



Installation of Apache OpenMeetings 4.0.11 on macOS Catalina 10.15.5

It is tested with positive result. We will use the Apache's binary version OpenMeetings 4.0.11 stable, that is to say will suppress his compilation. It is done step by step.

Starting....

1)

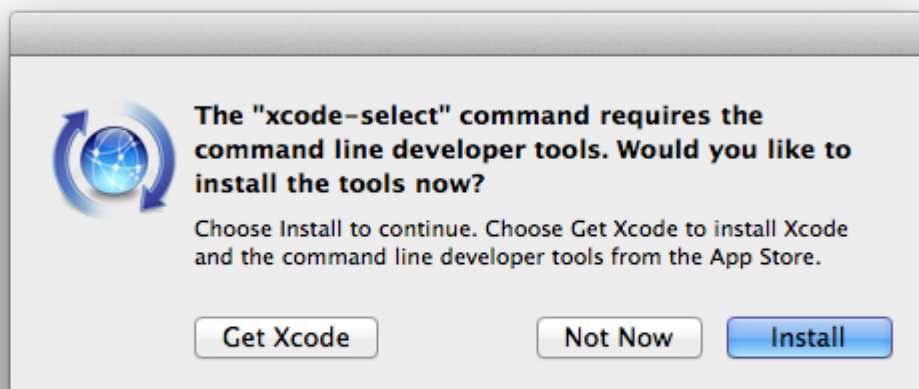
----- Installation of Command line developer tools -----

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

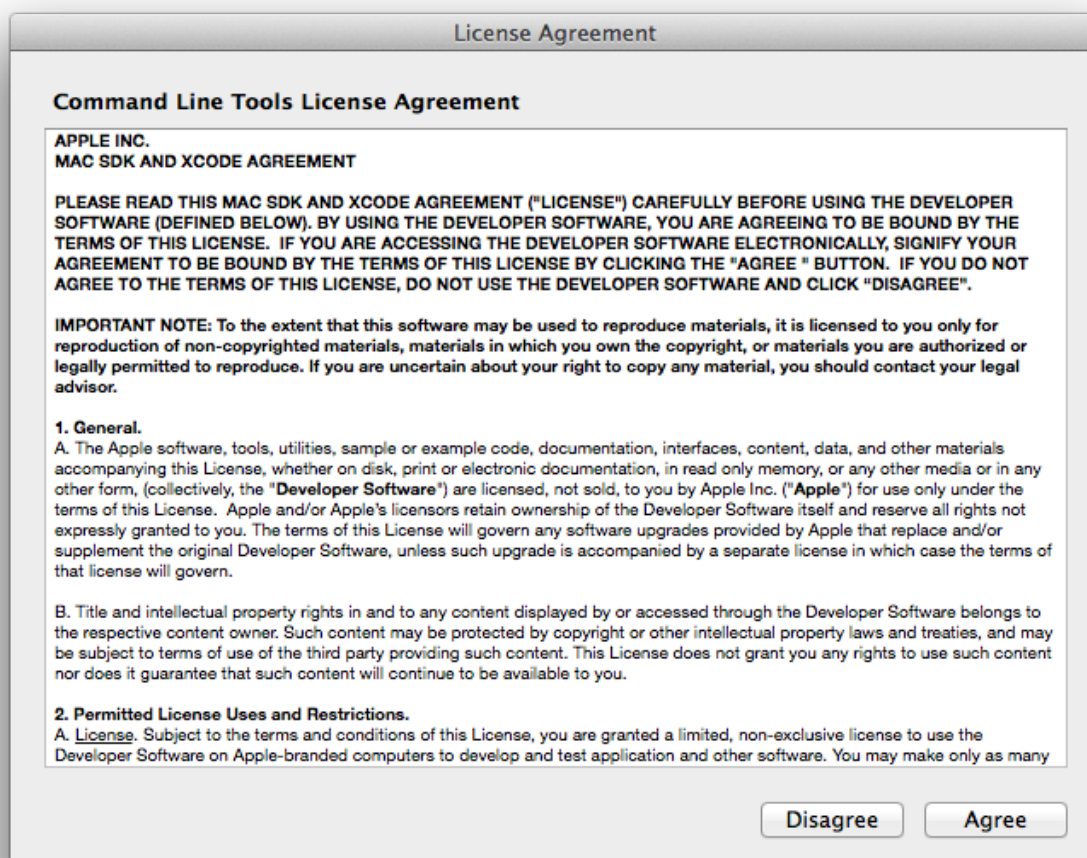
Run the shell as administrator, not as root, and install:

```
xcode-select --install
```

