

DEVOPS ASSIGNMENT 2

A PROJECT BY
ARUN AVK (18BCS012)
DHANUSH KUMAR R (18BCS071)
NISHEER V (18BCS061)
VIVEK SURESH (18BCS111)
NAVEEN DEVANG R (18BCS072)
ABDUL RAHMAN M (18BEC001)
DERIN VISHAL T K (18BEC047)
SEDHU RAMAN V (18BEC041)

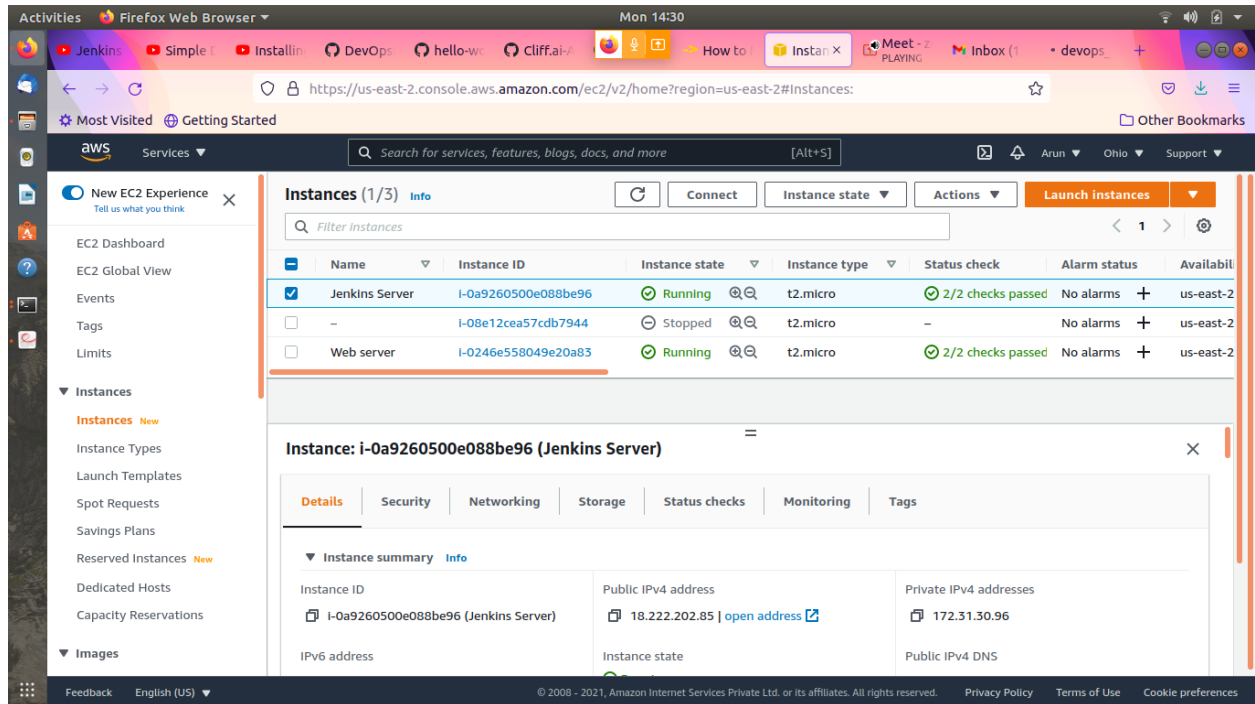
UNDER THE GUIDANCE OF
DR. UMA SHESHADRI Ph.D
PROFESSOR,COMPUTER SCIENCE & ENGINEERING,
INDIAN INSTITUTE OF INFORMATION TECHNOLOGY,DHARWAD.



