Installation of Apache OpenMeetings 3.x.x
on
Fedora 20 – 64bit

This tutorial it is bassed on two fresh installations of

Fedora-Live-Desktop-x86_64-20-1.iso

and after this add Mate Desktop and Kde Desktop respectively.

It is tested in both versions with positive result.
We will use the Apache's binary version:

OpenMeetings 3.0.3 stable

that is to say should suppress his compilation.

It is done step by step**.**

20-9-2014

Starting...

1)
At first place modify Selinux level security for the installation.

sudo gedit /etc/selinux/config

…modify:

SELINUX=**enforcing**

...to

SELINUX=**permissive**

When finish the installation you can back to enforcing level.

2)

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

Update operative system:

yum update -y

...and reboot for kernel changes:

reboot

3)

Install gedit and wget:

sudo yum -y install gedit wget

4)

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

RPM Fusion repo

For **Gnome (Mate)**...all in one line only:

su -c 'yum localinstall --nogpgcheck http://download1.rpmfusion.org/free/fedora/rpmfusion-free-release-stable.noarch.rpm http://download1.rpmfusion.org/nonfree/fedora/rpmfusion-nonfree-release-stable.noarch.rpm'

...and for **Kde**...all in one line only with a space between both:

su -c 'yum -y install wget && wget http://apt.kde-redhat.org/apt/kde-redhat/fedora/kde.repo -O /etc/yum.repos.d/kde.repo'

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

Fast searches repos:

sudo yum -y install yum-plugin-fastestmirror

sudo yum -y install yum-presto

yum update -y

5)

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

Should install packages and libraries necessary:

(In only one line)

yum install -y libjpeg-turbo libjpeg-turbo-devel libjpeg-turbo-utils giflib-devel freetype-devel gcc-c++ zlib-devel libtool bison bison-devel file-roller ghostscript freetype unzip gcc ncurses make bzip2 wget ImageMagick ghostscript ncurses zlib git make automake nasm pavucontrol alsa-plugins-pulseaudio flash-plugin vlc icedtea-web nmap

6)

-------- LibreOffice or **OpenOffice ------**

LibreOffice it is installed already in the distro.
Is need it to convert uploaded files.

7)

-------- Oracle Java 1.7 --------

Oracle Java 1.7 it is necessary to OpenMeetings works.

OpenJava 1.7 it is installed already, but is not ok for installing OpenMeeting.
icedtea-web, that is a java plugin browser, can help for room recordings and share desktop from Conference Room in OpenMeetings.

Well, should install Oracle Java 1.7.

Please visit:

http://www.oracle.com/technetwork/java/javase/downloads/jdk7-downloads-1880260.html

...clic on:

Agree and procced

...clic on:

Accept License Agreement

...and download the file called:

jdk-7u67-linux-x64.rpm

Place where the file was downloaded, for example:

cd /home/you_user

...and install it:

rpm -Uvh jdk-7u67-linux-x64.rpm

update-alternatives --install /usr/bin/java java /usr/java/jdk1.7.0_67/jre/bin/java 20000

update-alternatives --install /usr/bin/jar jar /usr/java/jdk1.7.0_67/bin/jar 20000

update-alternatives --install /usr/bin/javac javac /usr/java/jdk1.7.0_67/bin/javac 20000

update-alternatives --install /usr/bin/javaws javaws /usr/java/jdk1.7.0_67/jre/bin/javaws 20000

...now you must choose between OpenJava and Oracle Java to work with. Type the number **2** after run this command:

update-alternatives --config java

...so we select Oracle Java.

The next commands will give only one option each. Then is not what to choose:

update-alternatives --config javaws

update-alternatives --config javac

8)

-------- Installation MariaDB database server --------

MariaDB is the new database server.

We install it:

yum install -y mariadb mariadb-server

...and starting mariadb:

systemctl start mariadb.service

Give a password to mariadb root admin:

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

Make a database for OpenMeetings:

mysql -u root -p

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

CREATE DATABASE open303 DEFAULT CHARACTER SET 'utf8';

...now do a new user with a new password:

CREATE USER 'hola'@'localhost' IDENTIFIED BY '123456';

...and give privileges to this user on the open303 database:

GRANT ALL PRIVILEGES ON open303.* TO 'hola'@'localhost' WITH GRANT OPTION;

FLUSH PRIVILEGES;

quit

open303 ..... name of the database
hola ..... user for that database
123456 ..... password of that user

To start, restart and stop mariadb:

systemctl start mariadb.service

systemctl restart mariadb.service

systemctl stop mariadb.service

9)

-------- ImageMagick --------

We had installed ImageMagick in the beginning.
Will work with png, jpg, gif, etc

10)

-------- Sox --------

Sox is already installed in the distro.
Will work sound about.

11)

-------- Swftools --------

Swftools participate in convert uploaded files to swf and show them in the blackboard.

Will compile it:

cd /opt

wget http://www.swftools.org/swftools-2013-04-09-1007.tar.gz

tar xzvf swftools-2013-04-09-1007.tar.gz

cd /opt/swftools-2013-04-09-1007

./configure --libdir=/usr/lib --bindir=/usr/bin

make

make install

cd /opt

12)

-------- Compile and installation of ffmpeg, lame, yasm and x264--------

To compile and install ffmpeg, lame, yasm and x264, i made my own mixture between these two web pages:

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

http://wiki.razuna.com/display/ecp/FFMpeg+Installation+on+CentOS+and+RedHat

Should install some package and libraries: (In only one line)

yum install -y glibc alsa-lib-devel faac faac-devel faad2 faad2-devel gsm gsm-devel imlib2 imlib2-devel lame-devel libogg libvorbis vorbis-tools theora-tools

Ffmpeg will work with the video. Starting...

