

Tomcat Server

Understanding the Tomcat Server

=====

Type	----- Java based web server
Version	----- 9.x(compatible with jdk 1.8+)
Vendor	----- Apache foundation (open source software)
Default port no	----- 8080
To download software	: www.apache.org
Servlet Container name	: catalina
JSP Container name	: jasper

While installing tomcat software choose

=====

- a) <Java_Home>\jre location
- b) Tomcat installation folder
- c) Default Port no (**3030**)
- d) Admin username,password(**admin,admin**)

To start tomcat server

=====

- a) user<tomcat_home>\bin\tomcat9.exe file

To see the home page of tomcat

=====

<http://localhost:3030/> ([url](#) in the browser address bar)

To change http port number of tomcat after installing tomcat

=====

Go to <Tomcat_Home>\conf\server.xml file and modify port attribute value
Of first <connector> tag → restart server

=> We can deploy java web application either in the form of directories(dir1,dir2)
or in the form war files in <Tomcat_Home>\webapps folder

Tomcat Installation directory structure

=====

D:\Tomcat9.0(<Tomcat_Home>)

```
|----->bin
      |----->.exe(tomcat9.exe)
|----->conf
      |----->*.xml(server.xml,tomcat-users.xml,..)
|----->log
      |----->*.txt
|----->lib
      |----->.jar(servlet-api.jar,jsp-api.jar,catalina.jar,jasper.jar)
|----->webapps
      |----->dir1,dir2,...
      |----->*.war
|----->work
      |----->
|----->temp
```

Procedure to create JDBC connection pool for Oracle and DataSource in Tomcat9

=====

Step1:make sure that tomcat-jdbc.jar,ojdbc6.jar file are placed in
 <tomcat_home>\lib folder.

In Tomcat9 server,the tomcat-jdbc.jar file comes along with tomcat software installation.if not coming get it by extracting **apache-tomcat-jdbc-1.1.0.1-bin.zip** file(download from internet)

Step2:write the following<Resource>tag in<context> of

<Tomcat_Home>\conf\context.xml

<Context>

```
<Resource name="DsJndi" type="javax.sql.DataSource"
  factory="org.apache.tomcat.jdbc.pool.DataSourceFactory"
  driverClassName="oracle.jdbc.driver.OracleDriver"
  maxActive="100" maxIdle="30" maxWait="10000"
  username="system" password="oracle"
  url="jdbc:oracle:thin:@localhost:1521:orcl"/>
```

</Context>

Step3: restart the server

To use the above poolApp web application we must write following code to get DataSource Object in make connection method of connection pool servlet.

```
DataSource ds=(DataSurce)ic.lookup("java:/comp/env/mypool");
```

Note:

=====

If we don't want to use above connection pool from the tomcat server that is linked with eclipse IDE then write **<Resource>**tag in **server section of context.xml** In eclipse IDE.

Important points:

=====

- **By Default Tomcat server does not support CrossContext Communication**
Because getContext(-) method is not implemented properly in Tomcatserver.
To enable cross context communication we can place
<Context crossContext="true"/> in **<Tomcat_Home>\config\context.xml** file
- Since **GlassFish,Jboss servers** internally use Tomcat server this crossContext communication is also not possible in this two servers.
- ServletContext of one web application which is accessed from the ServletContext object of another web application is called **Foreign Context**.