Installation of Apache OpenMeetings 4.0.0 on Mac El Capitan OS X 10.11.6

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.

5-11-2017

Starting.…

1)

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

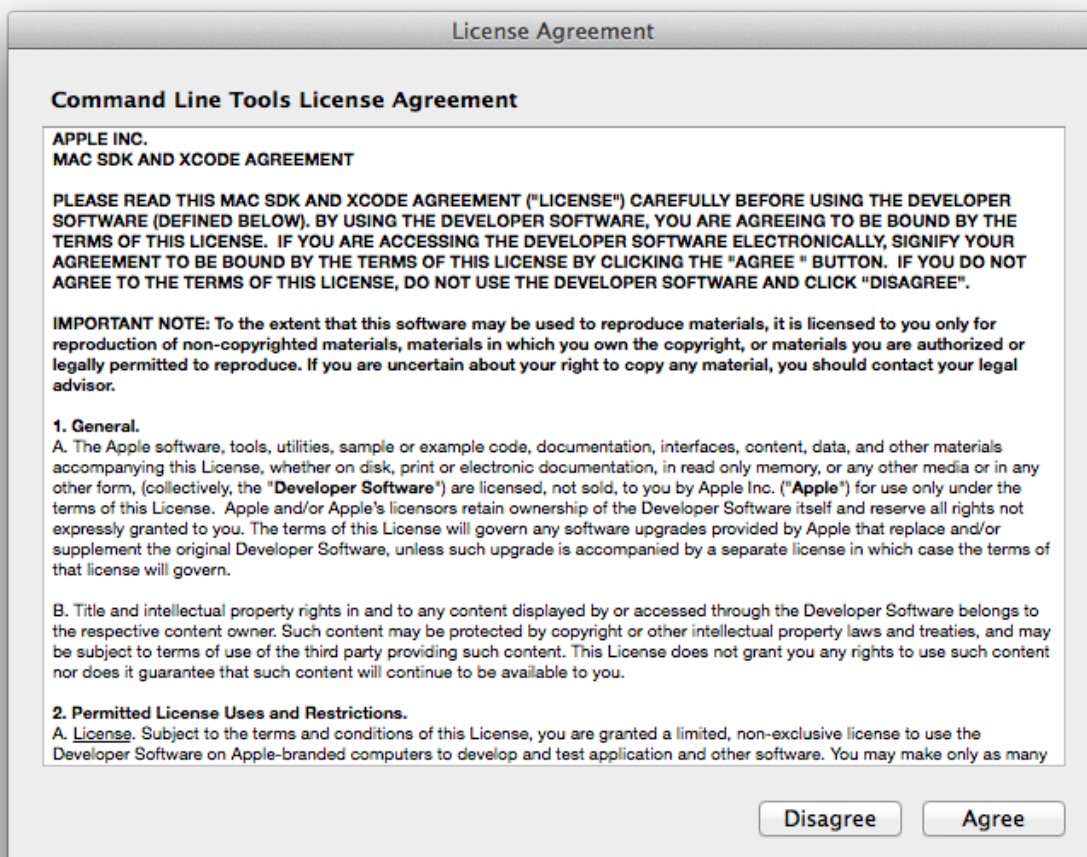We´ll install in first place the developer tools, that will help us to compile the sources.

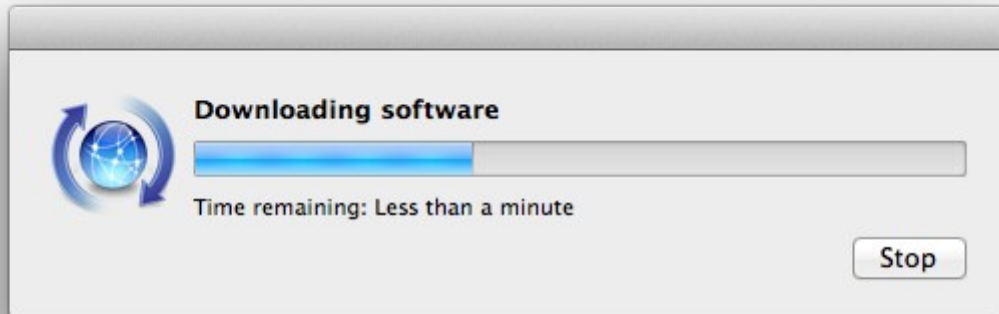Run the shell as administrator, not as root, and install:
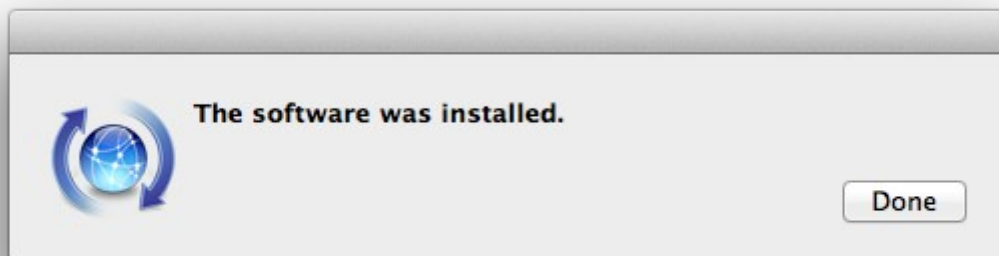
xcode-select --install

