

TP : Créer un cluster ECS

1) Étapes à Suivre:

1. Connectez-vous à AWS avec vos identifiants du Learner Lab
2. Création du Cluster ECS
3. Utilisez Amazon EC2 Instances

▼ Infrastructure [Info](#)

Customized

Your cluster is automatically configured for AWS Fargate (serverless) with two capacity providers. Add Amazon EC2 instances.

☐ AWS Fargate (serverless)
Pay as you go. Use if you have tiny, batch, or burst workloads or for zero maintenance overhead. The cluster has Fargate and Fargate Spot capacity providers by default.

☒ Amazon EC2 instances
Manual configurations. Use for large workloads with consistent resource demands.

Auto Scaling group (ASG) | [Info](#)
Use Auto Scaling groups to scale the Amazon EC2 instances in the cluster.

Create new ASG ▼

4. Configure les données

Amazon Linux 2 (kernel 5.10) ▼

EC2 instance type
Choose based on the workloads you plan to run on this cluster.

c1.medium
i386, x86_64
2 vCPU 1.699 GiB Memory ▼

EC2 instance role
An instance role is used by Amazon EC2 instances to make AWS API requests. If you don't already have an instance IAM role created, we can create one for you.

LabInstanceProfile
arn:aws:iam::114552748221:instance-profile/LabInstanceProfile ▼

Desired capacity
Specify the number of instances to launch in your cluster.

Minimum

4

Maximum

5

VPC
Select a VPC to use for your Amazon ECS resources.

vpc-0961828eff1dfdf6
default ▼

Create a new VPC

Subnets
Select the subnets where your instances are launched and your tasks run. We recommend that you use three subnets for production.

Choose subnets ▼

Clear current selection

subnet-0d5a215f9877fa286
us-east-1f 172.31.64.0/20 X

subnet-0b10c5e178d04711d
us-east-1e 172.31.48.0/20 X

subnet-081679d67ee3c5d87
us-east-1b 172.31.0.0/20 X

subnet-0a6f236d7e89f6b64
us-east-1a 172.31.32.0/20 X

subnet-0dd883198cf5928e1
us-east-1c 172.31.80.0/20 X

subnet-0fa860f294439c70d
us-east-1d 172.31.16.0/20 X

Security group | [Info](#)
Choose an existing security group or create a new security group.

☒ Use an existing security group
☐ Create a new security group

Security group name
Choose an existing security group.

Choose security groups ▼

sg-038b0fa208f2583ee X
default

Auto-assign public IP | [Info](#)
Choose whether to auto-assign a public IP to the Amazon EC2 instances

Use subnet setting ▼

Clusters (1) [Info](#) Last updated December 11, 2024 at 21:00 (UTC+1:00) Create cluster

Cluster	Services	Tasks	Container instances	CloudWatch monitori
cluster	0	No tasks running	4 EC2	Default

[Clusters](#) > [cluster](#) > Infrastructure

Capacity provider	ASG	Man...	Man...	Man...	Curr...	Desi...	Min ..
Infra-ECS-Cluster-clust...	Infra-ECS-Clus...	Turned on	Turned off	Turned on	4	4	4

You can also use FARGATE and FARGATE_SPOT capacity providers to launch tasks on AWS Fargate.

Container instances (4) [Info](#) Register external instances Actions

<input type="checkbox"/>	Container instance	Status	Type	Instance ID	Capacit...	Availability zo...	Ru...
<input type="checkbox"/>	308c9340c6194b1...	Active	EC2	i-0611afb160ca...	Infra-ECS-...	us-east-1d	0
<input type="checkbox"/>	35eabd5abee14baf...	Active	EC2	i-0cd4b05d7974...	Infra-ECS-...	us-east-1c	0
<input type="checkbox"/>	b0ef212e8b944d3...	Active	EC2	i-0f22082efeb8...	Infra-ECS-...	us-east-1a	0
<input type="checkbox"/>	d668b27d33eb417...	Active	EC2	i-0e30d3efe760...	Infra-ECS-...	us-east-1b	0

5. Créer une définition de tâche ECS

Une définition de tâche est comme un modèle qui décrit comment vos conteneurs doivent s'exécuter.

5.1 Accédez à l'interface ECS dans la console AWS :

- Allez sur la page ECS Task Definitions.
- Cliquez sur Créer une nouvelle définition de tâche.

5.2 Configurez la définition de tâche :

- **Nom de la tâche**
- **Type de lancement** : Fargate ou EC2 selon votre configuration.
- **Configuration des conteneurs** :
 - Image : Fournissez une image Docker (par exemple, nginx:latest).
 - Ports exposés : Exemple : 80 pour une application web.
 - Mémoire et CPU : Configurez les ressources nécessaires pour vos conteneurs.

6. Créer un service ECS

Un service ECS permet d'exécuter et de gérer un ou plusieurs conteneurs basés sur votre définition de tâche.

- Cliquez sur votre cluster
- Cliquez sur Services > Créer.
- Configuration du service :

- Type de lancement : Fargate ou EC2.
 - Définition de tâche : Sélectionnez la définition de tâche créée à l'étape précédente.
 - Nom du service
 - Nombre de tâches : Spécifiez combien de conteneurs doivent tourner (par exemple, 2).
- Configurer le Load Balancer
 - **Créer le service**

Services (1) Info

Manage tags Update Delete service Create

Filter services by value

Filter launch type: Any launch type

Filter service type: Any service type

< 1 > ⚙

<input type="checkbox"/>	Service name	ARN	Status	Service...	Deployments and tasks
<input type="checkbox"/>	nginx-service	arn:aws:ec...	Active	REPLICA	<div></div> 2/2 Task

Tasks (2)

Manage tags Stop Run new task

Filter tasks by property or value

Filter desired status: Any desired status

Filter launch type: Any launch type

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<input type="checkbox"/>	Task	Last status	Desired st...	Task defini...	Health sta...	Started by
<input type="checkbox"/>	8dbbc...	Running	Running	nginx-task:1	Unknown	ecs-svc/52872620078...
<input type="checkbox"/>	f4c1a...	Running	Running	nginx-task:1	Unknown	ecs-svc/52872620078...

Load balancers (1/1)

Elastic Load Balancing scales your load balancer capacity automatically in response to changes in incoming traffic.

Actions Create load balancer

Filter load balancers

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<input checked="" type="checkbox"/>	Name	DNS name	State	VPC ID	Availability Zones
<input checked="" type="checkbox"/>	nginx-lab	nginx-lab-681774434.us-ea...	Active	vpc-0961828eff1dfdf6	6 Availability Zones

Clusters (1) Info

Last updated December 12, 2024 at 11:08 (UTC+1:00) Create cluster

Search clusters

< 1 > ⚙

Cluster	Services	Tasks	Container instances	CloudWatch
nginx-cluster	1	<div></div> 0 Pending 2 Running	4 EC2	Default

7. Tester le Déploiement

- Accédez à EC2 > Load Balancers
- Copiez le DNS Name de l'ALB.
- Ouvrez-le dans un navigateur :

- Vous devriez voir la page d'accueil par défaut de Nginx.