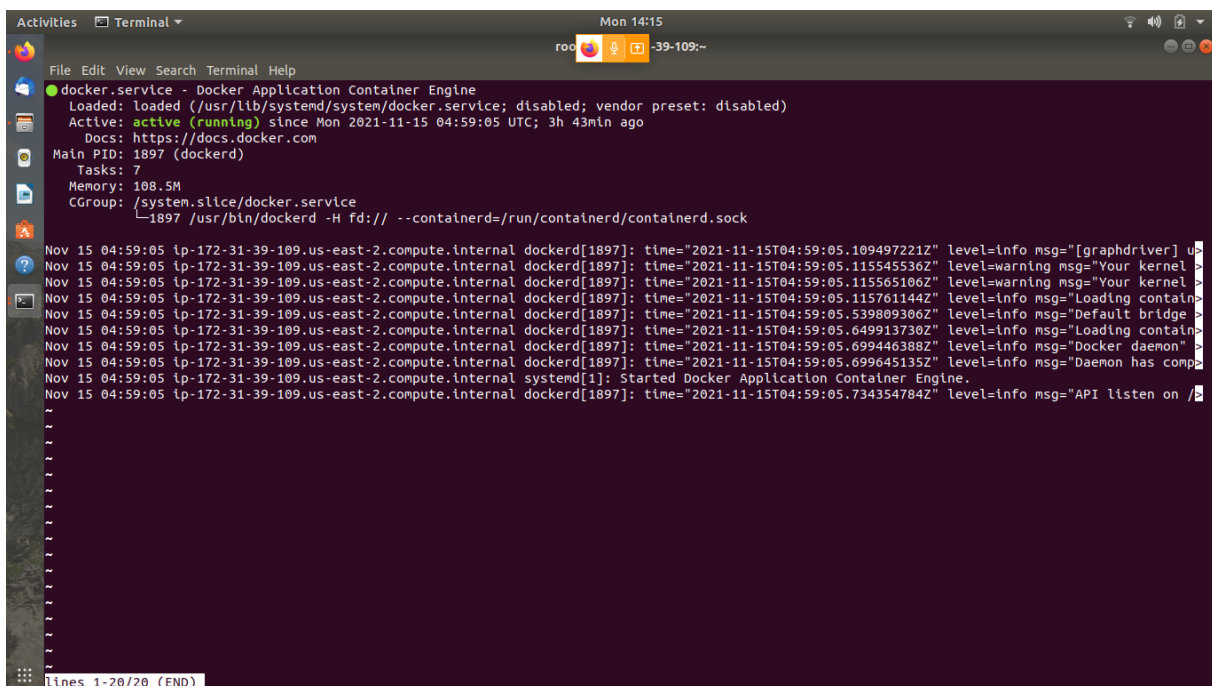
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PROBLEM STATEMENT: CREATE A CI/CD PIPELINE USING JENKINS AND DOCKER