Please copy and past as it is, do not any change.

mkdir ~/ffmpeg_sources

cd ~/ffmpeg_sources

First will download all the packages we need to compile. In shell as root:

curl -L -O http://downloads.sourceforge.net/project/lame/lame/3.99/lame-3.99.5.tar.gz

git clone --depth 1 git://git.code.sf.net/p/opencore-amr/fdk-aac

curl -O http://downloads.xiph.org/releases/opus/opus-1.1.tar.gz

wget http://downloads.xvid.org/downloads/xvidcore-1.3.2.tar.gz

wget http://downloads.xiph.org/releases/ogg/libogg-1.3.1.tar.gz

wget http://downloads.xiph.org/releases/vorbis/libvorbis-1.3.4.tar.gz

wget http://downloads.xiph.org/releases/theora/libtheora-1.1.1.tar.gz

wget http://www.tortall.net/projects/yasm/releases/yasm-1.2.0.tar.gz

git clone http://git.chromium.org/webm/libvpx.git

git clone git://git.videolan.org/x264.git

git clone git://source.ffmpeg.org/ffmpeg.git

...once all these packages-files are downloaded start the compilation...please be connected Internet.

1) ---- libmp3lame ----

cd ~/ffmpeg_sources

tar xzvf lame-3.99.5.tar.gz

cd lame-3.99.5

(In only one line)

./configure --prefix="$HOME/ffmpeg_build" --bindir="$HOME/bin" --disable-shared --enable-nasm

make

make install

make distclean

2) ---- libfdk_aac ----

cd ~/ffmpeg_sources

cd fdk-aac

autoreconf -fiv

./configure --prefix="$HOME/ffmpeg_build" --disable-shared

make

make install

make distclean

3) ---- libopus ----

cd ~/ffmpeg_sources

tar xzvf opus-1.1.tar.gz

cd opus-1.1

./configure --prefix="$HOME/ffmpeg_build" --disable-shared

make

make install

make distclean

4) ---- Install xvid ----

cd ~/ffmpeg_sources

tar xzvf xvidcore-1.3.2.tar.gz

cd xvidcore/build/generic

./configure --prefix="$HOME/ffmpeg_build"

make

make install

5) ---- Install LibOgg ----

cd ~/ffmpeg_sources

tar xzvf libogg-1.3.1.tar.gz

cd libogg-1.3.1

./configure --prefix="$HOME/ffmpeg_build" --disable-shared

make

make install

6) ---- Install Libvorbis ----

cd ~/ffmpeg_sources

tar xzvf libvorbis-1.3.4.tar.gz

cd libvorbis-1.3.4

./configure --prefix="$HOME/ffmpeg_build" --with-ogg="$HOME/ffmpeg_build" --disable-shared

make

make install

7) ---- Install Libtheora ----

cd ~/ffmpeg_sources

tar xzvf libtheora-1.1.1.tar.gz

cd libtheora-1.1.1

(In only one line)

./configure --prefix="$HOME/ffmpeg_build" --with-ogg="$HOME/ffmpeg_build" --disable-examples --disable-shared --disable-sdltest --disable-vorbistest

make

make install

8) ---- Install Yasm ----

yum remove yasm

cd ~/ffmpeg_sources

tar xzfv yasm-1.2.0.tar.gz

cd yasm-1.2.0

./configure --prefix="$HOME/ffmpeg_build" --bindir="$HOME/bin"

make

make install

export "PATH=$PATH:$HOME/bin"

9) ---- Install Libvpx ----

cd ~/ffmpeg_sources

cd libvpx

./configure --prefix="$HOME/ffmpeg_build" --disable-examples

make

make install

10) ---- Install X264 ----

cd ~/ffmpeg_sources

cd x264

./configure --prefix="$HOME/ffmpeg_build" --bindir="$HOME/bin" --enable-static

make

make install

Config Libraries

export LD_LIBRARY_PATH=/usr/local/lib/

echo /usr/local/lib >> /etc/ld.so.conf.d/custom-libs.conf

ldconfig

11) ---- FFmpeg ----

cd ~/ffmpeg_sources

cd ffmpeg

git checkout release/2.2

PKG_CONFIG_PATH="$HOME/ffmpeg_build/lib/pkgconfig"

export PKG_CONFIG_PATH

(In only one line)

./configure --prefix="$HOME/ffmpeg_build" --extra-cflags="-I$HOME/ffmpeg_build/include" --extra-ldflags="-L$HOME/ffmpeg_build/lib" --bindir="$HOME/bin" --extra-libs=-ldl --enable-gpl --enable-nonfree --enable-libfdk_aac --enable-libmp3lame --enable-libopus --enable-libvorbis --enable-libvpx --enable-libx264 --enable-libtheora --enable-libxvid

make

make install

….....

The compilation is finished.

….....

Now we have the compiled files in: ~/bin

Should copy all them to /usr/local/bin to be enabled:

cd ~/bin

cp ffmpeg ffprobe ffserver lame vsyasm x264 yasm ytasm /usr/local/bin

13)

-------- Jodconverter --------

We need Jodconverter to convert the uploaded files.

cd /opt

wget http://jodconverter.googlecode.com/files/jodconverter-core-3.0-beta-4-dist.zip

unzip jodconverter-core-3.0-beta-4-dist.zip

14)

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

Make a folder called **red5303** where download the Apache OpenMeetings file and where make the installation:.

mkdir /opt/red5303

This url that you can visit, is the Apache OpenMeetings 3.0.3 stable version:

http://openmeetings.apache.org/downloads.html

cd /opt/red5303

Here i put two valids examples links to choose download:

wget http://apache.rediris.es/openmeetings/3.0.3/bin/apache-openmeetings-3.0.3.zip

