Install Development Environment

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Onnet - AHT

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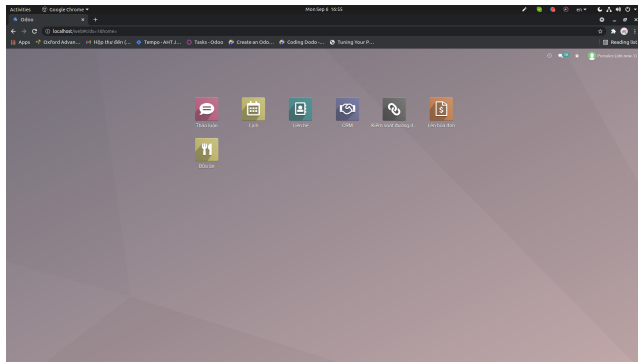# Things required FOR DEV?

Resources - Configuration - Data

Figure 1: Odoo

Resources

1. System (OS, native dependencies)
2. Python (version, virtualenv)
3. Postgresql
4. Odoo Base (community, enterprise)
5. Custom Addons

Configuration

1. odoo.conf
2. postgresql config

Data

1. DEV or PRODUCTION

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Resources

System

- OS: Debian GNU/Linux OS, highly recommend Ubuntu 18,20 LTS
- For libraries using native code, it is necessary to install development tools and native dependencies before the Python dependencies of Odoo.
- These core tools will help us install other Odoo dependencies using simple commands.

```
sudo apt install bla bla bla...
```

Python

- Different Odoo versions require different python versions
- Prepare to work with multiple python versions (pyenv, update-alternatives, . . .)
- Odoo dependencies are listed in the `requirements.txt` file located at the root of the Odoo community directory.
- Installed via pip and under **virtual environment** except wkhtmltopdf

Postgresql

- Supported version: 10.0 and later
- Odoo forbids connecting as `postgres` so you need to create a new PostgreSQL user (normally grant superuser priviledge)
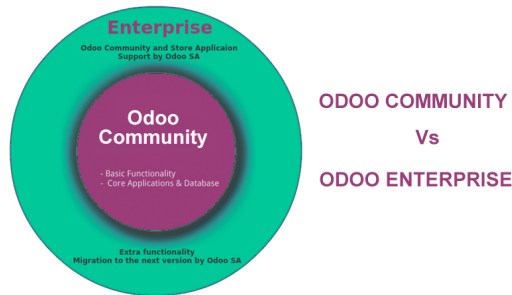
Odoo Base

Figure 2: Differences between Odoo EE and CE

- The master branch is under development and is unstable, so it is advisable not to use this for production since it might break down your database.
- The Enterprise git repository does not contain the full Odoo source code. It is only a collection of extra add-ons.
- `git clone`

Custom Addons

- The **BIGGEST BUG SOURCE** of your project

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Steps

Before you start any project, BE AWARE

- There are several ways to setup Odoo!
- Try to make your development environment similar to production environment as much as possible
- Some features in production should be disable in development or at least handle it (cron jobs, licence check, mail, . . .)
- Avoid generating local data inside Odoo/Project code base
- Are you sudo user? Be aware of your priviledge and what you do with sudo

Source Install

- Why?
- Not actually Installation of Odoo, You are running Odoo **directly from source**

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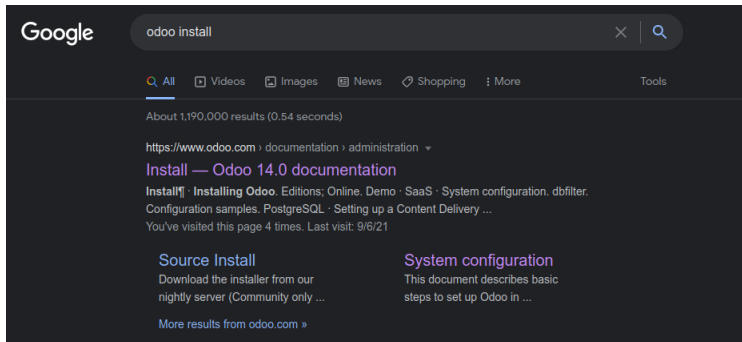Some Recommendations
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Thank you
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0. Read the Docs

Figure 3: How to install Odoo

1. Install dependencies

```
sudo apt update
sudo apt install git python3-pip build-essential wget blah blah blah -y
```

- Missing package? → How to install bla bla bla ubuntu bla bla bla...

