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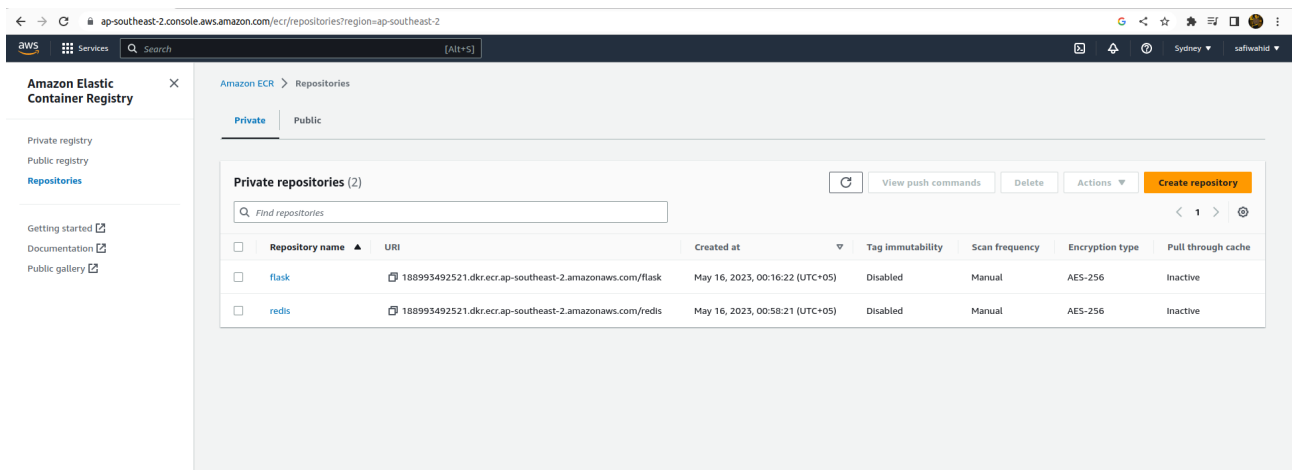
### 1. Setting the environment variable for service.

```
day_1_microservices > integrating_flask_redis > app.py > ...
1  import time
2  import os
3
4  import redis
5  from flask import Flask
6
7  app = Flask(__name__)
8  service=os.environ.get('SERVICE_DISCOVERY')
9  cache = redis.Redis(host=service, port=6379)
10
11
12 def get_and_increase_hit_count():
13     retries = 5
14     while True:
15         try:
16             return cache.incr("hits")
17         except redis.exceptions.ConnectionError as exc:
18             if retries == 0:
19                 raise exc
20             retries -= 1
21             time.sleep(0.5)
22
23
24 @app.route("/")
25 def hello():
26     count = get_and_increase_hit_count()
27     return "Hello World! I have been seen {} times.\n".format(count)
```

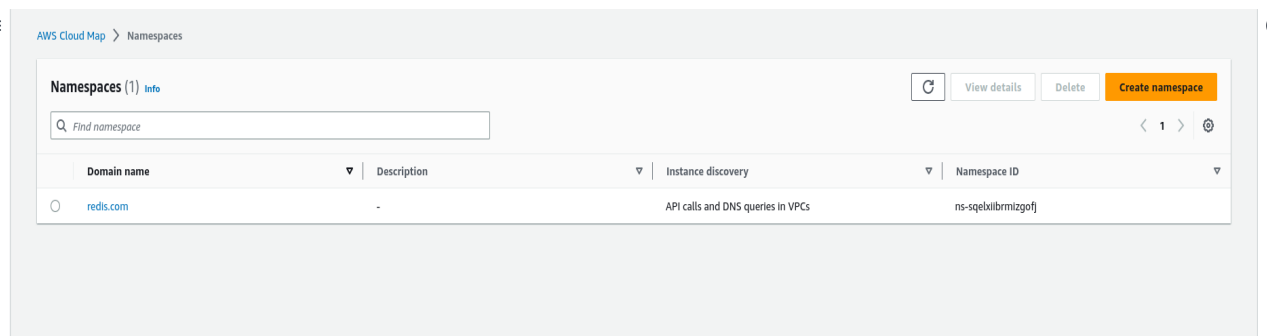
### 2.adding env to dockerfile

```
day_1_microservices > integrating_flask_redis > Dockerfile
1  FROM python:3.7-alpine
2
3  WORKDIR /code
4
5  ENV FLASK_APP=app.py
6  ENV FLASK_RUN_HOST=0.0.0
7  ENV SERVICE_DISCOVERY='redis'
8
9  RUN apk add --no-cache gcc musl-dev linux-headers
10 COPY requirements.txt requirements.txt
11
12 RUN pip install -r requirements.txt
13
14 EXPOSE 5000
15 |
16 COPY . .
17
18 CMD ["flask", "run"]
```

