



Installation of Apache OpenMeetings 4.0.10 on Debian 10

This tutorial is made based on a fresh installations of

[debian-live-10.0.0-amd64-mate.iso](#)

It is tested with positive result. We will use the Apache's binary version OpenMeetings 4.0.10 stable, that is to say will suppress his compilation. It is done step by step.

14-12-2019

Starting...

1)

First, we update and upgrade the OS:

```
sudo apt update
```

```
sudo apt upgrade
```

2)

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

OpenMeetings need Java to work. So, we install OpenJava 11:

```
sudo apt install openjdk-11-jdk openjdk-11-jdk-headless
```

...and his plugin for web:

```
sudo apt install icedtea-netx
```

Now, please, select OpenJava 11 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-get 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-get 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 Debian 10 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.32.0.0.207.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 -----

FFmpeg will work with video. We install it:

```
sudo apt install ffmpeg
```

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 chosen, type it:

```
MariaDB [(none)]> CREATE DATABASE open4010 DEFAULT CHARACTER SET 'utf8';
```

With this command we has created a database called open4010.

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 open4010.* TO 'hola'@'localhost'  
IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;
```

- * open4010is the database name.
- * holais 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 leave MariaDB:

```
MariaDB [(none)]> quit
```

8)

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

We'll install OpenMeetings in /opt/red54010. All the following information will be based on this directory.

Make the folder:

```
mkdir /opt/red54010
```

```
cd /opt/red54010
```

...and download the red5-OpenMeetings file:

```
wget http://archive.apache.org/dist/openmeetings/4.0.10/bin/apache-openmeetings-4.0.10.tar.gz
```

```
tar xzvf apache-openmeetings-4.0.10.tar.gz
```

...save the unloaded file to /opt:

```
mv apache-openmeetings-4.0.10.tar.gz /opt
```

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

```
chown -R nobody /opt/red54010
```

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/5.1.48/mysql-connector-java-5.1.48.jar
```

...and copy it to where must be:

```
cp /opt/mysql-connector-java-5.1.48.jar /opt/red54010/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/red5-2
```

...copy it to:

```
cp red5-2 /etc/init.d/
```

...and concede permission of execution:

```
chmod +x /etc/init.d/red5-2
```

10)

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

Start MariaDB, if still it is not:

```
/etc/init.d/mysql start
```

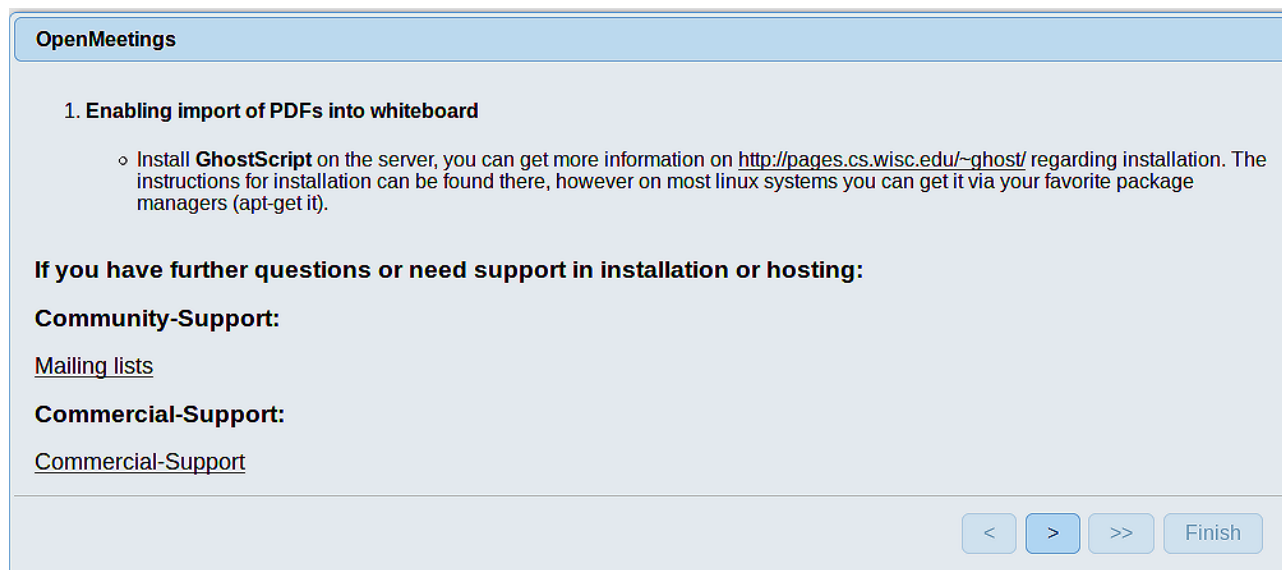
...and now start red5-OpenMeetings:

```
/etc/init.d/red5-2 start
```

...wait 40 seconds at least, in order that red5 it is running completely. And after this, can go to:

<http://localhost:5080/openmeetings>


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



The screenshot shows a web browser window titled "OpenMeetings". The page content includes:

- 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](#)

At the bottom right of the page, there are four navigation buttons: a left arrow (<), a right arrow (>), a double right arrow (>>), and a "Finish" button.

