

## Installation of Apache OpenMeetings 4.0.0 on macOS High Sierra 10.13.1

It is tested with positive result. We will use the Apache's binary version OpenMeetings 4.0.0 stable, that is to say will suppress his compilation. It is done step by step.

18-11-2017

1)	
	Installation of Command line developer tools

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

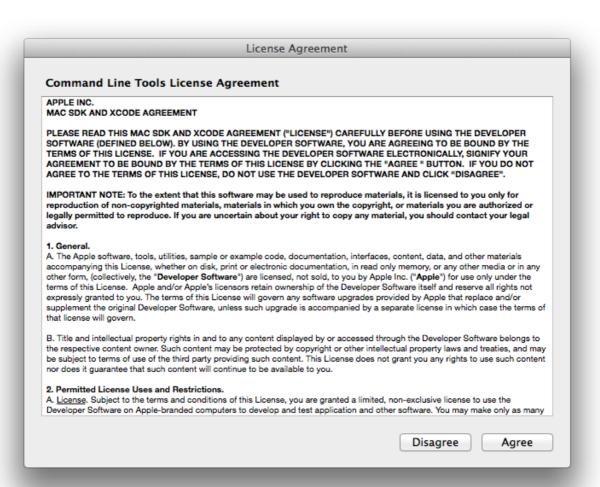
Run the shell as administrator, not as root, and install:

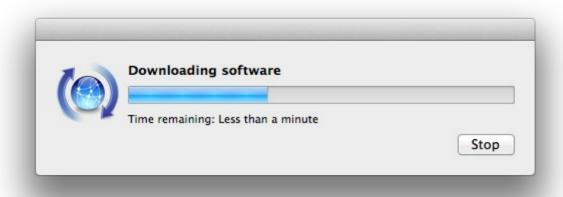
xcode-select --install

...will open a window informing:

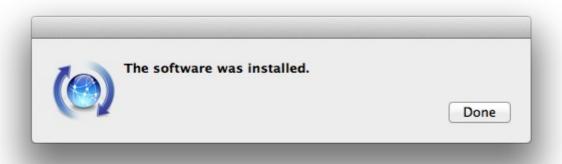


clic Install button only, and will open other window. clic Agree button





...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 <b>1.8</b> is need it to work OpenMeetings <b>4.0.0</b> . Will install Oracle Java 1.8.
Java <b>1.8</b> is need it to work OpenMeetings <b>4.0.0</b> . Will install Oracle Java 1.8. Please, visit:
Please, visit: <a href="http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-214051.html">http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-214051.html</a>
Please, visit: <a href="http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-214051.html">http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-214051.html</a> clic on:
Please, visit: <a href="http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-214051.html">http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-214051.html</a>
Please, visit: <a href="http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-214051.html">http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-214051.html</a> clic on:
Please, visit:  http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-214051.html clic on:  Agree and proceed
Please, visit: <a href="http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-214051.html">http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-214051.html</a> clic on:  Agree and proceed check:  Accept License Agreement
Please, visit:  http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-214051.html clic on:  Agree and proceed check:

Once unloaded the file, do clic on it and follow 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 4.1.4

Download full installation

Do clic on the unloaded file: **Apache\_OpenOffice\_4.1.4\_MacOS\_x86-64\_install....** and will open this window:



1	nlease	drag	Onen	Office	icon	to rigi	at to	Ann	licat	ione	fold	er ico	n
····	mease,	urag	Optil	Onice	ICOII	to rigi	n, w	Դիհ	ncai	10113	IUIU		ц.

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.
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 <u>install_flash_player_osx.dmg</u> file and install it by default.
8) FFmpeg compilation
FFmpeg work about video. We'll compile it. For it base on this url:

...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)

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

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 <b>you-user</b> by your real username:			
cd /Users/you-user				
git clonedepth 1 git	://source.ffmpeg.org/ffmpeg			
cd ffmpeg	(Only one line with space between each one)			
enable-libfreetype	/usr/localenable-gplenable-nonfreeenable-libassenable-libfdk-aa-enable-libmp3lameenable-libopusenable-libtheoraenable-libvorbisble-libx264enable-libxvidenable-libx265			
make	(spend about 10 minutes)			
sudo make install	(will ask for the user password)			
ffmpeg it is installed	d in /usr/local/bin			
9)	Installation of MariaDB data server			
O 1-4				
	e MariaDB. We install it:			
brew install mariadb				
Once the installation is	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 p	assword 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 open40 DEFAULT CHARACTER SET 'utf8';

...now we create a user with all permission on this open40 database. User password must be of 8 digits minimum:

