LAB: Create an S3 Bucket from a Fargate Cluster Task via IAM policies

You need:

- An AWS Account
- Configured AWS Cli locally

Duration of the Lab: 30 Minutes.

Difficulty: medium

Try to list S3 Buckets from your local machine.

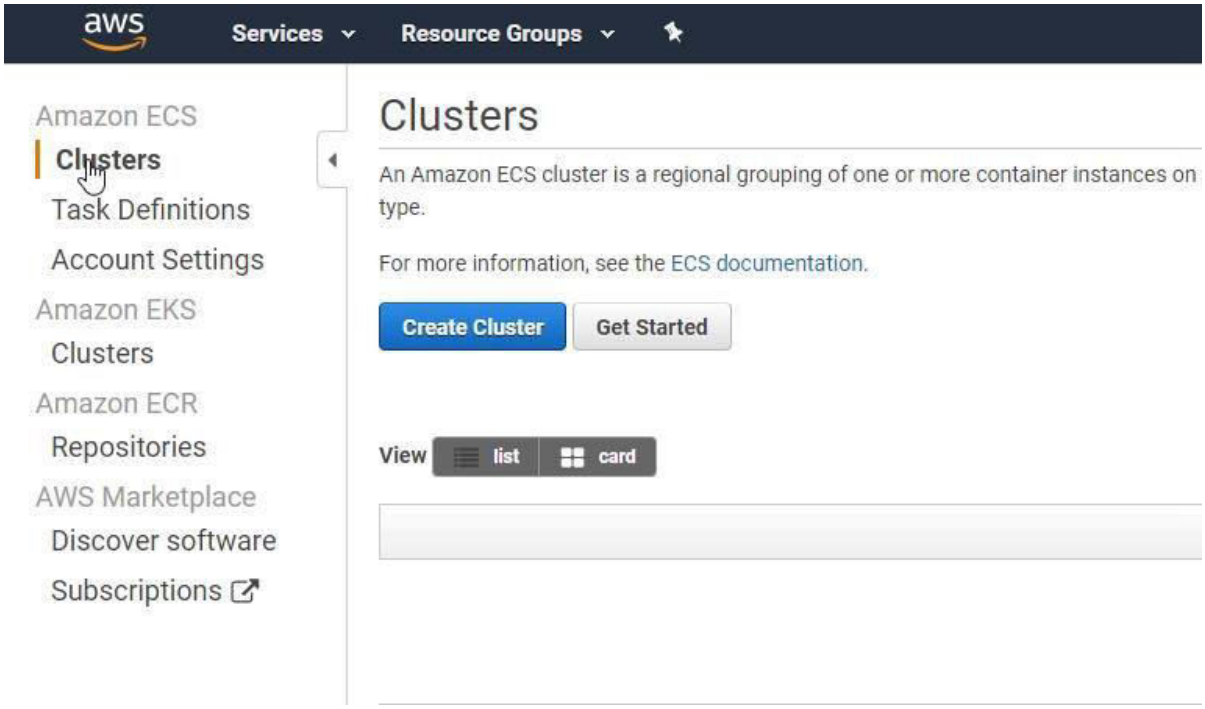
Open a new Terminal/PowerShell and see if you can run the image banst/awscli locally and mount your local aws credentials into the container:

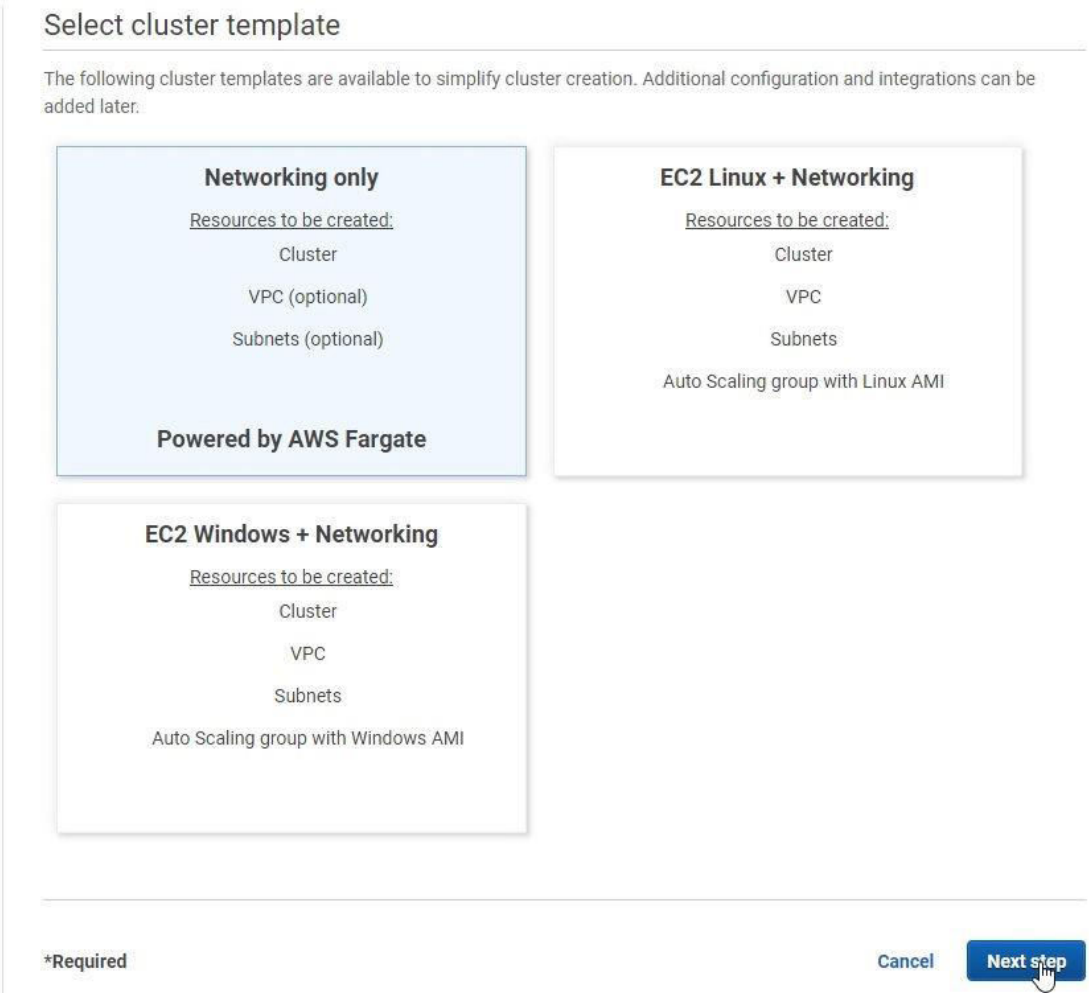
```
docker run --rm -it -v ~/.aws:/root/.aws banst/awscli s3 ls
```

