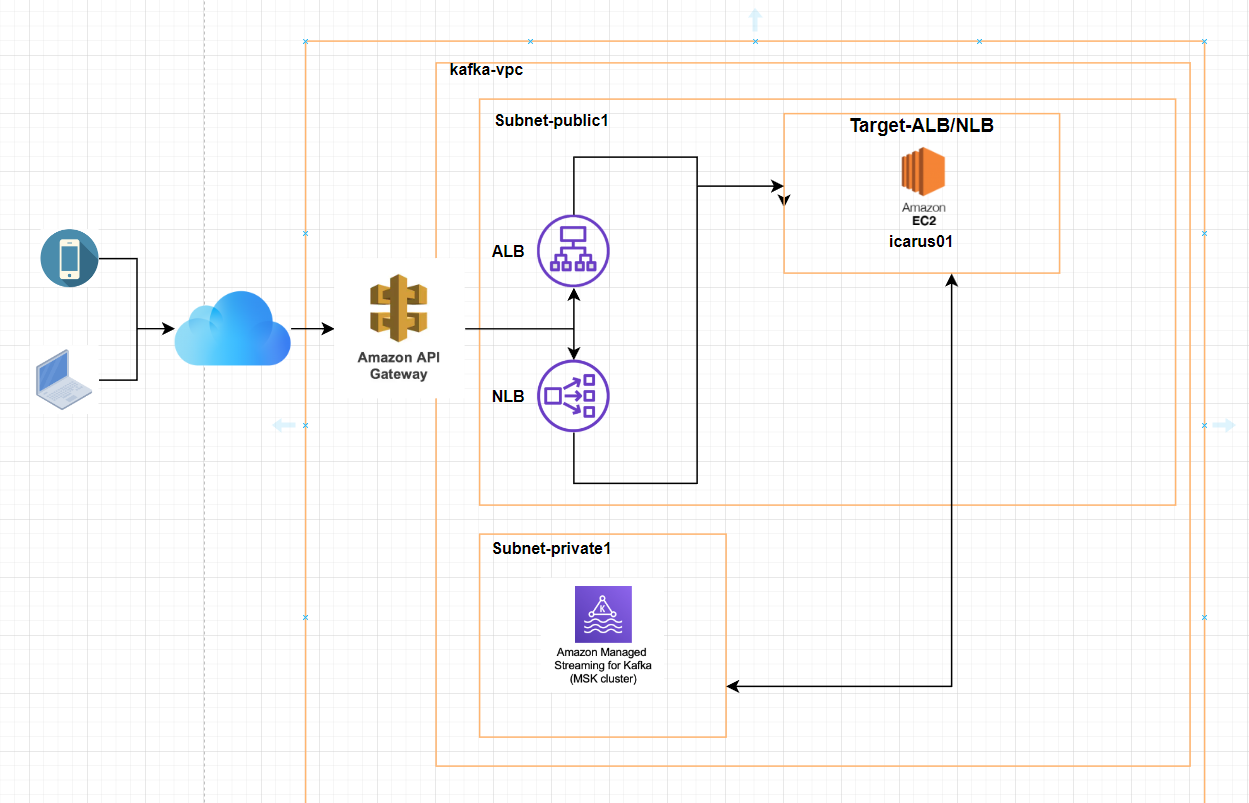
# Configuración CLOUD

## Datos del Estudiante

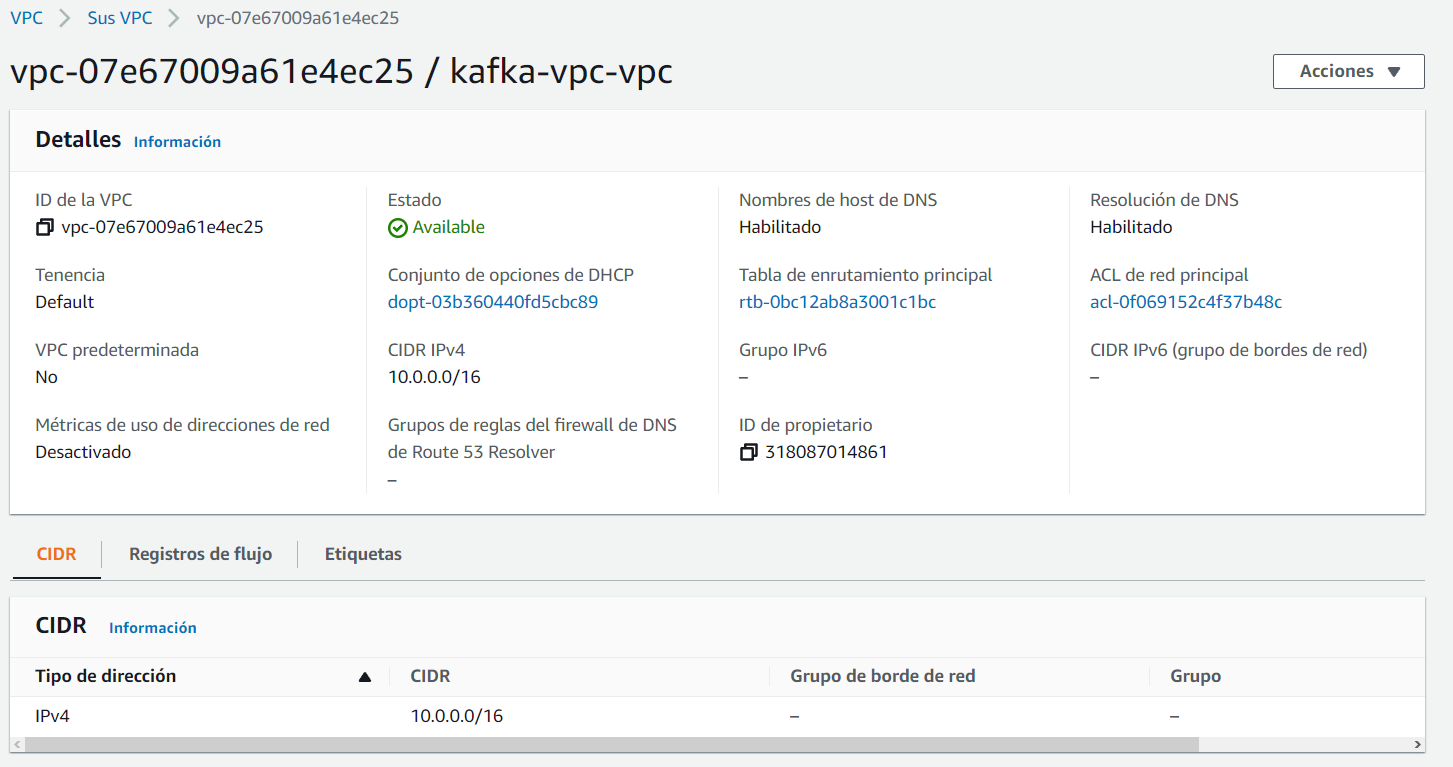
Nombres y Apellidos: Luis Fernando Litano Ramos

