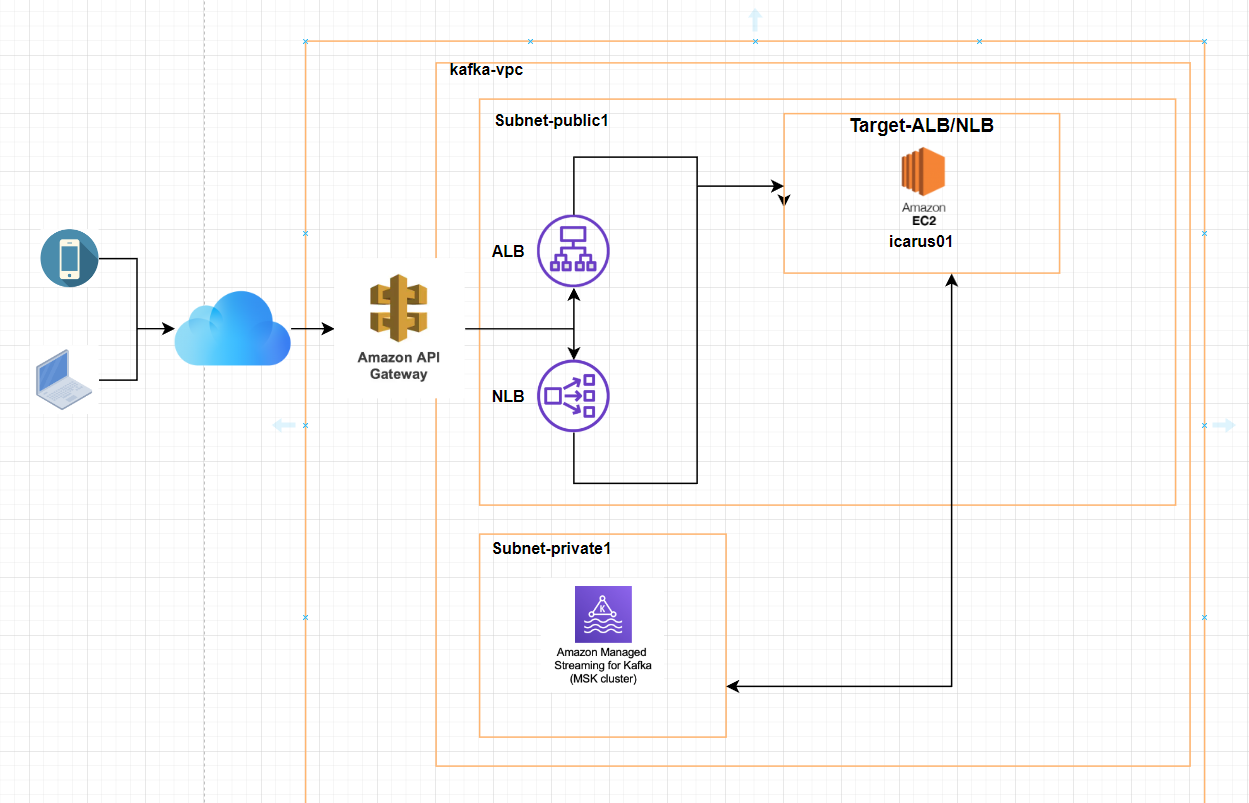
# Configuración CLOUD

## Datos del Estudiante

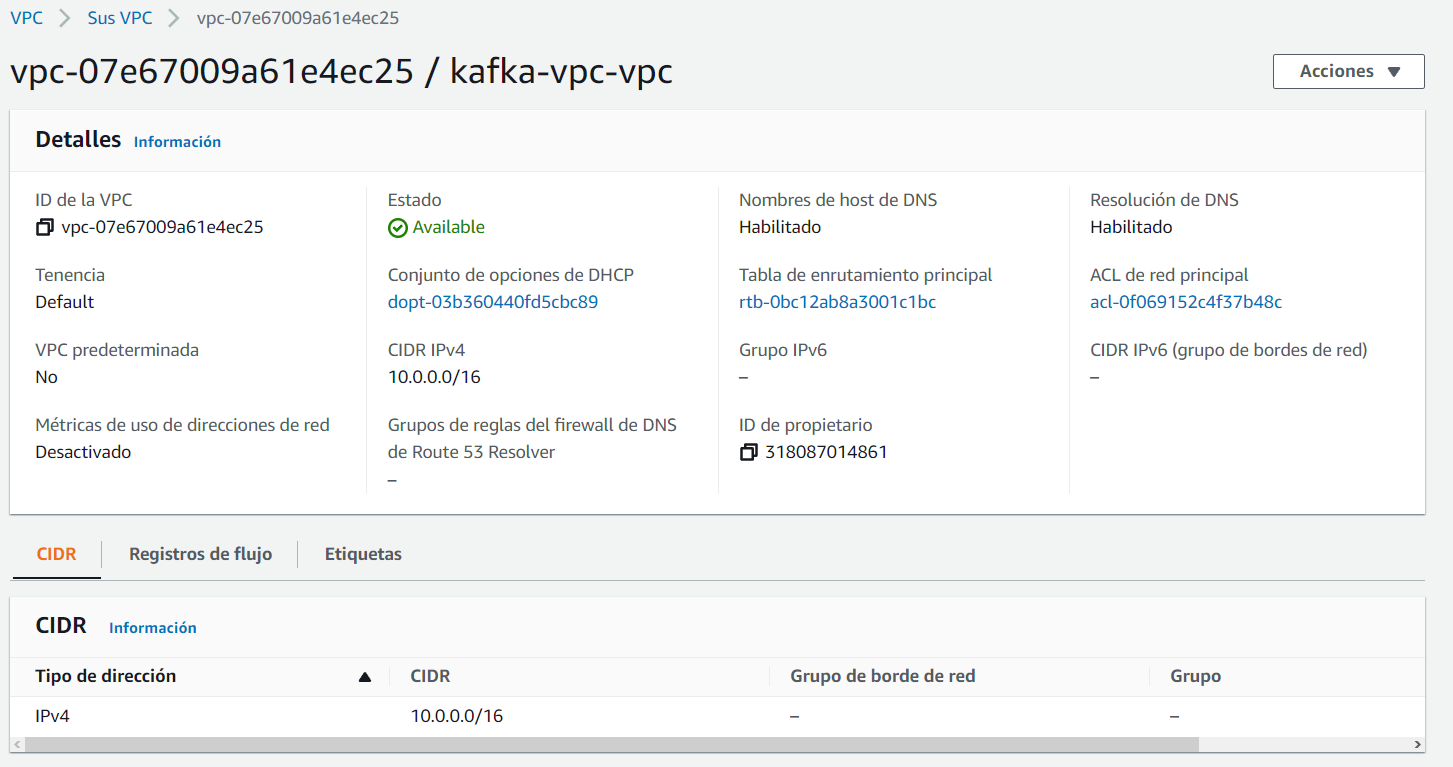
Nombres y Apellidos: Luis Fernando Litano Ramos

