Installation of Apache OpenMeetings 4.0.4 on Centos 7

This tutorial is made based on fresh installations of

CentOS-7-x86_64-Minimal-1708.iso

It is tested with positive result. We will use the Apache's binary version OpenMeetings 4.0.4 stable, that is to say will suppress his compilation. It is done step by step.

18-7-2018

Please, be connected to Internet in all the process tu run any server.

Starting...

1)
At first place we must modify Selinux level security for the installation:

yum install -y nano

sudo nano /etc/selinux/config

…modify:

SELINUX=enforcing

...to

SELINUX=**permissive**

2)

------ Update Operative System ------

Update operative system:

yum update -y

...and reboot, for kernel changes and the new Selinux configuration take effect:

reboot

3)

------ ADD Repos ------

yum install -y wget

EPEL:

wget http://epel.mirror.nucleus.be/7/x86_64/Packages/e/epel-release-7-11.noarch.rpm

sudo rpm -Uvh epel-release-7*.rpm

Nux

(Only one line without space between both)

rpm -Uvh http://li.nux.ro/download/nux/dextop/el7/x86_64/nux-dextop-release-0-5.el7.nux.noarch.rpm

Adobe repo 64-bit x86_64 ## For Flash player.

rpm -ivh http://linuxdownload.adobe.com/adobe-release/adobe-release-x86_64-1.0-1.noarch.rpm

rpm --import /etc/pki/rpm-gpg/RPM-GPG-KEY-adobe-linux

yum update -y

4)

------ Installation of OpenJava 1.8 ------

Java **1.8** is necessary for OpenMeetings **4.0.4**. We install OpenJava 1.8:

yum install -y java-1.8.0-openjdk

...and icedtea-web for can access to record and share desktop in OpenMeetings:

yum install -y icedtea-web

Maybe you have installed various versions of Java. We select the just installed OpenJava 1.8:

update-alternatives --config java

And to see if the selected version is active:

java -version

5)

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

OpenMeetings will need LibreOffice to convert to pdf the uploaded office files. Install it.

Maybe it is installed, but for iso server:

yum -y install libreoffice libreoffice-headless

6)

------ Installation of necessary packages and libraries ------

Will install packages and libraries we´ll need later:

(All in only one line. A space between 1ªand 2ª. Thogether 2ª and 3ª)

yum install -y libjpeg libjpeg-devel ghostscript freetype freetype-devel unzip gcc gcc-c++ ncurses ncurses-devel make zlib zlib-devel libtool bison bison-devel openssl-devel bzip2 bzip2-devel file-roller git autoconf automake pkgconfig tomcat-native nmap vlc

7)

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

ImageMagick, work the images files jpg, png, gif, etc. We install it and some libraries:

yum install -y ImageMagick giflib giflib-devel giflib-utils

Sox, work the sound. Will compile it:

cd /opt

wget http://ftp.icm.edu.pl/packages/sox/14.4.2/sox-14.4.2.tar.gz

tar xzvf sox-14.4.2.tar.gz

cd /opt/sox-14.4.2

./configure

make && make install

cd /opt

8)

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

OpenMeetings even need Adobe Flash Player for cam.

yum install -y flash-plugin

9)

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

FFmpeg work with video. Will install a paquets, libraries and vlc to play the recordings:

(Only one line without space between them)

yum install -y glibc alsa-lib-devel faac faac-devel faad2 faad2-devel gsm gsm-devel imlib2 imlib2-devel lame-devel vorbis-tools theora-tools libvpx-devel vlc autoconf automake cmake freetype-devel gcc gcc-c++ git libtool make mercurial pkgconfig zlib-devel curl

This ffmpeg compilation is based on this url, updated file versions 18-7-2018:

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

I made a script to compile and install ffmpeg on Centos. It is tested and is ok.
The result of any recording we do in OpenMeetings will be in mp4 format.

When is finished, will appear a text:

FFmpeg Compilation is Finished!

So, we download the script:

cd /opt

wget https://cwiki.apache.org/confluence/download/attachments/27838216/ffmpeg_centos7.sh

...concede execution permission to it:

chmod +x ffmpeg_centos7.sh

...and run it (be connected to Internet). The compilation will spend about 30 minutes:

./ffmpeg_centos7.sh

All the compiled files will be installed in: /usr/local/bin

When finish, please continue to **step 10).**

10)

------ Installation MariaDB data server ------

MariaDB is the database server.

We install it:

yum install -y mariadb-server

...and run mariadb:

systemctl start mariadb.service

Give a password to mariadb root . Please, modify new-password by your own.

mysqladmin -u root password new-password

Make a database for OpenMeetings. User password must be of 8 digits minimum:

mysql -u root -p

...will ask for the root password you does just now:

MariaDB [(none)]> CREATE DATABASE open404 DEFAULT CHARACTER SET 'utf8';

Now we create a user with all permission on this open404 database.

