Installation of Apache OpenMeetings 4.0.6 on Windows 10

This tutorial is made based on a fresh installations of

Windows 10 64bit

It is tested with positive result. We will use the Apache's binary version OpenMeetings 4.0.6 stable, that is to say will suppress his compilation. It is done step by step.

15-10-2018

Starting…

1)

------ Installation of Ghostscript and 7-Zip ------

Download ghostscript and 7-Zip:

http://info.elf.stuba.sk/packages/pub/pc/utiltext/gs925w64.exe

http://www.7-zip.org/a/7z1805-x64.exe

...please, install both programs by default.

2)

------ Installation of Oracle Java 1.8 ------

OpenMeetings **4.0.6** need Java **1.8** to work. So, we install Oracle Java 1.8.

We download it:

http://gate.bitel.ru/pub/soft/java/j2se/1.8.x/jdk-8u181-windows-x64.exe

Please, install it by default...**"jdk-8u181-windows-x64.exe".**

3)

------ Installation of LibreOffice ------

LibreOffice is need it to convert to pdf the uploaded office files.

We download it:

http://archive.services.openoffice.org/pub/mirror/ALL_primary_servers/rsync/
rsync.documentfoundation.org/tdf-pub/libreoffice/stable/6.0.4/win/x86_64/
LibreOffice_6.0.4_Win_x64.msi

...and install it by default.

4)

------ Installation ImageMagick and Sox ------

ImageMagick, will work the image files, png, jpg, gif, etc. We download it:

http://ftp.icm.edu.pl/packages/ImageMagick/binaries/ImageMagick-7.0.7-17-portable-Q16-x64.zip

...uncompress it in C:\. Will look so:

C:\ImageMagick-7.0.7-17-portable-Q16-x64

Sox, work the sound. We´ll download it:

https://sourceforge.net/projects/sox/files/sox/14.4.2/sox-14.4.2-win32.exe/download

...and install it by default.

5)

------ Installation of Adobe Flash Player ------

OpenMeetings even need Adobe Flash Player for cam and sound. We install it

http://get.adobe.com/es/flashplayer/

...unmark "**Optional oferts**", and press the button "**Install now**".
Will download a file that we must install it.

6)

------ Compilation of FFmpeg ------

I´ve based at this url to compile ffmpeg:

http://www.thingsiuse.org/2014/06/building-ffmpeg-for-h264-and-aac.html

Make a folder called **ffb** in the root drive C: or your own.
The path look so:

C:\ffb

Download the necesary base to compile (71mb size):

http://xhmikosr.1f0.de/tools/msys/MSYS_MinGW-w64_GCC_710_x86-x64_Full.7z

Uncompress this file, and inside will find a folder called **MSYS,** move it to C:\ffb.
Look so:

C:\ffb\MSYS

...we go there to, and launch msys.bat file:

C:\ffb\MSYS\msys.bat

...will open a terminal and will create automatically two folders called **home** and other with the name of the Windows user. Look so:

C:\ffb\MSYS\home\your-user

A)
Download the files and move them to: C:\ffb\MSYS\home\your-user

https://sourceforge.net/projects/lame/files/lame/3.100/lame-3.100.tar.gz/download

https://sourceforge.net/projects/opencore-amr/files/fdk-aac/fdk-aac-0.1.6.tar.gz/download

https://download.videolan.org/x264/snapshots/x264-snapshot-20180613-2245.tar.bz2

http://ffmpeg.org/releases/ffmpeg-4.0.tar.bz2

...remember move them..

B)
Start the compilation. Spend about 30 to 40 minutes.

Launch the file C:\ffb\MSYS\msys.bat, *if the terminal is not open*, and copy and paste:

----- **Lame** -----

```
tar xvfz lame-3.100.tar.gz

cd ~/lame-3.100
```

(Only one line with space between both)

```
./configure --prefix=/usr/local/x86_64-w64-mingw32 --host=x86_64-w64-mingw32 --enable-static --disable-shared --disable-decoder --enable-nasm

make clean && make

make install

cd ~
```

----- **Fdk-aac** -----

```
tar xvfz fdk-aac-0.1.6.tar.gz

cd ~/fdk-aac-0.1.6
```

(Only one line without space between both)

```
./configure --prefix=/usr/local/x86_64-w64-mingw32 --host=x86_64-w64-mingw32 --enable-shared=no

make clean && make

make install

cd ~
```

----- **X-264** -----

```
tar xvjf x264-snapshot-20180613-2245.tar.bz2

cd ~/x264-snapshot-20180613-2245
```

(Only one line without space between both)

./configure --prefix=/usr/local/x86_64-w64-mingw32 --cross-prefix=x86_64-w64-mingw32- --host=x86_64-w64-mingw32 --enable-static --bit-depth=8 --enable-win32thread

make clean && make

make install

cd ~

----- **FFmpeg** -----

tar xvjf ffmpeg-4.0.tar.bz2

cd ~/ffmpeg-4.0

(Only one line. The red text is a command. Lines 3 and 4 with space between both)

CPPFLAGS="$CPPFLAGS -I/usr/local/x86_64-w64-mingw32/include" ./configure --extra-ldflags='-L/usr/local/x86_64-w64-mingw32/lib' --prefix=/usr/local/x86_64-w64-mingw32 --cross-prefix=x86_64-w64-mingw32- --target-os=mingw32 --enable-w32threads --arch=x86_64 --enable-runtime-cpudetect --disable-debug --enable-static --disable-shared --disable-ffplay --enable-gpl --enable-version3 --enable-nonfree --enable-libmp3lame --enable-libfdk-aac --enable-libx264

….wait...and don´t press any key after **Enter**. It is compiling, even look stoped.

make clean && make

make install

cd ~

....the compilation of FFmpeg is Finished.

You can find the compiled files in:

C:\ffb\MSYS\local\x86_64-w64-mingw32\bin

...these are: ffmpeg.exe, ffprobe.exe, lame.exe and x264.exe

Now we make a folder called **ffmpeg** at **C:**. Look so:

C:\ffmpeg

...and copy the four compiled files to there. Later we´ll configure his path.

