



Installation of Apache OpenMeetings 4.0.2

on

Fedora 27 final

This tutorial it is based on a fresh installation of

Fedora-MATE_Compiz-Live-x86_64-27-1.6.iso

It is tested with positive result.
We will use the Apache's binary version
OpenMeetings 4.0.2 stable,
that is to say we'll suppress his compilation.
It is done step by step.

25-2-2018

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-27.noarch.rpm http://download1.rpmfusion.org/nonfree/fedora/rpmfusion-nonfree-release-27.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 packages and libraries -----

We install packages and libraries necessary:

(Only one line with a space between them)

```
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 Java 1.8 -----

Java 1.8 is need it to work OpenMeetings 4.0.2. Will install Oracle Java 1.8.

-- Only for Fedora 32 bit --

```
cd /opt
```

Download the file:

(All in one line only. 1^a and 2^a without space between them. A space to the 3^a. Together 3^a and 4^a)

```
wget --no-cookies --no-check-certificate --header "Cookie: gpw_e24=http%3A%2F
%2Fwww.oracle.com%2F; oraclelicense=accept-securebackup-cookie"
http://download.oracle.com/otn-pub/java/jdk/8u161-b12/2f38c3b165be4555a1fa6e98c45e0808/jdk-
8u161-linux-i586.rpm
```

...and install it:

```
rpm -ivh jdk-8u161-linux-i586.rpm
```

-- Only for Fedora 64 bit --

```
cd /opt
```

Download the file:

(All in one line only. 1^a and 2^a without space between them. A space to the 3^a. Together 3^a and 4^a)

```
wget --no-cookies --no-check-certificate --header "Cookie: gpw_e24=http%3A%2F
%2Fwww.oracle.com%2F; oraclelicense=accept-securebackup-cookie"
http://download.oracle.com/otn-pub/java/jdk/8u161-b12/2f38c3b165be4555a1fa6e98c45e0808/jdk-
8u161-linux-x64.rpm
```

...and install it:

```
rpm -ivh jdk-8u161-linux-x64.rpm
```

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

May be you have installed different versions of Java. Please, select the just installed Oracle Java:

```
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 distro, but if you use a server iso then install it:

```
dnf -y install libreoffice
```

Is need it 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. We install it:

```
dnf install -y flash-plugin
```

9)

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

FFmpeg will work with 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 25-2-2018.

<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-fedora.sh
```

...concede execution permission:

```
chmod +x ffmpeg-fedora.sh
```

...and run it:

```
./ffmpeg-fedora.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 on: /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 root in MariaDB. Please, replace **new-password** by your own which:

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

Make a database for OpenMeetings:

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

...will ask for the root password we does just now:

```
MariaDB [(none)]> CREATE DATABASE open402 DEFAULT CHARACTER SET 'utf8';
```

Now we create a user with all permission on this open402 database. User password must be of 8 digits minimum:

(Only one line with space between both)

```
MariaDB [(none)]> GRANT ALL PRIVILEGES ON open402.* TO 'hola'@'localhost'
IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;
```

```
* open402 ..... 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 **red5402** where download the Apache OpenMeetings file, and where we'll do the installation:

```
mkdir /opt/red5402
```

```
cd /opt/red5402
```

...download and uncompress the file:

```
wget http://apache.miloslavbrada.cz/openmeetings/4.0.2/bin/apache-openmeetings-4.0.2.zip
```

```
unzip apache-openmeetings-4.0.2.zip
```

...save the original file to /opt:

```
mv apache-openmeetings-4.0.2.zip /opt
```

12)

----- **Connector Java 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/5.1.45/mysql-connector-java-5.1.45.jar
```

```
cp mysql-connector-java-5.1.45.jar /opt/red5402/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/red5402, please edit the script and modify the line:

RED5_HOME=/opt/red5402

...to

RED5_HOME=/your-path-installation

14)

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

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

`systemctl start mariadb.service`

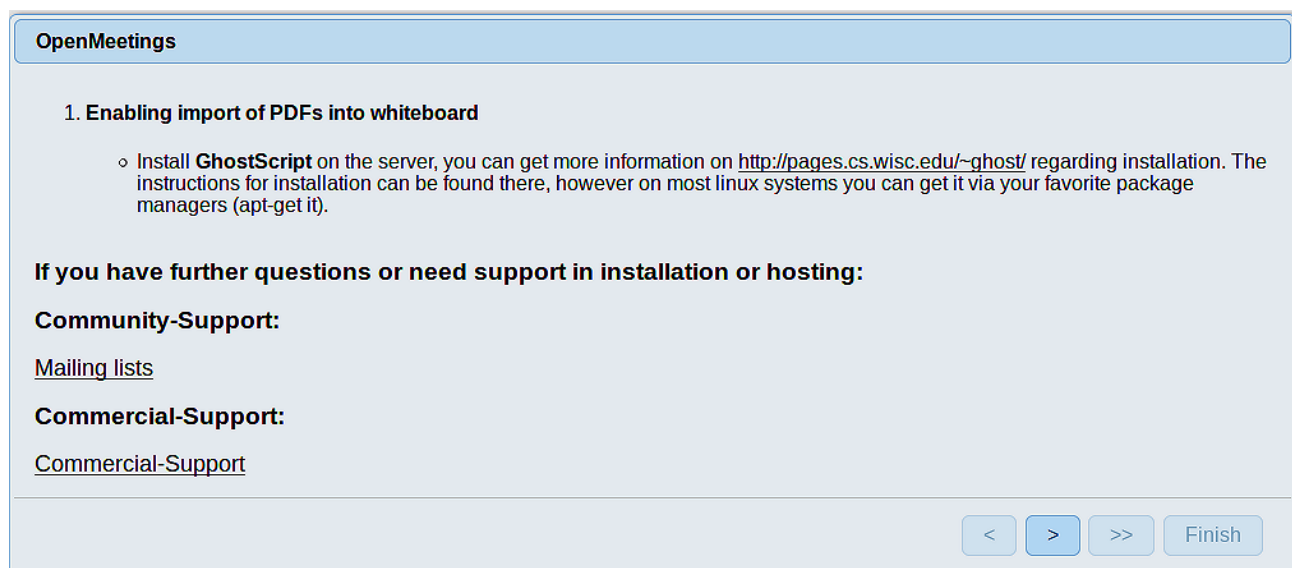
...and red5-OpenMeetings (be connected to Internet, to run it quickly):


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

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

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

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



...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

...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

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, the user name and his password we did at the step 10:

Specify the name of the database = open402

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 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="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 MailServer 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:



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