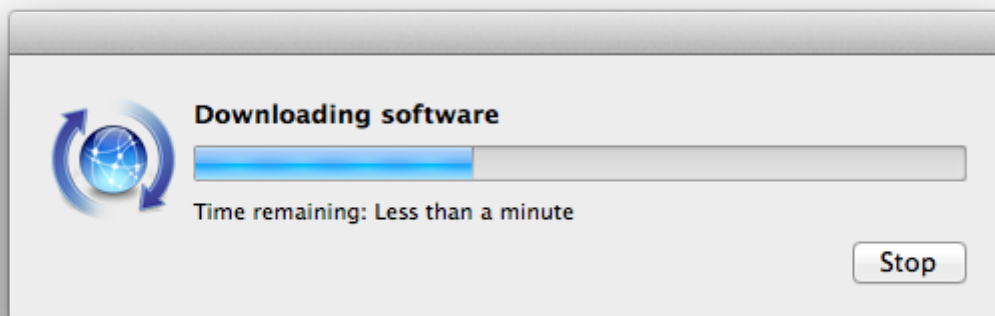
...will open a window informing:



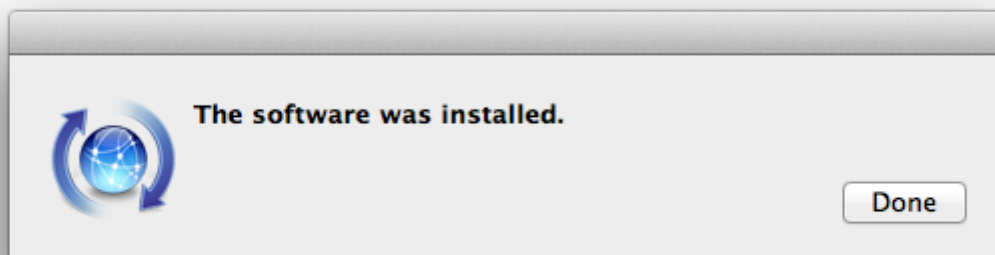
click **Install** button only, and will open other window. click **Agree** button



...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`

`brew upgrade`

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 Java** -----

Java 1.8 minimum is needed to work OpenMeetings 4.0.11. Will install Oracle Java 1.8.

Please change `you-user` by your real Mac user name:

`cd /Users/you-user`

...download the java file:

(Only one line without space between both)

`wget https://github.com/frekele/oracle-java/releases/download/8u212-b10/jdk-8u212-macosx-x64.dmg`

...go to your home folder, where is the downloaded file, and clic on it:

jdk-8u212-macosx-x64.dmg

...and following 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:

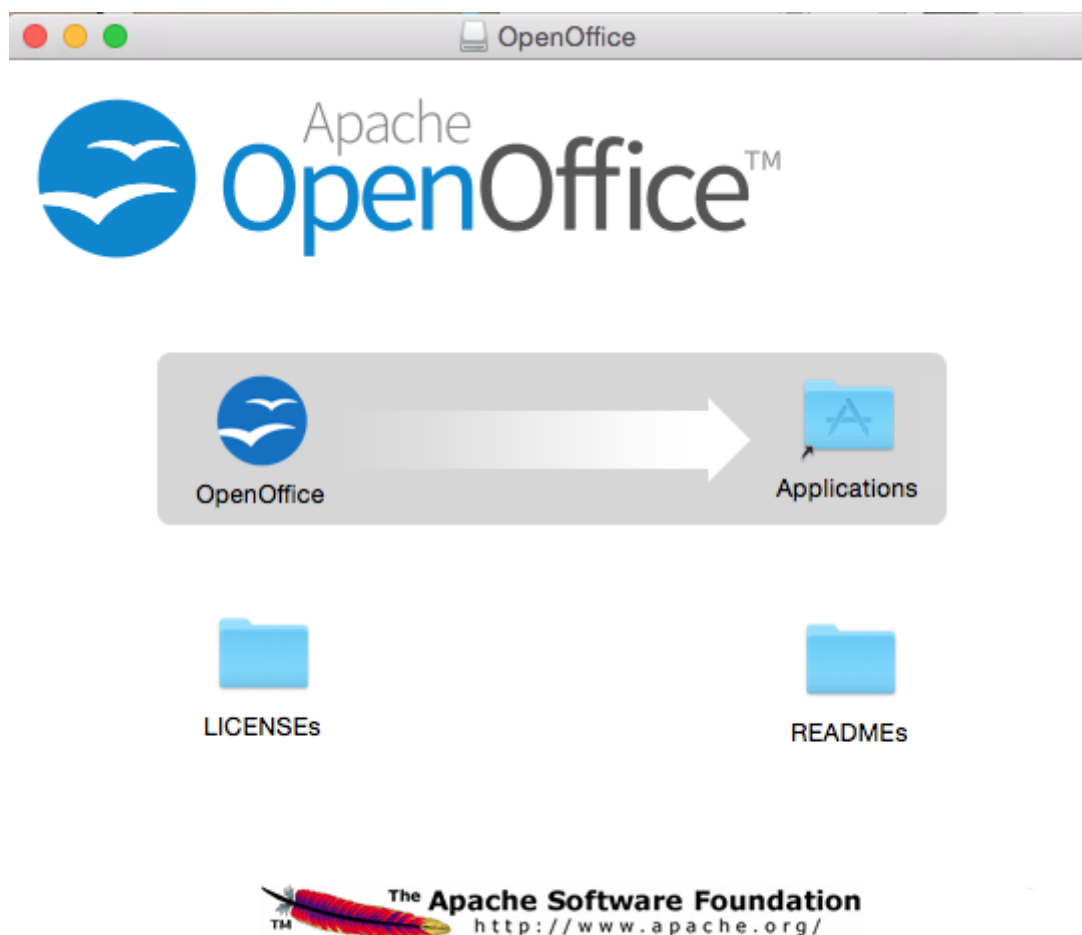
<http://www.openoffice.org/download/>

...select and download:

OS X (version >= 10-7) (DMG) language 4.1.7

Download full installation

Do clic on the unloaded file: **Apache_OpenOffice_4.1.7_MacOS_x86-64_install....**
and will open this window:



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

After that, run manually **OpenOffice** from **Applications** (**right clic** => **“Open”**) and close it later.

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's installation** -----

FFmpeg work about video. We'll employ a binarie file yet compiled.

Change **you-user** by your real user name. Download ffmpeg, ffplay and ffprobe:

```
cd /Users/you-user/Downloads
```

```
wget https://evermeet.cx/ffmpeg/ffmpeg-4.2.1.7z
```

```
wget https://evermeet.cx/ffmpeg/ffprobe-4.2.1.7z
```

```
wget https://evermeet.cx/ffmpeg/ffplay-4.2.1.7z
```

Please, go to “Downloads” folder, where are the downloaded files, and:

right clic on each 7z file => Open

...so we uncompress the 7z files and will appear the files ffmpeg, ffplay and ffprobe.

We copy them to *usr/local/bin*. For that we access as super user to terminal:

```
sudo su    ...will ask for user password
```

```
cp ffmpeg ffplay ffprobe /usr/local/bin
```

...and exit of super user:

```
exit
```

With this is finish the ffmpeg installation.

The recording we'll make on OpenMeetings should be mp4 format.

