Installation of Apache OpenMeetings 4.0.7 on Slackware 14.2

slackware64-14.2-install-dvd.iso

This tutorial is bassed in a fresh installation of Slackware 14.2.

It is tested with positive result. We will use the Apache's binary version OpenMeetings 4.0.7 stable, that is to say will suppress his compilation. It is done step by step.

1-1-2019

Starting...

1)

Update the OS:

slackpkg update

slackpkg upgrade-all

...and install some packages and libraries:

(Only one line with a space between both)

slackpkg install nano make libtool bison ghostscript freetype gcc ncurses make bzip2 wget git automake curl autoconf automake cmake mercurial

2)

------ Installation of Slpkg ------

Slpkg is a user-friendly package manager for Slackware installations. Resolves dependencies.

We download and install it:

cd /opt

wget https://github.com/dslackw/slpkg/releases/download/v3.3.4/slpkg-3.3.4-x86_64-1_dsw.txz

upgradepkg --install-new slpkg-3.3.4-x86_64-1_dsw.txz

Configure his repositories uncommenting some ones:

nano /etc/slpkg/repositories.conf

sbo
slack
alien
msb{1.18}   ...this is for Mate desktop.

...press **Ctrl+x**, will ask to save, press **Y** and **Enter** to exit.
Update it:

slpkg update

3)

------ Installation of OpenJava 1.8 and Icedtea-web ------

OpenMeetings need Java to work. Download and install OpenJava 1.8:

cd /opt

slpkg -s alien openjdk

...will ask:

Would you like to continue [y/N]?   ...press **Y** and **Enter**

Install Icedtea-web to access recordings and share desktop in OpenMeetings room:

slpkg -s alien icedtea-web

...will ask:

Would you like to continue [y/N]?   ...press **Y** and **Enter**

Now configure Java Environment JAVA_HOME:

nano /etc/profile

...and at bottom file type or copy and paste the green text:

JAVA_HOME="/usr/lib64/java"
CLASSPATH="."
PATH="$PATH:/usr/lib64/java/bin"
export JAVA_HOME
export CLASSPATH
export PATH

...press **Ctrl+x**, will ask to save, press **Y** and **Enter** to exit nano.

To take effect inmediatily this change, run the following command:

source /etc/profile

4)

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

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

slpkg -s alien libreoffice

...will ask:

Would you like to continue [y/N]?   ...press **Y** and **Enter**

5)

------ **Instalación de Adobe Flash Player** ------

Adobe Flash Player, even is need it for webcam and audio in the OpenMeetings rooms.

For Firefox:

slpkg -s alien flashplayer-plugin

For Chromium:

slpkg -s alien chromium-pepperflash-plugin

6)

------ Installation of ImageMagick y Sox ------

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

slackpkg install imagemagick

Sox, work the sound. We install it:

slackpkg install sox

7)

------ Compilation and installation of FFmpeg ------

FFmpeg work the video. To compile and install it, i´ve based at this url, with some modifications and updated to 1-1-2019:

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

Download the script that will compile and install ffmpeg:

cd /opt

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

...concede execution permission:

chmod +x ffmpeg-slackware.sh

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

./ffmpeg-slackware.sh

Will spend about 25 minutes. When finish will anounce with this text:

FFmpeg Compilation is Finished!

FFmpeg will be installed in: /usr/local/bin.

8)

------ **Installation of MariaDB** ------

We´ll install the MariaDB data server::

slackpkg install mariadb

...create a data base need it for MariaDB can run for first time:

mysql_install_db --user=mysql

Do owner to mysql:

chown -R mysql:mysql /var/lib/mysql

...concede execution permission to rc.mysqld:

chmod 755 /etc/rc.d/rc.mysqld

...and make a link to *mysql.server* to run MariaDB:

cd /usr/share/mysql

cp mysql.server /etc/init.d/mysql

….concede execution permission:

chmod +x /etc/init.d/mysql

Edit and comment out one line, so the 3306 port will be accesible to OpenMeetings:

nano /etc/rc.d/rc.mysqld

...and comment out:

SKIP="--skip-networking"

...must be so:

SKIP="--skip-networking"

...press **Ctrl+x**, will ask to save, press **Y** and **Enter** to exit nano.

