Installation of Apache OpenMeetings 4.0.6 on Ubuntu 14.04 LTS

This tutorial is made based on fresh installations of

ubuntu-14.04.2-desktop-amd64.iso

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)

First update and upgrade the OS:

sudo apt-get update

sudo apt-get upgrade

2)

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

OpenMeetings **4.0.6** need Java **1.8** or **1.9** to work. We´ll install OpenJava. First needed install a new repo, because the normal repos have not OpenJava 1.8:

sudo add-apt-repository ppa:openjdk-r/ppa   ...pres **Enter** to any question.

sudo apt-get update

...and now install OpenJava:

sudo apt-get install openjdk-8-jdk

If you have more than one java version installed, please select OpenJava 1.8:

sudo update-alternatives --config java

You can see the active java version:

java -version

When you have finished installing OpenMeetings, and being in a room want to record or share desktop, you would have to press the TV icon above right, and after opening a new window go in it and search-select the next file:

/usr/lib/jvm/java-1.8.0-openjdk-i386/bin/javaws   ...**on 32bit**

 /usr/lib/jvm/java-1.8.0-openjdk-amd64/bin/javaws   ...**on 64bit**

3)
------ Installation of LibreOffice ------

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

The ubuntu desktop iso have already LibreOffice installed, so don´t need install it. This is specially for server ubuntu iso:

sudo add-apt-repository ppa:libreoffice/ppa

sudo apt-get update

sudo apt-get install libreoffice

Now some kind of information only:

LibreOffice installation folder is /usr/lib/libreoffice.

4)
------ Installation ImageMagick and Sox ------

ImageMagick, work the image files, jpg, png, gif, etc. Install it and some paquet and libraries.

(Only one line without space between both)

sudo apt-get install -y imagemagick libgif4 libjpeg62 zlib1g-dev liboil0.3 unzip make build-essential wget

Sox, work the sound. Will compile.

cd /opt

wget http://sourceforge.net/projects/sox/files/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

5)
------ Installation of Adobe Flash Player ------

OpenMeetings even need Adobe Flash Player for cam and audio. Install it:

sudo apt-get install flashplugin-installer

6)
------ Compilation of FFmpeg ------

FFmpeg will work with video.

This compilation is based on:

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

Updated to 15-10-2018. Install libraries.

(Only one line with space between each one)

sudo apt-get -y --force-yes install 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 nmap vlc

I made a script that it will download, compile and install ffmpeg.

The result of any recording we do in OpenMeetings, will be in mp4 format.

Please, download the script.

cd /opt

wget https://cwiki.apache.org/confluence/download/attachments/27838216/ffmpeg-ubuntu.sh

...concede permission of execution:

chmod +x ffmpeg-ubuntu.sh

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

./ffmpeg-ubuntu.sh

When finish the compilation, a text will announce it:

FFmpeg Compilation is Finished!

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

All the compiled files are installed on: /usr/local/bin

7)
------ Installation and configuration of MariaDB data server ------

MariaDB is the data server. Will install it.

First install these paquets:

sudo apt-get install python-software-properties software-properties-common

...and now MariaDB:

sudo apt-get install mariadb-server

Will open a window asking for a root MariaDB password.
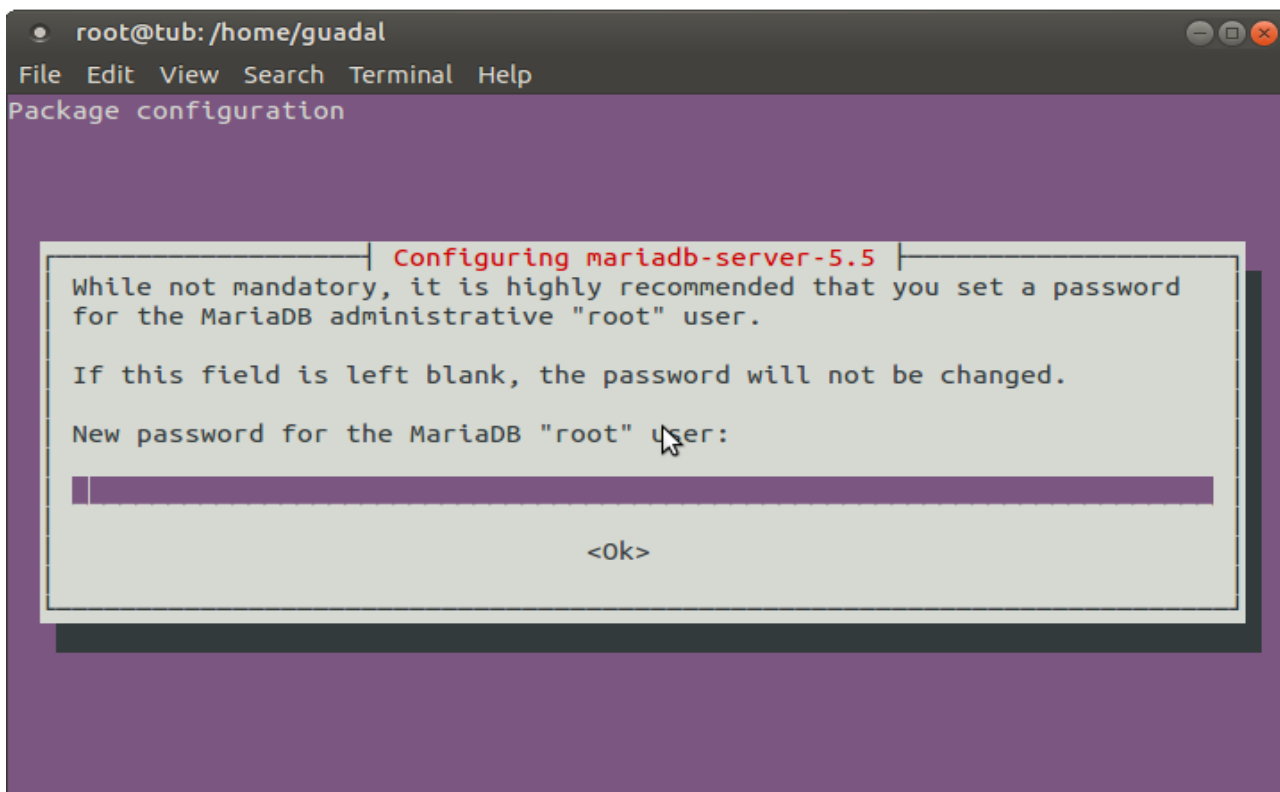
Type one password → **OK** → **Enter**

Will ask repeat the password:
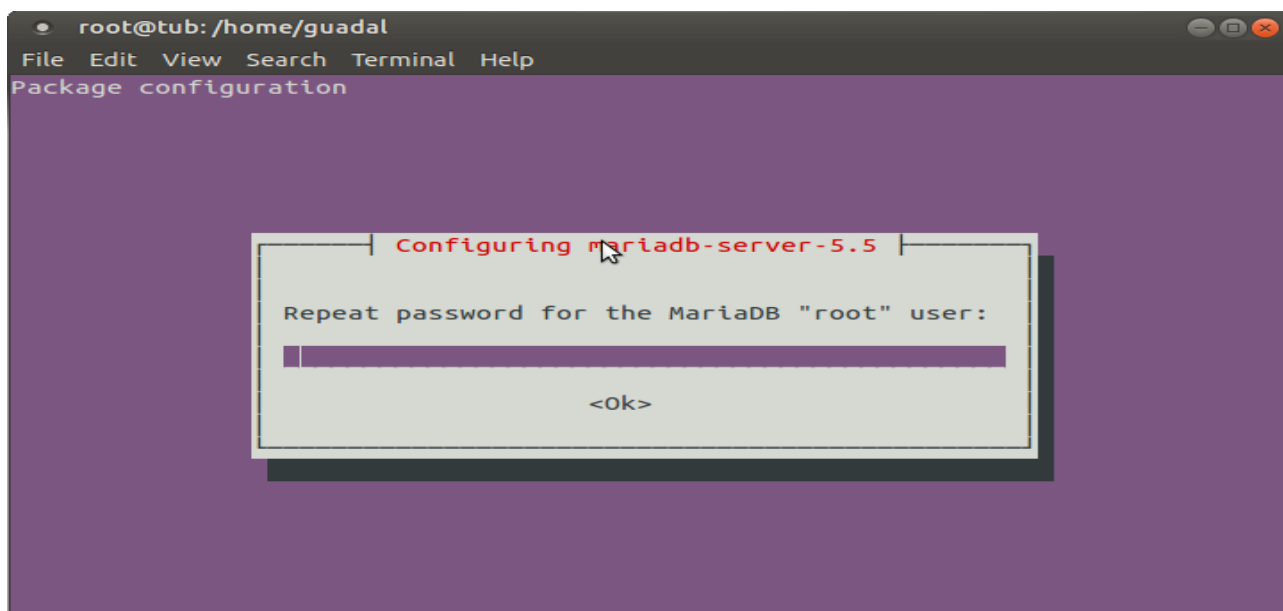
Run MariaDB:

/etc/init.d/mysql start

Make a database with his own user for OpenMeetings:

mysql -u root -p

...will ask for the root password that we have just chosen, type it...