9)

----- 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
```

...now give a root password in MariaDB:

```
mysql
```

```
use mysql;
```

...modify **password** by one of you like:

```
grant all privileges on *.* to root@'localhost' identified by 'password' with grant option;
```

...and exit MariaDB:

```
quit
```

10)

----- Building a database 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 open4011 DEFAULT CHARACTER SET 'utf8';
```

...now we create a user with all permission on this open4011 database. User password must be of 8 digits minimum:

(One line only with a space between both)

```
MariaDB [(none)]> GRANT ALL PRIVILEGES ON open4011.* TO 'hola'@'localhost'  
IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;
```

...and exit MariaDB:

```
MariaDB [(none)]> quit
```

```
* open4011 ..... 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/red54011
```

...then make the folder:

```
mkdir /Users/you-user/red54011
```

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

Download Apache-OpenMeetings file to the installation folder:

```
cd /Users/you-user/red54011
```

```
wget https://archive.apache.org/dist/openmeetings/4.0.11/bin/apache-openmeetings-4.0.11.tar.gz
```

```
tar xzvf apache-openmeetings-4.0.11.tar.gz
```

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

```
mv apache-openmeetings-4.0.11.tar.gz /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 https://repo1.maven.org/maven2/mysql/mysql-connector-java/5.1.49/mysql-connector-java-5.1.49.jar
```

...and copy it to his place:

(Only one line with space between both)

```
cp /Users/you-user/mysql-connector-java-5.1.49.jar  
/Users/you-user/red54011/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: (change /you-user/ by your real user name)

```
export RED5_HOME=/Users/you-user/red54011
```

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

