LTIMindtree

GAURAV PRAMOD KUMAR

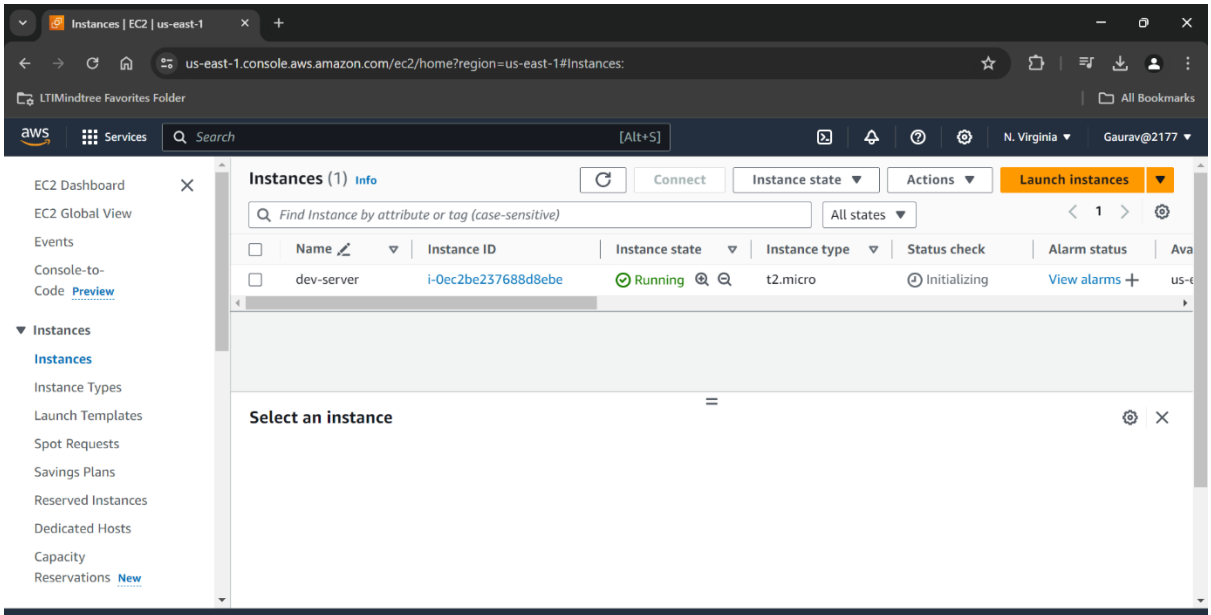
# Milestone Assessment 2

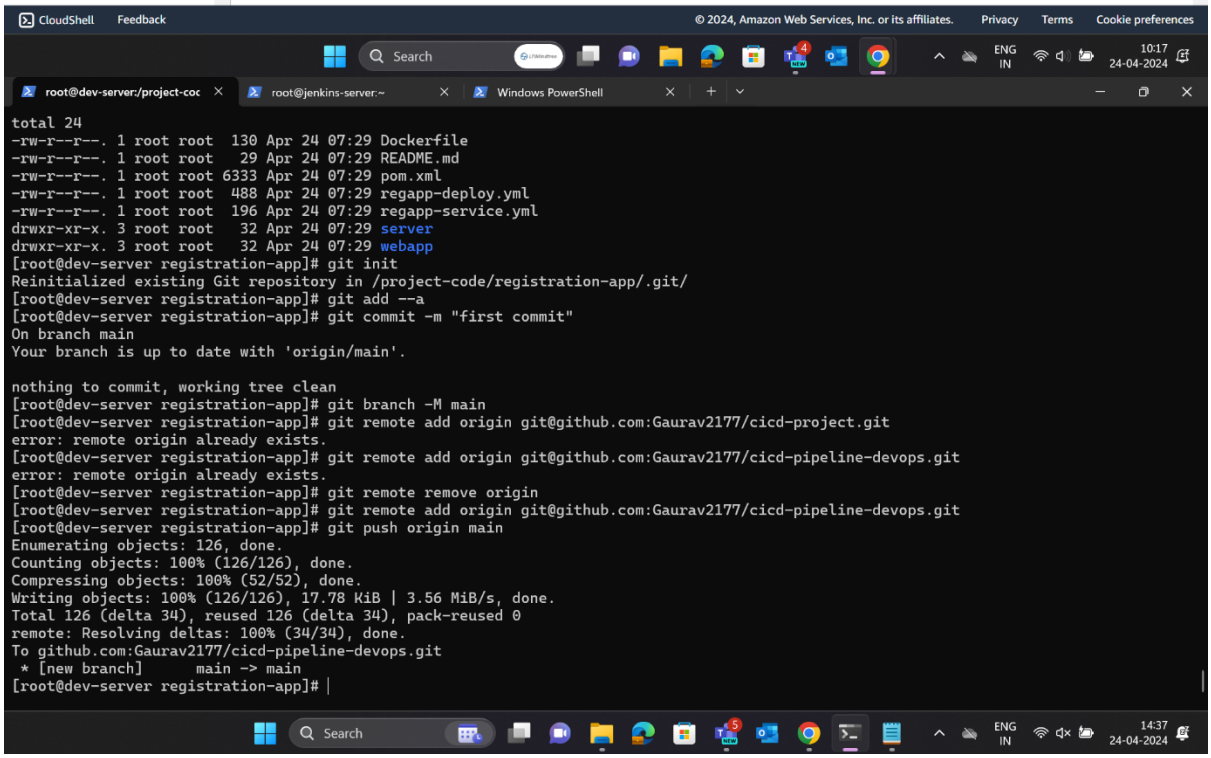
## Solution Document

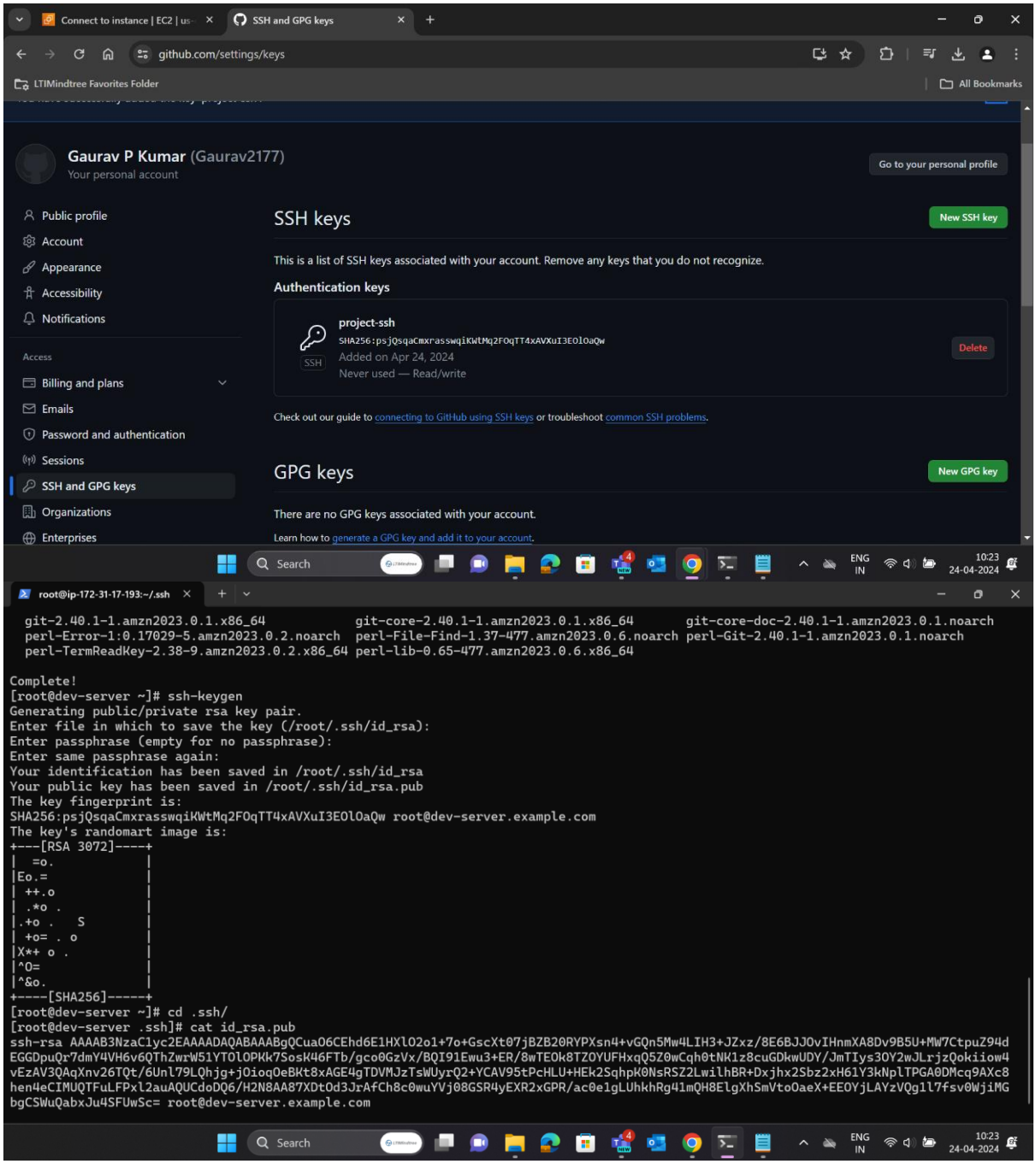
Document Version / Details: Ver. 2.1/ 02-Jan-2023

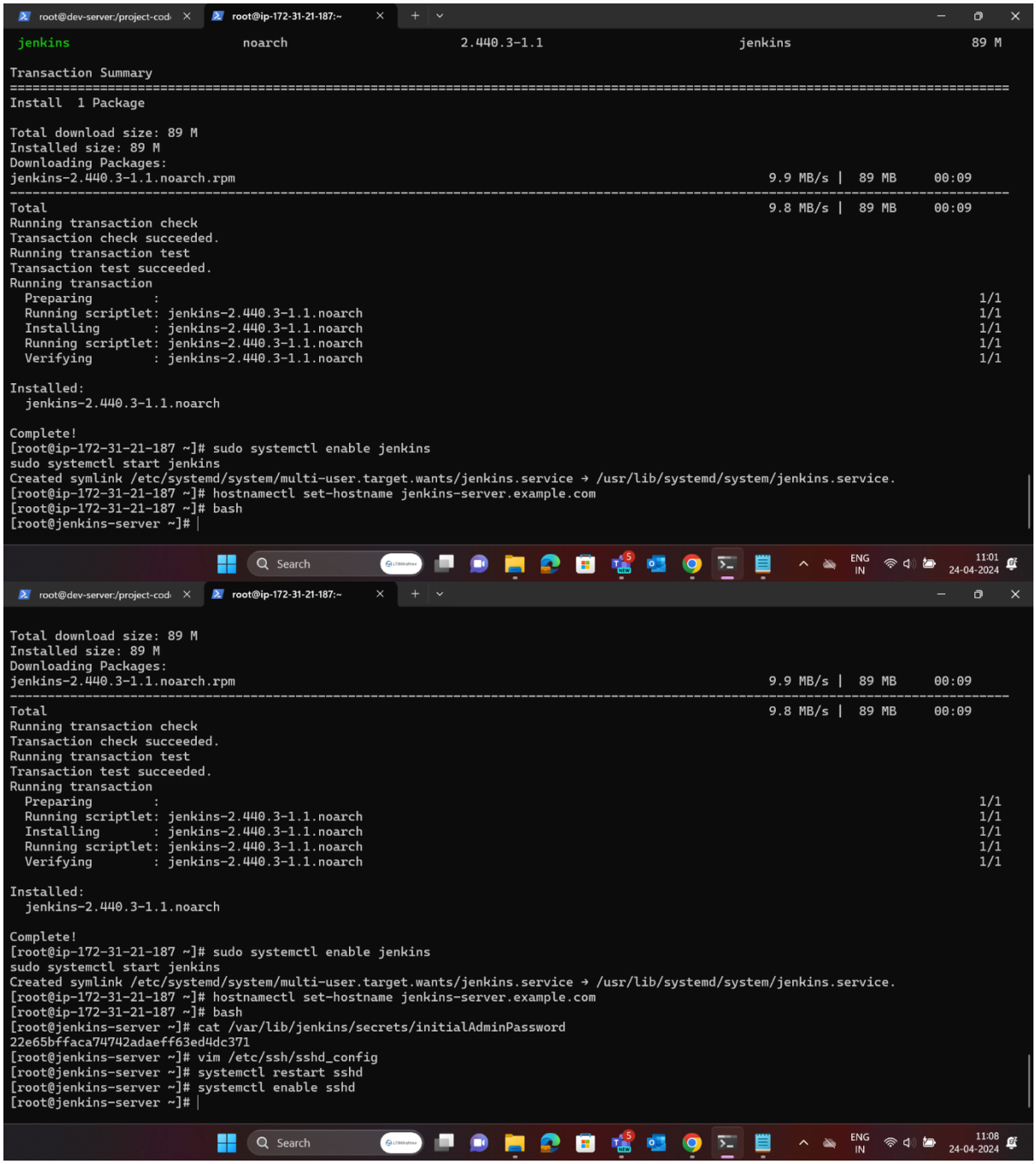
## Setting Up Development Server and Jenkins Server:

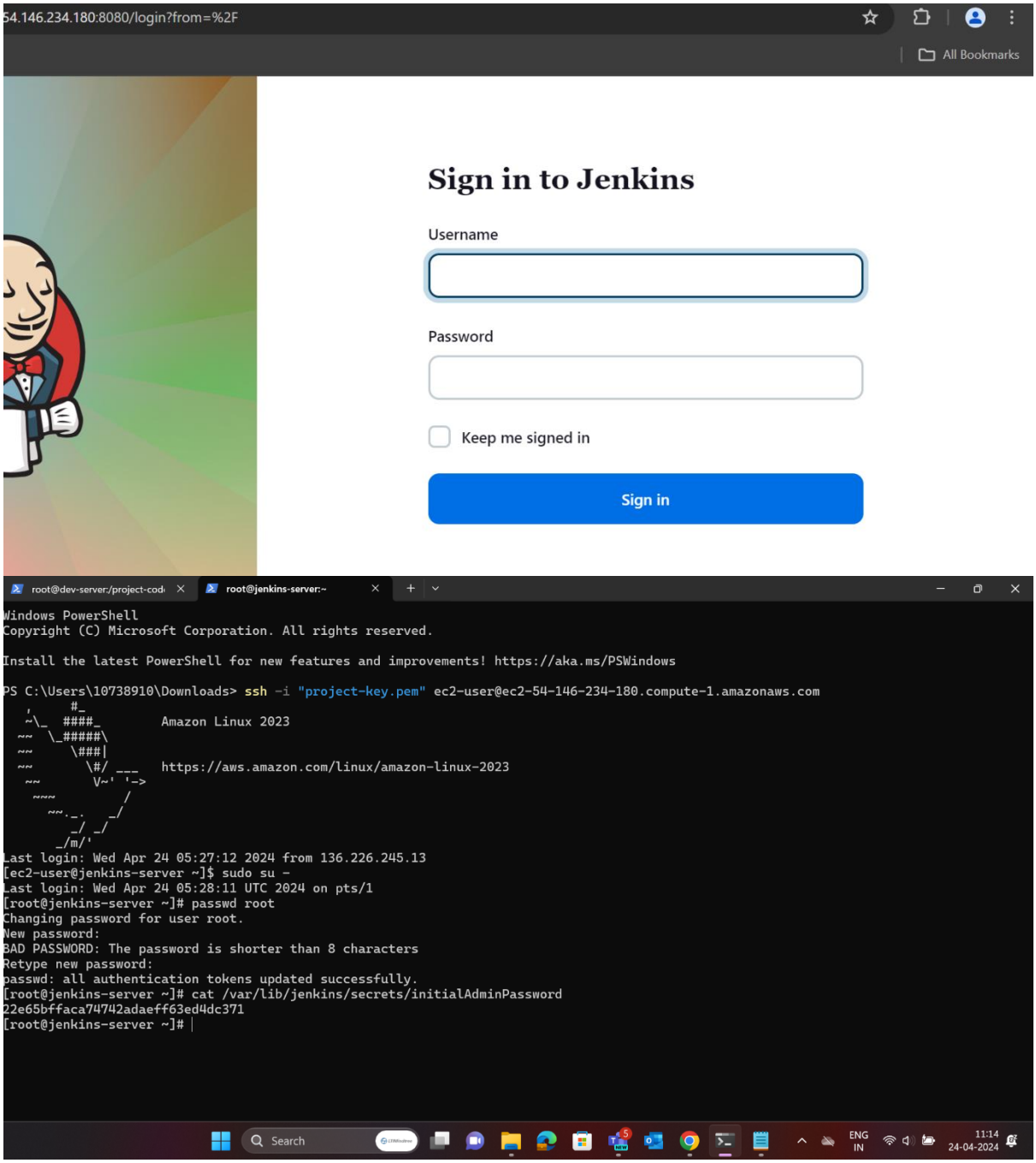
- EC2 Instances: Launch separate instances for the development server and Jenkins on AWS.
- SSH Key for GitHub: Generate an SSH key pair on the development server and add the public key to GitHub for secure access.
- Jenkins Installation: Install Jenkins on the development server to automate builds and deployments.
- SSH Configuration: Configure SSHD on the Jenkins server for password authentication to ensure secure access.
- User Setup: Create a dedicated user account within Jenkins for managing permissions and access control.
- Additional Software: Install Apache on the development server for web hosting and Maven on the Jenkins server for dependency management.
- Webhooks and Jobs: Configure webhooks in GitHub and set up Jenkins jobs to automate builds triggered by code changes.

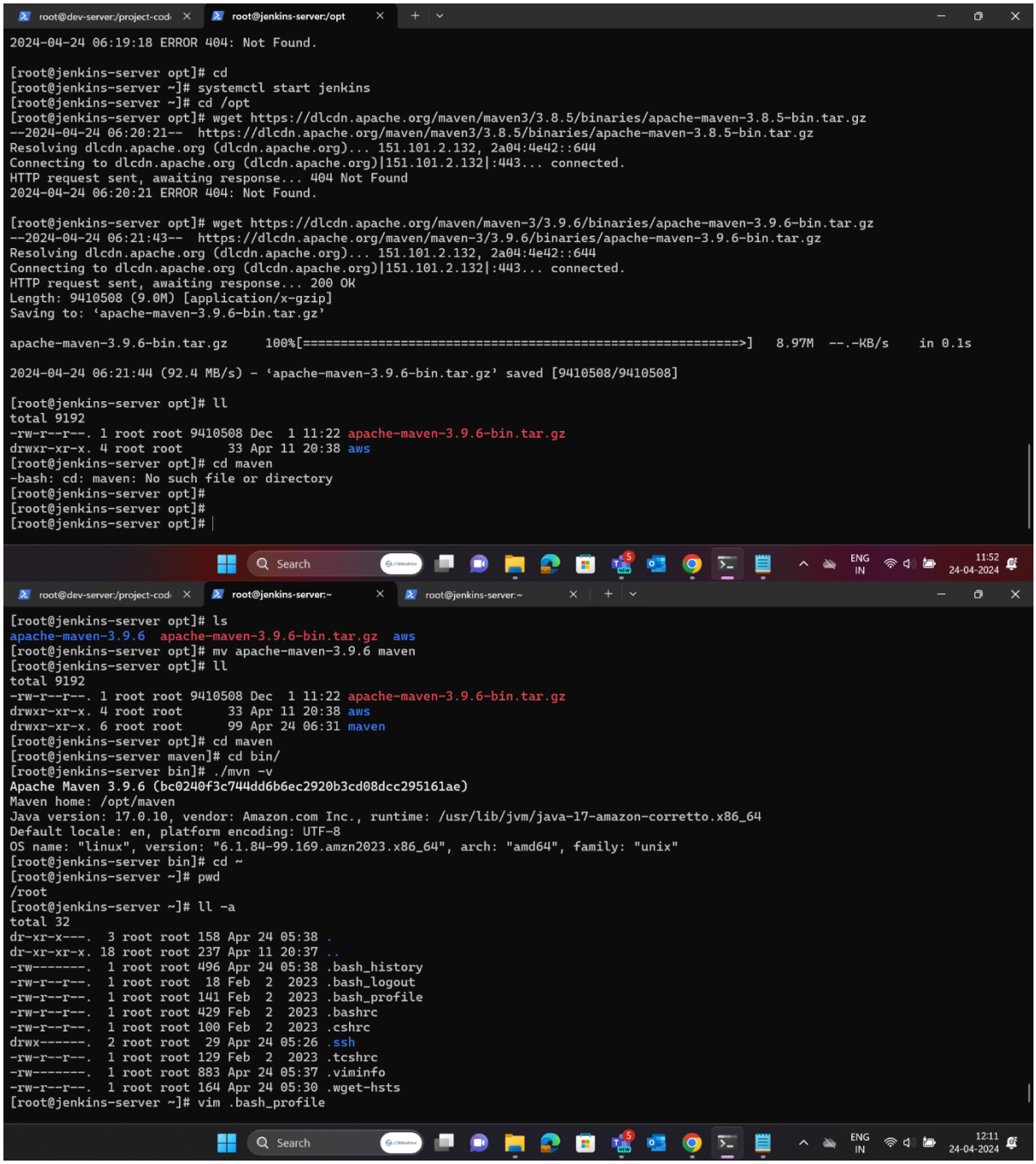

Instances | EC2 | us-east-1
us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:
LTIMindtree Favorites Folder
All Bookmarks
aws
Services
Search
[Alt+S]
N. Virginia
Gaurav@2177
EC2 Dashboard
EC2 Global View
Events
Console-to-Code Preview
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity Reservations New
Instances (1) Info
Connect
Instance state
Actions
Launch instances
Find Instance by attribute or tag (case-sensitive)
All states
Name
Instance ID
Instance state
Instance type
Status check
Alarm status
dev-server
i-0ec2be237688d8ebe
Running
t2.micro
Initializing
View alarms
Select an instance

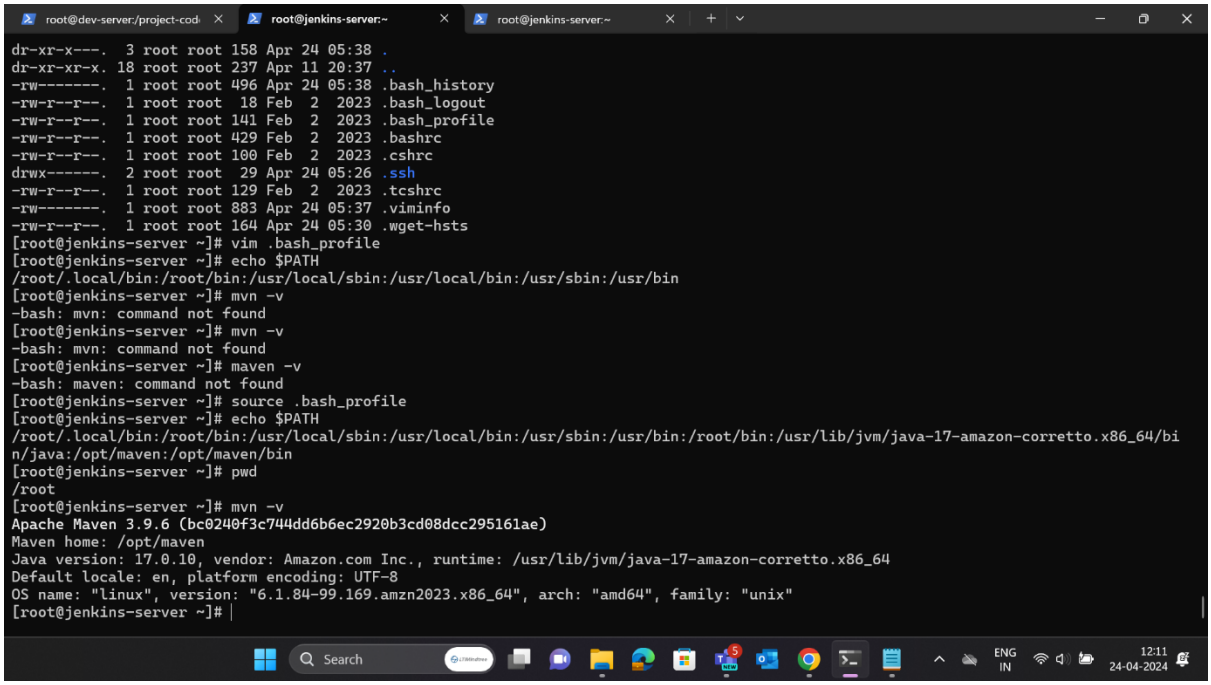

CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences
root@dev-server:/project-coc
root@jenkins-server:~
Windows PowerShell
total 24
-rw-r--r--. 1 root root 130 Apr 24 07:29 Dockerfile
-rw-r--r--. 1 root root 29 Apr 24 07:29 README.md
-rw-r--r--. 1 root root 6333 Apr 24 07:29 pom.xml
-rw-r--r--. 1 root root 488 Apr 24 07:29 regapp-deploy.yml
-rw-r--r--. 1 root root 196 Apr 24 07:29 regapp-service.yml
drwxr-xr-x. 3 root root 32 Apr 24 07:29 server
drwxr-xr-x. 3 root root 32 Apr 24 07:29 webapp
[root@dev-server registration-app]# git init
Reinitialized existing Git repository in /project-code/registration-app/.git/
[root@dev-server registration-app]# git add --a
[root@dev-server registration-app]# git commit -m "first commit"
On branch main
Your branch is up to date with 'origin/main'.
nothing to commit, working tree clean
[root@dev-server registration-app]# git branch -M main
[root@dev-server registration-app]# git remote add origin git@github.com:Gaurav2177/cicd-project.git
error: remote origin already exists.
[root@dev-server registration-app]# git remote add origin git@github.com:Gaurav2177/cicd-pipeline-devops.git
error: remote origin already exists.
[root@dev-server registration-app]# git remote remove origin
[root@dev-server registration-app]# git remote add origin git@github.com:Gaurav2177/cicd-pipeline-devops.git
[root@dev-server registration-app]# git push origin main
Enumerating objects: 126, done.
Counting objects: 100% (126/126), done.
Compressing objects: 100% (52/52), done.
Writing objects: 100% (126/126), 17.78 KiB | 3.56 MiB/s, done.
Total 126 (delta 34), reused 126 (delta 34), pack-reused 0
remote: Resolving deltas: 100% (34/34), done.
To github.com:Gaurav2177/cicd-pipeline-devops.git
* [new branch] main -> main
[root@dev-server registration-app]#


Connect to instance | EC2 | us-
SSH and GPG keys
github.com/settings/keys
LTIMindtree Favorites Folder
All Bookmarks
Gaurav P Kumar (Gaurav2177)
Your personal account
Go to your personal profile
Public profile
Account
Appearance
Accessibility
Notifications
Access
Billing and plans
Emails
Password and authentication
Sessions
SSH and GPG keys
Organizations
Enterprises
SSH keys
New SSH key
This is a list of SSH keys associated with your account. Remove any keys that you do not recognize.
Authentication keys
project-ssh
SHA256:psjQsqaCmxrasswqiKWtMq2FOqTT4xAVXuI3EOlOaQw
Added on Apr 24, 2024
Never used — Read/write
SSH
Delete
Check out our guide to connecting to GitHub using SSH keys or troubleshoot common SSH problems.
GPG keys
New GPG key
There are no GPG keys associated with your account.
Learn how to generate a GPG key and add it to your account.
Search
ENG
IN
10:23
24-04-2024
root@ip-172-31-17-193:~/.ssh
git-2.40.1-1.amzn2023.0.1.x86_64 git-core-2.40.1-1.amzn2023.0.1.x86_64 git-core-doc-2.40.1-1.amzn2023.0.1.noarch
perl-Error-1:0.17029-5.amzn2023.0.2.noarch perl-File-Find-1.37-477.amzn2023.0.6.noarch perl-Git-2.40.1-1.amzn2023.0.1.noarch
perl-TermReadKey-2.38-9.amzn2023.0.2.x86_64 perl-lib-0.65-477.amzn2023.0.6.x86_64
Complete!
[root@dev-server ~]# ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/root/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /root/.ssh/id_rsa
Your public key has been saved in /root/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:psjQsqaCmxrasswqiKWtMq2FOqTT4xAVXuI3EOlOaQw root@dev-server.example.com
The key's randomart image is:
+---[RSA 3072]----+
| =o. |
|Eo.= |
| ++.o |
| .*o . |
|.+o . S |
| +o= . o |
|X** o . |
|^O= |
|^&o. |
+----[SHA256]-----+
[root@dev-server ~]# cd .ssh/
[root@dev-server .ssh]# cat id_rsa.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABgQCuaO6CEhd6E1HXlO2o1+7o+GscXt07jBZB20RYPXsn4+vGQn5Mw4LIH3+JZxz/8E6BJJOvIHnmXA8Dv9B5U+MW7CtpuZ94d
EGGDpuQr7dmY4VH6v6QThZwrW51YTOlOPKk7SosK46FTb/gco0GzVx/BQI91Ewu3+ER/8wTEOk8TZOYUFHxqQ5Z0wCqh0tNK1z8cuGDkwUDY/JmTIys3OY2wJLrjzQokiiow4
vEzAV3QAqXnv26TQt/6Unl79LQhjg+jOioqOeBKt8xAGE4gTDVMJzTsWUyrQ2+YCAV95tPcHLU+HEk2SqhpK0NsRSZ2LwilhBR+Dxjhx2Sbz2xH61Y3kNplTPGA0DMcq9AXc8
hen4eCIMUQTFuLFPxl2auAQUCdoDQ6/H2N8AA87XDtOd3JrAfCh8c0wuYVj08GSR4yEXR2xGPR/ac0e1gLUhkhRg41mQH8ElgXhSmVtoOaeX+EEOYjLAYzVQg1l7fsv0WjiMG
bgCSWuQabxJu4SFUwSc= root@dev-server.example.com
Search
ENG
IN
10:23
24-04-2024




54.146.234.180:8080/login?from=%2F
All Bookmarks
Sign in to Jenkins
Username
Password
Keep me signed in
Sign in
root@dev-server:/project-cod
root@jenkins-server:~
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows
PS C:\Users\10738910\Downloads> ssh -i "project-key.pem" ec2-user@ec2-54-146-234-180.compute-1.amazonaws.com
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023
Last login: Wed Apr 24 05:27:12 2024 from 136.226.245.13
[ec2-user@jenkins-server ~]$ sudo su -
Last login: Wed Apr 24 05:28:11 UTC 2024 on pts/1
[root@jenkins-server ~]# passwd root
Changing password for user root.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
[root@jenkins-server ~]# cat /var/lib/jenkins/secrets/initialAdminPassword
22e65bffaca74742adaeff63ed4dc371
[root@jenkins-server ~]#
Search
ENG
IN
11:14
24-04-2024


root@dev-server:/project-cod
root@jenkins-server:/opt
2024-04-24 06:19:18 ERROR 404: Not Found.
[root@jenkins-server opt]# cd
[root@jenkins-server ~]# systemctl start jenkins
[root@jenkins-server ~]# cd /opt
[root@jenkins-server opt]# wget https://dlcdn.apache.org/maven/maven3/3.8.5/binaries/apache-maven-3.8.5-bin.tar.gz
--2024-04-24 06:20:21--  https://dlcdn.apache.org/maven/maven3/3.8.5/binaries/apache-maven-3.8.5-bin.tar.gz
Resolving dlcdn.apache.org (dlcdn.apache.org)... 151.101.2.132, 2a04:4e42::644
Connecting to dlcdn.apache.org (dlcdn.apache.org)|151.101.2.132|:443... connected.
HTTP request sent, awaiting response... 404 Not Found
2024-04-24 06:20:21 ERROR 404: Not Found.
[root@jenkins-server opt]# wget https://dlcdn.apache.org/maven/maven-3/3.9.6/binaries/apache-maven-3.9.6-bin.tar.gz
--2024-04-24 06:21:43--  https://dlcdn.apache.org/maven/maven-3/3.9.6/binaries/apache-maven-3.9.6-bin.tar.gz
Resolving dlcdn.apache.org (dlcdn.apache.org)... 151.101.2.132, 2a04:4e42::644
Connecting to dlcdn.apache.org (dlcdn.apache.org)|151.101.2.132|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 9410508 (9.0M) [application/x-gzip]
Saving to: 'apache-maven-3.9.6-bin.tar.gz'
apache-maven-3.9.6-bin.tar.gz 100%[==========>] 8.97M --.-KB/s in 0.1s
2024-04-24 06:21:44 (92.4 MB/s) - 'apache-maven-3.9.6-bin.tar.gz' saved [9410508/9410508]
[root@jenkins-server opt]# ll
total 9192
-rw-r--r--. 1 root root 9410508 Dec 1 11:22 apache-maven-3.9.6-bin.tar.gz
drwxr-xr-x. 4 root root 33 Apr 11 20:38 aws
[root@jenkins-server opt]# cd maven
-bash: cd: maven: No such file or directory
[root@jenkins-server opt]#
[root@jenkins-server opt]#
[root@jenkins-server opt]#
Search
ENG IN
11:52 24-04-2024
root@dev-server:/project-cod
root@jenkins-server:~
root@jenkins-server:~
[root@jenkins-server opt]# ls
apache-maven-3.9.6 apache-maven-3.9.6-bin.tar.gz aws
[root@jenkins-server opt]# mv apache-maven-3.9.6 maven
[root@jenkins-server opt]# ll
total 9192
-rw-r--r--. 1 root root 9410508 Dec 1 11:22 apache-maven-3.9.6-bin.tar.gz
drwxr-xr-x. 4 root root 33 Apr 11 20:38 aws
drwxr-xr-x. 6 root root 99 Apr 24 06:31 maven
[root@jenkins-server opt]# cd maven
[root@jenkins-server maven]# cd bin/
[root@jenkins-server bin]# ./mvn -v
Apache Maven 3.9.6 (bc0240f3c744dd6b6ec2920b3cd08dcc295161ae)
Maven home: /opt/maven
Java version: 17.0.10, vendor: Amazon.com Inc., runtime: /usr/lib/jvm/java-17-amazon-corretto.x86_64
Default locale: en, platform encoding: UTF-8
OS name: "linux", version: "6.1.84-99.169.amzn2023.x86_64", arch: "amd64", family: "unix"
[root@jenkins-server bin]# cd ~
[root@jenkins-server ~]# pwd
/root
[root@jenkins-server ~]# ll -a
total 32
dr-xr-x---. 3 root root 158 Apr 24 05:38 .
dr-xr-xr-x. 18 root root 237 Apr 11 20:37 ..
-rw-------. 1 root root 496 Apr 24 05:38 .bash_history
-rw-r--r--. 1 root root 18 Feb 2 2023 .bash_logout
-rw-r--r--. 1 root root 141 Feb 2 2023 .bash_profile
-rw-r--r--. 1 root root 429 Feb 2 2023 .bashrc
-rw-r--r--. 1 root root 100 Feb 2 2023 .cshrc
drwx------. 2 root root 29 Apr 24 05:26 .ssh
-rw-r--r--. 1 root root 129 Feb 2 2023 .tcshrc
-rw-------. 1 root root 883 Apr 24 05:37 .viminfo
-rw-r--r--. 1 root root 164 Apr 24 05:30 .wget-hsts
[root@jenkins-server ~]# vim .bash_profile
Search
ENG IN
12:11 24-04-2024


