**ASSIGNMENT 4.5**

**on**

**Cloud Deployment**

**Submitted by:**

**Haseebullah Shaikh (2303.KHI.DEG.015)**

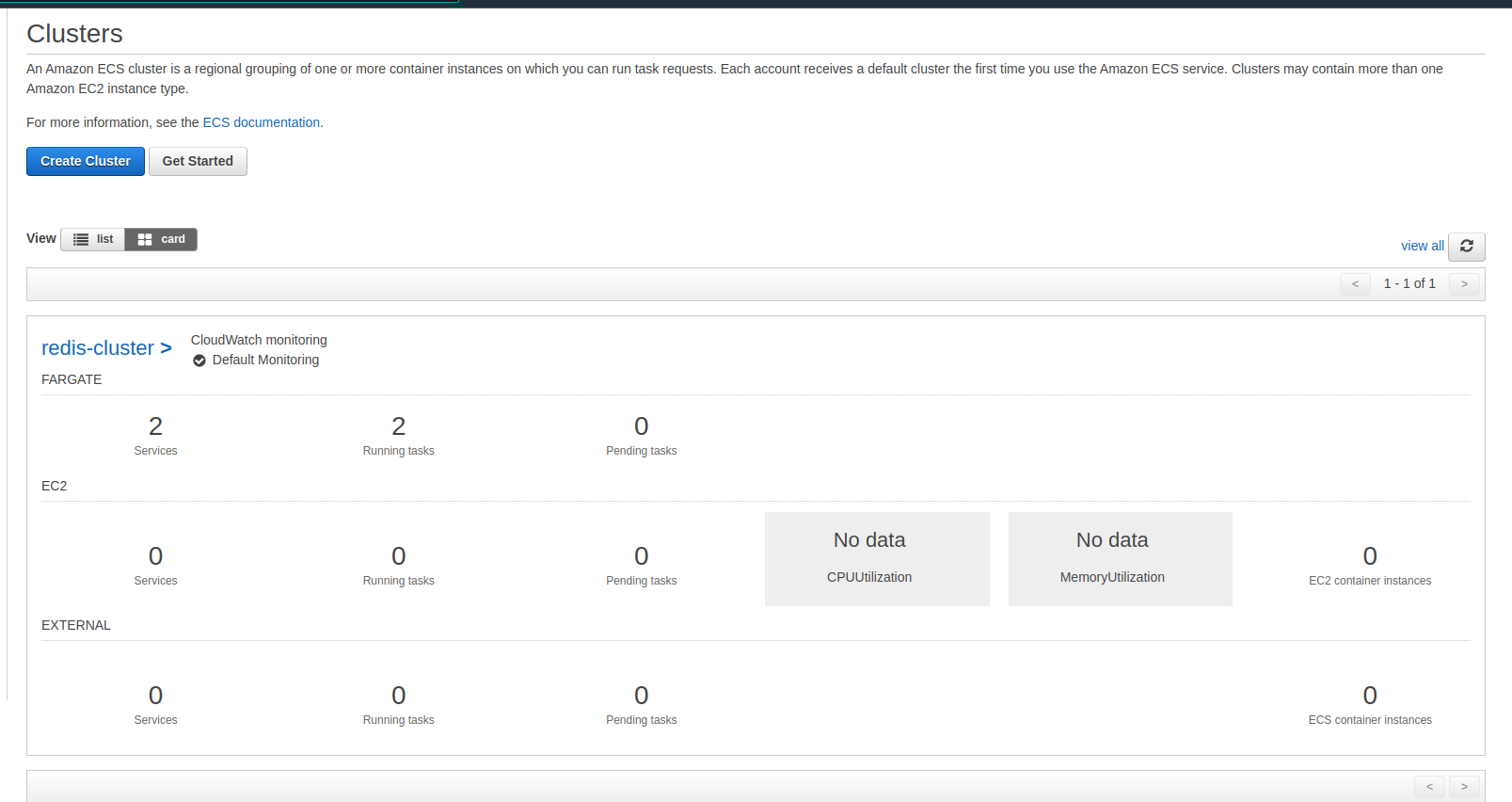
**and**

**Faiza Gulzar Ahmed (2303.khi.deg.001)**

**Dated:** 16th May 2023

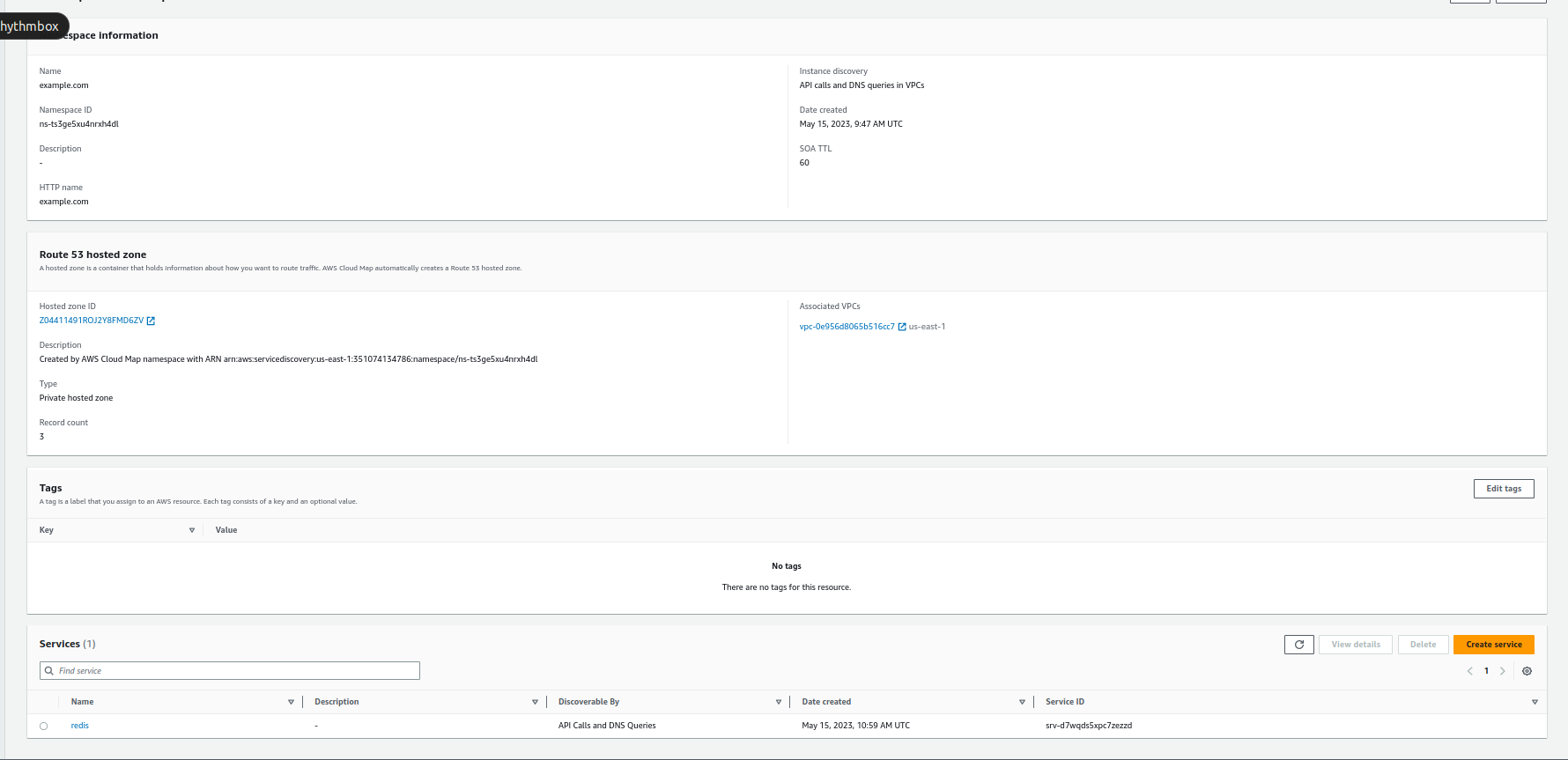