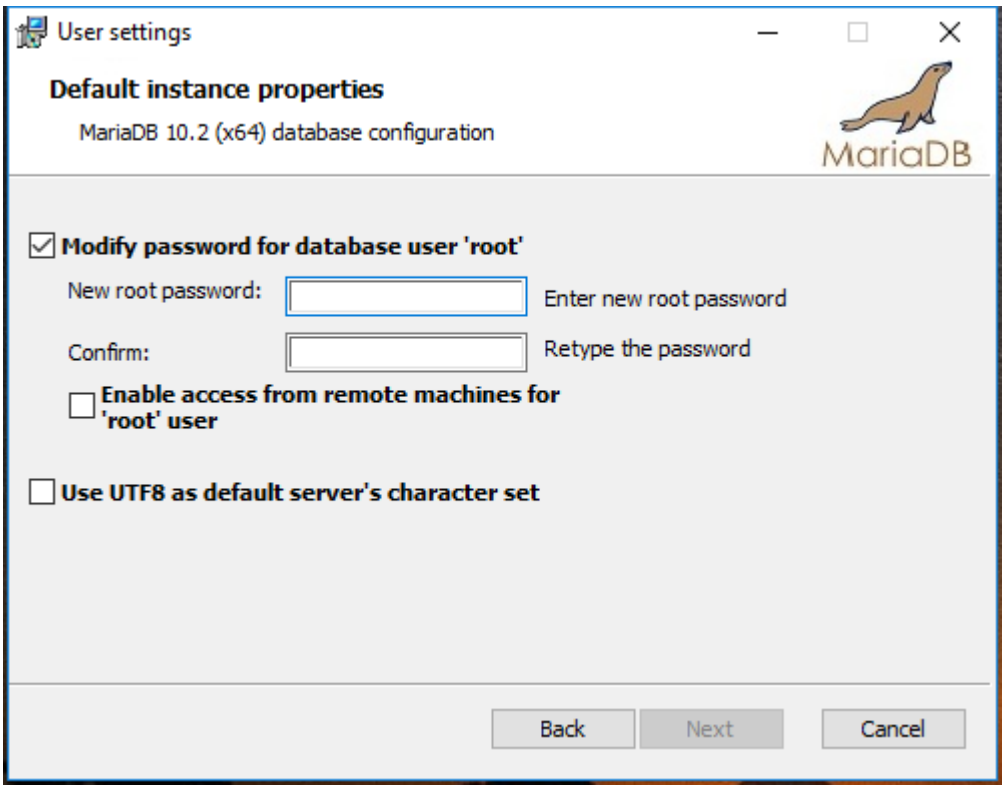
7)

------ **Installation of MariaDB data server** ------

MariaDB is the data server. Will download:

http://archive.mariadb.org/mariadb-10.2.15/winx64-packages/mariadb-10.2.15-winx64.msi

...and install the file unloaded "**mariadb-10.2.15-winx64.msi".**
Install it by default, and will ask for a root MariaDB password, choose one that you like:



When finish, launch the MariaDB terminal:

Start Menu → MariaDB 10.2 (x64) --> Command Prompt (MariaDB 10.2)

...make a database with his own user for OpenMeetings:

mysql -u root -p

...will ask for the root password that you have just choosen, type it:

MariaDB [(none)]> CREATE DATABASE open406 DEFAULT CHARACTER SET 'utf8';

With this command we has created a database called open406.
Now we create an user on this database. User password must be of 8 digits minimum:

(Only one line with space between both)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON open406.* TO 'hola'@'localhost' IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;

* open406 .....is the database name.
* hola ……is the user name for this database.
* 1a2B3c4D ..is the password for this user.

You can change the data...but remember it! Later we´ll need it.

Now, we leave MariaDB:

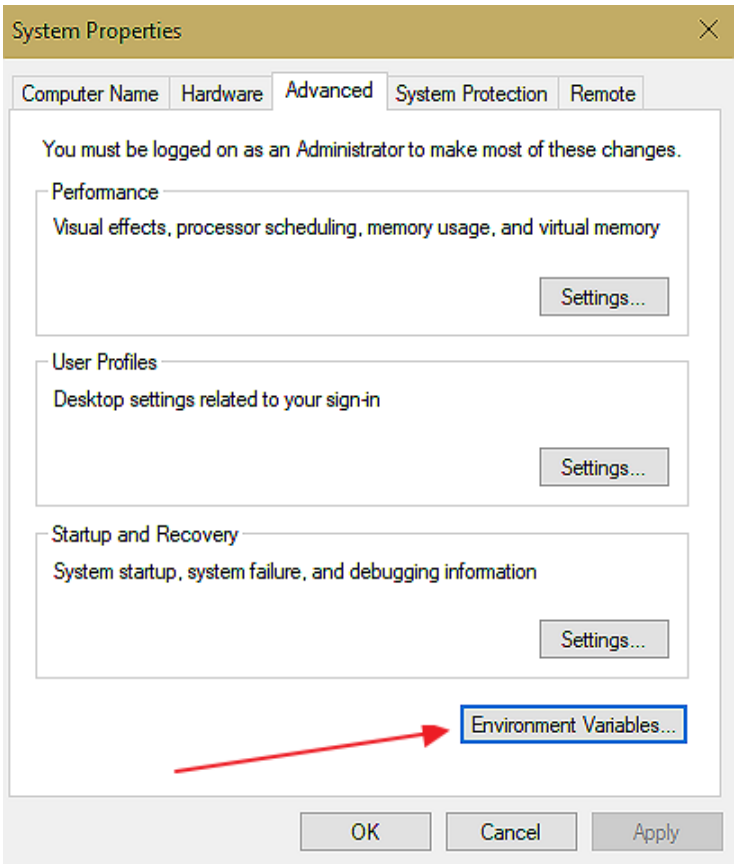
MariaDB [(none)]> quit

8)

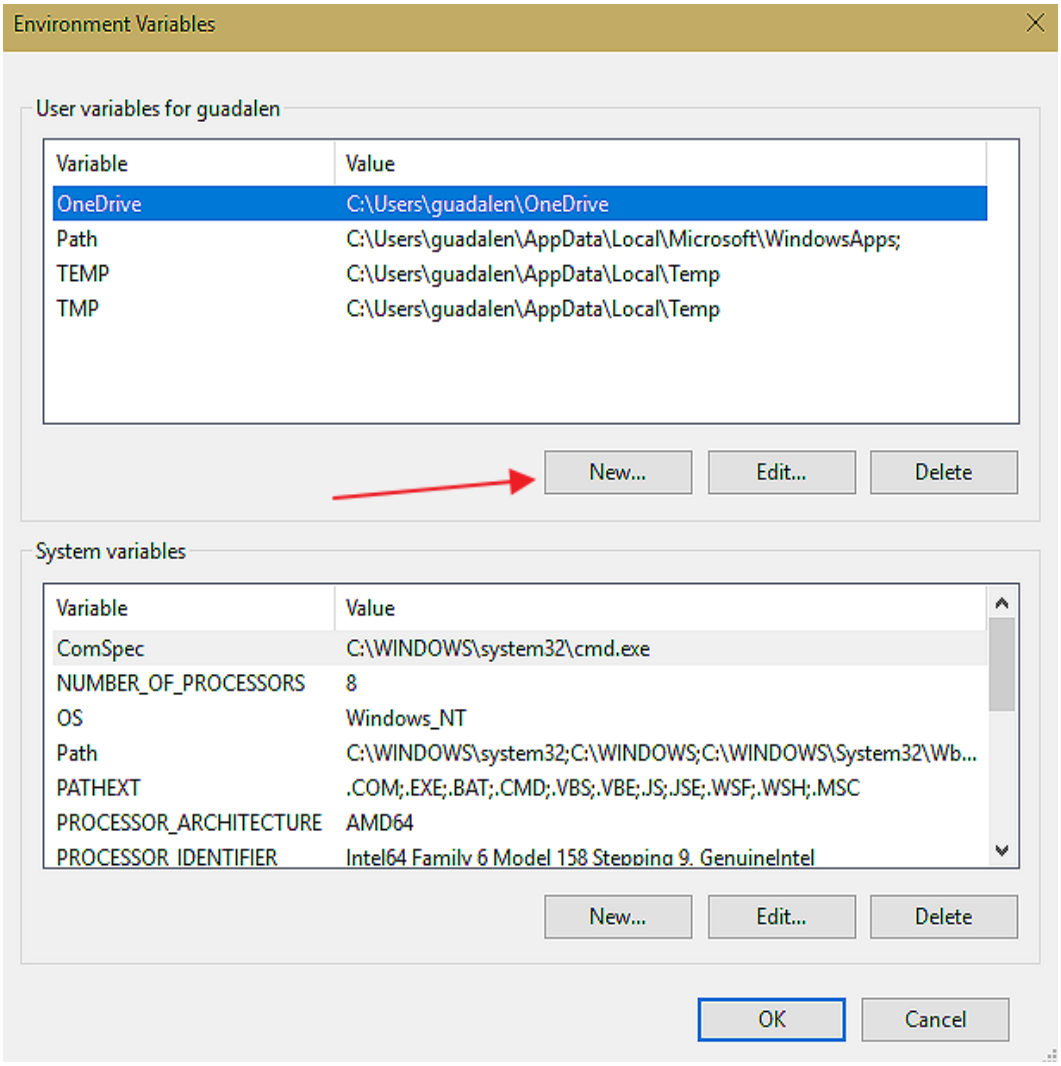
------ Environment Variables Configuration ------

