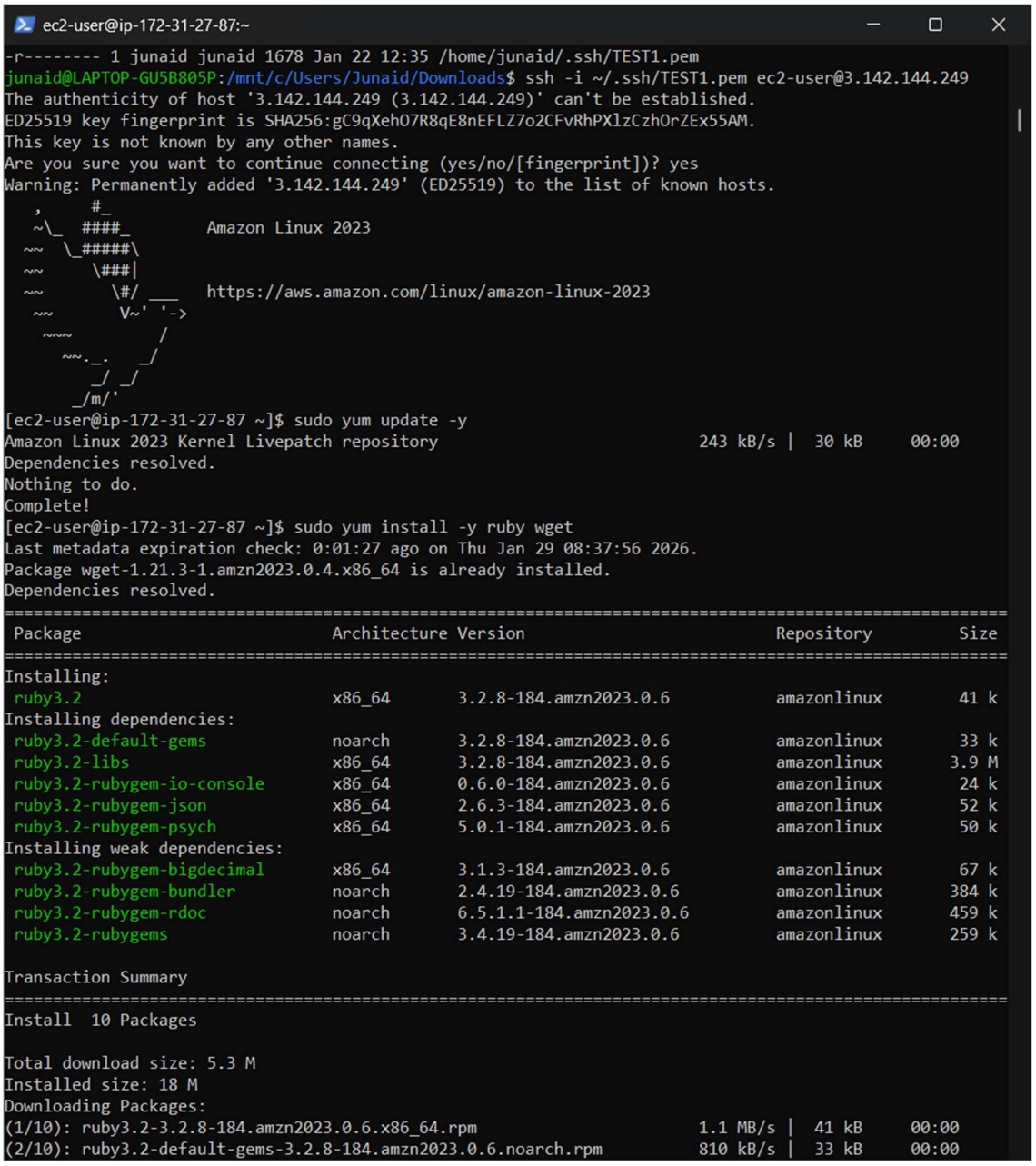
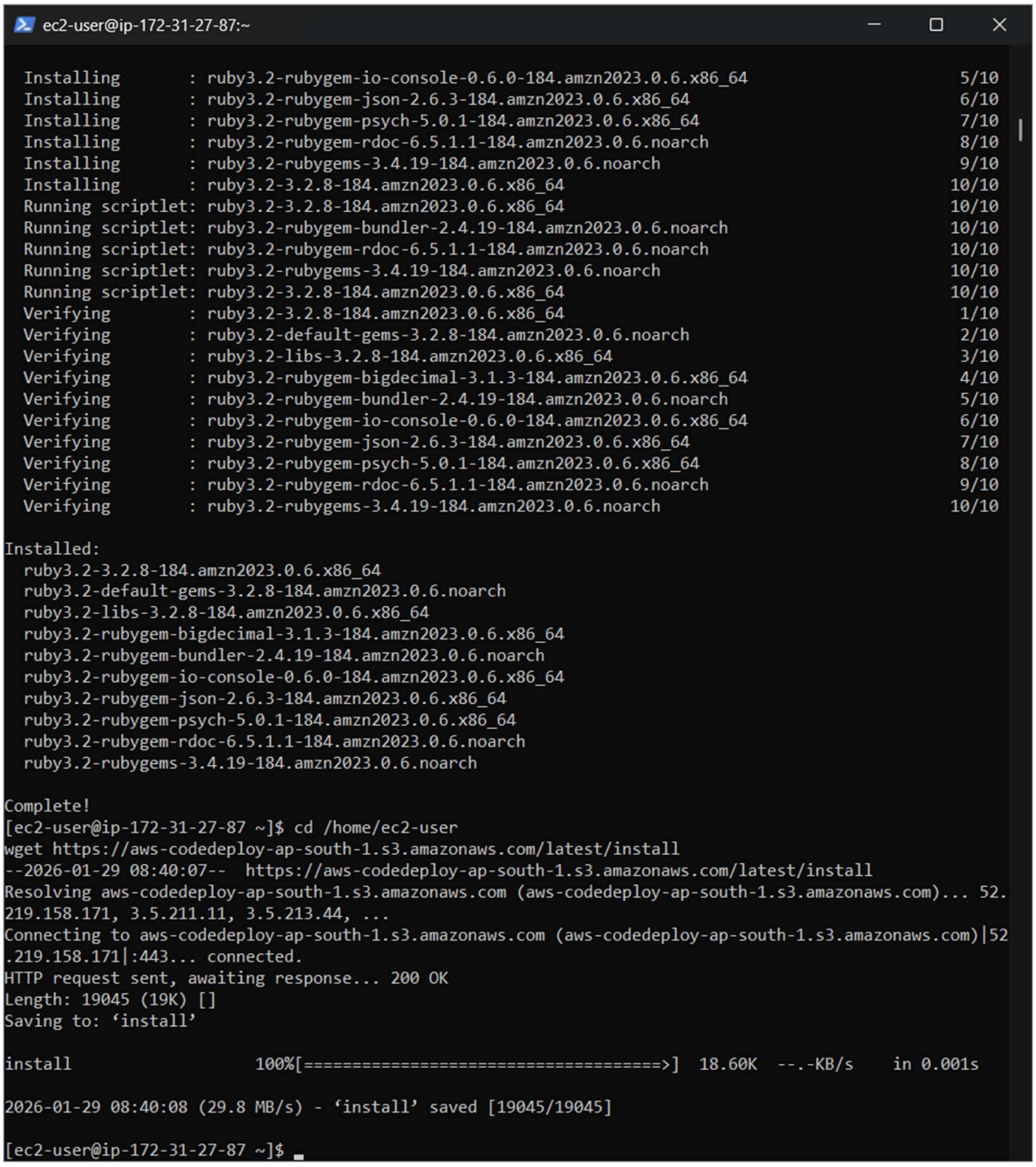
AWS Task-5

