Installation of Apache OpenMeetings 4.0.8 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 4.0.8 stable, that is to say will suppress his compilation. It is done step by step.

8-3-2019

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

Add repo **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

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 **4.0.8**. 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.

We install it:

yum -y install libreoffice libreoffice-headless

6)

------ **Installation of Ghostscript, necessary packages and libraries** ------

We install packages and libraries that we´ll need later:

(Only one line with space between 1ª and 2ª)

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 file-roller git autoconf automake pkgconfig tomcat-native nmap nano

By a script we should compile Ghostscript 9.26, free of security hole:

cd /opt

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

chmod +x ghostscript.sh

...and run it:

./ghostscript.sh

...when be finished will announce it: GhostScript compilation is Finished!

rm -Rf /opt/ghostscript-9.26

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:

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 and audio.

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 8-3-2019:

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

Download the script i´ve made, to compile and install ffmpeg on Centos 6.10. 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 isFinished!

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

...make 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.

mysqladmin -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 open408 DEFAULT CHARACTER SET 'utf8';

With this command, we has created a database called open408, though you can choose another name to your whish.

Now we create a user with all the permission on this open408 database.

(Only one line with space between both)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON open408.* TO 'hola'@'localhost' IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;

* open408 ....…......... 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/red5408. All the following information will be based on this directory.

Call to our folder of installation red5408.

Make the folder:

mkdir /opt/red5408

cd /opt/red5408

...and download the OpenMeetings file:

wget http://archive.apache.org/dist/openmeetings/4.0.8/bin/apache-openmeetings-4.0.8.zip

unzip apache-openmeetings-4.0.8.zip

...save the unloaded file to /opt:

mv apache-openmeetings-4.0.8.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/5.1.47/mysql-connector-java-5.1.47.jar

...and copy it to where must be:

cp /opt/mysql-connector-java-5.1.47.jar /opt/red5408/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/red5408, please edit the script and modify the line:

RED5_HOME=/opt/red5408

...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 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 on `>` button (bottom), and will show the default database 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

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

Specify the name of the database =   open408

Specify DB user   =   hola

Specify DB password =   1a2B3c4D

Please, press `>` button, and we´ll go to:

OpenMeetings

Userdata

Username
Userpass
EMail
User Time Zone   Europe/Madrid

Group(Domains)

Name

`<` `>` `>>` Finish

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.

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

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	**(32bits)**
	==	/usr/lib64/libreoffice	**(64bits)**

Pag 13

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:
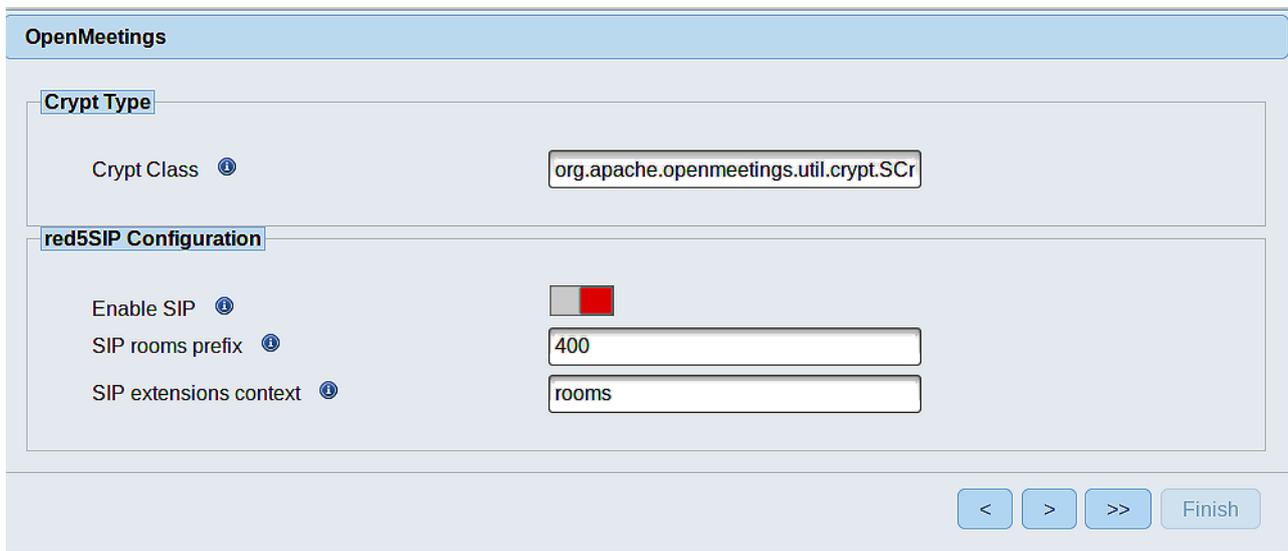
OpenMeetings