2. Download and install wkhtmltopdf

```
wget https://.../wkhtmltox_0.12.5-1.trusty_amd64.deb
sudo dpkg -i wkhtmltox_0.12.5-1.trusty_amd64.deb
```

Force install dependencies

```
sudo apt install -f
```

3. Install PostgreSQL

```
sudo apt install postgresql -y
```

- Make sure postgresql service is running

4. Configure PostgreSQL

```
sudo -u postgres createuser --superuser $(whoami)
```

- psycopg2

5. Configure git

```
git config --global user.name "Your Name"
git config --global user.email youremail@example.com
```

- git pull

6. Clone Odoo code base

```
git clone -b 14.0 --single-branch --depth 1 https://github.com/odoo/odoo.git
```

- You can place Odoo code base anywhere
- Only you know the best way to handle them

7. Create virtual environment

```
python3 -m venv ~/your_venv
```

- You can place your venv anywhere

8. Install Python dependencies in venv

```
pip3 install -r requirements.txt
```

- Make sure you activated your venv
- Your projects may have other additional requirements.txt

9. Create and start your Odoo instance

- Things are different depends on your project
- You should understand how to use `odoo-bin`

```
./odoo-bin --help
```

```
python3 odoo-bin -d odoo-test -i base --addons-path=addons --db-filter=odoo-test
```

Manage databases

Accessing the database management interface

- Manage Database link (under login button)
- /web/database/manager
- /web/database/selector
- master password

Or access directly to postgresql and do whatever

- createuser, createdb
- pg_restore, pg_dump
- systemctl

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Configuration

odoo.conf

```
[options]
addons_path = /home/misamisa/odoo-dev/AMPM/ampm-odoo-11/odoo/addons,...
admin_passwd = ShiroMoeMoeMoaMoaChuChoa
csv_internal_sep = ,
data_dir = /home/misamisa/odoo-dev/AMPM/.local/share/Odoo
db_maxconn = 128
db_host = localhost
db_name = False
db_password = misamisa
db_port = 5433
db_user = misamisa
...
```

- What?
- Why?

How to do it?

```
./odoo-bin --save --config myodoo.cfg --stop-after-init
./odoo-bin -c myodoo.cfg
```

- Path in configuration file should be absolute
- Order for passing parameter:
    1. default (defined by source code)
    2. configuration file
    3. via commandline

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Some Recommendations

Prepare for working with many projects

```
|--odoo-src
|   |--enterprise
|   |   |--14.0
|   |--odoo
|   |   |--14.0
|   |   |--master
|--odoo-dev
|   |--AMPM
|   |   |--ampm-odoo-11
|   |   |--ampm-odoo-addons
|   |   |--venv
|   |   |--.local
|   |   |--odoo.conf
|   |--ahterp
|   |   |--custom-addons
|   |   |--odoo.conf
|   |   |--venv
```

Choose your editor

- Pycharm, VS Code, Atom or even Vim :D
- Utilize the power of plugins
- You should know how to use your editor and how to config it
- Hard work first, then life will easier later (not sure when :/)

Others

- Update Apps List
- addons_path
- master_password
- reverse proxy
- Activate/Deactivate debug mode

Others

- whoami
- security considerations
- always prepare a backup
- read the log
- maximize utilisation of `odoo-bin`

Others

- restart service / upgrade moudles / reload browser?
- Experienced Odoo developers generally don't use the database management interface and perform operations from the command line

BEAR IN MIND

DEBUGGING AND LOGGING IS YOUR MAGIC WAND

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