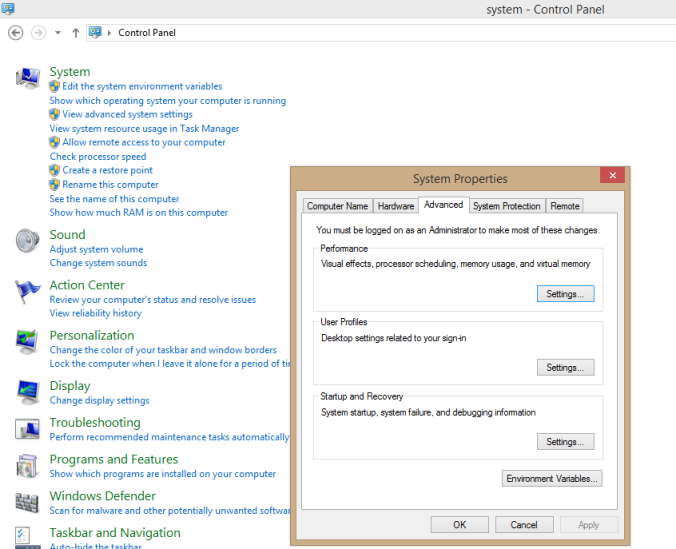
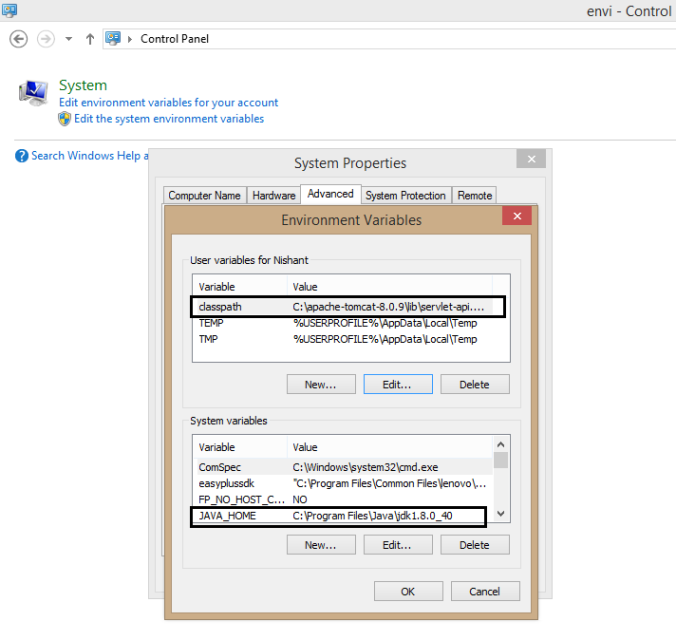
# **Apache TomCat: Installation and setup**

1. Download **Apache Tomcat** from [ApacheTomact Official Site](http://tomcat.apache.org/).
2. Unzip the rar file to the root of your C:drive. Now you will have path as: **C:\apache-tomcat-8.0.9**
3. Also ensure you have **Java** installed in your system.
4. Now it’s time to set the **environment variables.**
5. 
6. Go to Control Panel->System->Advanced System Settings->Environment Variables.
8. Now create new user variable **classpath** and set the value as the following: **C:\apache-tomcat-8.0.9\lib\servlet-api.jar;**
9. Now create new System Variable **JAVA\_HOME** and set the value as the following: **C:\Program Files\Java\jdk1.8.0\_40** It is used to specify location of Java Development Kit that is used to start Tomcat.
10. Now create new System variable **CATALINA\_HOME** and set the value as the location of the root directory of the “binary” distribution of Tomcat, i.e., **C:\apache-tomcat-8.0.9\bin**
11. Now we’re almost done , now for launching Apache Tomcat goto: **C:\apache-tomcat-8.0.9\bin** and run the **startup.bat** .If all is done correctly startup.bat will show the message **server startup** .
12. Now open your web-browser and type **http://localhost:8080** it will display the Apache Tomcat Page stating you have successfully installed.

Now to turn Off the server goto **C:\apache-tomcat-8.0.9\bin** and run the **shutdown.bat**.

Linux(Centos/RHEL)

1.install and configure Java

Dowload rpm packeges from [oracle website](http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html)

jdk-8u20-linux-i586.rpm[For **32-Bit** OS]

jdk-8u20-linux-x64.rpm[For **64-Bit** OS]

Iinstall rpm packages

# rpm -Uvh jdk-8u20-linux-i586.rpm[For **32-Bit** OS]

# rpm -Uvh jdk-8u20-linux-x64.rpm[For **64-Bit** OS]

Next, configure newly installed JAVA 8 files using command ‘alternatives‘, run the following series of commands on the terminal to configure Java.

