



Installation of Apache OpenMeetings 4.0.11 on openSUSE Leap 15.2

This tutorial is made based on fresh installations of

openSUSE-Leap-15.2-DVD-x86_64.iso

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 -----

Update operative system:

`zypper refresh`

`zypper update`

2)

----- Installation of Java and Icedtea-web -----

Java it is necessary to work OpenMeetings **4.0.11**. So, we install OpenJava 11:

```
zypper install -y java-11-openjdk java-11-openjdk-headless
```

Also we must install Icedtea-web can recording and share desktop from OpenMeetings:

```
zypper install -y icedtea-web update-alternatives
```

Now we'll see if is installed more than one java version. If it is, then select our OpenJava 11:

```
update-alternatives --config java
```

...and to see the active version:

```
java -version
```

3)

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

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

Maybe it is installed, but for iso server specially:

```
zypper install -y libreoffice
```

4)

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

We install packages and libraries that we'll need later:

(Only one line with space between both)

```
zypper install -y gcc ghostscript unzip freetype freetype-devel ncurses ncurses-devel make libz1  
zlib-devel libtool bzip2 file-roller git autoconf automake pkg-config nmap nano
```

5)

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

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

```
zypper install -y ImageMagick giflib-devel
```

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

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

...and comment out the two follow lines near to bottom file:

```
<policy domain="coder" rights="write" pattern="PS" />
<policy domain="coder" rights="write" pattern="PDF" />
```

...to:

```
<!-- <policy domain="coder" rights="write" pattern="PS" /> -->
<!-- <policy domain="coder" rights="write" pattern="PDF" /> -->
```

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 ImageMagick.

Sox, work the sound. Install it:

```
zypper install -y sox
```

6)

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

OpenMeetings even need Adobe Flash Player for cam and audio.

Add Adobe repo and install it:

```
zypper ar --check --refresh http://linuxdownload.adobe.com/linux/x86_64/ adobe
```

```
zypper se -s -r adobe
```

...will ask if you wish continue, answer yes.

(Only one line without space between both)

```
sudo rpm -ivh http://linuxdownload.adobe.com/adobe-release/adobe-release-x86_64-1.0-1.noarch.rpm
```

```
rpm --import /etc/pki/rpm-gpg/RPM-GPG-KEY-adobe-linux
```

```
zypper install flash-plugin    ...press Enter when ask.
```

7)

----- Compilation of FFmpeg and installation of packman repo -----

FFmpeg work the video. We install Packman repository to can install somes libraries:

```
zypper ar -cfp 90 http://ftp.gwdg.de/pub/linux/misc/packman/suse/openSUSE_Leap_15.2/ packman
```

```
zypper update
```

 ...when ask, accept for allways typing the letter **a** and pressing **Enter**

(Only one line witht space between both)

```
zypper install -y glibc imlib2 imlib2-devel mercurial cmake freetype2-devel libfreetype6 curl git vlc  
libogg-devel libtheora-devel libvorbis-devel libvpx-devel fdk-aac-devel libmp3lame-devel
```

This ffmpeg compilation is based in this url:

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

I made a script that will download, compile and install ffmpeg. Download the script:

```
cd /opt
```

```
wget https://cwiki.apache.org/confluence/download/attachments/27838216/ffmpeg_opensuse15.sh
```

...concede permission of execution:

```
chmod +x ffmpeg_opensuse15.sh
```

...and run it, be connected to Internet:

```
./ffmpeg_opensuse15.sh
```

Will spend about 20 minutes. When finish, will announce it with this text:

FFmpeg Compilation is Finished!

...then, please go to **step 8**).

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

8)

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

MariaDB is the data server.

We install it:

```
zypper install -y mariadb mariadb-tools
```

...and run mariadb:

```
systemctl start mysql.service
```

Give a password to MariaDB root . Please, modify **new-password** by 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-mariadb password that we have just chosen:

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

Now we create a user with all permission on this database. User password must be of 8 digits minimum with letter case, numbers or characters + * % etc:

(Only one line with space between both)

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

- * **open4011**is the database name.
- * **hola**is the user name for the database.
- * **1a2B3c4D** ..is the password of this user.

