Installation of Apache OpenMeetings 3.3.0 on PCLinuxOS 2017

pclinuxos64-MATE-2017.02.iso

This tutorial is made based on fresh installations of
PCLinuxOS 2017 Mate.

It is tested with positive result. We will use the
Apache's binary version OpenMeetings 3.3.0 stable,
that is to say, will suppress his compilation.
It is done step by step**.**

14-7-2017

Starting…

1)

Update and upgrade the operative system. Please go to:

apt-get update

apt-get upgrade

2)
                          ------ Installation of libraries and packages ------

(Only one line with space between each one)

apt-get install -y libjpeg-progs giflib-progs freetype-devel gcc-c++ zlib1-devel libtool bison bison-static-devel file-roller ghostscript freetype unzip gcc ncurses make zlib1 bzip2 wget ghostscript ncurses zlib1 zlib1-devel x264-devel git make automake nasm pavucontrol rpm-installer freetype2 curl

3)

------ Installation of LibreOffice and Java Sun 1.8.x ------

When we install LibreOffice also will install automatically Java sun 1.8.x. OpenMeetings **3.3.0** need java **1.8** to work.

LibreOffice will convert to pdf the uploaded office files. We install it:

lomanager

...if show a message like this: *Please Update your system. (more details...)....*

...then please go to:

Synaptic --> **Mark All Upgrades** --> **Apply** --> **Apply**

...and we type in shell newly:

lomanager

...will show a window where select your locale language for LibreOffice, and after this answer yes or ok to any question.

Will start installing Java sun 1.8.x and continue with LibreOffice. If would not install java, you can do it:

apt-get install java-sun

Once the installation it is finished you can change the LibreOffice language interface in:

Tools --> **Options** --> **Language settings** --> **Languages** --> **User interface** (select your language) --> **OK**

LibreOffice (installed or updated 14-7-2017) is in: /opt/libreoffice5.2

4)

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

Flash player it is installed in Mate already, but not in KDE minimum. So will install it and firefox also, if you like it. Adobe Flash Player even is need it for rooms in OpenMeetings:

apt-get install -y firefox flash-player-plugin

5)

------ Installation of ImageMagick, Sox and Swftools ------

ImageMagick, work with image files jpg, png, gif, etc. We install it:

apt-get install ImageMagick

Sox, work the sound. It is installed, but we´ll uninstall it and compile a newer version than it is in the repo:

apt-get remove sox

...and download and compile the new version:

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

Swftools. LibreOffice convert to pdf the office files uploaded, and Swftools convert these pdf to swf, flash files, that later will show in the whiteboard. Don´t install a newer version, surely will have not pdf2swf. We install it. Please, modify your_username to your real user name:

cd /home/your_username

...download it: (Only one line without space between both)

wget ftp://ftp.is.freebsd.org/pub/repoforge/redhat/el6/en/x86_64/dag/RPMS/swftools-0.9.1-1.el6.rf.x86_64.rpm

Please, go to your /home/your_username, and (be connected to Internet):

Right clic on the swftools-0.9.1-1.el6.rf.x86_64.rpm file --> **Open with** --> **RPM-installer** → will

ask for root password → push **Enter**

Now will block this swftools version in Synaptic and then can´t update installing a new version:

Synaptic → click on **swftools** line → **Package** (Up left) **--> Lock Version**

6)

------ **Install**, **remove, rename somes packages** ------

We´ll install lame for mp3 audio:

apt-get install lame

We´ll remove ffmpeg that automatically was installed in Mate. In KDE minimum was not but to do it is not bad. Later we´ll build our own ffmpeg.

apt-get remove ffmpeg

...will remove automatically vokoscreen also.

Rename x264, that we´ll compile later:

mv /usr/bin/x264 /usr/bin/x264-synaptic

...because if we remove x264 will lose automatically too many packages.

Now will block this x264 version in Synaptic and then can´t update installing a new version:

Synaptic → click on **x264 line →** **Package (Up left) --> Lock Version**

7)

------ **Compiling and installing FFmpeg** ------

To compile and install ffmpeg, lame, yasm and x264, i´ve followed a guide with somes modifications. Files updated 16-2-2107:

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

Install a librarie need it for the compilation:

Modify your_username to your real user name:

cd /home/your_username

...download it:

<div align="center">(Only one line without space between both)</div>

wget http://download.opensuse.org/repositories/home:/ganglia:/musescore2/SLE11/x86_64/
libmp3lame-devel-3.99.5-2.1.x86_64.rpm

Please, go to your /home/your_username, and (be connected to Internet):

