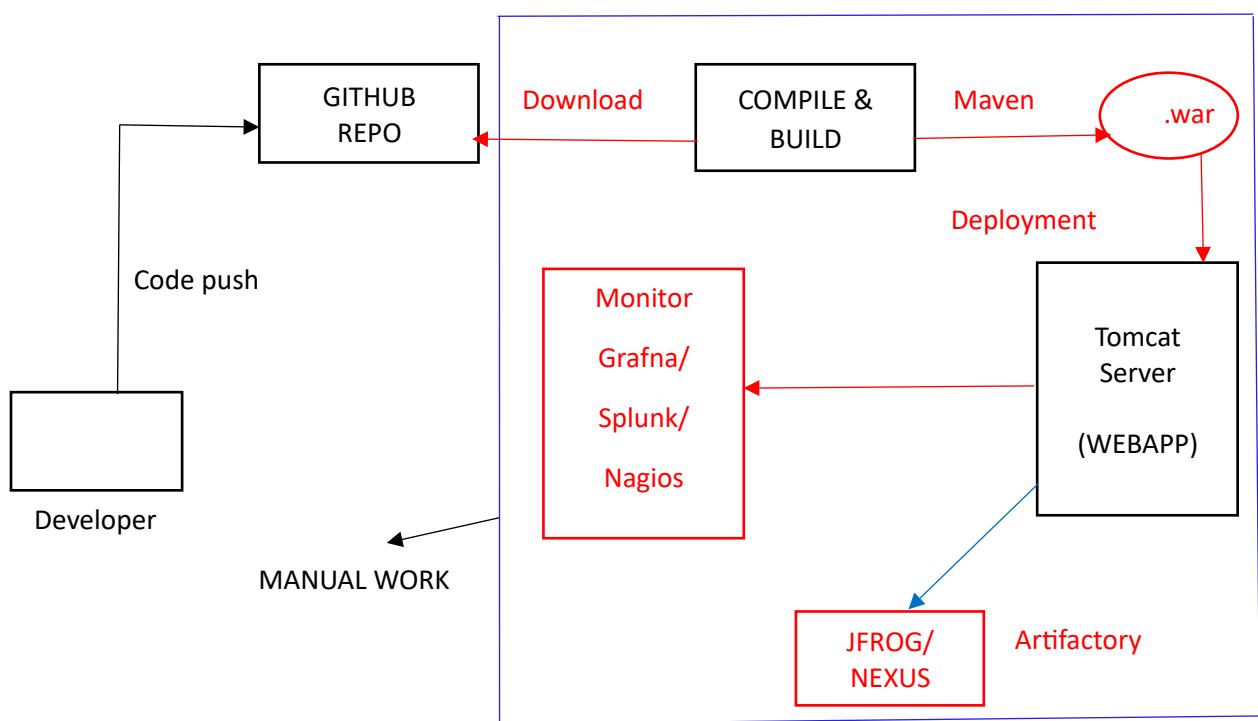


### 3.JENKINS

- Jenkins is an open source .
- CICD is continuous integration/continuous delivery and deployment (CI/CD) automation software
- DevOps tool written in the Java programming language. It is used to implement CI/CD workflows, called pipelines.
- All this process is done to automatic after that message come with help of pipeline.

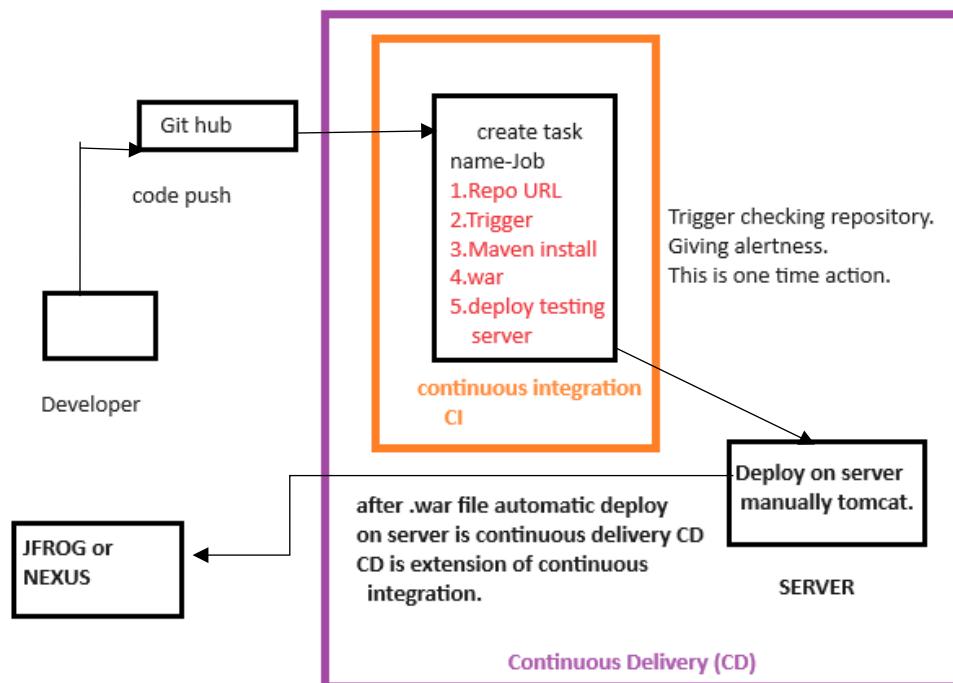
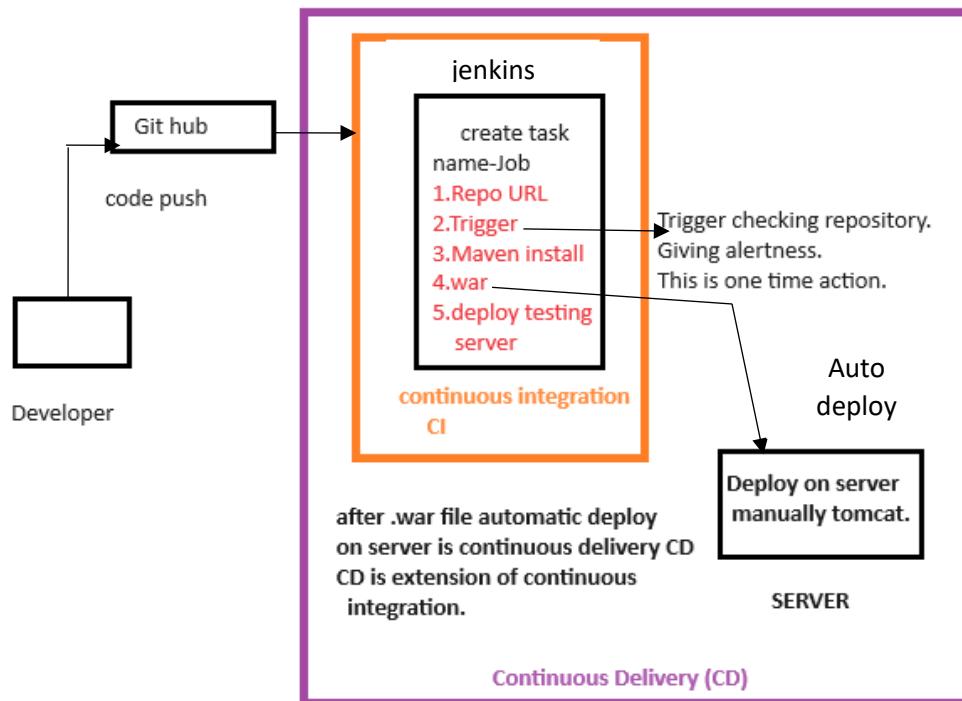


Manual task:-

- Developer code pushed on git hub
- As Devop's we responsible to download code .
- Compile & built code in war.file
- Deployed on server tomcat webapp
- .war file Store in JEFROG/NEXUS . It is secure.it is replica of .war file.
- Monitor using tools graphna/splunk,nagina

What is CI CD and CD?

Ans:-



Complete till production is called continuous deployment.

Code store in .war file

If deploy on production is manually then store on .JFROG if devops don't take any risk automatic

## Installation CICD

Google jenkins download

All Videos Images News Books More Tools

About 23,90,00,000 results (0.58 seconds)

Jenkins https://www.jenkins.io › download :: Jenkins download and deployment

Downloading Jenkins. Jenkins is distributed as WAR files, native packages, installers, and Docker images. Follow these installation steps: ... library icon are ... Jenkins War Packages · Jenkins Debian Packages · Jenkins Redhat Packages

**Download Jenkins 2.414.3 LTS for:**

Generic Java package (.war) Click

SHA-256: 2d93254bc186df349bc4ad06b6b1dd757c493190f0558d111dbda9517a847b59

Docker

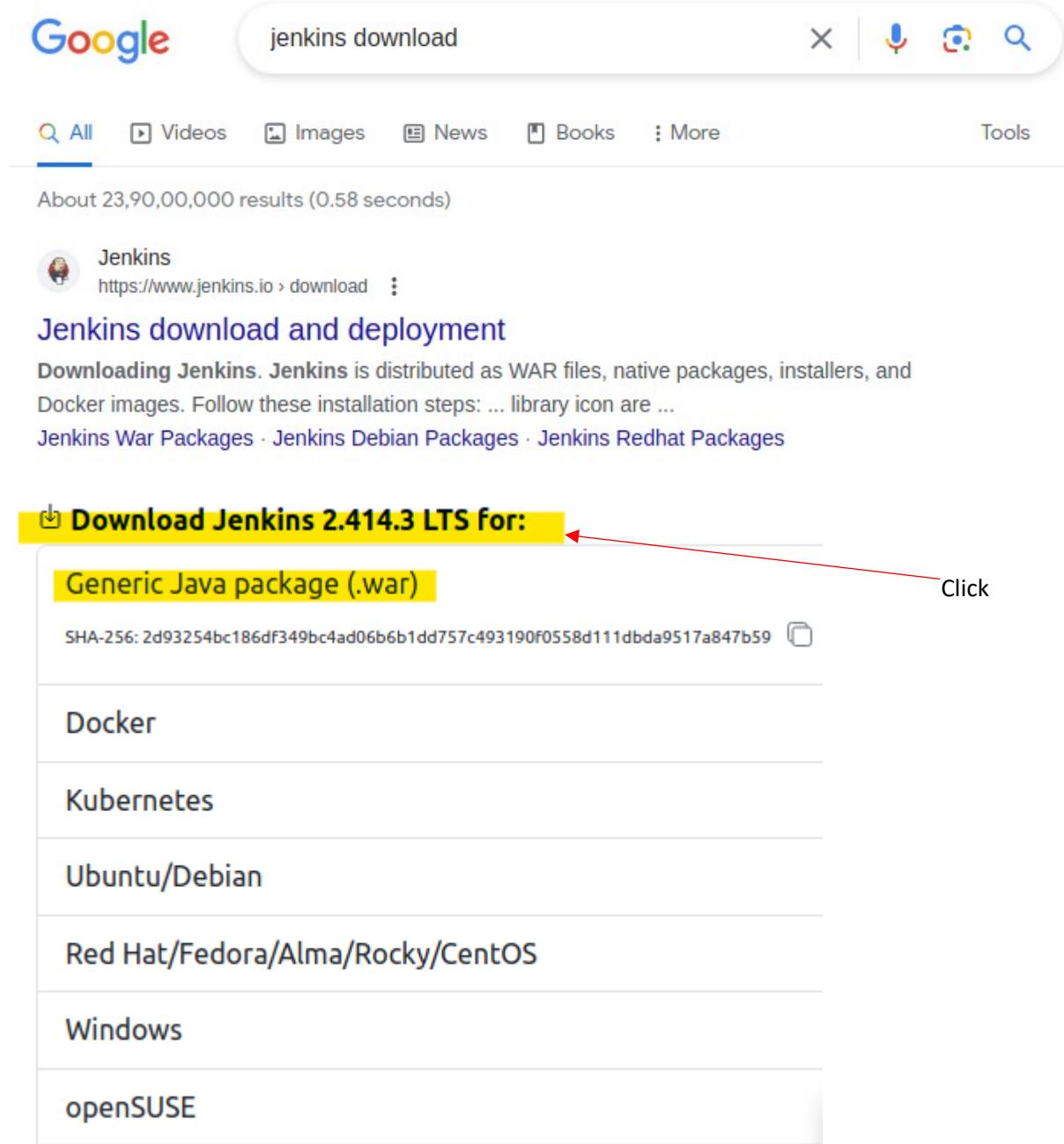
Kubernetes

Ubuntu/Debian

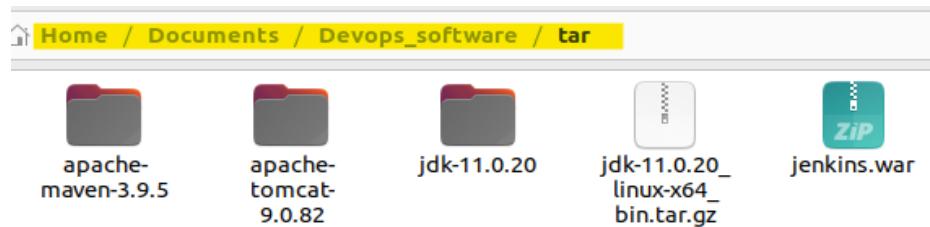
Red Hat/Fedora/Alma/Rocky/CentOS

Windows

openSUSE



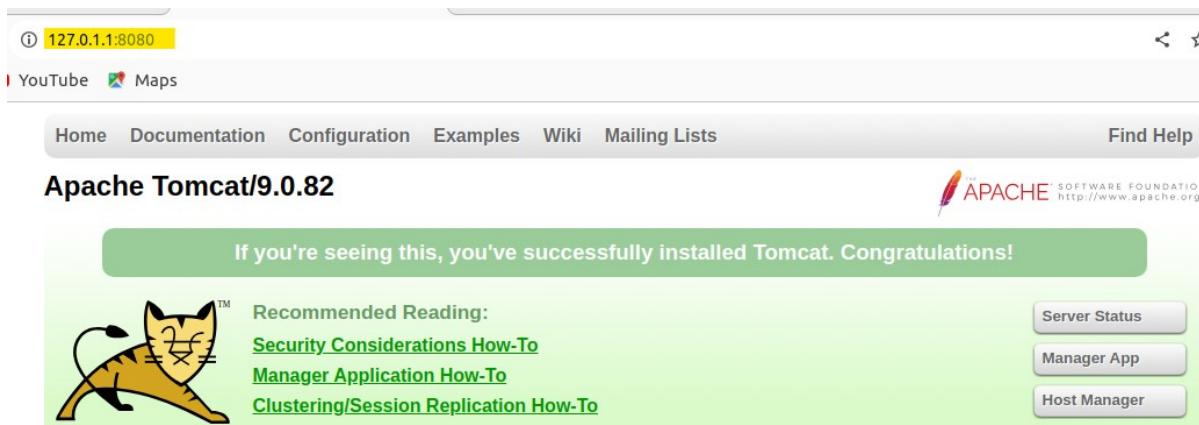
Now cut Jenkins file from download and paste in tar folder.



```
kunal@kunalsh:~$ cd Documents/Devops_software/tar/
kunal@kunalsh:~/Documents/Devops_software/tar$ ls -a
.  apache-maven-3.9.5  jdk-11.0.20          jenkins.war
..  apache-tomcat-9.0.82  jdk-11.0.20_linux-x64_bin.tar.gz
kunal@kunalsh:~/Documents/Devops_software/tar$ cp jenkins.war /home/kunal/Documents/Devops_software/tar/apache-tomcat-9.0.82/webapps
kunal@kunalsh:~/Documents/Devops_software/tar$ cd
```

```
kunal@kunalsh:~$ cd Documents/Devops_software/tar/apache-tomcat-9.0.82/webapps/
kunal@kunalsh:~/Documents/Devops_software/tar/apache-tomcat-9.0.82/webapps$ ls -a
.      android.war  deskauto    fox20.war   ioc.war    lays.war    nba.war    wiki.war
..      autocad     deskauto.war goku       jenkins.war manager    Plasto
ajio    autocad.war docs        goku.war   kingsman   motherdairy  Plasto.war
ajio.war baseball   examples   host-manager kingsman.war motherdairy.war ROOT
amul   baseball.war fifa       icc        laliga     mrf        spark
amul.war ceat      fifa.war   icc.war   laliga.war mrf.war   spark.war
android ceat.war   fox20     ioc       lays      nba       wiki
kunal@kunalsh:~/Documents/Devops_software/tar/apache-tomcat-9.0.82/webapps$ cd ..
kunal@kunalsh:~/Documents/Devops_software/tar/apache-tomcat-9.0.82$ cd bin
kunal@kunalsh:~/Documents/Devops_software/tar/apache-tomcat-9.0.82/bin$ ./startup.sh
```

Then open tomcat 127.0.1.1:8080



Trigger:-pole scm → start and build periodic schedule

If new data arrive and create .var file.

For open → 127.0.1.1:8080/jenkins

## Getting Started

# Unlock Jenkins

To ensure Jenkins is securely set up by the administrator, a password has been written to the log ([not sure where to find it?](#)) and this file on the server:

```
/home/kunal/.jenkins/secrets/initialAdminPassword
```

Please copy the password from either location and paste it below.

Administrator password

Continue

```
kunal@kunalsh:~/Documents/Devops_software/tar/apache-tomcat-9.0.82/bin$ hostname -i  
127.0.0.1.1  
kunal@kunalsh:~/Documents/Devops_software/tar/apache-tomcat-9.0.82/bin$ cat /home/kunal/.jenkins/secrets/initialAdminPassword  
eb458f649f1e4773ba1dba7090920b4d
```

## Getting Started

# Unlock Jenkins

To ensure Jenkins is securely set up by the administrator, a password has been written to the log ([not sure where to find it?](#)) and this file on the server:

```
/home/kunal/.jenkins/secrets/initialAdminPassword
```

Please copy the password from either location and paste it below.

Administrator password

Continue

## Install suggested plugins

Install plugins the Jenkins community finds most useful.

getting started

Username -Kunalshiwarkar passwd dev

Date:-31/10/23

```
kunal@kunalsh:~/Documents/Devops_software/tar/apache-tomcat-9.0.82/bin$ cd Documents/Devops_software/tar/apache-tomcat-9.0.82/bin
kunal@kunalsh:~/Documents/Devops_software/tar/apache-tomcat-9.0.82/bin$ ./startup.sh
Using CATALINA_BASE:   /home/kunal/Documents/Devops_software/tar/apache-tomcat-9.0.82
Using CATALINA_HOME:   /home/kunal/Documents/Devops_software/tar/apache-tomcat-9.0.82
Using CATALINA_TMPDIR: /home/kunal/Documents/Devops_software/tar/apache-tomcat-9.0.82/temp
Using JRE_HOME:        /home/kunal/Documents/Devops_software/tar/jdk-11.0.20
Using CLASSPATH:       /home/kunal/Documents/Devops_software/tar/apache-tomcat-9.0.82/bin/b
tar/apache-tomcat-9.0.82/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
kunal@kunalsh:~/Documents/Devops_software/tar/apache-tomcat-9.0.82/bin$ hostname -i
127.0.1.1
```

How many type of job in Jenkins?



#### Freestyle project

This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

Configure source code management, Build trigger , build environment , build steps , post build action

Making job



#### Pipeline

Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

General , advance project option , pipeline

In one file , all job configuration write.



#### Folder

Creates a container that stores nested items in it. Useful for grouping things together. Unlike view, which is just a filter, a folder creates a separate namespace, so you can have multiple things of the same name as long as they are in different folders.

In folder job related information put into folder

Display name , description , pipeline libraries.



#### Multibranch Pipeline

Creates a set of Pipeline projects according to detected branches in one SCM repository.

Make automatic build for branch.

General, branch sources , build configuration , scan multibranch pipelines triggers , orphaned item strategy, appearance , health metrics , properties.

## System Configuration



### System

Configure global settings and paths.



### Tools

Configure tools, their locations and automatic installers.



### Plugins

Add, remove, disable or enable plugins that can extend the functionality of Jenkins.



### Nodes

Add, remove, control and monitor the various nodes that Jenkins runs jobs on.



### Clouds

Add, remove, and configure cloud instances to provision agents on-demand.

## Security



### Security

Secure Jenkins; define who is allowed to access/use the system.