```
sudo su      ...acces as superuser
```

...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 is 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 completely. Then, go with the browser to:

<http://localhost:5080/openmeetings>

...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](#)

<
>
>>
Finish

...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

Specify the name of the database

Check

<
>
>>
Finish

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

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: MySQL

Specify DB host: localhost

Specify DB port: 3306

Specify the name of the database: openmeetings

Specify DB user:

Specify DB password:

Check

< > >> Finish

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

Specify the name of the database = open4011

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:

OpenMeetings

Userdata

Username:

Userpass:

EMail:

User Time Zone: Europe/Madrid

Group(Domains)

Name:

< > >> Finish

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:

OpenMeetings

Configuration

Allow self-registering	<input checked="" type="checkbox"/>
Send Email to new registered Users	<input type="checkbox"/>
New Users need to verify their EMail	<input type="checkbox"/>
Default DB objects of all types will be created (including Rooms, OAuth2 servers etc.)	<input checked="" type="checkbox"/>
Mail-Referer	<input type="text" value="noreply@openmeetings.apache.org"/>
SMTP-Server	<input type="text" value="localhost"/>
SMTP-Server Port(default SmtP-Server Port is 25)	<input type="text" value="25"/>
SMTP-Username	<input type="text"/>
SMTP-Userpass	<input type="text"/>
Enable TLS in Mail Server Auth	<input type="checkbox"/>
Set inviter's email address as ReplyTo in email invitations	<input checked="" type="checkbox"/>
Default Language	<input type="text" value="inglés"/>


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

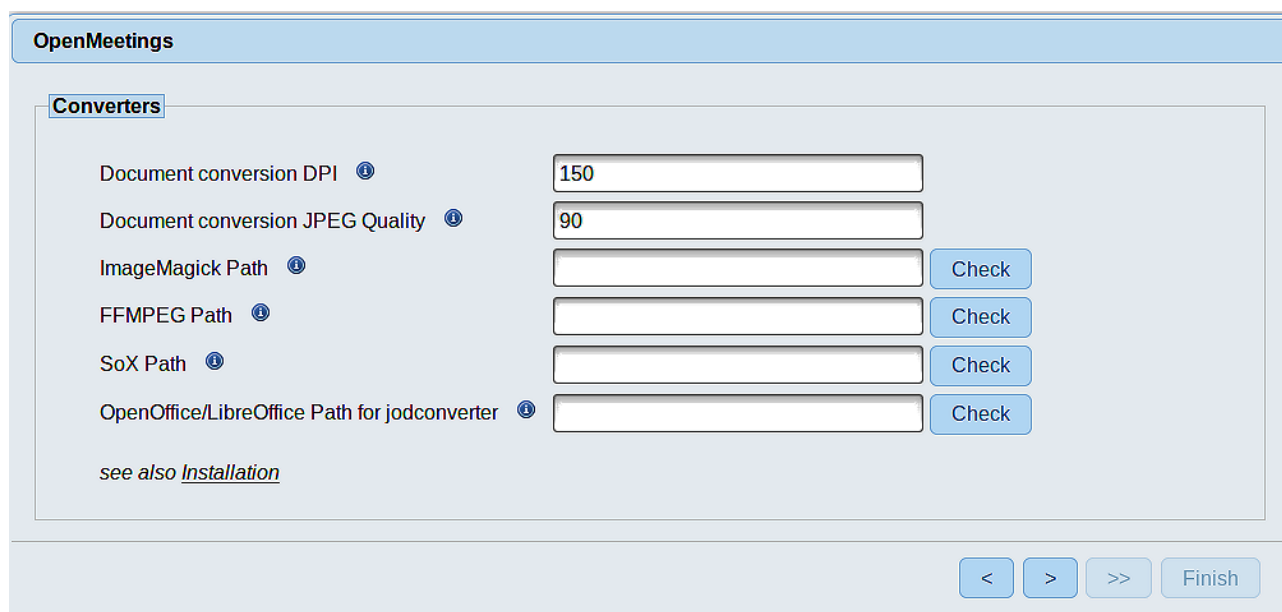
Mail-Refer	==	john@gmail.com
SMTP-Server	==	smtp.gmail.com
SMTP-Server Port (default SmtP-Server Port is 25)	==	587
SMTP-Username	==	john@gmail.com
SMTP-Userpass	==	password of john@gmail.com
Enable TLS in Mail Server Auth	==	...turn green the button to activate

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:



The screenshot shows the 'OpenMeetings' configuration window with the 'Converters' tab selected. The following fields are visible:

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

At the bottom of the window, there are navigation buttons: '<', '>', '>>', and '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

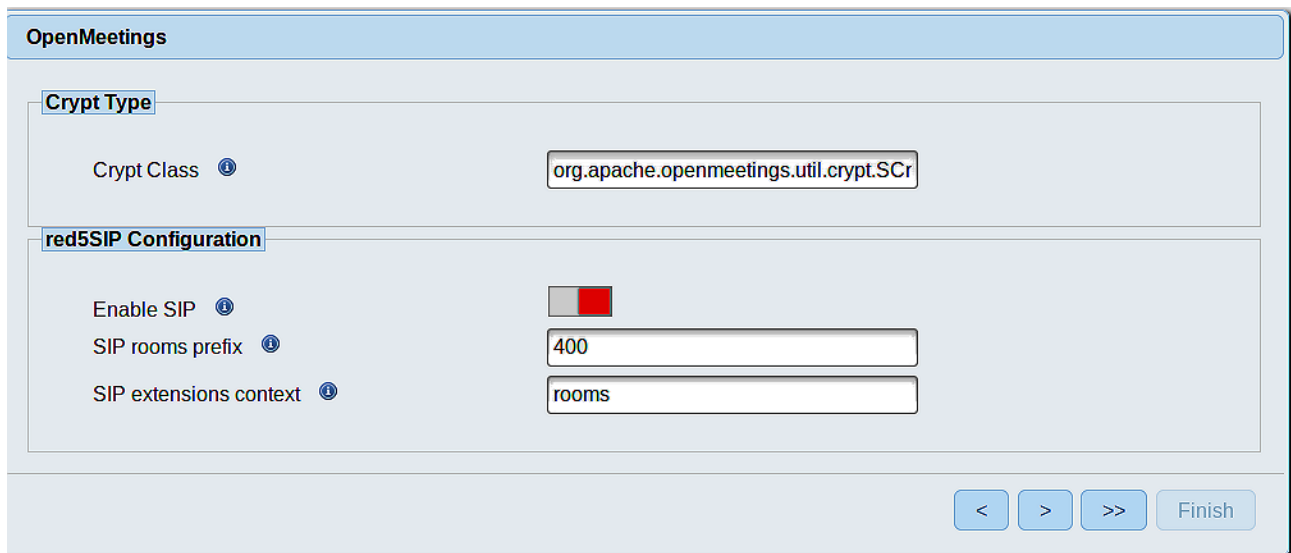
**OpenOffice/LibreOffice Path for
jodconverter** == /Applications/OpenOffice.app/Contents

Attention!... once you have entered the above path and press the button  it will all look still and **“IF”** a small window appears warning that **"You can't open ffmpeg because the developer can't be verified"**... Then don't touch anything and go to:

Apple> System Preferences => Security and Privacy => General (tab)
press the elongated button at the bottom right, that says something like:

Allow ffmpeg anyway

...then 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:



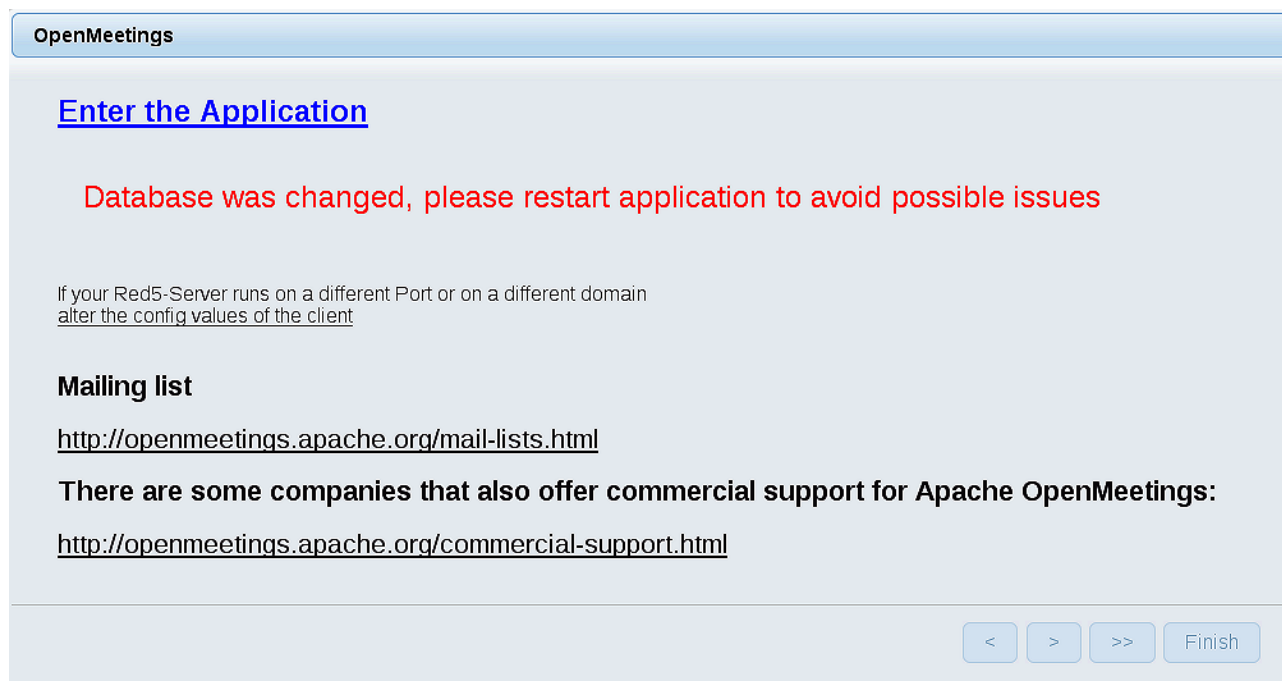
Now push the button  Will show this window:



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
```