Now we configure **"**Environment Variables**",** so Windows will know where find Java and MariaDB.

Please go to: **Control Panel → System and security → System → Advanced System Configuration → Environment Variables**

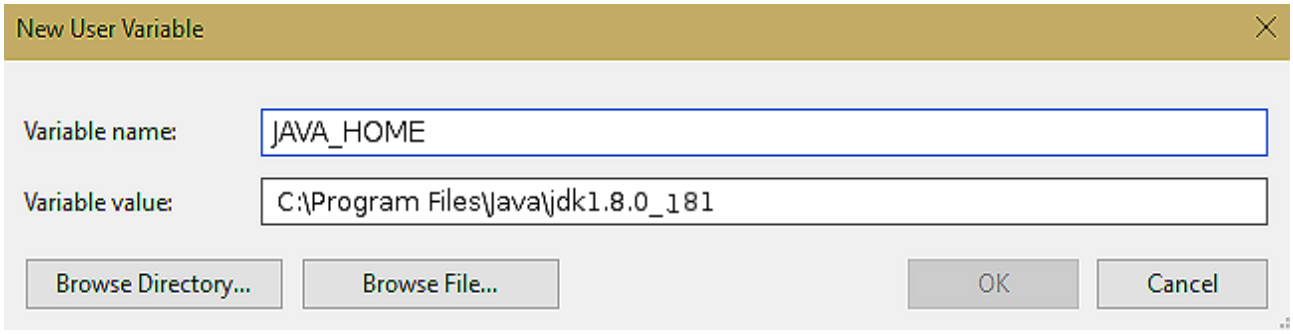


...will show this window:



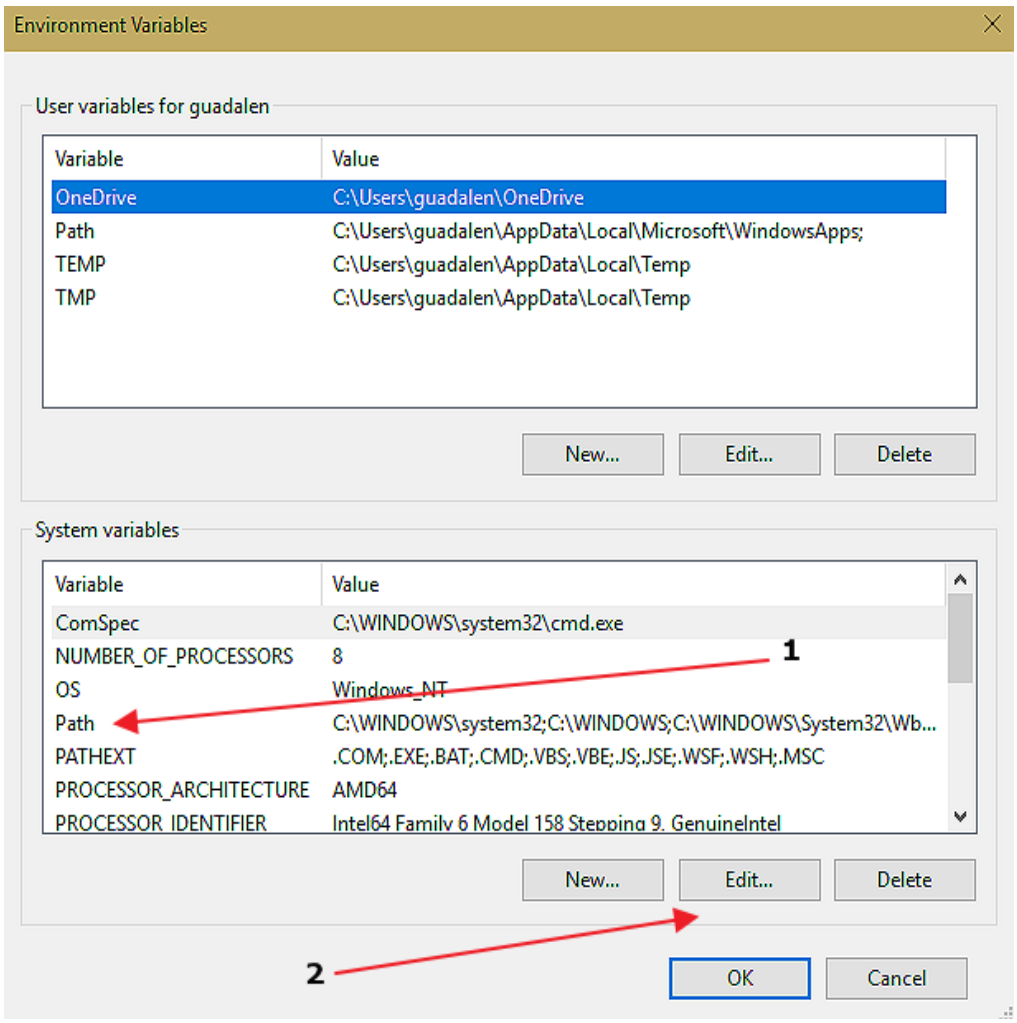
...press the up button "**New**" and make a variable:

Variable name == JAVA_HOME
Variable value == C:\Program Files\Java\jdk1.8.0_181

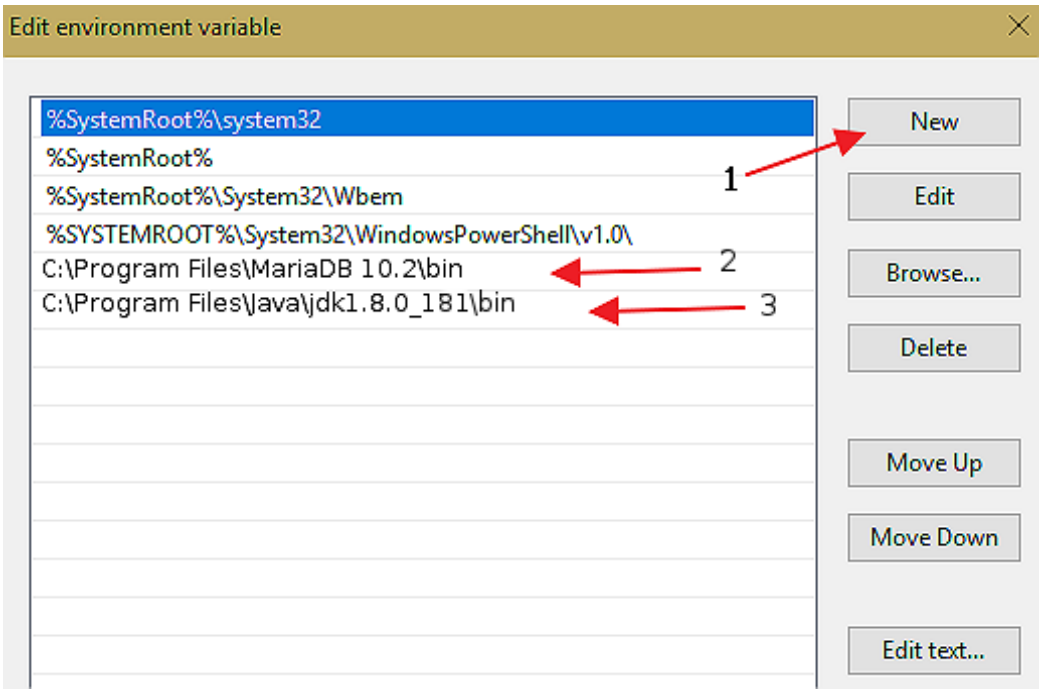


...and press **"OK"** button.

Now make click in: **System variables** → clic on **Path** (line), and later in **Edit** button



...and will open a new window:



...press the button **"New"** and copy-paste, to left, the **MariaDB** path:

C:\Program Files\MariaDB 10.2\bin

...press again the button **"New"** and paste, to left, the Java path:

C:\Program Files\Java\jdk1.8.0_181\bin

9)

------ **Installation of OpenMeetings** ------

Download the red5-OpenMeetings file:

http://archive.apache.org/dist/openmeetings/4.0.6/bin/apache-openmeetings-4.0.6.zip

...uncompress it in C:\. Look so:

C:\apache-openmeetings-4.0.6

...rename it to:

C:\red5406

Download and install the connector between MariaDB and OpenMeetings:

http://repo1.maven.org/maven2/mysql/mysql-connector-java/5.1.46/mysql-connector-java-5.1.46.jar

...and copy-install it to:

C:\red5406\webapps\openmeetings\WEB-INF\lib

10)

------ **Launch red5-OpenMeetings** ------

Launch MariaDB, if is not. For that press in the keyboard:

Windows+x --> **Execute** --> type **cmd**

...will open a terminal where we type:

C:\WINDOWS\system32\services.msc

...will open the **Services** window. Go to **MySQL** (this is our MariaDB), right click on it and click on **Initialize.**

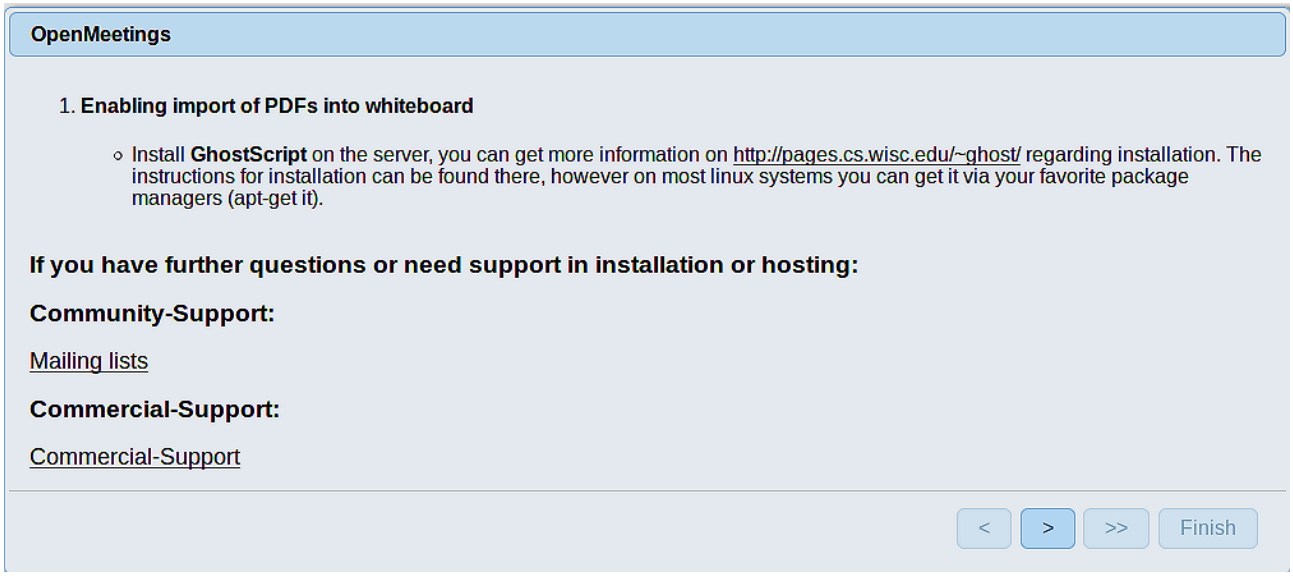
Now we launch red5-OpenMeetings. Please, double click on the file:

C:\red5406\red5.bat

...wait 40 seconds minimum, till red5 is running completly, later go to:

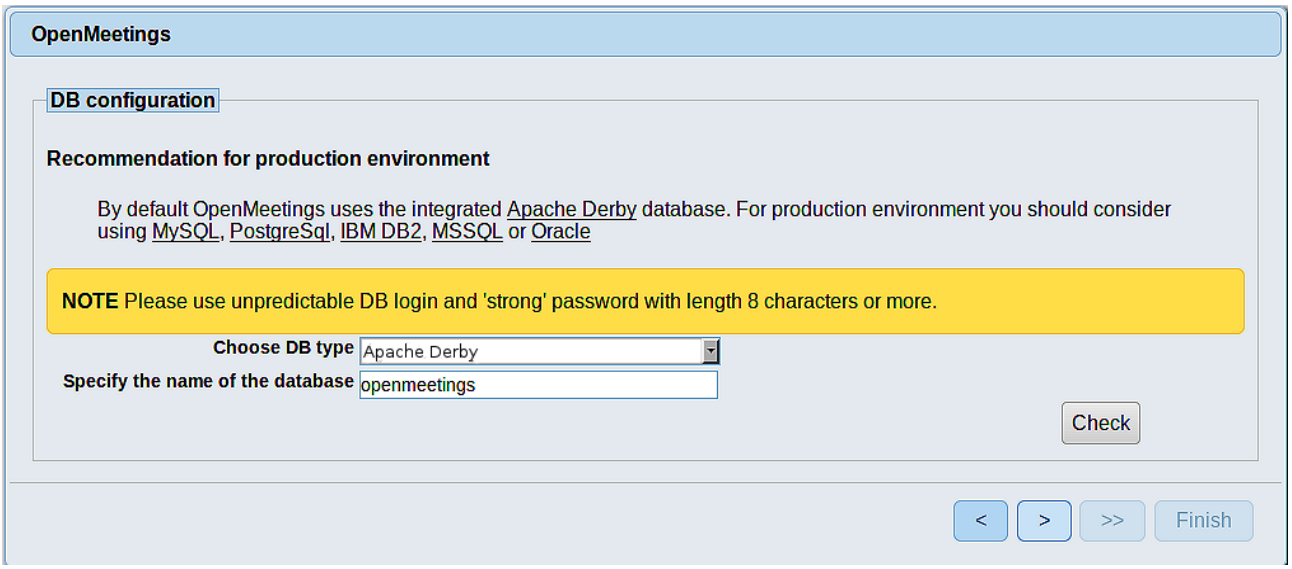
http://localhost:5080/openmeetings/install

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

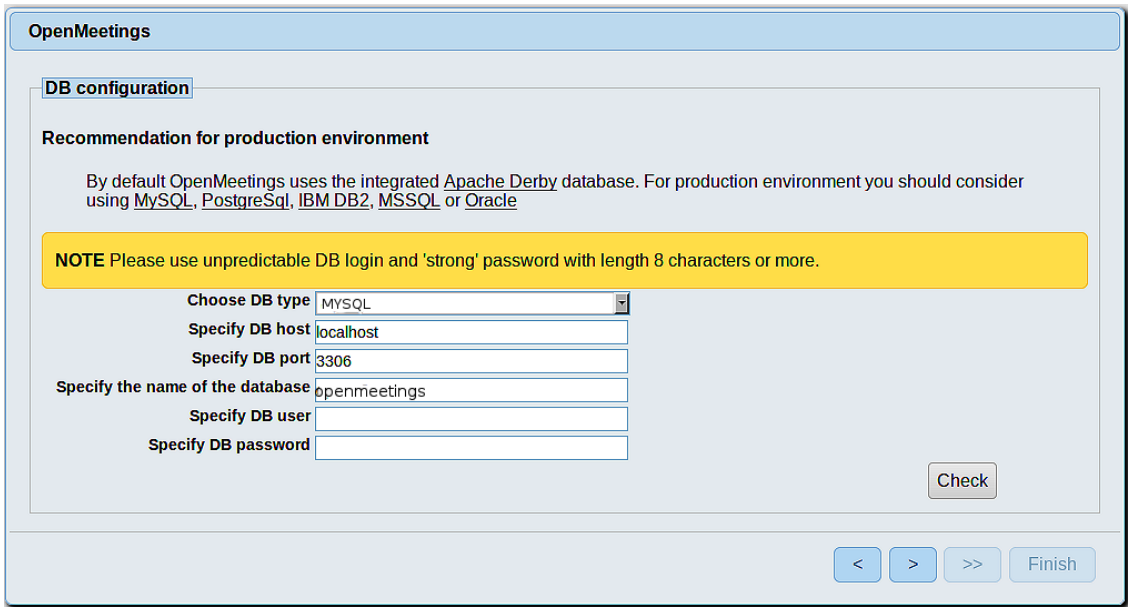


...press on > button (bottom), and will show the default database configuration

with Derby, but we employ MySQL (MariaDB),



...then, scroll and **Choose DB type** to MySQL:



...will show the database name configuration by default.
We must introduce the database name, user name we did for our database, at the step 7, and his password:

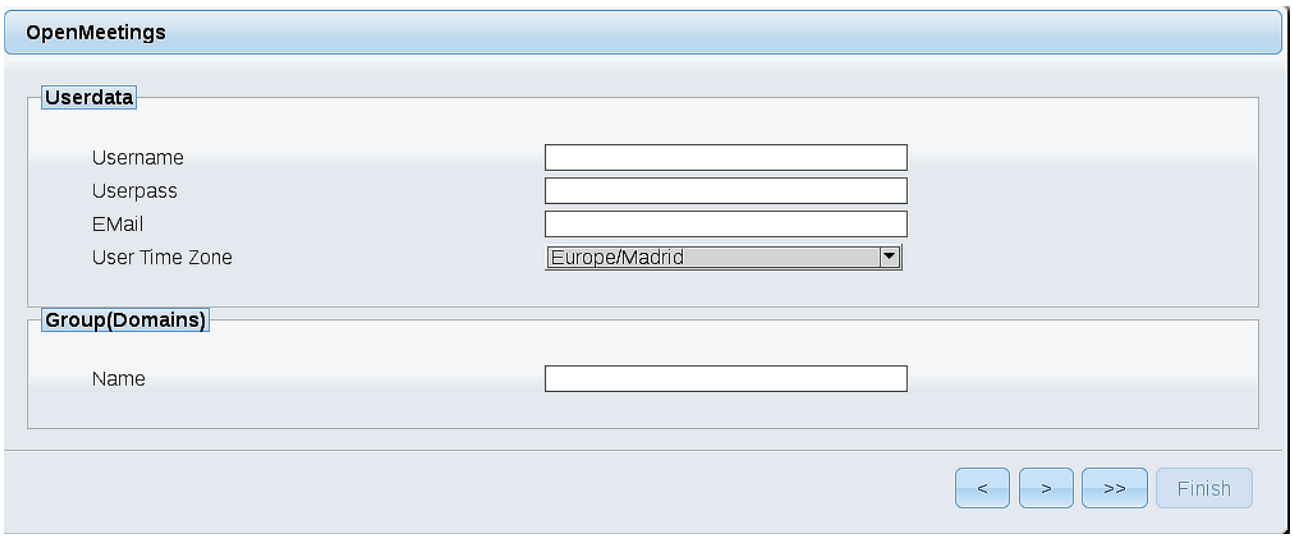
Specify the name of the database = open406

Specify DB user = hola

Specify DB password = 1a2B3c4D

...if you choose any other data, type it here.

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.

