Installation of Apache OpenMeetings 5.0.0-M4

on

Fedora 30 final

This tutorial it is bassed on a fresh installa-
tion of

Fedora-MATE_Compiz-Live-x86_64-30-1.2.iso

My sincere thanks to Maxim Solodovnik for his help,
without which i could not have finished this tutorial
satisfactorily.

It is done step by step**.**

Starting...

1)
At first place, modify Selinux level security, for the installation, and install nano editor:

su

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.

Add our user system to sudoers, so can use sudo:

nano /etc/sudoers

...copy and paste replacing user by your real user system name:

user   ALL=(ALL:ALL) ALL

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

exit   ...exit as root.

2)

------ **Update the system** ------

Update the system:

sudo dnf update -y

...and reboot the machine to get effect the changes. After reboot continue at step 3:

sudo reboot

3)

------ **ADD Repos** ------

RPM Fusion repo

(Only one line without space between them)

sudo su -c 'dnf install --nogpgcheck http://download1.rpmfusion.org/free/fedora/rpmfusion-free-release-30.noarch.rpm http://download1.rpmfusion.org/nonfree/fedora/rpmfusion-nonfree-release-30.noarch.rpm'

 Update again:

sudo dnf update -y

4)

------ **Installation of packets and libraries** ------

We install necessary packets and libraries:

(Only one line with a space between each one)

sudo 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)' h264enc

5)

------ Installation of OpenJava ------

Java 11 is needeed to work OpenMeetings 5.0.0-M4. Will install OpenJava 11.

-- Only for Fedora 32 bit --

sudo dnf install java-11-openjdk.i686 java-11-openjdk-headless.i686

-- Only for Fedora 64 bit --

sudo dnf install java-11-openjdk.x86_64 java-11-openjdk-headless.x86_64

May be you have installed different versions of Java. Please, select the just installed OpenJava 11:

sudo update-alternatives --config java

...and to see if the selected version is active:

sudo java -version

6)

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

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

sudo dnf -y install libreoffice

Is needeed 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:

sudo dnf -y install ImageMagick

Sox, work with the audio. Install it:

sudo dnf -y install sox

8)

------ **Installation of FFmpeg** ------

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

(Only one line with space between each one of them)

sudo dnf install -y ffmpeg glibc alsa-lib-devel gsm gsm-devel imlib2 imlib2-devel libogg libvorbis vorbis-tools theora-tools libvpx-devel mercurial cmake curl git gstreamer1-libav gstreamer1-plugins-ugly

9)

------ **Installation of MariaDB data server** ------

MariaDB is the data server fork of MySQL.

We install it:

sudo dnf install -y mariadb mariadb-server

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

sudo systemctl start mariadb.service

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

sudo mysqladmin -u root password **new-password**

Make a database for OpenMeetings:

sudo mysql -u root -p

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

MariaDB [(none)]> CREATE DATABASE open504 DEFAULT CHARACTER SET 'utf8';

Now we create a user with all permision on this open504 database. User password must be of 8 digits minimum:

(Only one line with space between both)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON open504.* TO 'hola'@'localhost' IDENTIFIED BY '1a2B3c4D' WITH GRANT OPTION;

* open504 .... 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

10)

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

We´ll install OpenMeetings in /opt/open504. All the following information will be based on this directory:

cd /opt

...download and uncompress the file:

(Only one line without space between both)

sudo wget http://archive.apache.org/dist/openmeetings/5.0.0-M4/bin/apache-openmeetings-5.0.0-M4.tar.gz

sudo tar xzvf apache-openmeetings-5.0.0-M4.tar.gz

...and rename the obtained folder:

sudo mv apache-openmeetings-5.0.0-M4 open504

11)
------ Installation connector OpenMeetings with MariaDB ------

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

cd /opt

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

sudo wget https://repo1.maven.org/maven2/mysql/mysql-connector-java/8.0.19/mysql-connector-java-8.0.19.jar

sudo cp mysql-connector-java-8.0.19.jar /opt/open504/webapps/openmeetings/WEB-INF/lib

12)
------ Script to launch Tomcat-OpenMeetings ------

We´ll download the script to run Tomcat-OpenMeetings:

cd /opt

sudo wget https://cwiki.apache.org/confluence/download/attachments/27838216/tomcat3

...copy it to where must be:

sudo cp tomcat3 /etc/init.d/

...and concede execution permission:

sudo chmod +x /etc/init.d/tomcat3

If you made the installation in any other different path to /opt/open504, please edit the script and modify the line:

CATALINA_HOME=/opt/open504

...to

CATALINA_HOME=/your-path-installation

13)

<p align="center">**------ Run Tomcat-OpenMeetings ------**</p>

Run MariaDB:
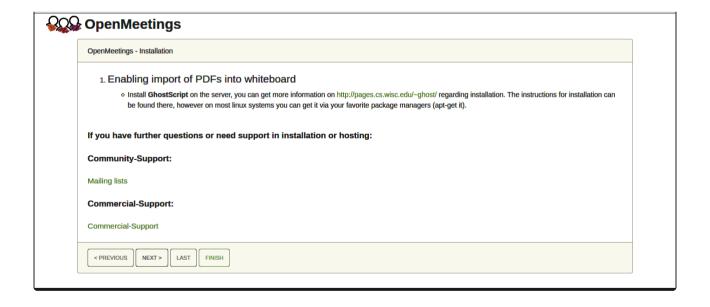
sudo systemctl start mariadb.service

