**AWS SAMPLE PROJECT**

**Date: 22.03.2018**

**Set Up The BASTION HOST:**

To setup a Bastion host Prerequisite

1) VPC

2) 2 – Route tables

3) 2 – subnets

4) 2 – instances

All are creat new one . Don't take default vpc … … ….. ….

1) Need to login AWS console

2) VPC Is Under Networking go to the network under network select VPC $ Creat new VPC.

3) Then go to the subnets and create two subnets one is public and one is private Both are in Different A.Z .

4) Then go to the Route table $ create two route tables one is public and one is private.

5) Then go to the interenet Gateway $ Creat Internet gateway To Provide the internet to public Subnets .

6) This internet gateway need to attach public route table. ( Go the Route tables – Routes - Edit Routes Add IGW )

7) Need to create NAT gateway / NAT instance To Provide the Internet to Private Subnets .

( Here is the Nate Gateway is chargeable / Nat instance is Not Chargeable)

8) To creat a Nat Gateway Go to Nat Gateway $ Creat it .While creating Nat Gateway It is attached with Public Subnets

9) If you Creat NAT instance – Go to community image – Search for nat Instance $ Creat Nat instance . While creating Nat instance it is attache with Public Subnets

10 ) Ater creating Nat Instance select NAT -instance and go to actions – select **Networking –** change **sourceDest. Check in that s**tatus is by default is enable we need to disable it.

11) After Creating This NAT – gateway or NAT instance need attach private route table – Go Route tables – Routes – Add Nat Gateway / Nat instance here

12 ) Now need to create two ec2-instances like one is Public instance $ One is Private .

while creating Public Instance Need to attach public subnet $ same Private instance Is Attach private subnet . In security groups need to open HTTP ,HTTPS,SSH,TOMCAT PORT need to configure.

**13) Nginx:-**  In Public ec2 instance need to install nginx and configure the below file

**vi** **/ete/nginx/conf.d/default\_conf**

upstream appset {

server 192.168.2.120:8080;

}

server {

listen 80;

location / {

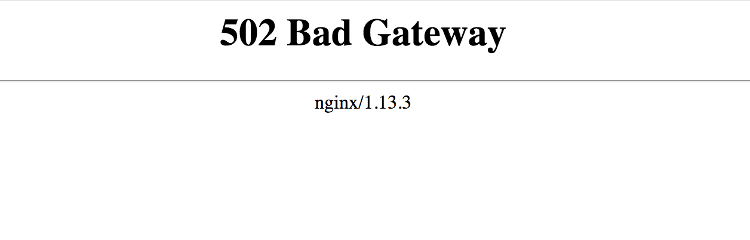
proxy\_pass http://appset;

}

}

**14) Tomcat**:- In another Private ec2 instance need to configure tomcat and this local IP and Port numbers we need to configure in Public instance

**Issues with configuration and solution**:-



## Diagnosis

Environment

* Any Linux distribution that ships with SELinux

Diagnostic Steps

Check for errors in the SELinux logs:

sudo cat /var/log/audit/audit.log | grep nginx | grep denied

## Cause

SELinux prevent connections on port 8080 or 8085 for the nginx process.

## Resolution

## Execute the following command in your server:

## cd /var/logs/nginx/

sudo cat /var/log/audit/audit.log | grep nginx | grep denied | audit2allow -M mynginx

sudo semodule -i mynginx.pp

**Output:-** Finally we will hit the Nginx Ip( 13.92.137.75:80),will get like this output.

