

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
Additional charges apply when outside of free tier allowance
Firewall (security groups): 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

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

Step 3: Configure storage

Root volume: 8 GiB gp3 (Advanced: 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...
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 details of 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 with the following configuration:

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 interface. 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 details are listed:

- Security group name:** launch-wizard-1
- Security group ID:** sg-0977c73d7e8d5c86d
- Description:** launch-wizard-1 created 2025-04-08T17:26:56.942Z
- VPC ID:** vpc-07f2dc389716a7f01
- Owner:** 905418201986
- 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 one row of data:

Name	Security group rule ID	IP version	Type	Protocol	Port range
-	sgr-0c4e75025dee89469	IPv4	HTTP	TCP	80

The bottom of the screen shows the AWS navigation bar and a status bar indicating 29°C, Partly cloudy, and the date 08-04-2025.

Connecting to the EC2 Instance:

The screenshot shows the AWS EC2 Connect to instance page for an instance with ID i-0aab65d42d2773a5d. The **SSH client** tab is selected. The page provides instructions for connecting:

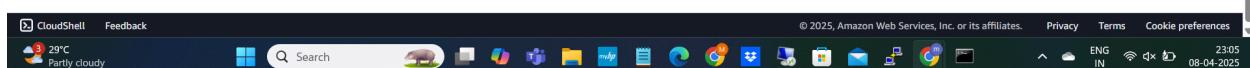
- Open an SSH client.
- Locate your private key file. The key used to launch this instance is aws-key.pem
- Run this command, if necessary, to ensure your key is not publicly viewable.
chmod 400 "aws-key.pem"
- Connect to your instance using its Public DNS:
ec2-3-93-148-250.compute-1.amazonaws.com

A message indicates that the command has been copied to the clipboard: **Command copied**.

The copied command is: `ssh -i "aws-key.pem" ubuntu@ec2-3-93-148-250.compute-1.amazonaws.com`

A note at the bottom states: **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, there is a **Cancel** button.



```

[1] ubuntu@ip-172-31-80-5:~ 
Microsoft Windows [Version 10.0_26100_3624]
(c) Microsoft Corporation. All rights reserved.

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:u3JBsLzZhMmZggjAn9MwBp1VfglUR+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

```

[1] Select 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 [265 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 Package [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 kB]
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [268 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 [880 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 libgall嚮18t64 libgbm1 libgd-pixbuf2-2.0-0 libgd-pixbuf2-0-bin libgd-pixbuf2-0-common libgf7 libgl1 libgl1-amber-dei  
libgl1-mesa-dei libgl1-mesa libglvnd0 libglx-mesa libglxgraphite2-3 libglxk2 0-0t64 libglxk2 0-bin libglxk2 0-common libharfbuzz0b libice6 libjbig2 libjpeg-turbo8 libjng8 liblcms2-2 libllvml9  
libpano-1.0-0 libpanocairo-1.0-0 libpaciess0 libpaciess1 libpixman-1 libpixv2-2 libpixv2-2 libpixv2-common libsharpyuv0 libsm6 libthai-data libthai0 libtiff6 libvulkan1 libwayland-client9  
libwayland-server0 libwebp7 libx11-xcb1 libxaw7 libxcb-dri2-0 libxcb-dri3-0 libxcb-glx0 libxcb-present0 libxcb-render0 libxcb-shm0 libxcb-sync1 libxcb-xfixes0 libxcbcompositel  
libxcursor1 libxdamage1 libxfices3 libxfixed2 libxinerama1 libxbm6 libxpm0 libxrander2 libxshmfence1 libxt6t64 libxtst6 libxv1 libxxf86dg1 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 libgall嚮18t64 libgbm1 libgd-pixbuf2-2.0-0 libgd-pixbuf2-0-bin libgd-pixbuf2-0-common libgf7 libgl1 libgl1-amber-dei  
libgl1-mesa-dei libgl1-mesa libglvnd0 libglx-mesa libglxgraphite2-3 libglxk2 0-0t64 libglxk2 0-bin libglxk2 0-common libharfbuzz0b libice6 libjbig2 libjpeg-turbo8 libjng8 liblcms2-2 libllvml9  
libpano-1.0-0 libpanocairo-1.0-0 libpaciess0 libpaciess1 libpixman-1 libpixv2-2 libpixv2-common libsharpyuv0 libsm6 libthai-data libthai0 libtiff6 libvulkan1 libwayland-client9  
libwayland-server0 libwebp7 libx11-xcb1 libxaw7 libxcb-dri2-0 libxcb-dri3-0 libxcb-glx0 libxcb-present0 libxcb-render0 libxcb-shm0 libxcb-sync1 libxcb-xfixes0 libxcbcompositel  
libxcursor1 libxdamage1 libxfices3 libxfixed2 libxinerama1 libxbm6 libxpm0 libxrander2 libxshmfence1 libxt6t64 libxtst6 libxv1 libxxf86dg1 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 libgd-pixbuf2-0-common all 2.42.10+dfsg-3ubuntu3.1 [8024 B]  
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/min amd64 libjbig2-turbo8 amd64 2.1.5.2ubuntu2 [150 kB]  
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/min amd64 libjpeg8 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 libjbig2 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 libsharpuyv8 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.

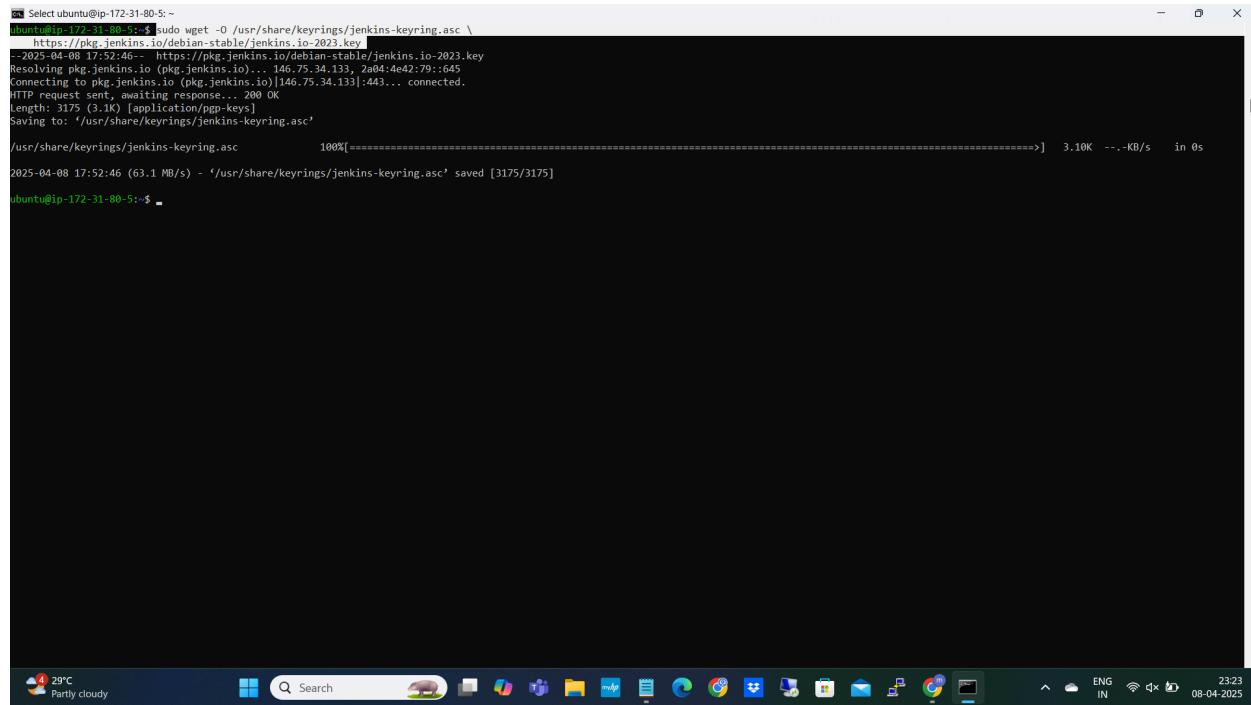
No user sessions are running outdated binaries.

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 terminal window titled "Select ubuntu@ip-172-31-80-5:~" showing the command to download the Jenkins keyring. The output shows the progress of the wget command, which completed successfully at 17:52:46 on April 8, 2025.

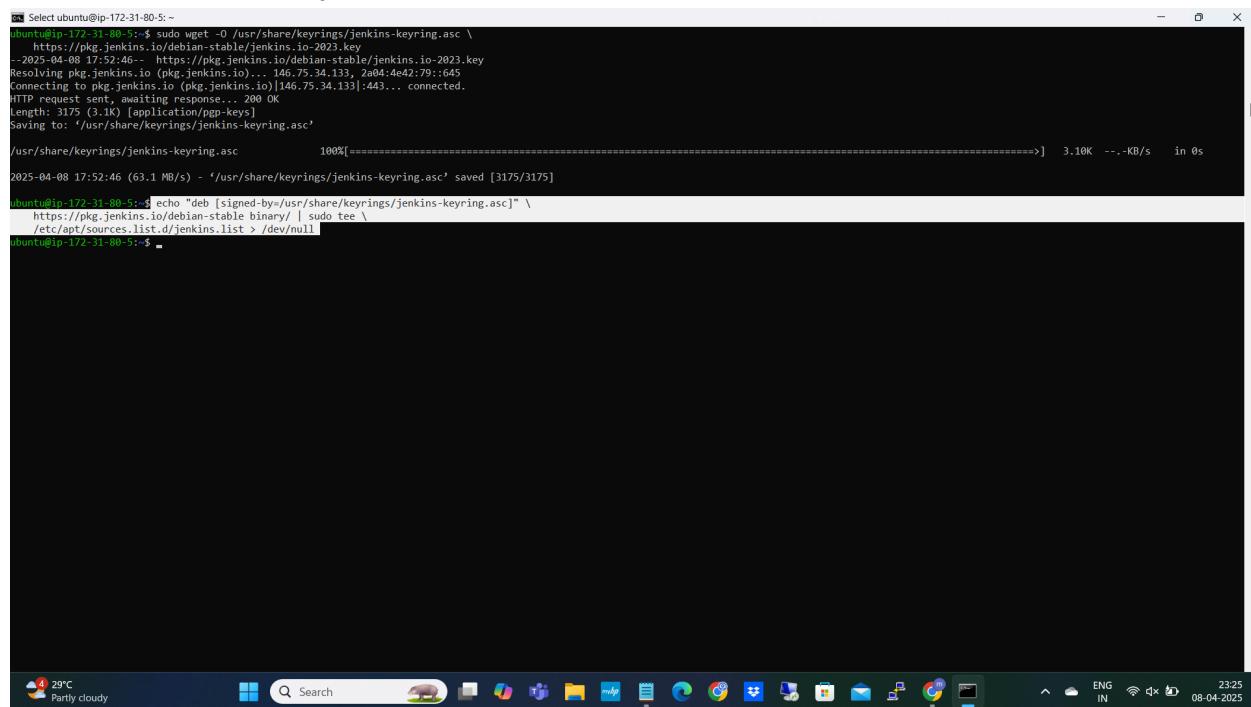
```
ubuntu@ip-172-31-80-5:~$ sudo wget -O /usr/share/keyrings/jenkins-keyring.asc \
https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
--2025-04-08 17:52:46 -- https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
Resolving pkg.jenkins.io (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 terminal window titled "Select ubuntu@ip-172-31-80-5:~" showing the command to add Jenkins to the apt sources list. The output shows the progress of the echo command, which completed successfully at 17:52:46 on April 8, 2025.

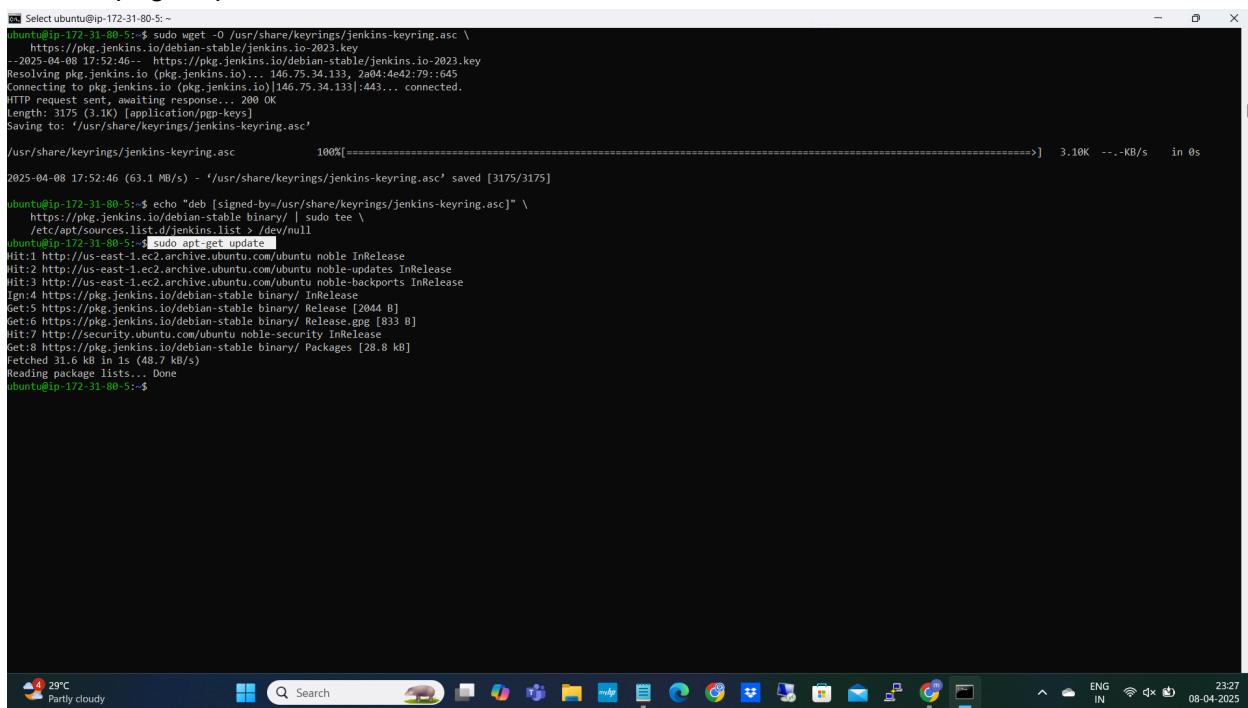
```
ubuntu@ip-172-31-80-5:~$ sudo wget -O /usr/share/keyrings/jenkins-keyring.asc \
https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
--2025-04-08 17:52:46 -- https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
Resolving pkg.jenkins.io (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]