### Credentials

Configure credentials



### Credential Providers

Configure the credential providers and types



### Users

Create/delete/modify users that can log in to this Jenkins.

## Status Information



### System Information

Displays various environmental information to assist trouble-shooting.



### System Log

System log captures output from java.util.logging output related to Jenkins.



### Load Statistics

Check your resource utilization and see if you need more computers for your builds.



### About Jenkins

See the version and license information.

## Troubleshooting



### Manage Old Data

Scrub configuration files to remove remnants from old plugins and earlier versions.

People:- how many users access Jenkins we see using list out.

Build history:- which user build , modify all things tracked in build history.

Managed activity :- we can perform administration , perform all work like permission deletion.

Tools:- java , maven , cloud , cradle , selenium , ant this integrated using tools

Plugin:- first tool as form plugin install.

Available:- maven click

Go to install then search

Node :- master slave concept

Cloud

Security :- permission access.

System information :- here plugin install or not,

Thread uses , Jenkins health status state

System log:- Jenkins log, job creation saw , problem saw in Jenkins log

Load statitics:- what is load in Jenkins

About Jenkins:- details

Tools & action:-- we used command in CLI.

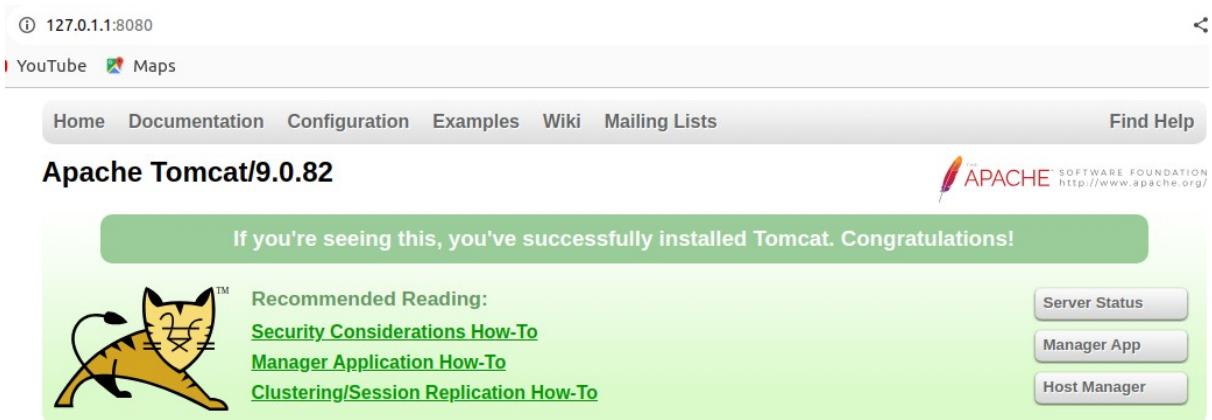
Reload configuration built :- safely restart

Date-1/11/2023

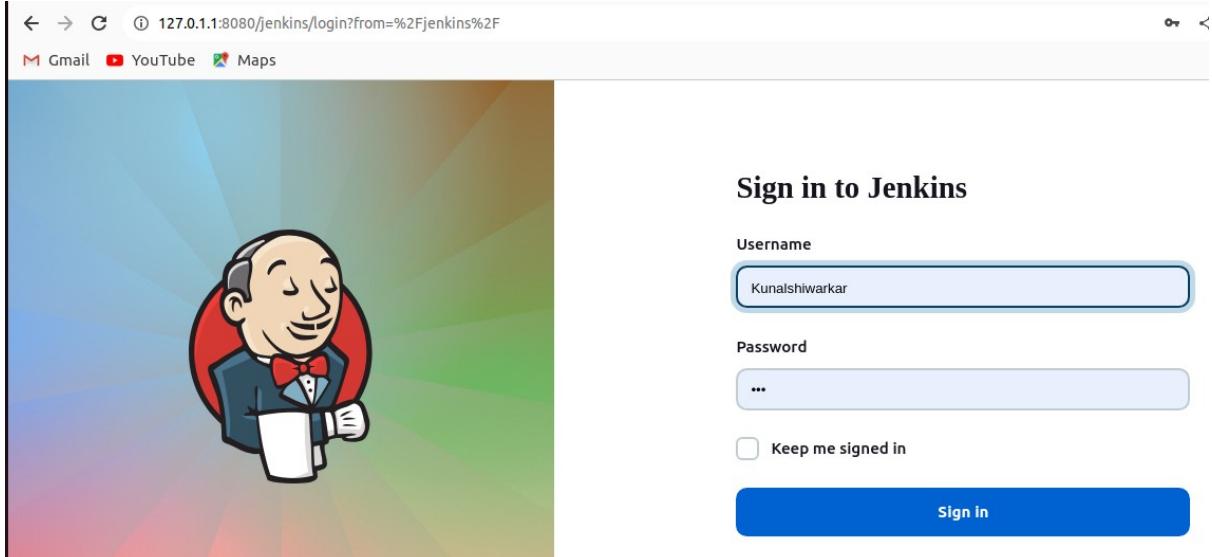
Start jenkins

```
kunal@kunalsh:~/Documents/Devops_software/tar/apache-tomcat-9.0.82/bin$ ./startup.sh
Using CATALINA_BASE:   /home/kunal/Documents/Devops_software/tar/apache-tomcat-9.0.82
Using CATALINA_HOME:   /home/kunal/Documents/Devops_software/tar/apache-tomcat-9.0.82
Using CATALINA_TMPDIR: /home/kunal/Documents/Devops_software/tar/apache-tomcat-9.0.82/temp
Using JRE_HOME:        /home/kunal/Documents/Devops_software/tar/jdk-11.0.20
Using CLASSPATH:       /home/kunal/Documents/Devops_software/tar/apache-tomcat-9.0.82/bin/bootstrap.jar!/org/apache/tomcat/embed/juli/JuliEmbedTomcat.class
                       /home/kunal/Documents/Devops_software/tar/apache-tomcat-9.0.82/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.

kunal@kunalsh:~/Documents/Devops_software/tar/apache-tomcat-9.0.82/bin$ hostname -i
127.0.1.1
```



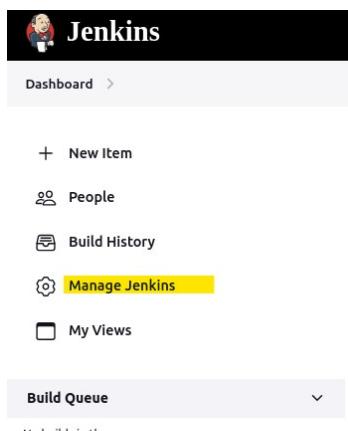
The screenshot shows the Apache Tomcat 9.0.82 homepage. At the top, it displays the URL 127.0.1.1:8080. Below the URL, there are links for YouTube and Maps. A navigation bar includes Home, Documentation, Configuration, Examples, Wiki, and Mailing Lists, along with a Find Help button. The main content features a green banner with the text "If you're seeing this, you've successfully installed Tomcat. Congratulations!" and a cartoon cat logo. It also lists "Recommended Reading" with links to Security Considerations How-To, Manager Application How-To, and Clustering/Session Replication How-To. To the right, there are three buttons: Server Status, Manager App, and Host Manager.

The screenshot shows the Jenkins sign-in page. The URL in the address bar is 127.0.1.1:8080/jenkins/login?from=%2Fjenkins%2F. The page features a large background image of the Jenkins mascot, a smiling man in a tuxedo holding a mug. To the right, the title "Sign in to Jenkins" is displayed above a form. The form includes fields for "Username" (KunalShiwarkar) and "Password" (represented by three dots), a "Keep me signed in" checkbox, and a blue "Sign in" button.

Configure java and maven add in Jenkins.

1.click on manage Jenkins.



then click on tools

A screenshot of the "Manage Jenkins" page. It has a left sidebar with links: "Dashboard", "Manage Jenkins" (highlighted in grey), "People", "Build History", "My Views", "Build Queue" (showing "No builds in the queue"), and "Build Executor Status" (showing "1 Idle" and "2 Idle"). The main content area is titled "System Configuration" and contains sections for "System", "Plugins", "Clouds", and "Nodes". A red arrow points from the text "then click on tools" to the "Tools" section in the main content area.

Default setting as it is don't change

A screenshot of the "Tools" configuration page. It shows the "Maven Configuration" section with a dropdown labeled "Default settings provider" containing the option "Use default maven settings". Below it is another dropdown labeled "Default global settings provider" containing the option "Use default maven global settings". Red arrows point from the text "Default setting as it is don't change" to the "Default settings provider" and "Default global settings provider" dropdowns.

### JDK

#### Name

jdk-11.0.20

#### JAVA\_HOME

/home/kunal/Documents/Devops\_software/tar/jdk-11.0.20

Install automatically ?

### Maven

#### Name

maven-3.9.5

#### MAVEN\_HOME

/home/kunal/Documents/Devops\_software/tar/apache-maven-3.9.5

Install automatically ?

**Save**

**Apply**

1.apply then save.

### 1.Example: freestyle project

```
kunal@kunalsh:~$ mvn archetype:generate -DgroupId=com.grras1 -DartifactId=grras1 -Dversion=1.0-SNAPSHOT -DinteractiveMode=false -DarchetypeArtifactId=maven-archetype-webapp  
[INFO] Scanning for projects...
```

```
kunal@kunalsh:~$ cd grras1/  
kunal@kunalsh:~/grras1$ ls -a  
. .. pom.xml src  
kunal@kunalsh:~/grras1$ mvn install  
[INFO] Scanning for projects...  
[INFO]
```

```
kunal@ubuntu-machines:~/grras1$ ls -a  
. .. pom.xml src target  
kunal@ubuntu-machines:~/grras1$ cd target/  
kunal@ubuntu-machines:~/grras1/target$ pwd  
/home/kunal/grras1/target  
kunal@ubuntu-machines:~/grras1/target$ ls -a  
. .. classes grras1 grras1.war maven-archiver
```

```
kunal@ubuntu-machines:~/grras1/target$ cd ..  
kunal@ubuntu-machines:~/grras1$ git init  
hint: Using 'master' as the name for the initial branch. This default branch name  
hint: is subject to change. To configure the initial branch name to use in all  
hint: of your new repositories, which will suppress this warning, call:  
hint:  
hint: git config --global init.defaultBranch <name>  
hint:  
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and  
hint: 'development'. The just-created branch can be renamed via this command:  
hint:  
hint: git branch -m <name>  
Initialized empty Git repository in /home/kunal/grras1/.git/
```

```
kunal@kunalsh:~/grras1$ git status  
On branch master  
  
No commits yet  
  
Untracked files:  
(use "git add <file>..." to include in what will be committed)  
    pom.xml  
    src/  
    target/  
  
nothing added to commit but untracked files present (use "git add" to track)  
kunal@kunalsh:~/grras1$ git add .  
kunal@kunalsh:~/grras1$ git status  
On branch master  
  
No commits yet  
  
Changes to be committed:  
(use "git rm --cached <file>..." to unstage)  
    new file:   pom.xml  
    new file:   src/main/webapp/WEB-INF/web.xml  
    new file:   src/main/webapp/index.jsp  
    new file:   target/grras1.war  
    new file:   target/grras1/WEB-INF/web.xml  
    new file:   target/grras1/index.jsp  
    new file:   target/maven-archiver/pom.properties  
  
kunal@kunalsh:~/grras1$ git commit -m "msg"
```

## Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

Required fields are marked with an asterisk (\*).

Owner \*      Repository name \*



/ grras1

✓ grras1 is available.

Great repository names are short and memorable. Need inspiration? How about **super-duper-dollop** ?

Description (optional)

### Quick setup — if you've done this kind of thing before

or    [HTTPS](#)    [SSH](#)    <https://github.com/Kunalshiwarkar/grras1.git>

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

```
kunal@kunalsh:~/grras1$ git remote add grras1 https://github.com/Kunalshiwarkar/grras1.git
kunal@kunalsh:~/grras1$ git remote -v
grras1  https://github.com/Kunalshiwarkar/grras1.git (fetch)
grras1  https://github.com/Kunalshiwarkar/grras1.git (push)
```

```
kunal@ubuntu-machines:~/grras1$ git push grras1
Username for 'https://github.com': Kunalshiwarkar
Password for 'https://Kunalshiwarkar@github.com':
Enumerating objects: 13, done.
Counting objects: 100% (13/13), done.
Compressing objects: 100% (9/9), done.
Writing objects: 100% (13/13), 2.22 KiB | 569.00 KiB/s, done.
Total 13 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/Kunalshiwarkar/grras1.git
 * [new branch]      master -> master
```

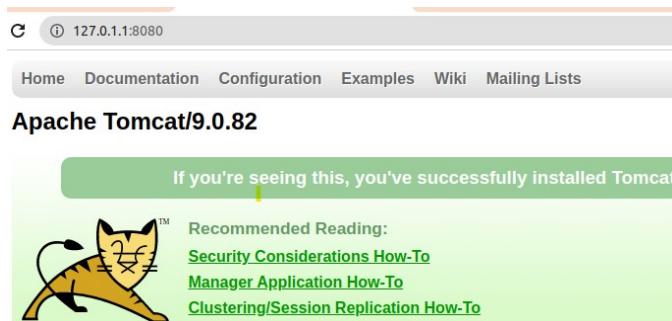
**grras1** (Public)

[Pin](#) [Unwatch 1](#)

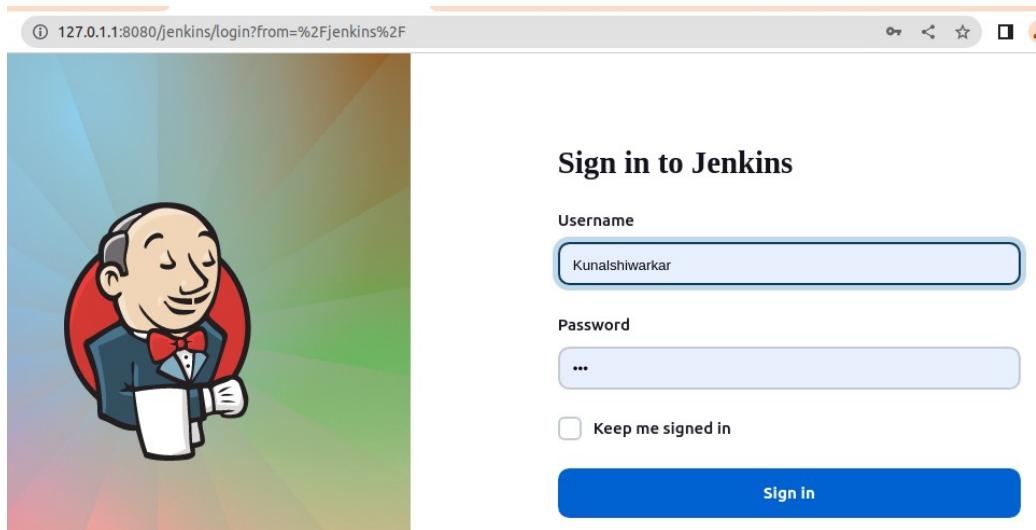
[master](#) [1 branch](#) [0 tags](#) [Go to file](#) [Add file](#) [Code](#)

| Kunalshiwarkar msg | 0c41292 8 minutes ago | ⌚ 1 commit    |
|--------------------|-----------------------|---------------|
| src/main/webapp    | msg                   | 8 minutes ago |
| target             | msg                   | 8 minutes ago |
| pom.xml            | msg                   | 8 minutes ago |

```
kunal@ubuntu-machines:~/grrasi$ cd
kunal@ubuntu-machines:~$ cd Documents/devopsssoftware/tar/apache-tomcat-9.0.82/bin/
kunal@ubuntu-machines:~/Documents/devopsssoftware/tar/apache-tomcat-9.0.82/bin$ pwd
/home/kunal/Documents/devopsssoftware/tar/apache-tomcat-9.0.82/bin
kunal@ubuntu-machines:~/Documents/devopsssoftware/tar/apache-tomcat-9.0.82/bin$ ./startup.sh
```

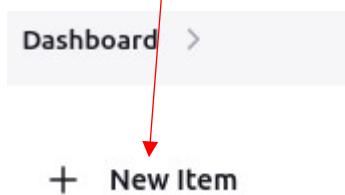


127.0.1.1:8080/jenkins



### 1. Freestyle project

Click on new item.



Freestyle project → click on ok

**Enter an item name**

grras1  
» Required field

**Freestyle project**  
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

**Pipeline**  
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

**OK configuration project**  
Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific

**Configure**

**General**  Enabled

**General**

Description  
this is java file freestyle|

Source Code Management  
Build Triggers  
Build Environment

Plain text [Preview](#)

**Quick setup — if you've done this kind of thing before**

or [HTTPS](#) [SSH](#) <https://github.com/Kunalshiwarkar/grras1.git>

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

Paste URL OF repo here

**Configure**

**Source Code Management**

None  Git [?](#)

**Repositories** [?](#)

Repository URL [?](#) [X](#)

**Please enter Git repository.**

Credentials [?](#)  
- none - [Add](#) [▼](#)

### Branches to build ?

Branch Specifier (blank for 'any') ?

\*/master



Add Branch

### Repository browser ?

(Auto)



### Additional Behaviours

Add ▾

Build Environment

Build Steps

Post-build Actions

### Build Steps

≡ Invoke top-level Maven targets ?

Maven Version

maven-3.9.5

Goals

install

Advanced ▾

Save

Apply

Build Steps

Post-build Actions

≡ Execute shell ?

Command

See [the list of available environment variables](#)

echo "hello world"

**Project grras1**

Status: this is java file freestyle

Changes: this is java file freestyle

Workspace:

**Build Now**

Configure

Delete Project

Dependency Graph

Rename

**Permalinks**

Build History: trend ▾

Filter builds... /

#1 1 Nov 2023, 21:38

Atom feed for all Atom feed for failures

**Console Output**

```
Started by user kunal shiwardar
Running as SYSTEM
Building in workspace /home/kunal/.jenkins/workspace/grras1
The recommended git tool is: NONE
No credentials specified
> git rev-parse --resolve-git-dir /home/kunal/.jenkins/workspace
Fetching changes from the remote Git repository
```

**log file show**

**Build #1 (1 Nov 2023, 21:38:38)**

```
</> No changes.
⌚ Started by user kunal shiwardar
❖ git Revision: 098b42f9b0d59a4c60d82c5c35cfbcacf17c7366
Repository: https://github.com/Kunalshiwardar/grras1.git
• refs/remotes/origin/master
```

Click on grras1

| All | +  |        |                    |              |               |          |
|-----|----|--------|--------------------|--------------|---------------|----------|
| S   | W  | Name ↓ | Last Success       | Last Failure | Last Duration | Coverage |
| ✓   | ☀️ | grras1 | 5 min 32 sec<br>#1 | N/A          | 29 sec        | ▷        |
|     |    |        |                    |              |               | n/a      |

Status

## Project grras1

</> Changes

this is java file freestyle

Workspace

▷ Build Now

⚙ Configure

Delete Project

Dependency Graph

Rename

### Permalinks

- Last build (#1), 7 min 3 sec ago
- Last stable build (#1), 7 min 3 sec ago
- Last successful build (#1), 7 min 3 sec ago
- Last completed build (#1), 7 min 4 sec ago

```
kunal@ubuntu-machines:~/Documents/devopssoftware/tar/apache-tomcat-9.0.82$ cd webapps/  
kunal@ubuntu-machines:~/Documents/devopssoftware/tar/apache-tomcat-9.0.82/webapps$ pwd  
/home/kunal/Documents/devopssoftware/tar/apache-tomcat-9.0.82/webapps
```

### Build Steps

#### Configure

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

#### Invoke top-level Maven targets

Maven Version

maven-3.9.5

Goals

install

Advanced

#### Execute shell

Command

See the list of available environment variables

```
copy target/grras1.war /home/kunal/Documents/devopssoftware/tar/apache-tomcat-9.0.82/web
```

Build now

Status

## Project grras1

this is java file freestyle

Changes

Workspace

▷ Build Now

Configure

Delete Project

Dependency Graph

Rename

Build #2 (1 Nov 2023, 21:55:52)

</> No changes.



