

# Setup Odoo Development Environment

# Table of contents

- **System requirements**
- **Setup postgres database**
- **Odoo source install**
- **Install system dependencies**
- **Install python**
- **Install virtual environment**
- **Install python libraries**
- **Debug with Pycharm**



# System requirements

---

1. OS: Ubuntu 20.04
2. IDE: Pycharm

# Install postgres database

## Create the file repository configuration:

```
$ sudo sh -c 'echo "deb http://apt.postgresql.org/pub/repos/apt $(lsb_release -cs)-pgdg
main" > /etc/apt/sources.list.d/pgdg.list'
```

## Import the repository signing key:

```
$ wget --quiet -O - https://www.postgresql.org/media/keys/ACCC4CF8.asc | sudo apt-key add -
```

## Update the package lists:

```
$ sudo apt-get update
```

## Install the latest version of PostgreSQL:

```
$ sudo apt-get -y install postgresql postgresql-client
```

## Create postgres user for Odoo:

```
$ su postgres
```

```
$ psql
```

```
> CREATE user odoo WITH LOGIN CREATEDB PASSWORD '<YOUR_PASSWORD>'
```

```
> exit
```

# Odoo source install

---



There are multiple ways to install Odoo, depending on the intended use case.

## **Packaged installers**

Suitable for testing Odoo, developing modules and can be used for long-term production use with additional deployment and maintenance work.

## **Source Install**

Provides greater flexibility: e.g. allow multiple running Odoo versions on the same system. Good for developing modules, can be used as base for production deployment.

## **Docker**

If you usually use [docker](#) for development or deployment, an official [docker](#) base image is available.



# Odoo source install

---

- More convenient for module developers as the Odoo source is more easily accessible than using **packaged installation**.
- Starting and stopping Odoo more flexible and explicit than the services set up by the packaged installations, and allows overriding settings using **command-line parameters** without needing to edit a configuration file.
- Provides greater control over the system's set up, and allows to more easily keep (and run) multiple versions of Odoo side-by-side.

# Odoo source install

---

## Fetch the sources

There are two ways to obtain the source code of Odoo:

- As a zip **archive**
- Through **git**.

# Odoo source install

---

## Fetch the sources

### Archive

Community Edition:

- [Official download page](#)
- [GitHub repository](#)
- [Nightly server](#)

Enterprise Edition: (Need to be official Odoo developer to have access)

- [Official download page](#)
- [GitHub repository](#)



# Odoo source install

---



## Fetch the sources

### Git

The following requires [git](#) to be installed on your machine and that you have basic knowledge of git commands.

Community Edition:

```
$ git clone --depth 1 https://github.com/odoo/odoo.git
```

Enterprise Edition: (Need to be official Odoo developer to have access)

```
$ git clone https://github.com/odoo/enterprise.git
```



# Odoo source install

---



## Create configuration file

Enterprise Edition: (Need to be official Odoo developer to have access)

```
$ cp odoo/debian/odoo.conf .
```

Now, open “**odoo.conf**” file and fill in database connection information of the use that you created when install postgres



# Install system dependencies

---

## Python Dependencies

For libraries using native code, it is necessary to install development tools and native dependencies before the Python dependencies of Odoo. They are available in `-dev` or `-devel` packages for Python, PostgreSQL, libxml2, libxslt1, libevent, libsasl2 and libldap2.

On Debian/Ubuntu, the following command should install all the required libraries:

```
$ sudo apt install python3-dev libxml2-dev libxslt1-dev libldap2-dev libsasl2-dev \  
libtiff5-dev libjpeg8-dev libopenjp2-7-dev zlib1g-dev libfreetype6-dev \  
liblcms2-dev libwebp-dev libharfbuzz-dev libfribidi-dev libxcb1-dev libpq-dev \  
python3-dev node-less
```

# Install system dependencies

---

## Wkhtmltopdf

wkhtmltopdf is a set of open-source command-line tools for rendering HTML pages into PDF and various image formats. To print PDF reports in Odoo, you'll need to install the wkhtmltox package. The recommended version for Odoo is version **0.12.5**, which can be download from **Github**:

```
$ sudo wget
```

```
https://github.com/wkhtmltopdf/wkhtmltopdf/releases/download/0.12.5/wkhtmltox\_0.12.5-1.bionic\_amd64.deb
```

```
$ sudo apt install ./wkhtmltox_0.12.5-1.bionic_amd64.deb
```

# Install Python 3.7 (if not using Odoo 15)

---



## Add Deadsnakes PPA

Deadsnakes is a PPA with newer releases than the default Ubuntu repositories. Add the PPA by entering the following:

```
$ sudo add-apt-repository ppa:deadsnakes/ppa
```

The system will prompt you to press enter to continue. Do so, and allow it to finish. Refresh the package lists again:

```
$ sudo apt update
```

## Install Python 3

Now you can start the installation of Python 3.7 with the command:

```
$ sudo apt install python3.7 python3.7-dev
```

Allow the process to complete and verify the Python version was installed successfully:

```
$ python --version
```



# Install virtualenv

---

## Install Pip

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

## Then install virtualenv using pip3

```
$ sudo pip3 install virtualenv
```

## Now create a virtual environment

```
$ virtualenv -p python3.7 venv
```

**\*Note:** *you can use any name instead of “**venv**”, for the sake of this session we’ll use “**venv**”*

## Active your virtual environment:

```
$ source venv/bin/activate
```

# Install python libraries

---



## **Active your virtual environment:**

```
$ source /path/to/venv/bin/activate
```

## **Install python libraries required by Odoo:**

```
$ pip install -r /path/to/odoo/requirements.txt
```



# Run odoo service

---



**Active your virtual environment if it's not activated:**

```
$ source /path/to/venv/bin/activate
```

**Run Odoo:**

```
$ python odoo/odoo-bin -c odoo.conf
```





# Debug with pycharm

---



**PyCharm**

# Q&A