



## Installation of Apache OpenMeetings 4.0.11 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 4.0.11 stable, that is to say will suppress his compilation. It is done step by step.

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 Java -----

Java it is necessary for OpenMeetings 4.0.11. We'll install OpenJava 11. Continue as root:

```
pacman -S jdk11-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-11-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 each one)

```
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)

----- **Installation of FFmpeg** -----

FFmpeg work with video. Will install it and vlc to play the recordings that we'll make in OpenMeetings:

```
sudo pacman -S ffmpeg vlc
```

8)

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

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

```
sudo pacman -S mariadb
```

Initialize data directories (be connected to Internet):

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

...and run MariaDB:

```
sudo systemctl start mysqld
```

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

```
sudo mysqladmin -u root password new-password
```

Access to MariaDB:

```
sudo mysql -u root -p
```

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

Make a database called open4011 for OpenMeetings. User password must be of 8 digits minimum:

```
MariaDB [(none)]> CREATE DATABASE open4011 DEFAULT CHARACTER SET 'utf8';
```

Now we create a user with all permission on this open4011 database:

(Only one line with space between both)

```
MariaDB [(none)]> GRANT ALL PRIVILEGES ON open4011.* TO 'hola'@'localhost'
IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;
```

```
* open4011 ..... 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/red54011. All the following information will be based on this directory.

Call to our folder of installation red54011

Make that folder:

```
sudo mkdir -p /opt/red54011
```

```
cd /opt/red54011
```

...download the OpenMeetings file:

(Only one line without space between both)

```
sudo wget https://downloads.apache.org/openmeetings/4.0.11/bin/apache-openmeetings-4.0.11.tar.gz
```

...uncompress it:

```
sudo tar xzvf apache-openmeetings-4.0.11.tar.gz
```

...and save the unloaded file to /opt:

```
sudo mv apache-openmeetings-4.0.11.tar.gz /opt
```

Download and install the connector between OpenMeetings and MariaDB:

```
cd /opt
```

(Only one line without space between both)

```
sudo wget https://repo1.maven.org/maven2/mysql/mysql-connector-java/5.1.49/mysql-connector-java-5.1.49.jar
```

...and copy it to where must be:

```
sudo cp /opt/mysql-connector-java-5.1.49.jar /opt/red54011/webapps/openmeetings/WEB-INF/lib
```

10)

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

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

```
sudo mkdir /etc/init.d
```

Download the script to run red5-OpenMeetings:

```
cd /opt
```

```
sudo wget https://cwiki.apache.org/confluence/download/attachments/27838216/red5-2
```

...copy it to where must be:

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

...concede execution permission:

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

If you would made the installation in any other different path to /opt/red54011, please edit the script and modify the line:

```
RED5_HOME=/opt/red54011
```

...to

```
RED5_HOME=/your-path-installation
```

11)

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

Restart MariaDB:

```
sudo 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:

```
sudo /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/>

...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:**

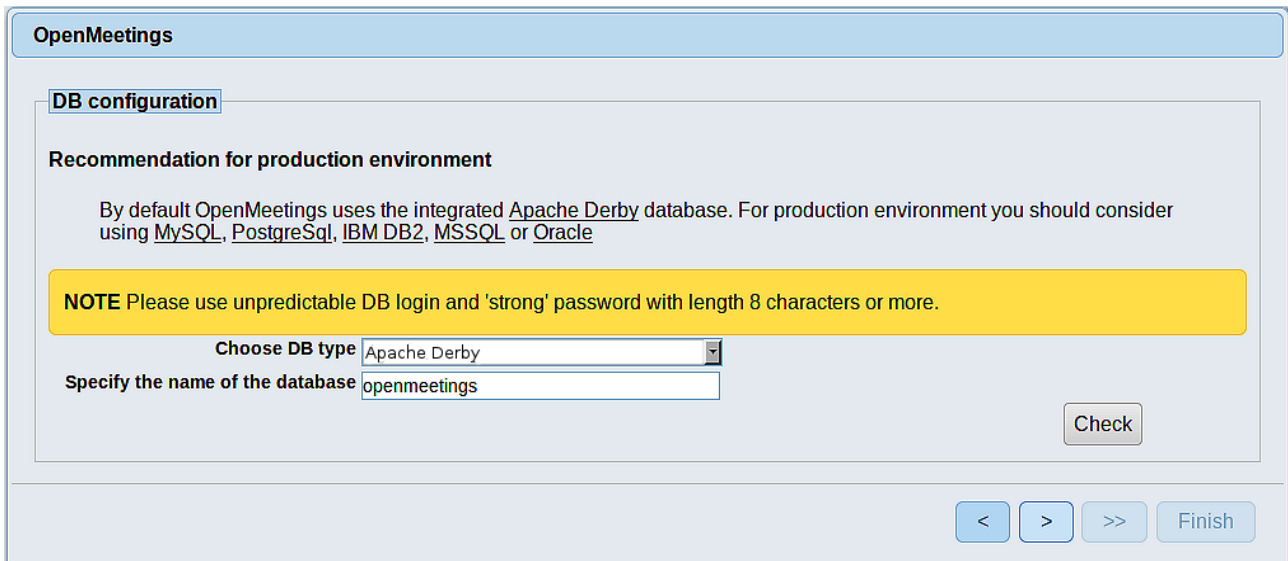
[Mailing lists](#)

**Commercial-Support:**

[Commercial-Support](#)

< > >> Finish

...push on  (bottom), and will show the default configuration with Derby, but we employ MySQL (MariaDB):



**OpenMeetings**

**DB configuration**

**Recommendation for production environment**

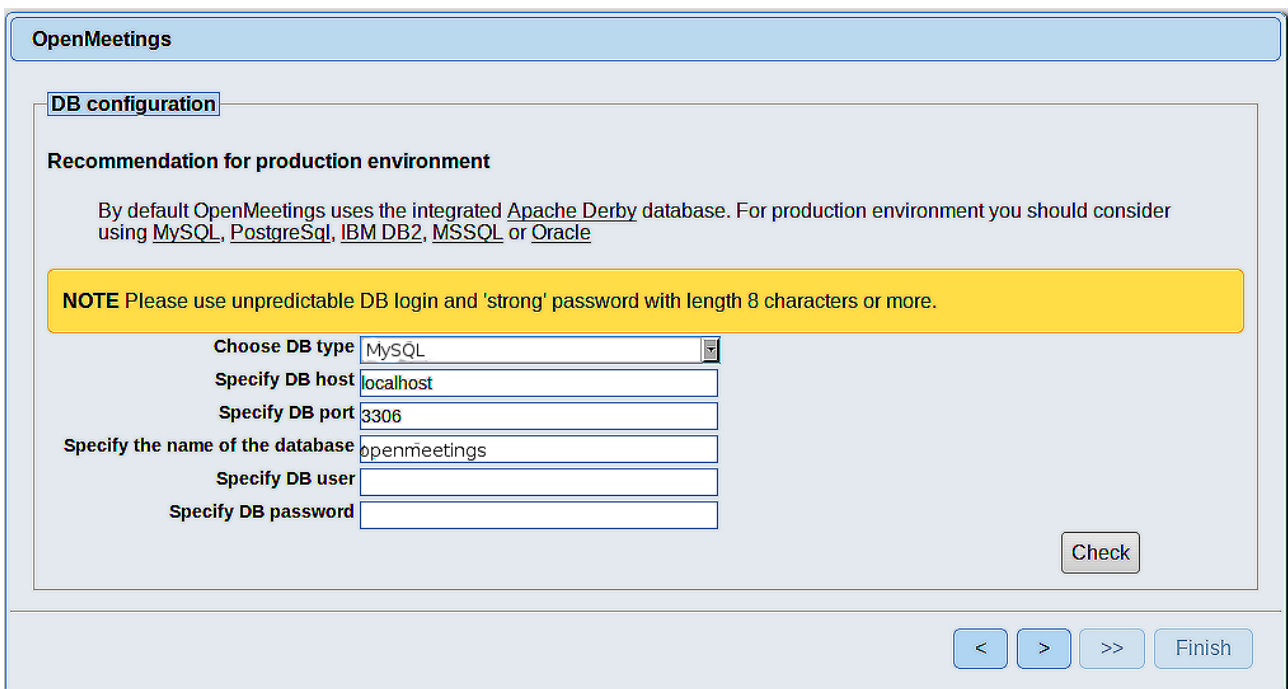
By default OpenMeetings uses the integrated [Apache Derby](#) database. For production environment you should consider using [MySQL](#), [PostgreSQL](#), [IBM DB2](#), [MSSQL](#) or [Oracle](#)

**NOTE** Please use unpredictable DB login and 'strong' password with length 8 characters or more.

Choose DB type

Specify the name of the database

...so, 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

Specify DB host

Specify DB port

Specify the name of the database

Specify DB user

Specify DB password

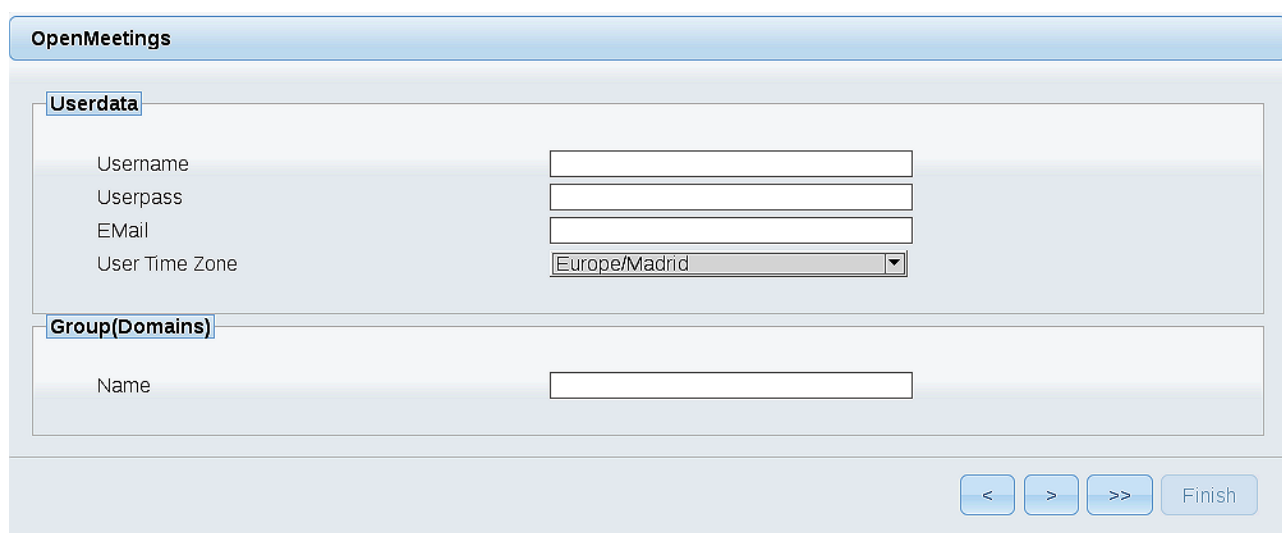
Now we must introduce the database name, user name and his password we did at the step 8:

**Specify the name of the database** = open4011

**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	<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)

<b>Mail-Refer</b>	==	<a href="mailto:john@gmail.com">john@gmail.com</a>
<b>SMTP-Server</b>	==	<a href="mailto:smtp@gmail.com">smtp@gmail.com</a>