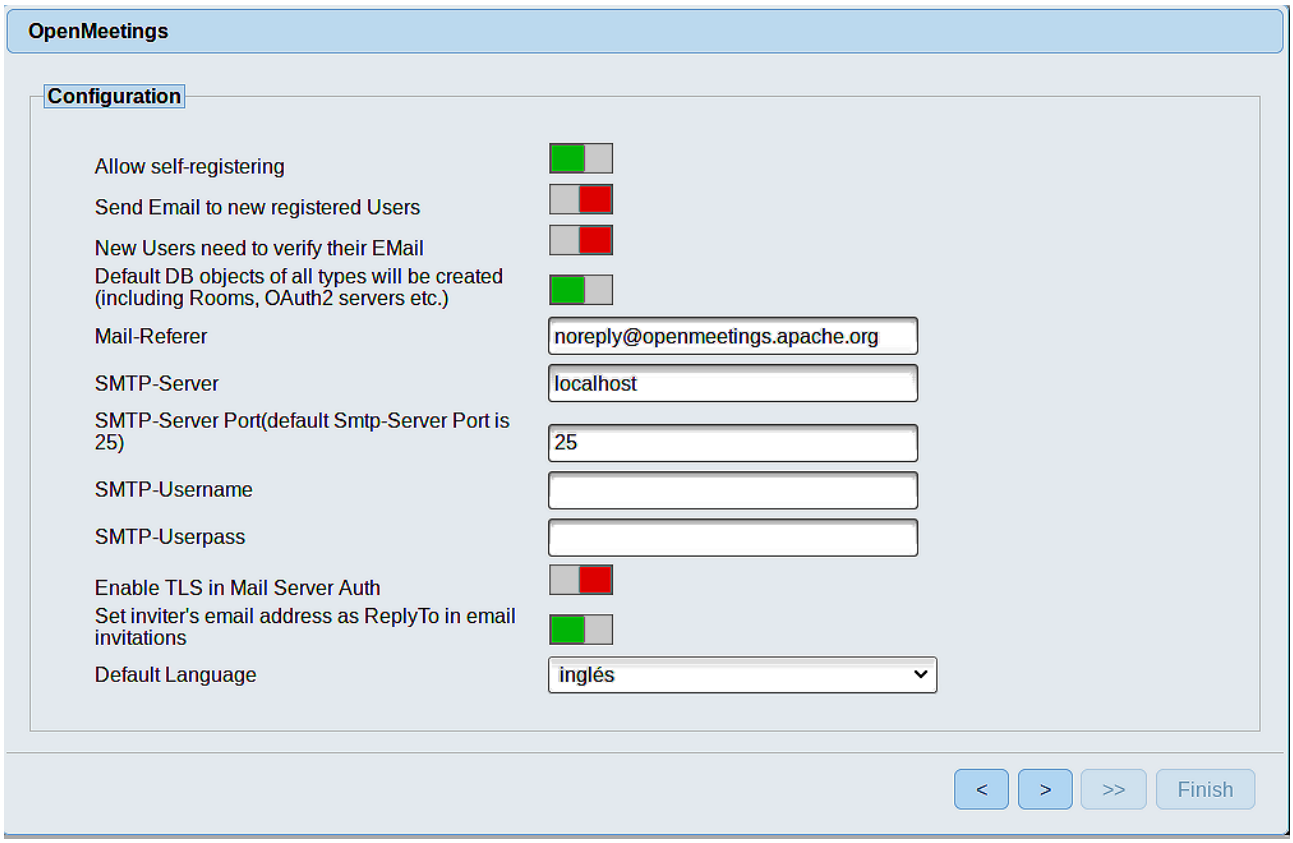
Userpass = password ...for the previous user.

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:

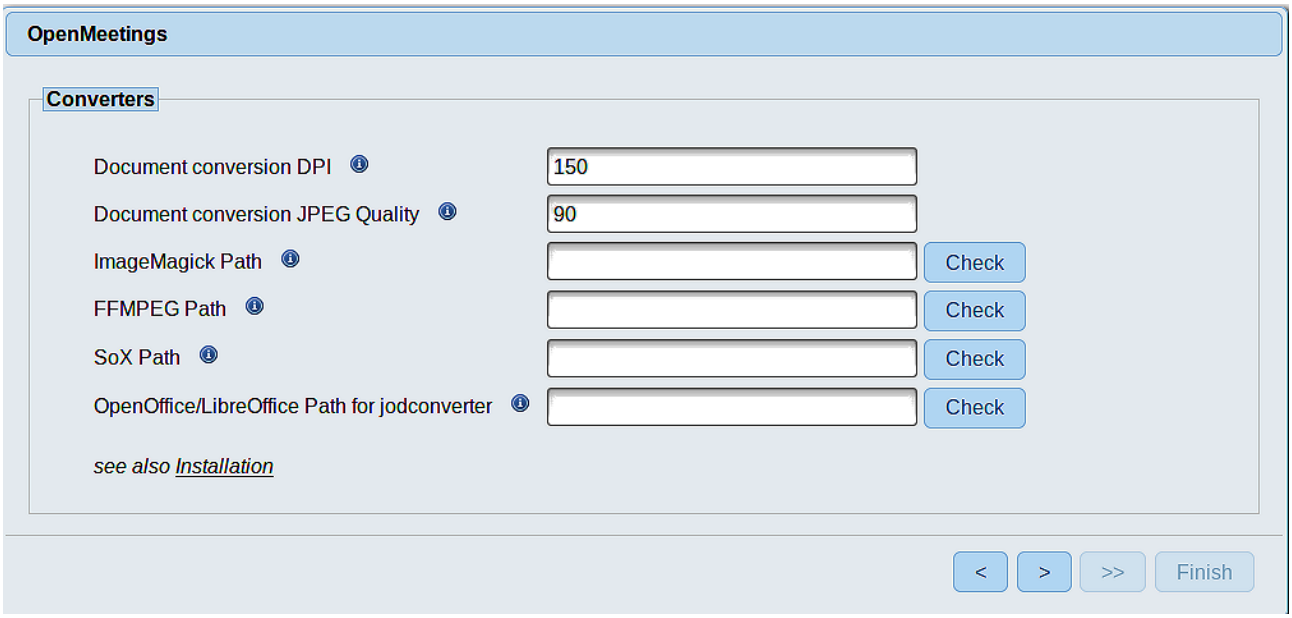


A valid example to configure the mail server with Gmail, is as follows:
(replace **john@gmail.com** with your real Gmail account)

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
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 == C:\ImageMagick-7.0.7-17-portable-Q16-x64

