**Lesson 12 Demo 2**

**Configuring Deploy plugin for performing Automated CD**

Steps to be followed:

1. Install Tomcat Apache 9 on Ubuntu VM
2. Log in to Jenkins CI tool and install Deploy to Container plugin
3. Configure Deployment stage in Jenkins’s pipeline to perform deployment to Tomcat Apache

**Step 1: Install Tomcat Apache 9 on Ubuntu VM**

1. Login to Ubuntu VM using root user to install Tomcat Apache and other required packages.

**apt update**

**apt install tomcat9 tomcat9-admin**

1. Once installation is done, proceed with setting up Tomcat user which would be used during deployment in Jenkins.
2. *Open the tomcat-users.xml file in the Tomcat directory with your favorite text editor.*

*vi /etc/tomcat9/tomcat-users.xml*

*add the below content on*

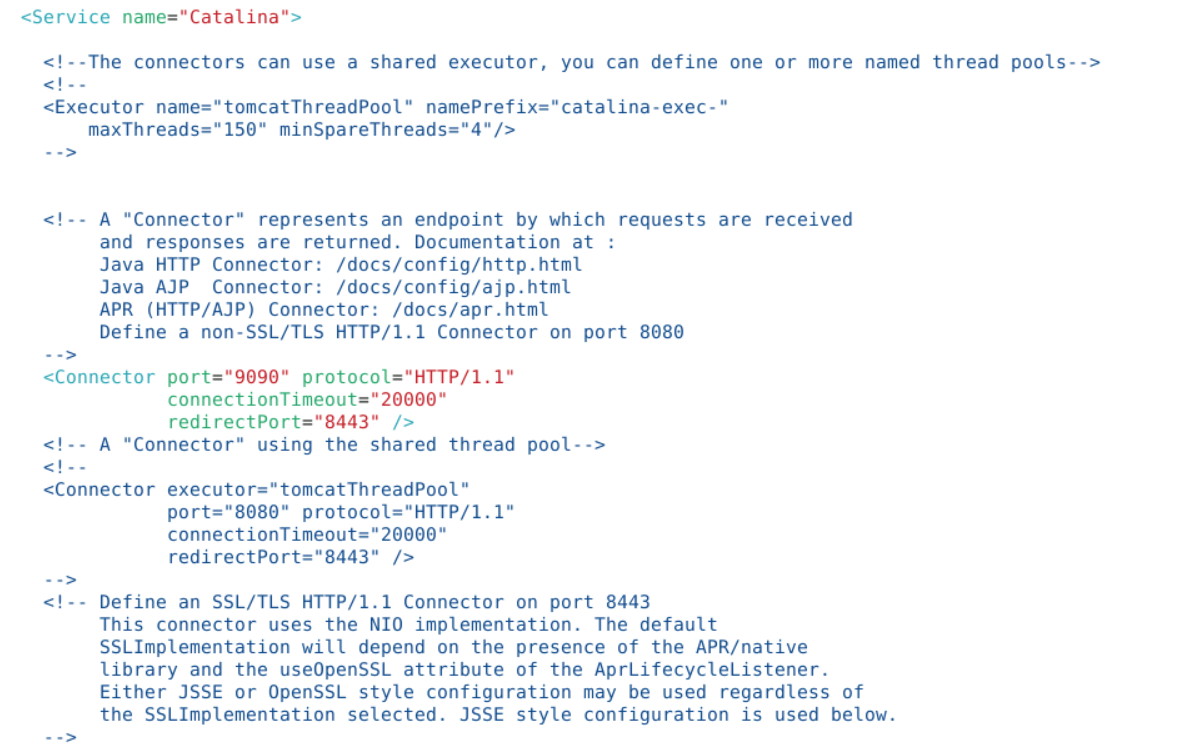
*tomcat-users.xml file*

*<user username="tomcat" password="password" roles="admin-gui,manager-gui,manager-script"/>*