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

Now, 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.

Make the folder:

```
mkdir /opt/red54011
```

```
cd /opt/red54011
```

...and download the OpenMeetings file:

```
wget https://archive.apache.org/dist/openmeetings/4.0.11/bin/apache-openmeetings-4.0.11.tar.gz
```

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

...save the unloaded file to /opt:

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

Download and install the connector file between OpenMeetings and MariaDB:

```
cd /opt
```

(Only one line without space between both)

```
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:

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

10)

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

We'll 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 made the installation in any other different path to /opt/red54011, please edit the script and modify the line:

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

...to

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

11)

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

Restart mariadb, (be connected to Internet):

```
systemctl restart mysql.service
```

...and run red5-OpenMeetings, please, in a new window terminal (be connected to Internet):

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

...wait about 40 seconds in order red5 can run completely. 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

...press 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

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

OpenMeetings

DB configuration

Recommendation for production environment

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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:

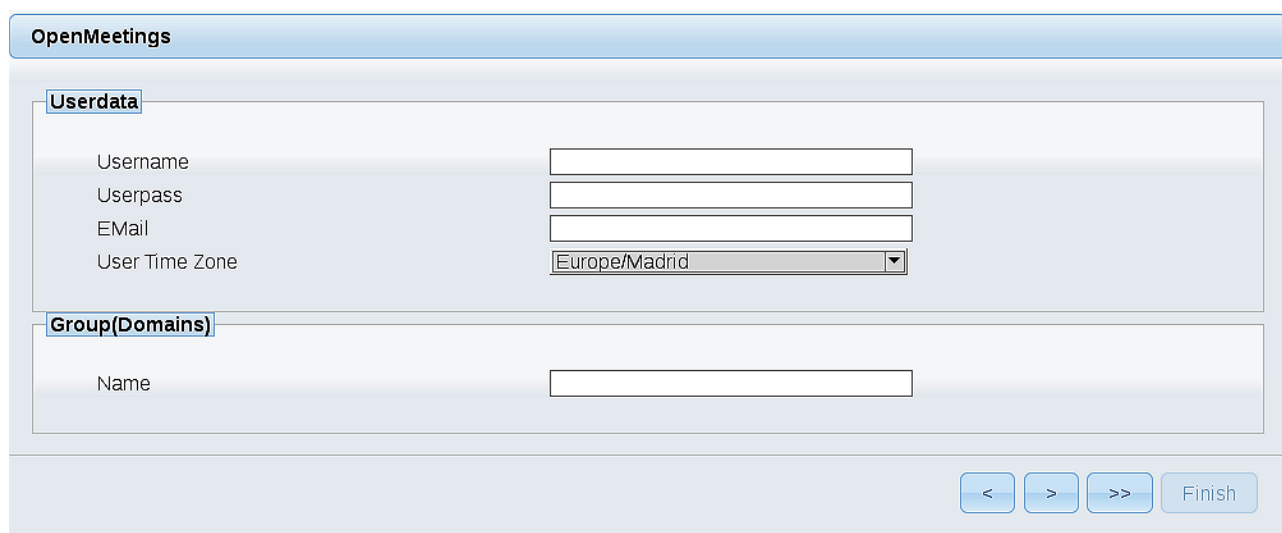
Specify the name of the database = open4011

Specify DB user = hola

Specify DB password = 1a2B3c4D

...if you choose any other data, please type it here.

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 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="password"/>
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"/>

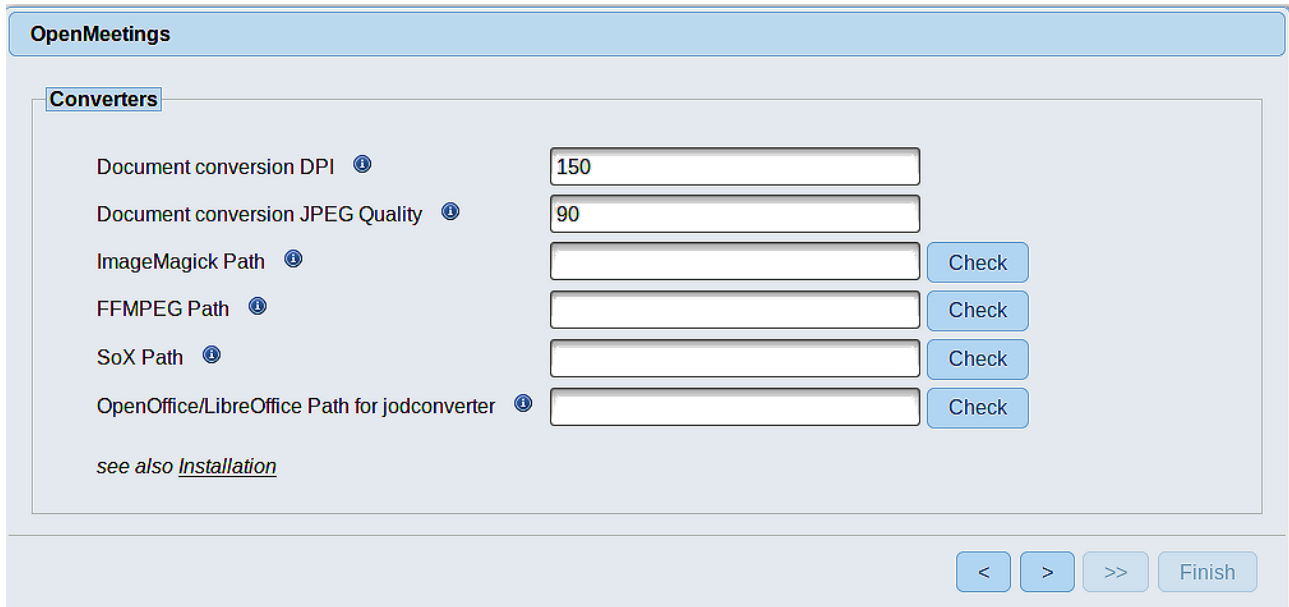
A valid example to configure the mail server with Gmail, is as follows:

(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
Default Language	==	...select your language


...the rest can modify 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](#)

Here we'll introduce the respective paths for the image, video, audio and conversion of uploaded files:


ImageMagick Path == `/usr/bin`

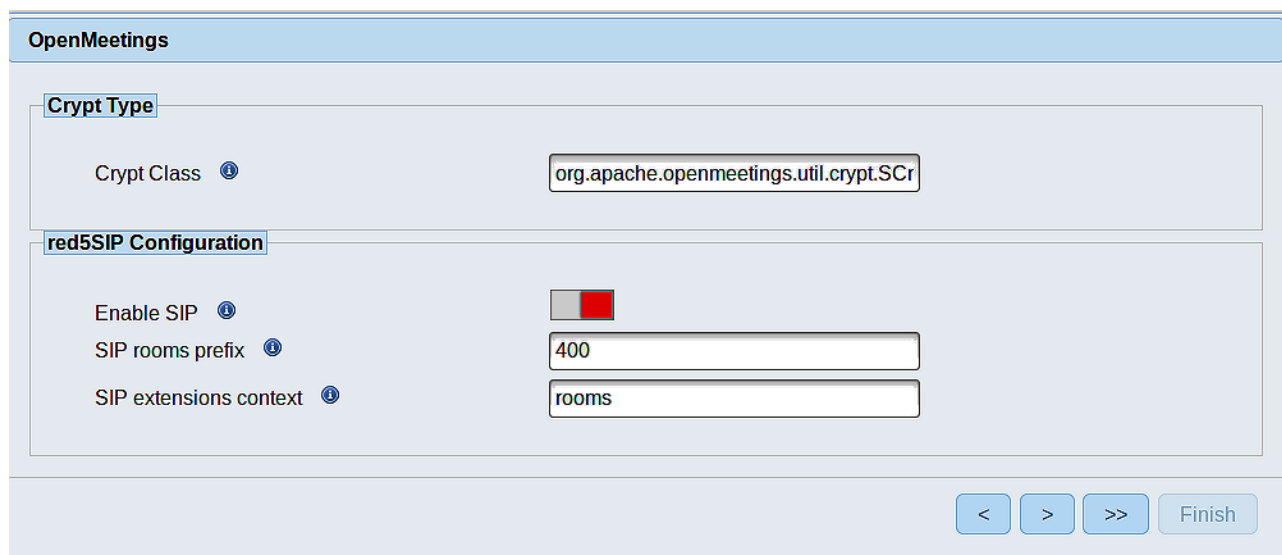
FFMPEG Path == `/usr/local/bin`

SOX Path == `/usr/bin`

OpenOffice/LibreOffice Path for jodconverter == `/usr/lib64/libreoffice`

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:

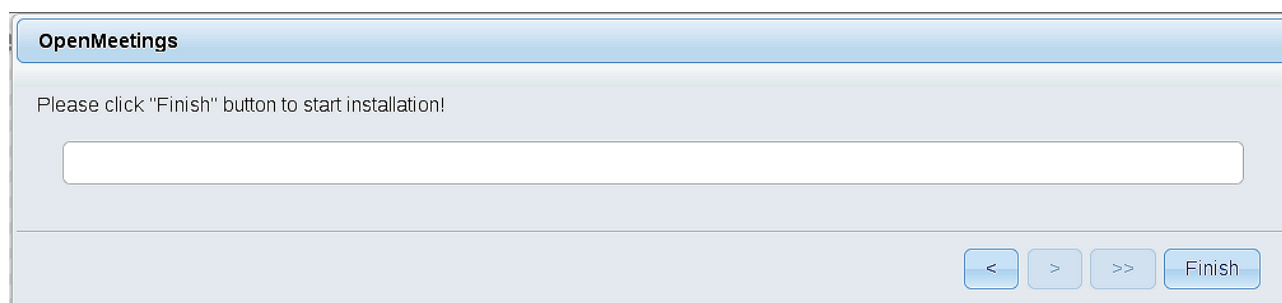


The screenshot shows the 'OpenMeetings' configuration window. It has two main sections:

- Crypt Type:** Contains a 'Crypt Class' field with the value 'org.apache.openmeetings.util.crypt.SCr'.
- red5SIP Configuration:** Contains three fields:
 - 'Enable SIP' with a red toggle switch.
 - 'SIP rooms prefix' with the value '400'.
 - 'SIP extensions context' with the value 'rooms'.

At the bottom right, there are navigation buttons: '<', '>', '>>', and 'Finish'.

Now push the button  Will show this window:

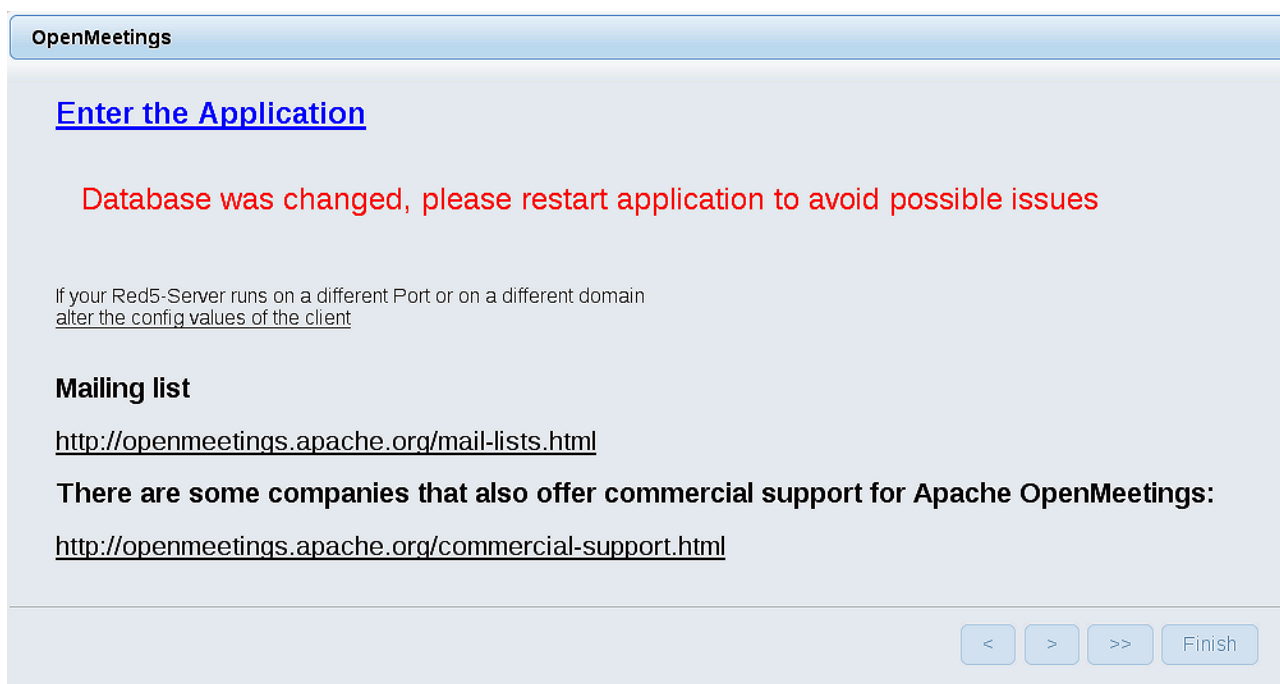


The screenshot shows the 'OpenMeetings' window with the following content:

- Header: 'OpenMeetings'
- Text: 'Please click "Finish" button to start installation!'
- A large empty text input field.
- Bottom right navigation buttons: '<', '>', '>>', and '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, open a new terminal and restart red5:

[/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 text input field for "Username or mail address", a text input field for "Password", a checkbox labeled "Remember login", a link for "Forgotten your password?", and a link for "Network testing". At the bottom, there are two buttons: "Not a member?" and "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 from Lan or Internet.

12)

----- **Installation of libraries and video codecs** -----

We'll install some libraries and video codecs for can see rightly the video recordings we'll make at rooms:

(Only one line with space between each one of them)