Started by user [kunal shiarkar](#)



Revision: 098b42f9b0d59a4c60d82c5c35cfbcacf17c7366  
Repository: <https://github.com/Kunalshiarkar/grras1.git>

refs/remotes/origin/master

Build History trend  
Filter builds...  
#2 1 Nov 2023, 21:55



← → C

① 127.0.1.1:8080/grras1/

## Hello World!

Now with trigger , now go to git hub grras1 repo , index.jsp file edit using and then commit

The screenshot shows a GitHub repository page for 'grras1' with the file 'index.jsp'. The code content is:

```
1 <html>
2 <body>
3 <h2>Hello devops </h2>
4 </body>
5 </html>
```

A red arrow points from the text above to the edit icon in the GitHub interface.

## Configure

## General

### General

Source Code Management

Build Triggers

### Description

this is java file freestyle

## 1.Poll SCM :-new data add in Jenkins job build. [Crontab job]

### Build Triggers

- Trigger builds remotely (e.g., from scripts) ?
- Build after other projects are built ?
- Build periodically ?
- Enable Artifactory trigger
- GitHub hook trigger for GITScm polling ?
- Maven Dependency Update Trigger ?

Poll SCM ?

Schedule ?

\*\*\*\*\*

Dashboard > grras1 >

**Status** Project grras1

</> Changes this is java file freestyle

Workspace

▷ Build Now

⌚ Configure

Delete Project

Git Polling Log

Dependency Graph

Rename

**Permalinks**

- Last build (#10), 1 hr 7 min ago
- Last stable build (#10), 1 hr 7 min ago
- Last successful build (#10), 1 hr 7 min ago
- Last completed build (#10), 1 hr 7 min ago

**Build History** trend ▾

Filter builds... /

#10 ← 1 Nov 2023, 23:07

refresh and edited index.jsp file see.

127.0.1.1.8080/grras1

← → ⚡ 127.0.1.1:8080/grras1/

## Hello devops

2. Build periodically:- continuous build generate. Job file

### Build Triggers

- Trigger builds remotely (e.g., from scripts) ?
  - Build after other projects are built ?
  - Build periodically ?
- Schedule ?
- ```
* * * * *
```
- Delete Project
- Dependency Graph
- Rename

**Build History** trend ▾

Filter builds... /

|    |                   |
|----|-------------------|
| #7 | 1 Nov 2023, 22:57 |
| #6 | 1 Nov 2023, 22:56 |

automatically created at every min

By using build periodically

Date:-3/11/23

## 1.How to discard old builds

The screenshot shows the Jenkins dashboard with the 'Build History' section selected. It lists four projects: grras1, grras10, grras2, and grras3. Each project has a status icon (green checkmark), a warning icon (yellow sun), the name, the last success timestamp (e.g., 1 day 2 hr #12, 2 days 15 hr #4, 1 min 43 sec #398, 2 days 21 hr #7), the last failure timestamp (N/A), the last duration (e.g., 2 min 29 sec, 55 sec, 1 min 16 sec, 41 sec), and coverage information (n/a). A sidebar on the left includes links for New Item, People, Manage Jenkins, Maven Repository, My Views, and Dependency Graph. A 'Build Queue' section below the sidebar indicates 'No builds in the queue.'

Go to job grras 5

Go to configure

The screenshot shows the 'Project grras5' configuration page. The left sidebar includes links for Status, Changes, Workspace, Build Now, Configure (which is highlighted in yellow), Delete Project, Git Polling Log, Dependency Graph, and Rename. The main content area displays the project name 'Project grras5' and a description 'this is java file freestyle.' It also shows a list of permalinks: Last build (#3), Last stable build (#3), Last successful build (#3), and Last completed build (#3), all from 3 days 3 hr ago. On the right side, there are 'Edit description' and 'Disable Project' buttons.

Configure → general

The screenshot shows the 'Configuration' page for the 'General' tab. The left sidebar includes links for General (which is highlighted in yellow), Source Code Management, Build Triggers, Build Environment, Build Steps, and Post-build Actions. The main content area shows the 'General' tab selected. It includes fields for 'Description' (containing 'this is java file freestyle.'), 'Plain text' (with a 'Preview' link), 'Jira site' (in a dropdown menu), and a checkbox for 'Discard old builds'. At the bottom are 'Save' and 'Apply' buttons.

Below description option of old builds.

Grras5 → configuration → general → Discard old builds

The screenshot shows the 'Discard old builds' configuration page. On the left, there's a sidebar with 'General' selected. The main area has a 'Strategy' section set to 'Log Rotation'. It includes fields for 'Days to keep builds' (set to 1) and 'Max # of builds to keep' (set to 2). A 'Advanced' button is at the bottom right.

### 1. How to check string parameter

Grras5 → configuration → general → this project is parameterized → string parameter

The screenshot shows the 'String Parameter' configuration page. Under 'General', 'This project is parameterised' is checked. The 'String Parameter' section contains fields for 'Name' (String Parameter), 'Default Value' (DEV), and 'Description' (this is string parameter). There are 'Plain text' and 'Preview' buttons at the bottom.

Click on trim the string then apply and save

The screenshot shows the 'String Parameter' configuration page again. The 'Trim the string' checkbox is checked. Other options like 'Throttle builds' and 'Execute concurrent builds if necessary' are also present. At the bottom are 'Save' and 'Apply' buttons.

Now click on build with parameter

Dashboard > grras5 >

Status

</> Changes

Workspace

Build with Parameters

Configure

Delete Project

Git Polling Log

Dependency Graph

Rename

## Project grras5

this is java file freestyle.

Permalinks

- Last build (#3), 3 days 3 hr ago
- Last stable build (#3), 3 days 3 hr ago
- Last successful build (#3), 3 days 3 hr ago
- Last completed build (#3), 3 days 3 hr ago

Then click on build.

Dashboard > grras5 >

Status

</> Changes

Workspace

Build with Parameters

Configure

Delete Project

Git Polling Log

Dependency Graph

Rename

## Project grras5

This build requires parameters:

String Parameter

this is string parameter

DEV

Build Cancel

Dashboard > grras5 >

 Status

</> Changes this is java file freestyle.

 Workspace

 Build with Parameters

 Configure

 Delete Project

 Git Polling Log

 Dependency Graph

 Rename

## Project grras5

### Permalinks

- [Last build \(#4\), 0.52 sec ago](#)
- [Last stable build \(#3\), 3 days 3 hr ago](#)
- [Last successful build \(#3\), 3 days 3 hr ago](#)
- [Last completed build \(#3\), 3 days 3 hr ago](#)

2.how to set a choice parameter?

Go to job grras5 then go to configure.

Dashboard > grras5 >

 Status

</> Changes this is java file freestyle.

 Workspace

 Build with Parameters

 Configure

 Delete Project

 Git Polling Log

 Dependency Graph

 Rename

## Project grras5

### Permalinks

- [Last build \(#4\), 3 min 8 sec ago](#)
- [Last stable build \(#4\), 3 min 8 sec ago](#)
- [Last successful build \(#4\), 3 min 8 sec ago](#)
- [Last completed build \(#4\), 3 min 8 sec ago](#)

First delete old parameter

The screenshot shows the Jenkins 'Configuration' page for a project named 'grras5'. The 'General' section is selected. A 'String Parameter' is defined with the name 'String Parameter' and a default value of 'DEV'. The 'This project is parameterised' checkbox is checked.

After complete choice parameter , apply and save.

The screenshot shows the Jenkins 'Configuration' page for a project named 'grras5'. The 'General' section is selected. A 'Choice Parameter' is defined with the name 'Choice Environment' and choices: DEV, QA, UAT, PROOD. The 'This project is parameterised' checkbox is checked. The 'Save' button is visible at the bottom.

Click on build with parameter.

The screenshot shows the 'Project grras5' page. The 'Status' tab is selected, showing links for 'Changes', 'Workspace', 'Build with Parameters', 'Configure', 'Delete Project', 'Git Polling Log', 'Dependency Graph', and 'Rename'. The 'Build with Parameters' link is highlighted.

Then click on build

Dashboard > grras5 >

Status

Changes

Workspace

Build with Parameters

Configure

Delete Project

Git Polling Log

Dependency Graph

Rename

## Project grras5

This build requires parameters:

**Choice Environment**  
This is choice parameter

DEV

Build Cancel

### 3. How to set boolean parameter?

Create new freestyle job

Dashboard > boolean parameter-job > Configuration

**Configure**

**General**

Enabled

**General**

Description  
This is job

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

Plain text [Preview](#)

Jira site

Dashboard > boolean parameter-job > Configuration [Disable Automated Maven Repository Cleaning](#)

This project is parameterised [?](#)

**Configure**

**General**

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

**String Parameter**

Name [?](#)  
FIRST\_NAME

Default Value [?](#)  
John

Description [?](#)

Dashboard > boolean parameter-job > Configuration Trim the string ?

## Configure

**General**

- Source Code Management
- Build Triggers
- Build Environment
- Build Steps
- Post-build Actions

**String Parameter**

Name : LAST\_NAME

Default Value : CENA

Description :

Dashboard > boolean parameter-job > Configuration Trim the string ?

## Configure

**General**

- Source Code Management
- Build Triggers
- Build Environment
- Build Steps
- Post-build Actions

**Choice Parameter**

Name : COUNTRY

Choices :

- USA
- FRANCE
- INDIA
- GERMANY
- BRITAIN

Description :

### Boolean parameter

Dashboard > boolean parameter-job > Configuration Plain Text Preview

## Configure

**General**

- Source Code Management
- Build Triggers
- Build Environment
- Build Steps
- Post-build Actions

**Boolean Parameter**

Name : SHOW\_NATIONALITY

Set by Default ?

Description :

Dashboard > boolean parameter-job > Configuration

**Configure**

- General
- Source Code Management
- Build Triggers
- Build Environment
- Build Steps**
- Post-build Actions

**Build Steps**

```
Execute shell
Command
See the list of available environment variables

if [ "$SHOW_NATIONALITY" = "true" ]; then
    echo "Thanks for the chance, I am from $COUNTRY"
else
    echo "Sorry I can't disclose my Nationality"
fi
```

Advanced ▾

Save Apply

Apply and save

Without mark

Dashboard > boolean parameter-job >

This build requires parameters.

- Workspace
- Build with Parameters
- Configure**
- Delete Project
- Move
- Rename

**Build History** trend ▾

Filter builds... /

#5 11 Nov 2023, 22:34

FIRST\_NAME  
John

LAST\_NAME  
CENA

COUNTRY  
USA

SHOW\_NATIONALITY

> Build Cancel

Then built

Dashboard > boolean parameter-job > #6 > Console Output

**Status**

</> Changes

**Console Output**

View as plain text

Edit Build Information

Delete build '#6'

Parameters

## Console Output

Started by user Kunal shiwardar  
 Running as SYSTEM  
 Building on the built-in node in workspace /home/kunal/.jenkins/workspace/boolean parameter-job  
 [boolean parameter-job] \$ /bin/sh -xe /home/kunal/Documents/Devops\_software/tar/apache-tomcat-9.0.82/temp/jenkins15021193019127712357.sh  
 + [ false = true ]  
 + echo Sorry I can't disclose my Nationality  
 Sorry I can't disclose my Nationality  
 Finished: SUCCESS

With mark

The screenshot shows the Jenkins interface for a project named "boolean parameter-job".

**Project boolean parameter-job**

This build requires parameters:

- FIRST\_NAME**: John
- LAST\_NAME**: CENA
- COUNTRY**: USA

**Build History** dropdown: trend ▾

SHOW\_NATIONALITY

**Console Output**

Started by user Kunal shiwarkar  
Running as SYSTEM  
Building on the built-in node in workspace /home/kunal/.jenkins/workspace/boolean parameter-job  
[boolean parameter-job] \$ /bin/sh -xe /home/kunal/Documents/Devops\_software/tar/apache-tomcat-9.0.82/temp/jenkins10986465829345430650.sh  
+ [ true = true ]  
+ echo Thanks for the chance, I am from USA  
Thanks for the chance, I am from USA  
Finished: SUCCESS

Date:-4/11/2023

Allow user in sign up

How to unable/disable sign up

How to allow user sign up or unable or disable signup.

How to unable/disable login in Jenkins.

1.step:- go to dashboard

The screenshot shows the Jenkins Dashboard. On the left, there is a sidebar with links: '+ New Item', 'People', 'Build History', 'Manage Jenkins' (which is highlighted with a yellow box), 'Maven Repository', 'My Views', and 'Dependency Graph'. Below this is a 'Build Queue' section with the message 'No builds in the queue.' To the right is a table showing build history for four projects: grras1, grras10, grras2, and grras3. The table columns are: S (Status), W (Last Build), Name, Last Success, Last Failure, Last Duration, and Coverage. Each row shows a green checkmark in the status column and a sun icon in the last build column. The last success time is listed as '1 day 3 hr #12' for grras1, '2 days 16 hr #4' for grras10, '24 sec #461' for grras2, and '2 days 23 hr #7' for grras3. The last failure is 'N/A' for all. The last duration is '2 min 29 sec' for grras1, '55 sec' for grras10, '16 sec' for grras2, and '41 sec' for grras3. Coverage is listed as 'n/a' for all.

2. step :- go to manage Jenkins

The screenshot shows the 'Manage Jenkins' page. The sidebar on the left is identical to the dashboard, with 'Manage Jenkins' highlighted by a yellow box. The main content area shows the same build history table as the dashboard, with four projects: grras1, grras10, grras2, and grras3. The table columns are: S (Status), W (Last Build), Name, Last Success, Last Failure, Last Duration, and Coverage. Each row shows a green checkmark in the status column and a sun icon in the last build column. The last success time is listed as '1 day 4 hr #12' for grras1, '2 days 17 hr #4' for grras10, '49 sec #503' for grras2, and '2 days 23 hr #7' for grras3. The last failure is 'N/A' for all. The last duration is '2 min 29 sec' for grras1, '55 sec' for grras10, '15 sec' for grras2, and '41 sec' for grras3. Coverage is listed as 'n/a' for all.

3.go to security

The screenshot shows the 'Security' section of the 'Manage Jenkins' page. At the top, there is a note: 'Add, remove, and configure cloud instances to provision agents on-demand.' Below this is a 'Security' button with a lock icon, which is highlighted with a yellow box. A red arrow points from the 'Security' button to the text 'Secure Jenkins; define who is allowed to access/use the system.' To the right of the 'Security' button are three other sections: 'Credentials' (with a key icon), 'Credential Providers' (with a briefcase icon), and 'Users' (with a person icon). The 'Credentials' section has the sub-instruction 'Configure credentials'. The 'Credential Providers' section has the sub-instruction 'Configure the credential providers and types'. The 'Users' section has the sub-instruction 'Create/delete/modify users that can log in to this Jenkins.'

Dashboard > Manage Jenkins > Security

## Security

### Authentication

Disable remember me

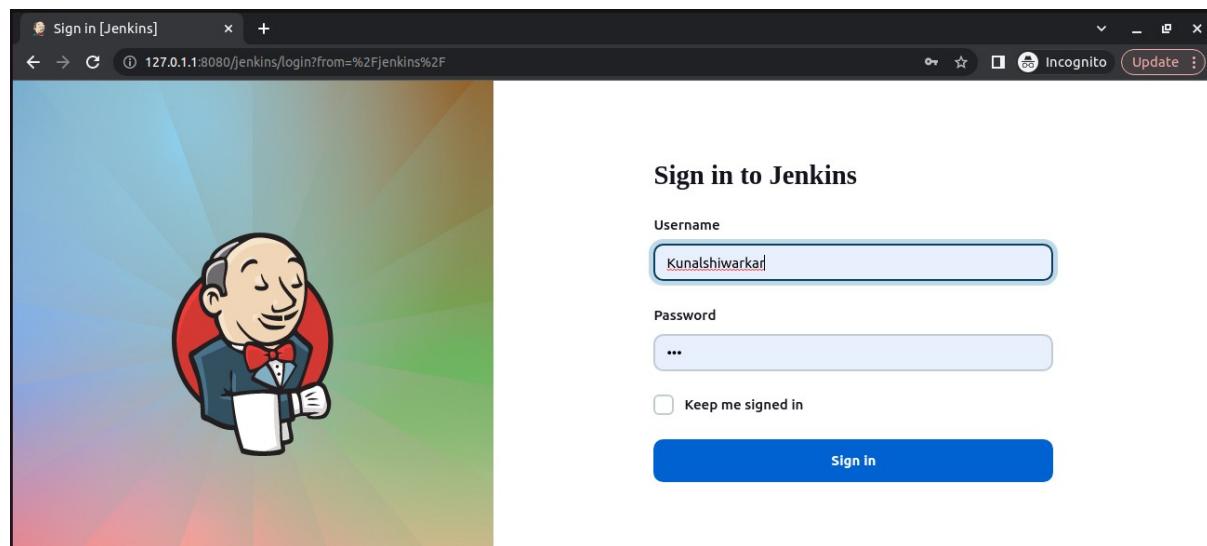
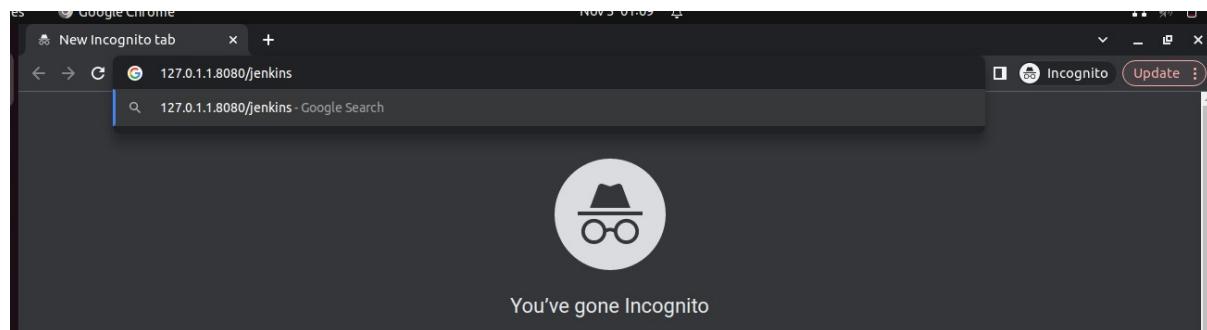
Security Realm

Jenkins' own user database

Allow users to sign up ?

If not click then other user can't signup

1<sup>st</sup> we open incognito :- 127.0.1.1:8080/jenkins



There is no signup , only login and logout is called incognito mode.

Dashboard [Jenkins]

Jenkins

Dashboard >

- + New Item
- People
- Build History
- Manage Jenkins
- Maven Repository
- My Views
- Dependency Graph

| S | W  | Name    | Last Success         | Last Failure        | Last Duration | Coverage |
|---|----|---------|----------------------|---------------------|---------------|----------|
| ✓ | ☀️ | grras1  | 1 day 4 hr<br>#12    | N/A                 | 2 min 29 sec  | n/a      |
| ✓ | ☀️ | grras10 | 2 days 17 hr<br>#4   | N/A                 | 55 sec        | n/a      |
| ✓ | ☀️ | grras2  | 1 min 11 sec<br>#522 | 1 hr 12 min<br>#451 | 14 sec        | n/a      |

Search (CTRL+K)

log out

then logout

Now go to own simple browser.

Any user to allow sign up then

- 1.manage Jenkins
- 2.security
- 3.authentication

Click on that option for sign up user

Allow users to sign up  With signup enabled, anyone on your network can become an authenticated user. It's recommended in this case to minimize the permissions granted to any authenticated user.

After authorization all setting default do not click other options. Save and apply

Allow users to sign up  With signup enabled, anyone on your network can become an authenticated user. It's recommended in this case to minimize the permissions granted to any authenticated user.

Now open new incognito mode and refresh we see register  
127.0.1.1:8080/Jenkins

Sign in to Jenkins

Username

Password

Keep me signed in

Sign in

or register

So that's why we not allow any user to sign up

No go simple own browser

The screenshot shows the Jenkins 'Security' configuration page. At the top, there is a navigation bar with links to 'Dashboard', 'Manage Jenkins', and 'Security'. The main section is titled 'Authentication'. Under 'Authentication', there is a checkbox labeled 'Disable remember me'. Below this is a section titled 'Security Realm' with a dropdown menu containing 'Jenkins' own user database'. In the 'Authorization' section, there is a checkbox labeled 'Allow users to sign up' which is highlighted with a yellow box and a red arrow pointing to it. Below the authorization section are two buttons: 'Save' and 'Apply'.