...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 7:

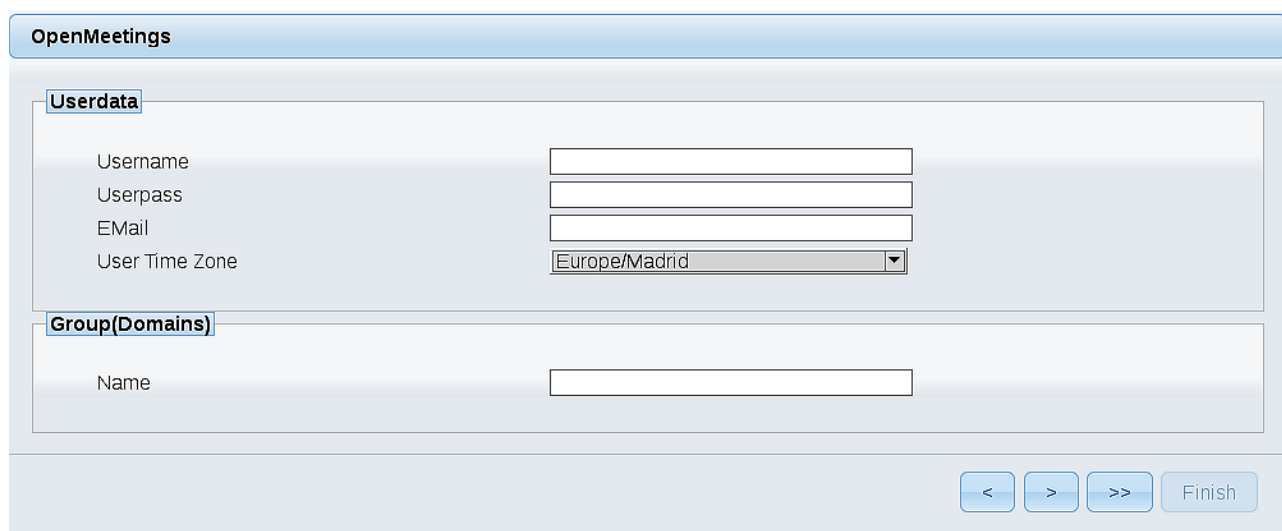
Specify the name of the database = open4010

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

Group(Domains)

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-name ...this user will be administrator.

Userpass = 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:

OpenMeetings

Configuration

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

A valid example to configure the mail server with Gmail, is as follows:
(replace **john@gmail.com** with your real Gmail account)

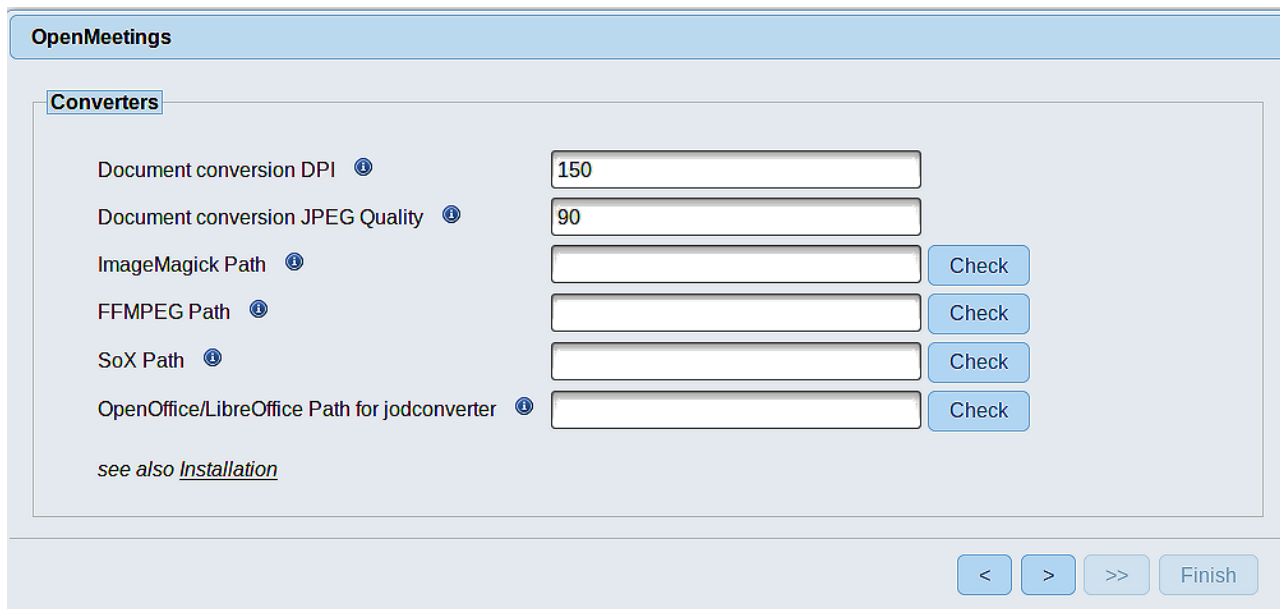
Mail-Refer	==	john@gmail.com
SMTP-Server	==	smtp@gmail.com
SMTP-Server Port (default SmtP-Server Port is 25)	==	587
SMTP-Username	==	john@gmail.com
SMTP-Userpass	==	password of john@gmail.com
Enable TLS in Mail Server Auth	==	...turn green the button to activate