```
zypper install  
libvidstab1_1-1.1.0-lp151.1.1.x86_64 libvidstab1_1-1.1.0-lp151.1.1.x86_64  
libavutil55-3.4.4-lp151.3.3.x86_64 libxvidcore4-1.3.5-lp151.2.2.x86_64  
libavresample3-3.4.4-lp151.3.3.x86_64 libswresample2-3.4.4-lp151.3.3.x86_64  
libswscale4-3.4.4-lp151.3.3.x86_64 libpostproc54-3.4.4-lp151.3.3.x86_64  
libavcodec57-3.4.4-lp151.3.3.x86_64 vlc-codecs-3.0.7.1-lp151.6.5.1.x86_64  
libavformat57-3.4.4-lp151.3.3.x86_64 libavfilter6-3.4.4-lp151.3.3.x86_64  
libavdevice57-3.4.4-lp151.3.3.x86_64
```

13)


----- **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 [Navigation icons] [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



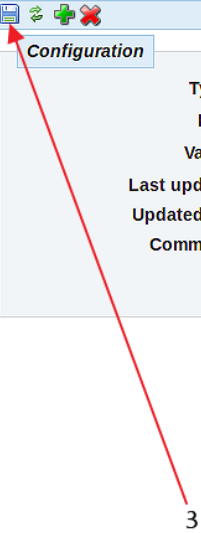
Key: path.ffmpeg

Value:

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

Updated by: toro

Comment: Path To FFMPEG

1 2 3

Chat

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 it them here:

[Live iso download](#)

Thank you.

Alvaro Bustos (PMC and Committer at Apache OpenMeetings).