...will open a window informing:

The "xcode-select" command requires the command line developer tools. Would you like to install the tools now?

Choose Install to continue. Choose Get Xcode to install Xcode and the command line developer tools from the App Store.

Get Xcode   Not Now   Install

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

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Command Line Tools License Agreement

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Disagree   Agree

...and will download and install the software

Downloading software

Time remaining: Less than a minute

Stop

...telling when it finished

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 **4.0.0**. Will install Oracle Java 1.8.

Please visit:

http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-214051.html

...clic on:

Agree and proceed

...check:

Accept License Agreement

...and download the file called:

jdk-8u152-macosx-x64.dmg

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

Download full installation

Do clic on the unloaded file: **Apache_OpenOffice_4.1.4_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.

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 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 open40 DEFAULT CHARACTER SET 'utf8';

...also we make an user with a password, this must have 8 digits minimum, for this data-base:

(One line only with a space between both)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON open40.* TO 'hola'@'localhost'
IDENTIFIED BY '1a2B3c4D' 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

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

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

If you have choose any other name for the data-base, here is where to type it.

clic **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).

We copy it to /opt:

sudo su

cp /Users/**you-user**/red5-mac2 /opt

...concede execution permission:

chmod +x /opt/red5-mac2

...and leave 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:
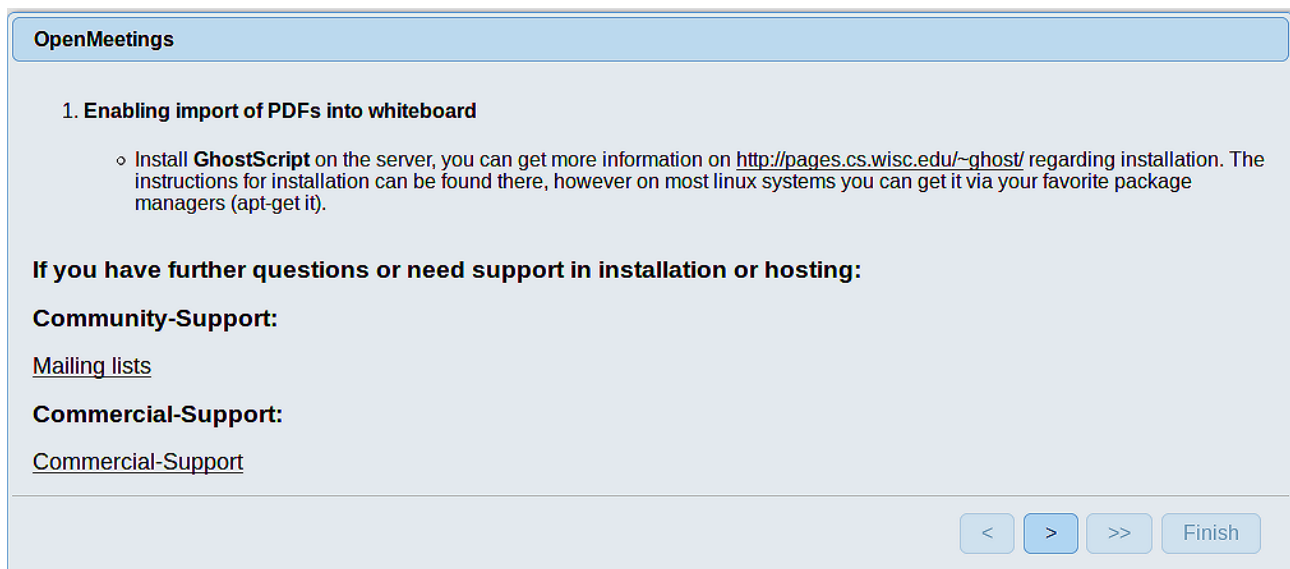
...push on > (bottom), and will show the default database configuration with Derby, but we

