**Lesson 12 Demo 2**

**Configuring Deploy plugin for performing Automated CD**

**Objective:** Configure a CI/CD pipeline for deploying application to Tomcat Apache.

**Tools required:** Jenkins CI Tool, Jenkins Master

**Pre-requisites:** You need to have Jenkins up and running.

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**

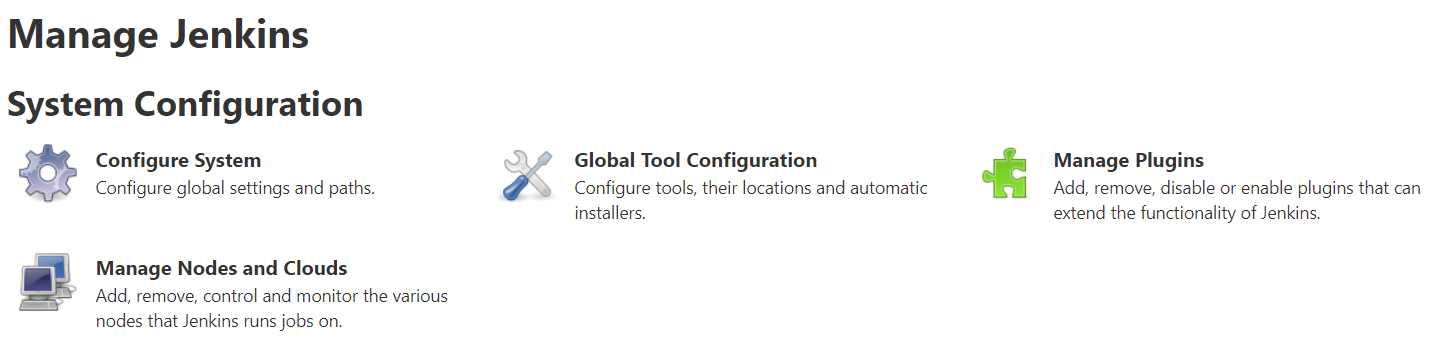
1. Once installation is done, proceed with setting up Tomcat user which would be used during deployment in Jenkins.
2. *Open the tomcat-users.xml file in the Tomcat directory with your favorite text editor.*

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

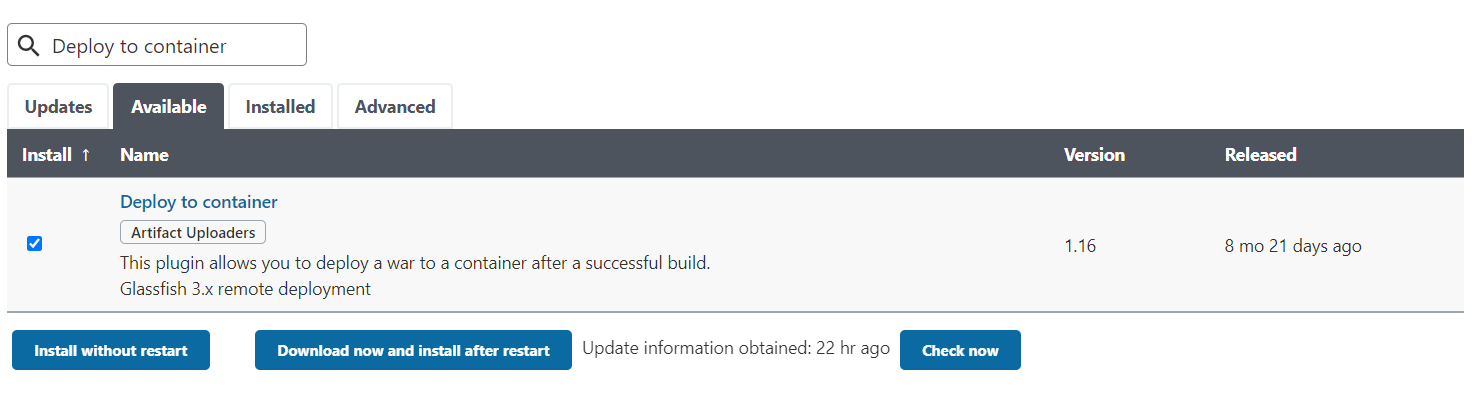
*<user username="tomcat" password="password" roles="admin-gui,manager-gui,manager-script"/>*