## Arquitectura

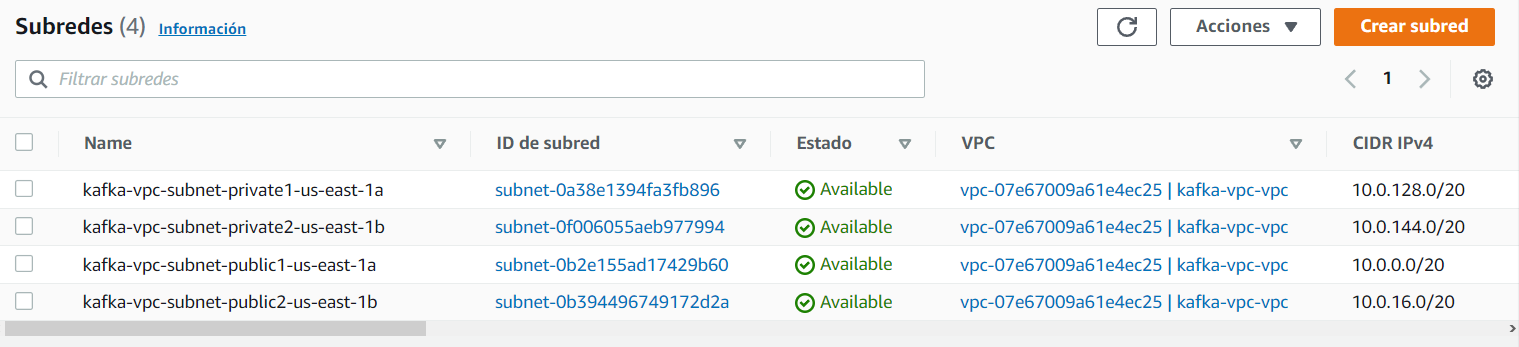
### AWS



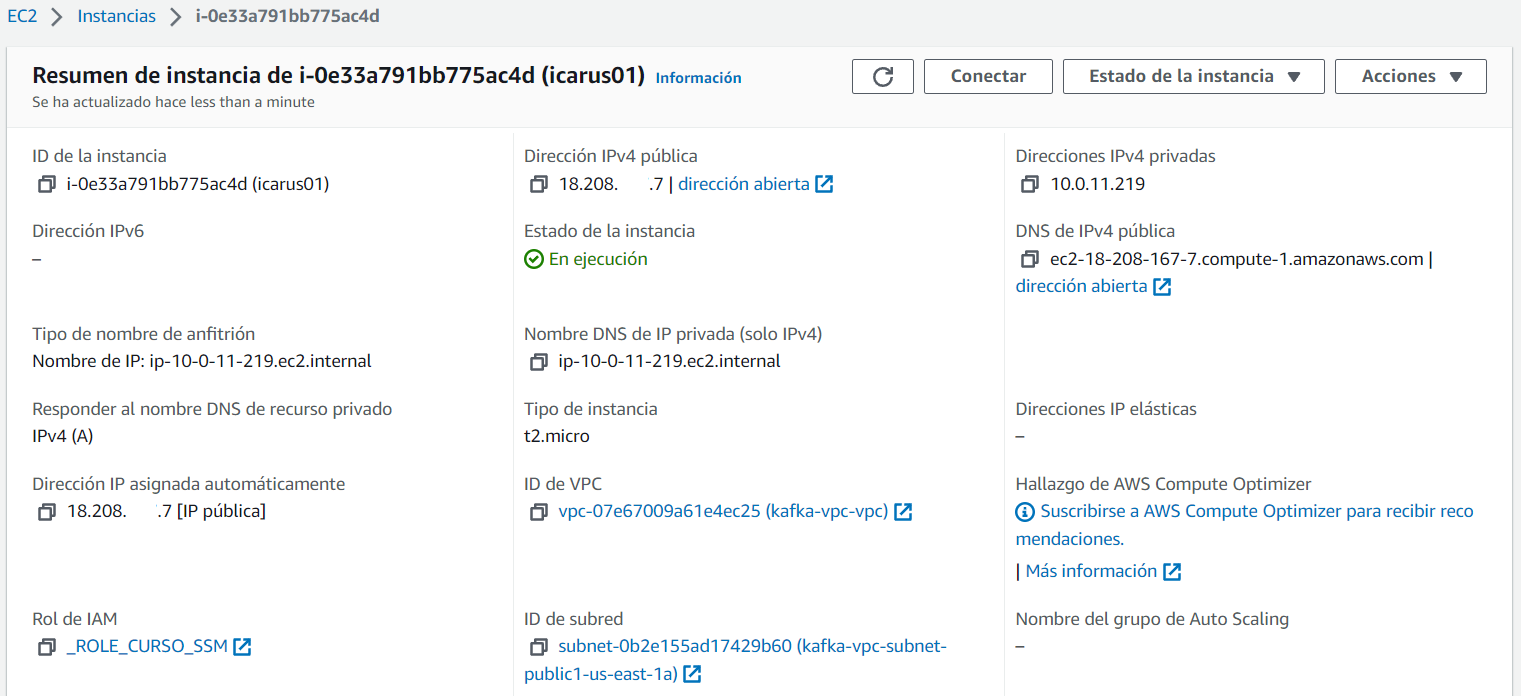
## VPC



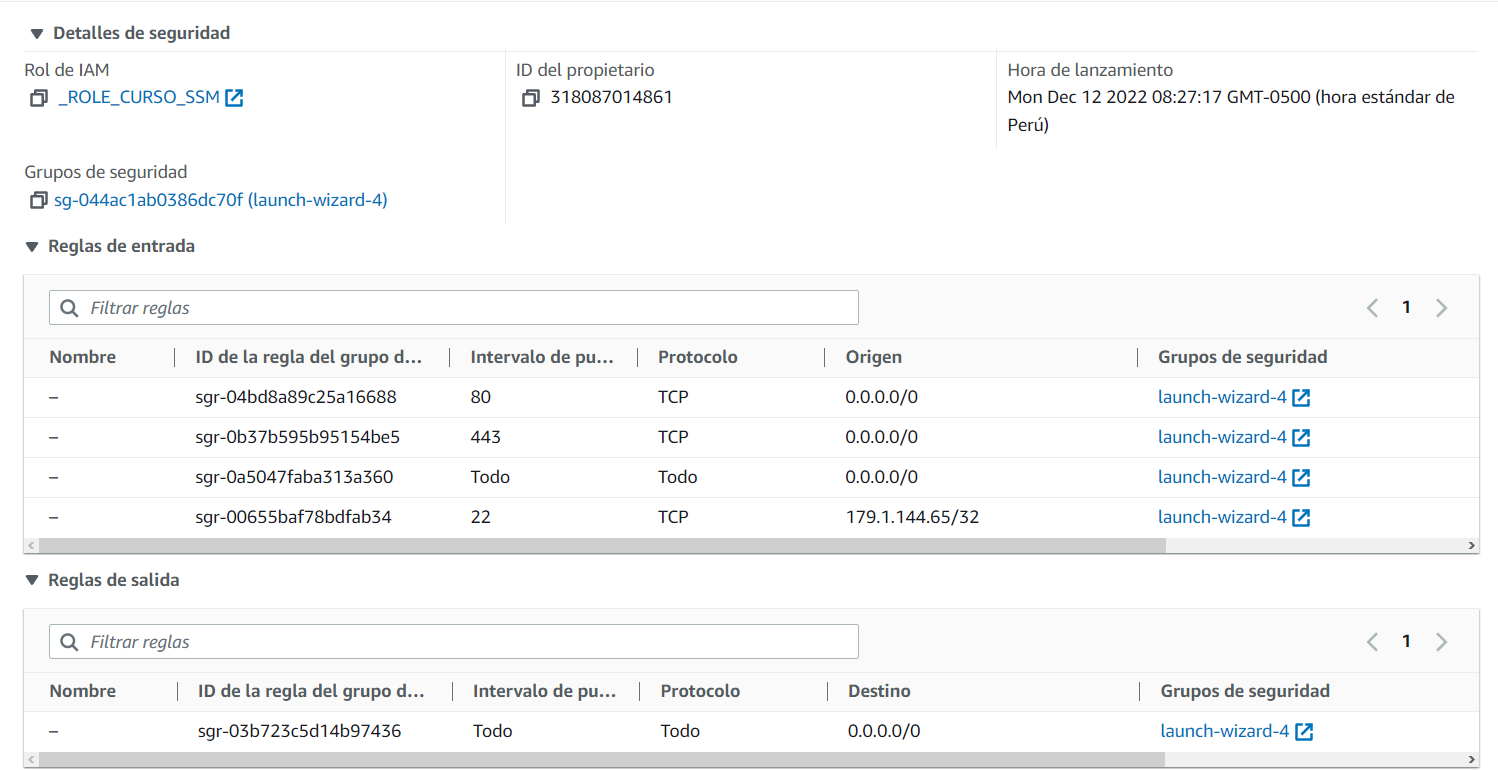
### Subredes (2 AZ)



