

## Installation of Apache OpenMeetings 4.0.4 on Centos 6.10

This tutorial is made based on fresh installations of

CentOS-6.9-x86 64-LiveDVD.iso

It is tested with positive result. We will use the Apache's binary version OpenMeetings 4.0.4 stable, that is to say will suppress his compilation. It is done step by step.

18-7-2018

Starting...

1)

yum install -y gedit wget

At first place we must modify Selinux level security for the installation:

sudo gedit /etc/selinux/config

...modify:

SELINUX=enforcing

...to **SELINUX**=**permissive** 2) ----- Update the System -----Update operative system: yum update -y ...and reboot for the kernel changes and the new **Selinux** configuration take effect.: reboot 3) ----- ADD Repos -----### Add the **Epel** repository ### For Centos 6.x 32bit cd /opt wget http://dl.fedoraproject.org/pub/epel/6/i386/epel-release-6-8.noarch.rpm rpm -Uvh epel-release-6-8.noarch.rpm For CentOS 6.x 64bit: cd /opt wget http://dl.fedoraproject.org/pub/epel/6/x86 64/epel-release-6-8.noarch.rpm rpm -Uvh epel-release-6-8.noarch.rpm ### Añadimos el repositorio linuxtech (32 y 64 bits) ### ...para la instalación de vlc, reproductor de video para las futuras grabaciones que hagamos en OpenMeetings.: cd /opt

wget http://pkgrepo.linuxtech.net/el6/release/linuxtech.repo

```
cp linuxtech.repo /etc/yum.repos.d
```

We install it:

```
### Adobe repo 32bit ## For Flash Player.
rpm -ivh http://linuxdownload.adobe.com/adobe-release/adobe-release-i386-1.0-1.noarch.rpm
rpm --import /etc/pki/rpm-gpg/RPM-GPG-KEY-adobe-linux
### Adobe repo 64bit ### 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
yum update
4)
                                ----- Installation of OpenJava 1.8 -----
Java 1.8 it is necessary to work OpenMeetings 4.0.4. We install OpenJava:
yum install -y java-1.8.0-openjdk
...and icedtea-web for can access to record and share desktop in OpenMeetings:
yum install -y icedtea-web
Maybe you have installed various versions of Java. We select the just installed OpenJava:
update-alternatives --config java
And to see if the selected version is active:
java -version
5)
                             ----- Installation of LibreOffice -----
OpenMeetings will need LibreOffice to convert to pdf the uploaded office files.
```

yum -y install libreoffice libreoffice-headless

**6)** ----- Installation of necessary packages and libraries -----We install packages and libraries that we'll need later: (Only one line with space between 1<sup>a</sup> and 2<sup>a</sup>) yum install -y libjpeg libjpeg-devel ghostscript freetype freetype-devel unzip gcc gcc-c++ ncurses ncurses-devel make zlib zlib-devel libtool bison bison-devel openssl-devel bzip2 bzip2-devel fileroller git autoconf automake pkgconfig tomcat-native nmap nano 7) ----- Installation ImageMagick and Sox -----**ImageMagick,** work the images files jpg, png, gif, etc. We install it and some libraries: yum install -y ImageMagick giflib giflib-devel giflib-utils **Sox,** work the sound. Will compile and install it: cd /opt wget http://ftp.icm.edu.pl/packages/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 cd /opt 8) ----- Installation of Adobe Flash Player -----

OpenMeetings even need Adobe Flash Player for cam.

yum install -y flash-plugin

9) ----- Compilation of FFmpeg -----

FFmpeg will work with video. Will install a libraries and vlc to play the recordings.

yum install -y glibc alsa-lib-devel faac faac-devel faad2 faad2-devel gsm gsm-devel imlib2 imlib2-devel lame-devel vorbis-tools theora-tools libvpx-devel vlc cmake mercurial nasm curl git

This ffmpeg compilation is based on this url, and the file versions are updated 25-5-2018:

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

Download the script i've made, to compile and install ffmpeg on Centos 6.9. It is tested and is ok.

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

Will spend about 30 minutes the complete compilation.

When is finished, a text will announce it:

FFmpeg Compilation is Finished!

