Installation of Apache OpenMeetings 4.0.9 on Linux Mint 19.1

This tutorial is made based on a minimal fresh installations of

linuxmint-19.1-mate-64bit.iso

It is tested with positive result. We will use the Apache's binary version OpenMeetings 4.0.9 stable, that is to say will suppress his compilation. It is done step by step.

16-7-2019

Starting...

1)

First, we update and upgrade the OS:

sudo apt update

sudo apt upgrade

2)

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

OpenMeetings **4.0.9** need Java **1.8** to work. So, we install OpenJava 1.8:

sudo apt install openjdk-8-jdk openjdk-8-jdk-headless

...and his plugin for web:

sudo apt install icedtea-netx

Now, please, select OpenJava 1.8, if you have more than one java versions installed:

sudo update-alternatives --config java

To see the active java version:

java -version

3)

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

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

The ubuntu desktop iso have already LibreOffice installed.

But we install it specially for server iso:

sudo add-apt-repository ppa:libreoffice/ppa

sudo apt update

sudo apt install libreoffice

4)

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

ImageMagick, will work the image files, png, jpg, gif, etc. Will install it and some more libraries and paquets:

sudo apt install -y imagemagick libjpeg62 zlib1g-dev

Sox, work the sound. We install it:

sudo apt install sox

5)

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

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

sudo apt install flashplugin-installer

6)

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

FFmpeg will work the video. This compilation is based on:

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

Updated files to 16-7-2019. Install some paquets and libraries:

(Only one line with space between each one)

sudo apt install -y autoconf automake build-essential libass-dev libfreetype6-dev libgpac-dev libsdl1.2-dev libtheora-dev libtool libva-dev libvdpau-dev libvorbis-dev libxcb1-dev libxcb-shm0-dev libxcb-xfixes0-dev pkg-config texi2html zlib1g-dev nasm libx264-dev cmake mercurial libopus-dev curl git vlc unzip make build-essential wget nmap

I made a script that will download, compile and install ffmpeg.
The result of any recording we do in OpenMeetings will be in mp4 format.
Please, download the mentioned script:

cd /opt

sudo wget https://cwiki.apache.org/confluence/download/attachments/27838216/ffmpeg_Mint19.sh

...concede permission of execution:

sudo chmod +x ffmpeg_Mint19.sh

...and run it (be connected to Internet). The compilation will spend about 20-30 minutes:

sudo ./ffmpeg_Mint19.sh

When finish the compilation, a text will announce it:

FFmpeg Compilation is Finished!

...then, please, go to **step 7).**

7)

------ Installation and configuration of MariaDB data server ------

MariaDB is the data server. Will install it. (Version 10.x):

sudo apt install mariadb-server

Run MariaDB:

sudo /etc/init.d/mysql start

Now we give a root password to MariaDB. Please, replace new-password with your own:

sudo mysqladmin -u root password new-password

Make a database with his own user for OpenMeetings:

sudo mysql -u root -p

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

MariaDB [(none)]> CREATE DATABASE open409 DEFAULT CHARACTER SET 'utf8';

With this command we has created a database called open409.
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 open409.* TO 'hola'@'localhost'
IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;

* open409 .....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)

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

We´ll install OpenMeetings in /opt/red5409. All the following information will be based on this directory.

Make the folder:

sudo mkdir /opt/red5409

cd /opt/red5409

...and download the red5-OpenMeetings file:

sudo wget http://archive.apache.org/dist/openmeetings/4.0.9/bin/apache-openmeetings-4.0.9.tar.gz

sudo tar xzvf apache-openmeetings-4.0.9.tar.gz

...save the unloaded file to /opt:

sudo mv apache-openmeetings-4.0.9.tar.gz /opt

Do to **nobody** owner of the whole OpenMeetings folder installation, by security:

sudo chown -R nobody /opt/red5409

Download and install the connector between OpenMeetings and MariaDB:

cd /opt

(Only one line without space between both)

sudo wget http://repo1.maven.org/maven2/mysql/mysql-connector-java/5.1.47/mysql-connector-java-5.1.47.jar

...and copy it to where must be:

sudo cp /opt/mysql-connector-java-5.1.47.jar /opt/red5409/webapps/openmeetings/WEB-INF/lib

9)

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

Please, download the red5 run script:

cd /opt

sudo wget https://cwiki.apache.org/confluence/download/attachments/27838216/red5-ubdeb2

...and copy it to:

sudo cp red5-ubdeb2 /etc/init.d/

...and concede permission of execution:

sudo chmod +x /etc/init.d/red5-ubdeb2

10)

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

Start MariaDB, if still it is not:

sudo /etc/init.d/mysql start

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

sudo /etc/init.d/red5-ubdeb2 start

...will appear two text lines in the shell:

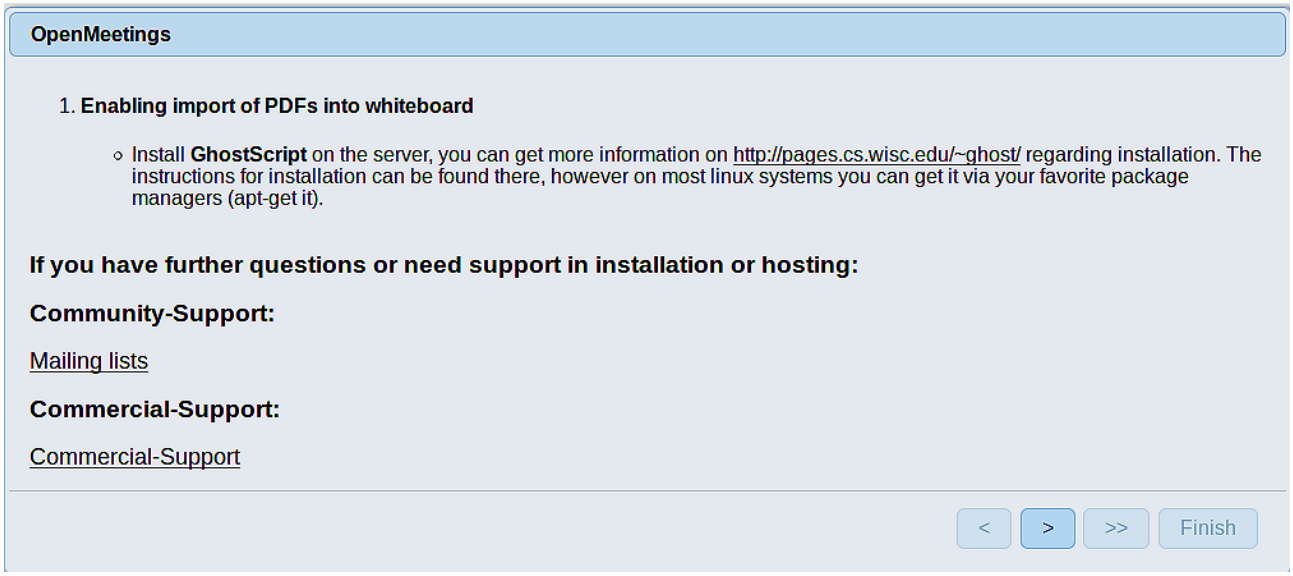
start-stop-daemon: --start needs --exec or --startas
Try 'start-stop-daemon --help' for more information.

...you do nothing. Don´t worry, everything work right,

...wait 40 seconds at least, in order that red5 runing completely. And after this, can go to:

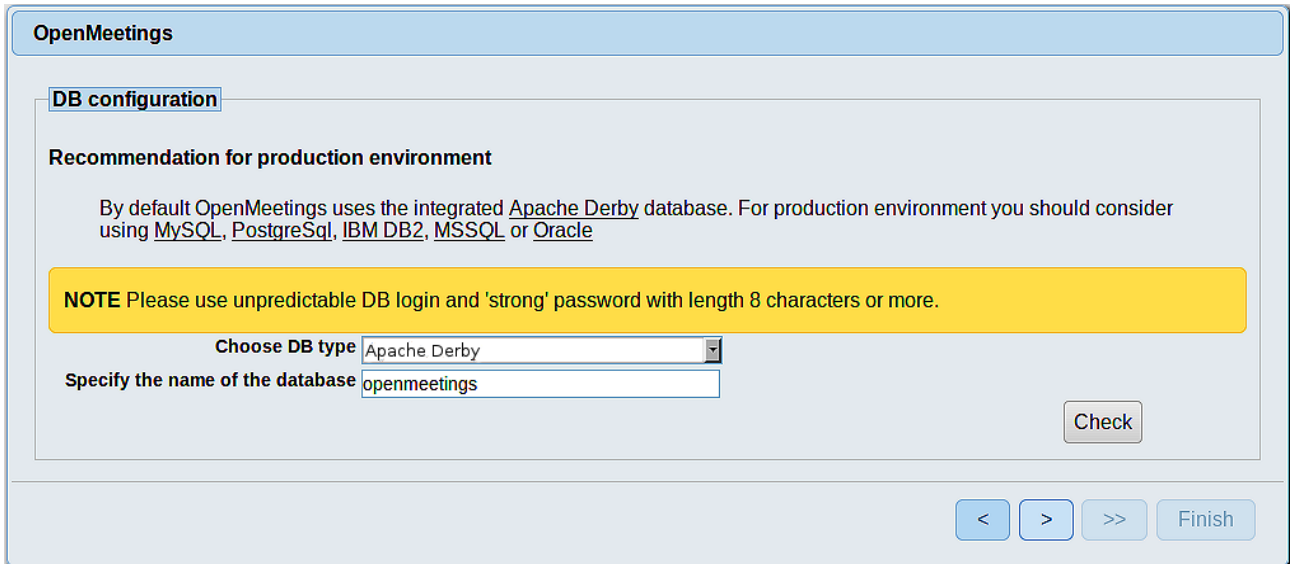
http://localhost:5080/openmeetings/install