<b>SMTP-Server Port (default SmtP-Server Port is 25)</b>	==	<a href="#">587</a>
<b>SMTP-Username</b>	==	<a href="mailto:john@gmail.com">john@gmail.com</a>
<b>SMTP-Userpass</b>	==	<a href="#">password of john@gmail.com</a>
<b>Enable TLS in Mail Server Auth</b>	==	<a href="#">...turn green the button to activate</a>
<b>Default Language</b>	==	<a href="#">...select your language</a>

...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/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 ⓘ


**red5SIP Configuration**

Enable SIP ⓘ

SIP rooms prefix ⓘ

SIP extensions context ⓘ

< > >> Finish

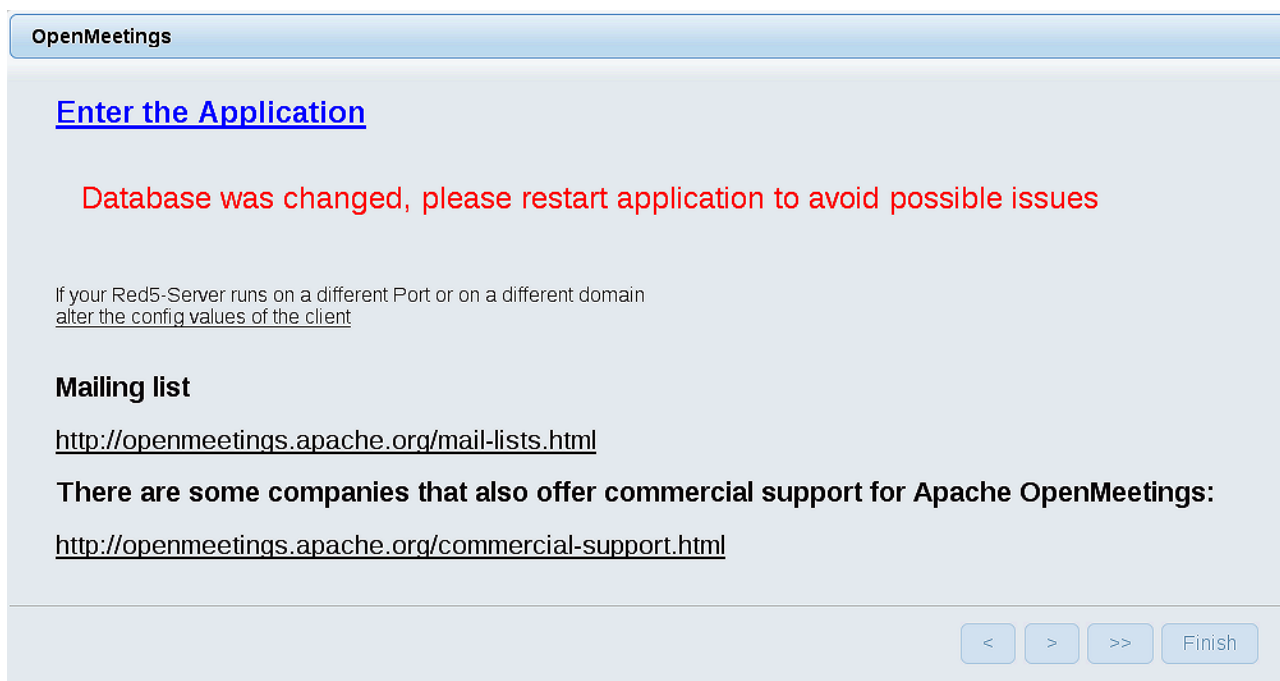
Now, touch the button  Will show this window:



Press **Finish** button...wait a seconds until 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:

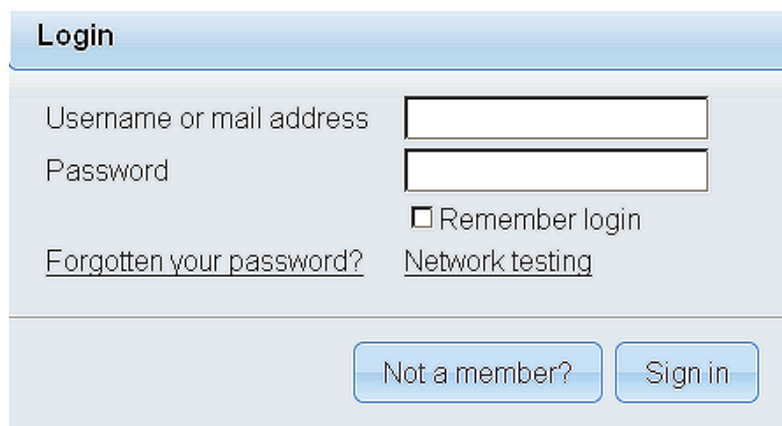
```
sudo /etc/init.d/red5-2 restart
```



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:



The screenshot shows a login form titled "Login". It contains the following elements:

- A label "Username or mail address" followed by a text input field.
- A label "Password" followed by a text input field.
- A checkbox labeled "Remember login".
- A link labeled "Forgotten your password?".
- A link labeled "Network testing".
- Two buttons at the bottom: "Not a member?" and "Sign in".

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, 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**

