

## Installation of Apache OpenMeetings 4.0.7 on Devuan 2 ascii

This tutorial is made based on a fresh installations of

## devuan\_ascii\_2.0.0\_amd64\_dvd-1.iso

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

Starting...

1)

----- Add repositories ------

Since Devuan 2 ascii it is Debian 9 but without systemd, we'll add the repos of this to our Devuan. First install nano editor:

apt install nano

...we edit sources.list:

nano /etc/apt/sources.list

...and add the following repos (copy and paste green text):

deb http://security.debian.org/debian-security/ stretch/updates main deb-src http://security.debian.org/debian-security/ stretch/updates main deb http://ftp.fr.debian.org/debian/ stretch main contrib non-free deb-src http://ftp.fr.debian.org/debian/ stretch main contrib non-free deb http://mirrors.kernel.org/debian/ stretch-updates main contrib non-free deb-src http://mirrors.kernel.org/debian/ stretch-updates main contrib non-free Press Ctrl+x, will ask to save, press Y and to exit nano press Enter.

Now, we update the system operative:

apt update

apt upgrade

2)

## ----- Installation of OpenJava 1.8 ------

OpenMeetings 4.0.7 need Java 1.8 to work. So, we install OpenJava 1.8:

sudo apt install openjdk-8-jdk openjdk-8-jdk-headless

...and his plugin for web:

sudo apt install icedtea-8-plugin

Now, please, select OpenJava, if you have more than one java versions installed:

sudo update-alternatives --config java

To see the active java version:

java -version

3)

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

LibreOffice is need it to convert to pdf the uploaded office files.

The debian desktop iso have already LibreOffice installed.

We do it also for server iso:

sudo apt install libreoffice

## 4)

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

**ImageMagic,** will work the image files, png, jpg, gif, etc. Will install it and some more libraries and paquets:

sudo apt install -y imagemagick libjpeg62 zlib1g-dev unzip make build-essential wget nmap

Sox, work the sound. We'll compile, because this version is newer than is in the repos:

cd /opt

wget http://sourceforge.net/projects/sox/files/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

5)

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

OpenMeetings even need Adobe Flash Player for cam and audio. On Devuan 2 is not easy install it from repos. We'll do almost manually:

cd /opt

mkdir flashplayer

cd flashplayer

(Only one line without space between both)

wget http://slackware.uk/people/alien/slackbuilds/flashplayer-plugin/build/flash\_player\_npapi\_linux.31.0.0.108.x86\_64.tar.gz

tar zxvf flash\_player\_npapi\_linux.31.0.0.108.x86\_64.tar.gz

...please, modify you-user, by your real user name:

mkdir /home/you-user/.mozilla/plugins

cp libflashplayer.so /home/you-user/.mozilla/plugins

6)

#### ----- Compilation of FFmpeg and Ghostscript-----

FFmpeg will work with video. This compilation is based on:

## https://trac.ffmpeg.org/wiki/CompilationGuide/Ubuntu

Updated files to 1-1-2019. Install some libraries:

(Only one line with space between each one)

sudo apt -y --force-yes install autoconf automake build-essential libass-dev libfreetype6-dev libgpac-dev libsdl1.2-dev libtheora-dev libtool libva-dev libvdpau-dev libvorbis-dev libxcb1-dev libxcb-shm0-dev libxcb-xfixes0-dev pkg-config texi2html zlib1g-dev nasm libx264-dev cmake mercurial libopus-dev curl git

I made a script that will download, compile and install ffmpeg. The result of any recording we do in OpenMeetings, will be in mp4 format. Please, download the script:

cd /opt

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

...concede permission of execution:

chmod +x ffmpeg\_UbunDebi.sh

...and run it (be connected to Internet). The compilation will spend about 30 minutes:

./ffmpeg\_UbunDebi.sh

When finish the compilation, a text will announce it: FFmpeg Compilation is Finished!

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

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 -R /opt/ghostscript-9.26

## 7)

----- Installation and configuration of MariaDB data server -----

**MariaDB** is the data server. Will install it. (Version 10.x):

sudo apt-get install mariadb-server

Run MariaDB:

/etc/init.d/mysql start

Now we give a root password to MariaDB. Please, replace new-password with your own:

mysqladmin -u root password new-password

Make a database with his own user for OpenMeetings:

mysql -u root -p

...will ask for the root password that you have just choosen, type it...

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

With this command we has created a database called open407. Now we create an user on this database. User password must be of 8 digits minimum:

(Only one line with space between both)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON open407.\* TO 'hola'@'localhost' IDENTIFIED BY 'la2B3c4D' WITH GRANT OPTION;

- \* open407 .....is the database name.
- \* hola .....is the user name for this database.
- \* 1a2B3c4D ...is the password for this user.