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

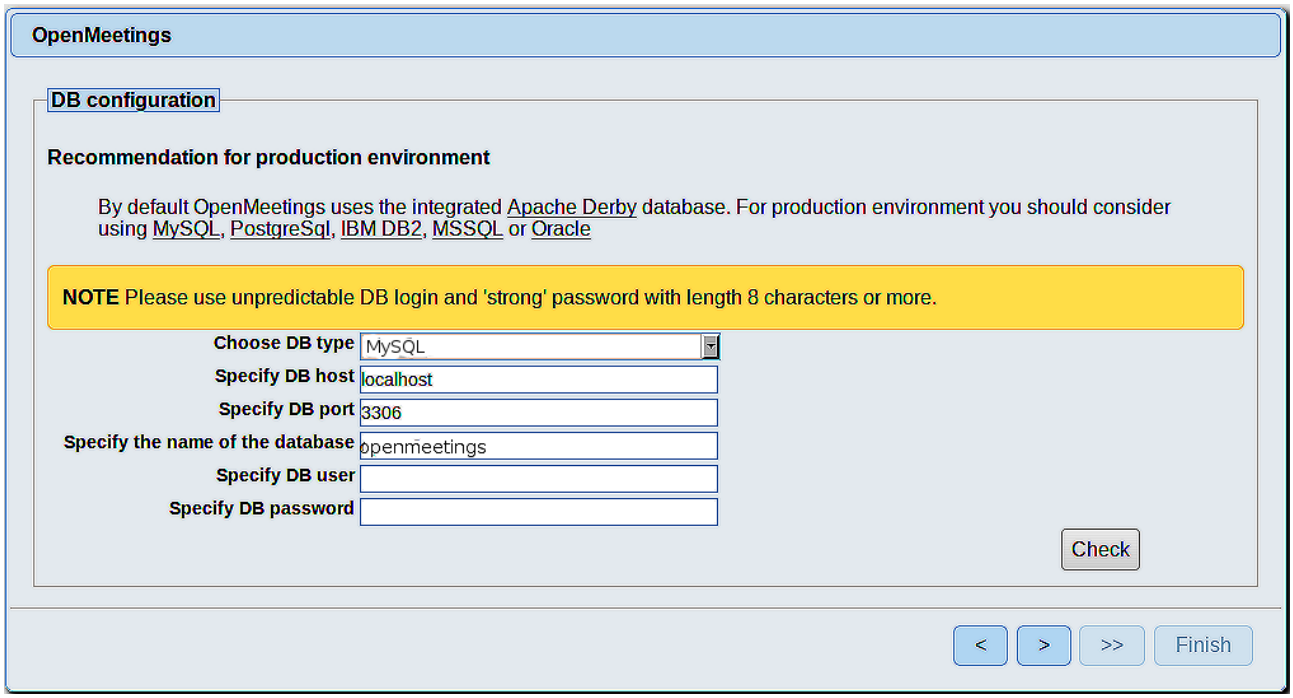


...press on > button (bottom), and will show the default database configuration

with Derby, but we employ MySQL (MariaDB),



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



Now we must introduce the database name, user name and his password, we did at the step 7:

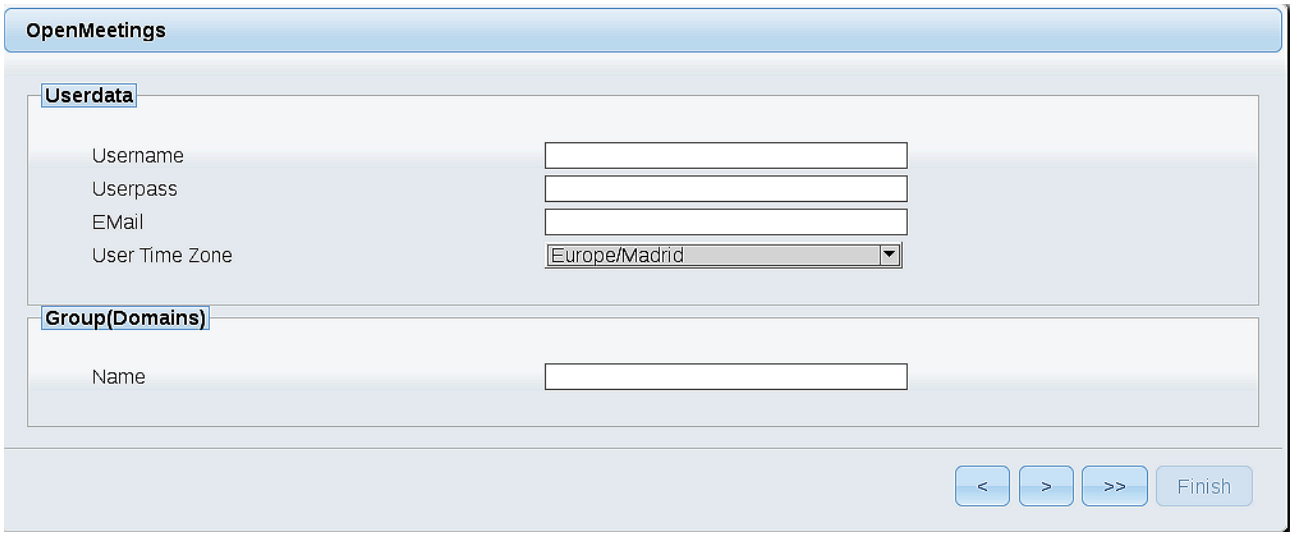
Specify the name of the database = open409

