

```
1.
Create vpc
    CIDR 10.0.0.0/16

    2-Public subnets
        public-01 CIDR 10.0.1.0/24
        public-02 CIDR 10.0.2.0/24
    2-Private subnets
        private-01 CIDR 10.0.3.0/24
        private-02 CIDR 10.0.4.0/24

    Public Route Table
        Internet Gateway

    Private Route Table
        NAT Gateway in public subnet -- To download images or container service will
fail

    Associate Route Tables with subnets

2.
Create ALB Security group
    inbound - ipv4 from anywhere

Create ALB to cluster Security Group
    inbound - All Traffic from ALB_SG

3.
Create Application Load Balancer - ALB
    Create target group
        IP addressing
        Use VPC CIDR address

    Create ALB
        internet Facing
        Network mapping - select vpc
        Select AZ's
        Select Security Group -- Internet Facing SG
        Select Target Group -- port 3000

4.
Create NAT gateway in public AZ
    connect to private route table - Needed for ECS service to get application/task

5.
Create ECS Cluster

6.
Create application
    docker build -t node-app-port80 .

    aws ecr get-login-password \
    --region us-east-1 \
| docker login \
    --username AWS \
    --password-stdin 891214930254.dkr.ecr.us-east-1.amazonaws.com
```

or use
ECR Public Gallery <https://gallery.ecr.aws/>
in the cluster task

7.
push application to ECR

8.
Create Cluster Task

9.
Create Cluster service
 Networking > private Subnets
 Security Group > Internet ALB SG not internal/cluster SG

 Loadbalancer
 listener
 port 80

Check to see if the desired number of tasks are running and stable.

CI/CD

10.
push to github

Private Subnets

SG from Lad Ballancer to container

Load Ballancer

Internet Facing w/Public Subnets

ALB_SG

From Internet to ALB

Anybody

Container_SG

From ALB_SG to Container_SG

ALB_SG only

Target Group

IP Based