**Solution:**

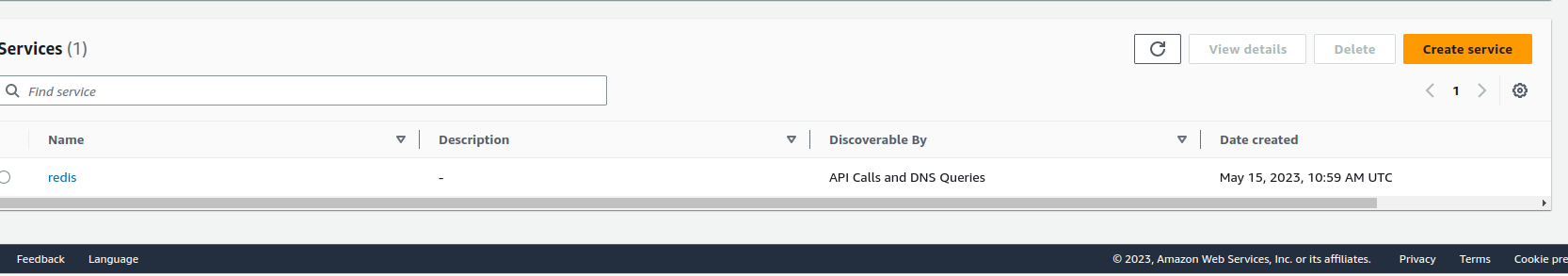
1. **Created AWS Cluster to get necessary resources such as VPC and subnets.**

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1. **Setting up service recovery to enable commination between redis and counter app using same vpc.**

