

Jenkins Task

Instance creation:

The screenshot shows the 'Launch an instance' wizard on the AWS EC2 console. The first step, 'Name and tags', is completed with the name 'jenkins-vm'. The 'Add additional tags' button is visible.

Summary

- Number of instances**: 1
- Software Image (AMI)**: Amazon Linux 2023 AMI 2023.7.2... (ami-00a929b66ed6e0de6)
- Virtual server type (instance type)**: t2.micro
- Firewall (security group)**: New security group
- Storage (volumes)**: 1 volume(s) - 8 GiB

Actions: Cancel, Launch instance, Preview code

Amazon Machine Image (AMI)

Description: Ubuntu Server 24.04 LTS (HVM), SSD Volume Type

Architecture: 64-bit (x86)

AMI ID: ami-084568db4383264d4

Publish Date: 2025-03-05

Username: ubuntu

Additional costs apply for AMIs with pre-installed software

Instance type: t2.micro

Additional costs apply for AMIs with pre-installed software

The screenshot shows the 'Launch an instance' wizard on the AWS EC2 console. The second step, 'Amazon Machine Image (AMI)', is selected. It shows the details for the 'Ubuntu Server 24.04 LTS (HVM), SSD Volume Type' AMI.

Summary

- Number of instances**: 1
- Software Image (AMI)**: Canonical, Ubuntu, 24.04, amd64... (ami-084568db4383264d4)
- Virtual server type (instance type)**: t2.micro
- Firewall (security group)**: New security group
- Storage (volumes)**: 1 volume(s) - 8 GiB

Actions: Cancel, Launch instance, Preview code

Amazon Machine Image (AMI)

Description: Ubuntu Server 24.04 LTS (HVM), EBS General Purpose (SSD) Volume Type. Support available from Canonical (<http://www.ubuntu.com/cloud/services>).

Architecture: Canonical, Ubuntu, 24.04, amd64 noble image

AMI ID: ami-084568db4383264d4

Publish Date: 2025-03-05

Username: ubuntu

Additional costs apply for AMIs with pre-installed software

Instance type: t2.micro

Additional costs apply for AMIs with pre-installed software

The screenshot shows three sequential steps of launching an EC2 instance on the AWS console.

Step 1: Key pair (login)

Key pair name - required: aws-key

Step 2: Network settings

Network: vpc-07f2dc389716a7f01
 Subnet: No preference (Default subnet in any availability zone)
 Auto-assign public IP: Enable
 Firewall (security group): Create security group (selected)

We'll create a new security group called 'launch-wizard-1' with the following rules:

- Allow SSH traffic from Anywhere (0.0.0.0/0)
- Allow HTTPS traffic from the internet
- Allow HTTP traffic from the internet

Step 3: Configure storage

Root volume: 8 GiB gp3 (gp3 selected)
 Advanced: Root volume, 3000 IOPS, Not encrypted

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage

Summary

Number of instances: 1

Software Image (AMI): Canonical, Ubuntu, 24.04, amd64...
 ami-084568db4383264d4

Virtual server type (instance type): t2.micro

Firewall (security group): New security group

Storage (volumes): 1 volume(s) - 8 GiB

Launch Instance

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Screenshot of the AWS EC2 Instances Launch an instance page showing a successful launch of instance i-0aab65d42d2773a5d.

Success
Successfully initiated launch of instance (i-0aab65d42d2773a5d)

Launch log

Next Steps

What would you like to do next with this instance, for example "create alarm" or "create backup"

Create billing and free tier usage alerts
To manage costs and avoid surprise bills, set up email notifications for billing and free tier usage thresholds.
[Create billing alerts](#)

Connect to your instance
Once your instance is running, log into it from your local computer.
[Connect to instance](#)
[Learn more](#)

Connect an RDS database
Configure the connection between an EC2 instance and a database to allow traffic flow between them.
[Connect an RDS database](#)
[Create a new RDS database](#)
[Learn more](#)

Create EBS snapshot policy
Create a policy that automates the creation, retention, and deletion of EBS snapshots.
[Create EBS snapshot policy](#)

Manage detailed monitoring, **Create Load Balancer**, **Create AWS budget**, **Manage CloudWatch alarms**

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Screenshot of the AWS EC2 Instances Instance details page for instance i-0aab65d42d2773a5d.

EC2

- Dashboard
- EC2 Global View
- Events
- Instances**
 - Instances
 - Instance Types
 - Launch Templates
 - Spot Requests
 - Savings Plans
 - Reserved Instances
 - Dedicated Hosts
 - Capacity Reservations
- Images**
 - AMIs
 - AMI Catalog
- Elastic Block Store**
 - Volumes
 - Snapshots
 - Lifecycle Manager

Instance summary for i-0aab65d42d2773a5d (jenkins-vm)

Updated 1 minute ago

Attribute	Value
Instance ID	i-0aab65d42d2773a5d
IPv6 address	-
Hostname type	IP name: ip-172-31-80-5.ec2.internal
Answer private resource DNS name	IPv4 (A)
Auto-assigned IP address	3.93.148.250 [Public IP]
IAM Role	-
IMDSv2	Required
Public IPv4 address	3.93.148.250 open address
Instance state	Running
Private IP DNS name (IPv4 only)	ip-172-31-80-5.ec2.internal
Instance type	t2.micro
VPC ID	vpc-07f2dc589716a7f01
Subnet ID	subnet-0e07ae45177b4d083
Instance ARN	arn:aws:ec2:us-east-1:905418201986:instance/i-0aab65d42d2773a5d
Managed	false

Connect Instance state Actions

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Edit inbound rules to add 8080 port:

The screenshot shows the AWS EC2 Security Groups console. The main view displays the security group **sg-0977c73d7e8d5c86d - launch-wizard-1**. The **Inbound rules** tab is selected, showing three existing rules:

Name	Security group rule ID	IP version	Type	Protocol	Port range
-	sgr-0c4e75025dee89469	IPv4	HTTP	TCP	80
-	sgr-0f05c0c6e0cc8a82	IPv4	HTTPS	TCP	443
-	sgr-0581baceddc0056cf	IPv4	SSH	TCP	22

The screenshot shows the **Edit inbound rules** dialog for the **sg-0977c73d7e8d5c86d - launch-wizard-1** security group. A new rule is being added:

Type	Protocol	Port range	Source	Description
Custom TCP	TCP	8080	Anyw...	0.0.0.0/0

A warning message at the bottom states: "⚠ Rules with source of 0.0.0.0 or ::/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only."

The screenshot shows the AWS EC2 Security Groups page. A green success message at the top states: "Inbound security group rules successfully modified on security group (sg-0977c73d7e8d5c86d | launch-wizard-1) Details". Below this, the security group "sg-0977c73d7e8d5c86d - launch-wizard-1" is listed. The "Details" section shows the following information:

Security group name	SG launch-wizard-1	Security group ID	sg-0977c73d7e8d5c86d
Owner	905418201986	Description	SG launch-wizard-1 created 2025-04-08T17:26:56.942Z
		Inbound rules count	4 Permission entries
		Outbound rules count	1 Permission entry

Below the details, there are tabs for "Inbound rules", "Outbound rules", "Sharing - new", "VPC associations - new", and "Tags". The "Inbound rules" tab is selected, showing a table with four entries. The table columns are: Name, Security group rule ID, IP version, Type, Protocol, and Port range. One entry is visible: "sgr-0c4e75025dee89469 IPv4 HTTP TCP 80".

Connecting to the EC2 Instance:

The screenshot shows the "Connect to instance" page for the instance "i-0aab65d42d2773a5d (jenkins-vm)". The "SSH client" tab is selected. The "Instance ID" is listed as "i-0aab65d42d2773a5d (jenkins-vm)". Below it is a numbered list of steps:

- Open an SSH client.
- Locate your private key file. The key used to launch this instance is aws-key.pem
- Run this command, if necessary, to ensure your key is not publicly viewable.
chmod 400 "aws-key.pem"
- Connect to your instance using its Public DNS:
ec2-3-93-148-250.compute-1.amazonaws.com

A green callout bubble says "Command copied". Below the steps is a note: "Note: In most cases, the guessed username is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username." At the bottom right is a "Cancel" button.



```
Ubuntu@ip-172-31-80-5:~  
Microsoft Windows [Version 10.0_26100_3624]  
(c) Microsoft Corporation. All rights reserved.  
  
C:\Users\mouni\Downloads>cd Downloads  
  
C:\Users\mouni\Downloads>ssh -i "aws-key.pem" ubuntu@ec2-3-93-148-250.compute-1.amazonaws.com  
The authenticity of host 'ec2-3-93-148-250.compute-1.amazonaws.com (3.93.148.250)' can't be established.  
ED25519 key fingerprint is SHA256:u3JBzLzZhMmZggjAnD9MwBp1VfglUR+a5s4aiQLE.  
This key is not known by any other names.  
Are you sure you want to connect (yes/no/[fingerprint])? yes  
Warning: Permanently added 'ec2-3-93-148-250.compute-1.amazonaws.com' (ED25519) to the list of known hosts.  
Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 6.6.0-1024-aws x86_64)  
  
* Documentation: https://help.ubuntu.com  
* Management: https://landscape.canonical.com  
* Support: https://ubuntu.com/pro  
  
System information as of Tue Apr 8 17:36:09 UTC 2025  
  
System load: 0.0 Processes: 105  
Usage of /: 25.0% of 6.71GB Users logged in: 0  
Memory usage: 19% IPv4 address for enX0: 172.31.80.5  
Swap usage: 0%  
  
Expanded Security Maintenance for Applications is not enabled.  
0 updates can be applied immediately.  
  
Enable ESM Apps to receive additional future security updates.  
See https://ubuntu.com/esm or run: sudo pro status  
  
The list of available updates is more than a week old.  
To check for new updates run: sudo apt update  
  
The programs included with the Ubuntu system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/*copyright.  
  
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by  
applicable law.  
  
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo_root" for details.  
Ubuntu@ip-172-31-80-5:~$
```



Jenkins installation:

Java installation:

```
$ sudo apt update
```

```
Ubuntu@ip-172-31-80-5:~  
The list of available updates is more than a week old.  
To check for new updates run: sudo apt update  
  
The programs included with the Ubuntu system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/*copyright.  
  
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by  
applicable law.  
  
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo_root" for details.  
Ubuntu@ip-172-31-80-5:~$ sudo apt update  
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble InRelease [126 kB]  
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]  
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]  
Get:4 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]  
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]  
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]  
Get:7 http://security.ubuntu.com/ubuntu noble-security/main amd64 Package [742 kB]  
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]  
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 c-n-f Metadata [301 kB]  
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Packages [269 kB]  
Get:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse Translation-en [118 kB]  
Get:12 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Components [35.0 kB]  
Get:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 c-n-f Metadata [8328 B]  
Get:14 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [389 kB]  
Get:15 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main Translation-en [103 kB]  
Get:16 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [151 kB]  
Get:17 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [265 kB]  
Get:18 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [1051 kB]  
Get:19 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [267 kB]  
Get:20 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [367 kB]  
Get:21 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [26.0 kB]  
Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Packages [892 kB]  
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted Translation-en [181 kB]  
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 kB]  
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 c-n-f Metadata [492 B]  
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Packages [21.5 kB]  
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse Translation-en [4788 B]  
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [608 B]  
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 c-n-f Metadata [592 B]  
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 Packages [39.1 kB]  
Get:31 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main Translation-en [8676 B]  
Get:32 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [7064 B]
```



```
ca Select ubuntu@ip-172-31-80-5:~  
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 c-n-f Metadata [492 B]  
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Packages [21.5 kB]  
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse Translation-en [4788 B]  
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 c-n-f Metadata [592 B]  
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 Packages [39.1 kB]  
Get:31 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main Translation-en [8676 B]  
Get:32 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 c-n-f Metadata [7064 B]  
Get:33 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [772 B]  
Get:34 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 c-n-f Metadata [40.4 kB]  
Get:35 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe Translation-en [16.3 kB]  
Get:36 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [15.8 kB]  
Get:37 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 c-n-f Metadata [1304 B]  
Get:38 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]  
Get:39 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 c-n-f Metadata [116 B]  
Get:40 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]  
Get:41 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 c-n-f Metadata [116 B]  
Get:42 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [142 kB]  
Get:43 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [8956 B]  
Get:44 http://security.ubuntu.com/ubuntu noble-security/main amd64 c-n-f Metadata [7068 B]  
Get:45 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [828 kB]  
Get:46 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [80 B]  
Get:47 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [52 B]  
Get:48 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [17.0 kB]  
Get:49 http://security.ubuntu.com/ubuntu noble-security/restricted Translation-en [175 kB]  
Get:50 http://security.ubuntu.com/ubuntu noble-security/restricted Translation-en [175 kB]  
Get:51 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [212 B]  
Get:52 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 c-n-f Metadata [468 B]  
Get:53 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Packages [17.6 kB]  
Get:54 http://security.ubuntu.com/ubuntu noble-security/multiverse Translation-en [3792 B]  
Get:55 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [208 B]  
Get:56 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 c-n-f Metadata [380 B]  
Fetched 33.3 MB in 7s (4482 kB/s)  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
55 packages can be upgraded. Run 'apt list --upgradable' to see them.  
ubuntu@ip-172-31-80-5:~$
```

```
$ sudo apt install fontconfig openjdk-17-jre
```

```
ca Select ubuntu@ip-172-31-80-5:~  
Get:54 http://security.ubuntu.com/ubuntu noble-security/multiverse Translation-en [3792 B]  
Get:55 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [208 B]  
Get:56 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 c-n-f Metadata [380 B]  
Fetched 33.3 MB in 7s (4482 kB/s)  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
55 packages can be upgraded. Run 'apt list --upgradable' to see them.  
ubuntu@ip-172-31-80-5:~$ sudo apt install fontconfig openjdk-17-jre  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following additional packages will be installed:  
adwaita-icon-theme also-theme glibx-cm-conf at-spi2-common at-spi2-core ca-certificates-java dconf-getting-backend dconf-service fontconfig config fonts-dejavu-core fonts-dejavu-extra  
fonts-dejavu-common fonts-dejavu-schemas gtk-update-icon-cache hicolor-icon-themes humanity-icon-themes java-common libbsound2 libdbsound2 libatk-brlapi2 0-0t64 libatk-wrapper-javaw  
libatk-wrapper-java-jni libatk1 0-0t64 libatspi2 0-0t64 libavahi-client3 libavahi-common-data libavahi-common3 libcairo-gobject2 libcairo2 libcupsc2t64 libdatr1 libdbconf1 libdeflate0 libdrm-amdgpu1  
libdrm-intel libdrm-nouveau2 libdrm-radeon1 libfontconfig1 libgall嚮 common libgail18t64 libgbm1 libgd-pixbuf2-2.0-0 libgd-pixbuf2-0-bin libgd-pixbuf2-0-common libgif7 libgl1 libgl1-amber-dei  
libgl1-mesa-dei libglapi-mesa libglvnd0 libglx-mesa libglxographite2-3 libglx2 0-0t64 libglx2 0-bin libglx2 0-common libharfbuzz0b libice6 libjbig2 libjpeg-turbo8 libjng8 liblcms2-2 libllvml9  
libpano-1.0-0 libpanocairo-1.0-0 libpaciess0 libpaciess1 libpixman-1 libpixman2 libpixbuf2 libpixrendr2 librender1 libshmefence1 libxt6t64 libxtst6 libxv1 libxxf86dga1 libxxf86vml mesa-libgallium  
mesa-vulkan-drivers openjdk-17-jre-headless session-migration ubuntu-mono x11-common x11-utils  
Suggested packages:  
default-jre also-utils libasound2-plugins cups-common gvfs libicms2-0 utils pscd librsvg2-bin libnss-mdns fonts-ipafont-gothic fonts-ipafont-mincho fonts-way-microhei | fonts-way-zenhei fonts-indic mesa-utils  
Recommended packages:  
luit  
The following NEW packages will be installed:  
adwaita-icon-theme also-theme glibx-cm-conf at-spi2-common at-spi2-core ca-certificates-java dconf-getting-backend dconf-service fontconfig config fonts-dejavu-core fonts-dejavu-extra  
fonts-dejavu-common fonts-dejavu-schemas gtk-update-icon-cache hicolor-icon-themes humanity-icon-themes java-common libbsound2 libdbsound2 libatk-brlapi2 0-0t64 libatk-wrapper-javaw  
libatk-wrapper-java-jni libatk1 0-0t64 libatspi2 0-0t64 libavahi-client3 libavahi-common-data libavahi-common3 libcairo-gobject2 libcairo2 libcupsc2t64 libdatr1 libdbconf1 libdeflate0 libdrm-amdgpu1  
libdrm-intel libdrm-nouveau2 libdrm-radeon1 libfontconfig1 libgall嚮 common libgail18t64 libgbm1 libgd-pixbuf2-2.0-0 libgd-pixbuf2-0-bin libgd-pixbuf2-0-common libgif7 libgl1 libgl1-amber-dei  
libgl1-mesa-dei libglapi-mesa libglvnd0 libglx-mesa libglxographite2-3 libglx2 0-0t64 libglx2 0-bin libglx2 0-common libharfbuzz0b libice6 libjbig2 libjpeg-turbo8 libjng8 liblcms2-2 libllvml9  
libpano-1.0-0 libpanocairo-1.0-0 libpaciess0 libpaciess1 libpixman-1 libpixman2 libpixbuf2 libpixrendr2 librender1 libshmefence1 libxt6t64 libxtst6 libxv1 libxxf86dga1 libxxf86vml mesa-libgallium  
mesa-vulkan-drivers openjdk-17-jre openjdk-17-jre-headless session-migration ubuntu-mono x11-common x11-utils  
0 upgraded, 120 newly installed, 0 to remove and 55 not upgraded.  
Need to get 122 MB of archives.  
After this operation, 543 MB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 libatk-brlapi2 0-0t64 libatk-wrapper-javaw [150 kB]  
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/min amd64 libbjpg-turbo8 amd64 2.1.5.2ubuntu2 [150 kB]  
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/min amd64 libbjpeg8 amd64 8c-2ubuntu11 [2148 B]  
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 libdeflate0 amd64 1.19-1ubuntu1 [43.9 kB]  
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/min amd64 libbjpg0 amd64 2.1-6.1ubuntu2 [29.7 kB]  
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/min amd64 liblerc4 amd64 4.0.0+4ubuntu2 [179 kB]  
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/min amd64 libsharpyuv8 amd64 1.3.2-0.4ubuntu3 [15.8 kB]  
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/min amd64 libweebp7 amd64 1.3.2-0.4ubuntu3 [230 kB]  
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 libtiff6 amd64 4.5.1+git230720-4ubuntu2.2 [199 kB]  
ubuntu@ip-172-31-80-5:~$
```

```
ca Select ubuntu@ip-172-31-80-5: ~
Adding debian:Starfield_Services_Root_Certificate_Authority_-G2.pem
Adding debian:SwissSign_Gold_CA_-G2.pem
Adding debian:SwissSign_Silver_CA_-G2.pem
Adding debian:t-teleSec_GlobalRoot_Class_2.pem
Adding debian:t-teleSec_GlobalRoot_Class_3.pem
Adding debian:TUBITAK_Kamu_SM_SSL_Kok_Sertifikasi_-Surum_1.pem
Adding debian:TNCAGlobal_Root_CA.pem
Adding debian:VeriSign_Root_Certification_Authority.pem
Adding debian:x509v3_CA_v1.pem
Adding debian:TrustAsia_Root_CA_v2.pem
Adding debian:TrustAsia_Global_Root_CA_G3.pem
Adding debian:TrustAsia_Global_Root_CA_G4.pem
Adding debian:Trustwave_Global_Certification_Authority.pem
Adding debian:Trustwave_Global_ECC_P256_Certification_Authority.pem
Adding debian:Trustwave_Global_ECC_P384_Certification_Authority.pem
Adding debian:TunTrust_Root_CA.pem
Adding debian:UCA_Extended_Validation_Root.pem
Adding debian:UCA_Global_G2_Root.pem
Adding debian:USERTrust_ECC_Certification_Authority.pem
Adding debian:USERTrust_RSA_Certification_Authority.pem
Adding debian:xRamp_Global_CA_Root.pem
Adding debian:certSIGN_ROOT_CA_G2.pem
Adding debian:certSIGN_ROOT_CA_G3.pem
Adding debian:certSIGN_Root_CA_2017.pem
Adding debian:ePKI_Root_Certification_Authority.pem
Adding debian:emSign_ECC_Root_CA_-C3.pem
Adding debian:emSign_ECC_Root_CA_-G3.pem
Adding debian:emSign_Root_CA_-C1.pem
Adding debian:emSign_Root_CA_-G1.pem
Adding debian:Trus_ECC_Root_CA.pem
Adding debian:Trus_Root_CA.pem
done.
Setting up openjdk-17-jre-amd64 (17.0.14+7-1~24.04) ...
Processing triggers for libc-bin (2.39-0ubuntu8.4)
Processing triggers for libgdk-pixbuf-2.0-0:amd64 (2.42.10+dfsg-3ubuntu3.1) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-80-5:~
```



