Installation of Apache OpenMeetings 4.0.7 on Arch Linux

This tutorial is based on a fresh installations of

arch-anywhere-2.2.9-x86_64.iso

Arch Anywhere, it is a pure Arch Linux, with the
only difference that the installation it is graphical.
That´s all.

It is tested with positive result. We will use the Apache's
binary version OpenMeetings 4.0.7 stable, that is to say
will suppress his compilation. It is done step by step.

1-1-2019

Please, be connected to Internet during all the process tu run any server.

Starting...

1)

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

Open a terminal as root:

su

...will ask for root password, and we update the operative system:

pacman -Syu

2)

------ Installation of OpenJava ------

Java it is necessary for OpenMeetings **4.0.7**. We´ll install Open Java 1.8.
Continue as root:

pacman -S jdk8-openjdk

...and the plugin that later, and being in a room, we can record and share desktop:

pacman -S icedtea-web

Do OpenJava as default (maybe is another java versions) and exit as root:

archlinux-java set java-8-openjdk/jre

exit

3)

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

OpenMeetings will need LibreOffice to convert to pdf the uploaded office files.

We install LibreOffice and Firefox (my Arch Linux installation have Mate desktop):

sudo pacman -S libreoffice

...press **Enter** to any question.

4)

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

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

(Only one line with space between both)

sudo pacman -S libjpeg ghostscript unzip gcc ncurses make zlib libtool bison bzip2 file-roller autoconf automake pkgconfig tomcat-native nmap curl freetype2 nano base-devel fakeroot jshon expac git wget

5)

------ Installation ImageMagick and Sox ------

ImageMagick, will work with images files jpg, png, gif, etc. We install it:

sudo pacman -S imagemagick

Sox, work the sound. Install it:

sudo pacman -S sox

6)

------ Installation of Adobe Flash Player ------

OpenMeetings even need Adobe Flash Player for cam and audio. We install it:

sudo pacman -S flashplugin

7)

------ Compilation of FFmpeg ------

FFmpeg work with video. Will install a libraries, paquets, and vlc to play the recordings that we´ll make in OpenMeetings. Access as root to shell:

su   ...will ask for root password

(Only one line with space between both)

pacman -S glibc faac faad2 gsm imlib2 vorbis-tools autoconf automake cmake gcc git libtool make mercurial nasm pkgconfig yasm vlc qt4

The ffmpeg compilation it is based on this url, updated file versions 1-1-2019:

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

I made a script that will download, compile and install ffmpeg. It is tested and works ok.
The result of any recordings we do in OpenMeetings, will be in mp4 format.

When the compilation be finished, will appear a text announces it:

FFMPEG Compilation is Finished!

So, download the script:

cd /opt

wget https://cwiki.apache.org/confluence/download/attachments/27838216/ffmpeg_archlinux2.sh

...concede execution permission to it:

chmod +x ffmpeg_archlinux2.sh

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

./ffmpeg_archlinux2.sh

The compilation will spend about 30 minutes.

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

When be finished, please go to **step 8).**

8)

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

MariaDB is the data server. We install it: (continue as root in shell)

pacman -S mariadb

Initialize data directories (be connected to Internet):

mysql_install_db --user=mysql --basedir=/usr --datadir=/var/lib/mysql

...and run MariaDB:

systemctl start mysqld

Give a password to MariaDB root . Please, modify new-password by your own and remember it:

mysqladmin -u root password new-password

Access to MariaDB:

mysql -u root -p

...will ask for the password you does just now.

Make a database called open407, for OpenMeetings. User password must be of 8 digits minimum:

MariaDB [(none)]> CREATE DATABASE open407 DEFAULT CHARACTER SET 'utf8';

Now we create a user with all permission on this open407 database:

(Only one line with space between both)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON open407.* TO 'hola'@'localhost'
IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;

* open407 ....…... name of the database
* hola   ....…... user for that database
* 1a2B3c4D   ....password of this user

You can change the data, but...remember it! Later we´ll need it.
We leave MariaDB:

MariaDB [(none)]> quit

9)

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

We´ll install OpenMeetings in /opt/red5407. All the following information will be based on this directory.

Call to our folder of installation red5407

Make that folder:

mkdir /opt/red5407

cd /opt/red5407

...and download the OpenMeetings file:

wget http://archive.apache.org/dist/openmeetings/4.0.7/bin/apache-openmeetings-4.0.7.zip

unzip apache-openmeetings-4.0.7.zip

...save the unloaded file to /opt:

mv apache-openmeetings-4.0.7.zip /opt

Download and install the connector between OpenMeetings and MariaDB:

cd /opt

<div align="center">(Only one line without space between both)</div>

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/red5407/webapps/openmeetings/WEB-INF/lib

10)
<div align="center">**------ Script to launch red5-OpenMeetings ------**</div>

We make the folder /etc/init.d, where put the red5 run script:

mkdir /etc/init.d

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 would made the installation in any other different path to /opt/red5407, please edit the script and modify the line:

RED5_HOME=/opt/red5407

...to

RED5_HOME=/your-path-installation

11)
<div align="center">**------ Run red5-OpenMeetings ------**</div>

Restart MariaDB:

systemctl restart mysqld

...and run red5-OpenMeetings. Please, open a new terminal as root, and be connected to Internet, so the running will be quick:

/etc/init.d/red5-2 start

...wait 30 or 40 seconds for running red5-OpenMeetings completly. Then, go with the browser to:

http://localhost:5080/openmeetings/install

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

...push on `>` (bottom), and will show the default configuration with Derby, but we employ

MySQL (MariaDB):

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

Now we must introduce the database name, user name and his password we did at the step 8:

Specify the name of the database = open407

Specify DB user = hola

Specify DB password = 1a2B3c4D

Press > 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 =   a-password ...for the previous user.

Email   =   email-adress ...of this 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:

OpenMeetings

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
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 like.

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
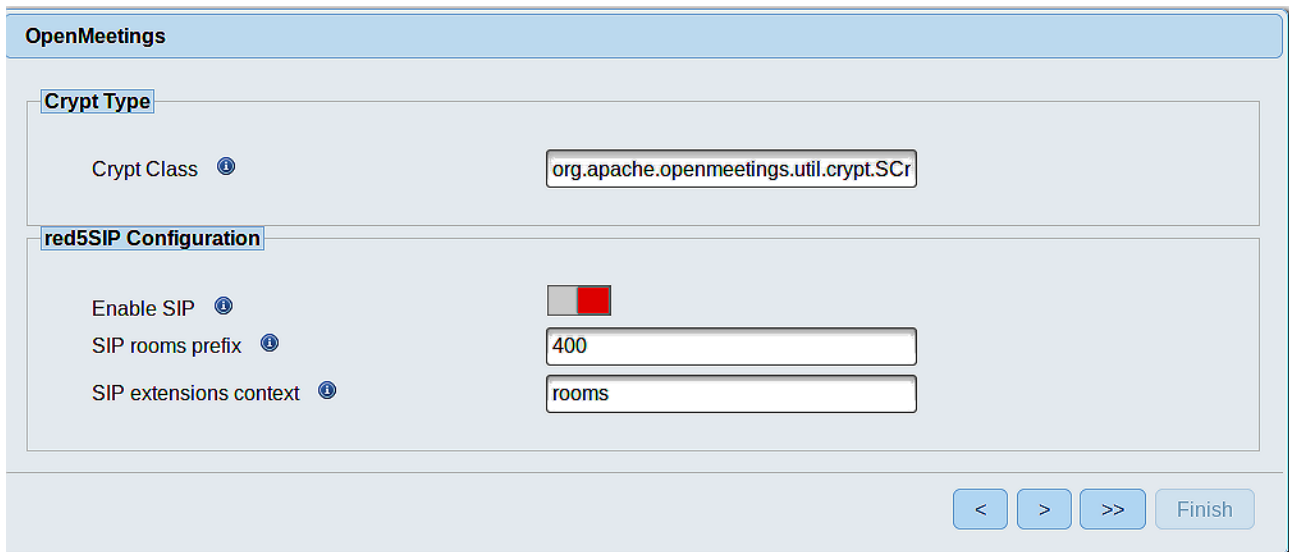
see also *Installation*

< > >> 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/bin
OpenOffice/LibreOffice Path for jodconverter	==	/usr/lib/libreoffice

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, touch the button [>] Will show this window:

OpenMeetings

Please click "Finish" button to start installation!

[<] [>] [>>] [Finish]

Press **Finish** button...wait a seconds untill the tables are fill in our database.

When is concluded, this another page will appear. Don´t clic on **Enter the Application**.
First is need it to restart red5 server. Please, be connectd to Internet. Open a new terminal as root:

/etc/init.d/red5-2 restart
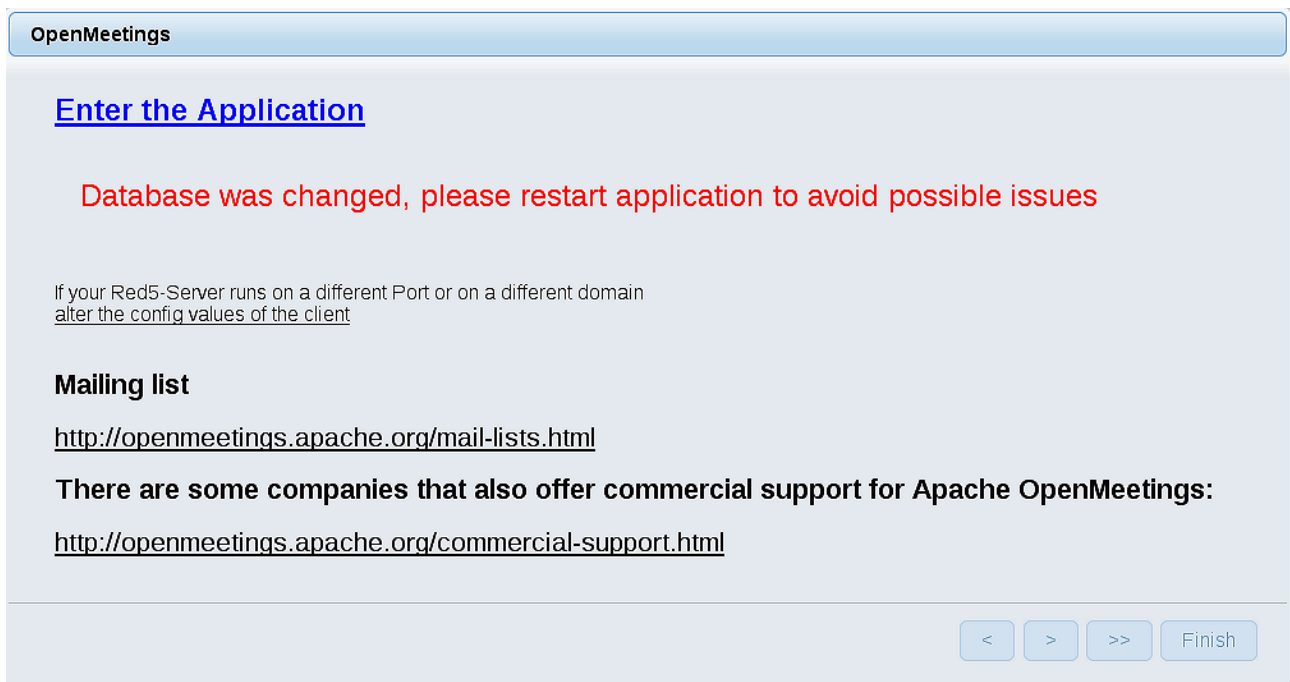
Now yes, you can clic on **Enter the Application**, or go with your browser to:

http://localhost:5080/openmeetings

...and will take us to the entry of OpenMeetings:

Introduce the user's name and the password, that you have choosen during the installation, push **Sign in** button, and…

...**Congratulations!**

The next time that you like to accede OpenMeetings, would be:

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.

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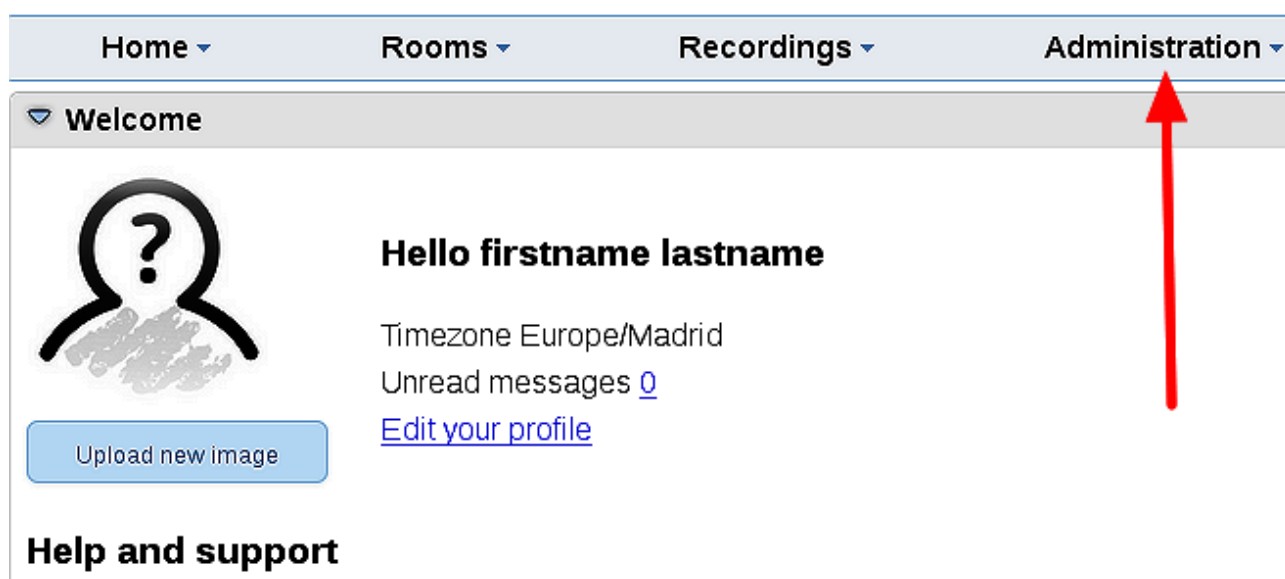
...and following the order of the red arrows:

12+1)

------ Special step for ImageMagick ------

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

nano /etc/ImageMagick-7/policy.xml

...and comment out the follow line, near to bottom file:

<policy domain="coder" rights="none" pattern="{PS,PS2,PS3,EPS,PDF,XPS}" />

...to

<!-- <policy domain="coder" rights="none" pattern="{PS,PS2,PS3,EPS,PDF,XPS}" /> -->

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 system-ImageMagick.

And this is all.

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

Thank you.

Alvaro Bustos