(One line only with a space between both)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON open40.\* TO 'hola'@'localhost' IDENTIFIED BY 'la2B3c4D' WITH GRANT OPTION;

...and leave MariaDB:

MariaDB [(none)]> quit

- \* open40 ..... 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/red540

...then make the folder:

mkdir /Users/you-user/red540

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

Download Apache-OpenMeetings file to the installation folder:

cd/Users/you-user/red540

wget http://apache.miloslavbrada.cz/openmeetings/4.0.0/bin/apache-openmeetings-4.0.0.zip

```
unzip apache-openmeetings-4.0.0.zip
...save the unloaded file moving it to your home:
mv apache-openmeetings-4.0.0.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/5.1.42/mysql-connector-java-
5.1.42.jar
...and copy it to his place:
                           (Only one line with a space between both)
cp/Users/you-user/mysql-connector-java-5.1.42.jar
/Users/you-user/red540/webapps/openmeetings/WEB-INF/lib
12)
                 ----- Configuration of the data-base on OpenMeetings -----
We'll configure the file that do connect OpenMeetings with MaraDB.
                            (Only one line without space between both)
nano /Users/you-user/red540/webapps/openmeetings/WEB-INF/classes/META-
INF/mysql persistence.xml
Modify line 72:
, Url=jdbc:mysql://localhost:3306/openmeetings?
...to
```

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

, Url=jdbc:mysql://localhost:3306/open40?

If you have choose any other name for the data-base, here is where to type it. Press **Ctrl+X**, will ask to save, clic **Y** and to exit clic **Retutn** (Enter.)

Now, protect the file:

(Only one line without space between both)

chmod 640 /Users/**you-user**/red540/webapps/openmeetings/WEB-INF/classes/META-INF/mysql persistence.xml

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

13)