**1.4 Open the server.xml file and change the connector port of tomcat**

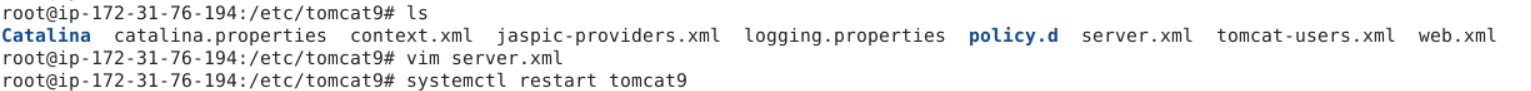
**vim /etc/tomcat9/server.xml**

**Scroll down to Connector port tag as shown below and change port number to 9090.**

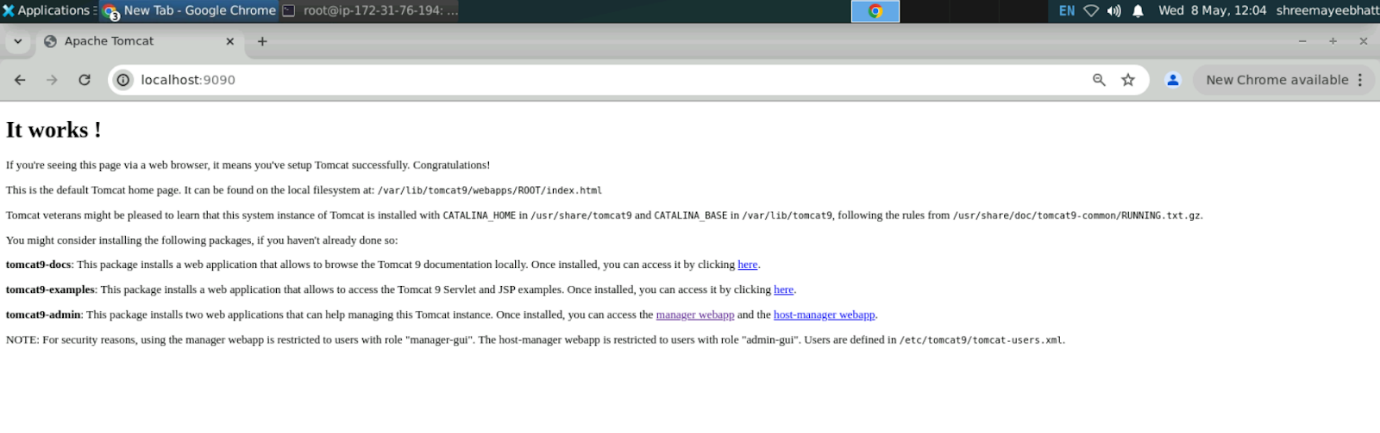
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**1.5 Restart tomcat 9**

**systemctl restart tomcat9**

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**1.6 Access tomcat from the browser**

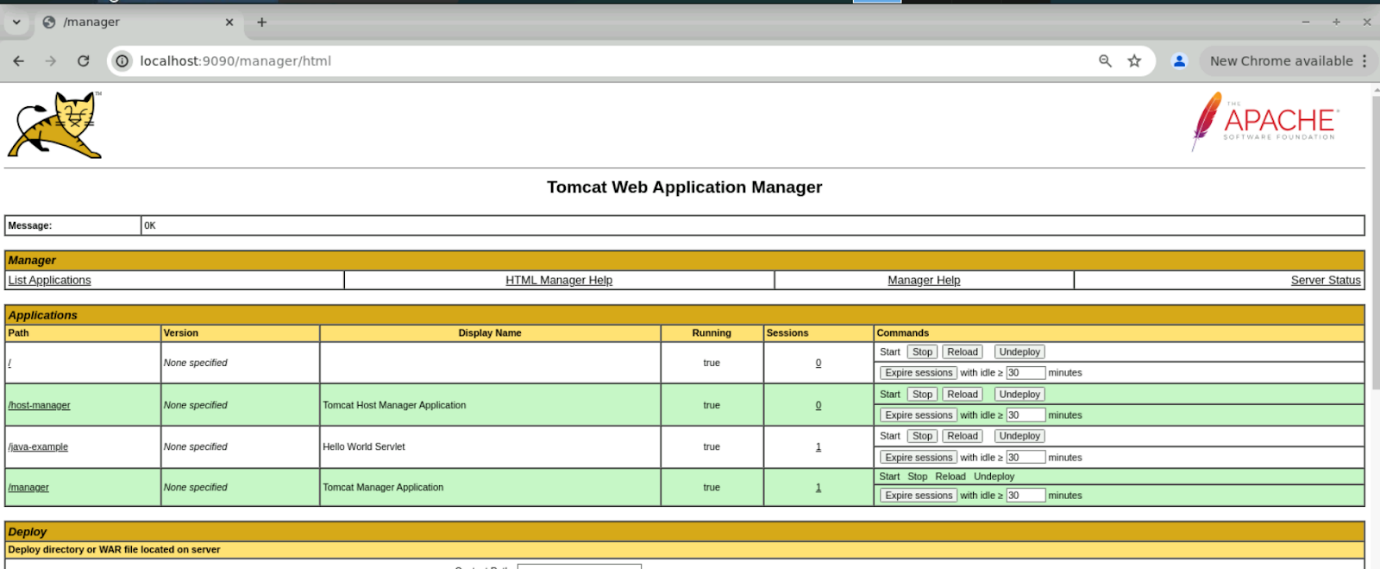
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**1.7 Lets access the manager webapp to make sure the tomcat setup is complete**

**Click on manager webapp link on the line for tomcat9-admin**

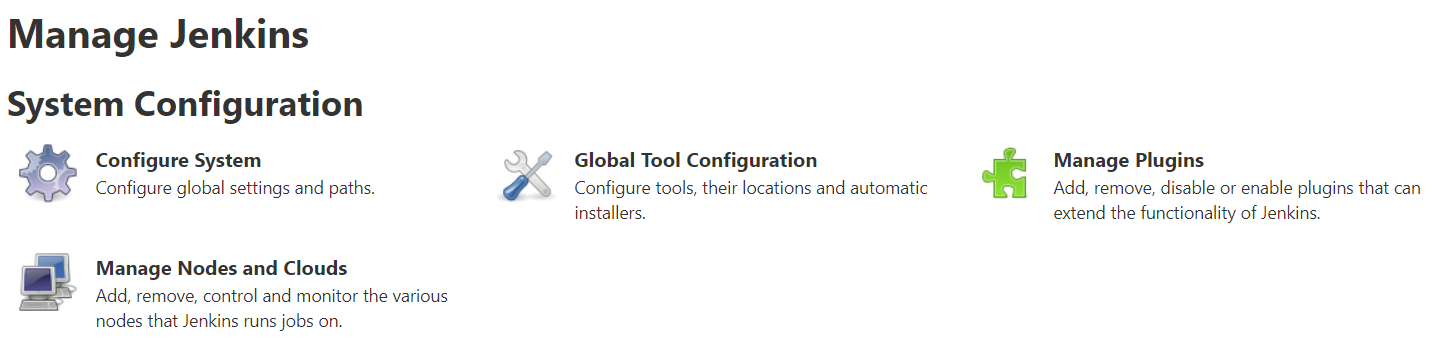
**It will ask for password,give password as : username = tomcat password=password**

