
**Installation of Apache OpenMeetings 5.0.0**

on

**Fedora 32 final**

This tutorial it is bassed on a fresh installation of

**Fedora-MATE_Compiz-Live-x86_64-32-1.6.iso**

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

It is done step by step**.**

Starting...

**1)**
At first place, modify Selinux level security, for the installation, and install nano editor:

su

dnf install nano

sudo nano /etc/selinux/config

…modify:

SELINUX=**enforcing**

...to

SELINUX=**permissive**

Press **Ctrl+x** and will ask to save, press **Y,** and **Enter**, to save and leave nano´s editor.

Add our user system to sudoers, so can use sudo:

nano /etc/sudoers

...copy and paste replacing user by your real user system name:

user ALL=(ALL:ALL) ALL

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

exit ...exit as root.

**2)**

**------ Update the system ------**

Update the system:

sudo dnf update -y

...and reboot the machine to get effect the changes. After reboot continue at step 3:

sudo reboot

**3)**

**------ ADD Repos ------**

**## RPM Fusion repo ##**

(Only one line without space between them)

sudo su -c 'dnf install --nogpgcheck http://download1.rpmfusion.org/free/fedora/rpmfusion-free-release-32.noarch.rpm http://download1.rpmfusion.org/nonfree/fedora/rpmfusion-nonfree-release-32.noarch.rpm'

Update again:

sudo dnf update -y

**4)**

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

Java 11 is needeed to work OpenMeetings 5.0.0. Will install OpenJava 11.

**-- Only for Fedora 32 bit --**

sudo dnf install java-11-openjdk.i686 java-11-openjdk-headless.i686

**-- Only for Fedora 64 bit --**

sudo dnf install java-11-openjdk.x86_64 java-11-openjdk-headless.x86_64

May be you have installed different versions of Java. Please, select the just installed OpenJava 11:

sudo update-alternatives --config java

...and to see if the selected version is active:

sudo java -version

**5)**

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

LibreOffice it is installed already in the desktop-distro, but especially for server iso:

sudo dnf -y install libreoffice

Is needeed to convert uploaded office files to pdf.

**6)**

**------ Installation of ImageMagick and Sox ------**

**ImageMagick,** work with the images files jpg, png, gif, etc. Install it:

sudo dnf -y install ImageMagick

**Sox,** work with the audio. Install it:

sudo dnf -y install sox

**7)**

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

FFmpeg will work the video. Will install it:

sudo dnf install -y ffmpeg

**8)**

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

MariaDB is the data server fork of MySQL.

We install it:

sudo dnf install -y mariadb mariadb-server

...and run MariaDB (be connected to Internet, to run it quickly):

sudo systemctl start mariadb.service

Give a password to MariaDB root. Please, replace **new-password** by your own whish:

sudo mysqladmin -u root password **new-password**

Make a database for OpenMeetings:

sudo mysql -u root -p

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

```
MariaDB [(none)]>  CREATE DATABASE open500 DEFAULT CHARACTER SET 'utf8';
```

Now we create a user with all permision on this open500 database. User password must be of 8 digits minimum:

(Only one line with space between both)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON open500.* TO 'hola'@'localhost' IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;

* open500 ..... 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

**9)**

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

We´ll install OpenMeetings in /opt/open500. All the following information will be based on this directory:

cd /opt

...download and uncompress the file:

sudo wget https://archive.apache.org/dist/openmeetings/5.0.0/bin/apache-openmeetings-5.0.0.tar.gz

...uncompress it:

sudo tar xzvf apache-openmeetings-5.0.0.tar.gz

...and rename the obtained folder:

sudo mv apache-openmeetings-5.0.0 open500

**10)**

**------ Installation connector OpenMeetings with MariaDB ------**

This file-driver is need it to connect OpenMeetings with MariaDB. Download and install it:

cd /opt

(Only one line without space between both)

sudo wget https://repo1.maven.org/maven2/mysql/mysql-connector-java/8.0.20/mysql-connector-java-8.0.20.jar

sudo cp mysql-connector-java-8.0.20.jar /opt/open500/webapps/openmeetings/WEB-INF/lib

**11)**

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

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

cd /opt

sudo wget https://cwiki.apache.org/confluence/download/attachments/27838216/tomcat3

...copy it to where must be:

sudo cp tomcat3 /etc/init.d/

...and concede execution permission:

sudo chmod +x /etc/init.d/tomcat3

If you made the installation in any other different path to /opt/open500, please edit the script and modify the line:

CATALINA_HOME=/opt/open500

...to

CATALINA_HOME=/your-path-installation

**12)**

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

Run MariaDB:

sudo systemctl start mariadb.service

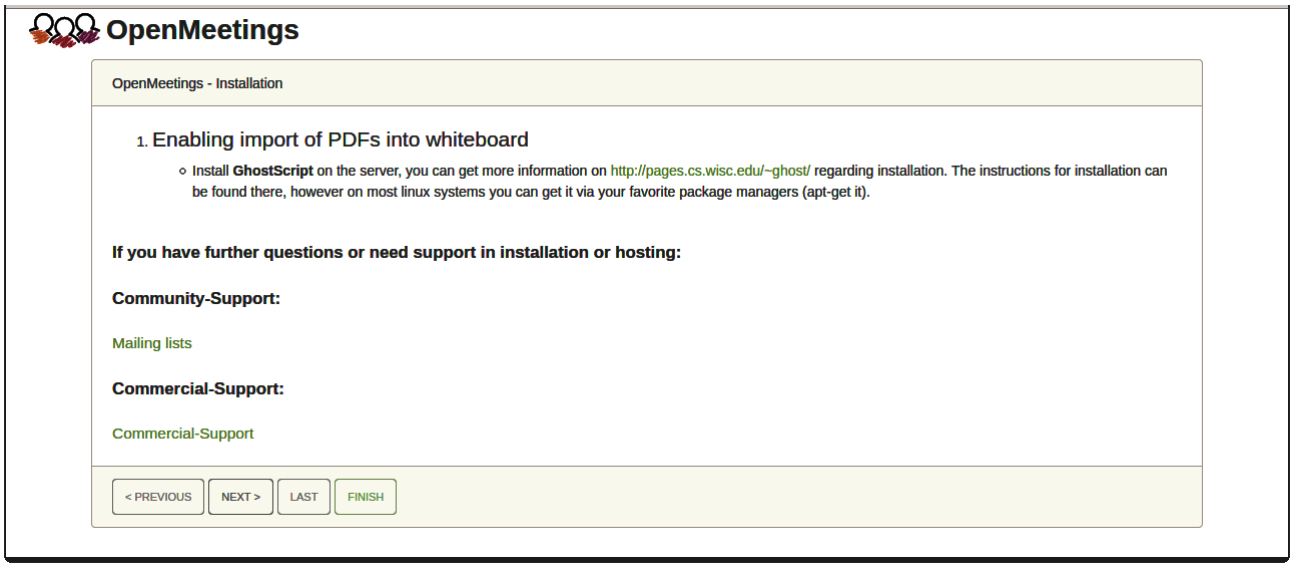
...and Tomcat-OpenMeetings:

sudo /etc/init.d/tomcat3 start

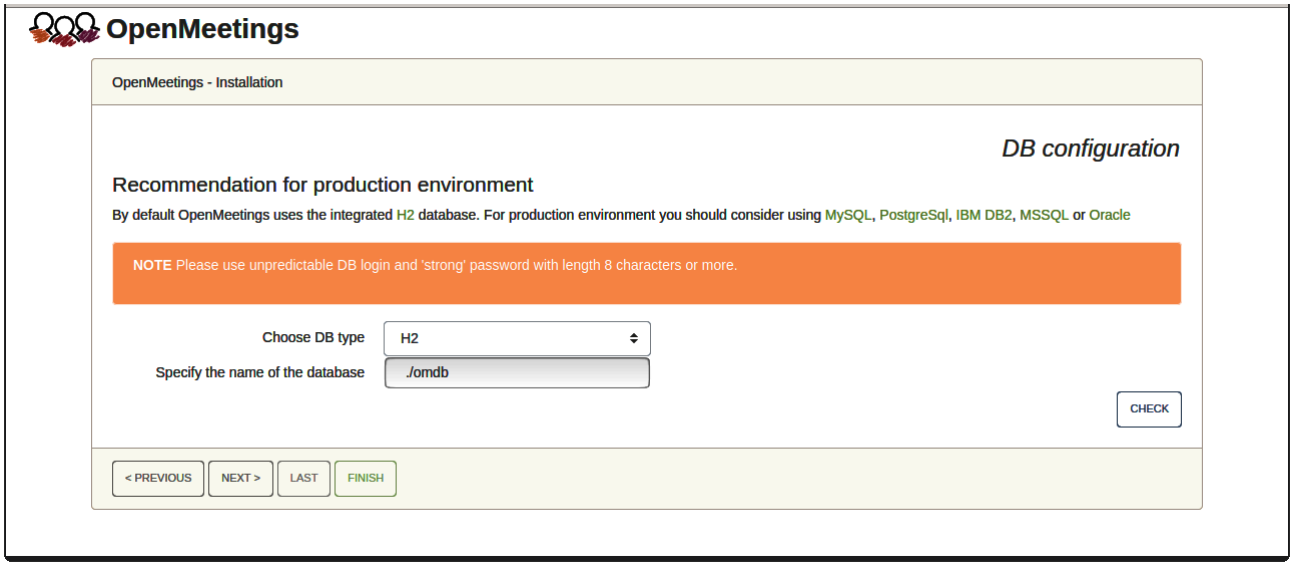
...wait about 40 seconds in order Tomcat run completly. Then, go with the browser to:

