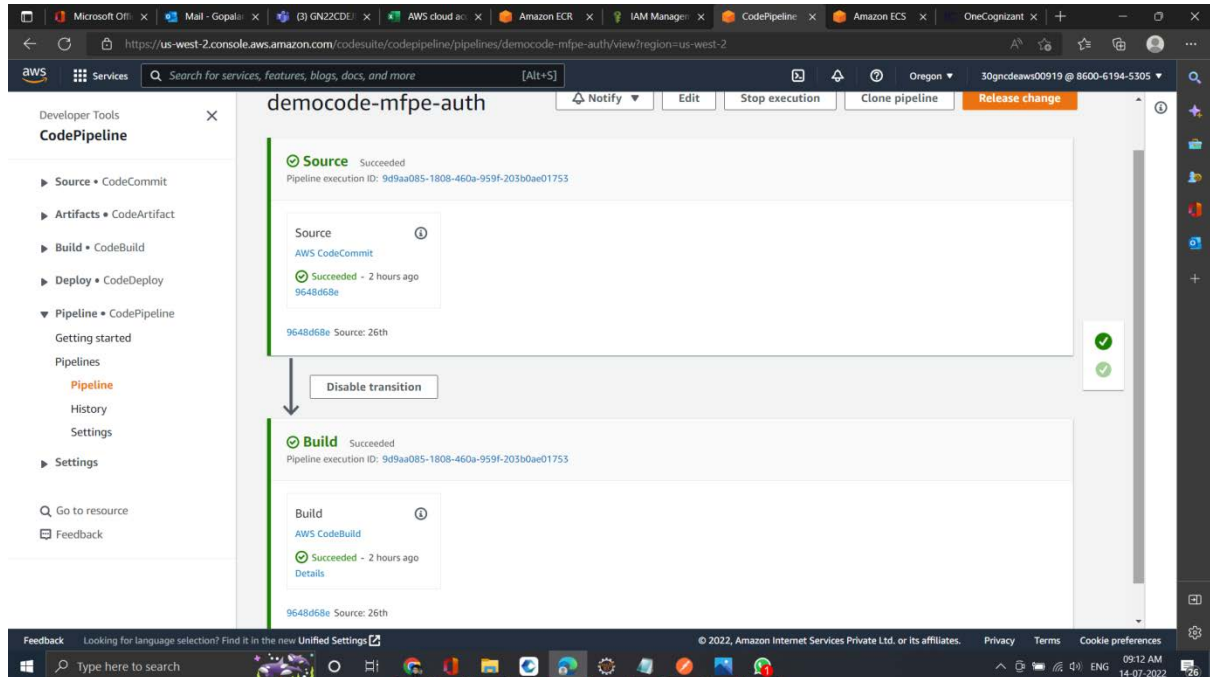


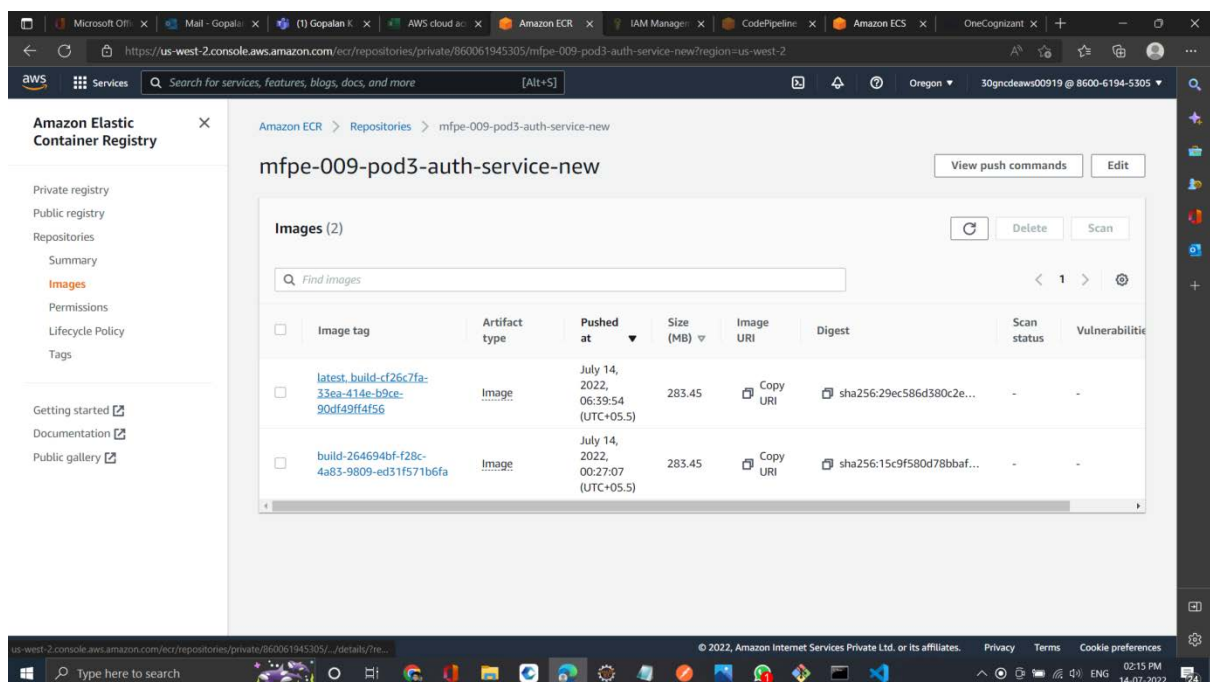
Deployment – MFPE Project

Authentication Service

CI/CD Pipeline for auth-service



The Docker image repository ECR



ECS for Authentication

The screenshot shows the AWS Management Console for the 'mfpe-009-pod3-auth-service' cluster. The cluster is in an 'ACTIVE' state. The console displays various metrics and a table of services.

Cluster : mfpe-009-pod3-auth-service

Get a detailed view of the resources on your cluster.

Cluster ARN: arn:aws:ecs:us-west-2:860061945305:cluster/mfpe-009-pod3-auth-service

Status: ACTIVE

Registered container instances: 0

Pending tasks count: 0 Fargate, 0 EC2, 0 External

Running tasks count: 1 Fargate, 0 EC2, 0 External