Run MariaDB:

/etc/init.d/mysql start

Now give a MariaDB root password.
Please, change a-password by other you like it:

mysqladmin -u root password a-password

9)

------ Make a data base for OpenMeetings ------

Make a data base for OpenMeetings:

mysql -p -u root

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

MariaDB [(none)]> CREATE DATABASE open407 DEFAULT CHARACTER SET 'utf8';

(Only one line with space between both))

MariaDB [(none)]> GRANT ALL PRIVILEGES ON open407.* TO 'hola'@'localhost'
IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;

...and exit MariaDB:

MariaDB [(none)]> quit

* open407   …........... is the name of the data base
* hola   …........... is the user name of this data base
* 1a2B3c4D   …........ is the password of of this user

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

Now is need it reboot the machine to take effect the changes we made in the Java Environment configuration. Stop MariaDB:

/etc/init.d/mysql stop

...and reboot. When comeback follow at the step 10:

reboot

10)

------ Installation of red5-OpenMeetings ------

We´ill install OpenMeetings 4.0.7 stable release.
Make a folder called **red5407** where to download the OpenMeetings file and will install it:

mkdir /opt/red5407

cd /opt/red5407

wget http://archive.apache.org/dist/openmeetings/4.0.7/bin/apache-openmeetings-4.0.7.zip

unzip apache-openmeetings-4.0.7.zip

mv apache-openmeetings-4.0.7.zip /opt

11)

------ Connector between OpenMeetings and MariaDB ------

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

cd /opt

(Only one line without space between both)

wget http://repo1.maven.org/maven2/mysql/mysql-connector-java/5.1.47/mysql-connector-java-5.1.47.jar

cp mysql-connector-java-5.1.47.jar /opt/red5407/webapps/openmeetings/WEB-INF/lib

12)

------ Script to run red5-OpenMeetings ------

Download the script that 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 any other different path to /opt/red5407, please edit the script and modify the line:

RED5_HOME=/opt/red5407

...a

RED5_HOME=/your-path-installation

13)

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

Run MariaDB:

/etc/init.d/mysql start

...and now run red5-OpenMeetings:

/etc/init.d/red5-2 start

...wait about 40 seconds in order red5 can run completly. Then, go 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).
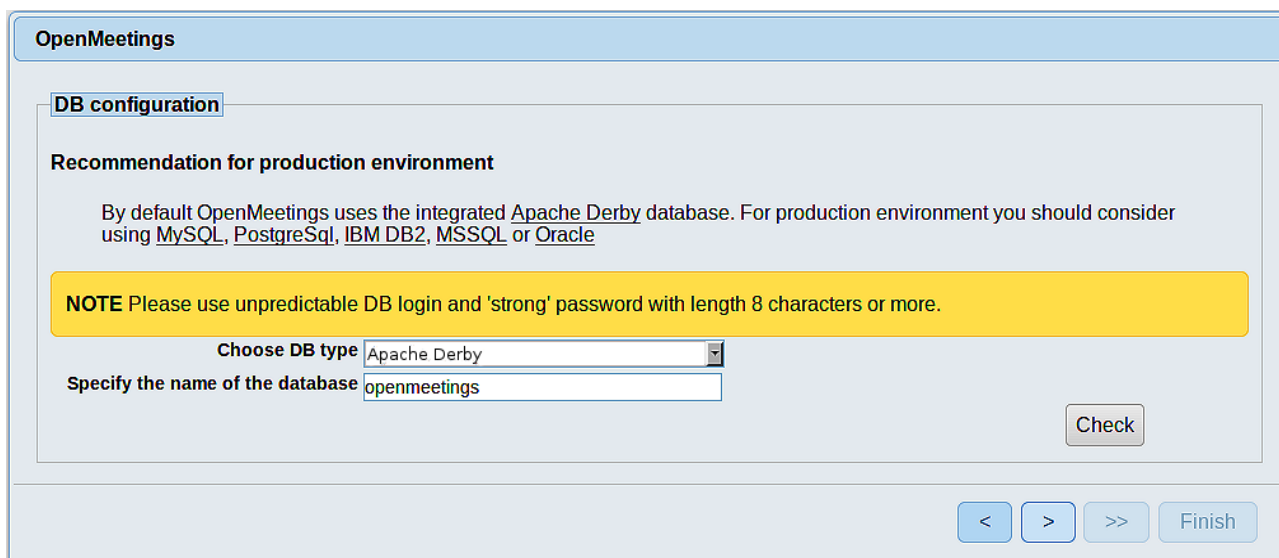
If you have further questions or need support in installation or hosting:

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
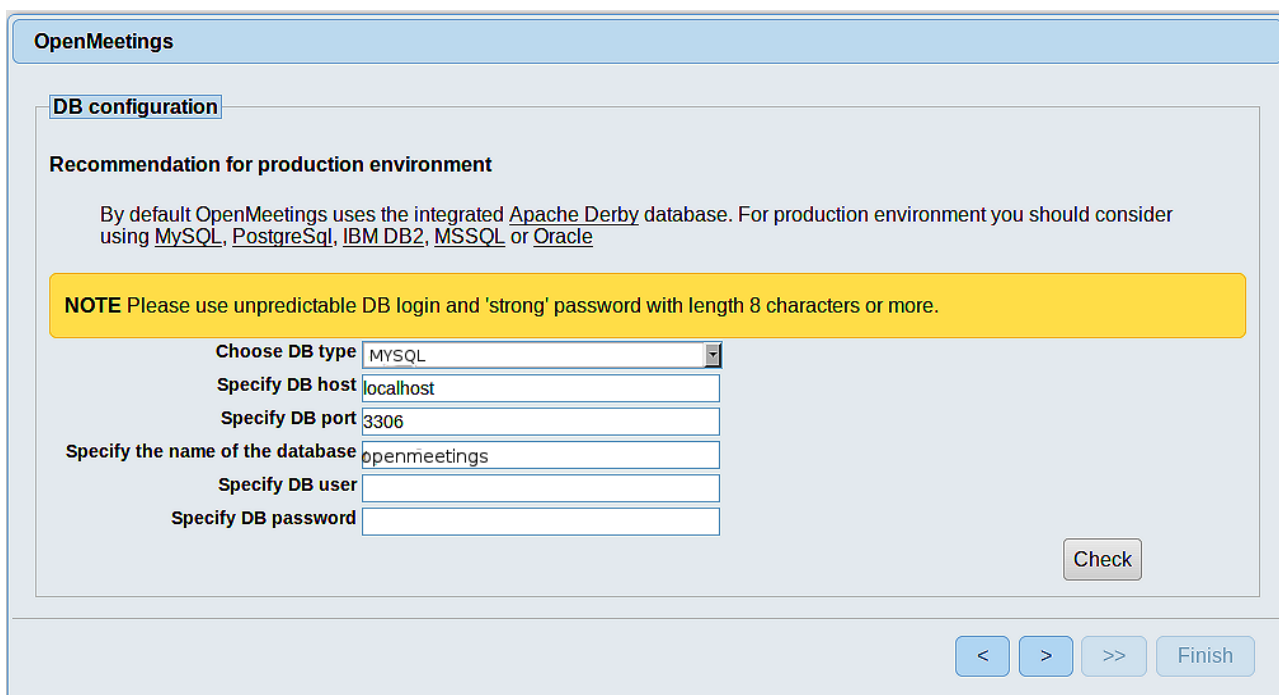
By default OpenMeetings uses the integrated Apache Derby database. For production environment you should consider using MySQL, PostgreSql, IBM DB2, MSSQL or Oracle.

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

Choose DB type `Apache Derby`

Specify the name of the database `openmeetings`

[Check]

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

...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 `MYSQL`

Specify DB host `localhost`

Specify DB port `3306`

Specify the name of the database `openmeetings`

Specify DB user

Specify DB password

[Check]

