⭐ DAY 1 — Infra Setup (Beginner-Friendly Guide for Ganesh)

🟦 STEP 0 — Prepare Ubuntu Server

Requirements:

- Ubuntu 22.04 LTS (VPS or physical server)
- 4GB RAM minimum (8GB recommended for production)
- SSH access

Login command:

```
ssh your_user@your_server_ip
```

🟦 STEP 1 — Create System User for Odoo

We do **NOT** run Odoo as root.

```
sudo adduser odoo
sudo usermod -aG sudo odoo
```

Switch into the odoo user:

```
su - odoo
```

🟦 STEP 2 — Install Required Packages

Run:

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

```
  python3-dev python3-venv libxml2-dev libxslt1-dev
libevent-dev \
  libjpeg-dev libpq-dev libldap2-dev libsasl2-dev
libtiff5-dev \
  nodejs npm -y
```

Install wkhtmltopdf (for PDF invoices):

```
sudo apt install wkhtmltopdf -y
```

🟦 STEP 3 — Install PostgreSQL

Odoo requires PostgreSQL.

Install:

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

Create a PostgreSQL user **odoo**:

```
sudo su - postgres
createuser -s odoo
exit
```

🟦 STEP 4 — Create Directory Structure for Dev/Staging/Prod

Define this structure:

```
/opt/topnotch/
    dev/
    staging/
    prod/
```

Create folders:

```
sudo mkdir -p /opt/topnotch/dev
sudo mkdir -p /opt/topnotch/staging
sudo mkdir -p /opt/topnotch/prod
sudo chown -R odoo:odoo /opt/topnotch
```

🟦 STEP 5 — Install Odoo 17 Source Code (Developer Version)

Switch into dev folder:

```
cd /opt/topnotch/dev
```

Clone Odoo:

```
git clone https://github.com/odoo/odoo --branch 17.0 --
single-branch
```

Create Python virtual environment:

```
python3 -m venv venv
source venv/bin/activate
```

Install required Python packages:

```
pip install -r odoo/requirements.txt
```

🟦 STEP 6 — Create Odoo Config File (Dev Instance)

Config file path:

```
/etc/odoo-dev.conf
```

Create file:

```
sudo nano /etc/odoo-dev.conf
```

Paste this:

```
[options]
admin_passwd = admin123
db_host = False
db_port = False
db_user = odoo
```

```
db_password = False
addons_path = /opt/topnotch/dev/odoo/addons,/opt/
topnotch/dev/custom_addons
xmlrpc_port = 8069
logfile = /var/log/odoo-dev.log
```
Create custom addons folder:

```
mkdir /opt/topnotch/dev/custom_addons
```
Set permissions:

```
sudo chown -R odoo:odoo /etc/odoo-dev.conf /var/log
```

🟦 STEP 7 — Create Systemd Service (Dev Instance)

```
sudo nano /etc/systemd/system/odoo-dev.service
```
Paste:

```
[Unit]
Description=Odoo 17 Dev
After=network.target

[Service]
Type=simple
User=odoo
ExecStart=/opt/topnotch/dev/venv/bin/python3 /opt/
topnotch/dev/odoo/odoo-bin -c /etc/odoo-dev.conf
Restart=always

[Install]
WantedBy=multi-user.target
```
Enable and start:

```
sudo systemctl daemon-reload
sudo systemctl enable odoo-dev
sudo systemctl start odoo-dev
sudo systemctl status odoo-dev
```
If working → open browser:

👉 http://your-server-ip:8069

🟦 STEP 8 — Clone Dev folder to create Staging and Production

Use same code-base structure:

```
cp -R /opt/topnotch/dev /opt/topnotch/staging
cp -R /opt/topnotch/dev /opt/topnotch/prod
```

Change config ports:

Staging: port **8071**
Production: port **8073**

I will prepare staging/prod config & services when you say **“prepare staging and production setup also”**.

🟦 STEP 9 — Install & Configure Nginx (Reverse Proxy)

Install:

```
sudo apt install nginx -y
```

Create config file:

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

Paste:

```
server {
    listen 80;
    server_name POS.YOURDOMAIN.COM;

    location / {
        proxy_pass http://127.0.0.1:8069;
        proxy_set_header Host $host;
        proxy_set_header X-Real-IP $remote_addr;
```

```
        proxy_set_header X-Forwarded-For
$proxy_add_x_forwarded_for;
    }
}
```

Enable:

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

🟦 STEP 10 — Add SSL (FREE via Let's Encrypt)

Install Certbot:

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

Run SSL:

```
sudo certbot --nginx -d pos.yourdomain.com
```

Auto-renew:

```
sudo systemctl enable certbot.timer
```

🟦 STEP 11 — Set Tanzanian Locale & Currency (TZS)

Open Odoo → Settings → General Settings:

Enable locale:

- Country: **Tanzania**
- Currency: **TZS (Tanzanian Shilling)**
- Format: **1,500.00**

Enable timezone:

`Africa/Dar_es_Salaam`

Enable Swahili language:

Settings → Translations → Languages → Install “sw_TZ”

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