Active service count: 1 Fargate, 0 EC2, 0 External

Draining service count: 0 Fargate, 0 EC2, 0 External

Services Table:

Service Name	Status	Service typ...	Task Defini...	Desired tas...	Running ta...	Launch typ...	Platform ve...
auth-service	ACTIVE	REPLICA	mfpe-009-po...	1	1	FARGATE	LATEST(1.4...

Deployed successfully

The screenshot shows the Postman application with a successful GET request to the endpoint '54.149.117.103:5000/authapp/'. The response status is 200 OK, and the body contains the text 'health check is ok'.

GET 54.149.117.103:5000/authapp/

Params: Authorization, Headers (8), Body, Pre-request Script, Tests, Settings

Query Params:

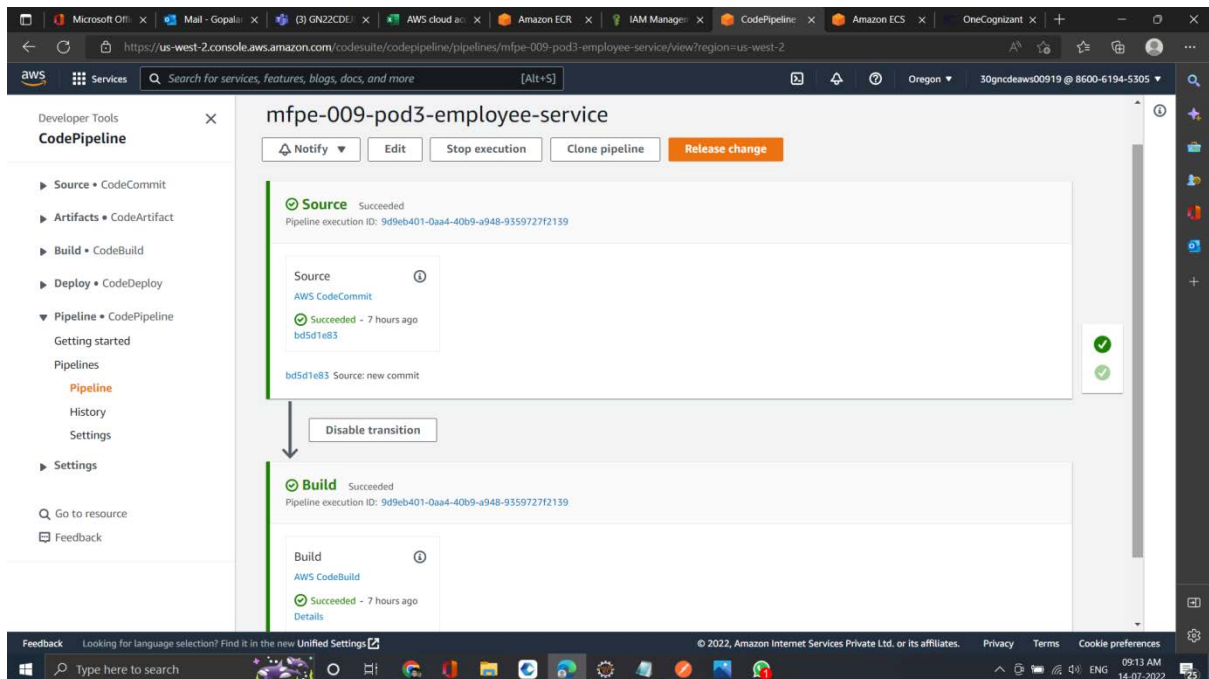
KEY	VALUE	DESCRIPTION
Key	Value	Description

