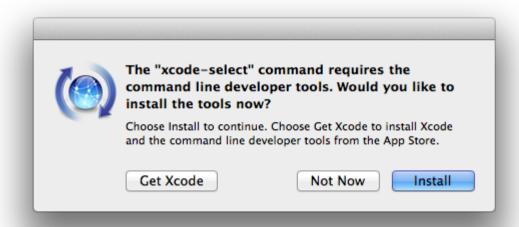


Installation of Apache OpenMeetings 4.0.11 on macOS Sierra 10.12.6

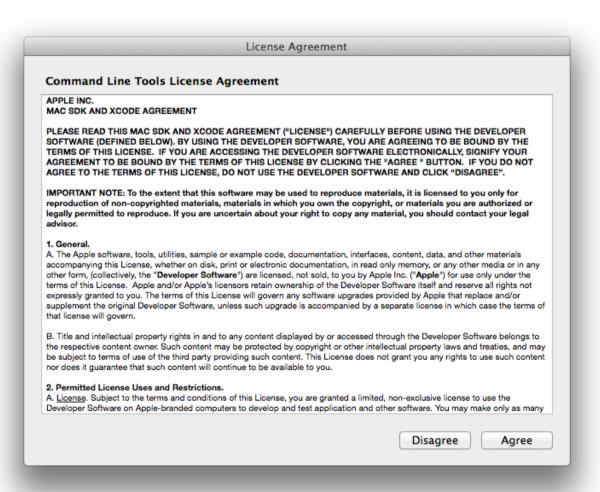
It is tested with positive result. We will use the Apache's binary version OpenMeetings 4.0.11 stable, that is to say will suppress his compilation. It is done step by step.

Starting
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-selectinstall

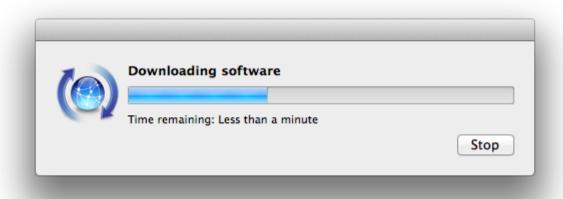
...will open a window informing:



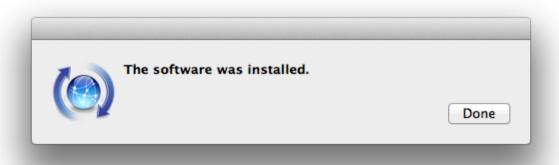
clic Install button only, and will open other window. clic Agree button



...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 Oracle Java 1.8						
Java is needed to work OpenMeetings 4.0.11. Will install Oracle Java 1.8.						
Please change user by your real Mac user name:						
cd /Users/user						
downlod the java file:						
downloa the java me.						
(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.						

----- 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 \geq 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:



1	olease,	drag	Open	Office	icon	to right	t, to A	appliq	cations	folder	icon.
1							,				

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
VIc, is the player for the video files we'll recording in OpenMeetings.
brew install Caskroom/cask/vlc
7) Installation of Adobe Flash Player
Flash Player even is need it for cam. Download and install it:
$\underline{http://fpdownload.macromedia.com/pub/flashplayer/latest/help/install_flash_player_osx.dmg}$
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
                         (Only one line with space between each one of them)
./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)
                            ----- 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
10)
                             ----- 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 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 'la2B3c4D' WITH GRANT OPTION;

...and leave 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 a 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:

export RED5 HOME=/Users/you-user/red54011

....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-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

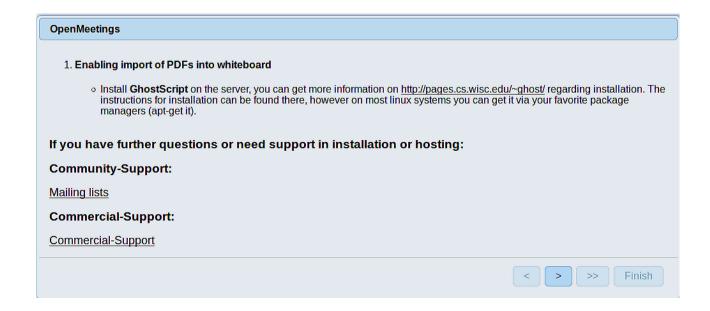
...and run red5-OpenMeetings from other window terminal. Please, be connected to Internet:

/opt/red5-mac2 start

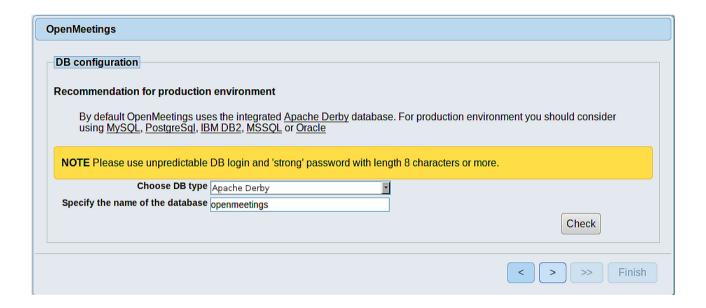
...wait about 40 seconds in order red5 can run completly. Then, go with the browser to:

http://localhost:5080/openmeetings

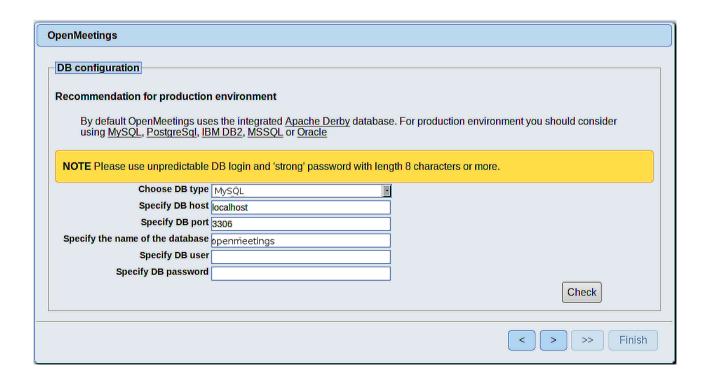
...there will appear a page similar to this one:



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



...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 = 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:



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.

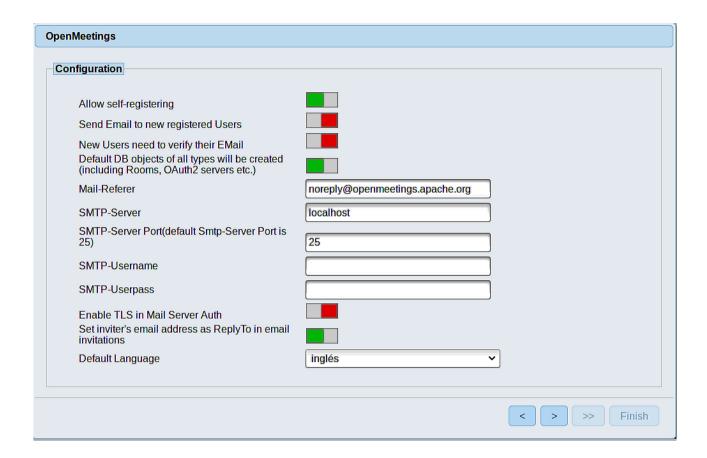
Userpass = password ... for the previous user.

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

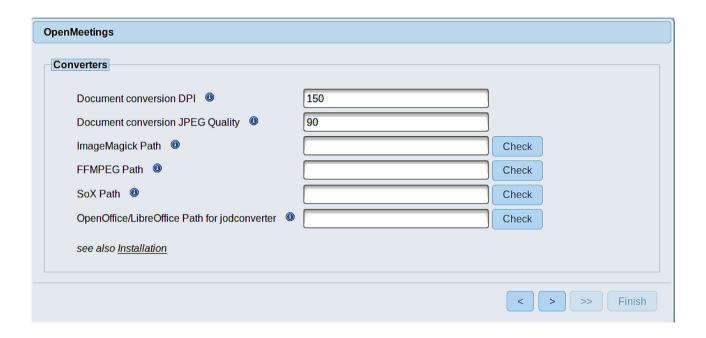
Enable TLS in Mail Server Auth == ...turn green the button to activate