# ----- 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/red540
```

....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

14)

# ----- 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 till the text "CleanupJob.cleanRoomFiles" 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:



...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 <u>Apache Derby</u> database. For production environment you should consider using <u>MySQL</u> , <u>PostgreSql</u> , <u>IBM DB2</u> , <u>MSSQL</u> or <u>Oracle</u>	
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	
< > >> Finis	sh

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

penMeetings		
DB configuration		
Recommendation for production	environment	
By default OpenMeetings use using MySQL, PostgreSql, IB	s the integrated <u>Apache Derby</u> databas <u>M DB2, MSSQL</u> or <u>Oracle</u>	se. For production environment you should consider
·	DB login and 'strong' password with len	ngth 8 characters or more.
Choose DB type		
Specify DB host		
Specify DB port		
Specify the name of the database	•	
Specify DB user		
Specify DB password		]
		Check
		< > >> Finish

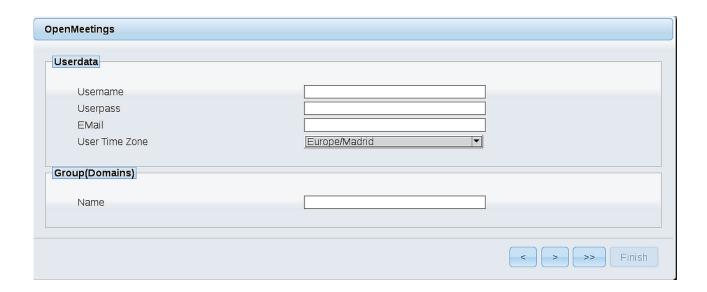
...and will show the database configuration we made in step 12.

If you've choose any other different name for this, will show equally. Now we must introduce the user name we did for our data base, at the step 10, and his password: **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:

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

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

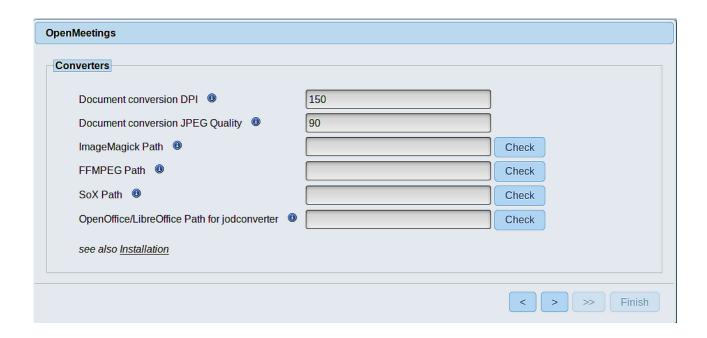
Enable TLS in Mail Server Auth == ...turn green the button to activate

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:



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

ImageMagick Path == /usr/local/bin

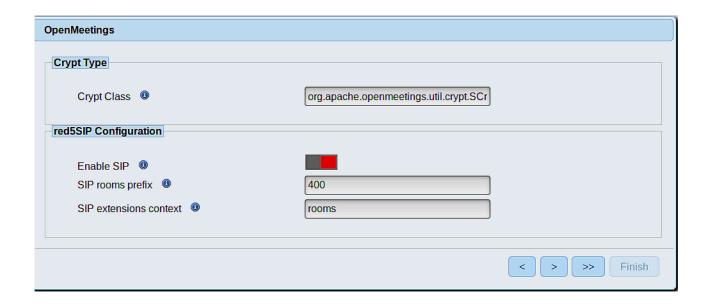
FFMPEG Path == /usr/local/bin

SOX Path == /usr/local/bin

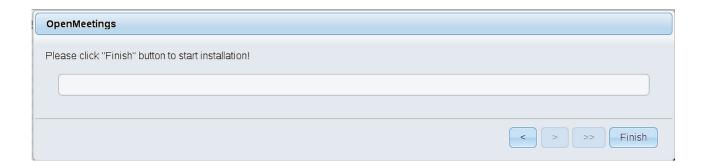
OpenOffice/LibreOffice Path for jodconverter == /Applications/OpenOffice.app/Contents

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:



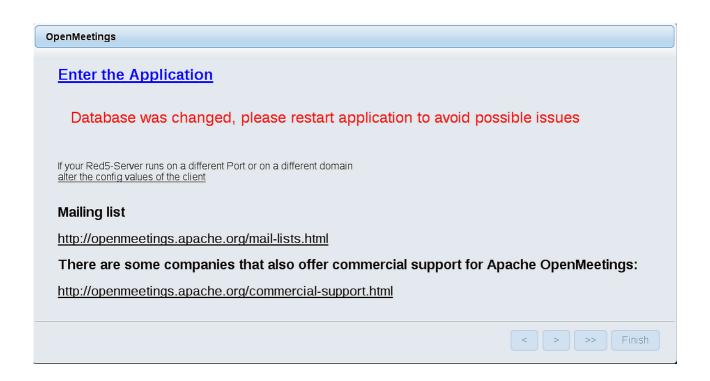
Now push the button | Will show this window:



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:

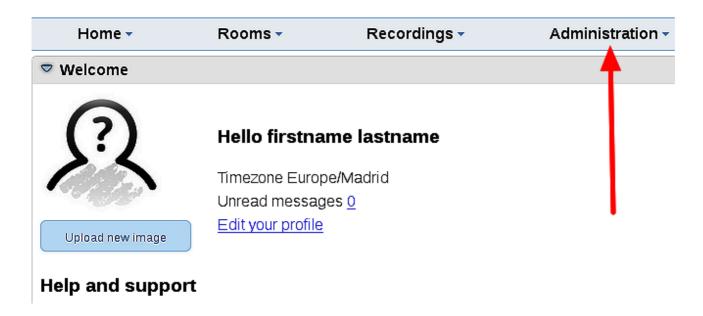
#### 1935 5080

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

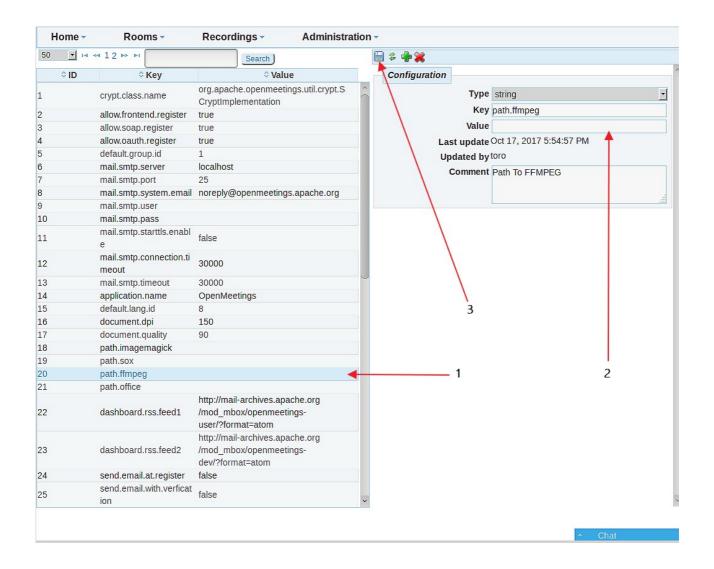
# 15) ----- Configuration of OpenMeetings -----

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

# $Administration \rightarrow Configuration$



...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