(Only one line with space between both)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON open404.* TO 'hola'@'localhost' IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;

* open404 ..... name of the database
* hola ..... user for that database
* 1a2B3c4D ..... password of that user

You can change the data...but remember it! Later we´ll need it. Now we leave MariaDB:

MariaDB [(none)]> quit

11)

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

We´ll install OpenMeetings in /opt/red5404. All the following information will be based on this directory.

Call to our folder of installation red5404

Make the folder:

mkdir /opt/red5404

cd /opt/red5404

...and download the OpenMeetings file:

wget http://archive.apache.org/dist/openmeetings/4.0.4/bin/apache-openmeetings-4.0.4.zip

unzip apache-openmeetings-4.0.4.zip

...save the unloaded file to /opt:

mv apache-openmeetings-4.0.4.zip /opt

Download and install the connector between OpenMeetings and MariaDB:

cd /opt

(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 where must be:

cp /opt/mysql-connector-java-5.1.46.jar /opt/red5404/webapps/openmeetings/WEB-INF/lib

12)

------ Script to launch red5-OpenMeetings ------

We´ll download the script to run red5-OpenMeetings:

cd /opt

wget https://cwiki.apache.org/confluence/download/attachments/27838216/red5-2

...copy it to where must be:

cp red5-2 /etc/init.d/

...concede execution permission:

chmod +x /etc/init.d/red5-2

If you made the installation in any other different path to /opt/red5404, please edit the script and modify the line:

RED5_HOME=/opt/red5404

...to

RED5_HOME=/your-path-installation

13)

------ Run red5-OpenMeetings ------

Restart MariaDB:

systemctl restart mariadb.service

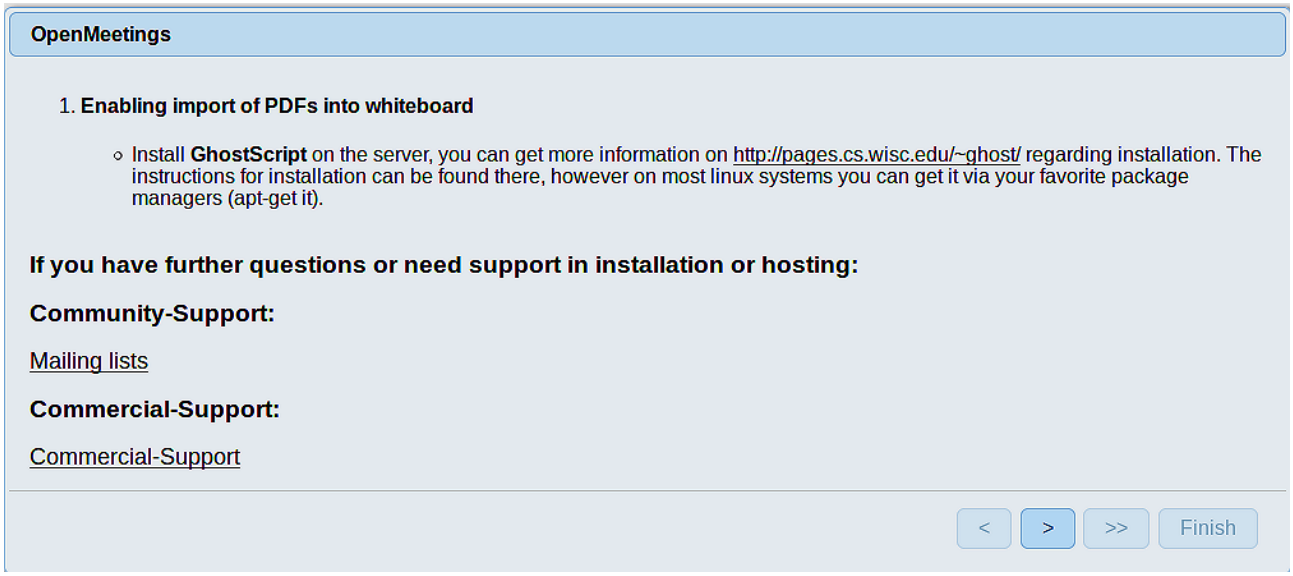
...and run red5-OpenMeetings. Please, be connected to Internet:

/etc/init.d/red5-2 start

...wait a minimum of 40 seconds in order red5 run completly. Then, go with your browser to:

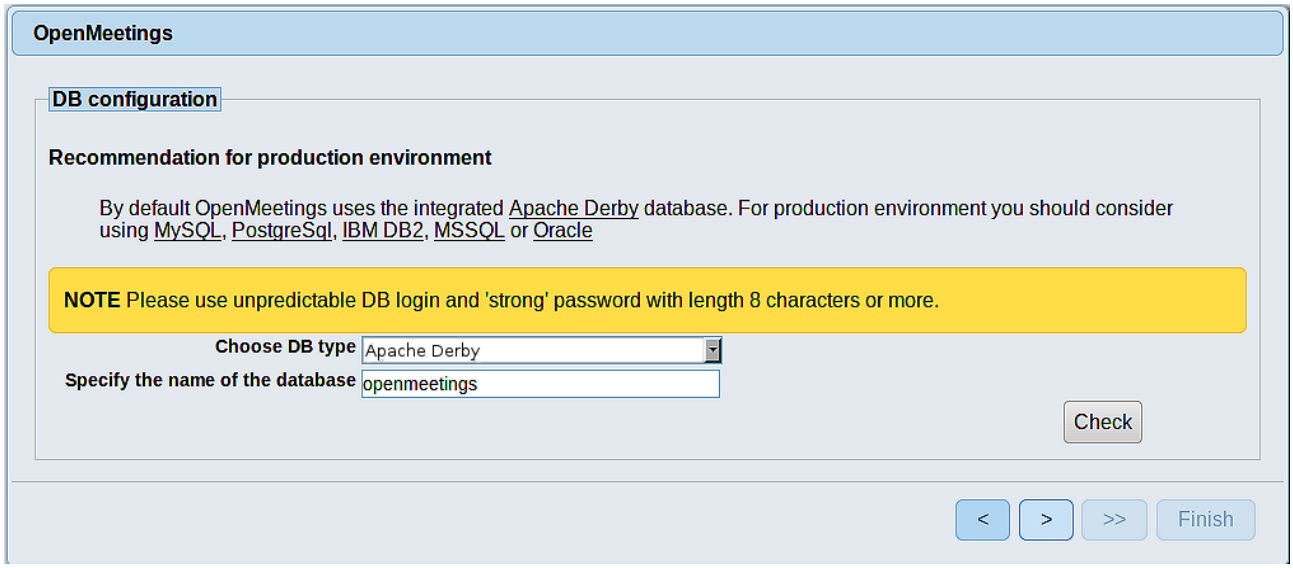
http://localhost:5080/openmeetings/install

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

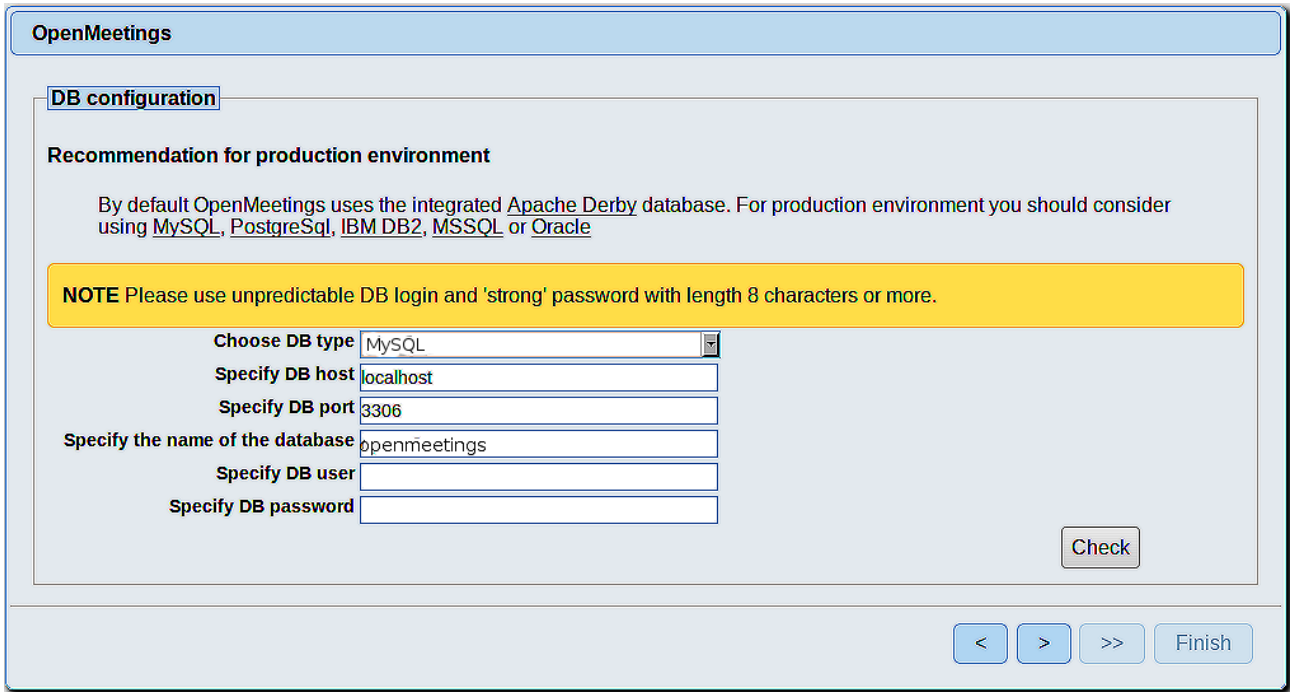


...push on > (bottom), and will show the default database configuration with Derby, but we

employ MySQL (MariaDB):