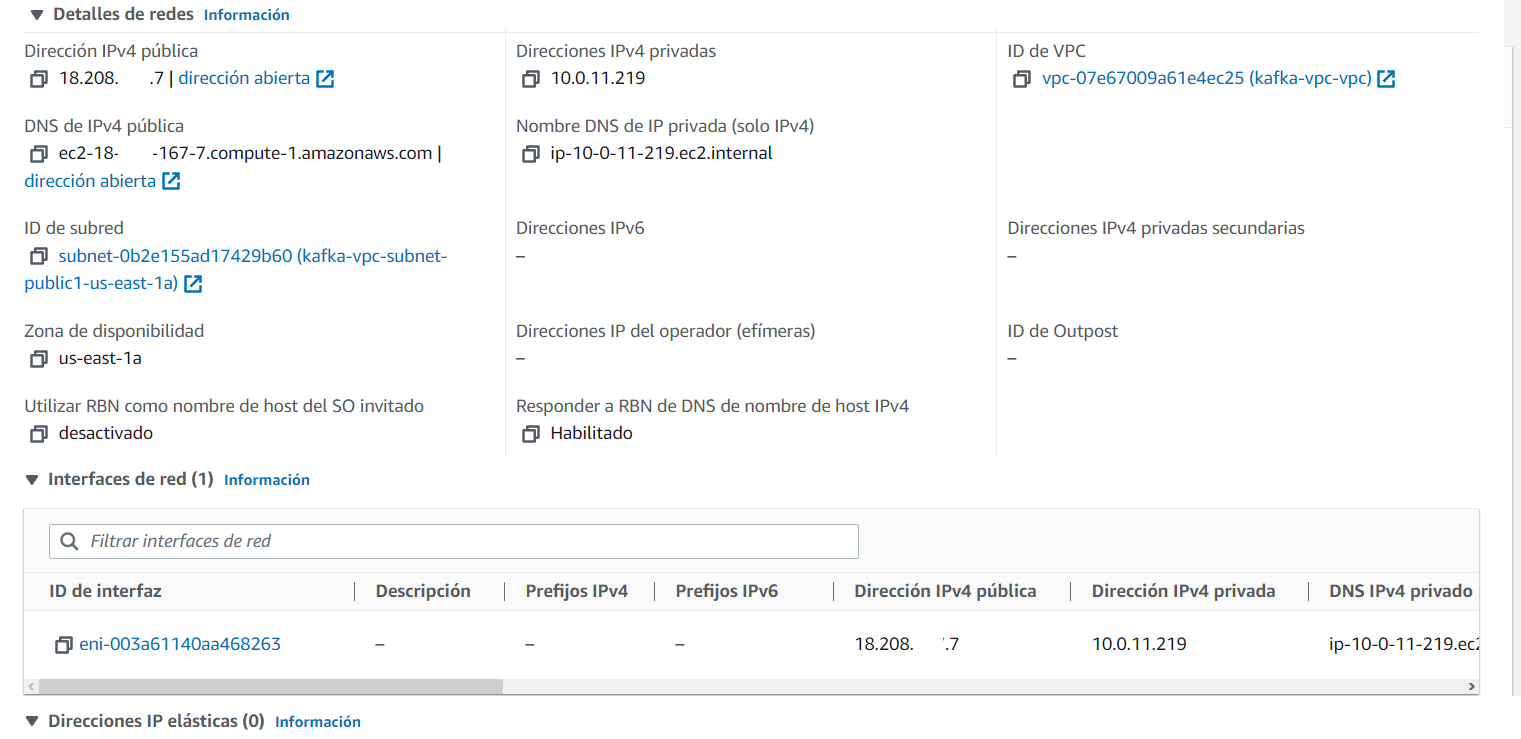
## EC2 - Micro servicios



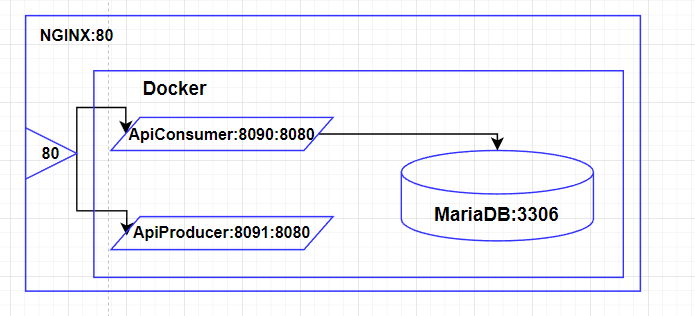
### Seguridad



### Redes

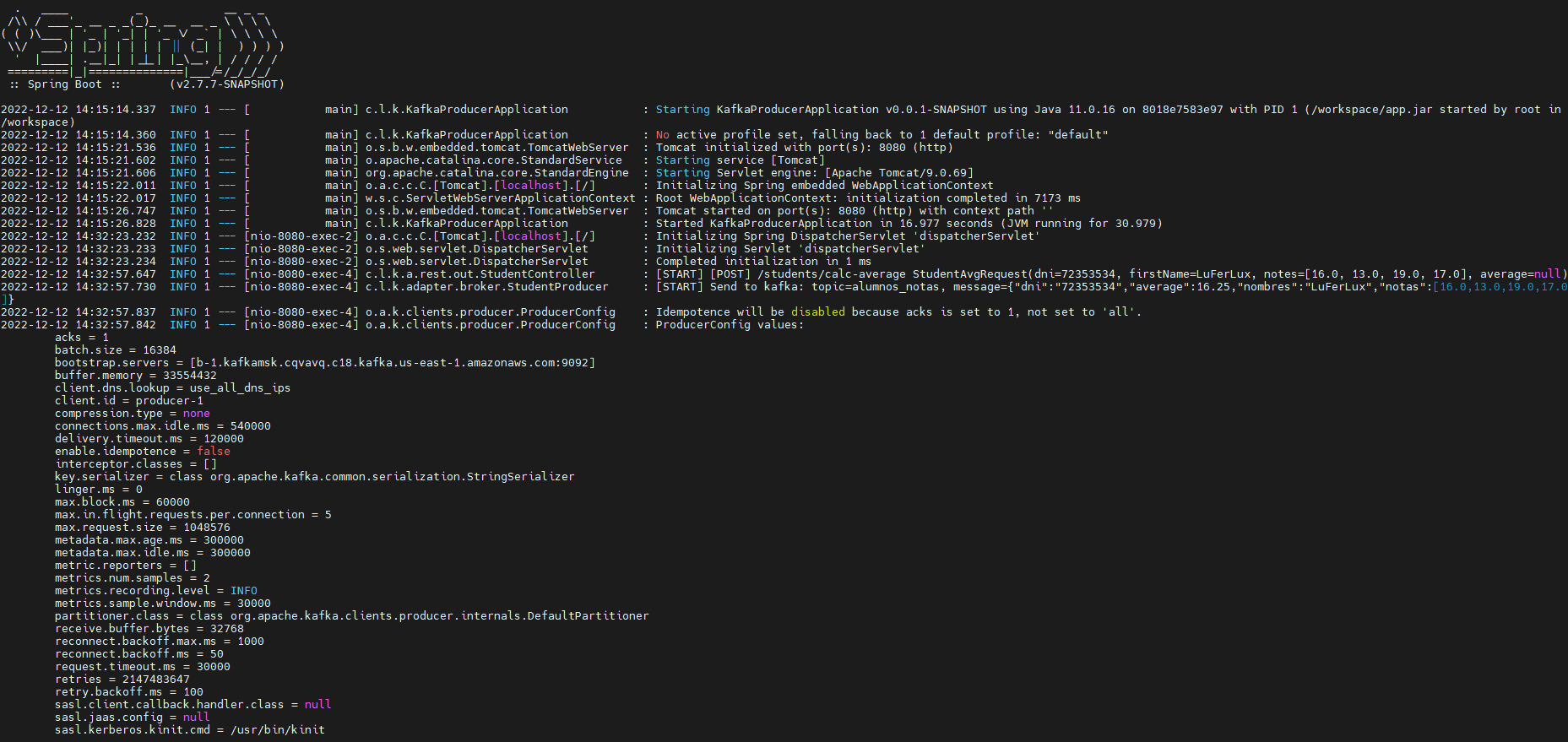