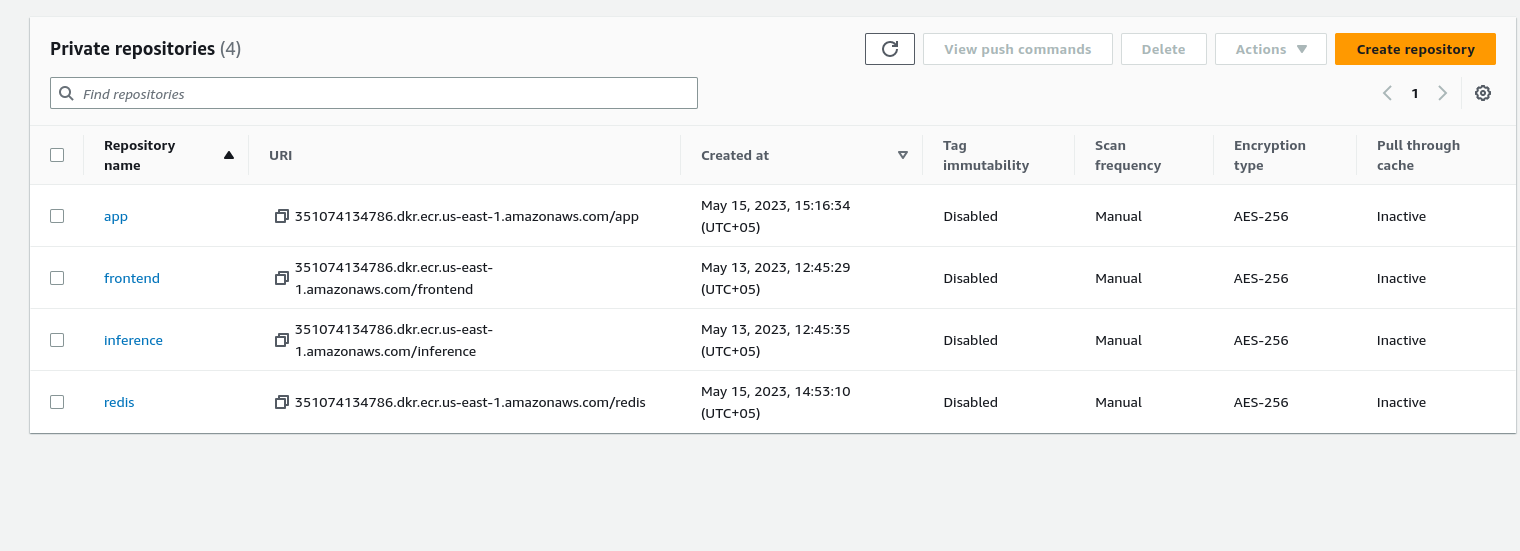
Creating name space

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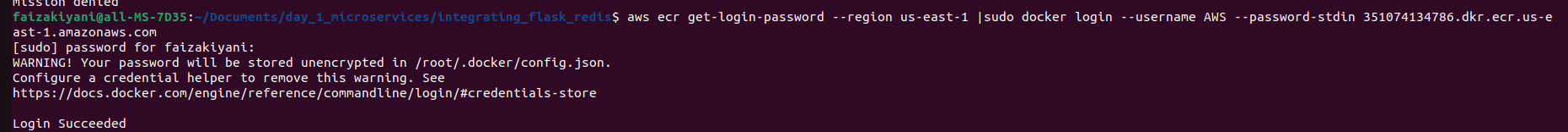
Creating Service in the namespace

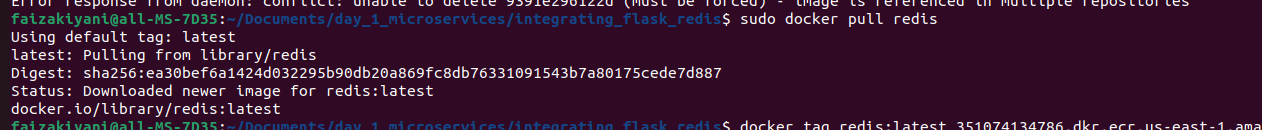
**3. Built and pushed docker images to Amazon Container Registry**

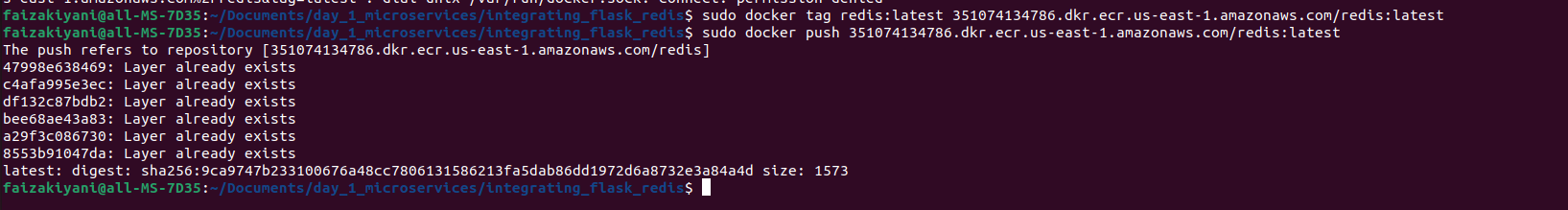
Created two private repositories redis and app.



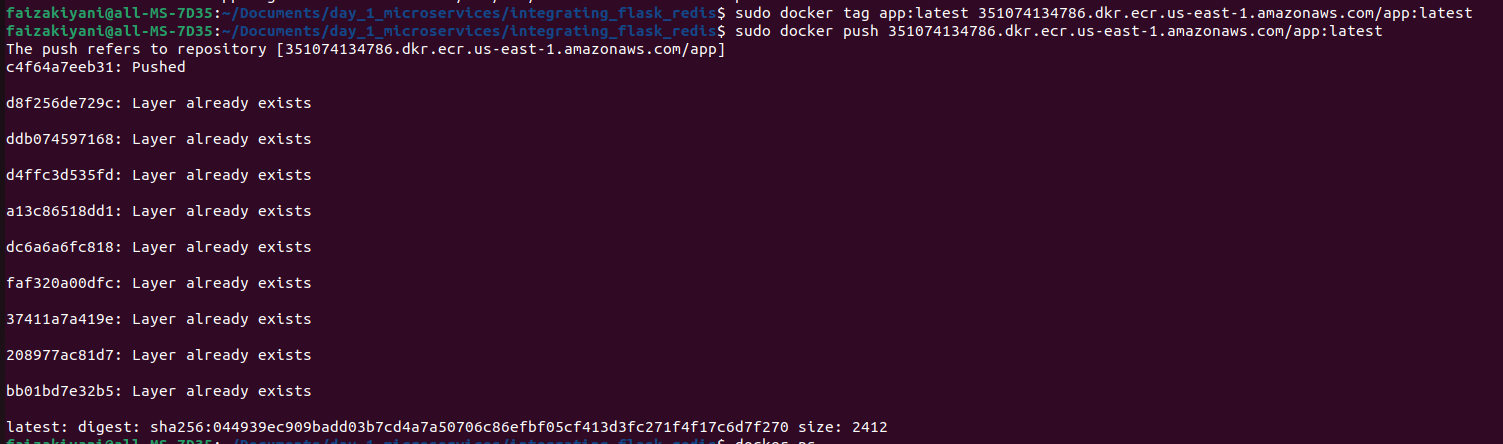
Pushed the images in their respective repository using commands in view push commands.

