

1. **Terraform Script name – This will provision the Tomcat server -**

**instance\_tomcat.tf**

provider "aws" {

region = "us-east-1"

}

resource "aws\_instance" "myins\_tomcat" {

ami = "ami-04763b3055de4860b"

instance\_type = "t2.micro"

vpc\_security\_group\_ids = [aws\_security\_group.atls.id]

#iam\_instance\_profile = "${aws\_iam\_instance\_profile.test1\_profile.name}"

key\_name = "mb777"

user\_data = "${file("use\_dat\_tomcat.sh")}"

tags = {

Name = "myins\_tomcat"

}

}

resource "aws\_security\_group" "atls" {

name = "atls"

description = "Allow TLS inbound traffic"

vpc\_id = "vpc-4b7ea436"

ingress {

description = "TLS from VPC"

from\_port = 22

to\_port = 22

protocol = "tcp"

cidr\_blocks = ["0.0.0.0/0"]

}

ingress {

description = "TLS from VPC"

from\_port = 8080

to\_port = 8080

protocol = "tcp"

cidr\_blocks = ["0.0.0.0/0"]

}

ingress {

description = "TLS from VPC"

from\_port = 8090

to\_port = 8090

protocol = "tcp"

cidr\_blocks = ["0.0.0.0/0"]

}

egress {

from\_port = 0

to\_port = 0

protocol = "-1"

cidr\_blocks = ["0.0.0.0/0"]

}

tags = {

Name = "atls"

}

}

1. User data files which is passed into the above terraform files for Jenkins –

use\_dat\_tomcat.sh

#!/bin/bash

sudo apt-get update

sudo apt-get install openjdk-8-jdk -y

sudo su

cd /opt

wget https://mirrors.gigenet.com/apache/tomcat/tomcat-9/v9.0.41/bin/apache-tomcat-9.0.41.tar.gz

tar -zxvf apache-tomcat-9.0.41.tar.gz

cd apache-tomcat-9.0.41

cd bin

chmod +x startup.sh

chmod +x shutdown.sh

ln -s /opt/apache-tomcat-9.0.41/bin/startup.sh /usr/local/bin/tomcatup

ln -s /opt/apache-tomcat-9.0.41/bin/shutdown.sh /usr/local/bin/tomcatdown

1. **Terraform script Name – This will create a Jenkins Server**

**instance\_jenkins.tf**

resource "aws\_instance" "myins\_jenkins" {

ami = "ami-04763b3055de4860b"

instance\_type = "t2.micro"

vpc\_security\_group\_ids = ["atls"]

#iam\_instance\_profile = "${aws\_iam\_instance\_profile.test1\_profile.name}"

key\_name = "mb777"

user\_data = "${file("use\_data\_jenkins.sh")}"

tags = {

Name = "myins\_jenkins"

}

}

1. User data files which is passed into the above terraform files for Jenkins –

**Use\_data\_jenkins.sh**

#!/bin/bash

sudo apt-get update

sudo apt-get install openjdk-8-jdk -y

sudo su

wget -q -O - https://pkg.jenkins.io/debian/jenkins-ci.org.key | sudo apt-key add - > /tmp.txt

echo deb https://pkg.jenkins.io/debian-stable binary/ | sudo tee /etc/apt/sources.list.d/jenkins.list > /tmp1.txt

sudo apt-get update

sudo apt-get install jenkins -y --allow-unauthenticated

sudo systemctl start jenkins

sudo ufw allow 8080 > tmp2.txt

sudo ufw allow OpenSSH > tmp3.txt

## install maven

cd /opt

wget <http://apache.mirrors.pair.com/maven/maven-3/3.6.3/binaries/apache-maven-3.6.3-bin.tar.gz>

sudo tar -xvzf apache-maven-3.6.3-bin.tar.gz