OpenMeetings

[Enter the Application](#)

Database was changed, please restart application to avoid possible issues

If your Red5-Server runs on a different Port or on a different domain
alter the config values of the client

Mailing list
<http://openmeetings.apache.org/mail-lists.html>

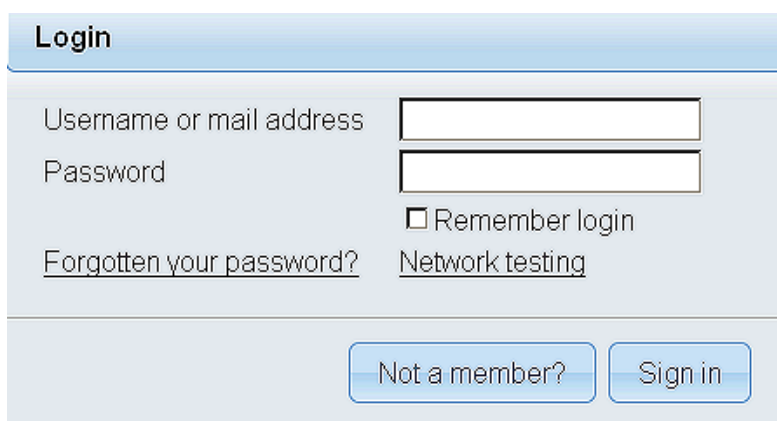
There are some companies that also offer commercial support for Apache OpenMeetings:
<http://openmeetings.apache.org/commercial-support.html>

< > >> Finish

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:



Login

Username or mail address

Password

Remember login

[Forgotten your password?](#) [Network testing](#)

[Not a member?](#) [Sign in](#)

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 access 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 access to OpenMeetings from other machines, in Lan or Internet.