root@dev-server:/project-cod
root@jenkins-server:~
root@jenkins-server:~
dr-xr-x---. 3 root root 158 Apr 24 05:38 .
dr-xr-xr-x. 18 root root 237 Apr 11 20:37 ..
-rw-------. 1 root root 496 Apr 24 05:38 .bash_history
-rw-r--r--. 1 root root 18 Feb 2 2023 .bash_logout
-rw-r--r--. 1 root root 141 Feb 2 2023 .bash_profile
-rw-r--r--. 1 root root 429 Feb 2 2023 .bashrc
-rw-r--r--. 1 root root 100 Feb 2 2023 .cshrc
drwx------. 2 root root 29 Apr 24 05:26 .ssh
-rw-r--r--. 1 root root 129 Feb 2 2023 .tcshrc
-rw-------. 1 root root 883 Apr 24 05:37 .viminfo
-rw-r--r--. 1 root root 164 Apr 24 05:30 .wget-hsts
[root@jenkins-server ~]# vim .bash_profile
[root@jenkins-server ~]# echo $PATH
/root/.local/bin:/root/bin:/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin
[root@jenkins-server ~]# mvn -v
-bash: mvn: command not found
[root@jenkins-server ~]# mvn -v
-bash: mvn: command not found
[root@jenkins-server ~]# maven -v
-bash: maven: command not found
[root@jenkins-server ~]# source .bash_profile
[root@jenkins-server ~]# echo $PATH
/root/.local/bin:/root/bin:/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/root/bin:/usr/lib/jvm/java-17-amazon-corretto.x86_64/bi
n/java:/opt/maven:/opt/maven/bin
[root@jenkins-server ~]# pwd
/root
[root@jenkins-server ~]# mvn -v
Apache Maven 3.9.6 (bc0240f3c744dd6b6ec2920b3cd08dcc295161ae)
Maven home: /opt/maven
Java version: 17.0.10, vendor: Amazon.com Inc., runtime: /usr/lib/jvm/java-17-amazon-corretto.x86_64
Default locale: en, platform encoding: UTF-8
OS name: "linux", version: "6.1.84-99.169.amzn2023.x86_64", arch: "amd64", family: "unix"
[root@jenkins-server ~]#
Search
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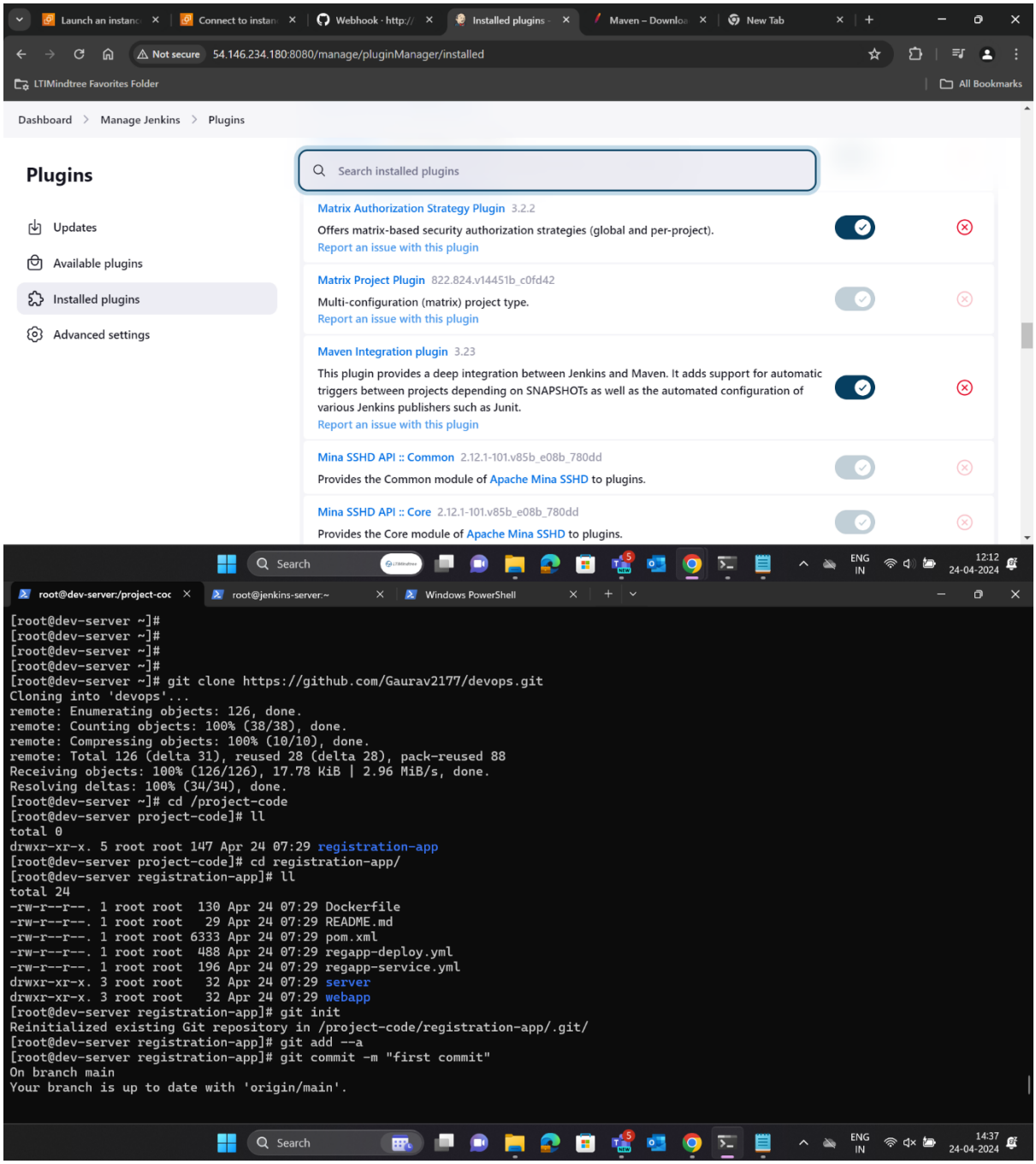
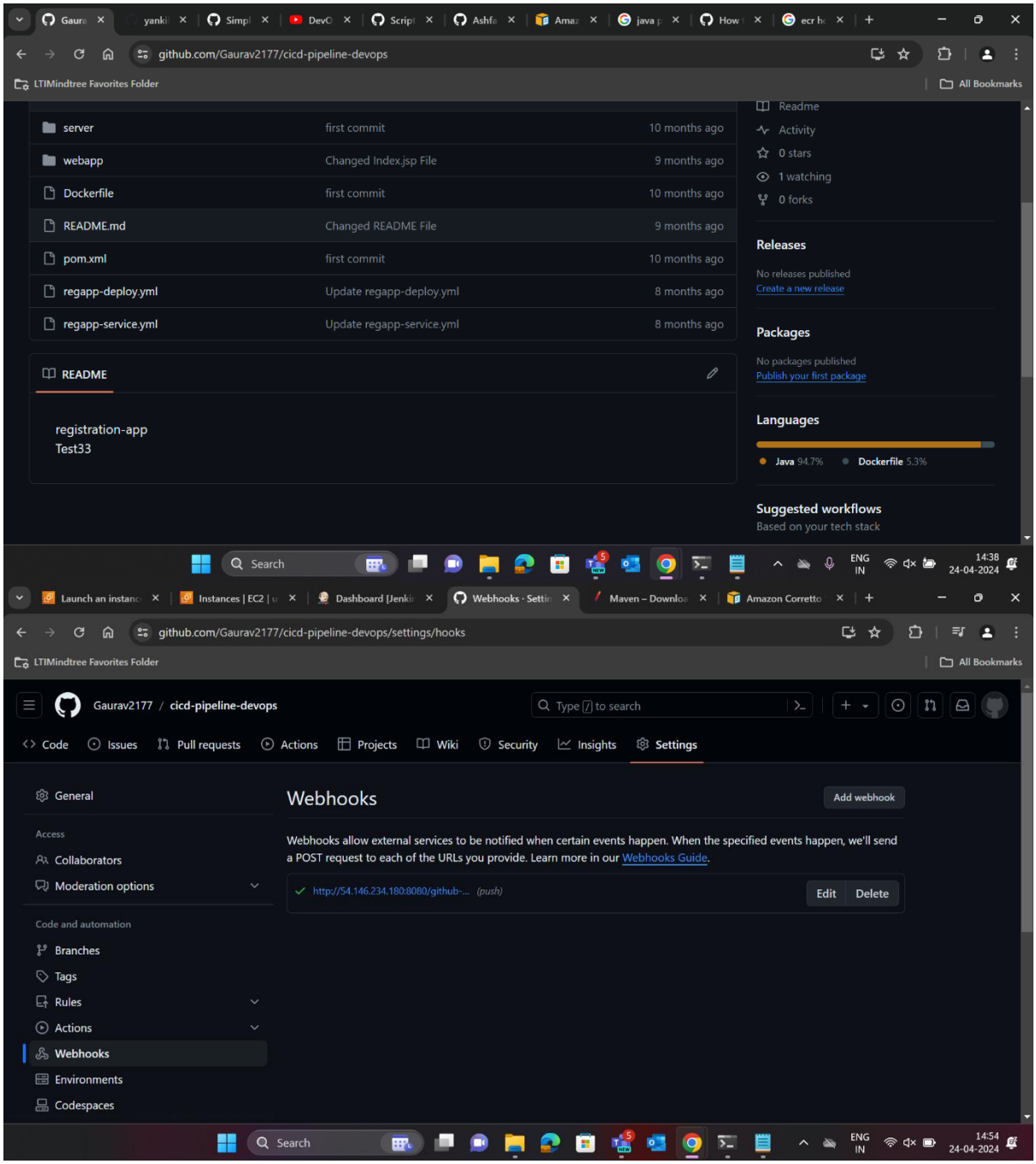
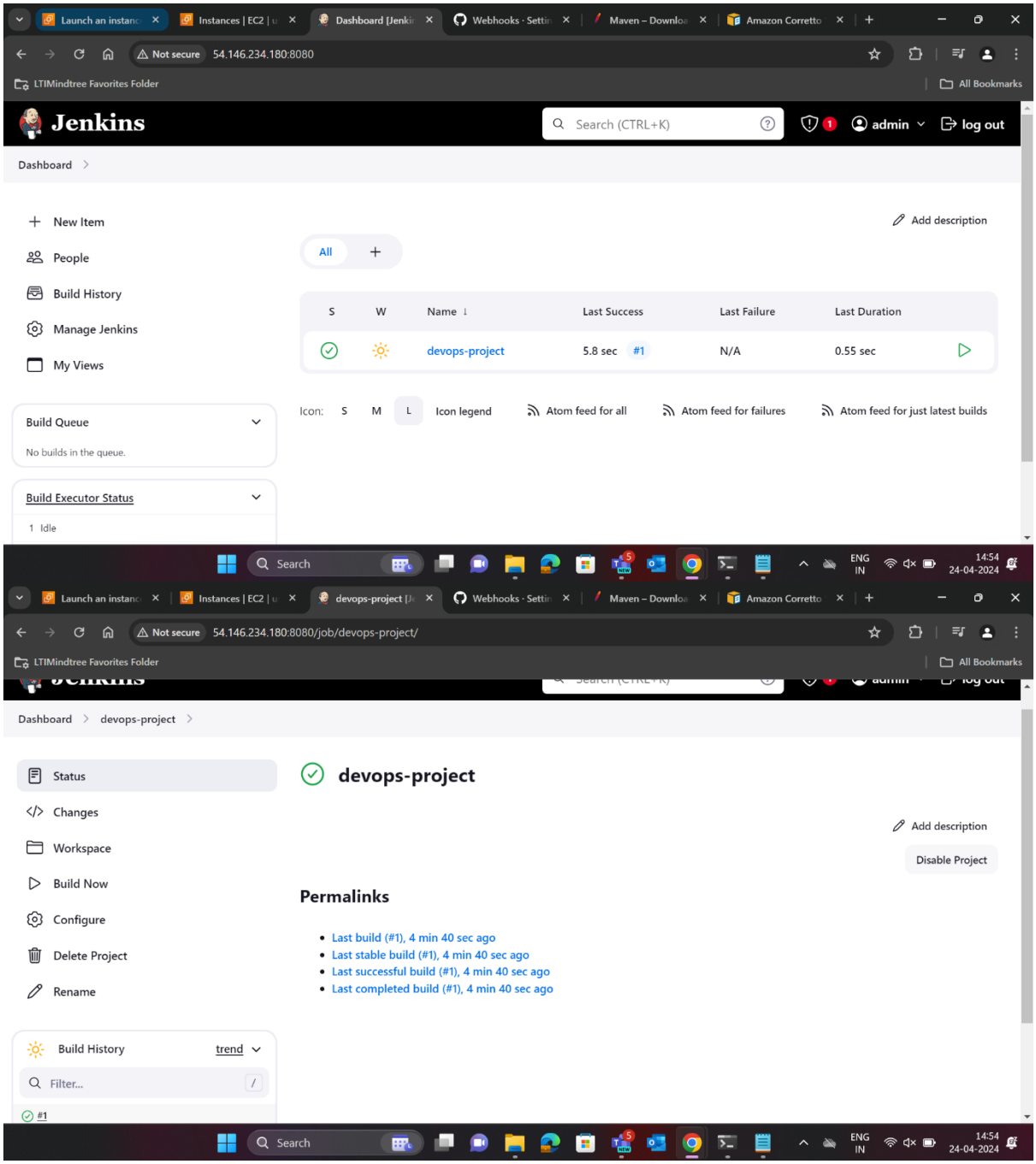
12:11
24-04-2024

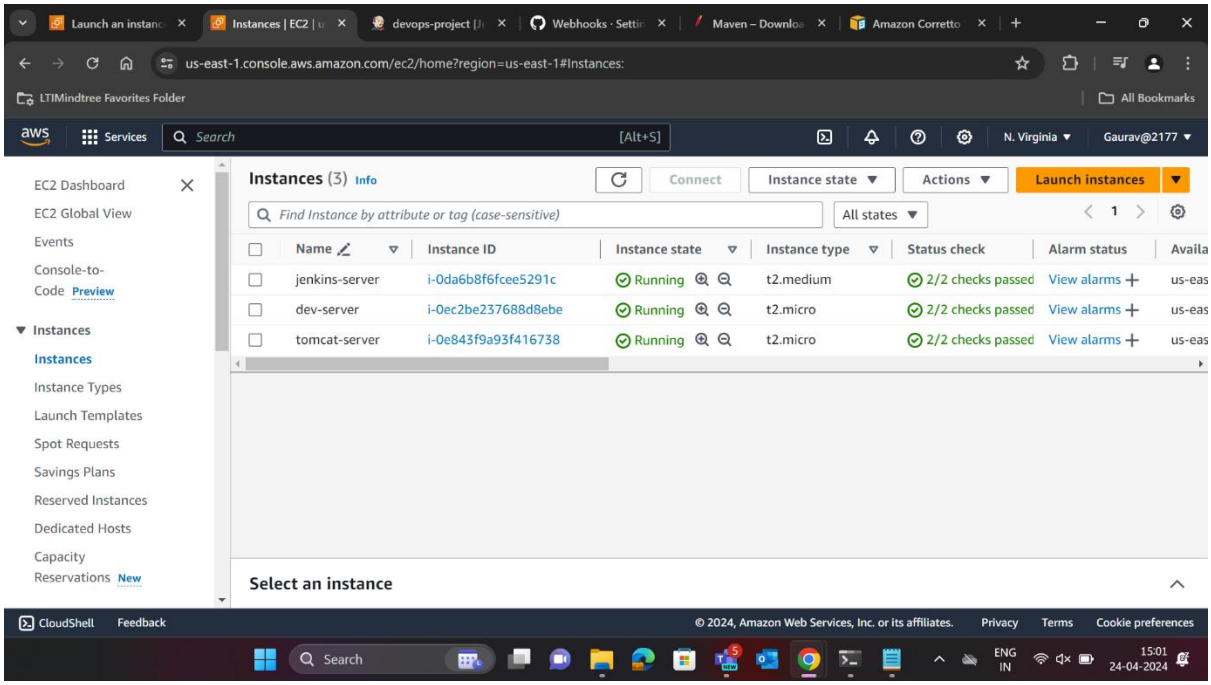
- Build a Java Project Using Jenkins and Generate Artifacts
- Configure Jenkins Job:
- Navigate to the Jenkins dashboard and click on "New Item" to create a new Jenkins job.
- Enter a name for the job and select "Freestyle project" as the job type.
- Configure the job settings, such as SCM (Source Code Management) and build triggers, according to your project requirements.
- Save the job configuration.
- Setup Maven in Jenkins:
- Go to "Manage Jenkins" > "Global Tool Configuration".
- Locate the "Maven" section and click on "Add Maven".
- Enter a name for the Maven installation and specify the MAVEN_HOME directory.
- Save the configuration.
- Configure Java in Jenkins:
- Similarly, in "Global Tool Configuration", locate the "JDK" section.
- Click on "Add JDK" and specify the JDK installation path.
- Save the configuration.
- Add Build Steps:
- In your Jenkins job configuration, navigate to the "Build" section.
- Add a build step to invoke Maven.
- Enter the Maven goals and options required to build your Java project (e.g., clean install).

- Save and Build:
- Save the Jenkins job configuration.
- Trigger a build manually or wait for the configured build trigger to execute the job.
- Monitor Build Progress:
- Monitor the Jenkins job build progress in the Jenkins dashboard.
- Inspect the console output for any errors or warnings during the build process.
- Generate Artifacts:
- Once the build is successful, the artifacts (e.g., JAR files) will be generated as per your Maven configuration.
- Navigate to the Jenkins job workspace to locate the generated artifacts.
- Verify that the artifacts are correctly generated and accessible for further deployment or distribution.


Launch an instanc
Connect to instan
Webhook · http://
Installed plugins -
Maven – Downloa
New Tab
Not secure
54.146.234.180:8080/manage/pluginManager/installed
LTIMindtree Favorites Folder
All Bookmarks
Dashboard
Manage Jenkins
Plugins
Plugins
Search installed plugins
Updates
Available plugins
Installed plugins
Advanced settings
Matrix Authorization Strategy Plugin 3.2.2
Offers matrix-based security authorization strategies (global and per-project).
Report an issue with this plugin
Matrix Project Plugin 822.824.v14451b_c0fd42
Multi-configuration (matrix) project type.
Report an issue with this plugin
Maven Integration plugin 3.23
This plugin provides a deep integration between Jenkins and Maven. It adds support for automatic triggers between projects depending on SNAPSHOTs as well as the automated configuration of various Jenkins publishers such as Junit.
Report an issue with this plugin
Mina SSHD API :: Common 2.12.1-101.v85b_e08b_780dd
Provides the Common module of Apache Mina SSHD to plugins.
Mina SSHD API :: Core 2.12.1-101.v85b_e08b_780dd
Provides the Core module of Apache Mina SSHD to plugins.
Search
ENG
IN
12:12
24-04-2024
root@dev-server:/project-coc
root@jenkins-server:~
Windows PowerShell
[root@dev-server ~]#
[root@dev-server ~]#
[root@dev-server ~]#
[root@dev-server ~]#
[root@dev-server ~]# git clone https://github.com/Gaurav2177/devops.git
Cloning into 'devops'...
remote: Enumerating objects: 126, done.
remote: Counting objects: 100% (38/38), done.
remote: Compressing objects: 100% (10/10), done.
remote: Total 126 (delta 31), reused 28 (delta 28), pack-reused 88
Receiving objects: 100% (126/126), 17.78 KiB | 2.96 MiB/s, done.
Resolving deltas: 100% (34/34), done.
[root@dev-server ~]# cd /project-code
[root@dev-server project-code]# ll
total 0
drwxr-xr-x. 5 root root 147 Apr 24 07:29 registration-app
[root@dev-server project-code]# cd registration-app/
[root@dev-server registration-app]# ll
total 24
-rw-r--r--. 1 root root 130 Apr 24 07:29 Dockerfile
-rw-r--r--. 1 root root 29 Apr 24 07:29 README.md
-rw-r--r--. 1 root root 6333 Apr 24 07:29 pom.xml
-rw-r--r--. 1 root root 488 Apr 24 07:29 regapp-deploy.yml
-rw-r--r--. 1 root root 196 Apr 24 07:29 regapp-service.yml
drwxr-xr-x. 3 root root 32 Apr 24 07:29 server
drwxr-xr-x. 3 root root 32 Apr 24 07:29 webapp
[root@dev-server registration-app]# git init
Reinitialized existing Git repository in /project-code/registration-app/.git/
[root@dev-server registration-app]# git add --a
[root@dev-server registration-app]# git commit -m "first commit"
On branch main
Your branch is up to date with 'origin/main'.
Search
ENG
IN
14:37
24-04-2024


github.com/Gaurav2177/cicd-pipeline-devops
server first commit 10 months ago
webapp Changed Index.jsp File 9 months ago
Dockerfile first commit 10 months ago
README.md Changed README File 9 months ago
pom.xml first commit 10 months ago
regapp-deploy.yml Update regapp-deploy.yml 8 months ago
regapp-service.yml Update regapp-service.yml 8 months ago
README
registration-app
Test33
Readme
Activity
0 stars
1 watching
0 forks
Releases
No releases published
Create a new release
Packages
No packages published
Publish your first package
Languages
Java 94.7%
Dockerfile 5.3%
Suggested workflows
Based on your tech stack
github.com/Gaurav2177/cicd-pipeline-devops/settings/hooks
Gaurav2177 / cicd-pipeline-devops
Code
Issues
Pull requests
Actions
Projects
Wiki
Security
Insights
Settings
General
Access
Collaborators
Moderation options
Code and automation
Branches
Tags
Rules
Actions
Webhooks
Environments
Codespaces
Webhooks
Add webhook
Webhooks allow external services to be notified when certain events happen. When the specified events happen, we'll send a POST request to each of the URLs you provide. Learn more in our Webhooks Guide.
http://54.146.234.180:8080/github-... (push)
Edit
Delete

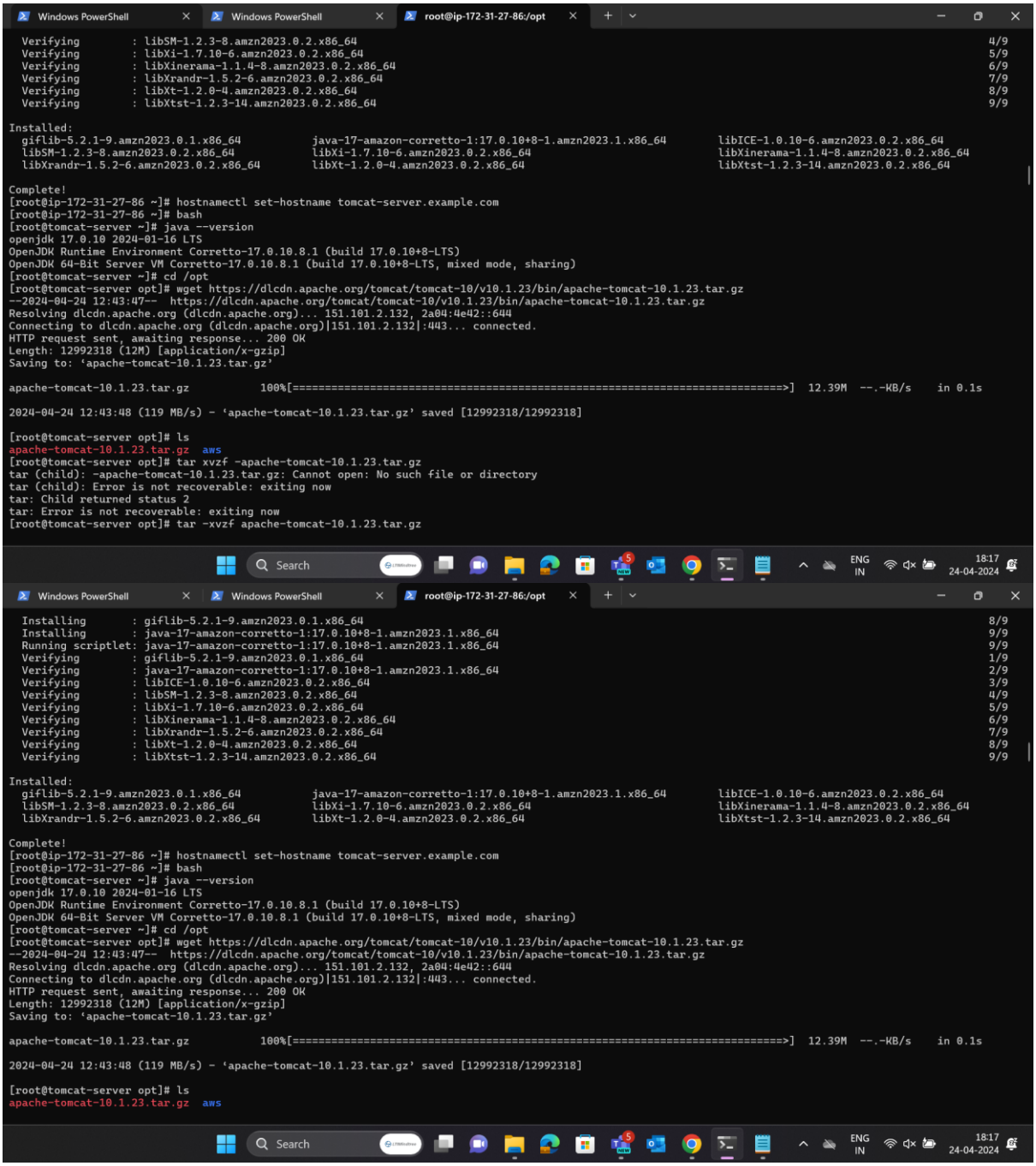

Launch an instanc
Instances | EC2 |
Dashboard [Jenkin
Webhooks - Settin
Maven – Downloa
Amazon Corretto
Not secure
54.146.234.180:8080
LTIMindtree Favorites Folder
All Bookmarks
Jenkins
Search (CTRL+K)
admin
log out
Dashboard
New Item
People
Build History
Manage Jenkins
My Views
Add description
All
S
W
Name
Last Success
Last Failure
Last Duration
devops-project
5.8 sec
#1
N/A
0.55 sec
Icon:
S
M
L
Icon legend
Atom feed for all
Atom feed for failures
Atom feed for just latest builds
Build Queue
No builds in the queue.
Build Executor Status
1 Idle
Search
ENG
IN
14:54
24-04-2024
Launch an instanc
Instances | EC2 |
devops-project [J
Webhooks - Settin
Maven – Downloa
Amazon Corretto
Not secure
54.146.234.180:8080/job/devops-project/
LTIMindtree Favorites Folder
All Bookmarks
Dashboard
devops-project
Status
Changes
Workspace
Build Now
Configure
Delete Project
Rename
devops-project
Add description
Disable Project
Permalinks
Last build (#1), 4 min 40 sec ago
Last stable build (#1), 4 min 40 sec ago
Last successful build (#1), 4 min 40 sec ago
Last completed build (#1), 4 min 40 sec ago
Build History
trend
Filter...
#1
Search
ENG
IN
14:54
24-04-2024

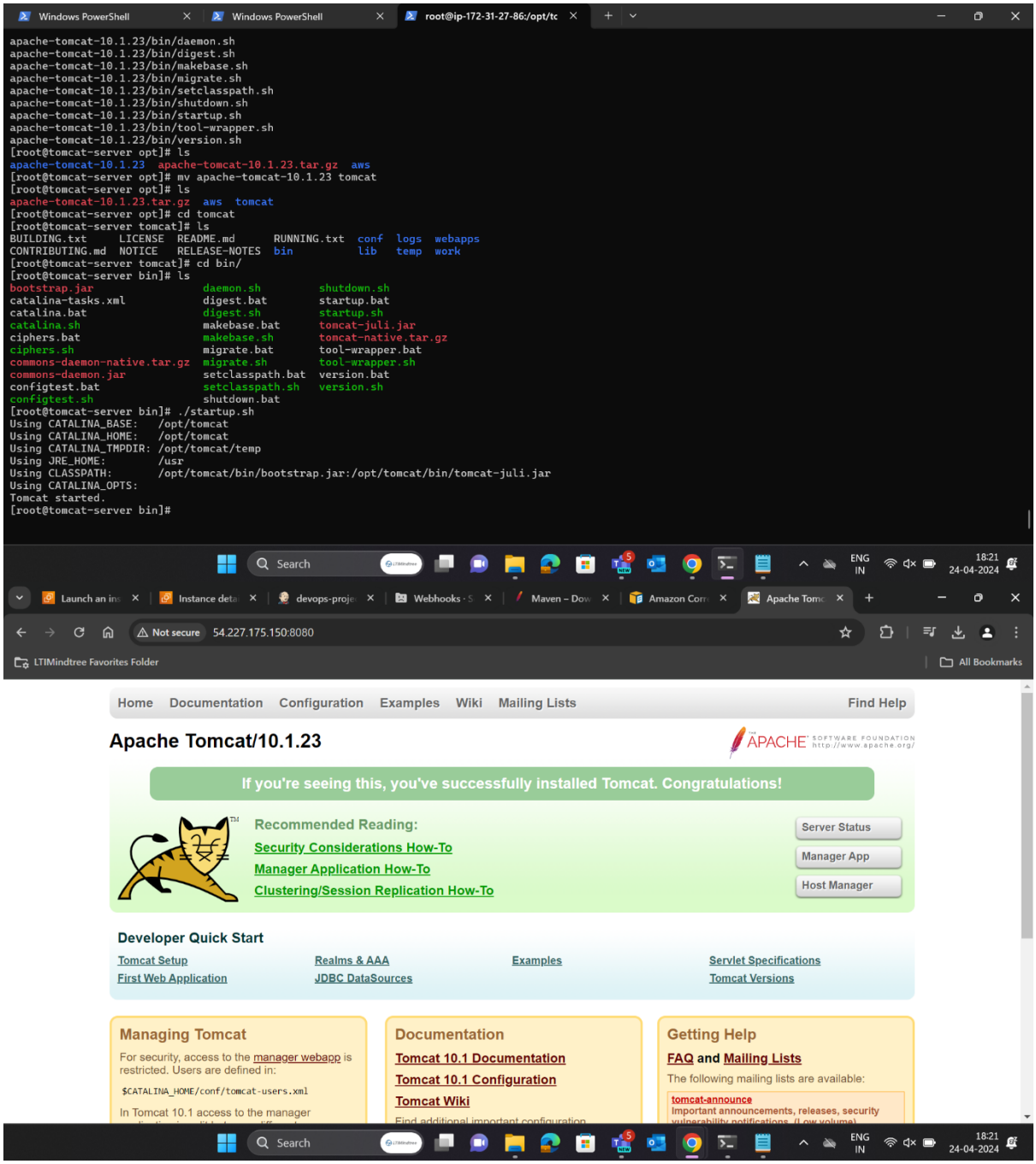

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:
Instances (3) Info
Connect
Instance state
Actions
Launch instances
Find Instance by attribute or tag (case-sensitive)
All states
Name
Instance ID
Instance state
Instance type
Status check
Alarm status
jenkins-server
i-0da6b8f6fcee5291c
Running
t2.medium
2/2 checks passed
View alarms
dev-server
i-0ec2be237688d8ebe
Running
t2.micro
2/2 checks passed
View alarms
tomcat-server
i-0e843f9a93f416738
Running
t2.micro
2/2 checks passed
View alarms
Select an instance
EC2 Dashboard
EC2 Global View
Events
Console-to-Code Preview
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity Reservations New
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences

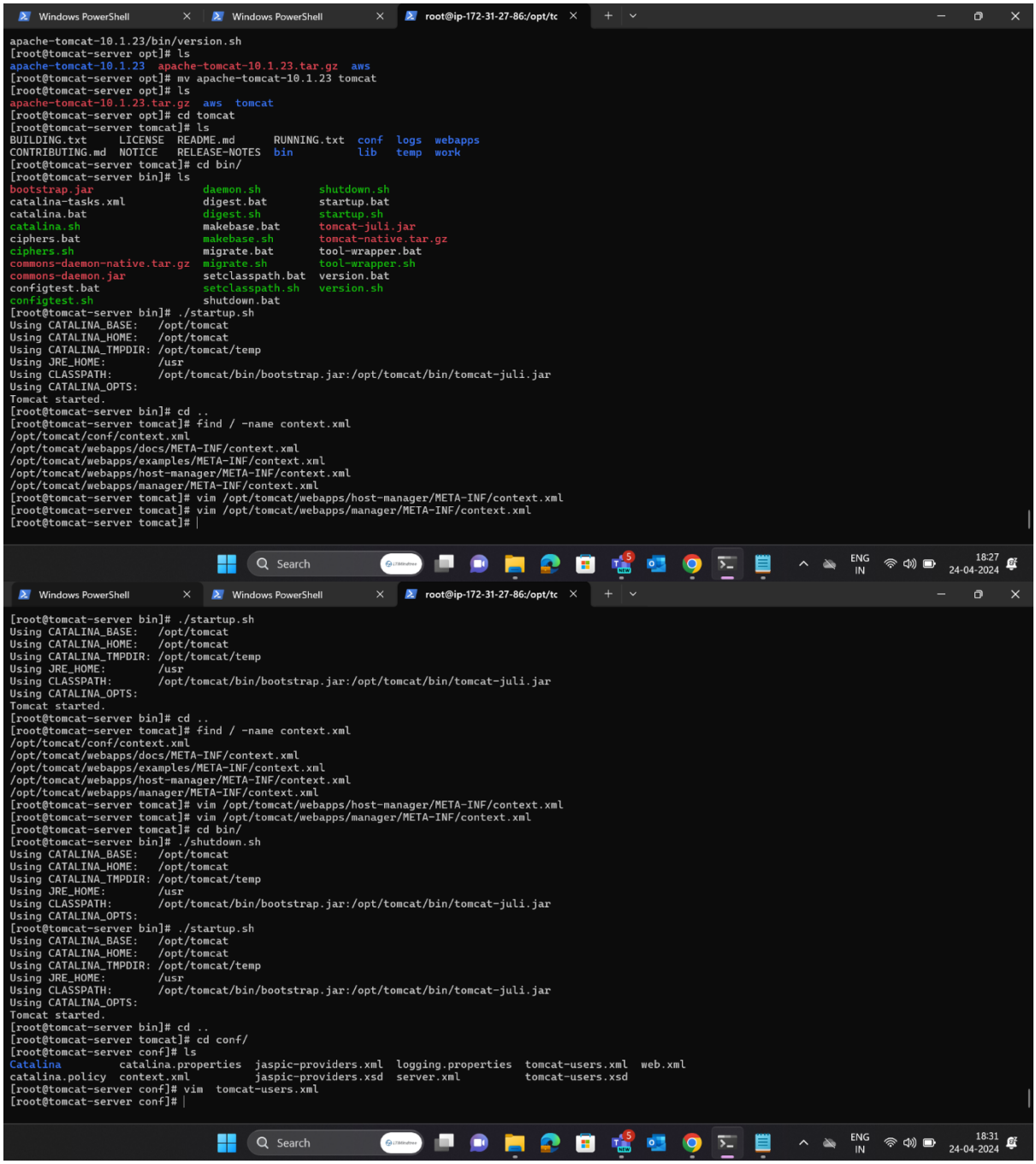
Integrate Tomcat in CI/CD Pipeline

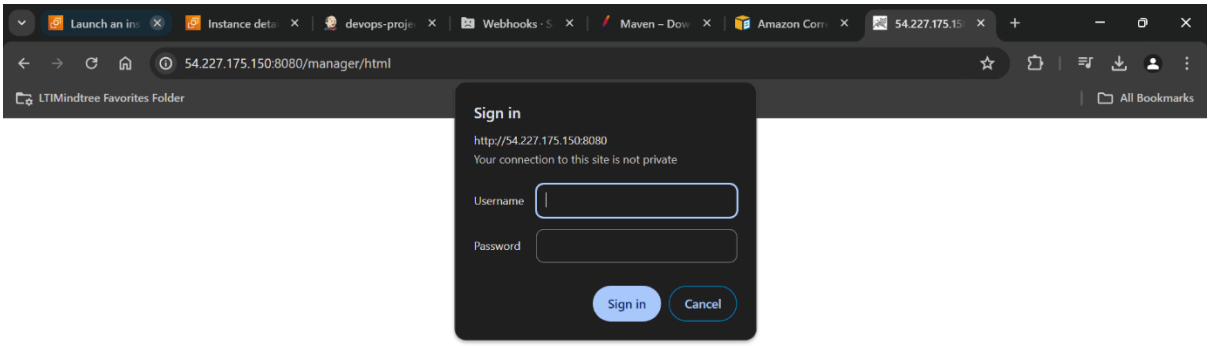
- Setup Tomcat Server:
- Provision a Linux EC2 instance for hosting the Tomcat server.
- Install Java on the EC2 instance to support Tomcat.
- Configure Tomcat by setting up necessary environment variables and permissions.
- Start the Tomcat server and verify its status.
- Access Tomcat Web UI on Port 8080:
- Once Tomcat is running, access its web interface using a web browser on port 8080.
- Verify that the Tomcat server is accessible and functioning correctly.
- Edit Manager App Error:
- Navigate to the Tomcat installation directory and locate the Manager App configuration files.
- Edit the context.xml files for the host-manager and manager applications to allow access.
- Save the changes and restart Tomcat for the configurations to take effect.
- Create Tomcat Users:
- Configure the tomcat-users.xml file to define users and roles for accessing the Tomcat Manager App.
- Add necessary roles and users with appropriate permissions.
- Save the changes and restart Tomcat to apply the user configurations.
- Install Tomcat Plugin in Jenkins:
- Access the Jenkins dashboard and navigate to "Manage Jenkins" > "Manage Plugins".
- Install the "Deploy to Container" plugin to enable deployment of artifacts to the Tomcat server.
- Configure Tomcat Server in Jenkins:
- In Jenkins, go to "Manage Jenkins" > "Configure System".
- Scroll down to the "Tomcat Servers" section and add a new Tomcat server configuration.
- Provide the necessary credentials and connection details for accessing the Tomcat server.
- Build Maven and Deploy to Tomcat Server:
- Create or configure a Jenkins job for building Maven projects.

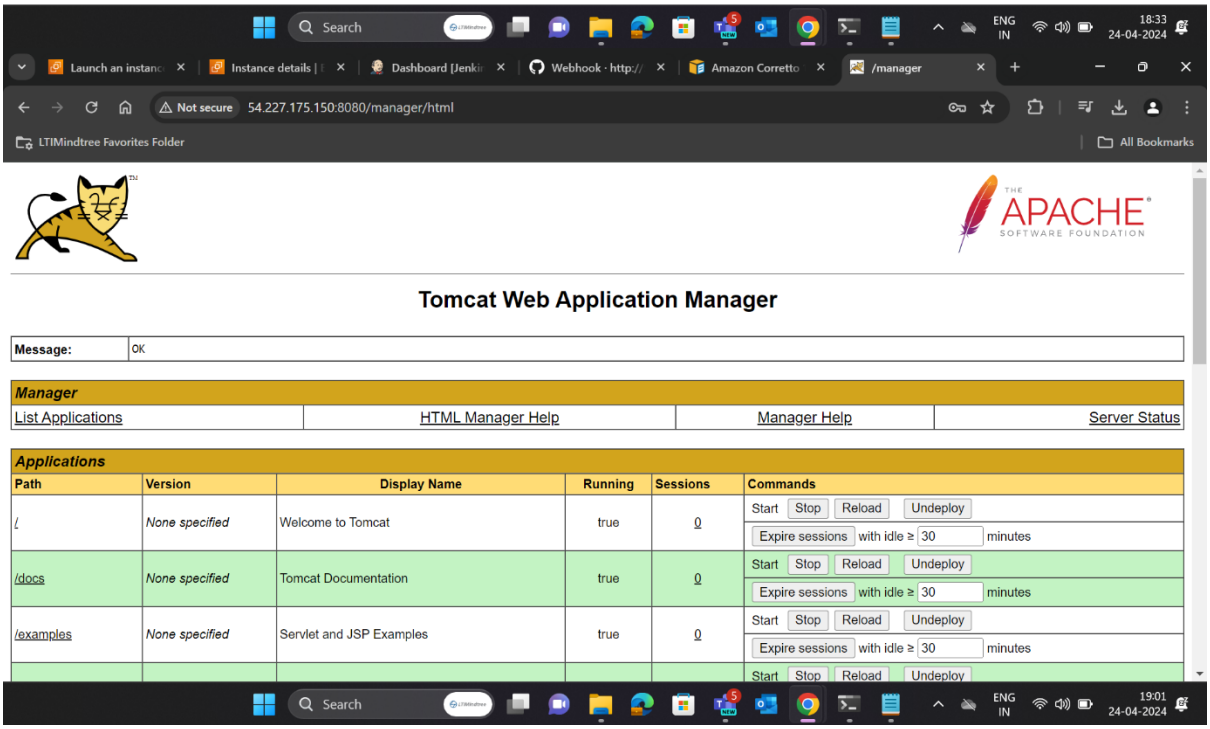
- Add a build step to deploy the artifacts to the Tomcat server using the "Deploy to Container" plugin.
- Configure the plugin with the appropriate Tomcat server details and deployment settings.
- Automate Build and Deploy using Poll SCM:
- Enable SCM polling in the Jenkins job configuration to automatically trigger builds when changes are detected in the source code repository.

