Installation of Apache OpenMeetings 4.0.9 on macOS Catalina 10.15

It is tested with positive result. We will use the Apache's binary version OpenMeetings 4.0.9 stable, that is to say will suppress his compilation. It is done step by step.

16-10-2019

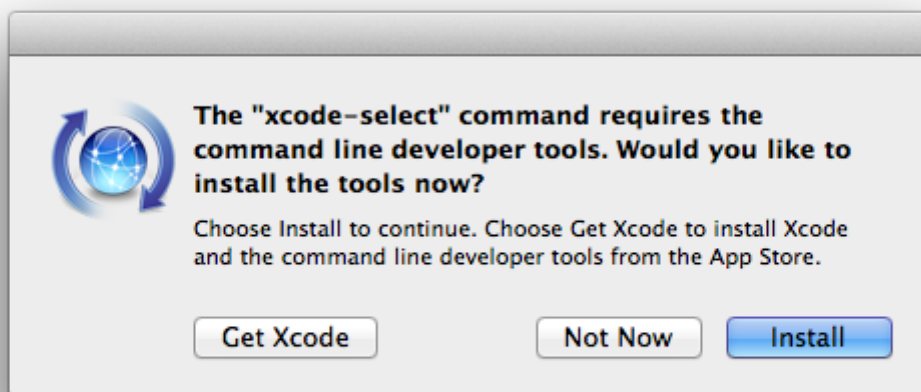Please be connected to Internet at any moment.

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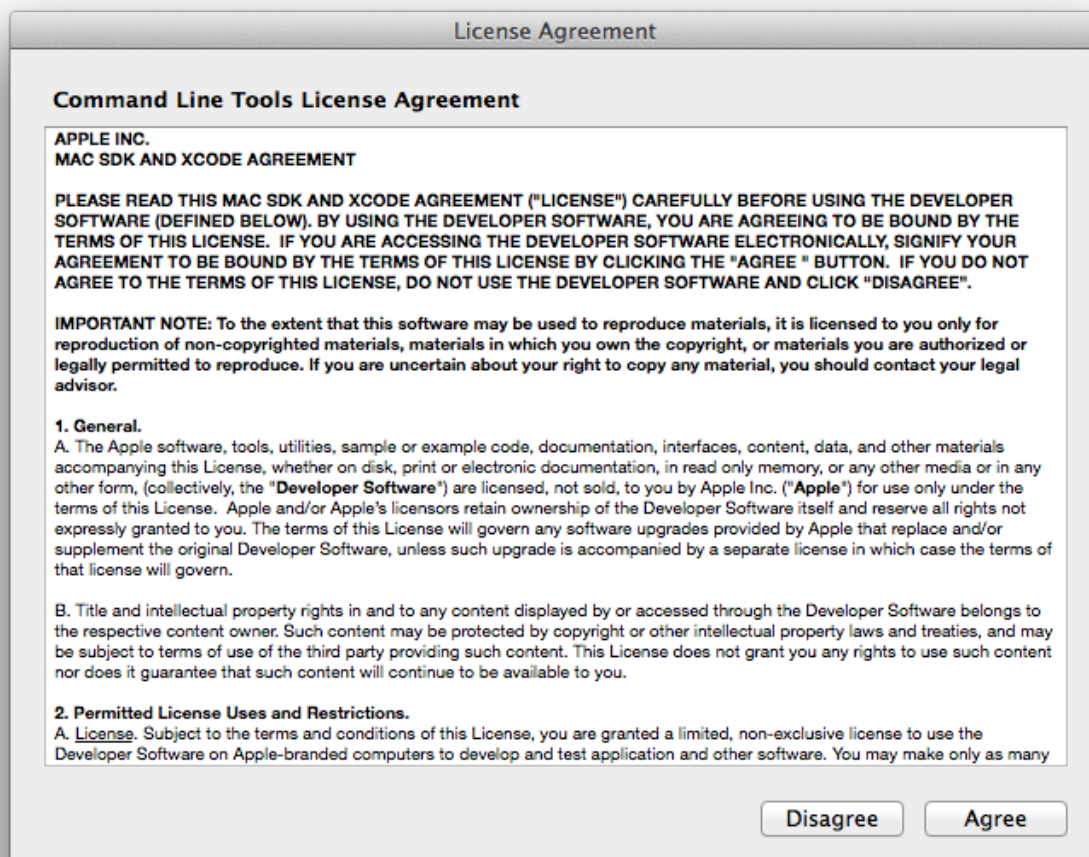
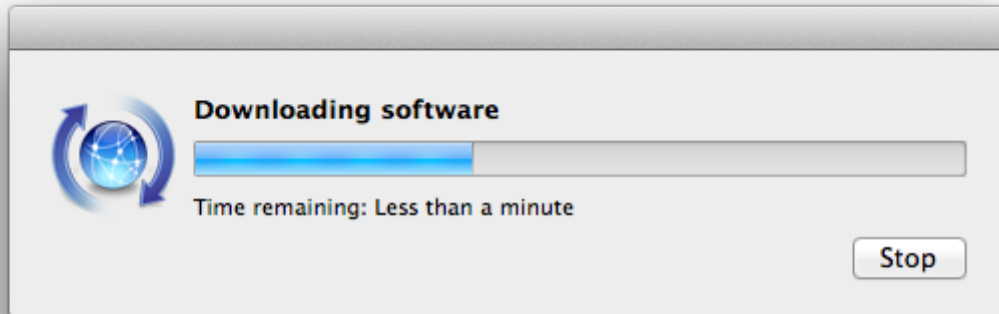Run the shell as administrator, not as root, and install:
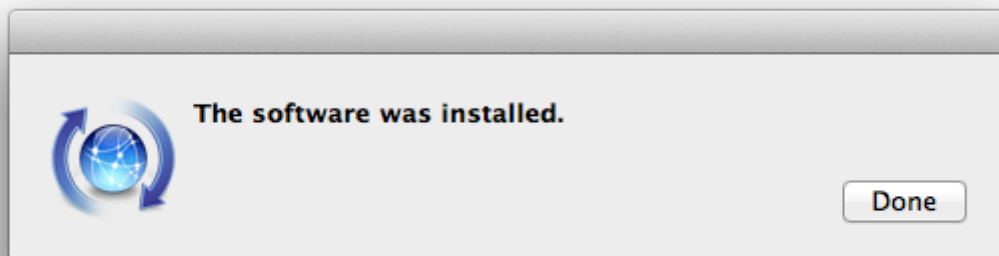
xcode-select --install

