



## **Installation of Apache OpenMeetings 4.0.11 on macOS High Sierra 10.13.6**

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....

1)

### **----- Installation of Command line developer tools -----**

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

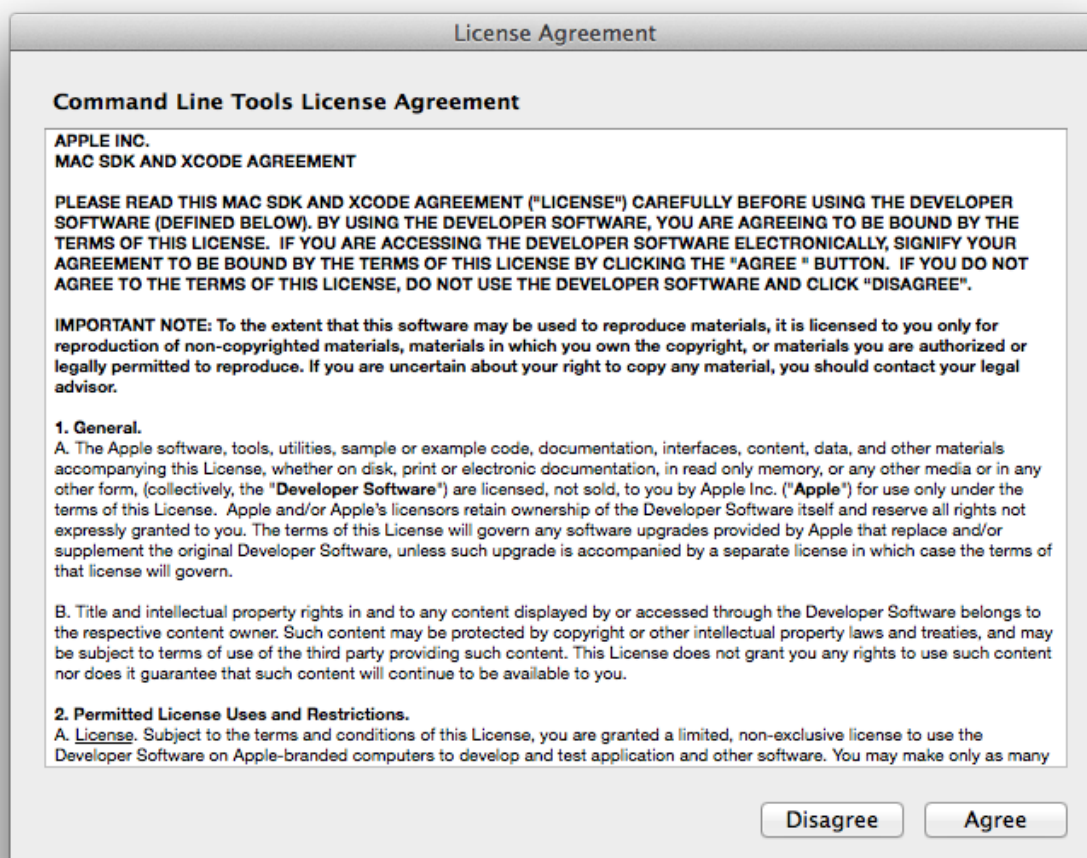
Run the shell as administrator, not as root, and install:

`xcode-select --install`

...will open a window informing:



click **Install** button only, and will open other window. click **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`

...download 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, 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](http://fpdownload.macromedia.com/pub/flashplayer/latest/help/install_flash_player_osx.dmg)

...clie 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 wish:

```
mysqladmin -u root password new-password
```

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 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 '1a2B3c4D' 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).