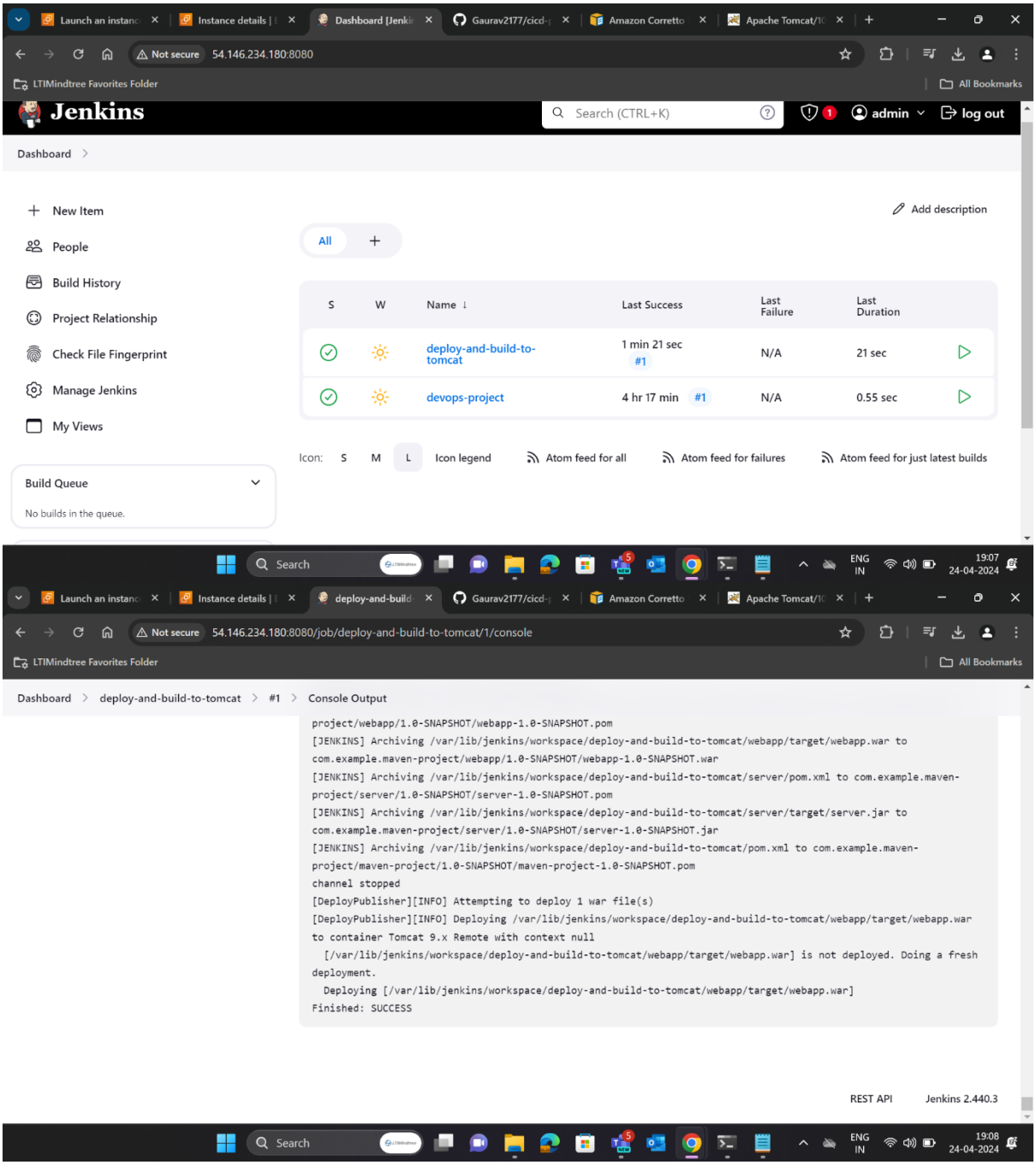


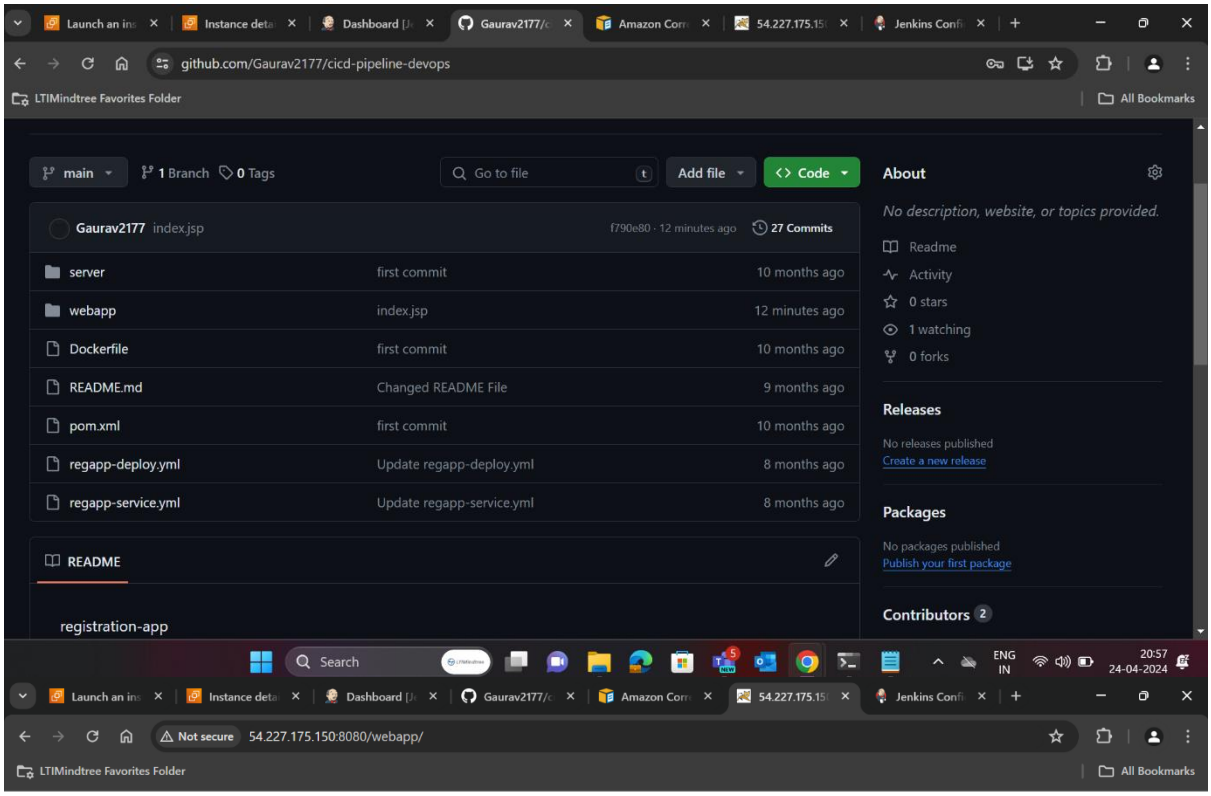

Windows PowerShell
Windows PowerShell
root@ip-172-31-27-86:/opt/tc
apache-tomcat-10.1.23/bin/daemon.sh
apache-tomcat-10.1.23/bin/digest.sh
apache-tomcat-10.1.23/bin/makebase.sh
apache-tomcat-10.1.23/bin/migrate.sh
apache-tomcat-10.1.23/bin/setclasspath.sh
apache-tomcat-10.1.23/bin/shutdown.sh
apache-tomcat-10.1.23/bin/startup.sh
apache-tomcat-10.1.23/bin/tool-wrapper.sh
apache-tomcat-10.1.23/bin/version.sh
[root@tomcat-server opt]# ls
apache-tomcat-10.1.23 apache-tomcat-10.1.23.tar.gz aws
[root@tomcat-server opt]# mv apache-tomcat-10.1.23 tomcat
[root@tomcat-server opt]# ls
apache-tomcat-10.1.23.tar.gz aws tomcat
[root@tomcat-server opt]# cd tomcat
[root@tomcat-server tomcat]# ls
BUILDING.txt LICENSE README.md RUNNING.txt conf logs webapps
CONTRIBUTING.md NOTICE RELEASE-NOTES bin lib temp work
[root@tomcat-server tomcat]# cd bin/
[root@tomcat-server bin]# ls
bootstrap.jar daemon.sh shutdown.sh
catalina-tasks.xml digest.bat startup.bat
catalina.bat digest.sh startup.sh
catalina.sh makebase.bat tomcat-juli.jar
ciphers.bat makebase.sh tomcat-native.tar.gz
ciphers.sh migrate.bat tool-wrapper.bat
commons-daemon-native.tar.gz migrate.sh tool-wrapper.sh
commons-daemon.jar setclasspath.bat version.bat
configtest.bat setclasspath.sh version.sh
configtest.sh shutdown.bat
[root@tomcat-server bin]# ./startup.sh
Using CATALINA_BASE: /opt/tomcat
Using CATALINA_HOME: /opt/tomcat
Using CATALINA_TMPDIR: /opt/tomcat/temp
Using JRE_HOME: /usr
Using CLASSPATH: /opt/tomcat/bin/bootstrap.jar:/opt/tomcat/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
[root@tomcat-server bin]#
Search
ENG IN
18:21 24-04-2024
Not secure 54.227.175.150:8080
LTIMindtree Favorites Folder
All Bookmarks
Home Documentation Configuration Examples Wiki Mailing Lists Find Help
Apache Tomcat/10.1.23
APACHE SOFTWARE FOUNDATION http://www.apache.org/
If you're seeing this, you've successfully installed Tomcat. Congratulations!
Recommended Reading:
Security Considerations How-To
Manager Application How-To
Clustering/Session Replication How-To
Server Status
Manager App
Host Manager
Developer Quick Start
Tomcat Setup
First Web Application
Realms & AAA
JDBC DataSources
Examples
Servlet Specifications
Tomcat Versions
Managing Tomcat
For security, access to the manager webapp is restricted. Users are defined in:
$CATALINA_HOME/conf/tomcat-users.xml
In Tomcat 10.1 access to the manager
Documentation
Tomcat 10.1 Documentation
Tomcat 10.1 Configuration
Tomcat Wiki
Getting Help
FAQ and Mailing Lists
The following mailing lists are available:
tomcat-announce
Important announcements, releases, security


Windows PowerShell
Windows PowerShell
root@ip-172-31-27-86:/opt/tc
apache-tomcat-10.1.23/bin/version.sh
[root@tomcat-server opt]# ls
apache-tomcat-10.1.23 apache-tomcat-10.1.23.tar.gz aws
[root@tomcat-server opt]# mv apache-tomcat-10.1.23 tomcat
[root@tomcat-server opt]# ls
apache-tomcat-10.1.23.tar.gz aws tomcat
[root@tomcat-server opt]# cd tomcat
[root@tomcat-server tomcat]# ls
BUILDING.txt LICENSE README.md RUNNING.txt conf logs webapps
CONTRIBUTING.md NOTICE RELEASE-NOTES bin lib temp work
[root@tomcat-server tomcat]# cd bin/
[root@tomcat-server bin]# ls
bootstrap.jar daemon.sh shutdown.sh
catalina-tasks.xml digest.bat startup.bat
catalina.bat digest.sh startup.sh
catalina.sh makebase.bat tomcat-juli.jar
ciphers.bat makebase.sh tomcat-native.tar.gz
ciphers.sh migrate.bat tool-wrapper.bat
commons-daemon-native.tar.gz migrate.sh tool-wrapper.sh
commons-daemon.jar setclasspath.bat version.bat
configtest.bat setclasspath.sh version.sh
configtest.sh shutdown.bat
[root@tomcat-server bin]# ./startup.sh
Using CATALINA_BASE: /opt/tomcat
Using CATALINA_HOME: /opt/tomcat
Using CATALINA_TMPDIR: /opt/tomcat/temp
Using JRE_HOME: /usr
Using CLASSPATH: /opt/tomcat/bin/bootstrap.jar:/opt/tomcat/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
[root@tomcat-server bin]# cd ..
[root@tomcat-server tomcat]# find / -name context.xml
/opt/tomcat/conf/context.xml
/opt/tomcat/webapps/docs/META-INF/context.xml
/opt/tomcat/webapps/examples/META-INF/context.xml
/opt/tomcat/webapps/host-manager/META-INF/context.xml
/opt/tomcat/webapps/manager/META-INF/context.xml
[root@tomcat-server tomcat]# vim /opt/tomcat/webapps/host-manager/META-INF/context.xml
[root@tomcat-server tomcat]# vim /opt/tomcat/webapps/manager/META-INF/context.xml
[root@tomcat-server tomcat]#
Search
ENG IN
18:27 24-04-2024
Windows PowerShell
Windows PowerShell
root@ip-172-31-27-86:/opt/tc
[root@tomcat-server bin]# ./startup.sh
Using CATALINA_BASE: /opt/tomcat
Using CATALINA_HOME: /opt/tomcat
Using CATALINA_TMPDIR: /opt/tomcat/temp
Using JRE_HOME: /usr
Using CLASSPATH: /opt/tomcat/bin/bootstrap.jar:/opt/tomcat/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
[root@tomcat-server bin]# cd ..
[root@tomcat-server tomcat]# find / -name context.xml
/opt/tomcat/conf/context.xml
/opt/tomcat/webapps/docs/META-INF/context.xml
/opt/tomcat/webapps/examples/META-INF/context.xml
/opt/tomcat/webapps/host-manager/META-INF/context.xml
/opt/tomcat/webapps/manager/META-INF/context.xml
[root@tomcat-server tomcat]# vim /opt/tomcat/webapps/host-manager/META-INF/context.xml
[root@tomcat-server tomcat]# vim /opt/tomcat/webapps/manager/META-INF/context.xml
[root@tomcat-server tomcat]# cd bin/
[root@tomcat-server bin]# ./shutdown.sh
Using CATALINA_BASE: /opt/tomcat
Using CATALINA_HOME: /opt/tomcat
Using CATALINA_TMPDIR: /opt/tomcat/temp
Using JRE_HOME: /usr
Using CLASSPATH: /opt/tomcat/bin/bootstrap.jar:/opt/tomcat/bin/tomcat-juli.jar
Using CATALINA_OPTS:
[root@tomcat-server bin]# ./startup.sh
Using CATALINA_BASE: /opt/tomcat
Using CATALINA_HOME: /opt/tomcat
Using CATALINA_TMPDIR: /opt/tomcat/temp
Using JRE_HOME: /usr
Using CLASSPATH: /opt/tomcat/bin/bootstrap.jar:/opt/tomcat/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
[root@tomcat-server bin]# cd ..
[root@tomcat-server tomcat]# cd conf/
[root@tomcat-server conf]# ls
Catalina catalina.properties jaspic-providers.xml logging.properties tomcat-users.xml web.xml
catalina.policy context.xml jaspic-providers.xsd server.xml tomcat-users.xsd
[root@tomcat-server conf]# vim tomcat-users.xml
[root@tomcat-server conf]#
Search
ENG IN
18:31 24-04-2024


54.227.175.150:8080/manager/html
LTIMindtree Favorites Folder
All Bookmarks
Sign in
http://54.227.175.150:8080
Your connection to this site is not private
Username
Password
Sign in
Cancel


Not secure
54.227.175.150:8080/manager/html
LTIMindtree Favorites Folder
All Bookmarks
Tomcat Web Application Manager
Message: OK
Manager
List Applications
HTML Manager Help
Manager Help
Server Status
Applications
Path
Version
Display Name
Running
Sessions
Commands
/
None specified
Welcome to Tomcat
true
0
Start Stop Reload Undeploy
Expire sessions with idle ≥ 30 minutes
/docs
None specified
Tomcat Documentation
true
0
Start Stop Reload Undeploy
Expire sessions with idle ≥ 30 minutes
/examples
None specified
Servlet and JSP Examples
true
0
Start Stop Reload Undeploy
Expire sessions with idle ≥ 30 minutes


Launch an instanc
Instance details |
Dashboard [Jenki
Gaurav2177/cicd-
Amazon Corretto
Apache Tomcat/10
Not secure
54.146.234.180:8080
LTIMindtree Favorites Folder
All Bookmarks
Jenkins
Search (CTRL+K)
admin
log out
Dashboard
New Item
People
Build History
Project Relationship
Check File Fingerprint
Manage Jenkins
My Views
Add description
All
S
W
Name
Last Success
Last Failure
Last Duration
deploy-and-build-to-tomcat
1 min 21 sec #1
N/A
21 sec
devops-project
4 hr 17 min #1
N/A
0.55 sec
Icon: S M L
Icon legend
Atom feed for all
Atom feed for failures
Atom feed for just latest builds
Build Queue
No builds in the queue.
Search
ENG IN
19:07
24-04-2024
deploy-and-build-to-tomcat/1/console
Dashboard
deploy-and-build-to-tomcat
#1
Console Output
project/webapp/1.0-SNAPSHOT/webapp-1.0-SNAPSHOT.pom
[JENKINS] Archiving /var/lib/jenkins/workspace/deploy-and-build-to-tomcat/webapp/target/webapp.war to com.example.maven-project/webapp/1.0-SNAPSHOT/webapp-1.0-SNAPSHOT.war
[JENKINS] Archiving /var/lib/jenkins/workspace/deploy-and-build-to-tomcat/server/pom.xml to com.example.maven-project/server/1.0-SNAPSHOT/server-1.0-SNAPSHOT.pom
[JENKINS] Archiving /var/lib/jenkins/workspace/deploy-and-build-to-tomcat/server/target/server.jar to com.example.maven-project/server/1.0-SNAPSHOT/server-1.0-SNAPSHOT.jar
[JENKINS] Archiving /var/lib/jenkins/workspace/deploy-and-build-to-tomcat/pom.xml to com.example.maven-project/maven-project/1.0-SNAPSHOT/maven-project-1.0-SNAPSHOT.pom
channel stopped
[DeployPublisher][INFO] Attempting to deploy 1 war file(s)
[DeployPublisher][INFO] Deploying /var/lib/jenkins/workspace/deploy-and-build-to-tomcat/webapp/target/webapp.war to container Tomcat 9.x Remote with context null
[/var/lib/jenkins/workspace/deploy-and-build-to-tomcat/webapp/target/webapp.war] is not deployed. Doing a fresh deployment.
Deploying [/var/lib/jenkins/workspace/deploy-and-build-to-tomcat/webapp/target/webapp.war]
Finished: SUCCESS
REST API
Jenkins 2.440.3
Search
ENG IN
19:08
24-04-2024







# Sample User Registration Web Application for my DevOps Project

Please fill in this form to create an account.

**Enter Name** Enter Full Name
**Enter mobile** Enter moible number
**Enter Email** Enter Email
**Password** Enter Password
**Repeat Password** Repeat Password

By creating an account you agree to our Terms & Privacy.

Register

Already have an account? Sign in.

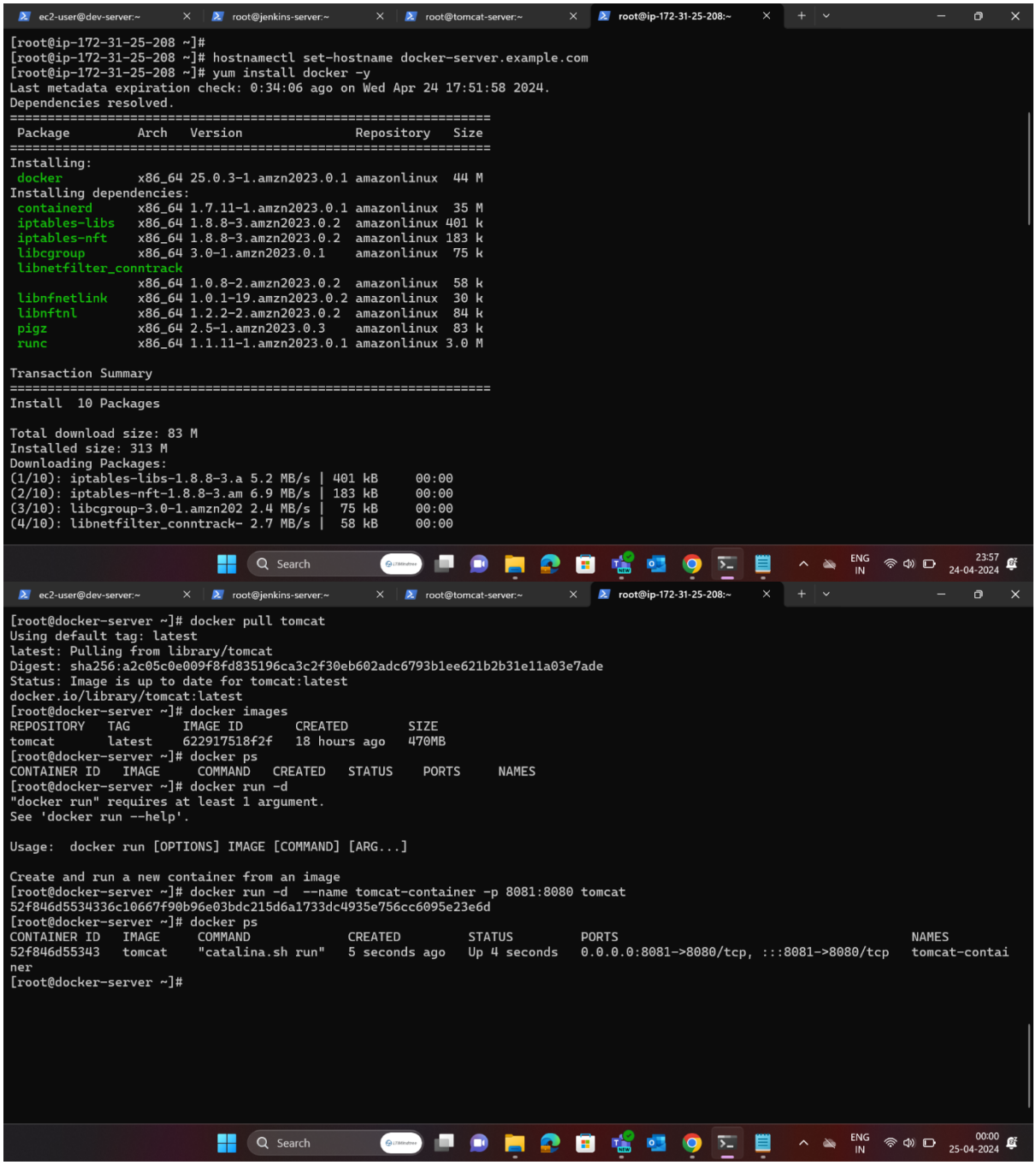
## Thank You

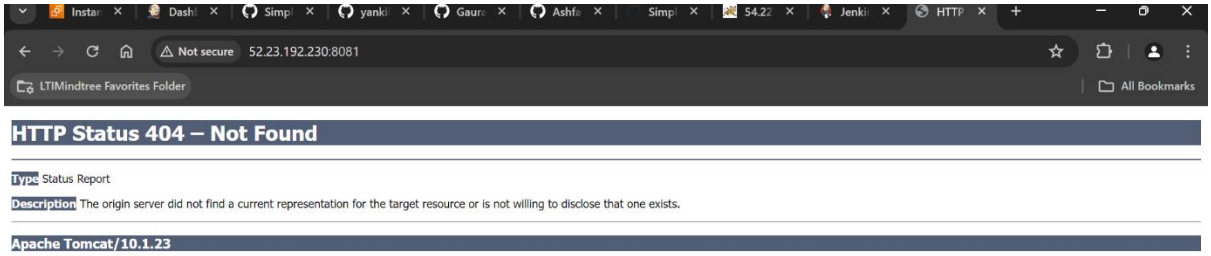
## See You Again

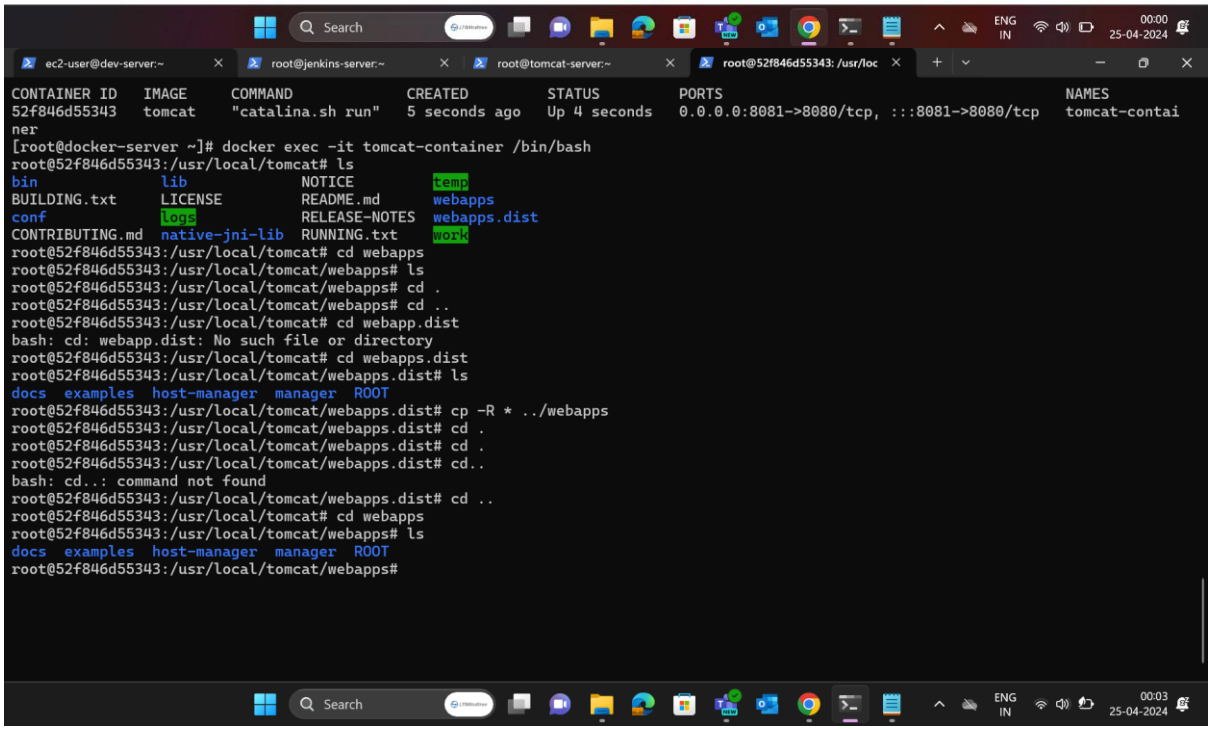
Configure Docker Permissions:

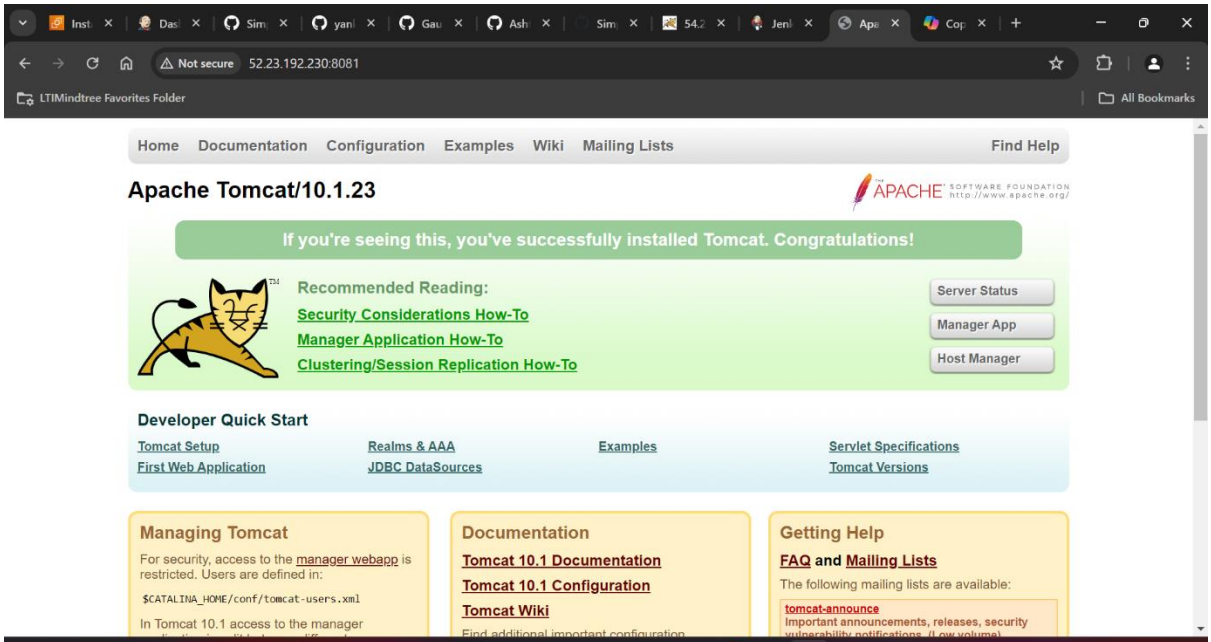
- Ensure that the Docker daemon is running.
- Start the Docker service if it's not already running: service docker start.
- Build Docker Image:
- Navigate to the directory containing the Dockerfile: cd /opt/docker.
- Build the Docker image using the Dockerfile: docker build -t tomcat:v1 ..
- Run Docker Container:
- Start a Docker container based on the built image: docker run -d --name tomcatv1 -p 8086:8080 tomcat:v1.
- Verify Container Status:
- Check if the container is running: docker ps.
- Automate Build and Deployment on Docker Container:
- Create a shell script to automate the build and deployment process.
- In the script, navigate to the Dockerfile directory, build the image, and run the container.
- Integrate with Jenkins:
- On your Jenkins server, create a new Jenkins job for automating the Docker build and deployment process.
- Configure the job to execute the shell script created in the previous step.

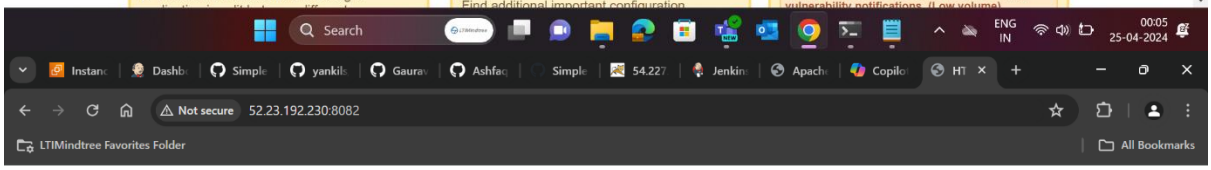
- Test the Jenkins job to ensure successful automation.