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



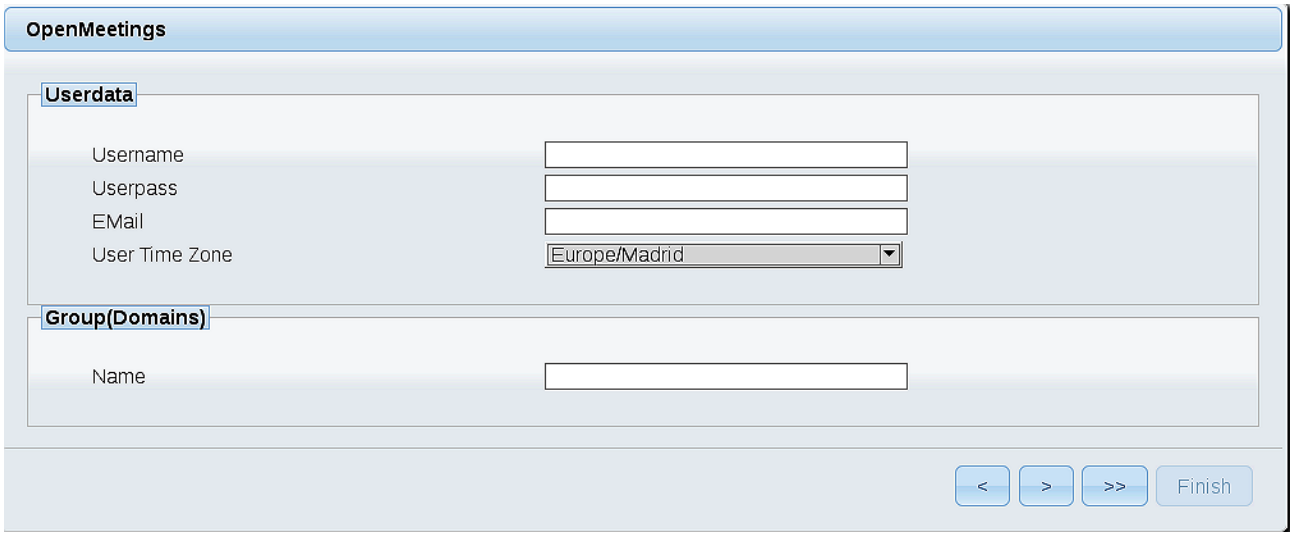
Here we must introduce the database name, user name and his password we did at the step 10:

Specify the name of the database = open404

Specify DB user = hola

Specify DB password = 1a2B3c4D

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.

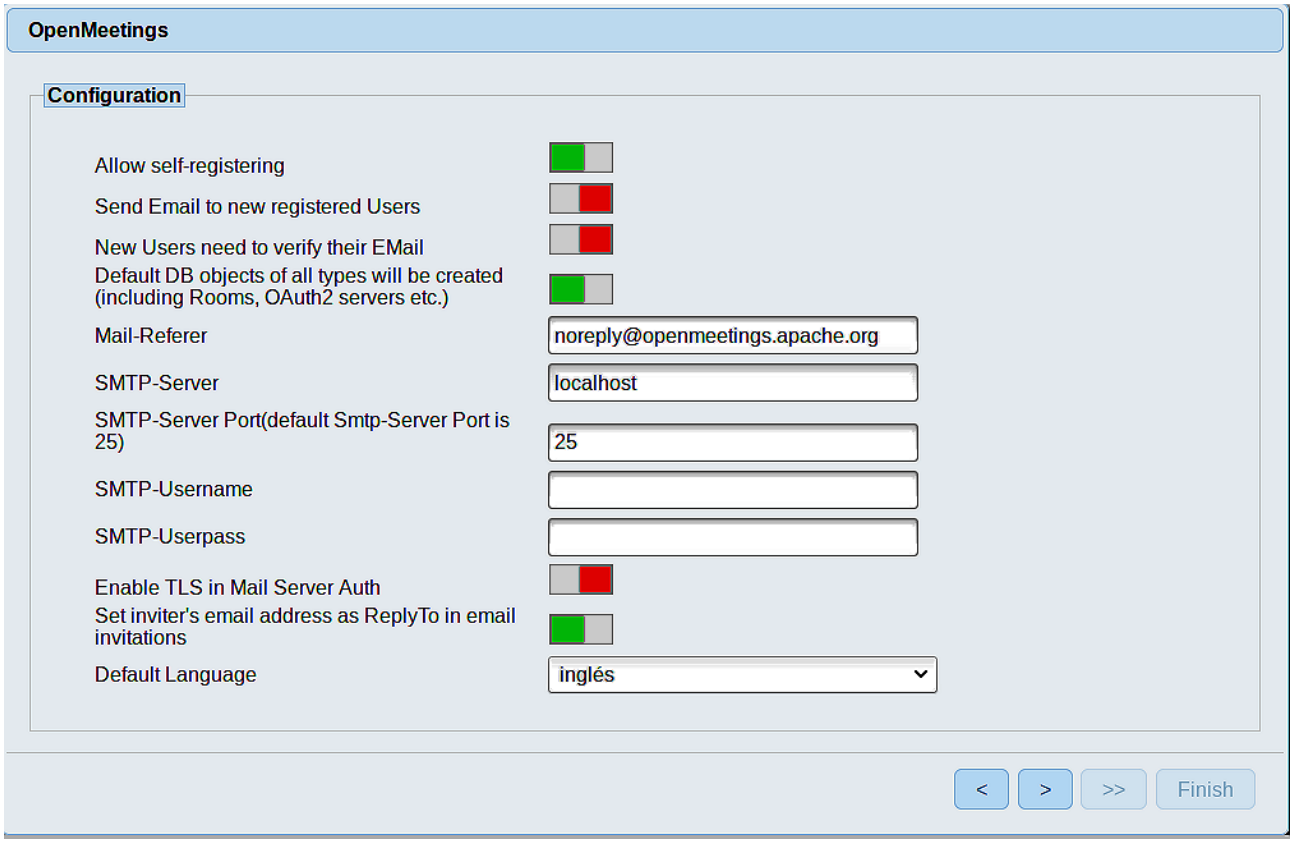
Userpass = a-password ...for the previous user.

