



Installation of Apache OpenMeetings 4.0.6 on Windows 10

This tutorial is made based on a fresh installations of

Windows 10 64bit

It is tested with positive result. We will use the Apache's binary version OpenMeetings 4.0.6 stable, that is to say will suppress his compilation. It is done step by step.

15-10-2018

Starting...

1)

----- Installation of Ghostscript and 7-Zip -----

Download ghostscript and 7-Zip:

<http://info.elf.stuba.sk/packages/pub/pc/utiltext/gs925w64.exe>

<http://www.7-zip.org/a/7z1805-x64.exe>

...please, install both programs by default.

2)

----- Installation of Oracle Java 1.8 -----

OpenMeetings 4.0.6 need Java 1.8 to work. So, we install Oracle Java 1.8.

We download it:

<http://gate.bitel.ru/pub/soft/java/j2se/1.8.x/jdk-8u181-windows-x64.exe>

Please, install it by default... “**jdk-8u181-windows-x64.exe**”.

3)

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

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

We download it:

http://archive.services.openoffice.org/pub/mirror/ALL_primary_servers/rsync/rsync.documentfoundation.org/tdf-pub/libreoffice/stable/6.0.4/win/x86_64/LibreOffice_6.0.4_Win_x64.msi

...and install it by default.

4)

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

ImageMagick, will work the image files, png, jpg, gif, etc. We download it:

<http://ftp.icm.edu.pl/packages/ImageMagick/binaries/ImageMagick-7.0.7-17-portable-Q16-x64.zip>

...uncompress it in C:\. Will look so:

C:\ImageMagick-7.0.7-17-portable-Q16-x64

Sox, work the sound. We'll download it:

<https://sourceforge.net/projects/sox/files/sox/14.4.2/sox-14.4.2-win32.exe/download>

...and install it by default.

5)

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

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

<http://get.adobe.com/es/flashplayer/>

...unmark “**Optional oferts**”, and press the button “**Install now**”.
Will download a file that we must install it.

6)

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

I've based at this url to compile ffmpeg:

<http://www.thingsiuse.org/2014/06/building-ffmpeg-for-h264-and-aac.html>

Make a folder called **ffb** in the root drive C: or your own.
The path look so:

C:\ffb

Download the necesary base to compile (71mb size):

http://xhmikosr.1f0.de/tools/msys/MSYS_MinGW-w64_GCC_710_x86-x64_Full.7z

Uncompress this file, and inside will find a folder called **MSYS**, move it to C:\ffb.
Look so:

C:\ffb\MSYS

...we go there to, and launch **msys.bat** file:

C:\ffb\MSYS\msys.bat

...will open a terminal and will create automatically two folders called **home** and other with the name of the Windows user. Look so:

C:\ffb\MSYS\home\your-user

A)

Download the files and move them to: C:\ffb\MSYS\home\your-user

<https://sourceforge.net/projects/lame/files/lame/3.100/lame-3.100.tar.gz/download>

<https://sourceforge.net/projects/opencore-amr/files/fdk-aac/fdk-aac-0.1.6.tar.gz/download>

<https://download.videolan.org/x264/snapshots/x264-snapshot-20180613-2245.tar.bz2>

<http://ffmpeg.org/releases/ffmpeg-4.0.tar.bz2>

...remember move them..

B)

Start the compilation. Spend about 30 to 40 minutes.

Launch the file C:\ffb\MSYS\msys.bat, *if the terminal is not open*, and copy and paste:

----- **Lame** -----

```
tar xvfz lame-3.100.tar.gz
```

```
cd ~/lame-3.100
```

(Only one line with space between both)

```
./configure --prefix=/usr/local/x86_64-w64-mingw32 --host=x86_64-w64-mingw32 --enable-static  
--disable-shared --disable-decoder --enable-nasm
```

```
make clean && make
```

```
make install
```

```
cd ~
```

----- **Fdk-aac** -----

```
tar xvfz fdk-aac-0.1.6.tar.gz
```

```
cd ~/fdk-aac-0.1.6
```

(Only one line without space between both)

```
./configure --prefix=/usr/local/x86_64-w64-mingw32 --host=x86_64-w64-mingw32 --enable-  
shared=no
```

```
make clean && make
```

```
make install
```

```
cd ~
```

----- **X-264** -----

```
tar xvjf x264-snapshot-20180613-2245.tar.bz2
```

```
cd ~/x264-snapshot-20180613-2245
```

(Only one line without space between both)

```
./configure --prefix=/usr/local/x86_64-w64-mingw32 --cross-prefix=x86_64-w64-mingw32--host=x86_64-w64-mingw32 --enable-static --bit-depth=8 --enable-win32thread
```

make clean && make

make install

cd ~

----- FFmpeg -----

```
tar xvjf ffmpeg-4.0.tar.bz2
```

```
cd ~/ffmpeg-4.0
```

(Only one line. The red text is a command. Lines 3 and 4 with space between both)

```
CPPFLAGS="$CPPFLAGS -I/usr/local/x86_64-w64-mingw32/include" ./configure --extra-ldflags='-L/usr/local/x86_64-w64-mingw32/lib' --prefix=/usr/local/x86_64-w64-mingw32 --cross-prefix=x86_64-w64-mingw32- --target-os=mingw32 --enable-w32threads --arch=x86_64 --enable-runtime-cpudetect --disable-debug --enable-static --disable-shared --disable-ffplay --enable-gpl --enable-version3 --enable-nonfree --enable-libmp3lame --enable-libfdk-aac --enable-libx264
```

....wait...and don't press any key after **Enter**. It is compiling, even look stoped.

make clean && make

make install

cd ~

....the compilation of FFmpeg is Finished.