...and Tomcat-OpenMeetings:
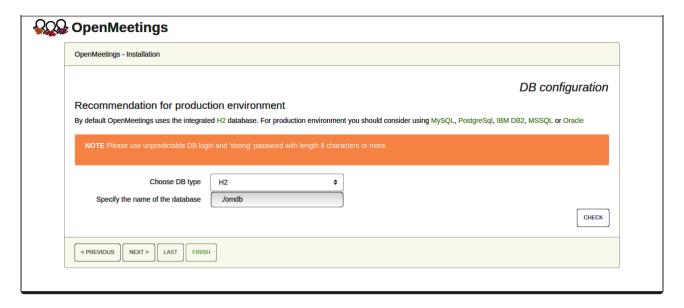
sudo /etc/init.d/tomcat3 start

 ...wait about 40 seconds in order Tomcat run completly. Then, go with the browser to:
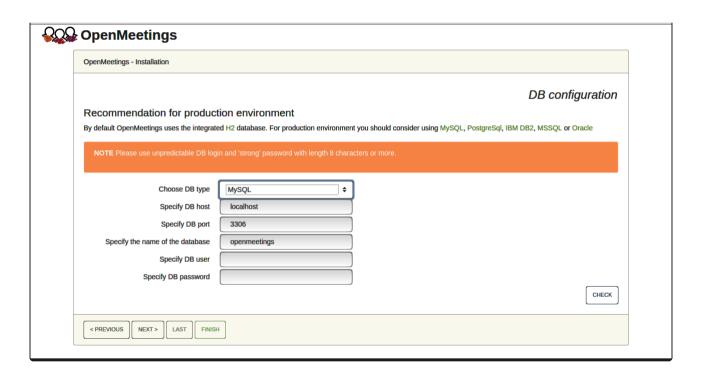
<p align="center">https://localhost:5443/openmeetings</p>

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

...press on "**Next >**" (bottom), and will show the default database configuration with H2, but we employ MySQL (MariaDB):

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

Now we must introduce the database name, the user name and his password we did at the step 9:

<div align="center">

Specify the name of the database   =   open504

Specify DB user   =   hola

Specify DB password   =   1a2B3c4D

</div>

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

Press "**Next >**" 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   =   exemple-openmeetings ...group name to choose

Press the button "**Next >**" 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)

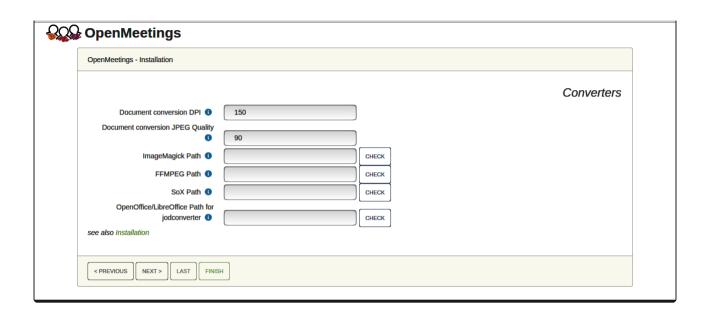|		
Mail-Refer	==	john@gmail.com
SMTP-Server	==	smtp.gmail.com
SMTP-Server Port (default Smtp-Server Port is 25)	==	587
SMTP-Username	==	john@gmail.com
SMTP-Userpass	==	password of john@gmail.com
Enable TLS in MailServer Auth	==	...turn green the button to activate

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

Default Language == ...select your language

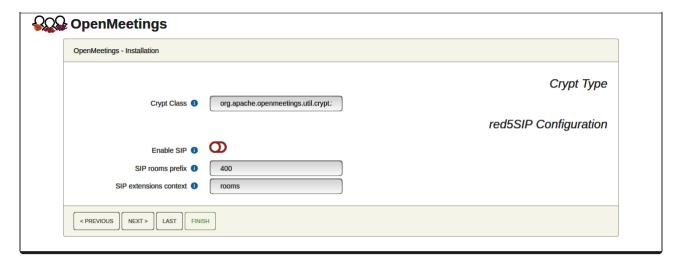...the rest you can change it as you like.

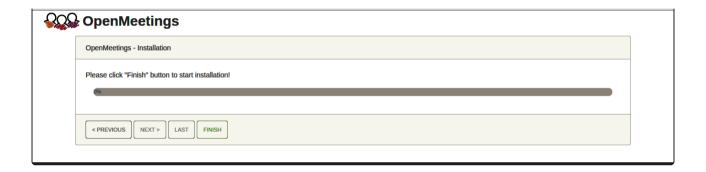Now press the button "**Next >**" and a new page will appear:

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

ImageMagick Path == /usr/bin

FFMPEG Path == /usr/bin

SOX Path == /usr/bin

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

As you go introducing paths, you can check if they are correct by pressing the button labeled **Check**.