...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

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 4.0.9. Will install Oracle Java 1.8.

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

cd /Users/you-user

...downlod 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.

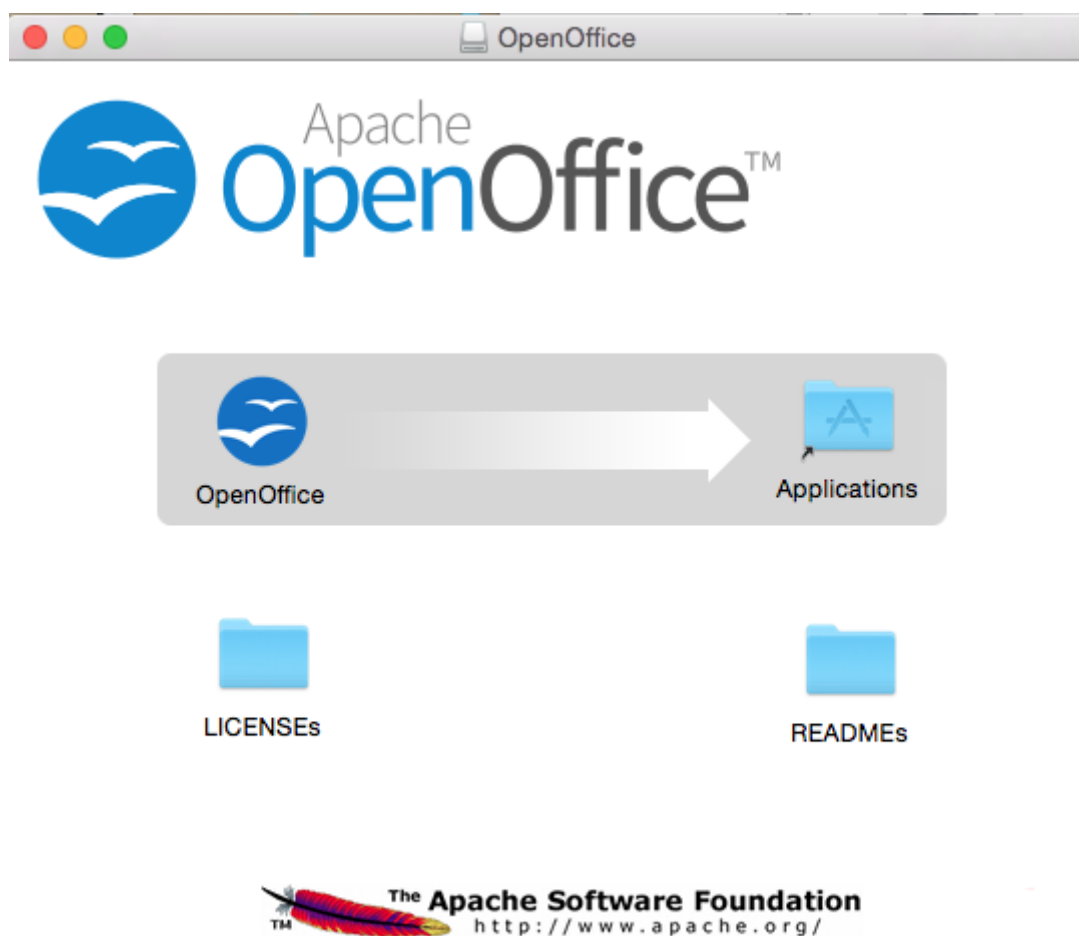To download please visit:

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 thar we acced 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 open409 DEFAULT CHARACTER SET 'utf8';

...now we create a user with all permission on this open409 database. User password must be of 8 digits minimum:

(One line only with a space between both)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON open409.* TO 'hola'@'localhost' IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;

...and exit MariaDB:

MariaDB [(none)]> quit

* open409 ………. 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/red5409

...then make the folder:

mkdir /Users/you-user/red5409

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

Download Apache-OpenMeetings file to the installation folder:

cd /Users/you-user/red5409

wget http://archive.apache.org/dist/openmeetings/4.0.9/bin/apache-openmeetings-4.0.9.tar.gz

tar xzvf apache-openmeetings-4.0.9.tar.gz

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

mv apache-openmeetings-4.0.9.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 http://repo1.maven.org/maven2/mysql/mysql-connector-java/5.1.48/mysql-connector-java-5.1.48.jar

...and copy it to his place:

(Only one line with a space between both)

cp /Users/you-user/mysql-connector-java-5.1.48.jar /Users/you-user/red5409/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/red5409

...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 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**

   o 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 Apache Derby

Specify the name of the database openmeetings

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	=	open409
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:

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

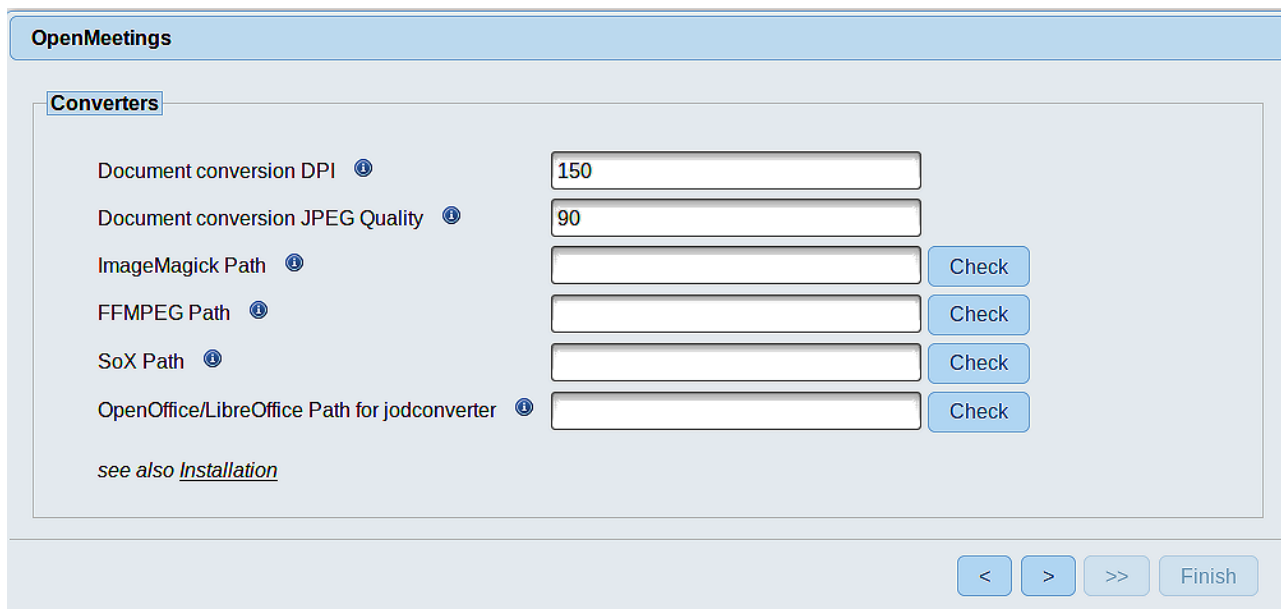|		
Mail-Refer	==	john@gmail.com
SMTP-Server	==	smtp.gmail.com
SMTP-Server Port (default Smtp-Server Port is 25)	==	587
SMTP-Username	==	john@gmail.com
SMTP-Userpass	==	password of john@gmail.com
Enable TLS in Mail Server Auth	==	...turn green the button to activate