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)

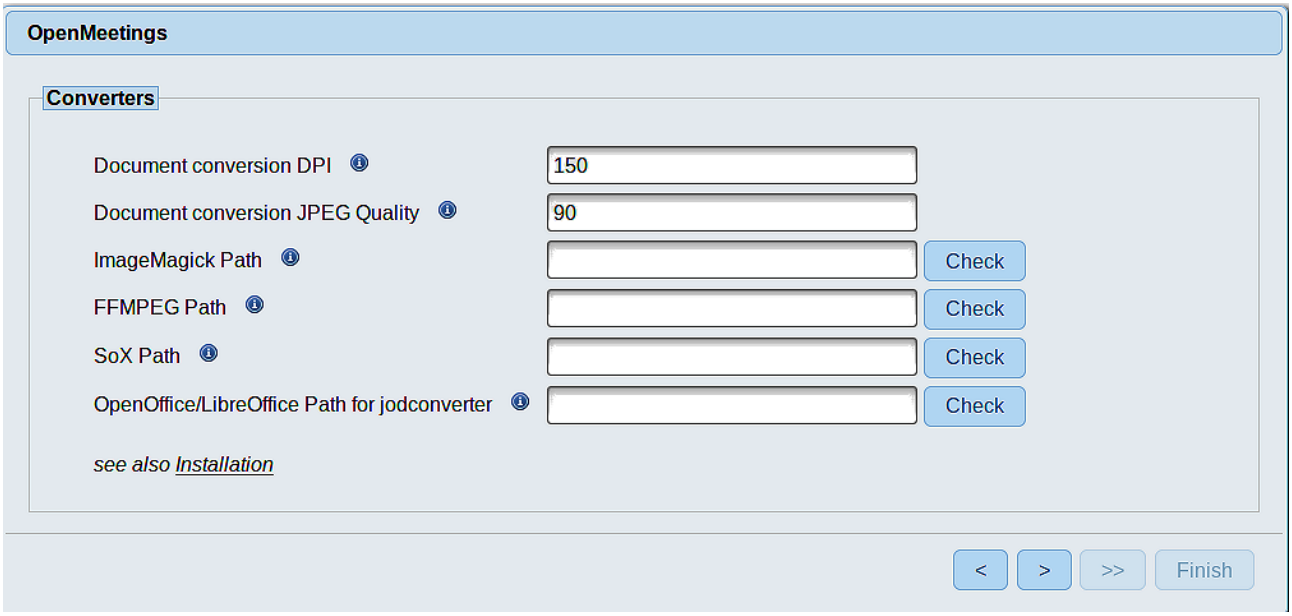
Mail-Refer	==	john@gmail.com
SMTP-Server	==	smtp.gmail.com
SMTP-Server Port (default Smtp-Server Port is 25)	==	587
SMTP-Username	==	john@gmail.com
SMTP-Userpass	==	password of john@gmail.com
Enable TLS in Mail Server Auth	==	...turn green the button to activate

To select the language of your server OpenMeetings, please scroll on the line:

Default Language	==	...select your language

...the rest we can leave as is. If necessary, can modify it as you like it:

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 == /usr/bin

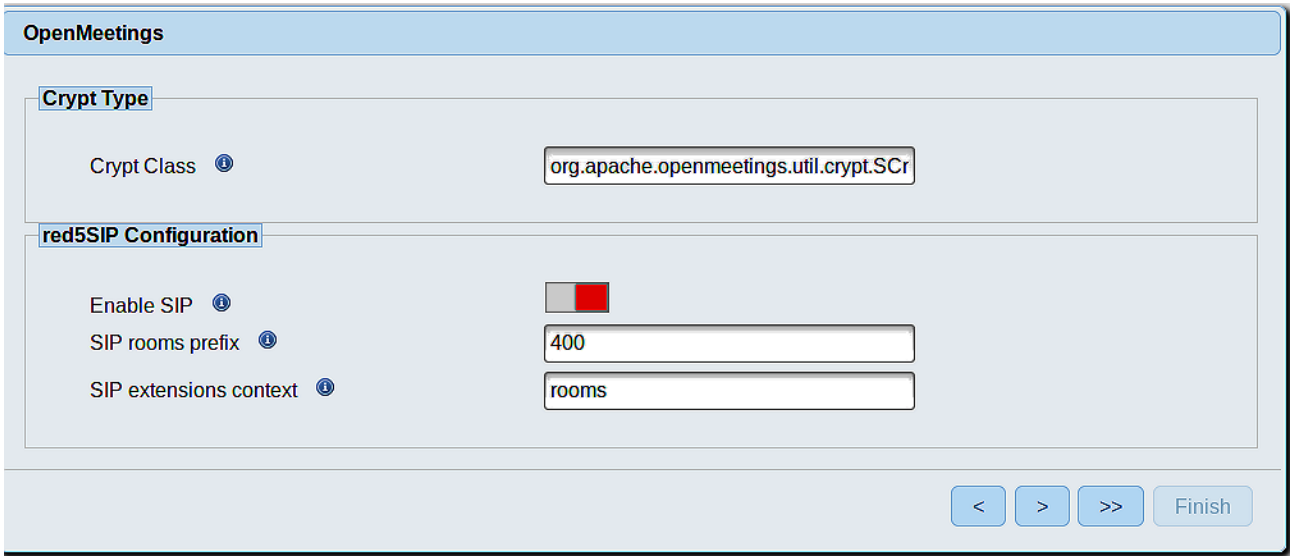
FFMPEG Path == /usr/local/bin

SOX Path == /usr/local/bin

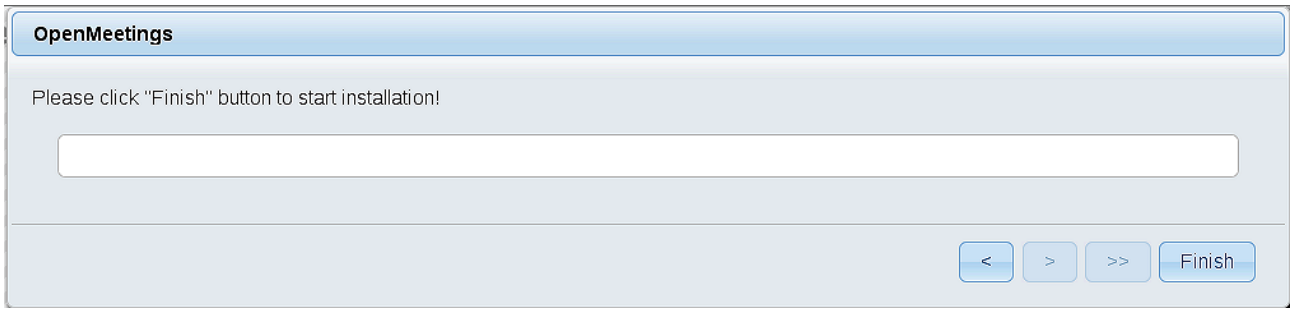
OpenOffice/LibreOffice Path for jodconverter == /usr/lib64/libreoffice

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:

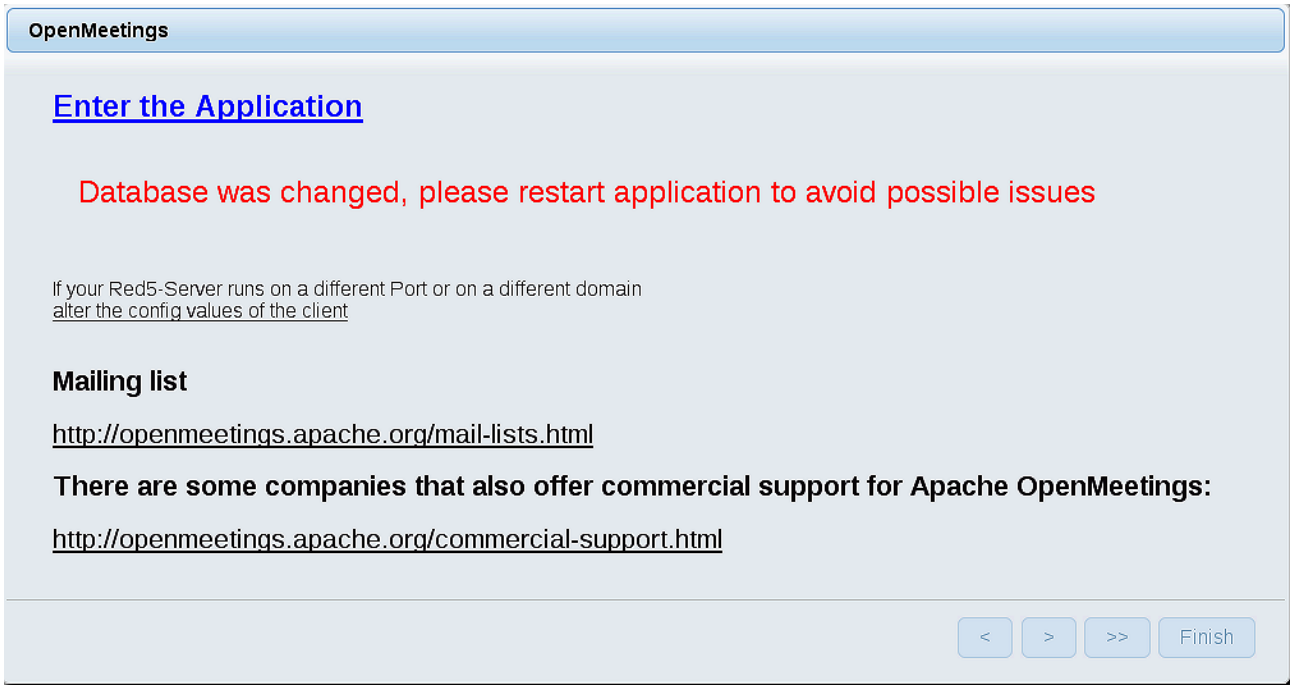


Now push the button > Will show this window:



Clic **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 server. Be connected to Internet:

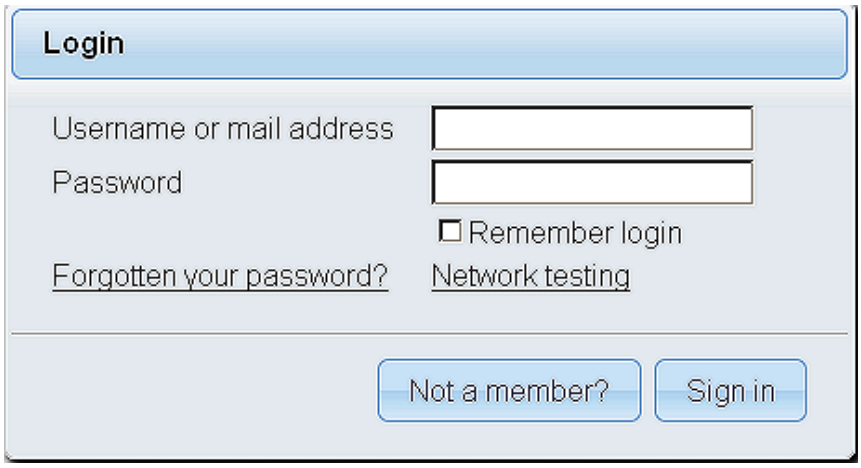
/etc/init.d/red5-2 restart



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 choosen during the installation, push **Sign in** button, and…

...Congratulations!

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

http://localhost:5080/openmeetings

Remember to open in the server, the two following ports:

1935 5080

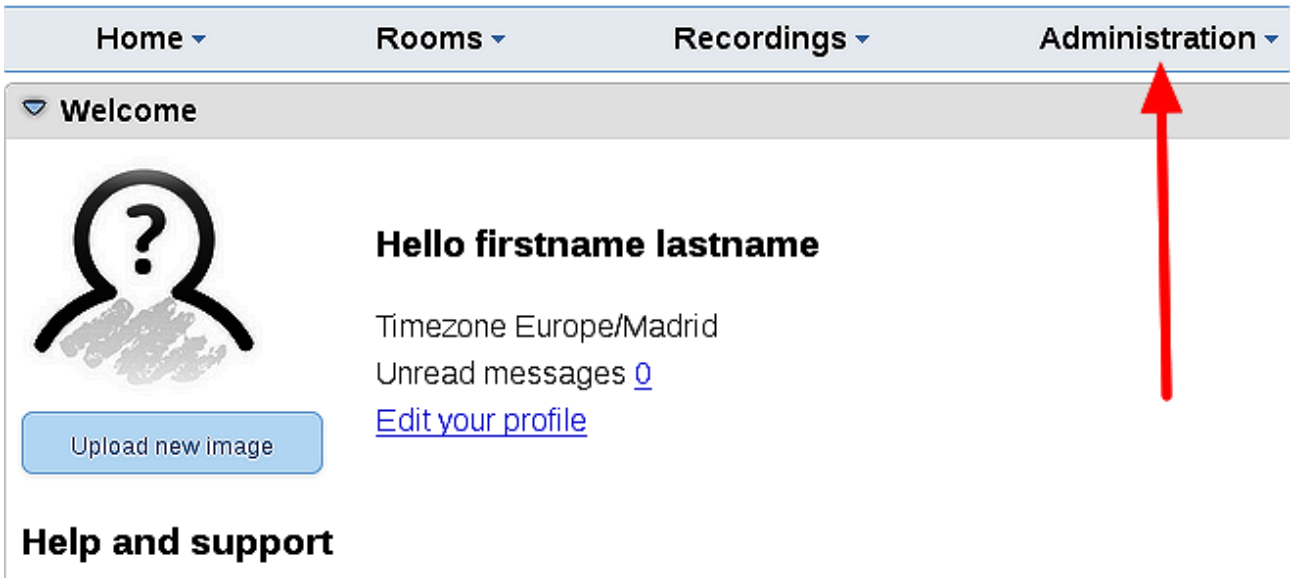
...in order that it could accede to OpenMeetings from other machines in Lan or Internet.