`sudo su` ...access 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`

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 completely. Then, go with the browser to:

<http://localhost:5080/openmeetings>

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

**OpenMeetings**

**1. Enabling import of PDFs into whiteboard**

- 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

Specify the name of the database

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

Specify DB host

Specify DB port

Specify the name of the database

Specify DB user

Specify DB password

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

**OpenMeetings**

**Userdata**

Username

Userpass

E-Mail

User Time Zone

**Group(Domains)**

Name

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	<input checked="" type="checkbox"/>
Send Email to new registered Users	<input type="checkbox"/>
New Users need to verify their EMail	<input type="checkbox"/>
Default DB objects of all types will be created (including Rooms, OAuth2 servers etc.)	<input checked="" type="checkbox"/>
Mail-Referer	<input type="text" value="noreply@openmeetings.apache.org"/>
SMTP-Server	<input type="text" value="localhost"/>
SMTP-Server Port(default SmtP-Server Port is 25)	<input type="text" value="25"/>
SMTP-Username	<input type="text"/>
SMTP-Userpass	<input type="text"/>
Enable TLS in Mail Server Auth	<input type="checkbox"/>
Set inviter's email address as ReplyTo in email invitations	<input checked="" type="checkbox"/>
Default Language	<input type="text" value="inglés"/>


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

<b>Mail-Refer</b>	==	john@gmail.com
<b>SMTP-Server</b>	==	smtp.gmail.com
<b>SMTP-Server Port (default SmtP-Server Port is 25)</b>	==	587
<b>SMTP-Username</b>	==	john@gmail.com
<b>SMTP-Userpass</b>	==	password of john@gmail.com
<b>Enable TLS in Mail Server Auth</b>	==	...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 ⓘ	<input type="text" value="150"/>	
Document conversion JPEG Quality ⓘ	<input type="text" value="90"/>	
ImageMagick Path ⓘ	<input type="text"/>	<input type="button" value="Check"/>
FFMPEG Path ⓘ	<input type="text"/>	<input type="button" value="Check"/>
SoX Path ⓘ	<input type="text"/>	<input type="button" value="Check"/>
OpenOffice/LibreOffice Path for jodconverter ⓘ	<input type="text"/>	<input type="button" value="Check"/>