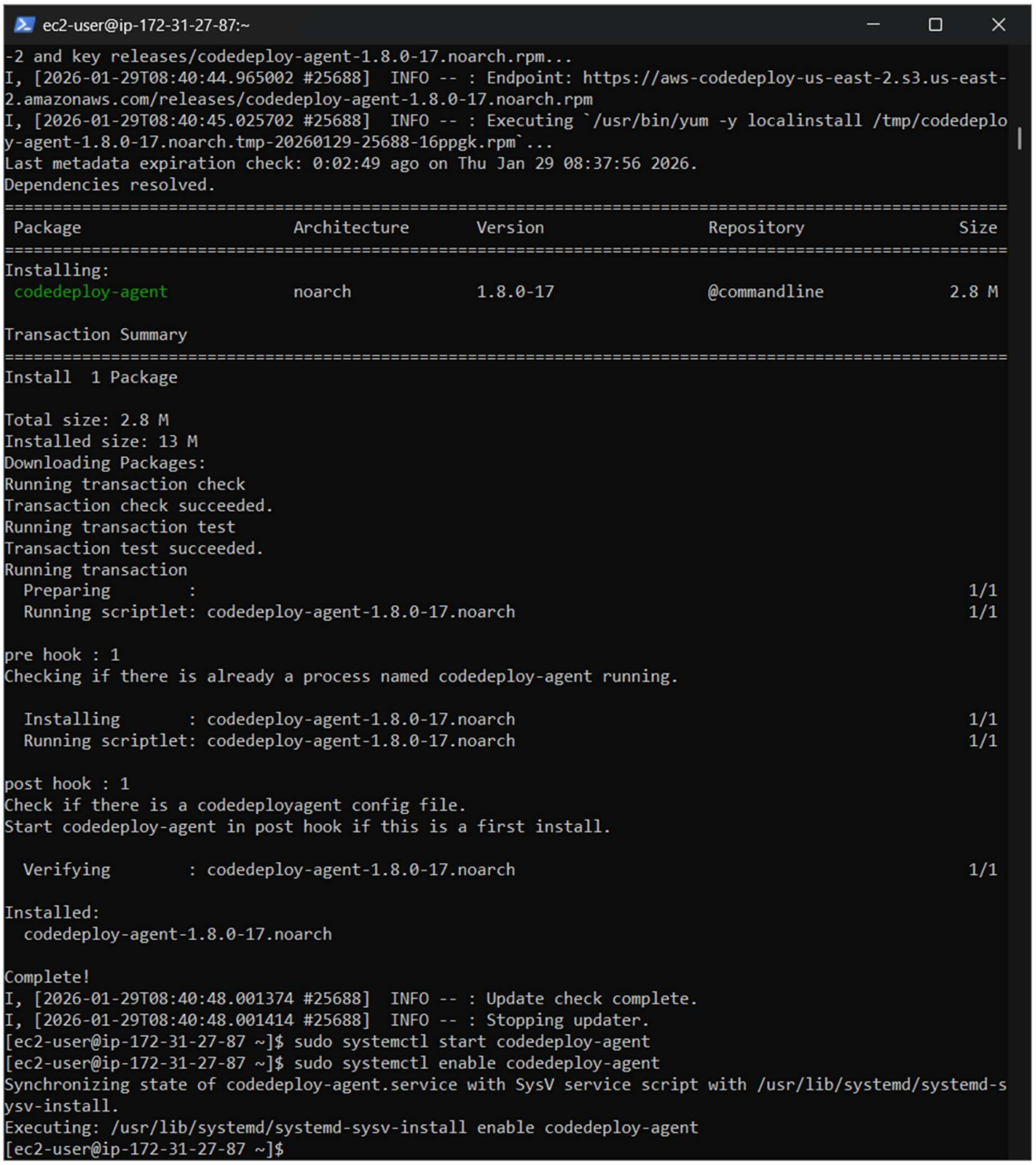
Task Description:

Deploy a simple web application using AWS code commit, code build and deploy & access via browser and automate via codepipeline.

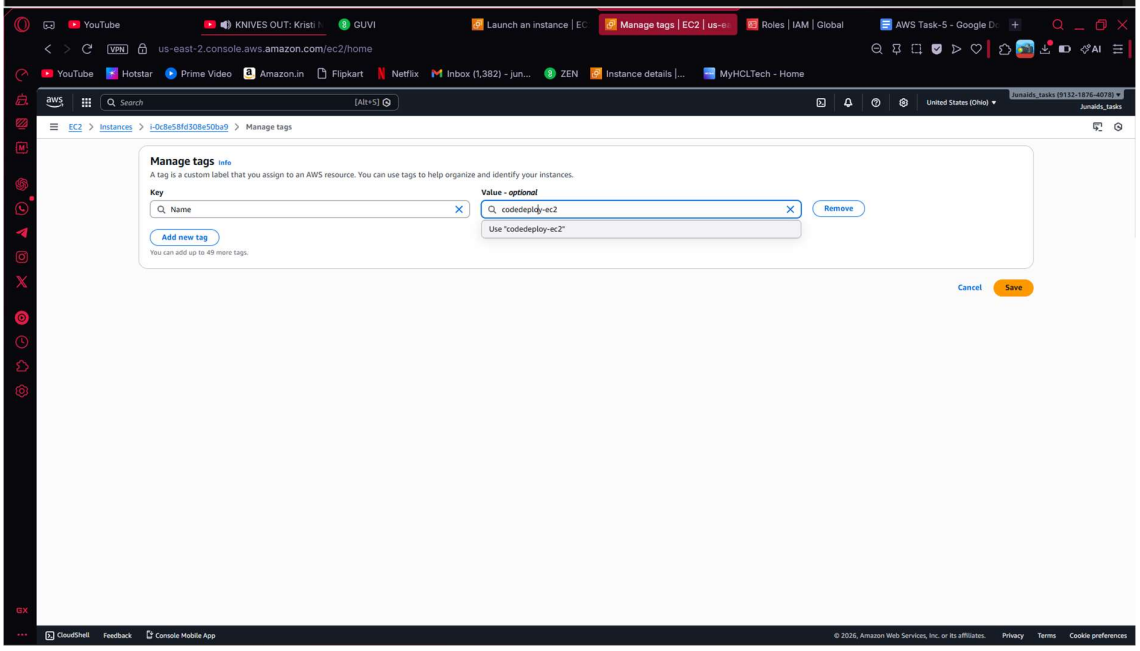

ec2-user@ip-172-31-27-87:~
-r-------- 1 junaid junaid 1678 Jan 22 12:35 /home/junaid/.ssh/TEST1.pem
junaid@LAPTOP-GU5B805P:/mnt/c/Users/Junaid/Downloads$ ssh -i ~/.ssh/TEST1.pem ec2-user@3.142.144.249
The authenticity of host '3.142.144.249 (3.142.144.249)' can't be established.
ED25519 key fingerprint is SHA256:gC9qXehO7R8qE8nEFLZ7o2CFvRhPXlzCzhOrZEx55AM.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '3.142.144.249' (ED25519) to the list of known hosts.
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023
[ec2-user@ip-172-31-27-87 ~]$ sudo yum update -y
Amazon Linux 2023 Kernel Livepatch repository 243 kB/s | 30 kB 00:00
Dependencies resolved.
Nothing to do.
Complete!
[ec2-user@ip-172-31-27-87 ~]$ sudo yum install -y ruby wget
Last metadata expiration check: 0:01:27 ago on Thu Jan 29 08:37:56 2026.
Package wget-1.21.3-1.amzn2023.0.4.x86_64 is already installed.
Dependencies resolved.
Package Architecture Version Repository Size
Installing:
ruby3.2 x86_64 3.2.8-184.amzn2023.0.6 amazonlinux 41 k
Installing dependencies:
ruby3.2-default-gems noarch 3.2.8-184.amzn2023.0.6 amazonlinux 33 k
ruby3.2-libs x86_64 3.2.8-184.amzn2023.0.6 amazonlinux 3.9 M
ruby3.2-rubygem-io-console x86_64 0.6.0-184.amzn2023.0.6 amazonlinux 24 k
ruby3.2-rubygem-json x86_64 2.6.3-184.amzn2023.0.6 amazonlinux 52 k
ruby3.2-rubygem-psych x86_64 5.0.1-184.amzn2023.0.6 amazonlinux 50 k
Installing weak dependencies:
ruby3.2-rubygem-bigdecimal x86_64 3.1.3-184.amzn2023.0.6 amazonlinux 67 k
ruby3.2-rubygem-bundler noarch 2.4.19-184.amzn2023.0.6 amazonlinux 384 k
ruby3.2-rubygem-rdoc noarch 6.5.1.1-184.amzn2023.0.6 amazonlinux 459 k
ruby3.2-rubygems noarch 3.4.19-184.amzn2023.0.6 amazonlinux 259 k
Transaction Summary
Install 10 Packages
Total download size: 5.3 M
Installed size: 18 M
Downloading Packages:
(1/10): ruby3.2-3.2.8-184.amzn2023.0.6.x86_64.rpm 1.1 MB/s | 41 kB 00:00
(2/10): ruby3.2-default-gems-3.2.8-184.amzn2023.0.6.noarch.rpm 810 kB/s | 33 kB 00:00