14)

----- **Recording in conference room** -----

When you try to record at Conference Room and press the monitor-tv icon (top right whiteboard) to do it, don't open the file (public.jnpl) but download it and right click on it and press "Open". Permit and follow the instructions.

Also, if you want to record video in the Conference Room, Oracle Java will give trouble. To avoid it we'll put the url of your OpenMeetings installation in the java control panel. For that do the following:

`cd /Library/PreferencePanes`

`open .` (attention the point)

... the folder will open, and then double-click on:

`JavaControlPanel.prefPane`

... and when the Java Control Panel window opens, go to:

Security > Edit Site List... > Add . . . type into the window:

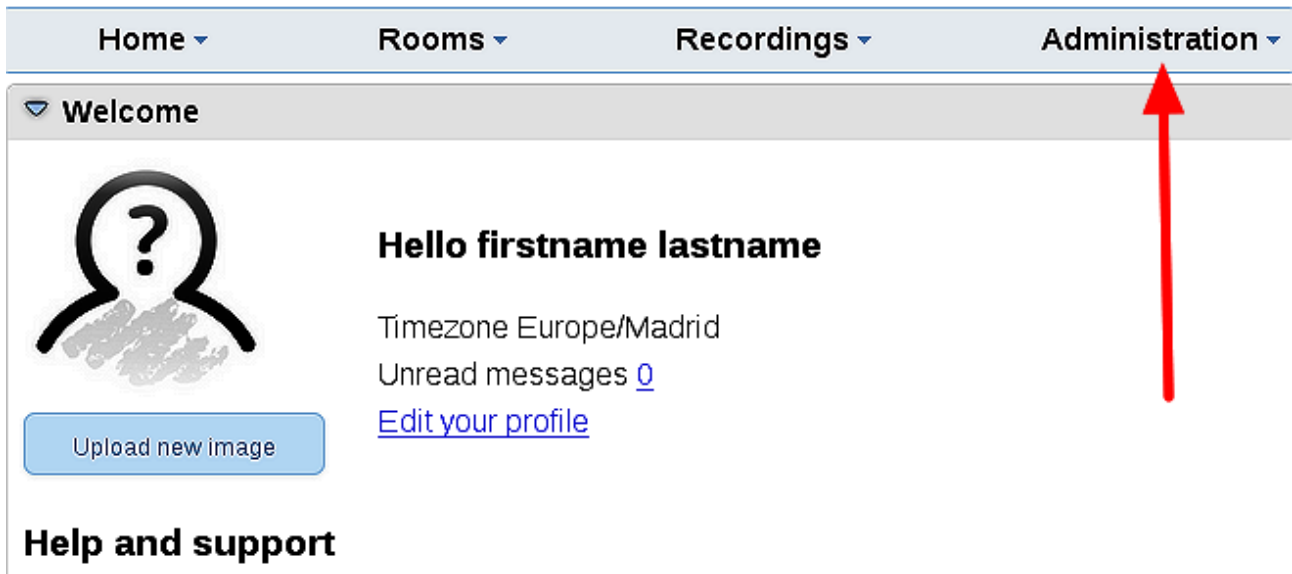
http://localhost:5080 ... or the url of your server with port 5080 => **Accept** => **Accept**

15)