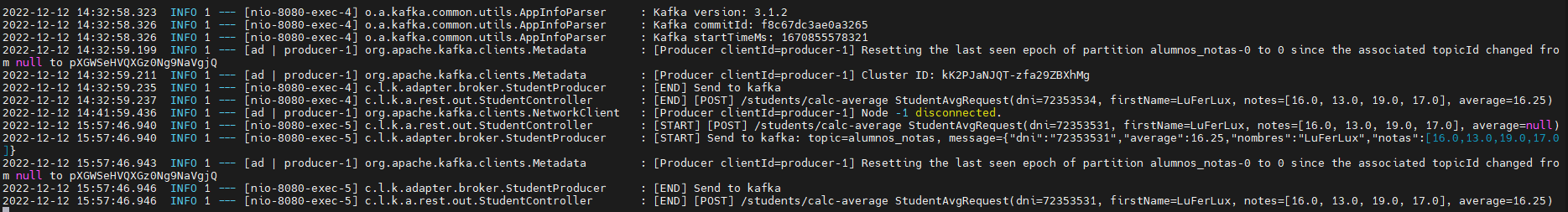
### Micro servicios



#### Logs ApiProducer

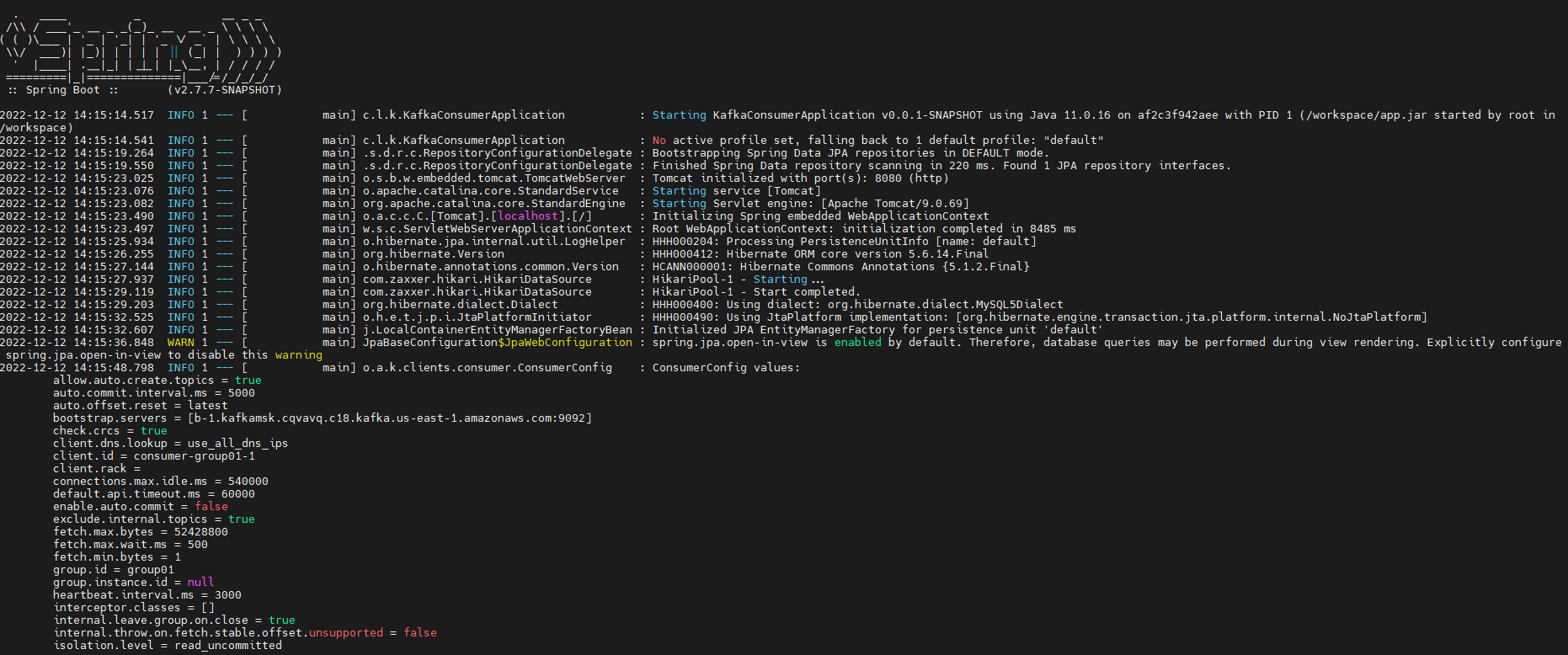
* Inicio del MS

- Recibiendo un request

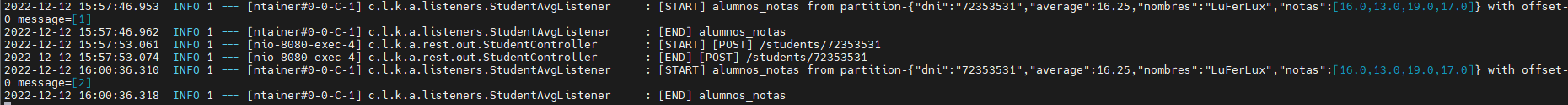