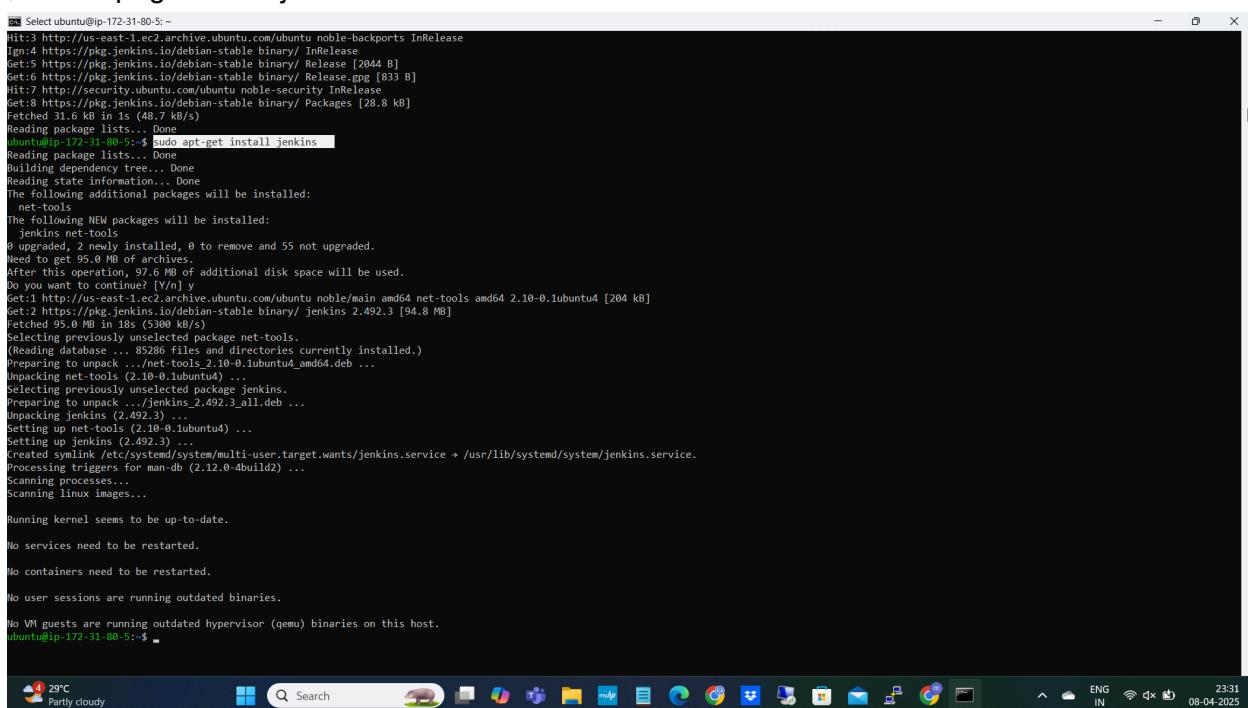
ubuntu@ip-172-31-80-5:~$ echo "deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc]" \
https://pkg.jenkins.io/debian-stable binary/ | sudo tee \
/etc/apt/sources.list.d/jenkins.list > /dev/null
ubuntu@ip-172-31-80-5:~$
```

```
$ 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
```



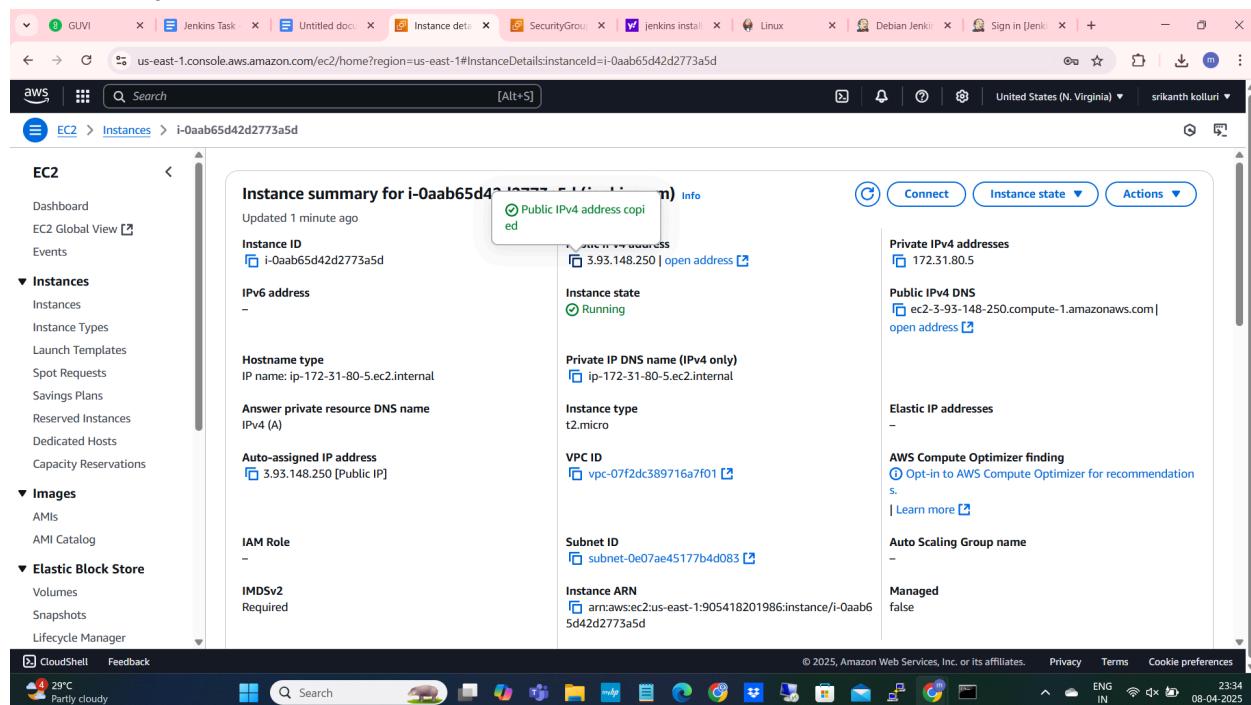
```
ubuntu@ip-172-31-80:~$ sudo apt-get install jenkins
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  net-tools
The following NEW packages will be installed:
  jenkins net-tools
0 upgraded, 2 newly 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 ... 20000 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
```

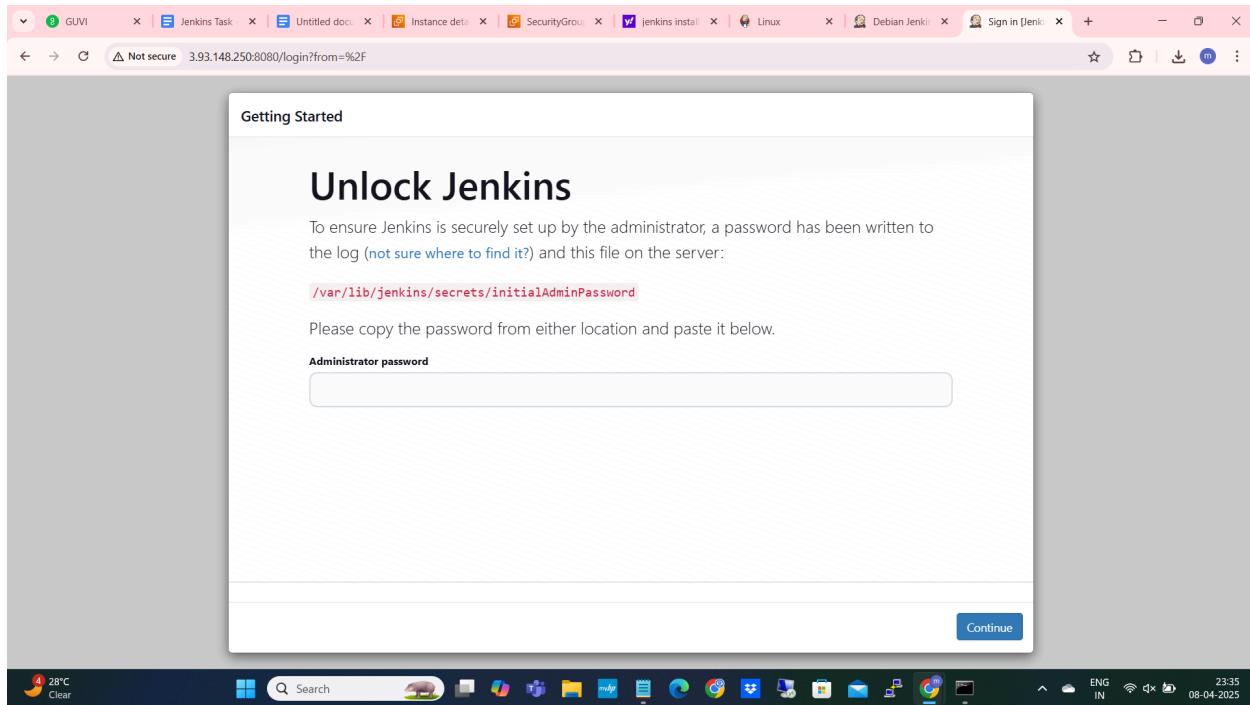
```
root@ip-172-31-80-5: ~  
net-tools  
The following NEW packages will be installed:  
jenkins net-tools  
0 upgraded, 2 newly installed, 0 to remove and 55 not upgraded.  
Need to get 95.0 MB of archives.  
After this operation, 97.6 MB of additional disk space will be used.  
Do you want to continue? [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 :



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.

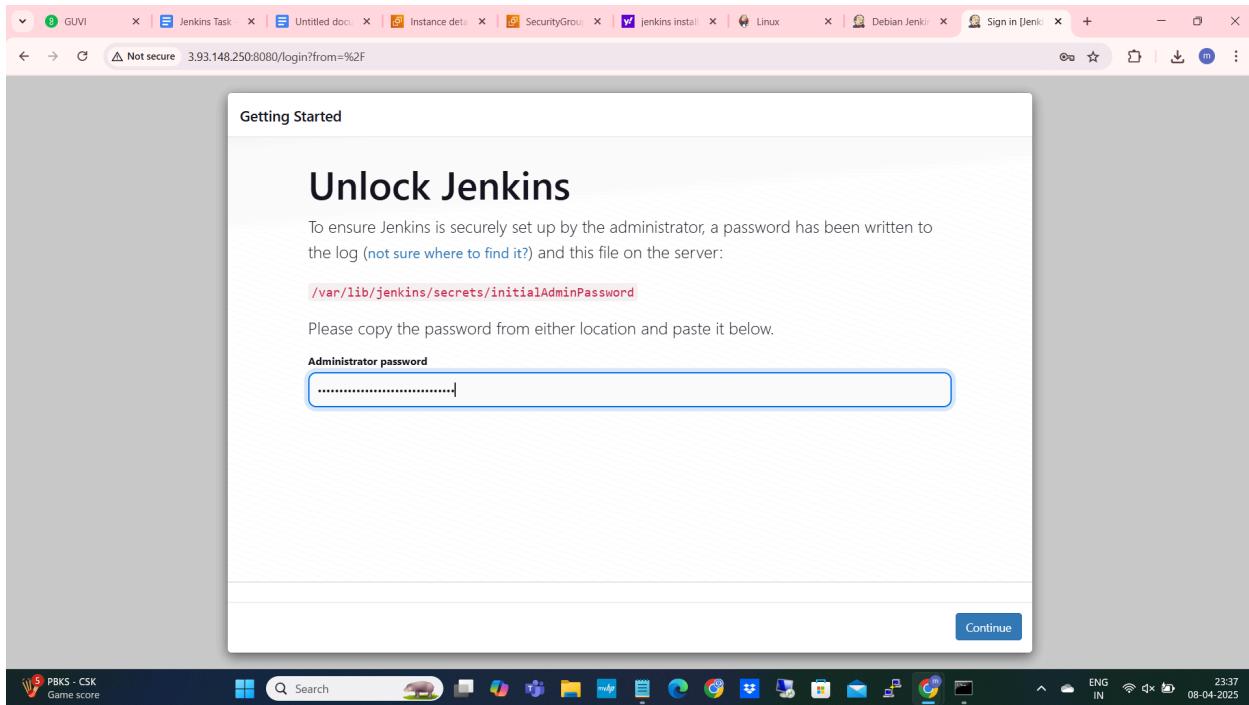
No containers need to be restarted.

No user sessions are running outdated binaries.

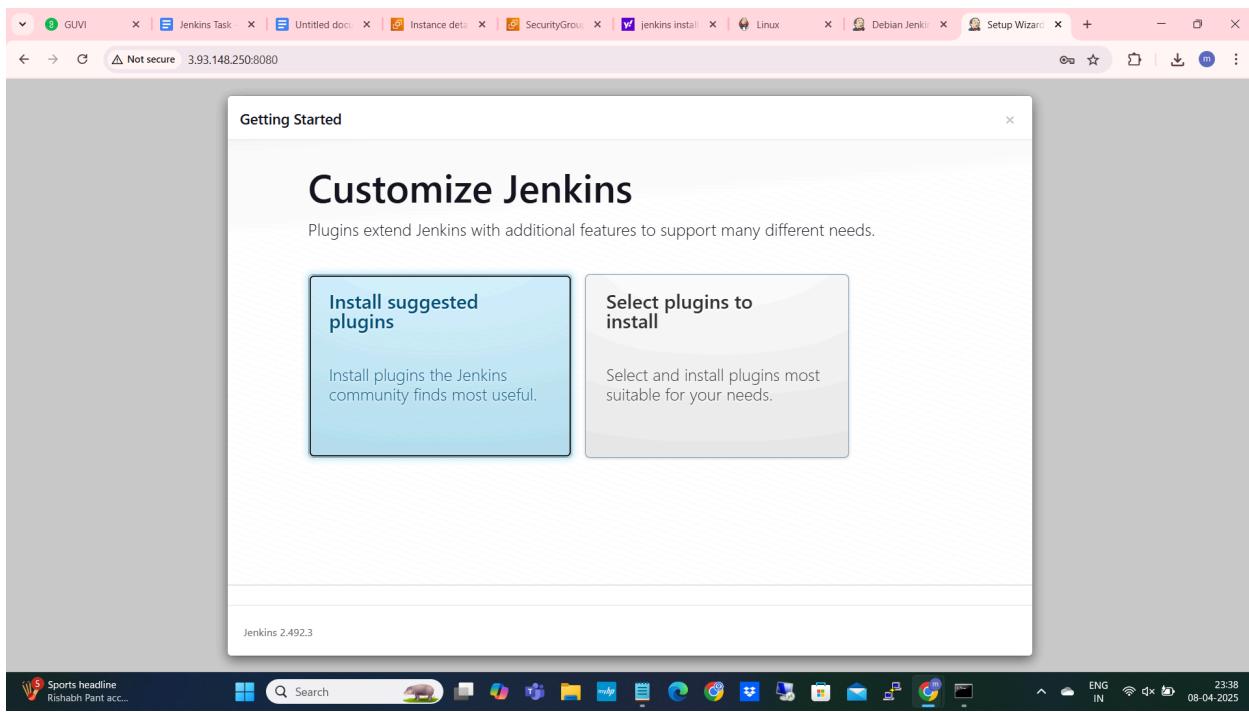
No VM guests are running outdated hypervisor (qemu) binaries on this host.