Body: health check is ok

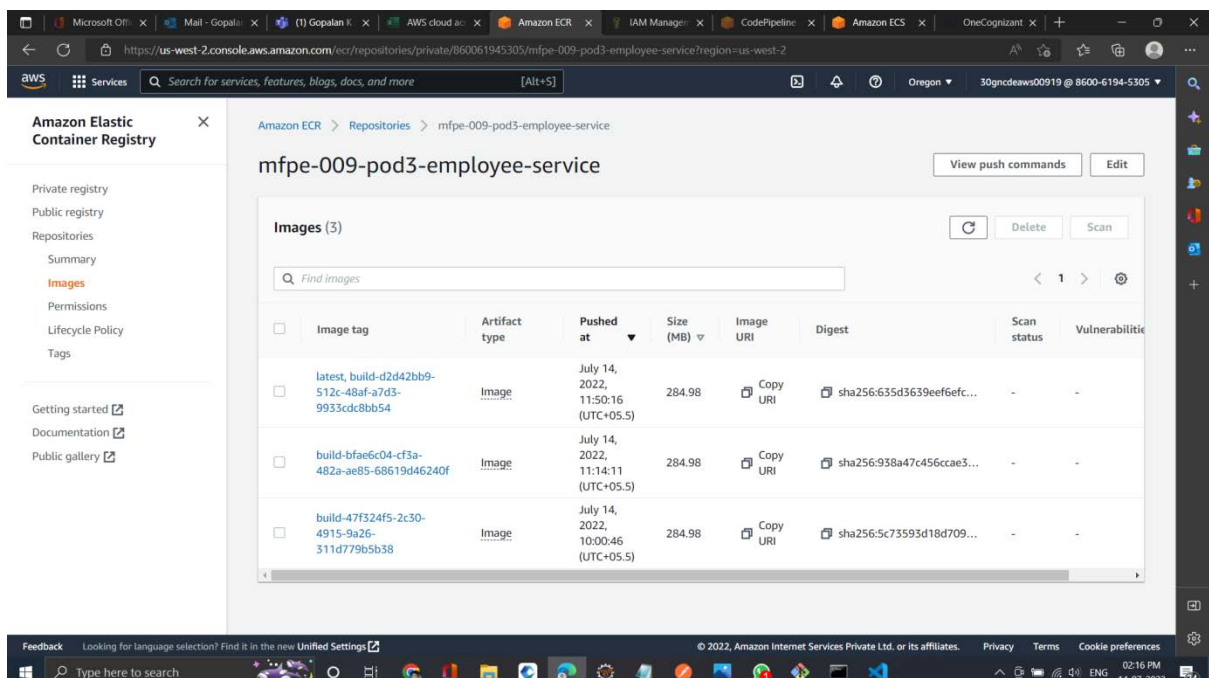
Status: 200 OK, Time: 288 ms, Size: 271 B

Employee Service

CI/CD Pipeline for employee service



The docker image repository ECR



ECS for Employee Service

The screenshot shows the AWS Management Console for the 'employee-service' ECS service. The service is in the 'ACTIVE' state, with a 'Desired count' of 1, 'Pending count' of 0, and 'Running count' of 1. The task definition is 'mfpe-009-pod3-employee-service:4'. The service type is 'REPLICA', launch type is 'FARGATE', and the service role is 'AWSServiceRoleForECS'. The service was created by 'arn:aws:iam::860061945305:user/30gncdeaws00919'.

