

Final Assessment

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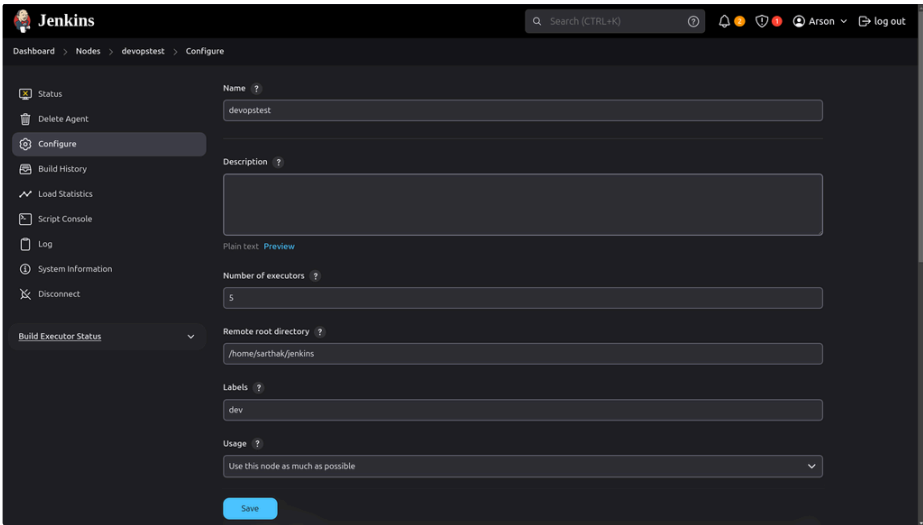
Task 1: Create a Shell Script which installs jenkins on any os with specified version.

Jenkins

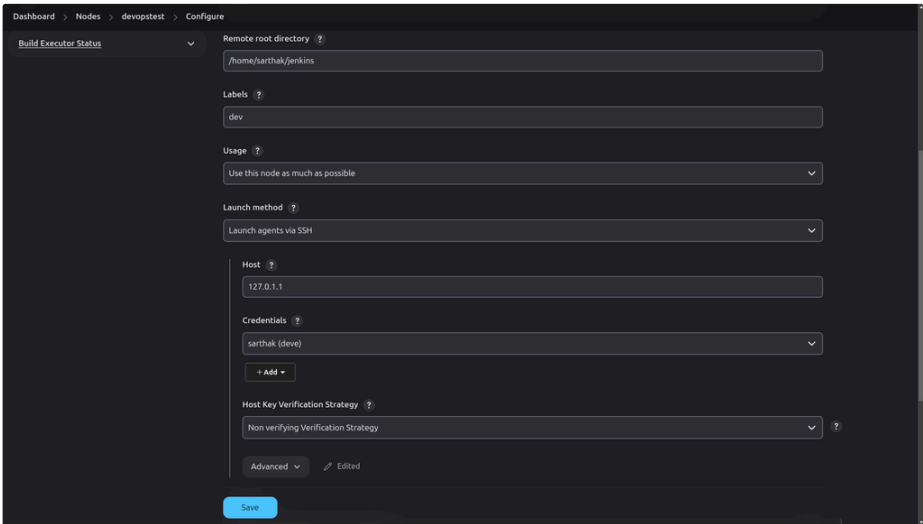
Task 2: Setup Master-slave architecture.