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:~$
```

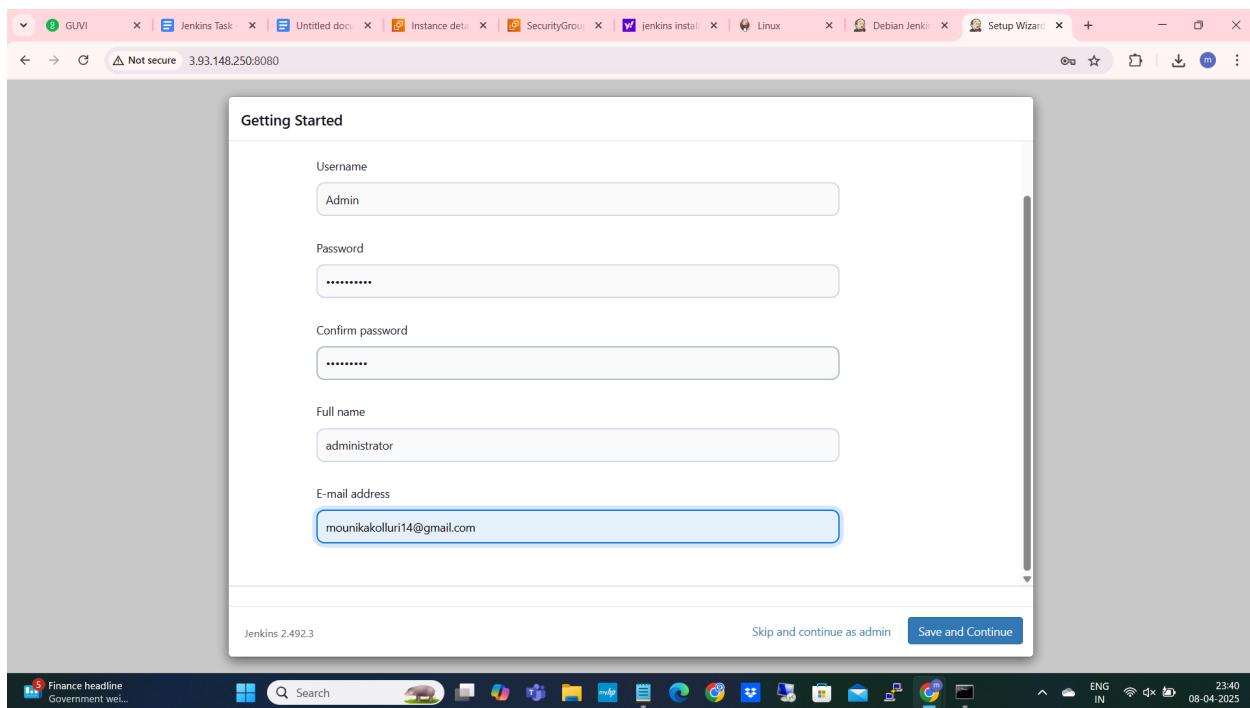
Enter the password and click on continue



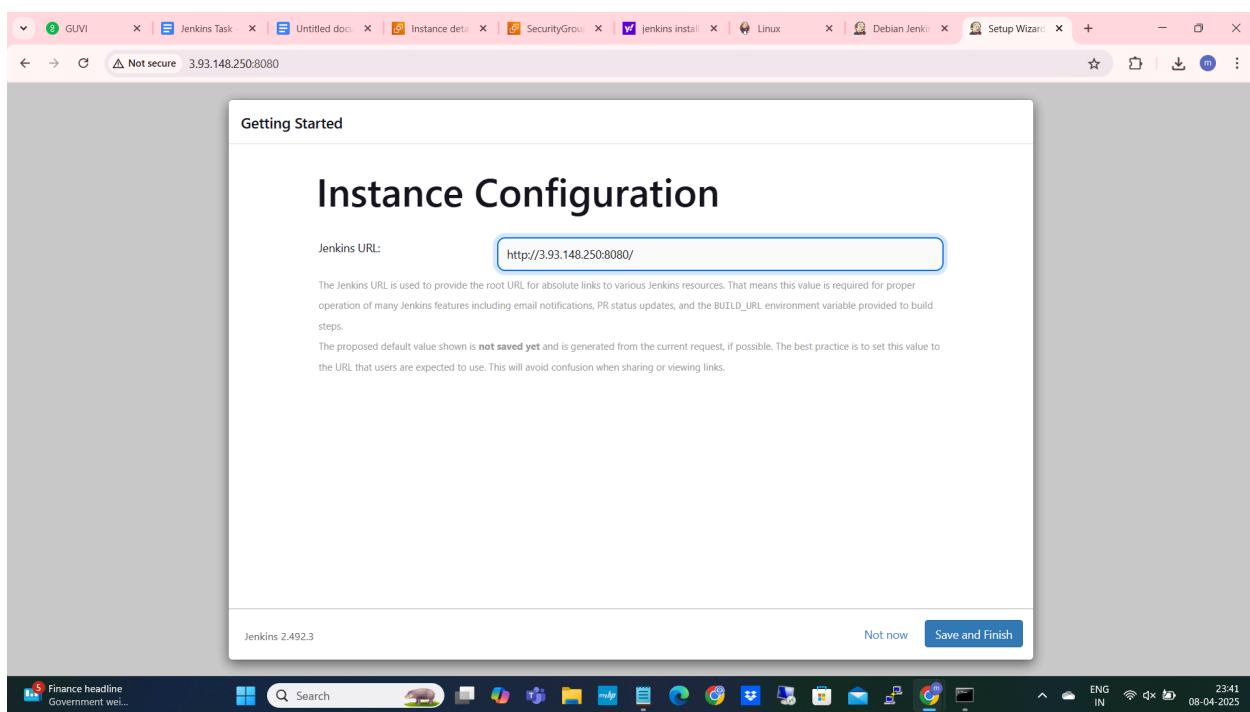
Click on suggested plugins:



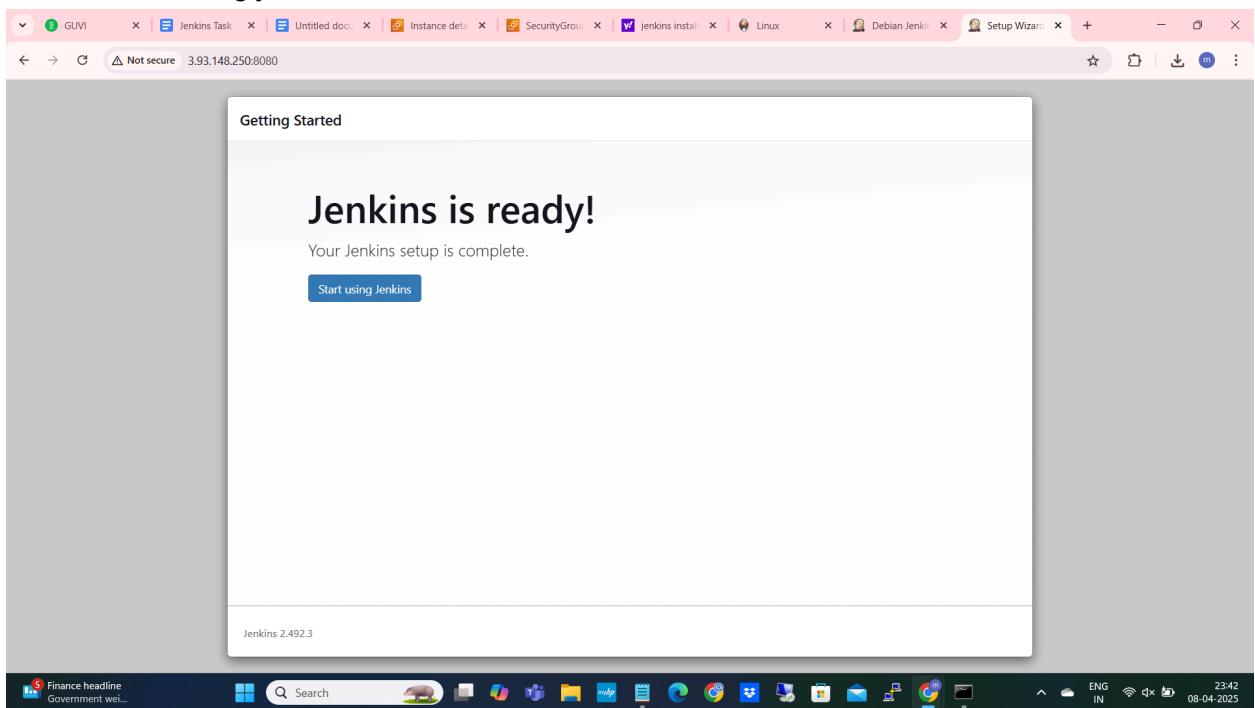
Create user:



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:

The screenshot shows the Jenkins 'New Item' creation interface. In the 'Enter an item name' field, the text 'test-freestyle-job' is entered. Below it, under 'Select an item type', the 'Freestyle project' option is selected, highlighted with a light gray background. The 'Pipeline' and 'Multi-configuration project' options are also listed but not selected. At the bottom right of the form is an 'OK' button. The browser's address bar shows the URL '3.93.148.250:8080/view/all/new/job'. The operating system taskbar at the bottom displays various application icons and the date '09-04-2025'.

Click on freestyle project then click ok

This screenshot is identical to the one above, showing the Jenkins 'New Item' creation page. The 'Freestyle project' option is selected, and the 'OK' button is highlighted with a blue border. The browser address bar and taskbar are also visible.

Provide description:

The screenshot shows the Jenkins job configuration page for a 'test-freestyle-job'. In the 'General' section, the 'Description' field contains the text 'my first freestyle job'. The 'Enabled' switch is turned on. On the left sidebar, there are tabs for General, Source Code Management, Triggers, Environment, Build Steps, and Post-build Actions. At the bottom are 'Save' and 'Apply' buttons.

configuring discard old builds option :

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

Click on save

The screenshot shows a browser window with multiple tabs open, including 'GUVI', 'Jenkins Task', 'Untitled docx', 'Instance data', 'SecurityGroup', 'jenkins install', 'Linux', 'Debian Jenkins', and 'test-freestyle'. The current page is '3.93.148.250:8080/job/test-freestyle-job/configure'. The navigation bar shows 'Dashboard > test-freestyle-job > Configuration'. The main content area is titled 'Configure' and has a 'General' tab selected. Under 'General', there is a section for 'Source Code Management' with a 'Discard old builds' checkbox checked. The 'Strategy' dropdown is set to 'Log Rotation'. The 'Days to keep builds' input field contains '30'. The 'Max # of builds to keep' dropdown is set to '20'. There is also an 'Advanced' button. Below this, there is a 'GitHub project' section with a checkbox that is unchecked. At the bottom of the configuration panel are 'Save' and 'Apply' buttons. The system tray at the bottom shows a weather icon (27°C, Mostly clear), a search bar, and various system icons.

This screenshot shows the same Jenkins configuration page as the previous one, but with the 'Source Code Management' tab selected. The left sidebar still shows 'General' as the active tab. The 'Source Code Management' section contains a note: 'Connect and manage your code repository to automatically pull the latest code for your builds.' It includes two options: 'None' (selected) and 'Git'. The 'Triggers' section is visible below, containing several checkboxes for triggering builds: 'Trigger builds remotely (e.g., from scripts)', 'Build after other projects are built', 'Build periodically', 'GitHub hook trigger for GITScm polling', and 'Poll SCM'. The 'Environment' section is also present, with a note: 'Configure settings and variables that define the context in which your build runs, like credentials, paths, and global parameters.' At the bottom of the configuration panel are 'Save' and 'Apply' buttons. The system tray at the bottom shows a weather icon (27°C, Mostly clear), a search bar, and various system icons.

The screenshot shows a web browser window with multiple tabs open, including Jenkins Task, Untitled doc, Instance data, SecurityGroup, jenkins install, Linux, Debian Jenkins, and test-freestyle. The main content area displays the 'Configuration' page for a 'test-freestyle-job'. The left sidebar has sections: General, Source Code Management, Triggers, Environment (which is selected), Build Steps, and Post-build Actions. The 'Environment' section contains several checkboxes for workspace management and build log inspection. Below it is a 'Build Steps' section with a 'Add build step' button. The 'Post-build Actions' section is shown below, with a 'Save' and 'Apply' button at the bottom.

Adding build steps:

This screenshot is similar to the one above, showing the Jenkins configuration page for the 'test-freestyle-job'. The 'Build Steps' section is highlighted. A dropdown menu is open over the 'Add build step' button, listing various build steps: Execute Windows batch command, Execute shell (which is selected), Invoke Ant, Invoke Gradle script, Invoke top-level Maven targets, Run with timeout, and Set build status to "pending" on GitHub commit. The rest of the configuration page and browser interface are visible.

The screenshot shows the Jenkins job configuration page for a 'test-freestyle-job'. The 'Build Steps' section is active, displaying an 'Execute shell' step. The 'Command' field contains the text 'See the list of available environment variables'. Below the command field is an 'Advanced' dropdown menu. At the bottom of the build steps section is a 'Post-build Actions' tab.

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'. The 'Build Steps' section is active, displaying an 'Execute shell' step. The 'Command' field now contains the text 'echo "building freestyle job"'. The rest of the interface is identical to the previous screenshot, including the 'Post-build Actions' tab at the bottom.

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

echo "building freestyle job"

Advanced

Add build step

Post-build Actions

Save Apply

The screenshot shows the Jenkins job configuration page for 'test-freestyle-job'. The 'Build Steps' section is selected. It contains two 'Execute shell' steps. The first step has the command: `echo "building freestyle job"`. The second step has the command: `java --version`. At the bottom, there are 'Save' and 'Apply' buttons.

Click on apply and save

The screenshot shows the Jenkins job configuration page for 'test-freestyle-job'. The 'Build Steps' section is selected. It contains two 'Execute shell' steps. The first step has the command: `echo "building freestyle job"`. The second step has the command: `java --version`. A green banner at the bottom left indicates the changes have been saved. At the bottom, there are 'Save' and 'Apply' buttons.

Jenkins

Dashboard > test-freestyle-job >

Status: my first freestyle job

Builds: No builds

Click on Build Now:

Jenkins

Dashboard > test-freestyle-job >

Status: ✓ my first freestyle job

Builds:

Filter
Success

#1 6:57 PM

Build executed successfully

Click on build number

The screenshot shows a web browser window with multiple tabs open. The active tab is 'Not secure 3.93.148.250:8080/job/test-freestyle-job/1/'. The page title is 'Jenkins'. The main content area displays build #1, which was started by user 'administrator' on April 8, 2025, at 6:57:44 PM. It took 0.17 seconds. The build status is green. The 'Console Output' section is visible, showing the command-line logs for the build process.

Click on console output:

The screenshot shows a web browser window with multiple tabs open. The active tab is 'Not secure 3.93.148.250:8080/job/test-freestyle-job/1/console'. The page title is 'Jenkins'. The main content area displays the 'Console Output' for build #1. It shows the command-line logs for the build process, including the start message, workspace location, and the execution of the build script. The logs indicate a successful build.