**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.

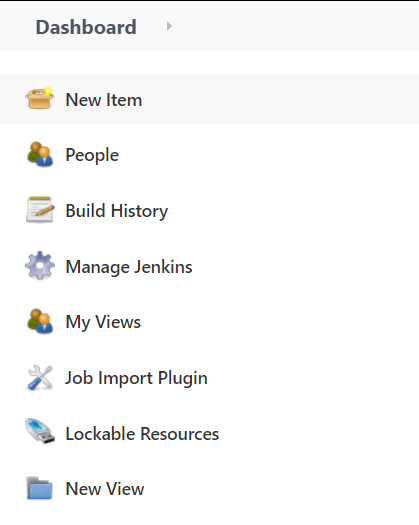


**Step 3: Configure Deployment stage in Jenkins’s pipeline to perform deployment to Tomcat Apache**

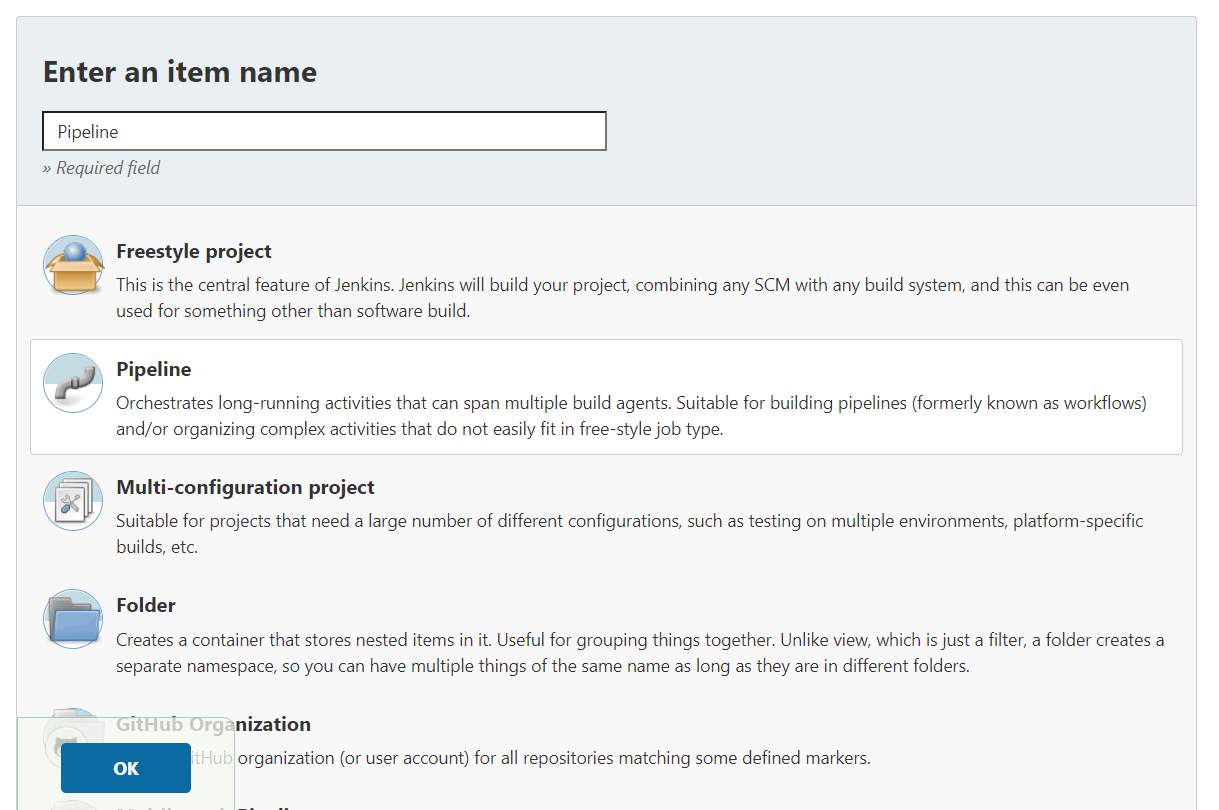
* 1. Add Deployment Stage to Jenkins pipeline as per below. Invoke Deploy to container snippet to integrate deployment to Tomcat Apache.