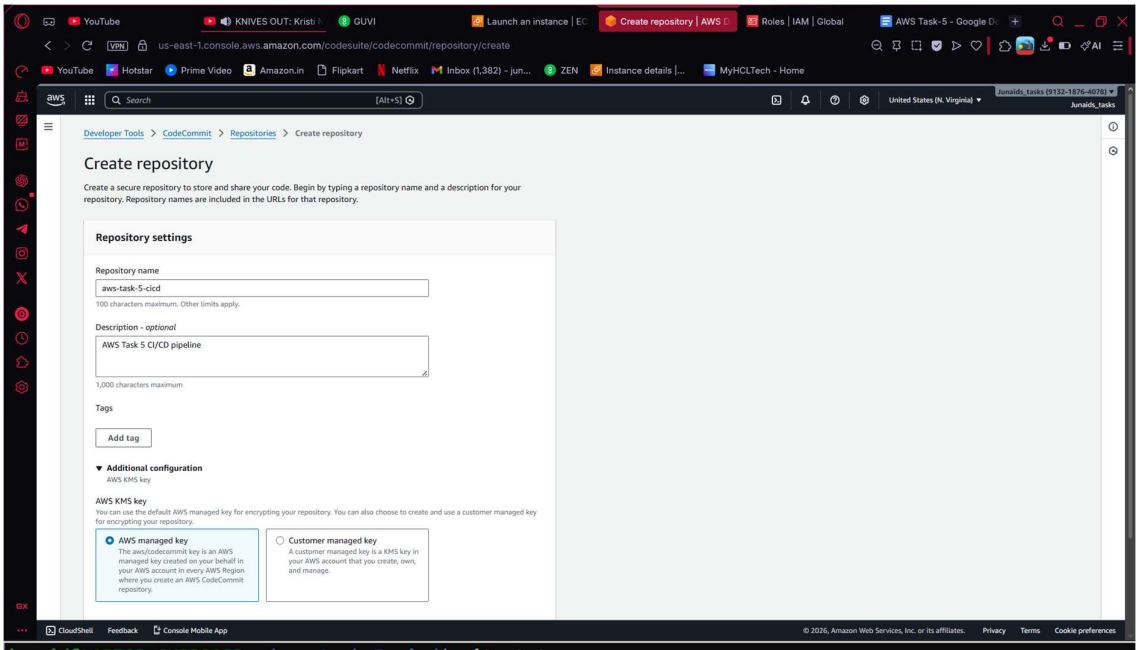

ec2-user@ip-172-31-27-87:~
Installing : ruby3.2-rubygem-io-console-0.6.0-184.amzn2023.0.6.x86_64 5/10
Installing : ruby3.2-rubygem-json-2.6.3-184.amzn2023.0.6.x86_64 6/10
Installing : ruby3.2-rubygem-psych-5.0.1-184.amzn2023.0.6.x86_64 7/10
Installing : ruby3.2-rubygem-rdoc-6.5.1.1-184.amzn2023.0.6.noarch 8/10
Installing : ruby3.2-rubygems-3.4.19-184.amzn2023.0.6.noarch 9/10
Installing : ruby3.2-3.2.8-184.amzn2023.0.6.x86_64 10/10
Running scriptlet: ruby3.2-3.2.8-184.amzn2023.0.6.x86_64 10/10
Running scriptlet: ruby3.2-rubygem-bundler-2.4.19-184.amzn2023.0.6.noarch 10/10
Running scriptlet: ruby3.2-rubygem-rdoc-6.5.1.1-184.amzn2023.0.6.noarch 10/10
Running scriptlet: ruby3.2-rubygems-3.4.19-184.amzn2023.0.6.noarch 10/10
Running scriptlet: ruby3.2-3.2.8-184.amzn2023.0.6.x86_64 10/10
Verifying : ruby3.2-3.2.8-184.amzn2023.0.6.x86_64 1/10
Verifying : ruby3.2-default-gems-3.2.8-184.amzn2023.0.6.noarch 2/10
Verifying : ruby3.2-libs-3.2.8-184.amzn2023.0.6.x86_64 3/10
Verifying : ruby3.2-rubygem-bigdecimal-3.1.3-184.amzn2023.0.6.x86_64 4/10
Verifying : ruby3.2-rubygem-bundler-2.4.19-184.amzn2023.0.6.noarch 5/10
Verifying : ruby3.2-rubygem-io-console-0.6.0-184.amzn2023.0.6.x86_64 6/10
Verifying : ruby3.2-rubygem-json-2.6.3-184.amzn2023.0.6.x86_64 7/10
Verifying : ruby3.2-rubygem-psych-5.0.1-184.amzn2023.0.6.x86_64 8/10
Verifying : ruby3.2-rubygem-rdoc-6.5.1.1-184.amzn2023.0.6.noarch 9/10
Verifying : ruby3.2-rubygems-3.4.19-184.amzn2023.0.6.noarch 10/10
Installed:
ruby3.2-3.2.8-184.amzn2023.0.6.x86_64
ruby3.2-default-gems-3.2.8-184.amzn2023.0.6.noarch
ruby3.2-libs-3.2.8-184.amzn2023.0.6.x86_64
ruby3.2-rubygem-bigdecimal-3.1.3-184.amzn2023.0.6.x86_64
ruby3.2-rubygem-bundler-2.4.19-184.amzn2023.0.6.noarch
ruby3.2-rubygem-io-console-0.6.0-184.amzn2023.0.6.x86_64
ruby3.2-rubygem-json-2.6.3-184.amzn2023.0.6.x86_64
ruby3.2-rubygem-psych-5.0.1-184.amzn2023.0.6.x86_64
ruby3.2-rubygem-rdoc-6.5.1.1-184.amzn2023.0.6.noarch
ruby3.2-rubygems-3.4.19-184.amzn2023.0.6.noarch
Complete!
[ec2-user@ip-172-31-27-87 ~]$ cd /home/ec2-user
wget https://aws-codedeploy-ap-south-1.s3.amazonaws.com/latest/install
--2026-01-29 08:40:07-- https://aws-codedeploy-ap-south-1.s3.amazonaws.com/latest/install
Resolving aws-codedeploy-ap-south-1.s3.amazonaws.com (aws-codedeploy-ap-south-1.s3.amazonaws.com)... 52.219.158.171, 3.5.211.11, 3.5.213.44, ...
Connecting to aws-codedeploy-ap-south-1.s3.amazonaws.com (aws-codedeploy-ap-south-1.s3.amazonaws.com)|52.219.158.171|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 19045 (19K) []
Saving to: ‘install’
install 100%[=====>] 18.60K --.-KB/s in 0.001s
2026-01-29 08:40:08 (29.8 MB/s) - ‘install’ saved [19045/19045]
[ec2-user@ip-172-31-27-87 ~]$

```
Installed:
  ruby3.2-3.2.8-184.amzn2023.0.6.x86_64
  ruby3.2-default-gems-3.2.8-184.amzn2023.0.6.noarch
  ruby3.2-libs-3.2.8-184.amzn2023.0.6.x86_64
  ruby3.2-rubygem-bigdecimal-3.1.3-184.amzn2023.0.6.x86_64
  ruby3.2-rubygem-bundler-2.4.19-184.amzn2023.0.6.noarch
  ruby3.2-rubygem-io-console-0.6.0-184.amzn2023.0.6.x86_64
  ruby3.2-rubygem-json-2.6.3-184.amzn2023.0.6.x86_64
  ruby3.2-rubygem-psych-5.0.1-184.amzn2023.0.6.x86_64
  ruby3.2-rubygem-rdoc-6.5.1.1-184.amzn2023.0.6.noarch
  ruby3.2-rubygems-3.4.19-184.amzn2023.0.6.noarch

Complete!
[ec2-user@ip-172-31-27-87 ~]$ cd /home/ec2-user
wget https://aws-codedeploy-ap-south-1.s3.amazonaws.com/latest/install
--2026-01-29 08:40:07--  https://aws-codedeploy-ap-south-1.s3.amazonaws.com/latest/install
Resolving aws-codedeploy-ap-south-1.s3.amazonaws.com (aws-codedeploy-ap-south-1.s3.amazonaws.com)... 52.
219.158.171, 3.5.211.11, 3.5.213.44, ...
Connecting to aws-codedeploy-ap-south-1.s3.amazonaws.com (aws-codedeploy-ap-south-1.s3.amazonaws.com)|52
.219.158.171|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 19045 (19K) []
Saving to: ‘install’

install                  100%[===================================>]  18.60K  --.-KB/s    in 0.001s

2026-01-29 08:40:08 (29.8 MB/s) - ‘install’ saved [19045/19045]

[ec2-user@ip-172-31-27-87 ~]$ chmod +x install
[ec2-user@ip-172-31-27-87 ~]$ sudo ./install auto
I, [2026-01-29T08:40:44.861996 #25688]  INFO -- : Starting Ruby version check.
W, [2026-01-29T08:40:44.862095 #25688]  WARN -- : The Ruby version in /usr/bin/ruby3.2 is 3.2.8, . Attem
pting to install anyway.
```