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 | open40
Specify DB user |
Specify DB password |

Check

< | > | >> | Finish

...will show the data base configuration we made in step 12.
If you`ve choose any other different name for this, will show equally.
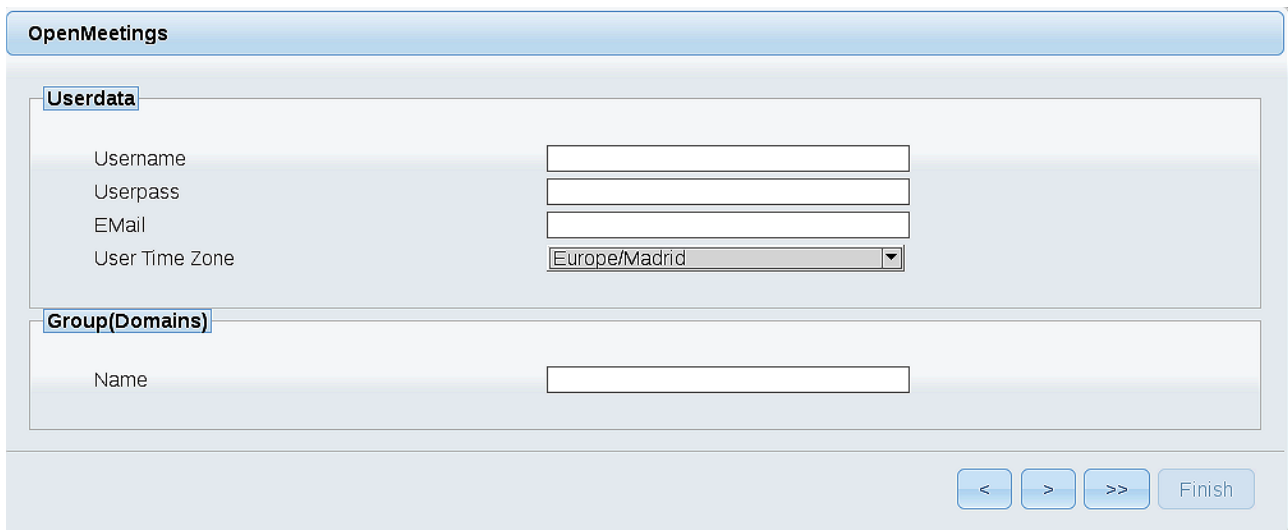
Now we must introduce the user name we did for our data base, at the step 10, and his password:

Specify DB user = hola

Specify DB password = 1a2B3c4D

...if you choose different data, please type it here.