***deploy adapters: [tomcat9(credentialsId: 'TomcatCreds', path: '', url: 'http://52.90.29.200:8080/')], contextPath: null, war: 'target/\*.war'***

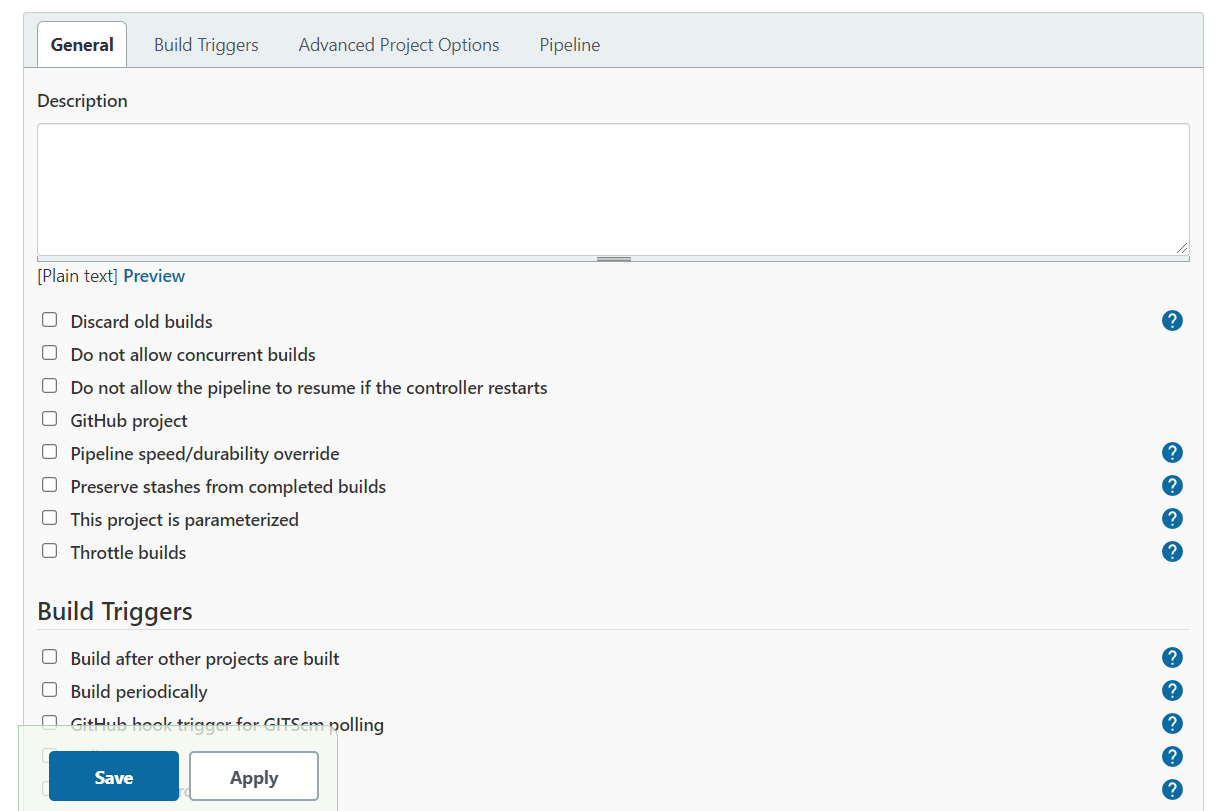
* 1. Login to Jenkins CI tool with admin user and click on New Item to create new Jenkins’s job.