#### Logs ApiConsumer

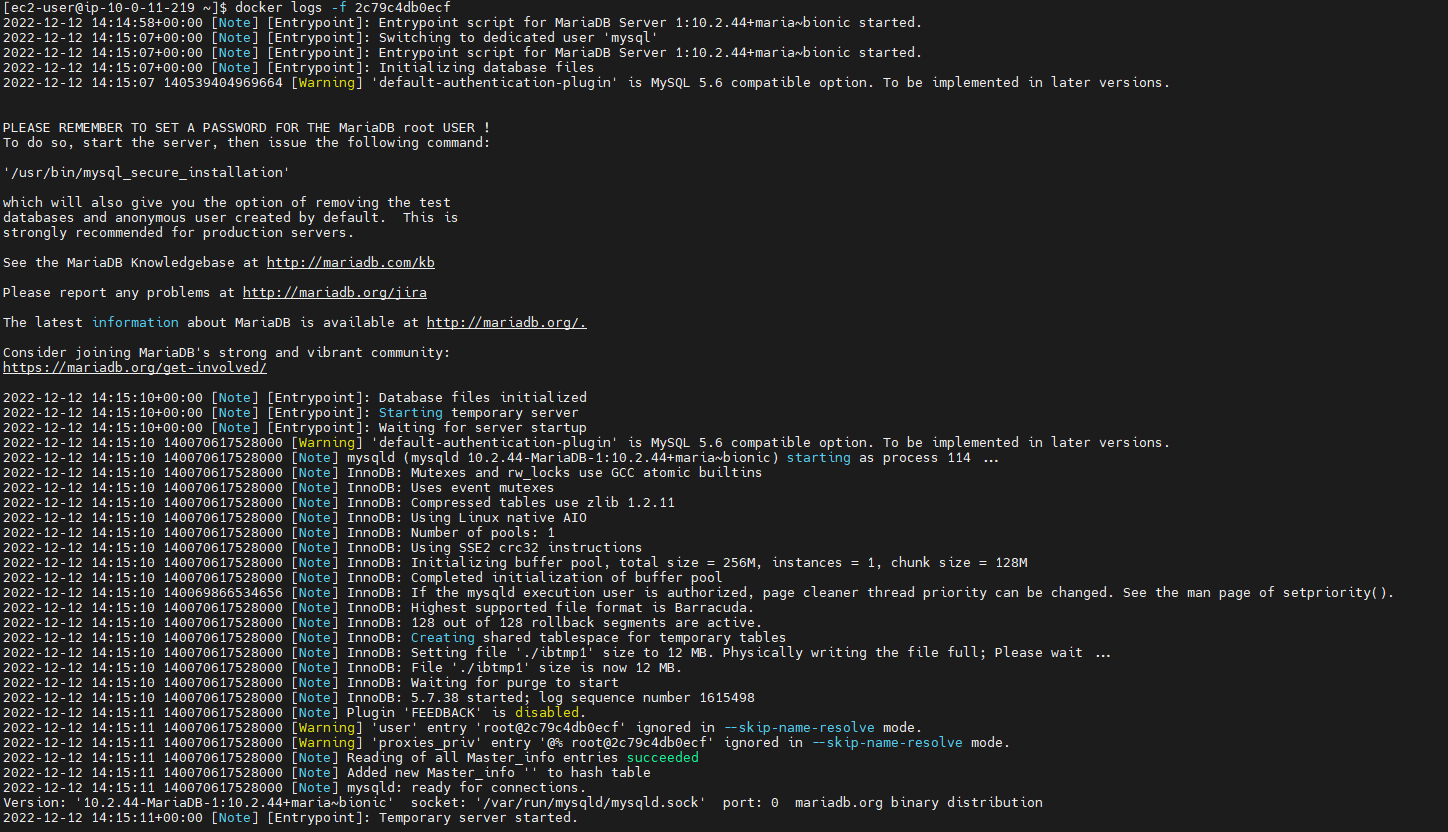
* Inicio del MS



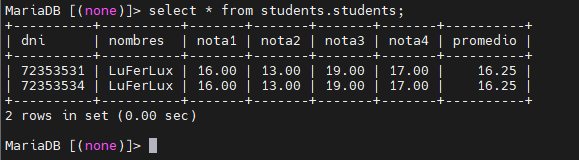
- Recibiendo un mensaje de kafka



