

Fargate Cluster & Service Discovery

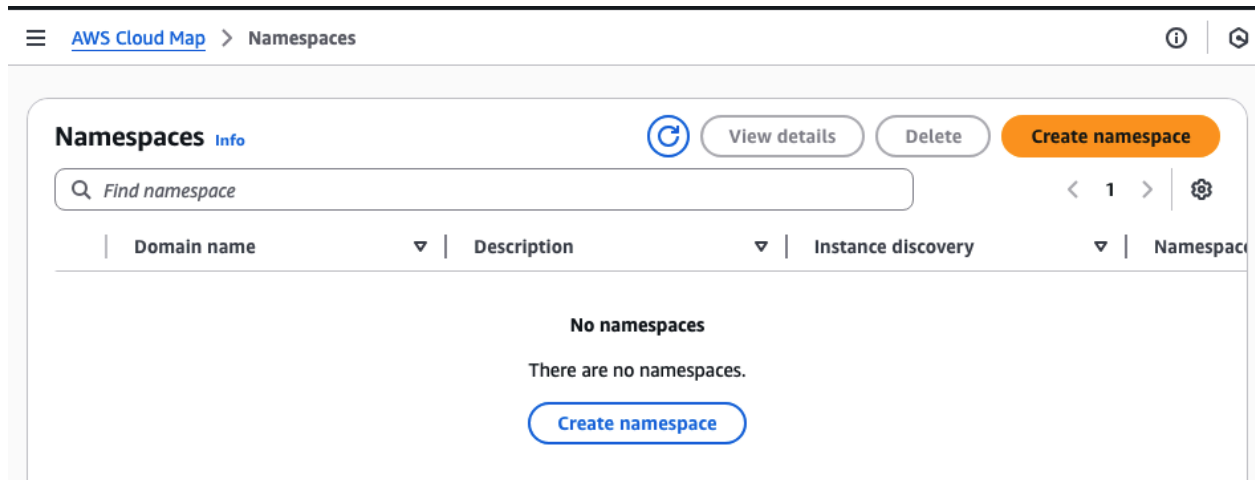
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Cloud Map Namespace

AWS Cloud Map is a **service-discovery** service.

- It lets your applications discover other services or resources by name instead of IP.
- Supports DNS and API-based lookup.
- Example:
 - Service movie-service registers in Cloud Map namespace app.local → DNS movie-service.app.local automatically resolves to running tasks.

- Go to AWS Cloud Map. Create Namespace



- Give a name for the namespace. I use **prod**

Namespace configuration

The namespace configuration determines how your application discovers service instances

Namespace name

A friendly name lets you easily find a namespace on the dashboard.

prod

The namespace name can have up to 1,024 characters, and must start and end with a letter.

Valid characters: a-z, A-Z, 0-9, . (period), _ (underscore), and - (hyphen)

- Instance Discovery (we want private DNS records within VPC)

Instance discovery

Instance discovery determines how your application discovers registered instances.

☐

API calls

Your application makes API calls to discover registered instances.

☒

API calls and DNS queries in VPCs

Your application makes API calls or submits DNS queries in VPCs to discover registered instances. Additional charges apply.

☐

API calls and public DNS queries

Your application makes API calls or submits public DNS queries to discover registered instances. Additional charges apply.

- Select VPC

VPC

This is the Amazon VPC that you want to associate the namespace with.

vpc-0fa6dbb2623191631 (netflux-vpc)

TTL

The SOA TTL value for the Route 53 hosted zone created with the namespace. Determines how long negatively cached results in [pricing impact](#) for DNS.

15

The value is in seconds.

- Create namespace

Fargate Cluster

- Create a cluster where our tasks will be running. I call this **prod** cluster. Also select prod namespace for service discovery within this cluster

Cluster configuration

Cluster name

prod

Cluster name must be 1 to 255 characters. Valid characters are a-z, A-Z, 0-9, hyphens (-), and underscores (_).

▼ Service Connect defaults - *optional*

Default namespace [Info](#)

Select or type the namespace name to specify a group of services that make up your application. You can overwrite this value at

🔍

prod

Private Cloud Map namespace for production
ns-5ri5zjqhntnaojlj DNS_PRIVATE

- Under **infrastructure**, Select “Fargate Only”

▼ Infrastructure - *advanced* [Info](#)

Configure the manner of obtaining compute resources that will be used to host your application.

Select a method of obtaining compute capacity

Your cluster is automatically configured for AWS Fargate (serverless), but you may choose to add Amazon EC2 instances (servers).

☒ Fargate only

Serverless - you don't think about creating or managing servers. Great for most common workloads.

☐ Fargate and Managed Instances [New](#)

Managed instances - Amazon ECS will manage patching and behalf while giving you configurability about the types of it more advanced workloads.

- Everything else is optional. We can create the cluster. It might take a minute to create the cluster

[Amazon Elastic Container Service](#) > Clusters

Amazon Elastic Container Service


ClustersNamespacesTask definitionsAccount settings

Clusters (1) [Info](#)

| Cluster | Services | Tasks | Container instances |
|----------------------|----------|------------------|---------------------|
| prod | 0 | No tasks running | 0 EC2 |

Cluster Creation Failure

Note: If it fails for some reason, we need to go to “CloudFormation ” to clear the entry to re-create the cluster.

 **There was an error creating cluster prod.**
Resource handler returned message: "Error occurred during operation 'CreateCluster SDK error: Failed to create Namespace ECS ServiceClientException; Request ID: a362e00a-676f-4019-9591-55ad75d59943; Proxy: null!'." (RequestToken: da3219ec-e689-83b7-5a04-...)
[View in CloudFormation](#) [Diagnose with Amazon Q](#)

Clusters (0) [Info](#)



| Cluster | Services | Tasks |
|---------|----------|-------|
|---------|----------|-------|