\$ java –version

```
ca Select ubuntu@ip-172-31-80-5: ~
Adding debian:Trustwave_Global_Certification_Authority.pem
Adding debian:Trustwave_Global_ECC_P256_Certification_Authority.pem
Adding debian:Trustwave_Global_ECC_P384_Certification_Authority.pem
Adding debian:TunTrust_Root_CA.pem
Adding debian:UCA_Extended_Validation_Root.pem
Adding debian:UCA_Global_G2_Root.pem
Adding debian:USERTrust_ECC_Certification_Authority.pem
Adding debian:USERTrust_RSA_Certification_Authority.pem
Adding debian:xRamp_Global_CA_Root.pem
Adding debian:certSIGN_ROOT_CA_G2.pem
Adding debian:certSIGN_Root_CA_G3.pem
Adding debian:certSIGN_Root_CA_2017.pem
Adding debian:ePKI_Root_Certification_Authority.pem
Adding debian:emSign_ECC_Root_CA_-C3.pem
Adding debian:emSign_ECC_Root_CA_-G3.pem
Adding debian:emSign_Root_CA_-C1.pem
Adding debian:emSign_Root_CA_-G1.pem
Adding debian:Virus_ECC_Root_CA.pem
Adding debian:Virus_Root_CA.pem
done.
Setting up openjdk-17-jre-amd64 (17.0.14+7-1~24.04) ...
Processing triggers for libc-bin (2.39-0ubuntu8.4)
Processing triggers for libgdk-pixbuf-2.0-0:amd64 (2.42.10+dfsg-3ubuntu3.1) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

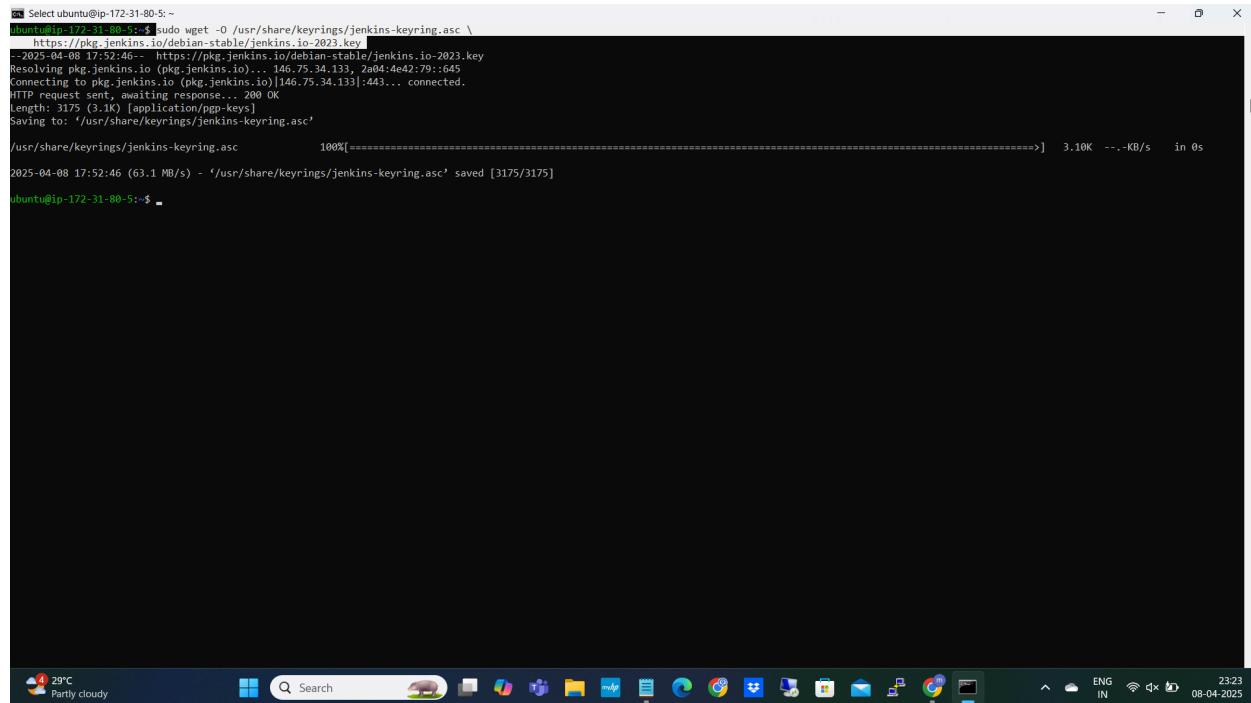
No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-80-5:~$ java --version
openjdk 17.0.14 2025-01-21
OpenJDK Runtime Environment (build 17.0.14+7-Ubuntu-124.04)
OpenJDK 64-Bit Server VM (build 17.0.14+7-Ubuntu-124.04, mixed mode, sharing)
ubuntu@ip-172-31-80-5:~$
```



Installing Jenkins

```
$ sudo wget -O /usr/share/keyrings/jenkins-keyring.asc \
https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
```



A screenshot of a terminal window on an Ubuntu desktop. The terminal shows the command to download the Jenkins keyring and its progress. The desktop environment includes a dock with various icons and a system tray at the bottom.

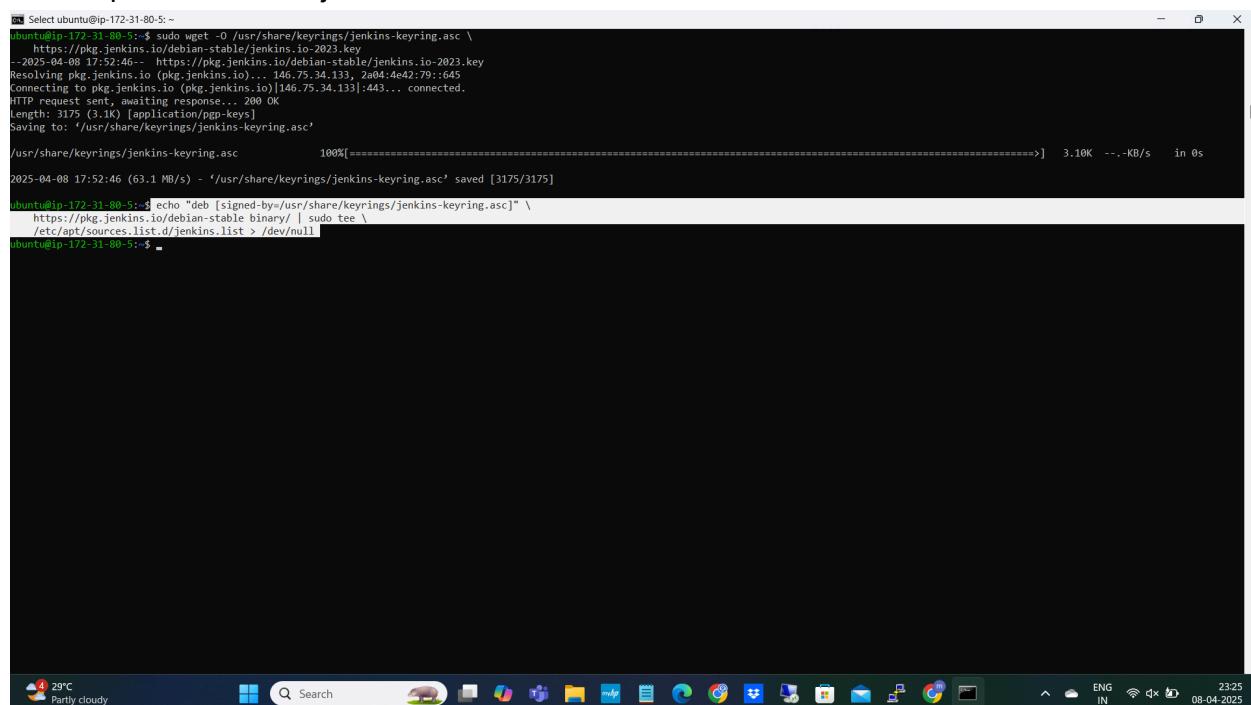
```
ubuntu@ip-172-31-80-5:~$ sudo wget -O /usr/share/keyrings/jenkins-keyring.asc \
https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
--2025-04-08 17:52:46-- https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
Resolving pkg.jenkins.io (pkg.jenkins.io)... 146.75.34.133, 2a04:4e42:79::645
Connecting to pkg.jenkins.io (pkg.jenkins.io)|146.75.34.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 3175 (3.1K) [application/pgp-keys]
Saving to: '/usr/share/keyrings/jenkins-keyring.asc'

/usr/share/keyrings/jenkins-keyring.asc      100%[=====] 3.10K --.-KB/s   in 0s

2025-04-08 17:52:46 (63.1 MB/s) - '/usr/share/keyrings/jenkins-keyring.asc' saved [3175/3175]

ubuntu@ip-172-31-80-5:~$
```

```
$ echo "deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc]" \
https://pkg.jenkins.io/debian-stable binary/ | sudo tee \
/etc/apt/sources.list.d/jenkins.list > /dev/null
```



A screenshot of a terminal window on an Ubuntu desktop. It shows the command to add Jenkins to the apt sources list and its execution. The desktop environment includes a dock with various icons and a system tray at the bottom.

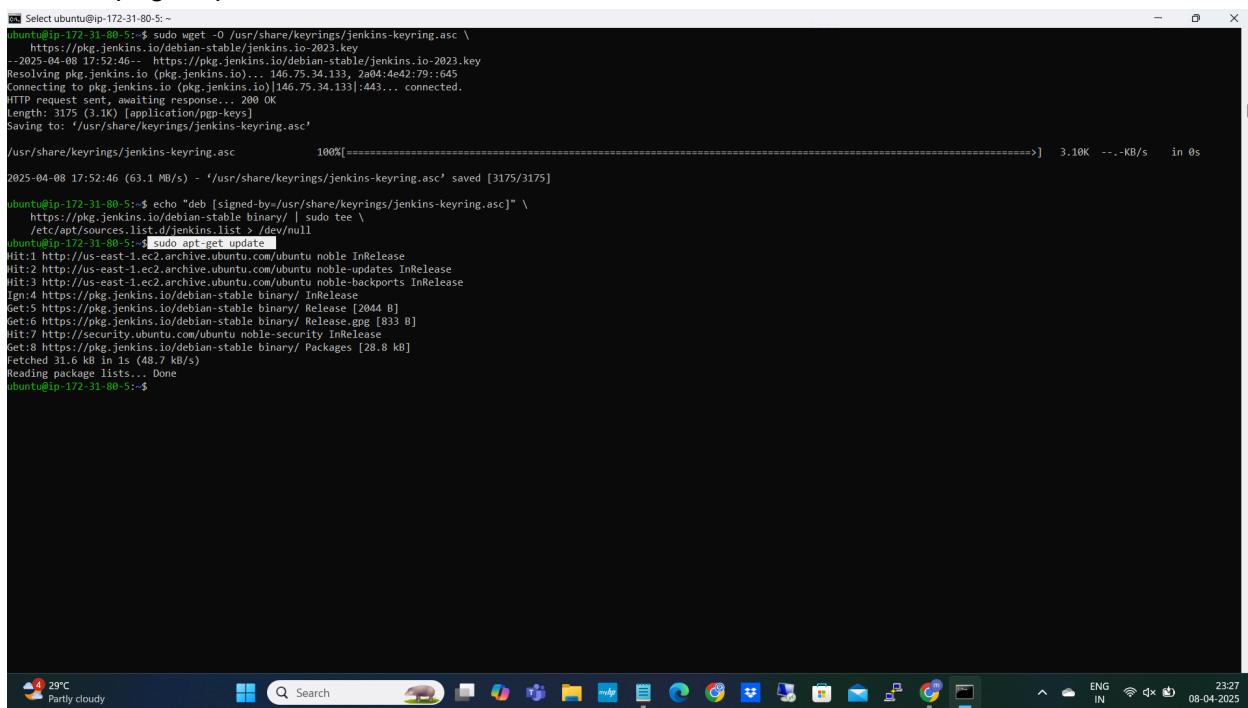
```
ubuntu@ip-172-31-80-5:~$ sudo wget -O /usr/share/keyrings/jenkins-keyring.asc \
https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
--2025-04-08 17:52:46-- https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
Resolving pkg.jenkins.io (pkg.jenkins.io)... 146.75.34.133, 2a04:4e42:79::645
Connecting to pkg.jenkins.io (pkg.jenkins.io)|146.75.34.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 3175 (3.1K) [application/pgp-keys]
Saving to: '/usr/share/keyrings/jenkins-keyring.asc'

/usr/share/keyrings/jenkins-keyring.asc      100%[=====] 3.10K --.-KB/s   in 0s

2025-04-08 17:52:46 (63.1 MB/s) - '/usr/share/keyrings/jenkins-keyring.asc' saved [3175/3175]

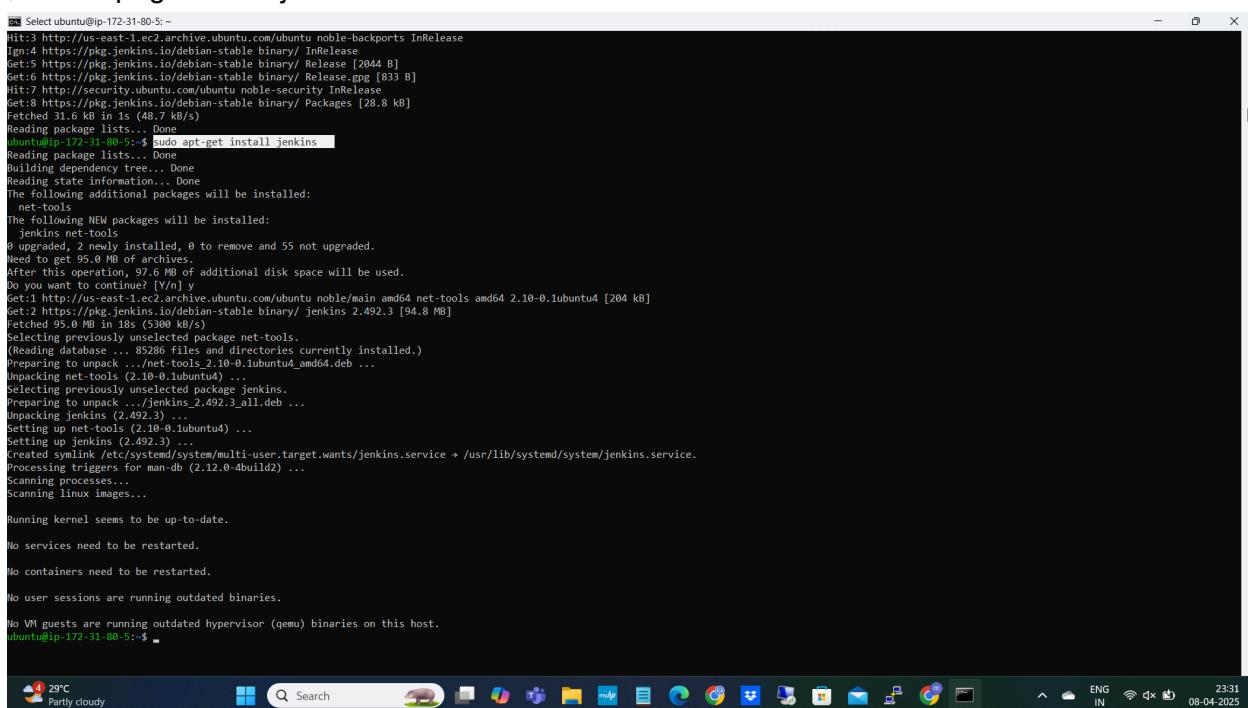
ubuntu@ip-172-31-80-5:~$ echo "deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc]" \
https://pkg.jenkins.io/debian-stable binary/ | sudo tee \
/etc/apt/sources.list.d/jenkins.list > /dev/null
ubuntu@ip-172-31-80-5:~$
```

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



```
ubuntu@ip-172-31-80:~$ sudo wget -O /usr/share/keyrings/jenkins-keyring.asc \
https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
[download progress bar] 3.10K ---.KB/s in 0s
ubuntu@ip-172-31-80:~$ echo "deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc]" \
https://pkg.jenkins.io/debian-stable binary/ | sudo tee \
/etc/apt/sources.list.d/jenkins.list > /dev/null
ubuntu@ip-172-31-80:~$ sudo apt-get update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease
Ign:4 https://pkg.jenkins.io/debian-stable binary/ InRelease
Get:5 https://pkg.jenkins.io/debian-stable binary/ Release [2044 B]
Get:6 https://pkg.jenkins.io/debian-stable binary/ Release.gpg [833 B]
Hit:7 http://security.ubuntu.com/ubuntu noble-security InRelease
Get:8 https://pkg.jenkins.io/debian-stable binary/ Packages [28.8 kB]
Fetched 31.6 kB in 1s (48.7 kB/s)
Reading package lists... Done
ubuntu@ip-172-31-80:~$
```