To select the language of your server OpenMeetings, please scroll on the line:

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 ⓘ

Document conversion JPEG Quality ⓘ

ImageMagick Path ⓘ

FFMPEG Path ⓘ

SoX Path ⓘ

OpenOffice/LibreOffice Path for jodconverter ⓘ

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/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  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 ⓘ


red5SIP Configuration

Enable SIP ⓘ

SIP rooms prefix ⓘ

SIP extensions context ⓘ

< > >> Finish

Now push the button  and will show this window:

OpenMeetings

Please click "Finish" button to start installation!

< > >> Finish

Press **Finish** button ...wait a seconds until 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](#)

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>

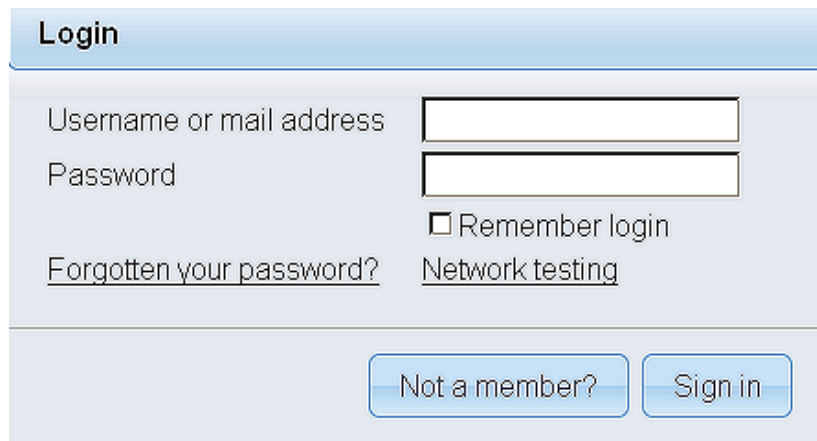
There are some companies that also offer commercial support for Apache OpenMeetings:
<http://openmeetings.apache.org/commercial-support.html>

< > >> 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

Remember login

[Forgotten your password?](#) [Network testing](#)

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 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 accessed OpenMeetings, if you would like to do any modification in the configuration, please go to:

Administration → Configuration

The screenshot shows the top navigation bar with 'Home', 'Rooms', 'Recordings', and 'Administration' menus. The 'Administration' menu is highlighted with a red arrow pointing upwards. Below the navigation bar is a 'Welcome' section with a user profile icon (a question mark), the text 'Hello firstname lastname', 'Timezone Europe/Madrid', 'Unread messages 0', and a link to 'Edit your profile'. There is also a button for 'Upload new image' and a 'Help and support' section.

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

The screenshot shows the 'Administration' page with the 'Configuration' sub-page selected. A table lists various configuration keys and their values. The row for 'path.ffmpeg' is highlighted. Three red arrows indicate the navigation path: arrow 1 points to the 'path.ffmpeg' row in the table; arrow 2 points to the 'Configuration' form for 'path.ffmpeg'; arrow 3 points to the 'Configuration' form for 'path.ffmpeg'.

ID	Key	Value
1	crypt.class.name	org.apache.openmeetings.util.crypt.SCryptImplementation
2	allow.frontend.register	true
3	allow.soap.register	true
4	allow.oauth.register	true
5	default.group.id	1
6	mail.smtp.server	localhost
7	mail.smtp.port	25
8	mail.smtp.system.email	noreply@openmeetings.apache.org
9	mail.smtp.user	
10	mail.smtp.pass	
11	mail.smtp.starttls.enable	false
12	mail.smtp.connection.timeout	30000
13	mail.smtp.timeout	30000
14	application.name	OpenMeetings
15	default.lang.id	8
16	document.dpi	150
17	document.quality	90
18	path.imagemagick	
19	path.sox	
20	path.ffmpeg	
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.verification	false

The configuration form for 'path.ffmpeg' shows the following details:

- Type: string
- Key: path.ffmpeg
- Value: (empty text box)
- Last update: Oct 17, 2017 5:54:57 PM
- Updated by: toro
- Comment: Path To FFMPEG

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

<http://openmeetings.apache.org/mailling-lists.html>



Also you can download if you like, a wallpaper of OpenMeetings for different devices such as:

PC, Mac, Smartphone, iPhone and Tablets. Here is the link to download:

[OpenMeetings Wallpaper Download](#)

A dvd live iso with OpenMeetings 4.0.10 on Ubuntu 18.04 lts is at your disposal.

Can find it here:

[Live iso download](#)

Thank you.

Alvaro Bustos (PMC and Committer at Apache OpenMeetings).