Open incognito register option not show

The screenshot shows the Jenkins 'Sign in to Jenkins' page within an Incognito browser window. The page features a large, colorful background image of a cartoon character wearing a tuxedo and bow tie, holding a white mug. To the right of the image is the 'Sign in to Jenkins' form. It includes fields for 'Username' and 'Password', a 'Keep me signed in' checkbox, and a 'Sign In' button. The browser's address bar shows the URL '127.0.1.1:8080/jenkins/login?from=%2Fjenkins%2F'.

## 2.Roles based authentication

How to unable/disable to login in Jenkins

Install a powerful security plug in

Role based authentication strategy.

Role assign to any user → read,write , delete , configuration, build , add , admin , useradd , particular access defined to user particular to do work.

Step:- manage Jenkins → system configuration → plugin

The screenshot shows the Jenkins System Configuration interface. It includes sections for System (configure global settings), Tools (configure tools), Plugins (add, remove, disable or enable plugins), Nodes (add, remove, control and monitor nodes), Clouds (add, remove, and configure cloud instances), and Managed files (e.g. settings.xml for maven, central managed scripts, custom files).

Dashboard → manage Jenkins → plugin → installed plugin

The screenshot shows the Jenkins Manage Jenkins > Plugins page. The 'Installed plugins' tab is selected. A search bar contains the text 'roll based auther'. The results table lists the 'Role-based Authorization Strategy' plugin, which is enabled.

No available then click on available plugin

The screenshot shows the Jenkins Manage Jenkins > Plugins page. The 'Available plugins' tab is selected. A search bar contains the text 'Search available plugins'. The results table lists the 'Role-based Authorization Strategy' plugin, which is released and available for installation.

Manage Jenkins --- security

The screenshot shows the Jenkins Manage Jenkins dashboard with the 'Security' section selected. The 'Security' tab is highlighted with a yellow background. Below it, there are four main configuration items:

- Clouds**: Adds, removes, and configures cloud instances to provision agents on-demand.
- Managed files**: Manages files like settings.xml for Maven, central managed scripts, and custom files.
- Security**: Secures Jenkins by defining who is allowed to access/use the system.
- Credentials**: Configures credentials.

Dashboard → manage Jenkins → security → authentication → role based strategy → save

The screenshot shows the Jenkins Security configuration page. Under the 'Authentication' section, the 'Role-Based Strategy' option is selected. Other options shown include 'Disable remember me' and 'Allow users to sign up'. Under the 'Authorization' section, 'Role-Based Strategy' is also selected. At the bottom, there are 'Save' and 'Apply' buttons.

After that , Dashboard→ manage Jenkins → manage and assign roles option show

The screenshot shows the Jenkins Manage Jenkins dashboard with the 'Manage and Assign Roles' option selected. The 'Manage and Assign Roles' tab is highlighted with a yellow background. Below it, there are four main configuration items:

- Security**: Secures Jenkins by defining who is allowed to access/use the system.
- Credentials**: Configures credentials.
- Manage and Assign Roles**: Handles permissions by creating roles and assigning them to users/groups.
- Users**: Creates/deletes/modifies users that can log in to this Jenkins.

Manage Jenkins → security → authorization → select role based strategy apply and save

Dashboard > Manage Jenkins > Security

## Security

### Authentication

Disable remember me

#### Security Realm

Jenkins' own user database

|  Allow users to sign up ?

#### Authorization

Role-Based Strategy

**Save** **Apply**

### 1. How to create user in Jenkins

Manage Jenkins → security → user

Dashboard > Manage Jenkins

## Security

 **Security**  
Secure Jenkins; define who is allowed to access/use the system.

 **Credentials**  
Configure credentials

 **Credential Providers**  
Configure the credential providers and types

 **Manage and Assign Roles**  
Handle permissions by creating roles and assigning them to users/groups

 **Users**  
Create/delete/modify users that can log in to this Jenkins.

Click on create user

Dashboard > Manage Jenkins > Jenkins' own user database

## Users

These users can log into Jenkins. This is a sub set of [this list](#), which also contains auto-created users who really just made some commits on some projects and have no direct Jenkins access.

| User ID                                                                                                            | Name            |
|--------------------------------------------------------------------------------------------------------------------|-----------------|
|  <a href="#">kunalshiwarkar</a> | kunal shiwarkar |

**+ Create User**

Dashboard → Manage Jenkins → Jenkins own user database → create user

## Create User

Username

john

Password

...

Confirm password

...

Full name

johnabc

**Create User**

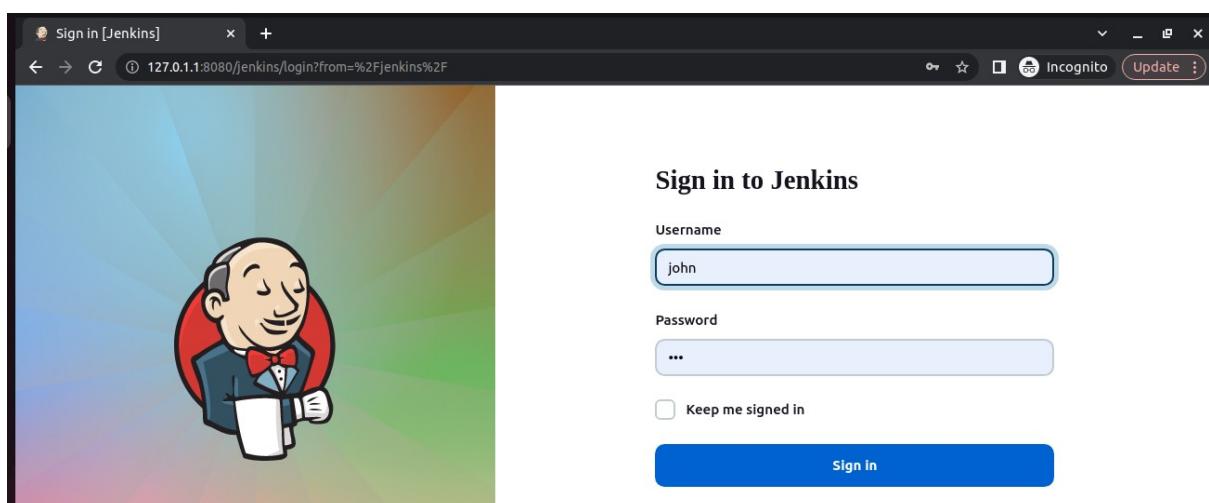
## Users

+ Create User

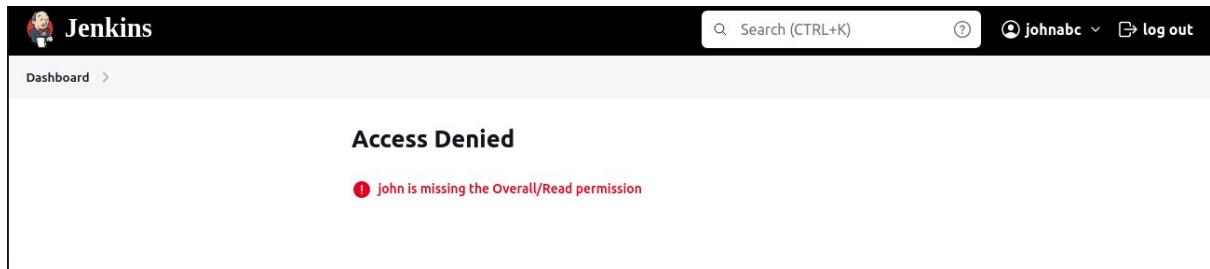
These users can log into Jenkins. This is a sub set of [this list](#), which also contains auto-created users who really just made some commits on some projects and have no direct Jenkins access.

| User ID        | Name            | Actions                                                                                                                                                                     |
|----------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| john           | johnabc         |   |
| kunalshiwarkar | kunal shiwarkar |                                                                                        |

Go to incognito check user access.



There is permission to user jack



Log out

## 2.create roles for particular user

manage Jenkins → security → manage and assign role

**Security**

- Security**: Secure Jenkins; define who is allowed to access/use the system.
- Credential Providers**: Configure the credential providers and types
- Users**: Create/delete/modify users that can log in to this Jenkins.
- Manage and Assign Roles**: Handle permissions by creating roles and assigning them to users/groups

Manage Jenkins → security → manage and assign roles → role to add “read only” → click add →

Apply and save

| Role      | Overall                             |                                     | Credentials              |                          |                          | Agent                    |                          |                          | Job                      |                          |                          | Run                      |                          |                          |                          |                          |
|-----------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|           | Administrator                       | Read                                | Create                   | Delete                   | Update                   | View                     | Configure                | Connect                  | Build                    | Provision                | Disconnect               | Discover                 | Create                   | Move                     | Release                  | Configure                |
| admin     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Read only | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Role to add**

Read only

Add

**Item roles**

Save Apply

Step :- manage Jenkins → security → manage and assign role → go to assign role

So click → add user “john”

The screenshot shows the Jenkins 'Assign Roles' page. In the top right corner, there is a search bar with the placeholder 'User name:' containing the text 'john'. Below it is a modal dialog box with 'Cancel' and 'OK' buttons. The main content area is titled 'Global roles' and contains a table:

| User/Group          | Read only                           | admin                               |
|---------------------|-------------------------------------|-------------------------------------|
| Anonymous           | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Authenticated Users | <input type="checkbox"/>            | <input type="checkbox"/>            |
| kunal shiwarkar     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| john                | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

At the bottom of the page are 'Add User' and 'Add Group' buttons, and 'Save' and 'Apply' buttons.

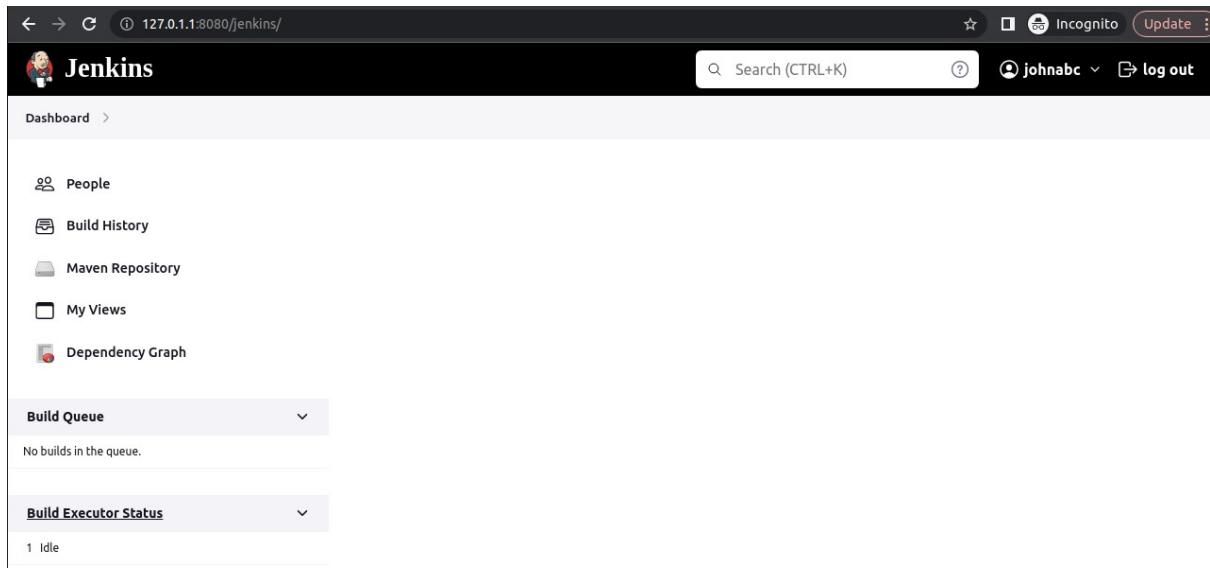
User john :- click on read only then apply and save

The screenshot shows the Jenkins 'Assign Roles' page. The URL path is 'Dashboard > Manage Jenkins > Manage and Assign Roles > Assign Roles'. The 'Assign Roles' tab is selected. The 'Global roles' section shows a table:

| User/Group          | Read only                           | admin                               |
|---------------------|-------------------------------------|-------------------------------------|
| Anonymous           | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Authenticated Users | <input type="checkbox"/>            | <input type="checkbox"/>            |
| kunal shiwarkar     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| johnabc             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

At the bottom of the page are 'Add User' and 'Add Group' buttons, and 'Save' and 'Apply' buttons.

Go to incognito account of john



Example:-

## Create new user

Manage Jenkins → security → user

The screenshot shows the Jenkins Security page. It features four main sections:

- Security**: Secure Jenkins; define who is allowed to access/use the system.
- Credentials**: Configure credentials.
- Credential Providers**: Configure the credential providers and types.
- Manage and Assign Roles**: Handle permissions by creating roles and assigning them to users/groups.

Click on create user

The screenshot shows the Jenkins Users page. It displays a list of users:

| User ID | Name           | Action |
|---------|----------------|--------|
|         | kunalshiwarkar |        |

A red arrow points from the "Click on create user" text to the "+ Create User" button.

## Create User

The screenshot shows the Jenkins Create User form. The fields are:

- Username**: msdhoni (highlighted in blue)
- >Password**: (redacted)
- Confirm password**: (redacted)

A validation error message is displayed next to the Username field:

! User name must only contain alphanumeric characters, underscore and dash

**Create User**

Jenkins

Search (CTRL+K) ? 🔔 2 🛡️ 1 kunal shiwardar log out

Dashboard > Jenkins' own user database

## Users

These users can log into Jenkins. This is a sub set of [this list](#), which also contains auto-created users who really just made some commits on some projects and have no direct Jenkins access.

| User ID        | Name            | Action |
|----------------|-----------------|--------|
| john           | johnabc         | ⚙️ 🗑️  |
| kunalshiwardar | kunal shiwardar | ⚙️     |
| msdhoni        | msdhoni         | ⚙️ 🗑️  |

+ Create User

Go to incognito

Sign in [Jenkins] 127.0.1.1:8080/jenkins/login?from=%2Fjenkins%2F



## Sign in to Jenkins

Username

Password

Keep me signed in

Sign in

Jenkins

Search (CTRL+K) ? msdhoni log out

Dashboard >

## Access Denied

msdhoni is missing the Overall/Read permission

Log out

Write access to msdhoni

Manage Jenkins → security → manage And role assign → role to add “write role” → click on add Apply and save.

| Role       | Overall                  | Credentials                         | Agent                    | Job                                 | Run                                 | Configure                           |
|------------|--------------------------|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
|            | Administrator            | Create                              | Connect                  | Provision                           | Read                                | Update                              |
| Read       | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Write-role | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Role to add  
Write-role

Add Save Apply

Manage Jenkins → manage and assign role → manage role → assign role → add user

| User/Group          | admin                               | Write-role                          | Read only                |
|---------------------|-------------------------------------|-------------------------------------|--------------------------|
| Anonymous           | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |
| Authenticated Users | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |
| johnabc             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| kunal shiwardkar    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| msdhoni             | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cancel OK

Add User Add Group Save Apply

Assign role → msdhoni → read only write-role → apply and save.

| User/Group          | admin                               | Write-role                          | Read only                           |
|---------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Anonymous           | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Authenticated Users | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| johnabc             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| kunal shiwardkar    | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| msdhoni             | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

Add User Add Group Save Apply

Open incognito and see .

The Jenkins dashboard shows the following build history for user msdholni:

| S | W | Name    | Last Success      | Last Failure     | Last Duration | Coverage |     |
|---|---|---------|-------------------|------------------|---------------|----------|-----|
|   |   | grras1  | 1 day 10 hr #12   | N/A              | 2 min 29 sec  |          | n/a |
|   |   | grras10 | 2 days 23 hr #4   | N/A              | 55 sec        |          | n/a |
|   |   | grras2  | 1 min 13 sec #682 | 7 hr 30 min #451 | 16 sec        |          | n/a |
|   |   | grras3  | 3 days 6 hr #7    | N/A              | 41 sec        |          | n/a |
|   |   | grras4  | 3 days 6 hr #6    | N/A              | 42 sec        |          | n/a |

To remove build option from user msdholni

The Project grras10 details page shows the following build history:

- Last build (#4), 3 days 6 hr ago
- Last stable build (#4), 3 days 6 hr ago
- Last successful build (#4), 3 days 6 hr ago
- Last completed build (#4), 3 days 6 hr ago

Go to manage Jenkins → security → manage and assign role → manage role

Then go to global roles → remove read option from write-role then apply and save

The Manage Roles page shows the following global roles configuration:

| Role       | Overall                             |                                     | Credentials              |                          | Agent                    |                          | Job                      |                          | Run                                 |                                     | V                        |
|------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
|            | Administer                          | Read                                | Create                   | Delete                   | View                     | Update                   | Build                    | Configure                | Connect                             | Create                              |                          |
| Read only  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |
| Write-role | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| admin      | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |

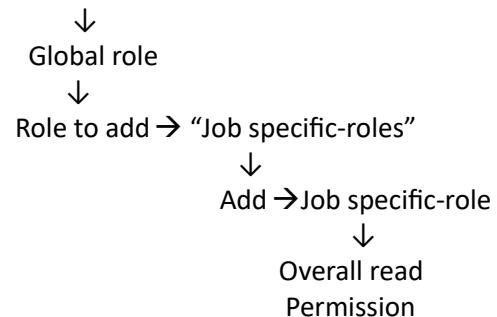
Then refresh incognito → remove build option. No build access to msdholni.

The screenshot shows the Jenkins interface for the project 'grras10'. On the left, there's a sidebar with links: Status, Changes, Configure, Dependency Graph, and Rename. The main content area is titled 'Project grras10' and contains the message 'this is file of freestyle'. It features a 'Build History' section with a 'trend' dropdown set to 'trend' and a 'Filter builds...' input field. Below this is a 'Permalinks' section with a list of four recent builds: 'Last build (#4), 3 days 6 hr ago', 'Last stable build (#4), 3 days 6 hr ago', 'Last successful build (#4), 3 days 6 hr ago', and 'Last completed build (#4), 3 days 6 hr ago'. There are also 'Edit description' and 'Disable Project' buttons.

### 3. How to restrict job to users using project roles.

Means any user see particular job.