You can find the compiled files in:

C:\ffb\MSYS\local\x86_64-w64-mingw32\bin

...these are: **ffmpeg.exe**, **ffprobe.exe**, **lame.exe** and **x264.exe**

Now we make a folder called **ffmpeg** at **C:**. Look so:

C:\ffmpeg

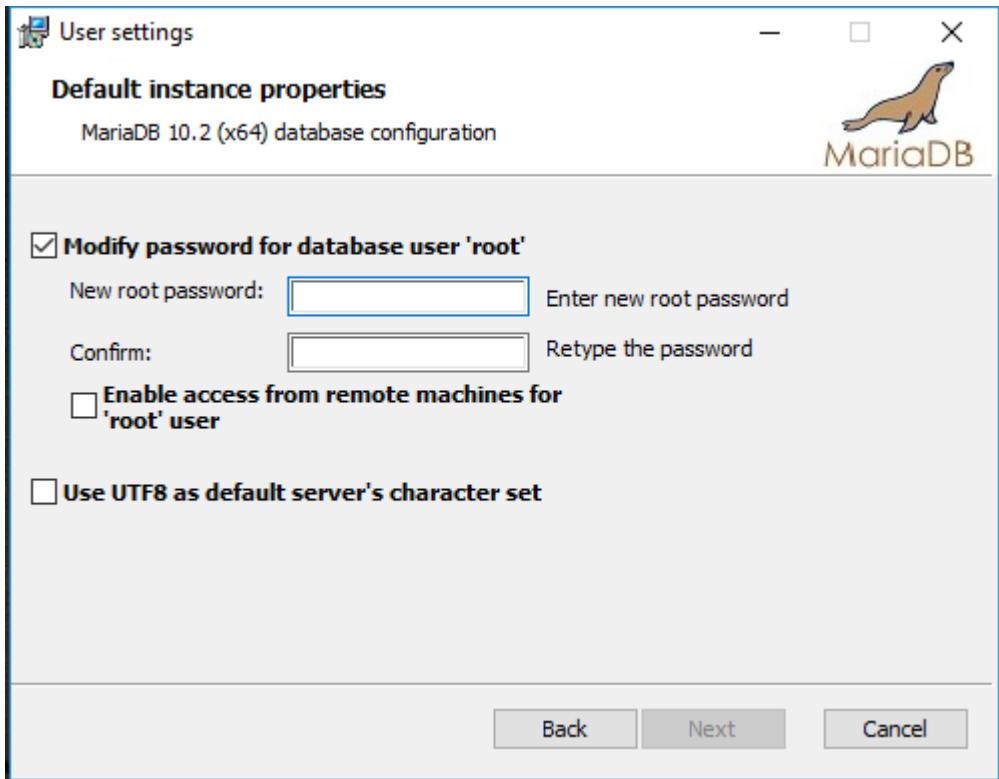
...and copy the four compiled files to there. Later we'll configure his path.

MariaDB is the data server. Will download:

<http://archive.mariadb.org/mariadb-10.2.15/winx64-packages/mariadb-10.2.15-winx64.msi>

...and install the file unloaded “**mariadb-10.2.15-winx64.msi**”.

Install it by default, and will ask for a root MariaDB password, choose one that you like:



When finish, launch the MariaDB terminal:

Start Menu → MariaDB 10.2 (x64) --> Command Prompt (MariaDB 10.2)

...make a database with his own user for OpenMeetings:

`mysql -u root -p`

...will ask for the root password that you have just chosen, type it:

MariaDB [(none)]> `CREATE DATABASE open406 DEFAULT CHARACTER SET 'utf8';`

With this command we have created a database called `open406`.

Now we create an user on this database. User password must be of 8 digits minimum:

(Only one line with space between both)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON open406.* TO 'hola'@'localhost'
IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;

- * **open406**is the database name.
- * **hola**is the user name for this database.
- * **1a2B3c4D** ..is the password for this user.