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

Default Language == ...select your language

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

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



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

ImageMagick Path == /usr/local/bin

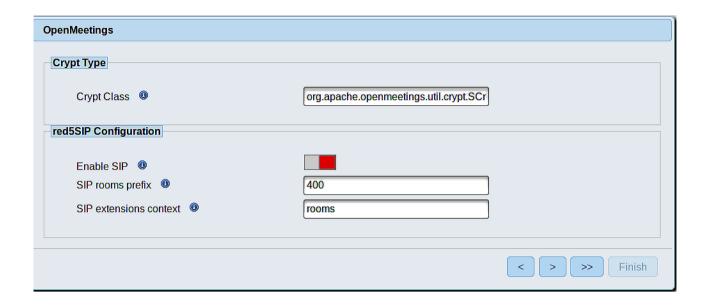
FFMPEG Path == /usr/local/bin

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:



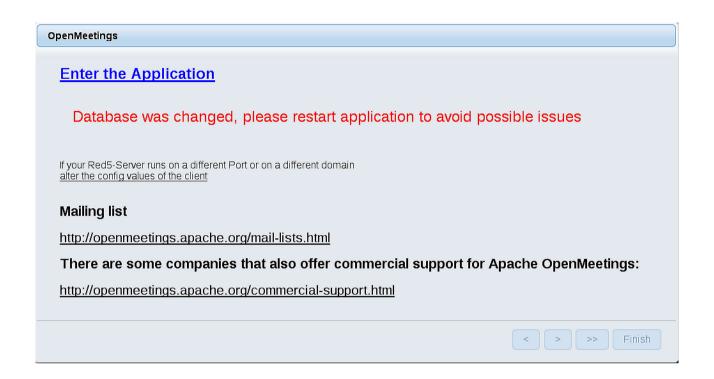
Now push the button Will show this window:



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



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 accese to OpenMeetings, will be:

http://localhost:5080/openmeetings

Remember to open in the server the two following ports:

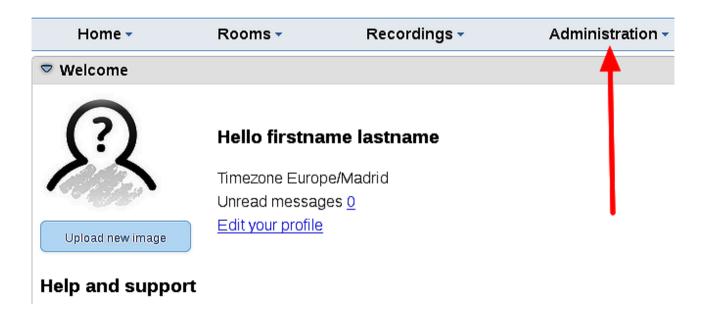
1935 5080

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

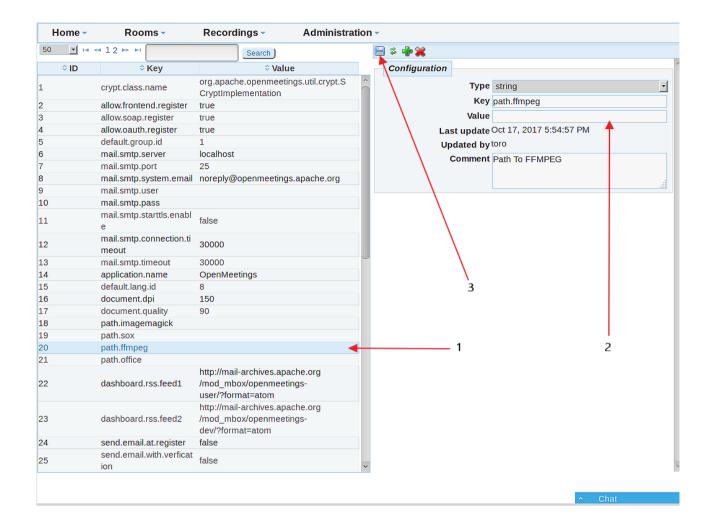
14) ----- Configuration of OpenMeetings -----

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:



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 4.0.11 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).