

# Continue from previous Jenkins-7.pdf

# Deploy project  
using Tomcat

```
Last login: Wed Jun  4 15:06:49 2025 from 18.206.107.29
ubuntu@ip-172-31-80-223:~$ sudo su
root@ip-172-31-80-223:/home/ubuntu# cd /var/lib/jenkins/workspace/my-addressbook-pipeline/target/
root@ip-172-31-80-223:/var/lib/jenkins/workspace/my-addressbook-pipeline/target# ls
addressbook      classes          generated-test-sources  maven-status  pmd.xml  surefire-reports
addressbook.war  generated-sources maven-archiver         pmd            reports  test-classes
root@ip-172-31-80-223:/var/lib/jenkins/workspace/my-addressbook-pipeline/target#
```

i-0a338bb08e21b7576 (jenkins-machine)

Save this location of war file somewhere

# we will Install Tomcat in machine

```
wget https://dlcdn.apache.org/tomcat/tomcat-9/v9.0.105/bin/apache-tomcat-9.0.105.zip
apt install unzip -y
unzip apache-tomcat-9.0.105.zip
```

## BUT THE PROBLEM IS **JENKINS** IS ALSO WORKING ON 8080 AND **TOMCAT** IS ALSO WORKING ON 8080 port

## we need to change the tomcat port

```
cd apache-tomcat-9.0.104
```

```
cd conf
```

```
vi server.xml
```

update it from 8080 to 9090.

```
Java AJP Connector: /docs/config/ajp.html
APR (HTTP/AJP) Connector: /docs/apr.html
Define a non-SSL/TLS HTTP/1.1 Connector on port 8080
-->
<Connector port="9090" protocol="HTTP/1.1"
    connectionTimeout="20000"
    redirectPort="8443"
    maxParameterCount="1000"
/>
<!-- A "Connector" using the shared thread pool-->
<!--
<Connector executor="tomcatThreadPool"
    port="8080" protocol="HTTP/1.1"
    connectionTimeout="20000"
    redirectPort="8443"
-- INSERT --
```

76,26

# Go to security of machines → go Edit Inbound rule

↓  
custom TCP → Allow  
traffic from  
go go port

Inbound rules control the incoming traffic that's allowed to reach the instance.

### Inbound rules [Info](#)

Security group rule ID	Type <a href="#">Info</a>	Protocol <a href="#">Info</a>	Port range <a href="#">Info</a>	Source <a href="#">Info</a>	Description - opti
sgr-087a4d931d5ac3967	Custom TCP ▼	TCP	9090	Cu... ▼ 0.0.0.0/0 ✕	

now we will run the tomcat on 9090 port

```
cd ..  
cd bin  
chmod 700 *.sh  
./startup.sh  
cd ..
```

u can now access the tomcat on publicipofmachine:9090

go to your jenkins job - configure and update the code ....we have added additional step 6

```
pipeline{
  agent any
  stages{
    stage("1st stage: checkout the code from github"){
      steps{
        git url: "https://github.com/akshu20791/addressbook-cicd-project"
      }
    }
    stage("2nd stage: compile the code"){
      steps{
        sh "mvn compile"
      }
    }
    stage("3rd stage: testing the code"){
      steps{
        sh "mvn test"
      }
    }
    stage("4th stage: quality assurance of the code"){
      steps{
        sh "mvn pmd:pmd"
      }
    }
    stage("5th stage: package the project"){
      steps{
        sh "mvn package"
      }
    }
    stage("6 stage: deploy the project" ){
      steps{
        sh "sudo cp /var/lib/jenkins/workspace/my-addressbook-pipeline/target/addressbook.war /home/ubuntu/apache-tomcat-9.0.104/webapps"
      }
    }
  }
}
```

If we try to build the project we will get an error message because jenkins user does not have sudo permissions

## to give sudo permissions to a user in linux

visudo

```
# User alias specification

# Cmnd alias specification

# User privilege specification
root    ALL=(ALL:ALL) ALL
jenkins ALL=(ALL:ALL) NOPASSWD: ALL
# Members of the admin group may gain root privileges
%admin   ALL=(ALL) ALL

# Allow members of group sudo to execute any command
%sudo   ALL=(ALL:ALL) ALL

# See sudoers(5) for more information on "include" directives
```

press ctrl X -> y -> enter to  
come out of the file

```
# restart the jenkins to accomate the changes which you did
service jenkins restart
build the job
```

<div>← → ↻ ⚠ Not secure 54.161.184.154:9090/addressbook/</div> <div>Filter contacts...</div>		
First Name	Last Name	
George	White	
Daniel	Thompson	
Timothy	Jones	
Peter	Wilson	
Dan	Robinson	