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.

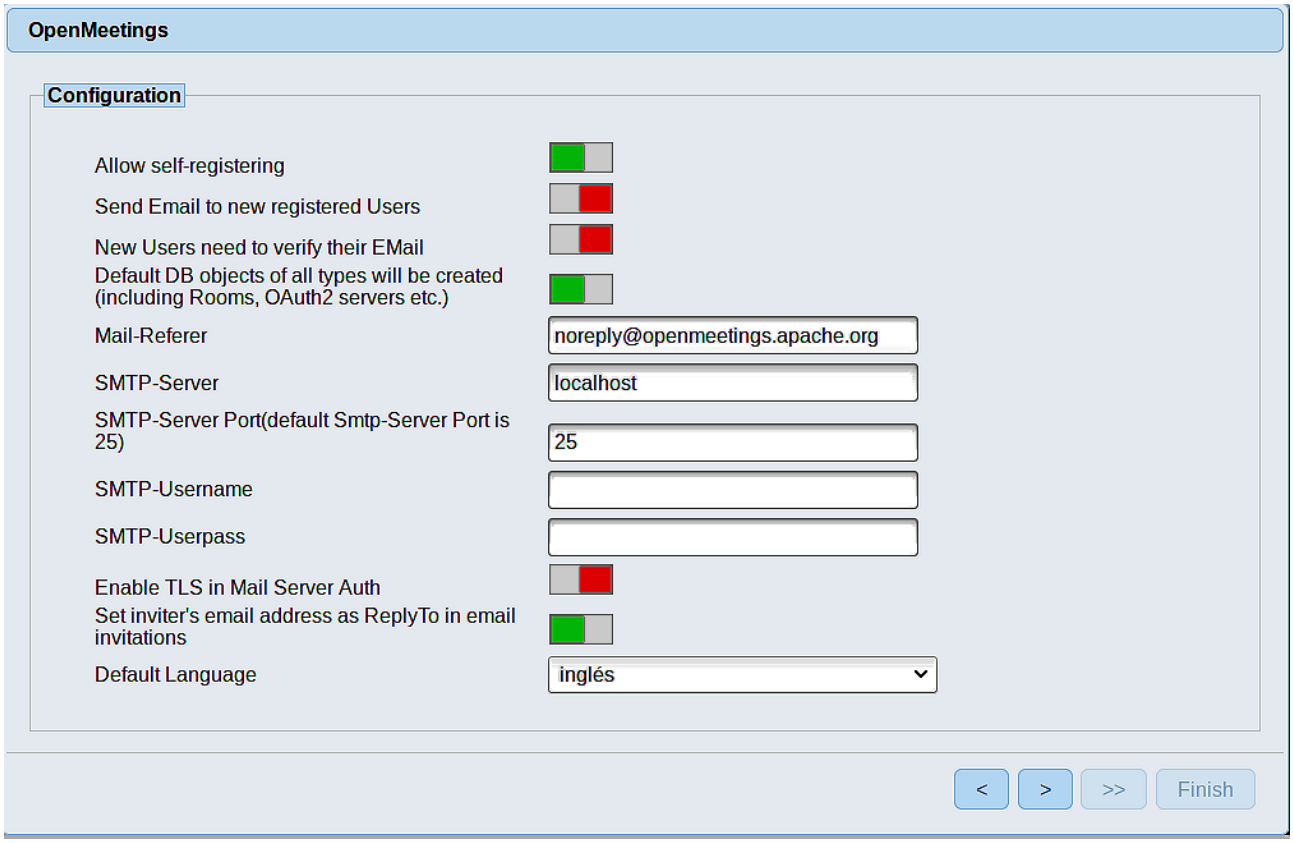
Userpass = password ...for the previous user.