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

Now, we leave MariaDB:

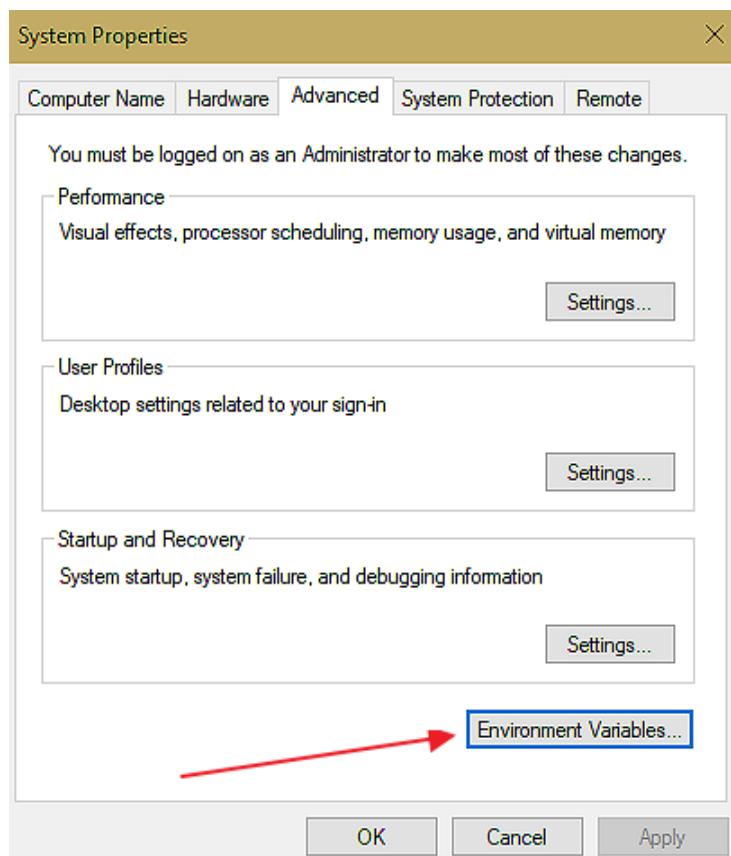
MariaDB [(none)]> quit

8)

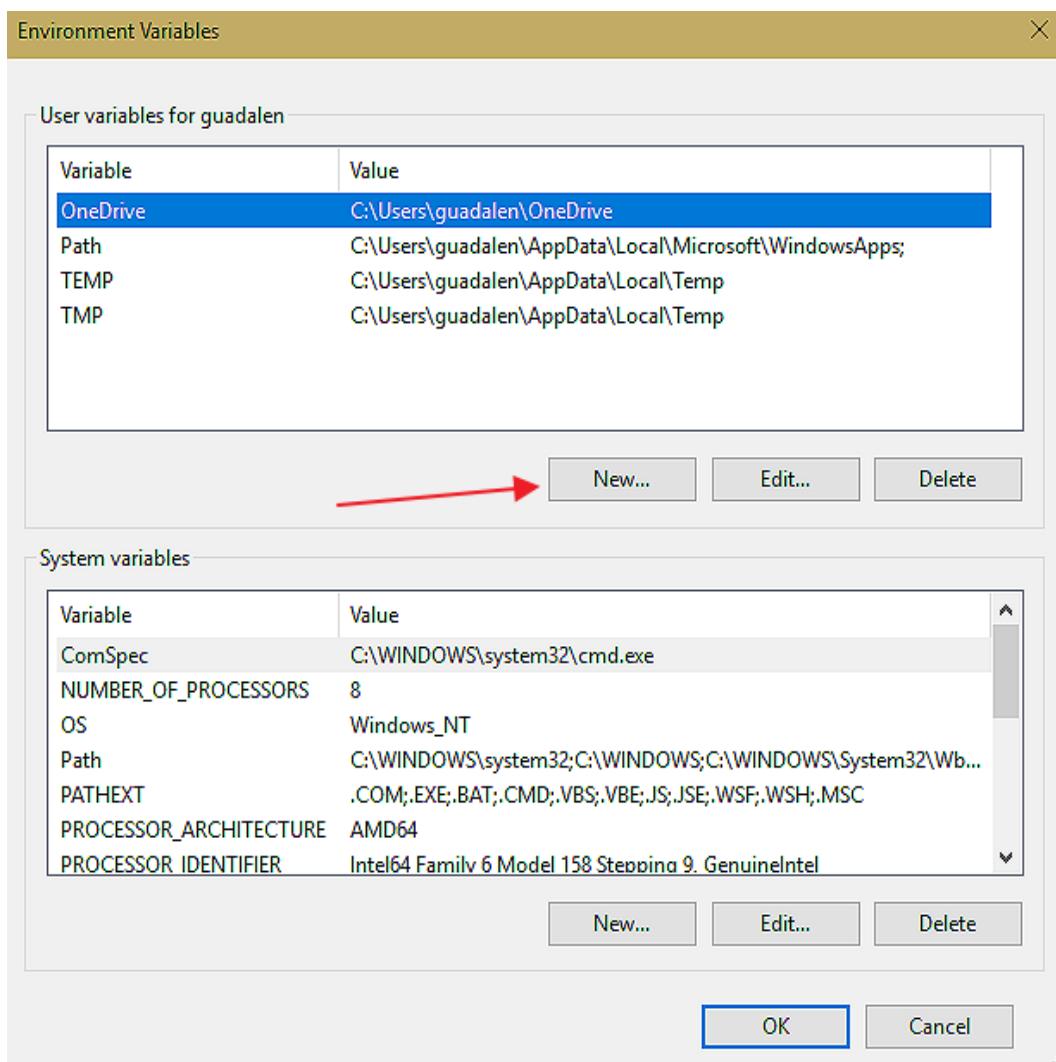
----- Environment Variables Configuration -----

Now we configure “Environment Variables”, so Windows will know where find Java and MariaDB.