Pulled and pushed redis image

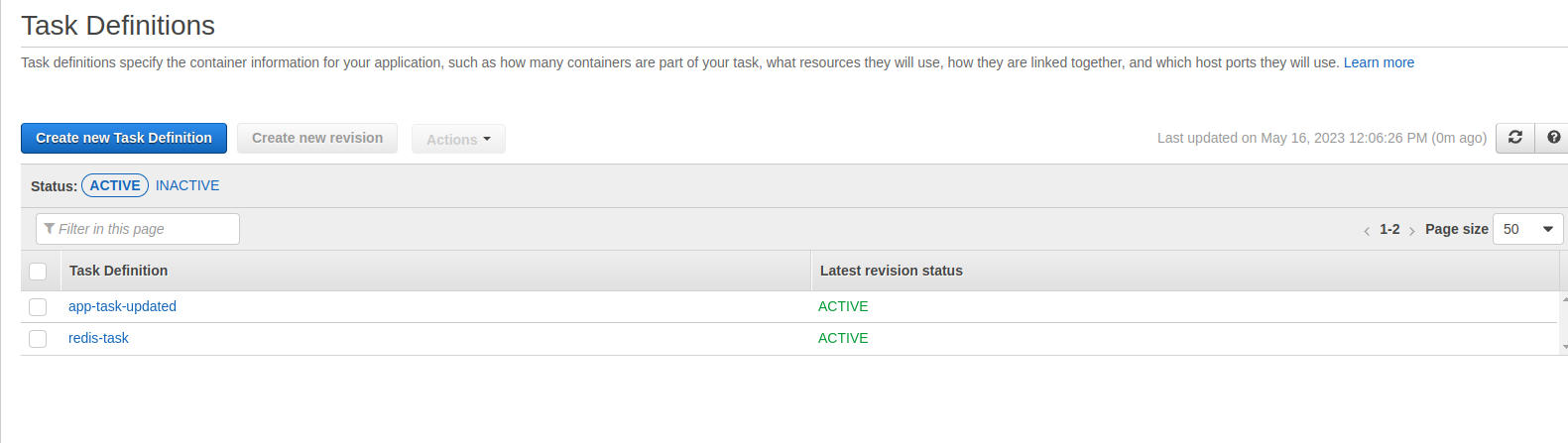


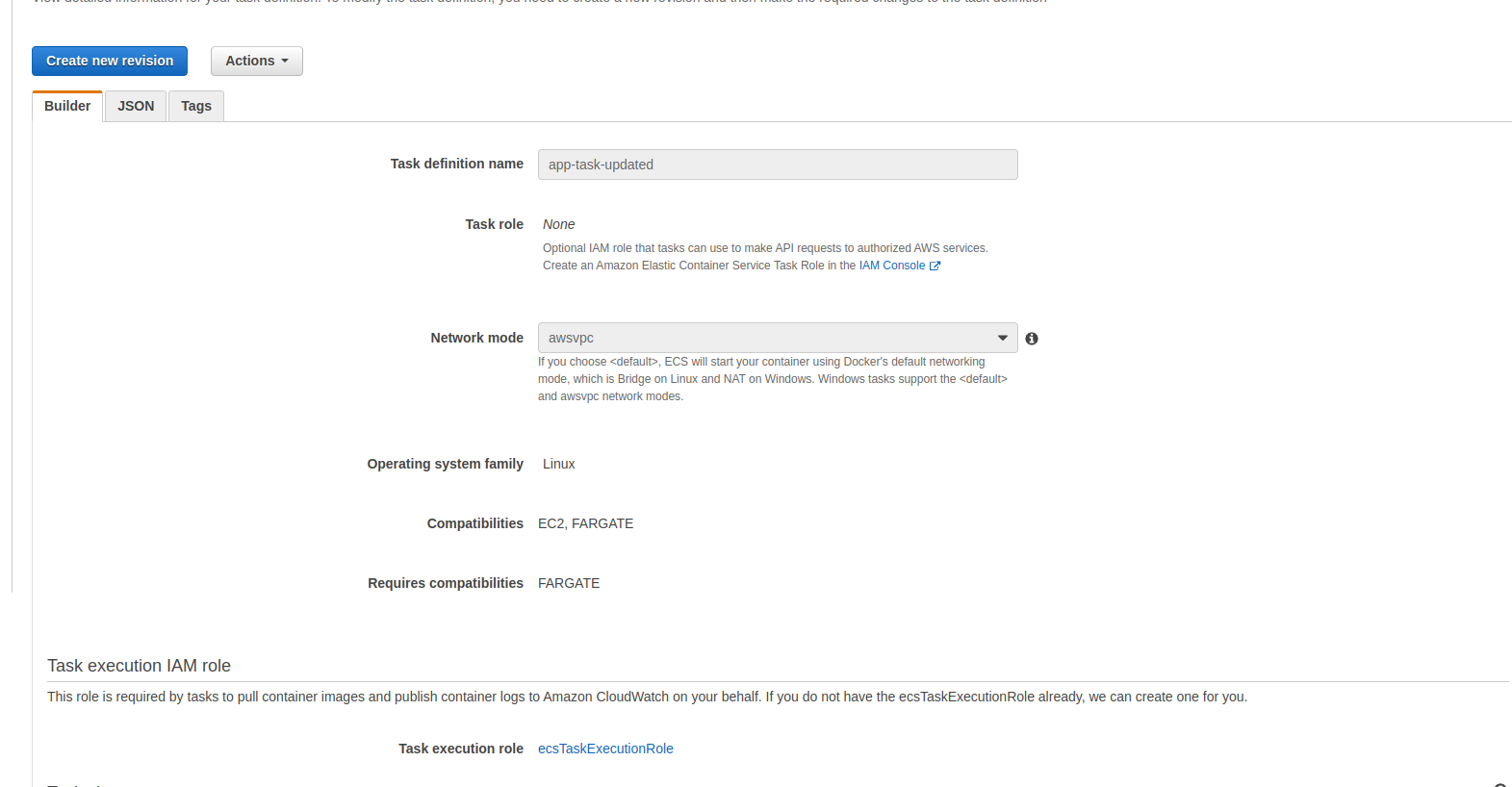


Built and pushed app image

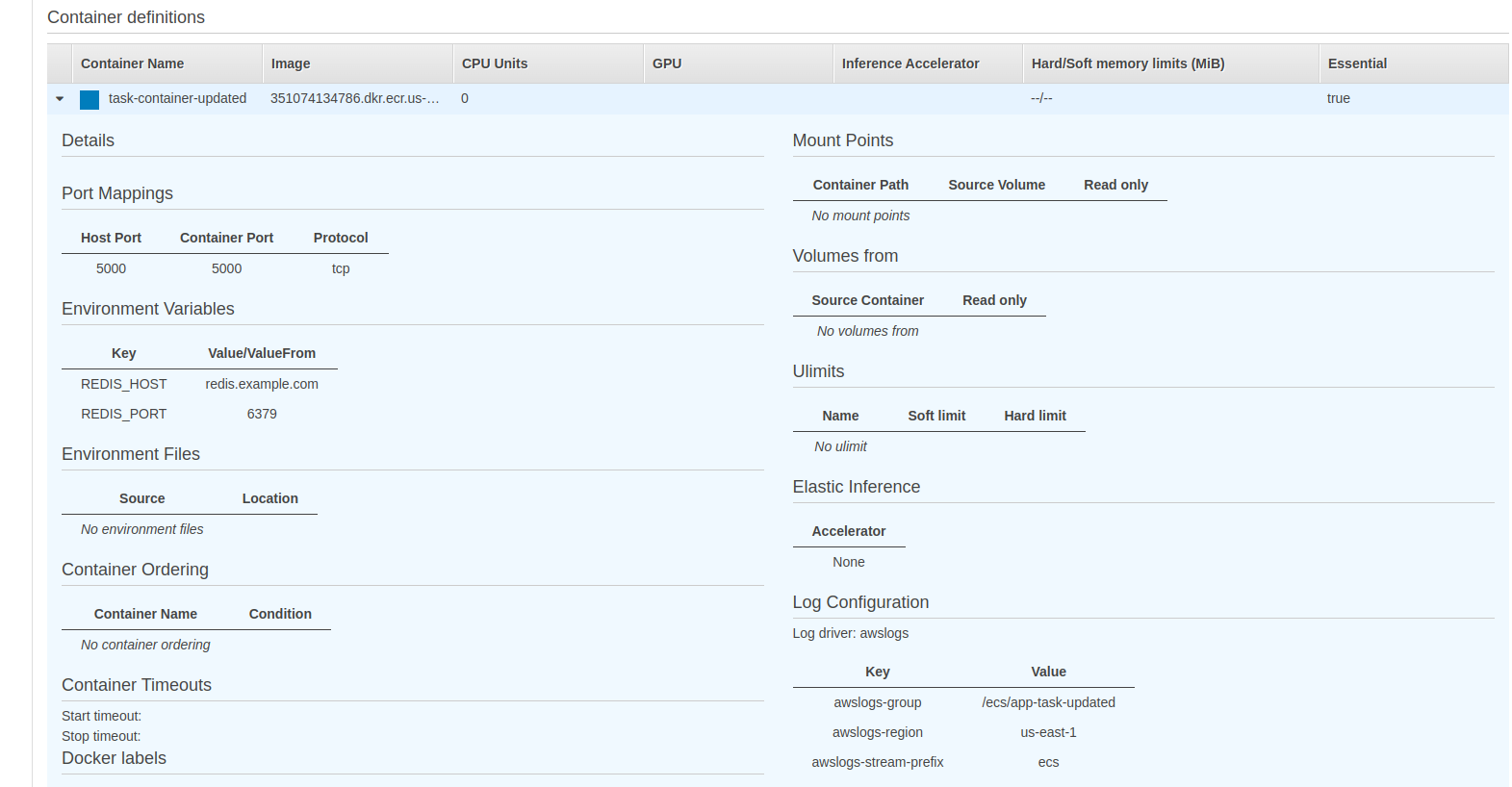


**4. Created task definition for each service specified provided memory and cpu, created container for each service to