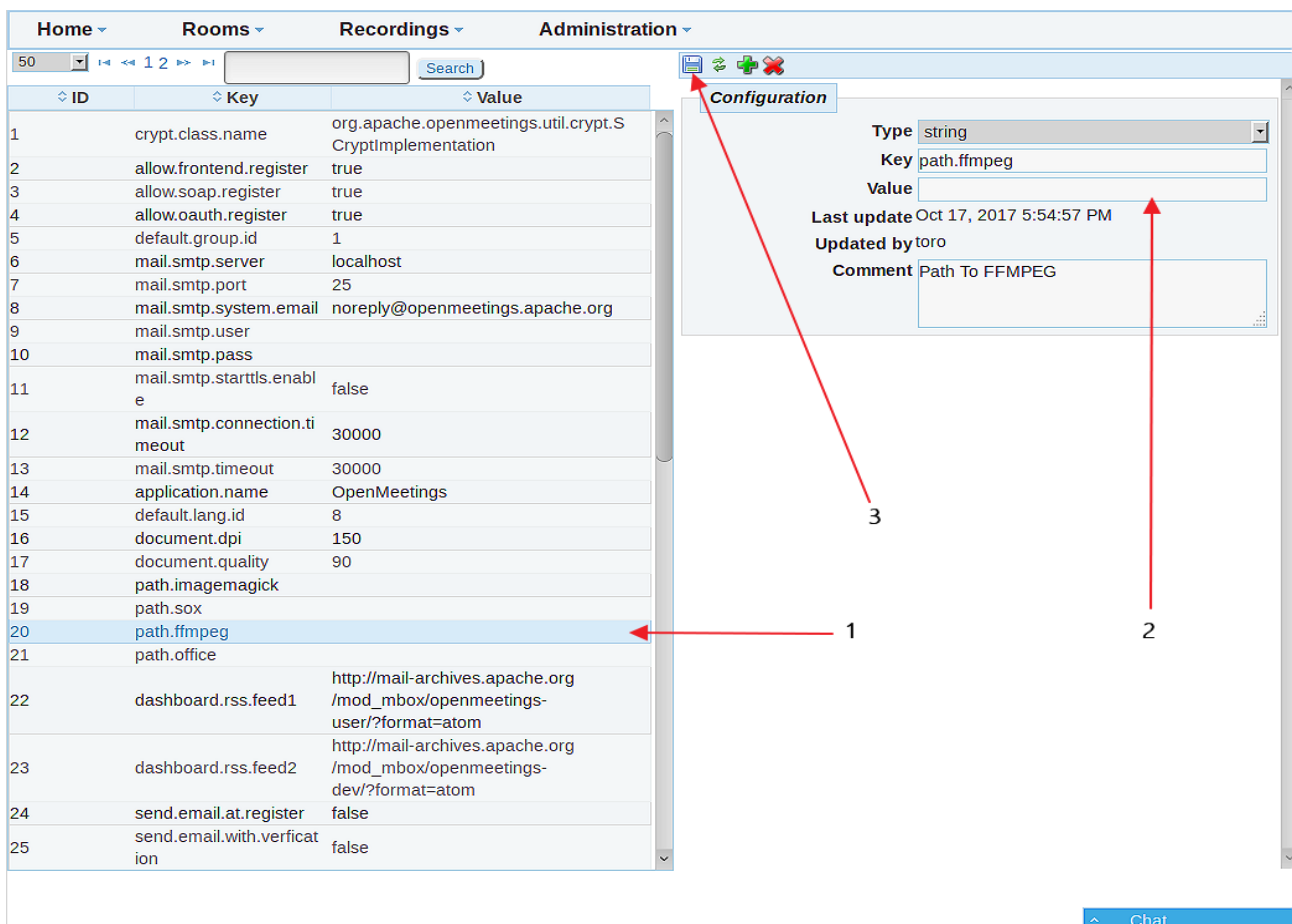
----- **Configuration of OpenMeetings** -----

Once you accessed 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:



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

<http://openmeetings.apache.org/mailling-lists.html>



Also you can download if you like, a wallpaper of OpenMeetings for different devices such as:

PC, Mac, Smartphone, iPhone and Tablets. Here is the link to download:

[OpenMeetings Wallpaper Download](#)

A dvd live iso with OpenMeetings 4.0.11 on Ubuntu 18.04 lts and other OpenMeetings 5.0.0 on Ubuntu 18.04 lts, is at your disposal.

Can find them here:

[Live iso download](#)

Thank you.

Alvaro Bustos (PMC and Committer at Apache OpenMeetings).