Go to manage Jenkins → security → manage and assign roles → manage role



The screenshot shows the Jenkins 'Manage Roles' page under 'Global roles'. The main area is a grid where rows represent global roles ('Read only', 'Write-role', 'admin') and columns represent Jenkins permissions (Overall, Credentials, Agent, Job, Run, Configure). Checkmarks indicate which roles have permission to perform specific actions. A 'Role to add' input field contains 'Job specific-role', and a 'Save' button is visible at the bottom.

| Role       | Overall                             | Credentials                         | Agent                    | Job                      | Run                      | Configure                |                          |                          |                                     |                                     |                          |                          |                          |
|------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|
|            | Administrator                       | Read                                | Create                   | Update                   | View                     | Disconnect               | Configure                | Create                   | Discover                            | Read                                | Move                     | Delete                   | Release                  |
| Read only  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Write-role | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| admin      | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Role to add: Job specific-role

Add Save Apply

Dashboard > Manage Jenkins > Manage and Assign Roles > Manage Roles

## Manage Roles

**Global roles**

| Role              | Overall                             | Credentials                         | Agent                    | Job                                 | Run                                 |
|-------------------|-------------------------------------|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| Read only         | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Write-role        | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| admin             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Job specific-role | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |

Role to add: Job specific-role

Below global roles → item roles



Role to add → "R/W Role"



Pattern → "mens-.\*" → add

Dashboard > Manage Jenkins > Manage and Assign Roles > Manage Roles

## Item roles

| Role | Pattern | Template | Credentials | Job | Run | View | SCM |
|------|---------|----------|-------------|-----|-----|------|-----|
|      |         |          |             |     |     |      |     |

Role to add: R/W Role

Pattern: Mens-.\*

Permission Template:

Save      Apply

### Permission Template

None

Add

After add → "R/w roles" → permission → job → built then apply and save

Dashboard > Manage Jenkins > Manage and Assign Roles > Manage Roles

Add

**Item roles**

| Role     | Pattern  | Template | Credentials | Job                                 | Run | View | SCM |
|----------|----------|----------|-------------|-------------------------------------|-----|------|-----|
| R/W Role | / Mens-* |          |             | <input checked="" type="checkbox"/> |     |      |     |

Role to add

R/W Role

**Save** **Apply**

Dashboard > Manage Jenkins > Manage and Assign Roles > Manage Roles

**Manage Roles**

**Global roles**

| Role              | Overall                             | Credentials                         | Agent                               | Job                                                                                                                                           | Run                                                                                                                                             |
|-------------------|-------------------------------------|-------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Job specific-role |                                     |                                     |                                     | <input checked="" type="checkbox"/><br>Build<br><input checked="" type="checkbox"/><br>Delete                                                 | <input checked="" type="checkbox"/><br>Move<br><input checked="" type="checkbox"/><br>Discover<br><input checked="" type="checkbox"/><br>Delete |
| Read only         | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/><br>View<br><input checked="" type="checkbox"/><br>Update<br><input checked="" type="checkbox"/><br>Delete | <input checked="" type="checkbox"/><br>Read<br><input checked="" type="checkbox"/><br>Replay<br><input checked="" type="checkbox"/><br>Delete   |
| Write-role        | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/><br>View<br><input checked="" type="checkbox"/><br>Update<br><input checked="" type="checkbox"/><br>Delete | <input checked="" type="checkbox"/><br>Update<br><input checked="" type="checkbox"/><br>Replay<br><input checked="" type="checkbox"/><br>Delete |
| admin             | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/><br>View<br><input checked="" type="checkbox"/><br>Update<br><input checked="" type="checkbox"/><br>Delete | <input checked="" type="checkbox"/><br>Update<br><input checked="" type="checkbox"/><br>Replay<br><input checked="" type="checkbox"/><br>Delete |

Dashboard > Manage Jenkins > Manage and Assign Roles > Manage Roles

Add

**Item roles**

| Role     | Pattern  | Template | Credentials | Job                                 | Run | View | SCM |
|----------|----------|----------|-------------|-------------------------------------|-----|------|-----|
| R/W Role | / Mens-* |          |             | <input checked="" type="checkbox"/> |     |      |     |

Role to add

R/W Role

**Save** **Apply**

Now we create new user

Manage Jenkins → security → user

The screenshot shows the Jenkins Security page. It features four main sections: "Security" (Secure Jenkins; define who is allowed to access/use the system), "Credentials" (Configure credentials), "Credential Providers" (Configure the credential providers and types), and "Users" (Create/delete/modify users that can log in to this Jenkins). The "Users" section is highlighted with a yellow box around its title.

Click on create user

The screenshot shows the Jenkins Users page. It displays a table with columns "User ID" and "Name". There is one entry: "kunalshiwarkar" with "kunal shiwarkar" in the Name column. To the right of the table is a blue button labeled "+ Create User" with a red arrow pointing towards it.

The screenshot shows the Jenkins Create User page. It contains several input fields: "Username" (Kunal), "Password" (three dots), "Confirm password" (three dots), "Full name" (kunal-mens), and "E-mail address" (empty). At the bottom is a blue "Create User" button.

**Users**[+ Create User](#)

These users can log into Jenkins. This is a sub set of [this list](#), which also contains auto-created users who really just made some commits on some projects and have no direct Jenkins access.

| User ID | Name           |                 |  |
|---------|----------------|-----------------|--|
|         | john           | johnabc         |  |
|         | Kunal          | kunal-mens      |  |
|         | kunalshiwarkar | kunal shiwarkar |  |
|         | msdhoni        | msdhoni         |  |

**4. How to copy from one configuration.****New item****Enter an item name**

Mens-shirts

» Required field

**Freestyle project**

This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

**Maven project**

Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.

If you want to create a new item from other existing, you can use this option:



Copy from

CICD

**OK**

As it is copy configuration copy from CICD to mens-shirts

Ok

Dashboard > Mens-shirts > Configuration

## General

**Configure**

**General**

Description  
This is java file

Plain text [Preview](#)

Discard old builds ?  
 GitHub project  
 This project is parameterised ?  
 Throttle builds ?

**Save** **Apply**

### Apply and save

Dashboard > Mens-shirts >

## Project Mens-shirts

**Status**

</> Changes This is java file

Workspace

Build Now

**Configure**

Delete Project

Rename

[Edit description](#) [Disable Project](#)

**Permalinks**

- Last build (#1), 8 min 37 sec ago
- Last stable build (#1), 8 min 37 sec ago
- Last successful build (#1), 8 min 37 sec ago
- Last completed build (#1), 8 min 37 sec ago

**Build History** trend ▾

Filter builds... /

#1 5 Nov 2023, 20:37

Build Log View Build Artifacts

GO manage Jenkins → manage and assign role → manage roles

Dashboard > Manage Jenkins > Manage and Assign Roles > Manage Roles

## Manage Roles

**Manage Roles**

**Assign Roles**

**Permission Templates**

**Role Strategy Macros**

**Global roles**

| Role              | Overall                             | Credentials                         | Agent                    | Job                      | Run                      |
|-------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|
| Job specific-role | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| admin             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Item roles Below mange roles . we give permission of build and read create configure.

Dashboard > Manage Jenkins > Manage and Assign Roles > Manage Roles

### Item roles

| Role | Pattern   | Template      | Credentials              | Job                                 | Run                                 | View                                | SCM                      |
|------|-----------|---------------|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| R/W  | "Mens-**" |               | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | Create        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | Delete        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | ManageDomains | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | Create        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | Delete        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | View          | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | Build         | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | Cancel        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | Configure     | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | Discover      | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | Delete        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | Replay        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | Read          | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | Move          | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | Configure     | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | Delete        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | Read          | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | Update        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | View          | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |           | Tag           | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Role to add:

Pattern ?

Save Apply

Apply and save

now go to assign role → add user → kunal → ok

Dashboard > Manage Jenkins > Manage and Assign Roles

### Assign Roles

User name:  Cancel OK

Global roles

| User/Group          | admin                               | write-role                          | lead-on-specific         |
|---------------------|-------------------------------------|-------------------------------------|--------------------------|
| admin               | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |
| Anonymous           | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |
| Authenticated Users | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |
| kunal-mens          | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| Kunal shiwardar     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Dashboard > Manage Jenkins > Manage and Assign Roles > Assign Roles

### Assign Roles

Global roles

| User/Group          | admin                               | Job specific-role                   |
|---------------------|-------------------------------------|-------------------------------------|
| Anonymous           | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Authenticated Users | <input type="checkbox"/>            | <input type="checkbox"/>            |
| kunal-mens          | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Kunal shiwardar     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Add User Add Group

Save Apply

Item roles below assign role

Add user → kunal → ok

Dashboard > Manage Jenkins > Manage and Assign Roles > Assign Roles

### Item roles

| User/Group          | R/W Roles                           |
|---------------------|-------------------------------------|
| Anonymous           | <input type="checkbox"/>            |
| Authenticated Users | <input type="checkbox"/>            |
| kunal-mens          | <input checked="" type="checkbox"/> |

Add User    Add Group

---

### Agent roles

| User/Group |
|------------|
|------------|

Save    Apply

Apply and save

Dashboard > Manage Jenkins > Manage and Assign Roles > Manage Roles

### Manage Roles

- Manage Roles
- Assign Roles
- Permission Templates
- Role Strategy Macros

#### Global roles

| Role              | Overall                             | Credentials                         | Agent                    | Job                      | Run                      |
|-------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|
| Job specific-role | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| admin             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Role to add

Save    Apply

Dashboard > Manage Jenkins > Manage and Assign Roles > Manage Roles

### Item roles

| Role     | Pattern    | Template | Credentials   | Job                      | Run                                 | View                                | SCM                      |
|----------|------------|----------|---------------|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| R/W Role | /*"Mens-*" |          | ManageDomains | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Role to add

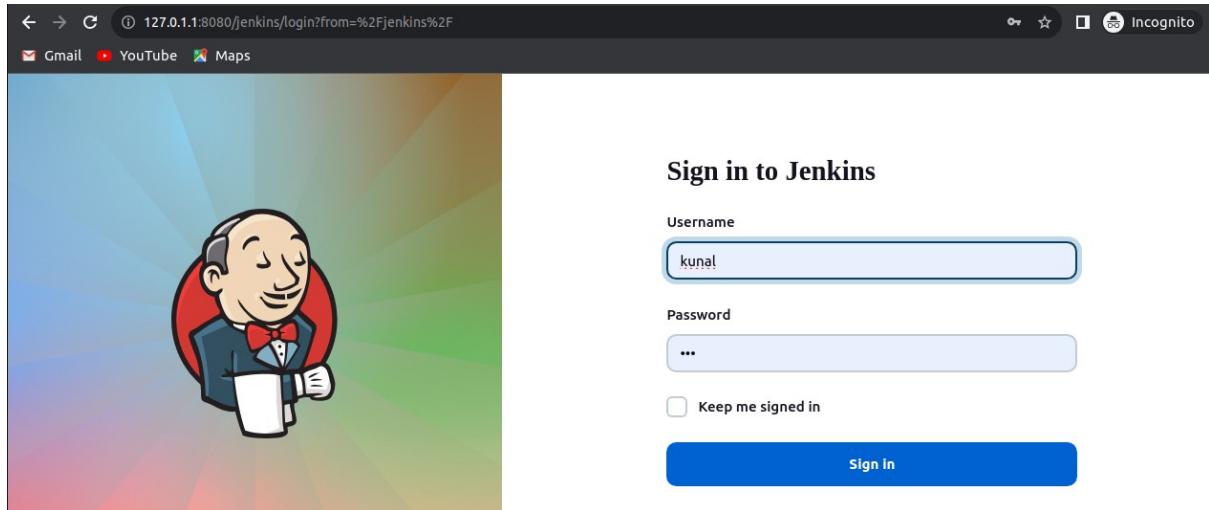
Pattern ?

Save    Apply

Apply and save

Go to incognito

127.0.1.1:8080/Jenkins



A screenshot of the Jenkins dashboard. The URL in the address bar is 127.0.1.1:8080/jenkins/. The dashboard includes a sidebar with links for 'Dashboard', 'People', 'Build History', and 'My Views'. The main area shows a 'Build Queue' table with one entry: 'Mens-shirts' (Status: Success, Last Success: 1 hr 22 min ago, Last Failure: N/A, Last Duration: 4.4 sec). Below the queue is a 'Build Executor Status' section showing 1 idle executor. A search bar at the top right contains 'Search (CTRL+K)' and a user profile for 'kunal-mens'. There are also links for 'log out' and 'Atom feed'.

Create Mens-jeans → copy from CICD

**Enter an item name**

Mens-jeans  
» Required field

**Freestyle project**  
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

As it is copy configuration copy from CICD to mens-jeans

If you want to create a new item from other existing, you can use this option:

**Copy from**  
CICD

**OK**

Ok

Dashboard > Mens-jeans > Configuration

**Configure**      **General**      Enabled

**General**

Description  
This is java file

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

Plain text [Preview](#)

Discard old builds [?](#)

GitHub project

This project is parameterized [?](#)

**Save**      **Apply**

Apply and save

Dashboard → manage jenkins → manage and assign role → manage roles → global roles

Dashboard > Manage Jenkins > Manage and Assign Roles > Manage Roles

**Assign Roles**      **Global roles**

**Permission Templates**

**Role Strategy Macros**

| Role              | Overall                                                                                     | Credentials                                                                                 | Agent                                                                                       | Job                                                                                         | Run                                                                                         |
|-------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Administrator     | <input type="checkbox"/><br><input checked="" type="checkbox"/><br><input type="checkbox"/> |
| Job specific-role | <input type="checkbox"/>                                                                    | <input checked="" type="checkbox"/>                                                         | <input type="checkbox"/>                                                                    | <input checked="" type="checkbox"/>                                                         | <input type="checkbox"/>                                                                    |
| admin             | <input checked="" type="checkbox"/>                                                         | <input type="checkbox"/>                                                                    | <input type="checkbox"/>                                                                    | <input type="checkbox"/>                                                                    | <input checked="" type="checkbox"/>                                                         |

**Role to add**

**Item roles**

| Role      | Pattern | Template | Credentials              | Job                                 | Run                                 | View                                | SCM                      |
|-----------|---------|----------|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
|           |         |          | Read                     | Move                                | Delete                              | Create                              | Configure                |
|           |         |          | Discover                 | Build                               | Cancel                              | Update                              | Tag                      |
|           |         |          | View                     | Cancel                              | Update                              | Replay                              | Read                     |
|           |         |          | Create                   | Delete                              | Replay                              | Delete                              | Delete                   |
| R/W Roles | "Mens"  |          | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Assign Roles****Manage Roles****Assign Roles**

{}} Permission Templates

kus Role Strategy Macros

**Global roles**

| User/Group          | admin                               |
|---------------------|-------------------------------------|
| Anonymous           | <input type="checkbox"/>            |
| Authenticated Users | <input type="checkbox"/>            |
| kunal-mens          | <input checked="" type="checkbox"/> |
| Kunal shiwardar     | <input checked="" type="checkbox"/> |

Add User

Add Group

Save

Apply

Add User

Add Group

**Item roles**

| User/Group          | R/W Roles                           |
|---------------------|-------------------------------------|
| Anonymous           | <input type="checkbox"/>            |
| Authenticated Users | <input type="checkbox"/>            |
| kunal-mens          | <input checked="" type="checkbox"/> |

Add User

Add Group

Save

Apply

**Save and apply**

Dashboard > Manage Jenkins > Manage and Assign Roles > Manage Roles

## Manage Roles

- [Manage Roles](#)
- [Assign Roles](#)
- [Permission Templates](#)
- [Role Strategy Macros](#)

### Global roles

| Role              | Overall                             | Credentials                         | Agent                    | Job                      | Run                      | View                     | SCM                      |
|-------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Job specific-role | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| admin             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Role to add

[Save](#) [Apply](#)

Dashboard > Manage Jenkins > Manage and Assign Roles > Manage Roles

### Item roles

| Role     | Pattern      | Template | Credentials              | Job                                 | Run                                 | View                                | SCM                      |
|----------|--------------|----------|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| R/W Role | "/" Mens-.*" |          | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Role to add

[Save](#) [Apply](#)

Apply and save

Open incognito and see

127.0.1.1:8080/jenkins/

Jenkins

Dashboard >

- [People](#)
- [Build History](#)
- [Maven Repository](#)
- [My Views](#)
- [Dependency Graph](#)

**All**

| S | W | Name        | Last Success       | Last Failure | Last Duration | Coverage |
|---|---|-------------|--------------------|--------------|---------------|----------|
|   |   | Mens-jeans  | 3 min 22 sec<br>#1 | N/A          | 1 min 23 sec  |          |
|   |   | Mens-shirts | 9 min 7 sec<br>#1  | N/A          | 1 min 2 sec   |          |

Build Queue

No builds in the queue.

Icon: S M L Icon legend Atom feed for all Atom feed for failures Atom feed for just latest builds

Build Executor Status

1 Idle

### 3. Folder type

Create job → Men's

Dashboard > All >

Enter an item name

Men's

» Required field

Folder → ok

Dashboard > All >

**Pipeline**  
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

**Multi-configuration project**  
Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.

**Folder**  
Creates a container that stores nested items in it. Useful for grouping things together. Unlike view, which is just a filter, a folder creates a separate namespace, so you can have multiple things of the same name as long as they are in different folders.

**Multibranch Pipeline**  
Creates a set of Pipeline projects according to detected branches in one SCM repository.

**Organization Folder**  
Creates a set of multibranch project subfolders by scanning for repositories.

If you want to create a new item from other existing, you can use this option:

Dashboard > Flipkart-Mens-apps job > Configuration

**Configuration**

**General**

Display Name ?  
Flip-Mens-apps job

Description

Plain text Preview

Save Apply

Dashboard > Flipkart-Mens-apps job

Status    Configure    New Item    Delete Folder    People    Build History    Rename    Credentials

## Flipkart-Mens-apps job

Folder name: Men's

All + Add description

This folder is empty

Create a Job →

### Create job in folder

Dashboard > Flipkart-Mens-apps job

### Enter an item name

jobs » Required field

**Freestyle project**  
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

**Pipeline**  
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as流水线) and/or organizing complex activities that do not easily fit in free-style job type.

OK

Multi-configuration project

Dashboard > Flipkart-Mens-apps job > jobs > Configuration

### Configure

General    Enabled

**General**

Description  
this is a sample job

Plain text: [Preview](#)

Discard old builds ?

GitHub project

Dashboard > Flipkart-Mens-apps job > Jobs > Configuration

## Configure

### Source Code Management

None

Git

Repositories

Repository URL: <https://github.com/Kunalshiwarkar/CICD.git>

Please enter Git repository.

Credentials: - none -

Save Apply

Dashboard > Flipkart-Mens-apps job > jobs > Configuration

## Configure

### Build Steps

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

Invoke top-level Maven targets

Maven Version: maven-3.9.5

Goals: install

Advanced

Add build step

Dashboard > Flipkart-Mens-apps job > jobs > Configuration

## Configure

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

Execute shell

Command:

```
See the list of available environment variables  
cp target/CICD.war /home/kunal/Documents/Devops_software/tar/apache-tomcat-9.0.82/webapps
```

Advanced

Add build step

Save Apply

Apply and save

Built now

Dashboard > Flipkart-Mens-apps job > jobs > Project jobs

Status Changes Workspace Build Now Configure Delete Project Move Rename

Full project name: Men's/jobs  
this is a sample job

Edit description Disable Project

### Permalinks

Build History trend ▾

Filter builds... /

#1 6 Nov 2023, 17:25

| S | W   | Name                   | Last Success    | Last Failure | Last Duration |
|---|-----|------------------------|-----------------|--------------|---------------|
| ✓ | ... | CICD                   | 21 hr #1        | N/A          | 5.2 sec       |
| ✗ | ... | Flipkart-Mens-apps job | N/A             | N/A          | N/A           |
| ✓ | ... | Men-jeans              | 16 hr #1        | N/A          | 4.7 sec       |
| ✓ | ... | Men-shirts             | 16 hr #1        | N/A          | 27 ms         |
| ✓ | ... | project4               | 2 days 16 hr #4 | N/A          | 6.5 sec       |
| ✗ | ... | project5               | N/A             | N/A          | N/A           |

Dashboard >

+ New Item Add description

People Build History Manage Jenkins My Views

Build Queue ▾ No builds in the queue.

Build Executor Status ▾

| S | W   | Name                   | Last Success    | Last Failure | Last Duration |
|---|-----|------------------------|-----------------|--------------|---------------|
| ✓ | ... | CICD                   | 21 hr #1        | N/A          | 5.2 sec       |
| ✗ | ... | Flipkart-Mens-apps job | N/A             | N/A          | N/A           |
| ✓ | ... | Men-jeans              | 16 hr #1        | N/A          | 4.7 sec       |
| ✓ | ... | Men-shirts             | 16 hr #1        | N/A          | 27 ms         |
| ✓ | ... | project4               | 2 days 16 hr #4 | N/A          | 6.5 sec       |
| ✗ | ... | project5               | N/A             | N/A          | N/A           |

Dashboard > Flipkart-Mens-apps job > Folder

Status Configure + New Item Add description

Delete Folder People Build History Rename Credentials

Folder name: Men's

| S | W   | Name | Last Success   | Last Failure | Last Duration |
|---|-----|------|----------------|--------------|---------------|
| ✓ | ... | jobs | 3 min 1 sec #1 | N/A          | 5.8 sec       |

Icon: S M L Icon legend Atom feed for all Atom feed for failures Atom feed for just latest builds

Dashboard > Flipkart-Mens-apps job >

### Enter an item name

sample  
» Required field

**Freestyle project**  
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

**Pipeline**  
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as流水线) and/or organizing complex activities that do not easily fit in free-style job type.

OK Configuration project

Dashboard > Flipkart-Mens-apps job > sample > Configuration

## Configure

### General

Enabled

**General**

Description  
this is sample file

Plain text [Preview](#)

Discard old builds [?](#)

GitHub project

This project is parameterised [?](#)

**Source Code Management**

**Build Triggers**

**Build Environment**

**Build Steps**

**Post-build Actions**

**Save** **Apply**

Dashboard > Flipkart-Mens-apps job > sample > Configuration

## Configure

**Source Code Management**

**Git** ?

**Repositories** ?

Repository URL [?](#)  
  
! Please enter Git repository.