ImageMagick Path (Path) == `/usr/bin`

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

SOX Path (Path) == `/usr/bin`

OpenOffice/LibreOffice Path (Path) for jodconverter == `/usr/lib/libreoffice` **(32bits)**
 == `/usr/lib64/libreoffice` **(64bits)**

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.

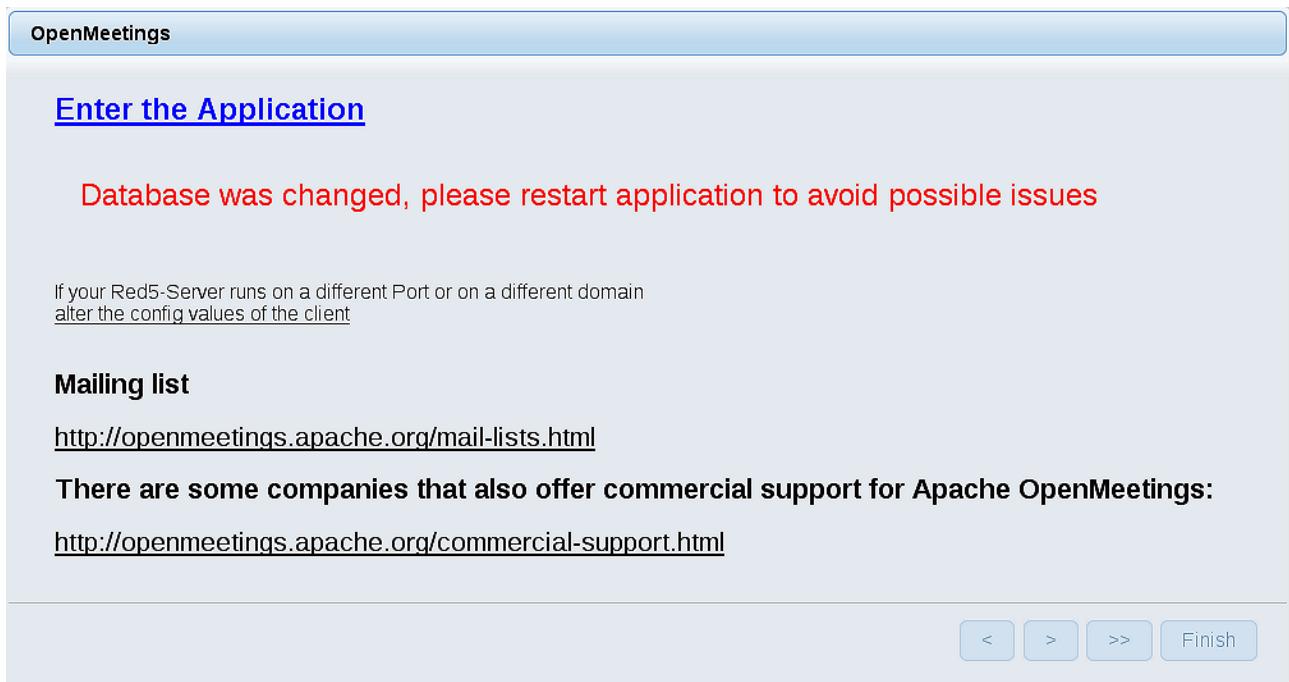
Once completed the paths, please click the button  and move on to another page that would be to activate the SIP. We will leave it as is, unless you want to activate it knowing what it does:

Now push the button  Will show this window:

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](#)



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 has a light blue header bar with the text "Login". Below the header, there are two input fields: "Username or mail address" and "Password". To the right of the "Password" field, there is a checkbox labeled "Remember login". Below the input fields, there are two links: "Forgotten your password?" and "Network testing". At the bottom of the form, there are two buttons: "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 accede to OpenMeetings, would be:

<http://localhost:5080/openmeetings>

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

1935 5080

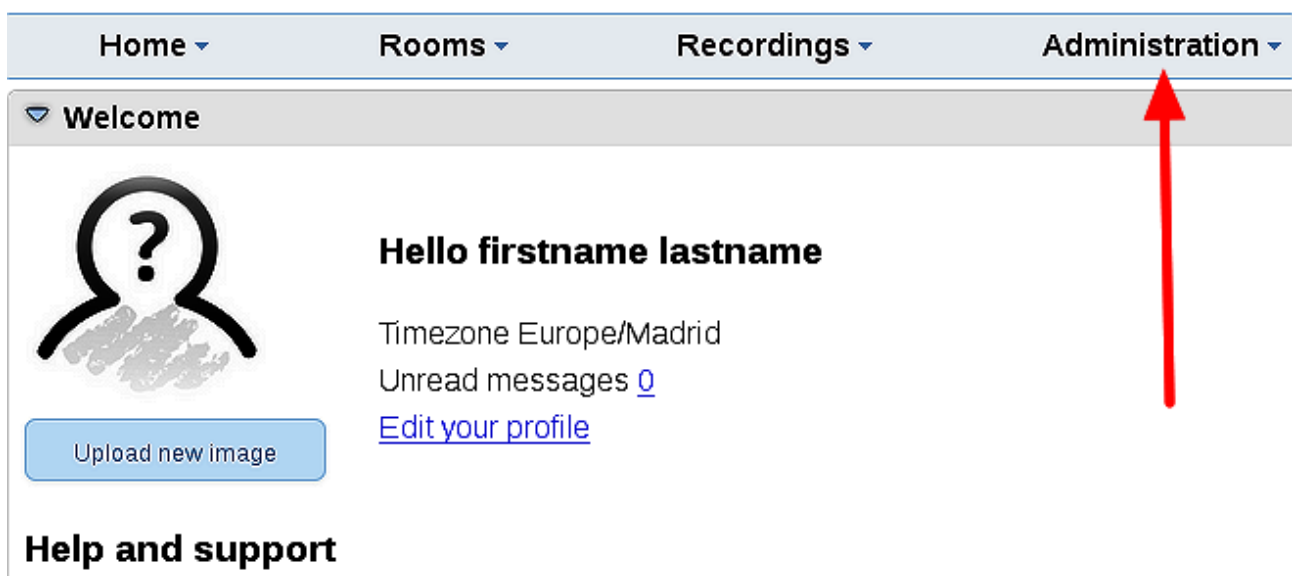
...in order that it could accede to OpenMeetings from other machines in Lan or from Internet.

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