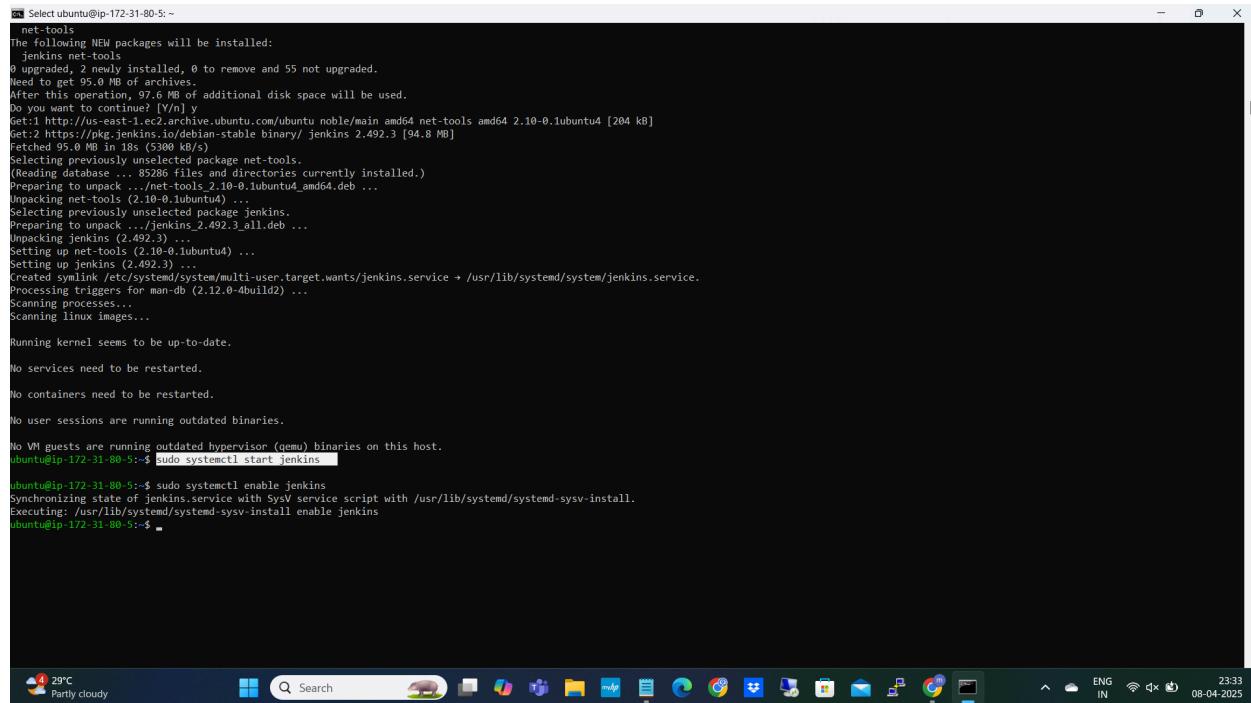
```
$ sudo apt-get install jenkins
```



```
ubuntu@ip-172-31-80:~$ sudo apt-get install jenkins
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  net-tools
The following NEW packages will be installed:
  jenkins net-tools
0 upgraded, 2 newly installed, 0 to remove and 55 not upgraded.
Need to get 95.0 MB of archives.
After this operation, 97.6 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu/main amd64 net-tools amd64 2.10-0.1ubuntu4 [204 kB]
Get:2 https://pkg.jenkins.io/debian-stable binary/ jenkins 2.492.3 [94.8 MB]
Fetched 95.0 MB in 1s (5300 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 200000 files and directories currently installed.)
Preparing to unpack .../net-tools_2.10-0.1ubuntu4_amd64.deb ...
Unpacking net-tools (2.10-0.1ubuntu4) ...
Selecting previously unselected package jenkins.
Preparing to unpack .../jenkins_2.492.3_all.deb ...
Unpacking jenkins (2.492.3) ...
Setting up net-tools (2.10-0.1ubuntu4) ...
Setting up jenkins (2.492.3) ...
Created symlink /etc/systemd/system/multi-user.target.wants/jenkins.service → /usr/lib/systemd/system/jenkins.service.
Processing triggers for man-db (2.12.0-4build2) ...
Scanning processes...
Scanning linux images...
Running kernel seems to be up-to-date.
No services need to be restarted.
No containers need to be restarted.
No user sessions are running outdated binaries.
No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-80:~$
```

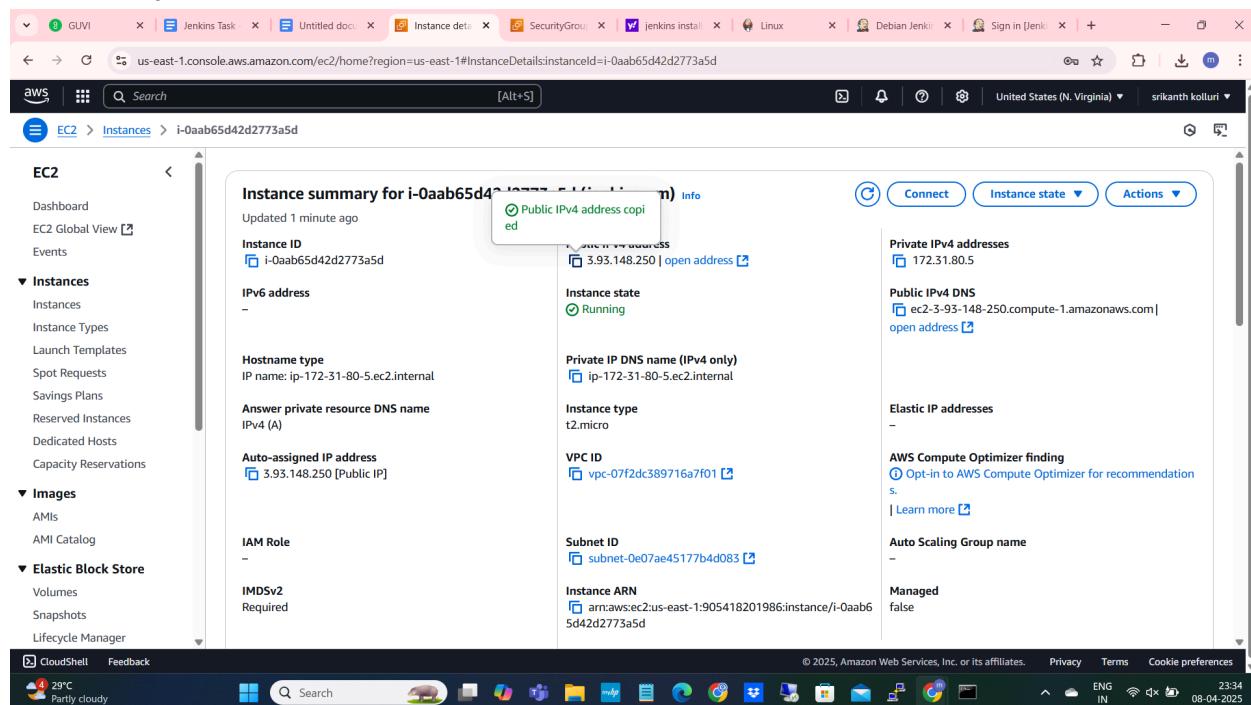
Start jenkins:

```
$ sudo systemctl start jenkins  
$ sudo systemctl enable jenkins
```



```
root@ip-172-31-80-5: ~  
net-tools  
The following NEW packages will be installed:  
jenkins net-tools  
0 upgraded, 2 newly installed, 0 to remove and 55 not upgraded.  
Need to get 95.0 MB of archives.  
After this operation, 97.6 MB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 net-tools amd64 2.10-0.1ubuntu4 [204 kB]  
Get:2 https://pkg.jenkins.io/debian-stable binary/ jenkins 2.492.3 [94.8 MB]  
Fetched 95.0 MB in 18s (5300 kB/s)  
Selecting previously unselected package net-tools.  
(Reading database ... 85286 files and directories currently installed.)  
Preparing unpack ... /net-tools_2.10-0.1ubuntu4_amd64.deb ...  
Unpacking net-tools (2.10-0.1ubuntu4) ...  
Selecting previously unselected package jenkins.  
Preparing to unpack .../jenkins_2.492.3_all.deb ...  
Unpacking jenkins (2.492.3) ...  
Setting up net-tools (2.10-0.1ubuntu4) ...  
Setting up jenkins (2.492.3) ...  
Created symlink /etc/systemd/system/multi-user.target.wants/jenkins.service → /usr/lib/systemd/system/jenkins.service.  
Processing triggers for man-db (2.12.0-4build2) ...  
Scanning processes...  
Scanning linux images...  
Running kernel seems to be up-to-date.  
No services need to be restarted.  
No containers need to be restarted.  
No user sessions are running outdated binaries.  
No VM guests are running outdated hypervisor (qemu) binaries on this host.  
ubuntu@ip-172-31-80-5:~$ sudo systemctl start jenkins  
ubuntu@ip-172-31-80-5:~$ sudo systemctl enable jenkins  
Synchronizing state of jenkins.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.  
Executing: /usr/lib/systemd/systemd-sysv-install enable jenkins  
ubuntu@ip-172-31-80-5:~$ -
```

Access the jenkins :

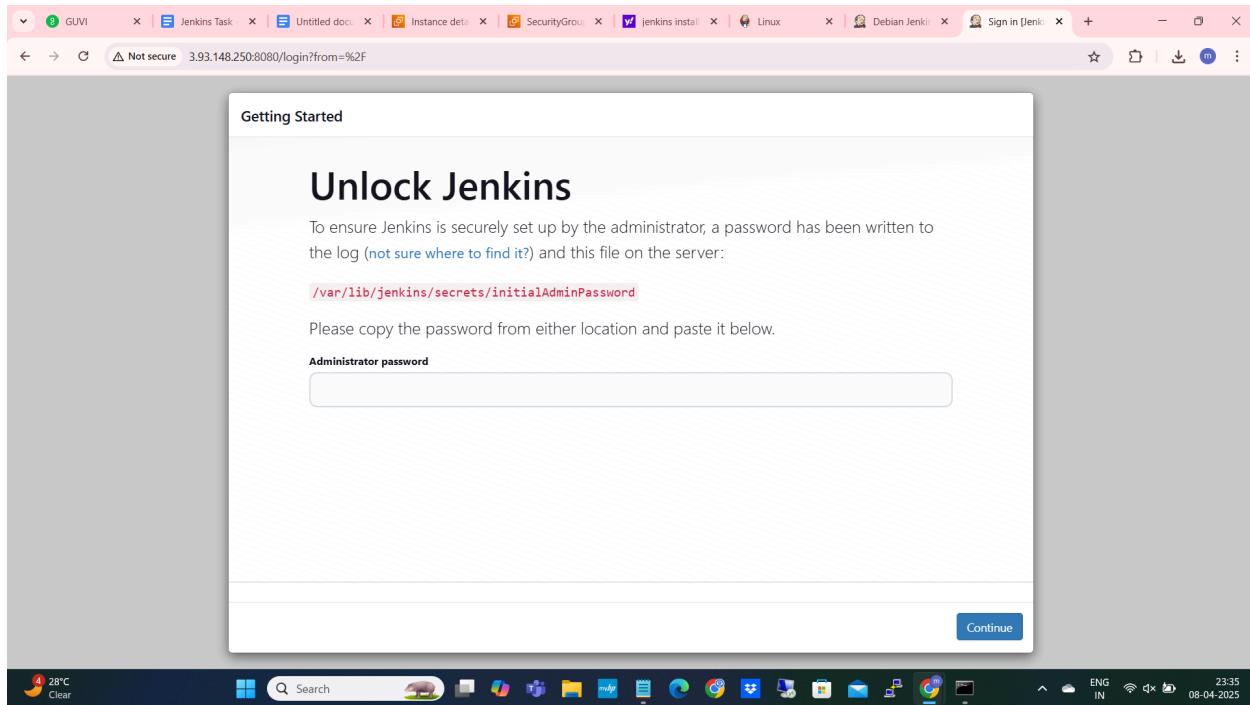


The screenshot shows the AWS Management Console interface for an EC2 instance named "i-0aab65d42d2773a5d". The "Instances" section is selected in the left sidebar. The main content area displays the "Instance summary" for this specific instance. Key details shown include:

- Public IPv4 address:** 3.93.148.250 (highlighted with a tooltip: "Public IPv4 address copied")
- Private IP DNS name (IPv4 only):** ip-172-31-80-5.ec2.internal
- Instance state:** Running
- Instance type:** t2.micro
- VPC ID:** vpc-07f2dc389716a7f01
- Subnet ID:** subnet-0e07ae45177b4d083
- Instance ARN:** arn:aws:ec2:us-east-1:905418201986:instance/i-0aab65d42d2773a5d
- Auto Scaling Group name:** Managed (false)

Ip: 3.93.148.250

Url: <http://3.93.148.250:8080/>



Get the password:

```
$ cat /var/lib/jenkins/secrets/initialAdminPassword
```

```
Get: 2 https://pkg.jenkins.io/debian-stable binary/ jenkins 2.492.3 [94.8 MB]
Fetched 95.0 MB in 18s (5300 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 85286 files and directories currently installed.)
Preparing to unpack .../net-tools_2.10-0.1ubuntu4_amd64.deb ...
Unpacking net-tools (2.10-0.1ubuntu4) ...
Selecting previously unselected package jenkins.
Preparing to unpack .../jenkins_2.492.3_all.deb ...
Unpacking jenkins (2.492.3) ...
Setting up net-tools (2.10-0.1ubuntu4) ...
Setting up jenkins (2.492.3) ...
Created symlink /etc/systemd/system/multi-user.target.wants/jenkins.service → /usr/lib/systemd/system/jenkins.service.
Processing triggers for man-db (2.12.0-4build2) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

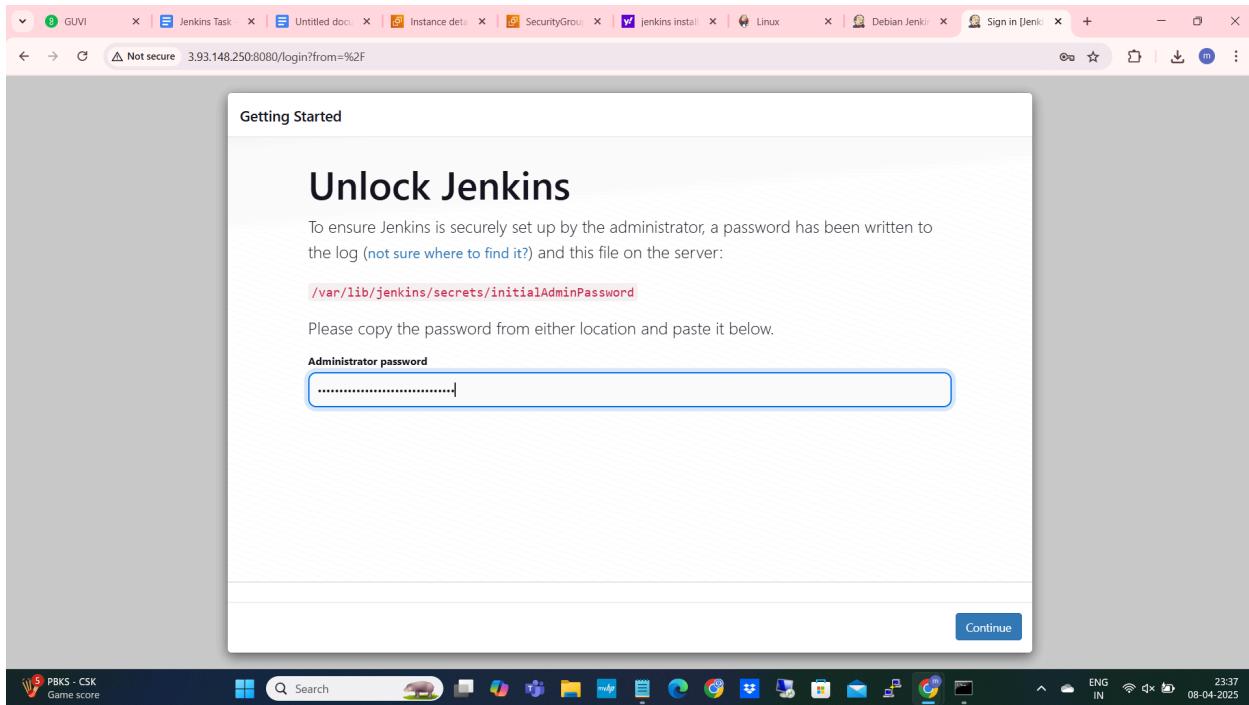
No containers need to be restarted.

No user sessions are running outdated binaries.

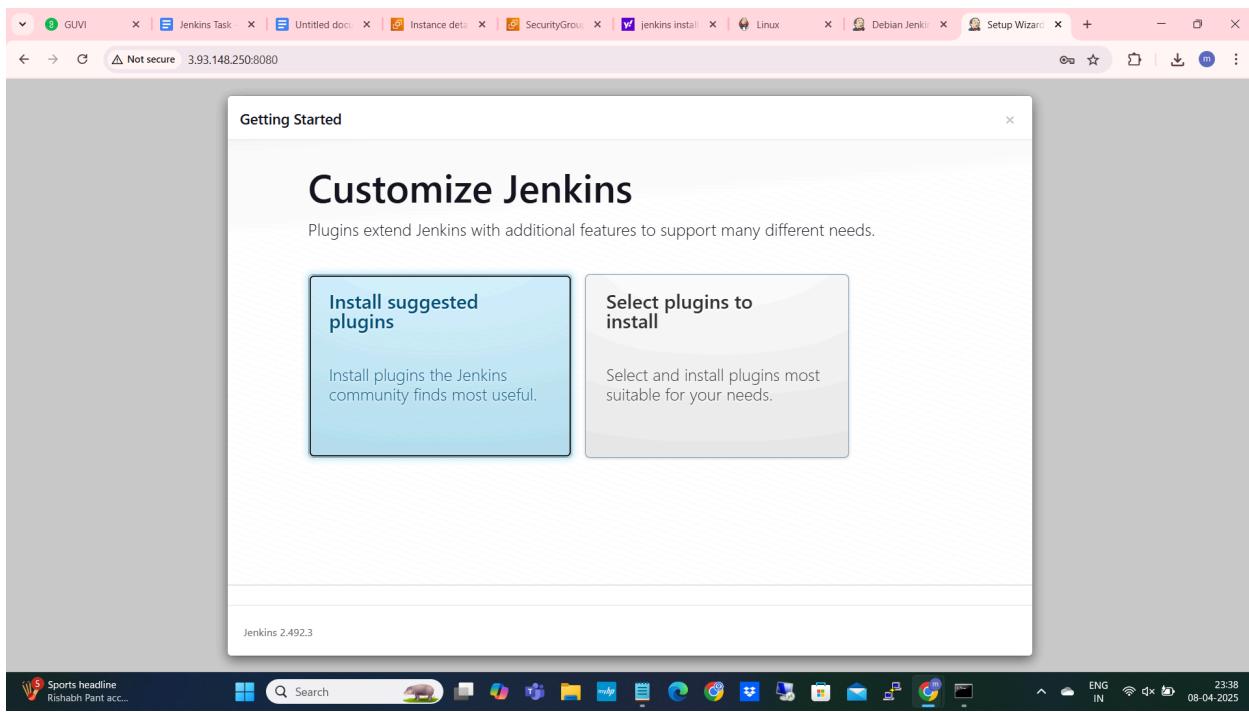
No VM guests are running outdated hypervisor (qemu) binaries on this host.

ubuntu@ip-172-31-80-5:~$ sudo systemctl start jenkins
ubuntu@ip-172-31-80-5:~$ sudo systemctl enable jenkins
Synchronizing state of jenkins.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable jenkins
ubuntu@ip-172-31-80-5:~$ cat /var/lib/jenkins/secrets/initialAdminPassword
cat: /var/lib/jenkins/secrets/initialAdminPassword: Permission denied
ubuntu@ip-172-31-80-5:~$ sudo cat /var/lib/jenkins/secrets/initialAdminPassword
d5d2ab5b03aa0a44f5b414ef14c1f3832e
ubuntu@ip-172-31-80-5:~$
```

