

# Installation of Apache OpenMeetings 4.0.3 on macOS Sierra 10.12.6

It is tested with positive result. We will use the Apache's binary version OpenMeetings 4.0.3 stable, that is to say will suppress his compilation. It is done step by step.

19-4-2018

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 re command line developer tools. V install the tools now?	•
Choose Install to continue. Choose Get X and the command line developer tools fr	
Get Xcode Not N	low Install

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

APPLE INC.	
MAC SDK AND XCOD	EAGREEMENT
SOFTWARE (DEFINED TERMS OF THIS LICE AGREEMENT TO BE B	TAC SDK AND XCODE AGREEMENT ("LICENSE") CAREFULLY BEFORE USING THE DEVELOPER I BELOW). BY USING THE DEVELOPER SOFTWARE, YOU ARE AGREEING TO BE BOUND BY THE NSE. IF YOU ARE ACCESSING THE DEVELOPER SOFTWARE ELECTRONICALLY, SIGNIFY YOUR SOUND BY THE TERMS OF THIS LICENSE BY CLICKING THE "AGREE " BUTTON. IF YOU DO NOT IS OF THIS LICENSE, DO NOT USE THE DEVELOPER SOFTWARE AND CLICK "DISAGREE".
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...and will download and install the software

10	Downloading software	
	Time remaining: Less than a minute	
	·····	Stop

...telling when it finished

10	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 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 1.8 is need it to work OpenMeetings 4.0.3. Will install Oracle Java 1.8.

Please, visit:

http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2140351.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.

# ----- 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 4.1.5

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 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:

<u>http://fpdownload.macromedia.com/pub/flashplayer/latest/help/install\_flash\_player\_osx.dmg</u> ...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:

# 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)

./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 open403 DEFAULT CHARACTER SET 'utf8';

...now we create a user with all permission on this open403 database. User password must be of 8 digits minimum:

(One line only with a space between both)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON open403.\* TO 'hola'@'localhost' IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;

...and leave MariaDB:

MariaDB [(none)]> quit

\* open403 ..... 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/red5403

... then make the folder:

mkdir /Users/you-user/red5403

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

Download Apache-OpenMeetings file to the installation folder:

cd /Users/you-user/red5403

wget http://apache.miloslavbrada.cz/openmeetings/4.0.3/bin/apache-openmeetings-4.0.3.zip

unzip apache-openmeetings-4.0.3.zip

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

mv apache-openmeetings-4.0.3.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**/red5403/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/red5403

....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

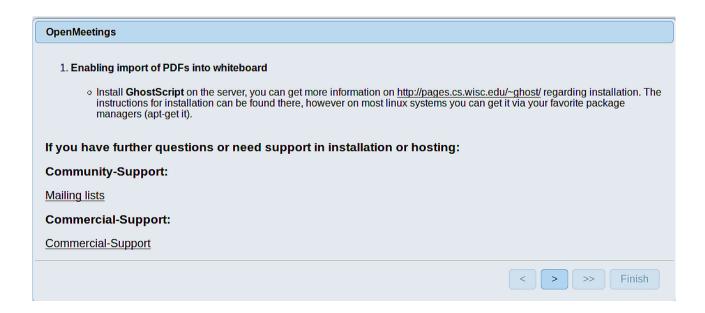
...and run red5-OpenMeetings from other window terminal. Please, be connected to Internet:

/opt/red5-mac2 start

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

http://localhost:5080/openmeetings/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
< > >> Finish

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

OpenMeetings	
DB configuration	
Recommendation for production environment	
By default OpenMeetings uses the integrated <u>Apache Derby</u> databas using <u>MySQL</u> , <u>PostgreSql</u> , <u>IBM DB2</u> , <u>MSSQL</u> or <u>Oracle</u>	se. For production environment you should consider
NOTE Please use unpredictable DB login and 'strong' password with ler	ngth 8 characters or more.
Choose DB type MySQL	T
Specify DB host	Ĵ
Specify DB port 3306	
Specify the name of the database ppenmeetings	Ī
Specify DB user	Ī
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 = open403 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-namethis user will be administrator.
Userpass	=	password for the previous user.
Email	=	email-adress of the previous user.
User Time	Zone	e =  country where is this server
Name	=	example-openmeetingsgroup 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 v
	< > >> 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
	<i>.</i> •	1 11 /1 1

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:

OpenMeetings		
Converters		
Document conversion DPI 0	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

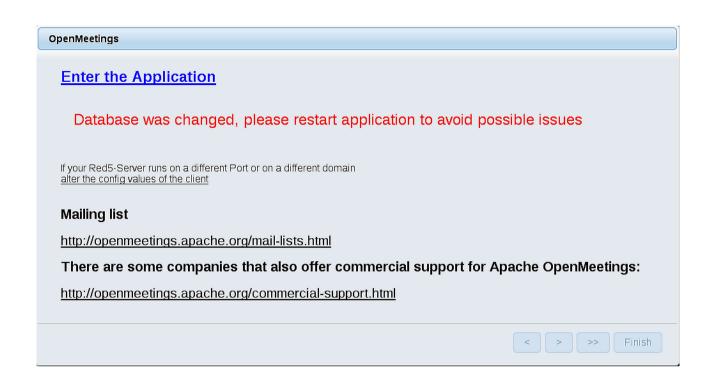
Now push the button  $\ge$  Will show this window:

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 <u>Enter the Application</u>. 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:

Login	
Username or mail address Password <u>Forgotten your password?</u>	Remember login
1	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 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 $\rightarrow$ Configuration

Home 👻	Rooms -	Recordings 🗸	Administration -
🗢 Welcome			<b>•</b>
$\mathbf{R}$	Hello firstname Timezone Europe/M Unread messages <u>0</u> Edit your profile	adrid	
Upload new image			
Help and support			

...and following the order of the red arrows:

	ome 🔻	Rooms 🔻	Recordings - Administra	tion -
50	<b>T</b> 14 -	≪ 12 ↦ ⊨	Search	🗎 🌣 🖶 💥
	≎ ID	≎ Key	⇒ Value	Configuration
_		crypt.class.name	org.apache.openmeetings.util.crypt.S CryptImplementation	Type string
2		allow.frontend.register	true	Key path.ffmpeg
3		allow.soap.register	true	Value
1		allow.oauth.register	true	Last update Oct 17, 2017 5:54:57 PM
5		default.group.id	1	Updated by toro
3		mail.smtp.server	localhost	
7		mail.smtp.port	25	Comment Path To FFMPEG
3			noreply@openmeetings.apache.org	
9		mail.smtp.user		
10		mail.smtp.pass		
11		mail.smtp.starttls.enabl	false	
12		mail.smtp.connection.ti meout	30000	
13		mail.smtp.timeout	30000	
14		application.name	OpenMeetings	
15		default.lang.id	8	3
16		document.dpi	150	
17		document.quality	90	
8		path.imagemagick		
19		path.sox		
20		path.ffmpeg	•	<u> </u>
21		path.office		
			http://mail-archives.apache.org	
22		dashboard.rss.feed1	/mod_mbox/openmeetings- user/?format=atom	
			http://mail-archives.apache.org	
23		dashboard.rss.feed2	/mod_mbox/openmeetings-	
			dev/?format=atom	
24		send.email.at.register	false	
25		send.email.with.verficat	false	×

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

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Thank you.

Alvaro Bustos