Right clic on the **libmp3lame-devel-3.99.5-2.1.x86_64.rpm** file --> **Open with** --> **RPM-installer**
→ will ask for root password → push **Enter**

The result of any recording we do in OpenMeetings, will be in mp4 format.
For compile ffmpeg, i build a scrypt that will download, compile and install it.
Download it:

cd /opt

wget https://cwiki.apache.org/confluence/download/attachments/27838216/ffmpeg-pclinuxos.sh

...concede perimission of execution:

chmod +x ffmpeg-pclinuxos.sh

...and run it (be connected to Internet):

./ffmpeg-pclinuxos.sh

The compilation spend about 25 minutes. When be finish, will announce it, with this text:

<div align="center">FFmpeg Compilation is Finished!</div>

Block in Synaptic: **ffmpeg** and **yasm** … *one by one*:

Synaptic → click on **ffmpeg** line → **Package** (up to left) --> **Lock Version**

…don´t worry if look the packages are not installed.

This is very important: When you update or upgrade the operative system, please do it from
Synaptic, so will respect the locked versions, thing that will do not if update or upgrade from the
shell.

FFmpeg is installed in: /usr/local/bin

8)

------ Installation of MySQL and building database ------

We´ll employ MySQL server, for the database.

apt-get install -y mysql

...run mysql:

service mysqld start

...we do a mysql upgrade:

mysql_upgrade

...and give a root mysql password remplacing new-password for your own preference, and remember it:

/usr/bin/mysqladmin -u root password new-password

We´ll build a database and an user for OpenMeetings. User password must be of 8 digits minimum:

mysql -p -u root

...will ask for password (you just made right now) type it and make the database:

mysql> CREATE DATABASE open330 DEFAULT CHARACTER SET 'utf8';

(Only one line with space between both)

mysql> GRANT ALL PRIVILEGES ON open330.* TO 'hola'@'localhost' IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;

...and leave MySQL:

mysql> quit

                    * open330 …........... is the data base name
                    * hola   …........… is the user name for this data base
                    * 1a2B3c4D …….   is the password for this user

You are free to change these names and password, but remember them. Later we´ll need it.

Now we´ll open mysql port 3306, so OpenMeetings can connect with it:

For **KDE**:

kwrite /etc/my.cnf

For **MATE**:

pluma /etc/my.cnf

...and the line number 51: skip-networking

...modify so, commented:

skip-networking

...and restart mysql:

service mysqld restart

9)
------ Installation of Apache OpenMeetings ------

We´ll install the 3.3.0 stable version.

We´ll make the OpenMeetings installation in /opt/red5330

Make a folder called **red5330** where download the Apache OpenMeetings file and where make the installation:.

mkdir /opt/red5330

cd /opt/red5330

wget http://apache.miloslavbrada.cz/openmeetings/3.3.0/bin/apache-openmeetings-3.3.0.zip

unzip apache-openmeetings-3.3.0.zip

mv apache-openmeetings-3.3.0.zip /opt
.

10)
------ Connector Java MySQL ------

This file is need it to connect OpenMeetings with MySQL. Download and install it:

cd /opt

(Only one line without space between both)

wget http://repo1.maven.org/maven2/mysql/mysql-connector-java/5.1.42/mysql-connector-java-5.1.42.jar

cp mysql-connector-java-5.1.42.jar /opt/red5330/webapps/openmeetings/WEB-INF/lib

11)
------ Configuring OpenMeetings for MySQL ------

Will introduce our data base name, user and password we made when MySQL configuration.

For MATE:

pluma /opt/red5330/webapps/openmeetings/WEB-INF/classes/META-INF/mysql_persistence.xml

For KDE:

kwrite /opt/red5330/webapps/openmeetings/WEB-INF/classes/META-INF/mysql_persistence.xml

Modify line 72:

Url=jdbc:mysql://localhost:3306/openmeetings_3_3?.......

to

Url=jdbc:mysql://localhost:3306/open330?....

...open330 is the database name we gives when install MySQL and build it.

If you choose any other database name, here is where to type it.

Protect the access to this file:

(Only one line witout space between both)

chmod 640 /opt/red5330/webapps/openmeetings/WEB-INF/classes/META-INF/mysql_persistence.xml

12)

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

We download the scrypt will 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 other path, edit the scrypt and modify the line:

RED5_HOME=/opt/red5330

...to

RED5_HOME=/your-path-installation

13)

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

Restart MySQL (be connected to Internet):

service mysqld restart

...and start red5-OpenMeetings (be connected to Internet):

/etc/init.d/red5-2 start

...wait untill the text "**clearSessionTable: 0**", it is the last in the shell. Then, go with the browser to:

http://localhost:5080/openmeetings/install

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

...press on [>] (bottom), and will show the default database configuration with Derby, but we

 employ MySQL:

...so, please 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	open330
Specify DB user	
Specify DB password	

Check

< > >> Finish

...will show the database configuration we made in step 11.