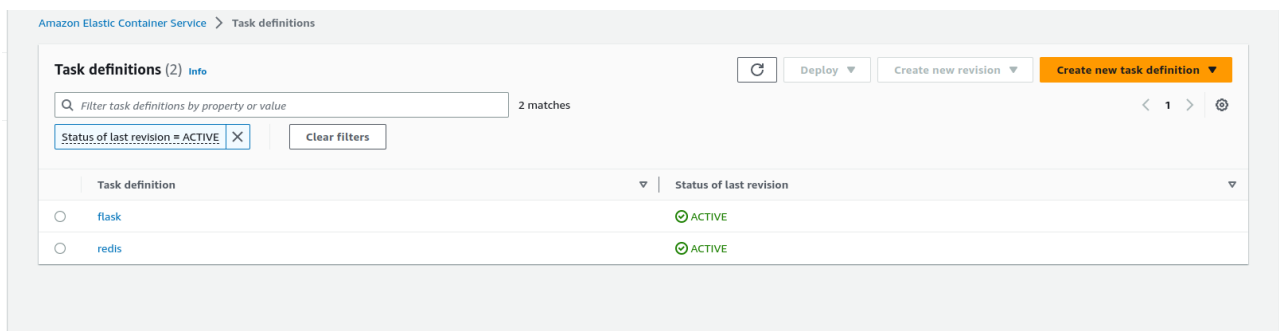
### 3. Pushed flask and redis images to ECR.



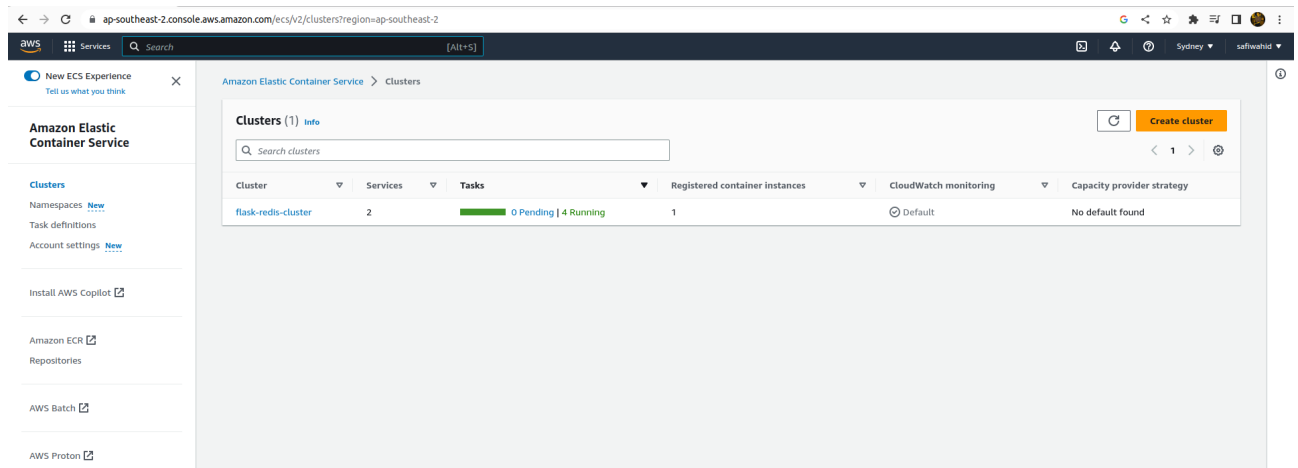
#### 4. Creating namespaces and services.