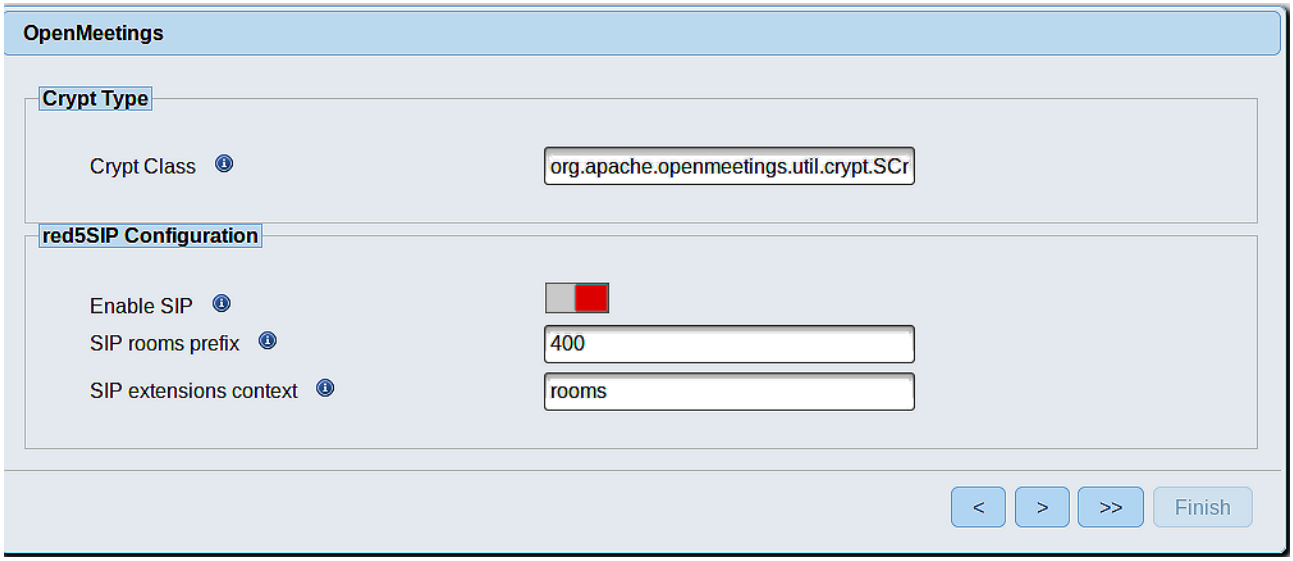
FFMPEG Path == C:\ffmpeg

SOX Path == C:\Program Files (x86)\sox-14-4-2

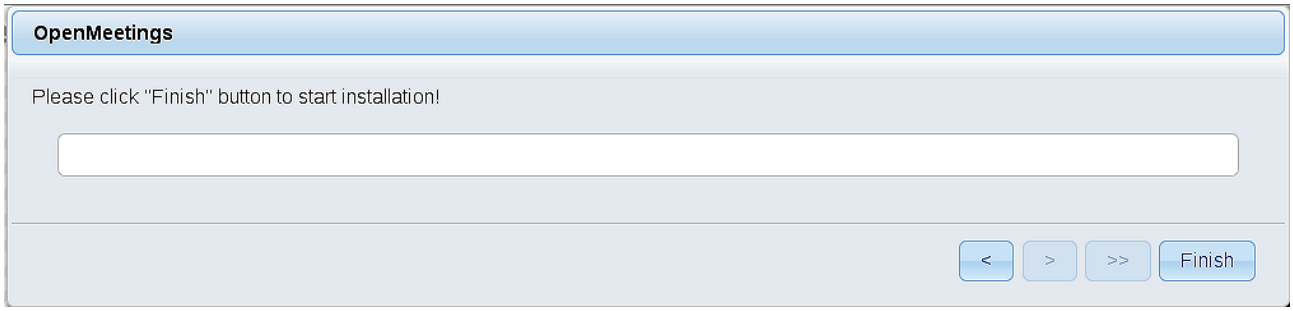
OpenOffice/LibreOffice Path for jodconverter == C:\Program Files\LibreOffice

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:



Push the button > and will show this window:



Press **Finish** button ...wait a seconds untill the tables are fill in the database.

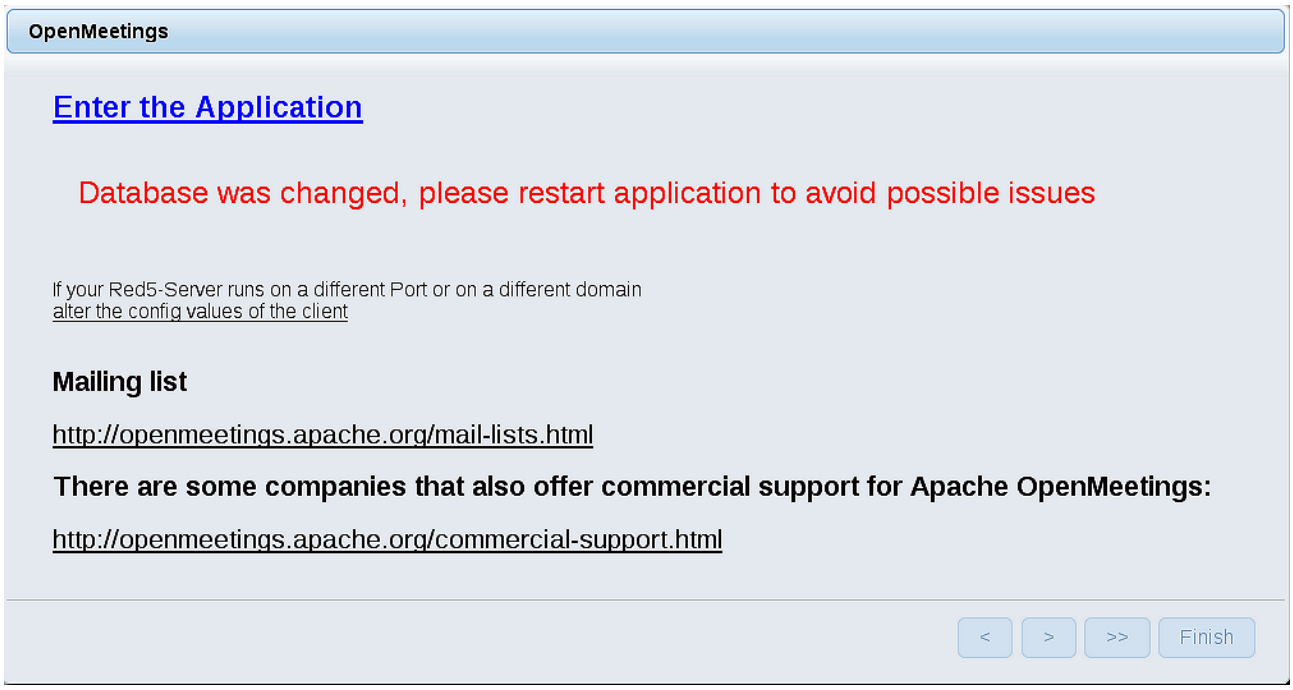
When has concluded, this another page will appear. Don´t clic on **Enter the Application**.
First is need it to restart the server.
For that, click on the terminal where we launch red5-OpenMeetings, and press in the keyboard:

Ctrl+c

...will ask something, you type **Y** and press **Enter**.
To launch again, double click on the **red5.bat** file:

C:\red5406\red5.bat

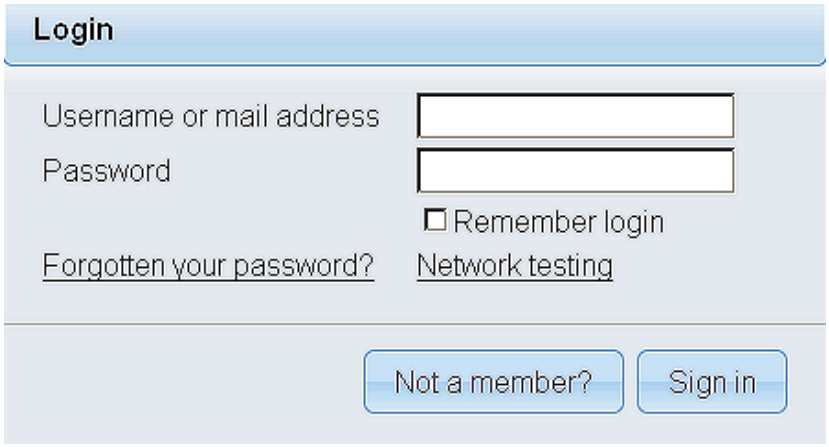
...wait a seconds to run red5 completly, and…