add image. Assigned appropriate ports and enviroment variables.**

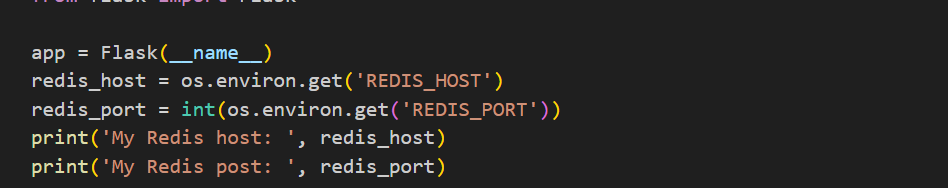
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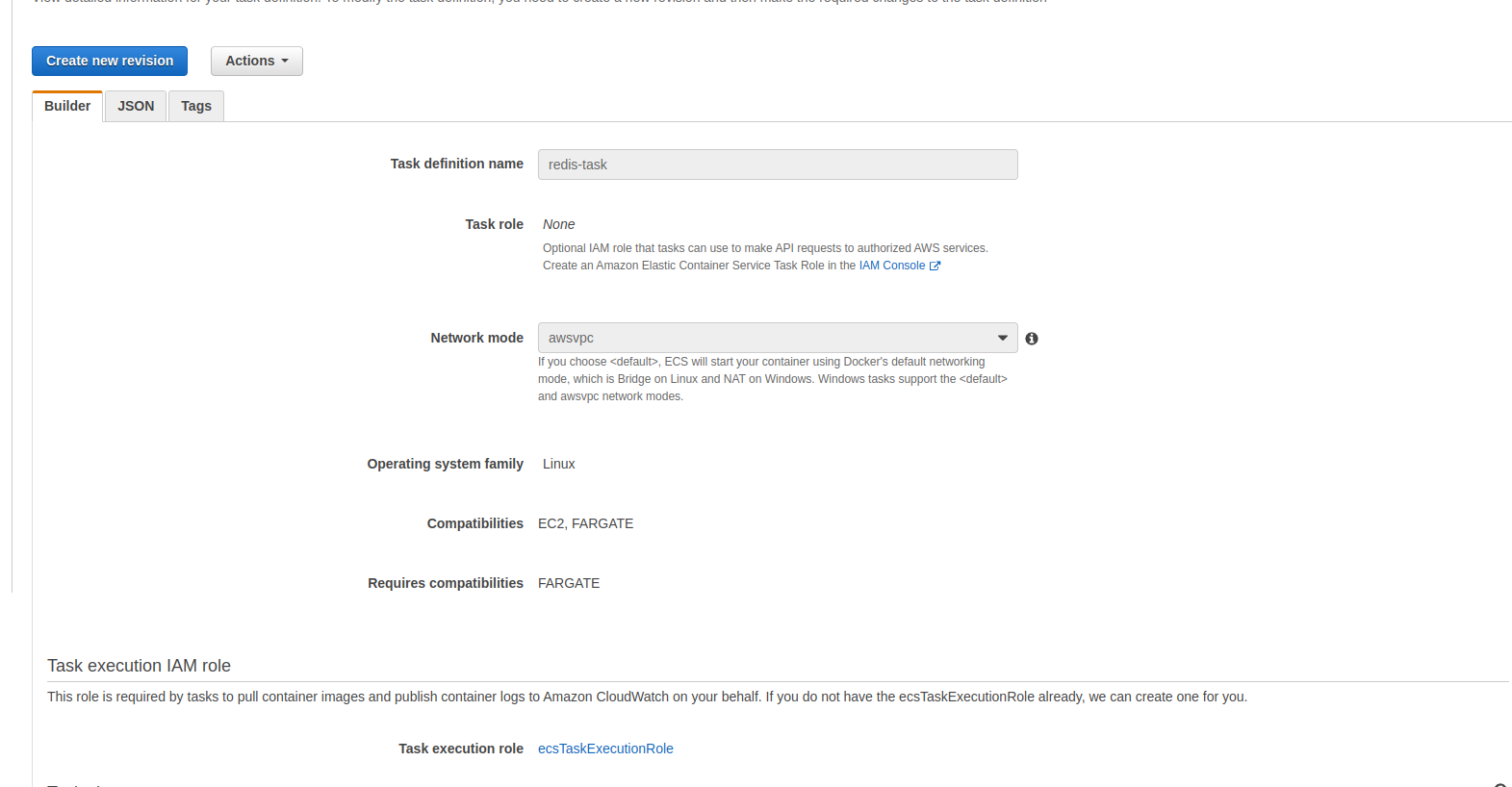
Setting the enviroment variables REDIS\_HOST and REDIS\_PORT, that we have updated in existing given app.

