5404

wget http://archive.apache.org/dist/openmeetings/4.0.4/bin/apache-openmeetings-4.0.4.zip

unzip apache-openmeetings-4.0.4.zip

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

mv apache-openmeetings-4.0.4.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/5.1.46/mysql-connector-java-5.1.46.jar

...and copy it to his place:

(Only one line with a space between both)

cp /Users/**you-user**/mysql-connector-java-5.1.46.jar /Users/**you-user**/red5404/webapps/openmeetings/WEB-INF/lib

12)

------ 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-mac2

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

nano /Users/**you-user**/red5-mac2

...modify the line:

export RED5_HOME=/Users/**you-user**/red5404

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

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

sudo su   ...acces as superuser

mkdir /opt   ...and build the directory /opt

...we copy the script red5-mac2 to /opt:

cp /Users/**you-user**/red5-mac2 /opt

...concede execution permission:

chmod +x /opt/red5-mac2

...and exit as superuser:

exit

13)

        ------ 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-mac2 start

...wait about 40 seconds in order red5 can run completly. Then, go with the browser to:

        http://localhost:5080/openmeetings/install

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

OpenMeetings

1. 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).

If you have further questions or need support in installation or hosting:

Community-Support:

Mailing lists

Commercial-Support:

Commercial-Support

<div style="text-align:right">`<` `>` `>>` Finish</div>

...press on `>` (bottom), and will show the default database configuration with Derby, but we employ MySQL (MariaDB):

OpenMeetings

DB configuration

Recommendation for production environment

By default OpenMeetings uses the integrated Apache Derby database. For production environment you should consider using MySQL, PostgreSql, IBM DB2, MSSQL or Oracle

NOTE Please use unpredictable DB login and 'strong' password with length 8 characters or more.

Choose DB type Apache Derby
Specify the name of the database openmeetings

Check

<div style="text-align:right">`<` `>` `>>` Finish</div>

...so, scroll and **Choose DB type** to MySQL:

Now we must introduce the database name, user name and his password we did at the step 10:

Specify the name of the database   =   open404

Specify DB user   =   hola

Specify DB password   =   1a2B3c4D

...if you choose any different data, here is where type it.

Please, press   >   button, and will go to:

Here, we must introduce a user name for OpenMeetings, and his password. This must have 8 digits minimum, and at least 1 special symbol like: + (% # !   ...etc.

> **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.

Press the button   `>`   and will lead us to a new page (below) where you can select the language for your OpenMeetings server, as well as other options such as the configuration of the mail server being used to send invitations or meetings from OpenMeetings:

A valid example to configure the mail server with Gmail, is as follows:
(replace **john@gmail.com** with your real Gmail account)

Mail-Refer	==	john@gmail.com
SMTP-Server	==	smtp.gmail.com
SMTP-Server Port (default Smtp-Server Port is 25)	==	587
SMTP-Username	==	john@gmail.com
SMTP-Userpass	==	password of john@gmail.com
Enable TLS in Mail Server Auth	==	...turn green the button to activate

To select the language of your server OpenMeetings, please scroll on the line:

Default Language	==	...select your language

...the rest you can change it as you like.

Now press the button `>` and a new page will appear:

OpenMeetings

Converters

Document conversion DPI ⓘ	150
Document conversion JPEG Quality ⓘ	90
ImageMagick Path ⓘ	[ ] Check
FFMPEG Path ⓘ	[ ] Check
SoX Path ⓘ	[ ] Check
OpenOffice/LibreOffice Path for jodconverter ⓘ	[ ] Check

see also *Installation*

`<` `>` `>>` `Finish`

Here we´ll introduce the respective path for the image, video, audio and conversion of uploaded files:

ImageMagick Path == /usr/local/bin
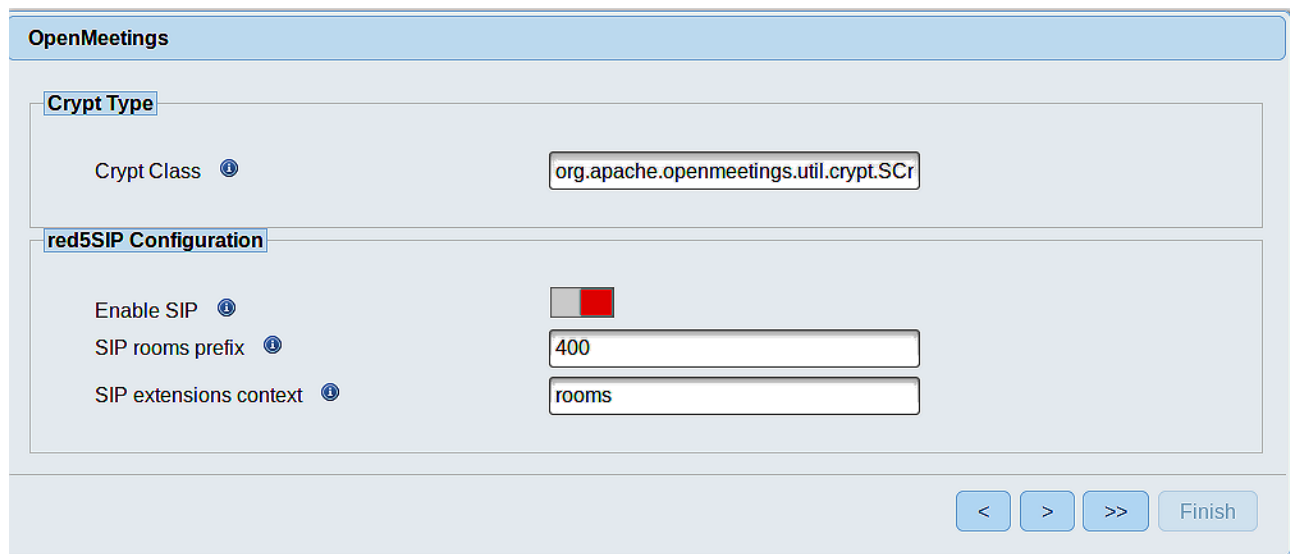
FFMPEG Path == /usr/local/bin

SOX Path == /usr/local/bin

OpenOffice/LibreOffice Path for jodconverter == /Applications/OpenOffice.app/Contents
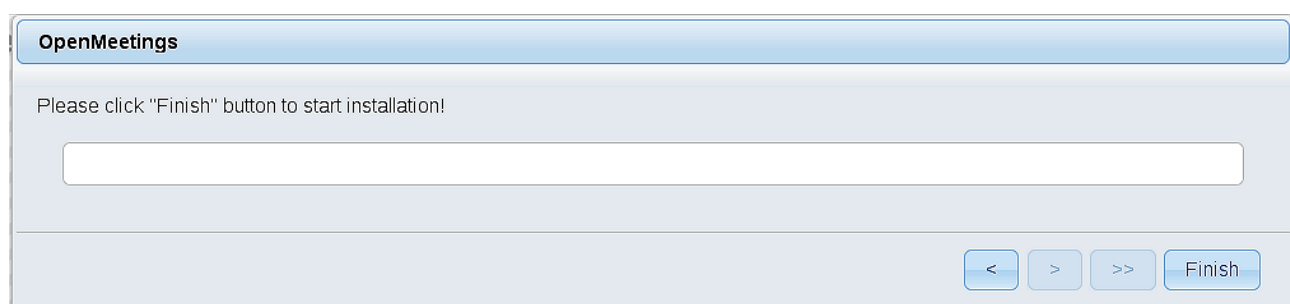
As you go introducing paths, you can check if they are correct by pressing the button labeled **Check**. If it does not display any error message, that is OK.

Once completed the paths, please press the button ⟩ and move on to another page that would be to activate the SIP. We will leave it as is, unless you want to activate it knowing what it does:

OpenMeetings	
Crypt Type	
Crypt Class ⓘ	org.apache.openmeetings.util.crypt.SCr
red5SIP Configuration	
Enable SIP ⓘ	
SIP rooms prefix ⓘ	400
SIP extensions context ⓘ	rooms

`< > >> Finish`

Now push the button ⟩ Will show this window:

OpenMeetings	
Please click "Finish" button to start installation!	

`< > >> Finish`

Press **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 to Internet):