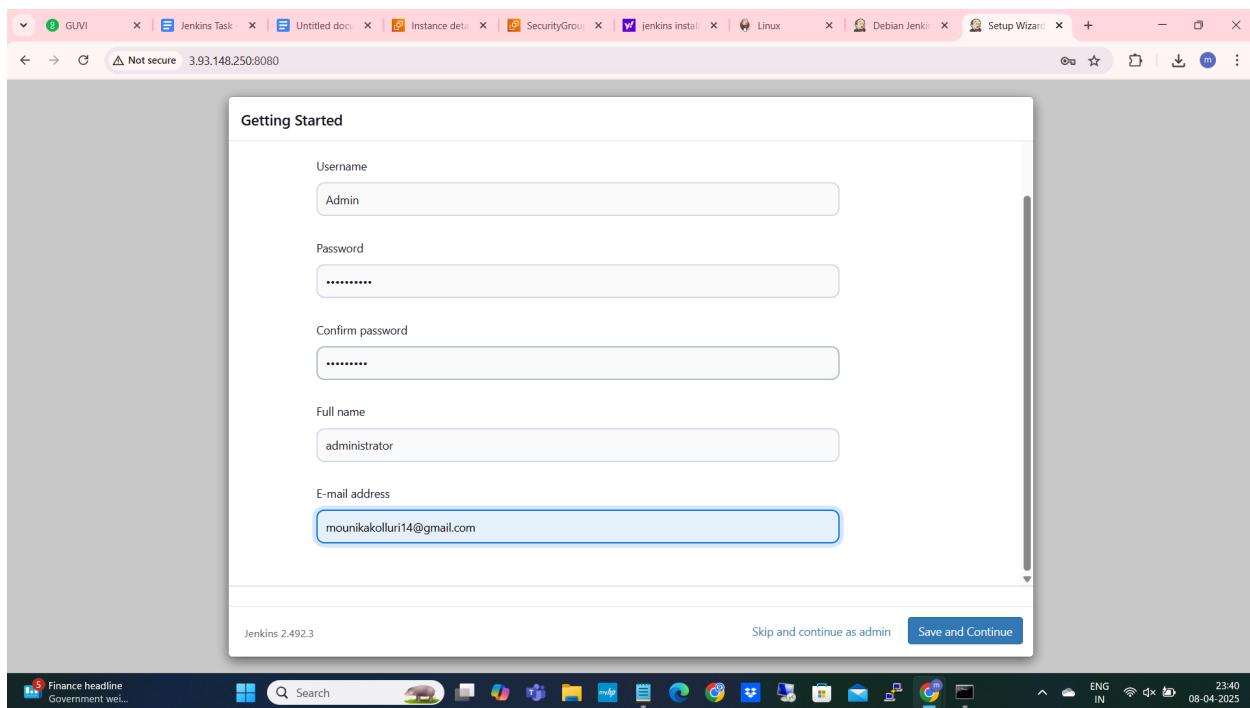
Enter the password and click on continue



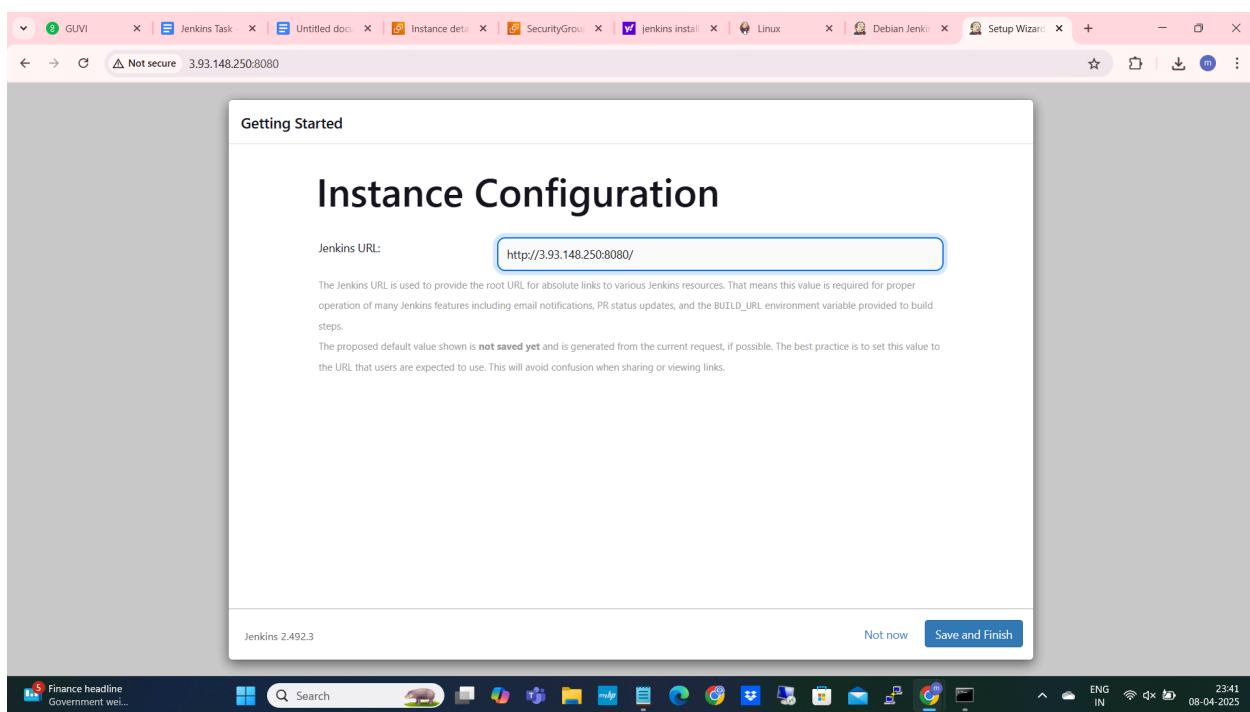
Click on suggested plugins:



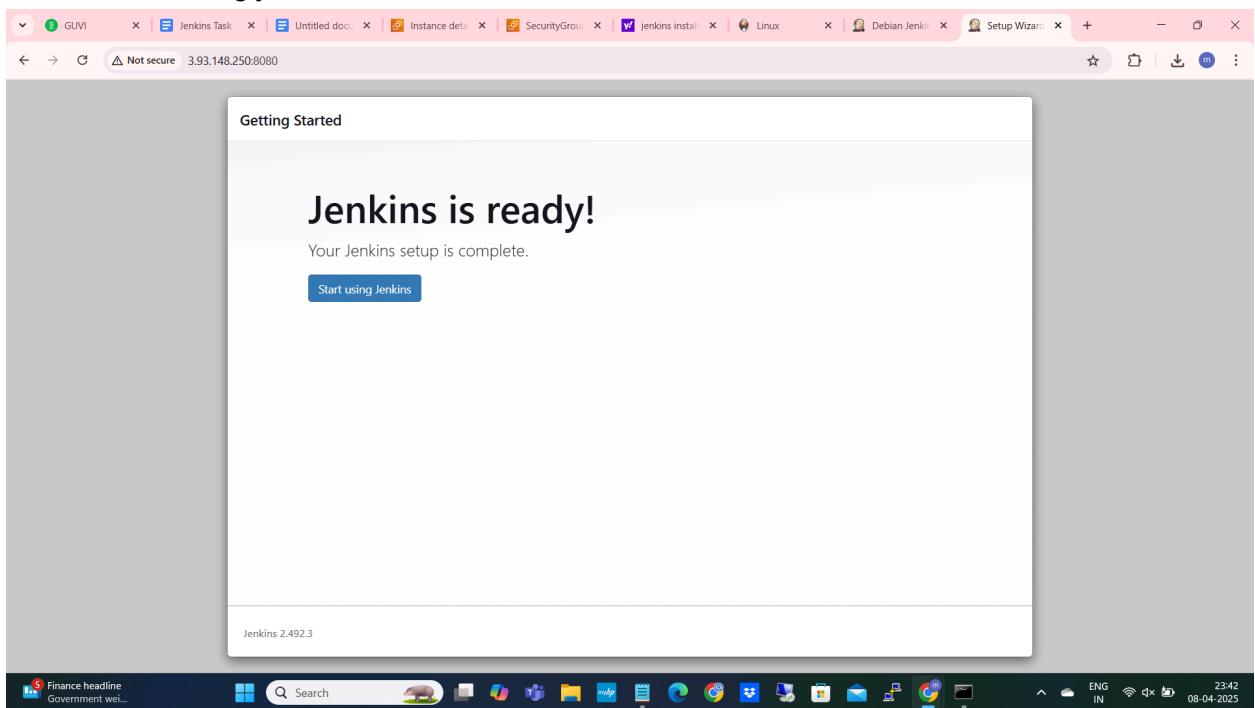
Create user:



Click on save and finish



Click on start using jenkins



The screenshot shows a browser window with the address bar set to 'Not secure 3.93.148.250:8080'. The main content is the Jenkins Dashboard. It features a 'Welcome to Jenkins!' message, a 'Start building your software project' section with links for 'Create a job', 'Set up a distributed build', 'Set up an agent', 'Configure a cloud', and 'Learn more about distributed builds'. Below this are sections for 'Build Queue' (No builds in the queue) and 'Build Executor Status' (0/2). The status bar at the bottom right indicates the Jenkins version.

Jobs Creation:

Creating Freestyle job:

Enter job name ,

Click on freestyle project then click ok

New Item

Enter an item name

test-freestyle-job

Select an item type

Freestyle project
Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.

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.

OK

Provide description:

Jenkins

Dashboard > test-freestyle-job > Configuration

Configure

General

Enabled

Description

my first freestyle job

Plain text [Preview](#)

Discard old builds [?](#)

GitHub project

This project is parameterized [?](#)

Throttle builds [?](#)

Execute concurrent builds if necessary [?](#)

Advanced [▼](#)

Save Apply

configuring discard old builds option :

The screenshot shows the Jenkins configuration interface for a 'test-freestyle-job'. The 'General' tab is selected. In the 'Discard old builds' section, the checkbox is checked, and the 'Strategy' dropdown is set to 'Log Rotation'. The 'Days to keep builds' input field contains '30'. The 'Max # of builds to keep' input field is empty. At the bottom, there are 'Save' and 'Apply' buttons.

Click on save

The screenshot shows the same Jenkins configuration interface as before, but now the 'Days to keep builds' input field contains '2d'. The 'Max # of builds to keep' input field is empty. The 'Save' and 'Apply' buttons are visible at the bottom.

The screenshot shows the Jenkins job configuration page for 'test-freestyle-job'. The left sidebar has tabs: General, Source Code Management (selected), Triggers, Environment, Build Steps, and Post-build Actions. The 'Source Code Management' section contains a note about connecting and managing code repositories, a 'None' radio button selected, and a 'Git' option. The 'Triggers' section lists several options like Trigger builds remotely, Build after other projects are built, Build periodically, GitHub hook trigger for GITScm polling, and Poll SCM, with 'None' selected.

The screenshot shows the Jenkins job configuration page for 'test-freestyle-job'. The left sidebar has tabs: General, Source Code Management, Triggers, Environment (selected), Build Steps, and Post-build Actions. The 'Environment' section contains a note about configuring settings and variables, and a list of checkboxes for workspace management, timestamps, log inspection, and build termination. The 'Build Steps' section has a 'Add build step' button. The 'Post-build Actions' section has a 'Add post-build action' button. At the bottom are 'Save' and 'Apply' buttons.

Adding build steps:

The screenshot shows the Jenkins job configuration page for 'test-freestyle-job'. The left sidebar has 'Build Steps' selected. In the main area, the 'Environment' section is open, displaying a list of build steps. A context menu is open over the 'Execute shell' item, showing options like 'Delete workspace before build starts' and 'Use secret text(s) or file(s)'.

Configure

Environment

Configure settings and variables that define the context in which your build runs, like credentials, paths, and global parameters.

- Delete workspace before build starts
- Use secret text(s) or file(s) ?

Filter

- Execute Windows batch command
- Execute shell
- Invoke Ant
- Invoke Gradle script
- Invoke top-level Maven targets
- Run with timeout
- Set build status to "pending" on GitHub commit

Add build step ^

The screenshot shows the Jenkins job configuration page for 'test-freestyle-job'. The left sidebar has 'Build Steps' selected. In the main area, the 'Build Steps' section is open, showing a single 'Execute shell' step. The 'Command' field is empty, indicated by a large blue placeholder box.

Configure

Build Steps

Automate your build process with ordered tasks like code compilation, testing, and deployment.

Execute shell ?

Command

See the list of available environment variables

Advanced ▾

Add build step ▾

Post-build Actions

Save Apply

Enter any build steps:

The screenshot shows the Jenkins job configuration page for a 'test-freestyle-job'. In the 'Build Steps' section, there is one step named 'Execute shell' with the command 'echo " building freestyle job"'. Below the build steps, there is a 'Post-build Actions' section which is currently empty.

Build Steps

- Execute shell

Command

```
echo " building freestyle job"
```

Post-build Actions

Save Apply

The screenshot shows the Jenkins job configuration page for a 'test-freestyle-job'. In the 'Build Steps' section, there are two steps, both named 'Execute shell'. The first step has the command 'echo "building freestyle job"'. The second step has the command 'java --version'. Below the build steps, there is a 'Post-build Actions' section which is currently empty.

Build Steps

- Execute shell
- Execute shell

Command

```
echo "building freestyle job"
```

```
java --version
```

Post-build Actions

Save Apply

Click on apply and save

The screenshot shows a browser window with multiple tabs open. The active tab is '3.93.148.250:8080/job/test-freestyle-job/configure'. The page displays the Jenkins configuration interface for a 'test-freestyle-job'. On the left, a sidebar lists 'General', 'Source Code Management', 'Triggers', 'Environment', 'Build Steps' (which is selected), and 'Post-build Actions'. The main content area shows two 'Execute shell' build steps. The first step has the command 'echo "Building freestyle job"'. The second step has the command 'java --version'. At the bottom left, a green button indicates the configuration has been saved.

The screenshot shows the Jenkins dashboard with a single job named 'test-freestyle-job' listed under 'Status'. The job description is 'my first freestyle job'. In the 'Builds' section, it says 'No builds'. On the right, there are links for 'Edit description' and 'log out'. The top of the screen shows a Windows taskbar with various icons and system status.

This screenshot is identical to the one above, showing the Jenkins dashboard with the 'test-freestyle-job' status and 'No builds' message. The top of the screen shows a Windows taskbar with various icons and system status.

Click on Build Now:Build executed successfully

Click on build number

Click on console output:

The screenshot shows a browser window with multiple tabs open. The active tab is 'Console Output' for a build named 'test-freestyle-job'. The page displays the build log, which includes the command used to start the build ('Started by user administrator'), the workspace ('Building in workspace /var/lib/jenkins/workspace/test-freestyle-job'), and the final status ('Finished: SUCCESS'). The log also shows the Java version ('java --version') and the OpenJDK Runtime Environment ('OpenJDK 17.0.14 2025-01-21').

Create pipeline job:

I. Declarative pipeline job:

The screenshot shows a browser window with multiple tabs open. The active tab is 'New Item' in Jenkins. The page prompts the user to enter an item name ('pipeline-job1') and select an item type. The 'Freestyle project' option is selected, described as a 'Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.' Other options shown include 'Pipeline' (orchestrates long-running activities), 'Multi-configuration project' (suitable for testing on multiple environments), and 'Folder' (creates a container for nested items). A blue 'OK' button is visible at the bottom.

Click on pipeline and Click on ok

New Item

Enter an item name

pipeline-job1

Select an item type

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.

Freestyle project Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.

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

OK

Configure

General

Enabled

Description

Plain text [Preview](#)

Discard old builds [?](#)

Do not allow concurrent builds

Do not allow the pipeline to resume if the controller restarts

GitHub project

Pipeline speed/durability override [?](#)

Preserve stashes from completed builds [?](#)

Save Apply

The screenshot shows the Jenkins configuration page for a pipeline job named "pipeline-job1". The "General" tab is selected. The "Enabled" switch is turned on. The "Description" field contains the text "This is declarative pipeline job". Below the description, there are several configuration options with checkboxes:

- Discard old builds
- Do not allow concurrent builds
- Do not allow the pipeline to resume if the controller restarts
- GitHub project
- Pipeline speed/durability override
- Preserve stashes from completed builds

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

The screenshot shows the Jenkins configuration page for a pipeline job named "pipeline-job1". The "General" tab is selected. The "Enabled" switch is turned on. The "Description" field contains the text "This is declarative pipeline job". Below the description, there are several configuration options with checkboxes:

- Discard old builds
- Do not allow concurrent builds
- Do not allow the pipeline to resume if the controller restarts
- GitHub project
- Pipeline speed/durability override
- Preserve stashes from completed builds
- This project is parameterized
- Throttle builds

Below the general settings is the "Triggers" section, which includes:

- Set up automated actions that start your build based on specific events, like code changes or scheduled times.
- Build after other projects are built
- Build periodically
- GitHub hook trigger for GITScm polling
- Poll SCM

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

The screenshot shows the Jenkins Pipeline configuration page. On the left, there's a sidebar with tabs: General, Triggers, Pipeline (which is selected and highlighted in grey), and Advanced. The main area is titled 'Pipeline' with the sub-instruction 'Define your Pipeline using Groovy directly or pull it from source control.' Below this is a dropdown menu set to 'Pipeline script'. A large text area labeled 'Script' contains a placeholder 'try sample Pipeline...'. At the bottom of the page are 'Save' and 'Apply' buttons.

Provide the pipeline script:

The screenshot shows the same Jenkins Pipeline configuration page as above, but now with a sample Groovy script pasted into the 'Script' editor. The script defines a pipeline with two stages: 'Build' and 'Test'. Each stage contains a single step that prints a message to the console. The script is as follows:

```
1< pipeline {  
2   agent any // Run the pipeline on any available agent  
3   stages {  
4     stage('Build') {  
5       steps {  
6         sh 'echo "Building the application"'  
7       }  
8     }  
9     stage('Test') {  
10    steps {  
11      sh 'echo "Running tests"'  
12    }  
13  }  
14 }  
15 }
```

Below the script, there's a checkbox labeled 'Use Groovy Sandbox' which is checked. At the bottom are 'Save' and 'Apply' buttons.

```

10 stage('Test') {
11     steps {
12         // Commands to test your application
13         sh 'echo "Running tests"'
14     }
15 }
16 stage('Deploy') {
17     steps {
18         // Commands to deploy your application
19         sh 'echo "Deploying the application"'
20     }
21 }
22 }
23 }

```

Use Groovy Sandbox ?

[Pipeline Syntax](#)

Advanced

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

Click on apply and save

This is declarative pipeline job

Permalinks

[Builds](#)

No builds

[Edit description](#)

[Changes](#)

[Build Now](#)

[Configure](#)

[Delete Pipeline](#)

[Stages](#)

[Rename](#)

[Pipeline Syntax](#)

[REST API Jenkins 2.492.3](#)

Click on Build Now → Build success:

This is declarative pipeline job

Permalinks

- Changes
- Build Now
- Configure
- Delete Pipeline
- Stages
- Rename
- Pipeline Syntax

Builds

No builds

Success
#2 7:16 PM
#1 7:15 PM

REST API Jenkins 2.492.3

3.93.148.250:8080/job/pipeline-job1/2/console

27°C Partly cloudy

Search

ENG IN 00:46 09-04-2025

Click on build number: #1
It will show the build status

#1 (Apr 8, 2025, 7:15:42 PM)

Started by user administrator

Started 1 min 28 sec ago
Took 5.3 sec

This run spent:

- 18 ms waiting;
- 5.3 sec build duration;
- 5.3 sec total from scheduled to completion.