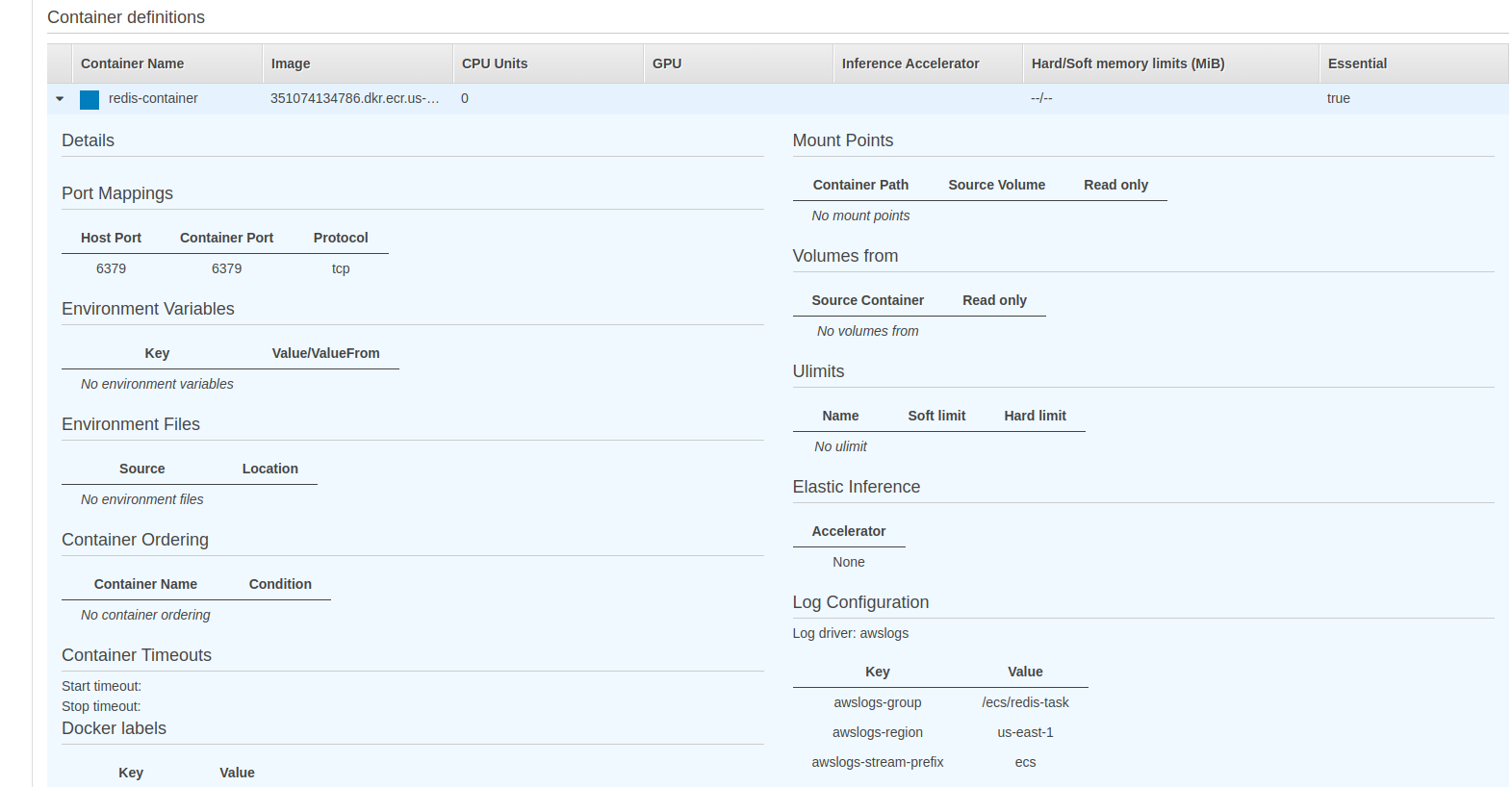
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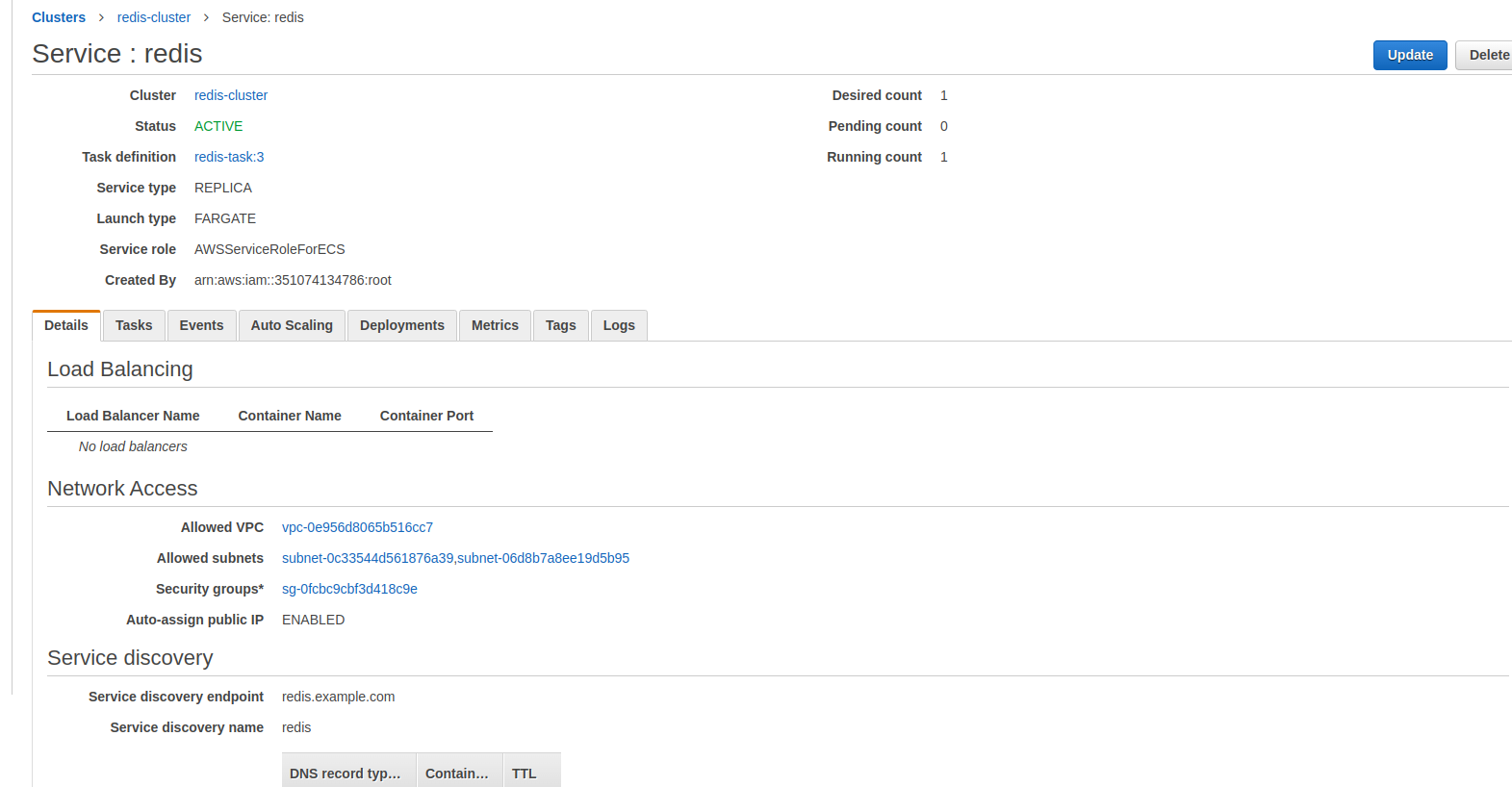
Updated app for creating enviroment variables, so app service can access the redis through these enviroment variables.