So, we download the script:

cd /opt

wget https://cwiki.apache.org/confluence/download/attachments/27838216/ffmpeg centos6.sh

...concede execution perrmission to it:

chmod +x ffmpeg centos6.sh

...and run it (be connected to Internet).

./ffmpeg centos6.sh

When be finished, please, go to step 10).

All the compiled files will be installed in: /usr/local/bin

```
10)
                         ----- Installation MariaDB database server -----
We build a file-repository to download MariaDB data server.
       -- For Centos 6.x 32bit --:
sudo gedit /etc/yum.repos.d/MariaDB.repo
...copy and paste:
[mariadb]
name = MariaDB
baseurl = http://yum.mariadb.org/10.0/centos6-x86
gpgkey=https://yum.mariadb.org/RPM-GPG-KEY-MariaDB
gpgcheck=1
      -- For Centos 6.x 64bit --:
sudo gedit /etc/yum.repos.d/MariaDB.repo
...copy and paste in:
[mariadb]
name = MariaDB
baseurl = http://yum.mariadb.org/10.0/centos6-amd64
gpgkey=https://yum.mariadb.org/RPM-GPG-KEY-MariaDB
gpgcheck=1
We install it:
yum -y install MariaDB-server MariaDB-client
...do a backup of the configuration file; and make a newone:
mv /etc/my.cnf /etc/my.bak
cp /usr/share/mysql/my-medium.cnf /etc/my.cnf
...and run MariaDB server:
```

#### service mysqld start

Give a password to mariadb root. Please, replace new-password by your own whish.

mysgladmin -u root password new-password

Make a database for OpenMeetings. User password must be of 8 digits minimum:

```
mysql -u root -p
```

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

MariaDB [(none)]> CREATE DATABASE open404 DEFAULT CHARACTER SET 'utf8';

With this command, we has created a database called open404, though you can choose another name to your whish.

Now we create a user with all the permission on this open404 database.

(Only one line with space between both)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON open404.\* TO 'hola'@'localhost' IDENTIFIED BY 'la2B3c4D' WITH GRANT OPTION;

- \* open404 ...... 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.

Leave MariaDB:

MariaDB [(none)]> quit

# 11)

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

We'll install OpenMeetings in /opt/red5404. All the following information will be based on this directory.

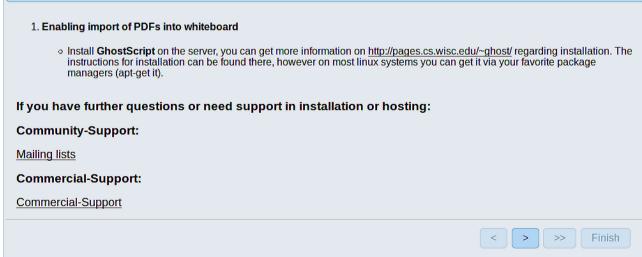
Call to our folder of installation red5404.

Make the folder:

```
mkdir /opt/red5404
cd /opt/red5404
...and download the OpenMeetings file:
wget http://archive.apache.org/dist/openmeetings/4.0.4/bin/apache-openmeetings-4.0.4.zip
unzip apache-openmeetings-4.0.4.zip
...save the unloaded file to /opt:
mv apache-openmeetings-4.0.4.zip /opt
Download 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/red5404/webapps/openmeetings/WEB-INF/lib
12)
                          ----- Script to launch red5-OpenMeetings -----
We'll download the script to run Red5-OpenMeetings:
cd /opt
wget https://cwiki.apache.org/confluence/download/attachments/27838216/red5-2
...copy it to where must be:
cp red5-2 /etc/init.d/
...concede execution permission:
chmod +x /etc/init.d/red5-2
```

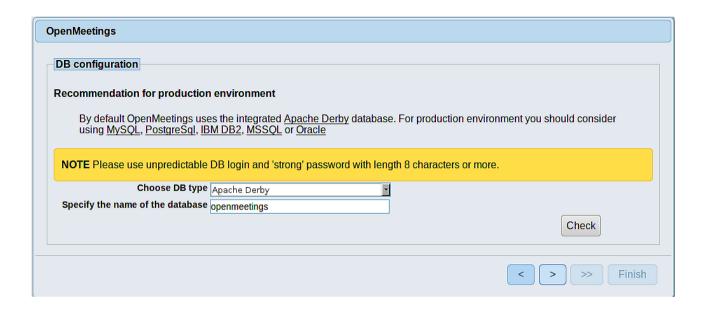
If you made the installation in any other different path to /opt/red5404, please edit the script and modify the line:

RED5 HOME=/opt/red5404 ...to RED5 HOME=/your-path-installation 13) ----- Run red5-OpenMeetings -----Restart mariadb: service mysqld restart ...and run red5-OpenMeetings. Please, be connected to Internet, so the run will be quick: /etc/init.d/red5-2 start ...wait about 40 seconds for running red5 completly. Then, go with the browser to: http://localhost:5080/openmeetings/install ...there will appear a page similar to this one: OpenMeetings 1. Enabling import of PDFs into whiteboard • Install **GhostScript** on the server, you can get more information on <a href="http://pages.cs.wisc.edu/~ghost/">http://pages.cs.wisc.edu/~ghost/</a> 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).

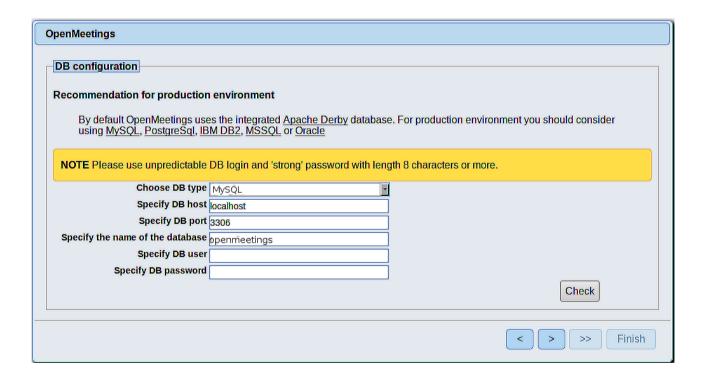


...press on button (bottom), and will show the default database configuration with Derby,

but we employ MySQL (MariaDB):



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



Here we must introduce the database name, user name and his password we did at the step 10:

Specify the name of the database = open404

Specify DB user = hola

Specify DB password = 1a2B3c4D

Please, press button, and we'll go to:



Now, 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 = a-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.

penMeetings	
Configuration	
Allow self-registering	
Send Email to new registered Users	
New Users need to verify their EMail	
Default DB objects of all types will be created (including Rooms, OAuth2 servers etc.)	
Mail-Referer	noreply@openmeetings.apache.org
SMTP-Server	localhost
SMTP-Server Port(default Smtp-Server Port is 25)	25
SMTP-Username	
SMTP-Userpass	
Enable TLS in Mail Server Auth	
Set inviter's email address as ReplyTo in email invitations	
Default Language	inglés
	< > >> Finish

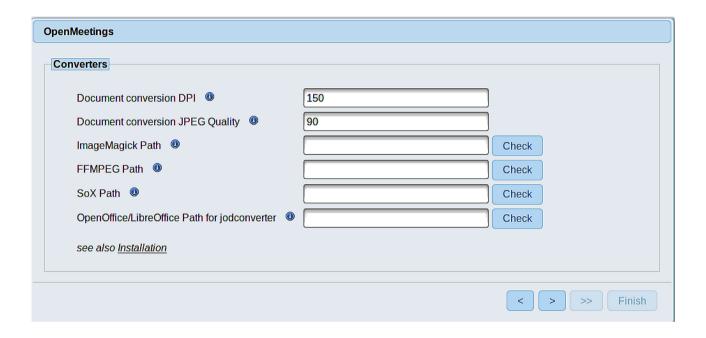
A valid example to configure the mail server with Gmail, is as follows:

(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
<b>Enable TLS in Mail Server Auth</b>	==	turn green the button to activate
Default Language	==	select your language

...the rest we you can modify it as you like it.