https://localhost:5443/openmeetings

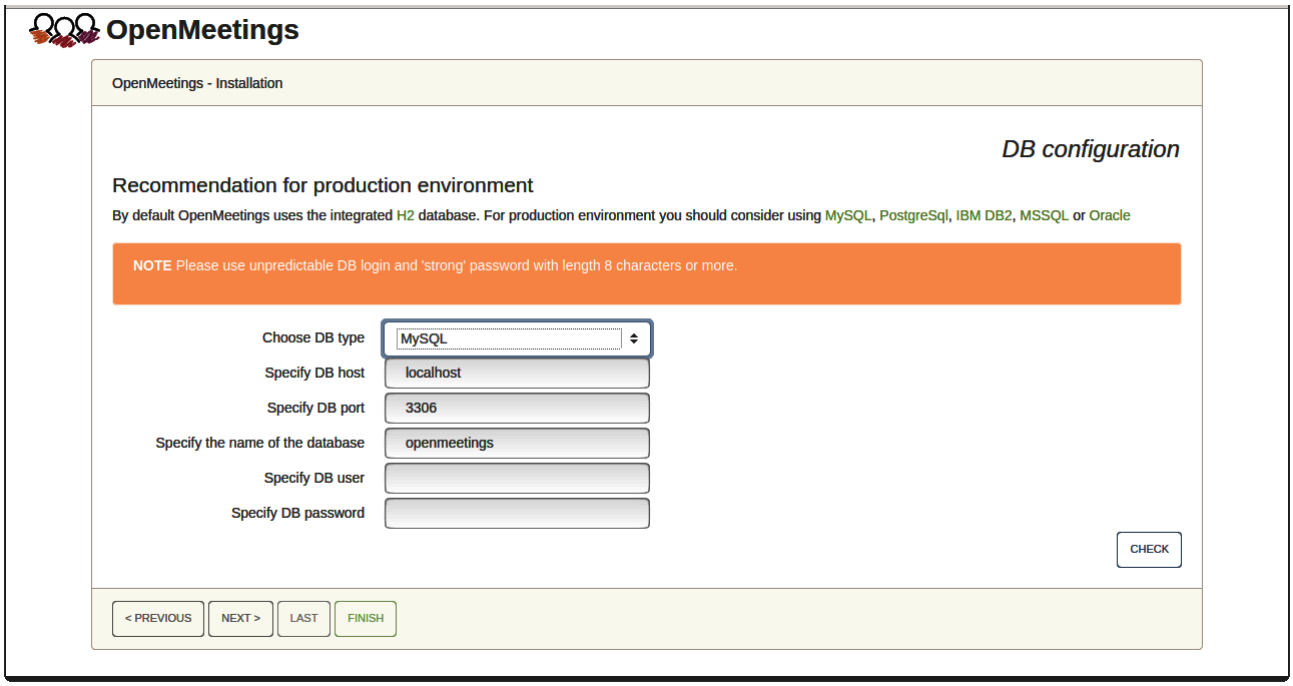
...there will show a page similar to this one:




...press on "**Next >**" (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, the user name and his password we did at the step 8:

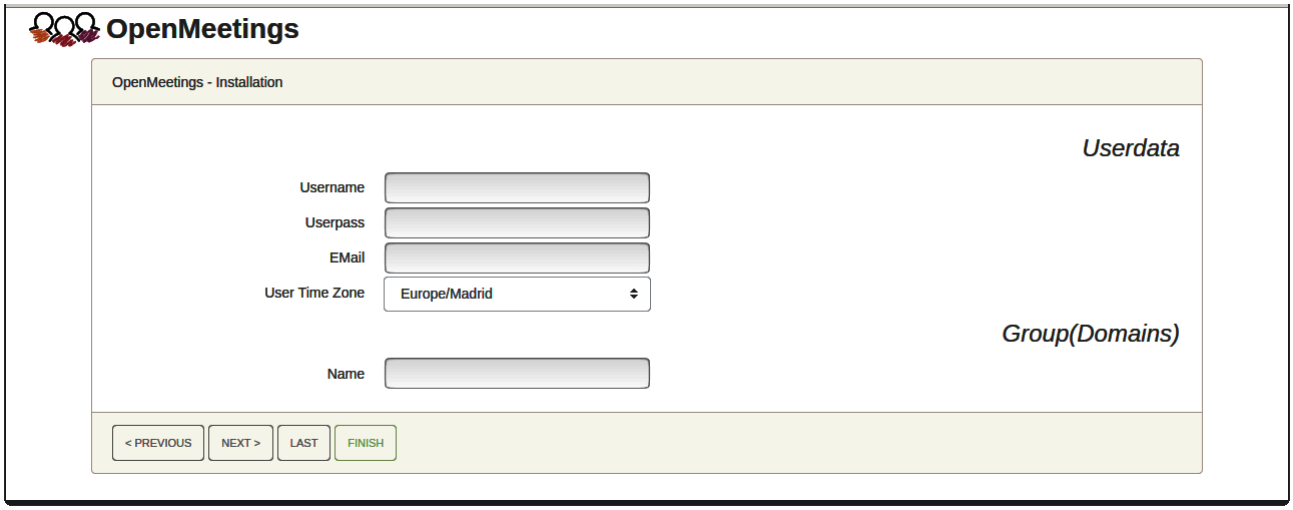
**Specify the name of the database** = open500

**Specify DB user** = hola

**Specify DB password** = 1a2B3c4D

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

Press "**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 name will have administrator rights.