Not secure
52.23.192.230:8081
LTIMindtree Favorites Folder
All Bookmarks
HTTP Status 404 – Not Found
Type Status Report
Description The origin server did not find a current representation for the target resource or is not willing to disclose that one exists.
Apache Tomcat/10.1.23


ec2-user@dev-server:~
root@jenkins-server:~
root@tomcat-server:~
root@52f846d55343: /usr/loc
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
52f846d55343 tomcat "catalina.sh run" 5 seconds ago Up 4 seconds 0.0.0.0:8081->8080/tcp, :::8081->8080/tcp tomcat-contai
ner
[root@docker-server ~]# docker exec -it tomcat-container /bin/bash
root@52f846d55343:/usr/local/tomcat# ls
bin lib NOTICE temp
BUILDING.txt LICENSE README.md webapps
conf logs RELEASE-NOTES webapps.dist
CONTRIBUTING.md native-jni-lib RUNNING.txt work
root@52f846d55343:/usr/local/tomcat# cd webapps
root@52f846d55343:/usr/local/tomcat/webapps# ls
root@52f846d55343:/usr/local/tomcat/webapps# cd .
root@52f846d55343:/usr/local/tomcat/webapps# cd ..
root@52f846d55343:/usr/local/tomcat# cd webapp.dist
bash: cd: webapp.dist: No such file or directory
root@52f846d55343:/usr/local/tomcat# cd webapps.dist
root@52f846d55343:/usr/local/tomcat/webapps.dist# ls
docs examples host-manager manager ROOT
root@52f846d55343:/usr/local/tomcat/webapps.dist# cp -R * ../webapps
root@52f846d55343:/usr/local/tomcat/webapps.dist# cd .
root@52f846d55343:/usr/local/tomcat/webapps.dist# cd .
root@52f846d55343:/usr/local/tomcat/webapps.dist# cd..
bash: cd..: command not found
root@52f846d55343:/usr/local/tomcat/webapps.dist# cd ..
root@52f846d55343:/usr/local/tomcat# cd webapps
root@52f846d55343:/usr/local/tomcat/webapps# ls
docs examples host-manager manager ROOT
root@52f846d55343:/usr/local/tomcat/webapps#





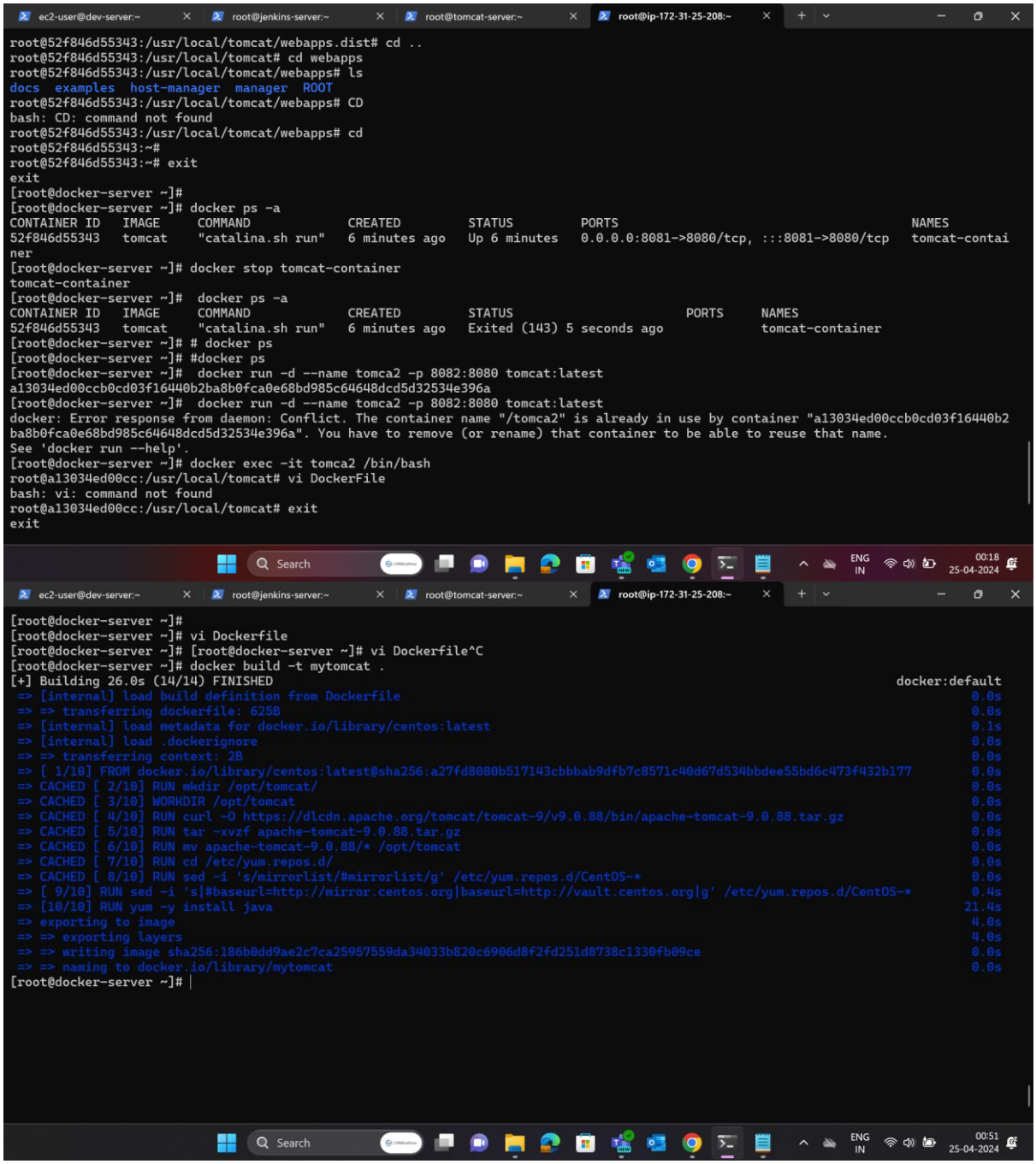


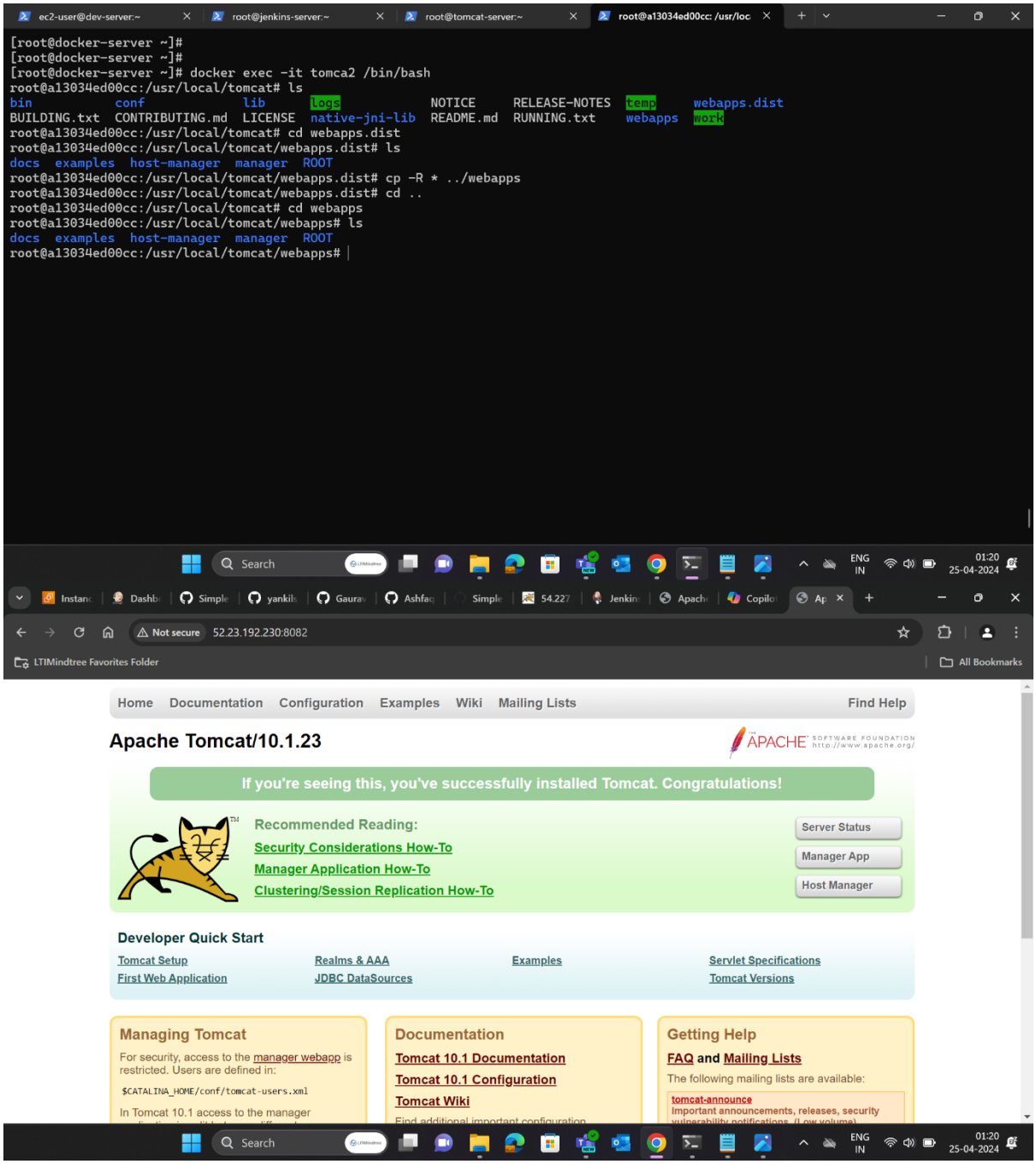
**HTTP Status 404 – Not Found**

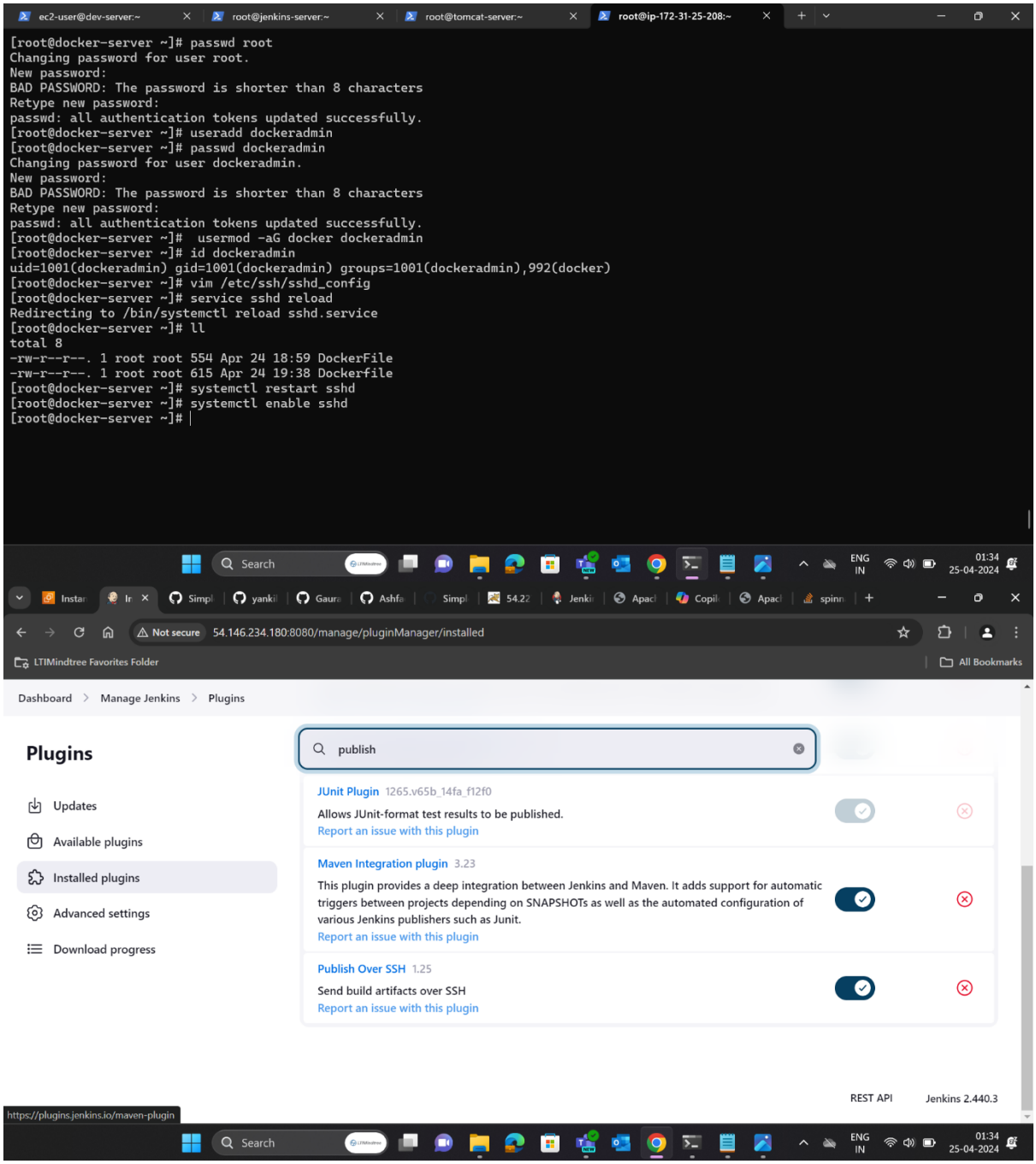
**Type** Status Report

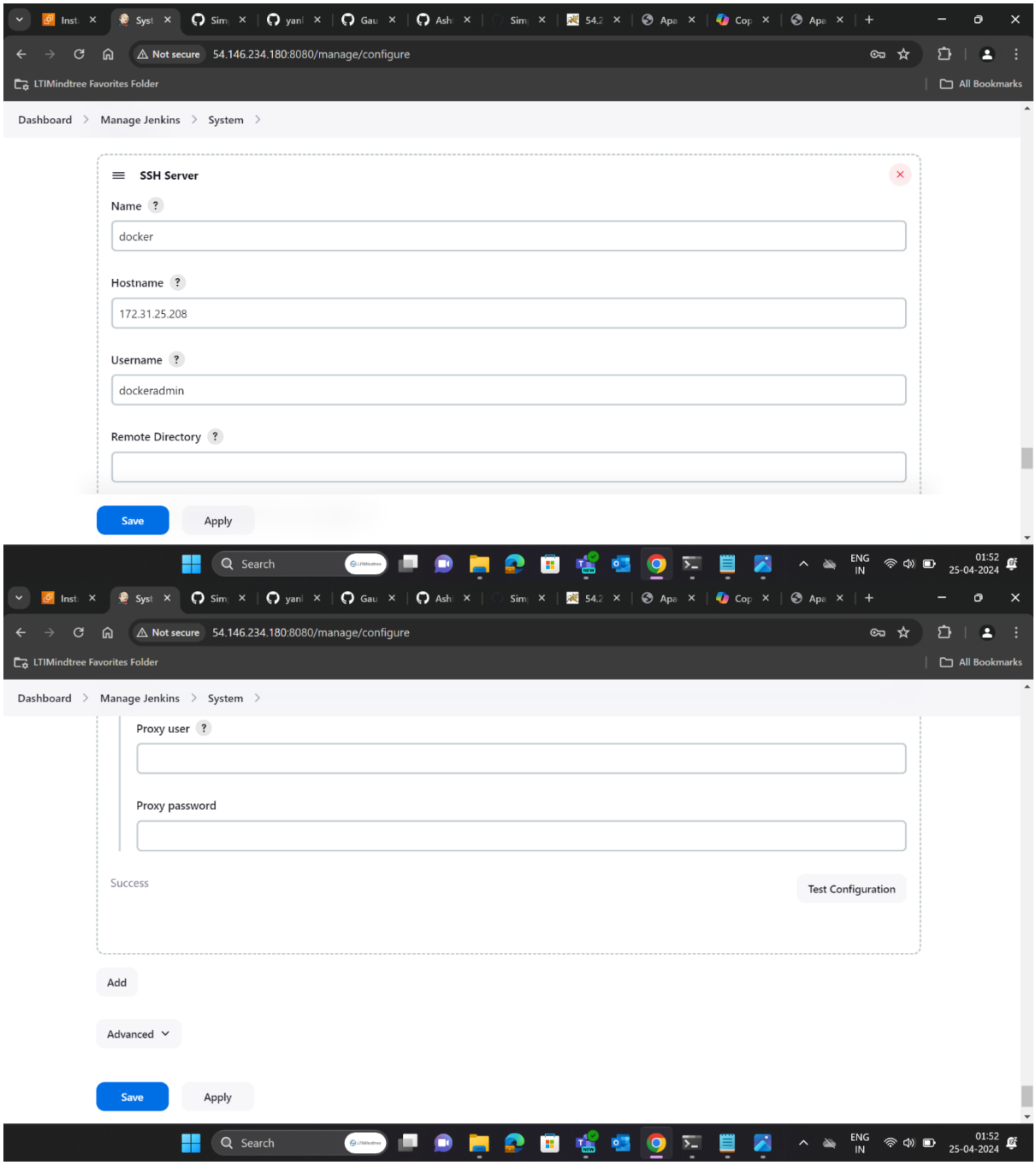
**Description** The origin server did not find a current representation for the target resource or is not willing to disclose that one exists.

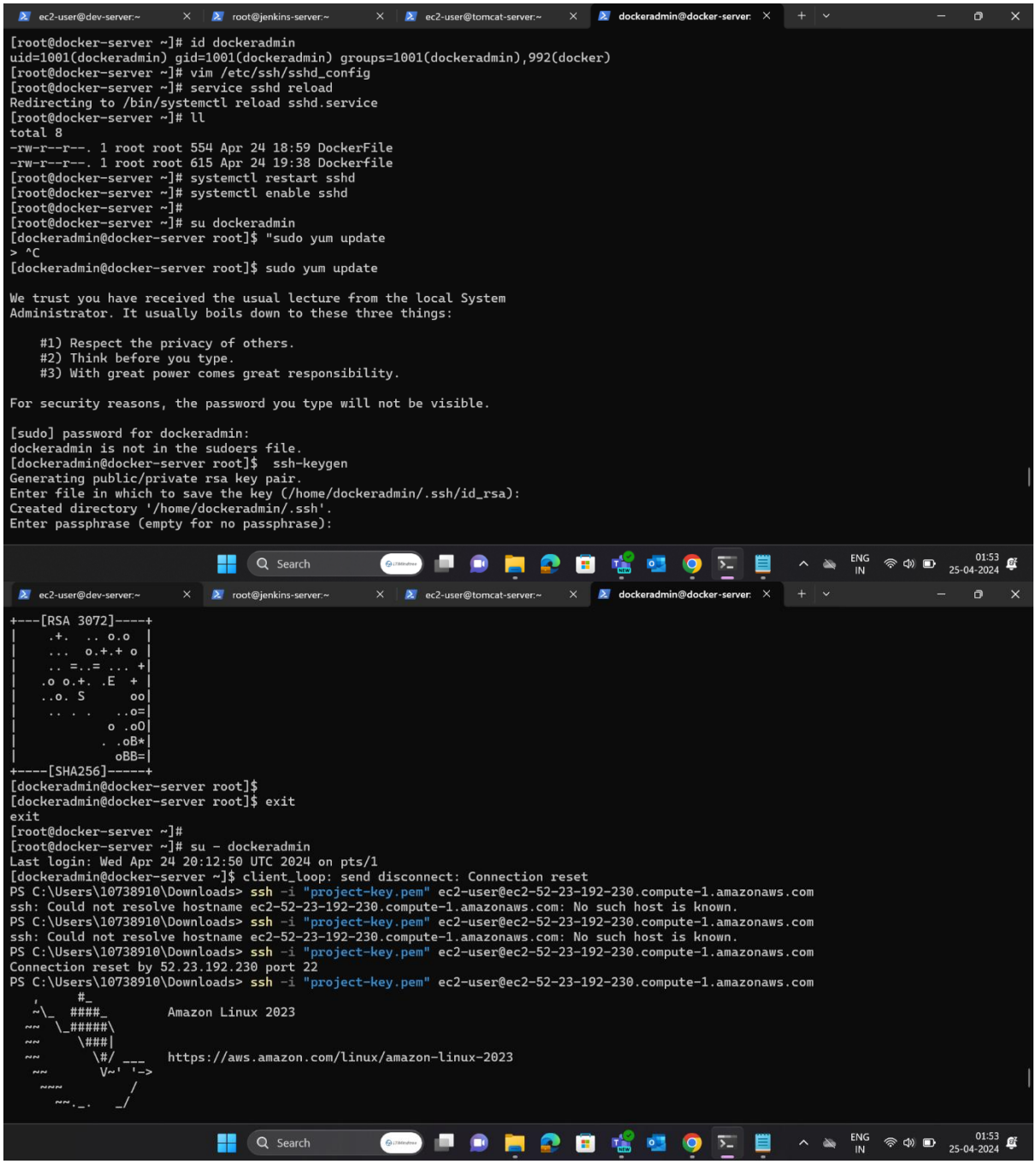
**Apache Tomcat/10.1.23**

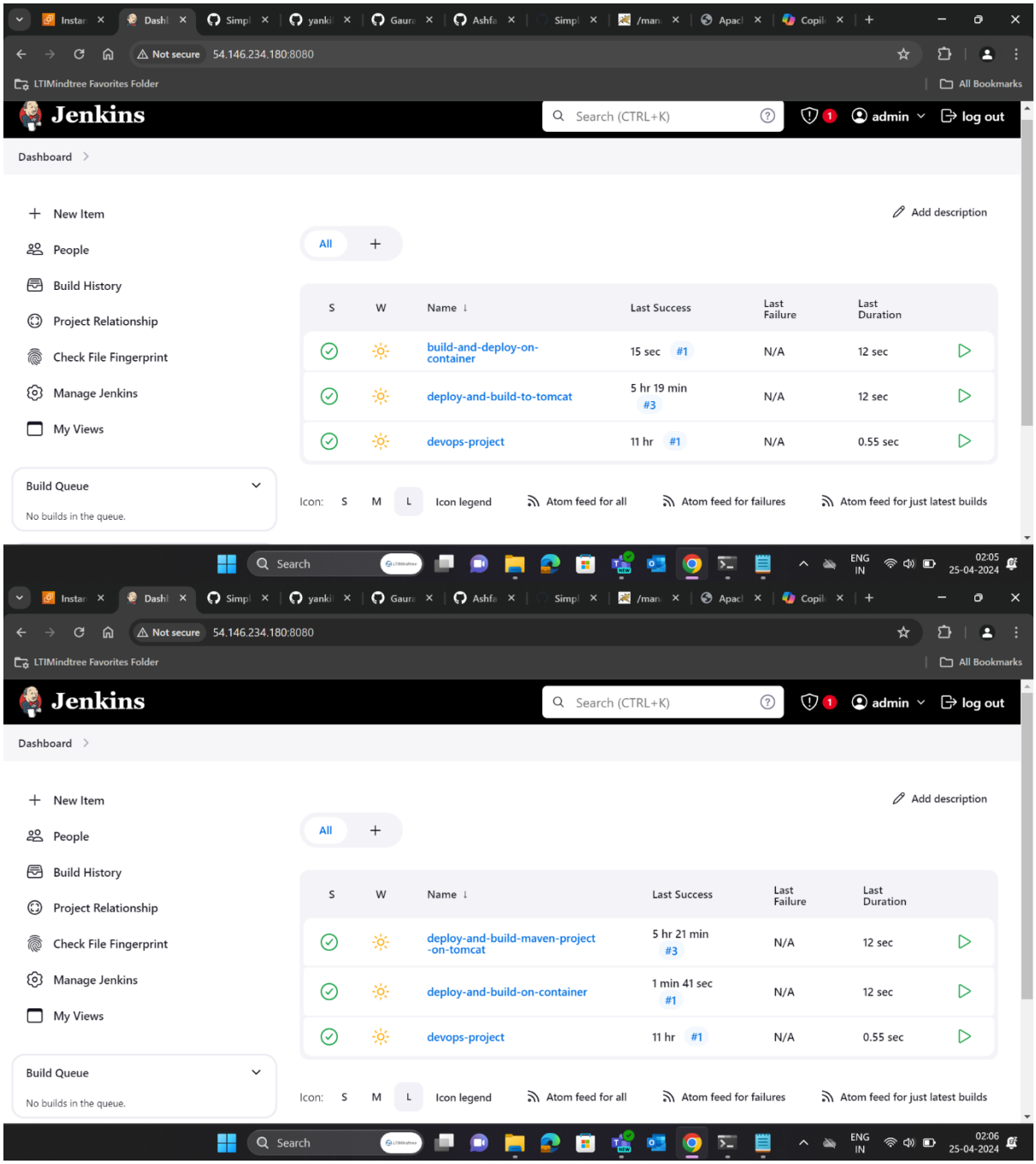

ec2-user@dev-server:~
root@jenkins-server:~
root@tomcat-server:~
root@ip-172-31-25-208:~
root@52f846d55343:/usr/local/tomcat/webapps.dist# cd ..
root@52f846d55343:/usr/local/tomcat# cd webapps
root@52f846d55343:/usr/local/tomcat/webapps# ls
docs examples host-manager manager ROOT
root@52f846d55343:/usr/local/tomcat/webapps# CD
bash: CD: command not found
root@52f846d55343:/usr/local/tomcat/webapps# cd
root@52f846d55343:~#
root@52f846d55343:~# exit
exit
[root@docker-server ~]#
[root@docker-server ~]# docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
52f846d55343 tomcat "catalina.sh run" 6 minutes ago Up 6 minutes 0.0.0.0:8081->8080/tcp, :::8081->8080/tcp tomcat-contai
ner
[root@docker-server ~]# docker stop tomcat-container
tomcat-container
[root@docker-server ~]# docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
52f846d55343 tomcat "catalina.sh run" 6 minutes ago Exited (143) 5 seconds ago tomcat-container
[root@docker-server ~]# # docker ps
[root@docker-server ~]# #docker ps
[root@docker-server ~]# docker run -d --name tomca2 -p 8082:8080 tomcat:latest
a13034ed00ccb0cd03f16440b2ba8b0fca0e68bd985c64648dcd5d32534e396a
[root@docker-server ~]# docker run -d --name tomca2 -p 8082:8080 tomcat:latest
docker: Error response from daemon: Conflict. The container name "/tomca2" is already in use by container "a13034ed00ccb0cd03f16440b2
ba8b0fca0e68bd985c64648dcd5d32534e396a". You have to remove (or rename) that container to be able to reuse that name.
See 'docker run --help'.
[root@docker-server ~]# docker exec -it tomca2 /bin/bash
root@a13034ed00cc:/usr/local/tomcat# vi DockerFile
bash: vi: command not found
root@a13034ed00cc:/usr/local/tomcat# exit
exit
Search
ENG IN
00:18 25-04-2024
ec2-user@dev-server:~
root@jenkins-server:~
root@tomcat-server:~
root@ip-172-31-25-208:~
[root@docker-server ~]#
[root@docker-server ~]# vi Dockerfile
[root@docker-server ~]# [root@docker-server ~]# vi Dockerfile^C
[root@docker-server ~]# docker build -t mytomcat .
[+] Building 26.0s (14/14) FINISHED docker:default
=> [internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 625B 0.0s
=> [internal] load metadata for docker.io/library/centos:latest 0.1s
=> [internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [ 1/10] FROM docker.io/library/centos:latest@sha256:a27fd8080b517143cbbbab9dfb7c8571c40d67d534bbdee55bd6c473f432b177 0.0s
=> CACHED [ 2/10] RUN mkdir /opt/tomcat/ 0.0s
=> CACHED [ 3/10] WORKDIR /opt/tomcat 0.0s
=> CACHED [ 4/10] RUN curl -O https://dlcdn.apache.org/tomcat/tomcat-9/v9.0.88/bin/apache-tomcat-9.0.88.tar.gz 0.0s
=> CACHED [ 5/10] RUN tar -xvzf apache-tomcat-9.0.88.tar.gz 0.0s
=> CACHED [ 6/10] RUN mv apache-tomcat-9.0.88/* /opt/tomcat 0.0s
=> CACHED [ 7/10] RUN cd /etc/yum.repos.d/ 0.0s
=> CACHED [ 8/10] RUN sed -i 's/mirrorlist/#mirrorlist/g' /etc/yum.repos.d/CentOS-* 0.0s
=> [ 9/10] RUN sed -i 's|#baseurl=http://mirror.centos.org|baseurl=http://vault.centos.org|g' /etc/yum.repos.d/CentOS-* 0.4s
=> [10/10] RUN yum -y install java 21.4s
=> exporting to image 4.0s
=> => exporting layers 4.0s
=> => writing image sha256:186b0dd9ae2c7ca25957559da34033b820c6906d8f2fd251d8738c1330fb09ce 0.0s
=> => naming to docker.io/library/mytomcat 0.0s
[root@docker-server ~]#
Search
ENG IN
00:51 25-04-2024


ec2-user@dev-server:~
root@jenkins-server:~
root@tomcat-server:~
root@a13034ed00cc: /usr/loc
[root@docker-server ~]#
[root@docker-server ~]#
[root@docker-server ~]# docker exec -it tomca2 /bin/bash
root@a13034ed00cc:/usr/local/tomcat# ls
bin conf lib logs NOTICE RELEASE-NOTES temp webapps.dist
BUILDING.txt CONTRIBUTING.md LICENSE native-jni-lib README.md RUNNING.txt webapps work
root@a13034ed00cc:/usr/local/tomcat# cd webapps.dist
root@a13034ed00cc:/usr/local/tomcat/webapps.dist# ls
docs examples host-manager manager ROOT
root@a13034ed00cc:/usr/local/tomcat/webapps.dist# cp -R * ../webapps
root@a13034ed00cc:/usr/local/tomcat/webapps.dist# cd ..
root@a13034ed00cc:/usr/local/tomcat# cd webapps
root@a13034ed00cc:/usr/local/tomcat/webapps# ls
docs examples host-manager manager ROOT
root@a13034ed00cc:/usr/local/tomcat/webapps#
Search
Not secure
52.23.192.230:8082
LTIMindtree Favorites Folder
All Bookmarks
Home Documentation Configuration Examples Wiki Mailing Lists Find Help
Apache Tomcat/10.1.23
If you're seeing this, you've successfully installed Tomcat. Congratulations!
Recommended Reading:
Security Considerations How-To
Manager Application How-To
Clustering/Session Replication How-To
Server Status
Manager App
Host Manager
Developer Quick Start
Tomcat Setup
First Web Application
Realms & AAA
JDBC DataSources
Examples
Servlet Specifications
Tomcat Versions
Managing Tomcat
For security, access to the manager webapp is restricted. Users are defined in:
$CATALINA_HOME/conf/tomcat-users.xml
In Tomcat 10.1 access to the manager
Documentation
Tomcat 10.1 Documentation
Tomcat 10.1 Configuration
Tomcat Wiki
Getting Help
FAQ and Mailing Lists
The following mailing lists are available:
tomcat-announce
Important announcements, releases, security
ENG IN
01:20
25-04-2024

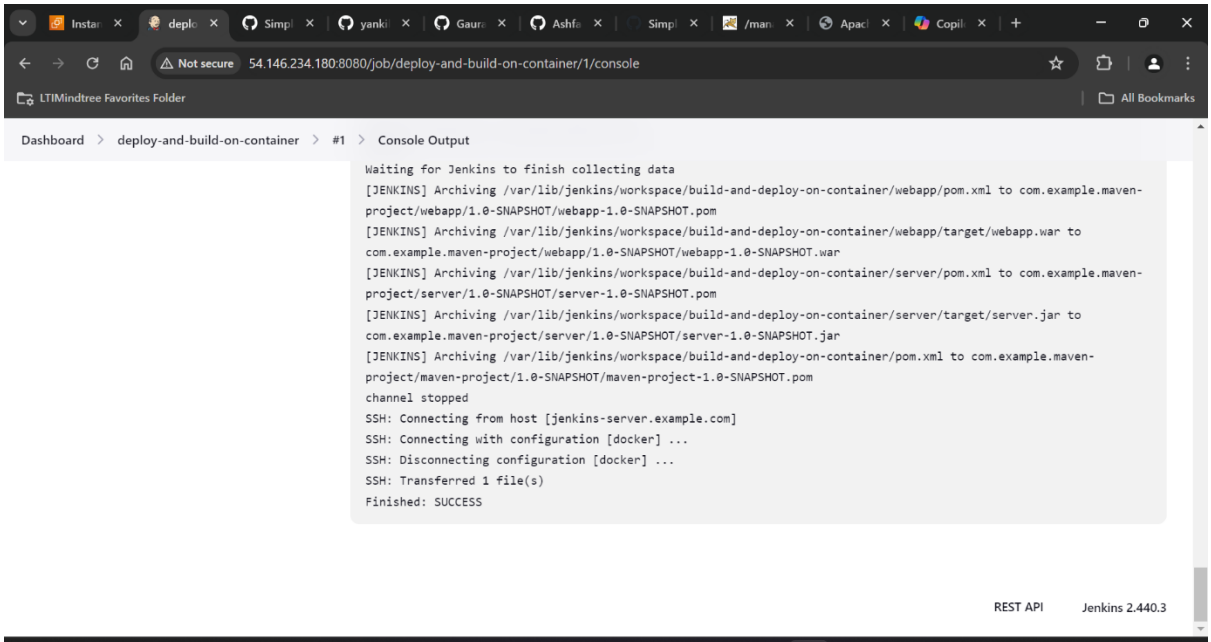

ec2-user@dev-server:~
root@jenkins-server:~
root@tomcat-server:~
root@ip-172-31-25-208:~
[root@docker-server ~]# passwd root
Changing password for user root.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
[root@docker-server ~]# useradd dockeradmin
[root@docker-server ~]# passwd dockeradmin
Changing password for user dockeradmin.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
[root@docker-server ~]# usermod -aG docker dockeradmin
[root@docker-server ~]# id dockeradmin
uid=1001(dockeradmin) gid=1001(dockeradmin) groups=1001(dockeradmin),992(docker)
[root@docker-server ~]# vim /etc/ssh/sshd_config
[root@docker-server ~]# service sshd reload
Redirecting to /bin/systemctl reload sshd.service
[root@docker-server ~]# ll
total 8
-rw-r--r--. 1 root root 554 Apr 24 18:59 DockerFile
-rw-r--r--. 1 root root 615 Apr 24 19:38 Dockerfile
[root@docker-server ~]# systemctl restart sshd
[root@docker-server ~]# systemctl enable sshd
[root@docker-server ~]#
Search
ENG IN
01:34 25-04-2024
Not secure
54.146.234.180:8080/manage/pluginManager/installed
LTIMindtree Favorites Folder
All Bookmarks
Dashboard
Manage Jenkins
Plugins
Plugins
publish
Updates
Available plugins
Installed plugins
Advanced settings
Download progress
JUnit Plugin 1265.v65b_14fa_f12f0
Allows JUnit-format test results to be published.
Report an issue with this plugin
Maven Integration plugin 3.23
This plugin provides a deep integration between Jenkins and Maven. It adds support for automatic triggers between projects depending on SNAPSHOTs as well as the automated configuration of various Jenkins publishers such as Junit.
Report an issue with this plugin
Publish Over SSH 1.25
Send build artifacts over SSH
Report an issue with this plugin
REST API
Jenkins 2.440.3
https://plugins.jenkins.io/maven-plugin

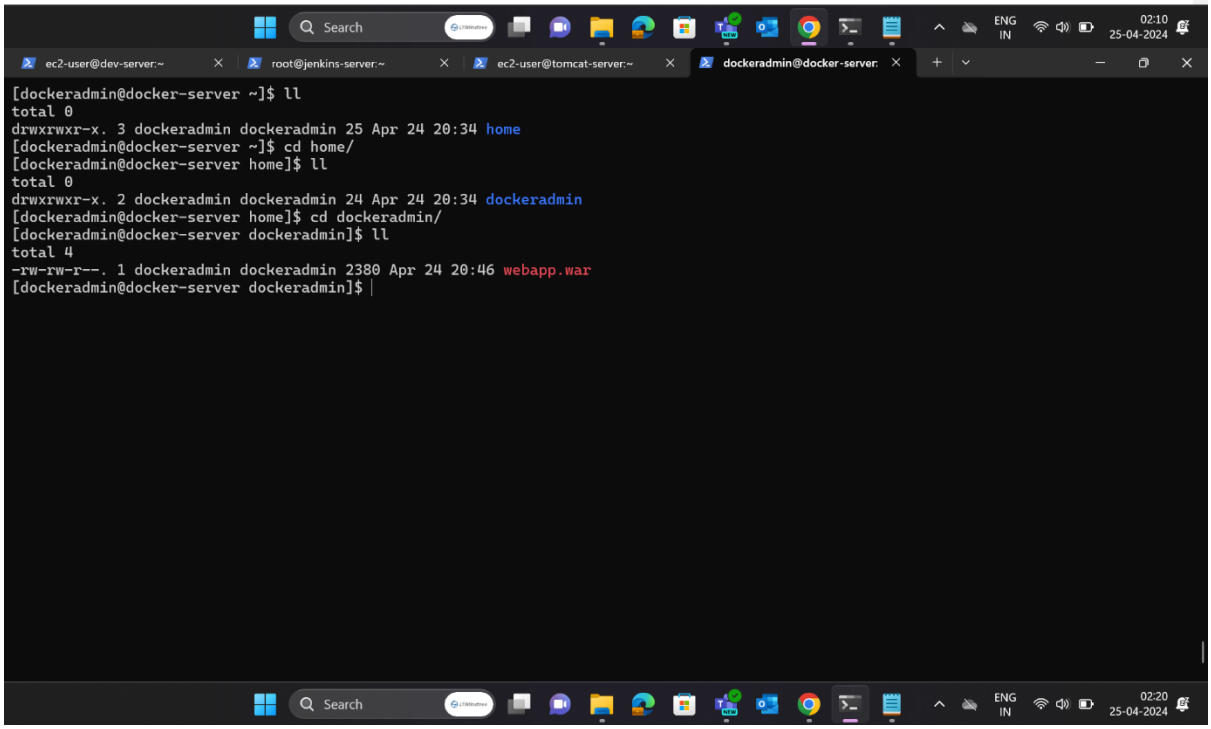

Not secure
54.146.234.180:8080/manage/configure
LTIMindtree Favorites Folder
All Bookmarks
Dashboard
Manage Jenkins
System
SSH Server
Name
docker
Hostname
172.31.25.208
Username
dockeradmin
Remote Directory
Save
Apply
Search
Not secure
54.146.234.180:8080/manage/configure
LTIMindtree Favorites Folder
All Bookmarks
Dashboard
Manage Jenkins
System
Proxy user
Proxy password
Success
Test Configuration
Add
Advanced
Save
Apply
Search

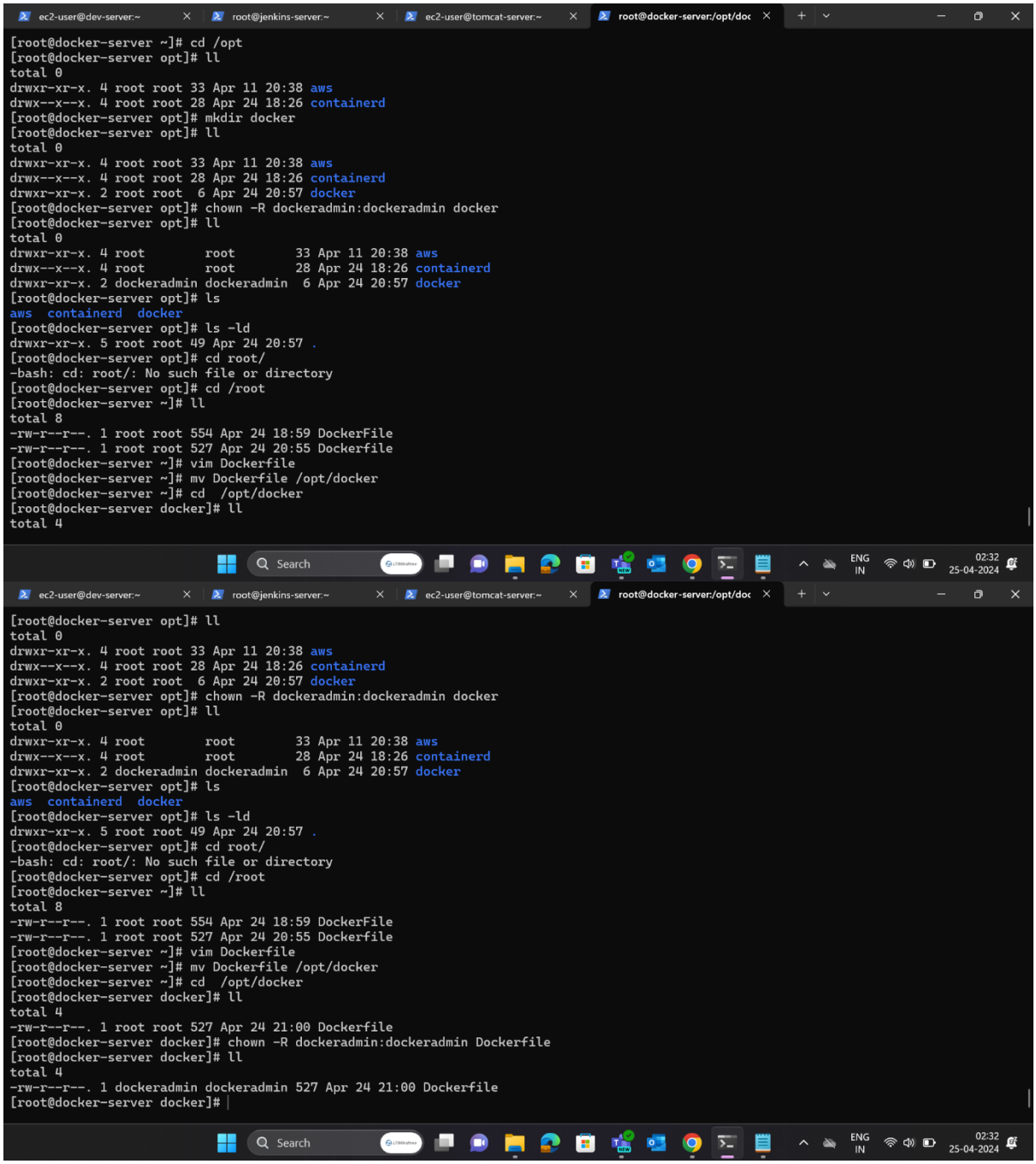

ec2-user@dev-server:~
root@jenkins-server:~
ec2-user@tomcat-server:~
dockeradmin@docker-server:
[root@docker-server ~]# id dockeradmin
uid=1001(dockeradmin) gid=1001(dockeradmin) groups=1001(dockeradmin),992(docker)
[root@docker-server ~]# vim /etc/ssh/sshd_config
[root@docker-server ~]# service sshd reload
Redirecting to /bin/systemctl reload sshd.service
[root@docker-server ~]# ll
total 8
-rw-r--r--. 1 root root 554 Apr 24 18:59 DockerFile
-rw-r--r--. 1 root root 615 Apr 24 19:38 Dockerfile
[root@docker-server ~]# systemctl restart sshd
[root@docker-server ~]# systemctl enable sshd
[root@docker-server ~]#
[root@docker-server ~]# su dockeradmin
[dockeradmin@docker-server root]$ "sudo yum update
> ^C
[dockeradmin@docker-server root]$ sudo yum update
We trust you have received the usual lecture from the local System
Administrator. It usually boils down to these three things:
#1) Respect the privacy of others.
#2) Think before you type.
#3) With great power comes great responsibility.
For security reasons, the password you type will not be visible.
[sudo] password for dockeradmin:
dockeradmin is not in the sudoers file.
[dockeradmin@docker-server root]$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/home/dockeradmin/.ssh/id_rsa):
Created directory '/home/dockeradmin/.ssh'.
Enter passphrase (empty for no passphrase):
Search
ENG
IN
01:53
25-04-2024
ec2-user@dev-server:~
root@jenkins-server:~
ec2-user@tomcat-server:~
dockeradmin@docker-server:
+---[RSA 3072]----+
| .+. .. o.o |
| ... o.+.+ o |
| .. =..= ... +|
| .o o.+. .E + |
| ..o. S oo|
| .. . . ..o=|
| o .oO|
| . .oB*|
| oBB=|
+----[SHA256]-----+
[dockeradmin@docker-server root]$
[dockeradmin@docker-server root]$ exit
exit
[root@docker-server ~]#
[root@docker-server ~]# su - dockeradmin
Last login: Wed Apr 24 20:12:50 UTC 2024 on pts/1
[dockeradmin@docker-server ~]$ client_loop: send disconnect: Connection reset
PS C:\Users\10738910\Downloads> ssh -i "project-key.pem" ec2-user@ec2-52-23-192-230.compute-1.amazonaws.com
ssh: Could not resolve hostname ec2-52-23-192-230.compute-1.amazonaws.com: No such host is known.
PS C:\Users\10738910\Downloads> ssh -i "project-key.pem" ec2-user@ec2-52-23-192-230.compute-1.amazonaws.com
ssh: Could not resolve hostname ec2-52-23-192-230.compute-1.amazonaws.com: No such host is known.
PS C:\Users\10738910\Downloads> ssh -i "project-key.pem" ec2-user@ec2-52-23-192-230.compute-1.amazonaws.com
Connection reset by 52.23.192.230 port 22
PS C:\Users\10738910\Downloads> ssh -i "project-key.pem" ec2-user@ec2-52-23-192-230.compute-1.amazonaws.com
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023
Search
ENG
IN
01:53
25-04-2024