Credentials [?](#)  
  
Add [▼](#)

Advanced [▼](#)

Dashboard > Flipkart-Mens-apps job > sample > Configuration

## Configure

### Build Steps

**General**

**Source Code Management**

**Build Triggers**

**Build Environment**

**Build Steps**

**Post-build Actions**

Invoke top-level Maven targets [?](#)

Maven Version

Goals

Advanced [▼](#)

Add build step [▼](#)

Dashboard > Flipkart-Mens-apps job > sample > Configuration

## Configure

- General
- Source Code Management
- Build Triggers
- Build Environment
- Build Steps**
- Post-build Actions

Execute shell ?

Command

See [the list of available environment variables](#)

```
cp target/CICD.war /home/kunal/Documents/Devops_software/tar/apache-tomcat-9.0.82/webapps|
```

Advanced ▾

Add build step ▾

**Save** **Apply**

Apply and save

Built now

Dashboard > Flipkart-Mens-apps job >

## Flipkart-Mens-apps job

Status

Folder name: Men's

Add description

All +

| S | W  | Name   | Last Success | Last Failure | Last Duration |
|---|----|--------|--------------|--------------|---------------|
| ✓ | ☀️ | jobs   | 22 min #1    | N/A          | 5.8 sec       |
| ✓ | ☀️ | sample | 11 sec #1    | N/A          | 4.5 sec       |

Icon: S M L Icon legend Atom feed for all Atom feed for failures Atom feed for just latest builds

## 4.Maven jobs

Go to manage Jenkins → plugin → available → maven

The screenshot shows the Jenkins Manage Plugins interface. At the top, it says "Dashboard > All". Below that, there's a search bar with "Java-jobs" and a note "» Required field". Three job types are listed: "Freestyle project" (selected), "Maven project", and "Pipeline". The "Freestyle project" section contains a brief description: "This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build." The "Maven project" section contains a description: "Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration." The "Pipeline" section contains a description: "Creates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type." A large "OK" button is visible at the bottom of the Pipeline section.

The screenshot shows the Jenkins Job Configuration page for a job named "Java-jobs". The top navigation bar shows "Dashboard > Java-jobs > Configuration". On the left, there's a sidebar with "Configure" and several tabs: General, Source Code Management, Build Triggers, Build Environment, Pre Steps, Build, Post Steps, and Build Settings. The "General" tab is selected. It has a "Description" field containing "This is maven project". Below that is a "Maven Info Plugin Configuration" section with a "Save" and "Apply" button. The status "Enabled" is shown with a checked checkbox. The bottom of the page shows a toolbar with icons for Save, Apply, and other actions.

The screenshot shows the "Source Code Management" configuration for the "Java-jobs" job. The top navigation bar shows "Dashboard > Java-jobs > Configuration". The sidebar on the left has the "Source Code Management" tab selected. In the main area, there are two radio buttons: "None" and "Git". The "Git" option is selected. Below it is a "Repositories" section with a "Repository URL" field containing "https://github.com/Kunalshiwarkar/CICD.git". A red error message "Please enter Git repository." is displayed next to the field. There's also a "Credentials" dropdown menu set to "-none-".

Dashboard > Java-jobs > Configuration

## Configure

### Build

- General
- Source Code Management
- Build Triggers
- Build Environment
- Pre Steps
- Build**
- 

Root POM ?  
pom.xml

Goals and options ?  
install

Advanced ▾

Inside Add post build step:- option of executive shell

Dashboard > Java-jobs > Configuration

## Configure

Run regardless of build result  
Should the post-build steps run only for successful builds, etc.

- General
- Source Code Management
- Build Triggers
- Build Environment
- Pre Steps
- Post Steps**
- Build Settings
- Post-build Actions

Execute shell ?

Command  
See [the list of available environment variables](#)

```
cp target/CICD.war /home/kunal/Documents/Devops_software/tar/apache-tomcat-9.0.82/webapps
```

**Save** **Apply**

Apply and save

Build now

File Java-jobs successful.

Dashboard > Java-jobs > Configuration

Add description

| All                    | +                       |
|------------------------|-------------------------|
| People                 |                         |
| Build History          |                         |
| Project Relationship   |                         |
| Check File Fingerprint |                         |
| Manage Jenkins         |                         |
| My Views               |                         |
| Build Queue            | No builds in the queue. |

| S     | W   | Name                   | Last Success    | Last Failure | Last Duration | Coverage |
|-------|-----|------------------------|-----------------|--------------|---------------|----------|
| Green | Sun | CICD                   | 22 hr #1        | N/A          | 5.2 sec       | n/a      |
| Green | Sun | Flipkart-Mens-apps job | N/A             | N/A          | N/A           | n/a      |
| Green | Sun | <b>Java-jobs</b>       | 1 min 2 sec #1  | N/A          | 13 sec        | n/a      |
| Green | Sun | Men-jeans              | 17 hr #1        | N/A          | 4.7 sec       | n/a      |
| Green | Sun | Men-shirts             | 17 hr #1        | N/A          | 27 ms         | n/a      |
| Green | Sun | project4               | 2 days 17 hr #4 | N/A          | 6.5 sec       | n/a      |
| Green | Sun | project5               | N/A             | N/A          | N/A           | n/a      |

## Email notification

How to send email notification

Manage Jenkins → plugin → mailer plugin

The screenshot shows the Jenkins 'Plugins' page. On the left, there's a sidebar with links: 'Updates', 'Available plugins', 'Installed plugins' (which is selected and highlighted in grey), 'Advanced settings', and 'Download progress'. The main area has a search bar with 'mailer' typed in. A table lists the 'Mailer Plugin' (version 463.vedf8358e006b\_). The table columns are 'Name' and 'Enabled'. The 'Enabled' column for the Mailer Plugin shows a green checkmark. Below the table, a note says: 'This plugin allows you to configure email notifications for build results.' and a link 'Report an issue with this plugin'.

Go to manage Jenkins → system configuration → system

The screenshot shows the Jenkins 'System Configuration' page. On the left, there are two dropdown menus: 'Build Queue' (No builds in the queue) and 'Build Executor Status' (1 Idle, 2 Idle). The main area contains several sections: 'System' (Configure global settings and paths), 'Tools' (Configure tools, their locations and automatic installers), 'Nodes' (Add, remove, control and monitor the various nodes that Jenkins runs jobs on), 'Plugins' (Add, remove, disable or enable plugins that can extend the functionality of Jenkins), 'Clouds' (Add, remove, and configure cloud instances to provision agents on-demand), and 'Managed files' (e.g. settings.xml for maven, central managed scripts, custom files, ...).

The screenshot shows the Jenkins 'E-mail Notification' configuration page. It includes fields for 'SMTP server' (set to 'smtp.gmail.com') and 'Default user e-mail suffix'. At the bottom, there are 'Advanced' and 'Edited' buttons.

Go to gmail account

The screenshot shows the Google Account 'Security' page. It displays information about 2-Step Verification, which is turned on ('On since 20:11'). Other sections include 'Home', 'Personal info', 'Data and privacy', and 'Passkeys'. A red arrow points from the 'App password' section in the previous screenshot to the '2-Step Verification' section here.

App password

The screenshot shows the '2-Step Verification' and 'App passwords' sections of the Google Account security settings. A red arrow points from the 'App passwords' section to the 'Create' button in the 'App passwords' screen below.

**2-Step Verification**

**App passwords**

You don't have any app passwords.

To create a new app specific password, type a name for it below...

App name: Test12

Create

The screenshot shows the 'Generated app password' screen. A red arrow points from the generated password 'xhob shth gqiv hylf' down to the 'Password' field in the configuration form below.

Generated app password

Your app password for your device

xhob shth gqiv hylf

Advanced ^ Edited

Use SMTP Authentication ?

User Name: kunalshiwarkar24@gmail.com

>Password: ..... (redacted)

Use SSL ?

Use TLS

The screenshot shows the Jenkins 'System' configuration page under 'Manage Jenkins'. A red arrow points from the 'Password' field in the configuration form above to the 'Password' field in this screen.

Dashboard > Manage Jenkins > System >

SMTP Port: 465

Reply-To Address:

Charset: UTF-8

Test configuration by sending test e-mail

Save Apply

Apply and save

example

Enter an item name

Email-failed

» Required field

If you want to create a new item from other existing, you can use this option:



Copy from

Men-jeans

OK

Ok .

Dashboard > Email-failed > Configuration

## Configure

### Build Triggers

General

Source Code Management

Build Triggers

Build Environment

Trigger builds remotely (e.g., from scripts) ?

Build after other projects are built ?

Build periodically ?

Schedule ?

\*\*\*\*\*|

then go to configure in execute shell , I incorrect target into /target

Dashboard > Email-failed > Configuration

## Configure

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

Advanced ▾

### Execute shell ?

Command

See [the list of available environment variables](#)

cp /target/CICD.war /home/kunal/Documents/Devops\_software/tar/apache-tomcat-9.0.82/webapps

The screenshot shows the Jenkins 'Post-build Actions' configuration page. On the left, there are tabs for 'Build Triggers', 'Build Environment', 'Build Steps', and 'Post-build Actions'. The 'Post-build Actions' tab is selected and highlighted with a grey background. On the right, there is a large button labeled 'Add post-build action ▾' with a downward arrow. Below it are two buttons: 'Save' (blue) and 'Apply' (white). The overall interface is clean with a white background and light grey borders.

The screenshot shows the Jenkins 'Configuration' screen under 'Email-failed > Configuration'. The 'Post-build Actions' section is expanded, showing the 'E-mail Notification' configuration. It includes fields for 'Recipients' (containing 'kunalshiwarkar24@gmail.com') and two checkboxes: 'Send e-mail for every unstable build' (checked) and 'Send separate e-mails to individuals who broke the build'. There is also an 'Add post-build action ▾' button and 'Save' and 'Apply' buttons at the bottom.

### Apply and save

The screenshot shows the Gmail inbox. The 'Primary' tab is selected, displaying three recent emails from 'me' with subject lines: 'Build failed in Jenkins: Email-failed #3', 'Build failed in Jenkins: Email-failed #2', and 'Build failed in Jenkins: Email-failed #1'. Each email has a timestamp of '21:52', '21:51', and '21:50' respectively. To the right of the inbox, there are sections for 'Promotions' and 'Social'.

Date-5/11/2023

## 5.Pipeline type

### 1.scripted pipeline

- Jenkins login
- Write pipeline inside job configuration in Jenkins job
- Scripted pipeline use inside Jenkins job
- It use only in rare cases.

### 2.Declarative pipeline

- Written in Jenkins files.
- No need of job
- Write job configuration in files, according to condition make job

Jenkins files is a domain specific language. It is called groovy.

Jenkins file is DSL base language

DSL → Domain specific language

Write Jenkins file is a one-time activity.

### Advantage

- User Ab1 write complete pipeline but also other user ab2 want that configuration , share Jenkins files easily according to same job condition.
- User Ab2 use as job configuration
- User Ab2 change just a little bit configuration target server path change
- No need to write pipeline from scratch
- New stage also add

### 1.Scripted pipeline

The screenshot shows the Jenkins dashboard with the URL [http://127.0.0.1:8080](#). A search bar at the top contains the text "first-scripted-pipeline". Below it is a dropdown menu with three items: "Freestyle project", "Maven project", and "Pipeline". The "Pipeline" item is highlighted with a blue border. At the bottom of the dropdown, there is an "OK" button and the text "Multi-configuration project".

**Configure****General**Enabled **General****Advanced Project Options****Pipeline****Description**

This is the first pipeline

Plain text [Preview](#)**Jira site****Pipeline****Configure****Definition****Pipeline script****Script** ?

```

1 pipeline {
2   agent any
3
4   stages {
5     stage('Hello') {
6       steps {
7         echo 'Hello World'
8       }
9     }
10   }
11 }
12

```

[try sample Pipeline...](#)[Save](#)[Apply](#)

Apply and save

Build now

**Status**

&lt;/&gt; Changes

**Pipeline first-scripted-pipeline**

This is the first pipeline

▷ Build Now

⚙ Configure

🗑 Delete Pipeline

**Stage View**

↔ Move

🔍 Full Stage View

✍ Rename

(? Pipeline Syntax

Average stage times:  
(Average full run time: ~1s)

Hello

174ms

174ms



## 2.Declarative pipeline

Dashboard > All >

Enter an item name

test-declarative-pip  
» Required field

**Freestyle project**  
 This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

**Maven project**  
 Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.

**Pipeline**  
 Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

**OK** **Multi-configuration project**

Dashboard > test-declarative-pip Configuration

**Configure** **General** Enabled 

**General** Description: This is declarative pipeline

**Advanced Project Options**

**Pipeline** Plain text [Preview](#)

Jira site

Copy url from grras6

Dashboard > test-declarative-pip > Configuration

**Pipeline**

**Configure** Definition: Pipeline script from SCM

**General** SCM: Git

**Advanced Project Options**

**Pipeline**

**Repositories**: Repository URL: https://github.com/KunalShiwarkar/grras6.git

**Credentials**

**Save** **Apply**

Apply and save

Build now

Delete Pipeline

Move

Full Stage View

Rename

Pipeline Syntax

Build History

trend ▾

Filter builds...

/

#2    [8 Nov 2023, 20:47](#)

#1    [8 Nov 2023, 20:45](#)

## Stage View

| Declarative: Checkout SCM | Hello |
|---------------------------|-------|
| 1s                        | 163ms |
|                           |       |

Average stage times:  
(Average full run time: ~4s)

#2 Nov 08 20:47 No Changes

#1 Nov 08 20:45 No Changes

## Permalinks

---

Date:-6/11/2023

## Assignment of pole SCM scripted

Dashboard > All >

**test-declarative pipe**  
» Required field

**Freestyle project**  
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

**Maven project**  
Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.

**Pipeline**  
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

**External Job**  
This type of job allows you to record the execution of a process run outside Jenkins, even on a remote machine. This is designed so that you can use Jenkins as a dashboard of your existing automation system.

**OK configuration project**  
Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific

Dashboard > test-declarative pipe > Configuration

### Configure

#### General

Enabled

General

Advanced Project Options

Pipeline

Description

This is declarative pipeline

Plain text [Preview](#)

Jira site

Dashboard > test-declarative pipe > Configuration

### Configure

#### Pipeline

General

Advanced Project Options

Pipeline

Definition

Pipeline script from SCM

SCM ?

Git

Repositories ?

Repository URL ?

`https://github.com/Kunalshiwarkar/CICD.git`

! Please enter Git repository.

Credentials ?

Dashboard > test-declarative pipe > Configuration

## Configure

- General
- Advanced Project Options
- Pipeline

Script Path ? Jenkinsfile

Lightweight checkout ?

[Pipeline Syntax](#)

Save Apply

### Go to Declarative Directive generator

Dashboard > test-declarative pipe

## Directives

Sample Directive

triggers: Triggers

See the [online documentation](#) for more information on the triggers directive.

Poll SCM ?

Schedule ?

\* \* \* \* \*

No schedules so will only run due to SCM changes if triggered by a post-commit hook

Ignore post-commit hooks ?

Generate Declarative Directive

```
triggers {  
    pollSCM '* * * * *'  
}
```

Then go to Jenkins repo of CICD in github

Kunalshiwarkar / CICD

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

CICD Public

master 1 branch 0 tags

Go to file Add file Code

Kunalshiwarkar Update Jenkinsfile

|                 |                    |
|-----------------|--------------------|
| src/main/webapp | msg                |
| target          | msg                |
| Jenkinsfile     | Update Jenkinsfile |
| pom.xml         | msg                |

Local Codespaces

Clone

HTTPS SSH GitHub CLI

https://github.com/Kunalshiwarkar/CICD.g1

Use Git or checkout with SVN using the web URL.

Download ZIP

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The screenshot shows the GitHub Actions pipeline configuration for the CICD repository. The Jenkinsfile contains the following code:

```

1 pipeline {
2     agent any
3
4     triggers {
5         pollSCM '* * * * *'
6     }
7
8     parameters {
9         choice(name: 'ENVIRONMENT', choices: ['QA','UAT'], description: 'Pick Environment value')
10    }
11
12    stages {
13        stage('Checkout') {
14            steps {
15                checkout scm
16            }
17        }
18        stage('Build') {
19            steps {
20                echo 'Building...'
21            }
22        }
23    }

```

A red arrow points from a callout box containing the text "Paste here below agent any" to the line "triggers {".

The screenshot shows the Jenkins Pipeline Configuration page for the "test-declarative pipe" job. The "Pipeline" tab is selected. The configuration includes:

- Script Path: Jenkinsfile
- Lightweight checkout: checked

At the bottom, there are "Save" and "Apply" buttons.

Apply and save

Build now

The screenshot shows the Jenkins Stage View for the "test-declarative pipe" job. The view displays the following information:

- Stage View:** Shows the stages: Declarative: Checkout SCM, Checkout, Build, and Deployment. The Checkout stage took 12s, the Build stage took 14s, and the Deployment stage took 2s.
- Declarative: Checkout SCM:** Average stage time: 12s (48s total).
- Checkout:** Average stage time: 14s.
- Build:** Average stage time: 1min 35s.
- Deployment:** Average stage time: 2s.
- Build History:** One build is listed: #1 (Nov 06 10:30) with "No Changes".
- Permalinks:** Links for Atom feed for all and Atom feed for failures.

REST API

## Build with parameter

Dashboard > test-declarative pipe >

**Pipeline test-declarative pipe**

Status Changes Build with Parameters Configure Delete Pipeline Move Full Stage View Dependency Graph Rename

This is declarative pipeline

Average stage times:  
(Average full run time: ~2min 48s)

| Declarative: Checkout SCM | Checkout | Build    | Deployment |
|---------------------------|----------|----------|------------|
| 12s                       | 14s      | 1min 35s | 2s         |
| 12s                       | 14s      | 1min 35s | 2s         |

127.0.1.1:8080/jenkins/job/test-declarative%20pipe/build?delay=0sec

---

Dashboard > test-declarative pipe >

**Pipeline test-declarative pipe**

Status Changes Build with Parameters Configure Delete Pipeline Move Full Stage View Dependency Graph Rename Pipeline Syntax

This build requires parameters:

ENVIRONMENT  
Pick Environment value

QA

> Build Cancel

Average stage times:  
(Average full run time: ~2min 39s)

| Declarative: Checkout SCM | Checkout | Build    | Deployment |
|---------------------------|----------|----------|------------|
| 10s                       | 13s      | 1min 36s | 2s         |
| 8s                        | 12s      | 1min 37s | 2s         |
| 12s                       | 14s      | 1min 35s | 2s         |

Build History trend ▾

Filter builds... /

#2 6 Nov 2023, 10:34  
#1 6 Nov 2023, 10:30

Atom feed for all Atom feed for failures

Permalinks

- Last build (#2), 0.97 sec ago
- Last stable build (#1), 3 min 52 sec ago
- Last successful build (#1), 3 min 52 sec ago
- Last completed build (#1), 3 min 52 sec ago

Date:-7/11/2023

## 6.Multibranch pipeline

It is used to create separate build for each branch.

Example

Create release1.0 and feature1.0 branch below master in CICD repo github

This branch is up to date with master.

| File            | Message            | Time        |
|-----------------|--------------------|-------------|
| src/main/webapp | msg                | 2 weeks ago |
| target          | msg                | 2 weeks ago |
| Jenkinsfile     | Update Jenkinsfile | yesterday   |
| pom.xml         | msg                | 2 weeks ago |

This branch is up to date with master.

| File            | Message            | Time        |
|-----------------|--------------------|-------------|
| src/main/webapp | msg                | 2 weeks ago |
| target          | msg                | 2 weeks ago |
| Jenkinsfile     | Update Jenkinsfile | yesterday   |
| pom.xml         | msg                | 2 weeks ago |

Configuration

General

Enabled

Display Name  ⚠ The display name, "CICD", is used as a name by a job and could cause confusing search results.