...now yes, you can click 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 choosen during the installation, push **Sign in** button, and…

...**Congratulations!**

The next time that you like accede to OpenMeetings would be:

http://localhost:5080/openmeetings

Remember to open in the server the two following ports:

1935 5080

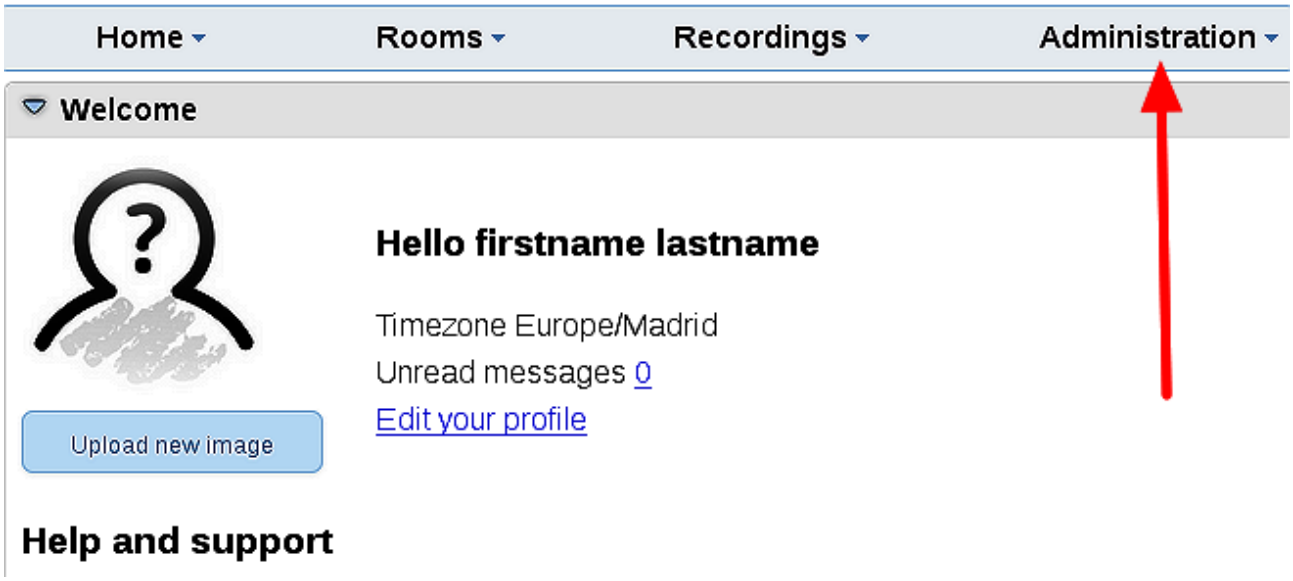
...in order that it could accede to OpenMeetings from other machines in LAN or Internet.

11)

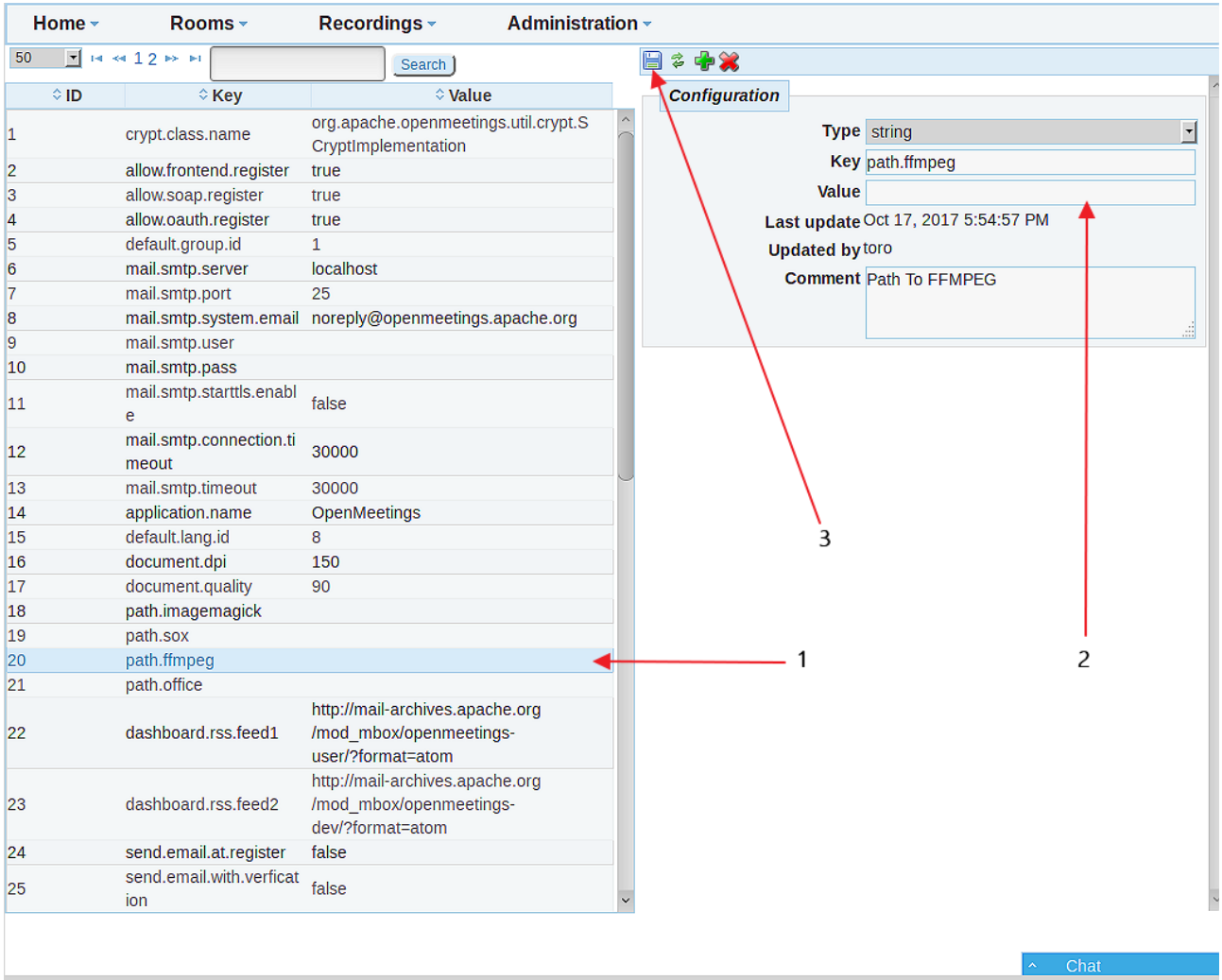
------ **OpenMeetings's Configuration** ------

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