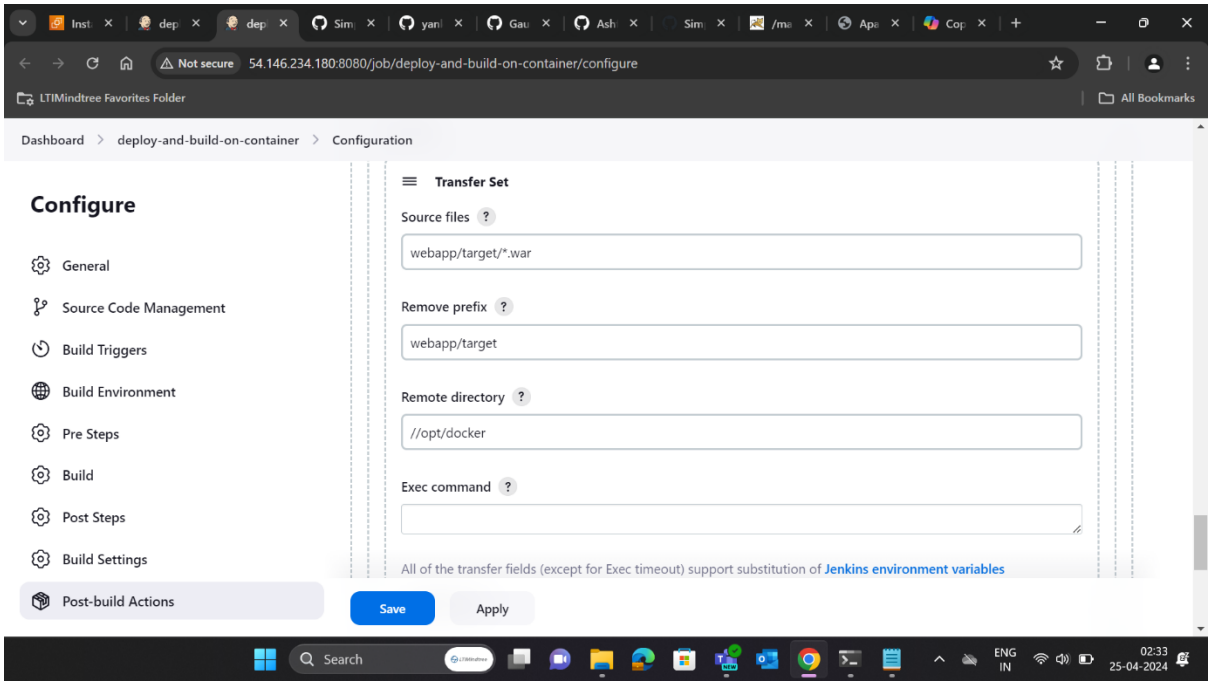

Not secure 54.146.234.180:8080
LTIMindtree Favorites Folder
All Bookmarks
Jenkins
Search (CTRL+K)
admin
log out
Dashboard
New Item
People
Build History
Project Relationship
Check File Fingerprint
Manage Jenkins
My Views
Build Queue
No builds in the queue.
Add description
All
S W Name ↓ Last Success Last Failure Last Duration
build-and-deploy-on-container 15 sec #1 N/A 12 sec
deploy-and-build-to-tomcat 5 hr 19 min #3 N/A 12 sec
devops-project 11 hr #1 N/A 0.55 sec
Icon: S M L Icon legend
Atom feed for all
Atom feed for failures
Atom feed for just latest builds
Search
ENG IN
02:05 25-04-2024


Not secure 54.146.234.180:8080
LTIMindtree Favorites Folder
All Bookmarks
Jenkins
Search (CTRL+K)
admin
log out
Dashboard
New Item
People
Build History
Project Relationship
Check File Fingerprint
Manage Jenkins
My Views
Build Queue
No builds in the queue.
Add description
All
S W Name ↓ Last Success Last Failure Last Duration
deploy-and-build-maven-project-on-tomcat 5 hr 21 min #3 N/A 12 sec
deploy-and-build-on-container 1 min 41 sec #1 N/A 12 sec
devops-project 11 hr #1 N/A 0.55 sec
Icon: S M L Icon legend
Atom feed for all
Atom feed for failures
Atom feed for just latest builds
Search
ENG IN
02:06 25-04-2024

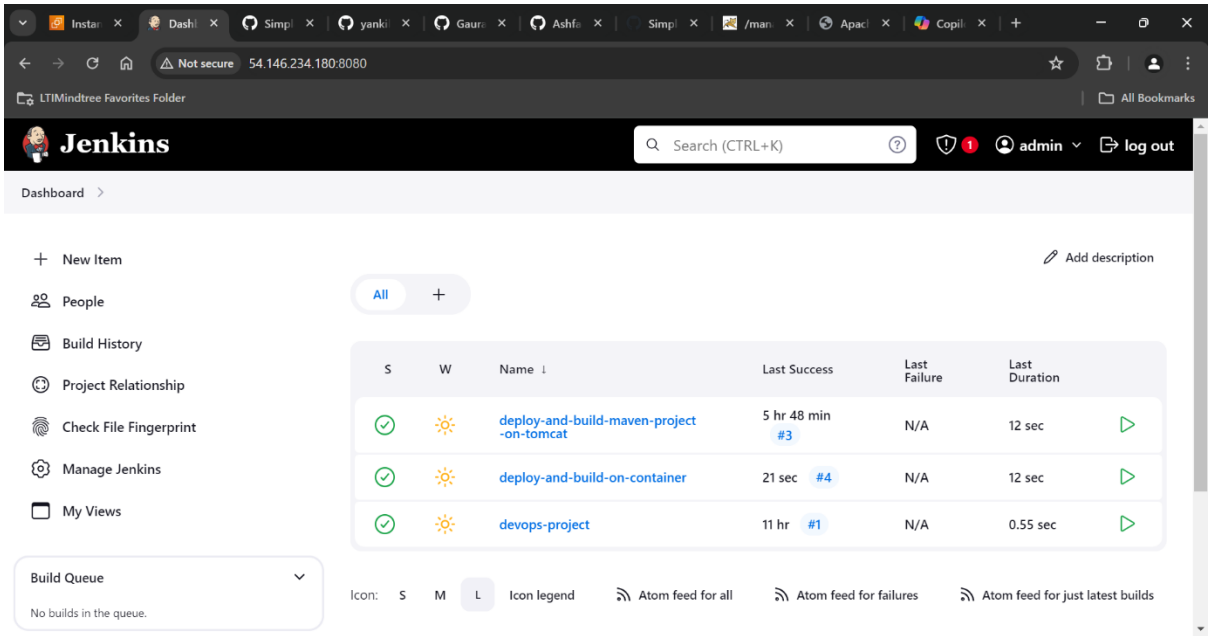

Not secure 54.146.234.180:8080/job/deploy-and-build-on-container/1/console
LTIMindtree Favorites Folder
All Bookmarks
Dashboard > deploy-and-build-on-container > #1 > Console Output
Waiting for Jenkins to finish collecting data
[JENKINS] Archiving /var/lib/jenkins/workspace/build-and-deploy-on-container/webapp/pom.xml to com.example.maven-project/webapp/1.0-SNAPSHOT/webapp-1.0-SNAPSHOT.pom
[JENKINS] Archiving /var/lib/jenkins/workspace/build-and-deploy-on-container/webapp/target/webapp.war to com.example.maven-project/webapp/1.0-SNAPSHOT/webapp-1.0-SNAPSHOT.war
[JENKINS] Archiving /var/lib/jenkins/workspace/build-and-deploy-on-container/server/pom.xml to com.example.maven-project/server/1.0-SNAPSHOT/server-1.0-SNAPSHOT.pom
[JENKINS] Archiving /var/lib/jenkins/workspace/build-and-deploy-on-container/server/target/server.jar to com.example.maven-project/server/1.0-SNAPSHOT/server-1.0-SNAPSHOT.jar
[JENKINS] Archiving /var/lib/jenkins/workspace/build-and-deploy-on-container/pom.xml to com.example.maven-project/maven-project/1.0-SNAPSHOT/maven-project-1.0-SNAPSHOT.pom
channel stopped
SSH: Connecting from host [jenkins-server.example.com]
SSH: Connecting with configuration [docker] ...
SSH: Disconnecting configuration [docker] ...
SSH: Transferred 1 file(s)
Finished: SUCCESS
REST API
Jenkins 2.440.3

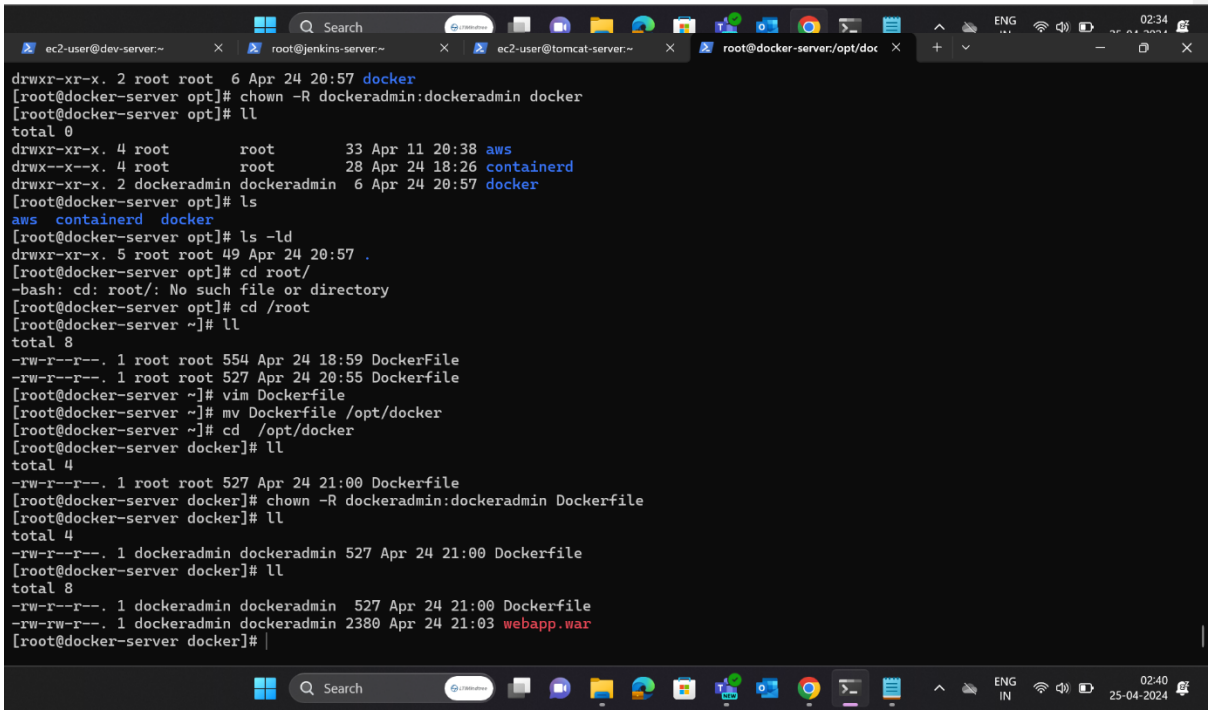

ec2-user@dev-server:~
root@jenkins-server:~
ec2-user@tomcat-server:~
dockeradmin@docker-server:
[dockeradmin@docker-server ~]$ ll
total 0
drwxrwxr-x. 3 dockeradmin dockeradmin 25 Apr 24 20:34 home
[dockeradmin@docker-server ~]$ cd home/
[dockeradmin@docker-server home]$ ll
total 0
drwxrwxr-x. 2 dockeradmin dockeradmin 24 Apr 24 20:34 dockeradmin
[dockeradmin@docker-server home]$ cd dockeradmin/
[dockeradmin@docker-server dockeradmin]$ ll
total 4
-rw-rw-r--. 1 dockeradmin dockeradmin 2380 Apr 24 20:46 webapp.war
[dockeradmin@docker-server dockeradmin]$

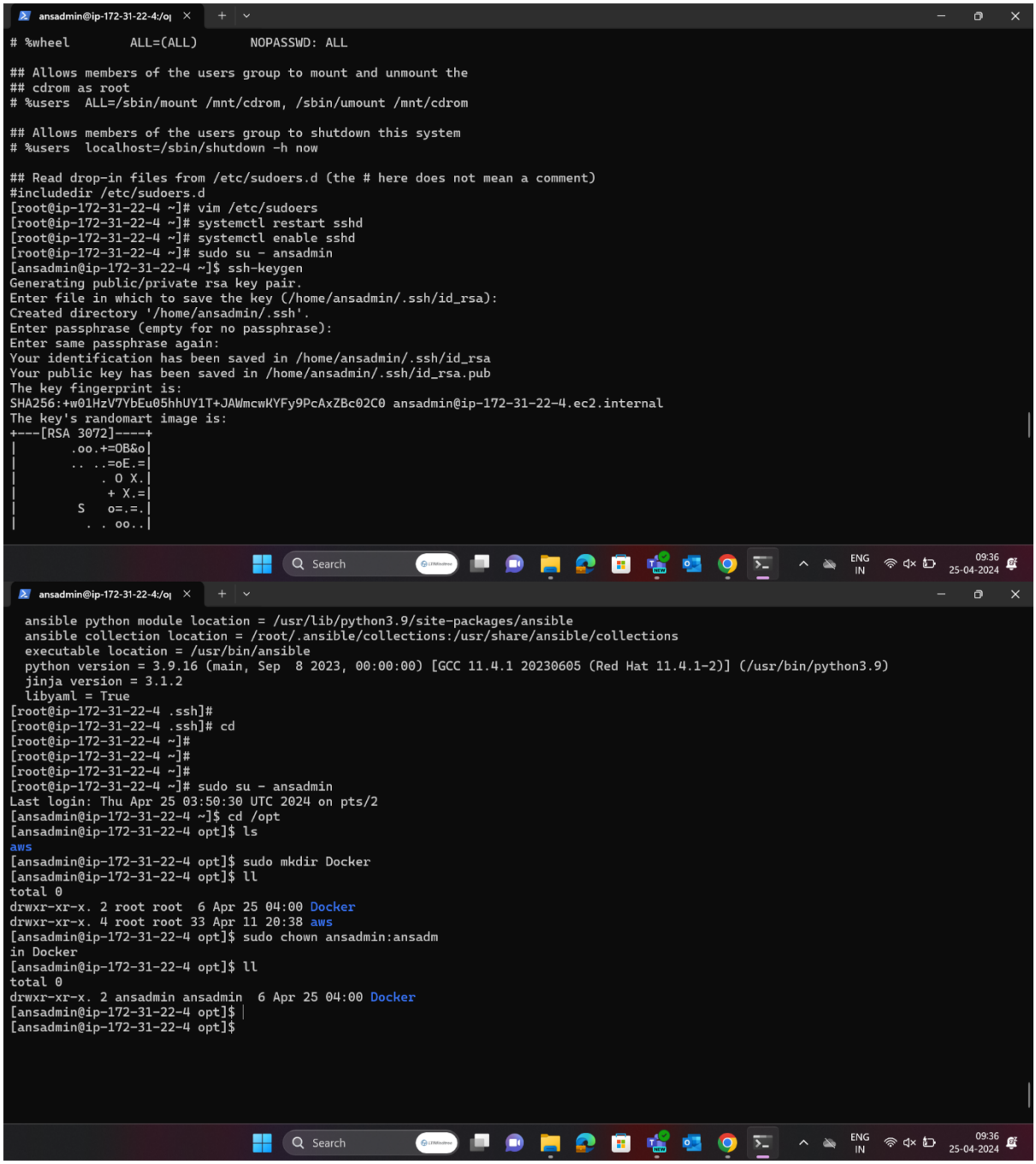

ec2-user@dev-server:~
root@jenkins-server:~
ec2-user@tomcat-server:~
root@docker-server:/opt/doc
[root@docker-server ~]# cd /opt
[root@docker-server opt]# ll
total 0
drwxr-xr-x. 4 root root 33 Apr 11 20:38 aws
drwx--x--x. 4 root root 28 Apr 24 18:26 containerd
[root@docker-server opt]# mkdir docker
[root@docker-server opt]# ll
total 0
drwxr-xr-x. 4 root root 33 Apr 11 20:38 aws
drwx--x--x. 4 root root 28 Apr 24 18:26 containerd
drwxr-xr-x. 2 root root  6 Apr 24 20:57 docker
[root@docker-server opt]# chown -R dockeradmin:dockeradmin docker
[root@docker-server opt]# ll
total 0
drwxr-xr-x. 4 root        root        33 Apr 11 20:38 aws
drwx--x--x. 4 root        root        28 Apr 24 18:26 containerd
drwxr-xr-x. 2 dockeradmin dockeradmin  6 Apr 24 20:57 docker
[root@docker-server opt]# ls
aws  containerd  docker
[root@docker-server opt]# ls -ld
drwxr-xr-x. 5 root root 49 Apr 24 20:57 .
[root@docker-server opt]# cd root/
-bash: cd: root/: No such file or directory
[root@docker-server opt]# cd /root
[root@docker-server ~]# ll
total 8
-rw-r--r--. 1 root root 554 Apr 24 18:59 DockerFile
-rw-r--r--. 1 root root 527 Apr 24 20:55 Dockerfile
[root@docker-server ~]# vim Dockerfile
[root@docker-server ~]# mv Dockerfile /opt/docker
[root@docker-server ~]# cd  /opt/docker
[root@docker-server docker]# ll
total 4
Search
ENG
IN
02:32
25-04-2024
ec2-user@dev-server:~
root@jenkins-server:~
ec2-user@tomcat-server:~
root@docker-server:/opt/doc
[root@docker-server opt]# ll
total 0
drwxr-xr-x. 4 root root 33 Apr 11 20:38 aws
drwx--x--x. 4 root root 28 Apr 24 18:26 containerd
drwxr-xr-x. 2 root root  6 Apr 24 20:57 docker
[root@docker-server opt]# chown -R dockeradmin:dockeradmin docker
[root@docker-server opt]# ll
total 0
drwxr-xr-x. 4 root        root        33 Apr 11 20:38 aws
drwx--x--x. 4 root        root        28 Apr 24 18:26 containerd
drwxr-xr-x. 2 dockeradmin dockeradmin  6 Apr 24 20:57 docker
[root@docker-server opt]# ls
aws  containerd  docker
[root@docker-server opt]# ls -ld
drwxr-xr-x. 5 root root 49 Apr 24 20:57 .
[root@docker-server opt]# cd root/
-bash: cd: root/: No such file or directory
[root@docker-server opt]# cd /root
[root@docker-server ~]# ll
total 8
-rw-r--r--. 1 root root 554 Apr 24 18:59 DockerFile
-rw-r--r--. 1 root root 527 Apr 24 20:55 Dockerfile
[root@docker-server ~]# vim Dockerfile
[root@docker-server ~]# mv Dockerfile /opt/docker
[root@docker-server ~]# cd  /opt/docker
[root@docker-server docker]# ll
total 4
-rw-r--r--. 1 root root 527 Apr 24 21:00 Dockerfile
[root@docker-server docker]# chown -R dockeradmin:dockeradmin Dockerfile
[root@docker-server docker]# ll
total 4
-rw-r--r--. 1 dockeradmin dockeradmin 527 Apr 24 21:00 Dockerfile
[root@docker-server docker]#
Search
ENG
IN
02:32
25-04-2024

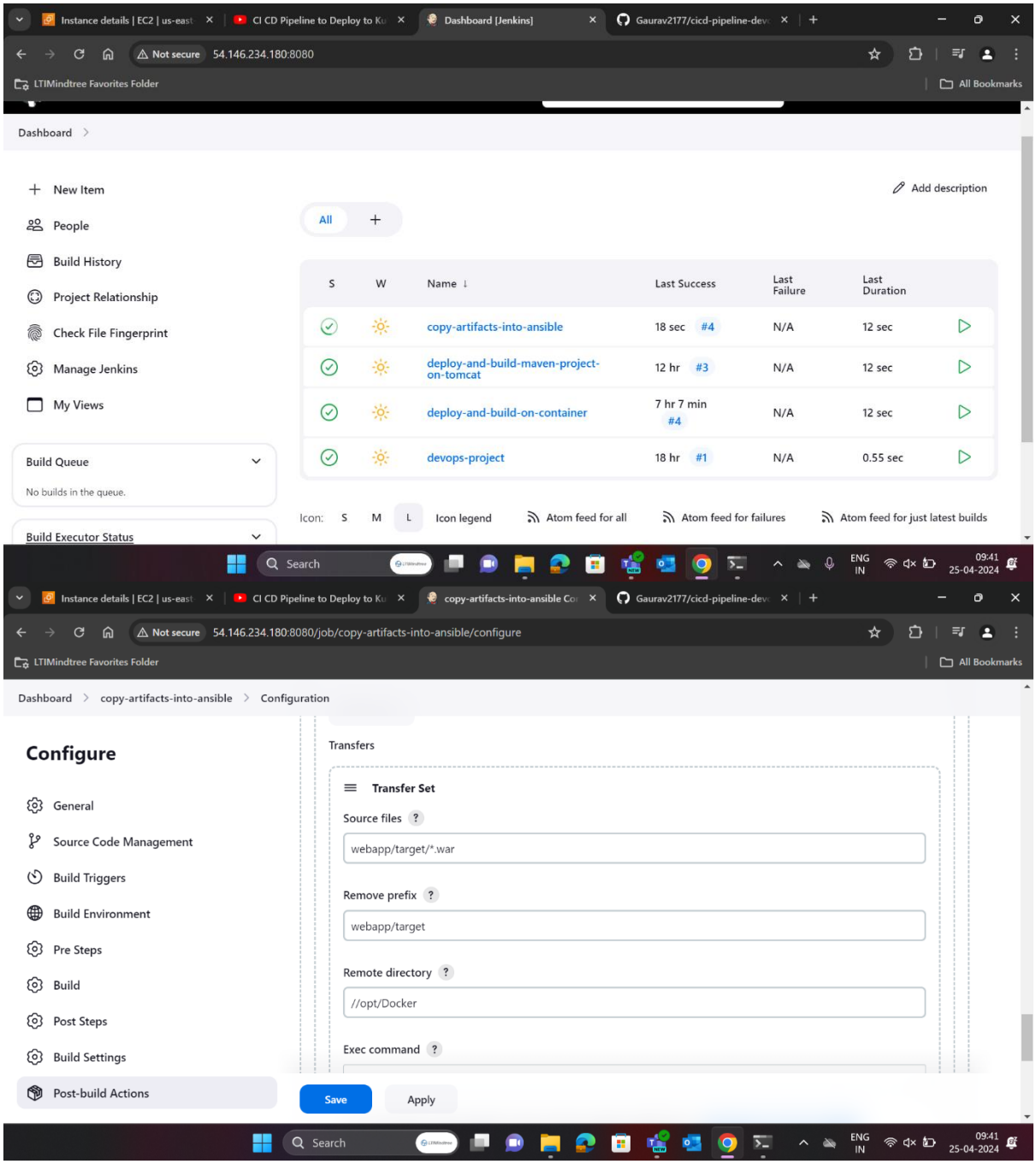

Not secure
54.146.234.180:8080/job/deploy-and-build-on-container/configure
LTIMindtree Favorites Folder
All Bookmarks
Dashboard
deploy-and-build-on-container
Configuration
Configure
General
Source Code Management
Build Triggers
Build Environment
Pre Steps
Build
Post Steps
Build Settings
Post-build Actions
Transfer Set
Source files
webapp/target/*.war
Remove prefix
webapp/target
Remote directory
//opt/docker
Exec command
All of the transfer fields (except for Exec timeout) support substitution of Jenkins environment variables
Save
Apply
Search
ENG
IN
02:33
25-04-2024

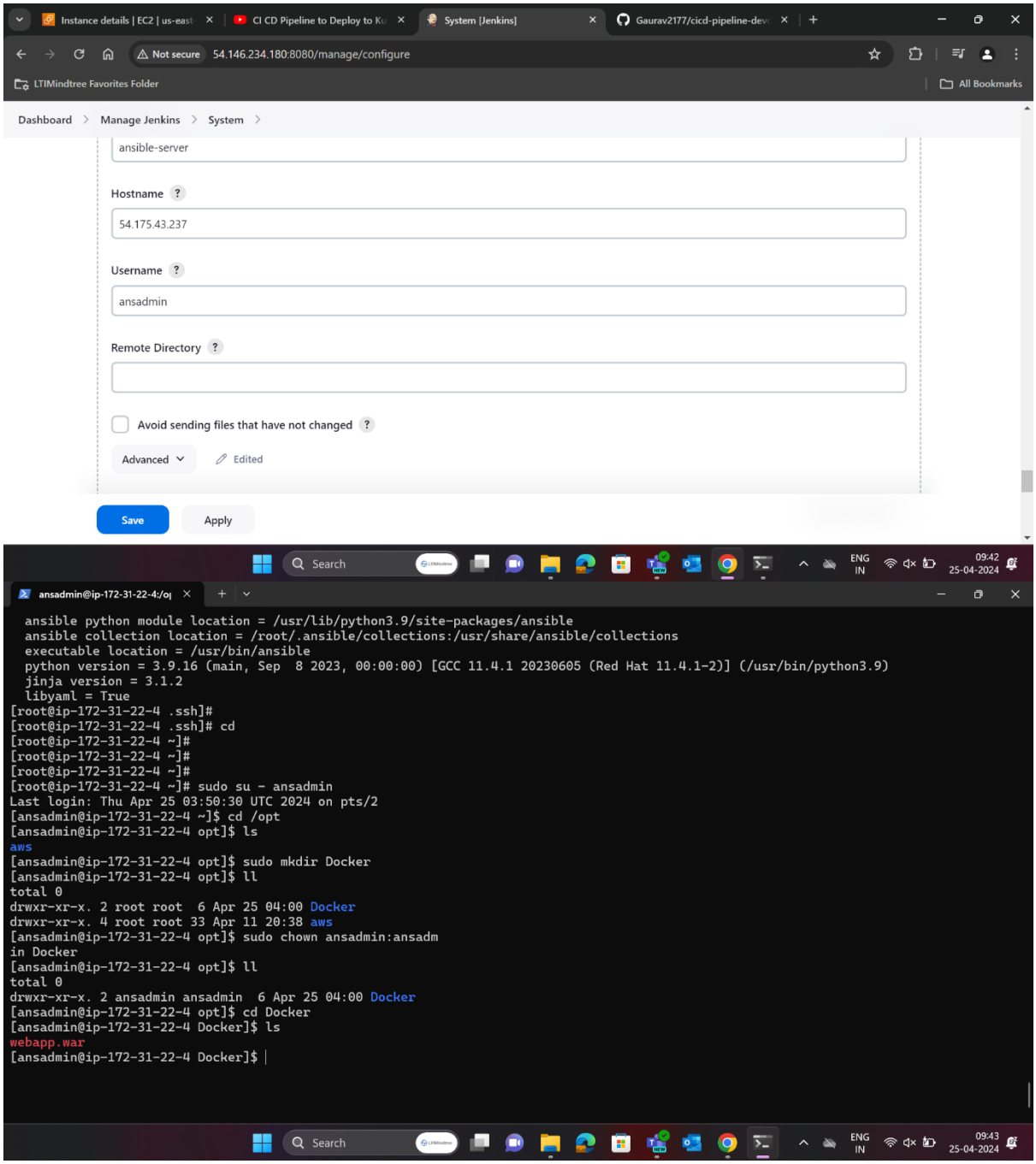
- Prepare Ansible Server:
- Setup EC2 Instance:
- Launch an EC2 instance to serve as your Ansible server.
- Setup Hostname:
- Configure the hostname for the Ansible server.
- Create 'ansadmin' User:
- Create a user named 'ansadmin' on the Ansible server.
- Add User to sudoers File:
- Grant sudo privileges to the 'ansadmin' user by adding it to the sudoers file.
- Generate SSH Keys:
- Generate SSH keys for the 'ansadmin' user to enable passwordless login.
- Enable Password Based Login:
- Configure SSH to allow password-based authentication if required.
- Install Ansible:
- Install Ansible on the Ansible server.

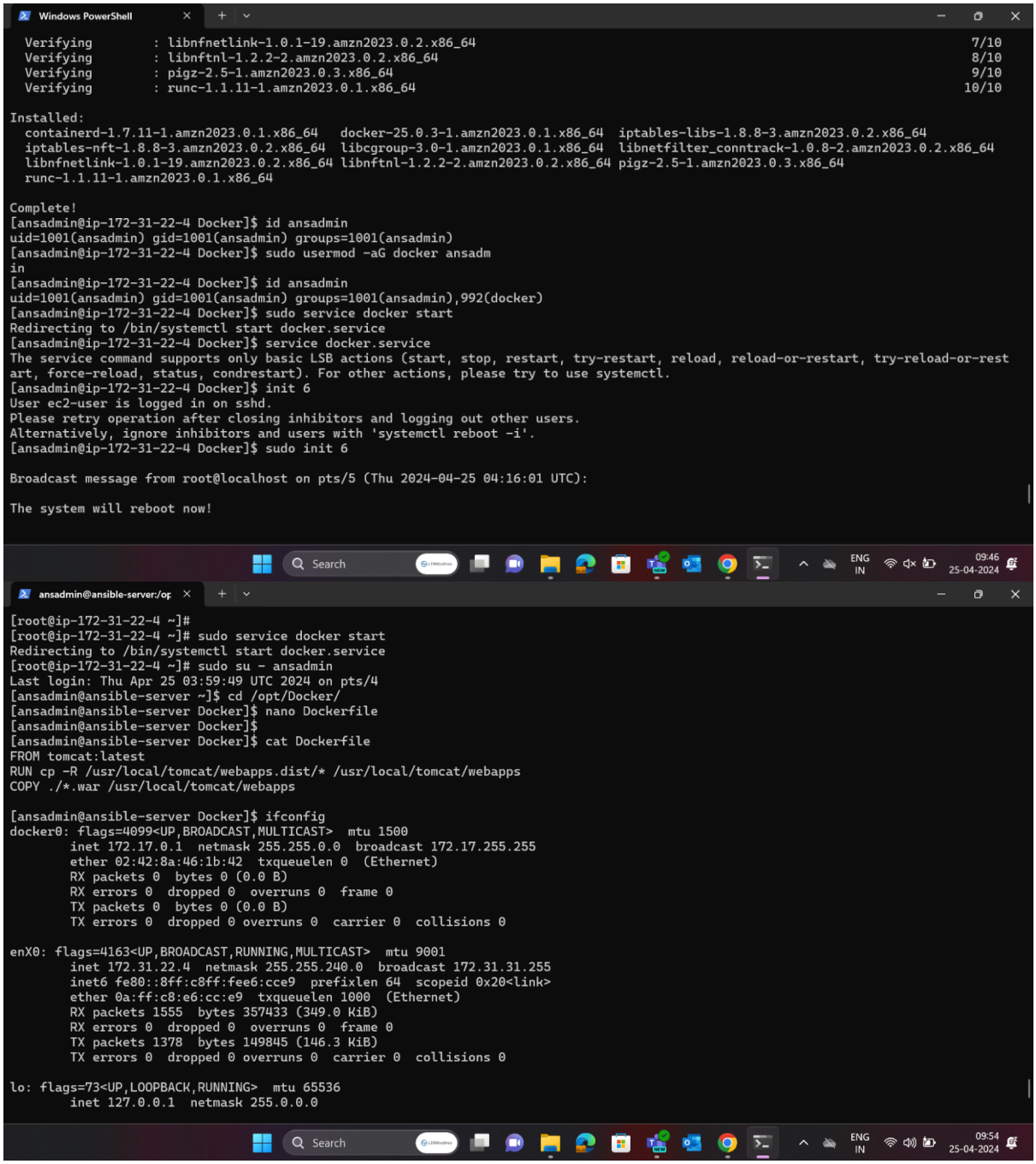

Not secure 54.146.234.180:8080
LTIMindtree Favorites Folder
All Bookmarks
Jenkins
Search (CTRL+K)
admin
log out
Dashboard
New Item
People
Build History
Project Relationship
Check File Fingerprint
Manage Jenkins
My Views
Add description
All
S
W
Name
Last Success
Last Failure
Last Duration
deploy-and-build-maven-project -on-tomcat
5 hr 48 min #3
N/A
12 sec
deploy-and-build-on-container
21 sec #4
N/A
12 sec
devops-project
11 hr #1
N/A
0.55 sec
Build Queue
No builds in the queue.
Icon: S M L
Icon legend
Atom feed for all
Atom feed for failures
Atom feed for just latest builds

