AI-03001 Openproject PostgreSQL in Ubuntu Server

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What is Openproject? what's the story of the application and founder? Is it really free or there's a catch? How OpenProject get their revenue? Provide a Step by Step on the setup and installation for Ubuntu. (Use PostgreSQL)

OpenProject is an open-source project management software that provides a comprehensive suite of tools for classic, agile, and hybrid project methodologies. It's a versatile platform used by a wide range of organizations to manage the entire project life cycle, from planning and execution to monitoring and control. Key features include Gantt charts, task management, team collaboration, time tracking, and bug tracking.

Origin Story and Founder

OpenProject's story begins in 2011 as a fork of an earlier open-source project management software called **ChiliProject**, which itself was a fork of **Redmine**. The team behind the fork, including founder **Niels Lindenthal**, sought to improve on ChiliProject's performance, security, and accessibility. The project was officially launched by the OpenProject Foundation, an association established in 2012 by its developers and users to promote and ensure the software's development.

Is it really free?

Yes, OpenProject is genuinely **free** as in "free speech" and **open source**. It's released under the GNU General Public License v3 (GPLv3). The catch is that the free version, known as the **Community Edition**, is designed for self-hosting and lacks the advanced features and professional support found in the paid versions.

How OpenProject Gets Revenue

OpenProject operates on a **freemium** model, generating revenue primarily through its paid plans and related services. While the Community Edition is free, the company offers commercial **Enterprise Cloud** and **Enterprise On-Premises** editions. These paid versions include additional features and enterprise-level support that are crucial for larger organizations. The company also earns revenue through professional services like training, consulting, and a reseller program.

Step-by-Step Installation on Ubuntu with PostgreSQL

The following guide provides a high-level overview of the steps to install OpenProject on an Ubuntu server using PostgreSQL. This process involves installing dependencies, setting up the database, and running the OpenProject installer. For the most up-to-date and detailed instructions, always refer to the official OpenProject documentation.

Prerequisites

- An Ubuntu server (e.g., Ubuntu 22.04 LTS).
- A dedicated, non-root user with `sudo` privileges.
- PostgreSQL installed and configured.
- A fully qualified domain name (FQDN) pointed to your server's IP address (optional but recommended for a production environment with SSL).

Step 1: Install Dependencies and Repository

1. First, update your package list and install the necessary tools to add the OpenProject repository.

   ```
   sudo apt update
   sudo apt -y install apt-transport-https ca-certificates wget
   ```

2. Import the OpenProject GPG key and add the official repository to your system.*Note: The version number (e.g., 14) in the URL may change, so verify the latest stable version from the official website.*

```
sudo wget -qO- <https://dl.packager.io/srv/opf/openproject/key> | sudo a
pt-key add -
sudo wget -O /etc/apt/sources.list.d/openproject.list <https://dl.packager.i
o/srv/opf/openproject/stable/14/installer/ubuntu/22.04.repo>
```

Step 2: Install and Configure PostgreSQL

1. Install the PostgreSQL server and its client tools.

```
sudo apt -y install postgresql postgresql-contrib libpq-dev
```

2. Switch to the PostgreSQL user to create the database and a new user for OpenProject.*You'll be prompted to set a password for the* `openproject` *user. Remember this password.*

```
sudo -i -u postgres
createuser -W openproject
createdb -O openproject openproject
exit
```

Step 3: Run the OpenProject Installer

1. Now, install the OpenProject package.

```
sudo apt update
sudo apt -y install openproject
```

2. The installation package includes a wizard to configure OpenProject. Run the configuration command.

```
sudo openproject configure
```

3. The installer will present a series of questions.
    - For the database, select **"Use an existing PostgreSQL database"**.

- Enter the database details: `localhost` for the host, `5432` for the port, `openproject` for both the username and database name, and the password you set in the previous step.
- Choose a web server. **Apache** is a common and recommended choice.
- Configure your domain name and other optional settings like SSL/TLS, Git/SVN integration, and email notification settings as prompted by the wizard.