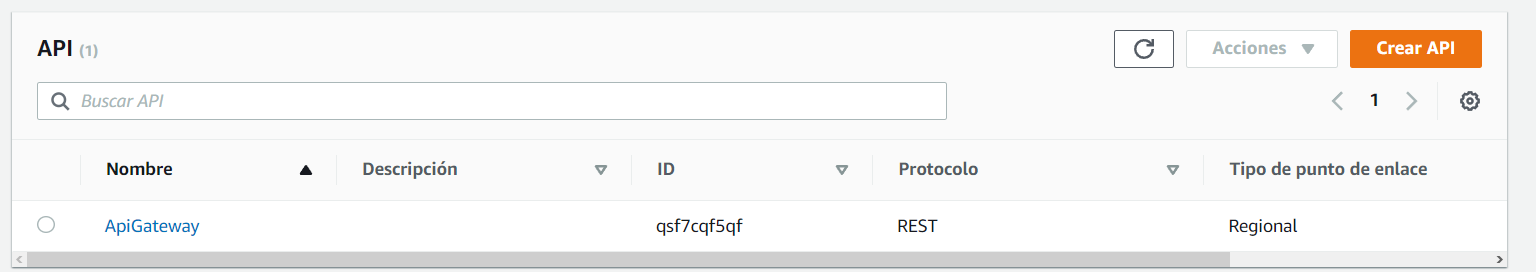
#### Logs MariaDB



* Visualización de la tabla

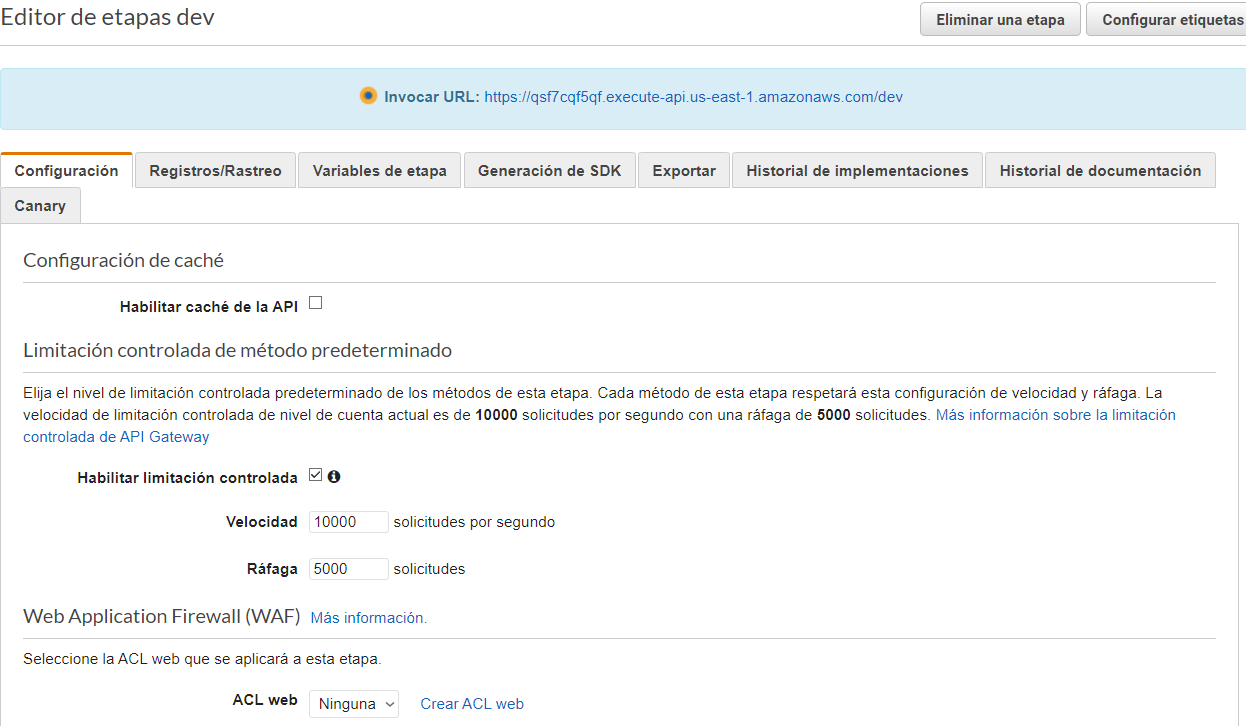


## Api Gateway

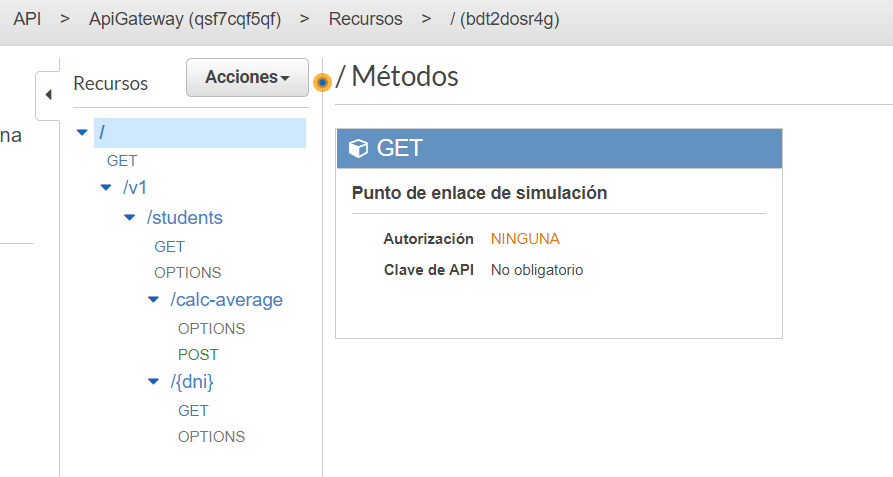