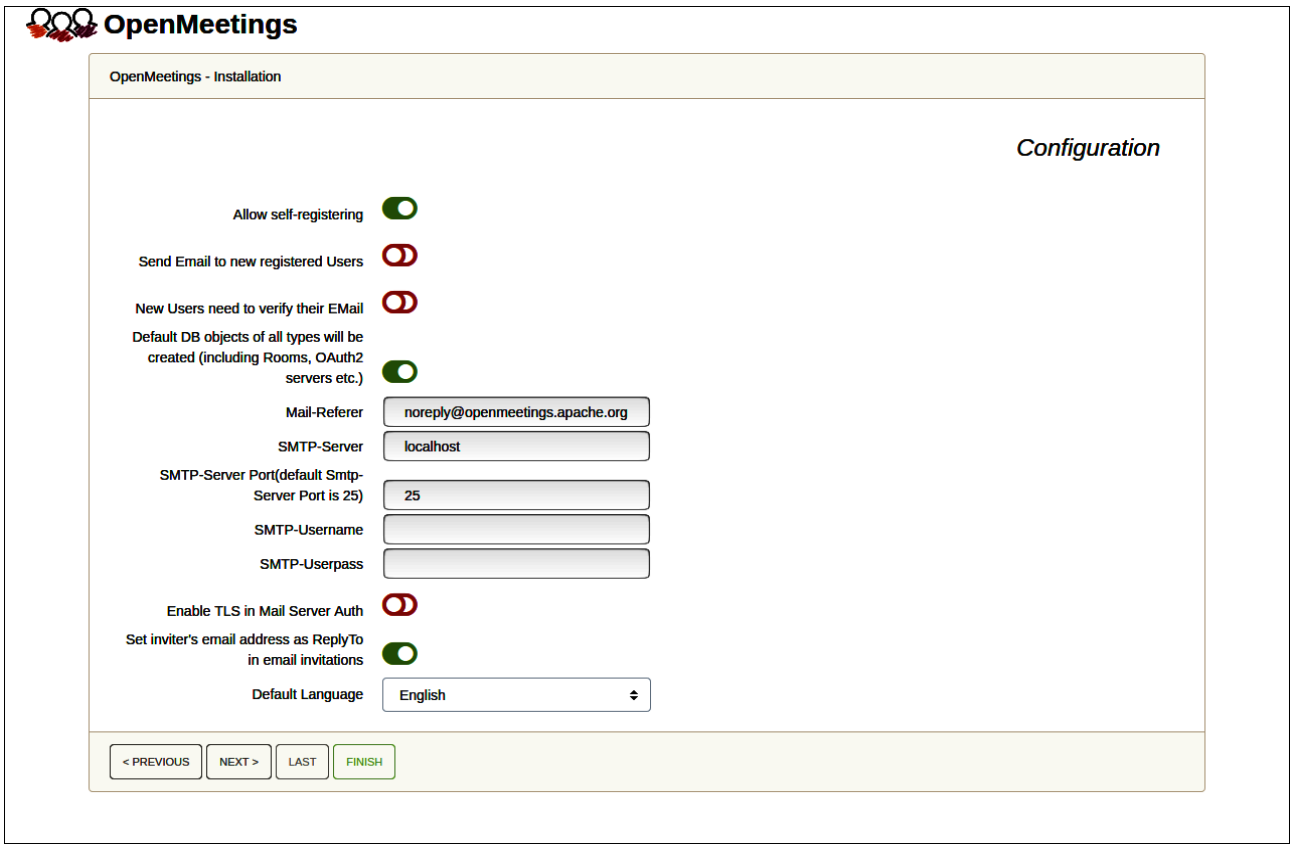
**Userpass** = a-password ….for the previous user