Service : employee-service

Cluster: [mfpe-009-pod3-emp-ms](#) | Status: **ACTIVE** | Desired count: 1 | Pending count: 0 | Running count: 1

Task definition: [mfpe-009-pod3-employee-service:4](#)

Service type: REPLICA | Launch type: FARGATE | Service role: AWSServiceRoleForECS | Created By: arn:aws:iam::860061945305:user/30gncdeaws00919

Details | **Tasks** | Events | Auto Scaling | Deployments | Metrics | Tags | Logs

Last updated on July 14, 2022 12:05:24 PM (0m ago)

Task status: **Running** Stopped

Filter in this page < 1-1 > Page size 50

Task	Task Definition	Last status	Desired status	Group	Launch type	Platform version
f65f9e0b7bb2464e85...	mfpe-009-pod3-emplo...	RUNNING	RUNNING	service:employee-ser...	FARGATE	1.4.0

Deployed successfully

The screenshot shows the Postman API client interface. A GET request to the endpoint '35.89.226.158:5001/employee/' has been successfully executed. The response status is '200 OK' with a time of 571 ms and a size of 182 B. The response body is 'health check is ok'.

35.89.226.158:5001/employee/

GET 35.89.226.158:5001/employee/

Params | **Authorization** | Headers (7) | Body | Pre-request Script | Tests | Settings

Type: Bearer Token

The authorization header will be automatically generated when you send the request. [Learn more about authorization](#)

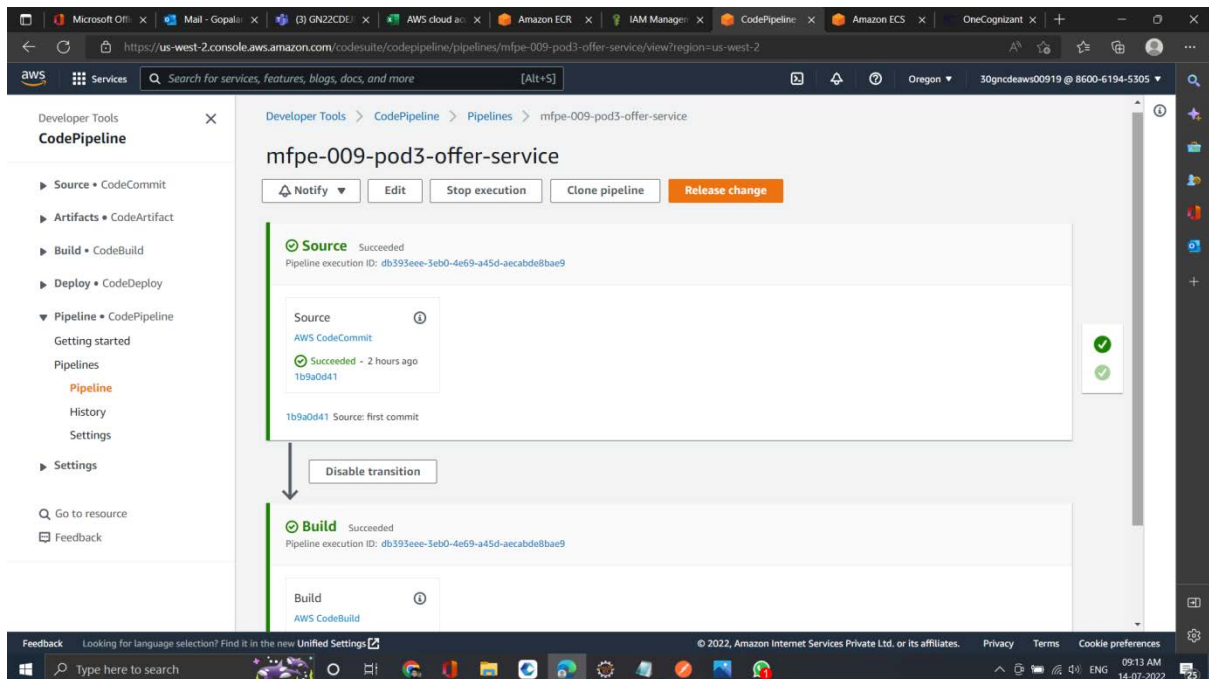
Token: eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXLTNlbnR...