## Arquitectura

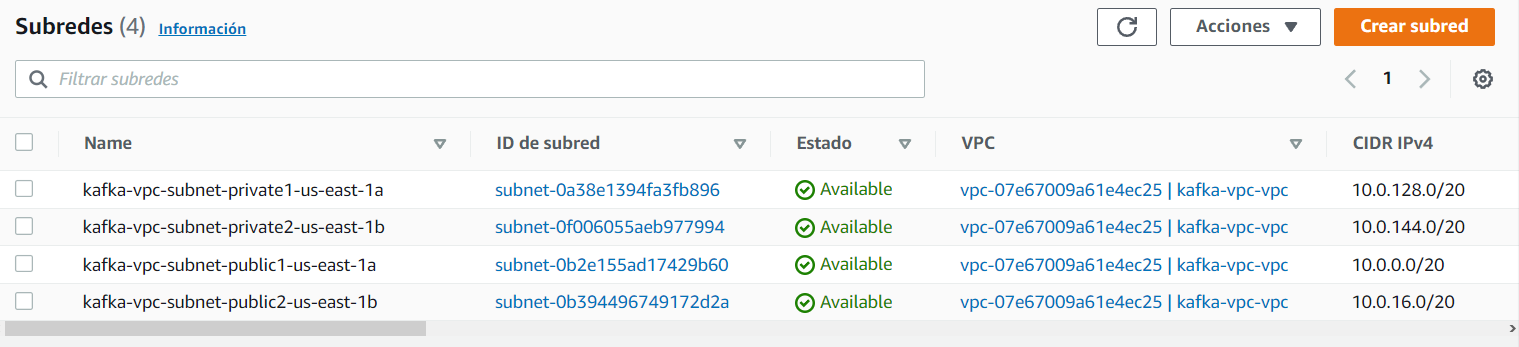
### AWS



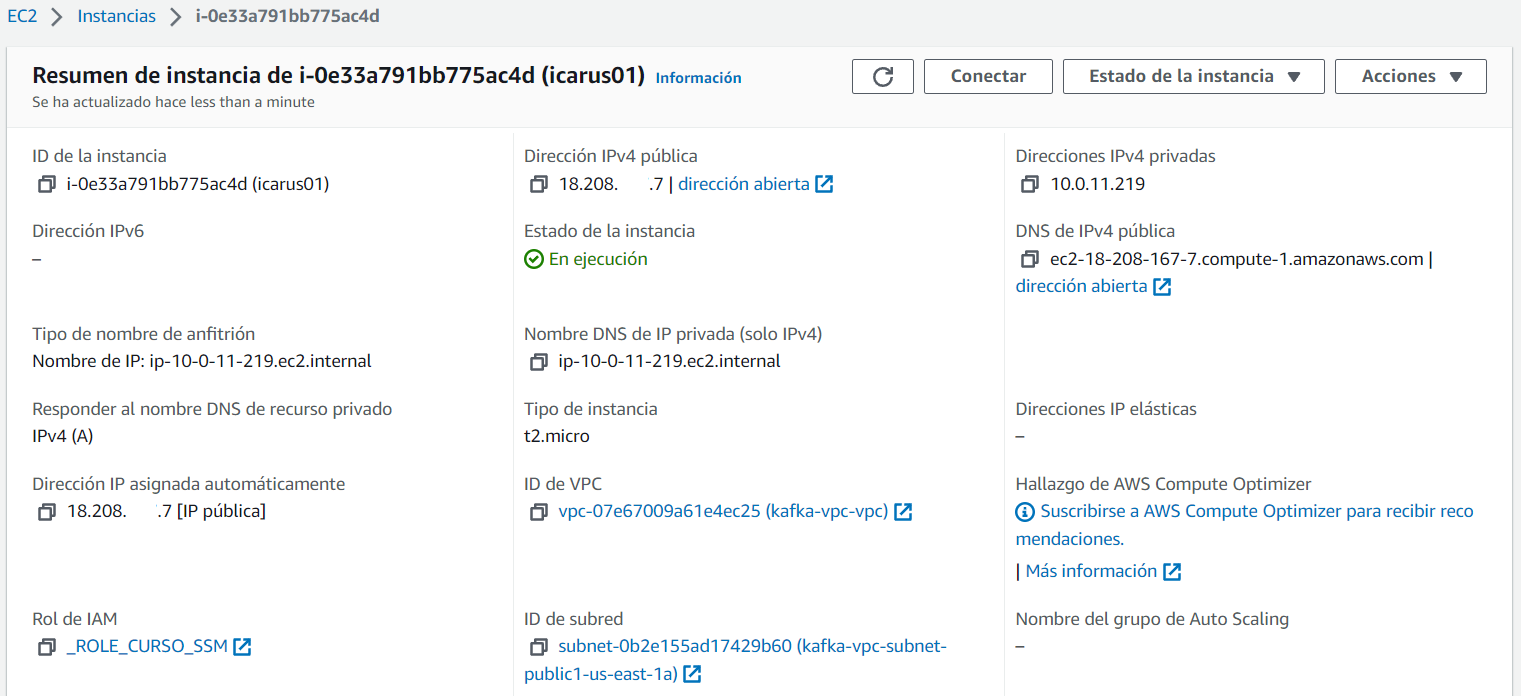
## VPC



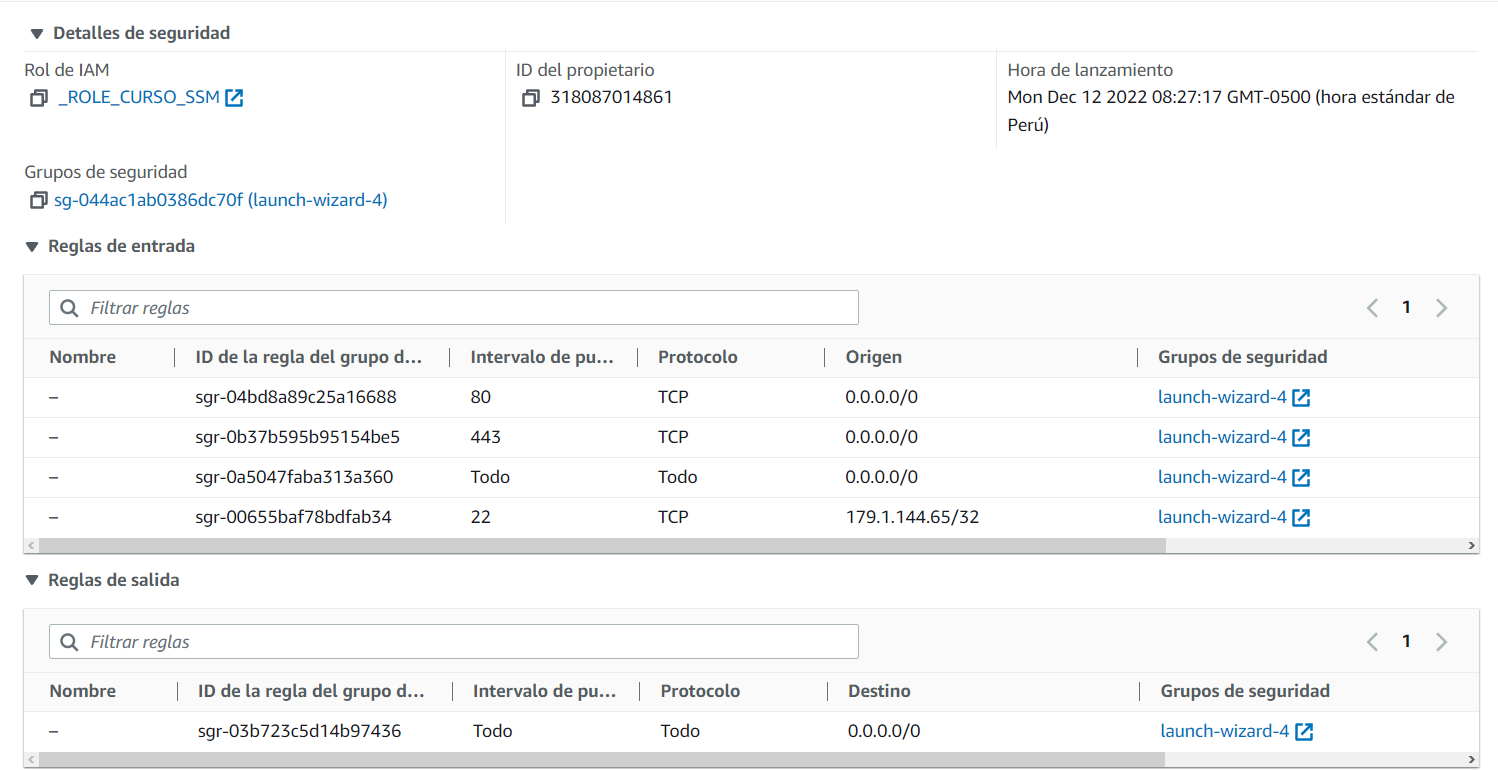
### Subredes (2 AZ)