</> No changes.

- Status
- Changes
- Console Output
- Edit Build Information
- Delete build #1*
- Timings
- Pipeline Overview
- Pipeline Console
- Restart from Stage
- Replay
- Pipeline Steps
- Workspaces
- Next Build

Add description Keep this build forever

REST API Jenkins 2.492.3

27°C Partly cloudy

Search

ENG IN 00:47 09-04-2025

Click on Console output: it will show the build log

The screenshot shows a browser window with multiple tabs open. The active tab is '3.93.148.250:8080/job/pipeline-job1/1/console'. The page title is 'Jenkins'. On the left, there's a sidebar with various Jenkins navigation links. The main content area is titled 'Console Output' and contains the following build log:

```
Started by user administrator
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/pipeline-job1
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Build)
[Pipeline] sh
+ echo Building the application
Building the application
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Test)
[Pipeline] sh
+ echo Running tests
Running tests
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Deploy)
[Pipeline] sh
+ echo Deploying the application
Deploying the application
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Deploy)
[Pipeline] sh
+ echo Deploying the application
Deploying the application
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

At the bottom of the browser window, you can see the Windows taskbar with various icons and system status.

This screenshot is identical to the one above, showing the Jenkins console output for pipeline-job1. The 'Console Output' tab is selected, and the build log is the same:

```
Started by user administrator
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/pipeline-job1
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Build)
[Pipeline] sh
+ echo Building the application
Building the application
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Test)
[Pipeline] sh
+ echo Running tests
Running tests
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Deploy)
[Pipeline] sh
+ echo Deploying the application
Deploying the application
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Deploy)
[Pipeline] sh
+ echo Deploying the application
Deploying the application
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

Again, the Windows taskbar is visible at the bottom.

Click on pipeline steps: we can view the each step execution:

The screenshot shows a Jenkins Pipeline execution details page. On the left, a sidebar menu includes options like Status, Changes, Console Output, Edit Build Information, Delete build #1, Timings, Pipeline Overview, Pipeline Console, Restart from Stage, Replay, and Pipeline Steps (which is selected). The main content area displays a table of pipeline steps with columns for Step, Arguments, and Status. Each step is accompanied by a 'View' and a 'Replay' link.

Step	Arguments	Status
Start of Pipeline - (4.3 sec in block)		✓
node - (2 sec in block)		✓
node block - (1.6 sec in block)		✓
stage - (0.57 sec in block)	Build	✓
stage block (Build) - (0.45 sec in block)		✓
sh - (0.32 sec in self)	echo "Building the application"	✓
stage - (0.46 sec in block)	Test	✓
stage block (Test) - (0.37 sec in block)		✓
sh - (0.29 sec in self)	echo "Running tests"	✓
stage - (0.4 sec in block)	Deploy	✓
stage block (Deploy) - (0.36 sec in block)		✓
sh - (0.29 sec in self)	echo "Deploying the application"	✓

Click on Replay: we can view the pipeline script

The screenshot shows a Jenkins Pipeline Replay interface. The sidebar menu includes Status, Changes, Console Output, Edit Build Information, Delete build #1, Timings, Pipeline Overview, Pipeline Console, Restart from Stage, Replay (selected), Pipeline Steps, Workspaces, and Next Build. The main content area features a title 'Replay #1' and a sub-section 'Main Script' containing a Jenkins Pipeline Groovy script. Below the script is a 'Pipeline Syntax' section and a 'Run' button. The status bar at the bottom shows system information like weather, battery level, and date.

```
1< pipeline {
2   agent any // Run the pipeline on any available agent
3   stages {
4     stage('Build') {
5       steps {
6         // Commands to build your application
7         sh 'echo "Building the application"'
8       }
9     }
10    stage('Test') {
11      steps {
12        // Commands to test your application
13        sh 'echo "Running tests"'
14      }
15    }
}
```

Scripted pipeline job : enter job name

New Item

Enter an item name

pipeline-job2

Select an item type

Freestyle project
Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.

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

OK

Click on pipeline then Click on ok

New Item

Enter an item name

pipeline-job2

Select an item type

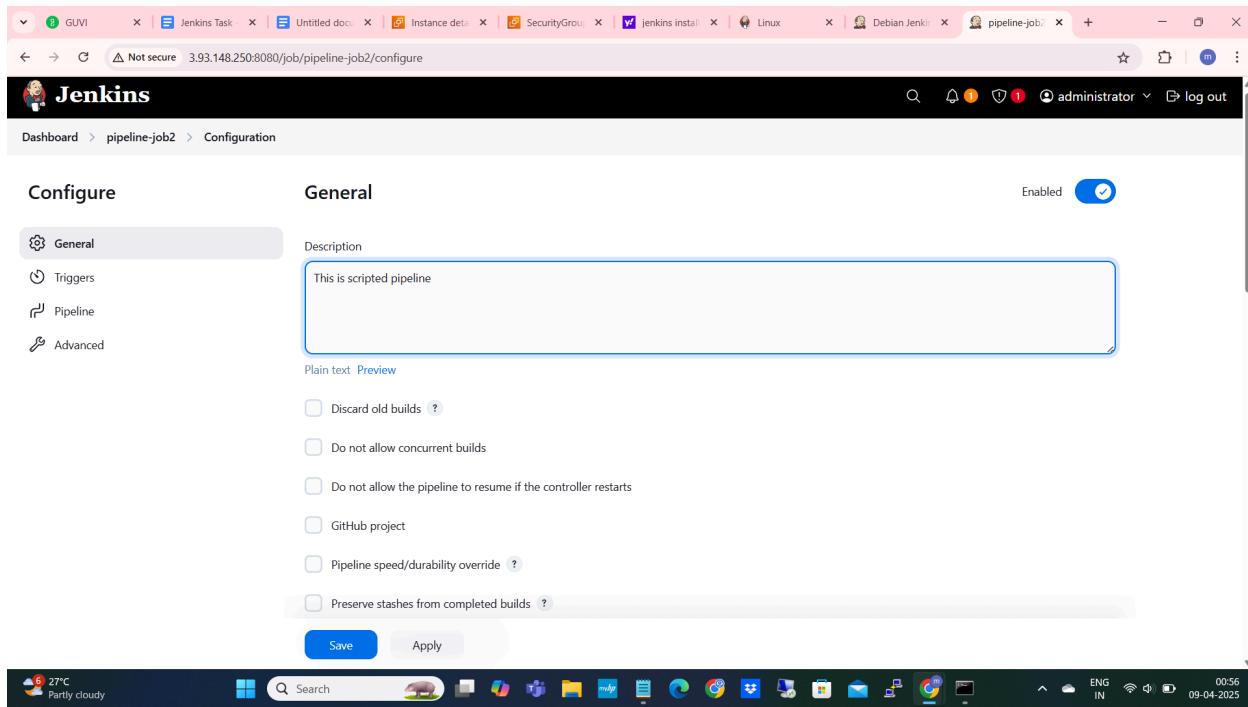
Pipeline
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

Freestyle project
Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.

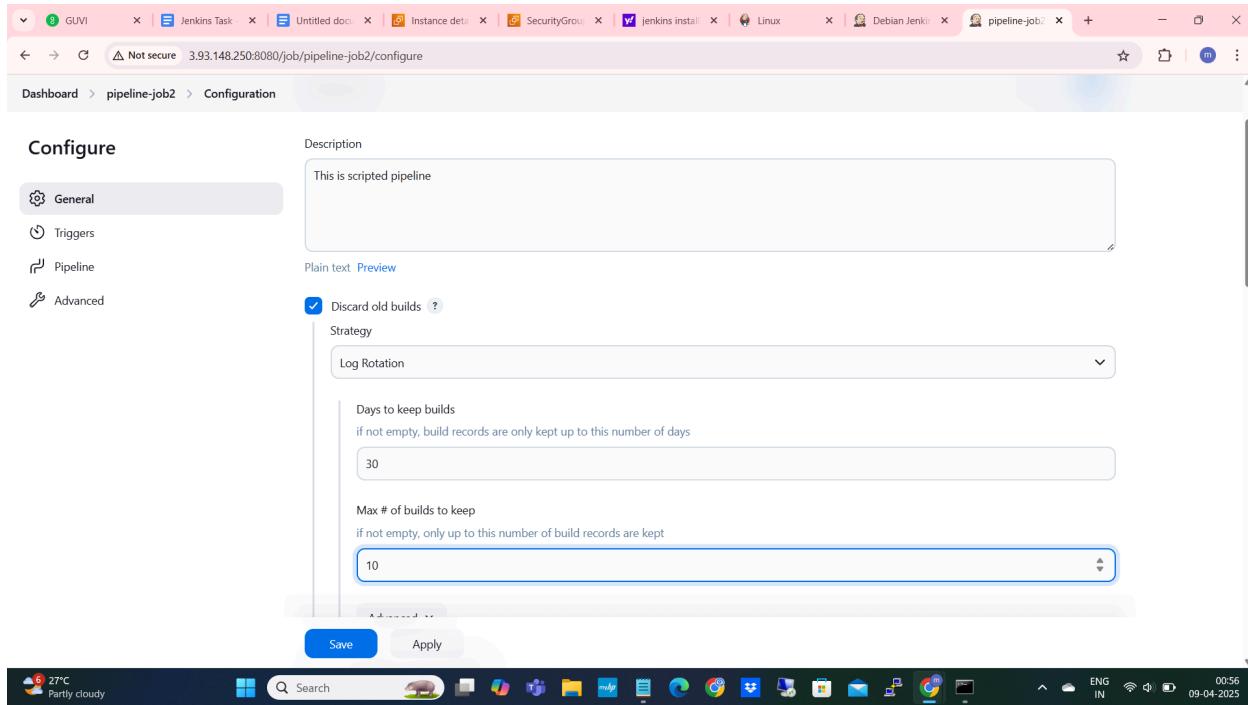
Multi-configuration project
Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.

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

OK



The screenshot shows the Jenkins Pipeline Job configuration page for 'pipeline-job2'. The 'General' tab is selected. The job is titled 'pipeline-job2' and has a description 'This is scripted pipeline'. The 'Enabled' switch is turned on. On the left, there's a sidebar with tabs: General (selected), Triggers, Pipeline, and Advanced. Below the tabs are several checkboxes: 'Discard old builds' (checked), 'Do not allow concurrent builds', 'Do not allow the pipeline to resume if the controller restarts', 'GitHub project', 'Pipeline speed/durability override', and 'Preserve stashes from completed builds'. At the bottom are 'Save' and 'Apply' buttons.



This screenshot is identical to the one above, but the 'Discard old builds' checkbox is checked. The rest of the configuration remains the same, including the description and other build options.

The screenshot shows the Jenkins Pipeline Job configuration page for 'pipeline-job2'. The 'General' tab is selected. Under 'Advanced', several checkboxes are available:

- Do not allow concurrent builds
- Do not allow the pipeline to resume if the controller restarts
- GitHub project
- Pipeline speed/durability override ?
- Preserve stashes from completed builds ?
- This project is parameterized ?
- Throttle builds ?

The 'Triggers' section is present but contains no active triggers.

At the bottom are 'Save' and 'Apply' buttons.

Provide the pipeline script:

The screenshot shows the Jenkins Pipeline Job configuration page for 'pipeline-job2'. The 'Pipeline' tab is selected. The 'Definition' dropdown is set to 'Pipeline script'. The 'Script' editor contains the following Groovy pipeline code:

```
1 node {  
2     stage('Build') {  
3         // Commands to build your application  
4         sh 'echo "Building the application"'  
5     }  
6     stage('Test') {  
7         // Commands to test your application  
8         sh 'echo "Running tests"'  
9     }  
10    stage('Deploy') {  
11        // Commands to deploy your application  
12        sh 'echo "Deploying the application"'  
13    }  
14}  
15
```

A checkbox for 'Use Groovy Sandbox' is checked. At the bottom are 'Save' and 'Apply' buttons.

Click on Apply and Save

The screenshot shows the Jenkins Pipeline configuration page for a job named 'pipeline-job2'. The 'Pipeline' tab is selected in the sidebar. The main area contains a 'Script' editor with the following Groovy code:

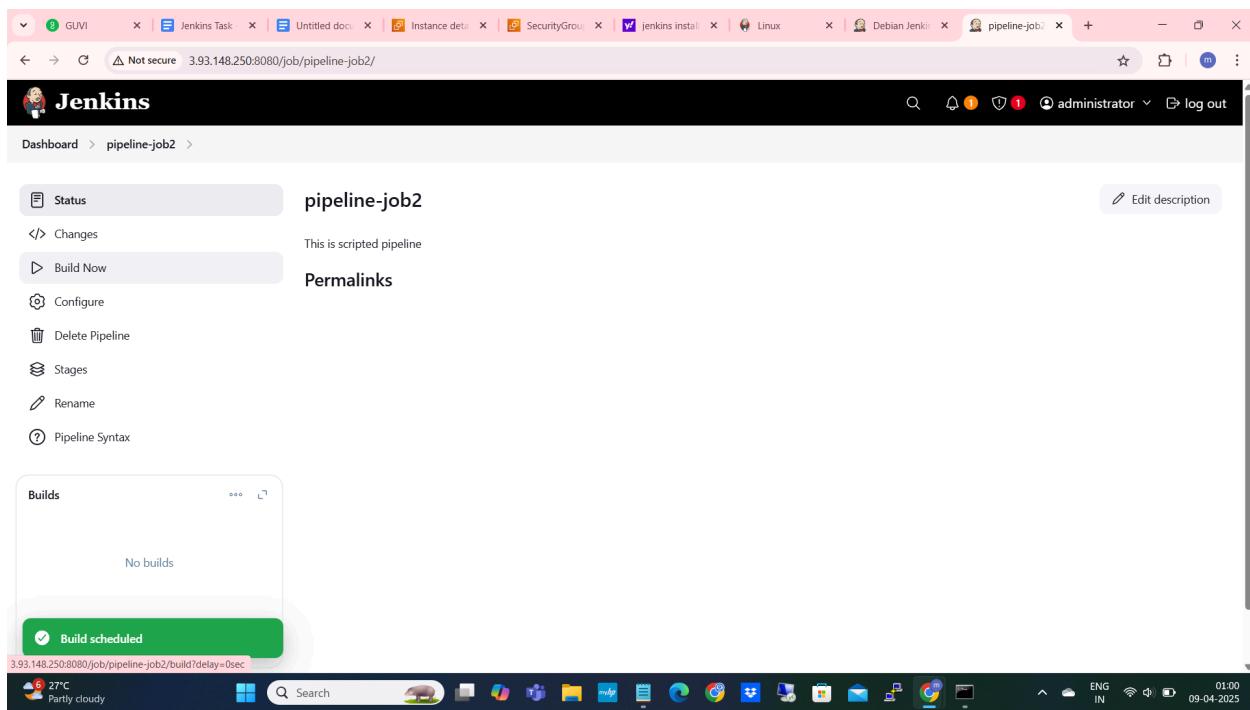
```
1 node {  
2     stage('Build') {  
3         // Commands to build your application  
4         sh 'echo "Building the application"'  
5     }  
6     stage('Test') {  
7         // Commands to test your application  
8         sh 'echo "Running tests"'  
9     }  
10    stage('Deploy') {  
11        // Commands to deploy your application  
12        sh 'echo "Deploying the application"'  
13    }  
14}  
15
```

Below the script, there is a checkbox labeled 'Use Groovy Sandbox' which is checked. At the bottom of the configuration page, there are two buttons: 'Save' and 'Apply'. A green 'Saved' button is visible on the left.

Scripted Pipeline job created:

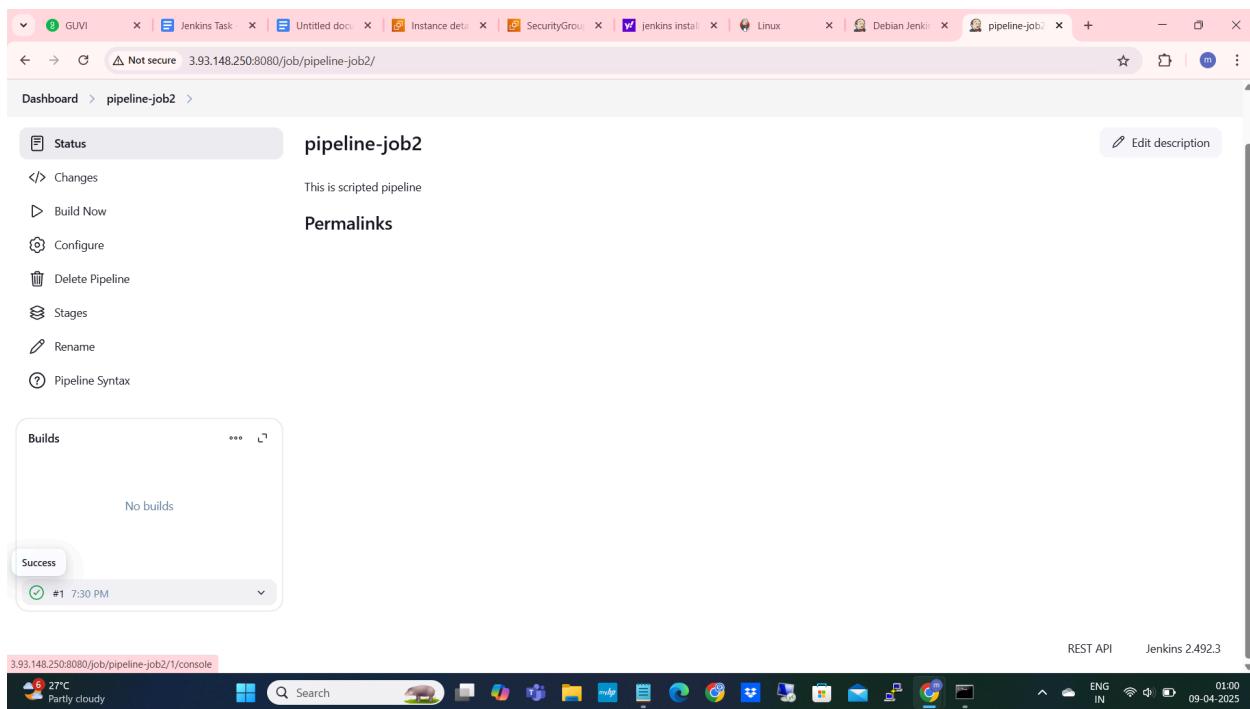
The screenshot shows the Jenkins pipeline job details page for 'pipeline-job2'. The top navigation bar includes links for 'Status', 'Changes', 'Build Now', 'Configure', 'Delete Pipeline', 'Stages', 'Rename', and 'Pipeline Syntax'. The main content area displays the pipeline script and a summary message: 'This is scripted pipeline'. Below this is a 'Permalinks' section with a 'Edit description' button. The 'Builds' section indicates 'No builds'. At the bottom right, there are links for 'REST API' and 'Jenkins 2.492.3'.

