

Project 2: Node.js App with Reverse Proxy, CI/CD, MongoDB, and Artifact Repo

Goal:

Deploy a Node.js Express app with Nginx reverse proxy, MongoDB, and Jenkins CI/CD.

Requirements:

- Jenkins master: Ubuntu
- Jenkins agent: Amazon Linux
- App EC2s: CentOS 7

Ansible roles:

- Install Node.js, Nginx
- Install and configure MongoDB
- Deploy app + configure reverse proxy

Artifact:

- Jenkins stores zipped app builds
- Retrieve specific build version from a Nexus repo

Pipeline:

- Jenkins pulls the code from GitHub
- Builds and packages the Node.js app
- Uploads the artifact to Nexus repository
- Triggers Ansible playbook on Jenkins agent
- Ansible deploys the app, configures reverse proxy

- App is accessible publicly via browser (port 80 or 3000)

Expected Output:

- Web page displays: "I am building pipelines like a pro!"