Please go to: **Control Panel → System and security → System → Advanced System Configuration → Environment Variables**

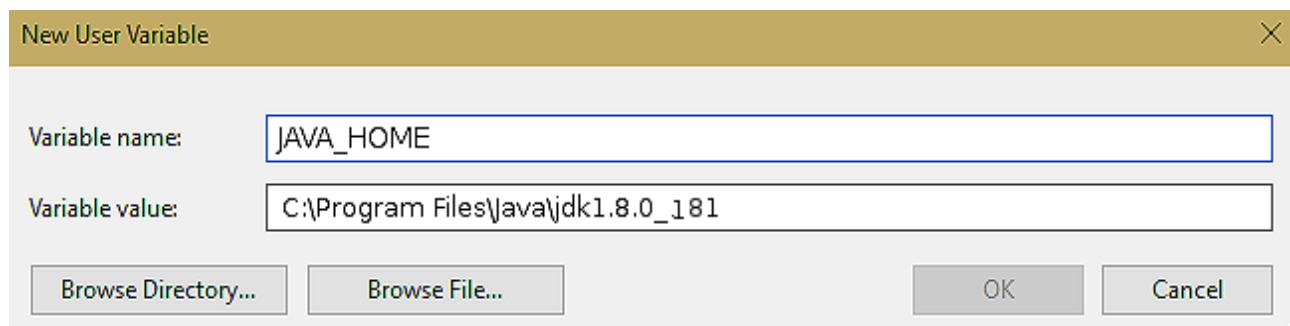


...will show this window:



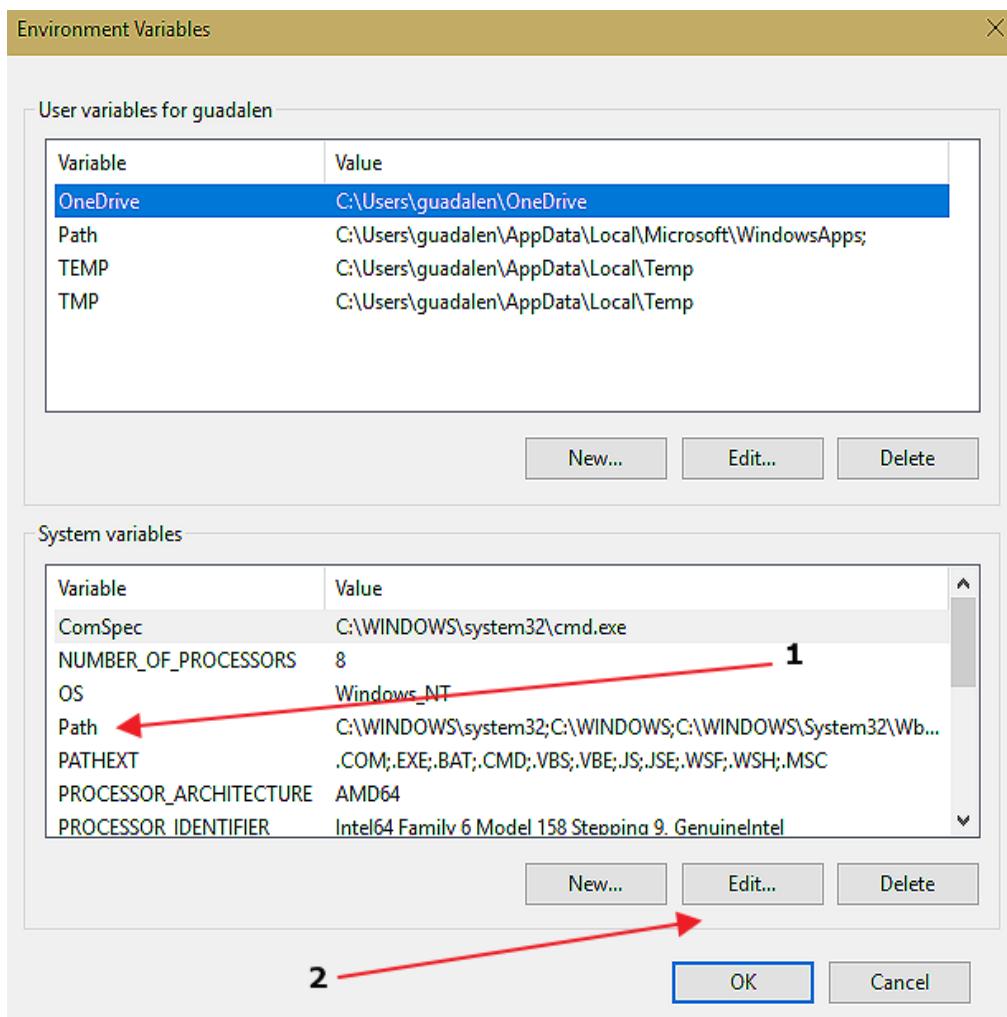
...press the up button “New” and make a variable:

Variable name == JAVA_HOME
Variable value == C:\Program Files\Java\jdk1.8.0_181

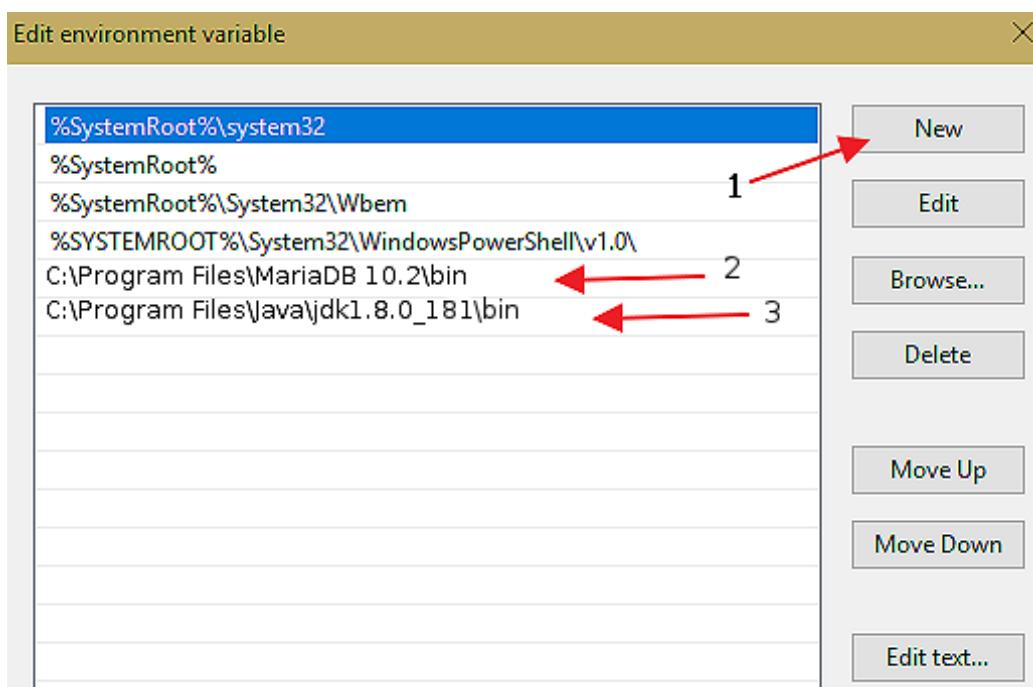


...and press “OK” button.

Now make click in: **System variables** → clic on **Path** (line), and later in **Edit** button



...and will open a new window:



...press the button “New” and copy-paste, to left, the **MariaDB** path:

C:\Program Files\MariaDB 10.2\bin

...press again the button “New” and paste, to left, the Java path:

C:\Program Files\Java\jdk1.8.0_181\bin

9)

----- **Installation of OpenMeetings** -----

Download the red5-OpenMeetings file:

<http://archive.apache.org/dist/openmeetings/4.0.6/bin/apache-openmeetings-4.0.6.zip>

...uncompress it in C:\. Look so:

C:\apache-openmeetings-4.0.6

...rename it to:

C:\red5406

Download and install the connector between MariaDB and OpenMeetings:

<http://repo1.maven.org/maven2/mysql/mysql-connector-java/5.1.46/mysql-connector-java-5.1.46.jar>

...and copy-install it to:

C:\red5406\webapps\openmeetings\WEB-INF\lib

10)

----- **Launch red5-OpenMeetings** -----

Launch MariaDB, if is not. For that press in the keyboard:

Windows+x --> Execute --> type cmd

...will open a terminal where we type:

C:\WINDOWS\system32\services.msc

...will open the **Services** window. Go to **MySQL** (this is our MariaDB), right click on it and click on **Initialize**.

Now we launch red5-OpenMeetings. Please, double click on the file:

C:\red5406\red5.bat

...wait 40 seconds minimum, till red5 is running completely, later go to:

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

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

The screenshot shows the first step of the OpenMeetings installation wizard. The title bar says "OpenMeetings". The main content area has a heading "1. Enabling import of PDFs into whiteboard". Below it is a bulleted list: "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).". A bold section "If you have further questions or need support in installation or hosting:" follows, with links to "Community-Support", "Mailing lists", "Commercial-Support", and "Commercial-Support". At the bottom right are navigation buttons: '<', '>', '>>', and "Finish".