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

...here we must introduce the data base name, user name and his password that we gives in step 9:
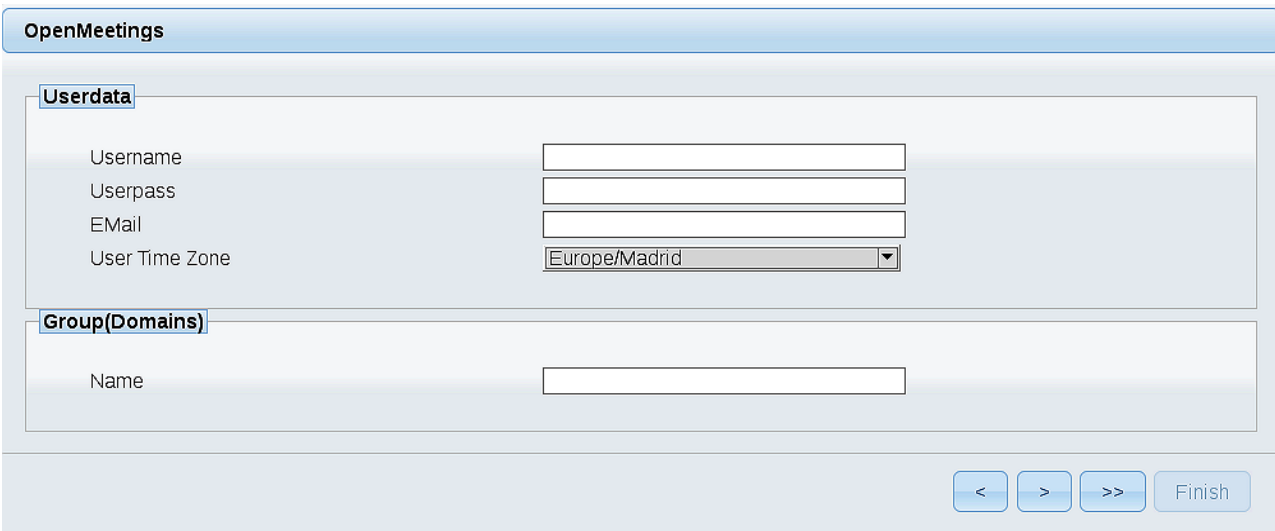
Specify the name of the database	=	open407	
Specify DB user	=	hola	
Specify DB password	=	1a2B3c4D	

If you had choose diferents data, please introduce it here:

Press th button   > 　 and will take us to:

OpenMeetings

Userdata

Username	
Userpass	
EMail	
User Time Zone	Europe/Madrid ▼

Group(Domains)

Name	

< 　 > 　 >> 　 Finish

Now, 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	🟩⬜
Send Email to new registered Users	⬜🟥
New Users need to verify their EMail	⬜🟥
Default DB objects of all types will be created (including Rooms, OAuth2 servers etc.)	🟩⬜
Mail-Referer	noreply@openmeetings.apache.org
SMTP-Server	localhost
SMTP-Server Port(default Smtp-Server Port is 25)	25
SMTP-Username	
SMTP-Userpass	
Enable TLS in Mail Server Auth	⬜🟥
Set inviter's email address as ReplyTo in email invitations	🟩⬜
Default Language	inglés

`< > >> Finish`

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
Default Language	==	...select your language

...the rest you can change it as you like.

Please press the button [>] and a new page will appear:

OpenMeetings		
Converters		
Document conversion DPI	150	
Document conversion JPEG Quality	90	
ImageMagick Path		Check
FFMPEG Path		Check
SoX Path		Check
OpenOffice/LibreOffice Path for jodconverter		Check
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/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:

Press the button > and will show this window:

Push **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:

/etc/init.d/red5-2 restart
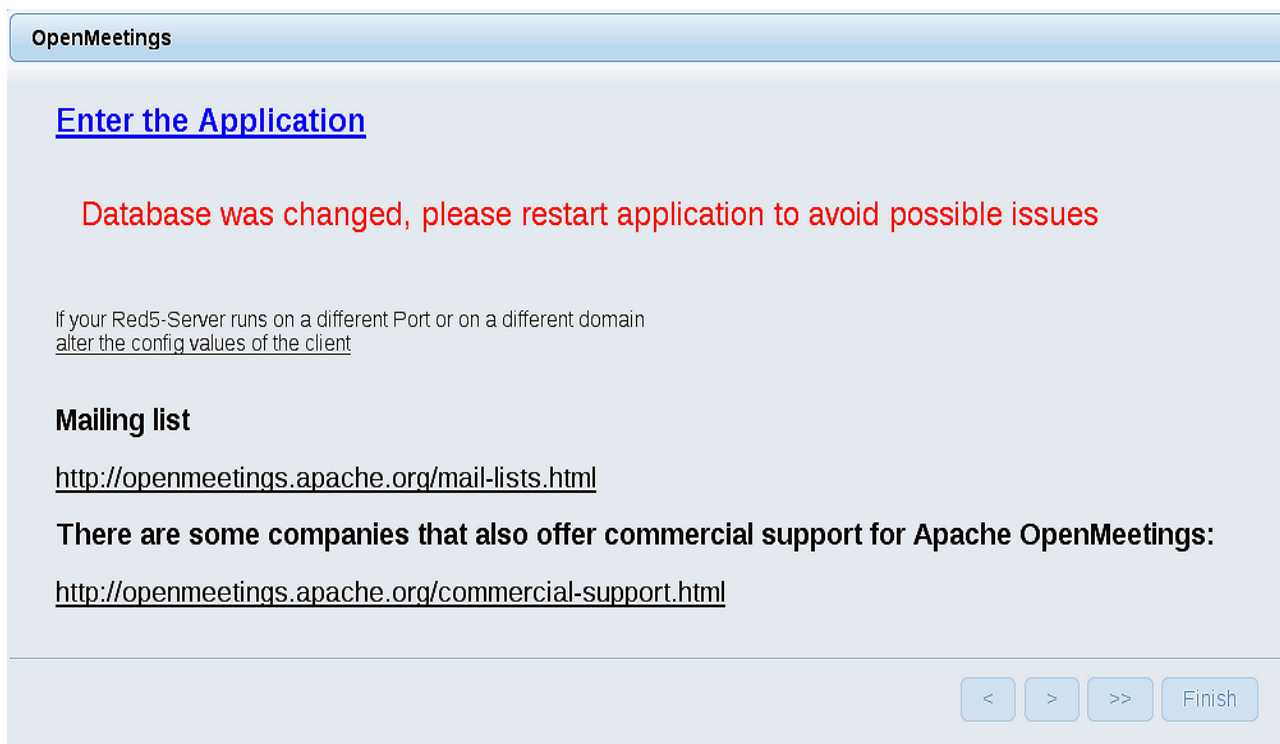
Now yes, you can clic on **Enter the Application**, or go with your browser to:

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 accede to OpenMeetings, would be

http://localhost:5080/openmeetings

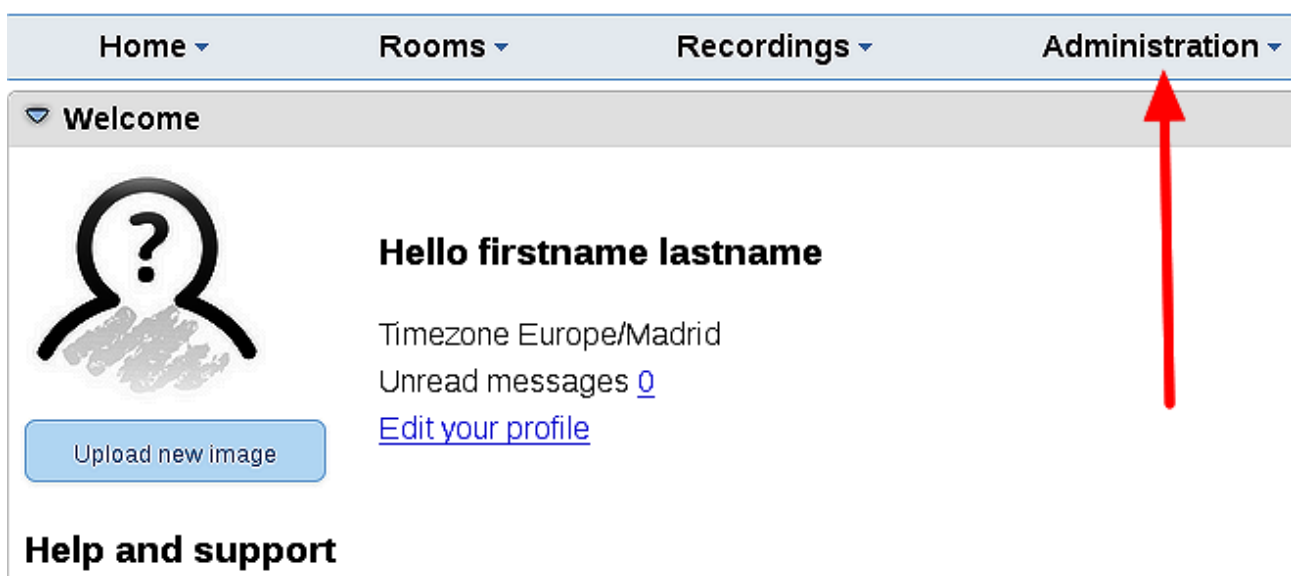Remember to open in the server, the two following ports:

1935   5080

...in order that it could accede to OpenMeetings from other machines in Lan or from Internet
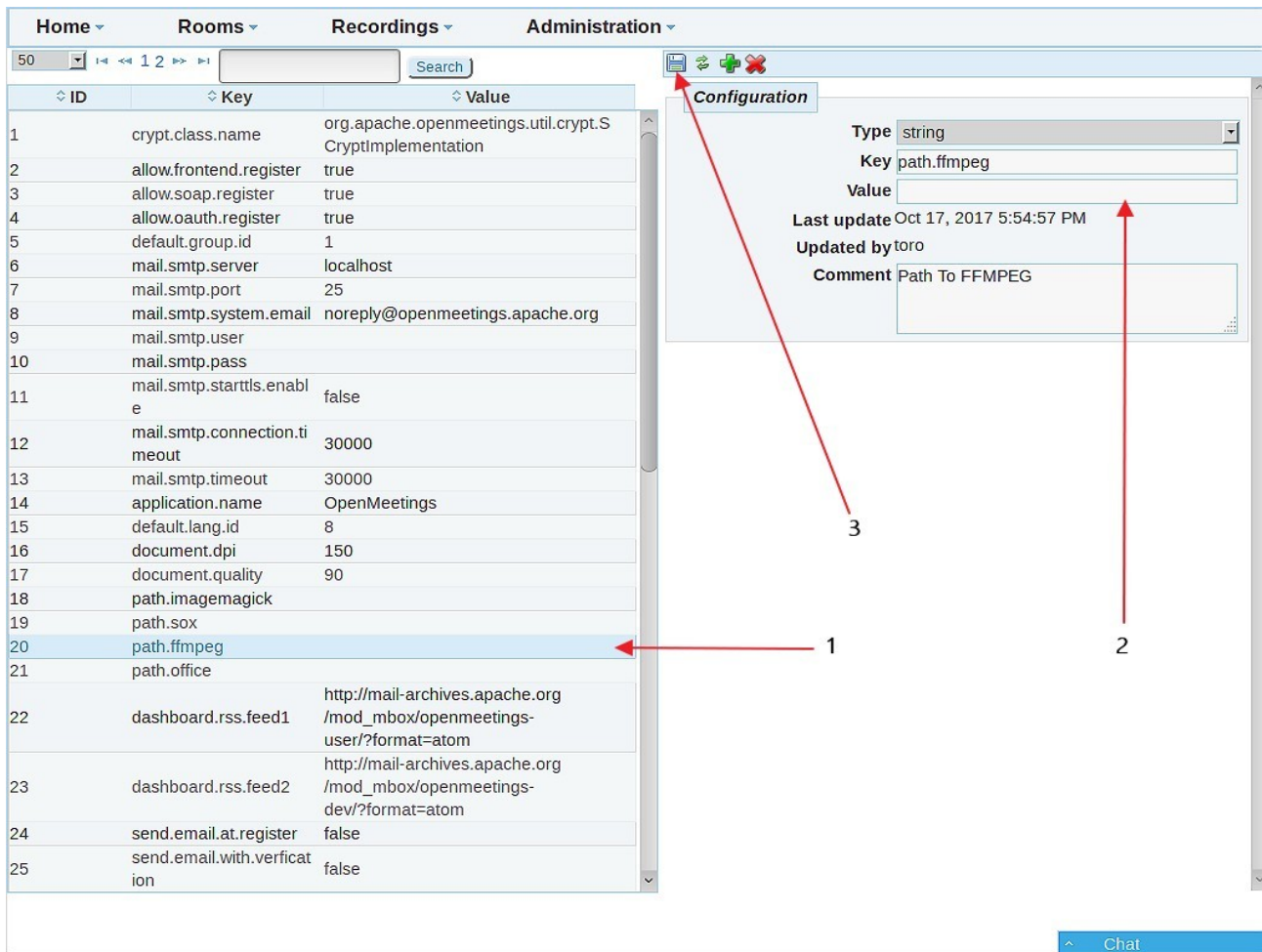
14)
------ **Configuration of OpenMeetings** ------

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:

15)

-------- **Ghostscript compilation and modify ImageMagick** --------

By a script we should compile Ghostscript 9.26, free of security hole:

cd /opt

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

chmod +x ghostscript.sh

...and run it:

./ghostscript.sh

...when be finished will announce it: GhostScript compilation is Finished!

rm -R /opt/ghostscript-9.26

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

nano /etc/ImageMagick-6/policy.xml

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

<policy domain="coder" rights="none" pattern="PS" />
<policy domain="coder" rights="none" pattern="PDF" />

...to:

<!-- <policy domain="coder" rights="none" pattern="PS" /> -->
<!-- <policy domain="coder" rights="none" 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 the system-ImageMagick.

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