Body | Cookies | Headers (5) | Test Results

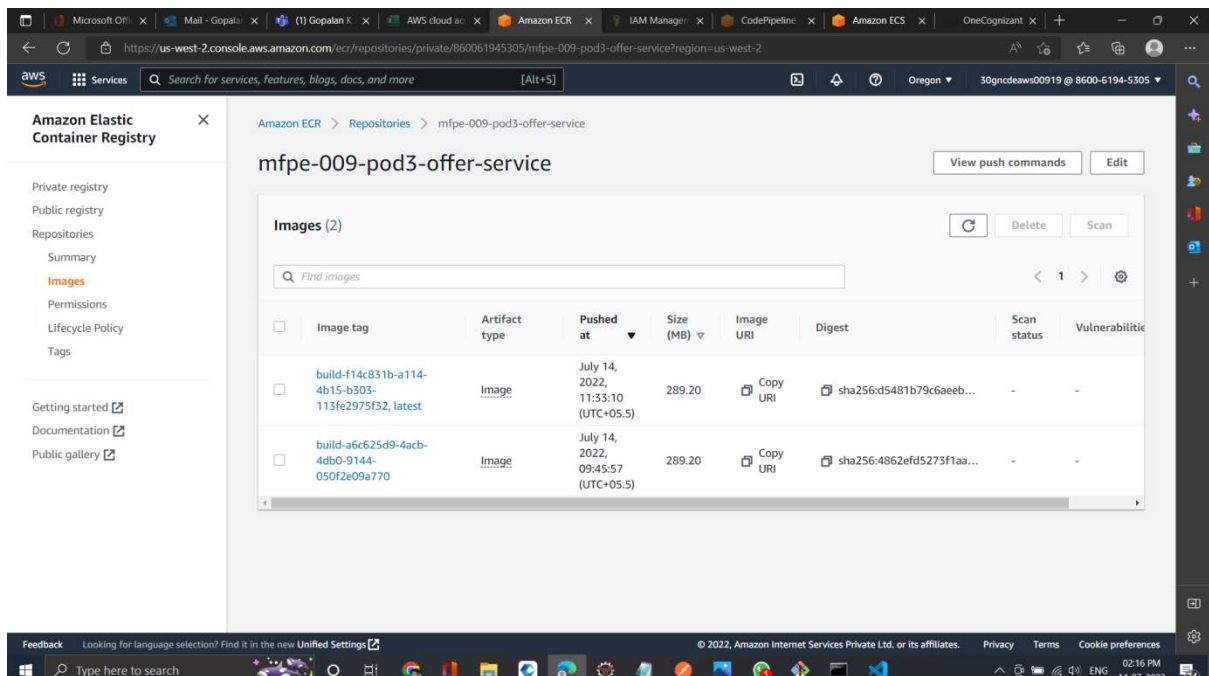
1 health check is ok

Offer Service

CI/CD Pipeline for offer service



The docker image repository ECR



ECS for Offer Service

The screenshot shows the AWS Management Console for the 'offer-service' in the 'us-west-2' region. The service is associated with the 'mfpe-009-pod3-employee-service' cluster. The service status is 'ACTIVE' and it is a 'REPLICA' type. The task definition is 'mfpe-009-pod3-offer-service:2'. The launch type is 'FARGATE' and the service role is 'AWSServiceRoleForECS'. The service was created by 'arn:aws:iam::860061945305:user:30gnodeaws00919'. The task status is 'Running' and the task definition is 'mfpe-009-pod3-offer-...'. The task is in a 'RUNNING' state. The task definition is 'mfpe-009-pod3-offer-...'. The task is in a 'RUNNING' state. The task definition is 'mfpe-009-pod3-offer-...'. The task is in a 'RUNNING' state.