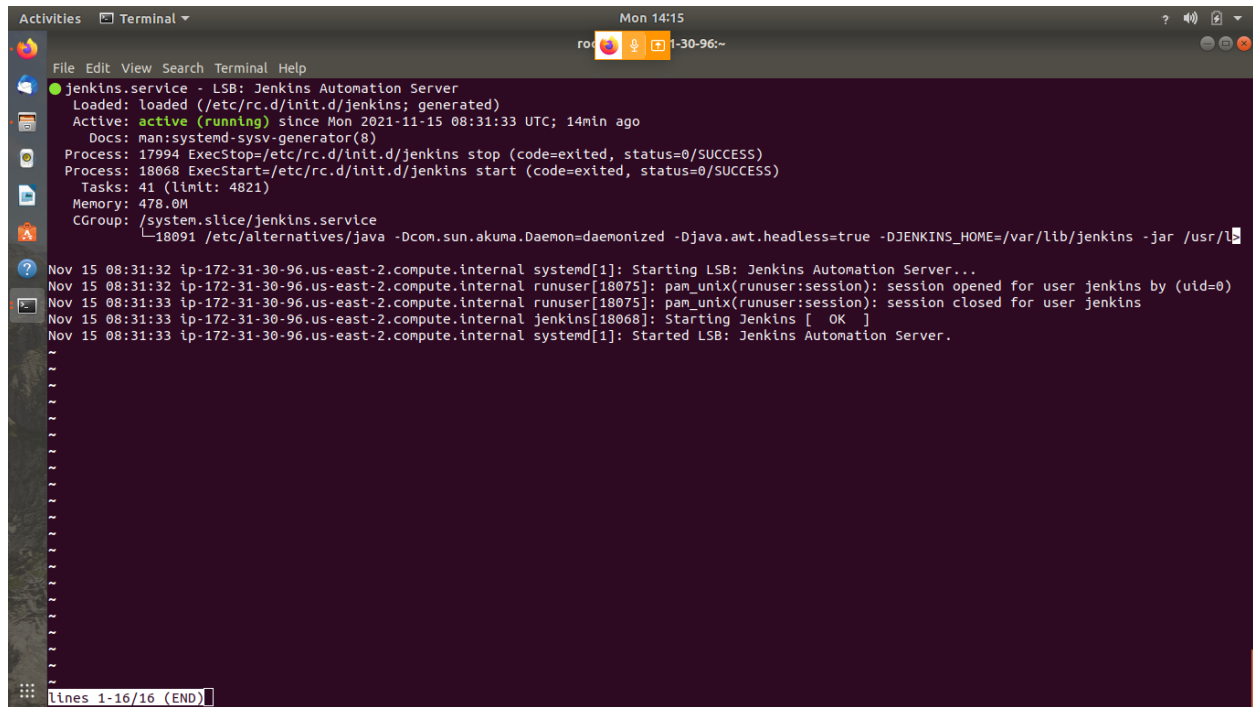
#STEP 1: We created two AWS Ec2 Redhat Linux instances naming **Jenkins Server & Web Server**.



#STEP 2 : Docker has been installed and initialized in Web Server.



#STEP 3 : We have installed and configured Jenkins and maven in Jenkins Server.

