

Documentation Of Mario Project

1. Launch EC2 Instance (Ubuntu OS)

2. Create a S3 bucket (replace the name of bucket in [backend.tf](#) file with your bucket name)

3. Update your system

```
sudo apt update -y
```

4. Setup Docker:

```
sudo apt install docker.io -y
```

```
sudo systemctl start docker
```

```
sudo usermod -aG docker ubuntu
```

```
newgrp docker
```

```
docker --version
```

5. Setup Terraform:

```
wget -O- https://apt.releases.hashicorp.com/gpg | sudo gpg  
--dearmor -o /usr/share/keyrings/hashicorp-archive-keyring.gpg
```

```
echo "deb
```

```
[signed-by=/usr/share/keyrings/hashicorp-archive-keyring.gpg]
```

```
https://apt.releases.hashicorp.com $(lsb_release -cs) main" |  
sudo tee /etc/apt/sources.list.d/hashicorp.list  
  
sudo apt update && sudo apt install terraform
```

6. Setup AWS CLI:

```
curl "https://awscli.amazonaws.com/awscli-exe-linux-x86_64.zip"  
-o "awscliv2.zip"  
  
sudo apt install unzip  
  
unzip awscliv2.zip  
  
sudo ./aws/install  
  
aws --version
```

7. Install kubectl

Download the latest release with the command:

```
curl -LO "https://dl.k8s.io/release/$(curl -L -s  
https://dl.k8s.io/release/stable.txt)/bin/linux/amd64/kubectl"
```

8. Install kubectl:

```
sudo install -o root -g root -m 0755 kubectl  
/usr/local/bin/kubectl
```

Note: If you do not have root access on the target system, you can still install kubectl to the ~/.local/bin directory:

```
chmod +x kubectl  
  
mkdir -p ~/.local/bin  
  
mv ./kubectl ~/.local/bin/kubectl
```

9. Configure AWS

- `Aws configure - -profile eks`

10. Clone the Repo

<https://github.com/itsdevopsprofile/Project-Super-Mario.git>

11. Initialise Terraform

- `terraform init`

12. Apply the changes

- `Terraform apply -auto-approve`

13. log in to cluster

```
aws eks update-kubeconfig --name EKS_CLOUD --profile tf-user  
--region ap-southeast-1
```

- `Kubectl apply -f` (service and deployment get created)
- `kubectl get service`
(copy the external IP and access your application)