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

with Derby, but we employ MySQL (MariaDB),

The screenshot shows the second step of the OpenMeetings installation wizard, titled "DB configuration". It has a heading "Recommendation for production environment" with text: "By default OpenMeetings uses the integrated [Apache Derby](#) database. For production environment you should consider using [MySQL](#), [PostgreSQL](#), [IBM DB2](#), [MSSQL](#) or [Oracle](#)". A yellow note box says "NOTE Please use unpredictable DB login and 'strong' password with length 8 characters or more.". Below is a form with "Choose DB type" set to "Apache Derby" and "Specify the name of the database" set to "openmeetings". A "Check" button is next to it. Navigation buttons are at the bottom right.

...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	hola
Specify DB password	1a2B3c4D

Check

< > >> Finish

...will show the database name configuration by default.

We must introduce the database name, user name we did for our database, at the step 7, and his password:

Specify the name of the database = open406

Specify DB user = hola

Specify DB password = 1a2B3c4D

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

Please, press button, and will go to:

OpenMeetings

Userdata

Username	<input type="text"/>
Userpass	<input type="text"/>
EMail	<input type="text"/>
User Time Zone	Europe/Madrid

Group(Domains)

Name	<input type="text"/>
------	----------------------

< > >> 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 be administrator.

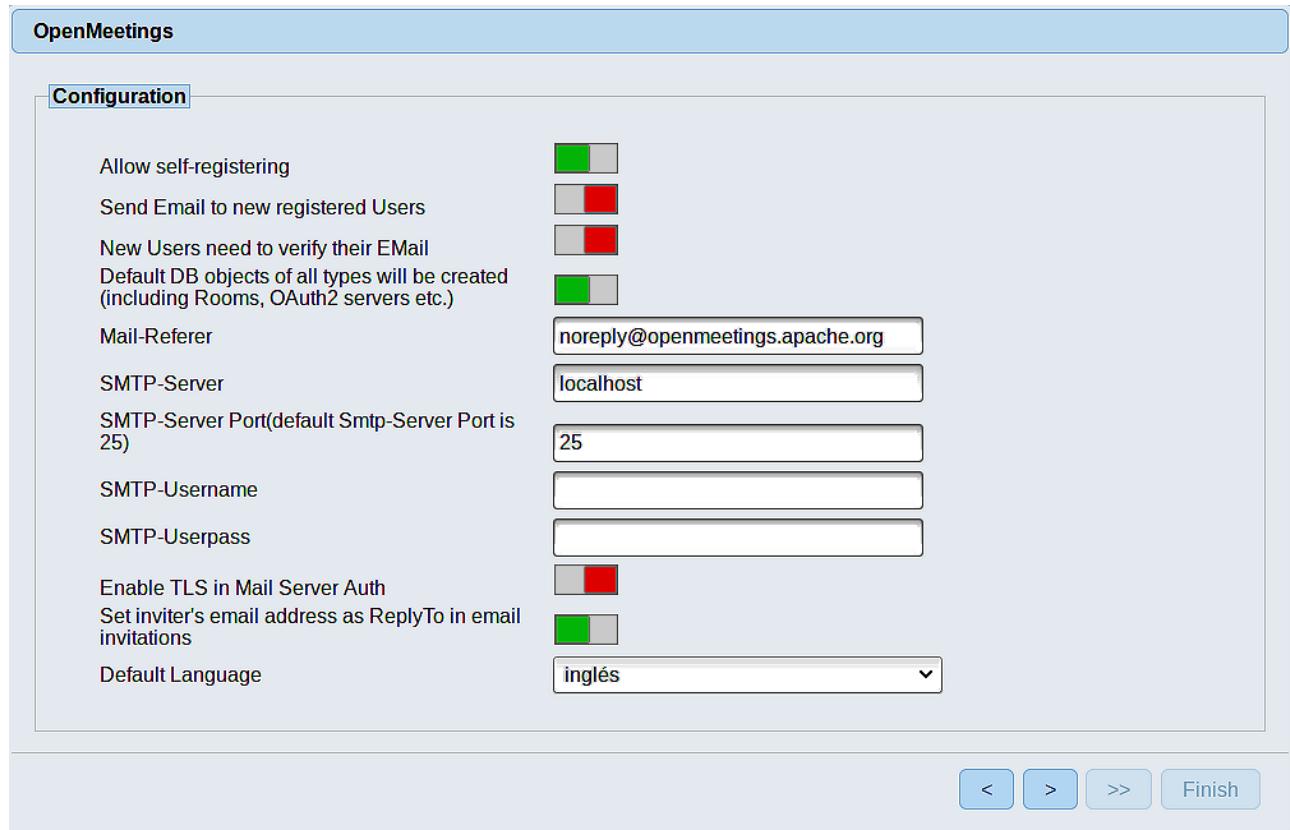
Userpass = password ...for the previous user.

