

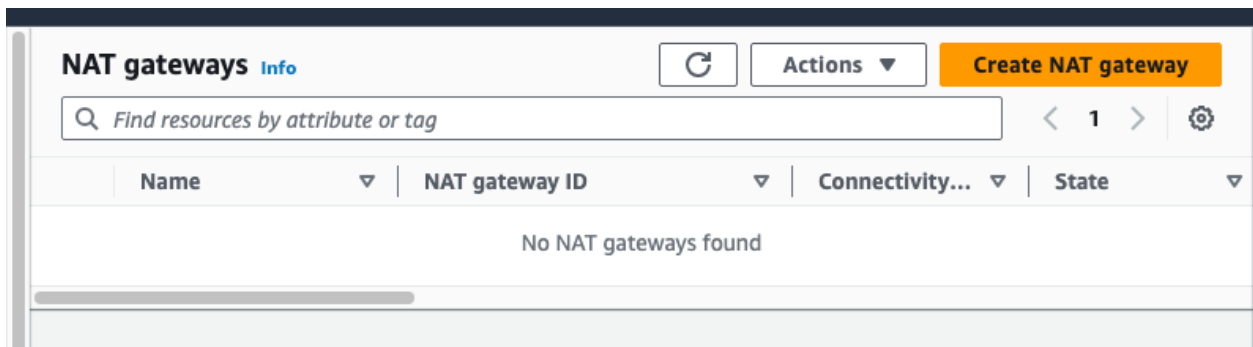
RDS	1
NAT Gateway	1
ECS/Fargate Service	3
Front End	5

RDS

- Start the DB Instance

NAT Gateway

- Our app is going to be running inside a private subnet. We need to pull ECR images. There will NOT be any connectivity. We need to add the NAT gateway.
- Go to VPC & Create NAT gateway



- NAT gateway will be part of the public subnet. We will allocate an Elastic IP address.

NAT gateway settings

Name - *optional*

Create a tag with a key of 'Name' and a value that you specify.

The name can be up to 256 characters long.

Subnet

Select a subnet in which to create the NAT gateway.

Connectivity type

Select a connectivity type for the NAT gateway.

☒ Public

☐ Private

Elastic IP allocation ID [Info](#)

Assign an Elastic IP address to the NAT gateway.

Allocate Elastic IP

- Create
- Go to Route Tables. The private subnet 1 and 2 should have NAT gateway associated with it.

Route tables (6) [Info](#)

<input type="checkbox"/>	Name	▲	Route table ID	▼	Ex
<input type="checkbox"/>	–		rtb-08eaba530d3268ea3		–
<input type="checkbox"/>	netflux-rtb-private1-us-east-1a		rtb-008328e4e116c5496		sul
<input type="checkbox"/>	netflux-rtb-private2-us-east-1b		rtb-094cc4f401a05234d		sul
<input type="checkbox"/>	netflux-rtb-private3-us-east-1a		rtb-0643d8c8fe783becf		sul
<input type="checkbox"/>	netflux-rtb-private4-us-east-1b		rtb-0b3db4d8e28af791e		sul
<input type="checkbox"/>	netflux-rtb-public		rtb-0f91cdbbc5c46136f		2 s

Edit routes

Destination	Target	Status
10.0.0.0/16	local	✔ Active
<input type="text" value="0.0.0.0/0"/>	<input type="text" value="local"/>	
	NAT Gateway	-
	<input type="text" value="nat-0d897b0752b286f99"/>	

rtb-008328e4e116c5496 / netflux-rtb-private1-us-east-1a

Details | **Routes** | Subnet associations | Edge associations | Route propagation | Tags

Routes (2)

Destination	Target	Status
0.0.0.0/0	nat-0d897b0752b286f99	✔ Active
10.0.0.0/16	local	✔ Active

- Repeat the same for private-subnet2

ECS/Fargate Service

- Go to Movie service. Update the service with desired tasks “2”

Family
movie-service ▼

Revision
1 (LATEST) ▼

Service name
Assign a unique name for this service.
movie-service

Service type [Info](#)
Specify the service type that the service scheduler will follow.

☒ **Replica**
Place and maintain a desired number of tasks across your cluster.

☐ **Daemon**
Place and maintain one copy of your task on each container instance.

Desired tasks
Specify the number of tasks to launch.
2

- Wait for 5 minutes! We can see the apps running fine!

[Amazon Elastic Container Service](#) > [Clusters](#) > [prod](#) > [Services](#) > [movie-service](#) > Tasks

movie-service [Info](#)

Health and metrics | **Tasks** | Logs | Deployments | Events | Configuration and networking | Tags

Tasks (1/2)

Filter tasks by property or value

Filter desired status: Running ▼

Filter launch type: Any launch type

	Task	Last status	Desired st...	Task defi...	Health sta...	Started at	Container insta
<input checked="" type="radio"/>	05b3e9...	Running	Running	movie-servi...	Healthy	1 minute ago	-
<input type="radio"/>	9fefa31...	Running	Running	movie-servi...	Healthy	1 minute ago	-

In case of issues, check the log for error, DB, NAT gateway, IAM Roles, Security Groups.