/opt/red5-mac2 restart
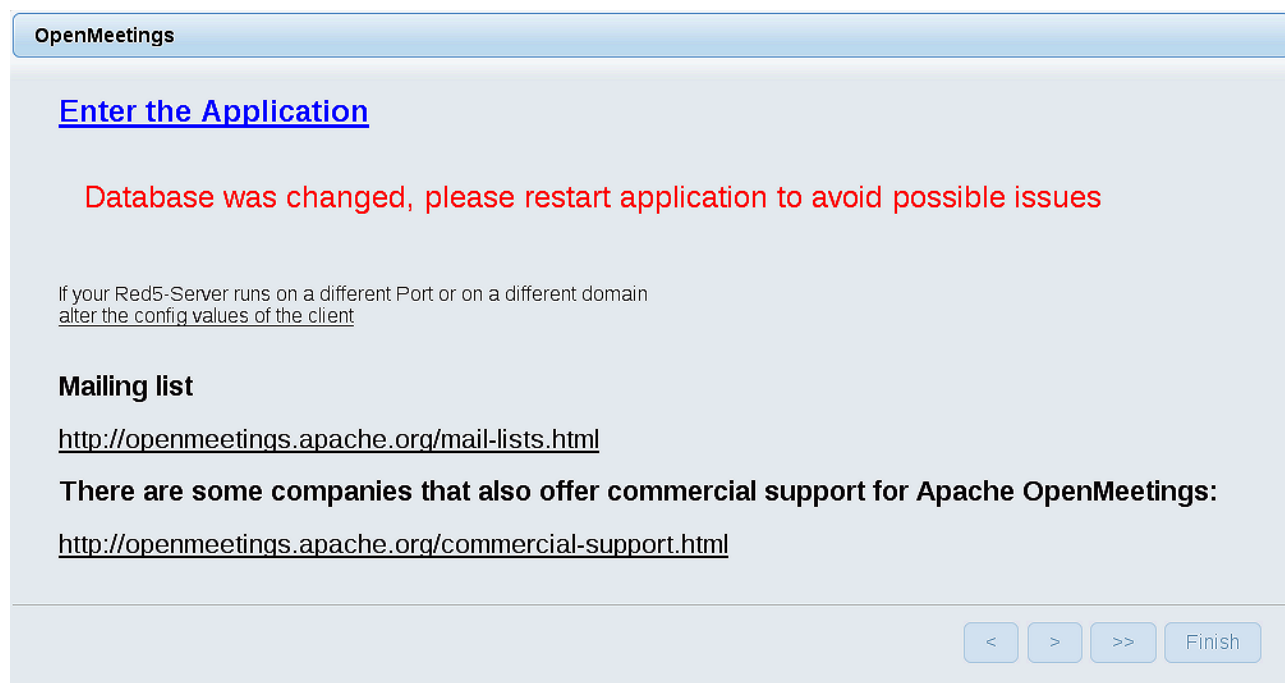
Now yes, you can clic on **Enter the Application**, or go with your browser to:

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, press **Sign in** button and…

...**Congratulations!**

The next time that you like acces 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.

14)

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

Once you acced to OpenMeetings, if you would like to do any modification in the configuration, please go to:

Administration → **Configuration**
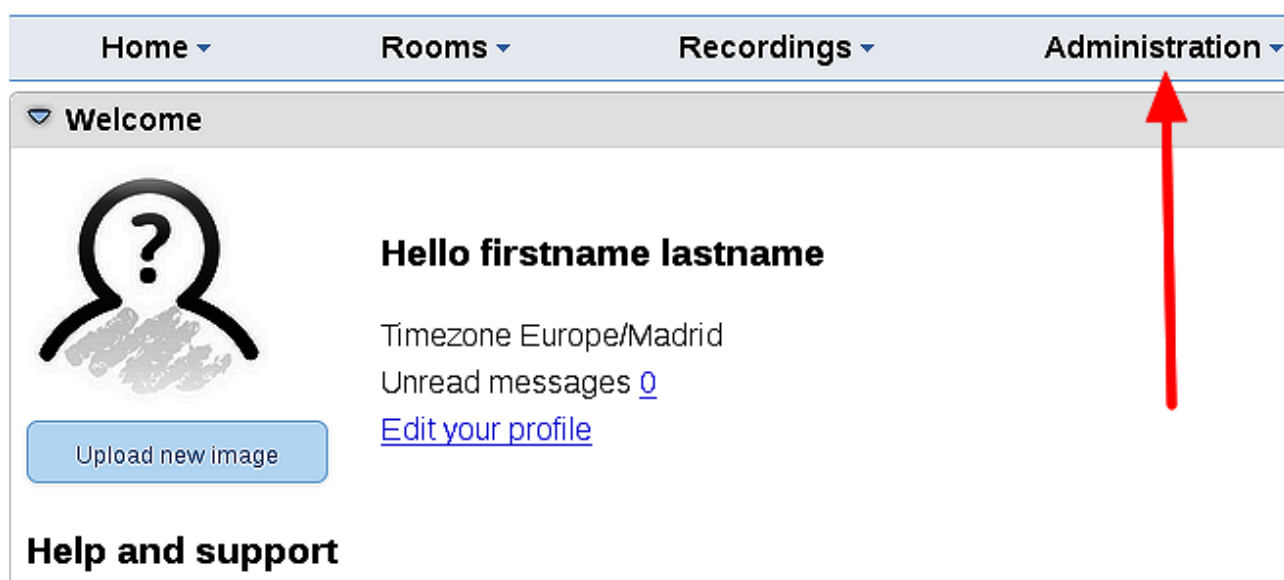
...and following the order of the red arrows:

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