Run your application with ECS

LAB Overview

This lab leads you through the steps to run a simple Mario Bros game as website. You will use provided docker image and run it using Amazon ECS service.

Task 1: Create ECS Cluster

In this step you will verify a content of the Amazon ECR.

1. On the **Services** menu, click **ECS**.
2. In the navigation pane on the left, click **Repositories**.

You should find there one repository called “szkola”.

3. In the navigation pane on the left, click **Clusters**.
4. Click **Create cluster** button.

Note: You will find tree options. Two options with classic EC2 machines, where virtual machines will be created in ECS Cluster. Third option (Fargate) is a serverless approach.

5. Select option **Networking only (Powered by AWS Fargate)** and **Next step**.
6. Provide all informations:
   6.1. **Cluster name:** studentXcluster
   6.2. **Create VPC**: leave unselected.
7. Click **Viec cluster**.

Task 2: Create a task definition

In this section, you will create and run task that will spin up our docker container with an application.

8. In the navigation pane on the left, click **Task Definitions**.
9. Then **Create new Task Definition**, select **FARGATE** and click **Next step**.
10. Provide all necessary information
    10.1. **Task Definition Name:** StudentX_task
    10.2. **Task memory:** 1GB
    10.3. **Task CPU:** 0.5 vCPU
11. In **Container Definition** select **Add Container.**
12. Provide all information:

12.1. **Container name**: studentX_container

12.2. **Image**: 094104221953.dkr.ecr.eu-west-1.amazonaws.com/szkolenie

12.3. **Port mappings:** 8080

13. Rest of the container configuration leave default and click **Add**.
14. Under the task definition windows leave the rest of configuration default and click **Create**.
15. Click **View task definition**.

You can review the configuration. Eventually you can also specify the config in the form of json template.

Task 3: Run a task.

The AMI has already been customized with the installation of Apache and PHP from the script you entered as user data when the instance was launched. Modify the web server by adding an index.php file.

16. In the navigation pane on the left, click **Clusters**.
17. Select your cluster and switch to **Tasks** tab.
18. Click **Run new Task** and provide the following configuration.
    18.1. **Launch type:** Fargate
    18.2. **Task definition:** select your task created in previous task.
    18.3. **Cluster**: select your cluster
    18.4. **Service name:** student_mario
    18.5. **Number of tasks:** 1
19. Leave rest as is, click **Next step** and provide following configuration:
    19.1. **Cluster VPC:** use your vpc.
    19.2. **Subnets:** select your Public subnets
    19.3. **Security groups**: make sure that port 8080 is opened.
20. Leave the rest and click **Next step** two times and then **Create Service**
21. Click **View service**.
22. Wait until the service will be in **RUNNING** state
23. Click on your task and look for **Public IP**
24. Open a new windows in web browser and paste the address with :8080 at the end.

END Your Lab

This is the end of the lab. You can remove a cluster.