

# Installation of Apache OpenMeetings 4.0.3 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 4.0.3 stable, that is to say will suppress his compilation. It is done step by step.

28-4-2018

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 **4.0.3**. We'll install Open Java 1.8. Continue as root:

#### pacman -S jdk8-openjdk

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

pacman -S icedtea-web

...exit as root:

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. 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 28-4-2018:

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-archlinux.sh

...concede execution permission to it:

chmod +x ffmpeg-archlinux.sh

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

#### ./ffmpeg-archlinux.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 open403, for OpenMeetings. User password must be of 8 digits minimum:

MariaDB [(none)]> CREATE DATABASE open403 DEFAULT CHARACTER SET 'utf8';

Now we create a user with all permission on this open403 database:

(Only one line with space between both)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON open403.\* TO 'hola'@'localhost' IDENTIFIED BY 'la2B3c4D' WITH GRANT OPTION;

- \* open403 ..... 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/red5403. All the following information will be based on this directory.

Call to our folder of installation red5403

Make that folder:

mkdir /opt/red5403

cd /opt/red5403

...and download the OpenMeetings file:

wget http://apache.miloslavbrada.cz/openmeetings/4.0.3/bin/apache-openmeetings-4.0.3.zip

unzip apache-openmeetings-4.0.3.zip

...save the unloaded file to /opt:

mv apache-openmeetings-4.0.3.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/red5403/webapps/openmeetings/WEB-INF/lib

# 10) ------ Script to launch red5-OpenMeetings ------

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/red5403, please edit the script and modify the line:

RED5\_HOME=/opt/red5403

...to

 $RED5\_HOME=/your-path-installation$ 

----- Run red5-OpenMeetings ------

11)

#### 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:

OpenMeetings
<ul> <li>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).</li> </ul>
If you have further questions or need support in installation or hosting:
Community-Support:
Mailing lists
Commercial-Support:
Commercial-Support
< > >> Finish

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

# MySQL (MariaDB):

OpenMeetings
DB configuration
Recommendation for production environment
By default OpenMeetings uses the integrated <u>Apache Derby</u> database. For production environment you should consider using <u>MySQL</u> , <u>PostgreSql</u> , <u>IBM DB2</u> , <u>MSSQL</u> or <u>Oracle</u>
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

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

OpenMeetings		
DB configuration		
Recommendation for production	environment	
By default OpenMeetings use using <u>MySQL</u> , <u>PostgreSql, IB</u>		e. For production environment you should consider
	DB login and 'strong' password with leng	gth 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

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

Specify the name of the database	=	open403
Specify DB user	=	hola
Specify DB password	=	1a2B3c4D

Press	>	button, and will go to:
11000	-	outton, and will go to.

OpenMeetings		
Userdata		
Username		]
Userpass		]
EMail		]
User Time Zone	Europe/Madrid	
Group(Domains)		
Name		7
Name		
		< > >> Finish

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-namethis user will be administrator.
Userpass	=	a-password for the previous user.
Email	=	email-adress of this previous user.
User Time	Zo	<b>ne</b> = country where is this server.
Name	=	example-openmeetingsgroup 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
	< > >> 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 you can change it as you like.

Now press the button > and a new page will appear:

OpenMeetings				
Converters				
Document conversion DPI 0	150			
Document conversion JPEG Quality (1)	90			
ImageMagick Path		Check		
FFMPEG Path 🔞		Check		
SoX Path 📵		Check		
OpenOffice/LibreOffice Path for jodconverter 🕚		Check		
see also <u>Installation</u>				
		< > >> 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/Libre( jodconverter	Office Path for		/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 (0) SIP rooms prefix (0)	400	
SIP extensions context 0	rooms	
		< > >> Finish

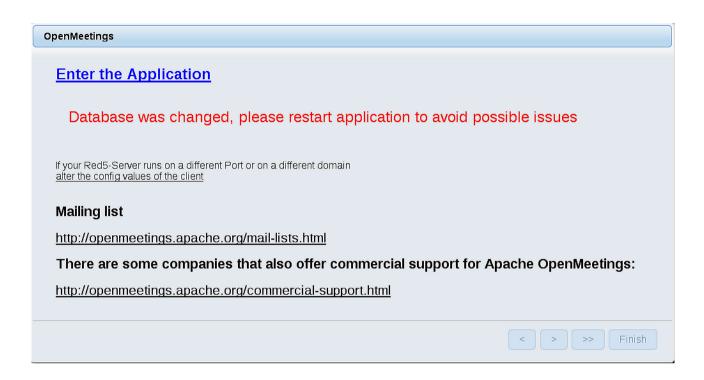
Now, touch the button Now this window:

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:

Login				
Username or mail address				
Password				
	Remember login			
Forgotten your password?	Network testing			
Not a member? Sign in				

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:

# $Administration \rightarrow Configuration$

Home 👻	Rooms -	Recordings 🗸	Administration -
🗢 Welcome			<b>•</b>
(?)	Hello firstna	me lastname	
Upload new image	Timezone Europ Unread messag <u>Edit your profile</u>	jes <u>O</u>	
Help and support			

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

Home 🔻	Rooms 🔻	Recordings - Administra	tion -
50 🗾 🛤	≪ 12 ↦ ⊨	Search )	🗎 🌣 🕂 💥
≎ ID	≎ Key	≎ Value	Configuration
1	crypt.class.name	org.apache.openmeetings.util.crypt.S CryptImplementation	Type string
2	allow.frontend.register	true	Key path.ffmpeg
3	allow.soap.register	true	Value
4	allow.oauth.register	true	Last update Oct 17, 2017 5:54:57 PM
5	default.group.id	1	Updated by toro
3	mail.smtp.server	localhost	Comment Path To FFMPEG
7	mail.smtp.port	25	Comment Path to FFMPEG
3	mail.smtp.system.email	noreply@openmeetings.apache.org	
Э	mail.smtp.user		
10	mail.smtp.pass		
11	mail.smtp.starttls.enabl	false	
12	mail.smtp.connection.ti meout	30000	
13	mail.smtp.timeout	30000	
L4	application.name	OpenMeetings	
15	default.lang.id	8	3
16	document.dpi	150	, j
17	document.quality	90	
18	path.imagemagick		
19	path.sox		
20	path.ffmpeg	•	1 2
21	path.office		
22	dashboard.rss.feed1	http://mail-archives.apache.org /mod_mbox/openmeetings- user/?format=atom	
23	dashboard.rss.feed2	http://mail-archives.apache.org /mod_mbox/openmeetings- dev/?format=atom	
24	send.email.at.register	false	
25	send.email.with.verficat	false	

And this is all.

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

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

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Thank you.

Alvaro Bustos