**EMail** = email-adress ...of the previous user.

**User Time Zone** = country where is this server

**Name** = exemple-openmeetings ...group name to choose

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

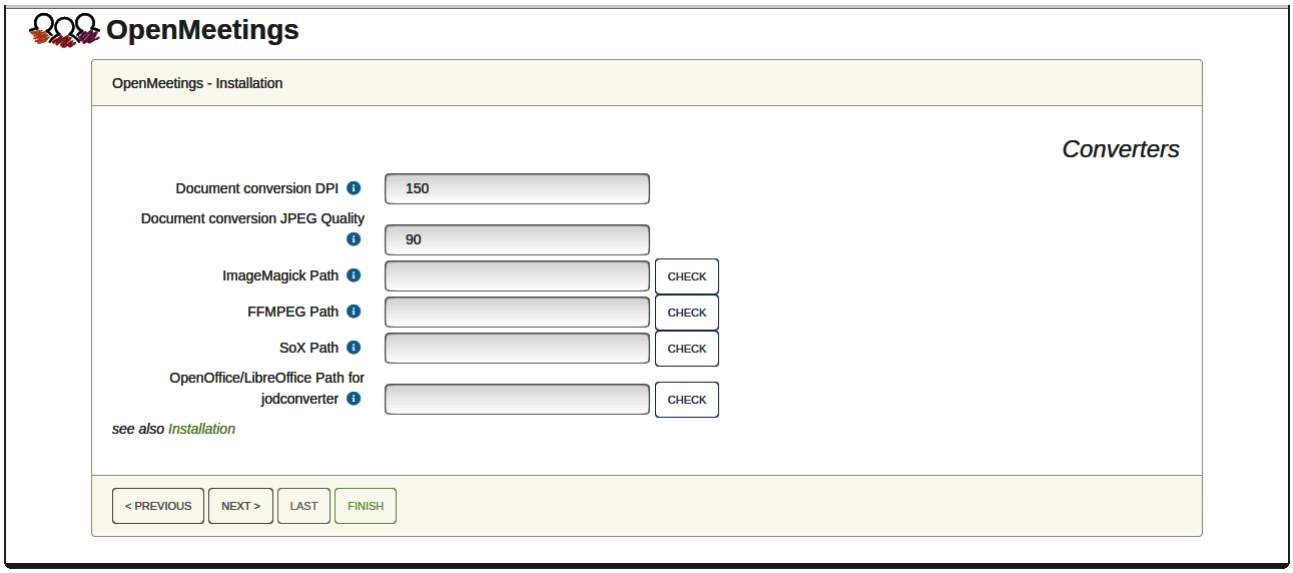
**Enable TLS in MailServer Auth** == ...turn green the button to activate

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

**Default Language** == ...select your language

...the rest you can change it as you like.

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 (LibreOffice):

**ImageMagick Path** == /usr/bin

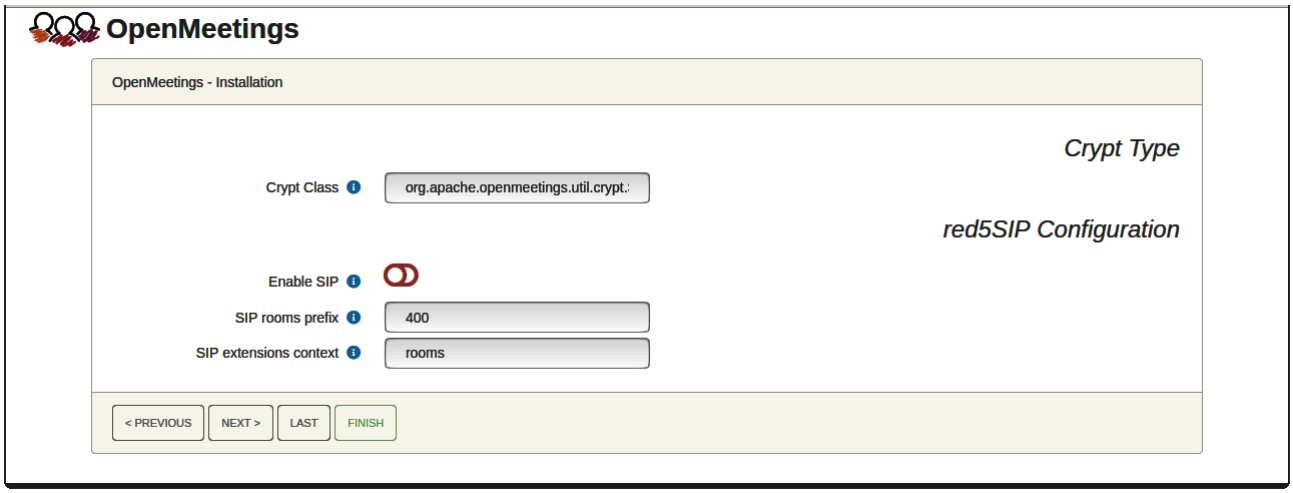
**FFMPEG Path** == /usr/bin

**SOX Path** == /usr/bin

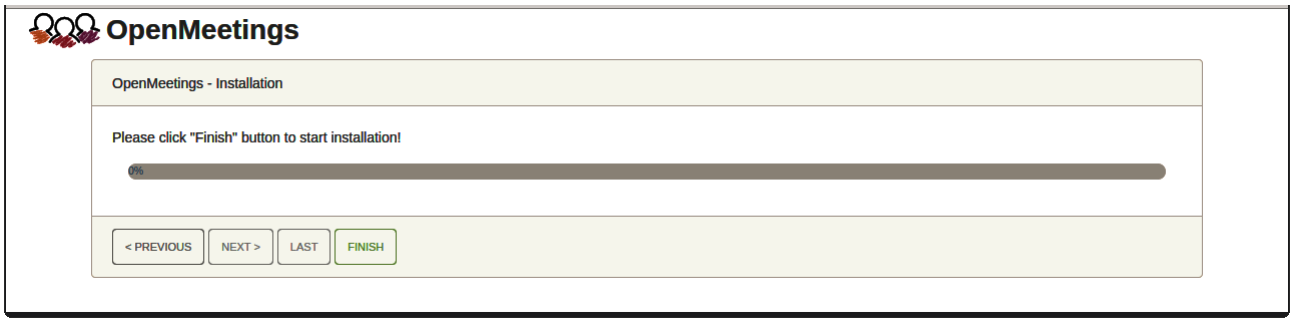
**OpenOffice/LibreOffice Path for jodconverter**
== /usr/lib/libreoffice **(32bits)**
== /usr/lib64/libreoffice **(64bits)**