Click on Build Now:



The screenshot shows a web browser window with multiple tabs open. The active tab is 'Jenkins' showing the configuration for 'pipeline-job2'. The 'Build Now' button is highlighted with a red rectangle. The status bar at the bottom shows 'Build scheduled'.

Build success:



The screenshot shows the same Jenkins configuration page as before, but now the 'Build Now' button has been clicked and the status has changed to 'Success'. The status bar at the bottom shows 'Success'.

Click on build number:
It will show the build status

The screenshot shows a web browser window with multiple tabs open. The active tab is 'Jenkins Task' at the URL '3.93.148.250:8080/job/pipeline-job2/'. The page title is 'Jenkins'. The main content area displays build #1, which was started by user 'administrator' on April 8, 2025, at 7:30:30 PM. The build took 1.4 seconds. A summary table shows the following details:

Detail	Value
Started by user	administrator
This run spent:	• 15 ms waiting; • 1.4 sec build duration; • 1.4 sec total from scheduled to completion.
</>	No changes.

The left sidebar contains links for Status, Changes, Console Output, Edit Build Information, Delete build '#1', Timings, Pipeline Overview, Pipeline Console, Replay, Pipeline Steps, and Workspaces. The bottom right corner of the browser window shows 'REST API' and 'Jenkins 2.492.3'.

Click on console Output: it will show the build log

The screenshot shows a web browser window with multiple tabs open. The active tab is 'Console Output' at the URL '3.93.148.250:8080/job/pipeline-job2/1/console'. The page title is 'Jenkins'. The main content area displays the build log for build #1, which was started by user 'administrator'. The log output is as follows:

```
Started by user administrator
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/pipeline-job2
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Build)
[Pipeline] sh
+ echo Building the application
Building the application
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Test)
[Pipeline] sh
+ echo Running tests
Running tests
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Deploy)
[Pipeline] sh
+ echo Deploying the application
```

The left sidebar contains links for Status, Changes, Console Output, Edit Build Information, Delete build '#1', Timings, Pipeline Overview, Pipeline Console, Replay, Pipeline Steps, and Workspaces. The bottom right corner of the browser window shows 'REST API' and 'Jenkins 2.492.3'.

```

[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/pipeline-job2
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Build)
[Pipeline] sh
+ echo Building the application
Building the application
[Pipeline]
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Test)
[Pipeline] sh
+ echo Running tests
Running tests
[Pipeline]
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Deploy)
[Pipeline] sh
+ echo Deploying the application
Deploying the application
[Pipeline]
[Pipeline] // stage
[Pipeline]
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS

```

27°C Partly cloudy

Search

ENG IN 01:02 09-04-2025

Create users:

Install the Role-based Strategy Plugin
Click on manage jenkins:

Dashboard >

+ New Item

Build History

Manage Jenkins

My Views

Build Queue

No builds in the queue.

Build Executor Status

0/2

All +

S	W	Name	Last Success	Last Failure	Last Duration
✓	☀️	pipeline-job1	27 min #2	N/A	1.9 sec
✓	☀️	pipeline-job2	13 min #1	N/A	1.4 sec
✓	☀️	test-freestyle-job	46 min #1	N/A	0.17 sec

Add description

Icon: S M L



The screenshot shows the Jenkins Manage Jenkins interface. At the top, there's a banner about building on the built-in node being a security issue, with links to documentation, Set up agent, Set up cloud, and Dismiss buttons. Below this is a warning about Java 17 end-of-life, with More Info and Ignore buttons. The main area has sections for System Configuration (System, Tools, Nodes, Clouds, Plugins, Appearance) and Security (Security, Credentials, Credential Providers). A sidebar on the left includes New Item, Build History, Manage Jenkins (which is selected), and My Views. A bottom banner at the bottom of the page also mentions Java 17 end-of-life.

Click on plugins

This screenshot is identical to the one above, but the Plugins section under System Configuration is highlighted with a gray background. The rest of the interface, including the Java 17 warning and the bottom banner, remains the same.

Click on available plugins

The screenshot shows the Jenkins plugin manager interface. The left sidebar has tabs for 'Updates', 'Available plugins' (which is selected), 'Installed plugins', 'Advanced settings', and 'Download progress'. The main area is titled 'Plugins' and contains a search bar with placeholder 'Search available plugins'. Below the search bar is a table with columns 'Install', 'Name', and 'Released'. The table lists several plugins:

Install	Name	Released
<input type="checkbox"/>	JavaMail API 1.6.2-11 Library plugins (for use by other plugins) This plugin provides the JavaMail API for other plugins.	1 mo 15 days ago
<input type="checkbox"/>	Command Agent Launcher 118.v72741845c17a_... Agent Management Allows agents to be launched using a specified command.	2 mo 16 days ago
<input type="checkbox"/>	Oracle Java SE Development Kit Installer 83.v417146707a_3d Allows the Oracle Java SE Development Kit (JDK) to be installed via download from Oracle's website.	2 mo 16 days ago
<input type="checkbox"/>	Pipeline: REST API 2.37 User Interface Provides a REST API to access pipeline and pipeline run data.	1 mo 23 days ago
<input type="checkbox"/>	Pipeline: Stage View 2.37 User Interface Pipeline Stage View Plugin.	1 mo 23 days ago
<input type="checkbox"/>	JSch dependency 0.2.16-95.v3eeeb_55fa_b_78	

At the bottom right of the table is an 'Install' button. The status bar at the bottom shows '26°C Party cloudy' and the date '09-04-2025'.

Select the [Role-based Authorization Strategy](#) plugin and click on install

The screenshot shows the Jenkins plugin manager interface, similar to the previous one but with a search bar containing 'role'. The 'Available plugins' tab is selected. The table lists two plugins:

Install	Name	Released
<input checked="" type="checkbox"/>	Role-based Authorization Strategy 756.v978cb_392eb_d3 Security Authentication and User Management Enables user authorization using a Role-Based strategy. Roles can be defined globally or for particular jobs or nodes selected by regular expressions.	2 mo 10 days ago
<input type="checkbox"/>	AWS Credentials 245.v8a_1b_7c11a_94d aws Allows storing Amazon IAM credentials within the Jenkins Credentials API. Store Amazon IAM access keys (AWSAccessKeyId and AWSSecretKey) within the Jenkins Credentials API. Also support IAM Roles and IAM MFA Token.	29 days ago

At the bottom right of the table is an 'Install' button. The status bar at the bottom shows '26°C Party cloudy' and the date '09-04-2025'.

REST API Jenkins 2.492.3

The screenshot shows the Jenkins plugin manager interface. On the left, there's a sidebar with options like 'Updates', 'Available plugins', 'Installed plugins', 'Advanced settings', and 'Download progress' (which is selected). The main area is titled 'Download progress' and shows a list of various Jenkins components and their download status. Most items show a green checkmark indicating success. The components listed include Ionicons API, Folders, OWASP Markup Formatter, ASM API, JSON Path API, Structs, Pipeline: Step API, Token Macro, Build Timeout, bouncycastle API, Credentials, Plain Credentials, Variant, SSH Credentials, Credentials Binding, and SCM API.

Component	Status
Ionicons API	Success
Folders	Success
OWASP Markup Formatter	Success
ASM API	Success
JSON Path API	Success
Structs	Success
Pipeline: Step API	Success
Token Macro	Success
Build Timeout	Success
bouncycastle API	Success
Credentials	Success
Plain Credentials	Success
Variant	Success
SSH Credentials	Success
Credentials Binding	Success
SCM API	Success

This screenshot is similar to the first one but includes two additional sections at the bottom. The first section, 'Go back to the top page', provides a link to return to the main Jenkins dashboard. The second section, 'Restart Jenkins when installation is complete and no jobs are running', contains a checkbox for automatically restarting Jenkins after all plugins have been installed. The rest of the interface is identical to the first screenshot, showing the 'Download progress' table.

Component	Status
Metrics	Success
Pipeline Graph View	Success
Git	Success
EDDSA API	Success
Trilead API	Success
SSH Build Agents	Success
Matrix Authorization Strategy	Success
PAM Authentication	Success
LDAP	Success
Email Extension	Success
Mailer	Success
Theme Manager	Success
Dark Theme	Success
Loading plugin extensions	Success
Role-based Authorization Strategy	Success
Loading plugin extensions	Success

Set up the role based strategy:

Go to **Manage Jenkins > Configure Security**.

The screenshot shows the Jenkins 'System Configuration' page under 'Manage Jenkins'. The 'Security' section is highlighted. It contains three main items: 'Security' (Secure Jenkins; define who is allowed to access/use the system), 'Credentials' (Configure credentials), and 'Users' (Create/delete/modify users that can log in to this Jenkins). A status bar at the bottom shows '26°C Partly cloudy' and the date '09-04-2025'.

Select Role based strategy under Authorization

The screenshot shows the Jenkins 'Security' page under 'Manage Jenkins'. The 'Authorization' section is highlighted, showing a dropdown menu with options: 'Logged-in users can do anything', 'Anyone can do anything', 'Legacy mode', 'Logged-in users can do anything', 'Matrix-based security', 'Project-based Matrix Authorization Strategy', and 'Role-Based Strategy'. The 'Role-Based Strategy' option is selected. At the bottom of the page are 'Save' and 'Apply' buttons. A status bar at the bottom shows '26°C Partly cloudy' and the date '09-04-2025'.

Click on apply and save

The screenshot shows the Jenkins 'Manage Jenkins > Security' configuration page. It includes sections for Authentication (with options like 'Disable "Keep me signed in"', 'Security Realm' set to 'Jenkins' own user database', and 'Allow users to sign up'), Authorization (set to 'Role-Based Strategy'), and Markup Formatter (set to 'Plain text'). A green 'Saved' message is displayed at the bottom left. The browser address bar shows the URL: 3.93.148.250:8080/manage/configureSecurity/.

Create users:

Go to **Manage Jenkins > users**

The screenshot shows the Jenkins 'Manage Jenkins > users' page. It displays various management options: Global Settings, Tools Configuration, Plugins, Nodes, Clouds, Appearance, Security (Security, Manage and Assign Roles), Credentials, Credential Providers, Users, Status Information (System Information, System Log), and Load Statistics. The 'Users' section is highlighted with a light gray background. The browser address bar shows the URL: 3.93.148.250:8080/manage/users/.

Click on Create user:

1. Developer user

The screenshot shows the Jenkins 'Users' page with one user listed:

User ID	Name
Admin	administrator

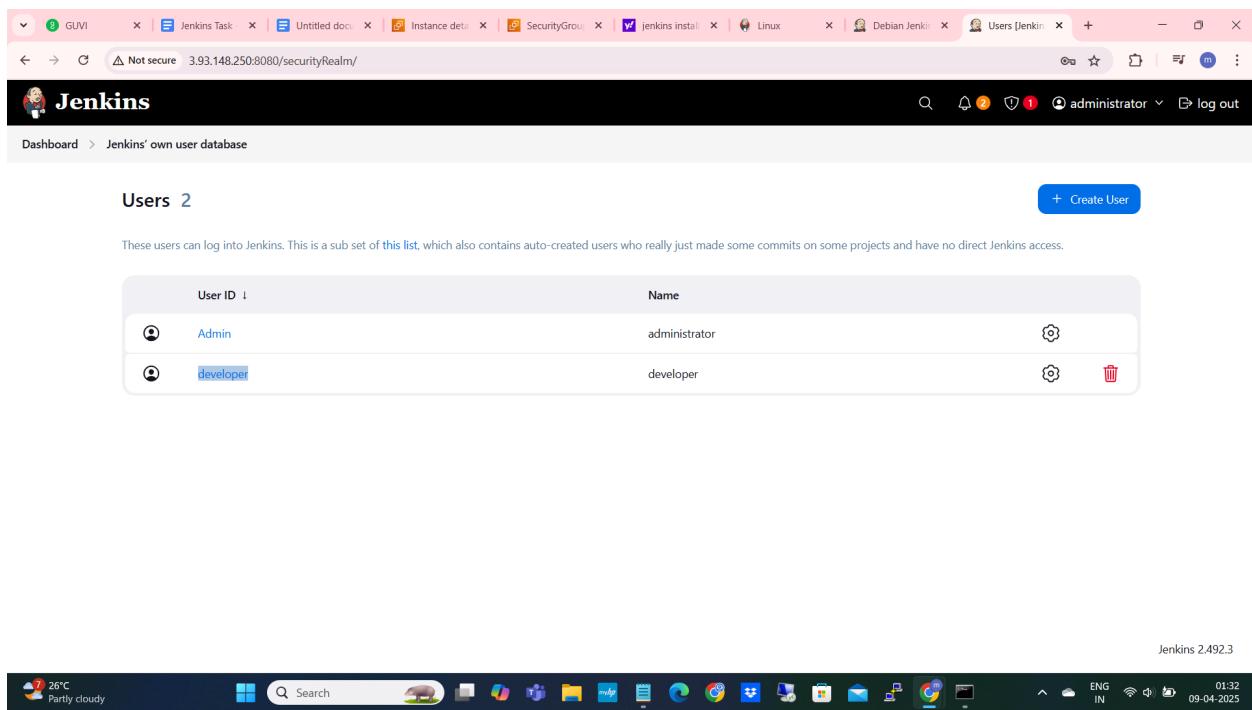
A blue 'Create User' button is visible in the top right corner.

The screenshot shows the Jenkins 'Create User' page with the following fields filled in:

- Username: developer
- Password: (redacted)
- Confirm password: (redacted)
- Full name: developer
- E-mail address: developer@gmail.com

A blue 'Create User' button is at the bottom of the form.

Click on Create user

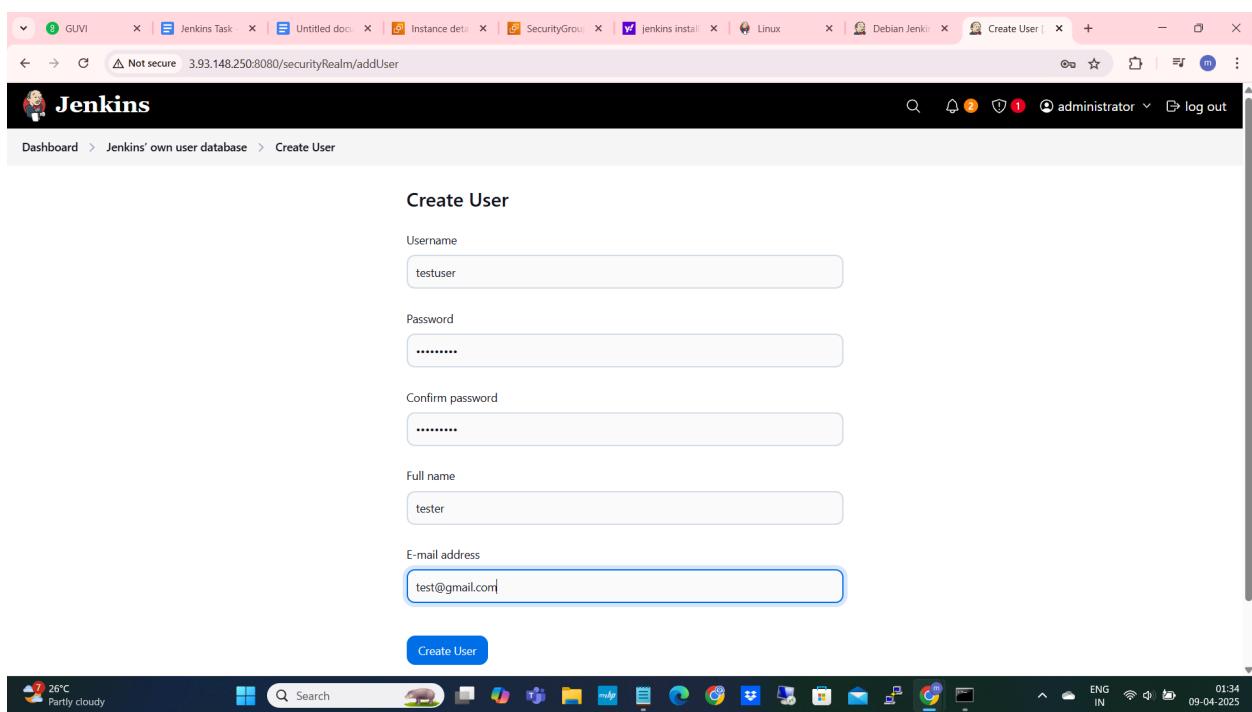


The screenshot shows the Jenkins 'Users' page. At the top, there is a navigation bar with tabs like 'Dashboard', 'Jenkins' own user database', and 'Create User'. Below the navigation bar, the page title is 'Users 2'. A sub-header note says: 'These users can log into Jenkins. This is a sub set of [this list](#), which also contains auto-created users who really just made some commits on some projects and have no direct Jenkins access.' A table lists two users:

User ID	Name	Action
Admin	administrator	
developer	developer	

In the bottom right corner of the page, it says 'Jenkins 2.492.3'. The browser's status bar at the bottom shows the date '09-04-2025'.

Create testuser:



The screenshot shows the 'Create User' form. The URL in the address bar is '3.93.148.250:8080/securityRealm/addUser'. The form has the following fields filled:

- Username: testuser
- Password: (redacted)
- Confirm password: (redacted)
- Full name: tester
- E-mail address: test@gmail.com

A blue 'Create User' button is at the bottom of the form. The browser's status bar at the bottom shows the date '09-04-2025'.

Click on Create user

The screenshot shows the Jenkins 'Users' page with three users listed:

User ID	Name	Action
Admin	administrator	edit
developer	developer	edit
testuser	tester	edit

A blue 'Create User' button is located at the top right. The page also includes a note about auto-created users and a Jenkins version indicator (2.492.3) at the bottom right.