Task	Task Definition	Last status	Desired status	Group	Launch type	Platform version
5e54c66e88bb4c2c9b...	mfpe-009-pod3-offer-...	RUNNING	RUNNING	service-offer-service	FARGATE	1.4.0

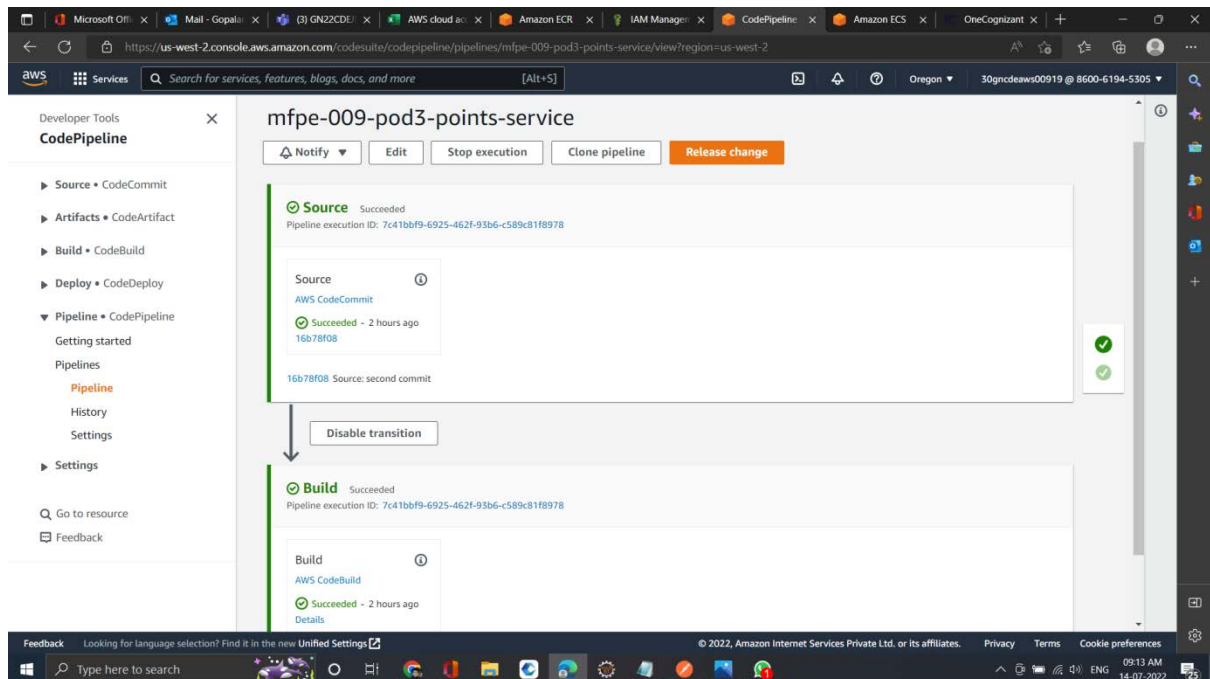
Deployed Successfully

The screenshot shows the Postman application interface. A GET request is sent to the URL '34.218.245.168:5002/offer/'. The response status is '200 OK' and the response body is 'Health Check ok'. The response is displayed in the 'Pretty' format.