**Manager app will open**

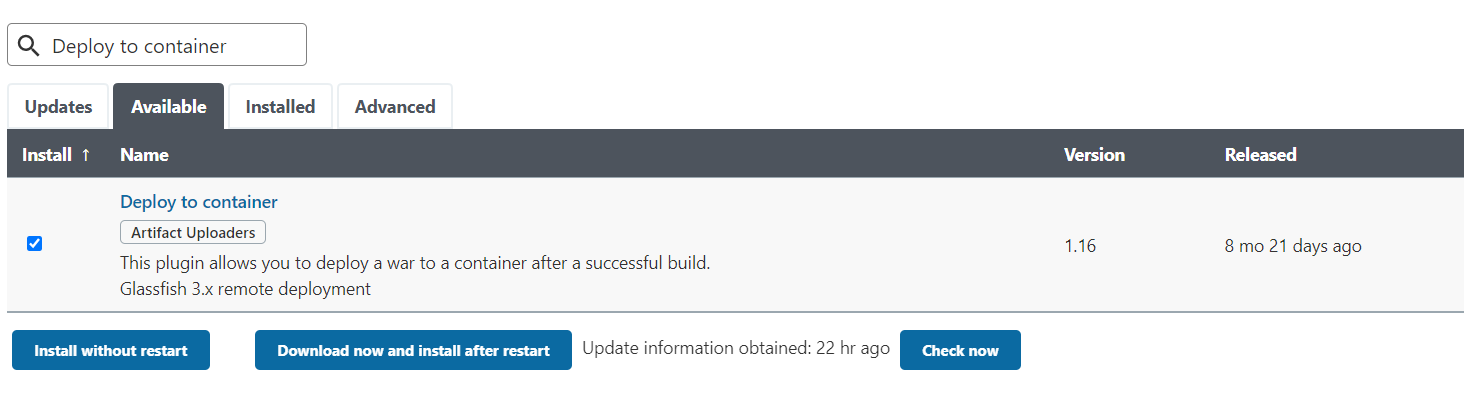
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**Step 2: Log in to Jenkins CI tool and install Deploy to Container plugin**

