

Experiment 10 Output

Aim: This experiment sets up a Continuous Integration/Continuous Deployment (CI/CD) pipeline using GitHub Actions, Docker, and LocalStack to simulate AWS services.

Creating S3 Bucket and Storing data

```
aws --endpoint-url=http://localhost:4566 s3 cp my-code.zip s3://my-ci-cd-artifacts/

powershell Compress-Archive -Path * -DestinationPath my-code.zip

aws --endpoint-url=http://localhost:4566 s3 cp my-code.zip s3://my-ci-cd-artifacts/

aws --endpoint-url=http://localhost:4566 s3 ls s3://my-ci-cd-artifacts/
```

Fig 1: S3 Bucket

Initialising a git repo

```
C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 10\Codes>git init
Initialized empty Git repository in C:/Users/rawat/Documents/8 SEMESTER/Cloud Computing

C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 10\Codes>git add .

C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 10\Codes>git commit
[master (root-commit) 2dfb5b6] Initial commit
3 files changed, 1153 insertions(+)
create mode 100644 Command Prompt Input and Output Explanation.md
create mode 100644 Command Prompt Input and Output Explanation.pdf
create mode 100644 Command Prompt Input and Output.txt
```

Fig 2: Git Repository Initialization

Pulling the Remote Repository

```
C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 10\Codes>git push -u origin main
To https://github.com/madhurimarawat/Cloud-Computing.git
! [rejected]        main -> main (fetch first)
error: failed to push some refs to 'https://github.com/madhurimarawat/Cloud-Computing.git'
hint: Updates were rejected because the remote contains work that you do not
hint: have locally. This is usually caused by another repository pushing to
hint: the same ref. If you want to integrate the remote changes, use
hint: 'git pull' before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.

C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 10\Codes>git pull origin main --rebase
remote: Enumerating objects: 248, done.
remote: Counting objects: 100% (248/248), done.
remote: Compressing objects: 100% (212/212), done.
remote: Total 248 (delta 180), reused 43 (delta 21), pack-reused 0 (from 0)
Receiving objects: 100% (248/248), 9.22 MiB | 1.11 MiB/s, done.
Resolving deltas: 100% (100/100), done.
From https://github.com/madhurimarawat/Cloud-Computing
 * branch      main      -> FETCH_HEAD
 * [new branch] main      -> origin/main
Successfully rebased and updated refs/heads/main.
```

Fig 3: Remote Repository

Updating in Remote Repository

```
C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 10\Codes>git add .

C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 10\Codes>git rebase --continue
fatal: no rebase in progress

C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 10\Codes>git push -u origin main
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 8 threads
Compressing objects: 100% (5/5), done.
Writing objects: 100% (5/5), 282.43 KiB | 31.38 MiB/s, done.
Total 5 (delta 1), reused 1 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/madhurimarawat/Cloud-Computing.git
   b201b02..eb4fa77 main -> main
branch 'main' set up to track 'origin/main'.
```

Fig 4: Updating in Repository

Remote Repository and Workflow

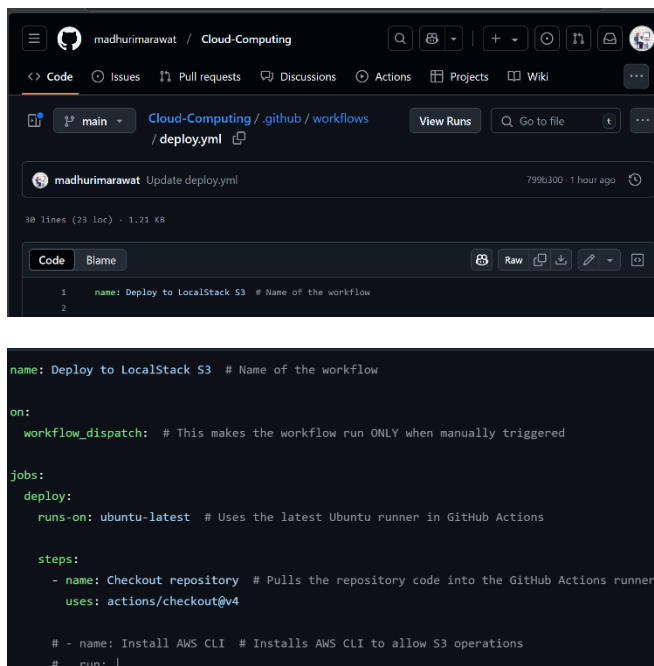


Fig 5: Remote Repository and Workflow File

Workflow Run

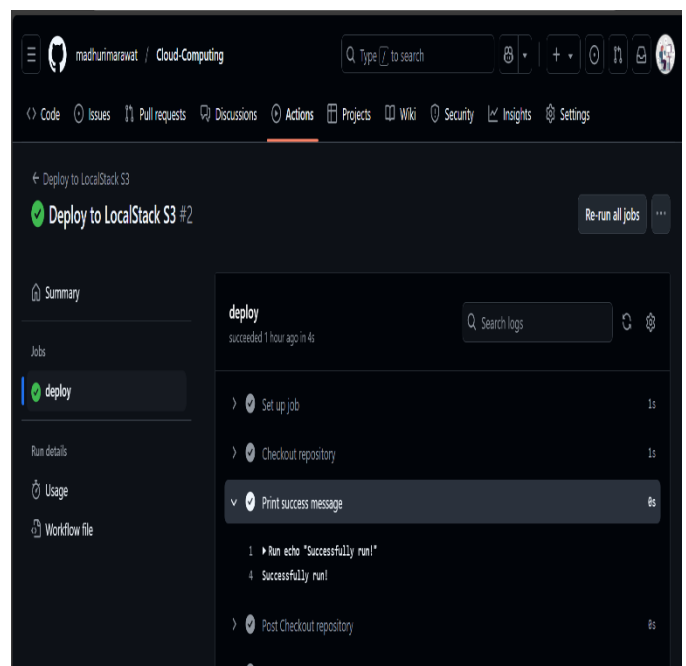


Fig 6: GitHub Actions Workflow