Description

Plain text [Preview](#)

**Configuration**

**Branch Sources**

**General**

**Branch Sources** (selected)

**Build Configuration**

**Scan Multibranch Pipeline Triggers**

**Orphaned Item Strategy**

**Appearance**

**Git Project Repository**

https://github.com/Kunalshiwarkar/CICD.git

**Credentials**

- none -

Add

**Property strategy**

All branches get the same properties

Add property

**Build Configuration**

Add source

**Scan Multibranch Pipeline Triggers**

**Health metrics**

**Properties**

**Save** **Apply**

apply and save and scan multi branch pipeline now

**Status**

**Configure**

Scan Multibranch Pipeline Now

Scan Multibranch Pipeline Log

Multibranch Pipeline Events

Delete Multibranch Pipeline

People

Build History

Project Relationship

Check File Fingerprint

Move

**CICD**

Folder name: multibranch-job  
This is multipipeline

**Disable Multibranch Pipeline**

**Branches (3)**

| S | W  | Name       | Last Success      | Last Failure | Last Duration | Coverage |
|---|----|------------|-------------------|--------------|---------------|----------|
| ✓ | ☀️ | feature1.0 | 8 hr 22 min<br>#1 | N/A          | 2 min 18 sec  | n/a      |
| ✓ | ☀️ | master     | 8 hr 25 min<br>#1 | N/A          | 2 min 49 sec  | n/a      |
| ✓ | ☀️ | release1.0 | 8 hr 25 min<br>#1 | N/A          | 2 min 47 sec  | n/a      |

Date:-8/11/2023

## Docker master-slave

Installation Steps:

===== =====

# Update apt-get cache

```
$ sudo apt-get update
```

# Install docker dependencies

```
$ sudo apt-get install apt-transport-https ca-certificates curl gnupg-agent software-properties-common
```

# Add GPG key to apt repository

```
$ curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -
```

# Setup Stable repository:

```
$ sudo add-apt-repository "deb [arch=amd64] https://download.docker.com/linux/ubuntu $(lsb_release -cs) stable"
```

# Update apt package index:

```
$ sudo apt-get update
```

# Install Latest version of Docker

```
$ sudo apt-get install docker-ce
```

#Installation Check

```
$ sudo docker --version
```

# container creation

```
$ sudo docker run - -name guru -it ubuntu /bin/bash
```

#uninstall docker:

```
$ sudo apt-get remove docker-ce
```

Master-slave concept

Master is used to administrate Jenkins

Slave is used to build a job from master.

Master and slave distribute load from master.

```
kunal@kunalsh:~$ sudo docker ps -a
[sudo] password for kunal:
CONTAINER ID        IMAGE       COMMAND       CREATED          STATUS          PORTS     NAMES
9407d7240447      ubuntu      "/bin/bash"   20 hours ago   Exited (255) About a minute ago
kunal@kunalsh:~$ sudo docker start kunal
kunal
kunal@kunalsh:~$ sudo docker attach kunal
```

Container start

```
root@9407d7240447:/# useradd -m -d /home/grras -s /bin/bash john
```

```
root@9407d7240447:/# passwd john
New password:
Retype new password:
passwd: password updated successfully
root@9407d7240447:/# cd /home/grras/
root@9407d7240447:/home/grras# mkdir slave-dir
root@9407d7240447:/home/grras# chmod 777 slave-dir/
root@9407d7240447:/home/grras# ls -a
.  ..  .bash_logout  .bashrc  .profile  slave-dir
```

```
root@9407d7240447:/home/grras# cd
```

```
root@9407d7240447:/# cd /home/grras/slave-dir/
root@9407d7240447:/home/grras/slave-dir# apt-get update
Hit:1 http://security.ubuntu.com/ubuntu jammy-security InRelease
Hit:2 http://archive.ubuntu.com/ubuntu jammy InRelease
Hit:3 http://archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:4 http://archive.ubuntu.com/ubuntu jammy-backports InRelease
Reading package lists... Done
root@9407d7240447:/home/grras/slave-dir# apt-get install git
Reading package lists... Done
```

```
root@9407d7240447:/home/grras/slave-dir# git --version
git version 2.34.1
root@9407d7240447:/home/grras/slave-dir# pwd
/home/grras/slave-dir
root@9407d7240447:/home/grras/slave-dir# hostname -i
172.17.0.2
```

Host name and pwd copy paste into some notes.

```
root@9407d7240447:/home/grras/slave-dir# cd ..
root@9407d7240447:/home/grras# cd
root@9407d7240447:~# apt-get update
Hit:1 http://archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://security.ubuntu.com/ubuntu jammy-security InRelease
Hit:3 http://archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:4 http://archive.ubuntu.com/ubuntu jammy-backports InRelease
Reading package lists... Done
root@9407d7240447:~# apt-get install openssh-server
```

```
root@9407d7240447:~# service ssh status
 * sshd is not running
root@9407d7240447:~# service ssh start
 * Starting OpenBSD Secure Shell server sshd
```

Now go to base machine

```
kunal@kunalsh:~$ sudo apt-get update  
[sudo] password for kunal:  
Get:1 https://dl.google.com/linux/chrome/deb stable InRelease [1,825 B]
```

```
kunal@kunalsh:~$ sudo apt-get install openssh-server  
Reading package lists... Done  
Building dependency tree... Done
```

```
kunal@kunalsh:~$ ssh john@172.17.0.2
```

```
john@9407d7240447:~$  
logout  
Connection to 172.17.0.2 closed.  
kunal@kunalsh:~$ cd Documents/Devops_software/tar/  
kunal@kunalsh:~/Documents/Devops_software/tar$ ls -a  
. apache-maven-3.9.5 apache-tomcat-9.0.82 jdk-11.0.20 jenkins.war  
.. apache-maven-3.9.5-bin.tar.gz apache-tomcat-9.0.82.tar.gz jdk-11.0.20_linux-x64_bin.tar.gz
```

Scp → copy

```
kunal@kunalsh:~/Documents/Devops_software/tar$ scp apache-maven-3.9.5-bin.tar.gz  
apache-tomcat-9.0.82.tar.gz jdk-11.0.20_linux-x64_bin.tar.gz john@172.17.0.2:/  
home/grras/slave-dir/  
john@172.17.0.2's password:  
apache-maven-3.9.5-bin.tar.gz  
          100% 9141KB 186.5MB/s  00:00  
apache-tomcat-9.0.82.tar.gz  
          100%    11MB 260.0MB/s  00:00  
jdk-11.0.20_linux-x64_bin.tar.gz  
          100% 162MB 232.7MB/s  00:00
```

Now to go container

```
root@9407d7240447:~# ls -a  
. .. .bashrc .profile  
root@9407d7240447:~# cd /home/grras/slave-dir/  
root@9407d7240447:/home/grras/slave-dir# ls -a  
. apache-maven-3.9.5-bin.tar.gz jdk-11.0.20_linux-x64_bin.tar.gz  
.. apache-tomcat-9.0.82.tar.gz  
root@9407d7240447:/home/grras/slave-dir# tar -zxf jdk-11.0.20_linux-x64_bin.tar.gz  
root@9407d7240447:/home/grras/slave-dir# tar -zxf apache-maven-3.9.5-bin.tar.gz  
root@9407d7240447:/home/grras/slave-dir# tar -zxf apache-tomcat-9.0.82.tar.gz  
root@9407d7240447:/home/grras/slave-dir# ls -a  
. apache-maven-3.9.5 apache-tomcat-9.0.82 jdk-11.0.20  
.. apache-maven-3.9.5-bin.tar.gz apache-tomcat-9.0.82.tar.gz jdk-11.0.20_linux-x64_bin.tar.gz  
root@9407d7240447:/home/grras/slave-dir# rm -rf apache-maven-3.9.5-bin.tar.gz  
root@9407d7240447:/home/grras/slave-dir# rm -rf apache-tomcat-9.0.82.tar.gz  
root@9407d7240447:/home/grras/slave-dir# rm -rf jdk-11.0.20_linux-x64_bin.tar.gz  
root@9407d7240447:/home/grras/slave-dir# ls -a  
. .. apache-maven-3.9.5 apache-tomcat-9.0.82 jdk-11.0.20  
root@9407d7240447:/home/grras/slave-dir# cd jdk-11.0.20/  
root@9407d7240447:/home/grras/slave-dir/jdk-11.0.20# pwd  
/home/grras/slave-dir/jdk-11.0.20  
root@9407d7240447:/home/grras/slave-dir/jdk-11.0.20# cd ..  
root@9407d7240447:/home/grras/slave-dir# cd apache-maven-3.9.5/  
root@9407d7240447:/home/grras/slave-dir/apache-maven-3.9.5# pwd  
/home/grras/slave-dir/apache-maven-3.9.5
```

Copy path of jdk and maven paste into notes

\*Untitled Document 1

```
1 export JAVA_HOME=/home/grras/slave-dir/jdk-11.0.20
2 export M2_HOME=/home/grras/slave-dir/apache-maven-3.9.5
3 export PATH=$JAVA_HOME/bin:$M2_HOME/bin:$PATH
4

root@9407d7240447:/home/grras/slave-dir/apache-maven-3.9.5# cd
root@9407d7240447:~# ls -a
.  ..  .bashrc  .profile
root@9407d7240447:~# apt-get update
Hit:1 http://security.ubuntu.com/ubuntu jammy-security InRelease
Hit:2 http://archive.ubuntu.com/ubuntu jammy InRelease
Hit:3 http://archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:4 http://archive.ubuntu.com/ubuntu jammy-backports InRelease
Reading package lists... Done
root@9407d7240447:~# apt-get install vim
```

Path Paste into .bashrc

```
root@9407d7240447:~# vim .bashrc
root@9407d7240447:~# tail -4 .bashrc
export JAVA_HOME=/home/grras/slave-dir/jdk-11.0.20
export M2_HOME=/home/grras/slave-dir/apache-maven-3.9.5
export PATH=$JAVA_HOME/bin:$M2_HOME/bin:$PATH

root@9407d7240447:~# source .bashrc
root@9407d7240447:~# java --version
java 11.0.20 2023-07-18 LTS
Java(TM) SE Runtime Environment 18.9 (build 11.0.20+9-LTS-256)
Java HotSpot(TM) 64-Bit Server VM 18.9 (build 11.0.20+9-LTS-256, mixed mode)
root@9407d7240447:~# mvn --version
Apache Maven 3.9.5 (57804ffe001d7215b5e7bcb531cf83df38f93546)
Maven home: /home/grras/slave-dir/apache-maven-3.9.5
Java version: 11.0.20, vendor: Oracle Corporation, runtime: /home/grras/slave-dir/jdk-11.0.20
Default locale: en_US, platform encoding: ANSI_X3.4-1968
OS name: "linux", version: "6.2.0-36-generic", arch: "amd64", family: "unix"
root@9407d7240447:~# git version
git version 2.34.1
```

Date:-9/11/2023

Master-slave

```
kunal@kunalsh:~$ sudo docker start kunal
[sudo] password for kunal:
kunal
kunal@kunalsh:~$ sudo docker attach kunal
root@9407d7240447:/# cd /home/grras/slave-dir/
root@9407d7240447:/home/grras/slave-dir# ls -a
. .. apache-maven-3.9.5 apache-tomcat-9.0.82 jdk-11.0.20
```

```
root@9407d7240447:/home/grras/slave-dir# chmod 777 jdk-11.0.20/
root@9407d7240447:/home/grras/slave-dir# cd apache-tomcat-9.0.82/
root@9407d7240447:/home/grras/slave-dir/apache-tomcat-9.0.82# chmod 777 webapps/
root@9407d7240447:/home/grras/slave-dir/apache-tomcat-9.0.82# ls -ld webapps/
drwxrwxrwx 7 root root 4096 Oct 11 13:15 webapps/
```

Go to Jenkins Create nodes

Dashboard > Manage Jenkins > Nodes > New node

## New node

Node name

Mens-slave

Type

Permanent Agent

Adds a plain, permanent agent to Jenkins. This is called "permanent" because Jenkins doesn't provide higher level of integration with these agents, such as dynamic provisioning. Select this type if no other agent types apply — for example such as when you are adding a physical computer, virtual machines managed outside Jenkins, etc.

**Create**

Create

Dashboard > Manage Jenkins > Nodes >

Name ?  
Mens-slave

Description ?  
This is slave for men's application

Plain text [Preview](#)

Number of executors ?  
1

Dashboard > Manage Jenkins > Nodes >

Remote root directory ?  
/home/grras/slave-dir

Labels ?  
mens-label

Usage ?  
Use this node as much as possible

Launch method ?  
Launch agents via SSH

## Add credentials

Dashboard > Manage Jenkins > Nodes >

### Jenkins Credentials Provider: Jenkins

Add Credentials

Domain  
Global credentials (unrestricted)

Kind  
Username with password

Scope ?  
Global (Jenkins, nodes, items, all child items, etc)

Dashboard > Manage Jenkins > Nodes >

Global (Jenkins, nodes, items, all child items, etc)

Username ?  
john

Treat username as secret ?

Password ?  
\*\*\*

ID ?  
john-dev

Dashboard > Manage Jenkins > Nodes >

Host ?  
172.17.0.2

Credentials ?  
john/\*\*\*\*\*

Add ▾

Host Key Verification Strategy ?  
Known hosts file Verification Strategy

Advanced ^

Availability ?  
Keep this agent online as much as possible

Dashboard > Manage Jenkins > Nodes >

### Node Properties

Disable deferred wipeout on this node ?

Environment variables

Tool Locations

List of tool locations ?

|      |               |   |
|------|---------------|---|
| Name | (Git) Default | X |
| Home | /usr/bin/git  |   |

Click on add

The screenshot shows the Jenkins 'Manage Jenkins' interface under the 'Nodes' section. A new node configuration is being added. The 'Name' field contains '(JDK) jdk-11.0.20' and the 'Home' field contains '/home/grras/slave-dir/jdk-11.0.20'. There is a red 'X' icon in the top right corner of the input field. At the bottom left is an 'Add' button.

Click on add

The screenshot shows the Jenkins 'Manage Jenkins' interface under the 'Nodes' section. A new node configuration is being added. The 'Name' field contains '(Maven) maven-3.9.5' and the 'Home' field contains '/home/grras/slave-dir/apache-maven-3.9.5'. There is a red 'X' icon in the top right corner of the input field. At the bottom left is an 'Add' button, and at the bottom center is a blue 'Save' button.

Save

Automatic build

[note:- If SSH build message show then start ssh service of container]

```
root@9407d7240447:/home/grras/slave-dir# service ssh status
 * sshd is not running
root@9407d7240447:/home/grras/slave-dir# service ssh start
 * Starting OpenBSD Secure Shell server sshd   [ OK ]
root@9407d7240447:/home/grras/slave-dir# service ssh status
 * sshd is running
```

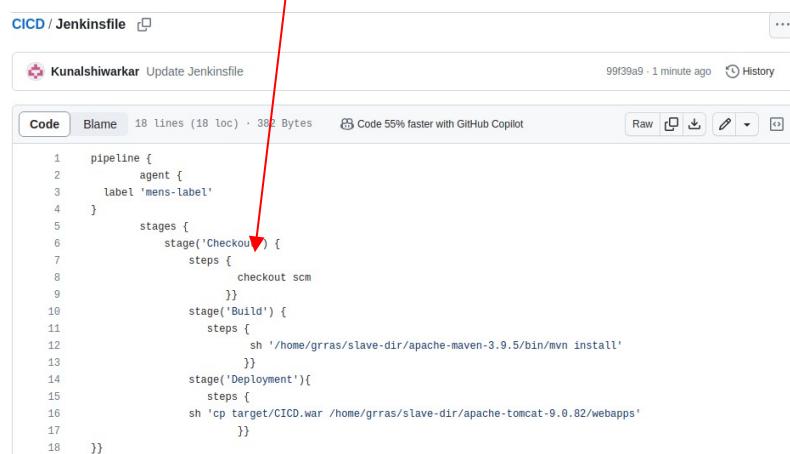
| S | Name          | Architecture  | Clock Difference | Free Disk Space | Free Swap Space | Free Temp Space | Response Time |
|---|---------------|---------------|------------------|-----------------|-----------------|-----------------|---------------|
|   | Built-In Node | Linux (amd64) | In sync          | 27.89 GB        | 3.81 GB         | 27.89 GB        | 0ms           |
|   | Mens-slave    | Linux (amd64) | In sync          | 27.89 GB        | 3.81 GB         | 27.89 GB        | 114ms         |

1<sup>st</sup> again configure Mens-shirts. Go to Mens-shirts

I open test-declarative-pipe file and go pipeline syntax then go declarative directive generator then Only I see that generate declarative directive

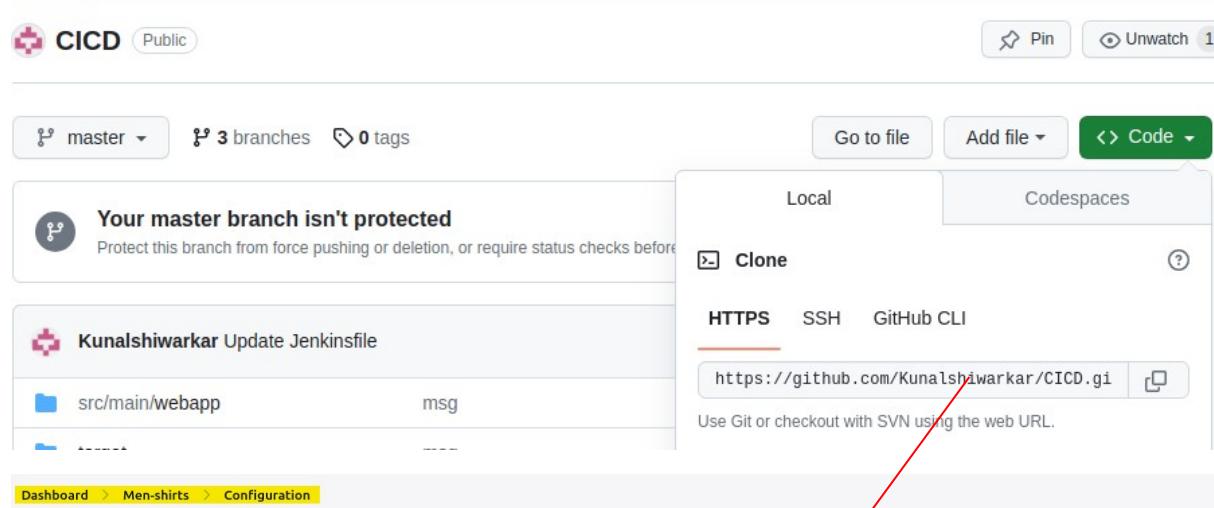
```
agent {
  label 'mens-label'
}
```

Copy and Then this paste into Jenkins script of CICD repo



```
1 pipeline {
2     agent {
3         label 'mens-label'
4     }
5     stages {
6         stage('Checkout') {
7             steps {
8                 checkout scm
9             }
10        stage('Build') {
11            steps {
12                sh '/home/grras/slave-dir/apache-maven-3.9.5/bin/mvn install'
13            }
14        stage('Deployment'){
15            steps {
16                sh 'cp target/CICD.war /home/grras/slave-dir/apache-tomcat-9.0.82/webapps'
17            }
18        }
19    }
20 }
```

Then copy URL from CICD repo github



Your master branch isn't protected  
Protect this branch from force pushing or deletion, or require status checks before

Kunalshiwarkar Update Jenkinsfile

src/main/webapp msg

Local Codespaces

Clone

HTTPS SSH GitHub CLI

https://github.com/Kunalshiwarkar/CICD.git

Use Git or checkout with SVN using the web URL.

Configure

Source Code Management

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

Repository URL ?  
https://github.com/Kunalshiwarkar/CICD.git

Credentials ?  
- none -

Dashboard > Mens-shirts > Configuration

## Configure

- General
- Source Code Management
- Build Triggers
- Build Environment
- Build Steps**
- Post-build Actions

Execute shell

Command

```
cp target/CICD.war /home/grras/slave-dir/apache-tomcat-9.0.82/webapps
```

Advanced

Add build step ▾

Save Apply

Apply and save then built now

Dashboard Mens-shirts

This is java file

Workspace Build Now Configure Delete Project Move Rename

Build History trend ▾ Filter builds... / #2 10 Nov 2023, 09:44

```
root@9407d7240447:/home/grras/slave-dir# cd apache-tomcat-9.0.82/webapps/
root@9407d7240447:/home/grras/slave-dir/apache-tomcat-9.0.82/webapps# ls -a
CICD.war  ROOT  docs  examples  host-manager  manager
```

Dashboard > Nodes > Mens-slave > Build History

Delete Agent Configure Build History Load Statistics Script Console Log System Information Disconnect

This history is not guaranteed to include all subtasks executed on the node, e.g. Jenkins Pipeline subtasks will not be displayed.