```

Started by user administrator
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/test-freestyle-job
[test-freestyle-job] $ /bin/sh -xe /tmp/jenkins6188313881575847856.sh
+ echo building freestyle job
building freestyle job
[test-freestyle-job] $ /bin/sh -xe /tmp/jenkins10883813941412531610.sh
+ 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)
Finished: SUCCESS

```

Create pipeline job:

I. Declarative pipeline job:

New Item

Enter an item name

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 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 interface 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 of the page are "Save" and "Apply" buttons.

This screenshot shows the same Jenkins configuration interface for the "pipeline-job1" job, but with more options visible under the "General" tab. The "Description" field is empty. The configuration options include:

- 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" tab, the "Triggers" section is partially visible, showing options like "Build after other projects are built", "Build periodically", "GitHub hook trigger for GITScm polling", and "Poll SCM".

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 of the page 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](#)

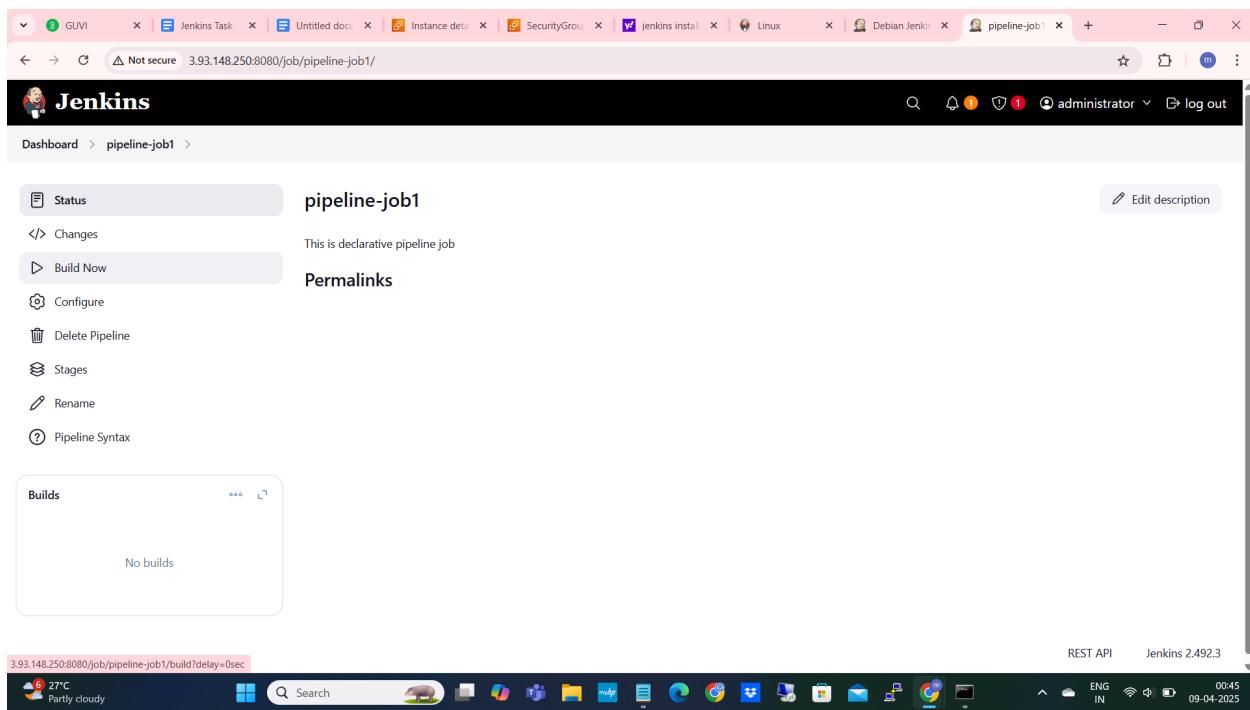
[Stages](#)

[Rename](#)

[Pipeline Syntax](#)

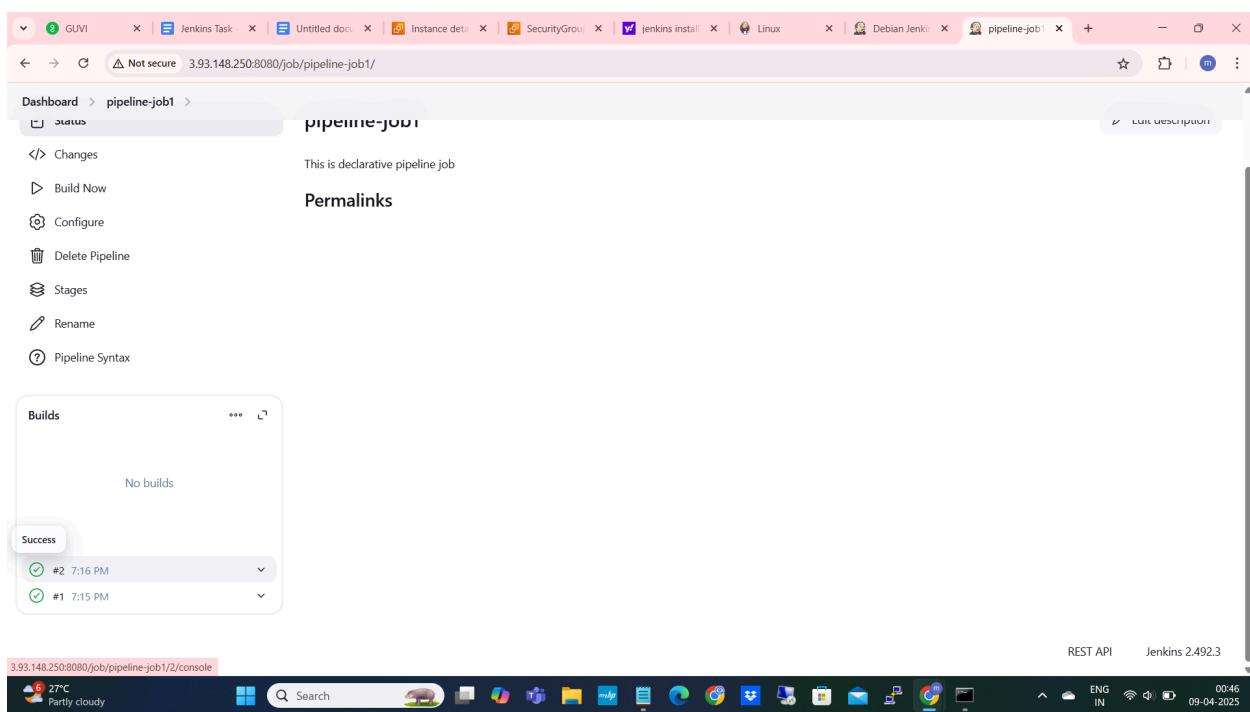
[REST API Jenkins 2.492.3](#)

Click on Build Now:



The screenshot shows a web browser window with multiple tabs open. The active tab is '3.93.148.250:8080/job/pipeline-job1/'. The page title is 'Jenkins'. The main content area is titled 'pipeline-job1' and contains the message 'This is declarative pipeline job'. On the left, there's a sidebar with options like 'Status', 'Changes', 'Build Now' (which is highlighted in yellow), 'Configure', 'Delete Pipeline', 'Stages', 'Rename', and 'Pipeline Syntax'. Below this is a 'Builds' section with a message 'No builds'. At the bottom right of the page, it says 'REST API Jenkins 2.492.3'. The browser's status bar at the bottom shows the URL '3.93.148.250:8080/job/pipeline-job1/build?delay=0sec', the date '09-04-2025', and the time '00:45'. The system tray on the right shows a weather icon for '27°C Partly cloudy'.

Build success:



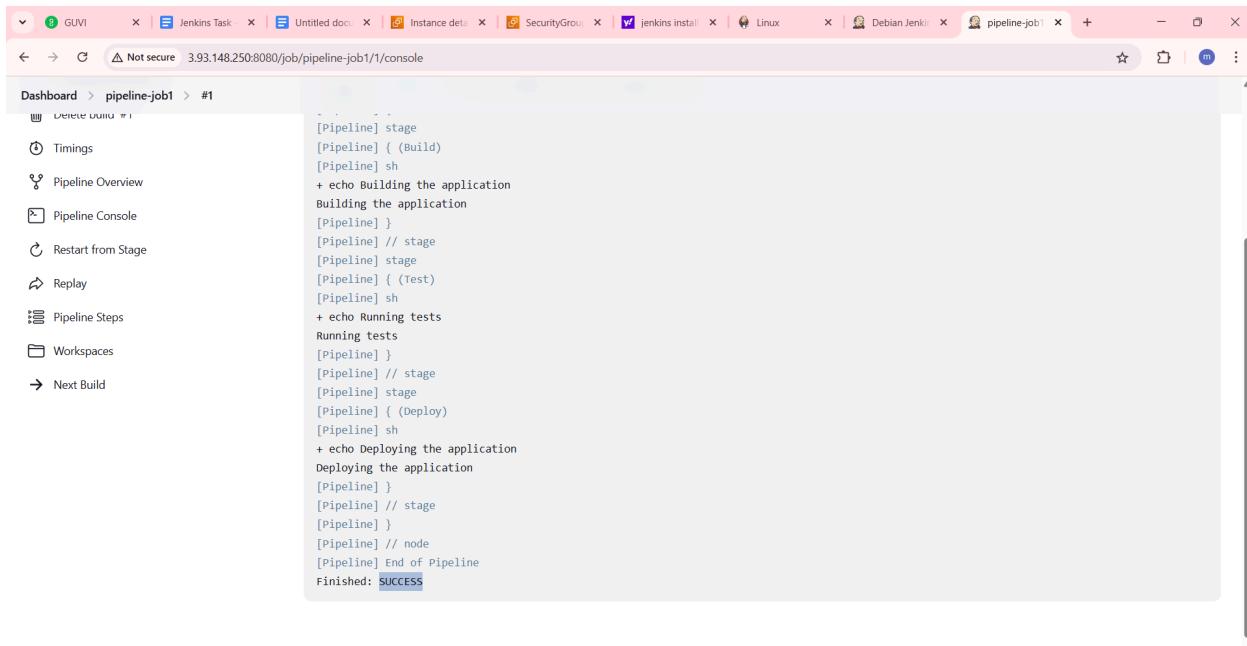
The screenshot shows the same Jenkins page as before, but now the 'Build Now' button has been clicked and the build has completed successfully. The 'Builds' section now shows two entries: '#2 7:16 PM' and '#1 7:15 PM', both marked with a green checkmark indicating success. The rest of the page and the browser interface remain the same, including the 'REST API Jenkins 2.492.3' footer and the system tray at the bottom.

Click on build number: #1
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-job1/1'. The page title is 'Jenkins'. The main content area displays the build status for '#1 (Apr 8, 2025, 7:15:42 PM)'. It includes a summary table with columns for 'Started by user administrator', 'This run spent:', and 'Build duration'. The sidebar on the left lists various Jenkins management options like Status, Changes, Console Output, and Pipeline Overview.

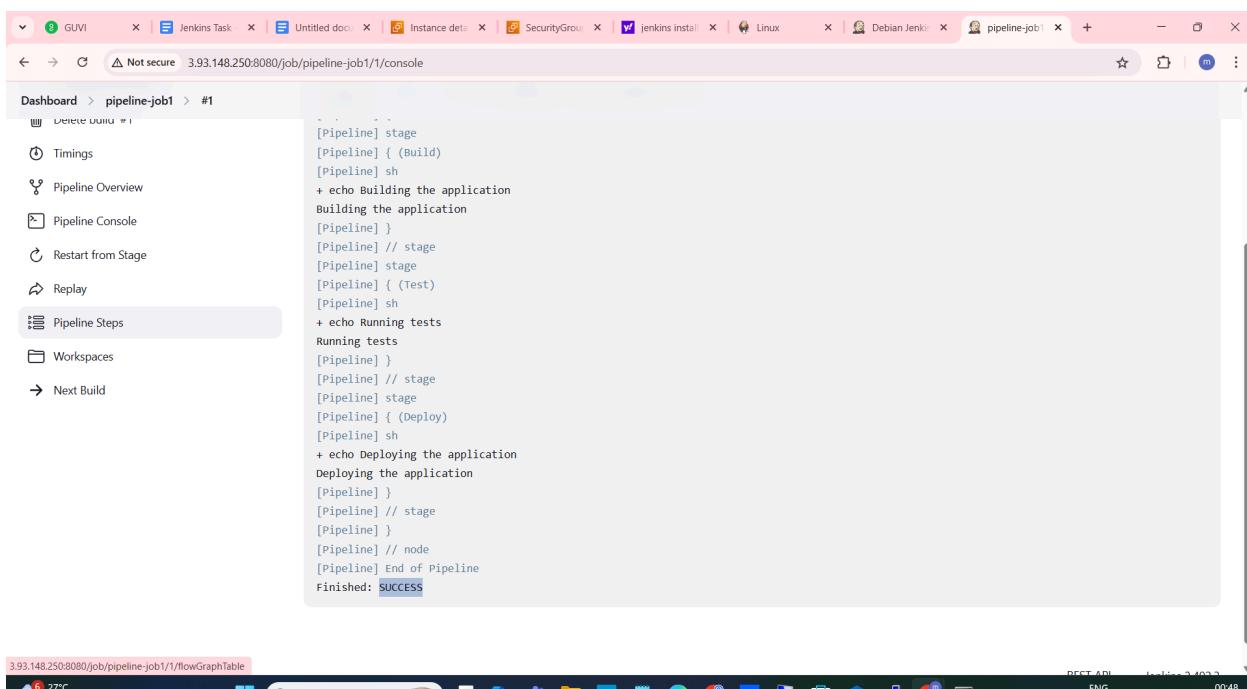
Click on Console output: it will show the build log

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-job1/1/console'. The page title is 'Jenkins'. The main content area displays the build log for '#1'. The log output shows the pipeline stages: Start of Pipeline, node configuration, stages, and deployment steps. The sidebar on the left lists various Jenkins management options like Status, Changes, and Pipeline Overview.



