How to Install Open HRMS on Ubuntu 16.04?

Step 1: Update The Server

Make your system Updated using these two commands

```
sudo apt-get update
sudo apt-get upgrade
```

Step 2: Secure Server

It is common for all versions and many of you may be aware of this, but I'm still including this.Run this command to make your server/system remotely accessible

```
sudo apt-get install openssh-server fail2ban
```

Step 3:Create a System User

Create a system user to run Open HRMS service. The source code of Open HRMS will reside in the home directory of this user if you follow these steps

```
sudo adduser --system --home=/opt/openhrms --group openhrms
```

Step 4: Install and Configure PostgresQL database server

Install PostgresQL:

```
sudo apt-get install postgresql
```

Then switch to the Postgres user:

```
sudo su - postgres
```

Create a PostgreSQL user for managing Open HRMS databases:

```
createuser --createdb --username postgres --no-createrole -no-superuser --pwprompt
openhrms
```

Remember the password, this has to be used in the configuration file.

Exit from Postgres user to continue the installation:

```
exit
```

Step 5: Install dependencies for Open HRMS

For the better performance of Open HRMS, we need Python 3.We will be installing these dependencies in Python 3. We need pip version 3 for that.

Install pip 3:

```
sudo apt-get install -y python3-pip
```

After the successful installation of pip3, Install dependencies using pip3:

```
pip3 install Babel decorator docutils ebaysdk feedparser gevent
Greenlet html2text Jinja2 lxml Mako MarkupSafe mock num2words
ofxparse passlib Pillow psutil psycogreen psycopg2 pydot
pyparsing PyPDF2 pyserial python-dateutil python-openid
pytz pyusb PyYAML qrcode reportlab requests sixsuds-jurko
```

There are some web dependencies for Open HRMS. like, Node.js and less

Install these web dependencies:

```
sudo apt-get install -y npm
sudo ln -s /usr/bin/nodejs /usr/bin/node
sudo npm install -g less less-plugin-clean-css
sudo apt-get install -y node-less
```

wkhtmltopdf is required to generate PDF reports from Open HRMS. Install ‘wkhtmltopdf’ on your server.
The most compatible version of wkhtmltopdf is 0.12.1

```
sudo wget
https://github.com/wkhtmltopdf/wkhtmltopdf/releases/download/0.12.1/wkhtmltox-
```

This command will trigger the downloading of the package

Install the package after downloading.

Then run these two commands to ensure the smooth working of the package

```
sudo cp /usr/local/bin/wkhtmltopdf /usr/bin
sudo cp /usr/local/bin/wkhtmltoimage /usr/bin
```

Step 6: Get Open HRMS

Move the Open HRMS Modules to the Server

```
 sudo git clone https://www.github.com/odoo/odoo --depth 1 ¥ --branch 11.0 --single-branch /opt/openhrms

sudo git clone https://github.com/CybroOdoo/OpenHRMS.git --depth 1 ¥ --branch 11.0 --single-branch /opt/openhrms/openhrms
```

Step 7: Configure Open HRMS

At first, we are creating a log file location for Open HRMS. Open HRMS will create and maintain its log files there.

```
sudo mkdir /var/log/openhrms
```

Give the full access to this directory to the openhrms user

```
sudo chown openhrms:root /var/log/openhrms
```

After creating log directory, we are going to create a configuration file for Open HRMS.
There is a configuration file that comes with the OpenHRMS we just downloaded.
We are copying that file to a more appropriate location

```
sudo cp /opt/openhrms/debian/openhrms.conf /etc/openhrms.conf
```

We have to make some changes in the configuration file, to edit the file, we are using a text editor called nano

sudo nano /etc/openhrms.conf

Here is the example of the configuration file:

```
[options]
; This is the password that allows database operations:
; admin_passwd = admin
db_host = False
db_port = False
db_user = openhrms
db_password =  “password entered while creating db user”
addons_path = /opt/openhrms/openhrms, /opt/openhrms/addons
logfile = /var/log/openhrms/openhrms.log
```

After the configuration file is ready, We have to give the ownership of the file to the Open HRMS user

```
sudo chown openhrms: /etc/openhrms.conf
sudo chmod 640 /etc/openhrms.conf
```

Step 8: Create a service to run Open HRMS

We have to create a system unit for Open HRMS So that it can behave like a service.

Create a new file Open HRMS.service at /etc/systemd/system/ just like we created the ‘Open HRMS.conf’ file

```
sudo nano /etc/systemd/system/openhrms.service
```

You can use this content for your file:

```
[Unit]
Description=OpenHRMS
Documentation=http://www.openhrms.com
[Service]
# Ubuntu/Debian convention:
Type=simple
User=openhrms
ExecStart=/opt/openhrms/odoo-bin -c /etc/openhrms.conf
[Install]
WantedBy=default.target
```

Since this is a service, we are giving full rights to this file to root user.

```
sudo chmod 755 /etc/systemd/system/openhrms.service
sudo chown root: /etc/systemd/system/openhrms.service
```

Step 9: Test Open HRMS
Start the Open HRMS service

```
sudo systemctl start openhrms.service
```

You can check the log file of Open HRMS

```
sudo tail -f /var/log/openhrms/openhrms.log
```

Step 10: Automating Starting of Open HRMS
This will enable the Open HRMS service to start automatically at boot time

```
sudo systemctl enable openhrms.service
```

Step 11: Access Open HRMS
Open a new browser window and enter HTTP://<your_domain_or_IP_address>:8069 in the address bar
If everything is working properly, you will redirect to Open HRMS's database creation page.