Assign roles to the user:

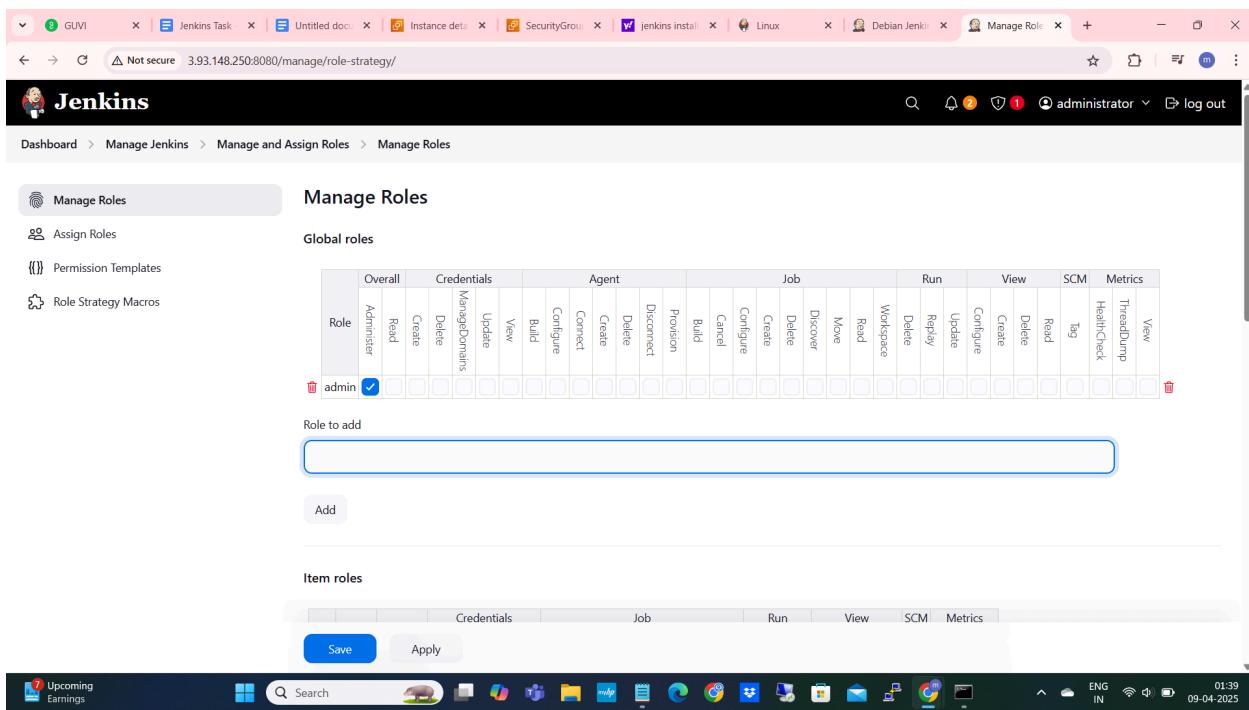
Go to Manage Jenkins > Manage and Assign Roles

The screenshot shows the Jenkins 'Manage and Assign Roles' page with several sections:

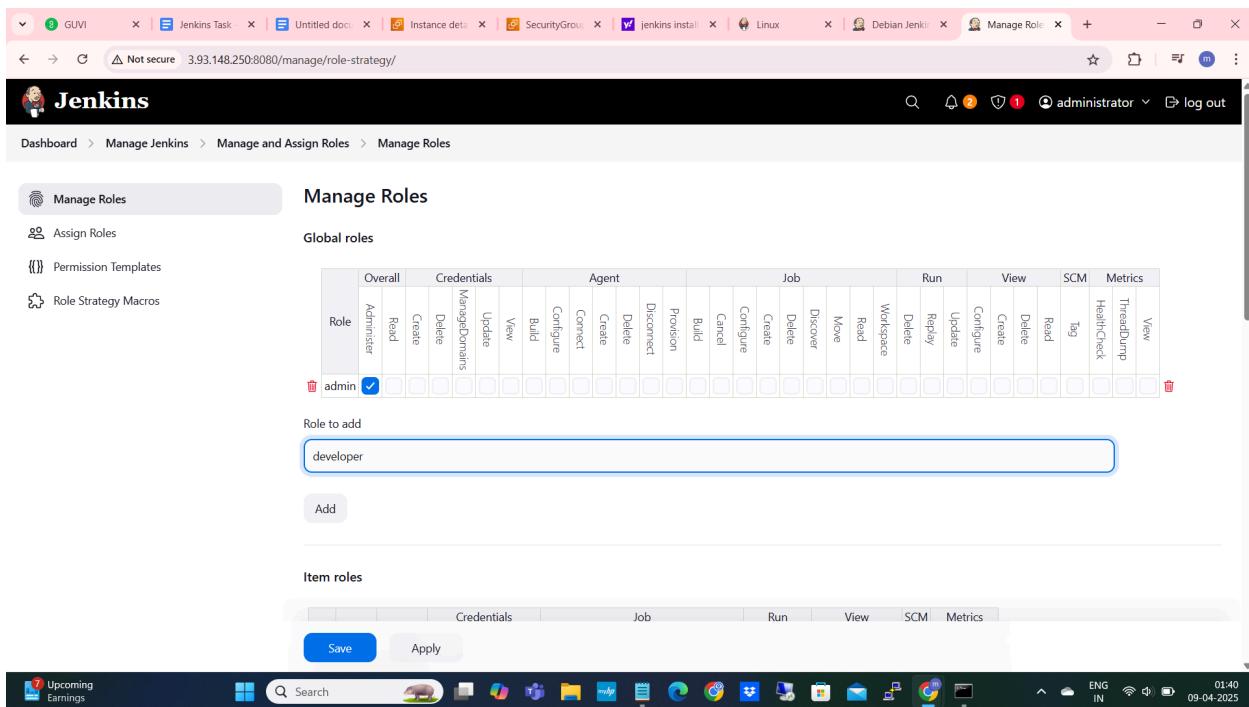
- Nodes**: Add, remove, control and monitor the various nodes that Jenkins runs jobs on.
- Clouds**: Add, remove, and configure cloud instances to provision agents on-demand.
- Appearance**: Configure the look and feel of Jenkins.
- Security**
 - Security**: Secure Jenkins; define who is allowed to access/use the system.
 - Manage and Assign Roles**: Handle permissions by creating roles and assigning them to users/groups (this option is highlighted).
- 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` 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.

A red box highlights the 'Manage and Assign Roles' link. The page is running on port 8080 and shows a taskbar at the bottom with various icons.

Provide Role names:



The screenshot shows the Jenkins Manage Roles interface. In the top-left corner, there's a sidebar with links: 'Manage Roles', 'Assign Roles', 'Permission Templates', and 'Role Strategy Macros'. The main area is titled 'Manage Roles' and contains a 'Global roles' table. This table has columns for 'Role' (with 'Overall' and 'Administrator' rows) and various Jenkins management tasks like 'Build', 'View', 'Run', etc. Under the 'Job' column, there are checkboxes for 'Discover', 'Delete', 'Create', 'Configure', and 'Cancel'. Below the table is a section for 'Role to add' with a text input field containing 'admin' and an 'Add' button. At the bottom is an 'Item roles' table with tabs for 'Credentials', 'Job', 'Run', 'View', 'SCM', and 'Metrics'. A 'Save' and 'Apply' button are located at the bottom left of this table.



This screenshot is identical to the one above, but the 'Role to add' input field now contains the text 'developer' instead of 'admin'. The rest of the interface, including the Global roles table and the Item roles table, remains the same.

Click on add

The screenshot shows the Jenkins Manage Roles interface. In the top navigation bar, there are several tabs: GUVI, Jenkins Task, Untitled docu, Instance details, SecurityGroup, jenkins install, Linux, Debian Jenkins, and Manage Role. The Manage Role tab is active. Below the tabs, the URL is 3.93.148.250:8080/manage/role-strategy/. On the left, there's a sidebar with links: Manage Roles, Assign Roles, Permission Templates, and Role Strategy Macros. The main content area has a heading 'Manage Roles' and a sub-section 'Role to add'. A dropdown menu is open over the 'admin' role, showing options like 'edit', 'delete', and 'add'. Below this, there's a section titled 'Item roles' with a table:

Role	Pattern	Template	Credentials	Job	Run	View	SCM	Metrics
admin				Configure	Read	View		
				Move	Move			
				Discover	Discover			
				Delete	Delete			
				Create	Create			

Below the table, there's another 'Role to add' field containing 'testuser'. At the bottom are 'Save' and 'Apply' buttons.

Add testuser role :

This screenshot is identical to the previous one, but the 'Role to add' field now contains the text 'testuser' instead of being empty. The rest of the interface, including the sidebar, table, and bottom buttons, remains the same.

Click on add

Role	Overall	Credentials	Agent	Job	Run	View	SCM	Metrics
admin	<input checked="" type="checkbox"/>	<input type="checkbox"/>						
developer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
testuser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Lets assign the role actions for each type of user: As your requirement

Role	Overall	Credentials	Agent	Job	Run	View	SCM	Metrics
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"/>
developer	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
testuser	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Click on Apply and save

Click Assign Roles to the users:

The screenshot shows the Jenkins 'Assign Roles' configuration page. In the 'Global roles' section, the 'administrator' role is selected for the 'User/Group' 'admin'. In the 'Item roles' section, the 'authenticatedUsers' role is selected for the 'User/Group' 'admin'. At the bottom, there are 'Save' and 'Apply' buttons.

Add created user Names/IDs:

The screenshot shows the Jenkins 'Assign Roles' configuration page. In the 'Global roles' section, the 'administrator' role is selected for the 'User/Group' 'admin'. In the 'Item roles' section, the 'authenticatedUsers' role is selected for the 'User/Group' 'admin'. At the bottom, there are 'Save' and 'Apply' buttons.

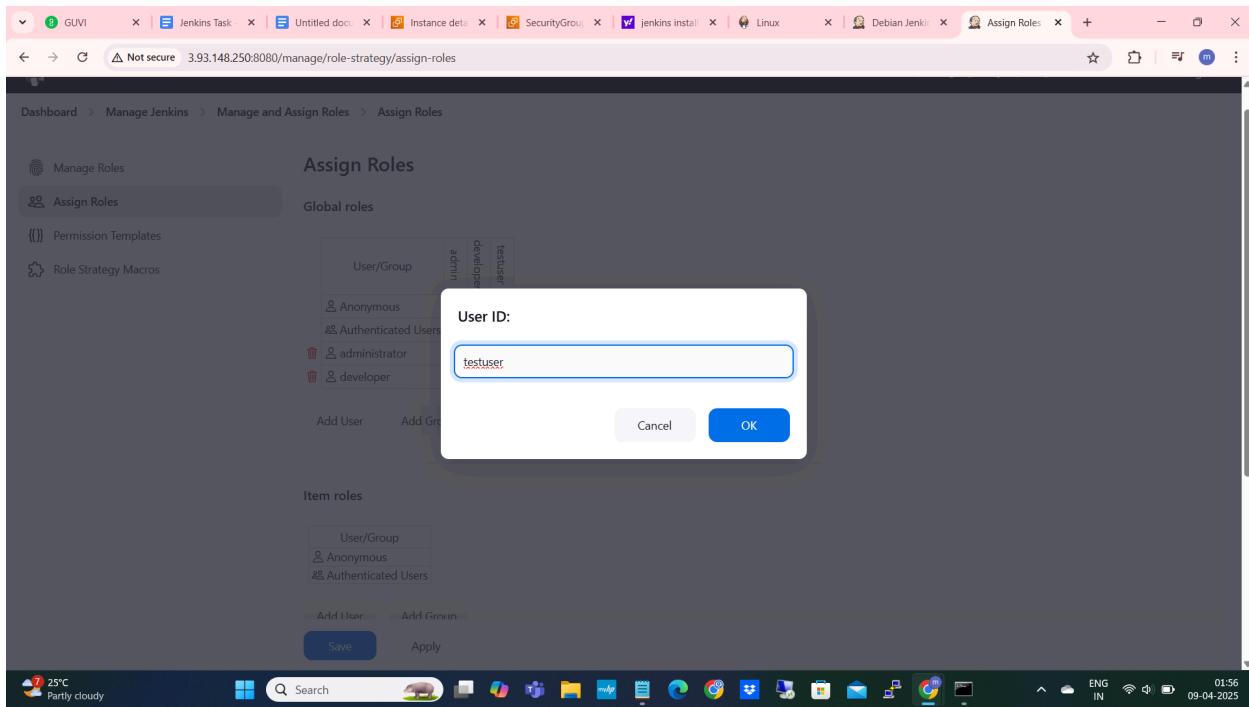
Click on Add user:

The screenshot shows the Jenkins 'Assign Roles' page. A modal dialog box is open, prompting for a 'User ID'. The input field contains 'developer'. Below the input field are two buttons: 'Cancel' and 'OK'. In the background, the main interface shows a table of users and their assigned roles. One row for 'developer' has a checkmark in the 'admin' column and a red trash icon in the 'testuser' column.

Click on Ok—the user added

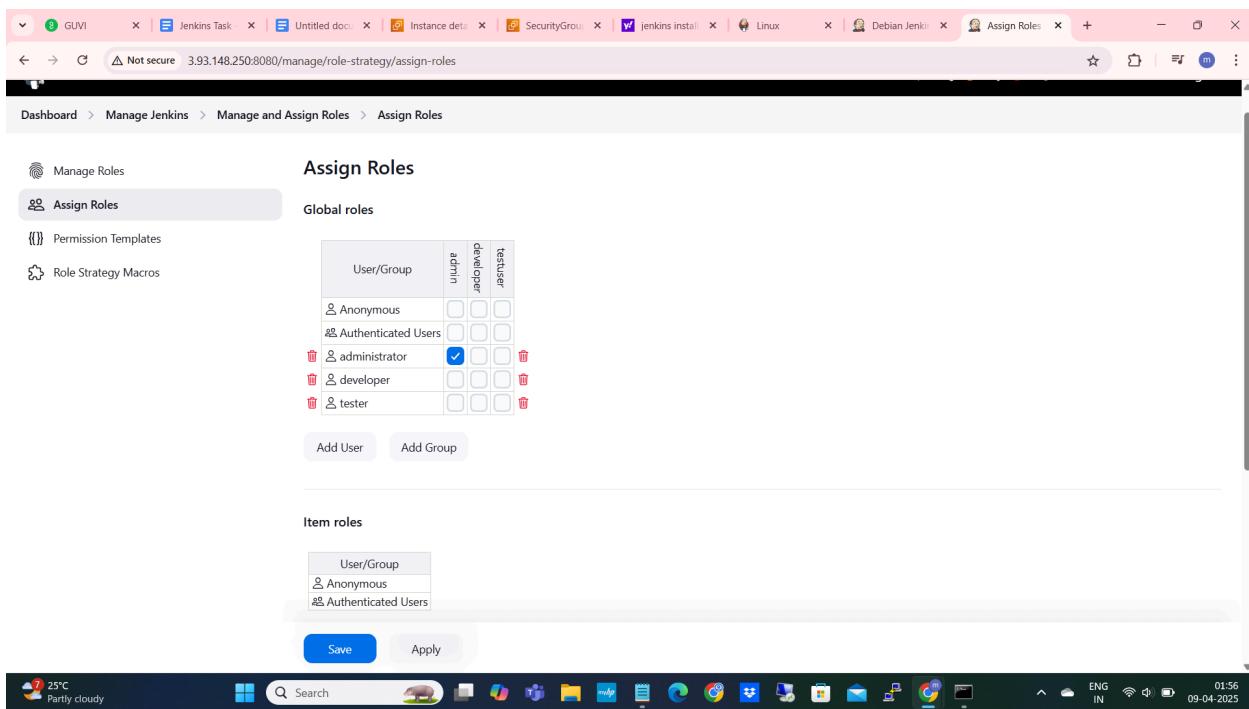
The screenshot shows the Jenkins 'Assign Roles' page after the user 'developer' has been added. The modal dialog is no longer visible. The main interface displays the user table with the 'developer' row now having a checkmark in both the 'admin' and 'testuser' columns.

Add testuser role:



The screenshot shows the Jenkins 'Assign Roles' interface. A modal dialog is open, prompting for a 'User ID'. The input field contains the value 'testuser'. Below the input field are two buttons: 'Cancel' and 'OK'. In the background, the main 'Assign Roles' page is visible, showing a table of users and their assigned roles. The table includes columns for 'User/Group', 'admin', 'developer', and 'testuser'. The 'administrator' row has a checked checkbox in the 'admin' column. The 'Save' and 'Apply' buttons are located at the bottom of the main page.

Click on ok



The screenshot shows the Jenkins 'Assign Roles' interface after the 'OK' button was clicked. The modal dialog is no longer present. The main table now shows that the 'testuser' role is assigned to the 'administrator' user, indicated by a checked checkbox in the 'testuser' column. The other rows ('admin', 'developer', and 'tester') remain unselected. The 'Save' and 'Apply' buttons are visible at the bottom of the page.

Select the roles of each User:

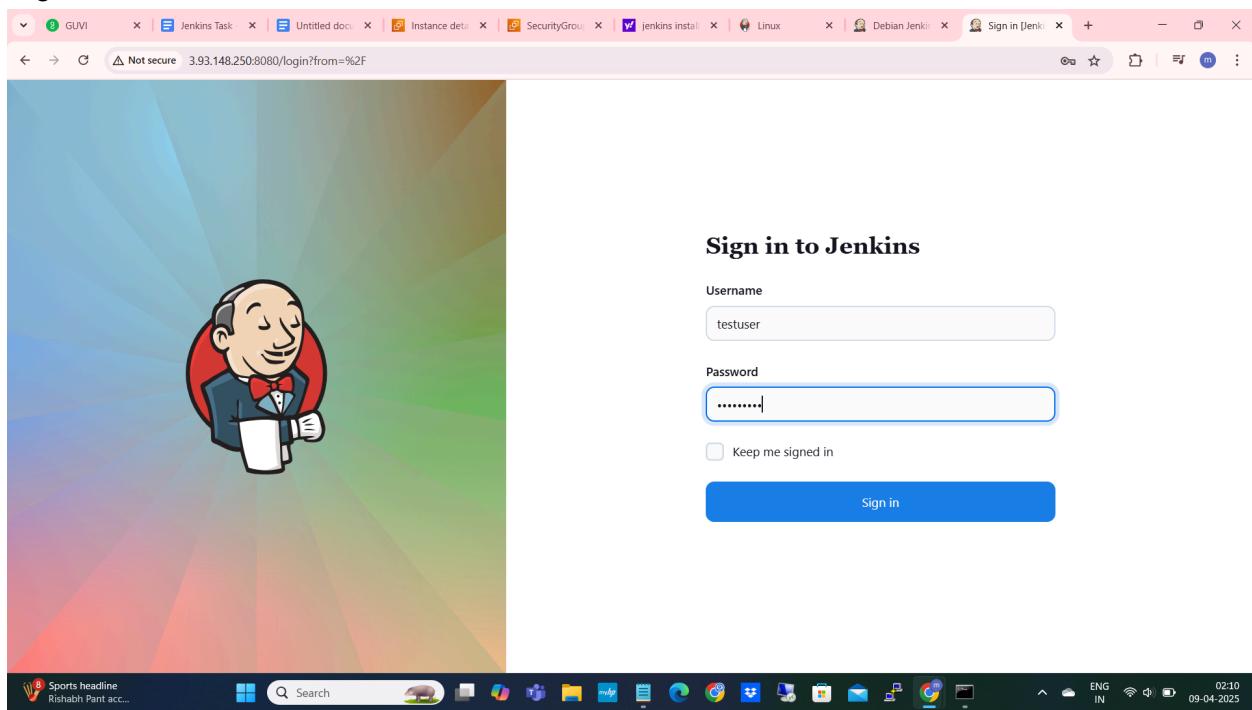
The screenshot shows the Jenkins 'Assign Roles' page. In the 'Global roles' section, the 'User/Group' column lists 'admin', 'developer', and 'tester'. The 'roles' column contains checkboxes for 'admin', 'developer', and 'tester'. Under 'admin', the 'admin' checkbox is checked. Under 'developer', the 'developer' checkbox is checked. Under 'tester', the 'tester' checkbox is checked. Below the table are 'Add User' and 'Add Group' buttons. In the 'Item roles' section, there is a table with columns 'User/Group', 'admin', 'developer', and 'tester'. The 'User/Group' row has checkboxes for 'Anonymous' and 'Authenticated Users'. The 'roles' column has checkboxes for 'admin', 'developer', and 'tester'. Below the table are 'Save' and 'Apply' buttons. The browser address bar shows the URL: 3.93.148.250:8080/manage/role-strategy/assign-roles.

Click on Apply and Save

The screenshot shows the Jenkins 'Assign Roles' page. The 'Global roles' and 'Item roles' sections are identical to the previous screenshot. A green banner at the bottom left indicates a successful save with the text 'Saved'. Below the banner are 'Save' and 'Apply' buttons. The browser address bar shows the URL: 3.93.148.250:8080/manage/role-strategy/assign-roles.