...or

wget http://ftp.cixug.es/apache/openmeetings/3.0.3/bin/apache-openmeetings-3.0.3.zip

unzip apache-openmeetings-3.0.3.zip

...save the original file to /opt:

mv apache-openmeetings-3.0.3.zip /opt

15)

---- Connector Java MariaDB----

This file is need it to connect OpenMeetings with MariaDB:

cd /opt

(In only one line)

wget http://repo1.maven.org/maven2/mysql/mysql-connector-java/5.1.32/mysql-connector-java-5.1.32.jar

cp mysql-connector-java-5.1.32.jar /opt/red5303/webapps/openmeetings/WEB-INF/lib

and do to **nobody** owner of OpenMeetings:

chown -R nobody /opt/red5303

16)

-------- Configuration of OpenMeetings for MariaDB --------

Will configure OpenMeetings to connect with MariaDB:

cd /opt/red5303/webapps/openmeetings/WEB-INF/classes/META-INF

mv persistence.xml persistence.xml-ori

mv mysql_persistence.xml persistence.xml

cd /opt

sudo gedit /opt/red5303/webapps/openmeetings/WEB-INF/classes/META-INF/persistence.xml

...and modify line 81:

Url=jdbc:mysql://localhost:3306/openmeetings?.....

to

Url=jdbc:mysql://localhost:3306/open303?....

...open303 is the database name we gives when install MariaDB and build it.

Modify also **lines 86** and **87**:

, Username=root
, Password=" />

...to

, Username=hola
, Password=123456" />

...hola is the user name we gives when install MariaDB for **open303** database.

... 123456 is the password for **hola** user.

If you choose any other database name, user name or password here is where to change.

Protect the access to this file:

chmod 640 /opt/red5303/webapps/openmeetings/WEB-INF/classes/META-INF/persistence.xml

17)

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

Build a script to start and stop red5-OpenMeetings, that we´ll call **red5**

sudo gedit /etc/init.d/red5

...copy and past the text from here:

```
#
#!/bin/sh -e
#
# Startup script for Red5

export RED5_HOME=/opt/red5303

start_red5="$RED5_HOME/red5.sh start"
stop_red5="$RED5_HOME/red5-shutdown.sh stop"

start() {
        echo -n "Starting Red5: "
        ${start_red5} &
        echo "done."
}
stop() {
        echo -n "Shutting down Red5: "
        ${stop_red5}
        echo "done."
}
case "$1" in
  start)
        start
        ;;
stop)
        stop
        ;;
  restart)
        stop
        sleep 10
        start
        ;;
  *)
        echo "Usage: $0 {start|stop|restart}"
esac

exit 0
```

...to here.

If you made the installation in any other path, can modify the line:

```
RED5_HOME=/opt/red5303
```

...to

```
RED5_HOME=/your-installation-path
```

Concede permission of execution to the script:

chmod +x /etc/init.d/red5

18)

Restart mariadb:

systemctl restart mariadb.service

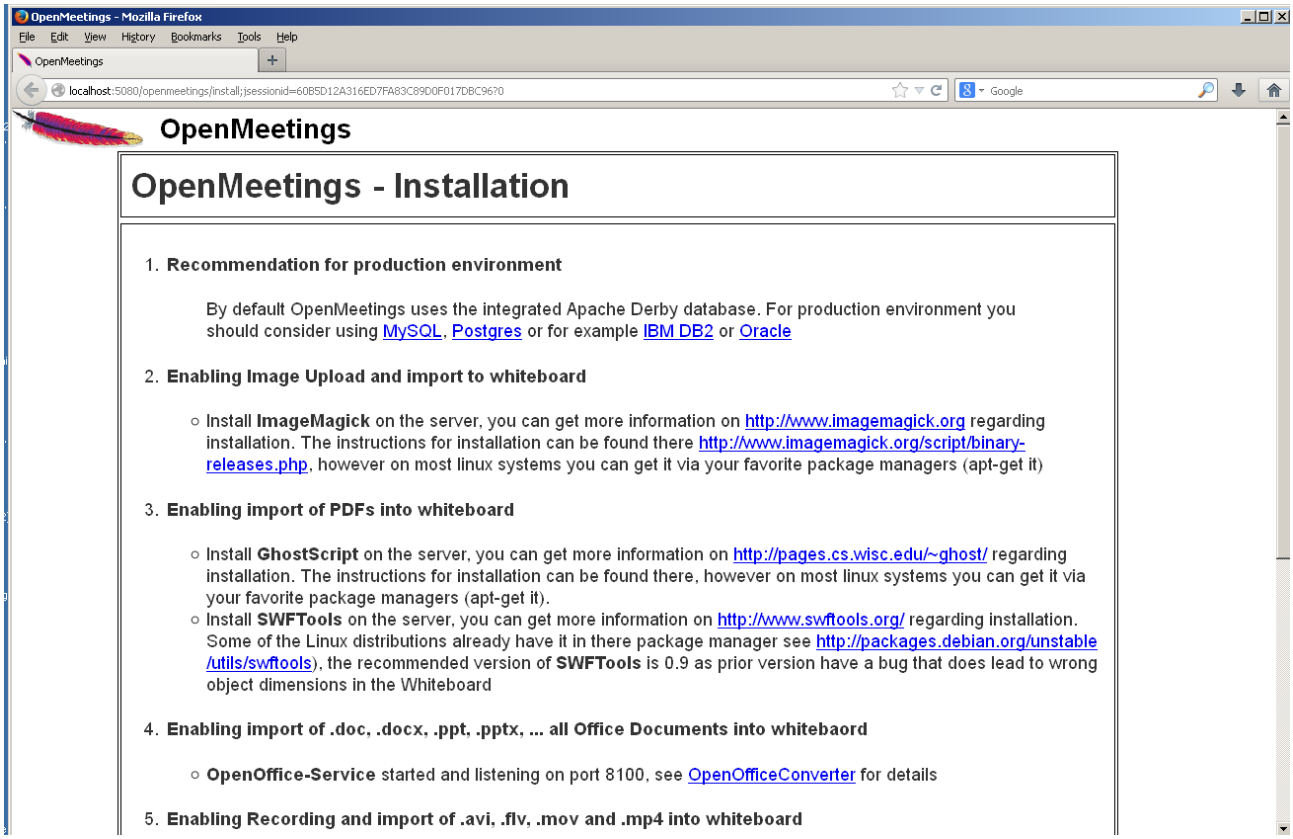
...and start red5-OpenMeetings:

/etc/init.d/red5 start

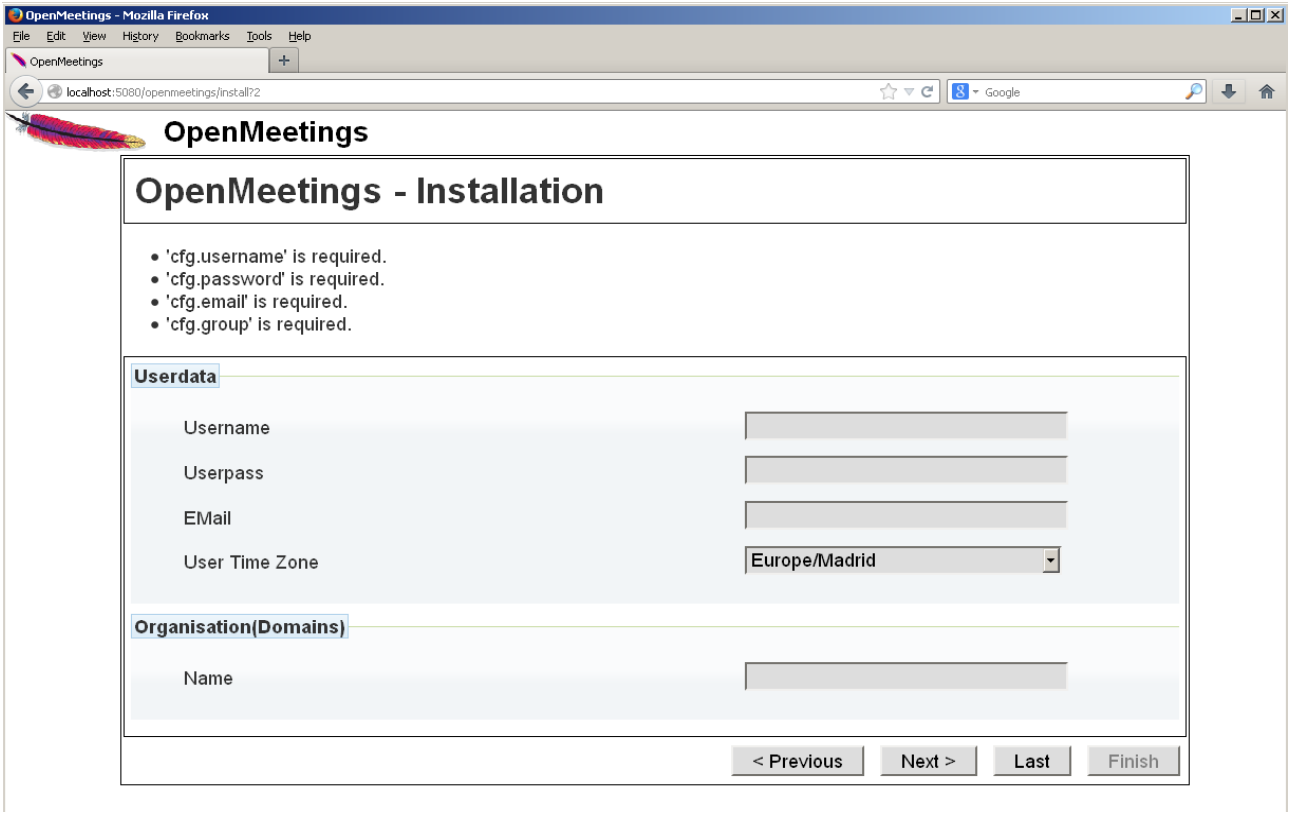
...wait somes longs seconds and later go with browser to:

http://localhost:5080/openmeetings/install

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



...click **Next** *button in the foot page and this other page will appear:*

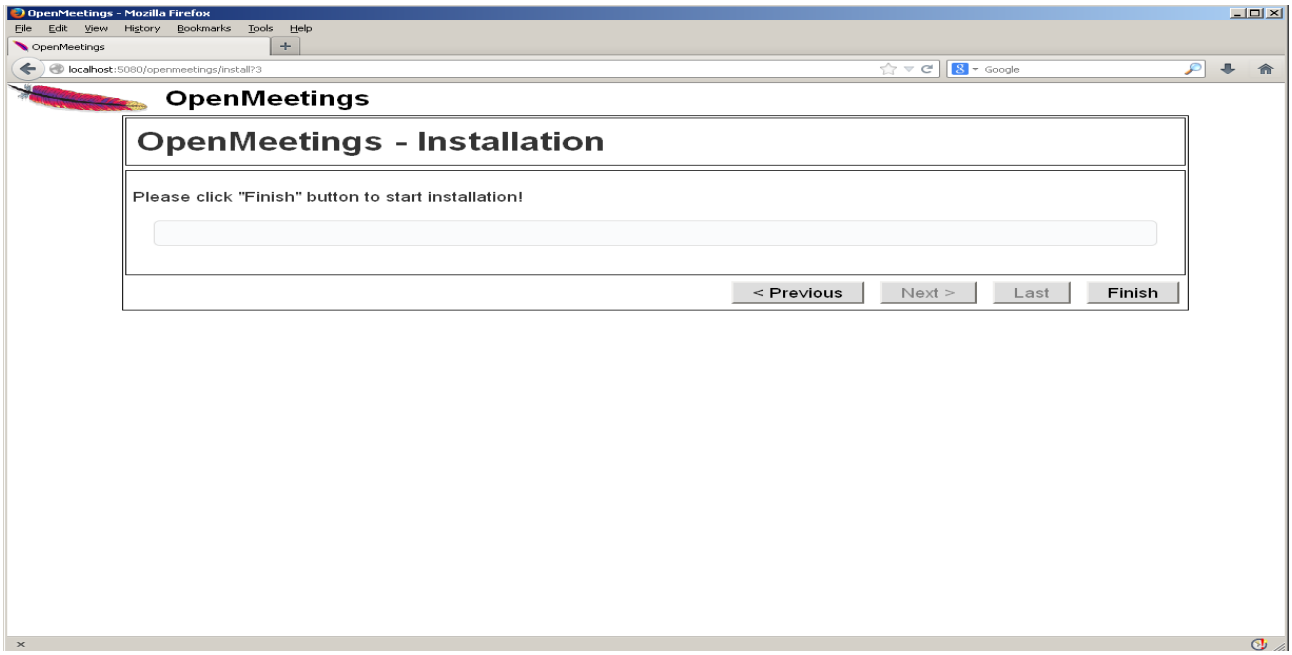


...here we have to introduce necessaryly, to be able to continue, the following:

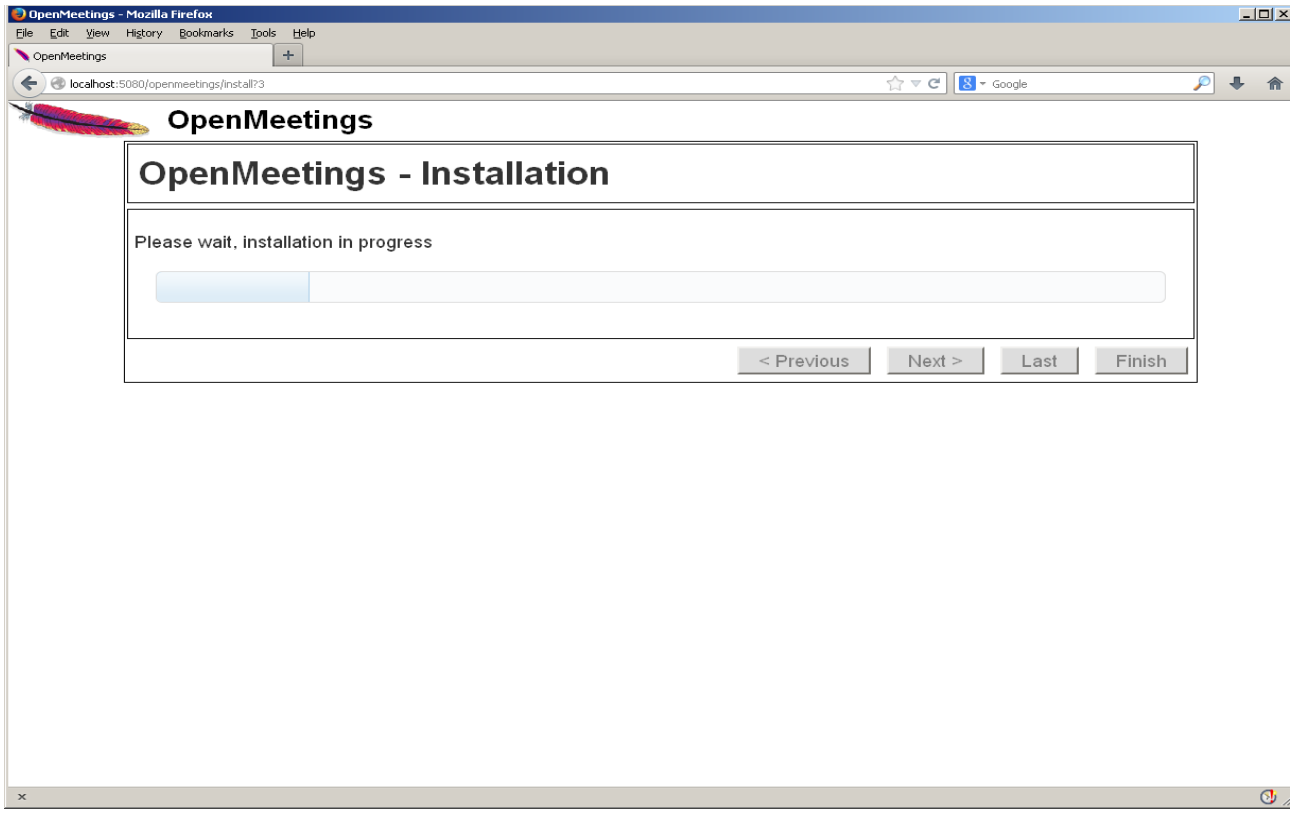
Username = **a-name** ...This user name will have administrator rights.
Userpass = **a-password** ….for the previous user
EMail = **email-adress** ...of the previous user.
User Time Zone = Select your geographyc situation
Name = **example-openmeetings** ...group name to choose

After finish the complet installation we´ll configure the rest.