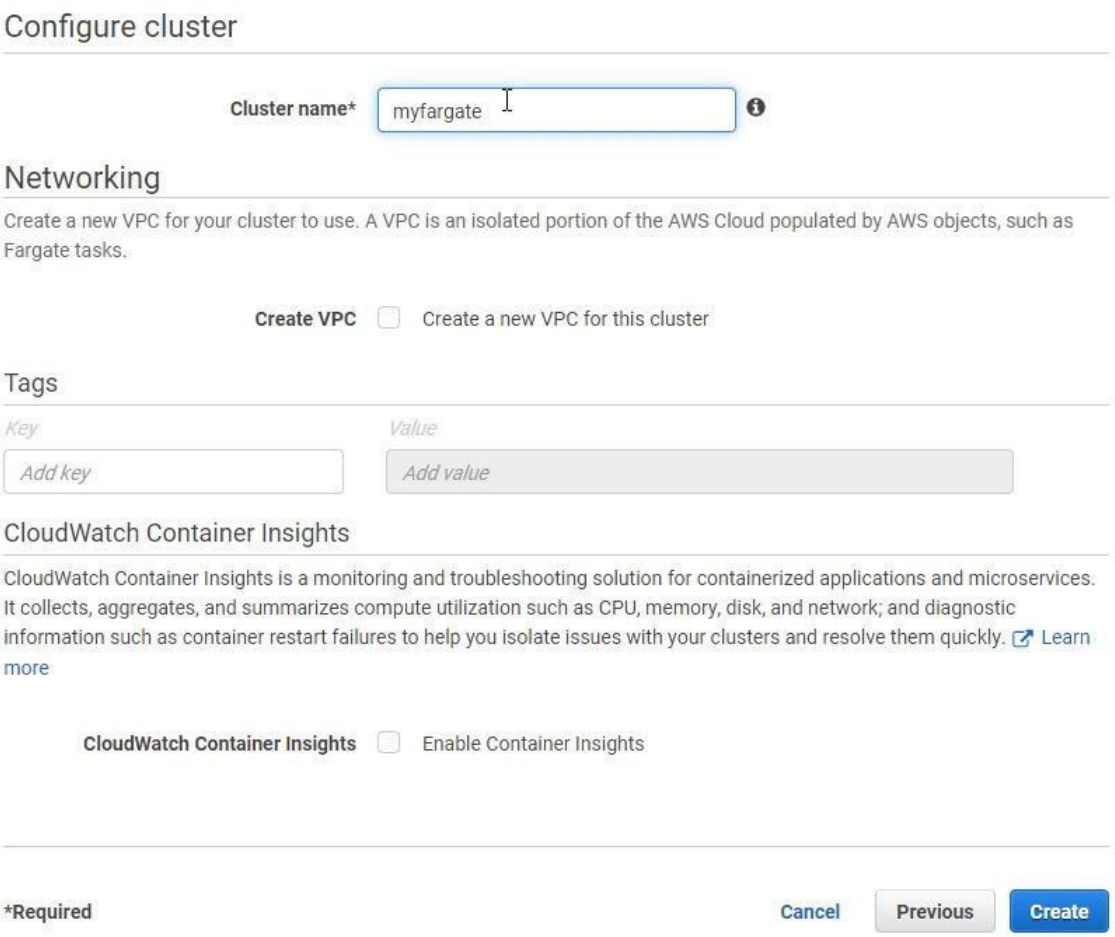
It should, ideally, output nothing (no error message), or S3 buckets, if you still have some. So we know the awscli works, let's use this in a container in the aws ecosystem!

Create a new Fargate Cluster

If you deleted your cluster in the previous lab then create a new one:

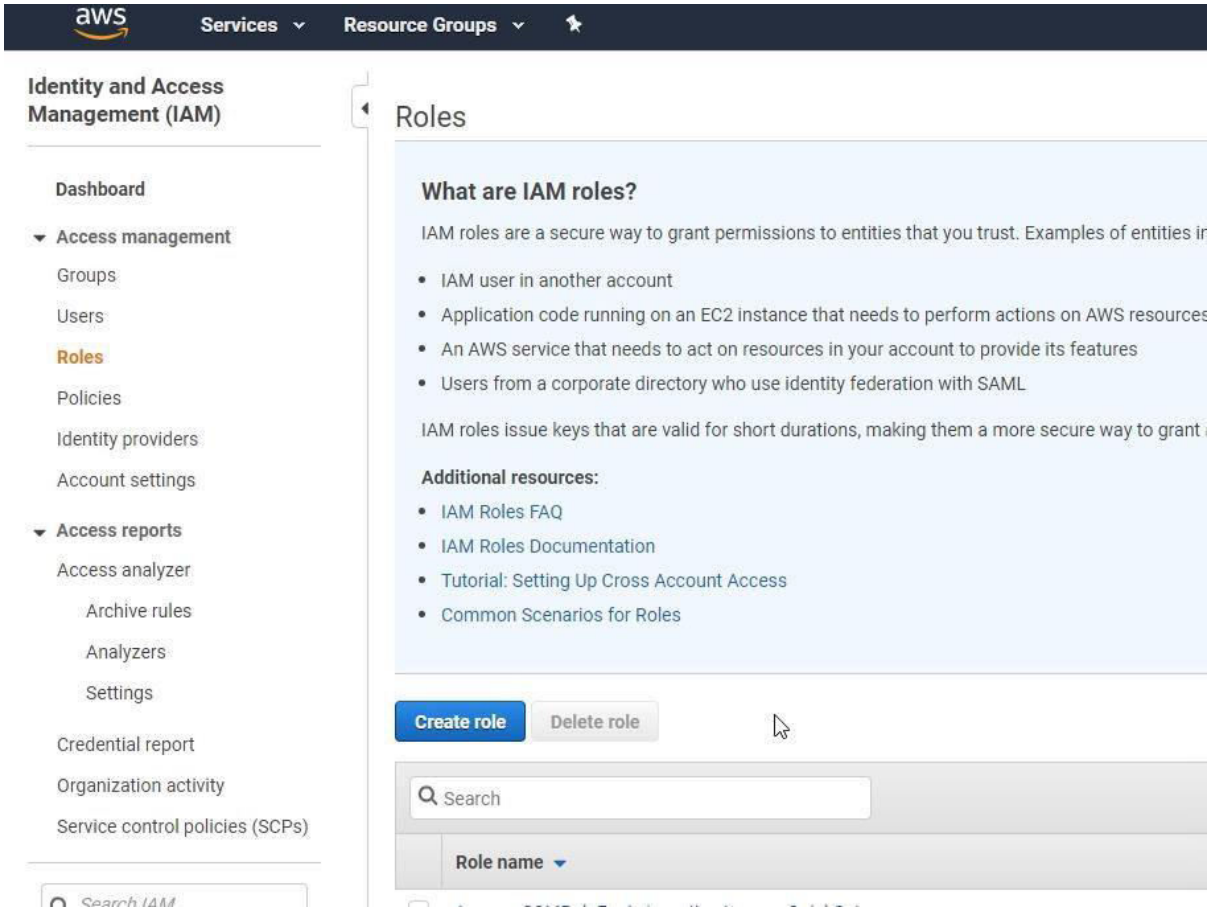



Select cluster template
The following cluster templates are available to simplify cluster creation. Additional configuration and integrations can be added later.
Networking only
Resources to be created:
Cluster
VPC (optional)
Subnets (optional)
Powered by AWS Fargate
EC2 Linux + Networking
Resources to be created:
Cluster
VPC
Subnets
Auto Scaling group with Linux AMI
EC2 Windows + Networking
Resources to be created:
Cluster
VPC
Subnets
Auto Scaling group with Windows AMI
*Required
Cancel
Next step

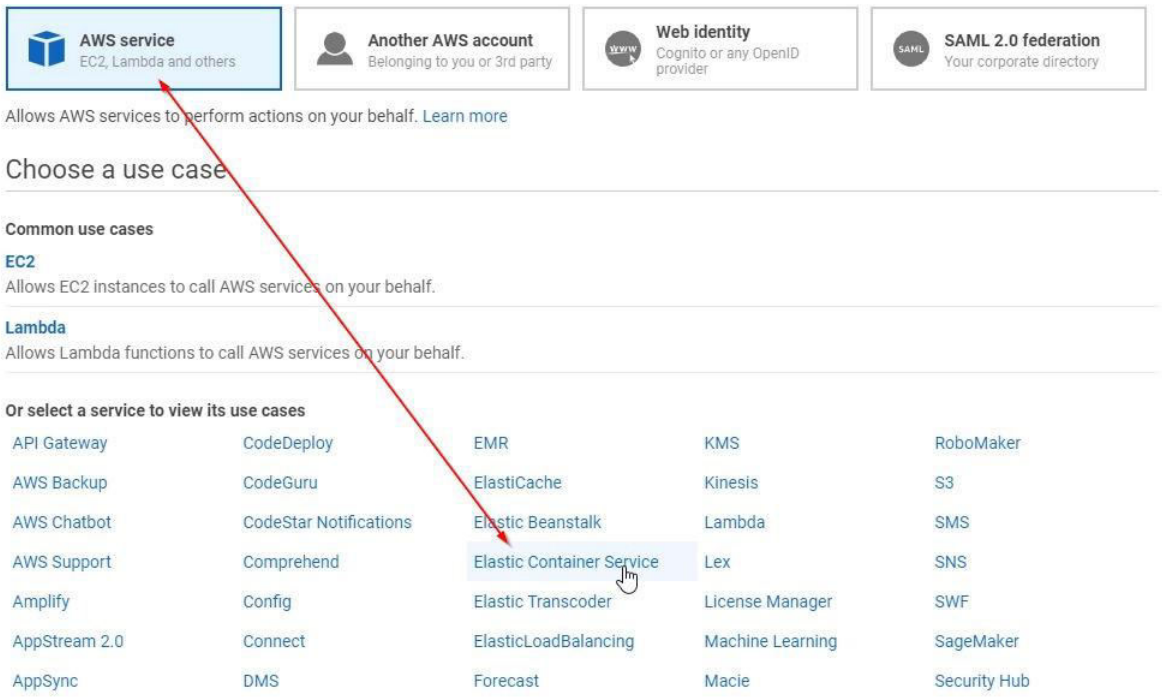


Create a new IAM Role for your Task

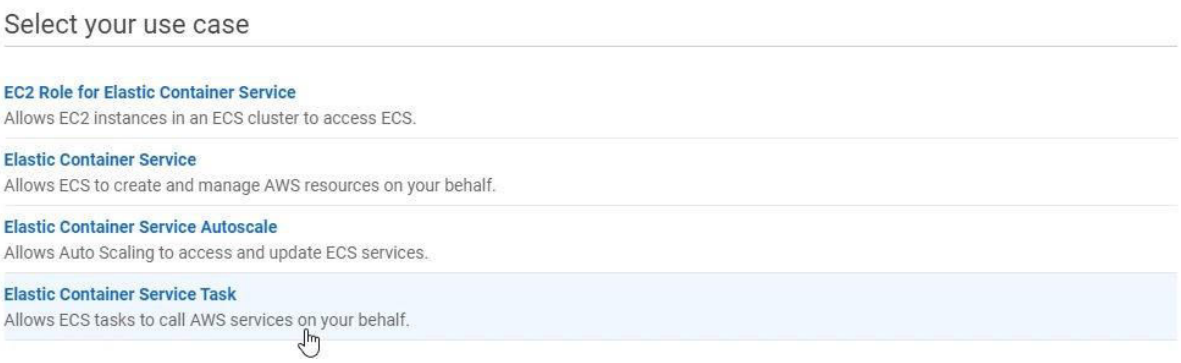
Open the IAM Dashboard -> Roles -> Create role



