#### **How to Install Tomcat9 on Ubntu**

#### **Download Tomcat Packages**

Now that Java JDK is installed, run the commands below to donwnload Tomcat packages..

cd /tmp && wget http://mirrors.sonic.net/apache/tomcat/tomcat-9/v9.0.8/bin/apache-tomcat-9.0.8.tar.gz

Then run the commands below to extract the downloaded packages.

tar -xzf apache-tomcat-9.0.8.tar.gz

Create a directory for Tomcat files… and move the files there by running the commands below….

sudo mv apache-tomcat-9.0.8 /opt/tomcat9

Create Tomcat users by running the commands below… this users will own the Tomcat directory content..

sudo useradd -r tomcat9 --shell /bin/false

Then give the user control of the directory…

sudo chown -R tomcat9 /opt/tomcat9

#### **Step 3: Configure Tomcat9 Service**

Now that the pakcage is extracted, run the commands to open Tomcat configuration file for its default user

sudo nano /opt/tomcat9/conf/tomcat-users.xml

Then create an account with password for the user and save by copying and pasting the line below into the file.. just before the **</tomcat-users>**

<role rolename="manager-gui"/>

<role rolename="admin-gui"/>

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

Save the file and exti..

Next, run the commands below to create a server account for Tomcat

sudo nano /etc/systemd/system/tomcat.service

then copy and paste the lines below into the file and save

[Unit]

Description=Tomcat9

After=network.target

[Service]

Type=forking

User=tomcat9

Group=tomcat9

Environment=CATALINA\_PID=/opt/tomcat9/tomcat9.pid

Environment=JAVA\_HOME=/usr/lib/jvm/java-8-oracle/

Environment=CATALINA\_HOME=/opt/tomcat9

Environment=CATALINA\_BASE=/opt/tomcat9

Environment="CATALINA\_OPTS=-Xms512m -Xmx512m"

Environment="JAVA\_OPTS=-Dfile.encoding=UTF-8 -Dnet.sf.ehcache.skipUpdateCheck=true -XX:+UseConcMarkSweepGC -XX:+CMSClassUnloadingEnabled -XX:+UseParNewGC"

ExecStart=/opt/tomcat9/bin/startup.sh

ExecStop=/opt/tomcat9/bin/shutdown.sh

[Install]

WantedBy=multi-user.target

Now make Linux scripts executable that is under ‘apache-tomcat-8.5.14/bin/‘ and then create symbolic link of startup and shutdown script for tomcat as:

Change all scripts **\*.sh** executable only for root as,

# chmod 700 /opt/tomcat/apache-tomcat-8.5.14/bin/\*.sh

Create Symbolic link for startup script as,

# ln -s /opt/tomcat/apache-tomcat-8.5.14/bin/startup.sh /usr/bin/tomcatup

Create Symbolic link for shutdown script as,

# ln -s /opt/tomcat/apache-tomcat-8.5.14/bin/shutdown.sh /usr/bin/tomcatdown

7. Now to start tomcat, you just need to fire the below command as root from anywhere in the shell.

# tomcatup

##### Sample Output

Using CATALINA\_BASE: /opt/tomcat/apache-tomcat-8.5.14

Using CATALINA\_HOME: /opt/tomcat/apache-tomcat-8.5.14

Using CATALINA\_TMPDIR: /opt/tomcat/apache-tomcat-8.5.14/temp

Using JRE\_HOME: /opt/java/jdk1.8.0\_131/jre/

Using CLASSPATH: /opt/tomcat/apache-tomcat-8.5.14/bin/bootstrap.jar:/opt/apache-tomcat-8.5.14/bin/tomcat-juli.jar

Tomcat started.