ec2-user@ip-172-31-27-87:~
-2 and key releases/codedeploy-agent-1.8.0-17.noarch.rpm...
I, [2026-01-29T08:40:44.965002 #25688] INFO -- : Endpoint: https://aws-codedeploy-us-east-2.s3.us-east-2.amazonaws.com/releases/codedeploy-agent-1.8.0-17.noarch.rpm
I, [2026-01-29T08:40:45.025702 #25688] INFO -- : Executing `/usr/bin/yum -y localinstall /tmp/codedeploy-agent-1.8.0-17.noarch.tmp-20260129-25688-16ppgk.rpm`...
Last metadata expiration check: 0:02:49 ago on Thu Jan 29 08:37:56 2026.
Dependencies resolved.
Package Architecture Version Repository Size
Installing:
codedeploy-agent noarch 1.8.0-17 @commandline 2.8 M
Transaction Summary
Install 1 Package
Total size: 2.8 M
Installed size: 13 M
Downloading Packages:
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing : 1/1
Running scriptlet: codedeploy-agent-1.8.0-17.noarch 1/1
pre hook : 1
Checking if there is already a process named codedeploy-agent running.
Installing : codedeploy-agent-1.8.0-17.noarch 1/1
Running scriptlet: codedeploy-agent-1.8.0-17.noarch 1/1
post hook : 1
Check if there is a codedeployagent config file.
Start codedeploy-agent in post hook if this is a first install.
Verifying : codedeploy-agent-1.8.0-17.noarch 1/1
Installed:
codedeploy-agent-1.8.0-17.noarch
Complete!
I, [2026-01-29T08:40:48.001374 #25688] INFO -- : Update check complete.
I, [2026-01-29T08:40:48.001414 #25688] INFO -- : Stopping updater.
[ec2-user@ip-172-31-27-87 ~]$ sudo systemctl start codedeploy-agent
[ec2-user@ip-172-31-27-87 ~]$ sudo systemctl enable codedeploy-agent
Synchronizing state of codedeploy-agent.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable codedeploy-agent
[ec2-user@ip-172-31-27-87 ~]$

```
[ec2-user@ip-172-31-27-87 ~]$ sudo systemctl start codedeploy-agent
[ec2-user@ip-172-31-27-87 ~]$ sudo systemctl enable codedeploy-agent
Synchronizing state of codedeploy-agent.service with SysV service script with /usr/lib/systemd/systemd-s
ysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable codedeploy-agent
[ec2-user@ip-172-31-27-87 ~]$ sudo systemctl status codedeploy-agent
● codedeploy-agent.service - AWS CodeDeploy Host Agent
     Loaded: loaded (/usr/lib/systemd/system/codedeploy-agent.service; enabled; preset: disabled)
     Active: active (running) since Thu 2026-01-29 08:40:46 UTC; 1min 38s ago
   Main PID: 25771 (ruby)
      Tasks: 3 (limit: 1067)
     Memory: 66.0M
        CPU: 1.209s
     CGroup: /system.slice/codedeploy-agent.service
             ├─25771 "codedeploy-agent: master 25771"
             └─25773 "codedeploy-agent: InstanceAgent::Plugins::CodeDeployPlugin::CommandPoller of mast>

Jan 29 08:40:46 ip-172-31-27-87.us-east-2.compute.internal systemd[1]: Starting codedeploy-agent.servic>
Jan 29 08:40:46 ip-172-31-27-87.us-east-2.compute.internal systemd[1]: Started codedeploy-agent.service>
lines 1-13/13 (END)
```






```
junaid@LAPTOP-GU5B805P:~/aws-task-5-cicd$ git status
git add .
git commit -m "Initial AWS Task 5 CI/CD files"
git push origin main
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        appspec.yml
        buildspec.yml
        index.html
        scripts/

nothing added to commit but untracked files present (use "git add" to track)
[master (root-commit) a94d7d7] Initial AWS Task 5 CI/CD files
 4 files changed, 35 insertions(+)
 create mode 100644 appspec.yml
 create mode 100644 buildspec.yml
 create mode 100644 index.html
 create mode 100755 scripts/install.sh
error: src refspec main does not match any
error: failed to push some refs to 'https://git-codecommit.us-east-1.amazonaws.com/v1/repos/aws-task-5-c
icd'
junaid@LAPTOP-GU5B805P:~/aws-task-5-cicd$ git branch -m master main
git push origin main
git push origin --delete master
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 12 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (7/7), 811 bytes | 135.00 KiB/s, done.
Total 7 (delta 0), reused 0 (delta 0), pack-reused 0
remote: Validating objects: 100%
To https://git-codecommit.us-east-1.amazonaws.com/v1/repos/aws-task-5-cicd
 * [new branch]      main -> main
error: unable to delete 'master': remote ref does not exist
error: failed to push some refs to 'https://git-codecommit.us-east-1.amazonaws.com/v1/repos/aws-task-5-c
icd'
```

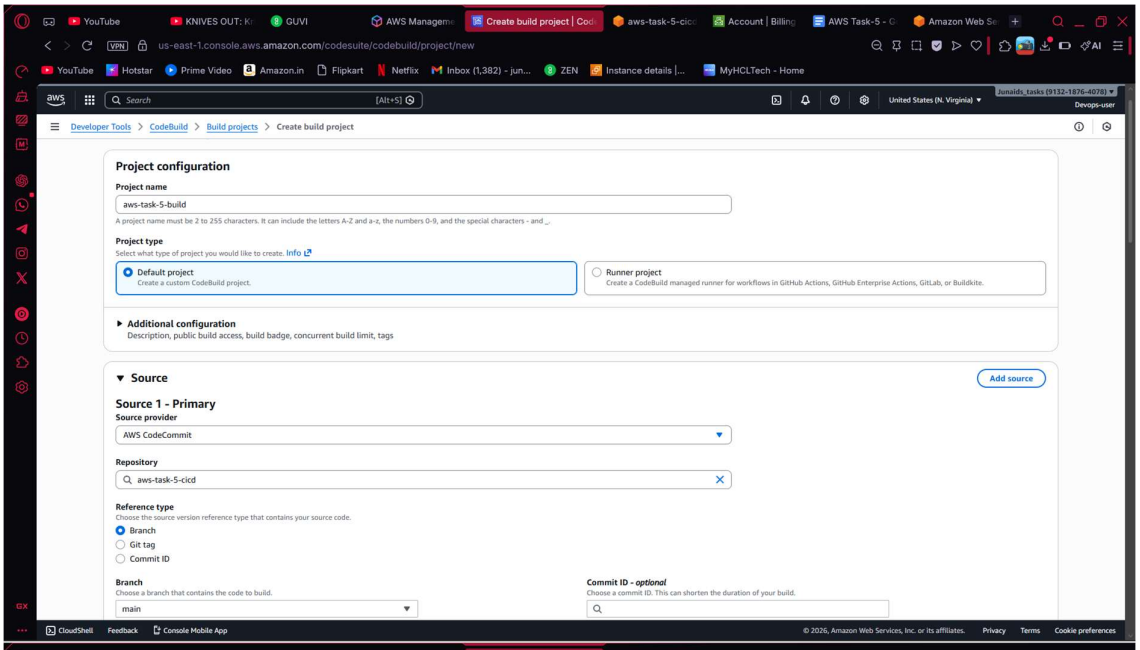
```
junaid@LAPTOP-GU5B805P:~/aws-task-5-cicd$ git branch
* main
junaid@LAPTOP-GU5B805P:~/aws-task-5-cicd$
```