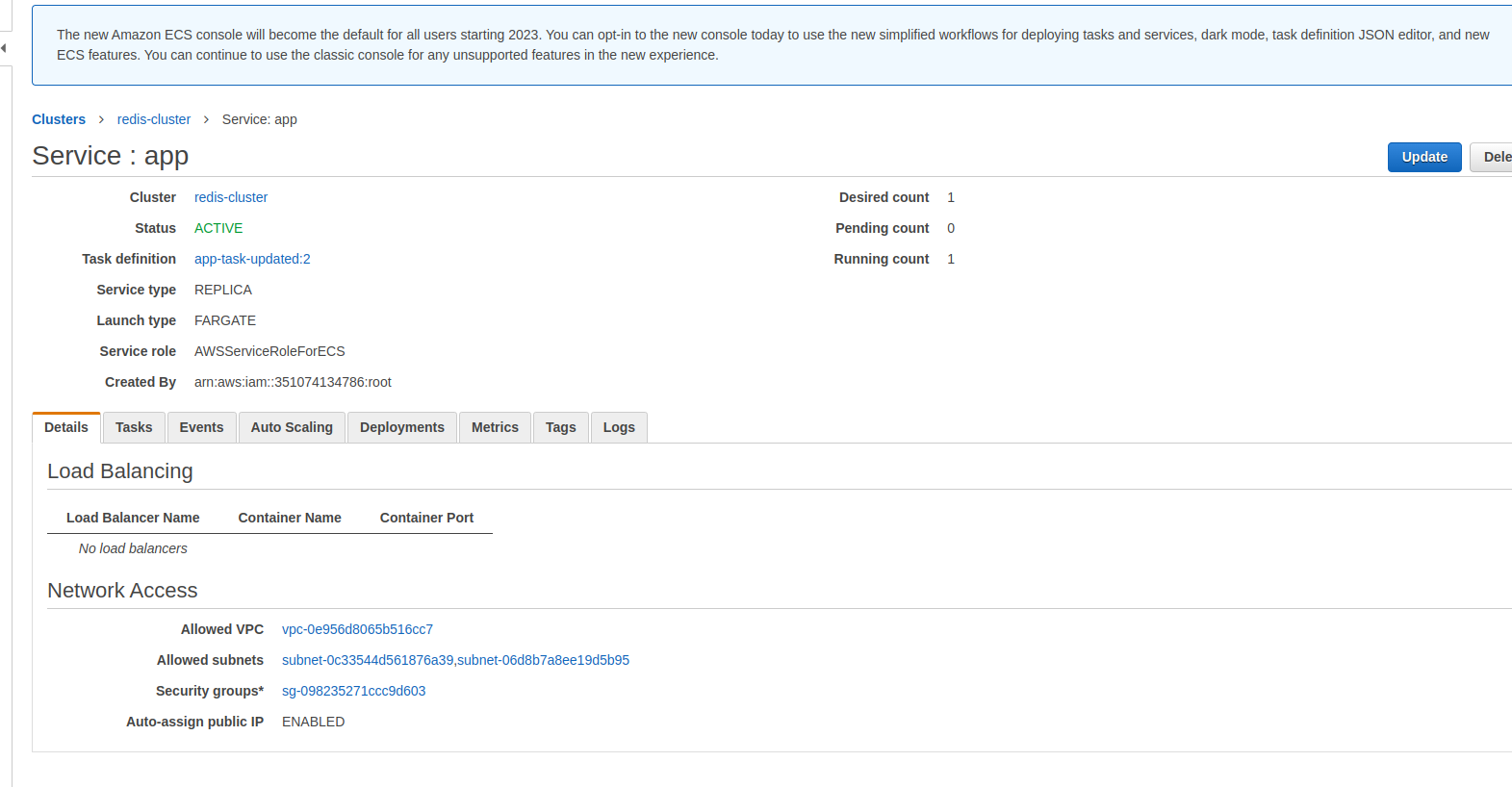
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Creating task for redis service adding container for image and setting appropriate port**.**