If you`ve choose any other different name for this, will show equally.
Now we must introduce the user name we did for our data base, at the step 8, and his password:

Specify DB user   =   hola

Specify DB password   =   1a2B3c4D

Please, press   >   button, and will go to:

OpenMeetings

Userdata

Username	
Userpass	
EMail	
User Time Zone	Europe/Madrid

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 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

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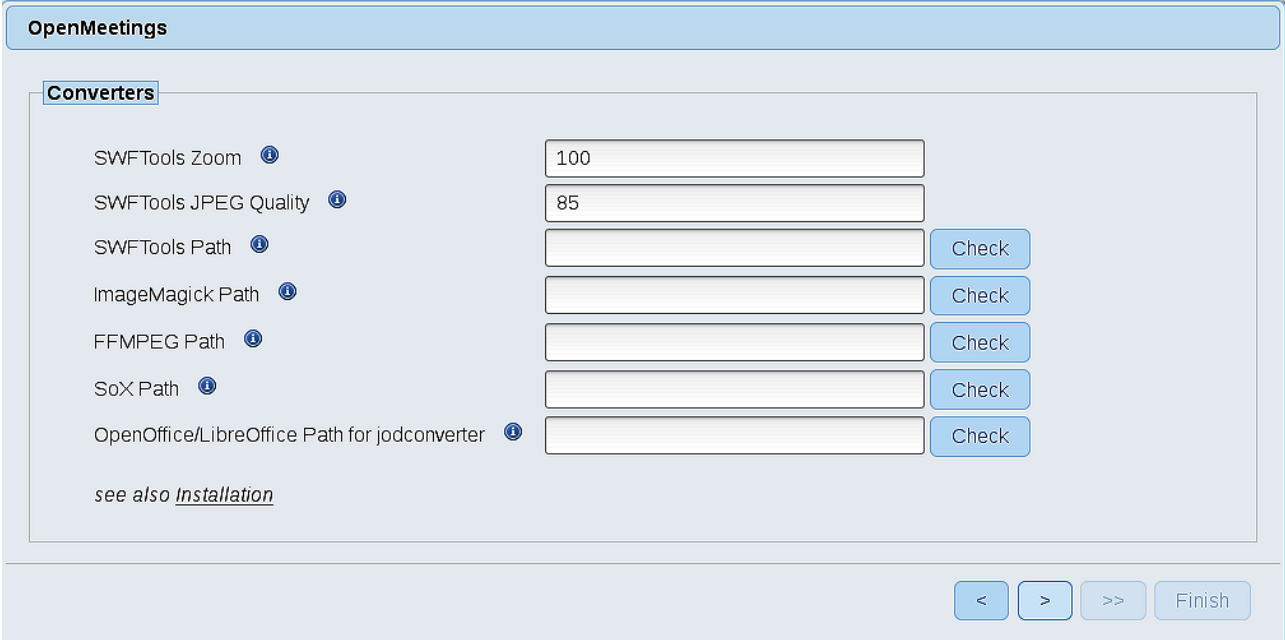
Mail-Refer (system_email_addr) == john@gmail.com

SMTP-Server (smtp_server) == smtp.gmail.com

SMTP-Server Port (default Smtp-Server Port is 25)
(smtp_port) == 587

SMTP-Username (email_username) == john@gmail.com

SMTP-Userpass (email_userpass) == password of john@gmail.com

Enable TLS in Mail Server Auth == Yes

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

Default Language == english

...the rest we can leave as is. If necessary, can modify it as you like it:

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:

SWFTools Path (Path)	==	/usr/bin
ImageMagick Path (Path)	==	/usr/bin
FFMPEG Path (Path)	==	/usr/local/bin
SOX Path (Path)	==	/usr/local/bin
OpenOffice/LibreOffice Path (Path) for jodconverter	==	/opt/libreoffice5.2

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 press 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   org.apache.openmeetings.util.crypt.SHA