```
[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
```

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



```
[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
```

The screenshot shows a Jenkins Pipeline interface. On the left, there's a sidebar with various navigation links. The 'Pipeline Steps' link is highlighted. The main content area displays a table of pipeline steps:

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 the Jenkins 'Replay' feature. The left sidebar has a 'Replay' link highlighted. The main area is titled 'Replay #1' and contains a 'Main Script' section with the following Groovy code:

```
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    }
}
```

Below the script, there's a 'Pipeline Syntax' section with a 'Run' button.

Scripted pipeline job :

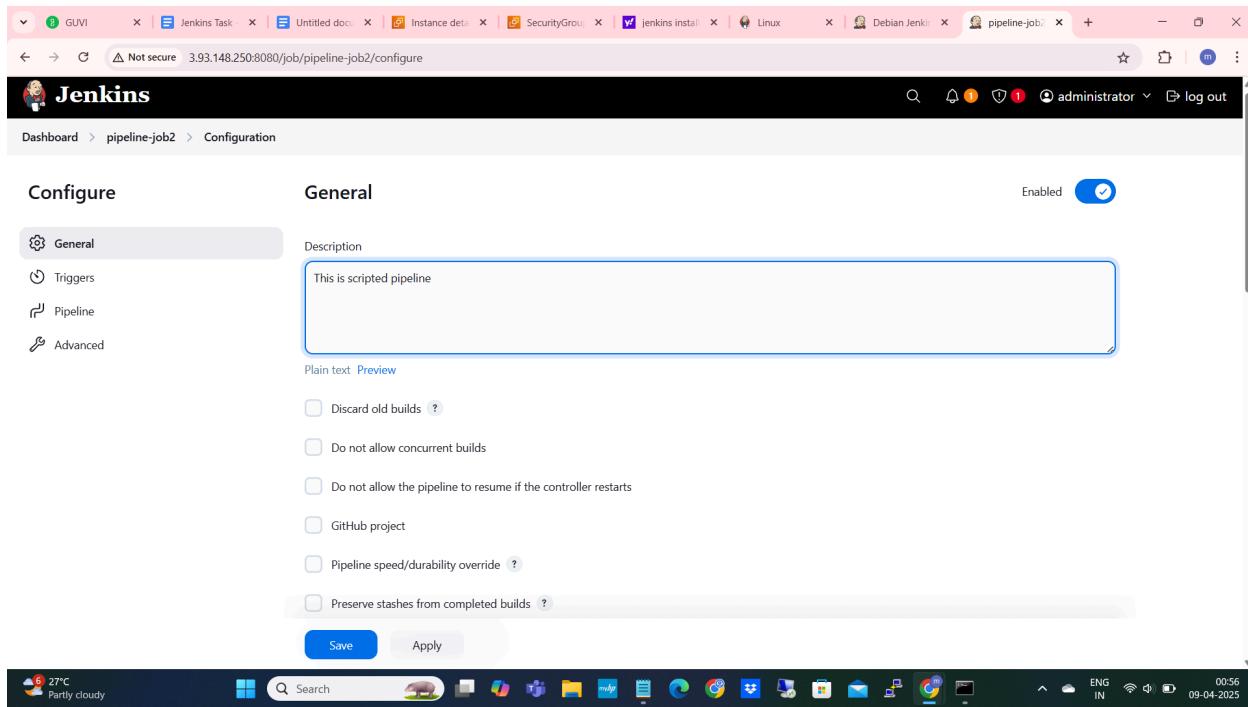
The screenshot shows the Jenkins 'New Item' creation interface. In the 'Enter an item name' field, 'pipeline-job2' is typed. Below the field, there are four options for item types:

- Freestyle project**: Described as a classic, general-purpose job type.
- Pipeline**: Described as orchestrating long-running activities suitable for building pipelines.
- Multi-configuration project**: Described as suitable for projects with many configurations.
- Folder**: Described as creating a container for nested items.

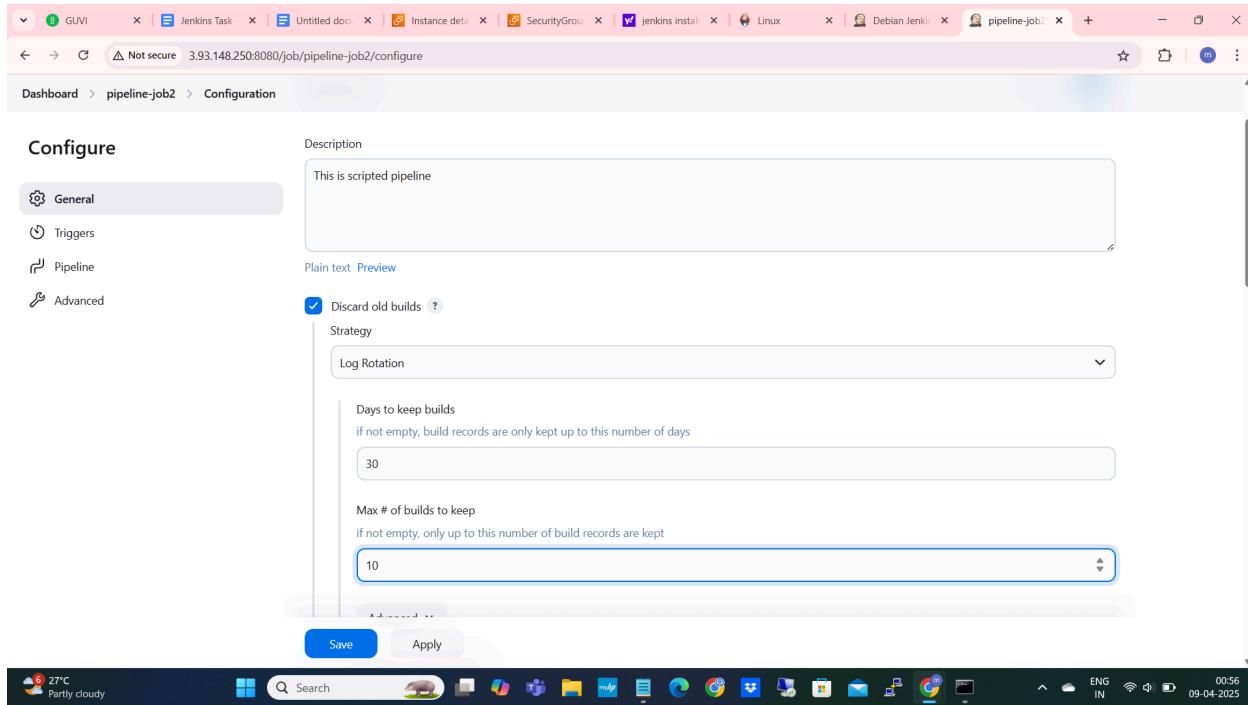
A blue 'OK' button is visible at the bottom of the dialog.

Click on pipeline and Click on ok

The screenshot shows the Jenkins 'New Item' creation interface after the 'Pipeline' option has been selected. The 'OK' button is now highlighted in blue, indicating it is the next step.



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 for build options: 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:

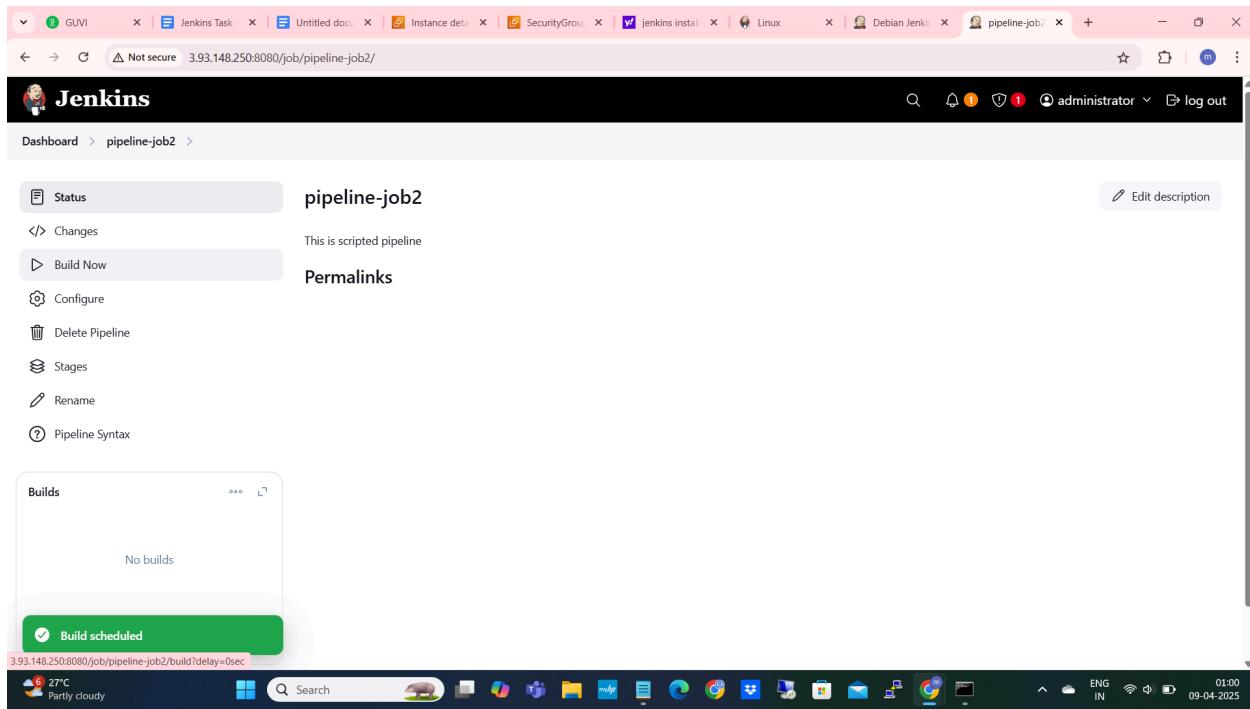
```
1 node {  
2     stage('Build') {  
3         // Commands to build your application  
4         sh 'echo "Building the application"'  
5     }  
6     stage('Test') {  
7         // Commands to test your application  
8         sh 'echo "Running tests"'  
9     }  
10    stage('Deploy') {  
11  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

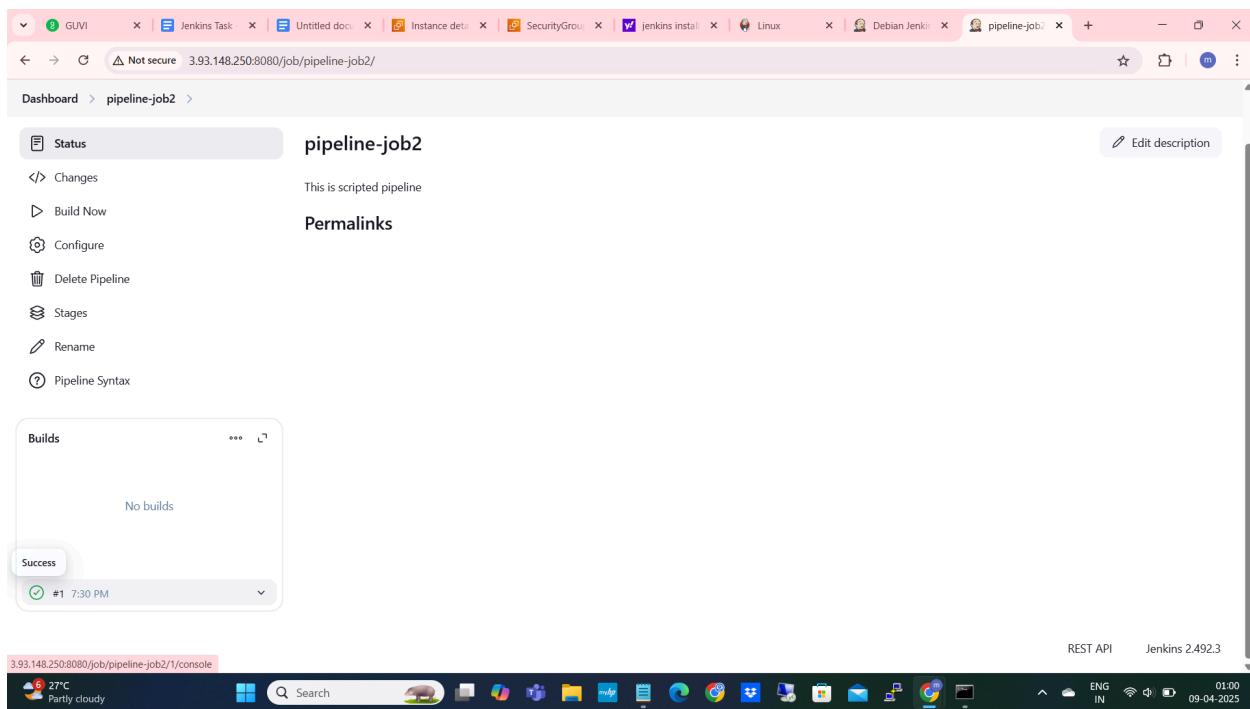
The screenshot shows the Jenkins pipeline job details page for 'pipeline-job2'. The top navigation bar includes links for 'Status', 'Changes', 'Build Now', 'Configure', 'Delete Pipeline', 'Stages', 'Rename', and 'Pipeline Syntax'. The main content area displays the pipeline script and a summary message: '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 'pipeline-job2' configuration. On the left, there's a sidebar with options like Status, Changes, Build Now (which is highlighted in yellow), Configure, Delete Pipeline, Stages, Rename, and Pipeline Syntax. Below the sidebar is a 'Builds' section with a message 'No builds'. At the bottom of the page, there's a green button labeled 'Build scheduled'. The browser's address bar shows the URL '3.93.148.250:8080/job/pipeline-job2/'. The system tray at the bottom right shows the date as 09-04-2025.

Build success:



This screenshot is identical to the previous one, showing the Jenkins configuration page for 'pipeline-job2'. However, the 'Builds' section now displays a message 'Success' above a list of builds, with the first build entry being '#1 7:30 PM'. The rest of the interface and system tray are the same.

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 'Not secure 3.93.148.250:8080/job/pipeline-job2/1'. The page title is 'Jenkins' and the sub-page title is '#1 (Apr 8, 2025, 7:30:30 PM)'. The main content area displays the build status with a green checkmark icon. It includes a summary of the build: 'Started by user administrator' and 'This run spent: 15 ms waiting; 1.4 sec build duration; 1.4 sec total from scheduled to completion.' A sidebar on the left lists various Jenkins management options like Status, Changes, Console Output, and Pipeline Overview. On the right, there are buttons for 'Add description', 'Keep this build forever', and links to 'Started 29 sec ago' and 'Took 1.4 sec'. At the bottom right, it says 'REST API Jenkins 2.492.3'. The system tray at the bottom of the screen shows the date as 09-04-2025.

