PPDM

Environment setup

Prepare the Server

1. Choose the Operating System:
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   a. Most commonly, Ubuntu LTS (e.g., 20.04 or 22.04) is used for deploying Odoo.
3. Update the System:

sudo apt update
sudo apt upgrade -y

2. Install Dependencies

1. Install Python and Other Dependencies:

sudo apt install python3 python3-pip build-essential wget python3-dev python3-venv \
        libxml2-dev libxslt1-dev zlib1g-dev libsasl2-dev libldap2-dev \
        libpng-dev libjpeg-dev libpq-dev libffi-dev libssl-dev -y

2. Install PostgreSQL:

sudo apt install postgresql postgresql-server-dev-all -y
sudo -i -u postgres
createuser --createdb --username postgres --no-createrole --no-superuser
--pwprompt odoo
createdb --username postgres --owner odoo odoo
exit

3. Install Odoo

1. Create a System User for Odoo:

sudo adduser --system --home=/opt/odoo --group odoo

2. Download Odoo Source Code:

   sudo apt install git

   sudo git clone https://www.github.com/odoo/odoo --depth 1 --branch 14.0 --single-branch /opt/odoo/odoo

3. Create a Python Virtual Environment:

cd /opt/odoo

sudo python3 -m venv odoo-venv

source odoo-venv/bin/activate

pip install wheel

pip install -r odoo/requirements.txt

Deactivate

4. Install Wkhtmltopdf (for PDF generation in Odoo):

   sudo apt install xfonts-75dpi

   wget https://github.com/wkhtmltopdf/packaging/releases/download/0.12.6-1/wkhtmltox_0.12.6-1.bionic_amd64.deb

   sudo dpkg -i wkhtmltox_0.12.6-1.bionic_amd64.deb

   sudo apt -f install -y

4. Configure Odoo

1. Create Odoo Configuration File:

Add the following content to the file:

```
[options]
; This is the password that allows database operations:
admin_passwd = admin
db_host = False
db_port = False
db_user = odoo
db_password = False
addons_path = /opt/odoo/odoo/addons
```

2.Set File Permissions:

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

5. Setup Systemd Service

1.Create a Systemd Service File for Odoo:

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

Add the following content:

```
[Unit]
Description=Odoo
Documentation=https://www.odoo.com
[Service]
# Ubuntu/Debian convention:
Type=simple
User=odoo
```

```
ExecStart=/opt/odoo/odoo-venv/bin/python3 /opt/odoo/odoo/odoo-bin -c
/etc/odoo.conf
[Install]
WantedBy=default.target
```

2. Start and Enable the Odoo Service:

sudo systemctl daemon-reload

sudo systemctl start odoo

sudo systemctl enable odoo

6. Configure Reverse Proxy with Nginx

1.Install Nginx:

sudo apt install nginx -y

2.Create Nginx Configuration for Odoo:

sudo nano /etc/nginx/sites-available/odoo

Add the following content:

```
server {

    listen 80;

    server_name your_domain_or_IP;
```

```
proxy_read_timeout 720s;

proxy_connect_timeout 720s;

proxy_send_timeout 720s;


# Add Headers for odoo proxy mode

proxy_set_header X-Forwarded-Host $host;

proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;

proxy_set_header X-Forwarded-Proto $scheme;

proxy_set_header X-Real-IP $remote_addr;


# log files

access_log /var/log/nginx/odoo.access.log;

error_log /var/log/nginx/odoo.error.log;


# Proxy requests to odoo backend

location / {

    proxy_pass http://127.0.0.1:8069;

    proxy_redirect off;

}


# Cache static files
```

```
    location ~* /web/static/ {

        proxy_cache_valid 200 60m;

        proxy_buffering on;

        expires 864000;

        proxy_pass http://127.0.0.1:8069;

    }

}
```

3.Enable Nginx Configuration:

```
sudo ln -s /etc/nginx/sites-available/odoo /etc/nginx/sites-enabled/

sudo nginx -t

sudo systemctl restart nginx
```

7. Secure the Installation

1.Secure Odoo with SSL (optional but recommended):

- Use Let's Encrypt for a free SSL certificate.

```
sudo apt install certbot python3-certbot-nginx -y

sudo certbot --nginx -d your_domain_or_IP
```

2.Enable Firewall:

sudo ufw allow OpenSSH

sudo ufw allow 'Nginx Full'

sudo ufw enable

8. Access Odoo

- Open a web browser and navigate to `http://your_domain_or_IP`. You should see the Odoo login page.