1. Login to Jenkins CI tool with admin user and navigate to Manage Jenkins and Manage Plugins.

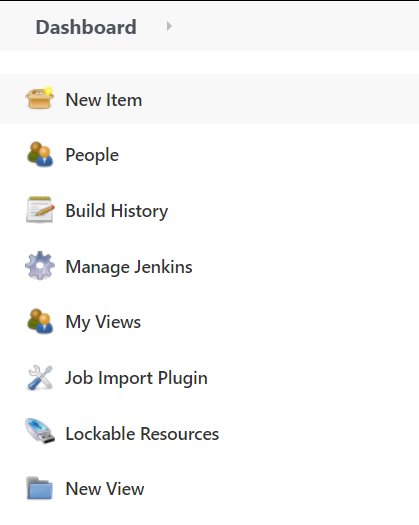


1. Then navigate to Available tab and search for Deploy to Container plugin.

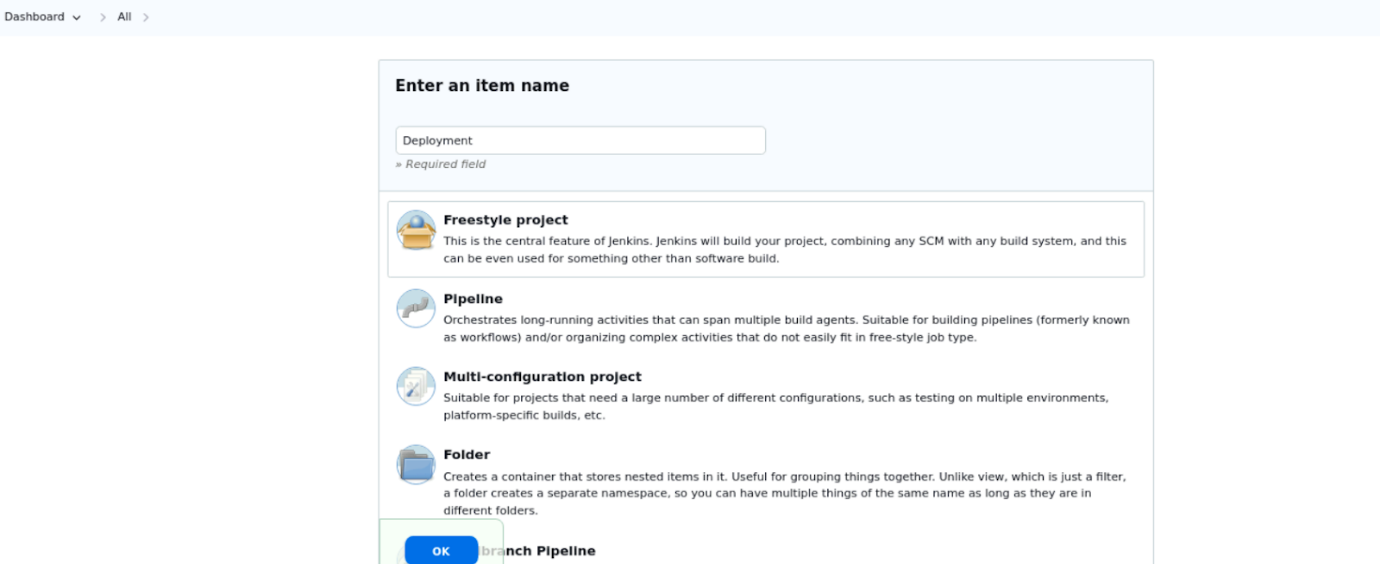


**Step 3: Configure a new freestyle job in Jenkins to perform deployment to Tomcat Apache**

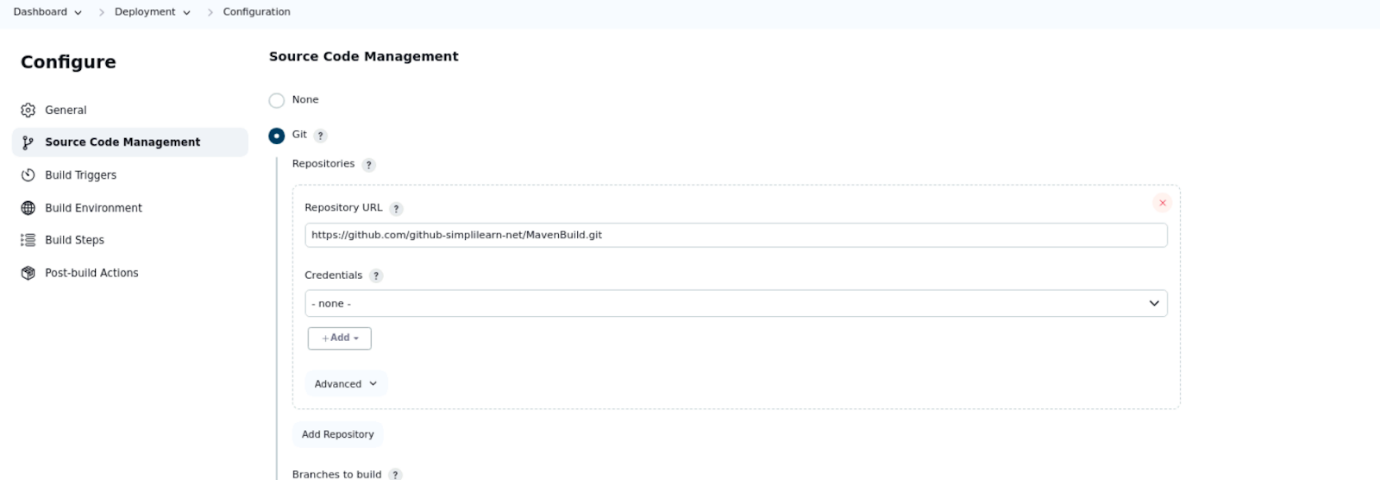
1. Login to Jenkins CI tool with admin user and click on New Item to create new Jenkins’s job.