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 it as is:

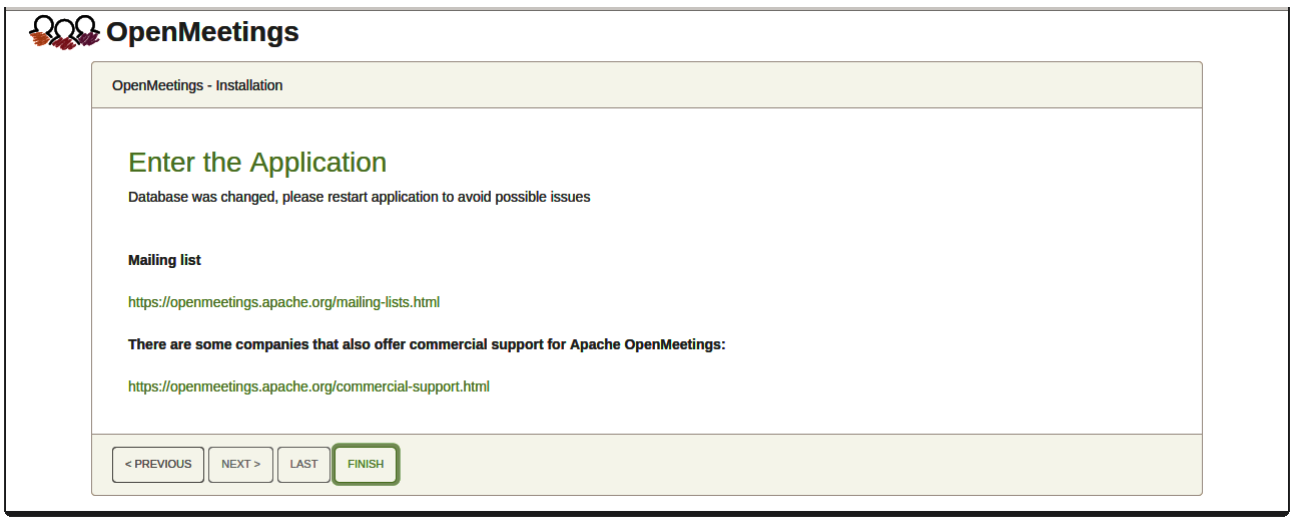



Now push the button "**Next >**" Will show this window:

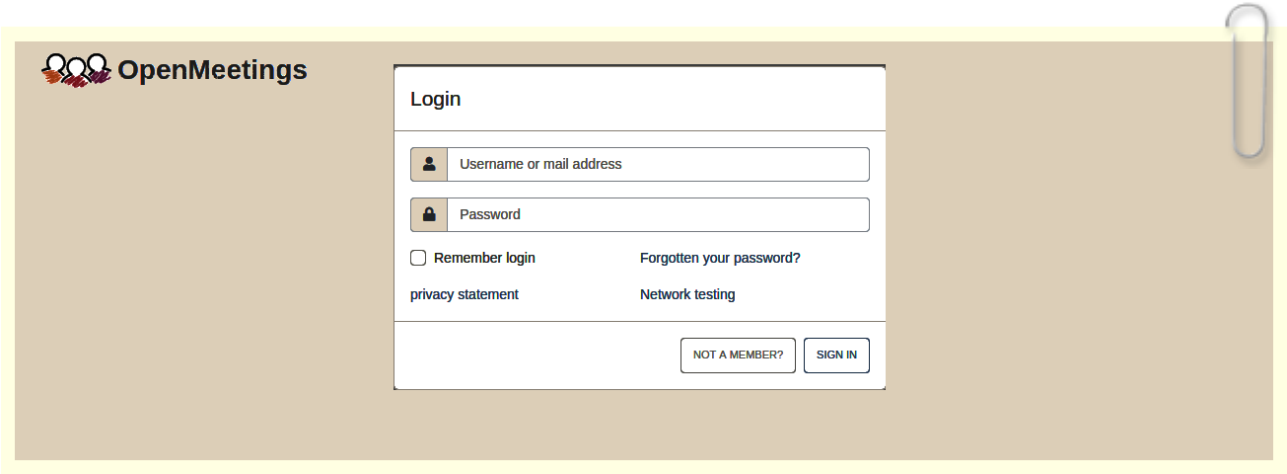



Press "**Finish**" button ...wait a seconds untill the tables are fill in the database.
When has concluded, this another page will appear. Don´t clic on **Enter the Application**.
First is need it to restart the server (be connected to Internet):

sudo /etc/init.d/tomcat3 restart



Now you can click on **Enter the Application** and it will take you to the OpenMeetings entry. But wait before entering OpenMeetings, we have to install Podman and Kurento-Media-Server, something we will do in the next steps, so that you can have access to the camera, micro, recording and desktop sharing in the room




