

Experiment 3 Output

This experiment sets up an AWS S3 bucket to upload, verify, and download data. It demonstrates secure and scalable cloud storage management.

Running AWS using Localstack

```
C:\Users\rawat>python "C:\Users\rawat\AppData\Local\Programs\Python\Python310\Scripts\localstack" start

LocalStack CLI 3.6.0
Profile: default

[12:23:00] starting LocalStack in Docker mode localstack.py:503
LocalStack Runtime Log (press CTRL-C to quit)

LocalStack version: 4.0.4.dev122
LocalStack build date: 2025-01-23
LocalStack build git hash: 81d9fb079

Ready.
2025-02-03T06:54:13.375 INFO --- [et.reactor-0] localstack.utils.bootstrap : Execution of "load_service_plugin" took 799.59ms
2025-02-03T06:54:13.375 INFO --- [et.reactor-0] localstack.utils.bootstrap : Execution of "require" took 799.59ms
2025-02-03T06:54:13.694 INFO --- [et.reactor-0] localstack.request.aws : AWS ec2.RunInstances => 400 (InvalidGroup
2025-02-03T06:54:57.862 INFO --- [et.reactor-0] localstack.request.aws : AWS ec2.CreateKeyPair => 200
2025-02-03T06:55:23.207 INFO --- [et.reactor-0] localstack.request.aws : AWS ec2.CreateSecurityGroup => 200
2025-02-03T06:56:47.344 INFO --- [et.reactor-0] localstack.request.aws : AWS ec2.RunInstances => 200
2025-02-03T06:58:33.435 INFO --- [et.reactor-0] localstack.request.aws : AWS apigateway.CreateRestApi => 201
2025-02-03T07:01:07.915 INFO --- [et.reactor-0] localstack.request.http : GET / => 200
2025-02-03T07:01:08.274 INFO --- [et.reactor-0] localstack.request.aws : AWS s3.ListObjects => 404 (NoSuchBucket)
```

Fig 1: Starting Localstack in the Console

Creating and Storing Data in S3 Bucket

```
C:\Users\rawat>aws --endpoint-url=http://localhost:4566 --region us-east-1 s3 ls
C:\Users\rawat>aws --endpoint-url=http://localhost:4566 --region us-east-1 s3 mb
make_bucket: my-test-bucket
C:\Users\rawat>aws --endpoint-url=http://localhost:4566 --region us-east-1 s3 ls
2025-02-18 18:55:33 my-test-bucket

C:\Users\rawat>cd "C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 3\Items>aws --
ive
upload: .\Sample_Housing_CSV_File.csv to s3://my-test-bucket/Sample_Housing_CSV_F
ing_CSV_File.csv
upload: .\Data_Transfer_Amazon.jpg to s3://my-test-bucket/Data_Transfer_Amazon.jp
upload: .\storage_service_offered_by_amazon.png to s3://my-test-bucket/storage_se
upload: .\Data_Transfer_Amazon.jpg to s3://my-test-bucket/Data_Transfer_Amazon.jp

C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 3\Items>aws --
2025-02-18 11:23:34 89553 Data_Transfer_Amazon.jpg
2025-02-18 11:23:34 29981 Sample_Housing_CSV_File.csv
2025-02-18 11:23:34 47575 storage_service_offered_by_amazon.png

C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 3\Items>aws --
fatal error: An error occurred (404) when calling the HeadObject operation: Key "
ing_CSV_File.csv"

C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 3\Items>aws --
download: s3://my-test-bucket/Sample_Housing_CSV_File.csv to .\Sample_Housing_CSV
ing_CSV_File.csv

C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 3\Items>type S
price,area,bedrooms,bathrooms,stories,mainroad,guestroom,basement,hotwaterheating
13300000,7420,4,2,3,yes,no,no,no,yes,2,yes,furnished
12250000,8960,4,4,4,yes,no,no,no,yes,3,no,furnished
12250000,9960,3,2,2,yes,no,yes,no,no,2,yes,semi-furnished
12215000,7500,4,2,2,yes,no,yes,no,yes,3,yes,furnished
11410000,7420,4,1,2,yes,yes,yes,no,yes,2,no,furnished
10850000,7500,3,3,1,yes,no,yes,no,yes,2,yes,semi-furnished
10150000,8580,4,3,4,yes,no,no,no,yes,2,yes,semi-furnished
10150000,16200,5,3,2,yes,no,no,no,no,0,no,unfurnished
9870000,8100,4,1,2,yes,yes,yes,no,yes,2,yes,furnished
```

Fig 3: S3 Bucket and contents

Running Docker

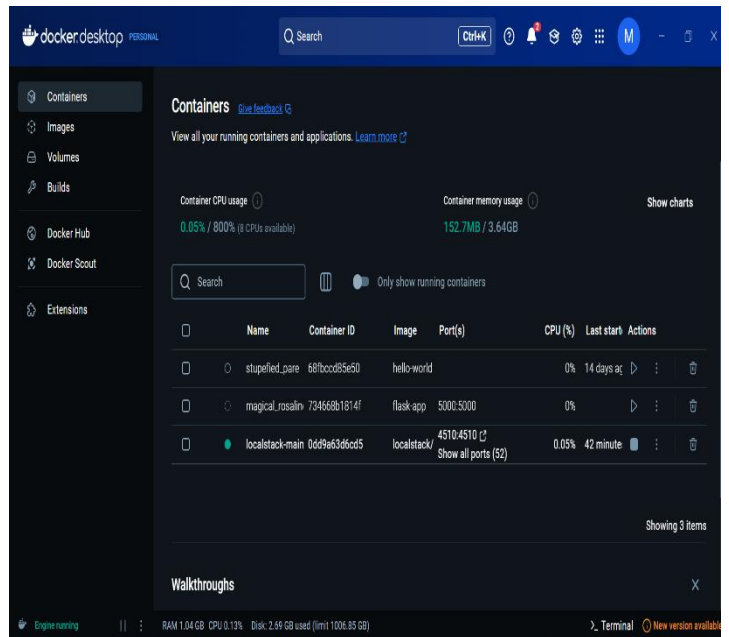


Fig 2: Docker for Desktop in windows

Contents in Bucket

```
C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 3\Items>start Data_Transfer_Amazon.jpg
C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 3\Items>start storage_service_offered_by_amazon.png
C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 3\Items>aws --endpoint-url=http://localhost:4566 --r
ing_CSV_File.csv "C:\Users\rawat\Downloads\Sample_Housing_CSV_File.csv"
download: s3://my-test-bucket/Sample_Housing_CSV_File.csv to ..\..\..\..\Downloads\Sample_Housing_CSV_File.csv
```

Fig 4: Printing CSV File

```
C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 3\Items>start Data_Transfer_Amazon.jpg
C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 3\Items>start storage_service_offered_by_amazon.png
C:\Users\rawat\Documents\8 SEMESTER\Cloud Computing\Lab\Experiment 3\Items>aws --endpoint-url=http://localhost:4566 --r
ing_CSV_File.csv "C:\Users\rawat\Downloads\Sample_Housing_CSV_File.csv"
download: s3://my-test-bucket/Sample_Housing_CSV_File.csv to ..\..\..\..\Downloads\Sample_Housing_CSV_File.csv
```

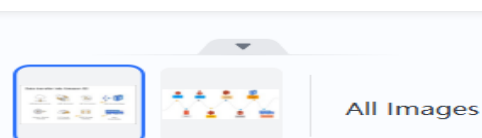


Fig 5: Images Output