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:

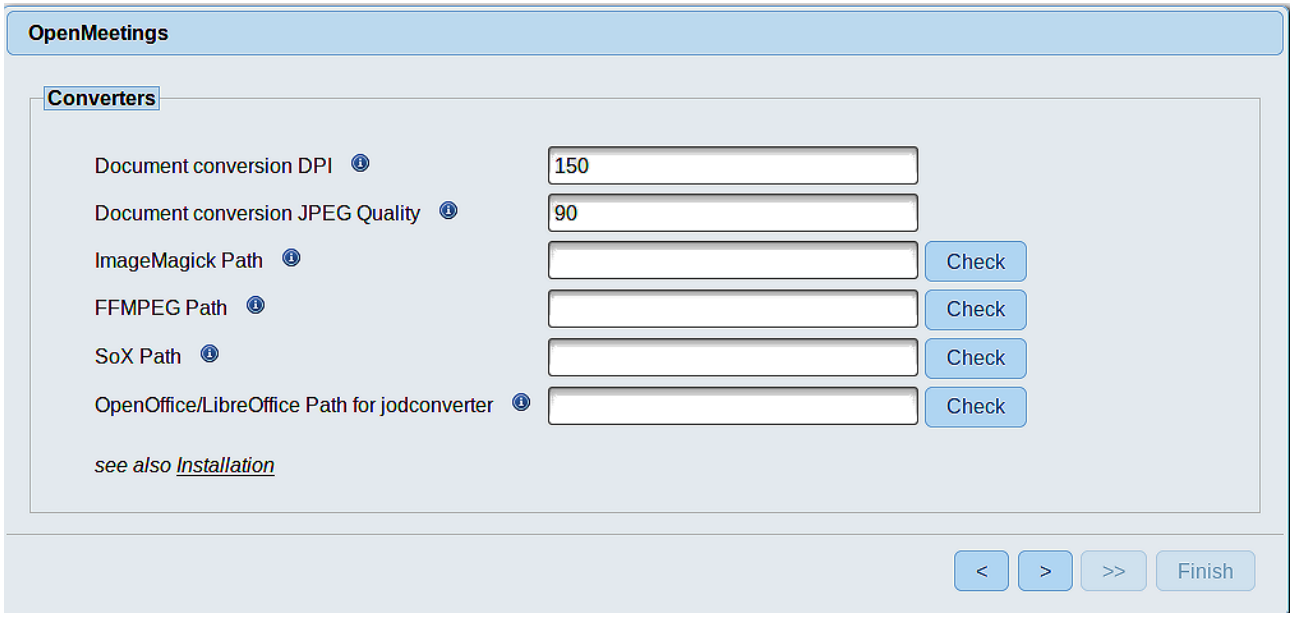


A valid example to configure the mail server with Gmail, is as follows:
(replace **john@gmail.com** with your real Gmail account)