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 'Not secure 3.93.148.250:8080/job/pipeline-job2/1/console'. The page title is 'Jenkins' and the sub-page title is '#1 (Apr 8, 2025, 7:30:30 PM)'. The main content area displays the build log under the 'Console Output' section, which is indicated by a green checkmark icon. 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
        Deploying the application
    [Pipeline] }
```

The sidebar on the left is identical to the previous screenshot, showing options like Status, Changes, and Console Output. The system tray at the bottom of the screen shows the date as 09-04-2025.

```

[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

Icon: S M L

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



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' (selected), 'Available plugins' (highlighted in grey), 'Installed plugins', 'Advanced settings', and 'Download progress'. The main area has a search bar and a message: 'No updates available'. Below it, a note says: 'Disabled rows are already upgraded, awaiting restart. Shaded but selectable rows are in progress or failed.' The top navigation bar shows the URL '3.93.148.250:8080/manage/pluginManager/' and the user 'administrator'.

The screenshot shows the Jenkins plugin manager interface with the 'Available plugins' tab selected. The left sidebar is identical to the previous screenshot. The main area lists several available plugins with their names, versions, descriptions, and release dates. The 'Install' button is highlighted in blue. The top navigation bar shows the URL '3.93.148.250:8080/manage/pluginManager/available' and the user 'administrator'.

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.v3eeccb_55fa_b_78	

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

Updates

Available plugins

Installed plugins

Advanced settings

Download progress

Plugins

Search role

Install

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

REST API Jenkins 2.492.3

26°C Partly cloudy

Search

Dashboard Manage Jenkins Plugins

Updates

Available plugins

Installed plugins

Advanced settings

Download progress

Plugins

Download progress

Preparation	
• Checking internet connectivity	Success
• Checking update center connectivity	Success
• Success	Success
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

26°C Partly cloudy

Search

ENG IN 01:18 09-04-2025

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'. The main area lists various Jenkins components with green checkmarks indicating they have been successfully installed. A note at the bottom says you can start using the installed plugins right away.

Plugins

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

→ Go back to the top page
(you can start using the installed plugins right away)

→ Restart Jenkins when installation is complete and no jobs are running

REST API Jenkins 2.492.3

Set up the role based strategy:
Go to **Manage Jenkins > Configure Security**.

The screenshot shows the Jenkins 'Configure Security' page under 'Manage Jenkins'. It features several sections: 'System Configuration' (with links to System, Tools, Plugins, Nodes, Clouds, and Appearance), 'Security' (with links to Security, Credentials, Users, and Credential Providers), and 'Status Information' (which includes a system tray-like bar at the bottom). A note at the top of the page states: 'you are running Jenkins on Java 11, support for which will end on or after Mar 31, 2020. Refer to the documentation for more details.'

Build Queue

No builds in the queue.

Build Executor Status 0/2

System Configuration

- System: Configure global settings and paths.
- Tools: Configure tools, their locations and automatic installers.
- Plugins: Add, remove, disable or enable plugins that can extend the functionality of Jenkins.
- Nodes: Add, remove, control and monitor the various nodes that Jenkins runs jobs on.
- Clouds: Add, remove, and configure cloud instances to provision agents on-demand.
- Appearance: Configure the look and feel of Jenkins.

Security

- Security: Secure Jenkins; define who is allowed to access/use the system.
- Credentials: Configure credentials.
- Users: Create/delete/modify users that can log in to this Jenkins.
- Credential Providers: Configure the credential providers and types.

Status Information

3.93.148.250:8080/manage/configureSecurity

26°C Partly cloudy

Search

ENG IN 01:26 09-04-2025

Select Role based strategy under Authorization

The screenshot shows the Jenkins 'Security' configuration page. In the 'Authorization' section, the dropdown menu is open, displaying several 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 highlighted with a blue selection bar. At the bottom of the page, there are 'Save' and 'Apply' buttons.

Click on apply and save

The screenshot shows the Jenkins 'Security' configuration page after saving the changes. The 'Authorization' dropdown now shows 'Role-Based Strategy'. A green banner at the bottom left indicates that the changes have been saved. The rest of the page structure is identical to the previous screenshot, with the 'Save' and 'Apply' buttons visible.

Create users:

Go to Manage Jenkins > users

The screenshot shows the Jenkins Manage Jenkins interface. The 'Users' section is highlighted with a light gray background. Other sections like 'Nodes', 'Clouds', 'Appearance', 'Security', 'Credentials', 'Manage and Assign Roles', 'System Information', 'System Log', and 'Load Statistics' are visible but not highlighted.

Click on Create user:

1. Developer user

The screenshot shows the Jenkins Users page. It displays a single user entry for 'administrator'. The table has columns for 'User ID' (Admin) and 'Name' (administrator). A 'Create User' button is located at the top right of the table.

User ID	Name
Admin	administrator

The screenshot shows the Jenkins addUser page. It features a form with fields for 'User ID' (set to 'admin') and 'Name' (set to 'admin'). Below the form is a note: '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.' At the bottom right is a note: 'Jenkins 2.492.3'.

Not secure 3.93.148.250:8080/manage/securityRealm/addUser

Create User

Username: developer

Password: *****

Confirm password: *****

Full name: developer

E-mail address: developer@gmail.com

Create User

Click on Create user

Not secure 3.93.148.250:8080/securityRealm/

Users 2

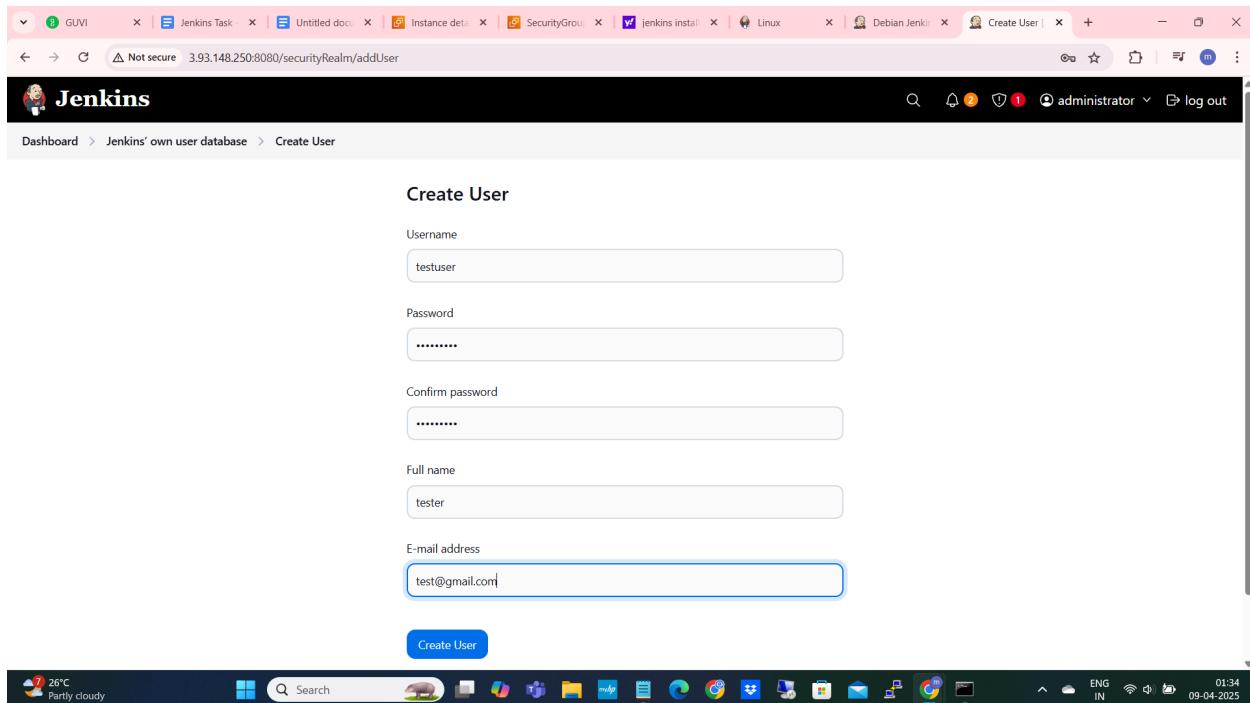
These users can log into Jenkins. This is a sub set of [this list](#), which also contains auto-created users who really just made some commits on some projects and have no direct Jenkins access.

User ID	Name	Action
Admin	administrator	
developer	developer	

+ Create User



Create testuser:

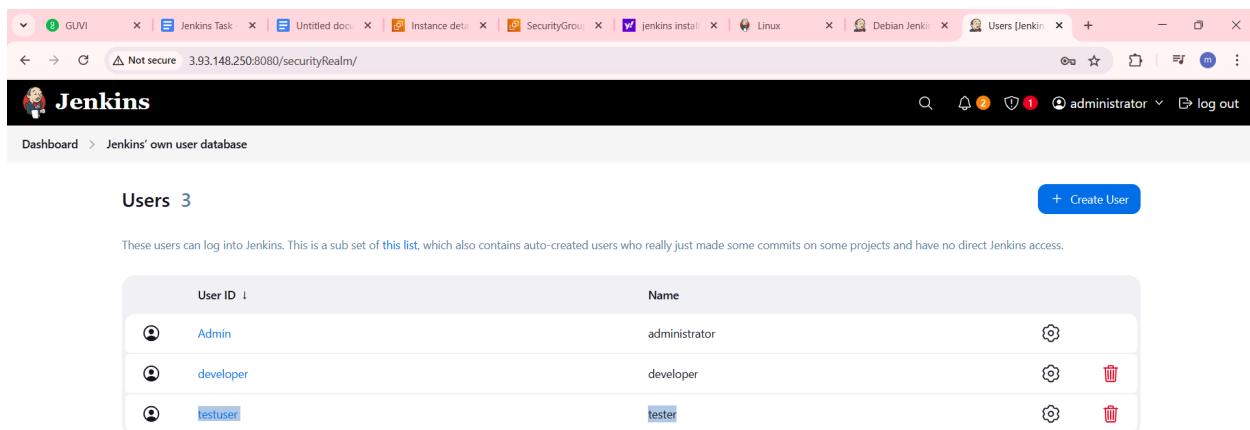


The screenshot shows the Jenkins 'Create User' form. The fields filled are:

- 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.

Click on Create user



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

User ID	Name	Action
Admin	administrator	
developer	developer	
testuser	tester	

A blue '+ Create User' button is at the top right.

Jenkins 2.492.3



Assign roles to the user:

Go to Manage Jenkins > Manage and Assign Roles

The screenshot shows the Jenkins Manage Jenkins interface. In the center, under the 'Security' heading, there is a section titled 'Manage and Assign Roles' which is highlighted with a gray background. This section contains the following text: 'Handle permissions by creating roles and assigning them to users/groups'. To the left of this section is a lock icon, and to the right are icons for 'Credentials' and 'Users'. Other sections visible include 'Nodes', 'Clouds', 'Appearance', 'System Information', 'About Jenkins', 'System Log', and 'Load Statistics'.

Provide Role names:

The screenshot shows the Jenkins Manage Roles page. At the top, there is a navigation path: Dashboard > Manage Jenkins > Manage and Assign Roles > Manage Roles. The main area features a table titled 'Manage Roles' with columns for 'Role', 'Overall', 'Credentials', 'Agent', 'Job', 'Run', 'View', 'SCM', and 'Metrics'. The 'Overall' column has sub-options like 'View', 'ThreadDump', 'HealthCheck', 'Tag', and 'Delete'. The 'Role' column currently lists 'Administrator' and 'admin'. Below the table is a search bar and a button labeled 'Add'. A separate section titled 'Item roles' is shown at the bottom, featuring tabs for 'Credentials', 'Job', 'Run', 'View', 'SCM', and 'Metrics', with 'Credentials' being the active tab. There are 'Save' and 'Apply' buttons at the bottom of this section.

The screenshot shows the Jenkins Manage Roles page. In the Global roles section, there is a table with columns for Role, Overall, Credentials, Agent, Job, Run, View, SCM, and Metrics. The 'Overall' column contains checkboxes for various Jenkins features: View, ThreadDump, HealthCheck, Workspace, Create, Configure, Update, Replay, Delete, Read, Tag, and Tag. The 'Job' column contains checkboxes for Discover, Delete, Move, Configure, Cancel, Build, Provision, Disconnect, Delete, Create, Connect, Domains, and ManageDomains. The 'Run' column contains checkboxes for Run, View, SCM, and Metrics. The 'View' column contains checkboxes for View, ThreadDump, HealthCheck, Workspace, Create, Configure, Update, Replay, Delete, Read, Tag, and Tag. The 'SCM' column contains checkboxes for View, ThreadDump, HealthCheck, Workspace, Create, Configure, Update, Replay, Delete, Read, Tag, and Tag. The 'Metrics' column contains checkboxes for View, ThreadDump, HealthCheck, Workspace, Create, Configure, Update, Replay, Delete, Read, Tag, and Tag. A row for the 'admin' user has all checkboxes checked. Below the table, there is a 'Role to add' input field containing 'developer' and an 'Add' button.

Click on add

The screenshot shows the Jenkins Manage Roles page after adding the 'developer' role. The 'Overall' column for the 'admin' user now includes a checkbox for 'developer'. The rest of the interface is identical to the previous screenshot, showing the same tables for Agent, Job, Run, View, SCM, and Metrics, and the same list of Jenkins features with checkboxes.

Add testuser role :

The screenshot shows the Jenkins Manage Roles interface. In the top navigation bar, the URL is 3.93.148.250:8080/manage/role-strategy/. The left sidebar has links for Manage Roles, Assign Roles, Permission Templates, and Role Strategy Macros. The main area shows a table of roles (admin, developer, testuser) with checkboxes for various Jenkins features like View, ThreadDump, HealthCheck, etc. A search bar at the bottom of the table contains 'testuser'. Below the table, there's a section titled 'Item roles' with a grid of Jenkins features. A 'Role to add' input field contains 'testuser'. At the bottom are 'Save' and 'Apply' buttons.