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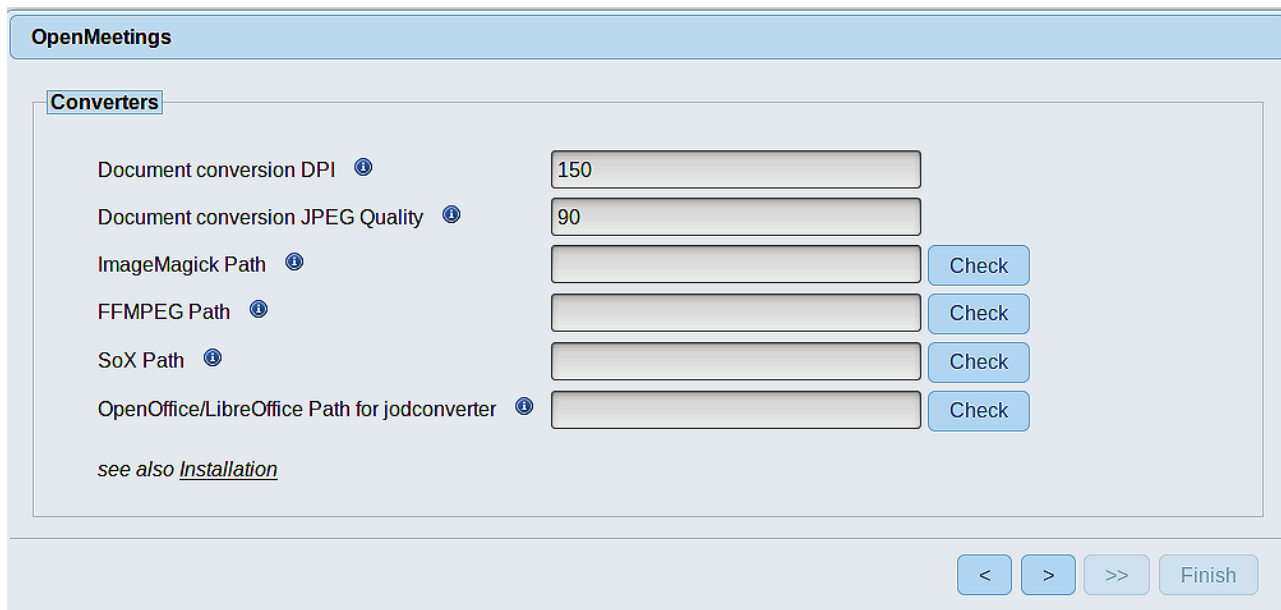
Mail-Refer	==	john@gmail.com
SMTP-Server	==	smtp.gmail.com
SMTP-Server Port (default Smtp-Server Port is 25)	==	587
SMTP-Username	==	john@gmail.com
SMTP-Userpass	==	password of john@gmail.com
Enable TLS in Mail Server Auth	==	...turn green the button to activate

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:

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

ImageMagick Path (Path)	==	/usr/local/bin
FFMPEG Path (Path)	==	/usr/local/bin
SOX Path (Path)	==	/usr/local/bin
OpenOffice/LibreOffice Path (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 click 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

Push **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 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, push **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 → Configuration
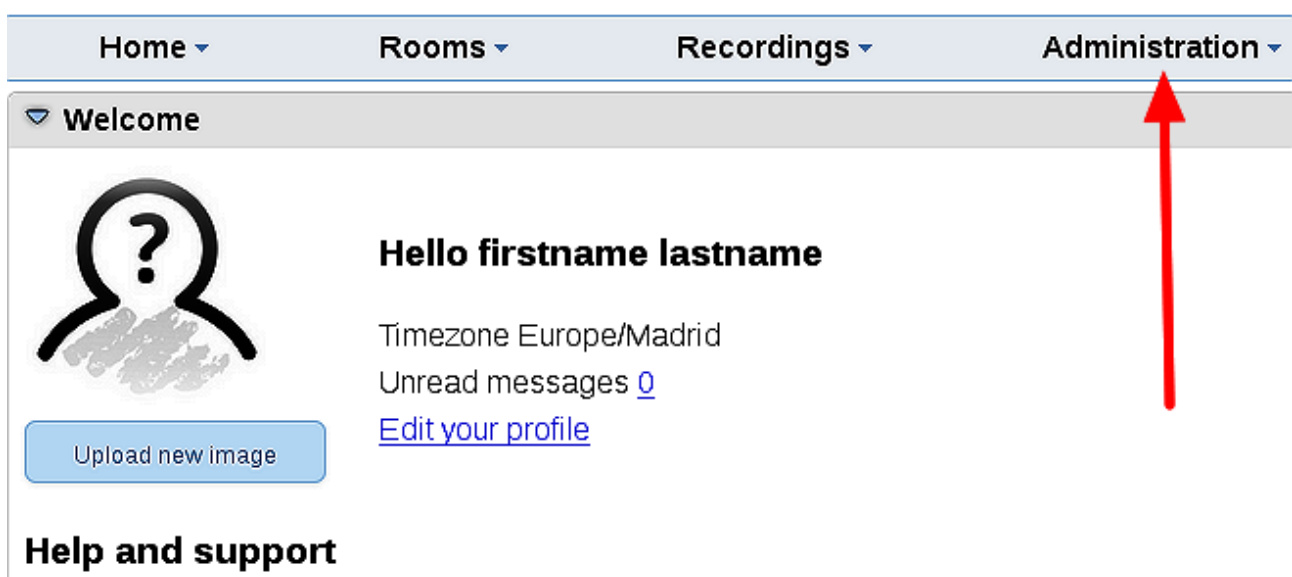
...and following the order of the red arrows:

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