Node.js Deployment

> Steps to deploy a Node.js app to AWS using PM2, NGINX as a reverse proxy and an SSL from LetsEncrypt

1. Create Free AWS Account

Create free AWS Account at https://aws.amazon.com/

2. Create and Lauch an EC2 instance and SSH into machine

I would be creating a t2.medium ubuntu machine for this.

3. Install Node and NPM

curl -sL https://deb.nodesource.com/setup_18.x | sudo -E bash -

sudo apt install nodejs

node --version

4. Clone your project from Github

git clone https://github.com/

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5. Install dependencies and test app

sudo npm i pm2 -g

pm2 start index

Other pm2 commands

pm2 show app

pm2 status

pm2 restart app

pm2 stop app

pm2 logs (Show log stream)

pm2 flush (Clear logs)

To make sure app starts when reboot

pm2 startup ubuntu

6. Setup Firewall

sudo ufw enable

sudo ufw status

sudo ufw allow ssh (Port 22)

sudo ufw allow http (Port 80)

sudo ufw allow https (Port 443)

7. Install NGINX and configure

sudo apt install nginx

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

Add the following to the location part of the server block

```
    server_name yourdomain.com www.yourdomain.com;

    location / {
        proxy_pass http://localhost:3000; #whatever port your app runs
on
        proxy_http_version 1.1;
        proxy_set_header Upgrade $http_upgrade;
        proxy_set_header Connection 'upgrade';
        proxy_set_header Host $host;
        proxy_cache_bypass $http_upgrade;
    }
```

Check NGINX config

sudo nginx -t

Restart NGINX

sudo nginx -s reload

8. Add SSL with LetsEncrypt

sudo add-apt-repository ppa:certbot/certbot

sudo apt-get update

sudo apt-get install python3-certbot-nginx

sudo certbot --nginx -d yourdomain.com -d www.yourdomain.com

Only valid for 90 days, test the renewal process with

certbot renew --dry-run