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

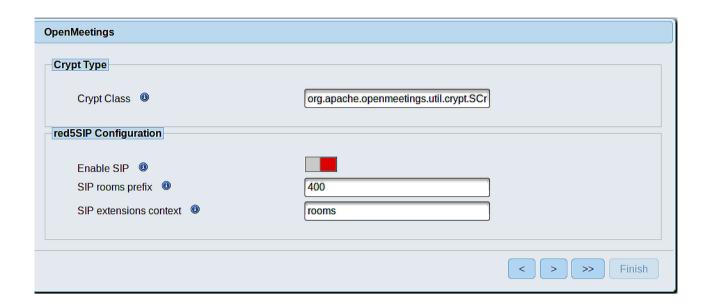
FFMPEG Path == /usr/local/bin

SOX Path == /usr/local/bin

OpenOffice/LibreOffice Path for == /usr/lib/libreoffice (32bits) |

jodconverter == /usr/lib/4/libreoffice (64bits)

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:



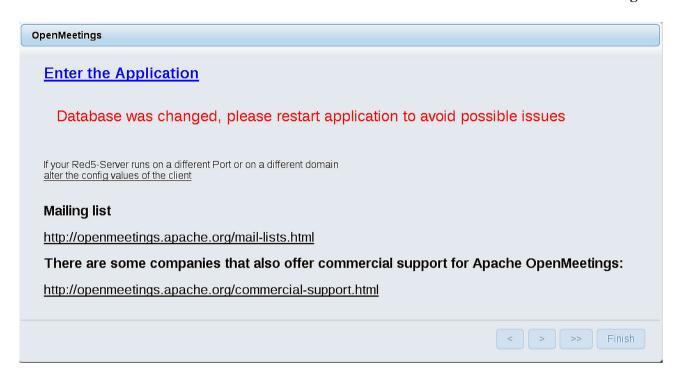
Now push the button | > | and will show this window:



Clic 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:

/etc/init.d/red5-2 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 OpenMeetings, will be through:

### http://localhost:5080/openmeetings

Remember to open in the server, the two following ports:

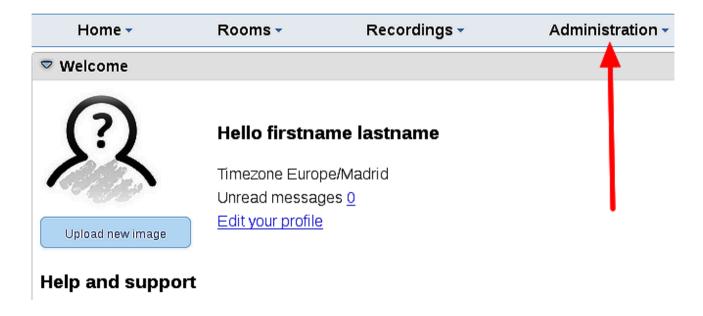
#### 1935 5080

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

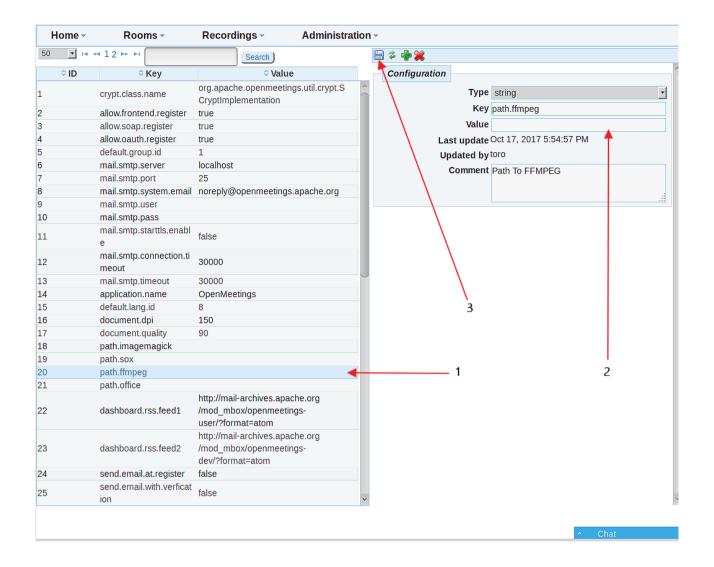
# 14) ----- OpenMeetings's configuration -----

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:



And this is all.

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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