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:



The screenshot shows the 'Configuration' section of the OpenMeetings setup. It includes the following settings:

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

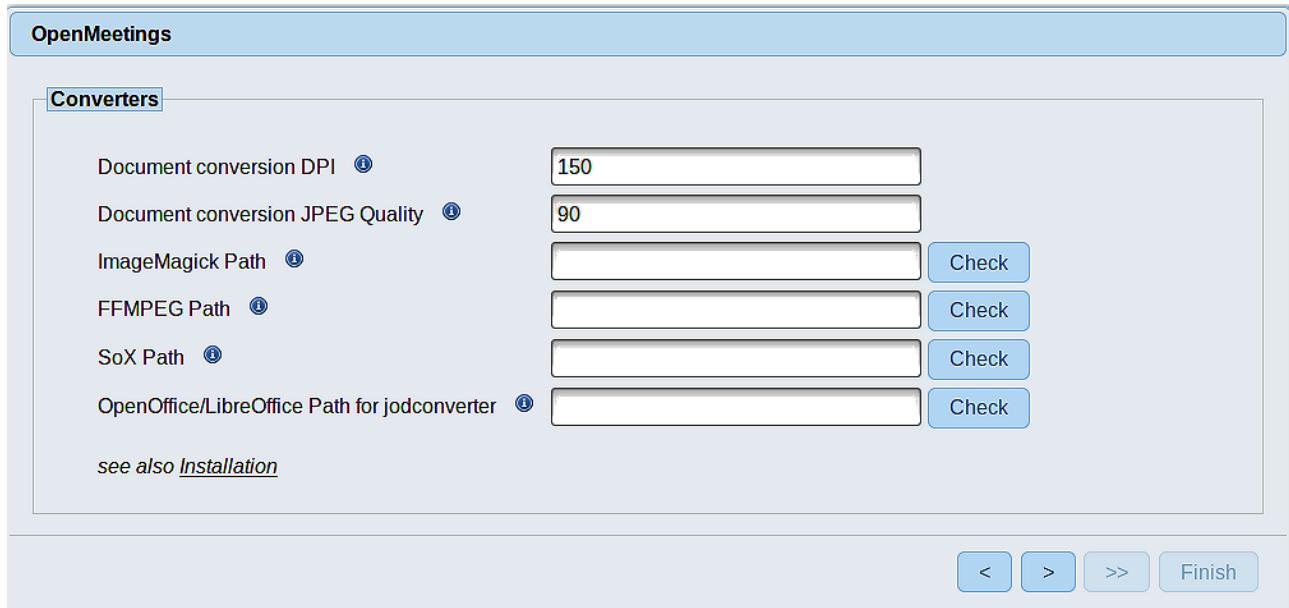
At the bottom right are navigation buttons: <, >, >>, and Finish.

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 Smtip-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 you can change it as you like.

Now press the button  and a new page will appear:



The screenshot shows the 'Converters' configuration page. It includes fields for Document conversion DPI (150), Document conversion JPEG Quality (90), ImageMagick Path, FFMPEG Path, SoX Path, and OpenOffice/LibreOffice Path for jodconverter. Each path field has a 'Check' button to its right. A note at the bottom says 'see also [Installation](#)'. Navigation buttons <, >, >>, and Finish are at the bottom right.

Setting	Value	Status
Document conversion DPI	150	Normal
Document conversion JPEG Quality	90	Normal
ImageMagick Path	(red border)	Warning/Error
FFMPEG Path		Normal
SoX Path		Normal
OpenOffice/LibreOffice Path for jodconverter		Normal