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:

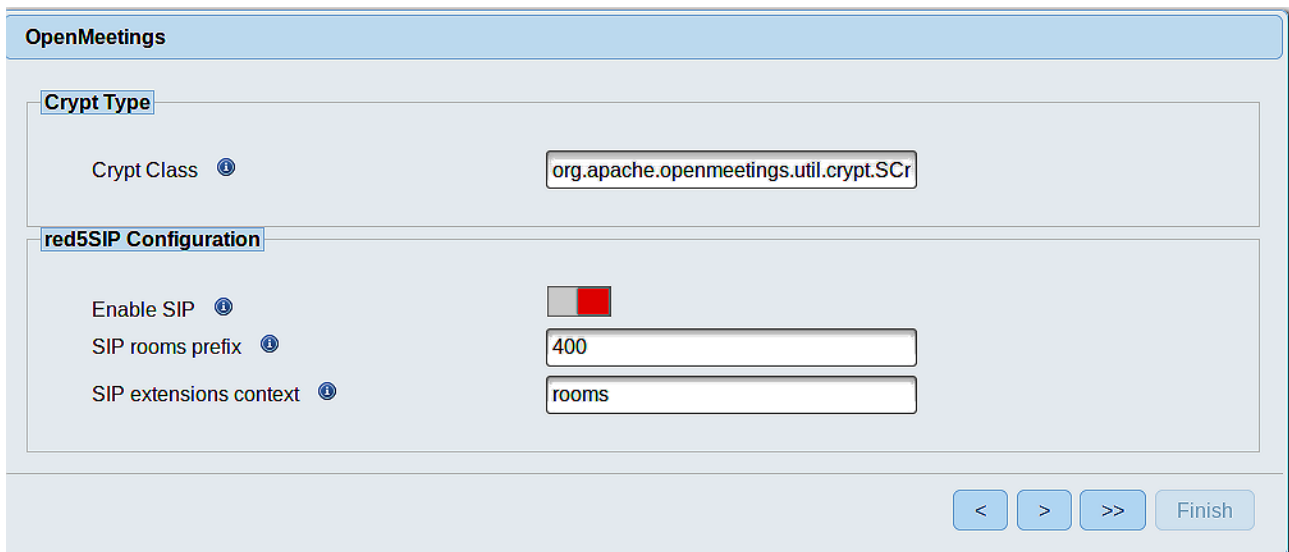|		
ImageMagick Path	==	/usr/local/bin
FFMPEG Path	==	/usr/local/bin
SOX Path	==	/usr/local/bin
OpenOffice/LibreOffice Path for jodconverter	==	/Applications/OpenOffice.app/Contents