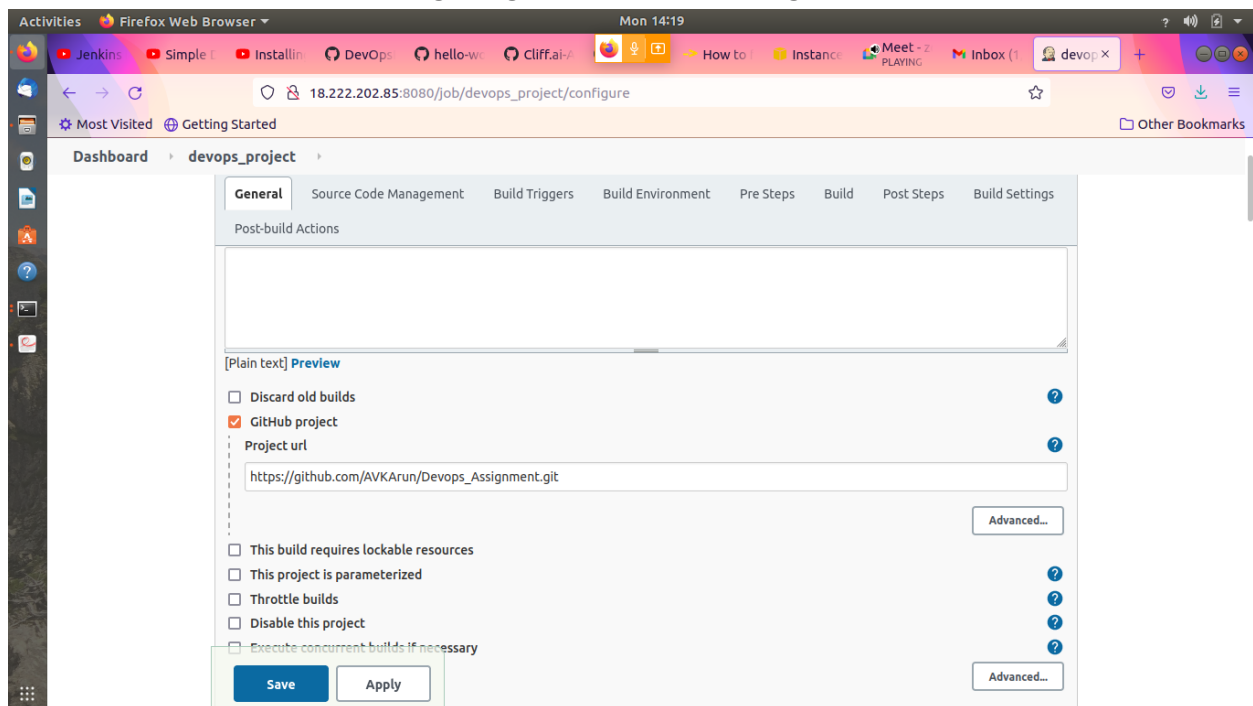


A terminal window showing the status of the Jenkins service. The output indicates that the service is active and running. It also shows the process details, including the user 'jenkins' and the command used to start the service. The logs show the service starting successfully.

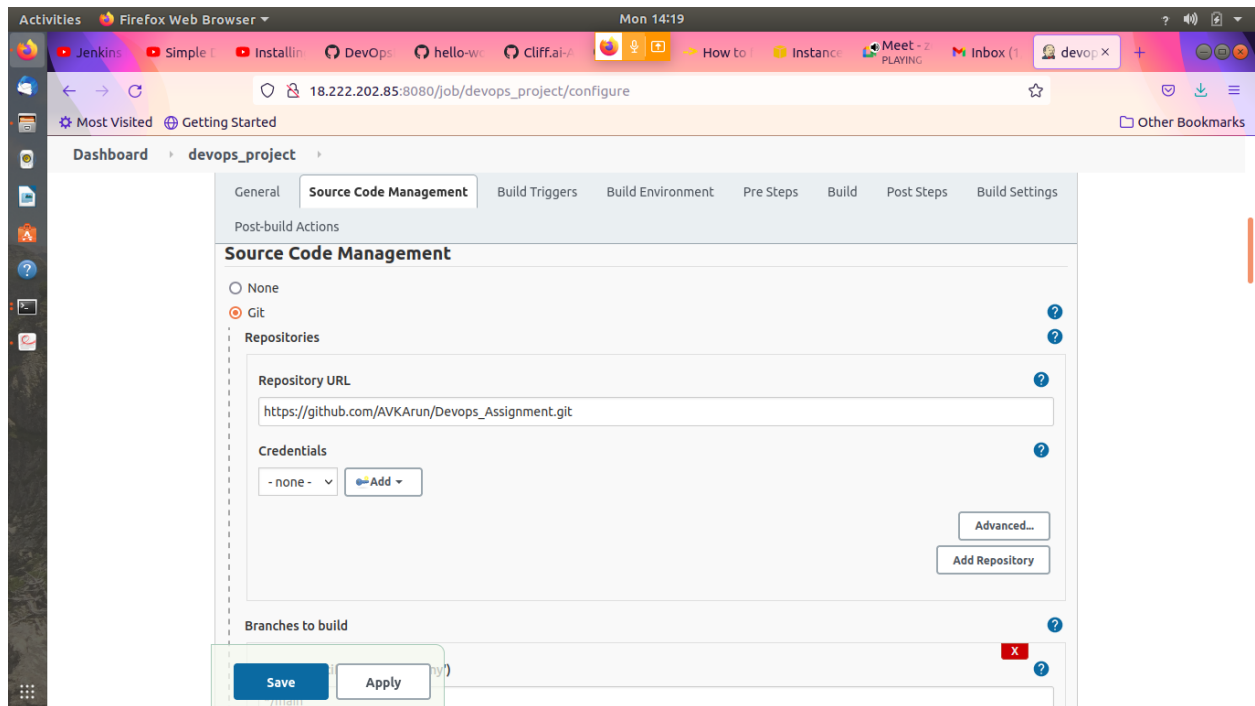
```
jenkins.service - LSB: Jenkins Automation Server
Loaded: loaded (/etc/rc.d/init.d/jenkins; generated)
Active: active (running) since Mon 2021-11-15 08:31:33 UTC; 14min ago
Docs: man:systemd-sysv-generator(8)
Process: 17994 ExecStop=/etc/rc.d/init.d/jenkins stop (code=exited, status=0/SUCCESS)
Process: 18068 ExecStart=/etc/rc.d/init.d/jenkins start (code=exited, status=0/SUCCESS)
Tasks: 41 (limit: 4821)
Memory: 478.0M
CGroup: /system.slice/jenkins.service
└─18091 /etc/alternatives/java -Dcom.sun.akuma.Daemon=daemonized -Djava.awt.headless=true -DJENKINS_HOME=/var/lib/jenkins -jar /usr/l...

Nov 15 08:31:32 ip-172-31-30-96.us-east-2.compute.internal systemd[1]: Starting LSB: Jenkins Automation Server...
Nov 15 08:31:32 ip-172-31-30-96.us-east-2.compute.internal runuser[18075]: pam_unix(runuser:session): session opened for user jenkins by (uid=0)
Nov 15 08:31:33 ip-172-31-30-96.us-east-2.compute.internal runuser[18075]: pam_unix(runuser:session): session closed for user jenkins
Nov 15 08:31:33 ip-172-31-30-96.us-east-2.compute.internal jenkins[18068]: Starting Jenkins [ OK ]
Nov 15 08:31:33 ip-172-31-30-96.us-east-2.compute.internal systemd[1]: Started LSB: Jenkins Automation Server.
```