You can use this default crypt type which is equal to PHP-MD5 function or BSD-Style encryption by using:org.apache.openmeetings.utils.crypt.MD5CryptImplementation for more information or to write your own Crypt-Style see: Custom Crypt Mechanism You can edit this value later BUT previous created Users and Sessions might be not usable anymore

red5SIP Configuration

Enable SIP   No

Enable red5SIP integration

SIP rooms prefix   400

Prefix for phone number of conference rooms

SIP extensions context   rooms

Context of Asterisk extensions

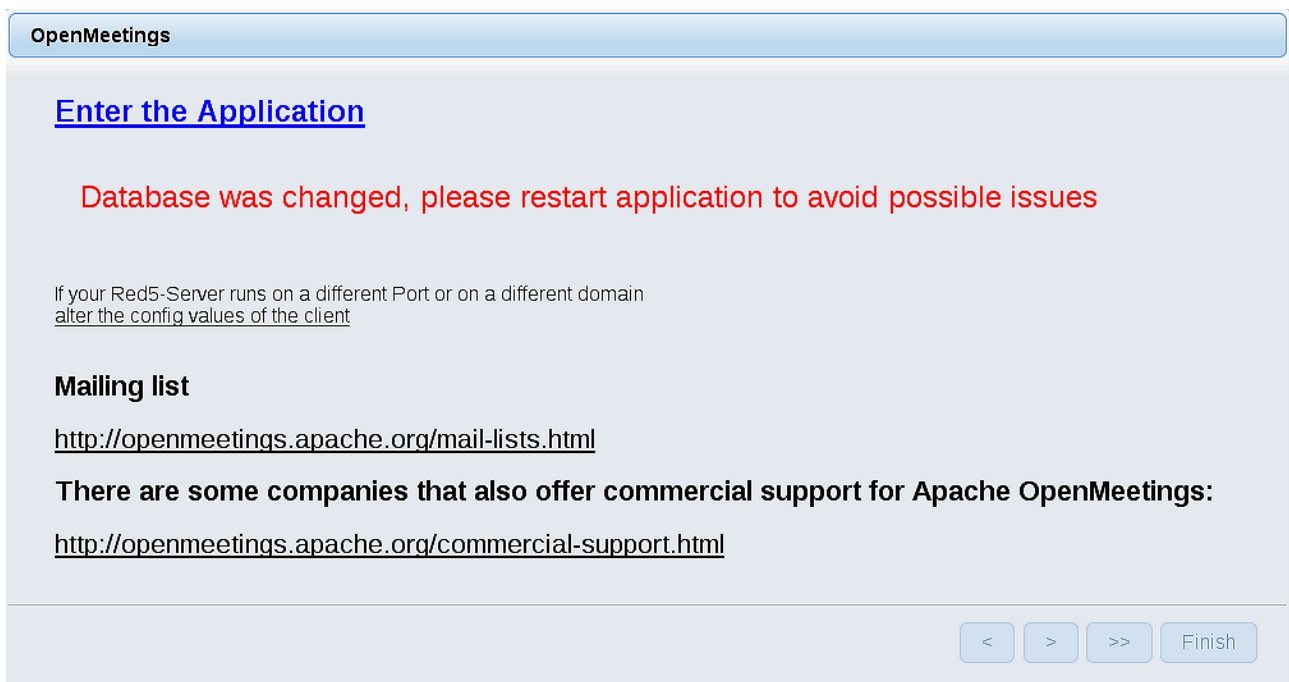[<] [>] [>>] [Finish]

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. Please, open a new shell window, and run this command
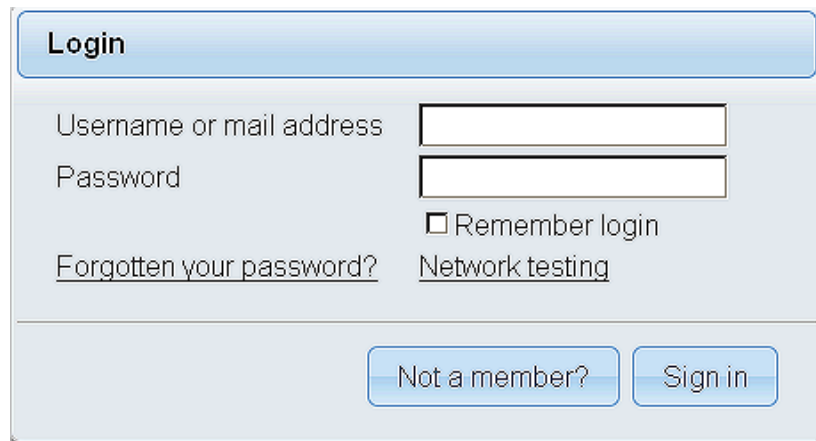(be connected to Internet):

/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:

 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 to OpenMeetings will 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.

14)

------ **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:

And this is all.

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

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

Thank you.

Alvaro Bustos