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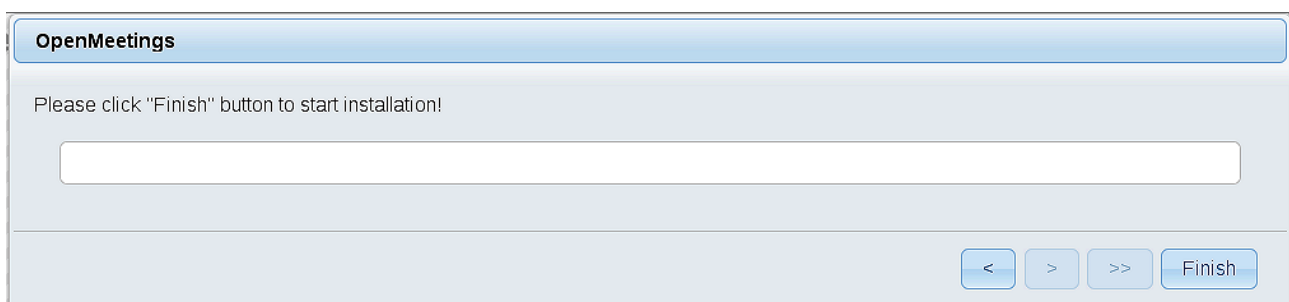
Apple> **System Preferences** => **Security and Privacy** => **General** (tab)
press the elongated button at the bottom righ,t that says something like:

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:

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…

<div align="center">

...**Congratulations!**

</div>

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

<div align="center">

http://localhost:5080/openmeetings

</div>

Remember to open in the server the two following ports:

<div align="center">

1935   5080

</div>

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

14)