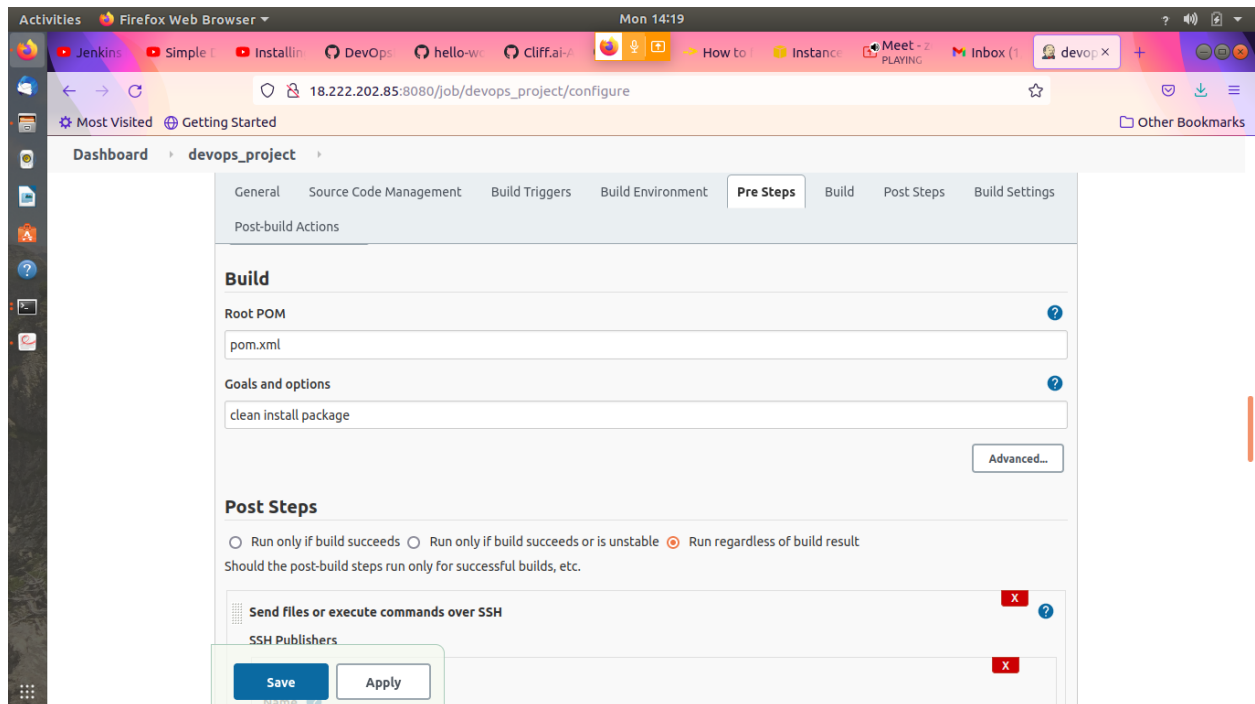
#STEP 4 : We have created a new Maven Project in the name of devops_project and configuring it with the following steps.