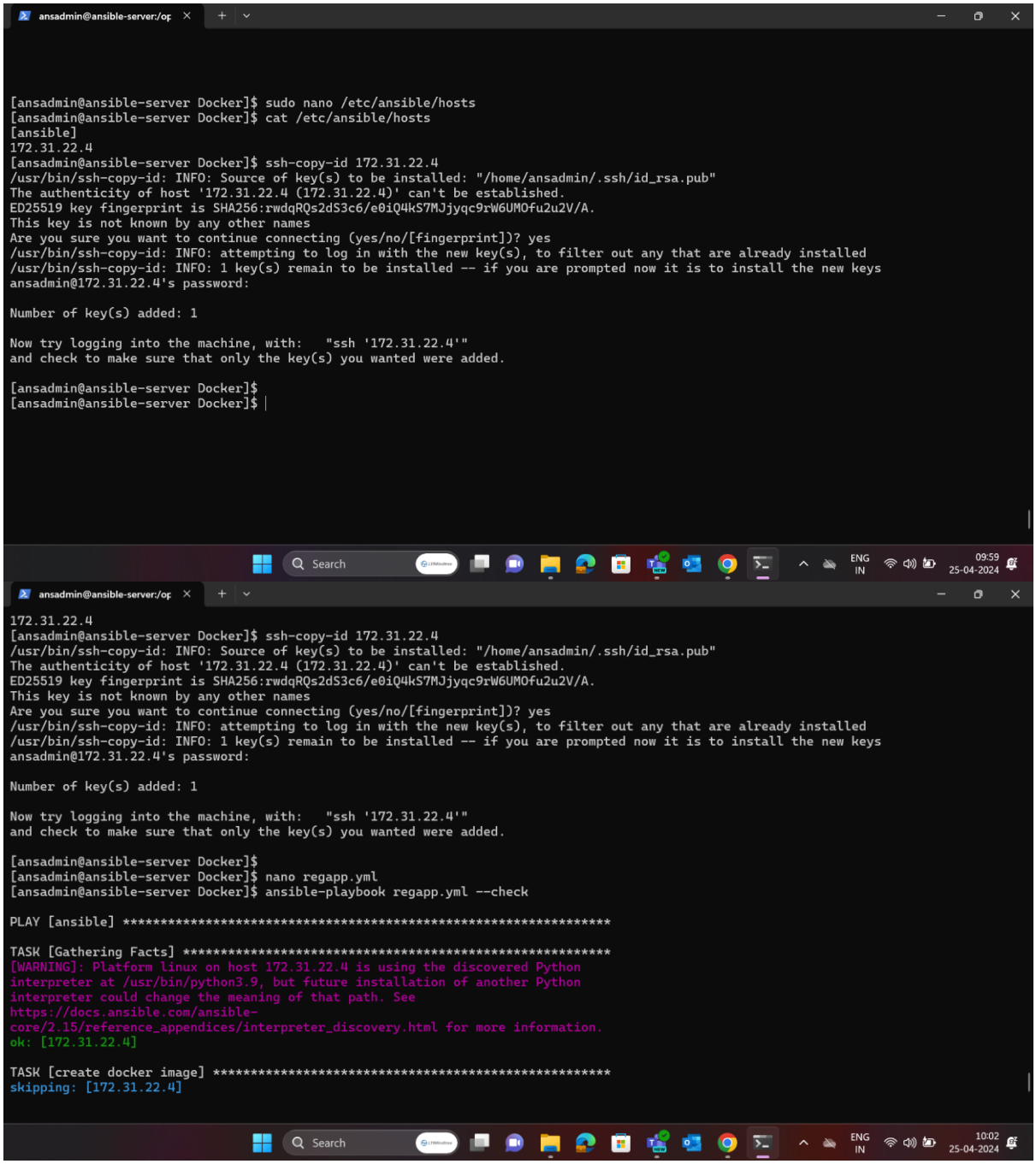

ec2-user@dev-server:~
root@jenkins-server:~
ec2-user@tomcat-server:~
root@docker-server:/opt/doc
drwxr-xr-x. 2 root root 6 Apr 24 20:57 docker
[root@docker-server opt]# chown -R dockeradmin:dockeradmin docker
[root@docker-server opt]# ll
total 0
drwxr-xr-x. 4 root root 33 Apr 11 20:38 aws
drwx--x--x. 4 root root 28 Apr 24 18:26 containerd
drwxr-xr-x. 2 dockeradmin dockeradmin 6 Apr 24 20:57 docker
[root@docker-server opt]# ls
aws containerd docker
[root@docker-server opt]# ls -ld
drwxr-xr-x. 5 root root 49 Apr 24 20:57 .
[root@docker-server opt]# cd root/
-bash: cd: root/: No such file or directory
[root@docker-server opt]# cd /root
[root@docker-server ~]# ll
total 8
-rw-r--r--. 1 root root 554 Apr 24 18:59 DockerFile
-rw-r--r--. 1 root root 527 Apr 24 20:55 Dockerfile
[root@docker-server ~]# vim Dockerfile
[root@docker-server ~]# mv Dockerfile /opt/docker
[root@docker-server ~]# cd /opt/docker
[root@docker-server docker]# ll
total 4
-rw-r--r--. 1 root root 527 Apr 24 21:00 Dockerfile
[root@docker-server docker]# chown -R dockeradmin:dockeradmin Dockerfile
[root@docker-server docker]# ll
total 4
-rw-r--r--. 1 dockeradmin dockeradmin 527 Apr 24 21:00 Dockerfile
[root@docker-server docker]# ll
total 8
-rw-r--r--. 1 dockeradmin dockeradmin 527 Apr 24 21:00 Dockerfile
-rw-rw-r--. 1 dockeradmin dockeradmin 2380 Apr 24 21:03 webapp.war
[root@docker-server docker]#

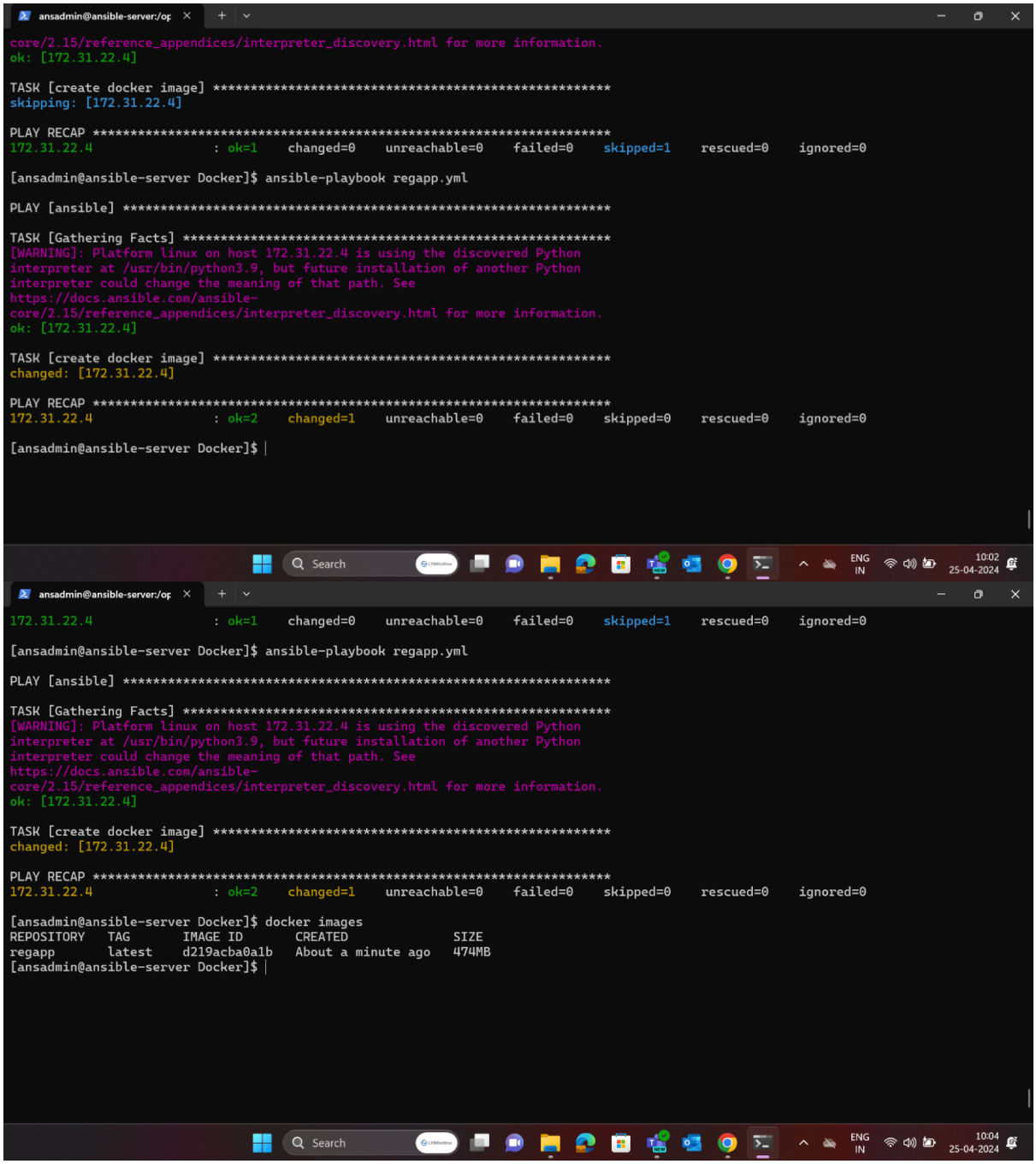

ansadmin@ip-172-31-22-4:/o
# %wheel ALL=(ALL) NOPASSWD: ALL
## Allows members of the users group to mount and unmount the
## cdrom as root
# %users ALL=/sbin/mount /mnt/cdrom, /sbin/umount /mnt/cdrom
## Allows members of the users group to shutdown this system
# %users localhost=/sbin/shutdown -h now
## Read drop-in files from /etc/sudoers.d (the # here does not mean a comment)
#includedir /etc/sudoers.d
[root@ip-172-31-22-4 ~]# vim /etc/sudoers
[root@ip-172-31-22-4 ~]# systemctl restart sshd
[root@ip-172-31-22-4 ~]# systemctl enable sshd
[root@ip-172-31-22-4 ~]# sudo su - ansadmin
[ansadmin@ip-172-31-22-4 ~]$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/home/ansadmin/.ssh/id_rsa):
Created directory '/home/ansadmin/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/ansadmin/.ssh/id_rsa
Your public key has been saved in /home/ansadmin/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:+w01HzV7YbEu05hhUY1T+JAWmcwKYFy9PcAxZBc02C0 ansadmin@ip-172-31-22-4.ec2.internal
The key's randomart image is:
+---[RSA 3072]----+
| .oo.+=OB&o|
| .. ..=oE.=|
| . O X.|
| + X.=|
| S o=.=.|
| . . oo..|
Search
ENG IN
09:36 25-04-2024
ansadmin@ip-172-31-22-4:/o
ansible python module location = /usr/lib/python3.9/site-packages/ansible
ansible collection location = /root/.ansible/collections:/usr/share/ansible/collections
executable location = /usr/bin/ansible
python version = 3.9.16 (main, Sep 8 2023, 00:00:00) [GCC 11.4.1 20230605 (Red Hat 11.4.1-2)] (/usr/bin/python3.9)
jinja version = 3.1.2
libyaml = True
[root@ip-172-31-22-4 .ssh]#
[root@ip-172-31-22-4 .ssh]# cd
[root@ip-172-31-22-4 ~]#
[root@ip-172-31-22-4 ~]#
[root@ip-172-31-22-4 ~]#
[root@ip-172-31-22-4 ~]# sudo su - ansadmin
Last login: Thu Apr 25 03:50:30 UTC 2024 on pts/2
[ansadmin@ip-172-31-22-4 ~]$ cd /opt
[ansadmin@ip-172-31-22-4 opt]$ ls
aws
[ansadmin@ip-172-31-22-4 opt]$ sudo mkdir Docker
[ansadmin@ip-172-31-22-4 opt]$ ll
total 0
drwxr-xr-x. 2 root root 6 Apr 25 04:00 Docker
drwxr-xr-x. 4 root root 33 Apr 11 20:38 aws
[ansadmin@ip-172-31-22-4 opt]$ sudo chown ansadmin:ansadm
in Docker
[ansadmin@ip-172-31-22-4 opt]$ ll
total 0
drwxr-xr-x. 2 ansadmin ansadmin 6 Apr 25 04:00 Docker
[ansadmin@ip-172-31-22-4 opt]$
[ansadmin@ip-172-31-22-4 opt]$
Search
ENG IN
09:36 25-04-2024

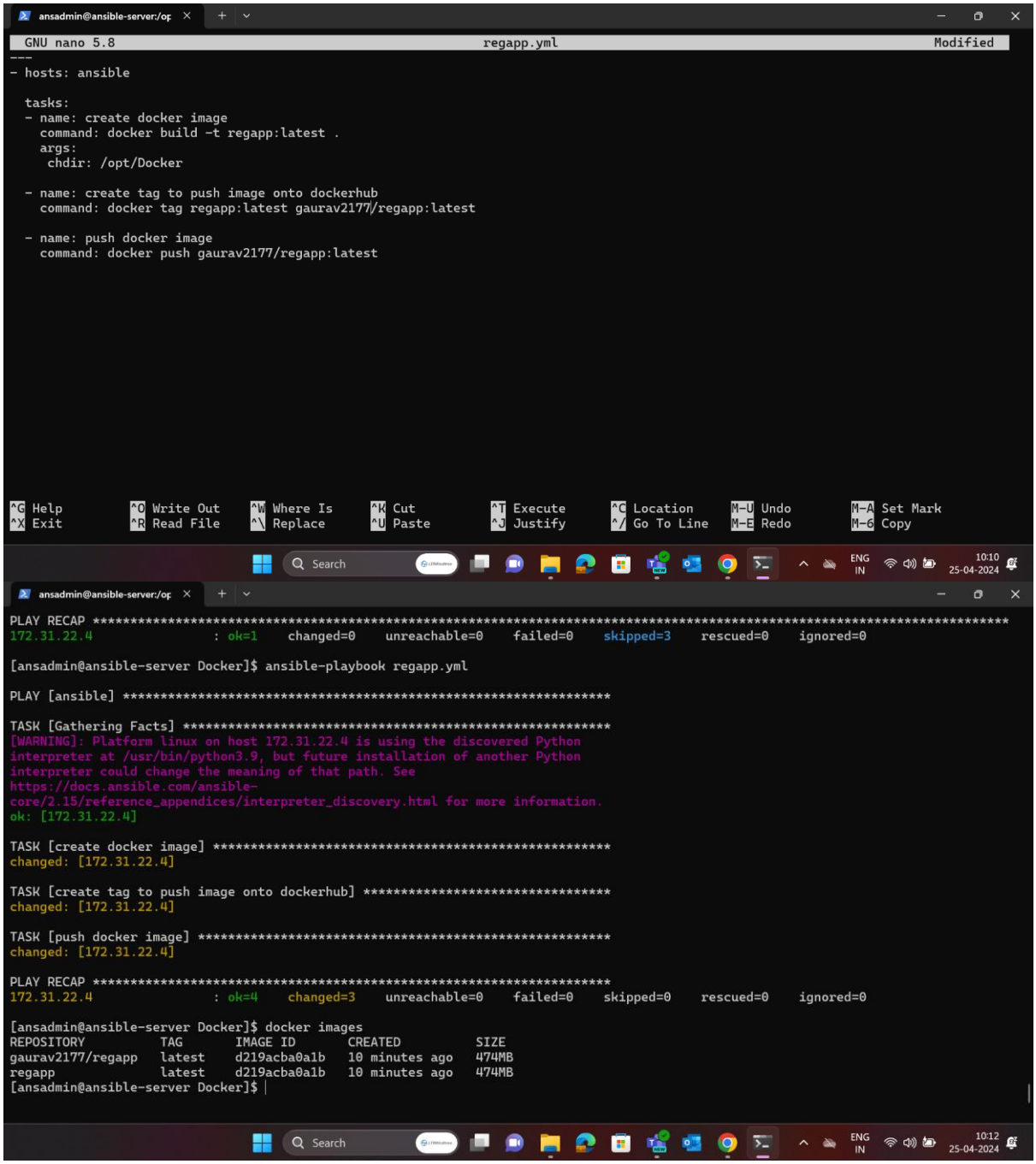

Instance details | EC2 | us-east
CI CD Pipeline to Deploy to Ku
Dashboard [Jenkins]
Gaurav2177/cicd-pipeline-dev
Not secure
54.146.234.180:8080
LTIMindtree Favorites Folder
All Bookmarks
Dashboard
New Item
People
Build History
Project Relationship
Check File Fingerprint
Manage Jenkins
My Views
Add description
All
S
W
Name
Last Success
Last Failure
Last Duration
copy-artifacts-into-ansible
18 sec #4
N/A
12 sec
deploy-and-build-maven-project-on-tomcat
12 hr #3
N/A
12 sec
deploy-and-build-on-container
7 hr 7 min #4
N/A
12 sec
devops-project
18 hr #1
N/A
0.55 sec
Build Queue
No builds in the queue.
Build Executor Status
Icon: S M L
Icon legend
Atom feed for all
Atom feed for failures
Atom feed for just latest builds
Search
ENG IN
09:41 25-04-2024
copy-artifacts-into-ansible Co
54.146.234.180:8080/job/copy-artifacts-into-ansible/configure
Dashboard > copy-artifacts-into-ansible > Configuration
Configure
General
Source Code Management
Build Triggers
Build Environment
Pre Steps
Build
Post Steps
Build Settings
Post-build Actions
Transfers
Transfer Set
Source files
webapp/target/*.war
Remove prefix
webapp/target
Remote directory
//opt/Docker
Exec command
Save
Apply

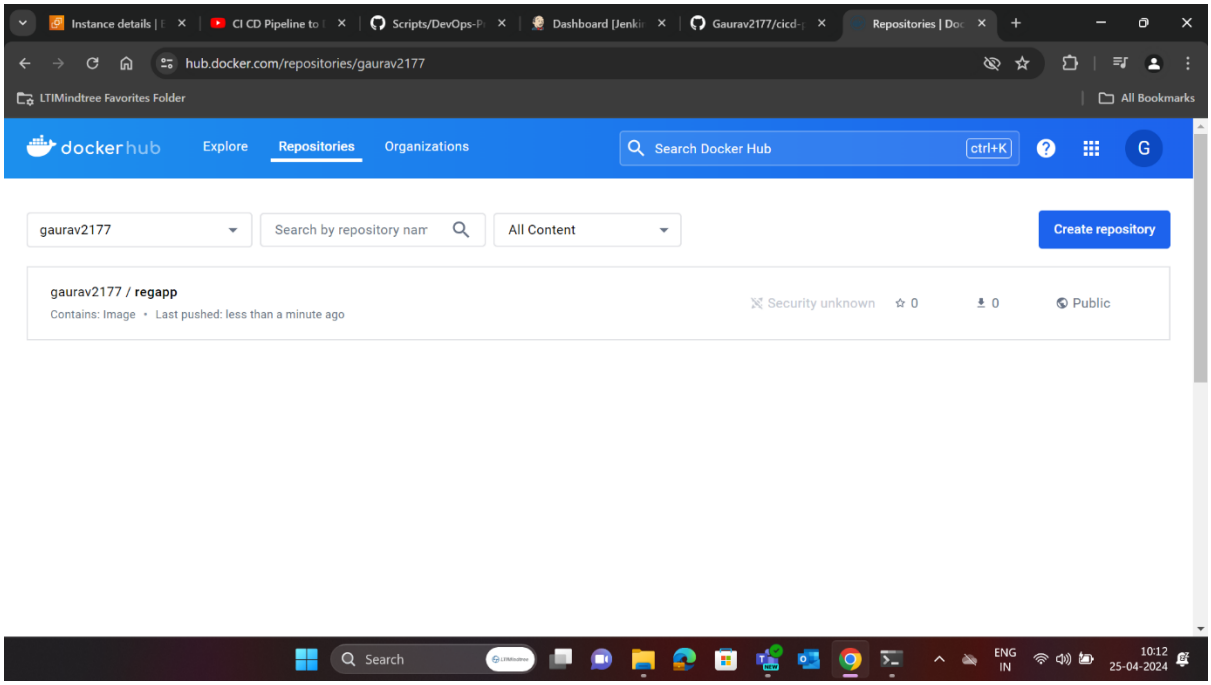

Instance details | EC2 | us-east
CI CD Pipeline to Deploy to Ku
System [Jenkins]
Gaurav2177/cicd-pipeline-dev
Not secure 54.146.234.180:8080/manage/configure
LTIMindtree Favorites Folder
All Bookmarks
Dashboard > Manage Jenkins > System >
ansible-server
Hostname
54.175.43.237
Username
ansadmin
Remote Directory
Avoid sending files that have not changed
Advanced
Edited
Save
Apply
Search
ENG IN
09:42 25-04-2024
ansadmin@ip-172-31-22-4:/o
ansible python module location = /usr/lib/python3.9/site-packages/ansible
ansible collection location = /root/.ansible/collections:/usr/share/ansible/collections
executable location = /usr/bin/ansible
python version = 3.9.16 (main, Sep 8 2023, 00:00:00) [GCC 11.4.1 20230605 (Red Hat 11.4.1-2)] (/usr/bin/python3.9)
jinja version = 3.1.2
libyaml = True
[root@ip-172-31-22-4 .ssh]#
[root@ip-172-31-22-4 .ssh]# cd
[root@ip-172-31-22-4 ~]#
[root@ip-172-31-22-4 ~]#
[root@ip-172-31-22-4 ~]#
[root@ip-172-31-22-4 ~]# sudo su - ansadmin
Last login: Thu Apr 25 03:50:30 UTC 2024 on pts/2
[ansadmin@ip-172-31-22-4 ~]$ cd /opt
[ansadmin@ip-172-31-22-4 opt]$ ls
aws
[ansadmin@ip-172-31-22-4 opt]$ sudo mkdir Docker
[ansadmin@ip-172-31-22-4 opt]$ ll
total 0
drwxr-xr-x. 2 root root 6 Apr 25 04:00 Docker
drwxr-xr-x. 4 root root 33 Apr 11 20:38 aws
[ansadmin@ip-172-31-22-4 opt]$ sudo chown ansadmin:ansadm
in Docker
[ansadmin@ip-172-31-22-4 opt]$ ll
total 0
drwxr-xr-x. 2 ansadmin ansadmin 6 Apr 25 04:00 Docker
[ansadmin@ip-172-31-22-4 opt]$ cd Docker
[ansadmin@ip-172-31-22-4 Docker]$ ls
webapp.war
[ansadmin@ip-172-31-22-4 Docker]$
Search
ENG IN
09:43 25-04-2024


Windows PowerShell
Verifying : libnfnetlink-1.0.1-19.amzn2023.0.2.x86_64 7/10
Verifying : libnftnl-1.2.2-2.amzn2023.0.2.x86_64 8/10
Verifying : pigz-2.5-1.amzn2023.0.3.x86_64 9/10
Verifying : runc-1.1.11-1.amzn2023.0.1.x86_64 10/10
Installed:
containerd-1.7.11-1.amzn2023.0.1.x86_64 docker-25.0.3-1.amzn2023.0.1.x86_64 iptables-libs-1.8.8-3.amzn2023.0.2.x86_64
iptables-nft-1.8.8-3.amzn2023.0.2.x86_64 libcgroup-3.0-1.amzn2023.0.1.x86_64 libnetfilter_conntrack-1.0.8-2.amzn2023.0.2.x86_64
libnfnetlink-1.0.1-19.amzn2023.0.2.x86_64 libnftnl-1.2.2-2.amzn2023.0.2.x86_64 pigz-2.5-1.amzn2023.0.3.x86_64
runc-1.1.11-1.amzn2023.0.1.x86_64
Complete!
[ansadmin@ip-172-31-22-4 Docker]$ id ansadmin
uid=1001(ansadmin) gid=1001(ansadmin) groups=1001(ansadmin)
[ansadmin@ip-172-31-22-4 Docker]$ sudo usermod -aG docker ansadm
in
[ansadmin@ip-172-31-22-4 Docker]$ id ansadmin
uid=1001(ansadmin) gid=1001(ansadmin) groups=1001(ansadmin),992(docker)
[ansadmin@ip-172-31-22-4 Docker]$ sudo service docker start
Redirecting to /bin/systemctl start docker.service
[ansadmin@ip-172-31-22-4 Docker]$ service docker.service
The service command supports only basic LSB actions (start, stop, restart, try-restart, reload, reload-or-restart, try-reload-or-rest
art, force-reload, status, condrestart). For other actions, please try to use systemctl.
[ansadmin@ip-172-31-22-4 Docker]$ init 6
User ec2-user is logged in on sshd.
Please retry operation after closing inhibitors and logging out other users.
Alternatively, ignore inhibitors and users with 'systemctl reboot -i'.
[ansadmin@ip-172-31-22-4 Docker]$ sudo init 6
Broadcast message from root@localhost on pts/5 (Thu 2024-04-25 04:16:01 UTC):
The system will reboot now!
Search
ENG IN
09:46 25-04-2024
ansadmin@ansible-server:/op
[root@ip-172-31-22-4 ~]#
[root@ip-172-31-22-4 ~]# sudo service docker start
Redirecting to /bin/systemctl start docker.service
[root@ip-172-31-22-4 ~]# sudo su - ansadmin
Last login: Thu Apr 25 03:59:49 UTC 2024 on pts/4
[ansadmin@ansible-server ~]$ cd /opt/Docker/
[ansadmin@ansible-server Docker]$ nano Dockerfile
[ansadmin@ansible-server Docker]$
[ansadmin@ansible-server Docker]$ cat Dockerfile
FROM tomcat:latest
RUN cp -R /usr/local/tomcat/webapps.dist/* /usr/local/tomcat/webapps
COPY ./*.war /usr/local/tomcat/webapps
[ansadmin@ansible-server Docker]$ ifconfig
docker0: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
inet 172.17.0.1 netmask 255.255.0.0 broadcast 172.17.255.255
ether 02:42:8a:46:1b:42 txqueuelen 0 (Ethernet)
RX packets 0 bytes 0 (0.0 B)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 0 bytes 0 (0.0 B)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
enX0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 9001
inet 172.31.22.4 netmask 255.255.240.0 broadcast 172.31.31.255
inet6 fe80::8ff:c8ff:fee6:cce9 prefixlen 64 scopeid 0x20<link>
ether 0a:ff:c8:e6:cc:e9 txqueuelen 1000 (Ethernet)
RX packets 1555 bytes 357433 (349.0 KiB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 1378 bytes 149845 (146.3 KiB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
inet 127.0.0.1 netmask 255.0.0.0
Search
ENG IN
09:54 25-04-2024

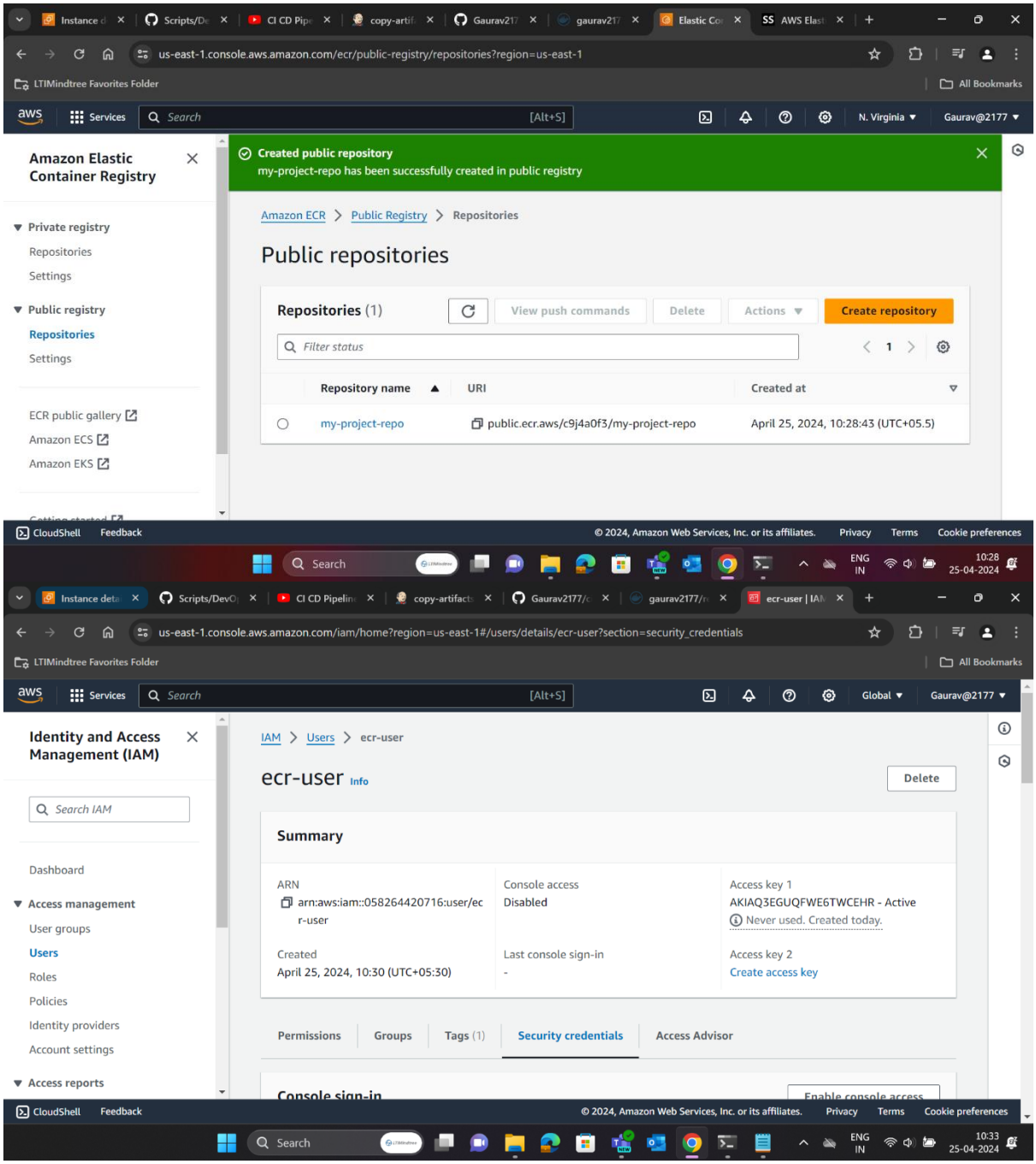

ansadmin@ansible-server:/op
[ansadmin@ansible-server Docker]$ sudo nano /etc/ansible/hosts
[ansadmin@ansible-server Docker]$ cat /etc/ansible/hosts
[ansible]
172.31.22.4
[ansadmin@ansible-server Docker]$ ssh-copy-id 172.31.22.4
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/ansadmin/.ssh/id_rsa.pub"
The authenticity of host '172.31.22.4 (172.31.22.4)' can't be established.
ED25519 key fingerprint is SHA256:rwdqRQs2dS3c6/e0iQ4kS7MJjyqc9rW6UMOfu2u2V/A.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys
ansadmin@172.31.22.4's password:
Number of key(s) added: 1
Now try logging into the machine, with: "ssh '172.31.22.4'"
and check to make sure that only the key(s) you wanted were added.
[ansadmin@ansible-server Docker]$
[ansadmin@ansible-server Docker]$
Search
ENG
IN
09:59
25-04-2024
ansadmin@ansible-server:/op
172.31.22.4
[ansadmin@ansible-server Docker]$ ssh-copy-id 172.31.22.4
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/ansadmin/.ssh/id_rsa.pub"
The authenticity of host '172.31.22.4 (172.31.22.4)' can't be established.
ED25519 key fingerprint is SHA256:rwdqRQs2dS3c6/e0iQ4kS7MJjyqc9rW6UMOfu2u2V/A.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys
ansadmin@172.31.22.4's password:
Number of key(s) added: 1
Now try logging into the machine, with: "ssh '172.31.22.4'"
and check to make sure that only the key(s) you wanted were added.
[ansadmin@ansible-server Docker]$
[ansadmin@ansible-server Docker]$ nano regapp.yml
[ansadmin@ansible-server Docker]$ ansible-playbook regapp.yml --check
PLAY [ansible] ***********************************************************
TASK [Gathering Facts] ***************************************************
[WARNING]: Platform linux on host 172.31.22.4 is using the discovered Python
interpreter at /usr/bin/python3.9, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-
core/2.15/reference_appendices/interpreter_discovery.html for more information.
ok: [172.31.22.4]
TASK [create docker image] ***********************************************
skipping: [172.31.22.4]
Search
ENG
IN
10:02
25-04-2024

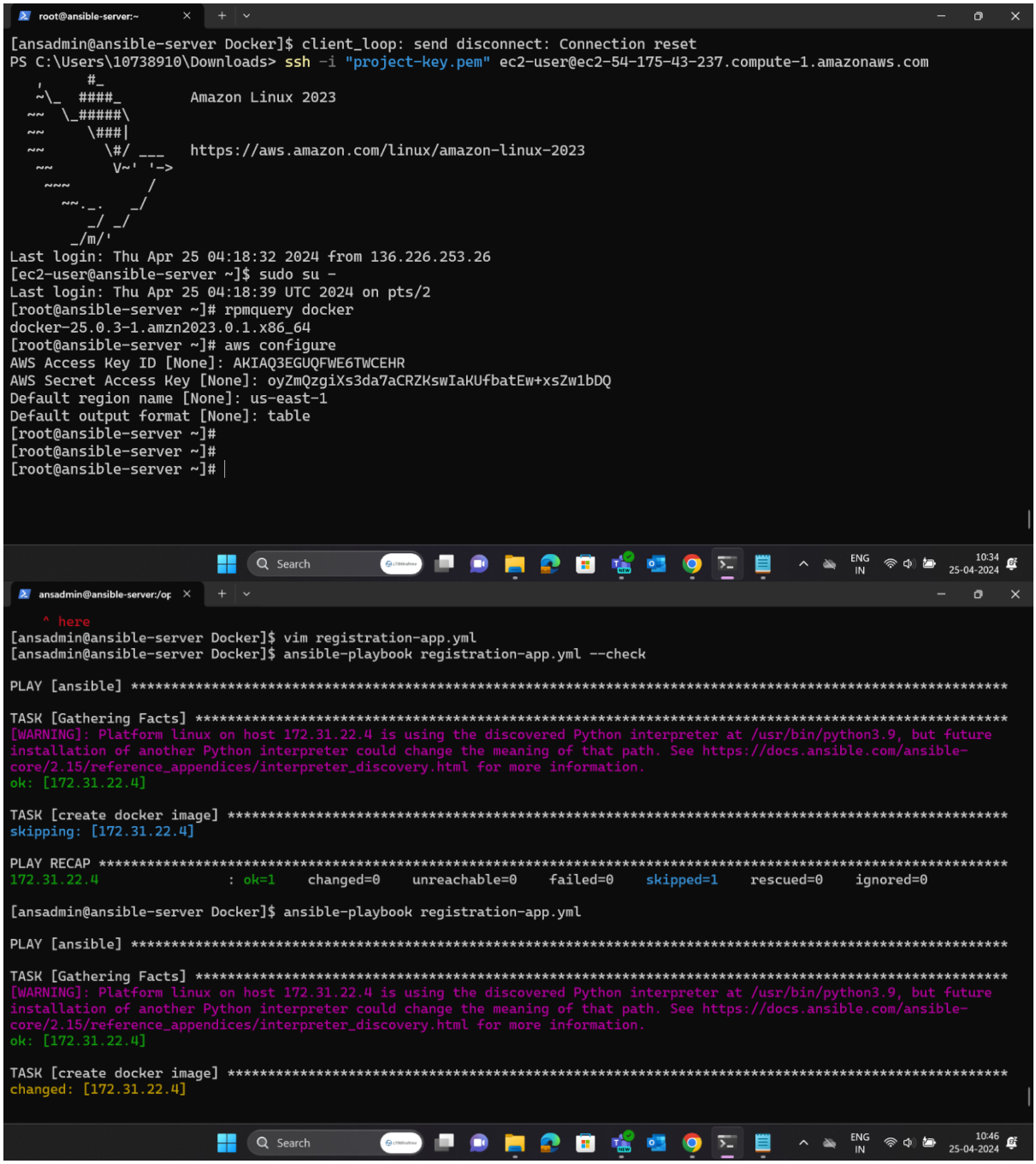

ansadmin@ansible-server:/op
core/2.15/reference_appendices/interpreter_discovery.html for more information.
ok: [172.31.22.4]
TASK [create docker image] ****************************************************
skipping: [172.31.22.4]
PLAY RECAP *********************************************************************
172.31.22.4 : ok=1 changed=0 unreachable=0 failed=0 skipped=1 rescued=0 ignored=0
[ansadmin@ansible-server Docker]$ ansible-playbook regapp.yml
PLAY [ansible] *****************************************************************
TASK [Gathering Facts] *********************************************************
[WARNING]: Platform linux on host 172.31.22.4 is using the discovered Python
interpreter at /usr/bin/python3.9, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-
core/2.15/reference_appendices/interpreter_discovery.html for more information.
ok: [172.31.22.4]
TASK [create docker image] ****************************************************
changed: [172.31.22.4]
PLAY RECAP *********************************************************************
172.31.22.4 : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0
[ansadmin@ansible-server Docker]$
Search
ENG
IN
10:02
25-04-2024
ansadmin@ansible-server:/op
172.31.22.4 : ok=1 changed=0 unreachable=0 failed=0 skipped=1 rescued=0 ignored=0
[ansadmin@ansible-server Docker]$ ansible-playbook regapp.yml
PLAY [ansible] *****************************************************************
TASK [Gathering Facts] *********************************************************
[WARNING]: Platform linux on host 172.31.22.4 is using the discovered Python
interpreter at /usr/bin/python3.9, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-
core/2.15/reference_appendices/interpreter_discovery.html for more information.
ok: [172.31.22.4]
TASK [create docker image] ****************************************************
changed: [172.31.22.4]
PLAY RECAP *********************************************************************
172.31.22.4 : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0
[ansadmin@ansible-server Docker]$ docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
regapp latest d219acba0a1b About a minute ago 474MB
[ansadmin@ansible-server Docker]$
Search
ENG
IN
10:04
25-04-2024