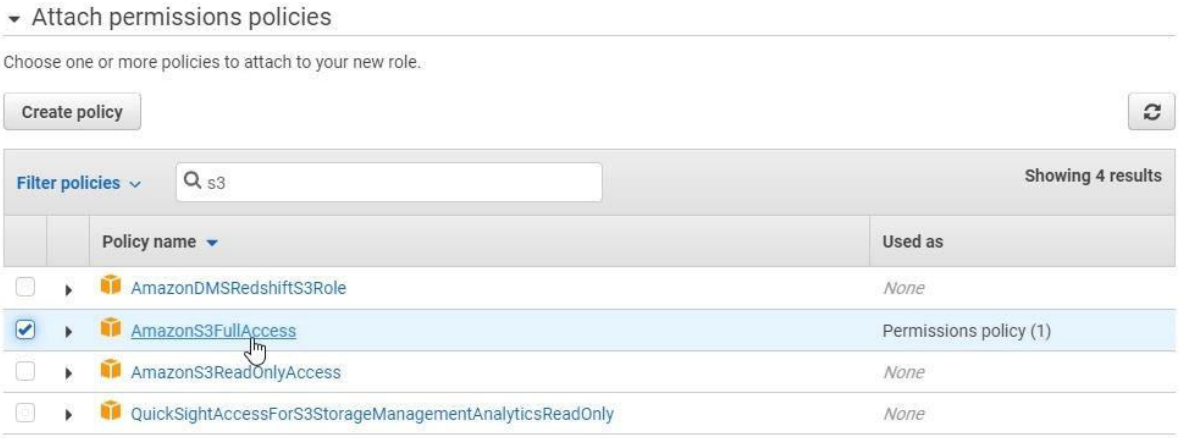
This time select “Elastic Container Service” as AWS Service:



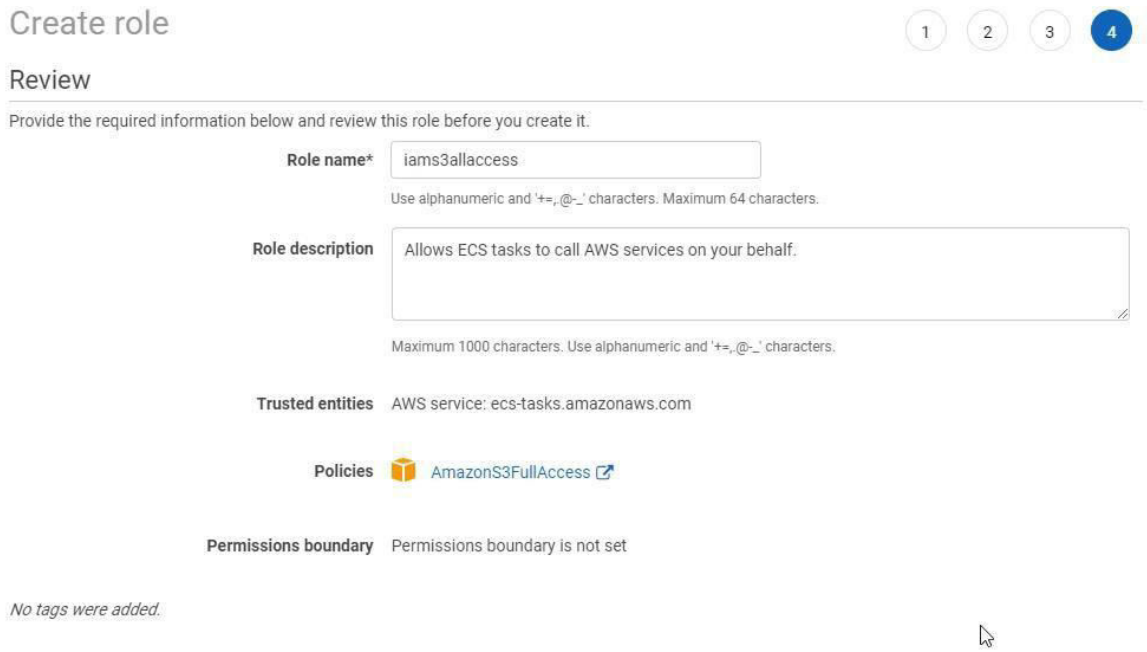
Select the Elastic Container Service Task, because our Task will talk to other AWS Services:



Give S3 Full Access Permissions:



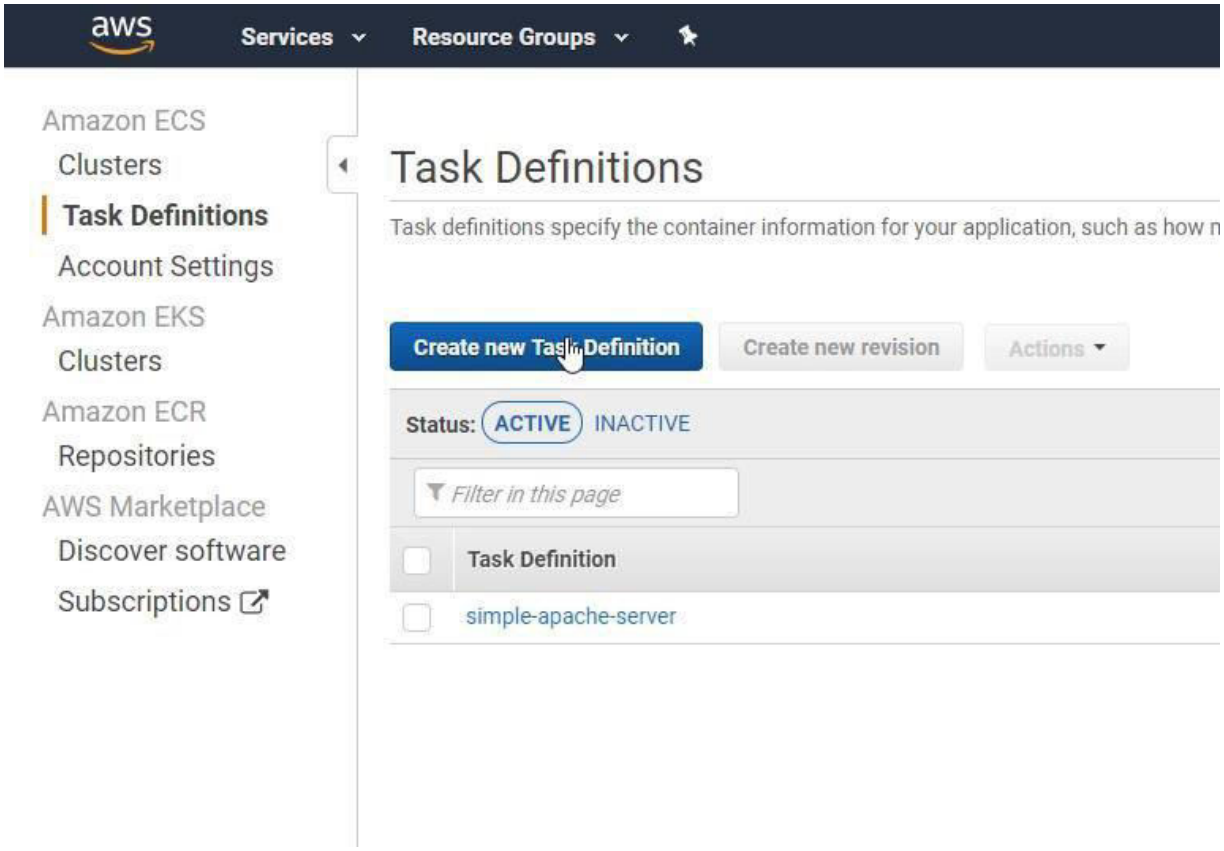
Give the Role a name, for example “iams3allaccess”:

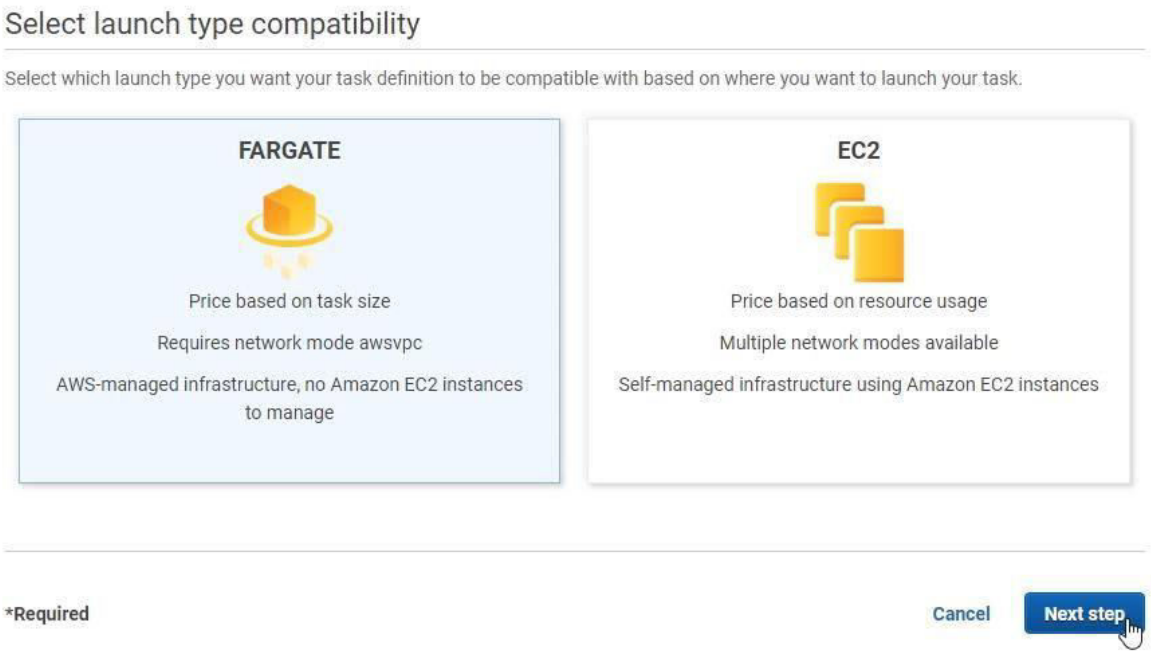


Then Create the Role

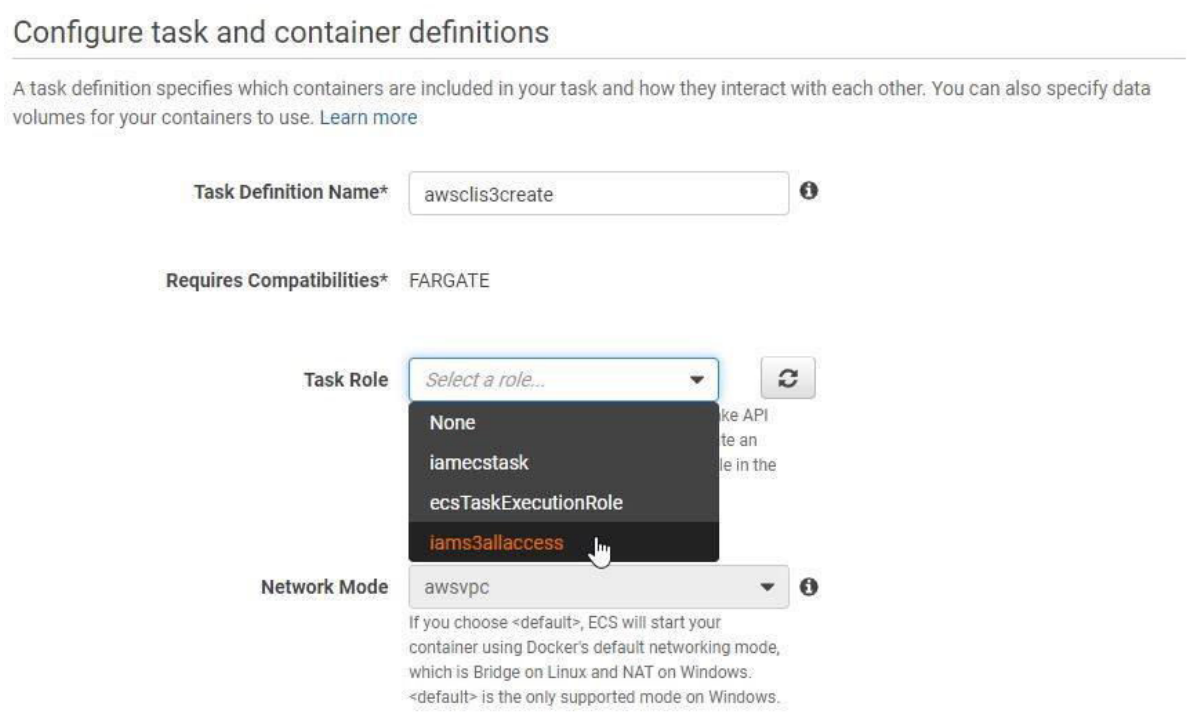
Create a Task Definition

Now we need a Task definition for our task





Select the Role you created in the previous IAM Step:



1.5GB of RAM and 0.25 vCPU is enough.

