**WordPress Setup on Ubuntu 22.04 with Nginx, Custom Domain, SSL & Bridged Networking**

### 📁 Server Environment

* **OS**: Ubuntu 22.04 LTS (VMware Workstation Pro 17)
* **Web Server**: Nginx
* **PHP**: php8.1-fpm
* **Database**: MySQL
* **CMS**: WordPress (latest)

### 🚀 Step-by-Step Setup & What You Learned

#### 1. Install Required Packages

sudo apt update  
sudo apt install nginx php-fpm php-mysql mysql-server unzip curl

#### 2. Download & Configure WordPress

cd /var/www/  
sudo mkdir ayonxyz.com  
cd ayonxyz.com  
sudo wget https://wordpress.org/latest.zip  
sudo unzip latest.zip  
sudo mv wordpress/\* .  
sudo rm -rf wordpress latest.zip  
sudo cp wp-config-sample.php wp-config.php  
sudo chown -R www-data:www-data /var/www/ayonxyz.com

#### 3. Configure wp-config.php

define('DB\_NAME', 'wordpress');  
define('DB\_USER', 'wpuser');  
define('DB\_PASSWORD', 'your\_password');  
define('DB\_HOST', 'localhost');  
define('WP\_HOME', 'http://ayonxyz.com');  
define('WP\_SITEURL', 'http://ayonxyz.com');

#### 4. Setup MySQL Database

sudo mysql -u root -p  
CREATE DATABASE wordpress;  
CREATE USER 'wpuser'@'localhost' IDENTIFIED BY 'your\_password';  
GRANT ALL PRIVILEGES ON wordpress.\* TO 'wpuser'@'localhost';  
FLUSH PRIVILEGES;  
EXIT;

### 🚩 Nginx Configuration

File: /etc/nginx/sites-available/ayonxyz.com

server {  
 listen 80;  
 server\_name ayonxyz.com www.ayonxyz.com;  
 return 301 https://$host$request\_uri;  
}  
  
server {  
 listen 443 ssl;  
 server\_name ayonxyz.com www.ayonxyz.com;  
  
 ssl\_certificate /etc/ssl/certs/ayonxyz-selfsigned.crt;  
 ssl\_certificate\_key /etc/ssl/private/ayonxyz-selfsigned.key;  
 ssl\_dhparam /etc/ssl/certs/dhparam.pem;  
  
 root /var/www/ayonxyz.com;  
 index index.php index.html index.htm;  
  
 access\_log /var/log/nginx/ayonxyz\_access.log;  
 error\_log /var/log/nginx/ayonxyz\_error.log;  
  
 location / {  
 try\_files $uri $uri/ /index.php?$args;  
 }  
  
 location ~ \.php$ {  
 include snippets/fastcgi-php.conf;  
 fastcgi\_pass unix:/var/run/php/php8.1-fpm.sock;  
 }  
  
 location ~ /\.ht {  
 deny all;  
 }  
}

#### Enable Site

sudo ln -s /etc/nginx/sites-available/ayonxyz.com /etc/nginx/sites-enabled/  
sudo nginx -t  
sudo systemctl reload nginx

### 🔐 SSL Setup (Self-Signed)

sudo openssl req -x509 -nodes -days 365 -newkey rsa:2048 \  
-keyout /etc/ssl/private/ayonxyz-selfsigned.key \  
-out /etc/ssl/certs/ayonxyz-selfsigned.crt  
  
sudo openssl dhparam -out /etc/ssl/certs/dhparam.pem 2048

### 🌐 Local Domain Resolution

Edit your hosts file on the desktop:

192.168.0.104 ayonxyz.com www.ayonxyz.com

You learned that you need this because ayonxyz.com is not a real DNS domain.

### 🌟 WordPress Admin Panel Access

Once WordPress is installed:

* Update the wp\_options table if domain/IP changes
* You can also update from inside WordPress:
  + Settings → General → WordPress Address + Site Address

### 🕹️ Bridged Networking

* Switched from NAT to **Bridged Adapter** in VMware
* Learned that IP changes — must reconfigure:
  + Hosts file
  + Database siteurl
  + Nginx (if IP-based config was used)

### 🌐 Access Issues from Mobile

* You learned mobile cannot resolve custom local domains like ayonxyz.com unless:
  + You update mobile hosts file (rooted) OR
  + Use real DNS + public IP setup

### 🎮 Bonus

* Set up custom access/error logs
* Understood try\_files $uri $uri/ /index.php?$args;
* Understood how to redirect HTTP to HTTPS using Nginx
* Dealt with WordPress database caching old URLs/IPs

### ✅ Summary

You’ve successfully:

* Deployed a WordPress site on Ubuntu using Nginx
* Used SSL (self-signed)
* Bridged your VM to the LAN
* Simulated a real-world domain deployment locally

Next up:

* Buy a domain and use Cloudflare or Namecheap
* Use Let’s Encrypt for valid HTTPS
* Add firewall and fail2ban for security

Keep it up, bro! You’re building real production-grade skills here. ✨