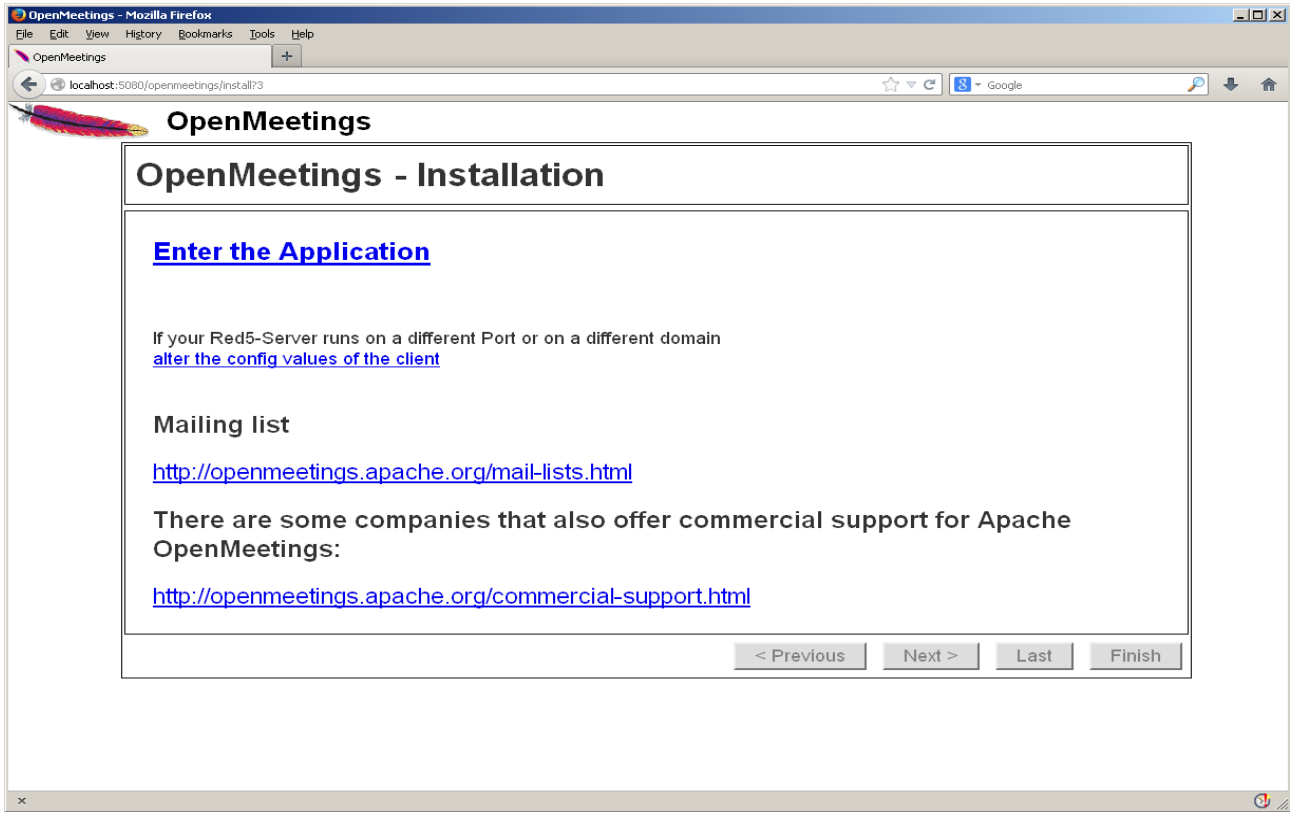
...click **Last** button and this other page will appear:



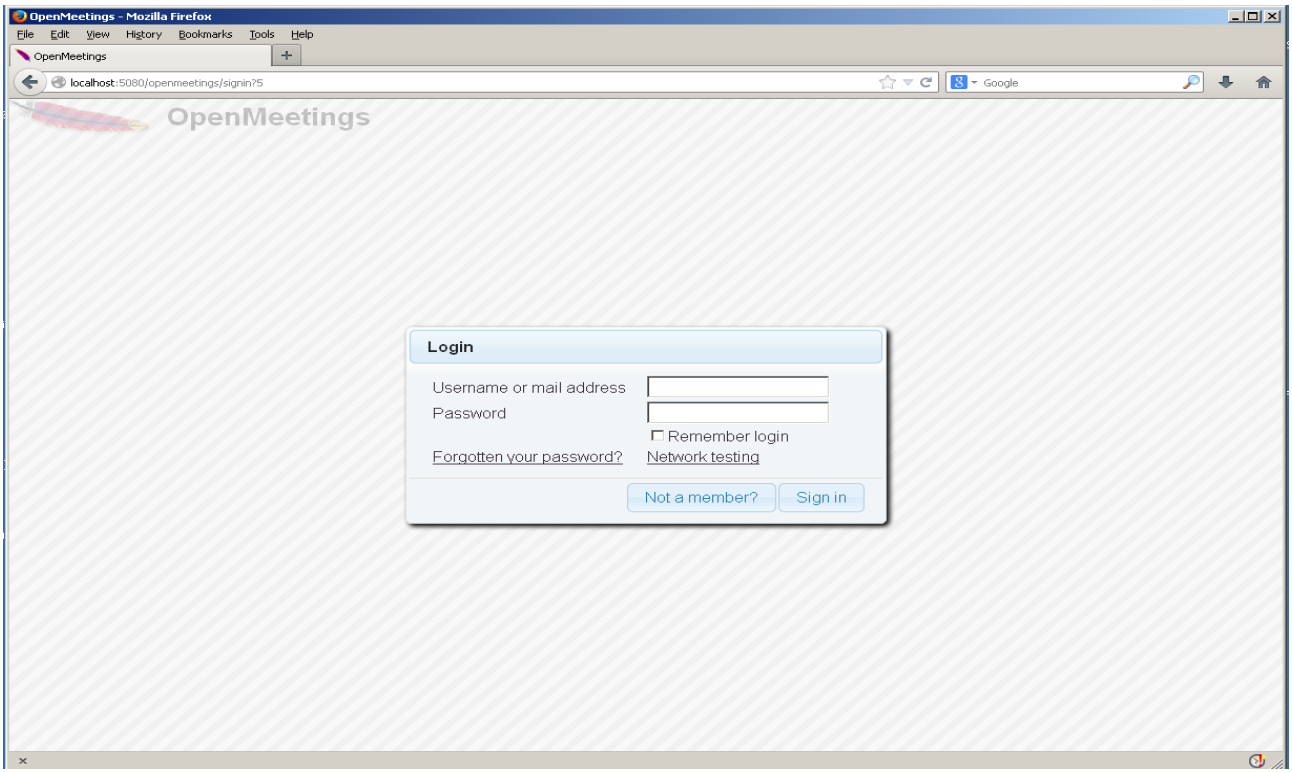
…click **Finish** and will start to fill the database tables:



When finish should show this page:



…click **Enter the Application** *and we'll see OpenMeetings's login page.*



...Congratulations!