Add containers:

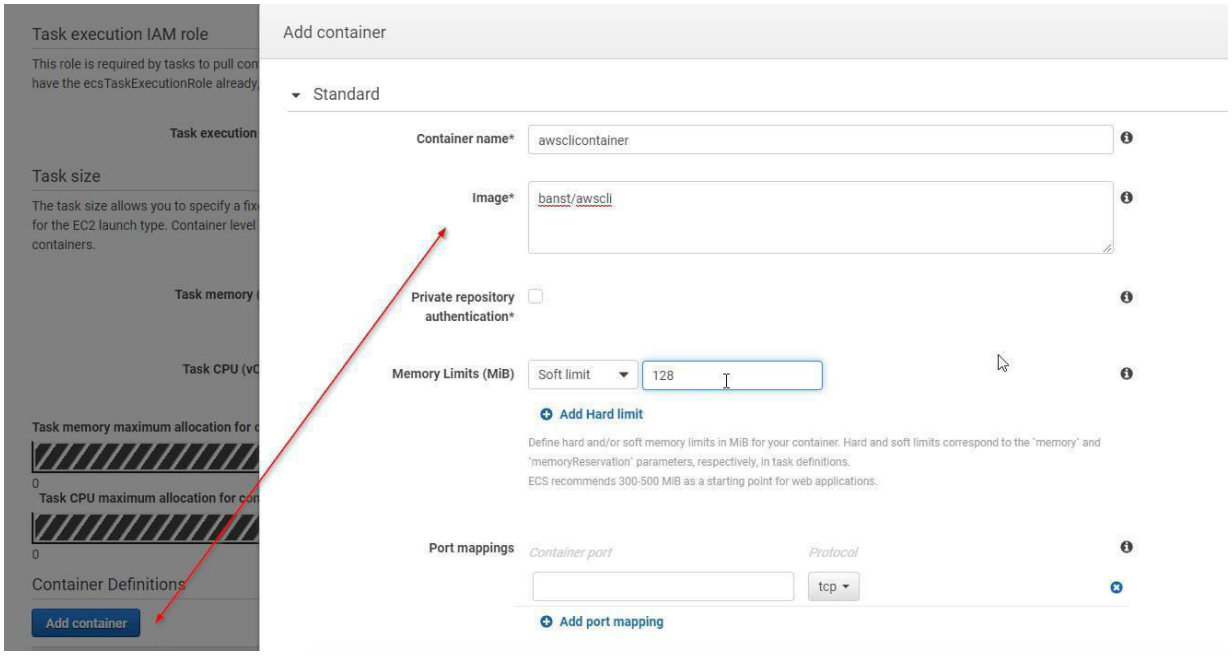
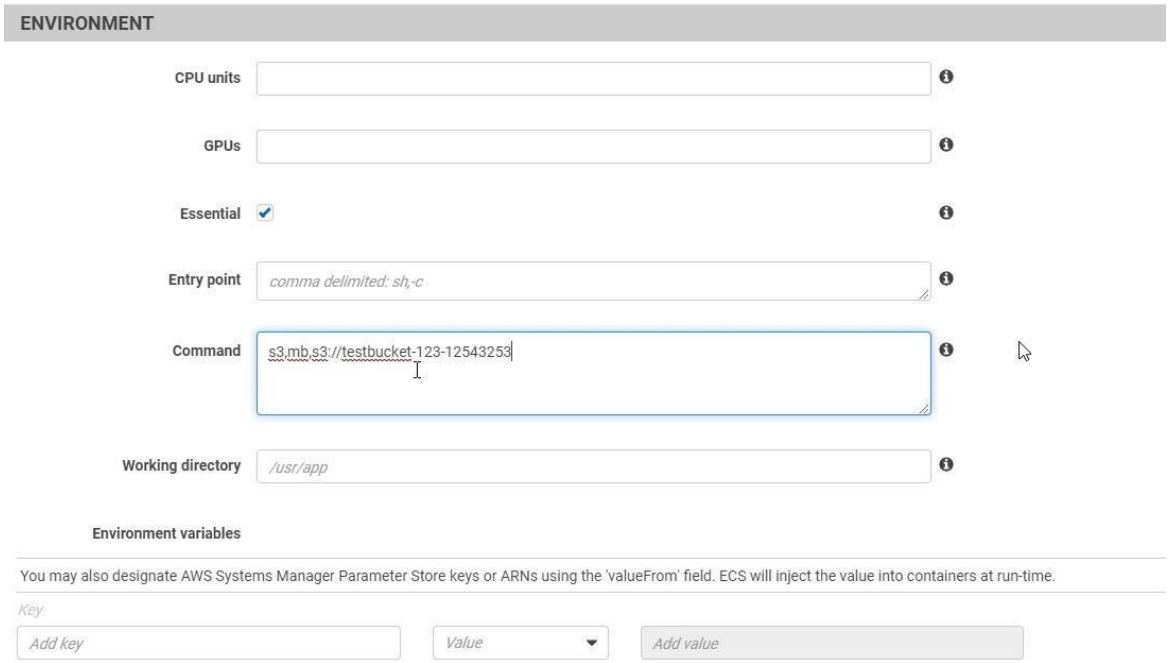


Image: banst/awscli

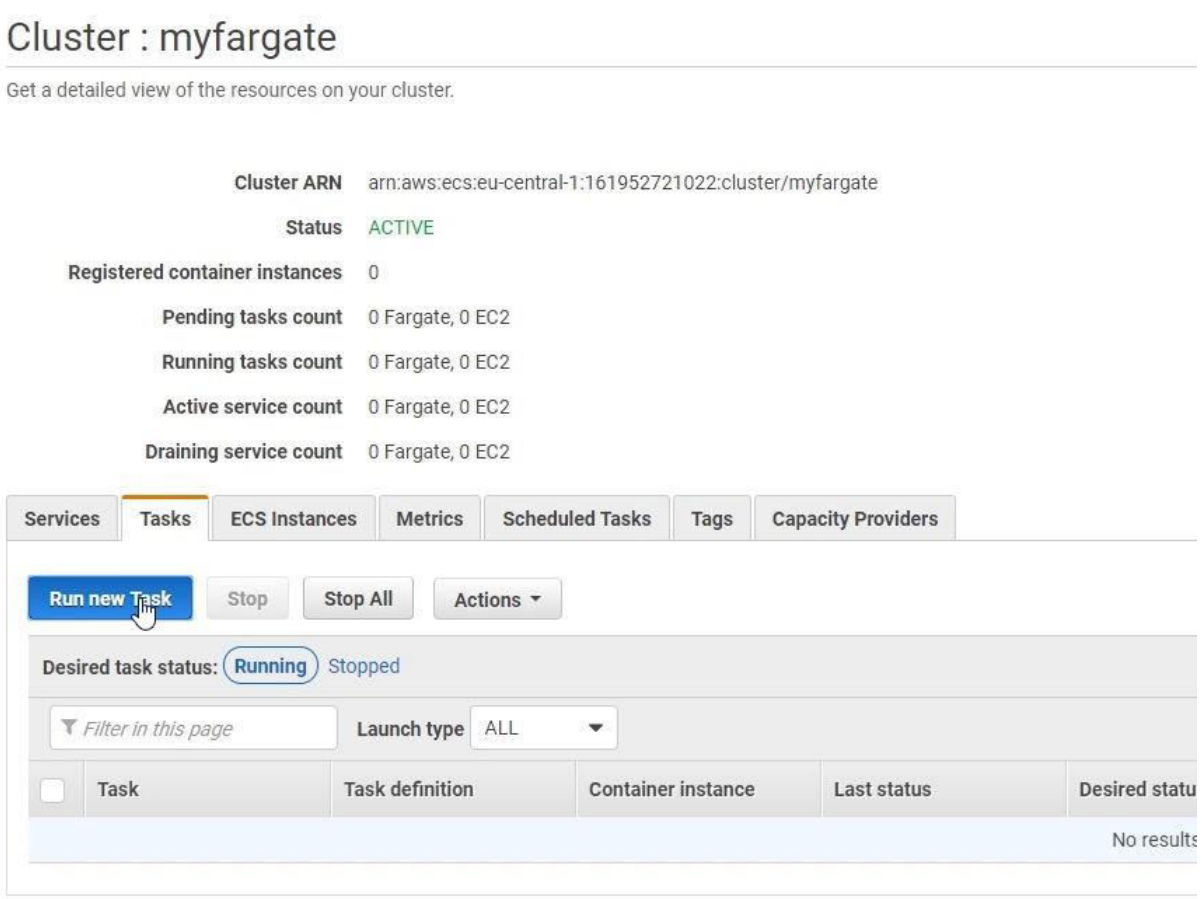
And as a command enter “s3,mb,s3://sometestbucket-123-123-234555”, so that bucket name should be pretty unique – hopefully. Otherwise change the bucket name to your own pattern/namespace or choose something random