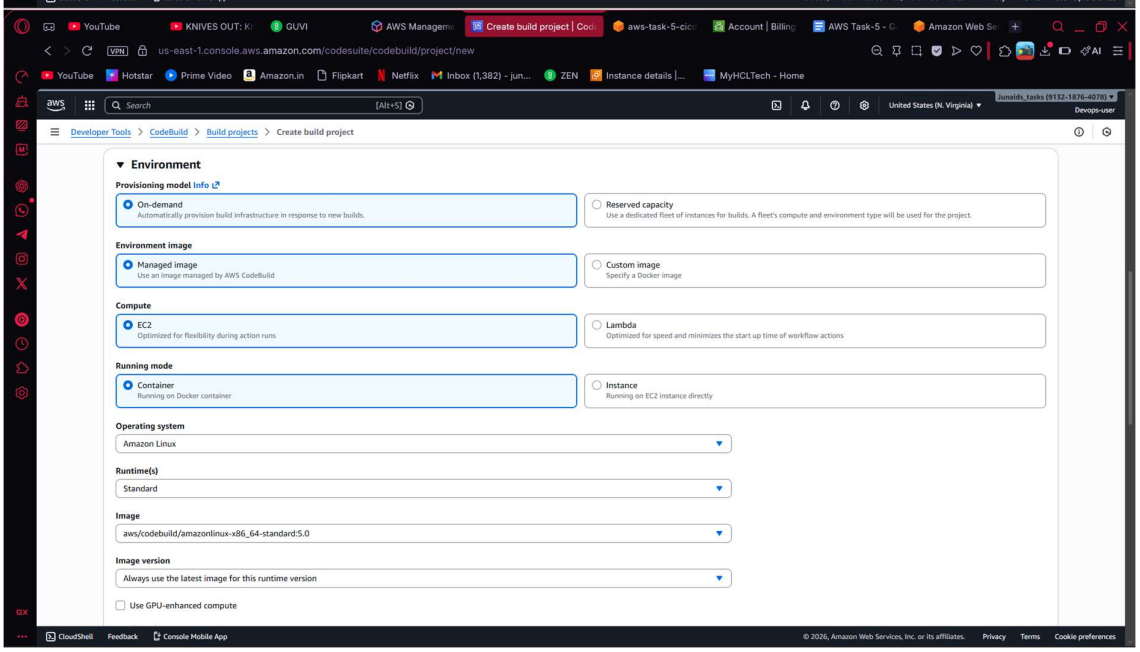
```
junaid@LAPTOP-GU5B805P:~$ cd ~
git clone https://git-codecommit.us-east-1.amazonaws.com/v1/repos/aws-task-5-cicd
Cloning into 'aws-task-5-cicd'...
Username for 'https://git-codecommit.us-east-1.amazonaws.com': Devops-user-at-913218764078
Password for 'https://Devops-user-at-913218764078@git-codecommit.us-east-1.amazonaws.com':
warning: You appear to have cloned an empty repository.
junaid@LAPTOP-GU5B805P:~$
```

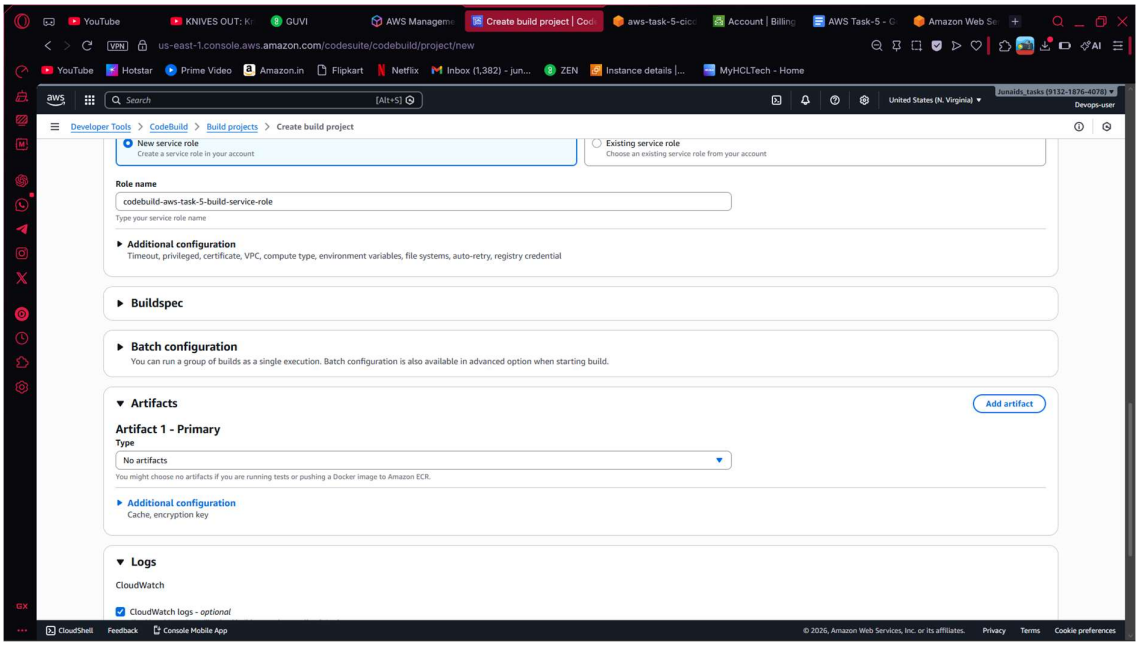
junaid@LAPTOP-GU5B805P: ~/aws-task-5-cicd