1. Select freestyle project while creating Jenkins’s job and provide custom job name.

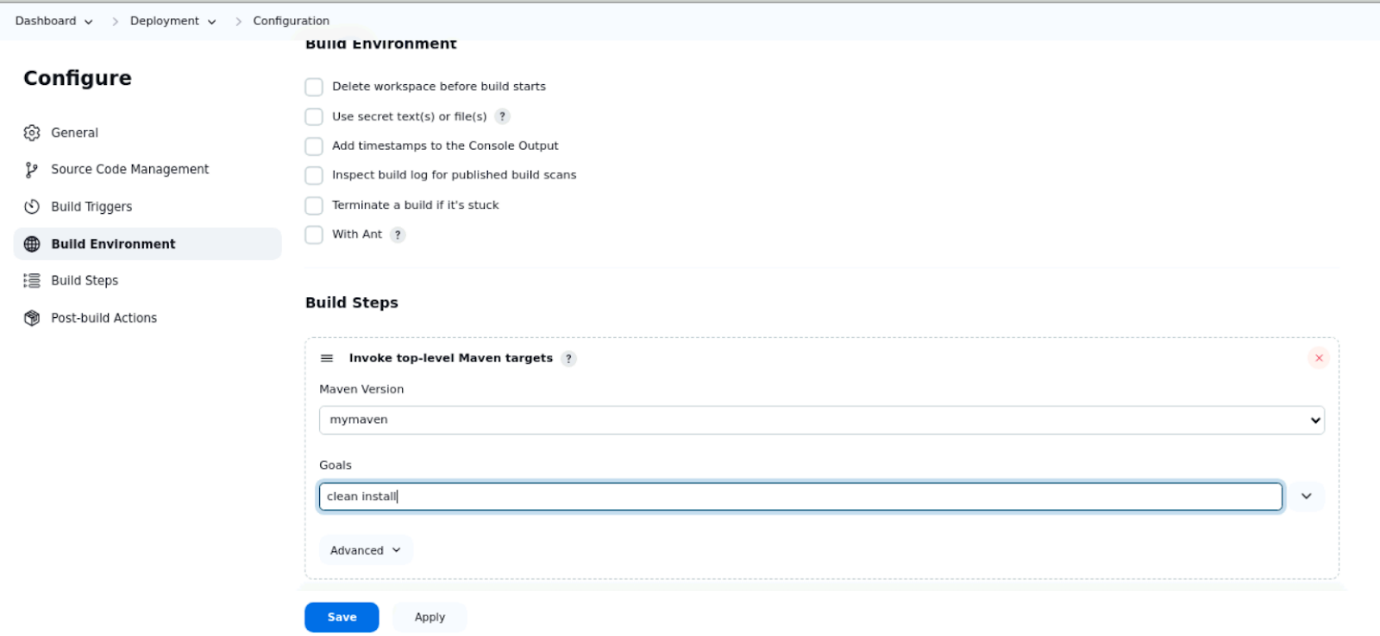


1. Once job name is provided, click on Ok button to save Jenkins’s job and a new configuration screen would be opened.In configure screen you need to access provide Git repository configurations from where you want to checkout pipeline.

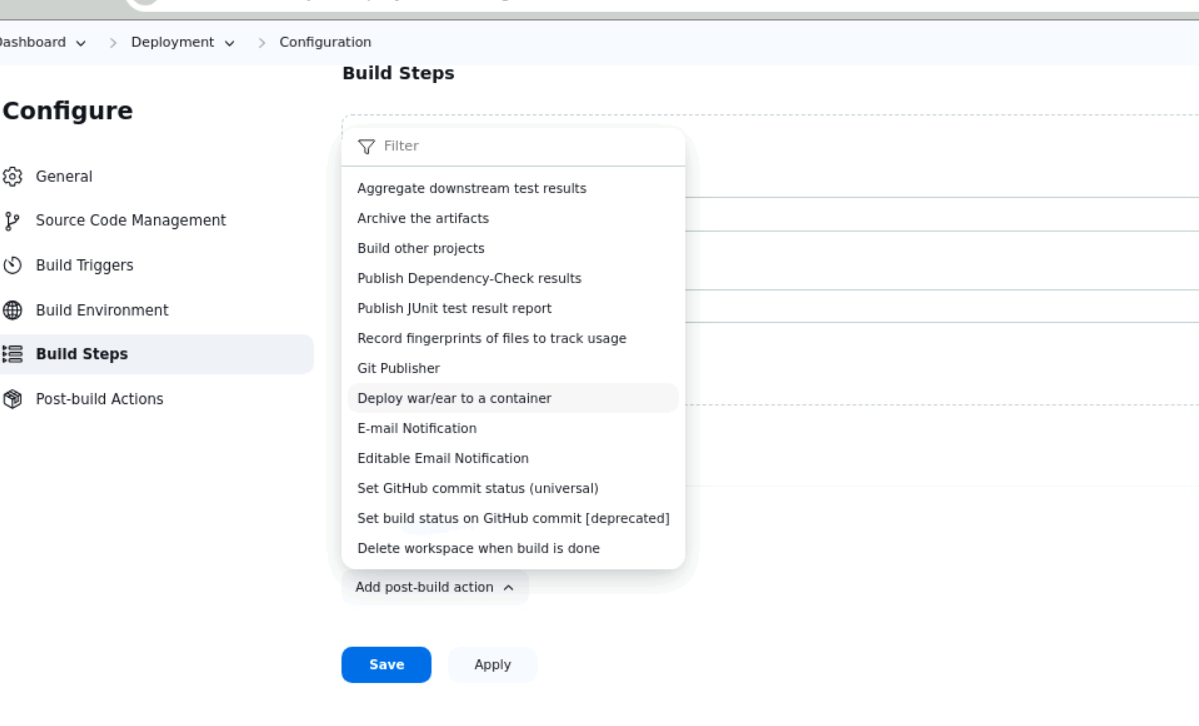


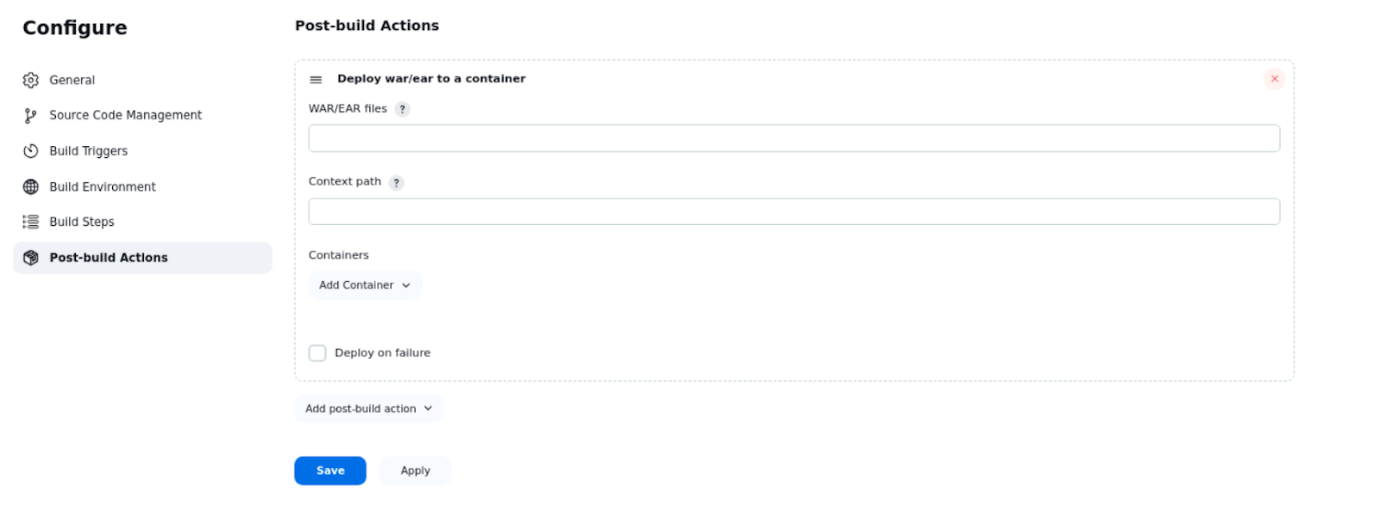
3.4  Add Invoke top-level Maven targets under Build steps.