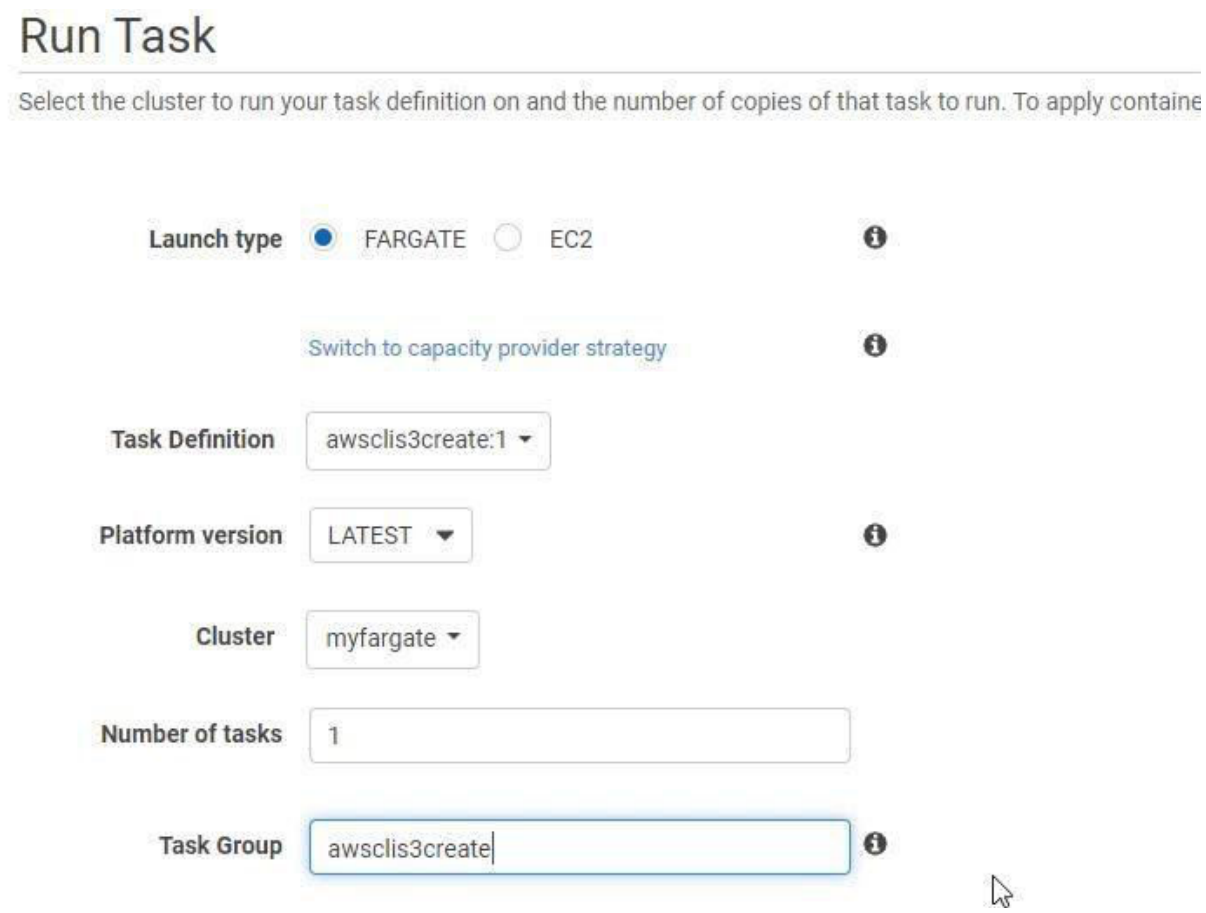
Then create the Task Definition.