*see also [Installation](#)*

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

**ImageMagick Path** == /usr/local/bin

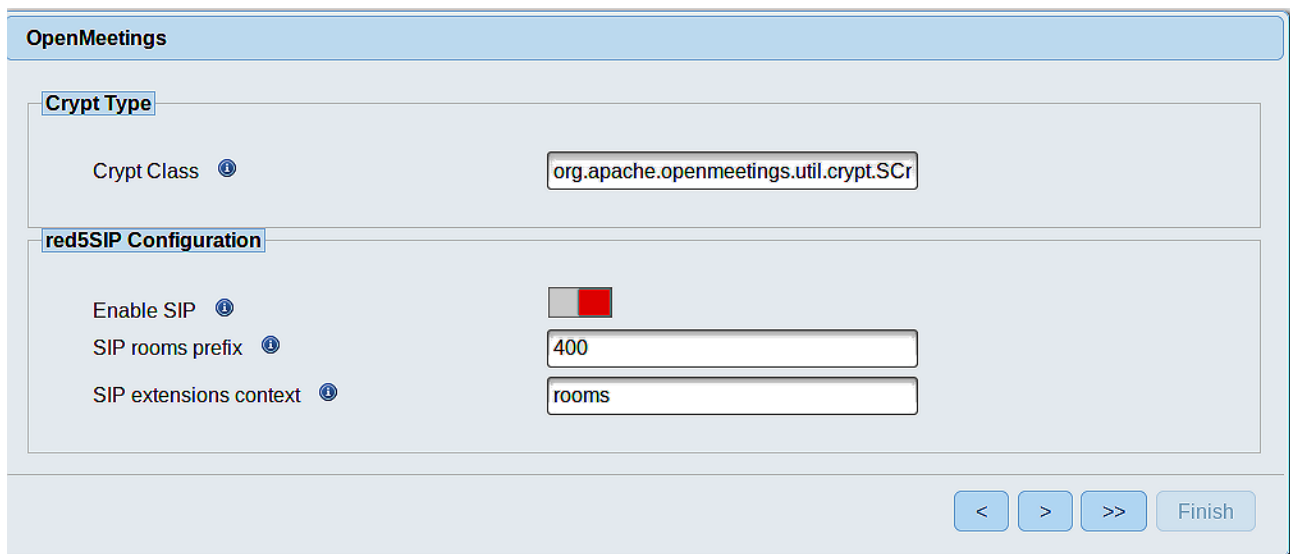
**FFMPEG Path** == /usr/local/bin

**SOX Path** == /usr/local/bin

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

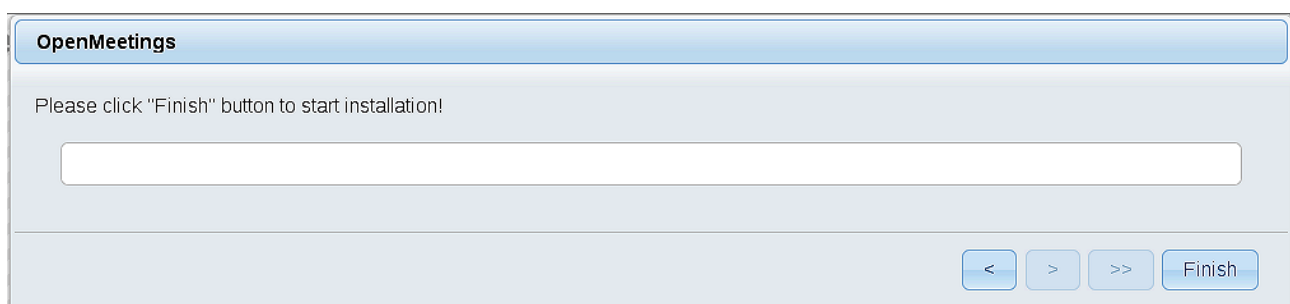
As you go introducing paths, you can check if they are correct by pressing the button labeled **Check**. If it does not display any error message, that is OK.

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:



The screenshot shows the 'OpenMeetings' configuration window. It has a title bar 'OpenMeetings' and a 'Crypt Type' section with a 'Crypt Class' field containing 'org.apache.openmeetings.util.crypt.SCr'. Below that is the 'red5SIP Configuration' section, which includes an 'Enable SIP' checkbox (checked), a 'SIP rooms prefix' field with '400', and a 'SIP extensions context' field with 'rooms'. At the bottom right, there are navigation buttons: '<', '>', '>>', and 'Finish'.

Now push the button  Will show this window:

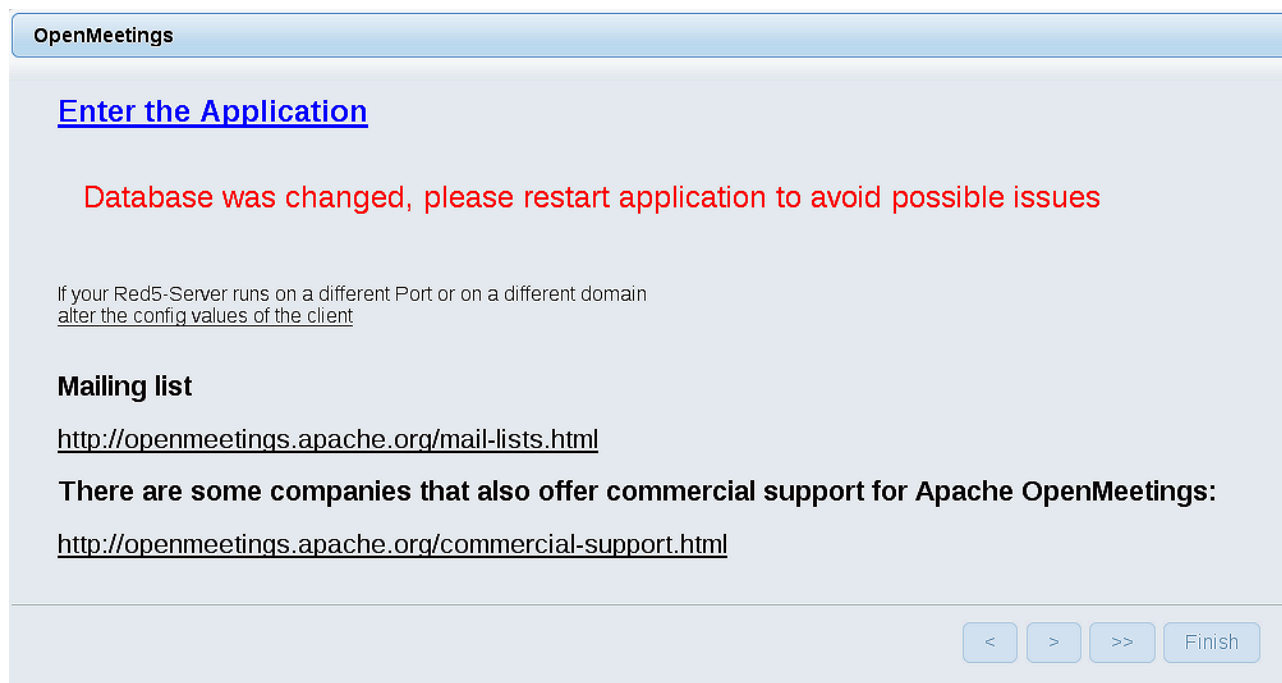


The screenshot shows the 'OpenMeetings' window after clicking the next button. The title bar is 'OpenMeetings'. The main content area contains the text 'Please click "Finish" button to start installation!' and a large empty text input field. At the bottom right, there are navigation buttons: '<', '>', '>>', and '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
```



**OpenMeetings**

[Enter the Application](#)

**Database was changed, please restart application to avoid possible issues**

If your Red5-Server runs on a different Port or on a different domain  
alter the config values of the client

**Mailing list**  
<http://openmeetings.apache.org/mail-lists.html>

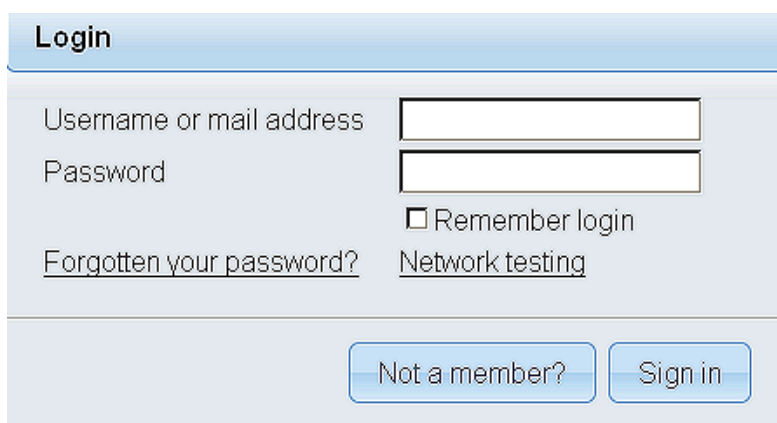
**There are some companies that also offer commercial support for Apache OpenMeetings:**  
<http://openmeetings.apache.org/commercial-support.html>

< > >> Finish

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

Remember login

[Forgotten your password?](#) [Network testing](#)

[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 acces to OpenMeetings, will be:

<http://localhost:5080/openmeetings>

Remember to open in the server the two following ports:

**1935 5080**

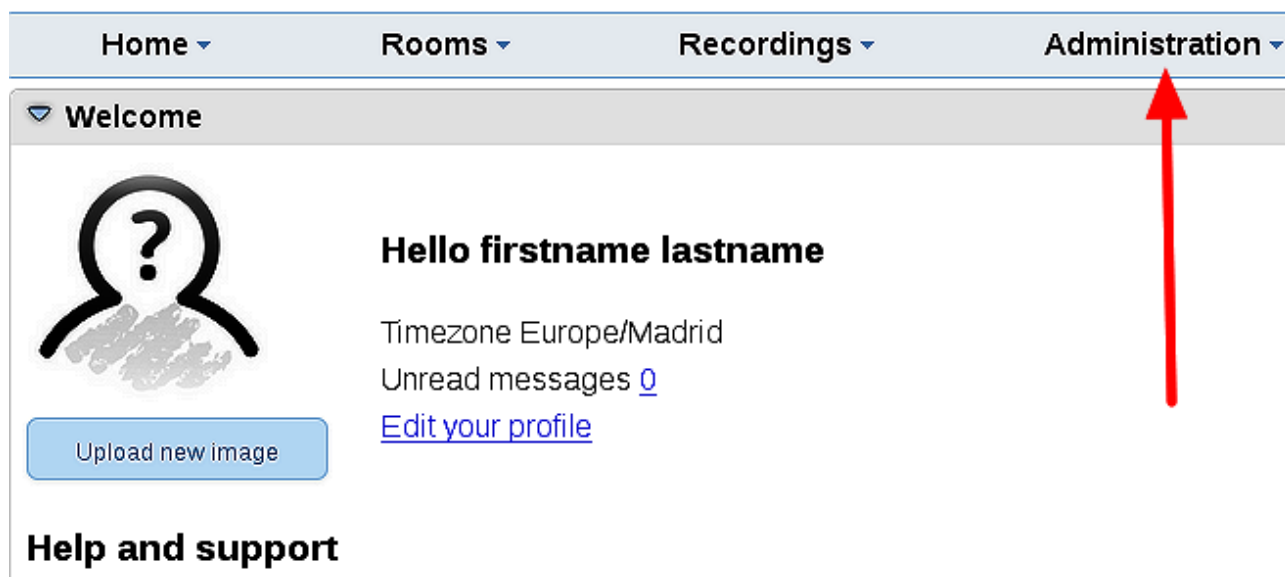
...in order that it could accede to OpenMeetings from other machines, in Lan or Internet.

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:

Home ▾ Rooms ▾ Recordings ▾ Administration ▾

50 [Search]

ID	Key	Value
1	crypt.class.name	org.apache.openmeetings.util.crypt.SCryptImplementation
2	allow.frontend.register	true
3	allow.soap.register	true
4	allow.oauth.register	true
5	default.group.id	1
6	mail.smtp.server	localhost
7	mail.smtp.port	25
8	mail.smtp.system.email	noreply@openmeetings.apache.org
9	mail.smtp.user	
10	mail.smtp.pass	
11	mail.smtp.starttls.enable	false
12	mail.smtp.connection.timeout	30000
13	mail.smtp.timeout	30000
14	application.name	OpenMeetings
15	default.lang.id	8
16	document.dpi	150
17	document.quality	90
18	path.imagemagick	
19	path.sox	
20	path.ffmpeg	
21	path.office	
22	dashboard.rss.feed1	http://mail-archives.apache.org/mod_mbox/openmeetings-user/?format=atom
23	dashboard.rss.feed2	http://mail-archives.apache.org/mod_mbox/openmeetings-dev/?format=atom
24	send.email.at.register	false
25	send.email.with.verification	false

**Configuration**

Type: string

Key: path.ffmpeg

Value:

Last update: Oct 17, 2017 5:54:57 PM

Updated by: toro

Comment: Path To FFMPEG

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

<https://openmeetings.apache.org/mailling-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 download:

[OpenMeetings Wallpaper Download](#)

A dvd live iso with OpenMeetings 4.0.11 on Ubuntu 18.04 lts and other OpenMeetings 5.0.1 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).