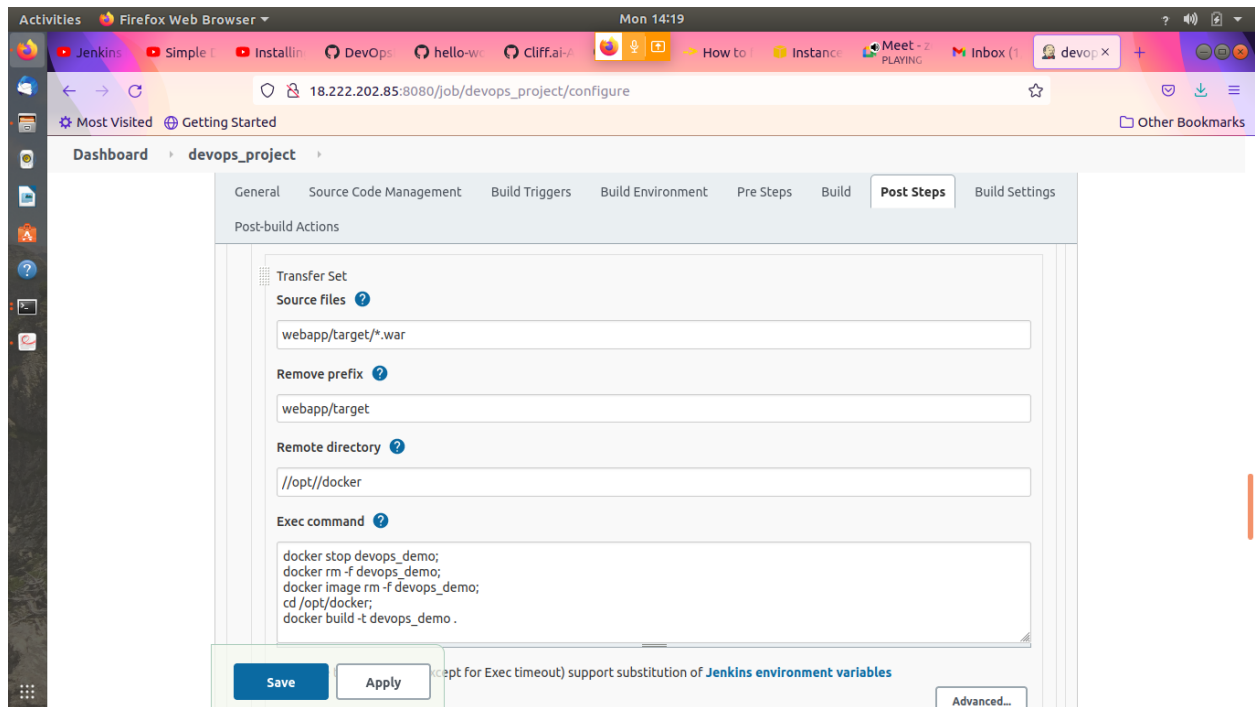
#STEP 5 : Adding the git repository.