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

ImageMagick Path == C:\ImageMagick-7.0.7-17-portable-Q16-x64

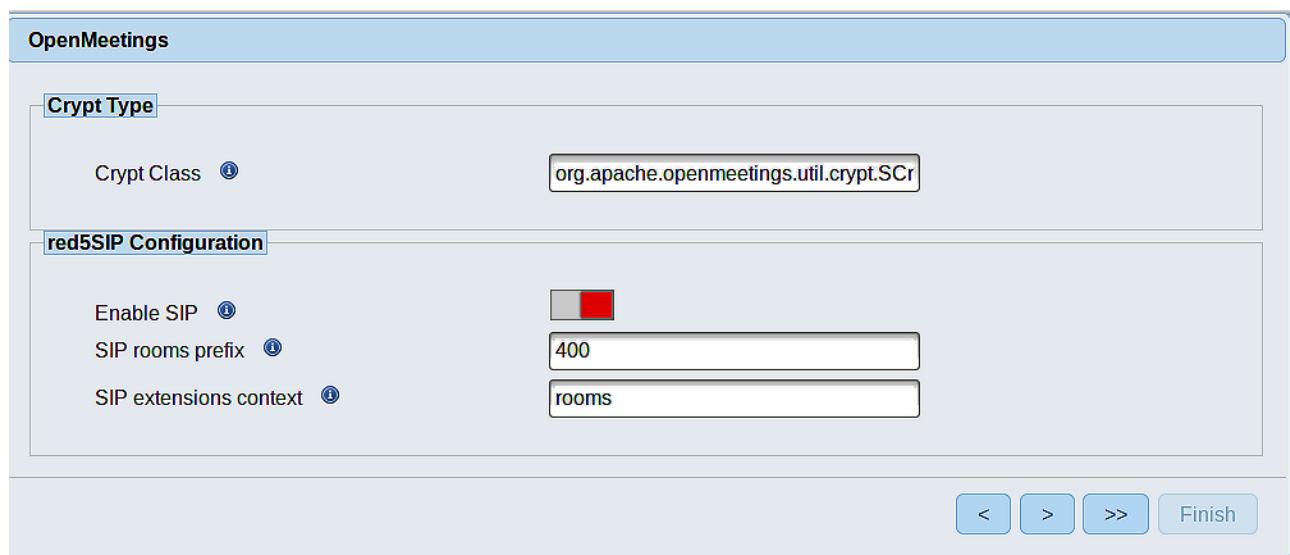
FFMPEG Path == C:\ffmpeg

SOX Path == C:\Program Files (x86)\sox-14-4-2

OpenOffice/LibreOffice Path for jodconverter == C:\Program Files\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:



Push the button  and will show this window:



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.

For that, click on the terminal where we launch red5-OpenMeetings, and press in the keyboard:

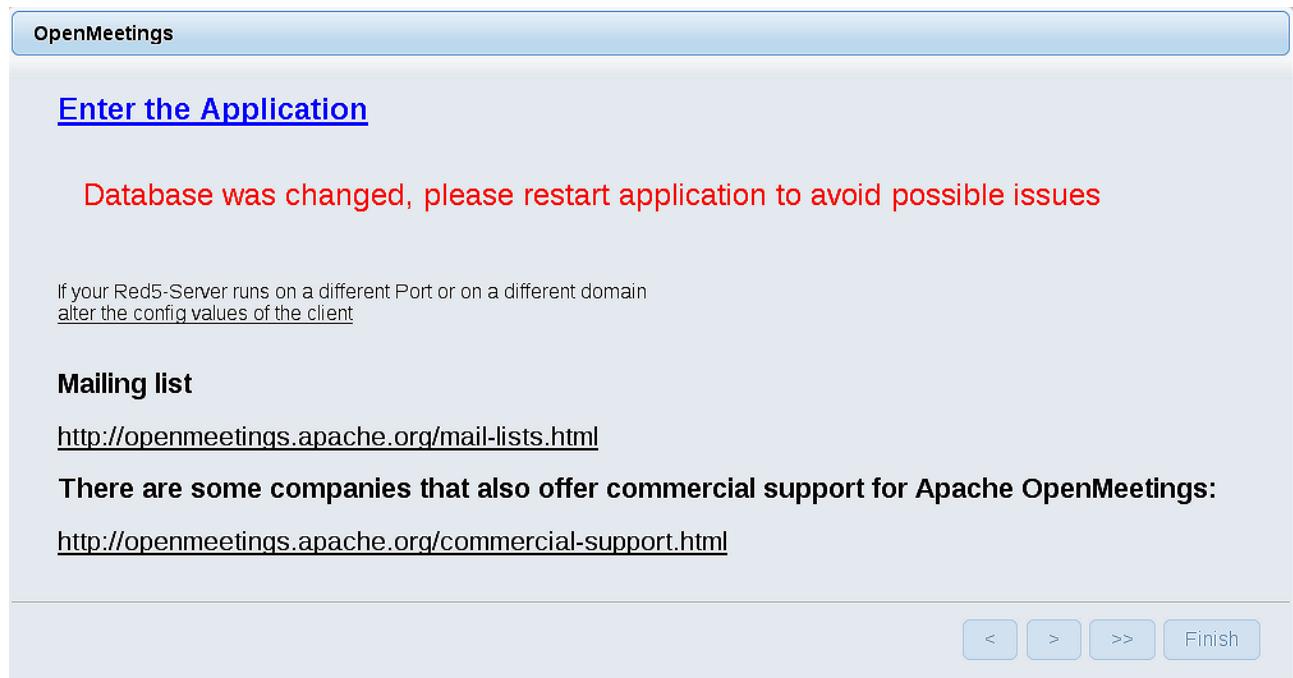
Ctrl+c

...will ask something, you type **Y** and press **Enter**.

To launch again, double click on the **red5.bat** file:

C:\red5406\red5.bat

...wait a seconds to run red5 completely, and...



...now yes, you can click 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 the 'Login' page of the OpenMeetings application. At the top, it says 'Login'. Below that, there are two input fields: 'Username or mail address' and 'Password'. To the right of the password field is a checkbox labeled 'Remember login'. Below the password field are two links: 'Forgotten your password?' and 'Network testing'. At the bottom of the form 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 Internet.

11)

----- **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 ▾

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.enabled	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

Red arrows indicate the following steps:

- Arrow 1 points to the 'path.ffmpeg' entry in the configuration table.
- Arrow 2 points to the 'path.ffmpeg' entry in the configuration panel.
- Arrow 3 points to the 'Configuration' panel itself.

Chat

And this is all.

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

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



Thank you.

Alvaro Bustos