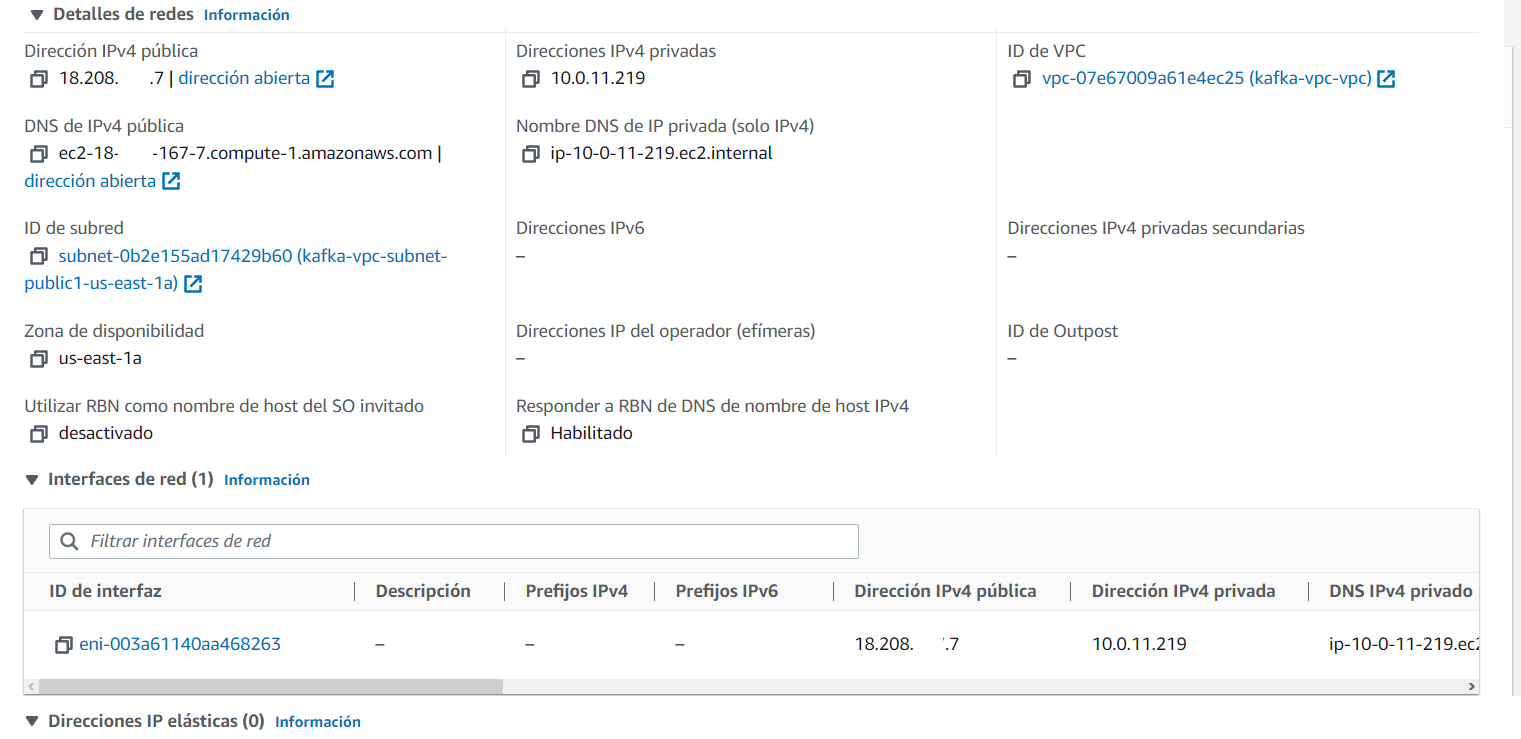
## EC2 - Micro servicios



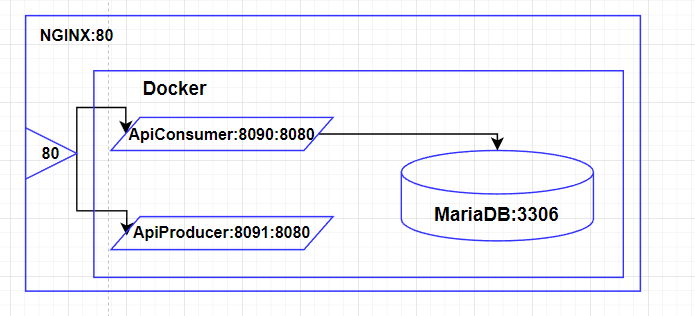
### Seguridad



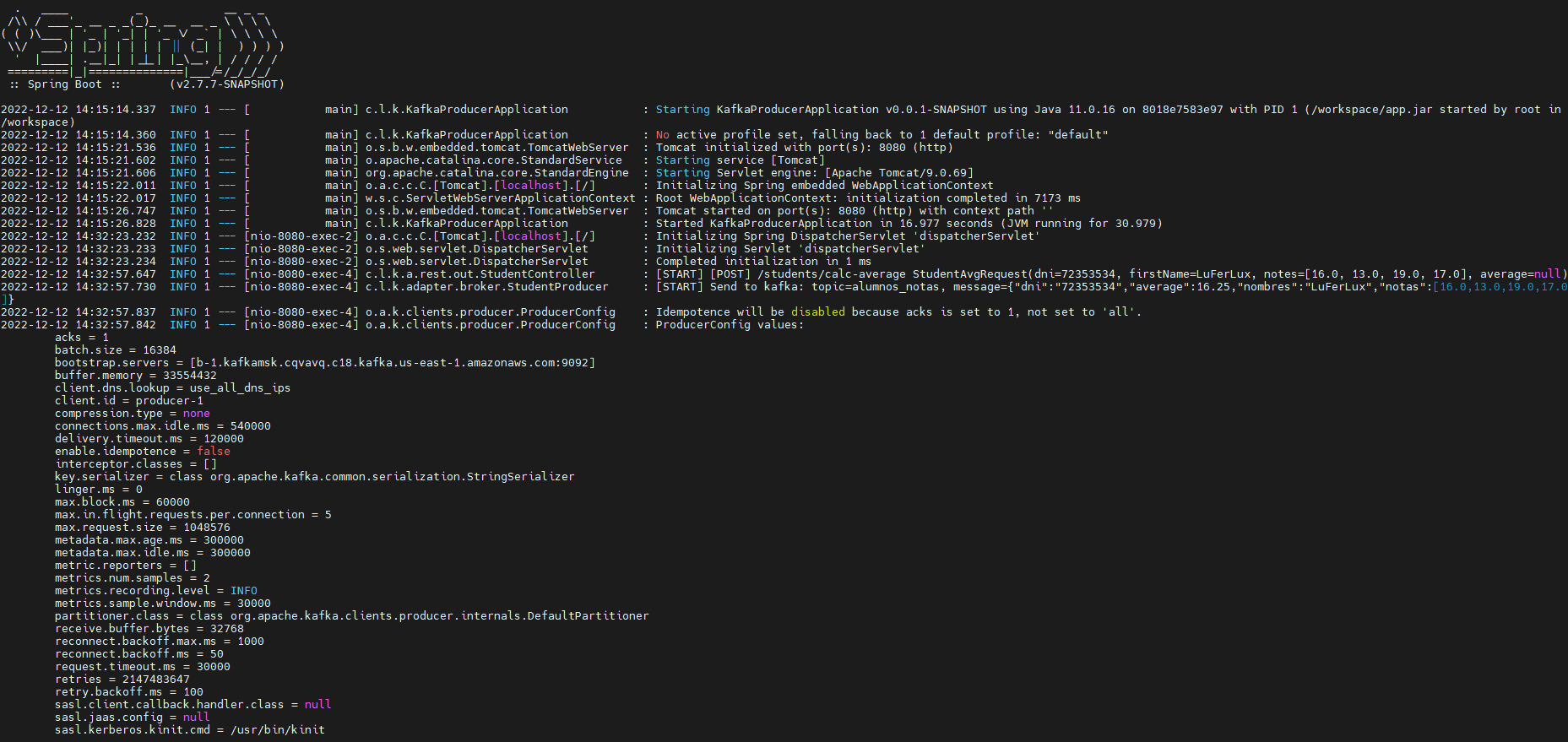
### Redes



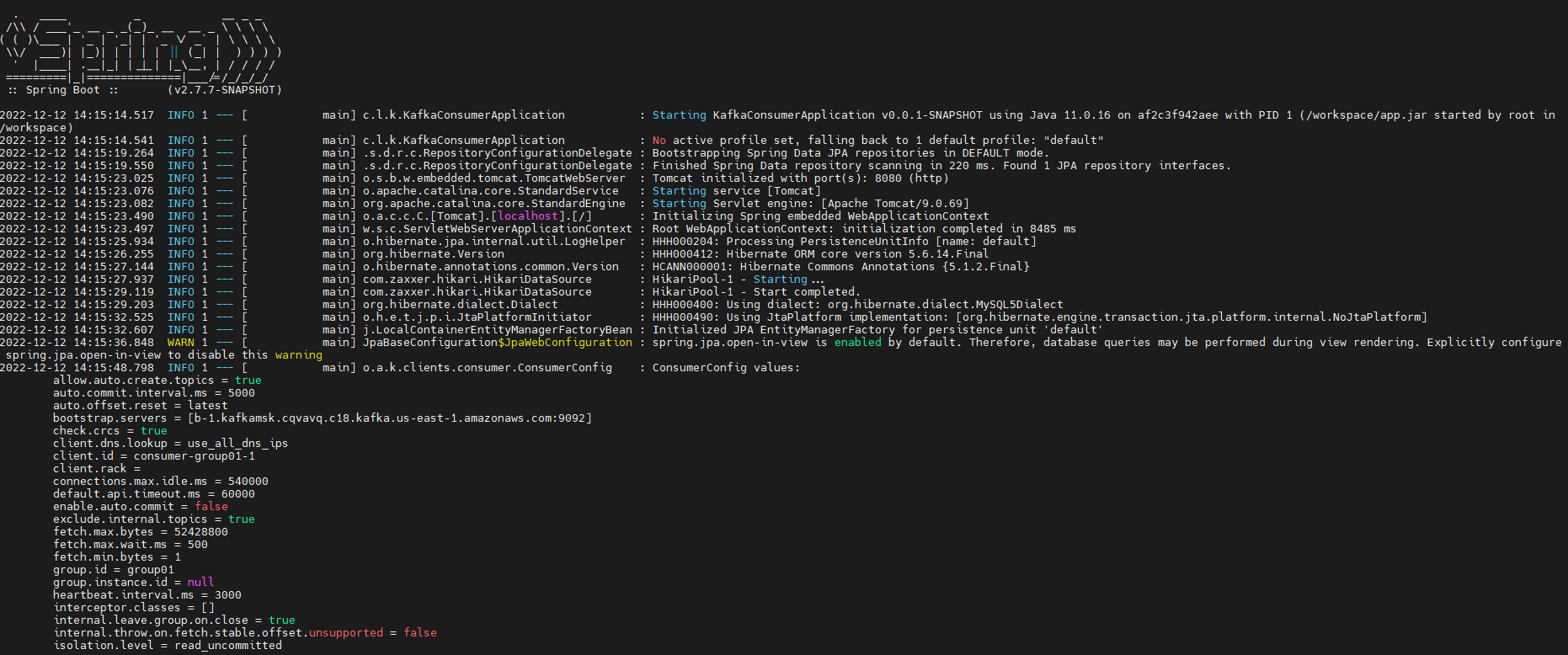
