



## Installation of Apache OpenMeetings 4.0.5

on

### Fedora 28 final

This tutorial it is based on a fresh installation of

### Fedora-MATE\_Compiz-Live-x86\_64-28-1.1.iso

It is tested with positive result.  
We will use the Apache's binary version  
OpenMeetings 4.0.5 stable,  
that is to say we'll suppress his compilation.  
It is done step by step.

25-5-2018

Starting...

1)

At first place, modify Selinux level security, for the installation, and install nano editor:

```
dnf install nano
```

```
sudo nano /etc/selinux/config
```

...modify:

```
SELINUX=enforcing
```

...to

```
SELINUX=permissive
```

Press **Ctrl+x** and will ask to save, press **Y**, and **Enter**, to save and leave nano's editor.

2)

----- Update Operative System -----

Update operative system:

```
dnf update -y
```

...and reboot, for kernel changes if it is, and the new **Selinux** configuration:

```
reboot
```

3)

----- ADD Repos -----

```
## RPM Fusion repo ##
```

(Only one line without space between them)

```
su -c 'dnf install --nogpgcheck http://download1.rpmfusion.org/free/fedora/rpmfusion-free-release-28.noarch.rpm http://download1.rpmfusion.org/nonfree/fedora/rpmfusion-nonfree-release-28.noarch.rpm'
```

```
### Adobe repo 32 bit ### For Flash Player.
```

```
rpm -ivh http://linuxdownload.adobe.com/adobe-release/adobe-release-i386-1.0-1.noarch.rpm
```

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

```
### Adobe repo 64 bit ### For Flash Player.
```

```
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
```

Update again:

```
dnf update -y
```

4)

## ----- Installation of packets and libraries -----

We install necessary packets and libraries:

(Only one line with a space between 2<sup>a</sup>-3<sup>a</sup> and 3<sup>a</sup>-4<sup>a</sup>)

```
dnf install -y libjpeg-turbo libjpeg-turbo-devel libjpeg-turbo-utils giflib-devel freetype-devel gcc-
c++ zlib-devel libtool bison bison-devel file-roller ghostscript freetype unzip gcc ncurses make
bzip2 wget ghostscript ncurses zlib git make automake nasm pavucontrol alsa-plugins-pulseaudio
nmap tomcat-native 'dnf-command(versionlock)'
```

5)

## ----- Installation of OpenJava 8 -----

Java 8, minimum, is needed to work OpenMeetings 4.0.5. Will install OpenJava 8.

-- Only for Fedora 32 bit --

```
dnf install java-1.8.0-openjdk.i686 java-1.8.0-openjdk-headless.i686
```

-- Only for Fedora 64 bit --

```
dnf install java-1.8.0-openjdk.x86_64 java-1.8.0-openjdk-headless.x86_64
```

-- Now for both, 32 bit and 64 bit --

```
dnf install icedtea-web          ...to can record and share dektop from rooms.
```

Maybe you have installed different versions of Java. Please, select the just installed OpenJava 8:

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

And to see if the selected version is active:

```
java -version
```

6)

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

LibreOffice it is installed already in the desktop-distro, but especially for server iso:

`dnf -y install libreoffice`

Is needed to convert uploaded office files to pdf.

7)

----- **Installation of ImageMagick and Sox** -----

**ImageMagick**, work with the images files jpg, png, gif, etc. Install it:

`dnf -y install ImageMagick`

**Sox**, work with the audio. Install it:

`dnf -y install sox`

8)

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

OpenMeetings even need Adobe Flash Player for cam and audio. We install it:

`dnf install -y flash-plugin`

9)

----- **Compilation of FFmpeg** -----

FFmpeg will work the video. Will install a paquets and libraries:

(Only one line with space between both)

`dnf install -y glibc alsa-lib-devel gsm gsm-devel imlib2 imlib2-devel libogg libvorbis vorbis-tools  
theora-tools libvpx-devel mercurial cmake curl git vlc`

This ffmpeg compilation is based on this url, and updated to 25-5-2018.

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

I made a script to download, compile and install ffmpeg on Fedora. It is tested and is ok.  
The result of any recording we do in OpenMeetings will be in mp4 format.

