

AWS EC2 Task: Deploy a Node.js App

Objective

Launch an EC2 instance, install Node.js, deploy a simple Node.js web app, and make it accessible via browser.

Task Steps

1. Launch EC2 Instance

- AMI: Amazon Linux 2
- Instance Type: t2.micro
- Security Group: Allow ports 22 (SSH) and 3000 (Node.js)
- Key Pair: Create or use existing

2. Connect to EC2 Instance

Use SSH:

```
ssh -i "your-key.pem" ec2-user@<your-ec2-public-ip>
```

3. Install Node.js & Git

```
curl -sL https://rpm.nodesource.com/setup_16.x | sudo bash -  
sudo yum install -y nodejs git
```

4. Clone Sample Node.js App

```
git clone https://github.com/heroku/node-js-sample.git  
cd node-js-sample
```

5. Install Dependencies & Run App

```
npm install  
node index.js  
(Default port: 3000)
```

6. Modify Security Group

Allow inbound TCP on port 3000 from 0.0.0.0/0

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7. Access App in Browser

Visit: `http://<your-ec2-public-ip>:3000`

8. Optional: Make Node App Run in Background

```
sudo npm install -g pm2
```

```
pm2 start index.js
```

```
pm2 startup
```

```
pm2 save
```

Deliverables

- Screenshot of Node.js app running in browser
- Terminal showing app started
- EC2 instance dashboard

Bonus Challenges

- Deploy your own custom Node.js app
- Connect with MongoDB Atlas or local MongoDB
- Use Nginx as a reverse proxy