### Micro servicios



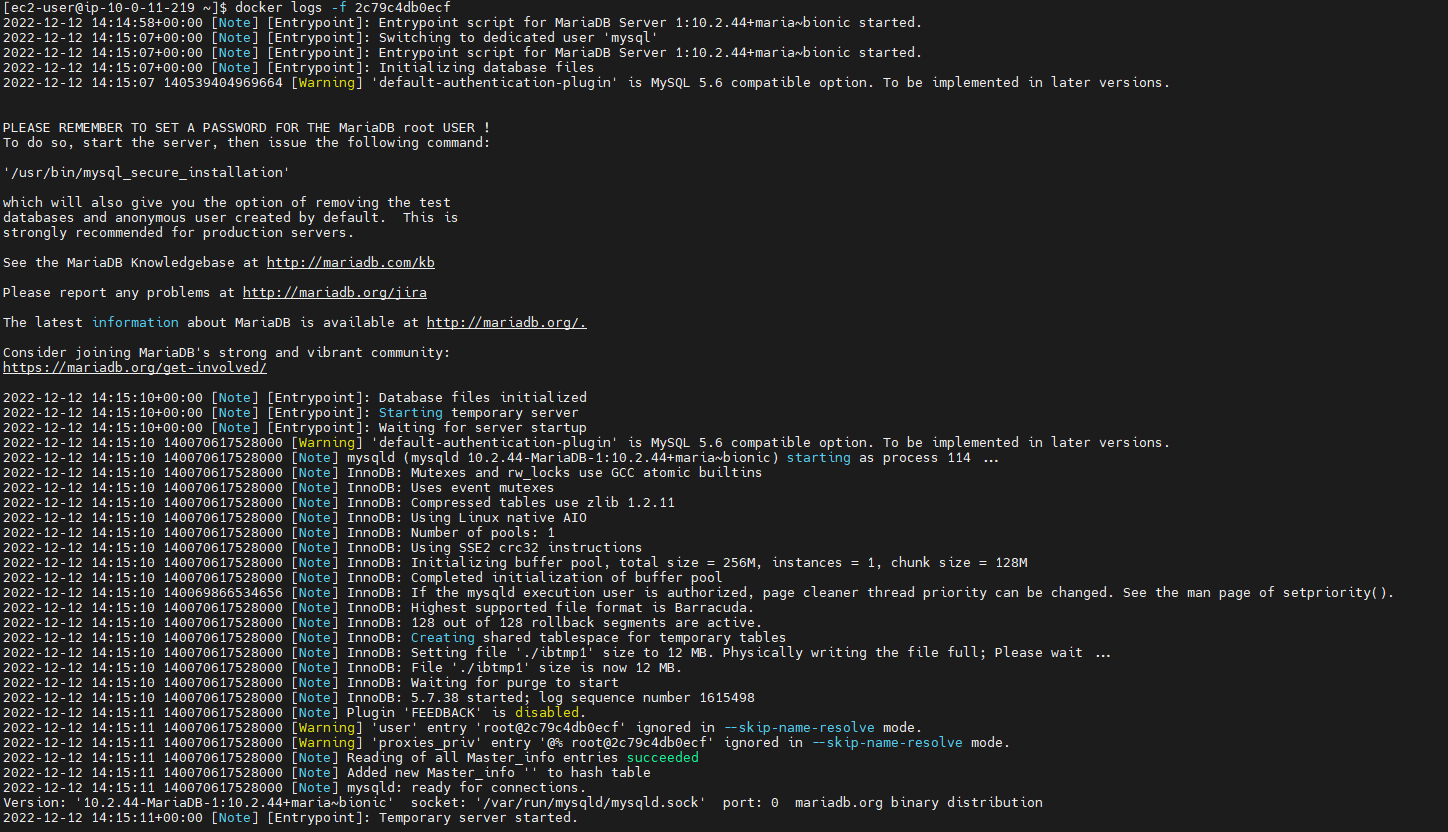
#### Logs ApiProducer



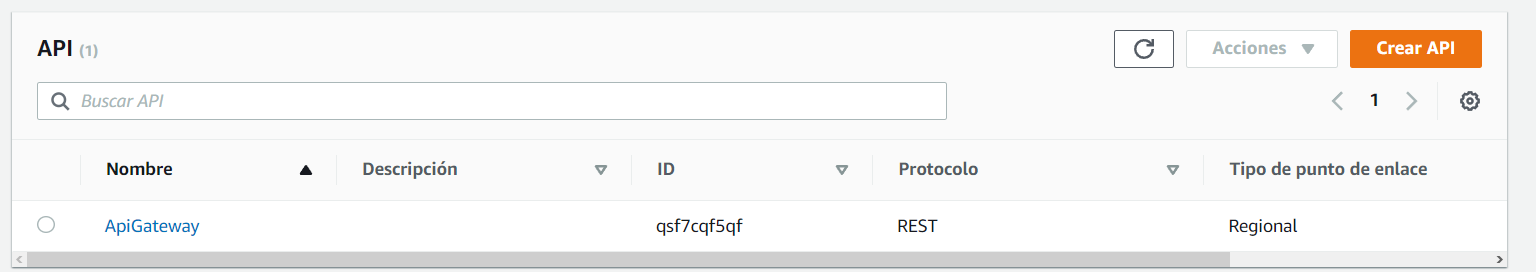
#### Logs ApiConsumer



#### Logs MariaDB

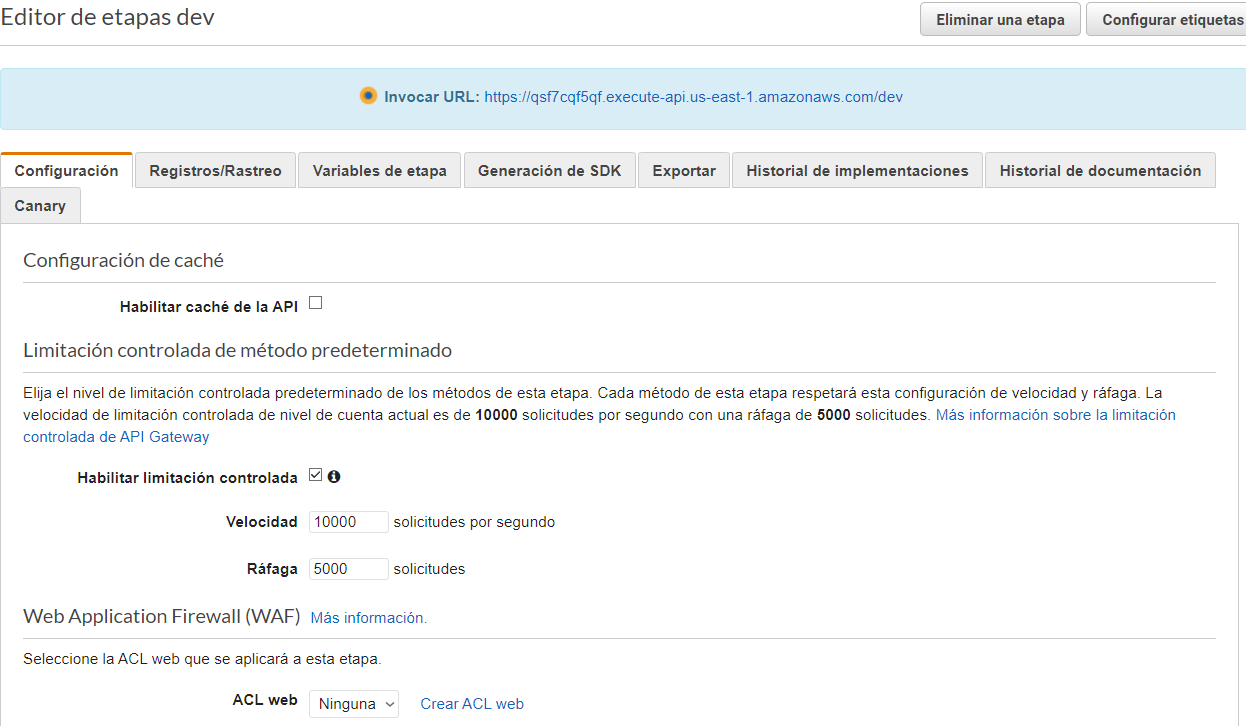


## Api Gateway

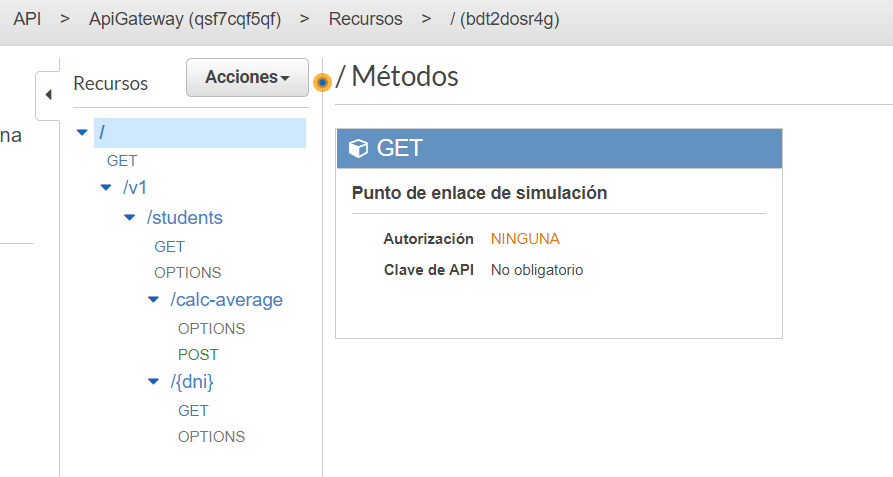