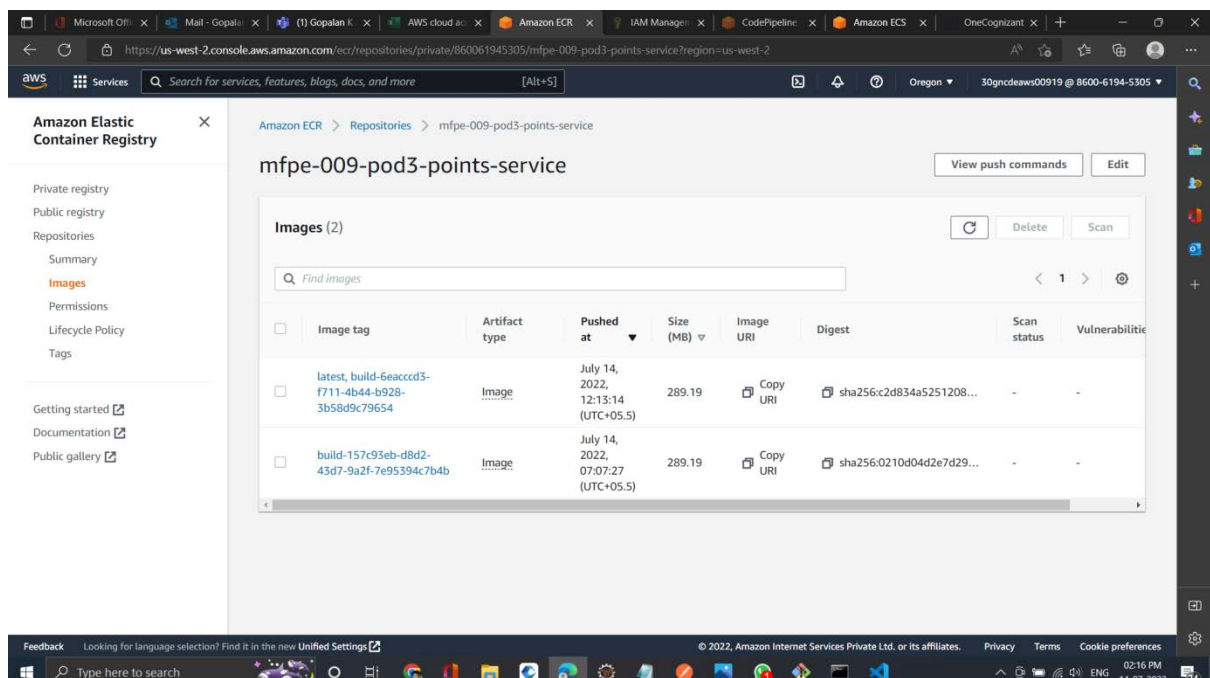
KEY	VALUE	DESCRIPTION
Key	Value	Description

Points Service

CI/CD Pipeline for points service



The Docker image repository ECR



ECS for Offer Service

The screenshot displays the AWS Management Console for the 'points-service' ECS service. The service is in an 'ACTIVE' state with a 'Desired count' of 1, 'Pending count' of 0, and 'Running count' of 1. The task definition is 'mfpe-009-pod3-points-service:1'. The service type is 'REPLICA', launch type is 'FARGATE', and the service role is 'AWSServiceRoleForECS'. The service was created by 'arn:aws:iam::860061945305:user:30gnodeaws00919'.

Service : points-service

Cluster: [mfpe-009-pod3-points-service](#) | Status: **ACTIVE** | Desired count: 1 | Pending count: 0 | Running count: 1

Task definition: [mfpe-009-pod3-points-service:1](#)

Service type: REPLICA | Launch type: FARGATE | Service role: AWSServiceRoleForECS | Created By: arn:aws:iam::860061945305:user:30gnodeaws00919

Details | Tasks | Events | Auto Scaling | Deployments | Metrics | Tags | Logs

Last updated on July 14, 2022 12:18:10 PM (0m ago)

Task status: **Running** Stopped

Filter in this page

Task	Task Definition	Last status	Desired status	Group	Launch type	Platform version
385a2a147628490ea...	mfpe-009-pod3-points...	RUNNING	RUNNING	service:points-service	FARGATE	1.4.0

Deployed Successfully

The screenshot shows the Postman interface with a GET request to '52.12.22.180:5003/points/'. The request is successful, returning a status of 200 OK. The response body is 'Health Check ok'.

52.12.22.180:5003/points/

GET 52.12.22.180:5003/points/

Params | Authorization | Headers (6) | Body | Pre-request Script | Tests | Settings

Query Params

KEY	VALUE	DESCRIPTION
Key	Value	Description

Body | Cookies | Headers (5) | Test Results

1 Health Check ok

Connect Employee Service with Offer and Auth Service

```
)
auth.feign.client=54.149.117.103:5000/authapp
auth.feign.name=authapp
!
offer.feign.client=34.218.245.168:5002/offer
offer.feign.name=offer-service
;
logging.level.org.springframework=info
logging.level.org.hibernate.SQL=trace
logging.level.org.hibernate.type.descriptor.sql=trace
)
)
#h2 database setup
spring.datasource.url=jdbc:h2:mem:testdb
spring.datasource.driverClassName=org.h2.Driver
spring.datasource.username=sa
spring.datasource.password=
spring.jpa.database-platform=org.hibernate.dialect.H2Dialect
spring.datasource.initialization-mode=always
spring.h2.console.path=/h2
spring.h2.console.enabled=true
```

