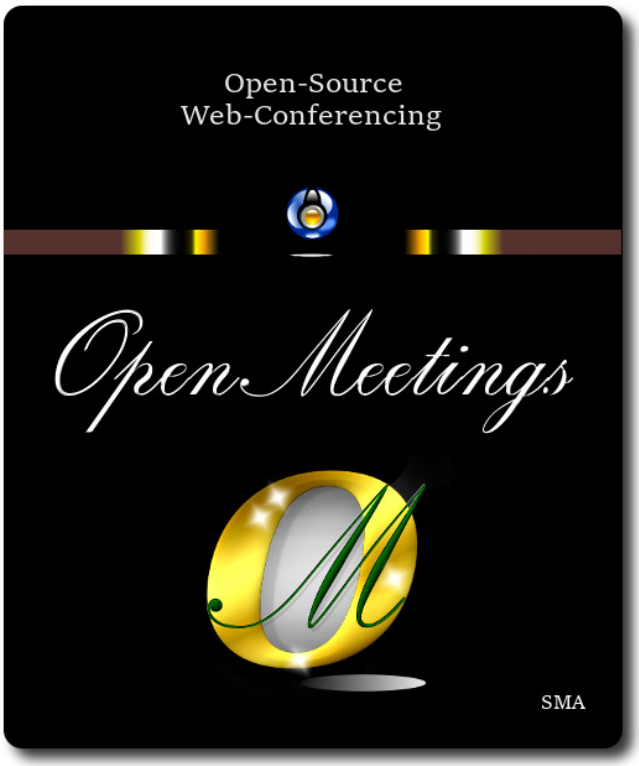


Installation of Apache OpenMeetings 6.3.0 on Ubuntu 22.10

The present tutorial is made based on a minimal fresh installations of

ubuntu-mate-22.10-desktop-amd64.iso

My sincere thanks to Maxim Solodovnik for his help, without which i could not have finished this tutorial satisfactorily.

It is made step by step.

Starting...

1)

First, we update and upgrade the OS:

sudo apt update

sudo apt upgrade

2)

------ Installation of Java ------

OpenMeetings 6.3.0 need Java to work. So we install OpenJava 17:

sudo apt install openjdk-17-jre openjdk-17-jre-headless nano

Now, please, select OpenJava 17, 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

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

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

...and comment 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.
This last must be repeated every time you update the ImageMagick, or maybe you´ll be asked to keep or replace the "policy.xml" file (modified by us), then pres "Keep" button.

Sox, work the sound. We install it:

sudo apt install sox

5)

------ Installation of FFmpeg ------

FFmpeg will work the video. We install together to vlc for watch the videos:

sudo apt install ffmpeg vlc curl

6)

------ Installation of MariaDB data base server ------

MariaDB is the data base server. Will install it:

sudo apt install mariadb-server

Run MariaDB:

sudo /etc/init.d/mariadb 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 open630 DEFAULT CHARACTER SET 'utf8';

(Only one line with space between both)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON open630.* TO 'hola'@'localhost' IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;

* open630 .....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

7)

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

We´ll install OpenMeetings in /opt/open630. All the following information will be based on this directory:

cd /opt

...download the tomcat-OpenMeetings file:

sudo wget https://archive.apache.org/dist/openmeetings/6.3.0/bin/apache-openmeetings-6.3.0.tar.gz

...uncompress it:

sudo tar xzvf apache-openmeetings-6.3.0.tar.gz

...and rename the obtained folder:

sudo mv apache-openmeetings-6.3.0 open630

...and we do to “nobody” user ownner of OpenMeetings installation folder:

sudo chown -R nobody:nogroup /opt/open630

Download and install the connector between OpenMeetings and MariaDB:

cd /opt

(Only one line without space between both)

sudo wget https://repo1.maven.org/maven2/mysql/mysql-connector-java/8.0.30/mysql-connector-java-8.0.30.jar

...and copy it to where must be:

sudo cp /opt/mysql-connector-java-8.0.30.jar /opt/open630/webapps/openmeetings/WEB-INF/lib

8)

------ Script to launch Tomcat-OpenMeetings ------

Please, download the tomcat-OpenMeetings run script:

cd /opt

sudo wget https://cwiki.apache.org/confluence/download/attachments/27838216/tomcat34

...copy it to:

sudo cp tomcat34 /etc/init.d/

...and concede permission of execution:

sudo chmod +x /etc/init.d/tomcat34

If you would made the installation in any other different path to /opt/open630, please edit the script and modify the line:

CATALINA_HOME==/opt/open630

...to

CATALINA_HOME==/your-path-installation

9)

------ Installation of Docker ------

Docker will be the container of Kurento-Media-Server, wich we´ll need for micro-audio, cam, recordings and share desktop.