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 == /usr/bin

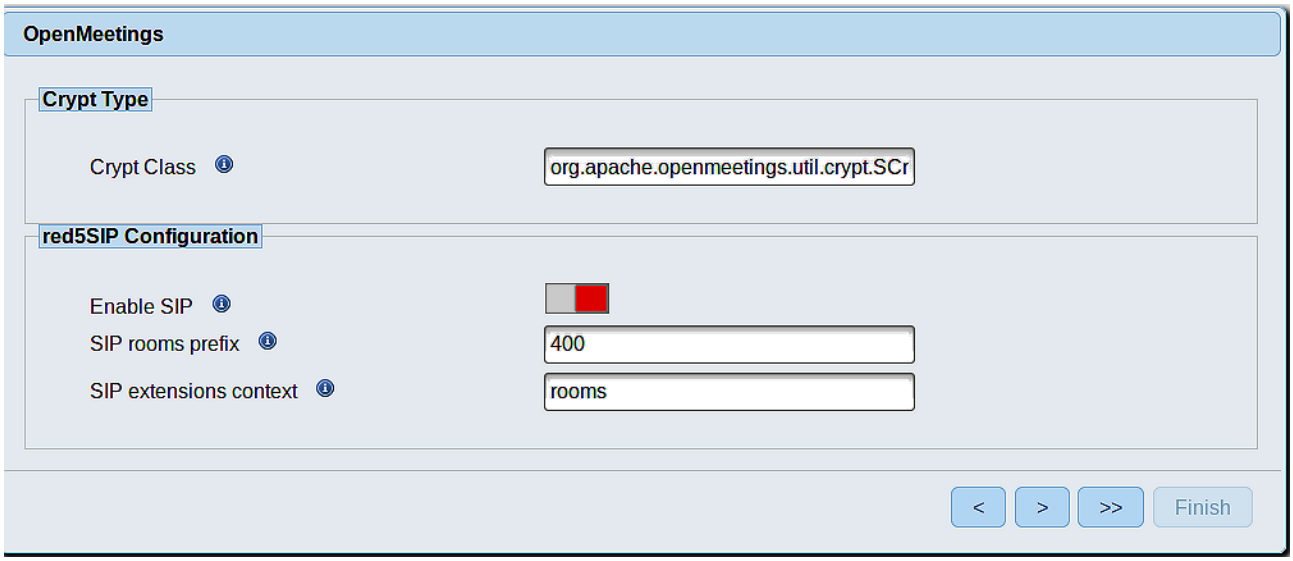
FFMPEG Path == /usr/local/bin

SOX Path == /usr/bin

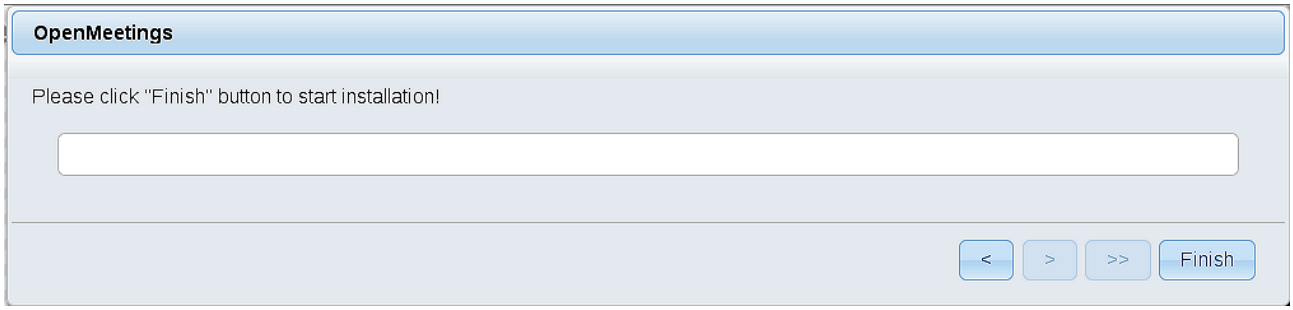
OpenOffice/LibreOffice Path for jodconverter == /usr/lib/libreoffice **(32bit - 64bit)**

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 > and will show this window:

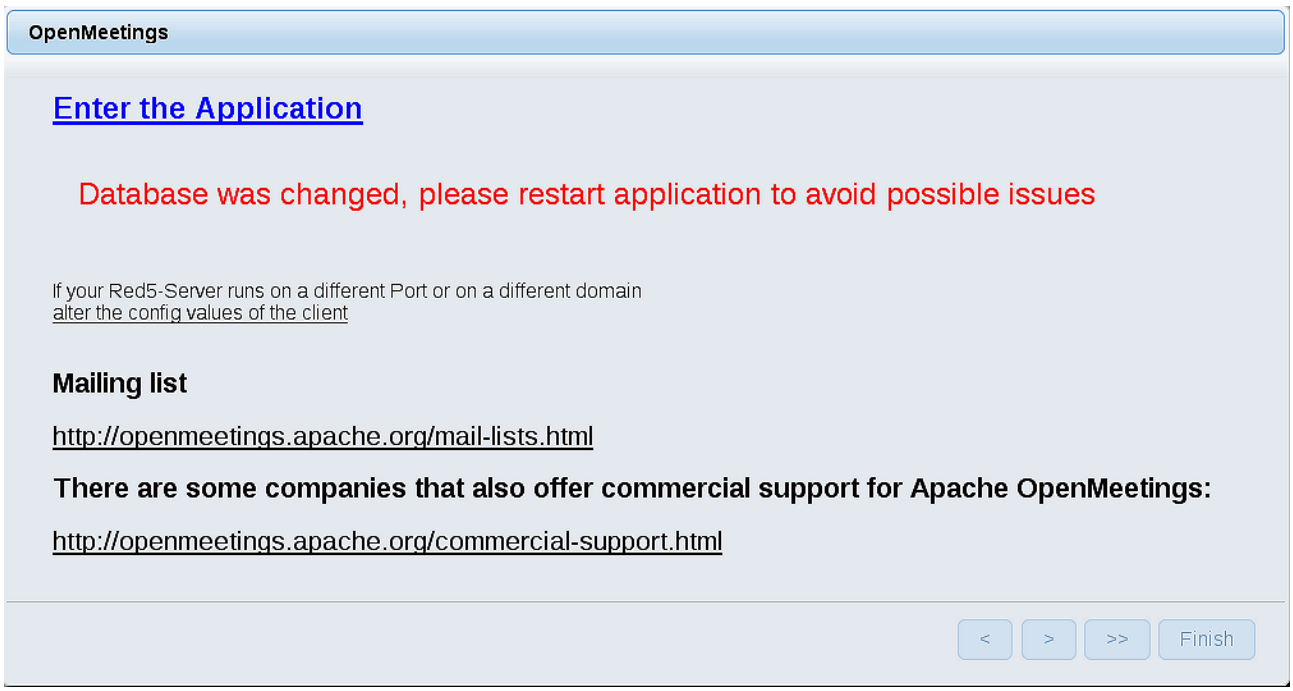


Press **Finish** button ...wait a seconds untill the tables are fill in the database.