Timeline © 2023 Jenkins

|  | Nov 9 | Nov 10 | Nov 11 | Nov 12 |
|--|-------|--------|--------|--------|
|  |       |        |        |        |

Mens-shirts #2

Build Executor Status

| S    | Build          | Time Since | Status |
|------|----------------|------------|--------|
| Idle | Mens-shirts #2 | 49 sec     | stable |

← → ⌂ 127.0.1.1:8080/CICD/

Gmail YouTube Maps

Hello World!

## Self example



Freestyle project → ok

A screenshot of the Jenkins Freestyle project configuration screen. The top navigation bar shows "Dashboard > Mens-shoes > Configuration". The left sidebar has tabs for "Configure" and "General". The "General" tab is selected, indicated by a highlighted background. On the right, there are configuration fields:

- Description:** This is file
- Source Code Management:** Plain text [Preview](#)
- Build Environment:** Jira site

An "Enabled" toggle switch is turned on, indicated by a checked circle.

Dashboard > Mens-shoes > Configuration

## Configure

- General
- Source Code Management
- Build Triggers
- Build Environment
- Build Steps
- Post-build Actions

Disable Automated Maven Repository Cleanup

This project is parameterised ?

Throttle builds ?

Execute concurrent builds if necessary ?

Restrict where this project can be run ?

Label Expression ?

mens-label

Label **mens-label** matches 1 node. Permissions or other restrictions provided by plugins may further reduce that list.

Advanced ▾

Copy URL from project1 before Jenkins file check

project1 / Jenkinsfile

Kunalshiwarkar Update Jenkinsfile 632cefa · now History

Code Blame 18 lines (18 loc) · 386 Bytes Code 55% faster with GitHub Copilot Raw ⌂ ⌄ ⌅ ⌆ ⌇ ⌈ ⌉

```

1 pipeline {
2     agent {
3         label 'mens-label'
4     }
5     stages {
6         stage('Checkout') {
7             steps {
8                 checkout scm
9             }
10        stage('Build') {
11            steps {
12                sh '/home/grras/slave-dir/apache-maven-3.9.5/bin/mvn install'
13            }
14        stage('Deployment'){
15            steps {
16                sh 'cp target/project1.war /home/grras/slave-dir/apache-tomcat-9.0.82/webapps'
17            }
18        }
19    }
20 }
```

Dashboard > Mens-shoes > Configuration

## Configure

### Source Code Management

- None
- Git ?

Repositories ?

Repository URL ?

https://github.com/Kunalshiwarkar/project1.git

Credentials ?

- none -

Add ▾

Dashboard > Mens-shoes > Configuration

## Configure

- General
- Source Code Management
- Build Triggers
- Build Environment
- Build Steps**
- Post-build Actions

**Invoke top-level Maven targets** ?

Maven Version: maven-3.9.5

Goals: install

Advanced ▾

Dashboard > Mens-shoes > Configuration

## Configure

- General
- Source Code Management
- Build Triggers
- Build Environment
- Build Steps**
- Post-build Actions

**Execute shell** ?

Command: See [the list of available environment variables](#)

```
cp target/project1.war /home/grras/slave-dir/apache-tomcat-9.0.82/webapps
```

Advanced ▾

Apply and save then build now

Dashboard > Nodes > Mens-slave > Build History

- Delete Agent
- Configure
- Build History**
- Load Statistics
- Script Console
- Log
- System Information
- Disconnect

This history is not guaranteed to include all subtasks executed on the node, e.g. Jenkins Pipeline subtasks will not be displayed.

| Nov 9 | Nov 10                                                                                                   | Nov 11 | Nov 12 |
|-------|----------------------------------------------------------------------------------------------------------|--------|--------|
|       | <span style="color: blue;">●</span> Mens-shirts #3<br><span style="color: blue;">●</span> Mens-shoes #10 |        |        |

Timeline © Shultz

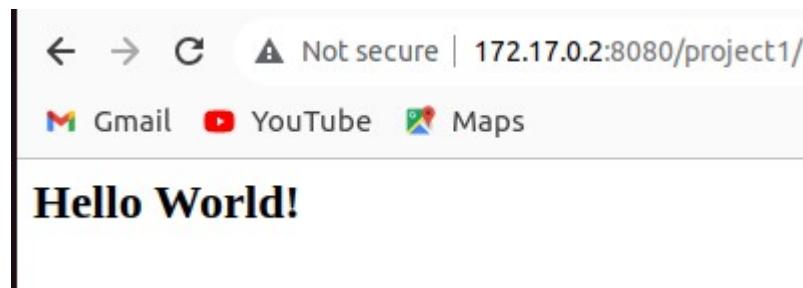
| Build Executor Status | S                                    | Build          | Time Since  | Status         |
|-----------------------|--------------------------------------|----------------|-------------|----------------|
| 1 Idle                | <span style="color: green;">○</span> | Mens-shirts #3 | 1 hr 2 min  | stable         |
|                       | <span style="color: green;">○</span> | Mens-shoes #10 | 1 hr 16 min | back to normal |

```
root@9407d7240447:~# cd /home/grras/slave-dir/apache-tomcat-9.0.82/webapps/
root@9407d7240447:/home/grras/slave-dir/apache-tomcat-9.0.82/webapps# ls -a
[  ] CICD.war  ROOT  docs  examples  host-manager  manager  project1.war
```

Open tomcat in container

```
root@9407d7240447:/home/grras/slave-dir/apache-tomcat-9.0.82# cd bin/
root@9407d7240447:/home/grras/slave-dir/apache-tomcat-9.0.82/bin# ./startup.sh
Using CATALINA_BASE:      /home/grras/slave-dir/apache-tomcat-9.0.82
Using CATALINA_HOME:       /home/grras/slave-dir/apache-tomcat-9.0.82
Using CATALINA_TMPDIR:     /home/grras/slave-dir/apache-tomcat-9.0.82/temp
Using JRE_HOME:            /home/grras/slave-dir/jdk-11.0.20
Using CLASSPATH:           /home/grras/slave-dir/apache-tomcat-9.0.82/bin/bootstrap.jar:/home/grras/slave-dir/apache-tomcat-9.0.82/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
```

[URL:-172.17.0.2:8080/project1](http://172.17.0.2:8080/project1)



Slag Notification message

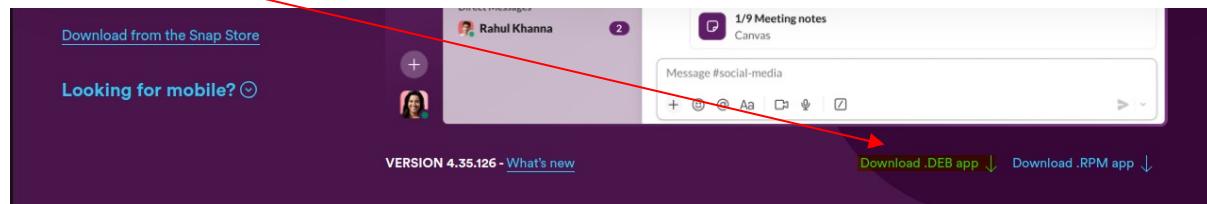
Go to google → slack.com → download slack

slack.com/intl/en-in/

YouTube Maps

The screenshot shows the Slack homepage. On the left, there's a purple sidebar with text about finding the right people. Below it, there's a button to sign up via email and another to try for free. The main content area has two columns: 'BY DEPARTMENT' and 'BY INDUSTRY'. Under 'BY DEPARTMENT', the categories are Engineering, IT, Customer Service, Sales, Project Management, Marketing, Human Resources, and Security. Under 'BY INDUSTRY', the categories are Technology, Media, Small business, Financial services, Retail, Public sector, Education, and Health and life sciences. To the right, there's a 'FEATURED' section with a thumbnail image of two people at a laptop and the text: 'How OpenAI connects customers and expands ChatGPT with Slack'. Below this, there are five more items: Task management, Scale, Engagement, Trust, and another snippet about ChatGPT.

Download deb file



Then install go to terminal follow this step

```
kunal@kunalsh:~/Downloads$ sudo dpkg -i slack-desktop-4.35.126-amd64.deb
[sudo] password for kunal:
Selecting previously unselected package slack-desktop.
(Reading database ... 234346 files and directories currently installed.)
Preparing to unpack slack-desktop-4.35.126-amd64.deb ...
Unpacking slack-desktop (4.35.126) ...
Setting up slack-desktop (4.35.126) ...
Processing triggers for mailcap (3.70+nmu1ubuntu1) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu3) ...
Processing triggers for desktop-file-utils (0.26-1ubuntu3) ...
kunal@kunalsh:~/Downloads$ sudo apt-get install -f
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
0 upgraded, 0 newly installed, 0 to remove and 167 not upgraded.
```

Click on create a new workspace



## What's the name of your company or team?

This will be the name of your Slack workspace – choose something that your team will recognise.

43

Next

## What's your name?

Adding your name and profile photo helps your teammates to recognise and connect with you more easily.

student

Your profile photo (optional)



Help your teammates to know that they're talking to the right person.

Upload photo

Next

The screenshot shows the Slack workspace interface for the "# student" channel. The sidebar on the left shows the workspace navigation with "student" selected. The main area displays the channel's welcome message: "Welcome to the # student channel! You created your team's first channel! Share ideas, make decisions and move work forwards with a common purpose and place." It includes a "Start here" button, a "Take a quick tour" button, and an "Add colleagues" button. The message input field at the bottom has "Message #student" typed into it.

Go to Jenkins → manage Jenkins → plugins → available Jenkins → slack notification → install

The screenshot shows the Jenkins Manage Jenkins > Plugins page. The "Available plugins" tab is selected. A search bar at the top right contains the text "Slack notification". A single plugin entry for "Slack Notification" is shown, with the "Install" button highlighted. The plugin details show it was released 3 months and 1 day ago and integrates Jenkins with Slack to allow publishing build statuses, messages, and files to Slack channels.

Both slack install

Dashboard > Manage Jenkins > Plugins

Available plugins

Installed plugins

Advanced settings

Download progress

Plugins

slack

| Name                                        | Enabled                                                      |
|---------------------------------------------|--------------------------------------------------------------|
| Global Slack Notifier Plugin 1.5            | <input checked="" type="checkbox"/> <input type="checkbox"/> |
| Slack Notification Plugin 684.v833089650554 | <input checked="" type="checkbox"/> <input type="checkbox"/> |

Create a channel → grras-test

student student-bsp3070.slack.com

90 days left to view full history

Get 55% off a paid subscription for a limited time. See upgrade options

Invite people to student

Create a channel

Preferences

Settings & administration

Tools

Search student

dent

a bookmark

Take a quick tour

Today

student 10:03 joined #student.

start here

message #student

Aa @ |

Notifications. Enable notifications

Create a channel

Channels are a way for teams to openly collaborate. Create a channel around a topic and people can join or follow the conversation.

Name

# grras-test 70

Channels are where conversations happen around a topic. Use a name that is easy to find and understand.

Invite external people PRO

Next

Create a channel

# grras-test

Visibility

Public - Anyone in student

Private - Only specific people  
Can only be viewed or joined by invitation

Step 2 of 2

Back Create

Then skip for now

View all member

# grras-test

+ Add a bookmark

Today

student 10:18 joined #grras-test.

Send a quick message to let your colleagues know that you're here.

Hello, team! Let's use this channel for...

B I S | ⌂ | ⌂ ⌂ | ⌂ | ⌂ | ⌂ | ⌂

Message #grras-test

Aa ☺ @ | ↻ | ↻ | ↻

▶ | ↻

Member list show then

Integration → click → add and app

# grras-test

Enable notifications Huddle

About Members 1 Integrations Settings

Find members

Add people

student (you) •

# grras-test

Enable notifications Huddle

About Members 1 Integrations Settings

Automate the tasks and processes that are unique to your team, no coding required.

See upgrade options

Apps

Bring the tools that you need into this channel to pull reports, start calls, file tickets and more.

Add an app

Then install incoming webhooks →

then add to slack

Add apps to grras-test

incoming webhooks

From the App Directory

- Incoming WebHooks** Send data into Slack in real-time. [Install](#)
- SnipForm for Slack** Send your form submissions to a Slack channel of your choice. [Install](#)
- verivu** test right now - integrate your testing with Slack. [Install](#)

slack app directory

Search App Directory

Incoming webhooks

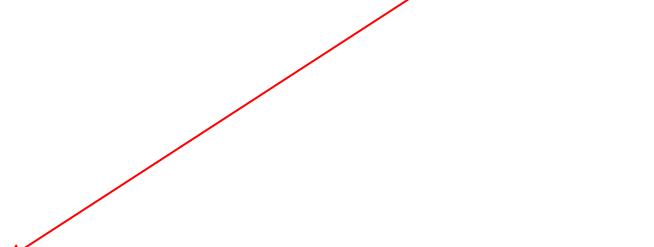
Description Permissions Security & compliance

Please note, this is a legacy custom integration - an outdated way for teams integrations lack newer features and they will be deprecated and possibly removed instead, we suggest that you check out their replacement.

Incoming Webhooks are a simple way to post messages from external sources via normal HTTP requests with a JSON payload, which includes the message described later.

Add to Slack

After add to slack complete then scroll and option see post to channel → #grras-test



slack app directory  Browse Manage Build

**New to Slack Integrations?**  
Take a look at our [Getting started](#) guide to familiarise yourself with the most common types of integrations and tips to keep in mind while building your own. You can also [register as a developer](#) to let us know what you're working on and to receive future updates to our APIs.

**Post to channel**  
Start by choosing a channel your incoming webhook will post messages to.  
 or create a new channel

**Add Incoming webhooks integration**

By creating an incoming webhook, you agree to the [Slack API terms of service](#).

slack app directory  Browse Manage Build

**New to Slack integrations?**  
Take a look at our [Getting started](#) guide to familiarise yourself with the most common types of integrations and tips to keep in mind while building your own. You can also [register as a developer](#) to let us know what you're working on and to receive future updates to our APIs.

**Setup instructions**  
We'll guide you through the steps required to configure an incoming webhook so you can start sending data to Slack. [close](#)

**Webhook URL** `https://hooks.slack.com/services/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`

**Sending messages** You h  
 URL TOKEN  
 • Send a JSON string as the `payload` parameter in a POST request

Then go any Jenkins file → first scripted pipeline or sample pipeline → pipeline syntax

Snippet generator

Dashboard > first-scripted-pipeline > Pipeline Syntax

↑ Back Overview

**Snippet Generator** This Snippet Generator will help you learn the Pipeline Script code which can be used to define various steps. Pick a step you are interested in from the list, configure it, click Generate Pipeline Script, and you will see a Pipeline Script statement that would call the step with that configuration. You may copy and paste the whole statement into your script, or pick up just the options you care about. (Most parameters are optional and can be omitted in your script, leaving them at default values.)

**Declarative Directive Generator**

**Declarative Online Documentation**

**Steps Reference**

**Global Variables Reference**

**Online Documentation**

**Examples Reference**

**IntelliJ IDEA GDSL**

**Sample Step**

slackSend: Send Slack Message

slackSend ?

Channel ?

#grras-test

Then click on advance

The screenshot shows the Jenkins Pipeline Syntax configuration page. At the top, there is a message box containing "Welcome to grras channel". Below it is an "Advanced" dropdown menu, which is currently open, indicated by a red arrow pointing to it. A "Generate Pipeline Script" button is visible. The main configuration area contains fields for "Message", "Color", "Workspace", and "Credential". The "Workspace" field has "devops" selected. The "Credential" field has "- none -" selected. There is also an "Add" button.

Click on credentials Add

## Jenkins Credentials Provider: Jenkins

### Add Credentials

Domain

Global credentials (unrestricted)

Kind

Secret text

Scope

Global (Jenkins, nodes, items, all child items, etc)

Dashboard > first-scripted-pipeline > Pipeline Syntax

Advanced ▾ / Edited

Scope ? Global (Jenkins, nodes, items, all child items, etc)

Secret .....\*

ID ? jenkins-pipeline-new

Description ?

Add Cancel

Add

Dashboard > first-scripted-pipeline > Pipeline Syntax

Credential ? jenkins-pipeline-new

Add ▾

Custom slack app bot user ?

Notify Committers ?

Override url ? https://hooks.slack.com/services

Fail On Error ?

Generate Pipeline Script

```
slackSend baseUrl: 'https://hooks.slack.com/services/', channel: '#grras-test', color: 'good', message: 'Welcome to grras channel', teamDomain: 'devops', tokenCredentialId: 'jenkins-pipeline-new'
```

Then go back to first-scripted-pipeline and configure the file again

Dashboard > first-scripted-pipeline > Configuration

**Configure**

**General**

Enabled

General

Advanced Project Options

Pipeline

Description  
This is the first pipeline

Plain text [Preview](#)

Jira site

Now go to project4 repo in git hub then create Jenkins file paste that script here

```

pipeline {
    agent any

    stages {
        stage('Checkout') {
            steps [
                checkout scm
            ]
        }
        stage('Build') {
            steps [
                sh '/home/kunal/Documents/Devops_software/tar/apache-maven-3.9.5/bin/mvn install'
            ]
        }
        stage('Deployment'){
            steps [
                sh 'cp target/project4.war /home/kunal/Documents/Devops_software/tar/apache-tomcat-9.0.82/webapps'
            ]
        }
        stage('slack notification'){
            steps [
                slackSend baseUrl: 'https://hooks.slack.com/services/', channel: '#grras-test', color: 'good', message: 'welcome to grras channel', teamDomain: 'devops', tokenCredentialId: 'jenkins-pipeline-new'
            ]
        }
    }
}

```

**project4** Public

master · 1 branch · 0 tags

Kunalshiwarkar Create Jenkinsfile

- src/main/webapp msg
- target Update index.jsp
- Jenkinsfile Create Jenkinsfile
- pom.xml msg

Help people interested in this repository understand your project by adding a

Local Codespaces

**Clone**

HTTPS SSH GitHub CLI

<https://github.com/Kunalshiwarkar/project4>

Use Git or checkout with SVN using the web URL.

**Download ZIP**

Dashboard > first-scripted-pipeline > Configuration

## Configure

### Pipeline

**Definition**

Pipeline script from SCM

**SCM**

Git

**Repositories**

Repository URL

<https://github.com/Kunalshiwarkar/project4.git>

Dashboard > first-scripted-pipeline > Configuration

## Configure

- General
- Advanced Project Options
- Pipeline**

Repository browser ? (Auto)

Additional Behaviours Add ▾

Script Path ? Jenkinsfile

Lightweight checkout ?

Pipeline Syntax

**Save** **Apply**

Apply and save then built now

Dashboard > first-scripted-pipeline >

**Configure** **Edit description** **Disable Project**

- Delete Pipeline
- Move
- Full Stage View
- Rename
- Pipeline Syntax

**Stage View**

| Declarative: Checkout SCM | Checkout   | Build | Deployment | slack notification |
|---------------------------|------------|-------|------------|--------------------|
| 1s                        | 1s         | 5s    | 359ms      | 1s                 |
| Nov 11 13:29              | No Changes | 1s    | 5s         | 359ms              |
| #2                        |            | 1s    | 5s         | 1s                 |

**Build History** trend ▾

Filter builds...

- #2 11 Nov 2023, 13:29
- #1 8 Nov 2023, 20:14

**Permalinks**

- Last build (#1), 2 days 17 hr ago
- Last stable build (#1), 2 days 17 hr ago
- Last successful build (#1), 2 days 17 hr ago

student ▾

Search student

# grras-test 1 Try canvas

+ Add a bookmark

Today

student 10:18 joined #grras-test.

student 10:40 added an integration to this channel: incoming-webhook

Incoming-webhook APP 13:29 welcome to grras channel

B I § Ø | ≈ ≈ ≈ ≈ ≈ ≈ ≈ ≈ ≈ ≈ ≈

Message #grras-test

+ Aa ☺ @ | ☐ ☐ ☐ ☐ ☐ ☐

Profile

student

+ Add name pronunciation

Action