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

With this command we has created a database called open406.
Now we create a 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 the database.
* 1a2B3c4D ..is the password of that user

You can change the data...but remember it! Later well need it.

Now, we leave MariaDB:

MariaDB [(none)]> quit

8)

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

We´ll install OpenMeetings in /opt/red5406. All the following information will be based on this directory.
Call to our folder of installation red5406

Make the folder:

mkdir /opt/red5406

cd /opt/red5406

...download the OpenMeetings file:

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

unzip apache-openmeetings-4.0.6.zip

...save the unloaded file to /opt:

mv apache-openmeetings-4.0.6.zip /opt

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

chown -R nobody /opt/red5406

Unload 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/red5406/webapps/openmeetings/WEB-INF/lib

9)
                    ------ Script to launch red5-OpenMeetings ------

Please, unload the red5 run script:

cd /opt

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

...and copy it to:

cp red5-ubdeb2 /etc/init.d/

Concede permission of execution:

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

10)
                    ------ Run red5-OpenMeetings ------

Start MariaDB if still it is not:

/etc/init.d/mysql start

...and now start red5-OpenMeetings:

/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 it is runing completely, and after can go to:

        http://localhost:5080/openmeetings/install

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

OpenMeetings

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

      o 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 [>] button, (bottom), and will show the default 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

...then, 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 `openmeetings`

Specify DB user ` `

Specify DB password ` `

Check

< | > | >> | Finish

Now we must introduce the database name, user name and his password, we did at the step 7:
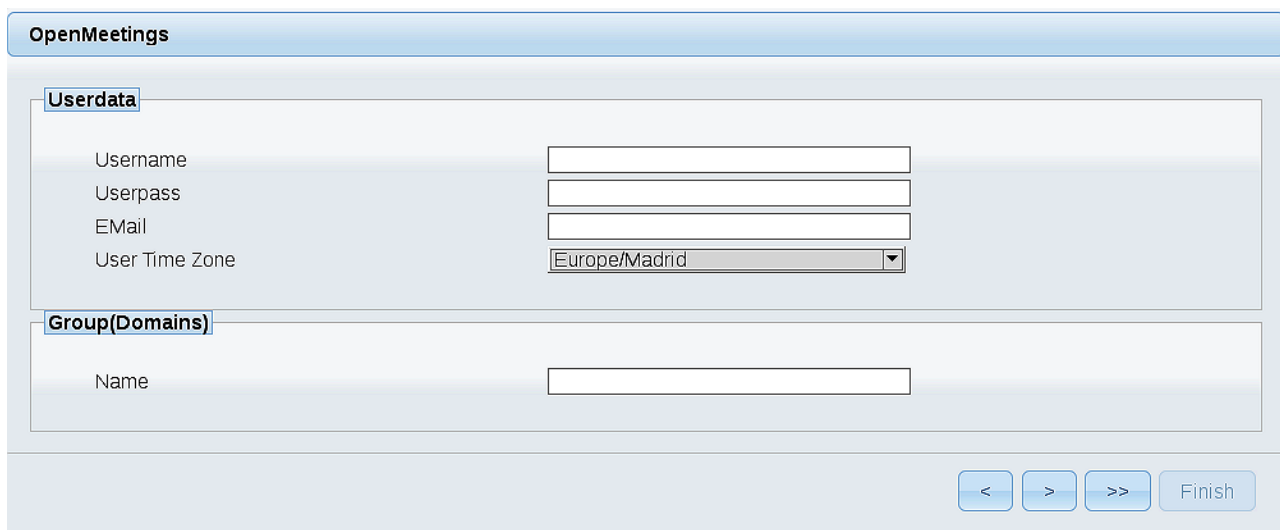
Specify the name of the database   =   open406