Once completed the paths, please click the button "**Next >**" and move on to another page that we will leave it as is:
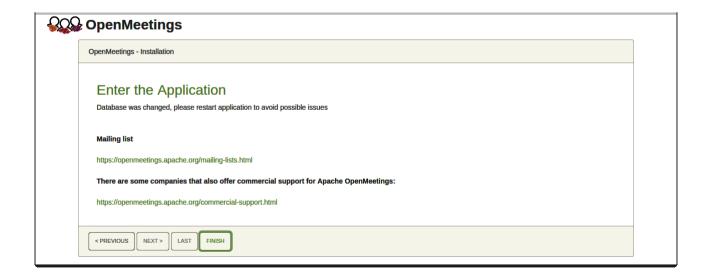
Now push the button "**Next >**" Will show this window:

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):

sudo /etc/init.d/tomcat3 restart

Now you can click on **Enter the Application** and it will take you to the OpenMeetings entry. But wait before entering OpenMeetings, we have to install Docker and Kurento-Media-Server, something we will do in the next steps, so that you can have access to the camera, micro, recording and desktop sharing in the room

14)

------ Installation of Docker ------

Docker will be the recipient of Kurento media server**.** First we install some neccessary libraries:

sudo dnf -y install dnf-plugins-core

...add docker repo:

sudo dnf config-manager --add-repo https://download.docker.com/linux/fedora/docker-ce.repo

sudo dnf makecache

...install docker:

sudo dnf install docker-ce

Add your user system name to docker group and so can run docker without be root. Replace user by your real system user name:

sudo gpasswd -a user docker

Stop Tomcat-OpenMeetings and Mariadb:

sudo /etc/init.d/tomcat3 stop

sudo systemctl stop mariadb.service

…and reboot the machine. After this, follow in the step **15)**:

sudo reboot

15)

------ Installation of Kurento-Media-Server ------

After had rebooted the computer, we´ll install Kurento-Media-Server need it for cam, mic-audio, recordings and share dektop in room.

First run docker:

sudo systemctl start docker.service

...and install kurento-media-server:

(Only one line, with space between 1 and 2, and without space between 2 and 3)

sudo docker run -d --name kms -p 8888:8888 --mount type=bind,source=/opt/open504/webapps/openmeetings/data,target=/opt/open504/webapps/ openmeetings/data kurento/kurento-media-server

Run kurento-media-server, wich name its kms:

sudo docker start kms

...and run also MariaDB and tomcat-OpenMeetings:

sudo systemctl start mariadb.service

sudo /etc/init.d/tomcat3 start

...wait around 40 seconds to tomcat run completly.

Now you can access OpenMeetings with all the functions at your disposal.

Clic the link down and type the user name and his password to login:

https://localhost:5443/openmeetings

To connect to this server from Internet or LAN is neccesary open the following ports:
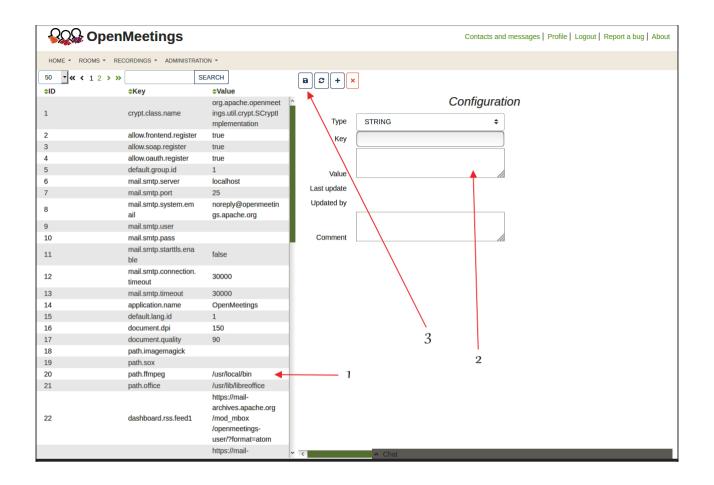
5443   8888

16)

------ 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:

17)

------ Order to run the servers ------

Once finished the installation of OpenMeetings, the next time you run the servers, please do it in this order:

sudo systemctl start mariadb.service   ..MariaDB data server

sudo systemctl start docker.service   …Docker, recipiente de Kurento media server

sudo docker start kms   ...Kurento media server

sudo /etc/init.d/tomcat3 start   ...Tomcat-OpenMeetings

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

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

Welcome to OpenMeetings!

- Project Team -

Also you can download if you like, a wallpaper of OpenMeetings for different devices such as:

PC, Mac, Smartphone, iPhone and Tablets. Here is the link to downoload:

OpenMeetings Wallpaper Download

A dvd live iso with OpenMeetings 5.0.0-M4 on Ubuntu 18.04 lts it is at your disposal.

Can find it here:

Live iso download

Thank you.

Alvaro Bustos (PMC and Committer at Apache OpenMeetings).