### Etapas

URL: <https://qsf7cqf5qf.execute-api.us-east-1.amazonaws.com/dev>

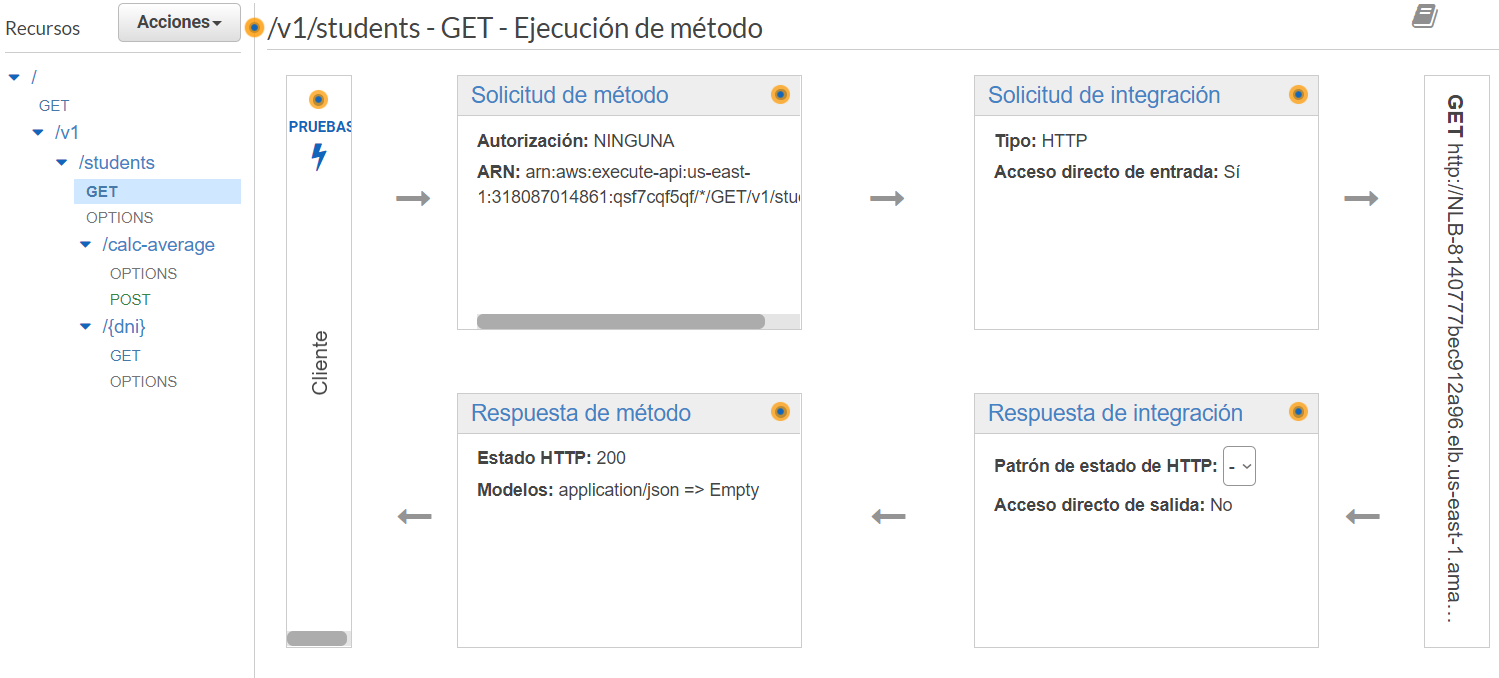


### Recursos

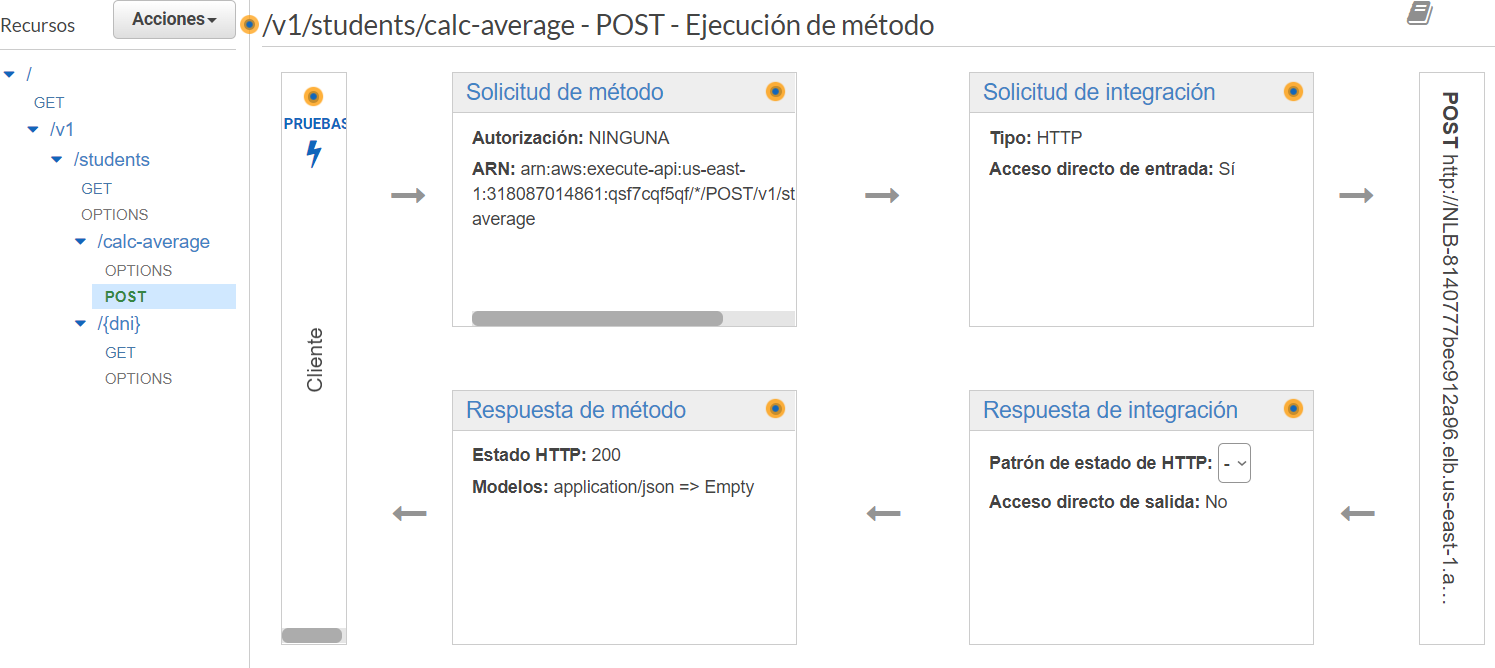


### Endpoints

* GET /v1/students: Ping



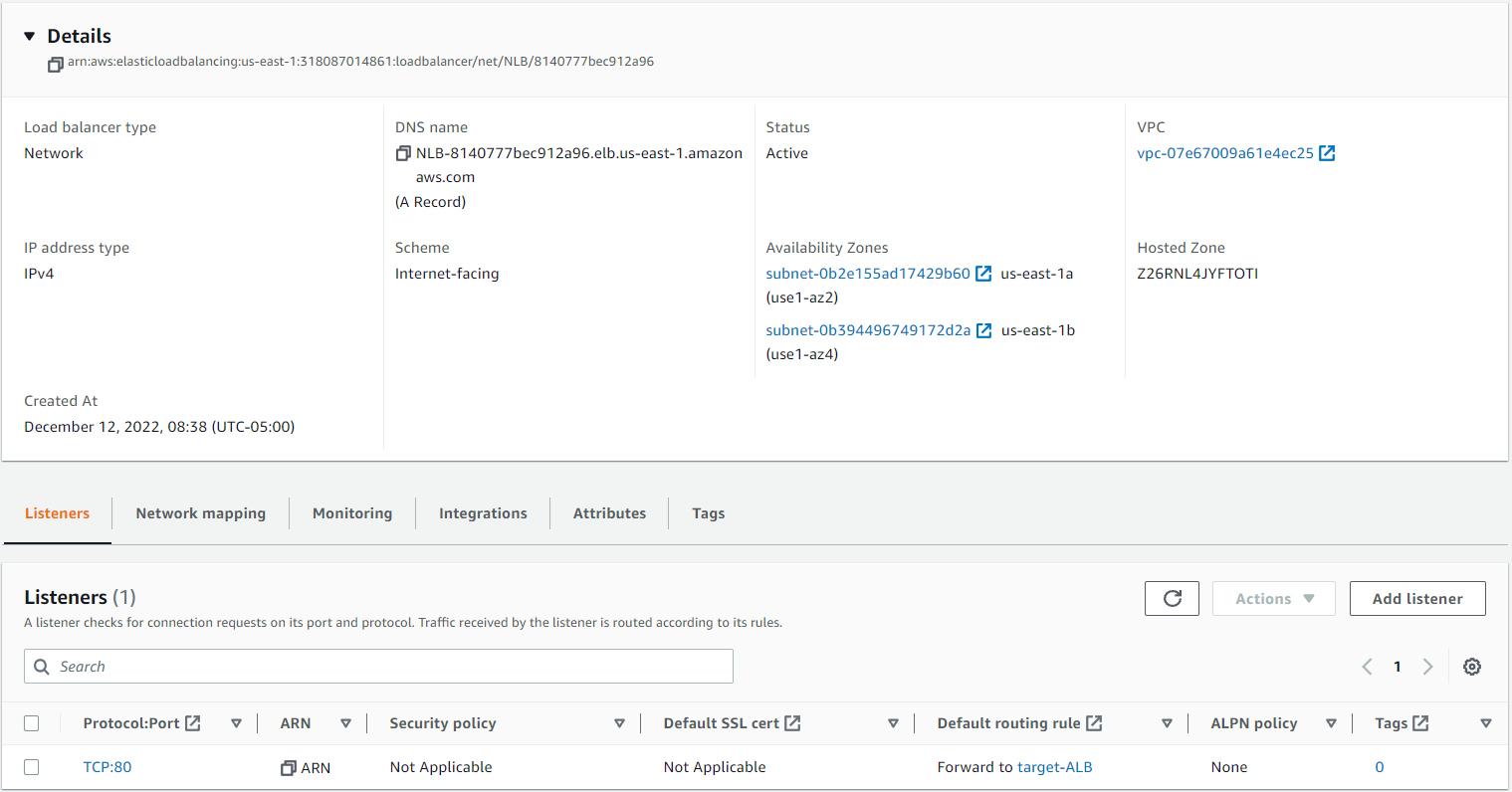