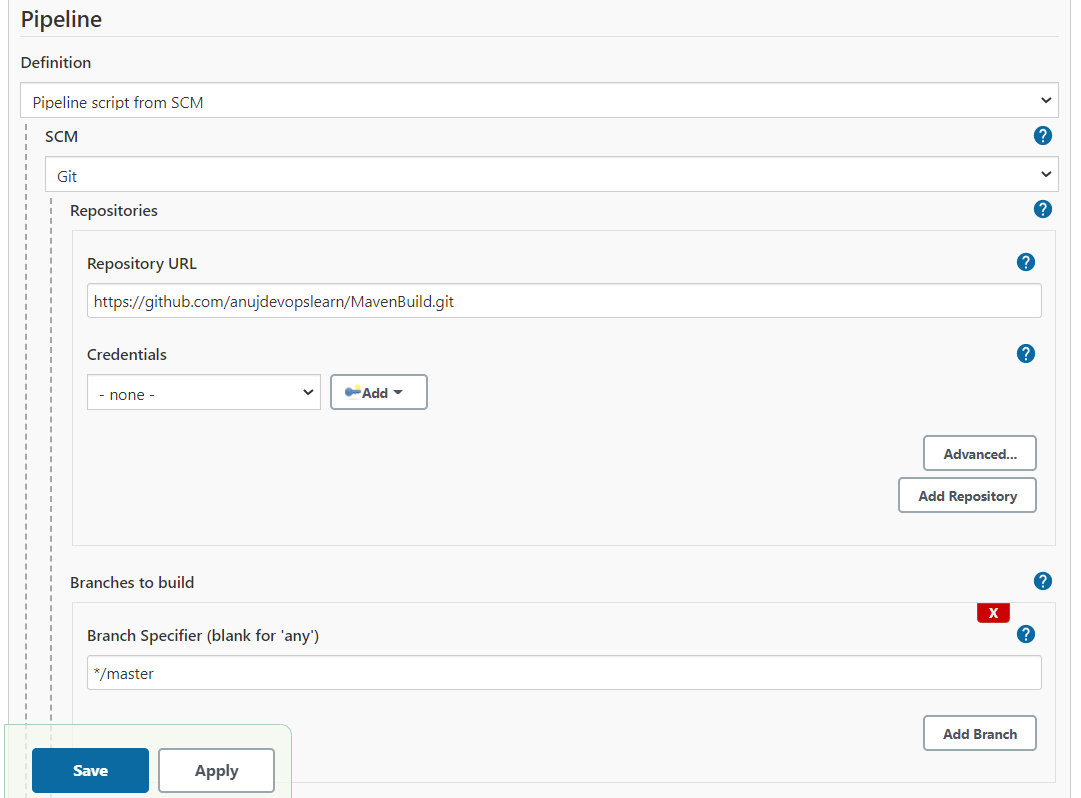
* 1. Select Pipeline project while creating Jenkins’s job and provide custom job name.



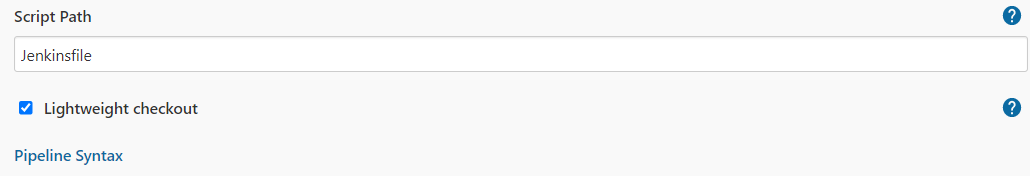
* 1. Once job name is provided, click on Ok button to save Jenkins’s job and a new configuration screen would be opened.



* 1. In configure screen you need to access Pipeline tab to provide Git repository configurations from where you want to checkout pipeline.



3.6 In case you are using different Pipeline script you can configure Script path in Pipeline project.



3.7Once Git repositories configurations are configured in Jenkins’s job, you can trigger Jenkins’s job build.

