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Apache Tomcat Server

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-> Apache Tomcat is one of the web Server

-> Apache tomcat which is used to run Java web Application

-> Apache Tomcat is free of cost server

-> Apache Tomcat is run on 8080 port number

-> Tomcat server is responsible to execute our web application and it handles user request and response

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Apache Tomcat Folder Structure

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bin : It contains the Commands / files to start and stop the server

conf : It contain the configuration file

lib : It contain the Libraries (jar file)

logs : It contain the server log

temp : Temp file will be created here (we can delete them)

webapps : This is called as Deployment folder

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Working with Apache Tomact in Linux VM

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-> Login into AWS Management Console

-> Create EC2 Instance (Amazon Linux AMI)

-> Connect to EC2 instance using MobaXterm / Putty

-> install java software using below command

$ sudo yum install java-1.8.0

-> Verify the version of java installed in our machine

$ java -version

Note: If we have multiple java versions installed then we can switch to particular version using below command

$ sudo alternatives --config java

-> We can download apache tomcat from official website

URL : https://tomcat.apache.org/download-90.cgi

-> We can find apache tomcat urls to download in official website downloads page

-> Copy the URL of tar file and execute below command in linux machine

$ wget <tomact-tar-file-url>

Note: I am using

"https://dlcdn.apache.org/tomcat/tomcat-9/v9.0.78/bin/apache-tomcat-9.0.78.tar.gz"

-> After tomact tar file got downloaded then extract Tomcat Tar file using below command

$ tar -xvf <tomact-tar-file-name>

-> Go inside tomcat folder and see folder structure

$ cd tomact-folder

$ ls -ltr

-> Go to tomact bin directory and run tomact server

$ cd bin

$ ./startup.sh

Note: Tomcat Server runs on 8080 port by default. Enable this port in security group as custom tcp

Type : Custom TCP

Protoal : TCP

Port Range: 8080

Source : Custom (0.0.0.0/0)

-> Access Tomact server from your browser

URL : http://EC2-VM-Public-IP:8080/

Note: It should open tomact server home page.

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Adminstration

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=> By default the Host Manager is only accessible from a browser running on the same machine as Tomcat. If you wish to modify this restriction, you'll need to edit the Host Manager's context.xml file.

=> File Location : <tomcat-folder>/webapps/manager/META-INF/context.xml

=> In Manager context.xml file, change <Valve> section like below (allow attribute value changed)

<Context antiResourceLocking="false" privileged="true" >

<Valve className="org.apache.catalina.valves.RemoteAddrValve" allow=".\*" />

</Context>

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Add tomact users in "<tomact-folder>/conf/tomact-users.xml" file like below

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<role rolename="manager-gui" />

<role rolename="manager-script" />

<role rolename="admin-gui" />

<user username="tomcat" password="tomcat" roles="manager-gui" />

<user username="admin" password="admin" roles="manager-gui,admin-gui,manager-script"/>

-> Stop the tomact server and start it

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Steps to deploy Maven Web Application in Tomcat Server

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1) Create Maven Web application

mvn archetype:generate -DarchetypeArtifactId=maven-archetype-webapp -DgroupId=in.com -DartifactId=flipkart\_app -DinteractiveMode=false

2) Edit "index.jsp" file like below (File Location : project-folder\src\main\webapp)

<html>

<body>

<h1><font color='red'>Welcome to Codetech Carporate Training Center..!!<font></h1>

<h2>Learn Here.. Lead Anywhere..!! </h2>

<a href=" ">Click Here To See Training Schedules</a>

</body>

</html>

3) Package maven web application as war file using maven goals

$ mvn clean package

4) Go to Tomcat Server Admin Dashboard and click on "Manager App"and Login using credentials

5) Select War file to upload and click on 'deploy' button

6) War file will be deployed and it will display in applications

7) Click on Application Path (It will open the application in browser)