Give goal as clean install



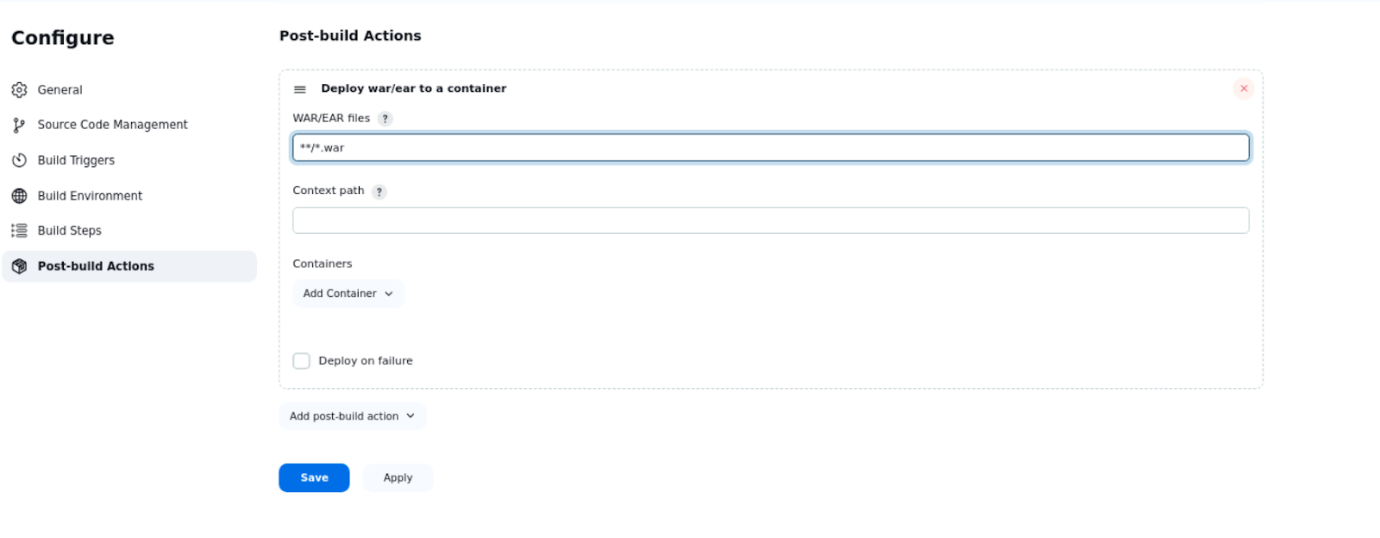
3.7Go to post build actions select deploy  war/ear to a container





