Tomcat 9 requires Java SE 8 or later. We will install OpenJDK, the open-source implementation of the Java Platform ,which is the default Java development and runtime in CentOS 9

<https://openjdk.java.net/>

mkdir /usr/share/java

cd /usr/share/java

Download Java to this direcroty

Running Tomcat as the root user is a security risk and not considered best practice

We’ll create a new system user

useradd tomcat01

passwd tomcat01

Create Directory for all tomcat files and preapre user for tomcat (TOMCAT\_BASE)

mkdir /tomcat

cd /tomcat

chown tomcat01:tomcat01 -R /tomcat/

vim .bash\_profile

Download Tomcat

We will download the latest version of Tomcat 9.0.x from the Tomcat downloads page .

cd /tomcat

tar -xvf apache-tomcat-9.0.56.tar.gz

cd apache-tomcat-9.0.56

wget https://tomcat.apache.org/tomcat-7.0-doc/appdev/sample/sample.war --no-check-certificate

<http://localhost:8080/sample>

**Configure multiple instances of Tomcat server**

mkdir instances

cp -pr apache-tomcat-9.0.56 instances/instance1

cd instances/

Delete unused files

Edit /conf/server.xml file for all new instance

cd /tomcat/

mkdir controller

cd controller/

#!/bin/bash

instance\_name=$1

TOMCAT\_BASE=/tomcat

INSTANCE\_BASE=$TOMCAT\_BASE/instances

CATALINA\_HOME=$TOMCAT\_BASE/apache-tomcat-9.0.56

CATALINA\_BASE=$INSTANCE\_BASE/$instance\_name

export CATALINA\_BASE CATALINA\_HOME

$CATALINA\_HOME/bin/startup.sh  
  
  
  
  
**Redirect http to https**  
  
<security-constraint>

<web-resource-collection>

<web-resource-name>Protected Context</web-resource-name>

<url-pattern>/\*</url-pattern>

</web-resource-collection>

<user-data-constraint>

<transport-guarantee>CONFIDENTIAL</transport-guarantee>

</user-data-constraint>

</security-constraint>  
  
 **Add certificate java keystore:**

keytool --list -keystore $JAVA\_HOME/lib/security/cacerts

keytool -import -alias ca -file somecert.cer -keystore $JAVA\_HOME/lib/security/cacerts -storepass changeit