Connect Offer service Employee and Auth Service

```
1
2 auth.feign.client=54.149.117.103:5000/authapp
3 auth.feign.name= authapp
4
5 employee.feign.client=34.216.112.90:5001/employee
6 employee.feign.name= employee
7
8 ##h2 database setup
9 spring.datasource.url=jdbc:h2:mem:testdb
10 spring.datasource.driverClassName=org.h2.Driver
11 spring.datasource.username=sa
12 spring.datasource.password=
13 spring.jpa.database-platform=org.hibernate.dialect.H2Dialect
14 spring.datasource.initialization-mode=always
15 spring.h2.console.path=/h2
16 spring.h2.console.enabled=true
```

Connect Points service with Auth, Employee and Offer Service

```
/ #auth
) auth.feign.client=54.149.117.103:5000/authapp
auth.feign.name= authapp
!
#offer
offer.feign.client=34.218.245.168:5002/offer
offer.feign.name=offer-service
;
#employee
employee.feign.client=35.89.226.158:5001/employee
employee.feign.name=employee-service
)
# Spring Framework and application log
```

Connect Front End with ECS Clusters Endpoints

```
@Injectable({
  providedIn: 'root'
})
export class PointsService {
  pointsserviceUrl = "http://52.12.22.180:5003/points"
  constructor(private http: HttpClient) { }
  updatePoints(token: String, id: number) {
    let options = {
      headers: { "Authorization": "Bearer " + token }
    }
    return this.http.post<messageResponse>(this.pointsserviceUrl + "/refreshpointsbyemp/" + id, null, options)
  }
}
```

```
@Injectable({
  providedIn: 'root'
})
export class OfferService {
  offerservice = "http://34.218.245.168:5002/offer"
  employeeserviceUrl = "http://35.89.226.158:5001/employee"
  constructor(private http: HttpClient) { }
  addOffer(token: String, offer: Offer) {
    let options = {
      headers: { "Authorization": "Bearer " + token }
    }
    return this.http.post<messageResponse>(this.offerservice + "/addOffer", offer, options)
  }
  getMyOffers(token: String, id: number) {
    let options = {
      headers: { "Authorization": "Bearer " + token }
    }
    return this.http.get<Offer[]>(this.employeeserviceUrl + "/viewEmployeeOffers/" + id, options)
  }
}
```

```
@Injectable({
  providedIn: 'root'
})
export class AuthenticationService {
  url = "http://4.149.117.103:5000/authapp"
  constructor(private http: HttpClient) { }
  getUserToken(empDetails: any) {
    return this.http.post<authResponse>(this.url + "/login", empDetails);
  }
}
```

Sample Code

buildspec.yml

```
1 version: 0.2
2
3
4 phases:
5   pre_build:
6     commands:
7       - mvn clean install
8       - echo Logging in to Amazon ECR...
9       - aws --version
10      - $(aws ecr get-login --region $AWS_DEFAULT_REGION --no-include-email)
11      - REPOSITORY_URI=860061945305.dkr.ecr.us-west-2.amazonaws.com/mfpe-009-pod3-auth-service-new
12      - COMMIT_HASH=$(echo $CODEBUILD_RESOLVED_SOURCE_VERSION | cut -c 1-7)
13      - IMAGE_TAG=build-$(echo $CODEBUILD_BUILD_ID | awk -F":" '{print $2}')
14   build:
15     commands:
16       - echo Build started on `date`
17       - echo Building the Docker image...
18       - docker build -t $REPOSITORY_URI:latest .
19       - docker tag $REPOSITORY_URI:latest $REPOSITORY_URI:$IMAGE_TAG
20   post_build:
21     commands:
22       - echo Build completed on `date`
23       - echo Pushing the Docker images...
24       - docker push $REPOSITORY_URI:latest
25       - docker push $REPOSITORY_URI:$IMAGE_TAG
26       - echo Writing image definitions file...
27       - printf ' [{"name": "auth-service", "imageUri": "%s"}]' $REPOSITORY_URI:$IMAGE_TAG > imagedefinitions.json
28       - cat imagedefinitions.json
29 artifacts:
30   files:
31     - imagedefinitions.json
32     - target/auth-service.jar
```

Dockerfile

```
1 FROM openjdk:8
2 EXPOSE 5000
3 ADD target/auth-service.jar auth-service.jar
4 ENTRYPOINT ["java", "-jar", "auth-service.jar"]
```