* POST /v1/students/calc-average: Recibe las notas del alumno, las envía por Kafka para que el consumer calcule y almacene el promedio.



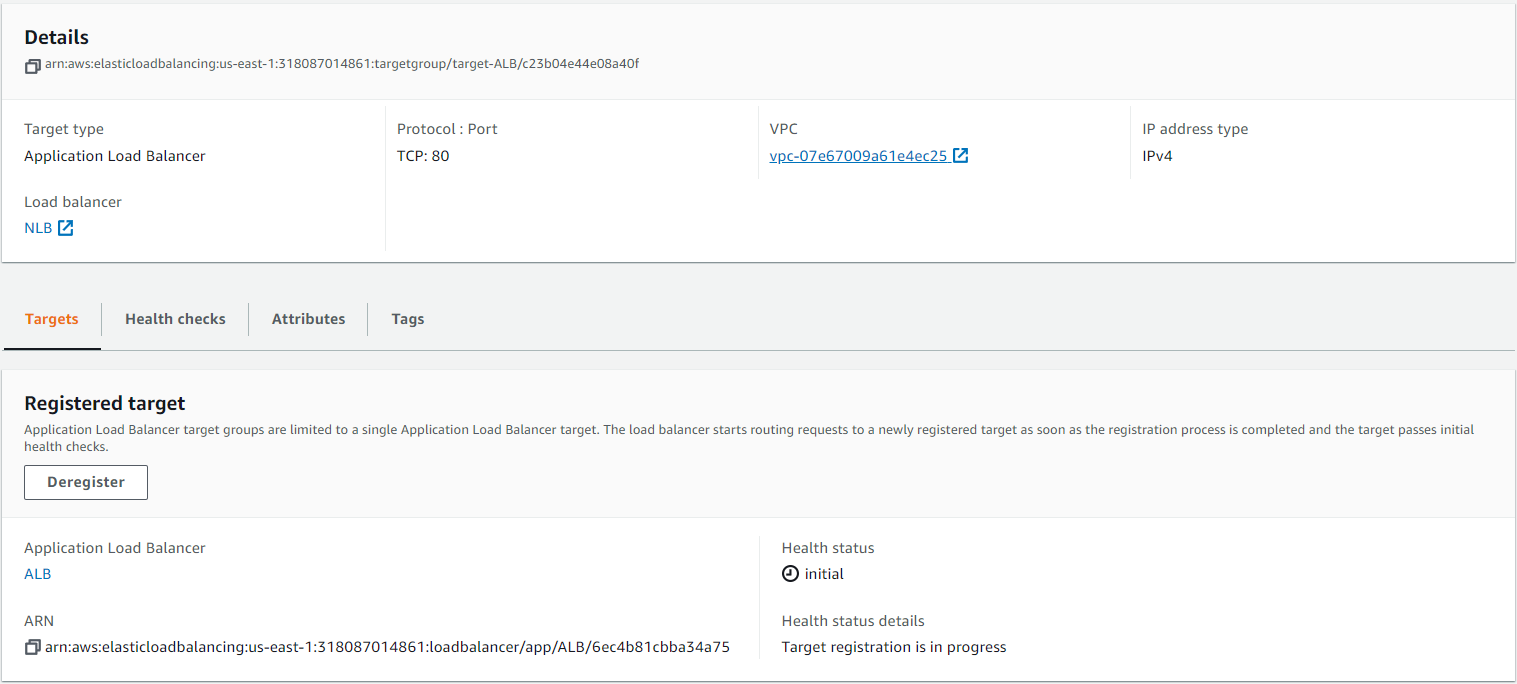
* GET /v1/students/{dni}: Obtiene las notas y promedio de un alumno.