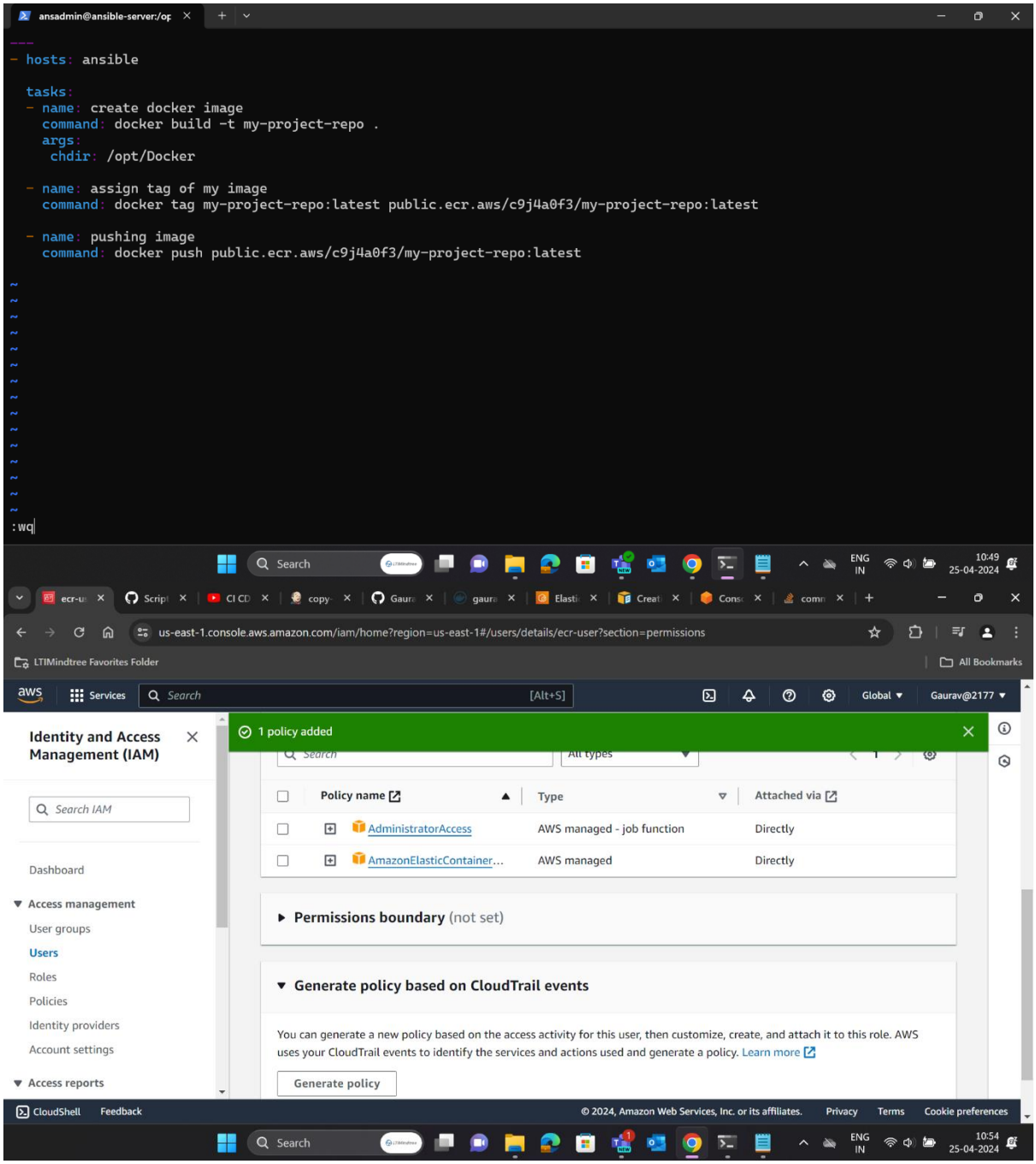

ansadmin@ansible-server:/op
GNU nano 5.8 regapp.yml Modified
---
- hosts: ansible
tasks:
- name: create docker image
command: docker build -t regapp:latest .
args:
chdir: /opt/Docker
- name: create tag to push image onto dockerhub
command: docker tag regapp:latest gaurav2177/regapp:latest
- name: push docker image
command: docker push gaurav2177/regapp:latest
^G Help ^O Write Out ^W Where Is ^K Cut ^T Execute ^C Location M-U Undo M-A Set Mark
^X Exit ^R Read File ^\ Replace ^U Paste ^J Justify ^/ Go To Line M-E Redo M-6 Copy
Search
ENG IN
10:10 25-04-2024
ansadmin@ansible-server:/op
PLAY RECAP ****************************************************************************************************************************
172.31.22.4 : ok=1 changed=0 unreachable=0 failed=0 skipped=3 rescued=0 ignored=0
[ansadmin@ansible-server Docker]$ ansible-playbook regapp.yml
PLAY [ansible] ************************************************************
TASK [Gathering Facts] ****************************************************
[WARNING]: Platform linux on host 172.31.22.4 is using the discovered Python
interpreter at /usr/bin/python3.9, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-
core/2.15/reference_appendices/interpreter_discovery.html for more information.
ok: [172.31.22.4]
TASK [create docker image] ************************************************
changed: [172.31.22.4]
TASK [create tag to push image onto dockerhub] ****************************
changed: [172.31.22.4]
TASK [push docker image] **************************************************
changed: [172.31.22.4]
PLAY RECAP ****************************************************************
172.31.22.4 : ok=4 changed=3 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0
[ansadmin@ansible-server Docker]$ docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
gaurav2177/regapp latest d219acba0a1b 10 minutes ago 474MB
regapp latest d219acba0a1b 10 minutes ago 474MB
[ansadmin@ansible-server Docker]$
Search
ENG IN
10:12 25-04-2024

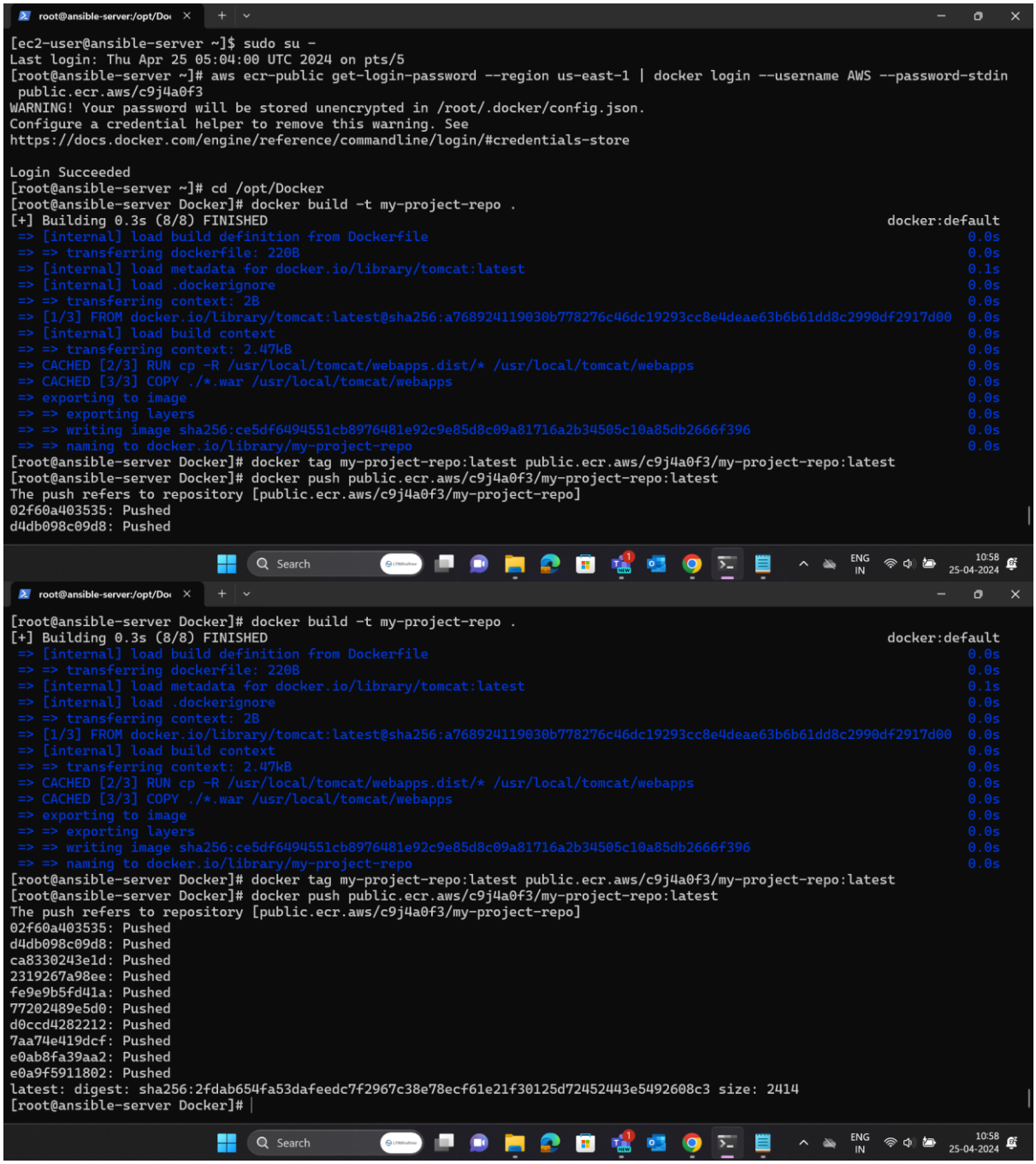

hub.docker.com/repositories/gaurav2177
docker hub
Explore
Repositories
Organizations
Search Docker Hub
ctrl+K
gaurav2177
Search by repository nam
All Content
Create repository
gaurav2177 / regapp
Contains: Image • Last pushed: less than a minute ago
Security unknown
0
0
Public
Search
ENG
IN
10:12
25-04-2024

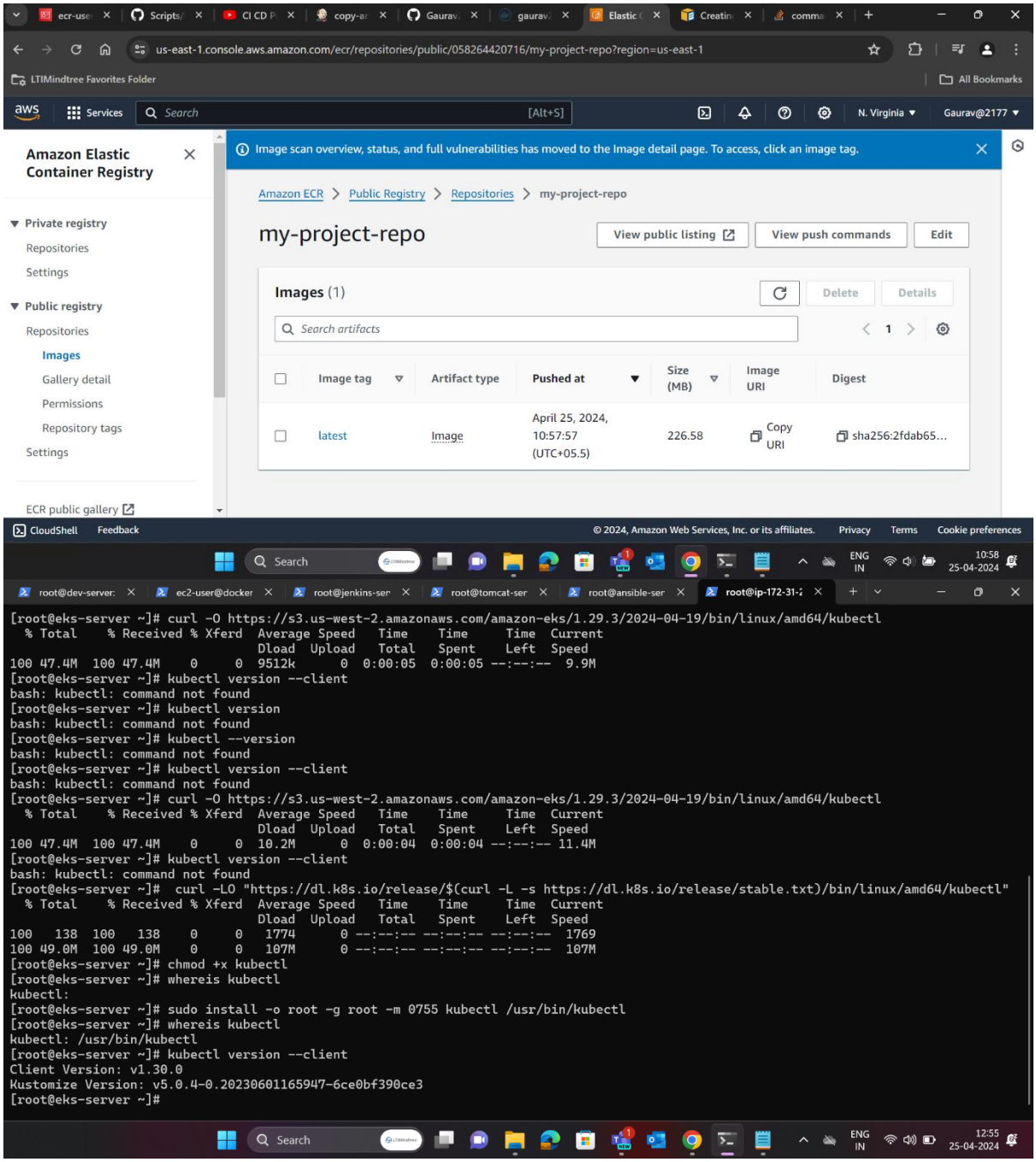
- Ensure ECR Repository Exists:
- Before pushing an image, make sure the ECR repository already exists. If not, create it using the Amazon ECR console.
- Authenticate Docker with ECR:
- Obtain an authentication token for your Docker client to interact with the ECR registry.
- Authenticate using the provided credentials.
- Tag Your Local Image:
- Identify the local Docker image you want to push.
- Tag your image with the ECR registry, repository, and optional image tag.
- Push the Image:
- Use the docker push command to push your image to the ECR repository.


us-east-1.console.aws.amazon.com/ecr/public-registry/repositories?region=us-east-1
Amazon Elastic Container Registry
Created public repository
my-project-repo has been successfully created in public registry
Amazon ECR > Public Registry > Repositories
Public repositories
Repositories (1)
View push commands
Delete
Actions
Create repository
Repository name
URI
Created at
my-project-repo
public.ecr.aws/c9j4a0f3/my-project-repo
April 25, 2024, 10:28:43 (UTC+05.5)
us-east-1.console.aws.amazon.com/iam/home?region=us-east-1#/users/details/ecr-user?section=security_credentials
Identity and Access Management (IAM)
IAM > Users > ecr-user
ecr-user Info
Delete
Summary
ARN
arn:aws:iam::058264420716:user/ecr-user
Console access
Disabled
Access key 1
AKIAQ3EGUQFWE6TWCEHR - Active
Never used. Created today.
Created
April 25, 2024, 10:30 (UTC+05:30)
Last console sign-in
-
Access key 2
Create access key
Permissions
Groups
Tags (1)
Security credentials
Access Advisor
Console sign-in
Enable console access

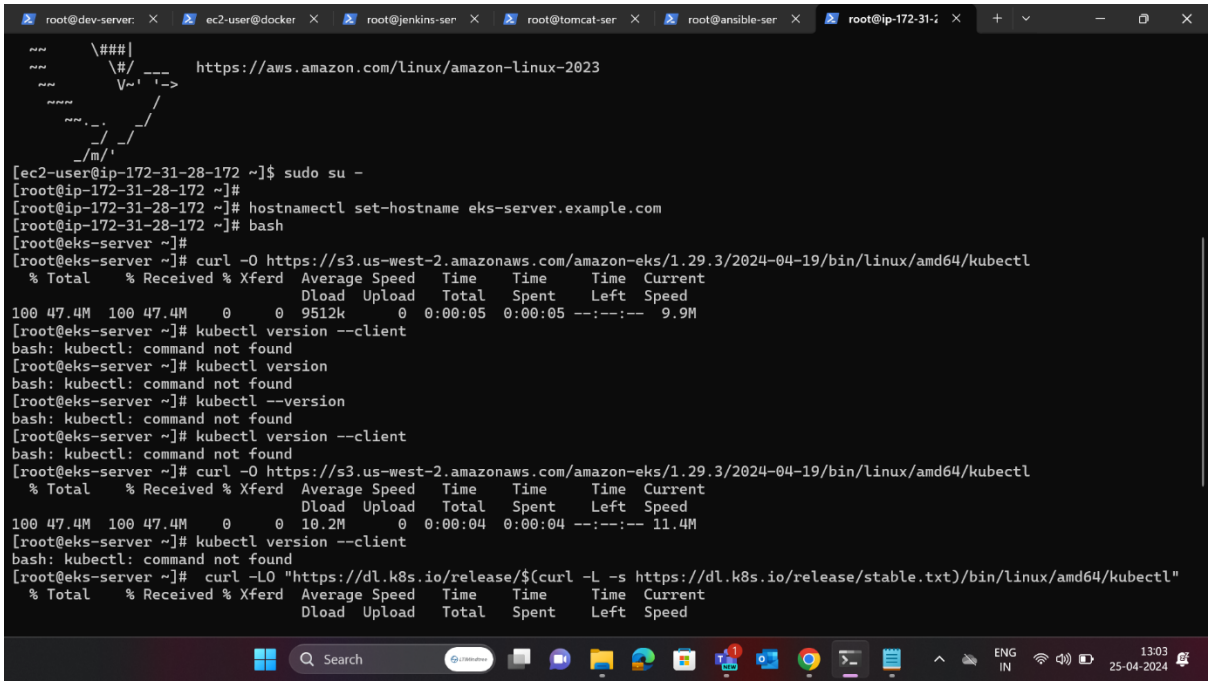

root@ansible-server:~
[ansadmin@ansible-server Docker]$ client_loop: send disconnect: Connection reset
PS C:\Users\10738910\Downloads> ssh -i "project-key.pem" ec2-user@ec2-54-175-43-237.compute-1.amazonaws.com
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023
Last login: Thu Apr 25 04:18:32 2024 from 136.226.253.26
[ec2-user@ansible-server ~]$ sudo su -
Last login: Thu Apr 25 04:18:39 UTC 2024 on pts/2
[root@ansible-server ~]# rpmquery docker
docker-25.0.3-1.amzn2023.0.1.x86_64
[root@ansible-server ~]# aws configure
AWS Access Key ID [None]: AKIAQ3EGUQFWE6TWCEHR
AWS Secret Access Key [None]: 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
Default region name [None]: us-east-1
Default output format [None]: table
[root@ansible-server ~]#
[root@ansible-server ~]#
[root@ansible-server ~]#
Search
ENG
IN
10:34
25-04-2024
ansadmin@ansible-server:/o
^ here
[ansadmin@ansible-server Docker]$ vim registration-app.yml
[ansadmin@ansible-server Docker]$ ansible-playbook registration-app.yml --check
PLAY [ansible] ****
TASK [Gathering Facts] ****
[WARNING]: Platform linux on host 172.31.22.4 is using the discovered Python interpreter at /usr/bin/python3.9, but future installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-core/2.15/reference_appendices/interpreter_discovery.html for more information.
ok: [172.31.22.4]
TASK [create docker image] ****
skipping: [172.31.22.4]
PLAY RECAP ****
172.31.22.4 : ok=1 changed=0 unreachable=0 failed=0 skipped=1 rescued=0 ignored=0
[ansadmin@ansible-server Docker]$ ansible-playbook registration-app.yml
PLAY [ansible] ****
TASK [Gathering Facts] ****
[WARNING]: Platform linux on host 172.31.22.4 is using the discovered Python interpreter at /usr/bin/python3.9, but future installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-core/2.15/reference_appendices/interpreter_discovery.html for more information.
ok: [172.31.22.4]
TASK [create docker image] ****
changed: [172.31.22.4]
Search
ENG
IN
10:46
25-04-2024


ansadmin@ansible-server:/op
---
- hosts: ansible
tasks:
- name: create docker image
command: docker build -t my-project-repo .
args:
chdir: /opt/Docker
- name: assign tag of my image
command: docker tag my-project-repo:latest public.ecr.aws/c9j4a0f3/my-project-repo:latest
- name: pushing image
command: docker push public.ecr.aws/c9j4a0f3/my-project-repo:latest
:wq
us-east-1.console.aws.amazon.com/iam/home?region=us-east-1#/users/details/ecr-user?section=permissions
Identity and Access Management (IAM)
1 policy added
Policy name
Type
Attached via
AdministratorAccess
AWS managed - job function
Directly
AmazonElasticContainer...
AWS managed
Directly
Permissions boundary (not set)
Generate policy based on CloudTrail events
You can generate a new policy based on the access activity for this user, then customize, create, and attach it to this role. AWS uses your CloudTrail events to identify the services and actions used and generate a policy. Learn more
Generate policy
Dashboard
Access management
User groups
Users
Roles
Policies
Identity providers
Account settings
Access reports
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences


root@ansible-server:/opt/Do
[ec2-user@ansible-server ~]$ sudo su -
Last login: Thu Apr 25 05:04:00 UTC 2024 on pts/5
[root@ansible-server ~]# aws ecr-public get-login-password --region us-east-1 | docker login --username AWS --password-stdin
public.ecr.aws/c9j4a0f3
WARNING! Your password will be stored unencrypted in /root/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store
Login Succeeded
[root@ansible-server ~]# cd /opt/Docker
[root@ansible-server Docker]# docker build -t my-project-repo .
[+] Building 0.3s (8/8) FINISHED docker:default
=> [internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 220B 0.0s
=> [internal] load metadata for docker.io/library/tomcat:latest 0.1s
=> [internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [1/3] FROM docker.io/library/tomcat:latest@sha256:a768924119030b778276c46dc19293cc8e4deae63b6b61dd8c2990df2917d00 0.0s
=> [internal] load build context 0.0s
=> => transferring context: 2.47kB 0.0s
=> CACHED [2/3] RUN cp -R /usr/local/tomcat/webapps.dist/* /usr/local/tomcat/webapps 0.0s
=> CACHED [3/3] COPY ./*.war /usr/local/tomcat/webapps 0.0s
=> exporting to image 0.0s
=> => exporting layers 0.0s
=> => writing image sha256:ce5df6494551cb8976481e92c9e85d8c09a81716a2b34505c10a85db2666f396 0.0s
=> => naming to docker.io/library/my-project-repo 0.0s
[root@ansible-server Docker]# docker tag my-project-repo:latest public.ecr.aws/c9j4a0f3/my-project-repo:latest
[root@ansible-server Docker]# docker push public.ecr.aws/c9j4a0f3/my-project-repo:latest
The push refers to repository [public.ecr.aws/c9j4a0f3/my-project-repo]
02f60a403535: Pushed
d4db098c09d8: Pushed
Search
ENG IN
10:58 25-04-2024
root@ansible-server:/opt/Do
[root@ansible-server Docker]# docker build -t my-project-repo .
[+] Building 0.3s (8/8) FINISHED docker:default
=> [internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 220B 0.0s
=> [internal] load metadata for docker.io/library/tomcat:latest 0.1s
=> [internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [1/3] FROM docker.io/library/tomcat:latest@sha256:a768924119030b778276c46dc19293cc8e4deae63b6b61dd8c2990df2917d00 0.0s
=> [internal] load build context 0.0s
=> => transferring context: 2.47kB 0.0s
=> CACHED [2/3] RUN cp -R /usr/local/tomcat/webapps.dist/* /usr/local/tomcat/webapps 0.0s
=> CACHED [3/3] COPY ./*.war /usr/local/tomcat/webapps 0.0s
=> exporting to image 0.0s
=> => exporting layers 0.0s
=> => writing image sha256:ce5df6494551cb8976481e92c9e85d8c09a81716a2b34505c10a85db2666f396 0.0s
=> => naming to docker.io/library/my-project-repo 0.0s
[root@ansible-server Docker]# docker tag my-project-repo:latest public.ecr.aws/c9j4a0f3/my-project-repo:latest
[root@ansible-server Docker]# docker push public.ecr.aws/c9j4a0f3/my-project-repo:latest
The push refers to repository [public.ecr.aws/c9j4a0f3/my-project-repo]
02f60a403535: Pushed
d4db098c09d8: Pushed
ca8330243e1d: Pushed
2319267a98ee: Pushed
fe9e9b5fd41a: Pushed
77202489e5d0: Pushed
d0ccd4282212: Pushed
7aa74e419dcf: Pushed
e0ab8fa39aa2: Pushed
e0a9f5911802: Pushed
latest: digest: sha256:2fdab654fa53dafeedc7f2967c38e78ecf61e21f30125d72452443e5492608c3 size: 2414
[root@ansible-server Docker]#
Search
ENG IN
10:58 25-04-2024



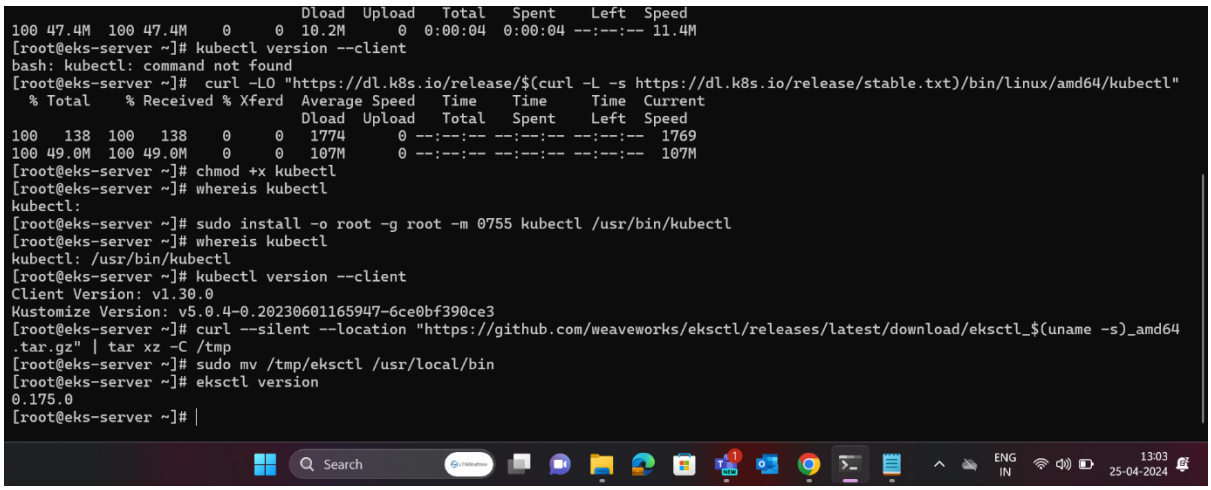

```
[root@eks-server ~]# curl -O https://s3.us-west-2.amazonaws.com/amazon-eks/1.29.3/2024-04-19/bin/linux/amd64/kubectl
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100 47.4M  100 47.4M    0     0  9512k      0  0:00:05  0:00:05 --:--:--  9.9M
[root@eks-server ~]# kubectl version --client
bash: kubectl: command not found
[root@eks-server ~]# kubectl version
bash: kubectl: command not found
[root@eks-server ~]# kubectl --version
bash: kubectl: command not found
[root@eks-server ~]# kubectl version --client
bash: kubectl: command not found
[root@eks-server ~]# curl -O https://s3.us-west-2.amazonaws.com/amazon-eks/1.29.3/2024-04-19/bin/linux/amd64/kubectl
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100 47.4M  100 47.4M    0     0  10.2M      0  0:00:04  0:00:04 --:--:-- 11.4M
[root@eks-server ~]# kubectl version --client
bash: kubectl: command not found
[root@eks-server ~]#  curl -LO "https://dl.k8s.io/release/$(curl -L -s https://dl.k8s.io/release/stable.txt)/bin/linux/amd64/kubectl"
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100   138  100   138    0     0   1774      0 --:--:-- --:--:-- --:--:--  1769
100 49.0M  100 49.0M    0     0   107M      0 --:--:-- --:--:-- --:--:--  107M
[root@eks-server ~]# chmod +x kubectl
[root@eks-server ~]# whereis kubectl
kubectl:
[root@eks-server ~]# sudo install -o root -g root -m 0755 kubectl /usr/bin/kubectl
[root@eks-server ~]# whereis kubectl
kubectl: /usr/bin/kubectl
[root@eks-server ~]# kubectl version --client
Client Version: v1.30.0
Kustomize Version: v5.0.4-0.20230601165947-6ce0bf390ce3
[root@eks-server ~]#
```

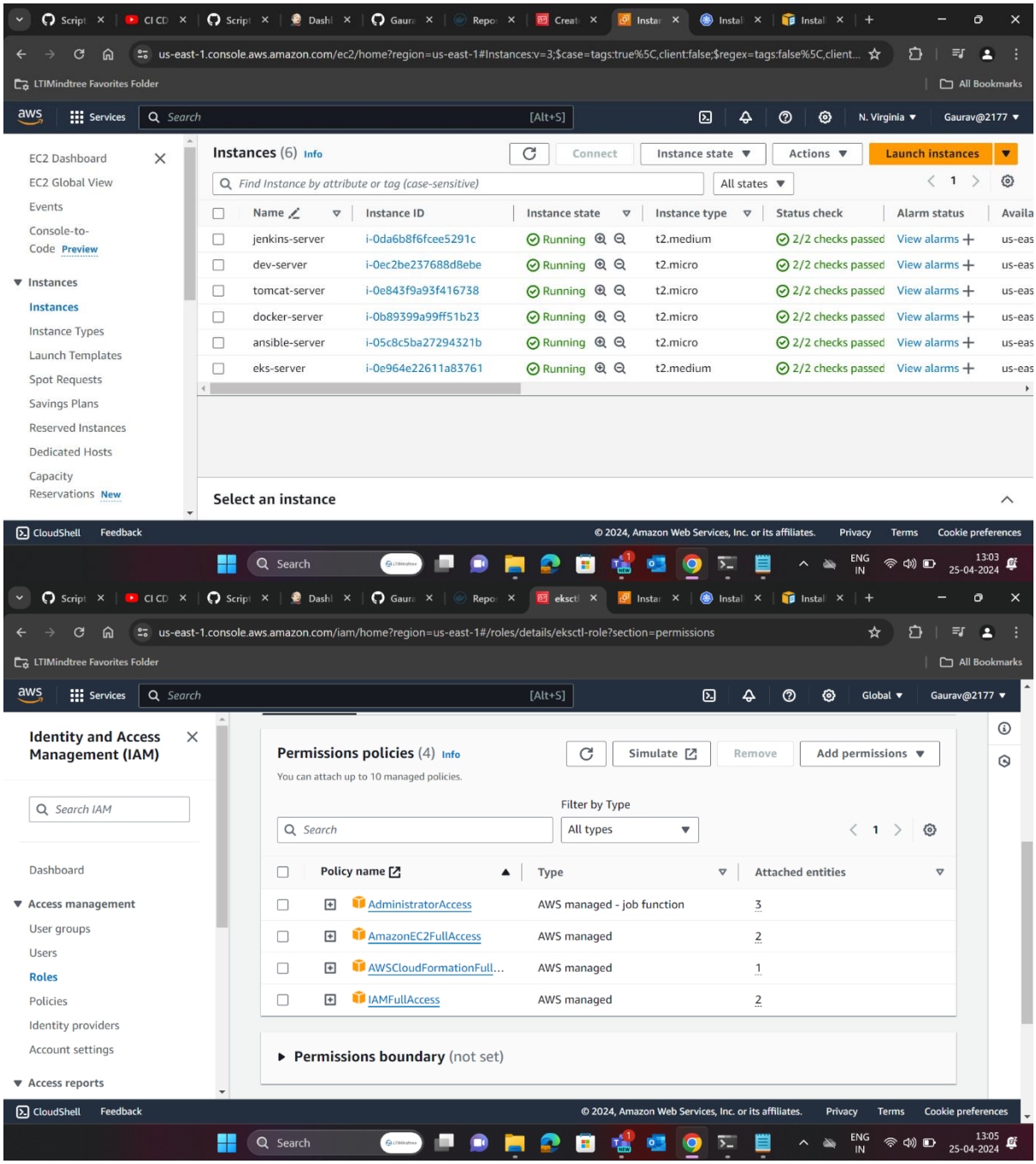

root@dev-server:
ec2-user@docker
root@jenkins-ser
root@tomcat-ser
root@ansible-ser
root@ip-172-31-2
~~ \###|
~~ \#/ ___ https://aws.amazon.com/linux/amazon-linux-2023
~~ V~' '->
~~~ /
~~._. _/
_/ _/
_/m/'
[ec2-user@ip-172-31-28-172 ~]$ sudo su -
[root@ip-172-31-28-172 ~]#
[root@ip-172-31-28-172 ~]# hostnamectl set-hostname eks-server.example.com
[root@ip-172-31-28-172 ~]# bash
[root@eks-server ~]#
[root@eks-server ~]# curl -O https://s3.us-west-2.amazonaws.com/amazon-eks/1.29.3/2024-04-19/bin/linux/amd64/kubectl
% Total % Received % Xferd Average Speed Time Time Time Current
Dload Upload Total Spent Left Speed
100 47.4M 100 47.4M 0 0 9512k 0 0:00:05 0:00:05 --:--:-- 9.9M
[root@eks-server ~]# kubectl version --client
bash: kubectl: command not found
[root@eks-server ~]# kubectl version
bash: kubectl: command not found
[root@eks-server ~]# kubectl --version
bash: kubectl: command not found
[root@eks-server ~]# kubectl version --client
bash: kubectl: command not found
[root@eks-server ~]# curl -O https://s3.us-west-2.amazonaws.com/amazon-eks/1.29.3/2024-04-19/bin/linux/amd64/kubectl
% Total % Received % Xferd Average Speed Time Time Time Current
Dload Upload Total Spent Left Speed
100 47.4M 100 47.4M 0 0 10.2M 0 0:00:04 0:00:04 --:--:-- 11.4M
[root@eks-server ~]# kubectl version --client
bash: kubectl: command not found
[root@eks-server ~]# curl -LO "https://dl.k8s.io/release/$(curl -L -s https://dl.k8s.io/release/stable.txt)/bin/linux/amd64/kubectl"
% Total % Received % Xferd Average Speed Time Time Time Current
Dload Upload Total Spent Left Speed
Search
ENG
IN
13:03
25-04-2024
~~~

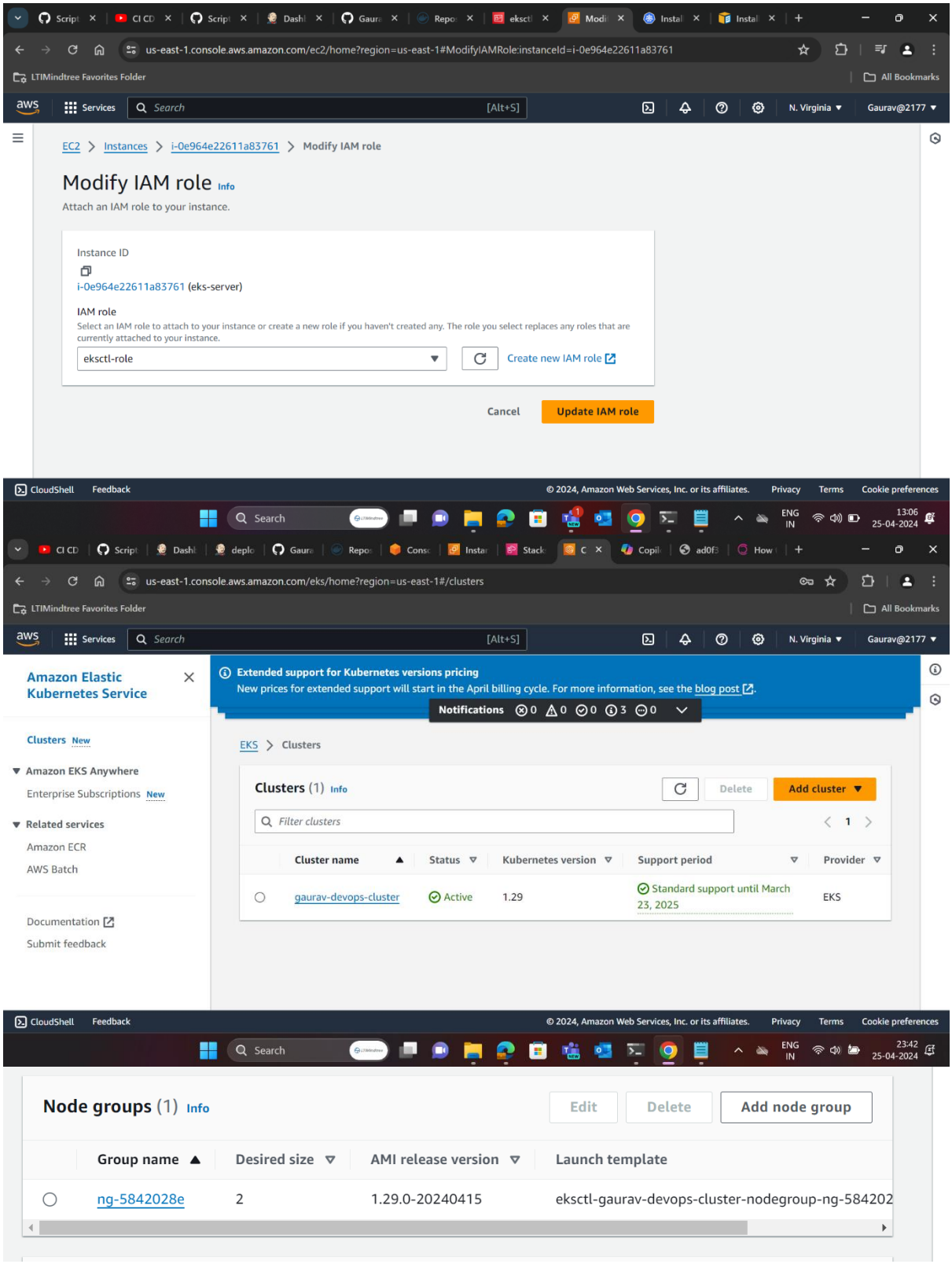
- Integrate EKS with Ansible:
- On AWS Console:
- Create an Amazon EKS cluster to deploy your Docker containers.
- Configure the cluster with the desired configurations, such as instance type, number of nodes, etc.
- Install kubectl:
- Install kubectl, the Kubernetes command-line tool, on the Ansible server.
- Configure kubectl:
- Configure kubectl to connect to your EKS cluster.
- Install AWS IAM Authenticator:
- Install the AWS IAM Authenticator to authenticate kubectl with your AWS account.
- Verify Cluster Connection:
- Test the connection to your EKS cluster using kubectl.
- Integrate Load Balancer with Ansible:
- Create Load Balancer:
- Using the AWS Console or CLI, create a load balancer (e.g., Application Load Balancer) to distribute traffic to your EKS cluster.
- Configure Load Balancer:

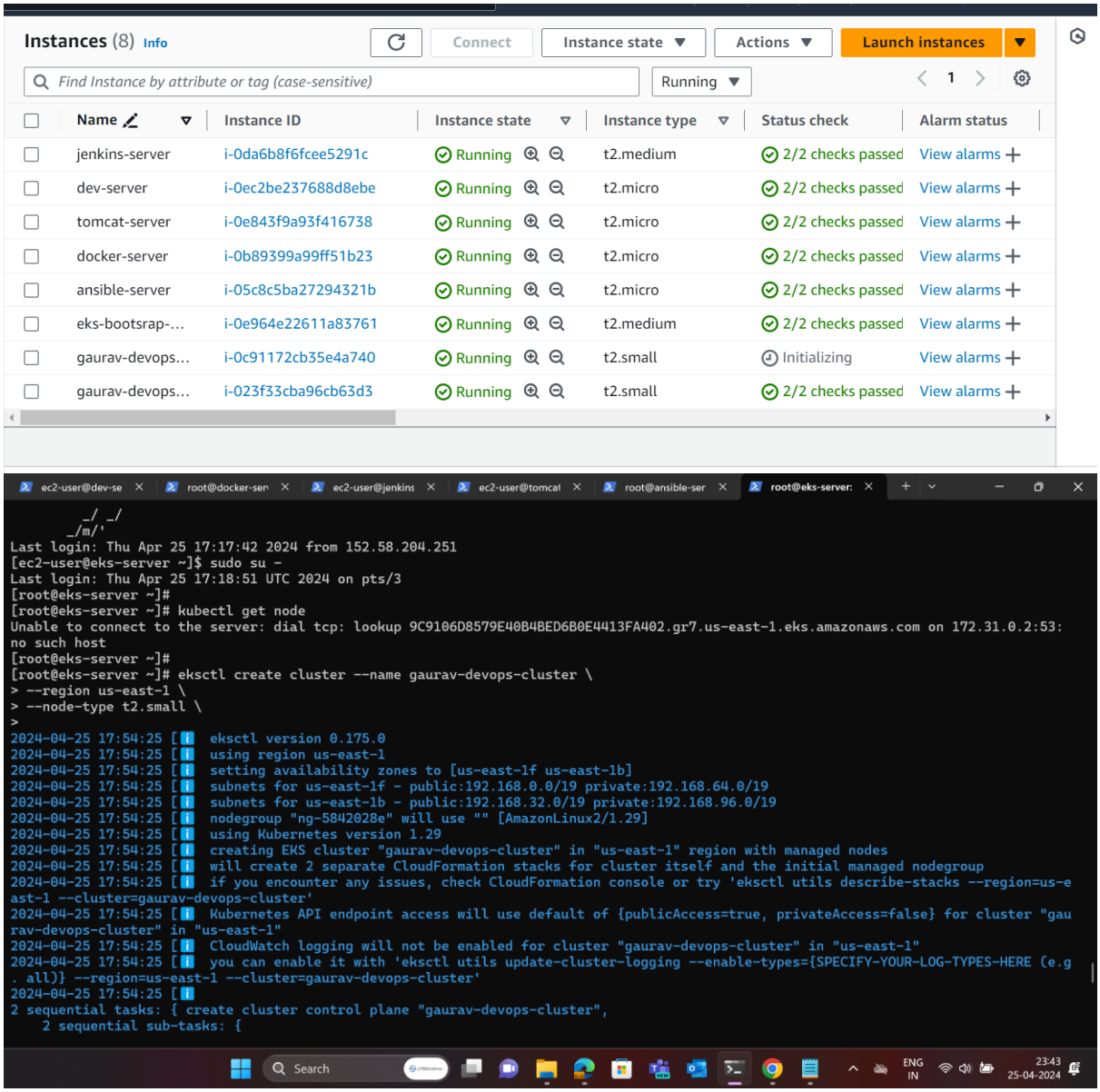
- Configure the load balancer settings such as listeners, target groups, etc., as per your requirements.
- Obtain Load Balancer DNS Name:
- Note down the DNS name of the load balancer to use it for routing traffic.
- Integrate Ansible with Jenkins:
- Configure Ansible with Jenkins:
- Install the necessary plugins on Jenkins to enable Ansible integration.
- Configure Jenkins to use Ansible for deployment tasks.
- Test Ansible Integration:
- Execute a test job on Jenkins to ensure successful communication with Ansible.
- Deploy Docker Containers to EKS:
- Create Kubernetes Deployment YAML:
- Write a Kubernetes deployment YAML file specifying the deployment configuration for your Docker containers.
- Apply Deployment:
- Use kubectl to apply the deployment YAML file to your EKS cluster, deploying the Docker containers.
- Update Load Balancer Configuration:
- Update Load Balancer Target Group:

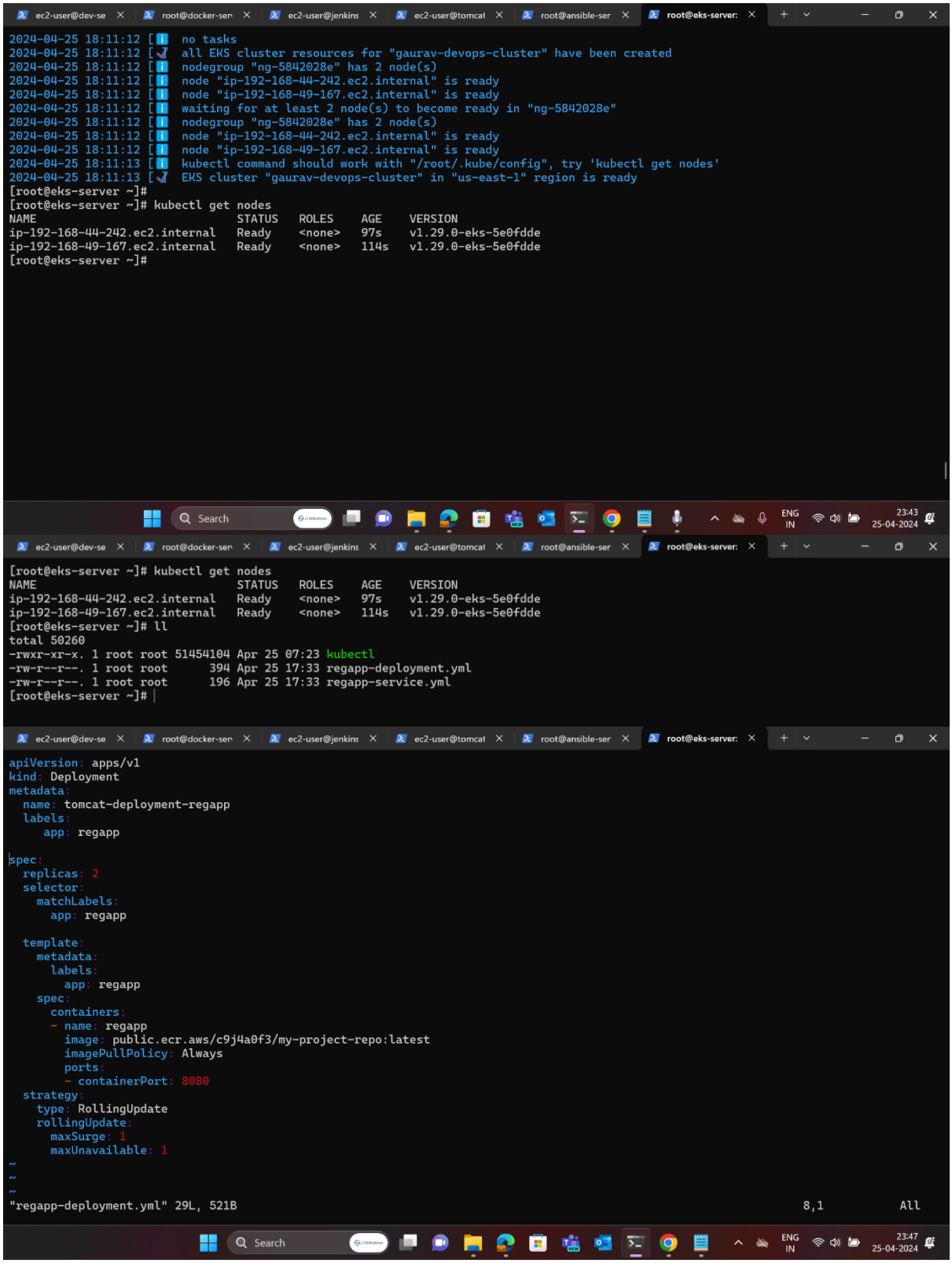
- Update the target group associated with the load balancer to include the newly deployed Docker containers.
- Update Load Balancer Listener Rules:
- Configure the load balancer listener rules to route traffic to the target group containing the Docker containers.
- Ansible Playbook for Deployment:
- Create Ansible Playbook:
- Write an Ansible playbook that includes tasks for deploying Docker containers to EKS and updating the load balancer configuration.
- Execute Ansible Playbook:
- Run the Ansible playbook on Jenkins to automate the deployment process, including deploying Docker containers to EKS and configuring the load balancer.

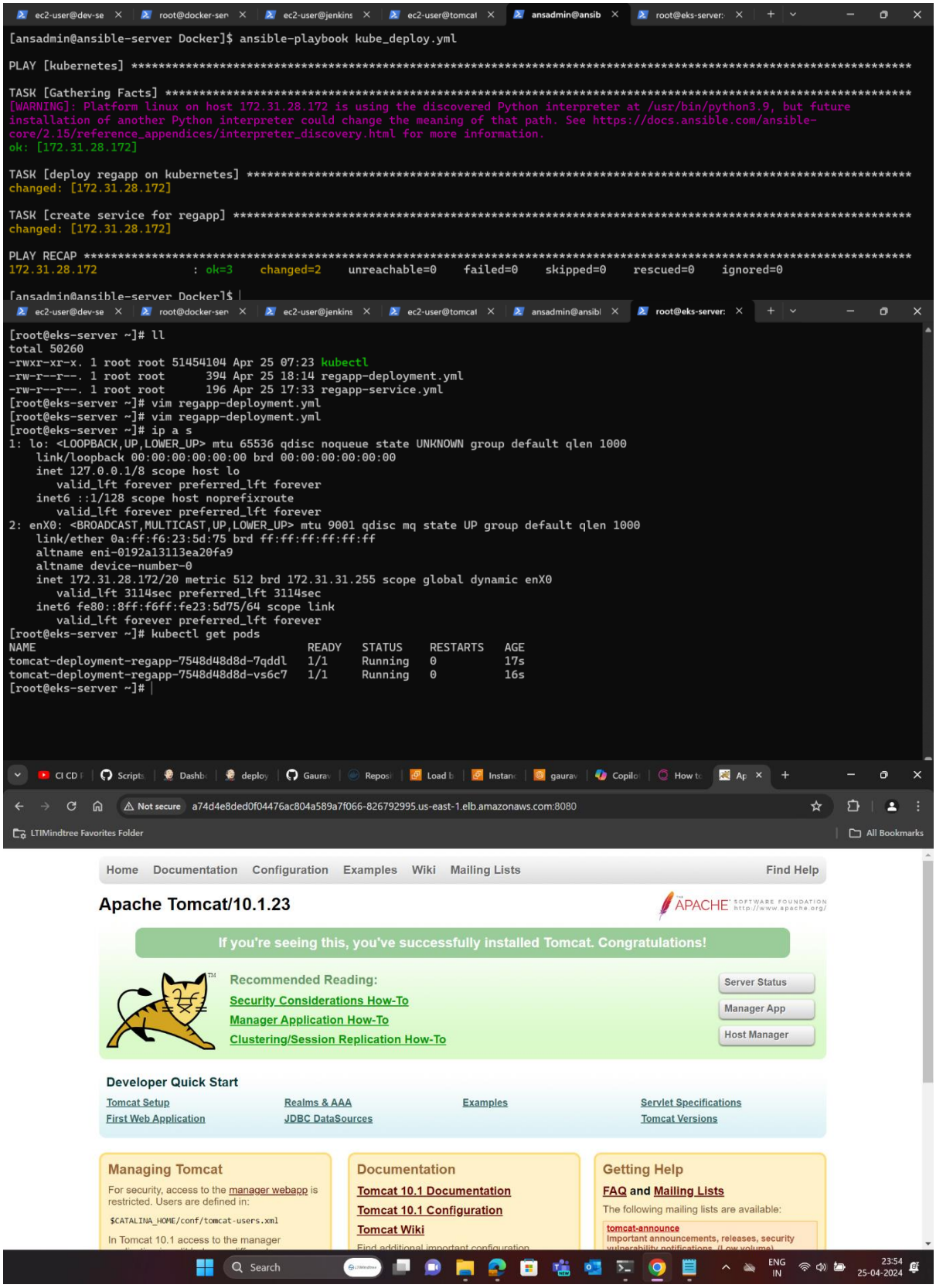


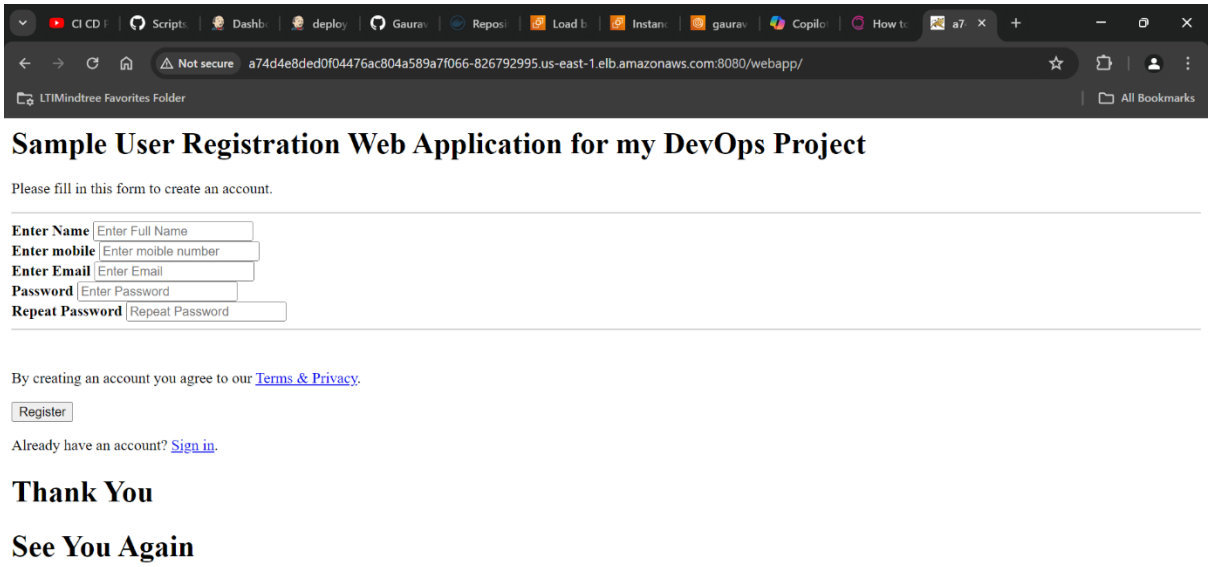

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:v=3;$case=tags:true%5C,client:false;$regex=tags:false%5C,client...
Services
Search
[Alt+S]
N. Virginia
Gaurav@2177
EC2 Dashboard
EC2 Global View
Events
Console-to-Code Preview
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity Reservations New
Instances (6) Info
Connect
Instance state
Actions
Launch instances
Find Instance by attribute or tag (case-sensitive)
All states
Name
Instance ID
Instance state
Instance type
Status check
Alarm status
jenkins-server i-0da6b8f6fcee5291c Running t2.medium 2/2 checks passed View alarms
dev-server i-0ec2be237688d8ebe Running t2.micro 2/2 checks passed View alarms
tomcat-server i-0e843f9a93f416738 Running t2.micro 2/2 checks passed View alarms
docker-server i-0b89399a99ff51b23 Running t2.micro 2/2 checks passed View alarms
ansible-server i-05c8c5ba27294321b Running t2.micro 2/2 checks passed View alarms
eks-server i-0e964e22611a83761 Running t2.medium 2/2 checks passed View alarms
Select an instance
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences
us-east-1.console.aws.amazon.com/iam/home?region=us-east-1#/roles/details/eksctl-role?section=permissions
Global
Identity and Access Management (IAM)
Search IAM
Dashboard
Access management
User groups
Users
Roles
Policies
Identity providers
Account settings
Access reports
Permissions policies (4) Info
You can attach up to 10 managed policies.
Simulate
Remove
Add permissions
Filter by Type
Search
All types
Policy name
Type
Attached entities
AdministratorAccess AWS managed - job function 3
AmazonEC2FullAccess AWS managed 2
AWSCloudFormationFull... AWS managed 1
IAMFullAccess AWS managed 2
Permissions boundary (not set)

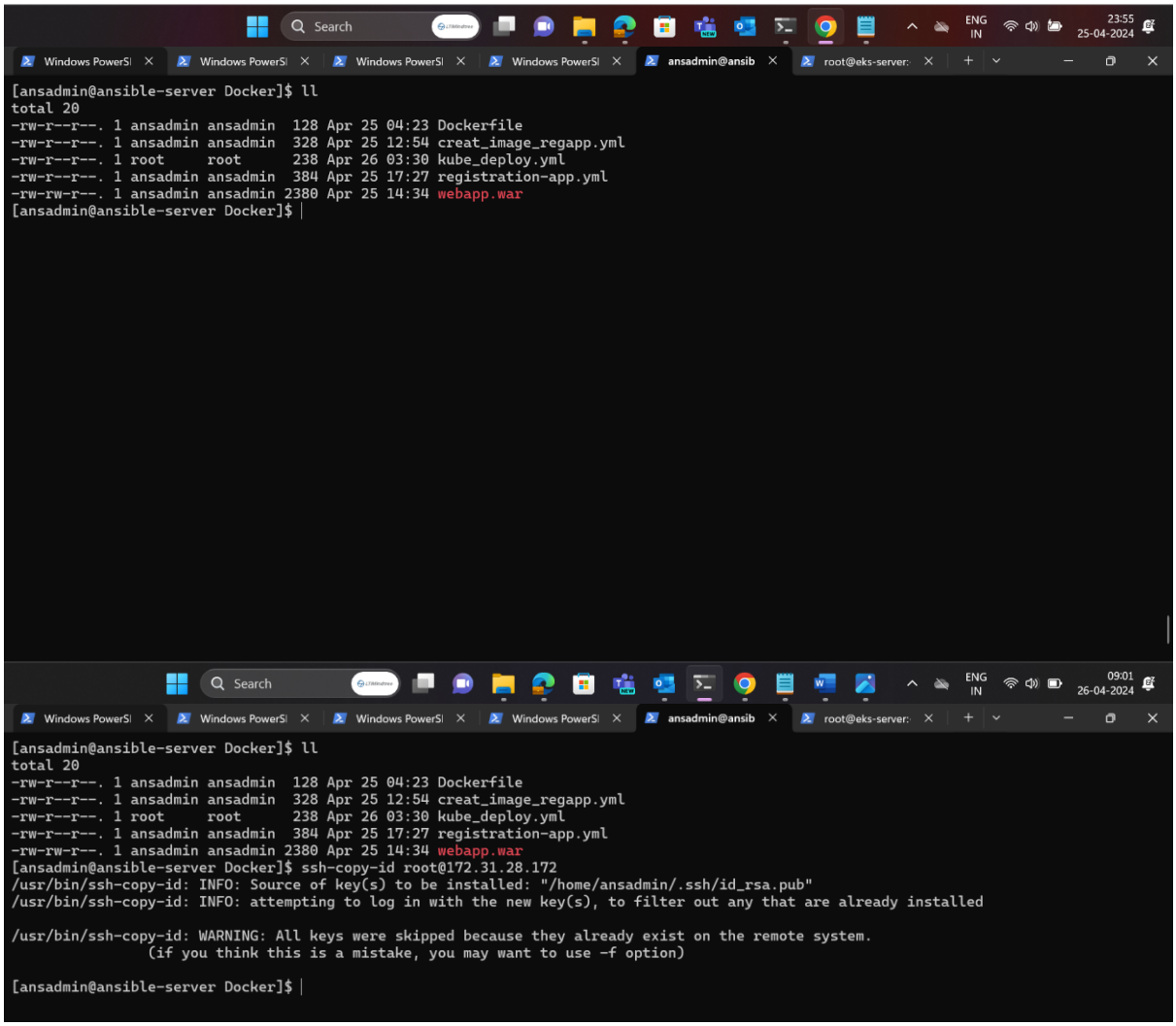

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#ModifyIAMRole:instanceId=i-0e964e22611a83761
EC2 > Instances > i-0e964e22611a83761 > Modify IAM role
Modify IAM role Info
Attach an IAM role to your instance.
Instance ID
i-0e964e22611a83761 (eks-server)
IAM role
Select an IAM role to attach to your instance or create a new role if you haven't created any. The role you select replaces any roles that are currently attached to your instance.
eksctl-role
Create new IAM role
Cancel
Update IAM role
us-east-1.console.aws.amazon.com/eks/home?region=us-east-1#/clusters
Amazon Elastic Kubernetes Service
Extended support for Kubernetes versions pricing
New prices for extended support will start in the April billing cycle. For more information, see the blog post.
Clusters New
Amazon EKS Anywhere
Enterprise Subscriptions New
Related services
Amazon ECR
AWS Batch
Documentation
Submit feedback
EKS > Clusters
Clusters (1) Info
Delete
Add cluster
Filter clusters
Cluster name
Status
Kubernetes version
Support period
Provider
gaurav-devops-cluster
Active
1.29
Standard support until March 23, 2025
EKS
Node groups (1) Info
Edit
Delete
Add node group
Group name
Desired size
AMI release version
Launch template
ng-5842028e
2
1.29.0-20240415
eksctl-gaurav-devops-cluster-nodegroup-ng-584202

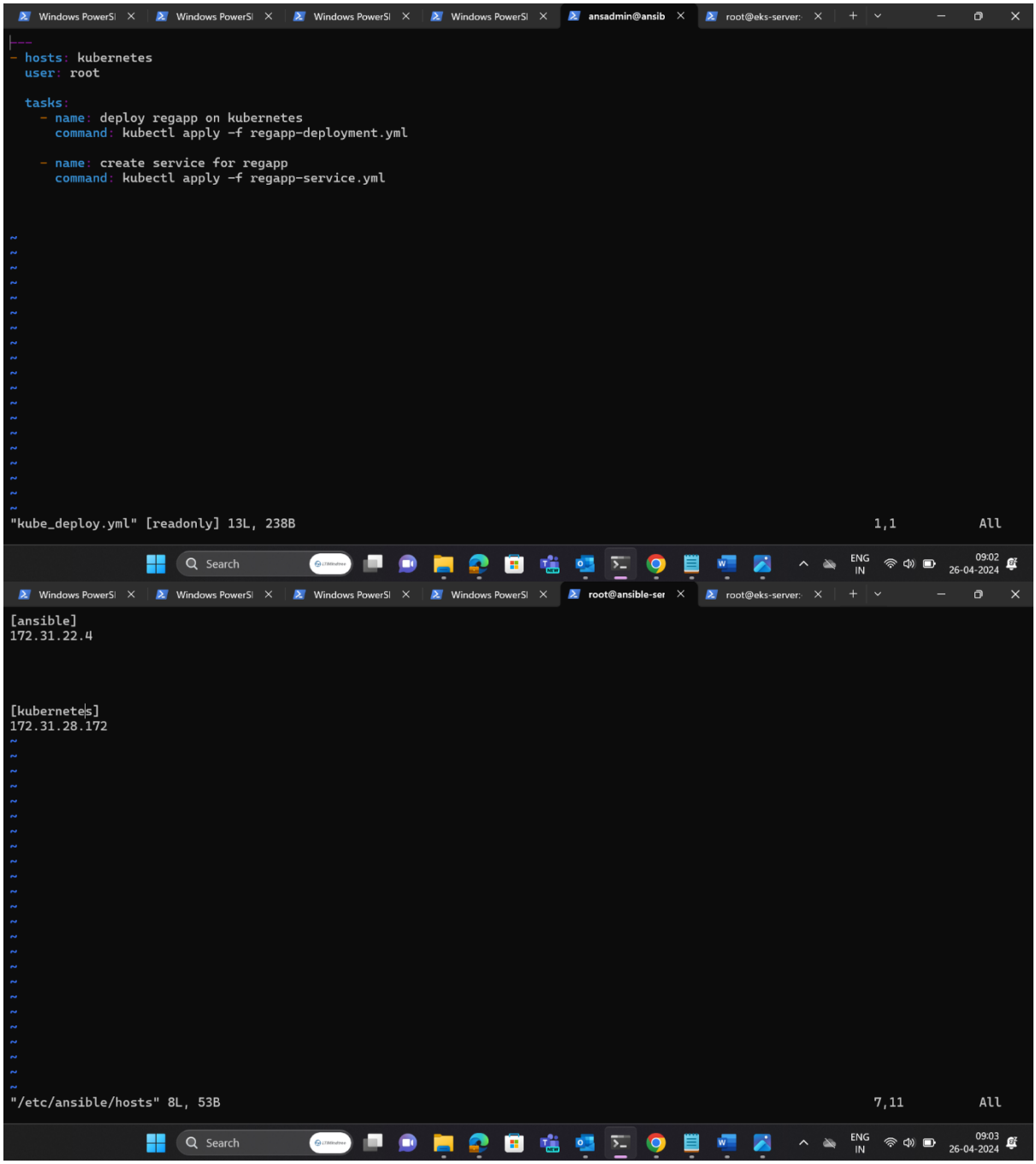

Instances (8) Info
Connect
Instance state
Actions
Launch instances
Find Instance by attribute or tag (case-sensitive)
Running
Name
Instance ID
Instance state
Instance type
Status check
Alarm status
jenkins-server i-0da6b8f6fcee5291c Running t2.medium 2/2 checks passed View alarms
dev-server i-0ec2be237688d8ebe Running t2.micro 2/2 checks passed View alarms
tomcat-server i-0e843f9a93f416738 Running t2.micro 2/2 checks passed View alarms
docker-server i-0b89399a99ff51b23 Running t2.micro 2/2 checks passed View alarms
ansible-server i-05c8c5ba27294321b Running t2.micro 2/2 checks passed View alarms
eks-bootsrap-... i-0e964e22611a83761 Running t2.medium 2/2 checks passed View alarms
gaurav-devops... i-0c91172cb35e4a740 Running t2.small Initializing View alarms
gaurav-devops... i-023f33cba96cb63d3 Running t2.small 2/2 checks passed View alarms
ec2-user@dev-se
root@docker-ser
ec2-user@jenkins
ec2-user@tomcat
root@ansible-ser
root@eks-server:
Last login: Thu Apr 25 17:17:42 2024 from 152.58.204.251
[ec2-user@eks-server ~]$ sudo su -
Last login: Thu Apr 25 17:18:51 UTC 2024 on pts/3
[root@eks-server ~]#
[root@eks-server ~]# kubectl get node
Unable to connect to the server: dial tcp: lookup 9C9106D8579E40B4BED6B0E4413FA402.gr7.us-east-1.eks.amazonaws.com on 172.31.0.2:53: no such host
[root@eks-server ~]#
[root@eks-server ~]# eksctl create cluster --name gaurav-devops-cluster \
> --region us-east-1 \
> --node-type t2.small \
>
2024-04-25 17:54:25 [ℹ] eksctl version 0.175.0
2024-04-25 17:54:25 [ℹ] using region us-east-1
2024-04-25 17:54:25 [ℹ] setting availability zones to [us-east-1f us-east-1b]
2024-04-25 17:54:25 [ℹ] subnets for us-east-1f - public:192.168.0.0/19 private:192.168.64.0/19
2024-04-25 17:54:25 [ℹ] subnets for us-east-1b - public:192.168.32.0/19 private:192.168.96.0/19
2024-04-25 17:54:25 [ℹ] nodegroup "ng-5842028e" will use "" [AmazonLinux2/1.29]
2024-04-25 17:54:25 [ℹ] using Kubernetes version 1.29
2024-04-25 17:54:25 [ℹ] creating EKS cluster "gaurav-devops-cluster" in "us-east-1" region with managed nodes
2024-04-25 17:54:25 [ℹ] will create 2 separate CloudFormation stacks for cluster itself and the initial managed nodegroup
2024-04-25 17:54:25 [ℹ] if you encounter any issues, check CloudFormation console or try 'eksctl utils describe-stacks --region=us-east-1 --cluster=gaurav-devops-cluster'
2024-04-25 17:54:25 [ℹ] Kubernetes API endpoint access will use default of {publicAccess=true, privateAccess=false} for cluster "gaurav-devops-cluster" in "us-east-1"
2024-04-25 17:54:25 [ℹ] CloudWatch logging will not be enabled for cluster "gaurav-devops-cluster" in "us-east-1"
2024-04-25 17:54:25 [ℹ] you can enable it with 'eksctl utils update-cluster-logging --enable-types={SPECIFY-YOUR-LOG-TYPES-HERE (e.g. all)} --region=us-east-1 --cluster=gaurav-devops-cluster'
2024-04-25 17:54:25 [ℹ]
2 sequential tasks: { create cluster control plane "gaurav-devops-cluster",
2 sequential sub-tasks: {
Search
ENG
IN
23:43
25-04-2024


ec2-user@dev-se
root@docker-ser
ec2-user@jenkins
ec2-user@tomcat
root@ansible-ser
root@eks-server:
2024-04-25 18:11:12 [INFO] no tasks
2024-04-25 18:11:12 [SUCCESS] all EKS cluster resources for "gaurav-devops-cluster" have been created
2024-04-25 18:11:12 [INFO] nodegroup "ng-5842028e" has 2 node(s)
2024-04-25 18:11:12 [INFO] node "ip-192-168-44-242.ec2.internal" is ready
2024-04-25 18:11:12 [INFO] node "ip-192-168-49-167.ec2.internal" is ready
2024-04-25 18:11:12 [INFO] waiting for at least 2 node(s) to become ready in "ng-5842028e"
2024-04-25 18:11:12 [INFO] nodegroup "ng-5842028e" has 2 node(s)
2024-04-25 18:11:12 [INFO] node "ip-192-168-44-242.ec2.internal" is ready
2024-04-25 18:11:12 [INFO] node "ip-192-168-49-167.ec2.internal" is ready
2024-04-25 18:11:13 [INFO] kubectl command should work with "/root/.kube/config", try 'kubectl get nodes'
2024-04-25 18:11:13 [SUCCESS] EKS cluster "gaurav-devops-cluster" in "us-east-1" region is ready
[root@eks-server ~]#
[root@eks-server ~]# kubectl get nodes
NAME STATUS ROLES AGE VERSION
ip-192-168-44-242.ec2.internal Ready <none> 97s v1.29.0-eks-5e0fdde
ip-192-168-49-167.ec2.internal Ready <none> 114s v1.29.0-eks-5e0fdde
[root@eks-server ~]#
Search
ENG IN
23:43 25-04-2024
[root@eks-server ~]# kubectl get nodes
NAME STATUS ROLES AGE VERSION
ip-192-168-44-242.ec2.internal Ready <none> 97s v1.29.0-eks-5e0fdde
ip-192-168-49-167.ec2.internal Ready <none> 114s v1.29.0-eks-5e0fdde
[root@eks-server ~]# ll
total 50260
-rwxr-xr-x. 1 root root 51454104 Apr 25 07:23 kubectl
-rw-r--r--. 1 root root 394 Apr 25 17:33 regapp-deployment.yml
-rw-r--r--. 1 root root 196 Apr 25 17:33 regapp-service.yml
[root@eks-server ~]#
apiVersion: apps/v1
kind: Deployment
metadata:
name: tomcat-deployment-regapp
labels:
app: regapp
spec:
replicas: 2
selector:
matchLabels:
app: regapp
template:
metadata:
labels:
app: regapp
spec:
containers:
- name: regapp
image: public.ecr.aws/c9j4a0f3/my-project-repo:latest
imagePullPolicy: Always
ports:
- containerPort: 8080
strategy:
type: RollingUpdate
rollingUpdate:
maxSurge: 1
maxUnavailable: 1
"regapp-deployment.yml" 29L, 521B
8,1
All
Search
ENG IN
23:47 25-04-2024


[ansadmin@ansible-server Docker]$ ansible-playbook kube_deploy.yml
PLAY [kubernetes] ***********
TASK [Gathering Facts] ***********
[WARNING]: Platform linux on host 172.31.28.172 is using the discovered Python interpreter at /usr/bin/python3.9, but future installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-core/2.15/reference_appendices/interpreter_discovery.html for more information.
ok: [172.31.28.172]
TASK [deploy regapp on kubernetes] ***********
changed: [172.31.28.172]
TASK [create service for regapp] ***********
changed: [172.31.28.172]
PLAY RECAP ***********
172.31.28.172 : ok=3 changed=2 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0
[ansadmin@ansible-server Docker]$
[root@eks-server ~]# ll
total 50260
-rwxr-xr-x. 1 root root 51454104 Apr 25 07:23 kubectl
-rw-r--r--. 1 root root 394 Apr 25 18:14 regapp-deployment.yml
-rw-r--r--. 1 root root 196 Apr 25 17:33 regapp-service.yml
[root@eks-server ~]# vim regapp-deployment.yml
[root@eks-server ~]# vim regapp-deployment.yml
[root@eks-server ~]# ip a s
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
inet 127.0.0.1/8 scope host lo
valid_lft forever preferred_lft forever
inet6 ::1/128 scope host noprefixroute
valid_lft forever preferred_lft forever
2: enX0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 9001 qdisc mq state UP group default qlen 1000
link/ether 0a:ff:f6:23:5d:75 brd ff:ff:ff:ff:ff:ff
altname eni-0192a13113ea20fa9
altname device-number-0
inet 172.31.28.172/20 metric 512 brd 172.31.31.255 scope global dynamic enX0
valid_lft 3114sec preferred_lft 3114sec
inet6 fe80::8ff:f6ff:fe23:5d75/64 scope link
valid_lft forever preferred_lft forever
[root@eks-server ~]# kubectl get pods
NAME READY STATUS RESTARTS AGE
tomcat-deployment-regapp-7548d48d8d-7qddl 1/1 Running 0 17s
tomcat-deployment-regapp-7548d48d8d-vs6c7 1/1 Running 0 16s
[root@eks-server ~]#
Not secure a74d4e8ded0f04476ac804a589a7f066-826792995.us-east-1.elb.amazonaws.com:8080
Home Documentation Configuration Examples Wiki Mailing Lists Find Help
Apache Tomcat/10.1.23
If you're seeing this, you've successfully installed Tomcat. Congratulations!
Recommended Reading:
Security Considerations How-To
Manager Application How-To
Clustering/Session Replication How-To
Server Status
Manager App
Host Manager
Developer Quick Start
Tomcat Setup
First Web Application
Realms & AAA
JDBC DataSources
Examples
Servlet Specifications
Tomcat Versions
Managing Tomcat
For security, access to the manager webapp is restricted. Users are defined in:
$CATALINA_HOME/conf/tomcat-users.xml
Documentation
Tomcat 10.1 Documentation
Tomcat 10.1 Configuration
Tomcat Wiki
Getting Help
FAQ and Mailing Lists
The following mailing lists are available:
tomcat-announce
Important announcements, releases, security
Search
ENG IN
23:54 25-04-2024


Not secure
a74d4e8ded0f04476ac804a589a7f066-826792995.us-east-1.elb.amazonaws.com:8080/webapp/
LTIMindtree Favorites Folder
All Bookmarks
Sample User Registration Web Application for my DevOps Project
Please fill in this form to create an account.
Enter Name
Enter Full Name
Enter mobile
Enter moible number
Enter Email
Enter Email
Password
Enter Password
Repeat Password
Repeat Password
By creating an account you agree to our Terms & Privacy.
Register
Already have an account? Sign in.
Thank You
See You Again


Windows PowerSl
ansadmin@ansib
root@eks-server:
[ansadmin@ansible-server Docker]$ ll
total 20
-rw-r--r--. 1 ansadmin ansadmin 128 Apr 25 04:23 Dockerfile
-rw-r--r--. 1 ansadmin ansadmin 328 Apr 25 12:54 creat_image_regapp.yml
-rw-r--r--. 1 root root 238 Apr 26 03:30 kube_deploy.yml
-rw-r--r--. 1 ansadmin ansadmin 384 Apr 25 17:27 registration-app.yml
-rw-rw-r--. 1 ansadmin ansadmin 2380 Apr 25 14:34 webapp.war
[ansadmin@ansible-server Docker]$
[ansadmin@ansible-server Docker]$ ll
total 20
-rw-r--r--. 1 ansadmin ansadmin 128 Apr 25 04:23 Dockerfile
-rw-r--r--. 1 ansadmin ansadmin 328 Apr 25 12:54 creat_image_regapp.yml
-rw-r--r--. 1 root root 238 Apr 26 03:30 kube_deploy.yml
-rw-r--r--. 1 ansadmin ansadmin 384 Apr 25 17:27 registration-app.yml
-rw-rw-r--. 1 ansadmin ansadmin 2380 Apr 25 14:34 webapp.war
[ansadmin@ansible-server Docker]$ ssh-copy-id root@172.31.28.172
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/ansadmin/.ssh/id_rsa.pub"
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
/usr/bin/ssh-copy-id: WARNING: All keys were skipped because they already exist on the remote system.
(if you think this is a mistake, you may want to use -f option)
[ansadmin@ansible-server Docker]$


Windows PowerSl
Windows PowerSl
Windows PowerSl
Windows PowerSl
ansadmin@ansib
root@eks-server:
---
- hosts: kubernetes
user: root
tasks:
- name: deploy regapp on kubernetes
command: kubectl apply -f regapp-deployment.yml
- name: create service for regapp
command: kubectl apply -f regapp-service.yml
"kube_deploy.yml" [readonly] 13L, 238B
1,1
All
Search
ENG
IN
09:02
26-04-2024
Windows PowerSl
Windows PowerSl
Windows PowerSl
Windows PowerSl
root@ansible-ser
root@eks-server:
[ansible]
172.31.22.4
[kubernetes]
172.31.28.172
"/etc/ansible/hosts" 8L, 53B
7,11
All
Search
ENG
IN
09:03
26-04-2024

LTIMindtree

# Let’s get to the future, faster. Together.