1: Creating a node named: devopstest.

no. of executors are 5



providing the ip of the host



```
Dashboard > Nodes > devopstest > Log

XDG_SESSION_TYPE=tty
_=')'"
Checking Java version in the PATH
openjdk version "17.0.13" 2024.10.15
OpenJDK Runtime Environment (build 17.0.13+11-Ubuntu-2ubuntu124.04)
OpenJDK 64-Bit Server VM (build 17.0.13+11-Ubuntu-2ubuntu124.04, mixed mode, sharing)
[11/26/24 11:23:30] [SSH] Checking java version of /home/sarthak/jenkins/jdk/bin/java
Couldn't figure out the Java version of /home/sarthak/jenkins/jdk/bin/java
Bash: line 1: /home/sarthak/jenkins/jdk/bin/java: No such file or directory


[11/26/24 11:23:30] [SSH] Checking Java version of java
[11/26/24 11:23:30] [SSH] java -version returned 17.0.13.
[11/26/24 11:23:30] [SSH] Starting sftp client.
[11/26/24 11:23:30] [SSH] Copying latest remoting.jar...
Source agent hash is F605AD4C308321A99315983CE626F196. Installed agent hash is F605AD4C308321A99315983CE626F196
Verified agent jar. No update is necessary.
Expanded the channel window size to 4MB
[11/26/24 11:23:30] [SSH] Starting agent process: cd "/home/sarthak/jenkins" && java -jar remoting.jar -workDir /home/sarthak/jenkins -
jar-cache /home/sarthak/jenkins/remoting/jarCache
Nov 26, 2024 11:23:30 AM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using /home/sarthak/jenkins/remoting as a remoting work directory
Nov 26, 2024 11:23:30 AM org.jenkinsci.remoting.engine.WorkDirManager setupLogging
INFO: Both error and output logs will be printed to /home/sarthak/jenkins/remoting
====[JENKINS REMOTING CAPACITY]====channel started
Remoting version: 3248.3258.v3277a_8e88c9b
Launcher: SSHLauncher
Communication Protocol: Standard in/out
This is a Unix agent
Agent successfully connected and online

• • •

REST API Jenkins 2.462.2
```

```
sarthak@sarthak-Vivobook-ASUSLaptop-K3605ZF-K3605ZF:~$
sarthak@sarthak-Vivobook-ASUSLaptop-K3605ZF-K3605ZF:~$ ps -ef | grep -i jenkins
jenkins 2034 1 0 Nov26 ? 00:10:29 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080
sarthak 3460 3398 0 Nov26 ? 00:07:39 java -jar remoting.jar -workDir /home/sarthak/jenkins -jar-cache /home/sarthak/jenkins/remoting/jarCache
sarthak 111191 166478 0 20:20 pts/0 00:00:00 orp --color=auto -i jenkins
sarthak@sarthak-Vivobook-ASUSLaptop-K3605ZF-K3605ZF:~$
```

Task 3: Setup Role based authorization.

 Jenkins

Search (CTRL+K)

Arson

log out

Dashboard > Manage Jenkins > Jenkins' own user database

Users 4

Create User

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

User ID	Name
arson	Arson
dev	developer
manager	manage
test	tester

Jenkins 2.462.2

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

Manage Roles

Assign Roles

Permission Templates

Role Strategy Macros

Assign Roles

Global roles

User/Group	usage	admin	manage
Anonymous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Authenticated Users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arson	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
developer	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
manage	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
tester	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Add UserAdd Group

Item roles

User/Group	developer	tester
Anonymous	<input type="checkbox"/>	<input type="checkbox"/>
Authenticated Users	<input type="checkbox"/>	<input type="checkbox"/>
developer	<input checked="" type="checkbox"/>	<input type="checkbox"/>
manage	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
tester	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SaveApply

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

Manage Roles

Assign Roles

Permission Templates

Role Strategy Macros

Assign Roles

Item roles

User/Group	developer	tester
Anonymous	<input type="checkbox"/>	<input type="checkbox"/>
Authenticated Users	<input type="checkbox"/>	<input type="checkbox"/>
developer	<input checked="" type="checkbox"/>	<input type="checkbox"/>
manage	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
tester	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Add UserAdd Group

Agent roles

User/Group
Anonymous
Authenticated Users

Add UserAdd Group

SaveApply

Jenkins 2.462.2

Jenkins

Search (CTRL+K)

developer

log out

Dashboard >

Build History

Project Relationship

Check File Fingerprint

My Views

Build Queue

Build Executor Status

All

+

S	W	Name	Last Success	Last Failure	Last Duration
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	dev_1	10 days #1	N/A	0.15 sec
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	dev_2	N/A	N/A	N/A

Icon: S M L

Add description

No builds in the queue.