Lets check the Roles and Permissions of the users by Login

Login with Test user:



Test user should only have view and read permissions
Here we don't have option to create new job and delete or Update existing jobs

Select any job:

This is a screenshot of a web browser displaying the Jenkins pipeline-job1 page. The page title is "pipeline-job1". It shows a summary of the job, stating it is a declarative pipeline job. Below this, there is a "Builds" section listing the following builds:

- Last build (#2), 1 hr 25 min ago
- Last stable build (#2), 1 hr 25 min ago
- Last successful build (#2), 1 hr 25 min ago
- Last completed build (#2), 1 hr 25 min ago

The status bar at the bottom of the browser window shows the following information:
REST API Jenkins 2.492.3
Trending videos Golden retriever...
Search ENG IN 02:12 09-04-2025

Here we only have status, changes and stages option to view and Read about the job

Click on build id:

This is a screenshot of a web browser displaying the Jenkins pipeline-job1/2 page, specifically for build #2. The page title is "pipeline-job1". It shows the details for the second build, which is marked as "stable". The status bar at the bottom of the browser window shows the following information:
3.93.148.250:8080/job/pipeline-job1/2
26°C Mostly clear Search ENG IN 02:13 09-04-2025

A screenshot of a web browser window displaying a Jenkins job summary. The URL is 3.93.148.250:8080/job/pipeline-job1/2. The main content shows a green checkmark icon next to the text "#2 (Apr 8, 2025, 7:16:23 PM)". To the left is a sidebar with various Jenkins navigation links: Status, Changes, Console Output (which is selected), View Build Information, Timings, Pipeline Overview, Pipeline Console, Pipeline Steps, and Previous Build. On the right, there are build statistics: Started by user administrator, Started 1 hr 27 min ago, Took 1.9 sec, and a summary of run spent: 14 ms waiting, 1.9 sec build duration, and 1.9 sec total from scheduled to completion. Below the sidebar, it says '</> No changes.'

A screenshot of a web browser window displaying a Jenkins job summary. The URL is 3.93.148.250:8080/job/pipeline-job1/2. The main content shows a green checkmark icon next to the text "#2 (Apr 8, 2025, 7:16:23 PM)". To the left is a sidebar with various Jenkins navigation links: Status, Changes, Console Output (which is selected), View Build Information, Timings, Pipeline Overview, Pipeline Console, Pipeline Steps, and Previous Build. On the right, there are build statistics: Started by user administrator, Started 1 hr 27 min ago, Took 1.9 sec, and a summary of run spent: 14 ms waiting, 1.9 sec build duration, and 1.9 sec total from scheduled to completion. Below the sidebar, it says '</> No changes.'

A screenshot of a web browser window displaying the Jenkins job #2 console output. The URL is 3.93.148.250:8080/job/pipeline-job1/2/console. The page title is "3.93.148.250:8080/job/pipeline-job1/2/console". The content area is currently empty, showing only the Jenkins logo and the URL.

Click on console output

A screenshot of a Windows desktop environment. The taskbar at the bottom shows various icons for applications like File Explorer, Edge, and Mail. The system tray indicates it's 09-04-2025, 02:14, with ENG IN language settings. The main window is a Jenkins interface for a pipeline job named 'pipeline-job1'. The left sidebar has options: Status, Changes, Console Output (which is selected), View Build Information, Timings, Pipeline Overview, Pipeline Console, Pipeline Steps, and Previous Build. The right panel shows the 'Console Output' tab with the following log text:

```
Started by user administrator
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/pipeline-job1
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Build)
[Pipeline] sh
+ echo Building the application
Building the application
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Test)
[Pipeline] sh
+ echo Running tests
Running tests
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Deploy)
[Pipeline] sh
+ echo Deploying the application
```

In the left panel we can only have view and read options regarding build

Now Login to the Developer:

A screenshot of a Windows desktop environment. The taskbar at the bottom shows various icons for applications like File Explorer, Edge, and Mail. The system tray indicates it's 09-04-2025, 02:16, with ENG IN language settings. The main window is a 'Sign in to Jenkins' page. On the left is a cartoon illustration of a bald man in a tuxedo holding a white mug. The right side has the title 'Sign in to Jenkins' and fields for 'Username' (containing 'developer') and 'Password' (containing '*****'). There is a 'Keep me signed in' checkbox and a blue 'Sign in' button.

The screenshot shows the Jenkins dashboard with three jobs listed:

S	W	Name	Last Success	Last Failure	Last Duration
✓	☀️	pipeline-job1	1 hr 30 min #2	N/A	1.9 sec
✓	☀️	pipeline-job2	1 hr 15 min #1	N/A	1.4 sec
✓	☀️	test-freestyle-job	1 hr 48 min #1	N/A	0.17 sec

Build Queue: No builds in the queue.

Build Executor Status: 0/2

Icon: S M L

REST API Jenkins 2.492.3

Click on any job:

The screenshot shows the Jenkins pipeline-job1 job details page:

Status: pipeline-job1 (green checkmark)

Description: This is declarative pipeline job

Permalinks:

- Last build (#2), 1 hr 30 min ago
- Last stable build (#2), 1 hr 30 min ago
- Last successful build (#2), 1 hr 30 min ago
- Last completed build (#2), 1 hr 30 min ago

Builds:

#	Build Time
#2	7:16 PM
#1	7:15 PM

REST API Jenkins 2.492.3

Here we can see developer permissions which we assigned :
Developer is allowed to view,read, create,update, build and delete jobs

Create new job: click on New item to create new job

The screenshot shows the Jenkins dashboard with the following details:

- Left sidebar:** Includes links for "New Item", "Build History", and "My Views".
- Build Queue:** Shows "No builds in the queue."
- Build Executor Status:** Shows "0/2".
- Job List:** A table with columns: S, W, Name, Last Success, Last Failure, and Last Duration. The data is as follows:

S	W	Name	Last Success	Last Failure	Last Duration
✓	☀️	pipeline-job1	7 min 41 sec #3	N/A	3.1 sec
✓	☀️	pipeline-job2	1 hr 25 min #1	N/A	1.4 sec
✓	☀️	test-freestyle-job	1 hr 57 min #1	N/A	0.17 sec

The screenshot shows the "New Item" dialog box with the following interface:

- Title:** New Item
- Input field:** Enter an item name (containing "freestyle-dev-job").
- Section:** Select an item type
 - Freestyle project:** Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.
 - 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.
- OK button:** Located at the bottom of the dialog.

The image shows a Windows desktop environment with two Jenkins configuration pages displayed side-by-side in separate browser windows.

Top Window (Left): General Configuration

- General Tab:** Enabled checkbox is checked. Description field contains "new job by developer".
 - Source Code Management:** GitHub project checkbox is checked.
 - Triggers:** Discard old builds, This project is parameterized, Throttle builds, Execute concurrent builds if necessary checkboxes are unchecked.
- Advanced:** Advanced dropdown is visible.
- Buttons:** Save and Apply buttons.

Bottom Window (Right): Full Configuration View

- General Tab:** Same configuration as the top window.
- Source Code Management Tab:** Connect and manage your code repository to automatically pull the latest code for your builds.
 - None radio button is selected.
 - Git radio button is available.
- Triggers Tab:** Set up automated actions that start your build based on specific events, like code changes or scheduled times.
 - Trigger builds remotely (e.g., from scripts) checkbox is unchecked.
- Buttons:** Save and Apply buttons.

System Status Bar: Shows weather (26°C, Mostly clear), search bar, taskbar icons (including Jenkins Task, Jenkins, freestyle-dev), system tray (ENG IN, 02:28, 09-04-2025).

The screenshot shows a web browser window with multiple tabs open, including Jenkins Task, Untitled doc, Instance data, SecurityGroup, jenkins install, Linux, and freestyle-dev. The main content area displays the Jenkins 'Configuration' page for a 'freestyle-dev-job'. The 'Build Steps' section contains a single 'Execute shell' step with the command 'echo " new job creating by developer"'. A green 'Saved' button is visible at the bottom left.

Configure

General

Source Code Management

Triggers

Environment

Build Steps

Post-build Actions

Configure

Add timestamps to the Console Output

Inspect build log for published build scans

Terminate a build if it's stuck

With Ant ?

Build Steps

Automate your build process with ordered tasks like code compilation, testing, and deployment.

Execute shell

Command

See the list of available environment variables

```
echo " new job creating by developer"
```

Advanced

Save Apply

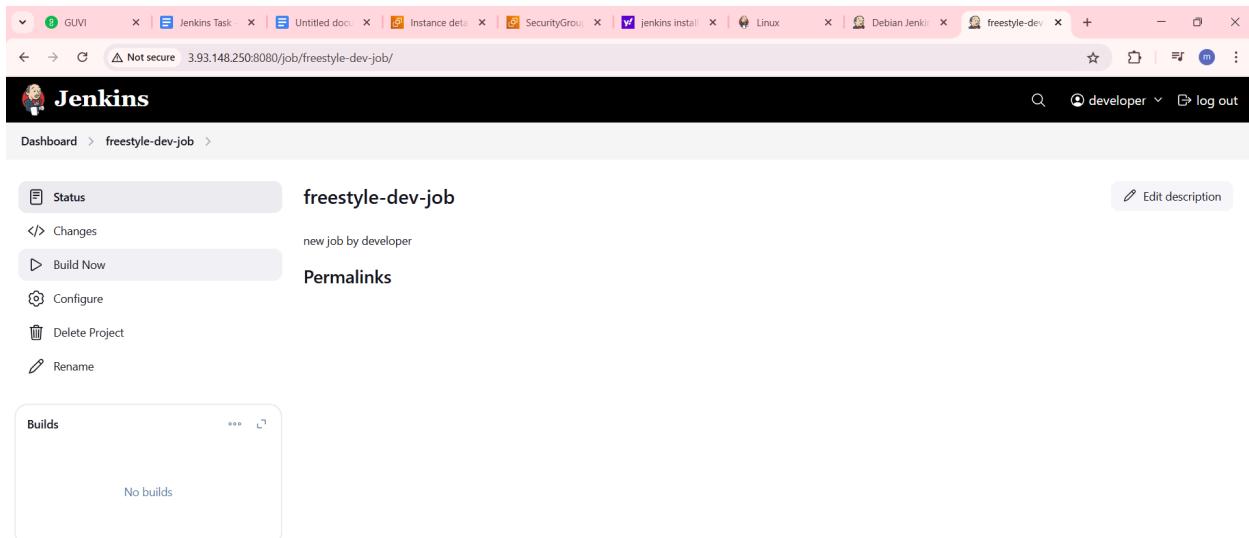
Saved

26°C Mostly clear

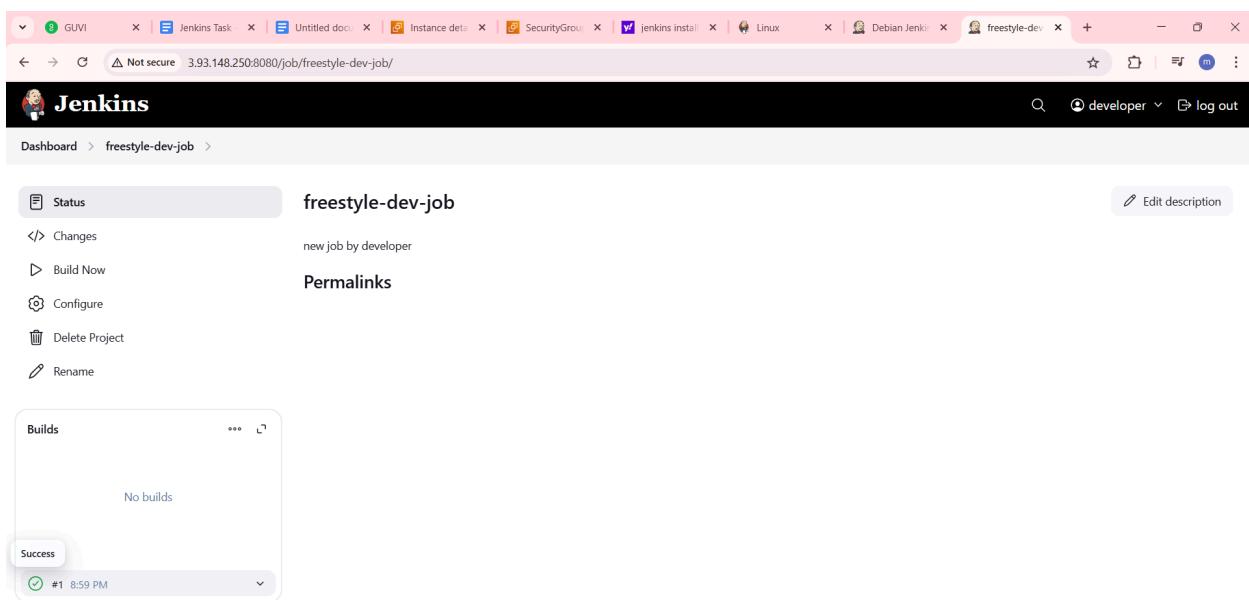
Search

ENG IN 02:29 09-04-2025

Click on build now



The screenshot shows a web browser window with multiple tabs open. The active tab is '3.93.148.250:8080/job/freestyle-dev-job/'. The page title is 'Jenkins' and the sub-page title is 'freestyle-dev-job'. On the left, there's a sidebar with options: Status, Changes, Build Now (which is highlighted with a yellow box), Configure, Delete Project, and Rename. Below the sidebar is a 'Builds' section with a message 'No builds'. At the top right, there are links for 'Edit description', 'developer', and 'log out'. The status bar at the bottom shows 'REST API Jenkins 2.492.3'.



This screenshot is similar to the one above, showing the Jenkins dashboard for the 'freestyle-dev-job'. However, the 'Build Now' button has been clicked, and a new message 'Success' has appeared in a green box at the bottom left, indicating the build has started. The build log entry '#1 8:59 PM' is shown with a green circular icon. The rest of the interface and status bar remain the same.



View console output:

The screenshot shows a web browser window with multiple tabs open. The active tab is titled "Jenkins" and displays the build details for "freestyle-dev-job #1". The build status is green with a checkmark, indicating it was successful on April 8, 2025, at 8:59:38 PM. It was started by the user "developer". The build took 12 ms. The "Console Output" section is collapsed. The "Changes" section is also collapsed. The "Timings" section shows the following metrics: 2 ms waiting, 12 ms build duration, and 14 ms total from scheduled to completion. The "View Build Information" link is present. The browser's address bar shows the URL: 3.93.148.250:8080/job/freestyle-dev-job/1/. The system tray at the bottom indicates a weather of 26°C and mostly clear, and the date/time as 09-04-2025.

The screenshot shows a web browser window with multiple tabs open. The active tab is titled "Jenkins" and displays the "Console Output" for "freestyle-dev-job #1". The output shows the build was started by "developer" and running as "SYSTEM". The log output includes the command "[freestyle-dev-job] \$ /bin/sh -xe /tmp/jenkins9500188042113177873.sh" followed by the message "+ echo new job creating by developer" and "new job creating by developer". The build finished successfully. The browser's address bar shows the URL: 3.93.148.250:8080/job/freestyle-dev-job/1/console. The system tray at the bottom indicates a weather of 26°C and mostly clear, and the date/time as 09-04-2025.



Update job: click on configure

The screenshot shows the Jenkins interface for a 'freestyle-dev-job'. The left sidebar has a 'Configure' button highlighted. The main content area displays the job's status, build history, and a 'Permalinks' section with recent builds. A 'Builds' table shows one build (#1) from today at 8:59 PM.

The screenshot shows the 'Configuration' page for the 'freestyle-dev-job'. The 'General' tab is selected. The 'Description' field contains the text 'new job by developer'. Under 'Advanced' settings, several options are listed with checkboxes: 'Discard old builds', 'GitHub project', 'This project is parameterized', 'Throttle builds', and 'Execute concurrent builds if necessary'. At the bottom are 'Save' and 'Apply' buttons.

The screenshot shows the Jenkins job configuration interface. The 'Build Steps' tab is active, displaying a command input field with the following content:

```
echo " new job created by developer"
echo "updating the job"
```

Below the command field is an 'Advanced' dropdown and a 'Post-build Actions' section with a 'Save' button.

The screenshot shows the Jenkins job configuration interface after changes have been saved. A green notification bar at the bottom left indicates that the changes have been saved successfully. The 'Build Steps' section shows the same configuration as the previous screenshot.

The screenshot shows a web browser window with multiple tabs open. The active tab is 'freestyle-dev-job' at the URL 3.93.148.250:8080/job/freestyle-dev-job/. The page title is 'Jenkins' and the sub-page title is 'freestyle-dev-job'. The status bar indicates 'new job by developer'. On the left, there's a sidebar with options like 'Status', 'Changes', 'Build Now', 'Configure', 'Delete Project', and 'Rename'. The main content area shows a 'Builds' section with a table. The first row shows a green circle icon, the build number '#1', the timestamp '8:59 PM', and a dropdown arrow. Below this, there's a 'Permalinks' section with a bulleted list of five links: 'Last build (#1), 3 min 49 sec ago', 'Last stable build (#1), 3 min 49 sec ago', 'Last successful build (#1), 3 min 49 sec ago', and 'Last completed build (#1), 3 min 49 sec ago'. At the top right, there's a 'Edit description' link.



Build now:

The screenshot shows the same Jenkins job page as before, but with a green banner at the top stating 'Build scheduled'. The build history table has been updated to show two entries: '#2 9:04 PM' and '#1 8:59 PM'. The rest of the page, including the sidebar and permalinks section, remains the same. The Windows taskbar at the bottom is identical to the one in the previous screenshot.

The screenshot shows a browser window with multiple tabs open. The active tab is 'Console Output' for build #2 of the 'freestyle-dev-job'. The Jenkins logo is at the top left. On the right, there are links for 'Download', 'Copy', and 'View as plain text'. The console output shows the build process starting, running as SYSTEM, building in workspace /var/lib/jenkins/workspace/freestyle-dev-job, and finally finishing with SUCCESS. The status bar at the bottom indicates it's a 'Not secure' connection to 3.93.148.250:8080.

Delete job: click on delete project

The screenshot shows a browser window with multiple tabs open. The active tab is the 'Configure' page for the 'freestyle-dev-job'. The Jenkins logo is at the top left. On the right, there is a link for 'Edit description'. The page shows the job has been created by developer. It includes a 'Permalinks' section with a bulleted list of build links and a 'Builds' section with a table showing two builds: #2 (9:04 PM) and #1 (8:59 PM). The status bar at the bottom indicates it's a 'Not secure' connection to 3.93.148.250:8080.



The screenshot shows the Jenkins interface with a modal dialog titled "Delete Project". The dialog asks "Delete the Project 'freestyle-dev-job'?". There are "Cancel" and "Yes" buttons. The background shows the Jenkins dashboard for the "freestyle-dev-job" project, which has a status of "new job by developer". The "Builds" section lists two builds: #2 (9:04 PM) and #1 (8:59 PM). The Jenkins version is 2.492.3.

The screenshot shows the Jenkins dashboard after the job was deleted. The "Build History" section is visible, showing three jobs: "pipeline-job1", "pipeline-job2", and "test-freestyle-job". The "Build Queue" and "Build Executor Status" sections are also present. The Jenkins version is 2.492.3.

Job deleted successfully