**Rest App Run Book**

1. Create EC2 instance.
2. Upgrade Java.

Jre

sudo yum install java-1.8.0

Jdk

sudo yum install java-1.8.0-openjdk-devel

sudo /usr/sbin/alternatives --config java

sudo /usr/sbin/alternatives --config javac

1. Install tomcat and mysql

sudo yum update

sudo yum install tomcat7 tomcat7-webapps tomcat7-admin-webapps

sudo service tomcat7 start

sudo yum install mysql-server

sudo service mysqld start

1. Change mysql password

/usr/libexec/mysql55/mysqladmin -u root password 'admin'

1. Login and create database and tables.

mysql -u root –p

mysql> CREATE DATABASE Company;

Query OK, 1 row affected (0.00 sec)

mysql>

mysql> use Company

Database changed

mysql> source company\_company.sql;

Query OK, 1 row affected (0.00 sec)

mysql> source company\_companydetails.sql;

1. Copy msql connector to lib dir

/usr/share/tomcat7/lib

apache-tomcat-8.5.9\lib\mysql-connector-java-5.1.40-bin.jar

1. Add db configurations

/etc/tomcat8/context.xml

<Resource

name="jdbc/CompanyDB"

auth="Container"

type="javax.sql.DataSource"

maxActive="100"

maxIdle="30"

maxWait="10000"

driverClassName="com.mysql.jdbc.Driver"

url="jdbc:mysql://localhost:3306/Company"

username="root"

password="admin"

/>

RDS connection

<Resource

name="jdbc/CompanyDB"

auth="Container"

type="javax.sql.DataSource"

maxActive="100"

maxIdle="30"

maxWait="10000"

driverClassName="com.mysql.jdbc.Driver"

url="jdbc:mysql://companydb.cxjwxn2f49bj.us-east-1.rds.amazonaws.com:3306/Company"

username="root"

password="Password"

/>

1. Deploy application.

sudo su -

[root@ip-172-31-18-221 ~]#

[root@ip-172-31-18-221 ~]# cd /var/lib/tomcat7/webapps

[root@ip-172-31-18-221 webapps]# ls -lrt

total 12

drwxr-xr-x 3 tomcat tomcat 4096 Dec 12 06:55 ROOT

drwxr-xr-x 7 tomcat tomcat 4096 Dec 12 06:55 examples

drwxr-xr-x 5 tomcat tomcat 4096 Dec 12 06:55 sample

[root@ip-172-31-18-221 webapps]#

[root@ip-172-31-18-221 webapps]# cp –r /home/ec2-user/CompanyDemo .

[root@ip-172-31-18-221 tomcat8]# cp /home/ec2-user/mysql-connector-java-5.1.40-bin.jar .

Issues and troubleshooting

1. Removed server3.0 jar from lib dir to resolve servlet error.
2. Add user to get admin access - tomcat-users.xml
3. Caused by: java.lang.ClassNotFoundException: org.apache.tomcat.dbcp.dbcp.BasicDataSourceFactory

sudo wget -O /usr/share/java/tomcat-dbcp-7.0.30.jar <http://search.maven.org/remotecontent?filepath=org/apache/tomcat/tomcat-dbcp/7.0.30/tomcat-dbcp-7.0.30.jar>

Add below line to jdbc connection in /etc/tomcat7/context.xml

factory="org.apache.commons.dbcp.BasicDataSourceFactory"

Directories

lrwxrwxrwx 1 root tomcat 23 Dec 12 09:49 work -> /var/cache/tomcat7/work

lrwxrwxrwx 1 root tomcat 24 Dec 12 09:49 webapps -> /var/lib/tomcat7/webapps

lrwxrwxrwx 1 root tomcat 23 Dec 12 09:49 temp -> /var/cache/tomcat7/temp

lrwxrwxrwx 1 root tomcat 16 Dec 12 09:49 logs -> /var/log/tomcat7

lrwxrwxrwx 1 root tomcat 23 Dec 12 09:49 lib -> /usr/share/java/tomcat7

lrwxrwxrwx 1 root tomcat 12 Dec 12 09:49 conf -> /etc/tomcat7

Redirect port 80 to 8080 in firewall

[root@ip-172-31-18-221 tomcat7]# sudo /sbin/iptables -t nat -I PREROUTING -p tcp --dport 80 -j REDIRECT --to-port 8080

[root@ip-172-31-18-221 tomcat7]# sudo /sbin/service iptables save

iptables: Saving firewall rules to /etc/sysconfig/iptables:[ OK ]

Access Rest Services

XML

http://<hostname/ipaddress>/CompanyDemo/rest/service/companylist

http://<hostname/ipaddress>/CompanyDemo/rest/service/company/{companyID}

eg: http:// <hostname/ipaddress>//CompanyDemo/rest/service/company/101

JSON

Set headers

Accept application/json

Content-Type application/json

Nginx

nginx.conf

upstream jrc\_tomcat\_servers {

# server 10.5.2.49:8080;

server 10.5.2.49:8081;

server 10.5.2.49:8082;

}

/etc/nginx/default.d/appserevr.conf

location /JerichoDemo/rest/service {

proxy\_set\_header X-Forwarded-For $proxy\_add\_x\_forwarded\_for;

proxy\_set\_header Host $http\_host;

proxy\_set\_header X-Forwarded-Proto https;

proxy\_redirect off;

proxy\_connect\_timeout 240;

proxy\_send\_timeout 240;

proxy\_read\_timeout 240;

proxy\_pass http://jrc\_tomcat\_servers/JerichoDemo;

}

location /artifactory {

proxy\_pass http://10.5.1.229:8081/artifactory;

}

location /Company {

proxy\_set\_header X-Forwarded-For $proxy\_add\_x\_forwarded\_for;

proxy\_set\_header Host $http\_host;

proxy\_set\_header X-Forwarded-Proto https;

proxy\_redirect off;

proxy\_connect\_timeout 240;

proxy\_send\_timeout 240;

proxy\_read\_timeout 240;

proxy\_pass http://54.85.13.45:8080/CompanyDemo;

}

}