You can change the data...but remember it! Later we'll need it.

Now, we exit MariaDB:

MariaDB [(none)]> quit

8)

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

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

Make the folder:

mkdir /opt/red5407

#### cd /opt/red5407

...and download the red5-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

Do to nobody owner of the whole OpenMeetings folder installation, by security:

chown -R nobody /opt/red5407

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

9)

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

Please, download the red5 run script:

cd /opt

wget https://cwiki.apache.org/confluence/download/attachments/27838216/red5-ubdeb2

...and copy it to:

cp red5-ubdeb2 /etc/init.d/

...and concede permission of execution:

chmod +x /etc/init.d/red5-ubdeb2

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

Start MariaDB, if still it is not:

/etc/init.d/mysql start

...and now start red5-OpenMeetings. Please, be connected to Internet:

/etc/init.d/red5-ubdeb2 start

...will appear two text lines in the shell:

start-stop-daemon: --start needs --exec or --startas Try 'start-stop-daemon --help' for more information.

...you do nothing. Don't worry, everything work right,

...wait 40 seconds at least, in order that red5 it is runing completely. And after this, can go 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 <u>http://pages.cs.wisc.edu/~ghost/</u> 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

...press on button (bottom), and will show the default database configuration with Derby, but we employ MySQL (MariaDB),

10)

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

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

OpenMeetings
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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 penmeetings
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 7:

## Specify the name of the database = open407 Specify DB user = hola Specify DB password = 1a2B3c4D

If you choosed a different data, please introduce it here.

Press **>** button, and will go to:

OpenMeetings		
Userdata		
Username Userpass EMail User Time Zone	Europe/Madrid	
Group(Domains)		1
		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	= passwordfor the previous user.		
Email	= email-adress of the previous user.		
<b>User Time Zone</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:

Pag	9
-----	---

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 crea (including Rooms, OAuth2 servers etc.)	ted
Mail-Referer	noreply@openmeetings.apache.org
SMTP-Server	localhost
SMTP-Server Port(default Smtp-Server Po 25)	25
SMTP-Username	
SMTP-Userpass	
Enable TLS in Mail Server Auth	
Set inviter's email address as ReplyTo in e invitations	mail
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
SMT	P-Server	==	smtp.gmail.com
SMTP-Server Port (default Smtp-Server Port is 25)			587
SMT	P-Username		john@gmail.com
SMT	P-Userpass		password of john@gmail.com
Enable TLS in Mail Server	Auth	==	turn green the button to activate
Defa	ult Language	==	select your language

...the rest you can change it as you like.

Now press the button  $\geq$  and a new page will appear:

OpenMeetings		
Converters		
Document conversion DPI 0	150	
Document conversion JPEG Quality 🕚	90	
ImageMagick Path		Check
FFMPEG Path 🕚		Check
SoX Path 🐵		Check
OpenOffice/LibreOffice Path for jodconverter (0)		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/local/bin	
OpenOffice/LibreOffice Path for jodconverter	==	/usr/lib/libreoffice	(32bit - 64bit)

As you go introducing paths, you can check if they are correct by pressing the button labeled **Check**. If it does not display any error message, that is OK.

Once completed the paths, please click the button  $\geq$  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	

rooms

Now push the button  $\geq$  and will show this window:

SIP extensions context

OpenMeetings	
Please click "Finish" button to start installation!	
	< > >> Finish

Press **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-ubdeb2 restart

Finish

>>

< >

OpenMeetings
Enter the Application
Database was changed, please restart application to avoid possible issues
If your Red5-Server runs on a different Port or on a different domain alter the config values of the client
Mailing list
http://openmeetings.apache.org/mail-lists.html
There are some companies that also offer commercial support for Apache OpenMeetings:
http://openmeetings.apache.org/commercial-support.html
< > >> Finish

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	
Forgotten your password?	Remember login
	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 accede to 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.

# 11) ----- 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 firstname	lastname	
6.7 3.	Timezone Europe/N		
Upload new image	Unread messages <u>(</u> Edit your profile	<u>1</u>	
Help and support			

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

Hom		Recordings - Administr	
50 <u>-</u>	1 • • 12 •> • •	Search	🗎 🌫 📲 💥
\$ ID	≎ Key	≎ Value	Configuration
	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
1	allow.oauth.register	true	Last update Oct 17, 2017 5:54:57 PM
5	default.group.id	1	Updated by toro
5	mail.smtp.server	localhost	Comment Path To FFMPEG
7	mail.smtp.port	25	Comment Path To FFMPEG
В		noreply@openmeetings.apache.org	
- 9	mail.smtp.user		
10	mail.smtp.pass		
11	mail.smtp.starttls.enabl e	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	
17	document.quality	90	
18	path.imagemagick		
19	path.sox		
20	path.ffmpeg		<b></b> 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