We download this script:

`cd /opt`

wget [https://cwiki.apache.org/confluence/download/attachments/27838216/ffmpeg\\_fedora28.sh](https://cwiki.apache.org/confluence/download/attachments/27838216/ffmpeg_fedora28.sh)

...concede execution permission:

```
chmod +x ffmpeg_fedora28.sh
```

...and run it:

```
./ffmpeg_fedora28.sh
```

The compilation will spend about 20-30 minutes.

At the end, a text will appear: **FFmpeg Compilation is Finished!**

Then, please go to **step 10**).

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

## 10)

### ----- Installation of MariaDB data server -----

MariaDB is the data server fork of MySQL.

We install it:

```
dnf install -y mariadb mariadb-server
```

...and run MariaDB (be connected to Internet, to run it quickly):

```
systemctl start mariadb.service
```

Give a password to MariaDB root. Please, replace **new-password** by your own wish:

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

Make a database for OpenMeetings:

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

...will ask for the root password you choose just now:

```
MariaDB [(none)]> CREATE DATABASE open405 DEFAULT CHARACTER SET 'utf8';
```

Now we create a user with all permission on this open405 database. User password must be of 8 digits minimum:

(Only one line with space between both)

```
MariaDB [(none)]> GRANT ALL PRIVILEGES ON open405.* TO 'hola'@'localhost'
IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;
```

```
* open405 ..... name of the database
* hola ..... user for that database
* 1a2B3c4D ..... password of that user
```

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

Now we leave MariaDB:

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

11)

#### ----- Installation of Apache OpenMeetings -----

Make a folder called **red5405** where download the Apache OpenMeetings file, and where we'll do the installation:

```
mkdir /opt/red5405
```

```
cd /opt/red5405
```

...download and uncompress the file:

```
wget http://archive.apache.org/dist/openmeetings/4.0.5/bin/apache-openmeetings-4.0.5.zip
```

```
unzip apache-openmeetings-4.0.5.zip
```

...save the original file to /opt:

```
mv apache-openmeetings-4.0.5.zip /opt
```

12)

#### ----- Installation connector OpenMeetings with MariaDB -----

This file-driver is need it to connect OpenMeetings with MariaDB. Download and install it:

```
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
```

```
cp mysql-connector-java-5.1.46.jar /opt/red5405/webapps/openmeetings/WEB-INF/lib
```

13)

----- **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/
```

...and concede execution permission:

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

If you made the installation in any other different path to /opt/red5405, please edit the script and modify the line:

```
RED5_HOME=/opt/red5405
```

...to

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

14)

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

Run MariaDB:

```
systemctl start mariadb.service
```

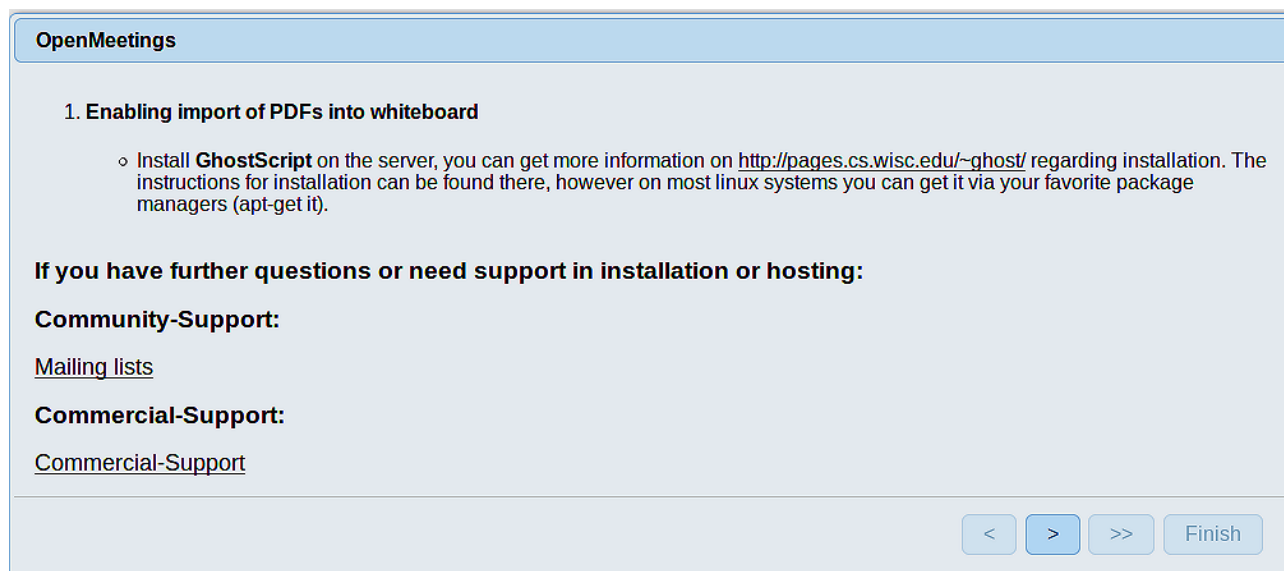
...and red5-OpenMeetings:

[/etc/init.d/red5-2 start](#)

...wait about 40 seconds in order red5 run completly. Then, go with the browser to:

<http://localhost:5080/openmeetings/install>

...there will show 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).

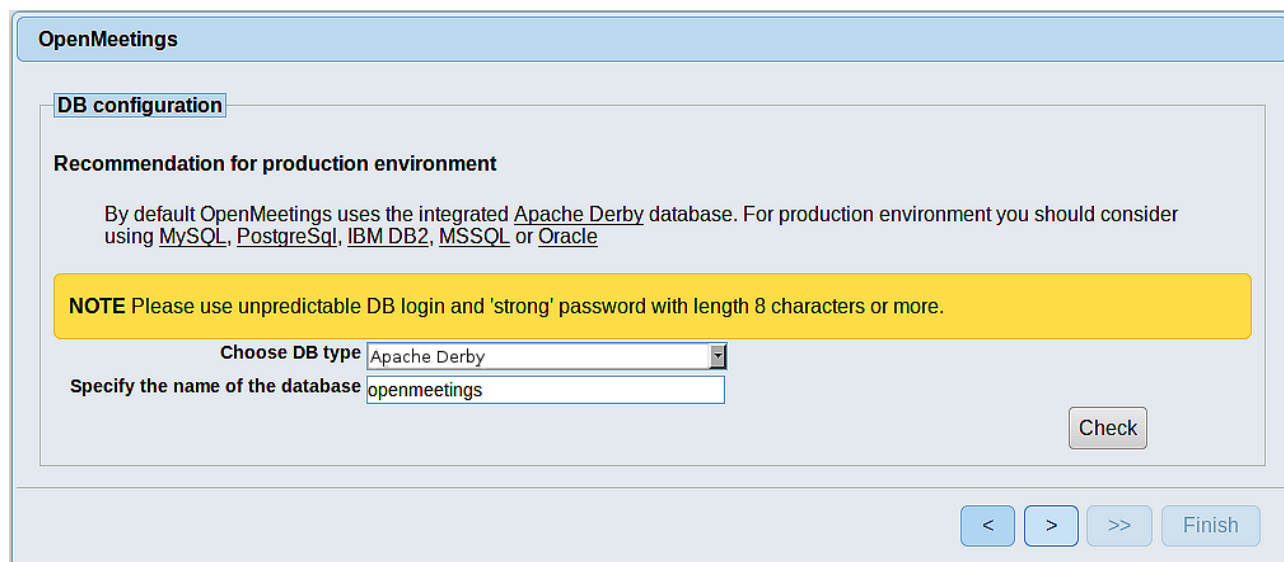
**If you have further questions or need support in installation or hosting:**

**Community-Support:**  
[Mailing lists](#)

**Commercial-Support:**  
[Commercial-Support](#)

< > >> Finish

...press on  (bottom), and will show the default 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

Specify the name of the database

Check

< > >> Finish

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



The screenshot shows the 'OpenMeetings' application window with the 'DB configuration' section. It includes a recommendation for production environments, a note about using strong passwords, and several input fields for database configuration. The fields are: 'Choose DB type' (MySQL), 'Specify DB host' (localhost), 'Specify DB port' (3306), 'Specify the name of the database' (openmeetings), 'Specify DB user' (empty), and 'Specify DB password' (empty). A 'Check' button is located at the bottom right of the configuration area. At the very bottom of the window, there are navigation buttons: '<', '>', '>>', and 'Finish'.

Now we must introduce the database name, the user name and his password we did at the step 10:

**Specify the name of the database = open405**

**Specify DB user = hola**

**Specify DB password = 1a2B3c4D**

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

Press  button, and will go to:

The screenshot shows the 'OpenMeetings' application window with the 'Userdata' and 'Group(Domains)' sections. The 'Userdata' section has four input fields: 'Username', 'Userpass', 'EMail', and 'User Time Zone' (with a dropdown menu set to 'Europe/Madrid'). The 'Group(Domains)' section has one input field labeled 'Name'. At the bottom of the window, there are navigation buttons: '<', '>', '>>', and '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 name will have administrator rights.

**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="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>	==	john@gmail.com
<b>SMTP-Server</b>	==	smtp.gmail.com
<b>SMTP-Server Port (default Smtplib-Server Port is 25)</b>	==	587
<b>SMTP-Username</b>	==	john@gmail.com
<b>SMTP-Userpass</b>	==	password of john@gmail.com
<b>Enable TLS in MailServer Auth</b>	==	...turn green the button to activate

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

<b>Default Language</b>	==	...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 ⓘ

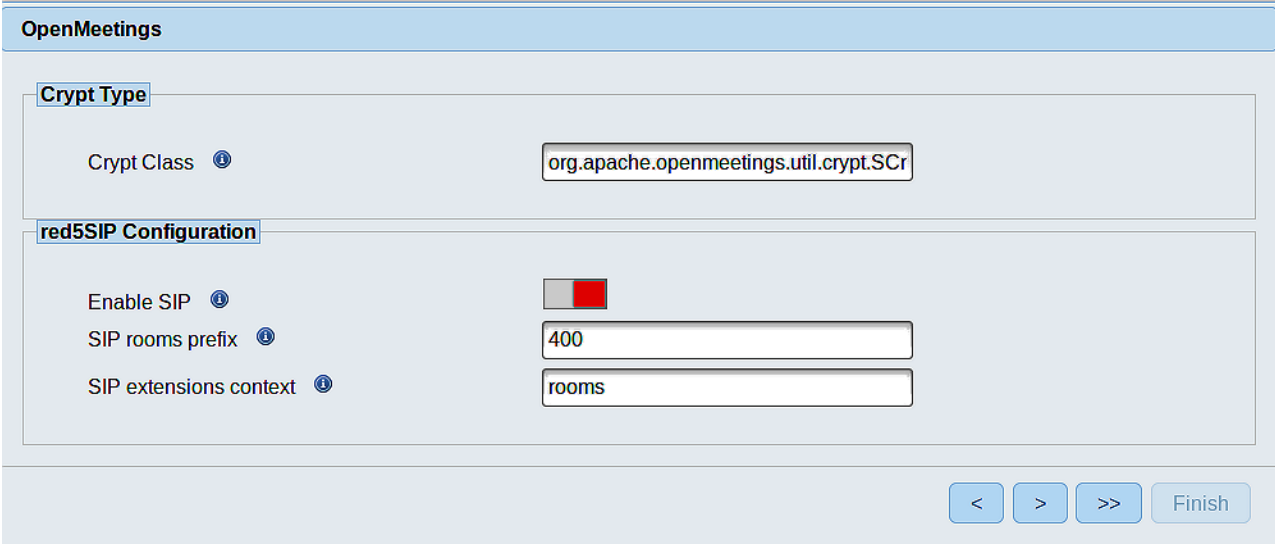
*see also [Installation](#)*

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

<b>ImageMagick Path</b>	==	<code>/usr/bin</code>	
<b>FFMPEG Path</b>	==	<code>/usr/local/bin</code>	
<b>SOX Path</b>	==	<code>/usr/bin</code>	
<b>OpenOffice/LibreOffice Path for jodconverter</b>	==	<code>/usr/lib/libreoffice</code>	<b>(32bits)</b>
	==	<code>/usr/lib64/libreoffice</code>	<b>(64bits)</b>

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:

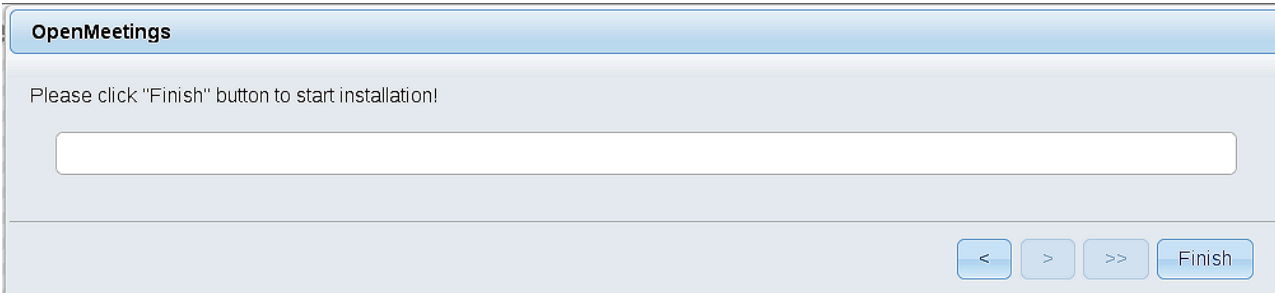


The screenshot shows the 'OpenMeetings' configuration window. It has a title bar 'OpenMeetings' and a light blue header. Below the header, there are two main sections:

- Crypt Type**: Contains a 'Crypt Class' label with a help icon and a text input field containing the value 'org.apache.openmeetings.util.crypt.SCr'.
- red5SIP Configuration**: Contains three items:
  - 'Enable SIP' with a help icon and a red toggle switch.
  - 'SIP rooms prefix' with a help icon and a text input field containing '400'.
  - 'SIP extensions context' with a help icon and a text input field containing 'rooms'.

At the bottom right of the window, there are four buttons: '<', '>', '>>', and 'Finish'.

Now push the button  Will show this window:



The screenshot shows the 'OpenMeetings' window after clicking the next button. The title bar is 'OpenMeetings'. The main content area contains the text 'Please click "Finish" button to start installation!' above a large empty text input field. At the bottom right, there are four buttons: '<', '>', '>>', and '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 (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](#)

Not a member? 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 accede to OpenMeetings, would be:

<http://localhost:5080/openmeetings>

Remember to open in the server, the two following ports:

**1935 5080**

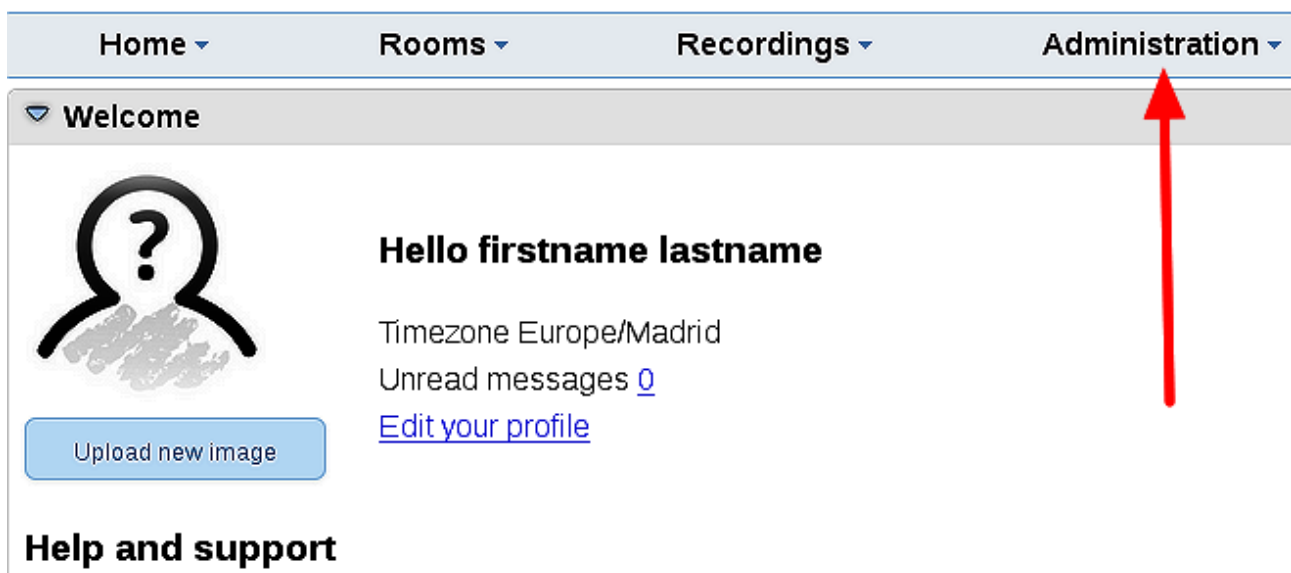
...in order that it could accede to OpenMeetings from other machines in Lan or from Internet.

15)

----- **Configuration of OpenMeetings** -----

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

**Administration → Configuration**



...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

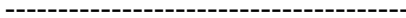
Updated by: toro

Comment: Path To FFMPEG

1 2 3

Chat

And this is all.



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

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



Thank you.

Alvaro Bustos