Introduce the user's name and the password that you have chosen during the installation and clic **Sign in**.

The next time to access OpenMeetings will be:

http://localhost:5080/openmeetings

Remember open in the server these three ports:

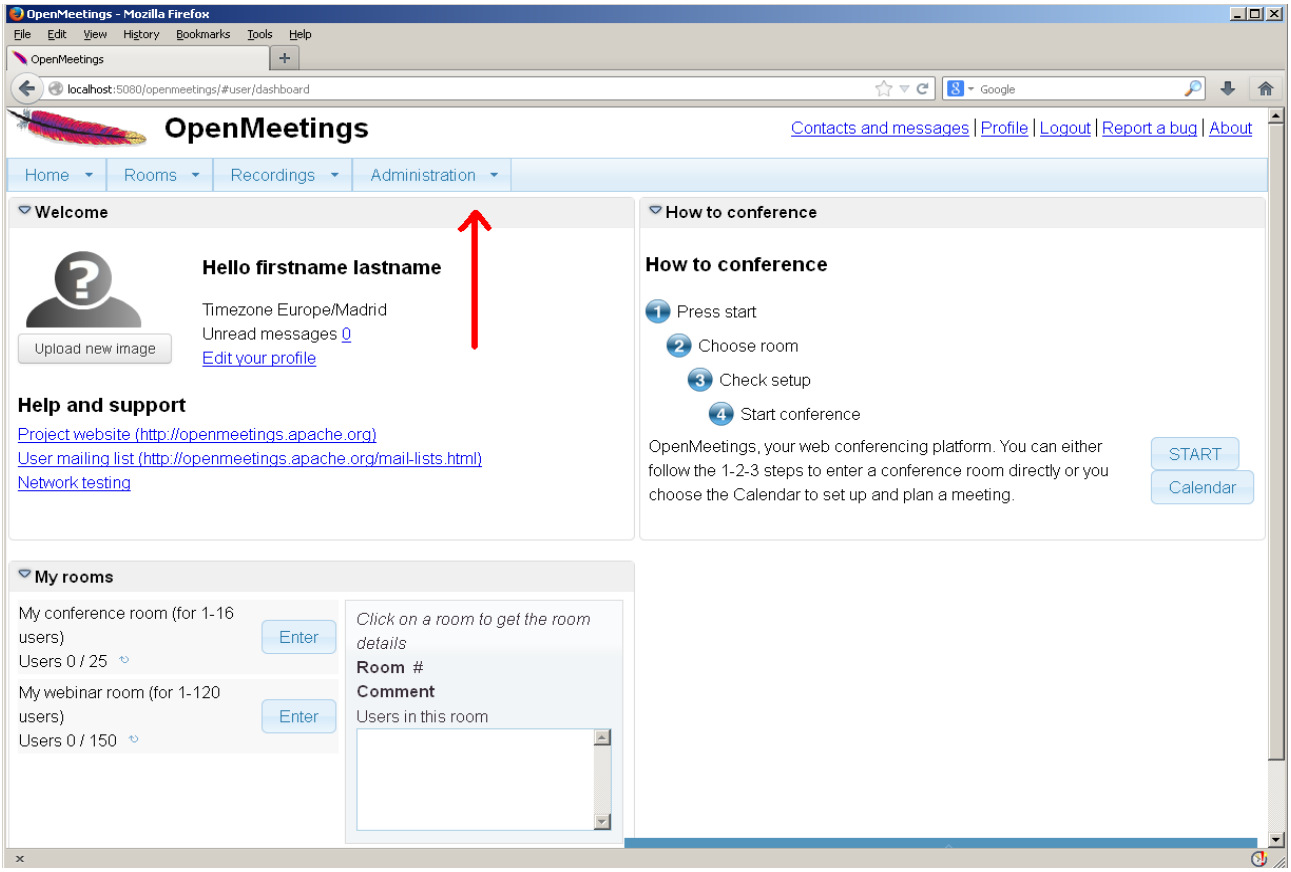
1935 5080 8088

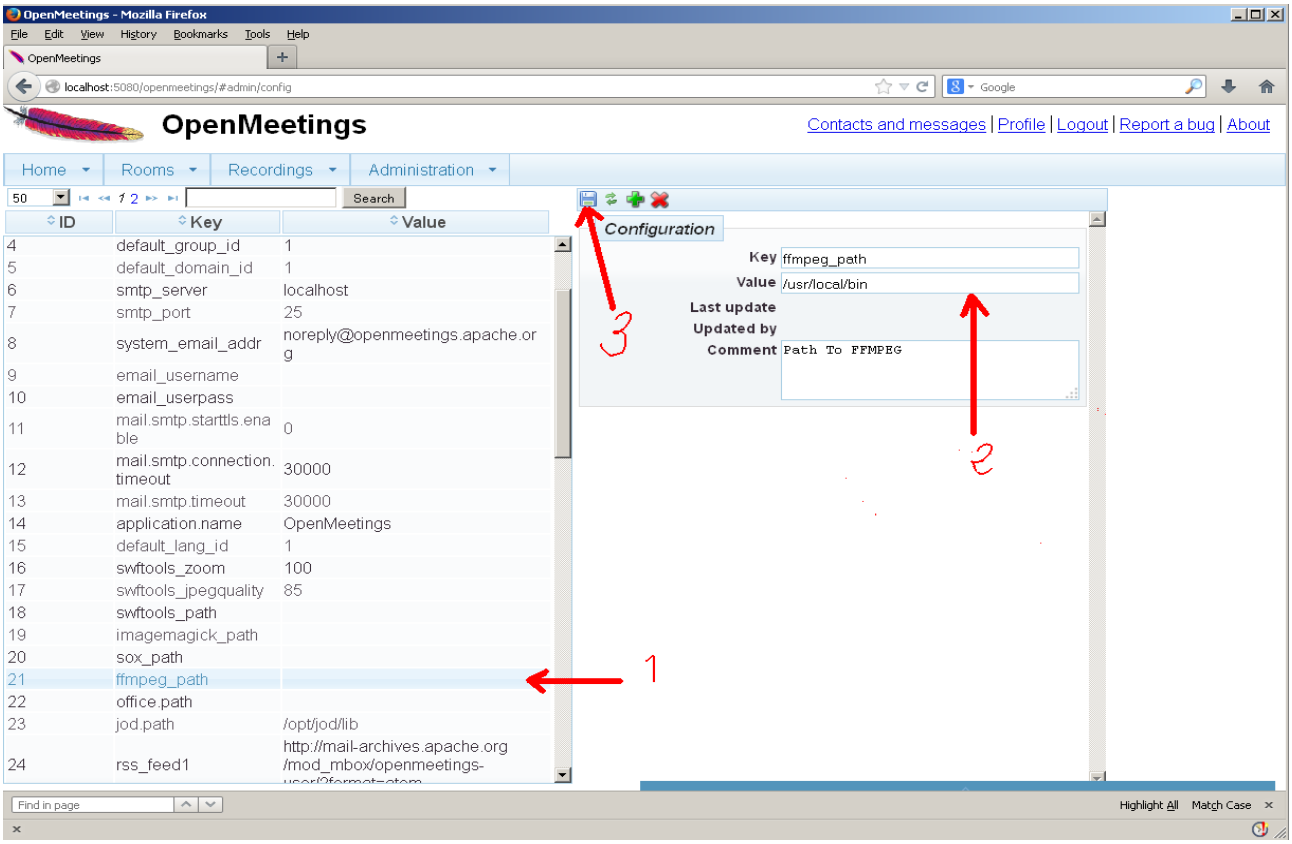
...in order can accede to OpenMeetings from other machines in Lan or Internet.

16)

---- Configuration of OpenMeetings ----

Once you acceded to OpenMeetings we go to: **Administration → Configuration**


OpenMeetings - Mozilla Firefox
File Edit View History Bookmarks Tools Help
OpenMeetings
localhost:5080/openmeetings/#user/dashboard
OpenMeetings
Contacts and messages | Profile | Logout | Report a bug | About
Home
Rooms
Recordings
Administration
Welcome
Hello firstname lastname
Timezone Europe/Madrid
Unread messages 0
Edit your profile
Upload new image
Help and support
Project website (http://openmeetings.apache.org)
User mailing list (http://openmeetings.apache.org/mail-lists.html)
Network testing
How to conference
How to conference
1 Press start
2 Choose room
3 Check setup
4 Start conference
OpenMeetings, your web conferencing platform. You can either follow the 1-2-3 steps to enter a conference room directly or you choose the Calendar to set up and plan a meeting.
START
Calendar
My rooms
My conference room (for 1-16 users)
Users 0 / 25
Enter
My webinar room (for 1-120 users)
Users 0 / 150
Enter
Click on a room to get the room details
Room #
Comment
Users in this room


OpenMeetings - Mozilla Firefox
localhost:5080/openmeetings/#admin/config
OpenMeetings
Contacts and messages | Profile | Logout | Report a bug | About