- Repeat the same for customer-service

Services (2) Info						
<div> <input type="text" value="Filter services by value"/> <div> Filter launch type Any launch type </div> <div> Filter service type Any service type </div> </div>						
<input type="checkbox"/>	Service name	ARN	Status	Service type	Deployments and tasks	
<input type="checkbox"/>	customer-service	arn:aws:ec...	Active	REPLICA	<div></div>	2/2 Tasks running
<input type="checkbox"/>	movie-service	arn:aws:ec...	Active	REPLICA	<div></div>	2/2 Tasks running

- At this point, we can access the API via CloudFront

```

d2e9qma06wiyp5.cloudfront.net/api/movies

Pretty-print
[{"id":1,"title":"INCEPTION","releaseYear":2010,"genre":"ACTION"}, {"id":2,"title":"THE GODFATHER","releaseYear":1972,"genre":"DRAMA"}, {"id":3,"title":"THE SHAWSHANK REDEMPTION","releaseYear":1994,"genre":"DRAMA"}, {"id":4,"title":"THE GODFATHER PART II","releaseYear":1973,"genre":"DRAMA"}, {"id":5,"title":"MAD MAX: FURY ROAD","releaseYear":2015,"genre":"ACTION"}, {"id":6,"title":"THE FUGITIVE","releaseYear":1993,"genre":"ACTION"}, {"id":7,"title":"THE FUGITIVE PART 2","releaseYear":1994,"genre":"ACTION"}, {"id":8,"title":"SUPERBAD","releaseYear":2007,"genre":"COMEDY"}, {"id":9,"title":"THE DARK KNIGHT","releaseYear":2008,"genre":"ACTION"}, {"id":10,"title":"THE DARK KNIGHT PART 2","releaseYear":2012,"genre":"ACTION"}, {"id":11,"title":"THE DARK KNIGHT PART 3","releaseYear":2012,"genre":"ACTION"}, {"id":12,"title":"THE DARK KNIGHT PART 4","releaseYear":2012,"genre":"ACTION"}, {"id":13,"title":"THE DARK KNIGHT PART 5","releaseYear":2012,"genre":"ACTION"}, {"id":14,"title":"FIGHT CLUB","releaseYear":1999,"genre":"DRAMA"}, {"id":15,"title":"THE MOUNTAIN","releaseYear":2008,"genre":"COMEDY"}, {"id":16,"title":"THE MOUNTAIN PART 2","releaseYear":2008,"genre":"COMEDY"}, {"id":17,"title":"THE MOUNTAIN PART 3","releaseYear":2008,"genre":"COMEDY"}, {"id":18,"title":"SCHINDLER'S LIST","releaseYear":1993,"genre":"DRAMA"}, {"id":19,"title":"THE AVENGERS","releaseYear":2011,"genre":"ACTION"}, {"id":20,"title":"THE AVENGERS PART 2","releaseYear":2011,"genre":"ACTION"}]

```

- We can also access the /api/customers/1. It also confirms that inter-service communication within the cluster works!

```

d2e9qma06wiyp5.cloudfront.net/api/customers/1

Pretty-print
{"id":1,"name":"sam","favoriteGenre":"ACTION","recommendedMovies":[{"id":1,"title":"INCEPTION","releaseYear":2010,"genre":"ACTION"}, {"id":2,"title":"THE GODFATHER","releaseYear":1972,"genre":"DRAMA"}, {"id":3,"title":"THE SHAWSHANK REDEMPTION","releaseYear":1994,"genre":"DRAMA"}, {"id":4,"title":"THE GODFATHER PART II","releaseYear":1973,"genre":"DRAMA"}, {"id":5,"title":"MAD MAX: FURY ROAD","releaseYear":2015,"genre":"ACTION"}, {"id":6,"title":"THE FUGITIVE","releaseYear":1993,"genre":"ACTION"}, {"id":7,"title":"THE FUGITIVE PART 2","releaseYear":1994,"genre":"ACTION"}, {"id":8,"title":"SUPERBAD","releaseYear":2007,"genre":"COMEDY"}, {"id":9,"title":"THE DARK KNIGHT","releaseYear":2008,"genre":"ACTION"}, {"id":10,"title":"THE DARK KNIGHT PART 2","releaseYear":2012,"genre":"ACTION"}, {"id":11,"title":"THE DARK KNIGHT PART 3","releaseYear":2012,"genre":"ACTION"}, {"id":12,"title":"THE DARK KNIGHT PART 4","releaseYear":2012,"genre":"ACTION"}, {"id":13,"title":"THE DARK KNIGHT PART 5","releaseYear":2012,"genre":"ACTION"}, {"id":14,"title":"FIGHT CLUB","releaseYear":1999,"genre":"DRAMA"}, {"id":15,"title":"THE MOUNTAIN","releaseYear":2008,"genre":"COMEDY"}, {"id":16,"title":"THE MOUNTAIN PART 2","releaseYear":2008,"genre":"COMEDY"}, {"id":17,"title":"THE MOUNTAIN PART 3","releaseYear":2008,"genre":"COMEDY"}, {"id":18,"title":"SCHINDLER'S LIST","releaseYear":1993,"genre":"DRAMA"}, {"id":19,"title":"THE AVENGERS","releaseYear":2011,"genre":"ACTION"}, {"id":20,"title":"THE AVENGERS PART 2","releaseYear":2011,"genre":"ACTION"}]}

```

Front End

- Lets finally deploy the front end - html, js, img files.
- Copy the files I had shared and upload them under your S3 bucket.

vins-netflux Info

Objects

Properties

Permissions

Metrics




Management

Access Point

Objects (3) Info

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all

🔍 Find objects by prefix

<input type="checkbox"/>	Name	Type
<input type="checkbox"/>	 images/	Folder
<input type="checkbox"/>	 index.html	html
<input type="checkbox"/>	 js/	Folder

- Access CloudFront URL

Netflux

Customer Profile



Name Sam

Favorite Genre

ACTION ▾

Recommended Movies

[All Movies](#)

#	Title	Release Year	Genre
1	Inception	2010	ACTION
2	Mad Max: Fury Road	2015	ACTION
3	Die Hard	1988	ACTION
4	Gladiator	2000	ACTION
5	The Dark Knight	2008	ACTION
6	The Matrix	1999	ACTION
7	The Avengers	2012	ACTION