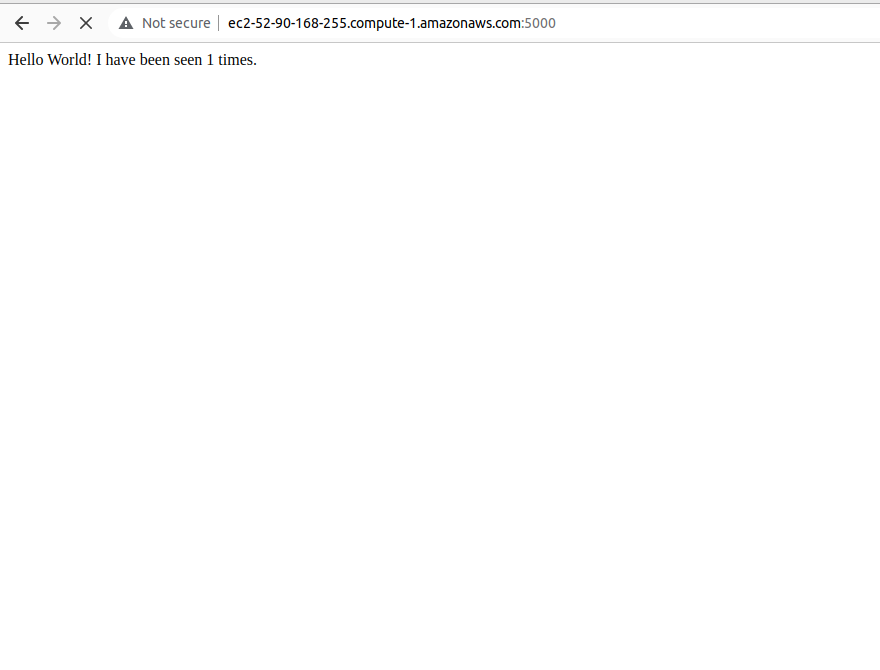
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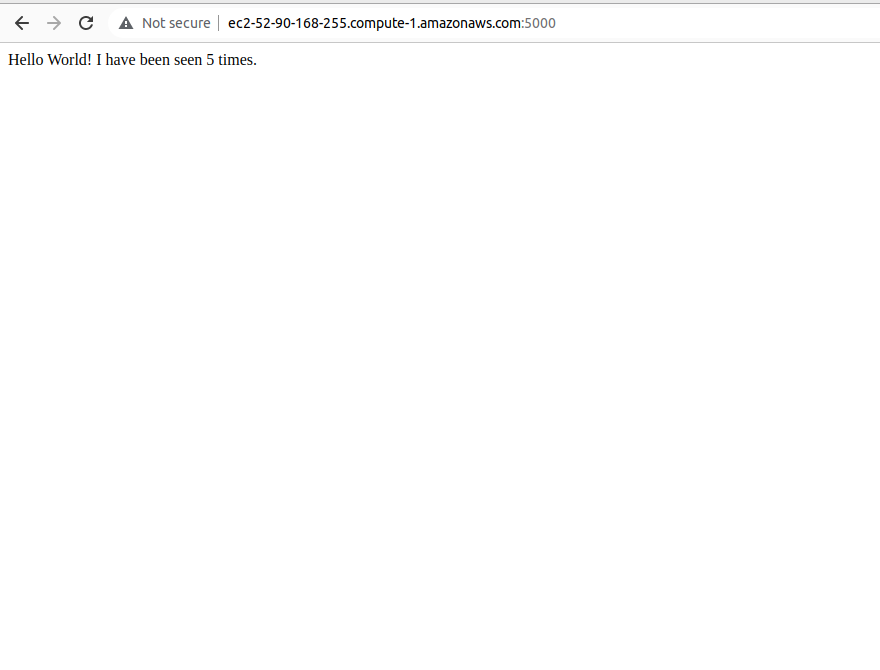
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**5. Created two ECS services redis and app in previously created cluster.**

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**Verifying app is accessible at port 5000 and can communicate with redis for storing visits counts in cache.**

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**The End ☺**