Home ▾ Rooms ▾ Recordings ▾ Administration ▾

Welcome




**Hello firstname lastname**

Timezone Europe/Madrid  
Unread messages [0](#)  
[Edit your profile](#)

[Upload new image](#)

**Help and support**



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

Home ▾ Rooms ▾ Recordings ▾ Administration ▾

50 [Search]

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

**Configuration**

Type: string



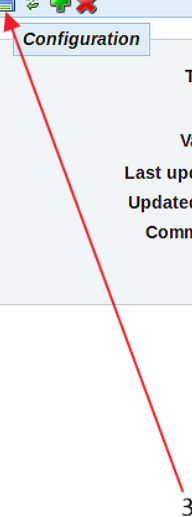
Key: path.ffmpeg

Value:

Last update: Oct 17, 2017 5:54:57 PM

Updated by: toro

Comment: Path To FFMPEG

1 2 3

Chat

13)

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

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

```
sudo nano /etc/ImageMagick-7/policy.xml
```

...and comment, if is not, the following line, near to bottom file:

```
<policy domain="module" rights="none" pattern="{PS,PDF,XPS}" />
```

...to

```
<!-- <policy domain="module" rights="none" pattern="{PS,PDF,XPS}" /> -->
```

Also comment this line, at bottom file:

```
<policy domain="delegate" rights="none" pattern="gs" />
```

...leaving it so:

```
<!-- <policy domain="delegate" rights="none" pattern="gs" /> -->
```

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.

-----

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 4.0.11 on Ubuntu 18.04 lts and other OpenMeetings 5.0.0 on Ubuntu 18.04 lts, is at your disposal.

Can find them here:

[Live iso download](#)

Thank you.

Alvaro Bustos (PMC and Committer at Apache OpenMeetings).