### Etapas

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

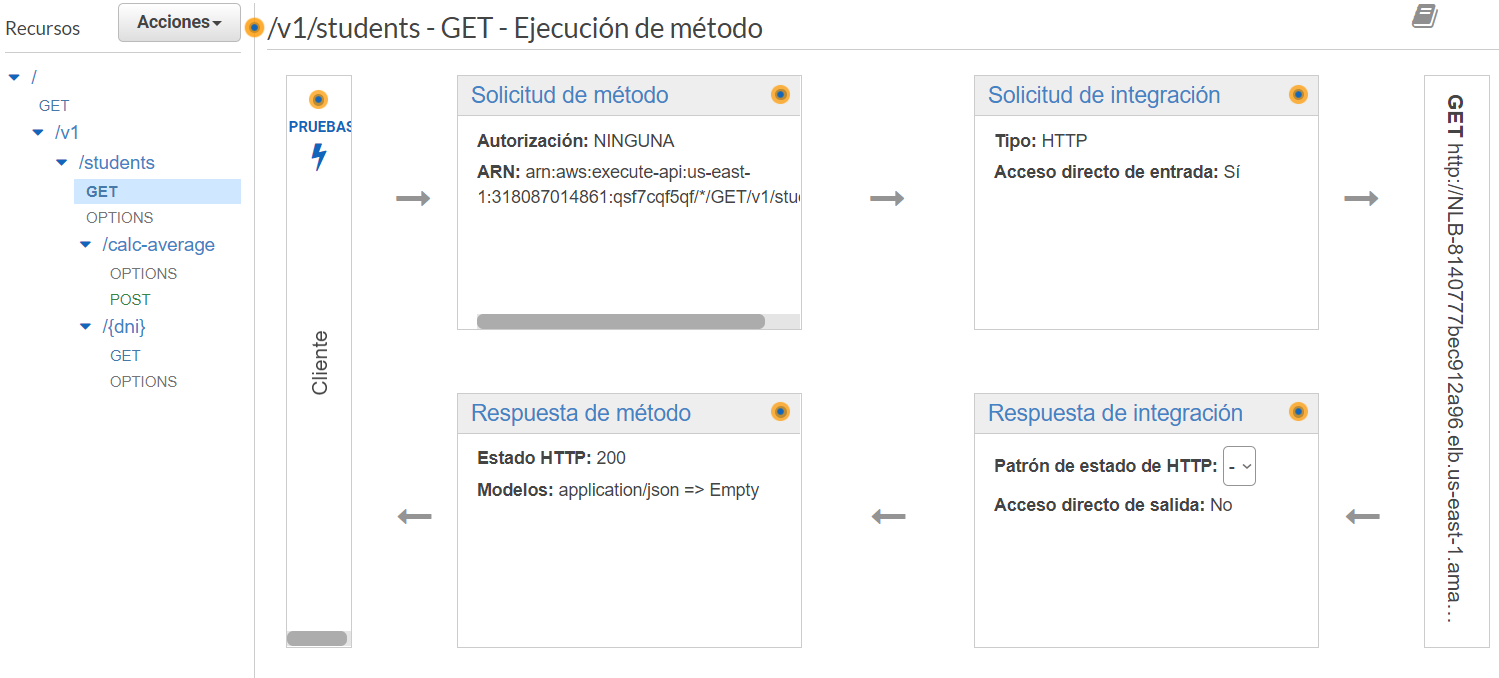


### Recursos

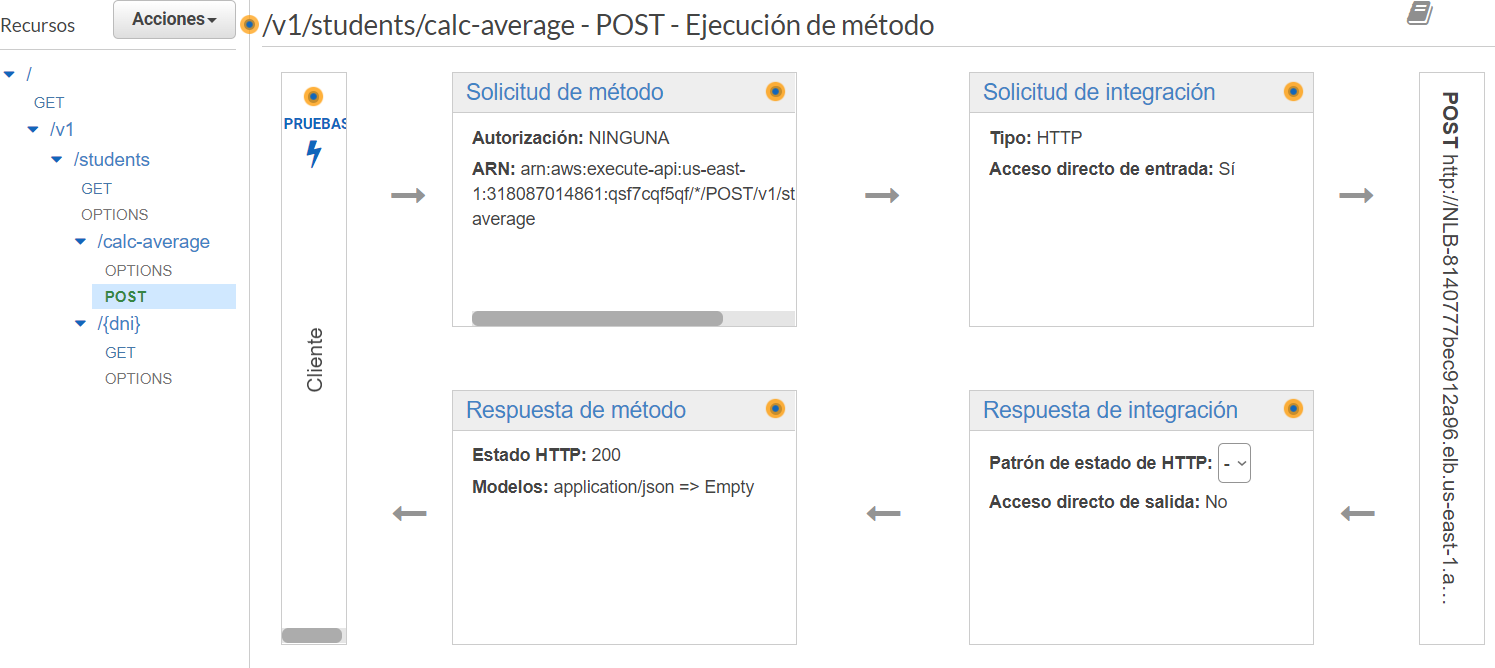


### Endpoints

* GET /v1/students: Ping