**13)**

**------ Installation of Podman ------**

Podman will be the recipient of Kurento Media Server**.** First we install some neccessary libraries:

sudo dnf -y install dnf-plugins-core

...install podmam:

sudo dnf install podman

Stop Tomcat-OpenMeetings and Mariadb:

sudo /etc/init.d/tomcat3 stop

sudo systemctl stop mariadb.service

…and reboot the machine. After this, follow in the step **14)**:

sudo reboot

**14)**

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

After had rebooted the computer, we´ll install Kurento-Media-Server needed for cam, mic-audio, recordings and share dektop in room.

First run podman:

sudo systemctl start podman.service

...and install kurento-media-server:

(Only one line, with space between 1 and 2, and without space between 2 and 3)

sudo podman run -d --name kms -p 8888:8888 --mount type=bind,source=/opt/open500/webapps/openmeetings/data,target=/opt/open500/webapps/openmeetings/data kurento/kurento-media-server

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

sudo podman start kms

...and run also MariaDB and tomcat-OpenMeetings:

sudo systemctl start mariadb.service

sudo /etc/init.d/tomcat3 start

...wait around 40 seconds to tomcat run completly.

Now you can access OpenMeetings with all the functions at your disposal.

Clic the link down and type the user name and his password to login:

https://localhost:5443/openmeetings

To connect to this server from Internet or LAN is neccesary open the following ports:

**5443 8888**

# 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:

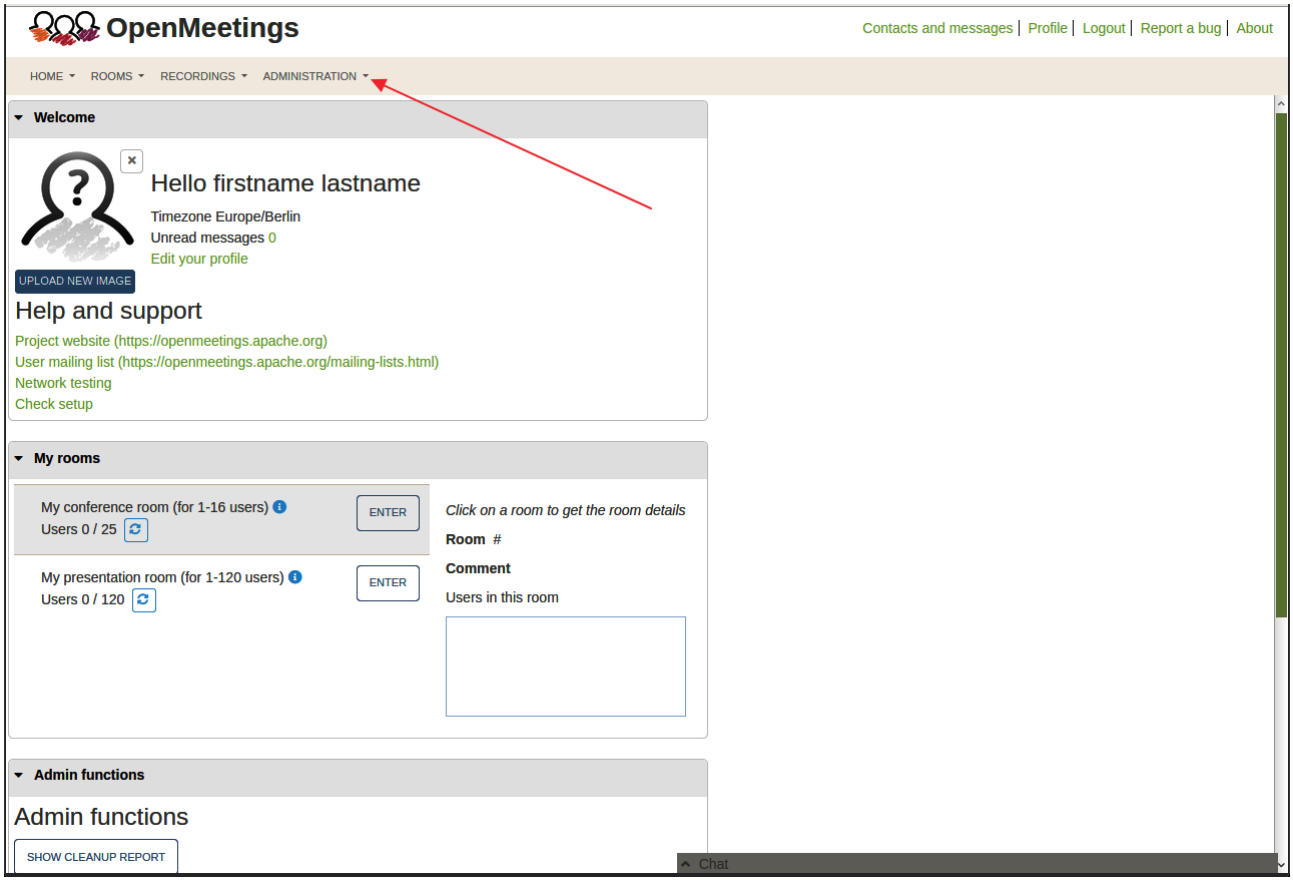
Installation SSL certificates and Coturn for OpenMeetings 5.0.0 on Fedora 32

