1. Configure 2 slave machines in jenkins master.

Launch 2 ec2 instances (salve01,slave02)

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Create ssh-keygen

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Login to master machine

switch to root user.

mkdir -p /var/lib/jenkins/.ssh

cd /var/lib/jenkins/.ssh

ssh-keyscan -H SLAVE-NODE-IP-OR-HOSTNAME >>/var/lib/jenkins/.ssh/known\_hosts

# ssh-keyscan -H 172.31.38.42 >>/var/lib/jenkins/.ssh/known\_hosts

chown jenkins:jenkins known\_hosts

#we need to change the owner as we ran ssh-keyscan command using “root” user.

# default user of Jenkins will be “jenkins”

chmod 700 known\_hosts

# DOne !!

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Create a job

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Steps to be done on jenkins GUI:

========================

Go to manage jenkins

open manage node

under launch method select "Launch via SSh"

Host "public ip of slave"

creditals: select user with private key

enter ec2-user as name and paste the pem key.

host key verification startegy to be selected

save..

we are good with the master and slave configuration

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A computer screen with text

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1. Configure webhooks to jenkins job.

Create a job

In configuration Check **GitHub hook trigger for GITScm polling**

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IF we change any commit in the repo it will automatically update in the job

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1. Configure poll scm and build periodical options in jenkins job.

Create a job

In job configure you will find Build Triggers and poll scm check both the box

Then write corn job in both

Poll scm : \* \* \* \* \*

Jenkins will check for SCM changes **every minute**.

Build triggers: H/2 \* \* \* \*

Jenkins will run the job **every 2 minutes**, even if no code changes.

Also add repo url in configure

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1. Take backup of jenkins server by using bash script.

Create Backup Folder

sudo mkdir -p /backup/Jenkins

Create the Backup Script

nano jenkins\_backup.sh

then write script

#!/bin/bash

# Set paths

JENKINS\_HOME="/var/lib/jenkins"

BACKUP\_DIR="/backup/jenkins"

TIMESTAMP=$(date +%Y-%m-%d\_%H-%M-%S)

BACKUP\_NAME="jenkins\_backup\_$TIMESTAMP.tar.gz"

# Create backup directory if it doesn't exist

mkdir -p "$BACKUP\_DIR"

echo "Starting Jenkins backup..."

# Create archive

tar -czvf "$BACKUP\_DIR/$BACKUP\_NAME" -C "$JENKINS\_HOME" .

echo "Backup completed: $BACKUP\_DIR/$BACKUP\_NAME"

Then Run:

sudo ./jenkins\_backup.sh

Verify the Backup

🡺ls /backup/jenkins

You will see

jenkins\_backup\_2025-05-30\_06-55-23.tar.gz

Backup Is done

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1. Take backup of jenkins using rethin backup plugin.

Go to Jenkins Dashboard.

Click **“Manage Jenkins”**

Click **“Manage Plugins”**

Go to the **“Available”** tab.

Search for **ThinBackup**

Check it, then click **Install without restart**

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🡺after install go to manage Jenkins

🡺click on system 🡺go to the   
option backup directory 🡺give the directory file location   
🡺/var/lib/jenkins/thinbackup 🡺give the corn job time like one   
day or hourly🡺slect all option for backup🡺click on save

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🡺go to manage junckins

🡺click on thin backup

🡺click on 🡺 backup

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🡺to verify

🡺go to cli

🡺go to the back up location

🡺ls   
🡺/var/lib/jenkins/thinbackup

you will see the backup time

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1. Setup a new jenkins server and dump the backup taken in task4.

Create new instatnce

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Install java and Jenkins in new instance

java-17-amazon-corretto.x86\_64

sudo dnf install -y java-17-amazon-corretto

java -version

java

sudo wget -O /etc/yum.repos.d/jenkins.repo https://pkg.jenkins.io/redhat/jenkins.repo

sudo rpm --import https://pkg.jenkins.io/redhat/jenkins.io-2023.key

sudo yum install -y jenkins

sudo systemctl start jenkins

sudo systemctl enable jenkins

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Open a browser:

<http://34.229.206.46:8080>

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**install ThinBackup Plugin**

Go to **Manage Jenkins > Manage Plugins**

Go to **Available** tab

Search: ThinBackup

Install it, then restart Jenkins if promp

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RUN in cli

scp -i ~/Downloads/jenkins.pem -r [ec2-user@13.220.49.72:/var/lib/jenkins/thinbackup ~/Downloads/](mailto:ec2-user@13.220.49.72:/var/lib/jenkins/thinbackup%20~/Downloads/)

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RUN new instance

scp -i ~/Downloads/jenkins.pem -r ~/Downloads/thinbackup ec2-user@34.229.206.46:~

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Move and fix permissions on the new server:

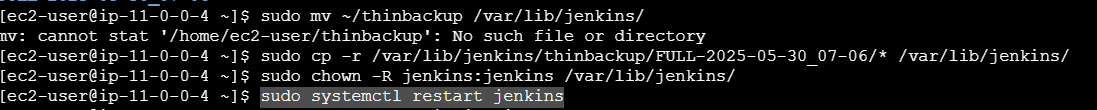
sudo mv ~/thinbackup /var/lib/jenkins/

sudo chown -R jenkins:jenkins /var/lib/jenkins/thinbackup

sudo cp -r /var/lib/jenkins/thinbackup/FULL-2025-05-30\_07-06/\* /var/lib/jenkins/

sudo chown -R jenkins:jenkins /var/lib/jenkins/

sudo systemctl restart Jenkins



Check the data is visible in new Jenkins

Old Jenkins

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New Jenkins

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