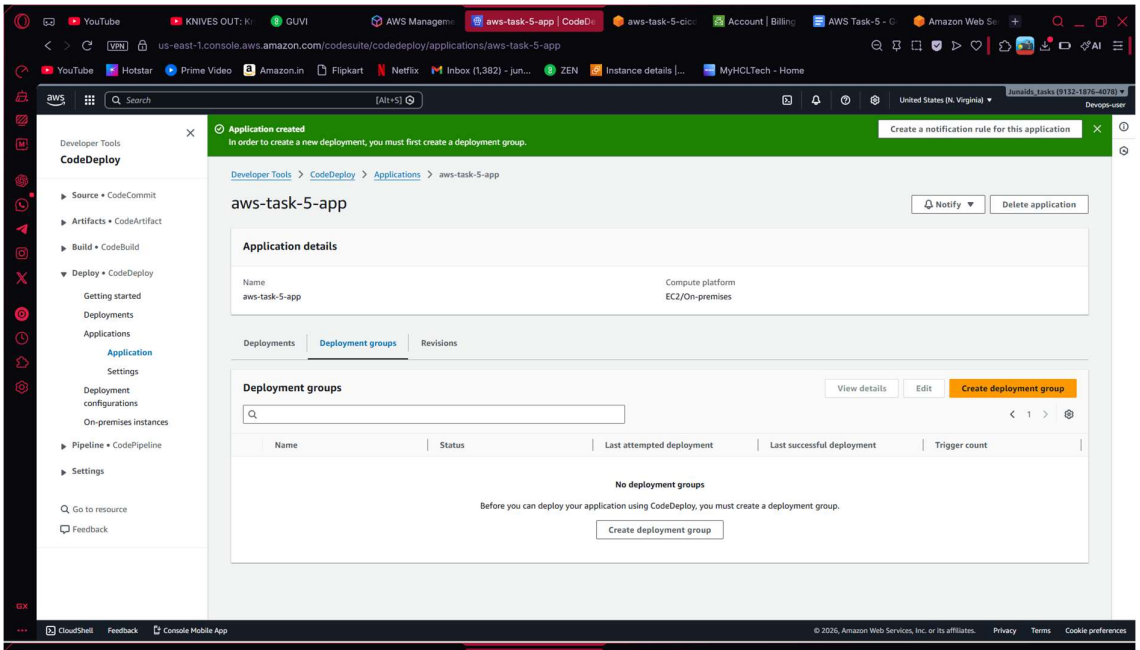
```
warning: You appear to have cloned an empty repository.
junaid@LAPTOP-GU5B805P:~$ cd ~/aws-task-5-cicd
pwd
/home/junaid/aws-task-5-cicd
junaid@LAPTOP-GU5B805P:~/aws-task-5-cicd$ cat <<EOF > index.html
<!DOCTYPE html>
<html>
<head>
  <title>AWS Task 5</title>
</head>
<body>
  <h1>CI/CD Deployment Successful 🎉</h1>
  <p>AWS CodePipeline is working!</p>
</body>
</html>
EOF
junaid@LAPTOP-GU5B805P:~/aws-task-5-cicd$ cat <<EOF > buildspec.yml
version: 0.2

phases:
  build:
    commands:
      - echo "Build started"

artifacts:
  files:
    - '**/*'
EOF
junaid@LAPTOP-GU5B805P:~/aws-task-5-cicd$ cat <<EOF > appspec.yml
version: 0.0
os: linux

files:
  - source: /
    destination: /var/www/html

hooks:
  AfterInstall:
    - location: scripts/install.sh
      timeout: 300
EOF
junaid@LAPTOP-GU5B805P:~/aws-task-5-cicd$ mkdir -p scripts

cat <<EOF > scripts/install.sh
#!/bin/bash
yum install -y httpd
systemctl start httpd
systemctl enable httpd
EOF
junaid@LAPTOP-GU5B805P:~/aws-task-5-cicd$ chmod +x scripts/install.sh
junaid@LAPTOP-GU5B805P:~/aws-task-5-cicd$ ls -R
.:
```

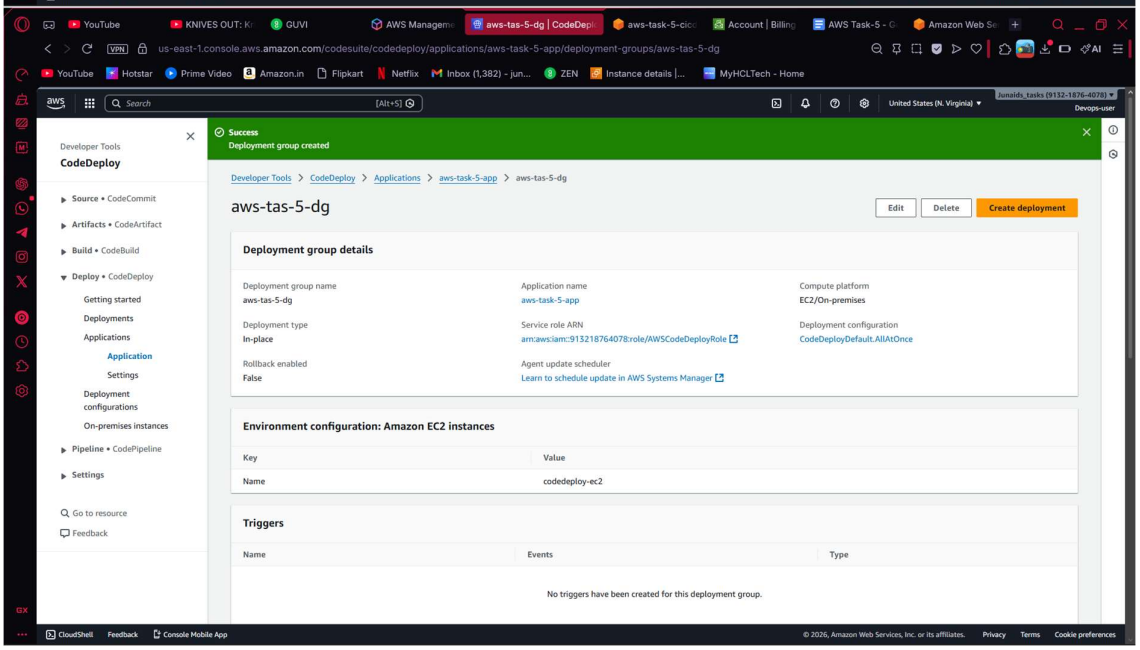
```
junaid@LAPTOP-GU5B805P:~/aws-task-5-cicd$ ls -R
.:
appspec.yml  buildspec.yml  index.html  scripts

./scripts:
install.sh
junaid@LAPTOP-GU5B805P:~/aws-task-5-cicd$
```

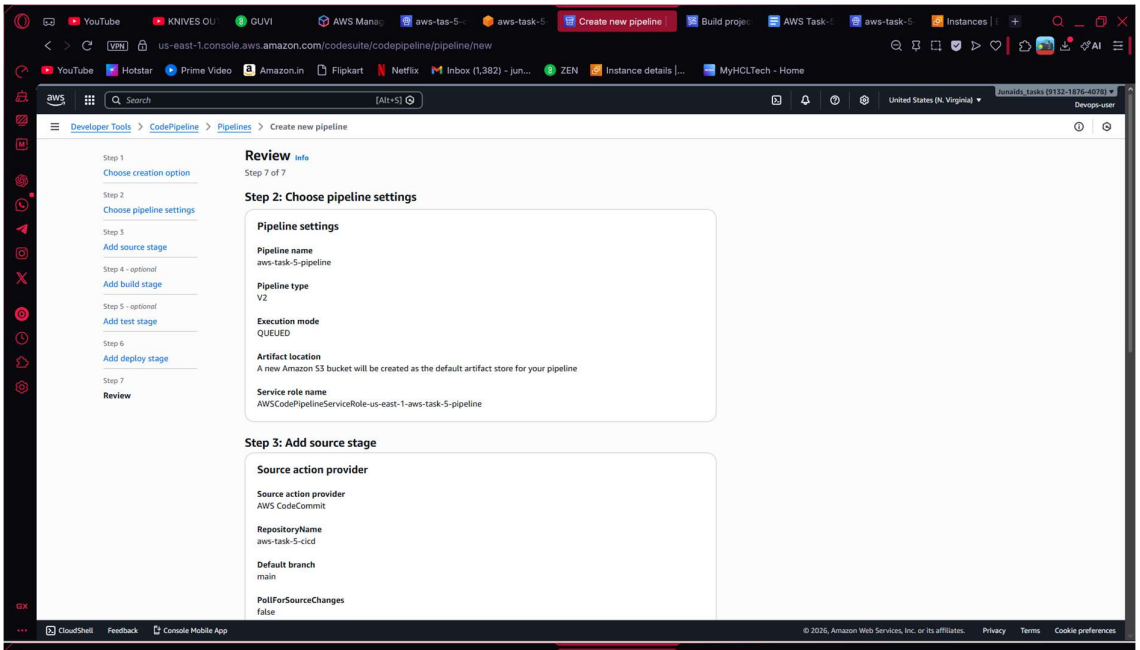

us-east-1.console.aws.amazon.com/codesuite/codebuild/project/new
Developer Tools > CodeBuild > Build projects > Create build project
Project configuration
Project name
aws-task-5-build
A project name must be 2 to 255 characters. It can include the letters A-Z and a-z, the numbers 0-9, and the special characters - and _.
Project type
Select what type of project you would like to create. Info
Default project
Create a custom CodeBuild project.
Runner project
Create a CodeBuild managed runner for workflows in GitHub Actions, GitHub Enterprise Actions, GitLab, or Buildkite.
Additional configuration
Description, public build access, build badge, concurrent build limit, tags
Source
Add source
Source 1 - Primary
Source provider
AWS CodeCommit
Repository
aws-task-5-cicd
Reference type
Choose the source version reference type that contains your source code.
Branch
Git tag
Commit ID
Branch
Choose a branch that contains the code to build.
main
Commit ID - optional
Choose a commit ID. This can shorten the duration of your build.
CloudShell
Feedback
Console Mobile App
© 2026, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences

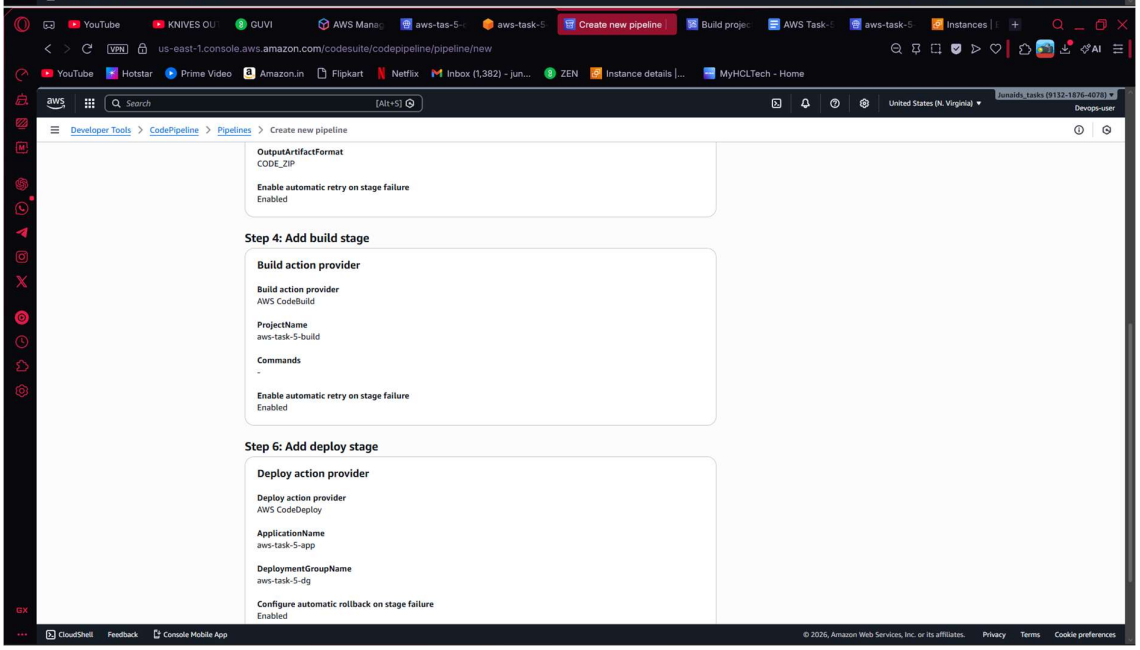

us-east-1.console.aws.amazon.com/codesuite/codebuild/project/new
Developer Tools > CodeBuild > Build projects > Create build project
Environment
Provisioning model Info
On-demand
Automatically provision build infrastructure in response to new builds.
Reserved capacity
Use a dedicated fleet of instances for builds. A fleet's compute and environment type will be used for the project.
Environment image
Managed image
Use an image managed by AWS CodeBuild
Custom image
Specify a Docker image
Compute
EC2
Optimized for flexibility during action runs
Lambda
Optimized for speed and minimizes the start up time of workflow actions
Running mode
Container
Running on Docker container
Instance
Running on EC2 instance directly
Operating system
Amazon Linux
Runtime(s)
Standard
Image
aws/codebuild/amazonlinux-x86_64-standard:5.0
Image version
Always use the latest image for this runtime version
Use GPU-enhanced compute
CloudShell
Feedback
Console Mobile App
© 2026, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences

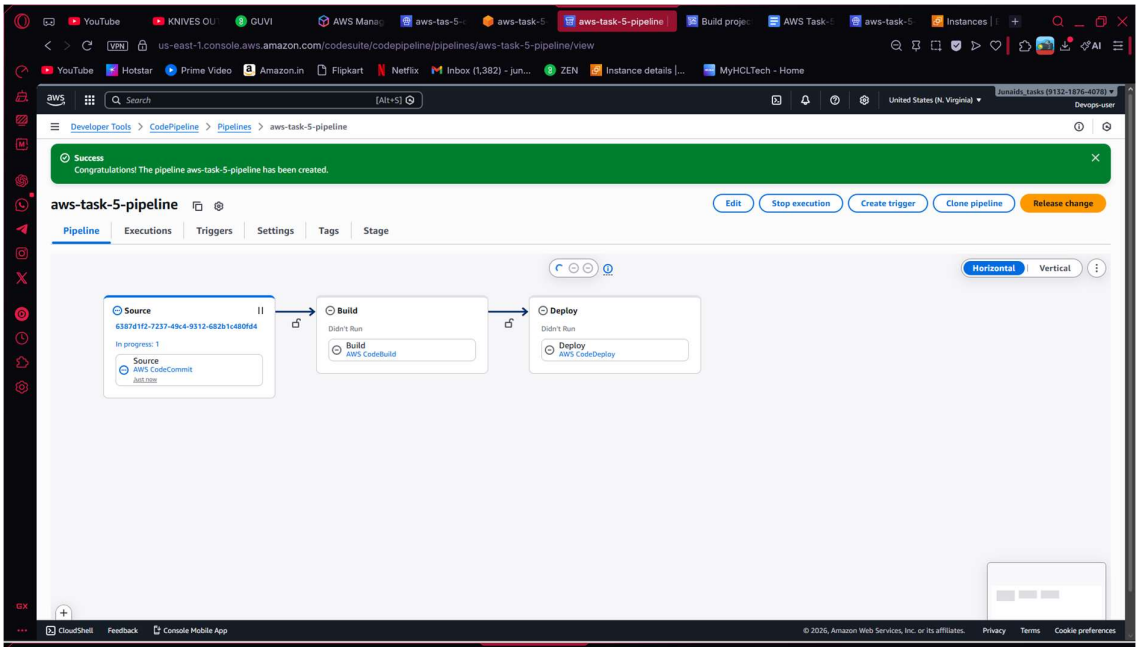

us-east-1.console.aws.amazon.com/codesuite/codebuild/project/new
Developer Tools > CodeBuild > Build projects > Create build project
New service role
Create a service role in your account
Existing service role
Choose an existing service role from your account
Role name
codebuild-aws-task-5-build-service-role
Type your service role name
Additional configuration
Timeout, privileged, certificate, VPC, compute type, environment variables, file systems, auto-retry, registry credential
Buildspec
Batch configuration
You can run a group of builds as a single execution. Batch configuration is also available in advanced option when starting build.
Artifacts
Add artifact
Artifact 1 - Primary
Type
No artifacts
You might choose no artifacts if you are running tests or pushing a Docker image to Amazon ECR.
Additional configuration
Cache, encryption key
Logs
CloudWatch
CloudWatch logs - optional
CloudShell
Feedback
Console Mobile App
© 2026, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences

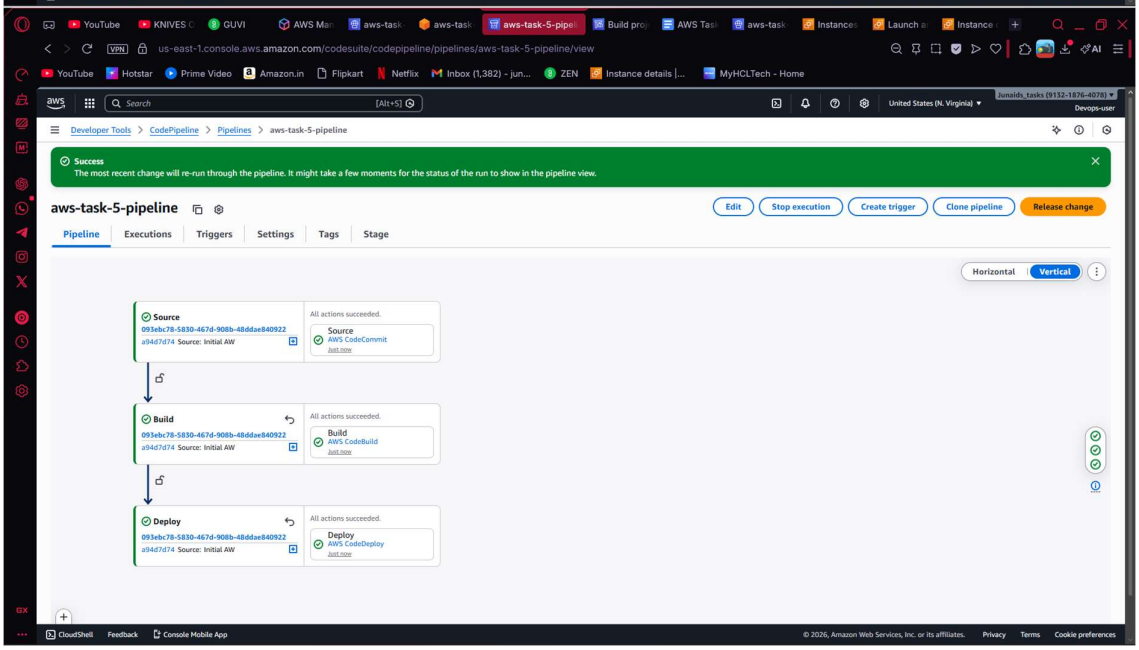

Application created
In order to create a new deployment, you must first create a deployment group.
Create a notification rule for this application
Developer Tools
CodeDeploy
Developer Tools > CodeDeploy > Applications > aws-task-5-app
aws-task-5-app
Notify
Delete application
Application details
Name
aws-task-5-app
Compute platform
EC2/On-premises
Deployments
Deployment groups
Revisions
Deployment groups
View details
Edit
Create deployment group
Name
Status
Last attempted deployment
Last successful deployment
Trigger count
No deployment groups
Before you can deploy your application using CodeDeploy, you must create a deployment group.
Create deployment group

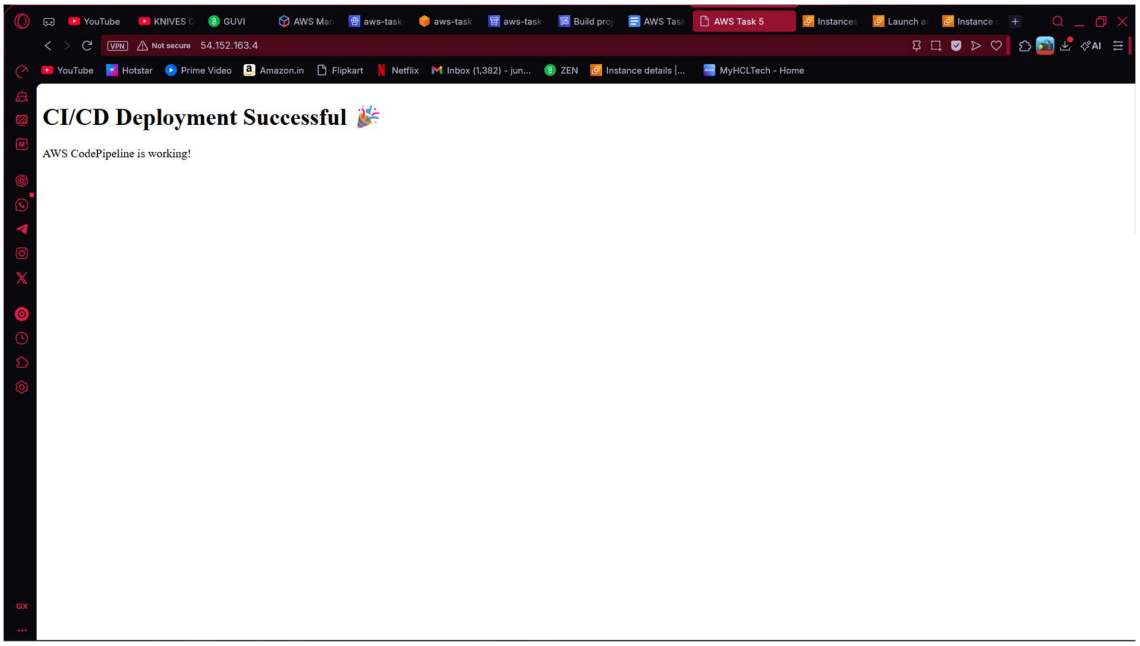

Success
Deployment group created
Developer Tools > CodeDeploy > Applications > aws-task-5-app > aws-tas-5-dg
aws-tas-5-dg
Edit
Delete
Create deployment
Deployment group details
Deployment group name
aws-tas-5-dg
Application name
aws-task-5-app
Compute platform
EC2/On-premises
Deployment type
In-place
Service role ARN
arn:aws:iam::913218764078:role/AWSCodeDeployRole
Deployment configuration
CodeDeployDefault.AllAtOnce
Rollback enabled
False
Agent update scheduler
Learn to schedule update in AWS Systems Manager
Environment configuration: Amazon EC2 instances
Key
Value
Name
codedeploy-ec2
Triggers
Name
Events
Type
No triggers have been created for this deployment group.


Developer Tools > CodePipeline > Pipelines > Create new pipeline
Step 1
Choose creation option
Step 2
Choose pipeline settings
Step 3
Add source stage
Step 4 - optional
Add build stage
Step 5 - optional
Add test stage
Step 6
Add deploy stage
Step 7
Review
Review Info
Step 7 of 7
Step 2: Choose pipeline settings
Pipeline settings
Pipeline name
aws-task-5-pipeline
Pipeline type
V2
Execution mode
QUEUED
Artifact location
A new Amazon S3 bucket will be created as the default artifact store for your pipeline
Service role name
AWSCodePipelineServiceRole-us-east-1-aws-task-5-pipeline
Step 3: Add source stage
Source action provider
Source action provider
AWS CodeCommit
RepositoryName
aws-task-5-cicd
Default branch
main
PollForSourceChanges
false


Developer Tools > CodePipeline > Pipelines > Create new pipeline
OutputArtifactFormat
CODE_ZIP
Enable automatic retry on stage failure
Enabled
Step 4: Add build stage
Build action provider
Build action provider
AWS CodeBuild
ProjectName
aws-task-5-build
Commands
-
Enable automatic retry on stage failure
Enabled
Step 6: Add deploy stage
Deploy action provider
Deploy action provider
AWS CodeDeploy
ApplicationName
aws-task-5-app
DeploymentGroupName
aws-task-5-dg
Configure automatic rollback on stage failure
Enabled


Success
Congratulations! The pipeline aws-task-5-pipeline has been created.
aws-task-5-pipeline
Edit
Stop execution
Create trigger
Clone pipeline
Release change
Pipeline
Executions
Triggers
Settings
Tags
Stage
Horizontal
Vertical
Source
Build
Didn't Run
Deploy
Didn't Run


Success
The most recent change will re-run through the pipeline. It might take a few moments for the status of the run to show in the pipeline view.
aws-task-5-pipeline
Edit
Stop execution
Create trigger
Clone pipeline
Release change
Pipeline
Executions
Triggers
Settings
Tags
Stage
Horizontal
Vertical
Source
Build
Deploy
All actions succeeded.


YouTube
KNIVES
GUVI
AWS Task 5
Not secure
54.152.163.4
YouTube
Hotstar
Prime Video
Amazon.in
Flipkart
Netflix
ZEN
MyHCLTech - Home
CI/CD Deployment Successful
AWS CodePipeline is working!