<div align="center">

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

</div>

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 clic 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:
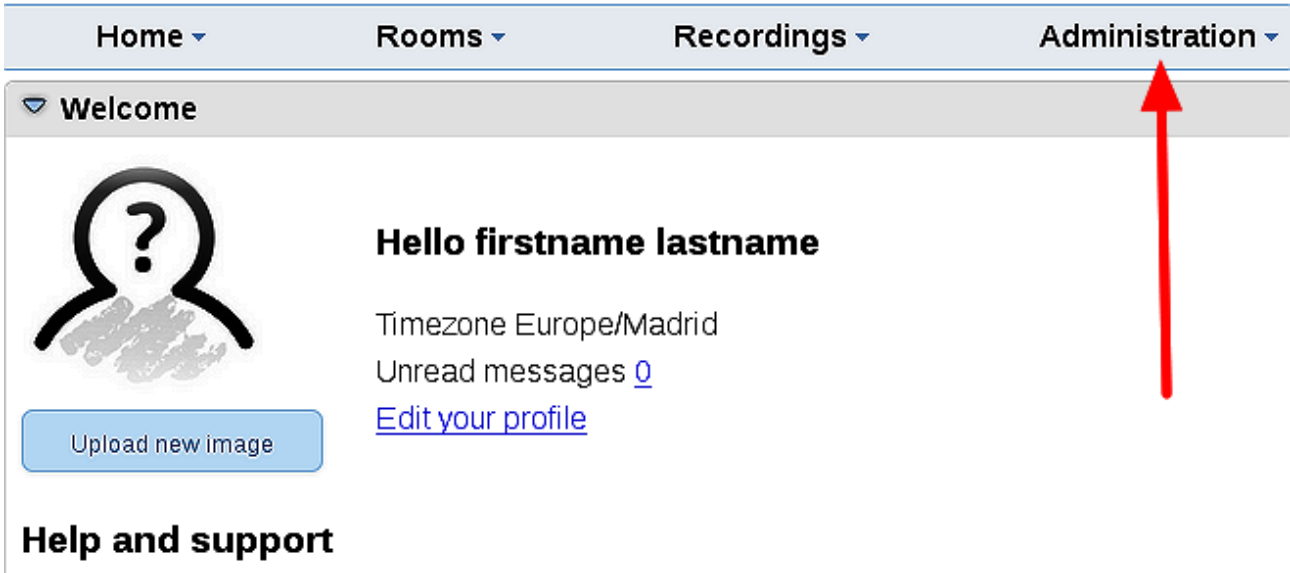
http://localhost:5080 ... or the url of your server with port 5080 => **Accept** =>. **Accept**
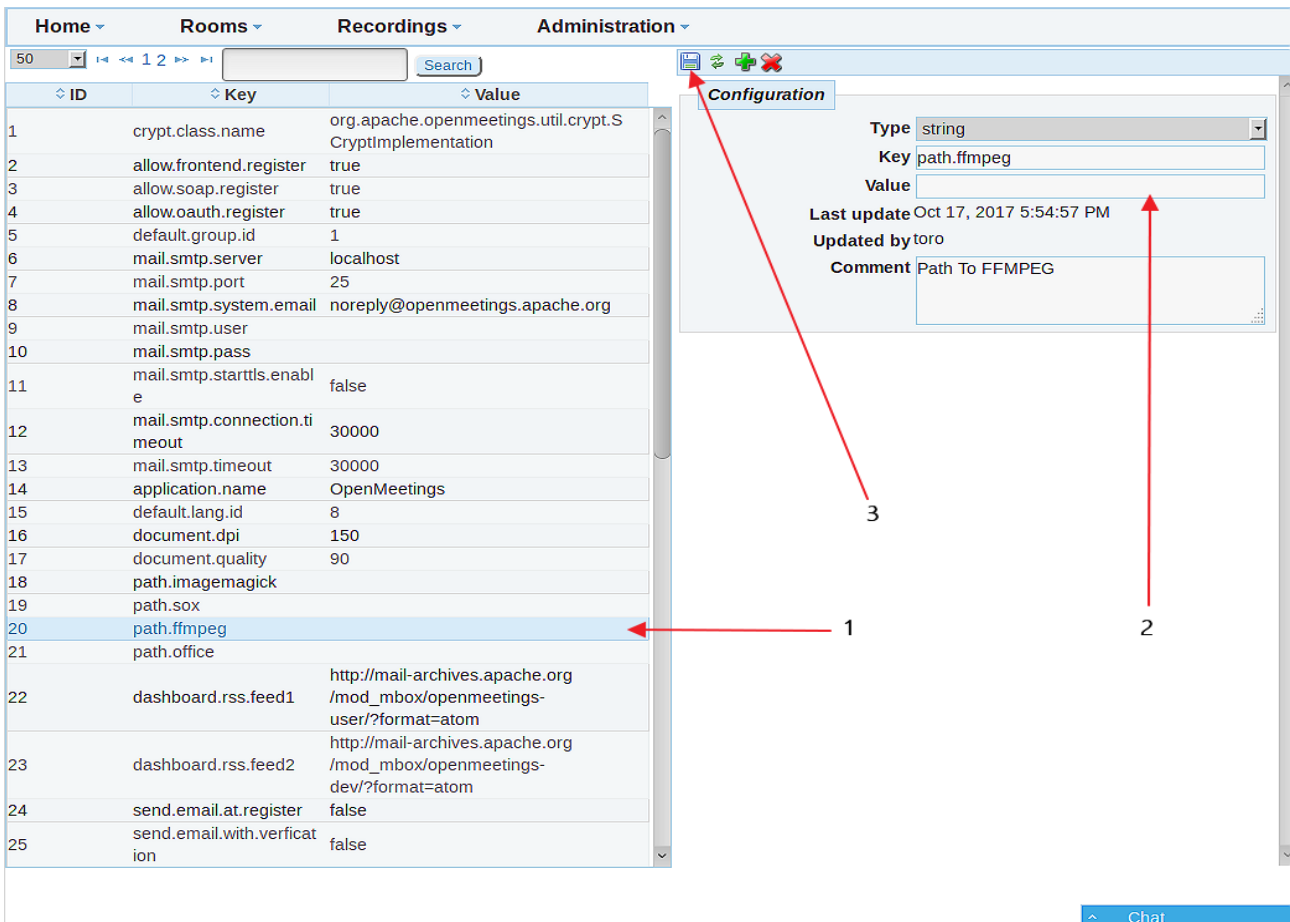
15)

<div align="center">

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

</div>

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:

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

http://openmeetings.apache.org/mailing-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 downoload:

OpenMeetings Wallpaper Download

A dvd live iso with OpenMeetings 4.0.9 on Ubuntu 18.04 lts is at your disposal.

Can find it here:

Live iso download

Thank you.

Alvaro Bustos (PMC and Committer at Apache OpenMeetings).