Role	Pattern	Template	Credentials	Job	Run	View	SCM	Metrics
				Configure	Discover	Create	View	
				Move	Replay	Delete	ThreadDump	
				Delete	Configure	Create	HealthCheck	
				Cancel	Build	Update	Tag	
				Build	View	View	Read	
				View	Update	SCM	Read	
				Update	Workspace	Metrics	Delete	
				ManageDomains	Run	View	Create	
				Delete	Run	SCM	Configure	
				Create	View	Metrics	Update	
					Discover	Metrics	Delete	
					Configure	View	Move	
					Move	ThreadDump	Read	
					Delete	HealthCheck	Delete	
					Cancel	Tag	Create	
					Build	Read	Update	
					View	Delete	Configure	
					Update	View	Update	
					Workspace	SCM	View	
					Run	Metrics	ThreadDump	
					View	View	HealthCheck	
					SCM	Metrics	Tag	
					Metrics	Metrics	Read	
					View	View	Delete	
					ThreadDump	ThreadDump	Create	
					HealthCheck	HealthCheck	Update	
					Tag	Tag	Delete	
					Read	Read	Configure	
					Delete	Delete	Update	
					View	View	View	
					SCM	SCM	Metrics	
					Metrics	Metrics	View	
					View	View	ThreadDump	
					ThreadDump	ThreadDump	HealthCheck	
					HealthCheck	HealthCheck	Tag	
					Tag	Tag	Read	
					Read	Read	Delete	
					Delete	Delete	Create	
					Create	Create	Configure	
					Configure	Configure	Update	
					Update	Update	Delete	
					Delete	Delete	Create	
					Create	Create	Update	
					Update	Update	View	
					View	View	ThreadDump	
					ThreadDump	ThreadDump	HealthCheck	
					HealthCheck	HealthCheck	Tag	
					Tag	Tag	Read	
					Read	Read	Delete	
					Delete	Delete	Create	
					Create	Create	Configure	
					Configure	Configure	Update	
					Update	Update	View	
					View	View	ThreadDump	
					ThreadDump	ThreadDump	HealthCheck	
					HealthCheck	HealthCheck	Tag	
					Tag	Tag	Read	
					Read	Read	Delete	
					Delete	Delete	Create	
					Create	Create	Configure	
					Configure	Configure	Update	
					Update	Update	View	
					View	View	ThreadDump	
					ThreadDump	ThreadDump	HealthCheck	
					HealthCheck	HealthCheck	Tag	
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					Create	Create	Configure	
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					View	View	ThreadDump	
					ThreadDump	ThreadDump	HealthCheck	
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					Create	Create	Configure	
					Configure	Configure	Update	
					Update	Update	View	
					View	View	ThreadDump	
					ThreadDump	ThreadDump	HealthCheck	
</td								

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

The screenshot shows the Jenkins Manage Roles interface. On the left, there's a sidebar with links: Manage Roles, Assign Roles, Permission Templates, and Role Strategy Macros. The main area is titled "Manage Roles" and shows a grid of permissions for three users: admin, developer, and testuser. The grid has columns for Overall, Credentials, Agent, Job, Run, View, SCM, and Metrics. Each column contains several sub-actions like Create, Delete, Read, etc. The "admin" row has checked boxes in every column. The "developer" and "testuser" rows have checked boxes in some columns, notably "View" and "Metrics". Below the grid, there's a "Role to add" input field containing "testuser" and an "Add" button. At the bottom are "Save" and "Apply" buttons.

Click on Apply and save

Click Assign Roles to the users:

The screenshot shows the Jenkins Assign Roles interface. On the left, there's a sidebar with links: Manage Roles, Assign Roles, Permission Templates, and Role Strategy Macros. The main area is titled "Assign Roles" and shows a grid of User/Groups. The grid has columns for User/Group, testuser, developer, and admin. The "admin" row has a checked checkbox in the "User/Group" column. Below the grid, there are "Add User" and "Add Group" buttons. At the bottom are "Save" and "Apply" buttons.

Add created user Names/IDs:

The screenshot shows the Jenkins 'Assign Roles' page. In the 'Global roles' section, under the 'User/Group' column, there is a row for 'developer'. The 'admin' checkbox is checked, while 'developer' and 'testuser' are unchecked. Below this, there are sections for 'Anonymous', 'Authenticated Users', and 'administrator', each with checkboxes for 'admin', 'developer', and 'testuser'. At the bottom of the page are 'Add User' and 'Add Group' buttons, and 'Save' and 'Apply' buttons.

Click on Add user:

The screenshot shows the same Jenkins 'Assign Roles' page as before, but with a modal dialog box overlaid. The dialog is titled 'User ID:' and contains a single input field with the value 'developer'. Below the input field are 'Cancel' and 'OK' buttons. The background of the page is darkened to show the underlying interface.

Click on Ok—the user added

The screenshot shows the Jenkins 'Assign Roles' page. In the 'Global roles' section, there is a table with columns 'User/Group' and 'admin', 'developer', and 'testuser'. Under 'admin', there are three checkboxes: 'admin' (checked), 'developer' (unchecked), and 'testuser' (unchecked). Under 'developer', there are three checkboxes: 'admin' (unchecked), 'developer' (checked), and 'testuser' (unchecked). Below the table are 'Add User' and 'Add Group' buttons. At the bottom of the page are 'Save' and 'Apply' buttons.

Add testuser role:

The screenshot shows the Jenkins 'Assign Roles' page with a modal dialog titled 'User ID:' in the foreground. The input field contains 'testuser'. The background shows the 'Global roles' section with the same table and checkboxes as the previous screenshot. Below the table are 'Add User' and 'Add Group' buttons. At the bottom of the page are 'Save' and 'Apply' buttons.

Click on ok

The screenshot shows the Jenkins 'Assign Roles' page. At the top, there are tabs for 'Manage Roles' and 'Assign Roles'. The 'Assign Roles' tab is selected. Below the tabs, there are two sections: 'Global roles' and 'Item roles'. In the 'Global roles' section, a table lists users and groups ('User/Group') against roles ('admin', 'developer', 'testuser'). Under 'Anonymous', 'Authenticated Users' is checked. Under 'administrator', 'admin' is checked. Under 'developer', 'developer' is checked. Under 'tester', 'testuser' is checked. There are 'Add User' and 'Add Group' buttons below the table. In the 'Item roles' section, a table lists users and groups ('User/Group') against roles ('admin', 'developer', 'testuser'). Under 'Anonymous', 'Authenticated Users' is checked. Under 'administrator', 'admin' is checked. Under 'developer', 'developer' is checked. Under 'tester', 'testuser' is checked. There are 'Save' and 'Apply' buttons at the bottom of the table. The browser address bar shows the URL: 3.93.148.250:8080/manage/role-strategy/assign-roles. The system tray at the bottom right shows the date as 09-04-2025.

Select the roles of each User:

This screenshot is identical to the one above, showing the Jenkins 'Assign Roles' page. The 'Assign Roles' tab is selected. The 'Global roles' and 'Item roles' sections show the same role assignments for users and groups. The browser address bar shows the URL: 3.93.148.250:8080/manage/role-strategy/assign-roles. The system tray at the bottom right shows the date as 09-04-2025.

Click on Apply and Save

The screenshot shows the Jenkins 'Assign Roles' configuration page. Under 'Global roles', the 'administrator' role has 'jenkins' checked under 'User/Group'. The 'developer' and 'tester' roles have both 'jenkins' and 'developer' checked. Under 'Item roles', 'Anonymous' and 'Authenticated Users' are selected. A green 'Saved' button is visible at the bottom left, and 'Save' and 'Apply' buttons are at the bottom right.

Lets check the Roles and Permissions of the users by Login

Login with Test user:

The screenshot shows the Jenkins 'Sign in to Jenkins' page. On the left is a cartoon character holding a coffee cup. The right side contains fields for 'Username' (testuser) and 'Password' (redacted). There is a 'Keep me signed in' checkbox and a 'Sign in' button. The status bar at the bottom indicates it's 09-04-2025, 02:10, ENG IN.

The screenshot shows the Jenkins dashboard with the following details:

- Build History:** Shows three builds: pipeline-job1 (#2), pipeline-job2 (#1), and test-freestyle-job (#1).
- Build Queue:** No builds in the queue.
- Build Executor Status:** 0/2 executors available.
- Table:** Displays build information across columns: Status (S), Warning (W), Name, Last Success, Last Failure, and Last Duration.

At the bottom, there are links for REST API and Jenkins 2.492.3.

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:

The screenshot shows the Jenkins pipeline-job1 details page with the following sections:

- Status:** Pipeline job1 is successful.
- Changes:** No changes listed.
- Stages:** No stages listed.
- Builds:** A list of builds with their status and timestamps:
 - 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
- Permalinks:** Links to the job's configuration and history.

At the bottom, there are links for REST API and Jenkins 2.492.3.

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

Click on build id:

The screenshot shows the Jenkins pipeline-job1 dashboard. At the top, there is a navigation bar with tabs for 'Status' (which is selected), 'Changes', and 'Stages'. Below the navigation bar, the title 'pipeline-job1' is displayed with a green checkmark icon. A sub-header states 'This is declarative pipeline job'. Under the 'Permalinks' section, there is a table titled 'Builds' showing the following data:

Build	Time	Status
Last build (#2)	1 hr 26 min ago	Success
Last stable build (#2)	1 hr 26 min ago	Success
Last successful build (#2)	1 hr 26 min ago	Success
Last completed build (#2)	1 hr 26 min ago	Success

Below the table, there are two dropdown menus showing build history: one for 'Today' showing '#2 7:16 PM' and '#1 7:15 PM', and another for 'Yesterday'.

The screenshot shows the Windows taskbar. The address bar indicates the URL is 3.93.148.250:8080/job/pipeline-job1/2/. The taskbar also shows various system icons like battery level (26°C), weather (Mostly clear), and system status (ENG IN). The Jenkins browser window is visible in the background.

The screenshot shows the Jenkins pipeline-job1/2 build details page. The title is '#2 (Apr 8, 2025, 7:16:23 PM)'. The left sidebar includes links for 'Status', 'Changes', 'Console Output', 'View Build Information', 'Timings', 'Pipeline Overview', 'Pipeline Console', 'Pipeline Steps', and 'Previous Build'. The main content area displays the following information:

- Started by user **administrator** (with a clock icon)
- This run spent:
 - 14 ms waiting;
 - 1.9 sec build duration;
 - 1.9 sec total from scheduled to completion.
- Output: '</> No changes.'

On the right side, there are two small text snippets: 'Started 1 hr 27 min ago' and 'Took 1.9 sec'.

The screenshot shows the Windows taskbar again. The address bar now shows the completed build URL: 3.93.148.250:8080/job/pipeline-job1/2/. The taskbar icons remain the same, indicating the build has finished.

The screenshot shows the Jenkins pipeline job #2 status page. The top navigation bar includes tabs for GUVI, Jenkins Task, Untitled doc, Instance data, SecurityGroup, jenkins install, Linux, Debian Jenkins, and pipeline-job1. The main content area displays the build status: #2 (Apr 8, 2025, 7:16:23 PM). It shows the build was started by user administrator and took 1.9 sec. The left sidebar contains links for Status, Changes, Console Output, View Build Information, Timings, Pipeline Overview, Pipeline Console, Pipeline Steps, and Previous Build.

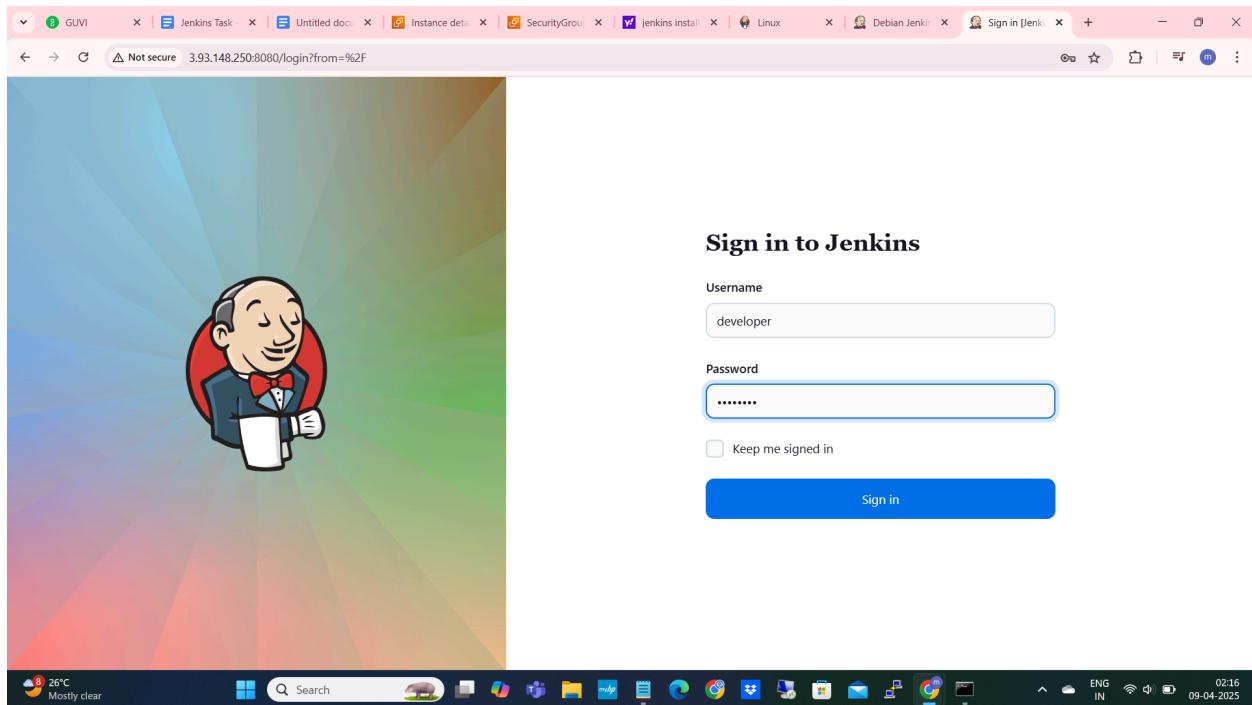


Click on console output

The screenshot shows the Jenkins pipeline job #2 console output page with the 'Console Output' tab selected. The main content area displays the build log, which includes commands like [Pipeline] Start of Pipeline, [Pipeline] node, Running on Jenkins in /var/lib/jenkins/workspace/pipeline-job1, and various stages and scripts being executed. The left sidebar contains links for Status, Changes, View Build Information, Timings, Pipeline Overview, Pipeline Console, Pipeline Steps, and Previous Build. On the right, there are buttons for Download, Copy, and View as plain text.

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

Now Login to the Developer:



The screenshot shows the Jenkins dashboard. At the top, there is a navigation bar with the Jenkins logo, a search bar, and user information ("developer" and "log out"). Below the navigation bar, the dashboard has a "Dashboard" link and a "Build History" section. The main area displays a table of builds:

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

At the bottom, there are icons for "Icon: S M L" and a "REST API" link.