Run the Task

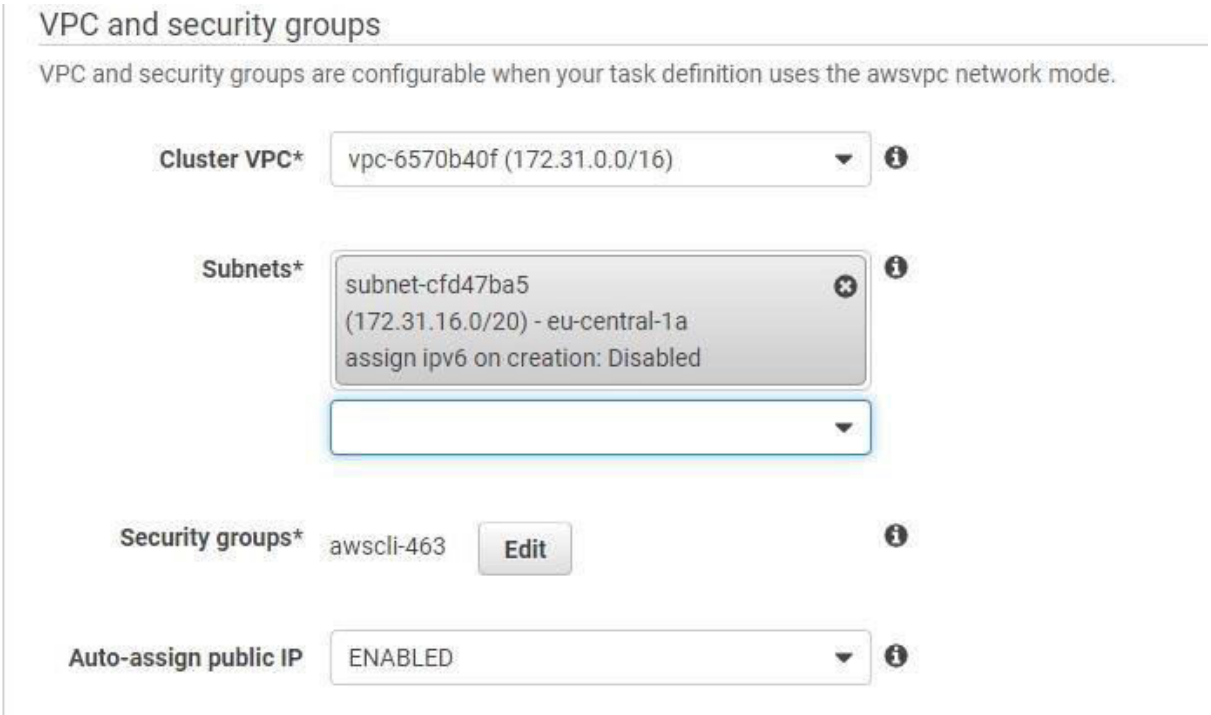
Open your Cluster, but this time go to the Task Tab, not the Service tab. Hit “Run new Task”:



Select your Task Definition, choose Fargate as Launch type, Choose your cluster and give the task group a name:

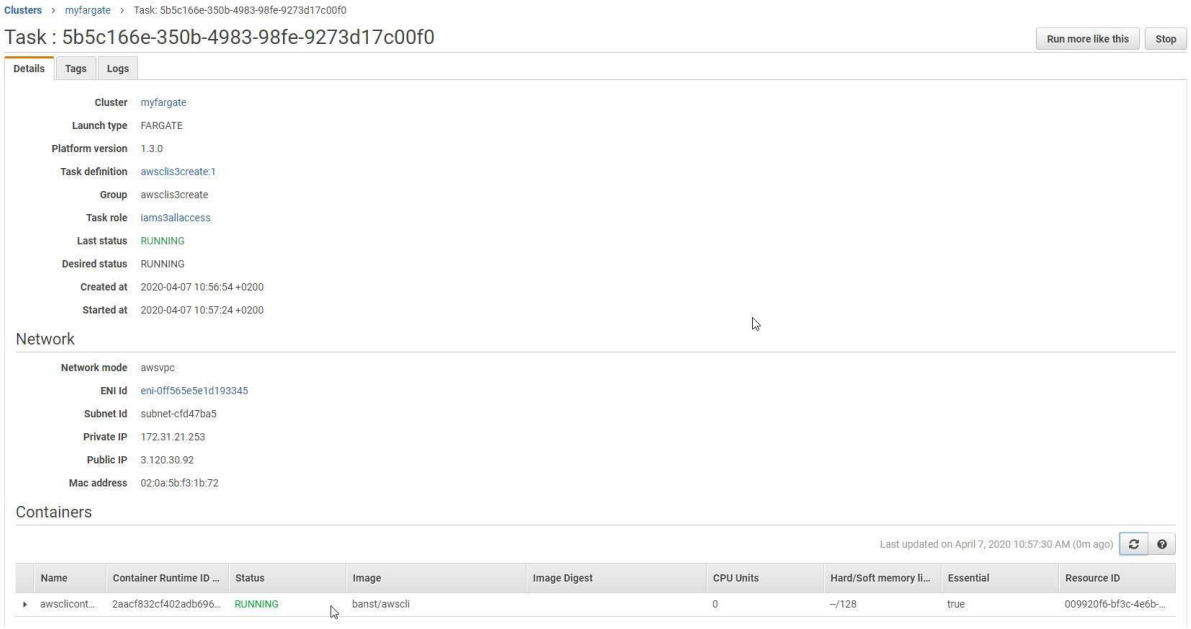


Choose your VPC and choose one Subnet where this task will be placed:



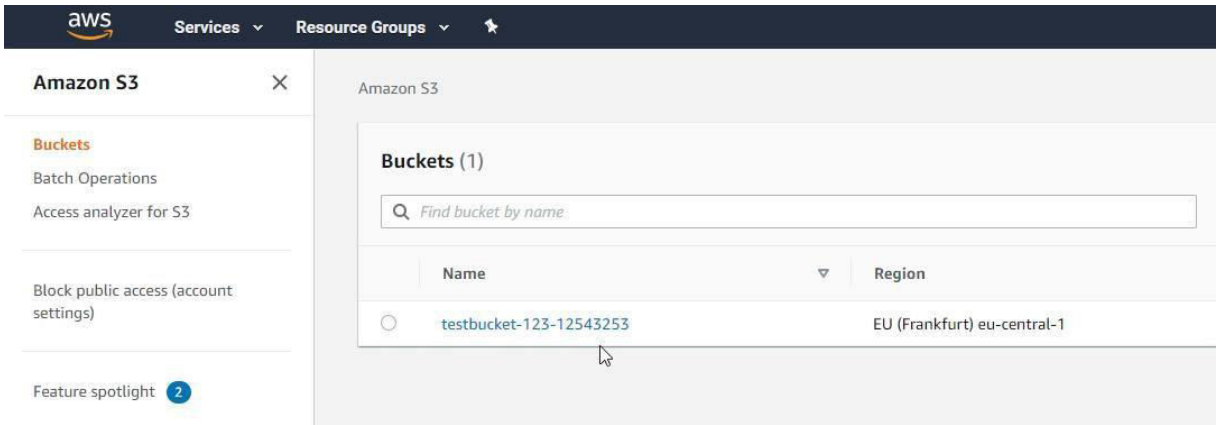
Then Run the Task.

Observe the Task going from Pending to Running to Stopped, because it's not a long running task:



Head over to the “Logs” tab and observe it created the bucket:

If you check your S3 Dashboard, you’ll see your new Bucket:



Clean Up

- Delete the Bucket

Lab End