Specify DB user   =   hola

Specify DB password   =   1a2B3c4D

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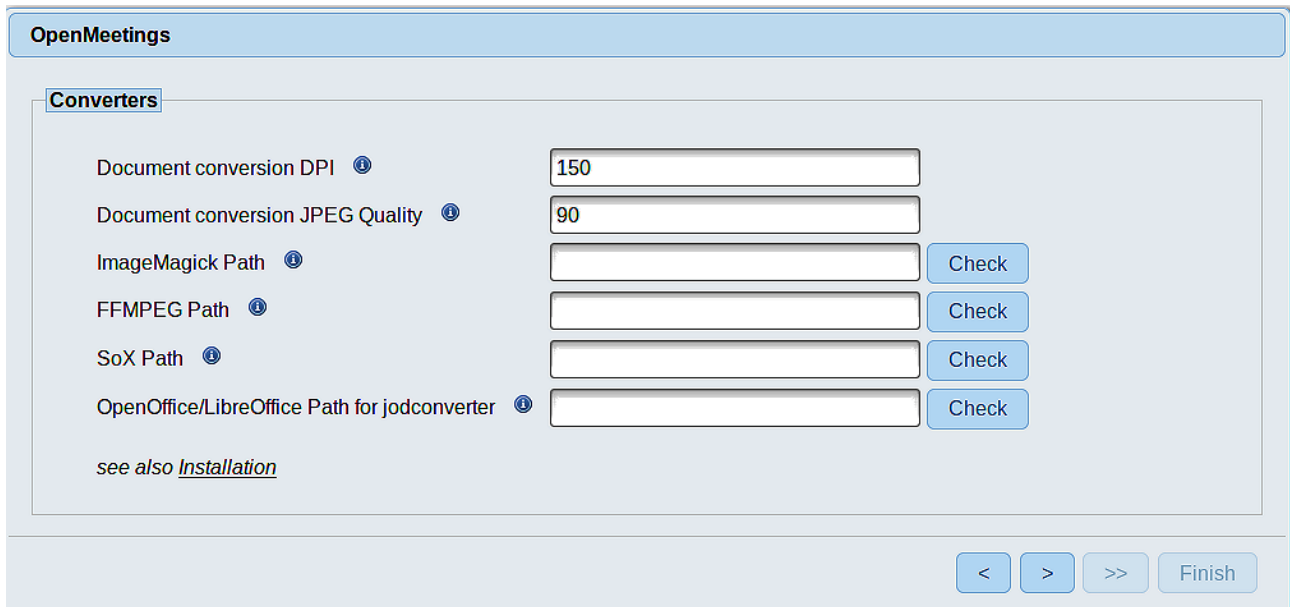
Mail-Refer	==	ohn@gmail.com
SMTP-Server	==	smtp.gmail.com
SMTP-Server Port (default Smtp-Server Port is 25)	==	587
SMTP-Username	==	john@gmail.com
SMTP-Userpass	==	password of john@gmail.com
Enable TLS in Mail Server Auth	==	...turn green the button to activate

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:

OpenMeetings

Converters

Document conversion DPI ⓘ	150
Document conversion JPEG Quality ⓘ	90
ImageMagick Path ⓘ	[ ] Check
FFMPEG Path ⓘ	[ ] Check
SoX Path ⓘ	[ ] Check
OpenOffice/LibreOffice Path for jodconverter ⓘ	[ ] Check

see also *Installation*

< > >> Finish

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/lib/libreoffice   **(32 y 64bits)**

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:

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:

/etc/init.d/red5-ubdeb2 restart
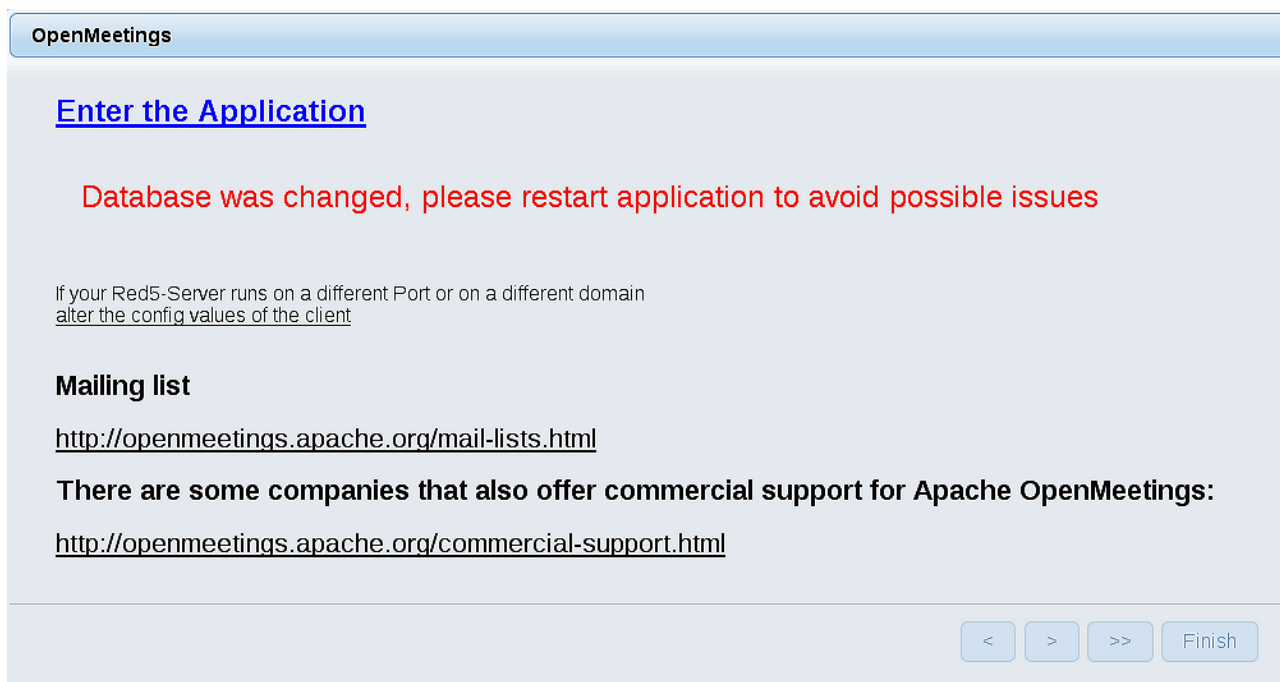
Now yes, you can clic on **Enter the Application**, or go with your browser to:

http://localhost:5080/openmeetings

...and will take us to the entry of OpenMeetings:

Introduce the user's name and the password that you have chosen during the installation, push **Sign in** button and…

...**Congratulations!**

The next time that you like to 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.

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
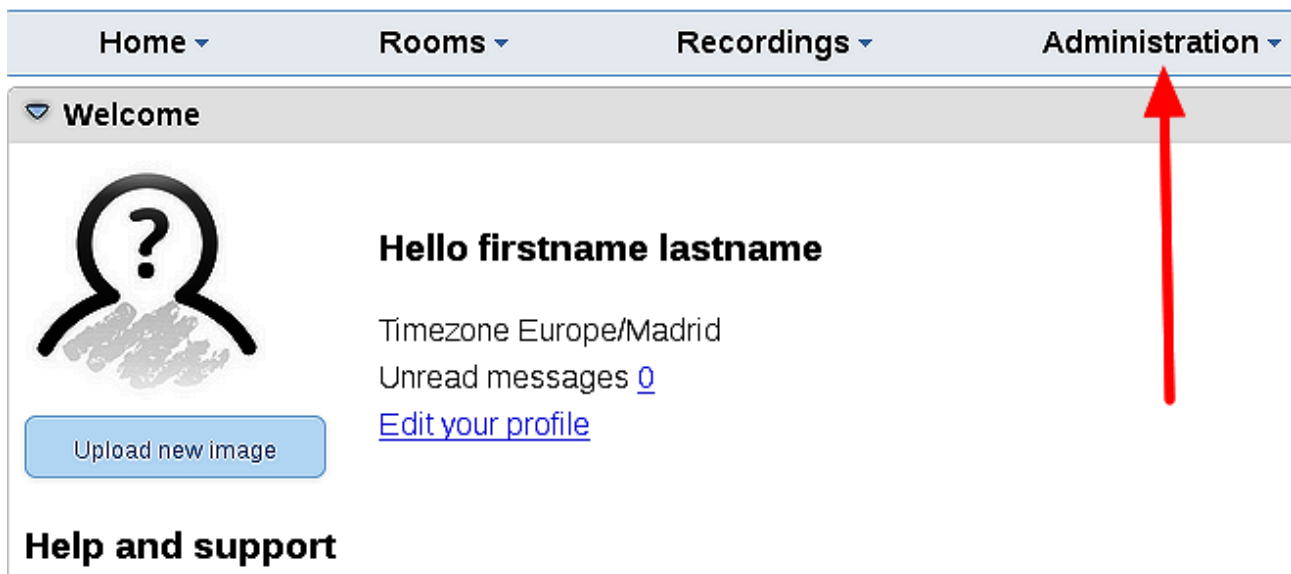
...and following the order of the red arrows:

12)

------ Special Step ImageMagick ------

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

nano /etc/ImageMagick/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.

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