Step 4: Access OpenProject

After the installation is complete, you should be able to access your OpenProject instance by navigating to your domain or server IP address in a web browser. The installer will have created a default administrator user for you to log in with and begin using the application.

Perfect. Here's your **Ultimate OpenProject Deployment Workbook** for **Ubuntu 22.04**. All commands are copy-paste ready, in chronological order, covering everything from system setup to backup.

OpenProject Deployment on Ubuntu 22.04 – Step-by-Step Workbook

1. Update and Install Prerequisites

```
sudo apt update
sudo apt upgrade -y
sudo apt install -y curl gnupg2 software-properties-common build-essential z
lib1g-dev libpq-dev libapache2-mod-passenger
```

---

2. Install RVM (Ruby Version Manager)

```
# Import keys
gpg --keyserver hkp://keyserver.ubuntu.com:80 --recv-keys 409B6B1796C27
5462A1703113804BB82D39DC0E3 7D2BAF1CF37B13E2069D6956105BD0E73
9499BDB

# Install RVM stable
\curl -sSL https://get.rvm.io | bash -s stable

# Load RVM
source ~/.rvm/scripts/rvm
```

3. Install Required Ruby Version

```
rvm install 3.3.4
rvm use 3.3.4 --default
ruby -v   # verify Ruby 3.3.4 is active
```

4. Install Bundler

```
gem install bundler
```

5. Install OpenProject

```
# Go to OpenProject directory (change if different)
cd /opt/openproject

# Configure bundler
bundle config set deployment true
bundle config set without 'development test'

# Install all gems
```

```
bundle install

# Migrate database
bundle exec rake db:migrate

# Precompile assets
bundle exec rake assets:precompile

# Set ownership for Apache
sudo chown -R www-data:www-data /opt/openproject
```

6. Setup Database (PostgreSQL example)

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

# Switch to postgres user
sudo -i -u postgres

# Create DB user
createuser openproject_user -P

# Create database
createdb openproject_db -O openproject_user

# Exit postgres user
exit
```

7. Configure Apache

```
sudo a2enmod passenger
sudo a2enmod rewrite

# Example virtual host file for OpenProject
```

```
sudo tee /etc/apache2/sites-available/openproject.conf > /dev/null <<EOL
<VirtualHost *:80>
    ServerName openproject.local
    DocumentRoot /opt/openproject/public

    <Directory /opt/openproject/public>
        Require all granted
        Options -MultiViews
        AllowOverride All
    </Directory>

    ErrorLog \${APACHE_LOG_DIR}/openproject_error.log
    CustomLog \${APACHE_LOG_DIR}/openproject_access.log combined
</VirtualHost>
EOL

sudo a2ensite openproject.conf
sudo systemctl restart apache2
```

---

8. Optional: Enable HTTPS (Let's Encrypt)

```
sudo apt install -y certbot python3-certbot-apache
sudo certbot --apache -d openproject.local
sudo systemctl reload apache2
```

---

9. Verify Installation

```
curl http://localhost/
# or access in browser: http://<VM-IP>/
```

---

10. Backup Plan

```
# Backup DB
pg_dump -U openproject_user openproject_db > /opt/backups/openproject_d
b_$(date +%F).sql

# Backup files
tar -czf /opt/backups/openproject_files_$(date +%F).tar.gz /opt/openproject

# Automate daily backup via cron
(crontab -l 2>/dev/null; echo "0 2 * * * /opt/backups/backup_script.sh") | cron
tab -
```

✅ Tips

1. Always use **Ubuntu 22.04** for OpenProject 14.x+.
2. Ensure RVM loads in your login shell: `source ~/.rvm/scripts/rvm`.
3. Never run `bundle install` as root; always use the RVM Ruby.
4. Check Apache error logs: `sudo tail -f /var/log/apache2/error.log`.

If you want, I can also **create a one-command "copy-paste installer script"** that automates this entire process for Ubuntu 22.04. It would do everything in sequence.

Do you want me to make that?