# alternatives --install /usr/bin/java java /usr/java/jdk1.8.0\_20/jre/bin/java 20000

# alternatives --install /usr/bin/jar jar /usr/java/jdk1.8.0\_20/bin/jar 20000

# alternatives --install /usr/bin/javac javac /usr/java/jdk1.8.0\_20/bin/javac 20000

# alternatives --install /usr/bin/javaws javaws /usr/java/jdk1.8.0\_20/jre/bin/javaws 20000

# alternatives --set java /usr/java/jdk1.8.0\_20/jre/bin/java

# alternatives --set javaws /usr/java/jdk1.8.0\_20/jre/bin/javaws

# alternatives --set javac /usr/java/jdk1.8.0\_20/bin/javac

# alternatives --set jar /usr/java/jdk1.8.0\_20/bin/jar

Verify java installation

java –version

2.installing tomcat

https://tomcat.apache.org/download-80.cgi

Now download the latest version of Apache Tomcat 8, using following wget command and extract it as shown below.

# cd /opt/

# wget http://ftp.itu.edu.tr/Mirror/Apache/tomcat/tomcat-8/v8.0.9/bin/apache-tomcat-8.0.9.tar.gz

# tar -xvf apache-tomcat-8.0.9.tar.gz

Now we all set to start the tomcat web server using the scripts provided by the tomcat package.

# cd /opt/apache-tomcat-8.0.9/bin

# ./startup.sh

##### Sample Output

Using CATALINA\_BASE: /opt/apache-tomcat-8.0.9

Using CATALINA\_HOME: /opt/apache-tomcat-8.0.9

Using CATALINA\_TMPDIR: /opt/apache-tomcat-8.0.9/temp

Using JRE\_HOME: /usr

Using CLASSPATH: /opt/apache-tomcat-8.0.9/bin/bootstrap.jar:/opt/apache-tomcat-8.0.9/bin/tomcat-juli.jar

Tomcat started.

Now to open Tomcat from your browser, go to your IP or domain with the 8080 port (because Tomcat will always run on the 8080 port)

### 3.Configuring Apache Tomcat 8

By default you only able to access default Tomcat page, to access admin and other sections like Server Status, Manager App and Host Manager. You need to configure user accounts for admins and managers. To do so, you need to edit ‘tomcat-users.xml‘ file located under /opt/apache-tomcat-8.0.9/conf directory.

#### Setup Tomcat User Accounts

For example, to assign the manager-gui role to a user named ‘tecmint‘ with a password ‘t$cm1n1‘, add the following line of code to the config file inside the section.

# vi /opt/apache-tomcat-8.0.9/conf/tomcat-users.xml

<role rolename="manager-gui"/><user username="osi" password="o**$itch1**" roles="manager-gui"/>

Similarly, you can also add ‘admin-gui‘ role to a admin user named ‘admin‘ with a password ‘adm!n‘ as shown below.

<role rolename="admin-gui"/><user username="admin" password="adm!n" roles="admin-gui"/>

After setting up the admin and managers roles, restart the Tomcat and then try to access the admin section.

./shutdown.sh

./startup.sh

For example, click on '**Server Status**' tab, it will prompt you to enter user credentials, enter username and password that you've added above in config file.

#### Changing Tomcat Port

If you want to run Tomcat on different port say 80 port. You will have to edit the ‘server.xml‘ file in ‘/opt/apache-tomcat-8.0.9/conf/‘. Before changing, port, make sure to stop the Tomcat server using.

# /opt/apache-tomcat-8.0.9/bin/shutdown.sh

Now open the server.xml file using the Vi editor.

# vi /opt/apache-tomcat-8.0.9/conf/server.xml

Now search for “Connector port” and change its value from 8080 to 80 or any other port you want as it follows.

To save the file, Press the ‘ESC’ key, and write :w then :x.

Now restart the Apache Tomcat server again, using below command.

# /opt/apache-tomcat-8.0.9/bin/startup.sh

That’s it, you server will be running on the 80 port.

Of course, you have to run all the above commands as a root, if you don’t they won’t work because we are working in the ‘/opt‘ directory which is a folder owned by the root user only, if you want you can run the server as a normal user but you will have to use your HOME folder as a working area to download, extract and run the Apache Tomcat server.

To get some information about your running Tomcat server and your computer, run.

/opt/apache-tomcat-8.0.9/bin/version.sh

##### Sample Output

Using CATALINA\_BASE: /opt/apache-tomcat-8.0.9

Using CATALINA\_HOME: /opt/apache-tomcat-8.0.9

Using CATALINA\_TMPDIR: /opt/apache-tomcat-8.0.9/temp

Using JRE\_HOME: /usr

Using CLASSPATH: /opt/apache-tomcat-8.0.9/bin/bootstrap.jar:/opt/apache-tomcat-8.0.9/bin/tomcat-juli.jarServer version: Apache Tomcat/8.0.9Server built: Jun 19 2014 01:54:25Server number: 8.0.9.0

OS Name: LinuxOS Version: 2.6.32-042stab084.26

Architecture: i386JVM Version: 1.8.0\_20-b26JVM

Vendor: Oracle Corporation

That’s it! Now you can start deploying JAVA based applications under Apache Tomcat 8. For more about on how to deploy applications and create virtual hosts, check out the official Tomcat documentation at.

https://tomcat.apache.org/tomcat-8.0-doc/