Update the system:

```
sudo apt update
```

Install some needed packets:

```
sudo apt install apt-transport-https ca-certificates curl software-properties-common
```

.
..add the GPG key for the oficial Docker repo:

```
sudo mkdir -p /etc/apt/keyrings
```

(Only one line with space between both)

```
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor –o
/etc/apt/keyrings/docker.gpg
```

...and now add the repo to our APT:

(Only one line without space between them))

```
echo "deb [arch=$(dpkg --print-architecture) signed-by=/usr/share/keyrings/docker-archive-
keyring.gpg] https://download.docker.com/linux/ubuntu $(lsb_release -cs) stable" | sudo tee /etc/apt/
sources.list.d/docker.list > /dev/null
```

...update to take effect the changes:

```
sudo chmod a+r /etc/apt/keyrings/docker.gpg
```

...(to solve a possible error)

```
sudo apt update
```

...and now to be sure Docker will be installed from the repo we´ve added, run this command:

```
apt-cache policy docker-ce
```

...must show something similar to this:

```
docker-ce:
  Installed: (none)
  Candidate: 5:19.03.9~3-0~ubuntu-focal
  Version table:
     5:19.03.9~3-0~ubuntu-focal 630
        630 https://download.docker.com/linux/ubuntu focal/stable amd64 Packages
```

...and install Docker:

```
sudo apt install docker-ce
```

...we check that the installation was right nd is running:

```
sudo systemctl status docker
```

...and will show something similar to this:

```
Output
? docker.service - Docker Application Container Engine
    Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor preset: enabled)
    Active: active (running) since Tue 2020-05-19 17:00:41 UTC; 17s ago
TriggeredBy: ? docker.socket
      Docs: https://docs.docker.com
  Main PID: 24321 (dockerd)
     Tasks: 8
    Memory: 46.4M
    CGroup: /system.slice/docker.service

       +-24321 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock
```

We add our user system and so can run Docker without be root:

```
sudo usermod -aG docker ${USER}
```

.To run docker, we´ll employ the following command:

```
sudo systemctl start docker.service
```

And with this we´ve finished the Docker installation.

10)

------ Installation of Kurento-Media-Server ------

Kurento is needed for micro-audio, cam, recordings and share desktop.
We install it on the docker recipient:

First run docker:

```
sudo systemctl start docker.service
```

…and now we´ll install kurento-media-server. But first we´ll create the folder where will be the video recorder files we should make in rooms, as well as the uploaded files and documents:

sudo mkdir -p /opt/om_data

…and install kurento:

(Only one line, with space between both)

sudo docker run -d --name kms -p 8888:8888 --mount type=bind,source=/opt/om_data,target=/opt/om_data kurento/kurento-media-server

Run kurento-media-server, wich name is kms:

sudo docker start kms

11)

------ Run Tomcat-OpenMeetings ------

Start MariaDB, if still it is not:

sudo /etc/init.d/mariadb start

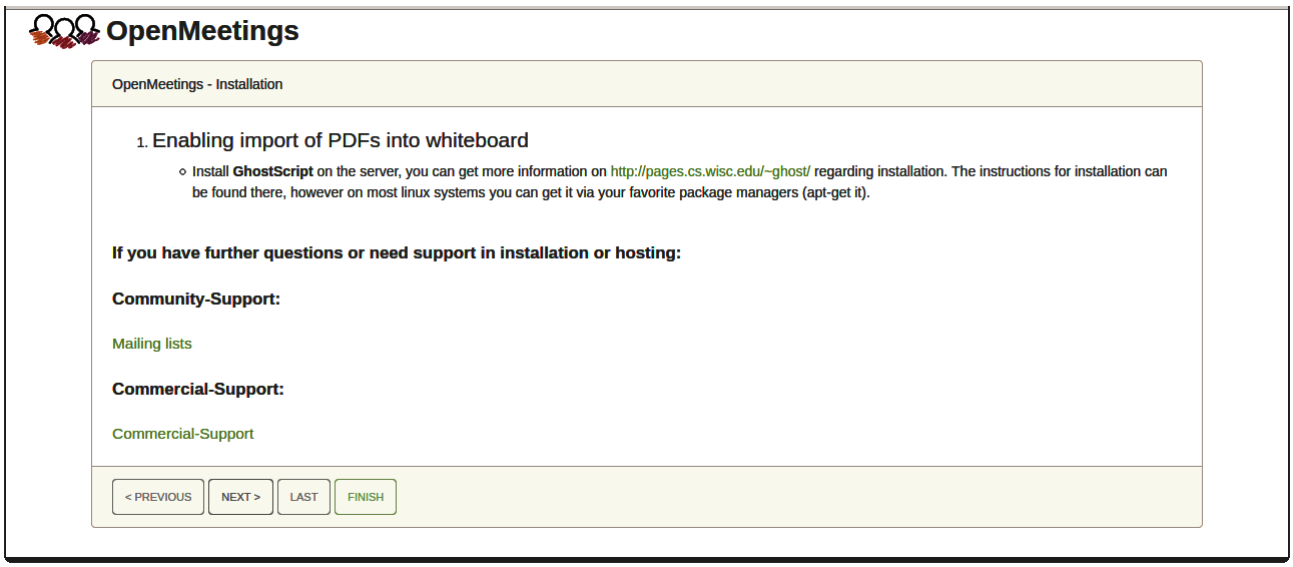
...and now start Tomcat-OpenMeetings:

sudo /etc/init.d/tomcat34 start

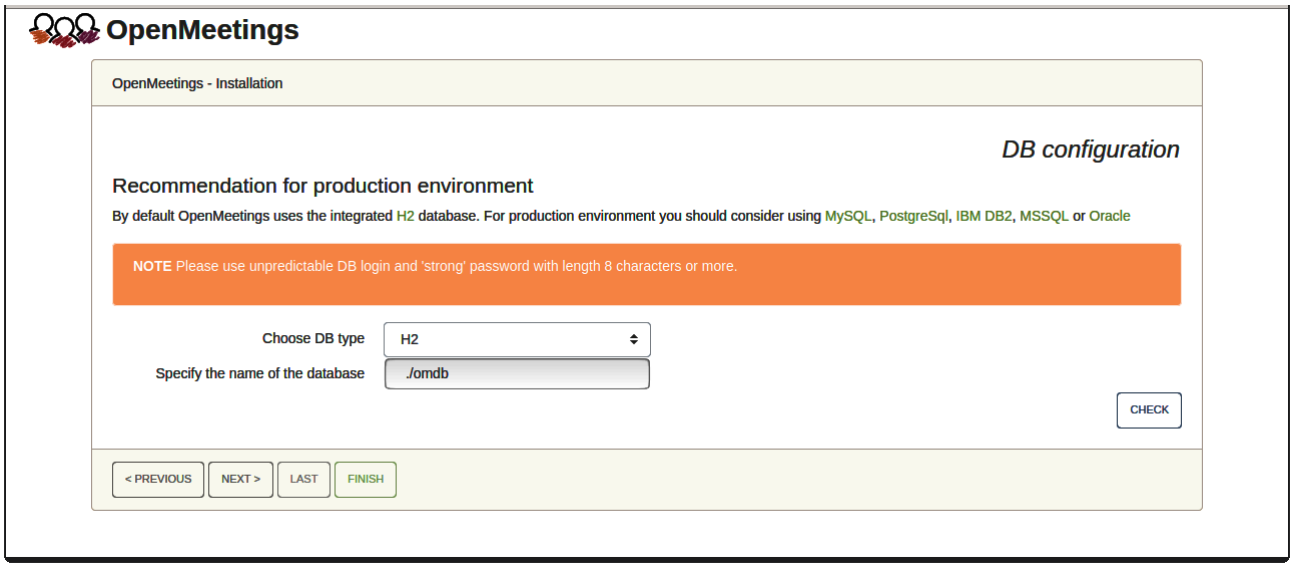
...wait 30 seconds at least, in order that tomcat runing completely. And after this, can go to:

https://localhost:5443/openmeetings

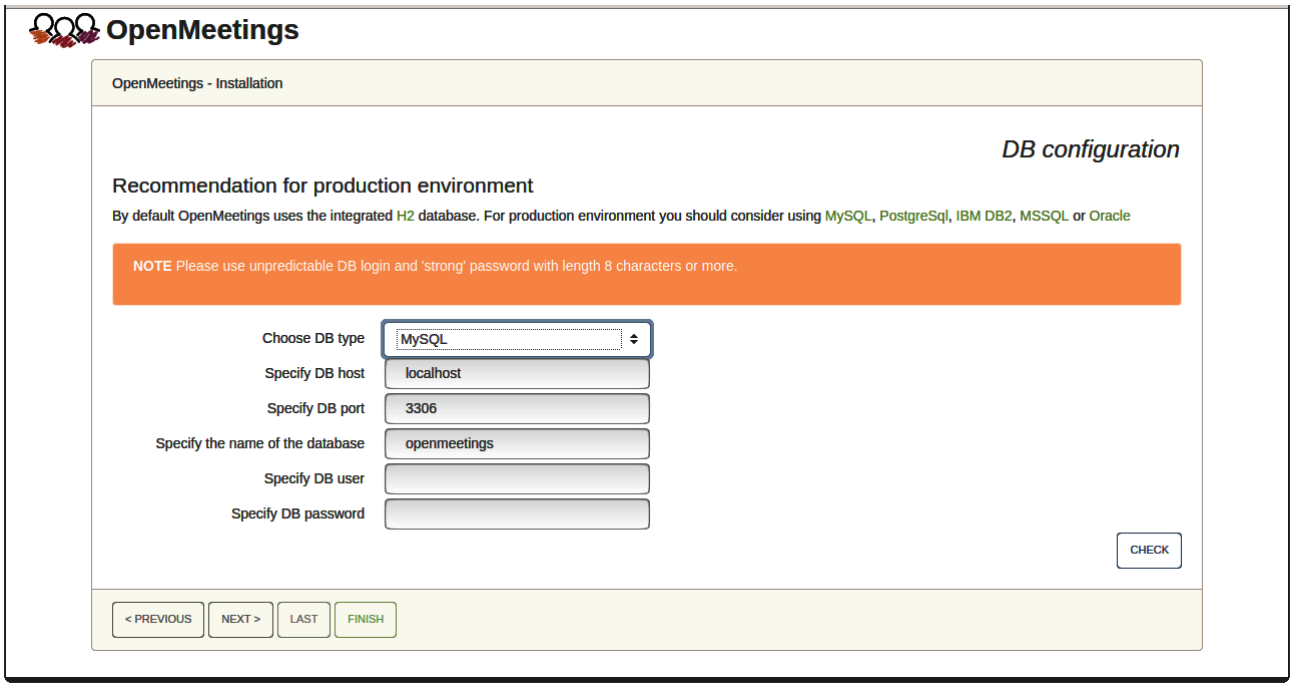
...there will appear a page similar to this one:



...press on "**Next >**" button (bottom), and will show the default database configuration with H2, but we employ MySQL (MariaDB),



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



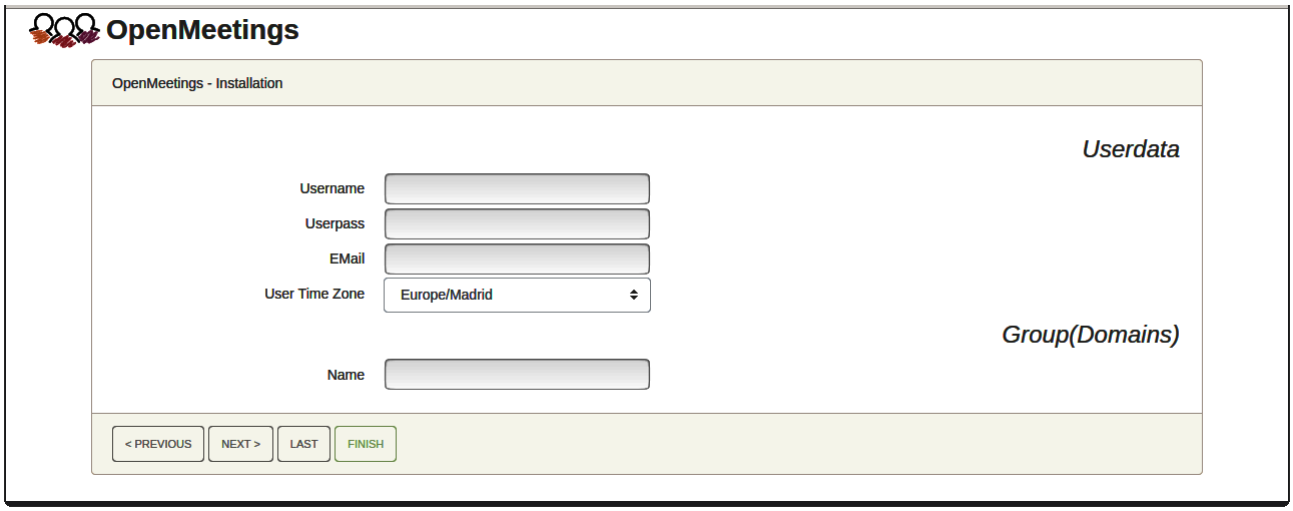
Now we must introduce the database name, user name and his password, we did at the step 6:

Specify the name of the database = open630

Specify DB user = hola

Specify DB password = 1a2B3c4D

...if you choose any other data, please type it here. Please push "**Next >**" 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.

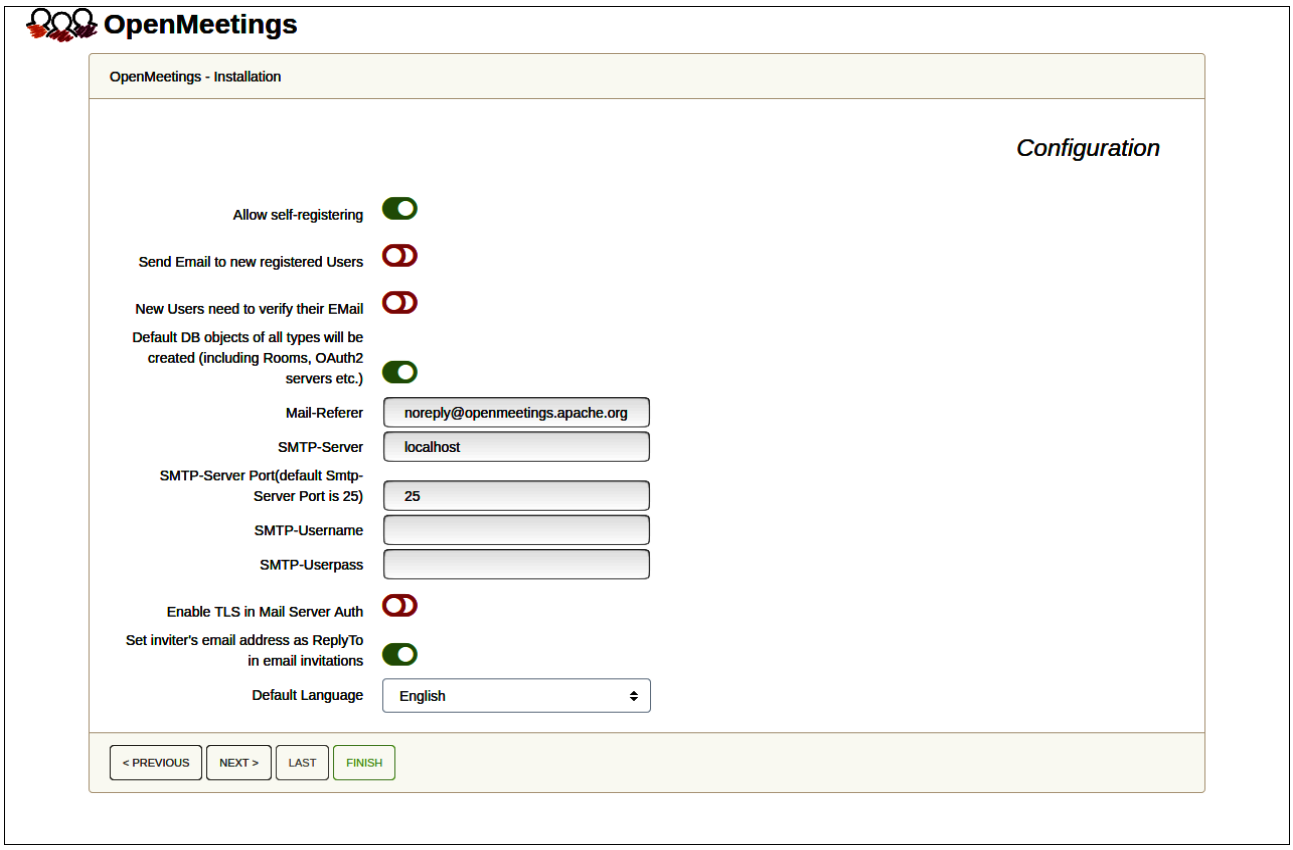
Email = email-adress ...of the previous user.

