**1) WHAT IS TOMCAT ?**

Tomcat is web application server. it is a java based application. it provides a platform to the java application.

to run tomcat we must install JAVA

**2)difference between web and application server ?**

**Application Server :**

**------->** we are using application server for dynamic content.

------>apache server is apache tomcat , jboss

------->Application server will maintain heavy load but performence will be low because data is dynamic so

-----> Every application server contain inbuid web server

------>Application server port is 8080

------>/opt/apache-tomcat/webapps

inside the webapps folder whatever the content is there all content we can see in the manage server (192.168.33.10:8080)

**WebServer :**

----->Web server will not maintain more load but performence will be fast in weberver because data is static so

----->we are using webserver for static content.

----->webserver is a tomcat

----->Apache is a php based

----->Apache server port is 80

**3)INSTALLATION OF TOMCAT ?**

---> rpm/yum

--->source code

---->customized method

**STEPS TO INSTALL THE TOMCAT :**

1) download the tomcat7.9 tar file

2)extract the tar file -----> tar -xvzf file..

3)set up the environment

4)start the tomcat

**4) HOW TO CHANGE PORT NUMBER IN TOMCAT ?**

How do I change the default port for Tomcat?

4 Answers

Goto tomcat>conf folder.

Edit server.xml.

Search "Connector port"

Replace "8080" by your port number.

Restart tomcat server.

**DEPLOYMENT PROCESS**

**5)Install a one web application top of the tomcat ?**

in this session we will know how to deploy one web application to tomcat by GUI

----> download gitbucket.war

----> deploy

1)GUI

a) Server method (vm) { from server side deployment }

b) client side (host) { from client side deployment }

----> Direct Method { directly copy to webapps folder }

----> Via Automation { Automation is a Major concept by using jenkins we are doing deployment here }

**Coming to GUI :**

first download gitbucket.war file from google

google -->download gitbucket---->go to releases----> under Assets gitbucket.war file---->download ( download that war file in linux so that go for /tmp/ , cd /tmp/ ----> sudo wget copywarfile link )

cd /tmp/

tmp]$sudo wget copywarfilelink

tmp]$ ls

Go to tomcat server 192.168.33.10.50:8080

once you enter into tomcat server go to tomcat manager inside the tomcat manager if you observe down side you can **DEPLOY DIRECTORY** OR **WAR FILE LOCATED ON SERVER ( this deployment is from server side )** and another one is **WAR FILE DEPLOY ( this deployment from client side it means post side , windows side )**

**DIRECT METHOD**

here what we are doing is by using MAVEN first we have to create package and deploy into webapps folder in TOMCAT.

1) mvn archetype:generate

project number :

group id : unique project name

artifact id : output file name

package id : same as group id

version: 1.0-SNAPSHOT VERSION

2)mvn validate

3)mvn compile

4)mvn test

5)mvn package

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once you give mvn archetype:generate it will download all dependecies and at last show you one number , here we want webapp project so select that webapp project number if webapps project number is 1203 , so if we give 1203 number automatically it will the dependencies which is related to that project.

next ,

group id : techmine

artifactory : sampleweb

version : 1.0-SNAPSHOT

package name : same as groupid (techmine) ------- if we enter

build will success

ls --> cd sampleweb --> tree

sampleweb]$ mvn validate

sampleweb]$mvn compile ---->ls ----> tree

sampleweb]$mvn test ---->ls ----> tree

sampleweb]$mvn package ----> ls -----> tree , here package will be generated with name as a **sampleweb.jar**

that package will be stored in target files

we created package , now we have to deploy directly , so command is

**sampleweb]$ cp target/sampleweb.war /opt/apache-tomcat-7.0.88/webapps/**

after this once we refresh tomcat server that sampleweb.jar will be stored in the tomcat server.