Click on any job:

The screenshot shows a Jenkins job configuration page for 'pipeline-job1'. The top navigation bar includes tabs for 'Status' (highlighted), 'Changes', 'Build Now' (which is currently selected), 'Configure', 'Delete Pipeline', 'Stages', 'Rename', and 'Pipeline Syntax'. The main content area shows the job's status as 'This is declarative pipeline job'. It lists four builds: #2 (7:16 PM), #1 (7:15 PM), 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), and Last completed build (#2) (1 hr 30 min ago). Below this is a 'Builds' section with a table showing two rows: #2 (7:16 PM) and #1 (7:15 PM). A 'Build scheduled' button is visible at the bottom of the build list. The bottom of the screen shows a Windows taskbar with various icons and system status.

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

Click on Build Now:

The screenshot shows the same Jenkins job configuration page for 'pipeline-job1'. The 'Build Now' button has been clicked, and a green message box at the bottom left of the build list area says 'Build scheduled'. The rest of the page content remains the same, including the build history and the 'Builds' table.

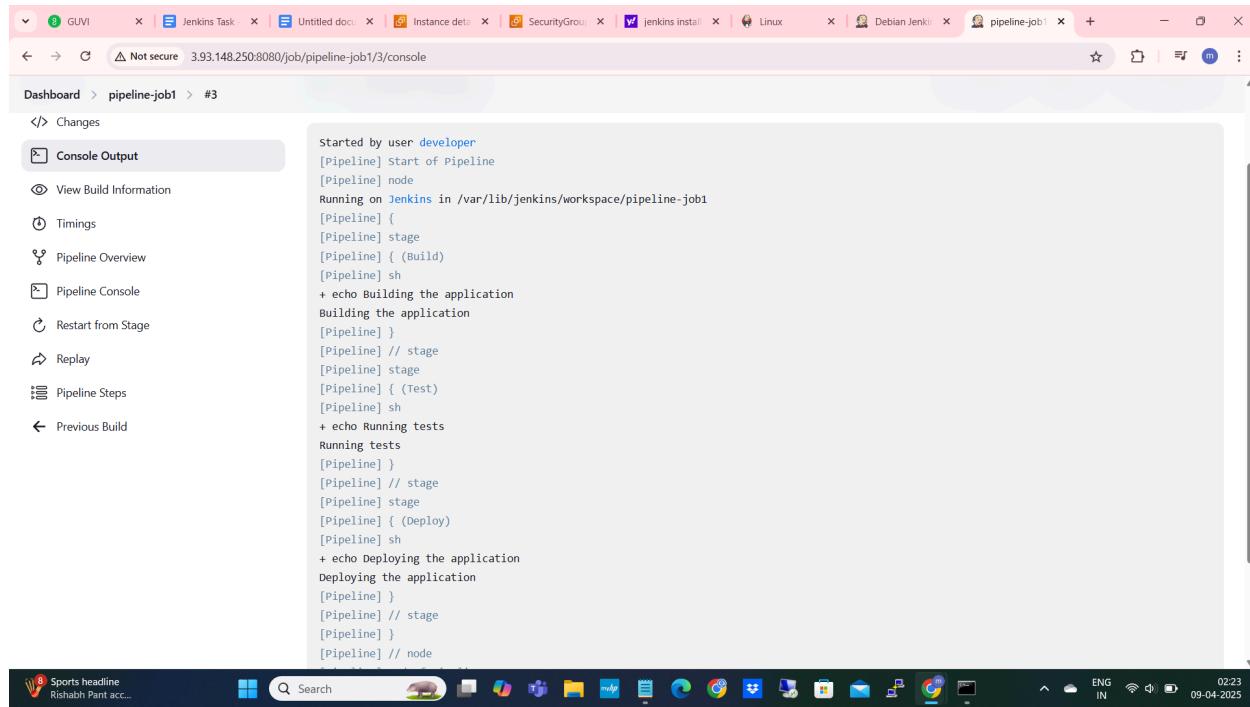
Click on build id:

This screenshot shows a web browser window with multiple tabs open. The active tab is 'Not secure 3.93.148.250:8080/view/all/job/pipeline-job1/'. The page title is 'pipeline-job1'. On the left, there's a sidebar with options like 'Status', 'Changes', 'Build Now', 'Configure', 'Delete Pipeline', 'Stages', 'Rename', and 'Pipeline Syntax'. Below this is a 'Builds' section with a table showing three successful builds: #3 (8:47 PM), #2 (7:16 PM), and #1 (7:15 PM). At the bottom right, it says 'REST API Jenkins 2.492.3'.

This screenshot shows a web browser window with multiple tabs open. The active tab is 'Not secure 3.93.148.250:8080/job/pipeline-job1/3/'. The page title is '#3 (Apr 8, 2025, 8:47:57 PM)'. The sidebar on the left includes 'Status', 'Console Output', 'View Build Information', 'Timings', 'Pipeline Overview', 'Pipeline Console' (which shows 'No changes.'), 'Restart From Stage', 'Replay', and 'Pipeline Steps'. The main content area shows that the build was started by user 'developer' and took 3.1 seconds. It also lists the run times: 14 ms waiting, 3.1 sec build duration, and 3.1 sec total from scheduled to completion. At the bottom right, it says 'Started 4 min 55 sec ago Took 3.1 sec'.



Click on console output:

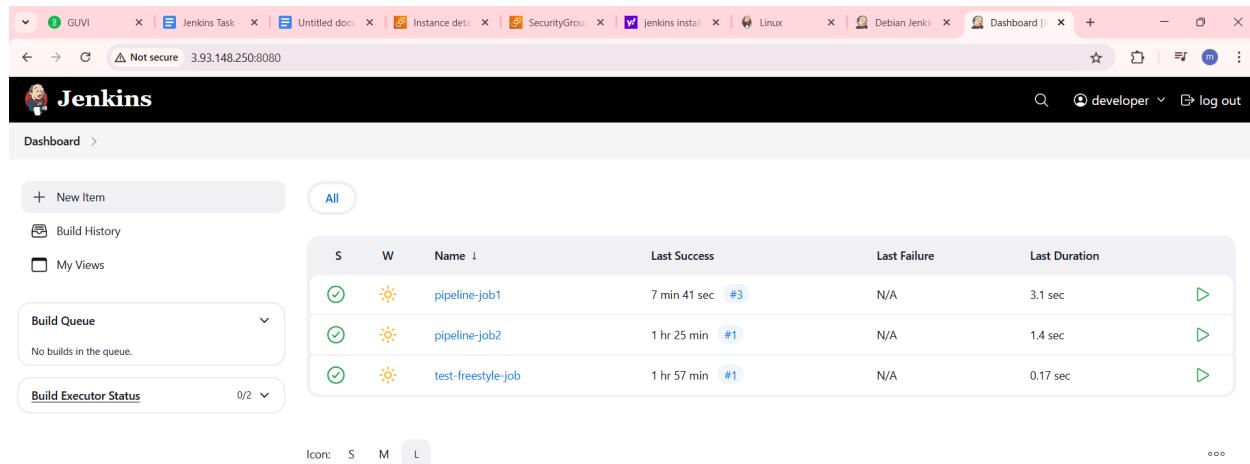


The screenshot shows a browser window with multiple tabs open. The active tab is '3.93.148.250:8080/job/pipeline-job1/3/console'. The page displays the Jenkins Pipeline console output for build #3. The output shows the following steps:

```
Started by user developer
[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] }
```

The system tray at the bottom right shows the date as 09-04-2025 and the time as 02:23.

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



The screenshot shows the Jenkins dashboard. On the left, there is a sidebar with 'New Item' highlighted. The main area displays a table of existing Jenkins jobs:

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

At the bottom, there is a status bar with icons for S, M, L, and a REST API link.



New Item

Enter an item name
freestyle-dev-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

Configure General

Description
new job by developer

Plain text [Preview](#)

Discard old builds [?](#)

GitHub project

This project is parameterized [?](#)

Throttle builds [?](#)

Execute concurrent builds if necessary [?](#)

Advanced [▼](#)

Save Apply

The screenshot shows the Jenkins job configuration page for 'freestyle-dev-job'. The 'General' section is selected. Under 'Source Code Management', the 'None' radio button is selected. Under 'Triggers', the 'Trigger builds remotely (e.g., from scripts)' checkbox is unchecked. At the bottom are 'Save' and 'Apply' buttons.

The screenshot shows the Jenkins job configuration page for 'freestyle-dev-job'. The 'Environment' section is selected. Under 'Build Steps', there is a 'Execute shell' step with the command 'echo " new job creating by developer"'. At the bottom are 'Advanced', 'Save', and 'Apply' buttons.

The screenshot shows two windows related to a Jenkins job named "freestyle-dev-job".

Top Window (Configuration):

- Configure:** General, Source Code Management, Triggers, Environment (selected), Build Steps, Post-build Actions.
- Build Steps:** Execute shell command:

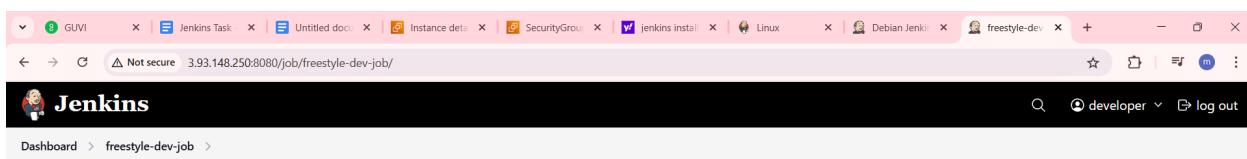
```
echo " new job creating by developer"
```
- Status:** Saved, Save, Apply.

Bottom Window (Build Status):

- Project Name:** freestyle-dev-job
- Status:** new job by developer
- Permalinks:** Edit description, log out.
- Builds:** No builds.
- Footer:** REST API, Jenkins 2.492.3.

Click on build now

A screenshot of a web browser showing the Jenkins interface. The title bar says "Not secure 3.93.148.250:8080/job/freestyle-dev-job/". The main content area shows a "Status" card for "freestyle-dev-job" which is "new job by developer". Below it is a "Build Now" button. To the right is an "Edit description" link. A "Permalinks" section is also present. At the bottom, there's a "Builds" section with a message "No builds".



View console output:

The screenshot shows a web browser window with multiple tabs open. The active tab is titled "Not secure 3.93.148.250:8080/job/freestyle-dev-job/1/". The page displays the Jenkins interface for a build job. On the left, there's a sidebar with links: Status (highlighted), Changes, Console Output (selected), View Build Information, and Timings. The main content area shows a green checkmark icon and the text "#1 (Apr 8, 2025, 8:59:38 PM)". Below this, it says "Started by user developer" and "This run spent:" followed by a bulleted list: "2 ms waiting", "12 ms build duration", and "14 ms total from scheduled to completion". At the bottom, it says "</> No changes.".

The screenshot shows a web browser window with multiple tabs open. The active tab is titled "Not secure 3.93.148.250:8080/job/freestyle-dev-job/1/console". The page displays the Jenkins interface for the console output of the build job. On the left, there's a sidebar with links: Status, Changes, Console Output (selected), View Build Information, and Timings. The main content area shows a green checkmark icon and the text "Console Output". It includes download, copy, and view as plain text buttons. The log output shows the following text:
Started by user developer
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/freestyle-dev-job
[freestyle-dev-job] \$ /bin/sh -xe /tmp/jenkins9500188042113177873.sh
+ echo new job creating by developer
new job creating by developer
Finished: SUCCESS

The screenshot shows a web browser window with multiple tabs open. The active tab is titled "Not secure 3.93.148.250:8080/job/freestyle-dev-job/1/console". This is the same screenshot as the previous one, showing the Jenkins console output for build #1.

Update job: click on configure

The screenshot shows the Jenkins interface for a 'freestyle-dev-job'. The job name is 'freestyle-dev-job' and it is described as 'new job by developer'. The 'Configure' link in the left sidebar is highlighted. Below the job name, there is a 'Builds' section showing one build (#1) from 8:59 PM today. On the right, there is a 'Permalinks' section with a link to the build history.

The screenshot shows the 'Configuration' page for the 'freestyle-dev-job'. The 'General' tab is selected. In the 'Description' field, the text 'new job by developer' is entered. Under the 'Advanced' section, several checkboxes are available: 'Discard old builds', 'GitHub project', 'This project is parameterized', 'Throttle builds', and 'Execute concurrent builds if necessary'. At the bottom, there are 'Save' and 'Apply' buttons. The Jenkins status bar at the bottom indicates '26°C Mostly clear' and the date '09-04-2025'.

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 success message 'Saved' is displayed at the bottom left. The 'Build Steps' section shows the same configuration as the previous screenshot.

Jenkins

Dashboard > freestyle-dev-job >

freestyle-dev-job

Status: ✓ new job by developer

Permalinks:

- 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
- Last completed build (#1), 3 min 49 sec ago

Builds:

Build	Time
#1	8:59 PM

Build Now



Build now:

Jenkins

Dashboard > freestyle-dev-job >

freestyle-dev-job

Status: ✓ new job by developer

Permalinks:

- 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
- Last completed build (#1), 3 min 49 sec ago

Builds:

Build	Time
#2	9:04 PM
#1	8:59 PM

Build scheduled

REST API Jenkins 2.49.3

26°C Mostly clear

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 successfully.

REST API Jenkins 2.492.3

Delete job: click on delete project

The screenshot shows a browser window with multiple tabs open. The active tab is the Jenkins 'freestyle-dev-job' page. The Jenkins logo is at the top left. On the right, there is a link for 'Edit description'. The page displays the job status as 'new job by developer'. It includes a 'Permalinks' section with a bulleted list of recent builds and a 'Builds' section showing two entries: '#2 9:04 PM' and '#1 8:59 PM'.

REST API Jenkins 2.492.3



The screenshot shows the Jenkins dashboard for the 'freestyle-dev-job' project. On the left, there's a sidebar with options like Status, Changes, Build Now, Configure, Delete Project, and Rename. Below that is a 'Builds' section showing two builds: #2 at 9:04 PM and #1 at 8:59 PM. A modal window titled 'Delete Project' is centered over the page, asking if you want to delete the 'freestyle-dev-job' project. The 'Yes' button is highlighted in red.

The screenshot shows the main Jenkins dashboard. On the left, there are links for New Item, Build History, and My Views. Below that is a 'Build Queue' section stating 'No builds in the queue.' To the right is a 'Build Executor Status' section showing 0/2 executors. The main area displays a table of build history:

S	W	Name ↓	Last Success	Last Failure	Last Duration
✓	☀️	pipeline-job1	17 min #3	N/A	3.1 sec
✓	☀️	pipeline-job2	1 hr 34 min #1	N/A	1.4 sec
✓	☀️	test-freestyle-job	2 hr 7 min #1	N/A	0.17 sec

The screenshot shows the Jenkins dashboard again. At the top, a message 'Job deleted successfully' is displayed in bold black text. The rest of the interface is identical to the previous screenshots, showing the build history table.