User Time Zone = country where is this server.

Name = example-openmeetings ...group name to choose.

Write down your username and password on a piece of paper, then it will be used to access OpenMeetings later.

Press the button "**Next >**" 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:



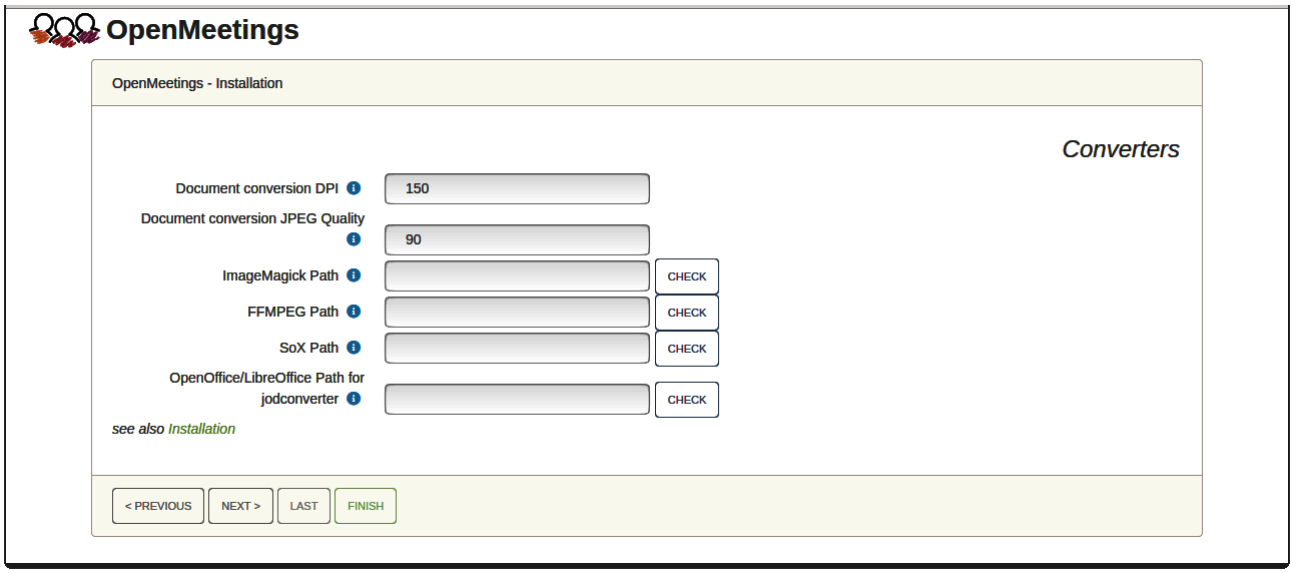
A valid example to configure the mail server with Gmail, is as follows:

(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 likes.

Now press the button "**Next >**" and a new page will appear:

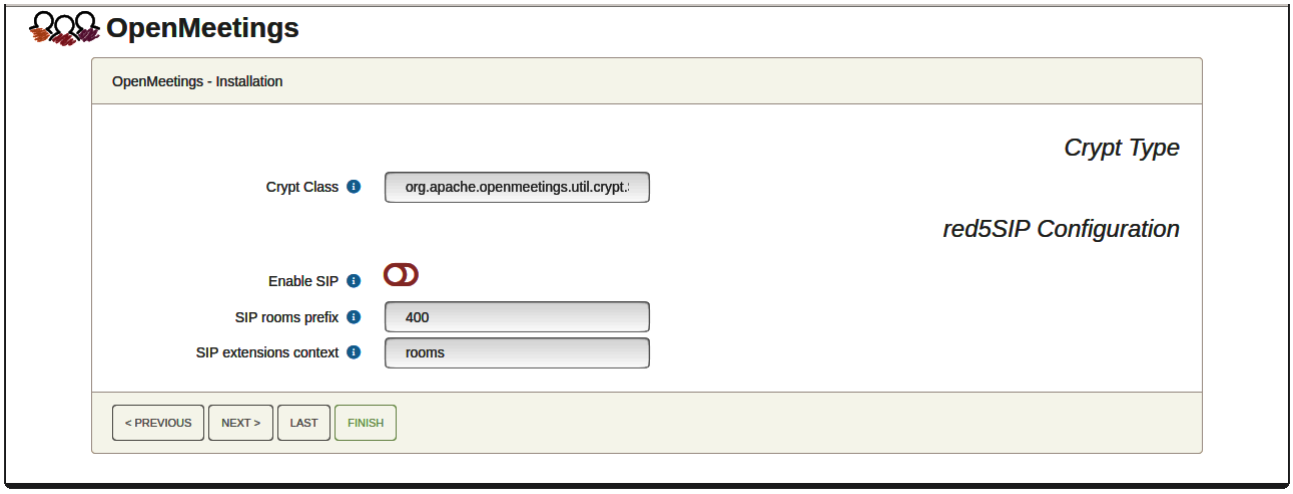


Here we´ll introduce the respective paths for the image, video, audio and conversion of uploaded files:

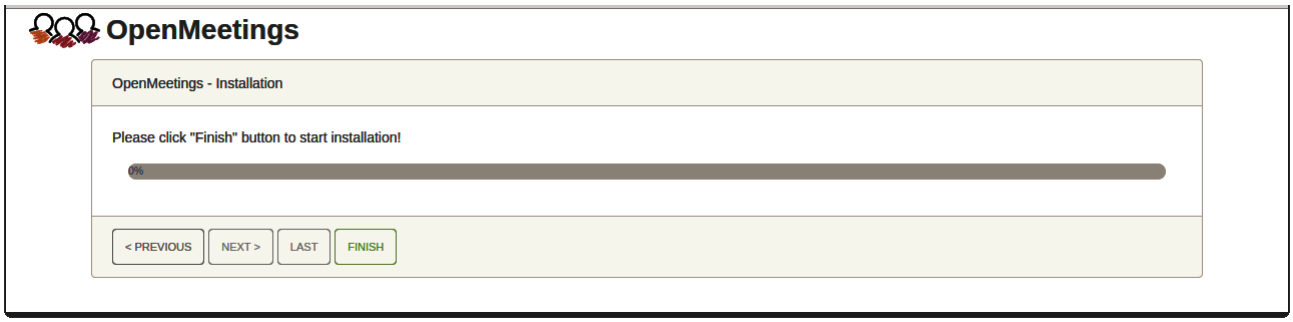
ImageMagick Path	==	...here empty
FFMPEG Path	==	...here empty
SOX Path	==	...here empty
OpenOffice/LibreOffice Path for jodconverter	==	/usr/lib/libreoffice

As you go introducing paths, you can check if they are correct by pressing the button labeled **Check**.

Once completed the paths, please click the button "**Next >**" and move on to another page that we will leave as is:

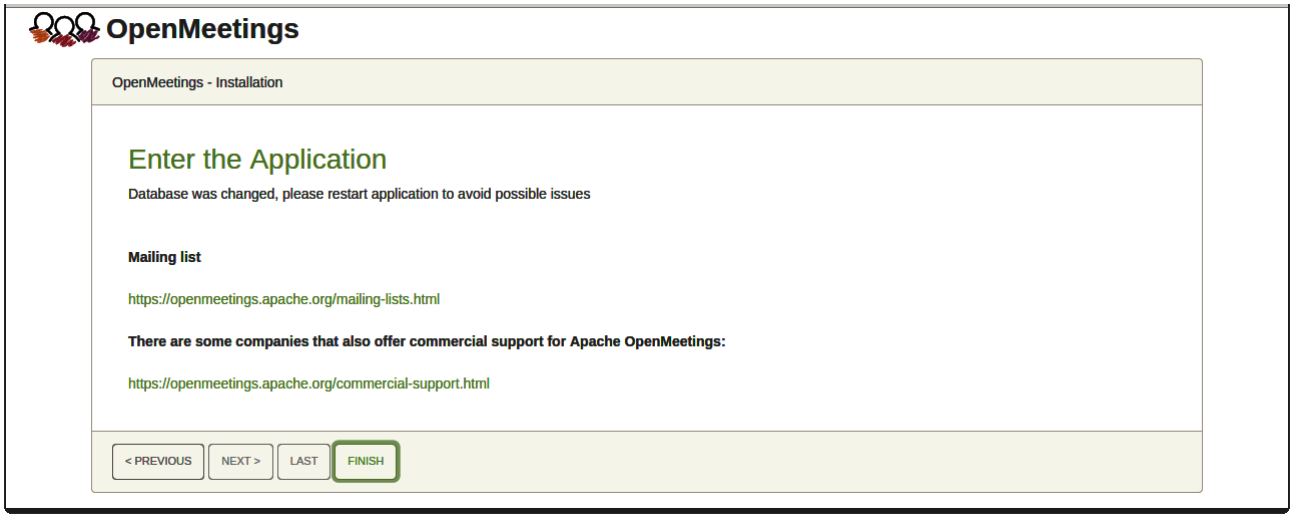


Now push the button "**Next >**" and will show this window:



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 needed restart the server:

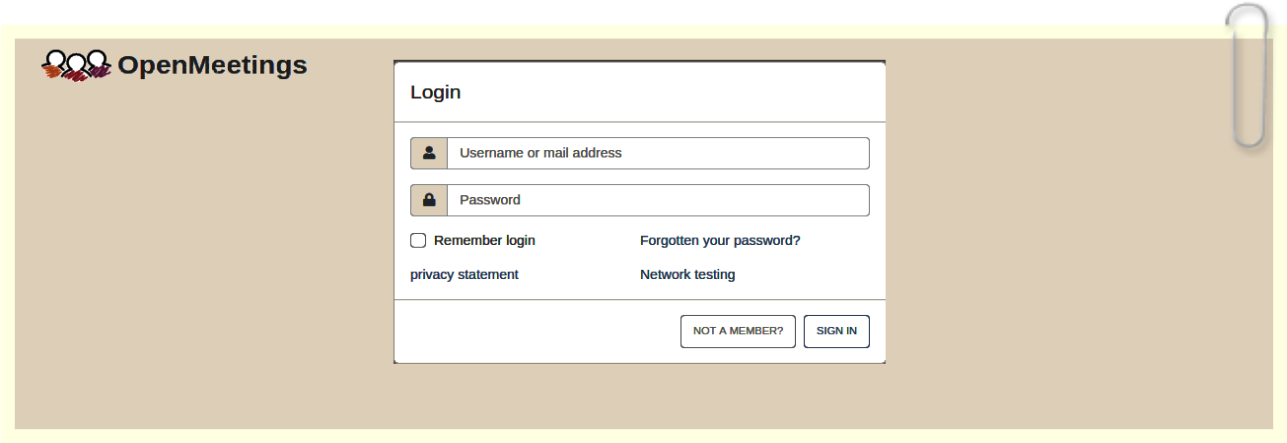
sudo /etc/init.d/tomcat34 restart



Now yes, you can clic on **Enter the Application**, or go with your browser to:

https://localhost:5443/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!

After installing OpenMeetings, you still need to install Coturn (Turn server), for which you can download the following tutorial and follow it from step 5:

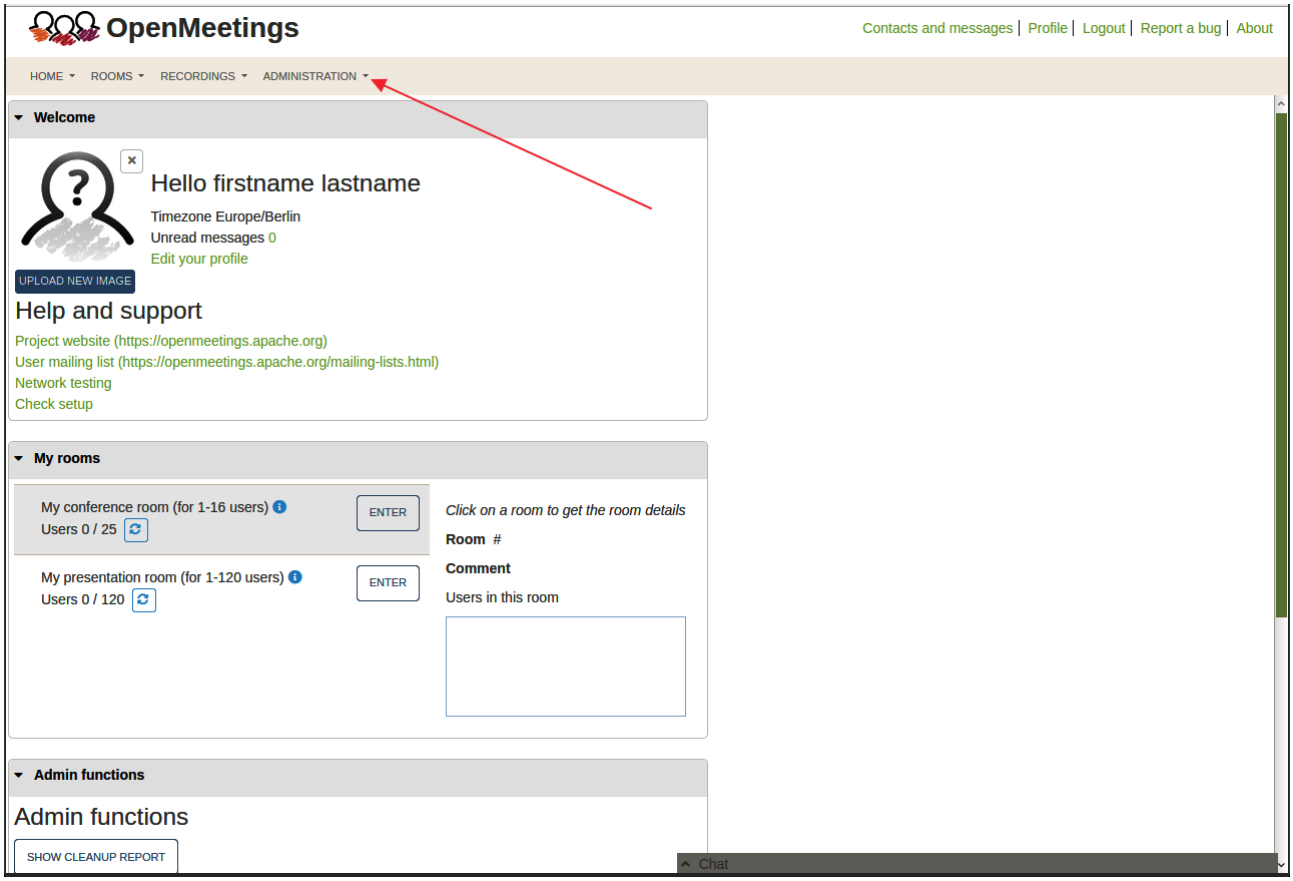
Installation SSL certificates and Coturn for OpenMeetings 6.3.0 on Ubuntu 22.10