When has concluded, this another page will appear. Don´t clic on **Enter the Application**.

First is need it to restart the server. Please, be connected to Internet:

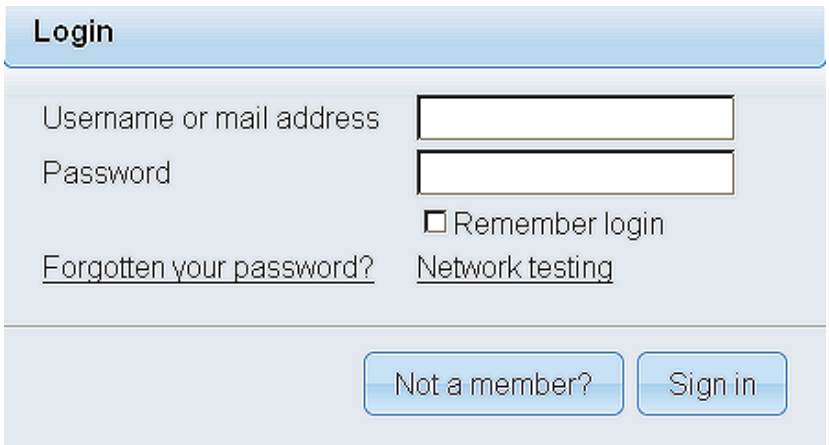
sudo /etc/init.d/red5-ubdeb2 restart



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 accede to OpenMeetings would be:

http://localhost:5080/openmeetings

Remember to open in the server the two following ports:

1935 5080

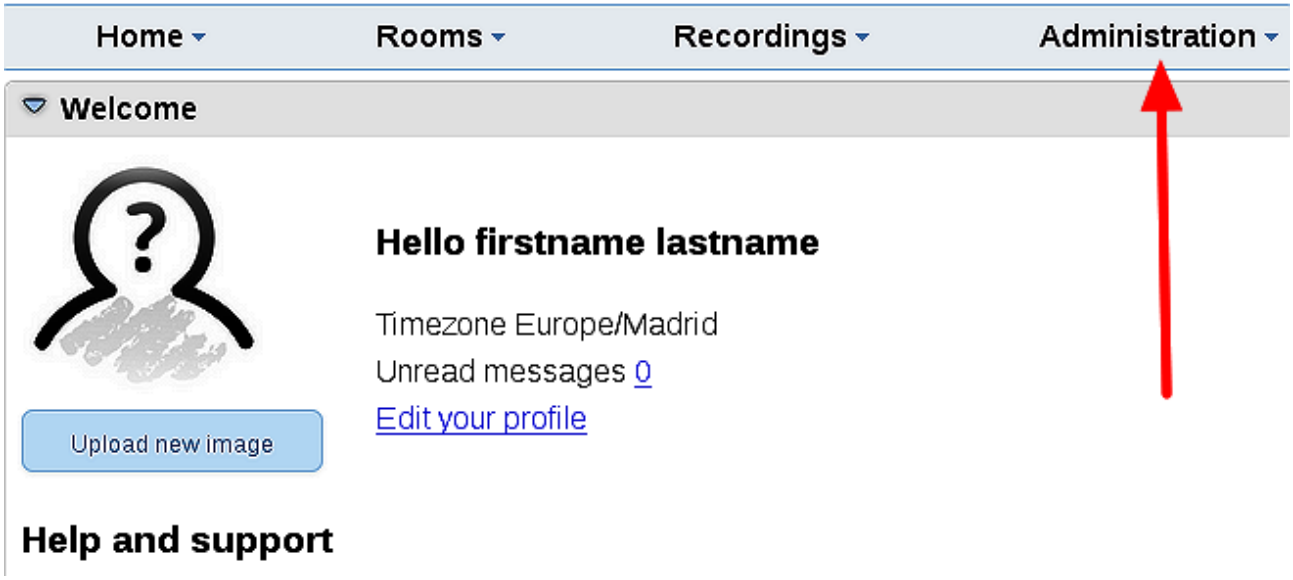
...in order that it could accede to OpenMeetings from other machines in LAN or Internet.