Home
Rooms
Recordings
Administration
Search
ID
Key
Value
4 default_group_id 1
5 default_domain_id 1
6 smtp_server localhost
7 smtp_port 25
8 system_email_addr noreply@openmeetings.apache.org
9 email_username
10 email_userpass
11 mail.smtp.starttls.enable 0
12 mail.smtp.connection.timeout 30000
13 mail.smtp.timeout 30000
14 application.name OpenMeetings
15 default_lang_id 1
16 swftools_zoom 100
17 swftools_jpegquality 85
18 swftools_path
19 imagemagick_path
20 sox_path
21 ffmpeg_path
22 office.path
23 jod.path /opt/jod/lib
24 rss_feed1 http://mail-archives.apache.org/mod_mbox/openmeetings-
Configuration
Key ffmpeg_path
Value /usr/local/bin
Last update
Updated by
Comment Path To FFMPEG
1
2
3

...introduce the path for files conversion, audio and video:

Click on: **swftools_path** ...and to up right in **Value** type: /usr/bin

Click on: **imagemagick_path** ...and to up right in **Value** type: /usr/bin

Click on: **sox_path** ...and to up right in **Value** type: /usr/bin

Click on: **ffmpeg_path** ...and to up right in **Value** type: /usr/local/bin

Click on: **office.path** ...and to up right in **Value** type: /usr/lib64/libreoffice

Click on: **jod.path** ...and to up right in **Value** type: /opt/jodconverter-core-3.0-beta-4/lib

Remember to do the number 3 on picture to save each change.

To stop red5-OpenMeetings: /etc/init.d/red5 stop

Flash Player it was installed in the beginning. OpenMeetings even need it for rooms.

And this is all.

If you have some doubt or question please expose it in Apache OpenMeetings forums:

http://openmeetings.apache.org/mail-lists.html

Thank you

Alvaro Bustos