14)

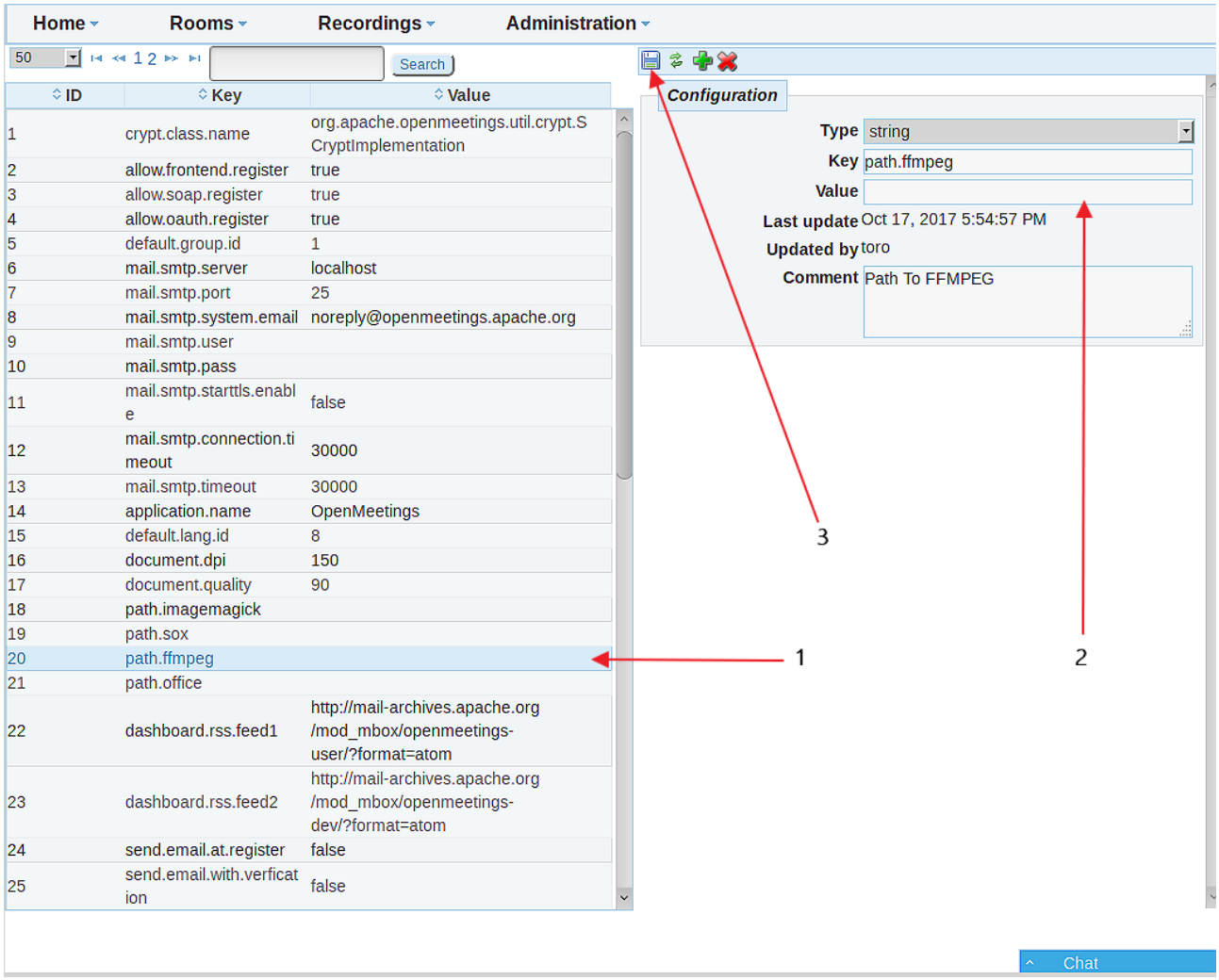
------ OpenMeetings's configuration ------

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