#STEP 6 : Providing goals to Pom.xml file.



#STEP 7 : Configuring SSH Server



#STEP 8 : Build Output

The screenshot shows the Jenkins web interface in a Firefox browser. The address bar displays the URL `18.222.202.85:8080/job/devops_project/1/console`. The Jenkins dashboard on the left includes links for 'Back to Project', 'Status', 'Changes', 'Console Output' (selected), 'View as plain text', 'Edit Build Information', 'Delete build #1', and 'Git Build Data'. The main console output area, titled 'Console Output' with a red 'X' icon, shows the following log:

```
Started by user admin
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/devops_project
The recommended git tool is: NONE
No credentials specified
Cloning the remote Git repository
Cloning repository https://github.com/AVKArun/Devops_Assignment.git
> git init /var/lib/jenkins/workspace/devops_project # timeout=10
Fetching upstream changes from https://github.com/AVKArun/Devops_Assignment.git
> git --version # timeout=10
> git --version # 'git version 2.27.0'
> git fetch --tags --force --progress -- https://github.com/AVKArun/Devops_Assignment.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git config remote.origin.url https://github.com/AVKArun/Devops_Assignment.git # timeout=10
> git config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/* # timeout=10
Avoid second fetch
> git rev-parse refs/remotes/origin/main^{commit} # timeout=10
Checking out Revision e94d67b09b05b21c885b05272ad814f8344661cf (refs/remotes/origin/main)
> git config core.sparsecheckout # timeout=10
> git checkout -f e94d67b09b05b21c885b05272ad814f8344661cf # timeout=10
Commit message: "Add files via upload"
First time build. Skipping changelog.
Parsing POMs
```

This screenshot shows the continuation of the Jenkins console output. The log continues with:

```
> git --version # timeout=10
> git --version # 'git version 2.27.0'
> git fetch --tags --force --progress -- https://github.com/AVKArun/Devops_Assignment.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git config remote.origin.url https://github.com/AVKArun/Devops_Assignment.git # timeout=10
> git config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/* # timeout=10
Avoid second fetch
> git rev-parse refs/remotes/origin/main^{commit} # timeout=10
Checking out Revision e94d67b09b05b21c885b05272ad814f8344661cf (refs/remotes/origin/main)
> git config core.sparsecheckout # timeout=10
> git checkout -f e94d67b09b05b21c885b05272ad814f8344661cf # timeout=10
Commit message: "Add files via upload"
First time build. Skipping changelog.
Parsing POMs
Discovered a new module com.example.maven-project:maven-project Maven Project
Discovered a new module com.example.maven-project:server Server
Discovered a new module com.example.maven-project:webapp Webapp
Modules changed, recalculating dependency graph
Established TCP socket on 42229
[devops_project] $ /usr/lib/jvm/java-11-openjdk-11.0.13.0.8-3.el8_5.x86_64/bin/java -cp /var/lib/jenkins/plugins/maven-plugin/WEB-INF/lib/maven35-agent-1.13.jar:/opt/maven/apache-maven-3.8.3/boot/plexus-classworlds-2.6.0.jar:/opt/maven/apache-maven-3.8.3/conf/logging-jenkins.maven3.agent.Maven35Main:/opt/maven/apache-maven-3.8.3/var/cache/jenkins/war/WEB-INF/lib/remoting-4.7.jar /var/lib/jenkins/plugins/maven-plugin/WEB-INF/lib/maven35-interceptor-1.13.jar /var/lib/jenkins/plugins/maven-plugin/WEB-INF/lib/maven3-interceptor-commons-1.13.jar 42229
<===[JENKINS REMOTING CAPACITY]===>channel started
```

At the bottom right of the console area, it says 'REST API' and 'Jenkins 2.289.3'.