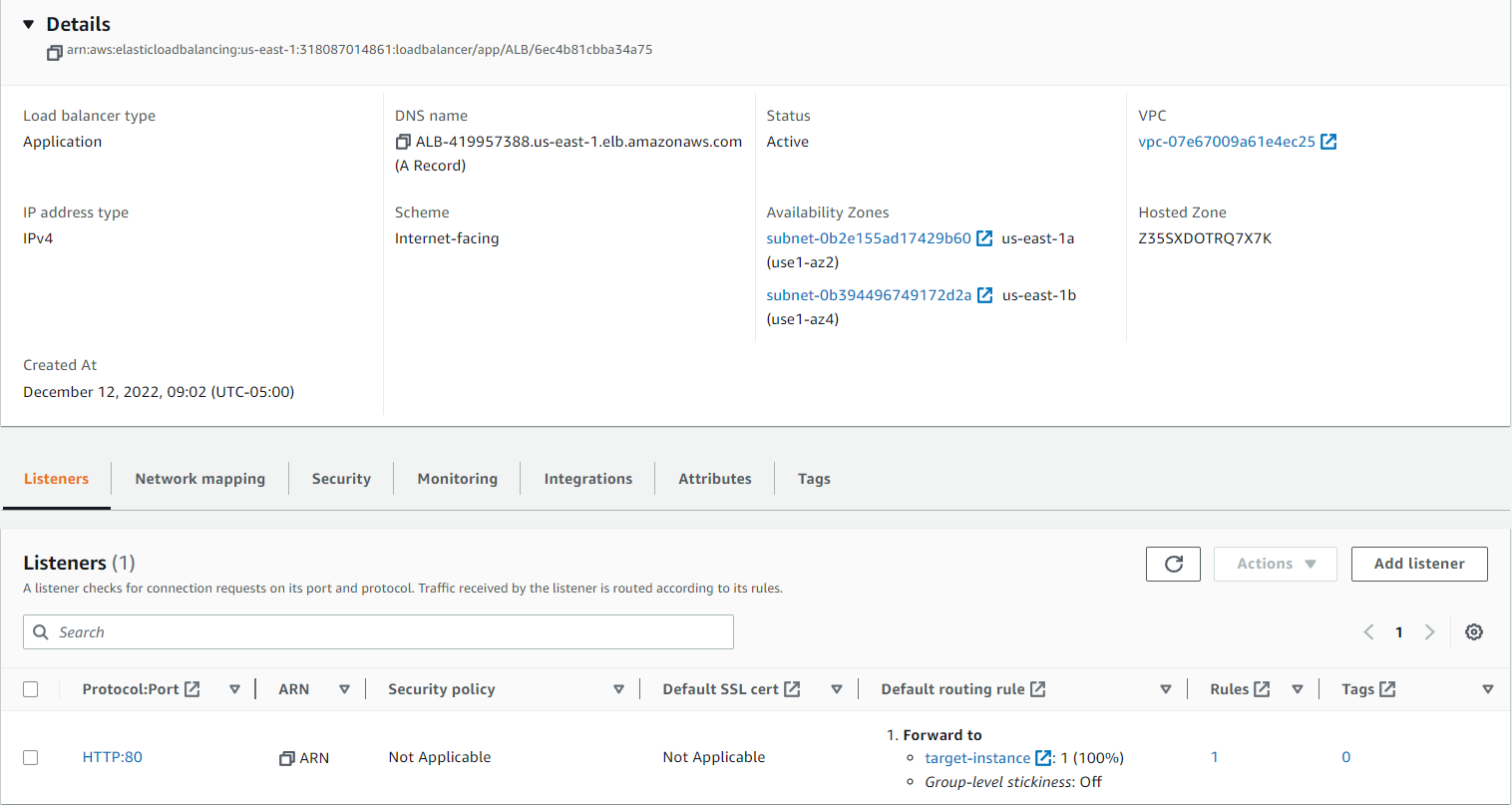
## Network Load Balancer



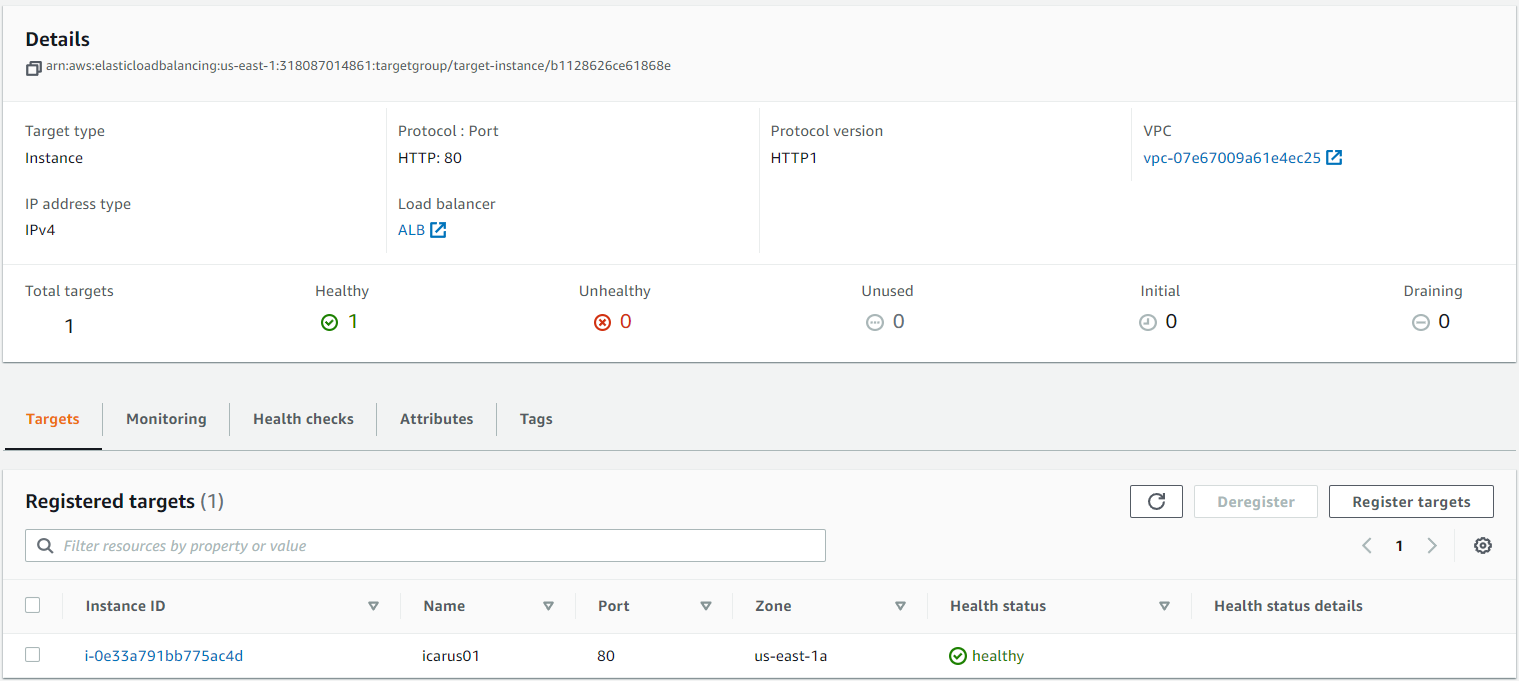
### Target-ALB



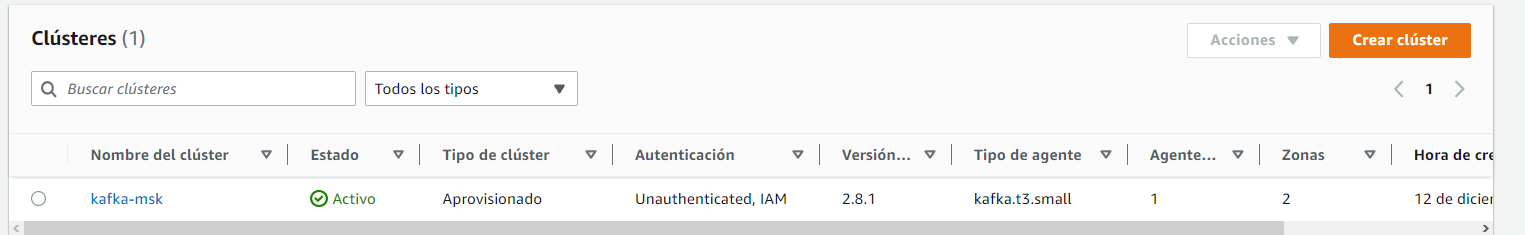
## Application Load Balancer

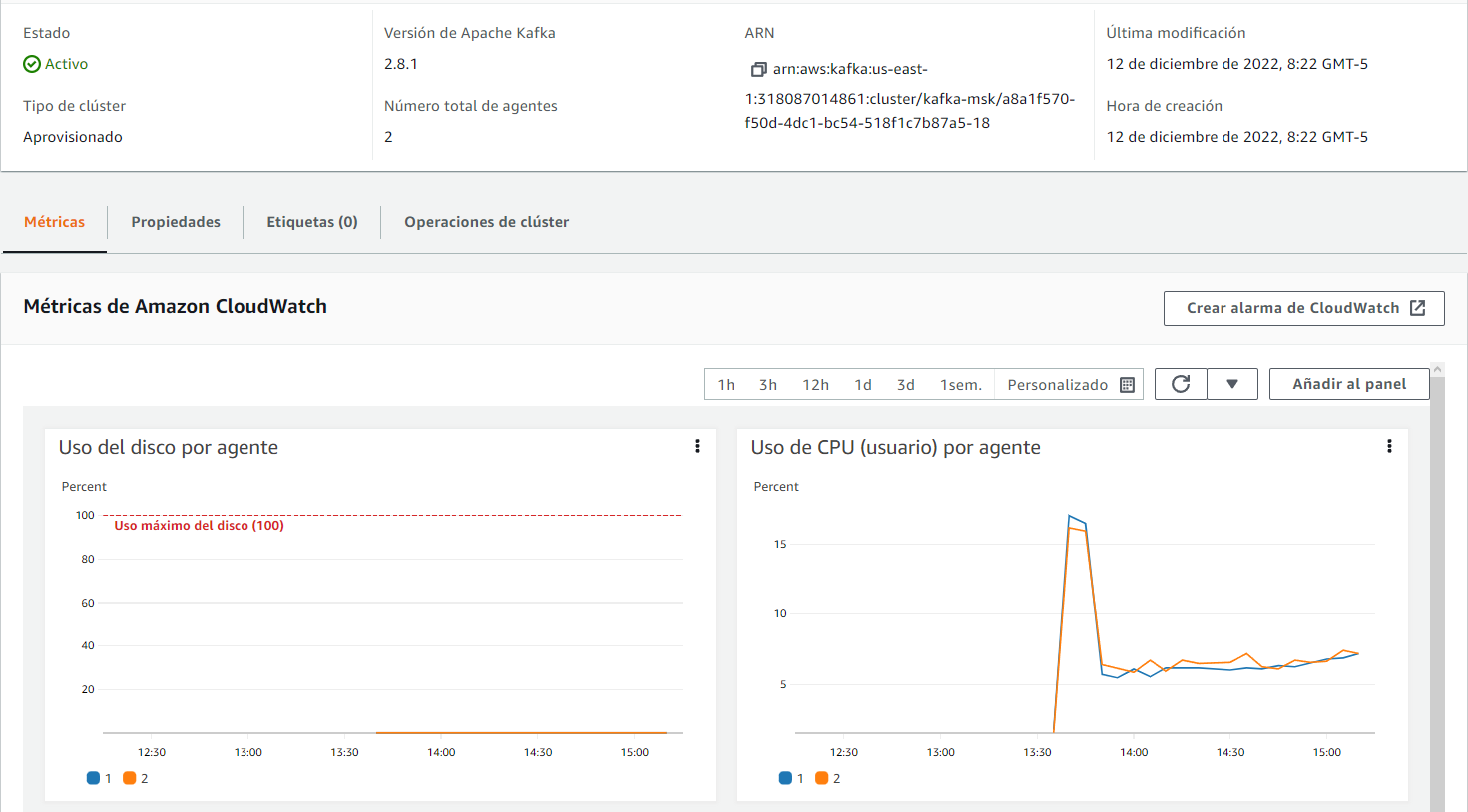


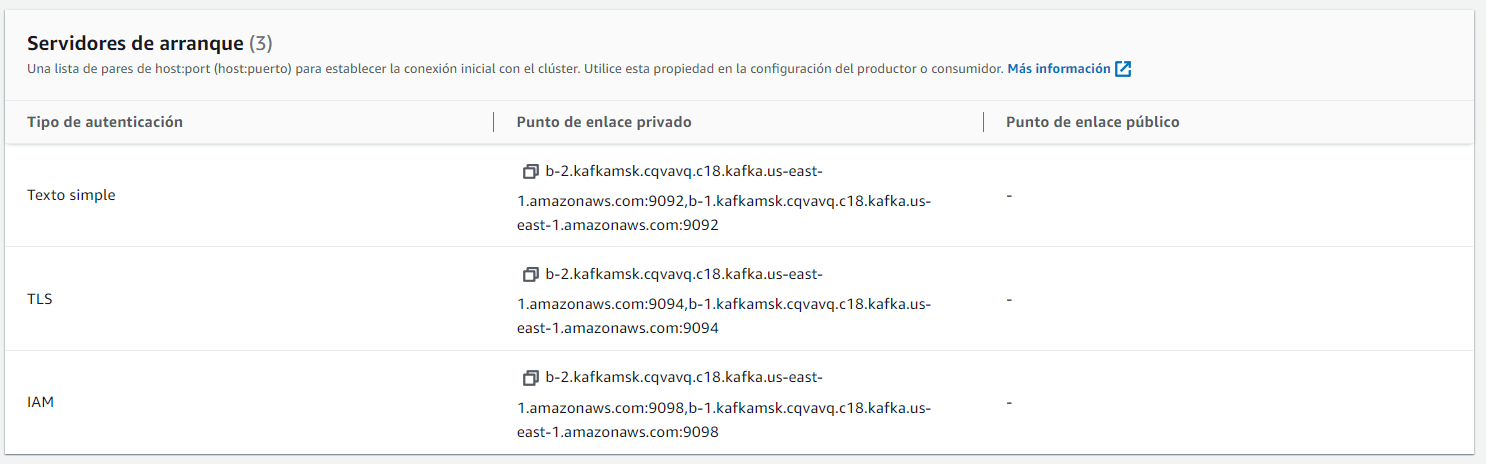
### Target-ALB



## KAFKA







### Creación del tópico: alumnos\_notas desde la instancia EC2

./bin/kafka-topics.sh --create --bootstrap-server b-1.kafkamsk.cqvavq.c18.kafka.us-east-1.amazonaws.com:9092 --replication-factor 1 --partitions 1 --topic alumnos\_notas