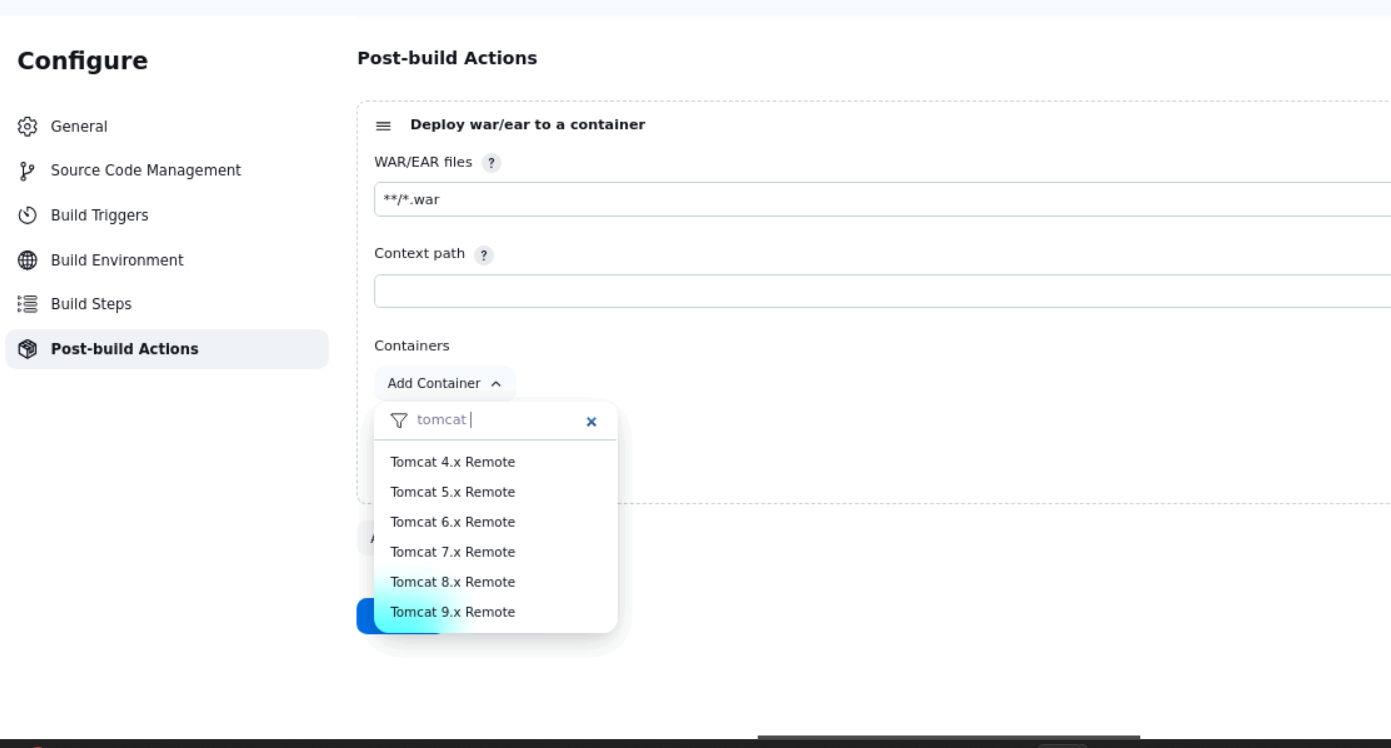
Fill the below details

WAR/EAR files : \*\*/\*.war



Containers: Click on Add containers

Search for tomcat 9 and select it

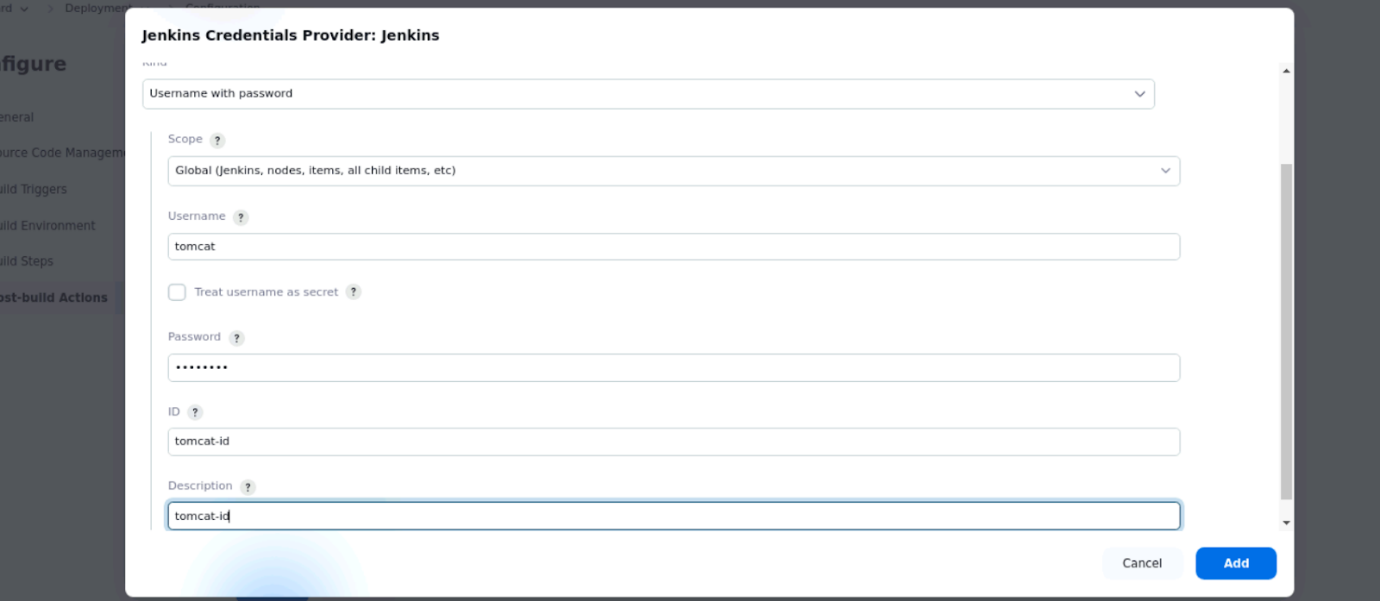


Credentials

Add credentials. Click on ADD button→ jenkins→

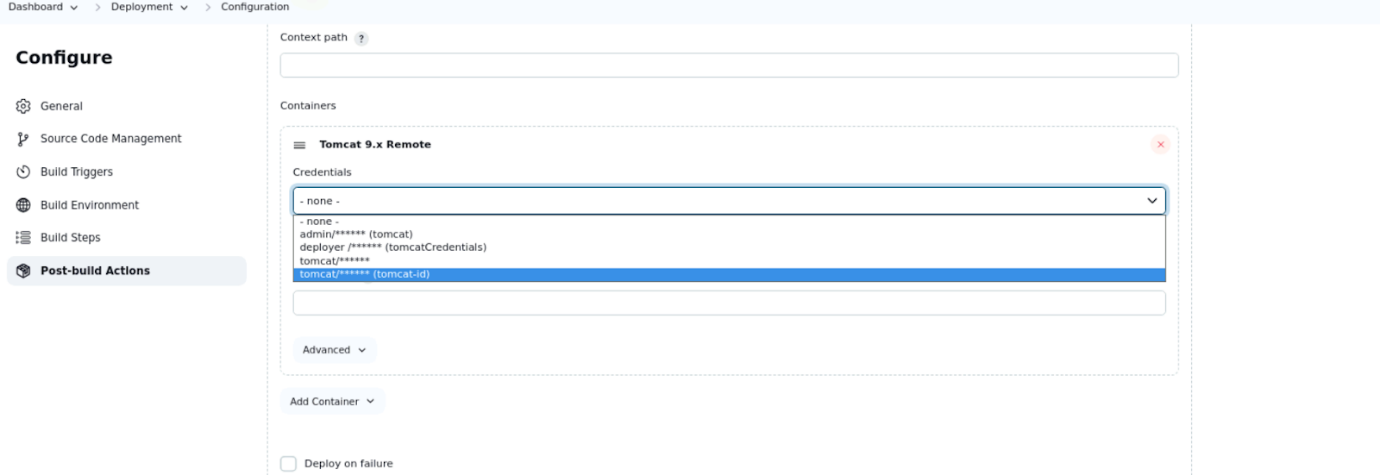
Username: tomcat, password = password

Id = tomcat-id, description = tomcat-id



Click on ADD button to save the credentials