#### 5. Creating Task definitions for flask and redis with port mappings and configurations.



#### 6. Adding services the cluster.



## Container Service

### Clusters

Namespaces [New](#)

Task definitions [New](#)

Account settings [New](#)

Install AWS Copilot [Link](#)

Amazon ECR [Link](#)

Repositories

AWS Batch [Link](#)

AWS Proton [Link](#)

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**Cluster overview**

ARN flask-redis-cluster	Status Active	CloudWatch monitoring Default	Registered container instances 1
Services	Tasks		
Draining -	Active 2	Pending -	Running 4

**Services**

Service name	Status	ARN	Service type	Deployments and tasks	Last deploy...	Task defini...	Revision
flask	Active	arn:aws:ecs...	REPLICA	2/2 Tasks ru...	Completed	flask	1
redis	Active	arn:aws:ecs...	REPLICA	2/2 Tasks ru...	Completed	redis	1

7. Checking the network interface of container and copying the public IP.

EC2

>

Network interfaces

>

eni-04e8d4f7c369150d6

Network interface summary for eni-04e8d4f7c369150d6

Delete network interface

Actions

▼ Network interface details

<div>Network interface ID</div> <div>eni-04e8d4f7c369150d6</div>	<div>Name</div> <div>-</div>	<div>Description</div> <div>arn:aws:ecs:ap-southeast-2:188993492521:attachment/40804bc8-63e5-4e26-b40d-ad1609718eb9</div>
<div>Network interface status</div> <div>In-use</div>	<div>Interface type</div> <div>Elastic network interface</div>	<div>Security groups</div> <div>sg-03a73ad6eb44826a9 (flask-4045)</div>
<div>VPC ID</div> <div>vpc-0dda8ff0488842e9a</div>	<div>Subnet ID</div> <div>subnet-0fa69535419984494</div>	<div>Availability Zone</div> <div>ap-southeast-2a</div>
<div>Owner</div> <div>188993492521</div>	<div>Requester ID</div> <div>578734482556</div>	<div>Requester-managed</div> <div>True</div>
<div>Source/dest. check</div> <div>True</div>		

▼ IP addresses

<div>Private IPv4 address</div> <div>10.0.0.234</div>	<div>Private IPv4 DNS</div> <div>ip-10-0-0-234.ap-southeast-2.compute.internal</div>	<div>Elastic Fabric Adapter</div> <div>False</div>
<div>Public IPv4 address</div> <div>13.55.209.230</div>	<div>Public IPv4 DNS</div> <div>ec2-13-55-209-230.ap-southeast-2.compute.amazonaws.com</div>	<div>IPv6 addresses</div> <div>-</div>
<div>Secondary private IPv4 addresses</div> <div>-</div>	<div>Association ID</div> <div>-</div>	<div>Elastic IP address owner</div> <div>amazon</div>
<div>MAC address</div> <div>02:ae:5b:1c:53:04</div>	<div>IPv4 Prefix Delegation</div> <div>-</div>	<div>IPv6 Prefix Delegation</div> <div>-</div>

▼ Instance details

<div>Instance ID</div> <div>-</div>	<div>Instance owner</div> <div>672209591922</div>	<div>Device index</div> <div>1</div>
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### 8. Checking the deployed instance on 5000 port.

Hello World! I have been seen 5 times.