**15)**

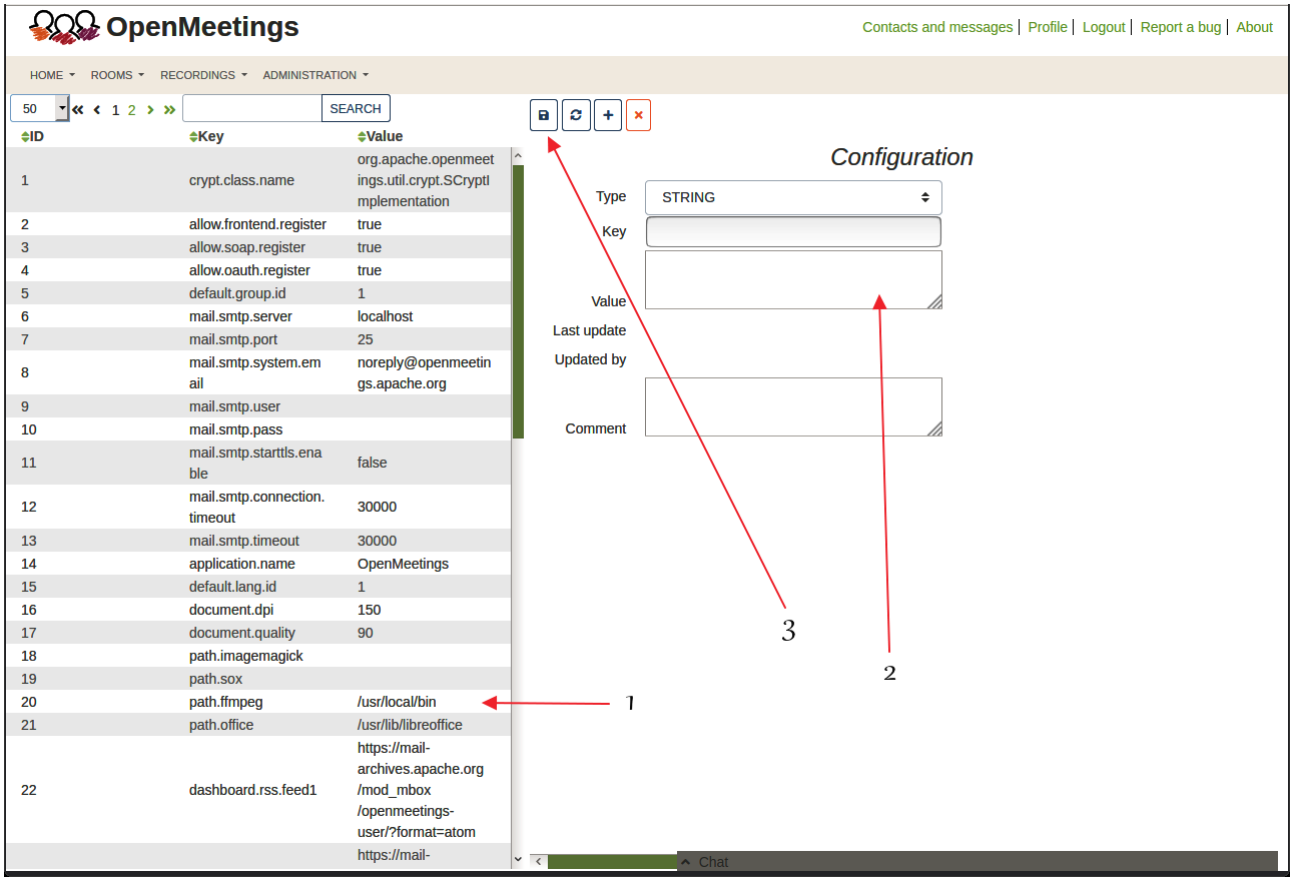
## ------ Configuration of OpenMeetings ------

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:




**16)**

**------ Order to run the servers ------**

Once finished the installation of OpenMeetings, the next time you run the servers, please do it in this order:

sudo systemctl start mariadb.service ..MariaDB data server

sudo systemctl start podman.service …Podman, recipient of Kurento media server

sudo podman start kms ...Kurento media server

sudo /etc/init.d/tomcat3 start ...Tomcat-OpenMeetings

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If you have some doubt or question, please expose it in 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 5.0.0 on Ubuntu 18.04 is at your disposal.

Can find it here:

Live iso download

Thank you.

Alvaro Bustos  (PMC and Committer at Apache OpenMeetings).