Build-in Node

1 idle

2 idle

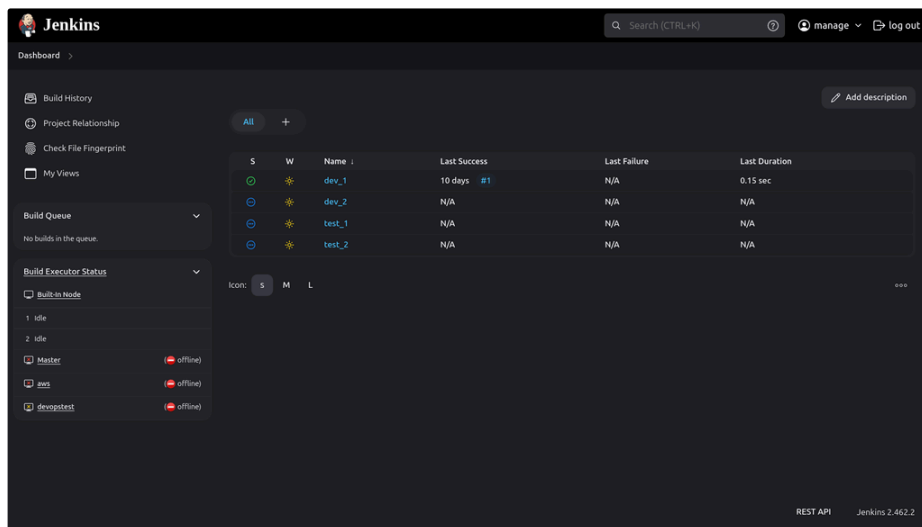
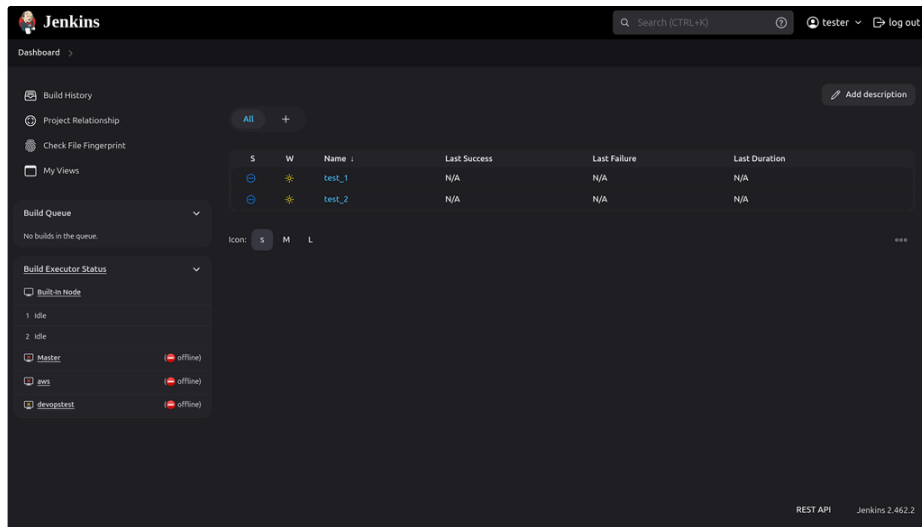
Master

aws

devopstest

REST API

Jenkins 2.462.2



Task 4: Create a pipeline to execute a shell script.

[Pipeline](#)

[disk.sh](#)

[process.sh](#)

Task 5 : Create another shell script that automates the backup of important files and directories to a backup location. The script should.

[Backup.sh](#)