Crypt Type

Crypt Class ⓘ   org.apache.openmeetings.util.crypt.SCr

red5SIP Configuration

Enable SIP ⓘ

SIP rooms prefix ⓘ   400

SIP extensions context ⓘ   rooms

      <   >   >>   Finish

Now push the button ⌈ > ⌉ and willl show this window:

OpenMeetings

Please click "Finish" button to start installation!

      <   >   >>   Finish

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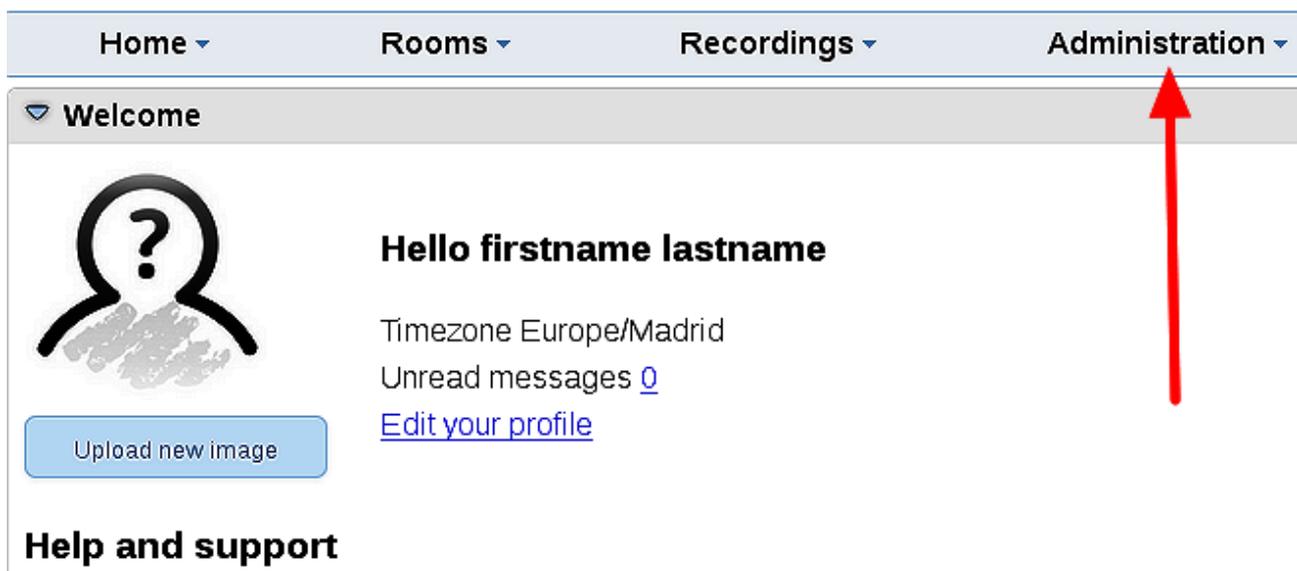
...and following the order of the red arrows:

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

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

Also you can download if you like, a wallpaper of OpenMeetings for different devices as:
PC, Mac, Smartphone, iPhone and Tablets. Here is the link to downoload:

[Download](#)

Thank you.

Alvaro Bustos