12)

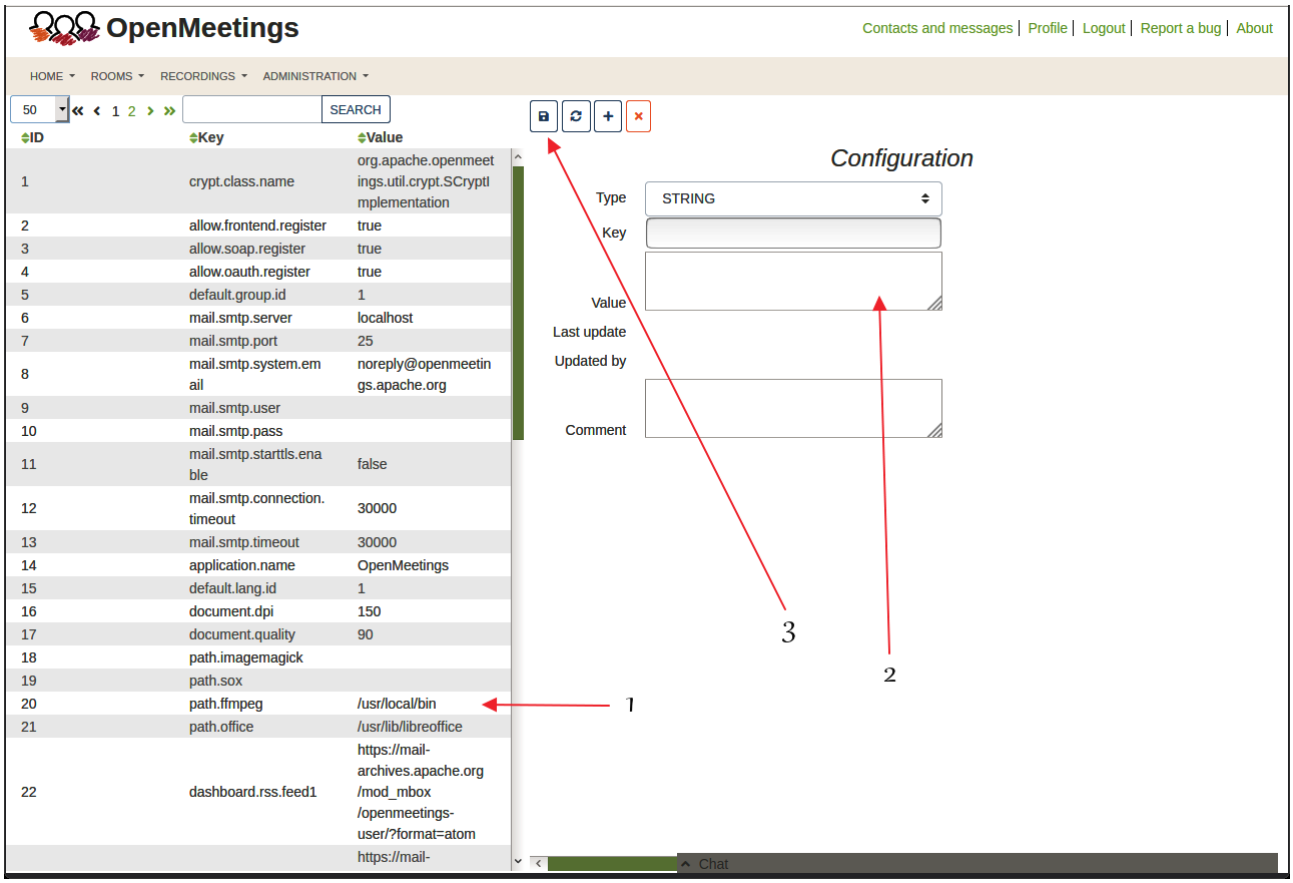
------ OpenMeetings's Configuration ------

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:



Now would be convenient stop any server and reboot the machine-server.

So to finish, the commands remember to run the servers are:

sudo /etc/init.d/mariadb start	….MariaDB data server
sudo systemctl start docker.service	…. Docker
sudo docker start kms	…..Kurento Media Server
sudo /etc/init.d/tomcat34 start	...Tomcat-OpenMeetings

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

https://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 download:

OpenMeetings Wallpaper Download

A dvd live iso with OpenMeetings 6.3.0 on Ubuntu 18.04, it is at your disposal.

Can find it here:

Live iso download

Thank you.

Alvaro Bustos (PMC and Committer at Apache OpenMeetings).