

Jenkins Tasks - 02

- Configure 2 slave machines in the Jenkins master.

The screenshot shows the Jenkins 'Nodes' configuration page. It lists three nodes: 'Built-In Node' (Architecture: Linux (amd64), Status: In sync, Free Disk Space: 27.21 GiB, Free Swap Space: 0 B, Free Temp Space: 1.87 GiB), 's-02' (Architecture: Linux (amd64), Status: In sync, Free Disk Space: 27.83 GiB, Free Swap Space: 0 B, Free Temp Space: 1.87 GiB), and 'Slave-01' (Architecture: Linux (amd64), Status: In sync, Free Disk Space: 27.82 GiB, Free Swap Space: 0 B, Free Temp Space: 1.87 GiB). Below the table, it shows 'Data obtained' and '3.5 sec'.

- Configure webhooks for the Jenkins job.

The screenshot shows the Jenkins 'Webhooks' configuration page for a job named 'Job-03'. It displays a successful delivery message: 'Last delivery was successful.' with a timestamp of '2023-09-11 11:38 AM'. There are 'Edit' and 'Delete' buttons at the bottom right.

- Configure Poll SCM and Build Periodically options in the Jenkins job.
- Poll SCM

The screenshot shows the Jenkins 'Job-03' configuration page. The left sidebar includes links for Status, Changes, Workspace, Build Now, Configure, Delete Project, Git Polling Log, and Rename. The main area shows the job name 'Job-03' with a green checkmark, status 'Testing', and a 'Permalinks' section listing recent builds. The 'Builds >' section shows two builds: '#4 11:38 AM' and '#3 11:37 AM'. At the bottom, there is a 'Build Periodically' button.

Build Periodically

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The screenshot shows the Jenkins job configuration and its build history.

Build periodically is checked, and the schedule is set to `* * * * *`. A warning message indicates that this means "every minute" and suggests using "H * * * *" instead.

Status for build #5 (Feb 10, 2026, 11:41:00 AM) is shown. The build was started by a timer. It spent 0.53 seconds in total, with 0.53 seconds being the build duration and 3 ms for waiting. The revision is 3376628dc9cd546daf67d857c0e1e7ac557c690b from the origin/main branch of the repository <https://github.com/ViqaasTaimoor/Testing.git>.

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- Take a backup of the Jenkins server using a **bash-script**.

```
#!/bin/bash

DATE=$(date +%F-%H-%M)
BACKUP_DIR="/tmp/jenkins-backup-$DATE"
JENKINS_HOME="/var/lib/jenkins"
S3_BUCKET="s3://jenkins-backup-bucket2010"

mkdir -p $BACKUP_DIR

# Stop Jenkins (safe backup)
sudo systemctl stop jenkins

# Copy Jenkins data
rsync -av --exclude='workspace' $JENKINS_HOME/ $BACKUP_DIR/

# Start Jenkins
sudo systemctl start jenkins

# Create tar file
tar -czf /tmp/jenkins-backup-$DATE.tar.gz -C /tmp jenkins-backup-$DATE

# Upload to s3
aws s3 cp /tmp/jenkins-backup-$DATE.tar.gz $S3_BUCKET/

# Cleanup
rm -rf $BACKUP_DIR
rm -f /tmp/jenkins-backup-$DATE.tar.gz
```

The screenshot shows the AWS S3 console interface. At the top, there's a navigation bar with tabs: Objects, Metadata, Properties, Permissions, Metrics, Management, and Access Points. The 'Objects' tab is selected. Below the navigation bar, there's a search bar labeled 'Find objects by prefix' and a 'Show versions' button. The main area displays a table of objects. The table has columns: Name, Type, Last modified, Size, and Storage class. There is one object listed:

Name	Type	Last modified	Size	Storage class
jenkins-backup-2026-02-10-11-46.tar.gz	gz	February 10, 2026, 17:17:22 (UTC+05:30)	134.9 MB	Standard

- Take a backup of Jenkins using the **ThinBackup** plugin.

```
[ec2-user@ip-172-31-72-218 ~]$ cd /var/lib/jenkins/thinbackup
[ec2-user@ip-172-31-72-218 thinbackup]$ ls
FULL-2026-02-10_11-52
[ec2-user@ip-172-31-72-218 thinbackup]$
```

- Set up a new Jenkins server and restore the backup taken in task 4.
- Backup was taken from s3 bucket and was extracted in /var/lib/jenkins

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```
2 sudo aws s3 sync s3://jenkins-backup-bucket/thinbackup /var/lib/jenkins/thinbackup
3 sudo aws s3 sync s3://jenkins-backup-bucket2010/thinbackup /var/lib/jenkins/thinbackup
4 aws s3 ls s3://jenkins-backup-bucket2010/
5 aws s3 ls s3://jenkins-backup-bucket2010/thinbackup/
6 aws s3 ls s3://jenkins-backup-bucket2010/thinbackup/clear
7 clear
8 aws s3 cp s3://jenkins-backup-bucket2010/jenkins-backup-2026-02-10-11-46.tar.gz /tmp/
9 systemctl stop jenkins
10 sudo systemctl stop jenkins
11 sudo rm -rf /var/lib/jenkins/*
12 sudo tar -xzf /tmp/jenkins-backup-2026-02-10-11-46.tar.gz -C /var/lib/jenkins --strip-components=1
13 sudo chown -R jenkins:jenkins /var/lib/jenkins
14 sudo systemctl start jenkins
15 sudo cat /var/lib/jenkins/secrets/initialAdminPassword
16 sudo cd /var/lib/jenkins/secrets/
17 sudo tar -xzf /tmp/jenkins-backup-2026-02-10-11-46.tar.gz -C /var/lib/jenkins --strip-components=1
18 ls -lh /tmp/jenkins-backup-2026-02-10-11-46.tar.gz
19 aws s3 cp s3://jenkins-backup-bucket2010/jenkins-backup-2026-02-10-11-46.tar.gz /tmp/
20 ls -lh /tmp/jenkins-backup-2026-02-10-11-46.tar.gz
21 tar -tzf /tmp/jenkins-backup-2026-02-10-11-46.tar.gz | head -10
22 sudo ls /var/lib/jenkins
23 sudo chown -R jenkins:jenkins /var/lib/jenkins
24 cd /var/lib
25 ll
26 ls -l /var/lib/jenkins | head
27 sudo systemctl start jenkins
28 sudo systemctl status jenkins
```

The screenshot shows the Jenkins dashboard at <http://54.242.33.175:8080>. The page is not secure.

Key elements of the dashboard:

- Left sidebar:** Jenkins logo, New Item, Build History, Project Relationship, Check File Fingerprint.
- Build Queue:** Build Queue (1) - Job-03.
- Build Executor Status:** Built-In Node (0/2), Slave-01 (launching...), s-02 (launching...).
- Job List:** A table showing four jobs:

S	W	Name
...	☀️	Job-01
✓	☀️	Job-03
...	☀️	Job-2
...	☀️	Private-Job