11)

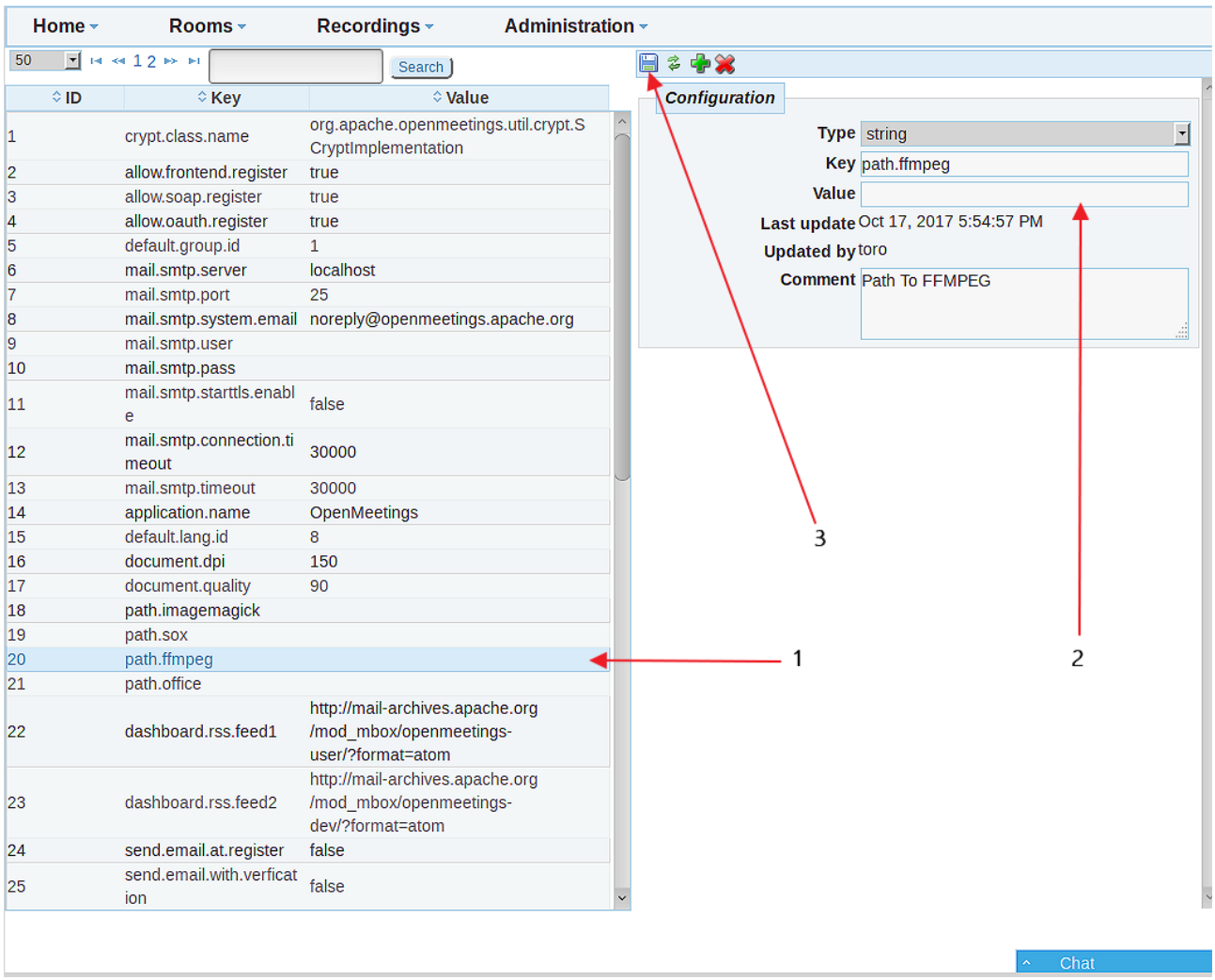
------ OpenMeetings's Configuration ------

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:



12)

------ Modification of ImageMagick ------

We modify ImageMagick, so OpenMeetings can upload office files to whiteboard:

sudo nano /etc/ImageMagick-6/policy.xml

...and comment out the two follow lines near to bottom file:

```
<policy domain="coder" rights="none" pattern="PS" />
<policy domain="coder" rights="none" pattern="PDF" />
```

...to:

```
<!-- <policy domain="coder" rights="none" pattern="PS" /> -->
<!-- <policy domain="coder" rights="none" pattern="PDF" /> -->
```

Press in the keyboard Ctrl+x, will ask to save, press Y, and press Enter to exit nano editor.

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

http://openmeetings.apache.org/mailing-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 downoload:

OpenMeetings Wallpaper Download

A dvd live iso with OpenMeetings 4.0.9 on Ubuntu 18.04 lts is at your disposal.

Can find it here:

Live iso download

Thank you.

Alvaro Bustos (PMC and Committer at Apache OpenMeetings).