In credentials dropdown, select the credentials





***Tomcat URL***

***http://localhost:9090/***

***Save the job and execute it***

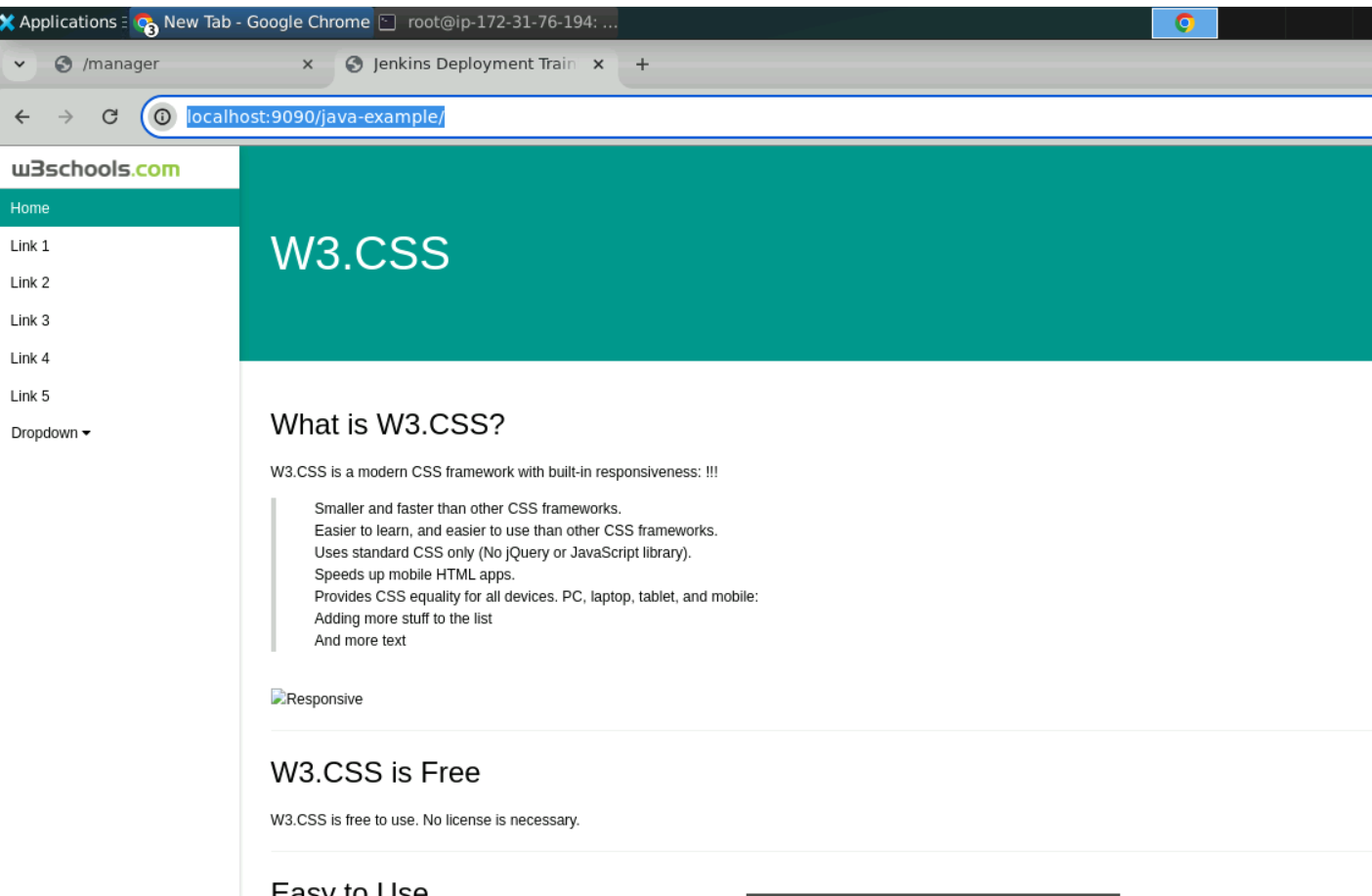
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***You can access the application from the browser by giving belo URL***

***http://localhost:9090/java-example/***

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