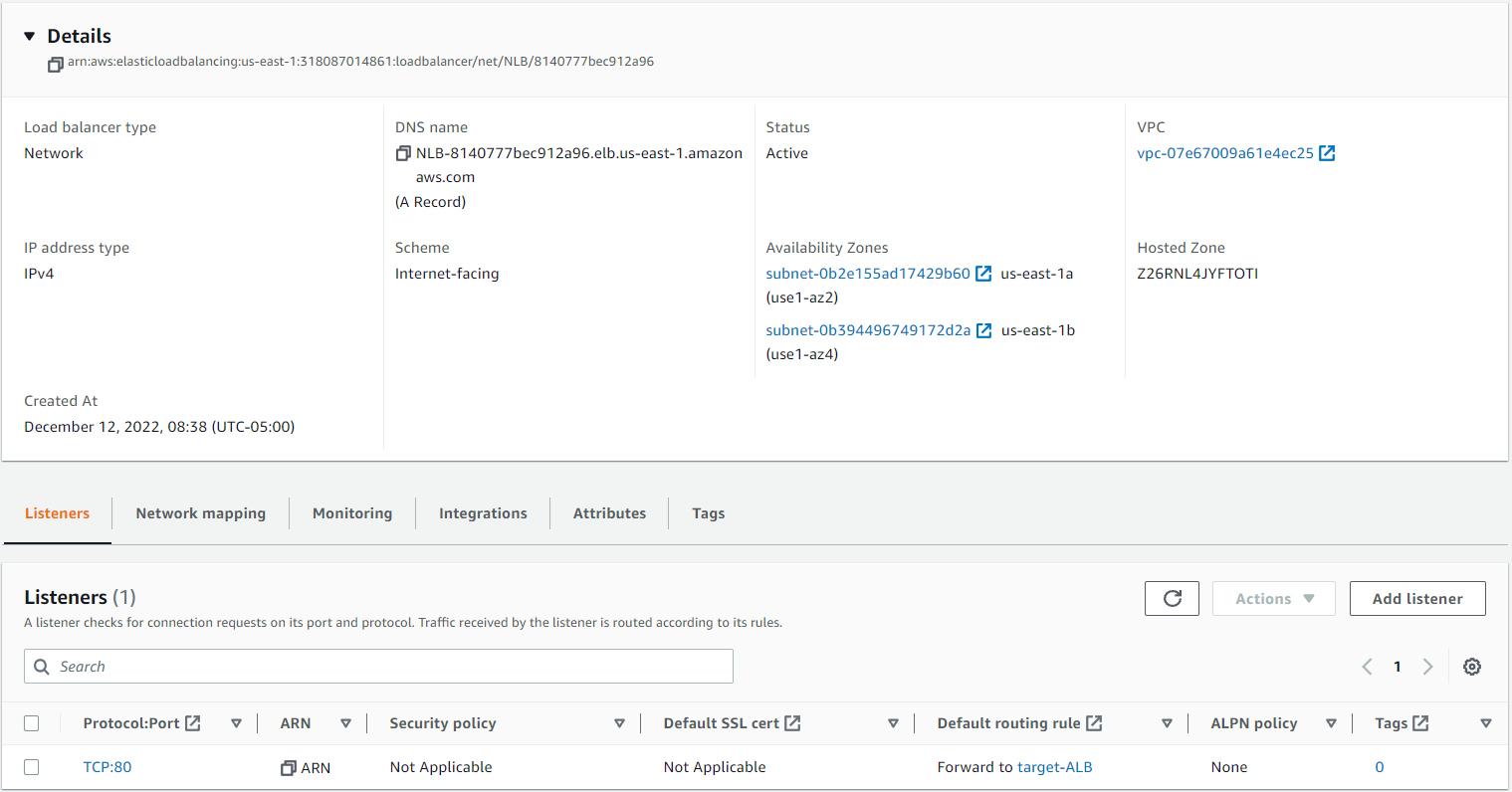
* POST /v1/students/calc-average: Recibe las notas del alumno, las envía por Kafka para que el consumer calcule y almacene el promedio.



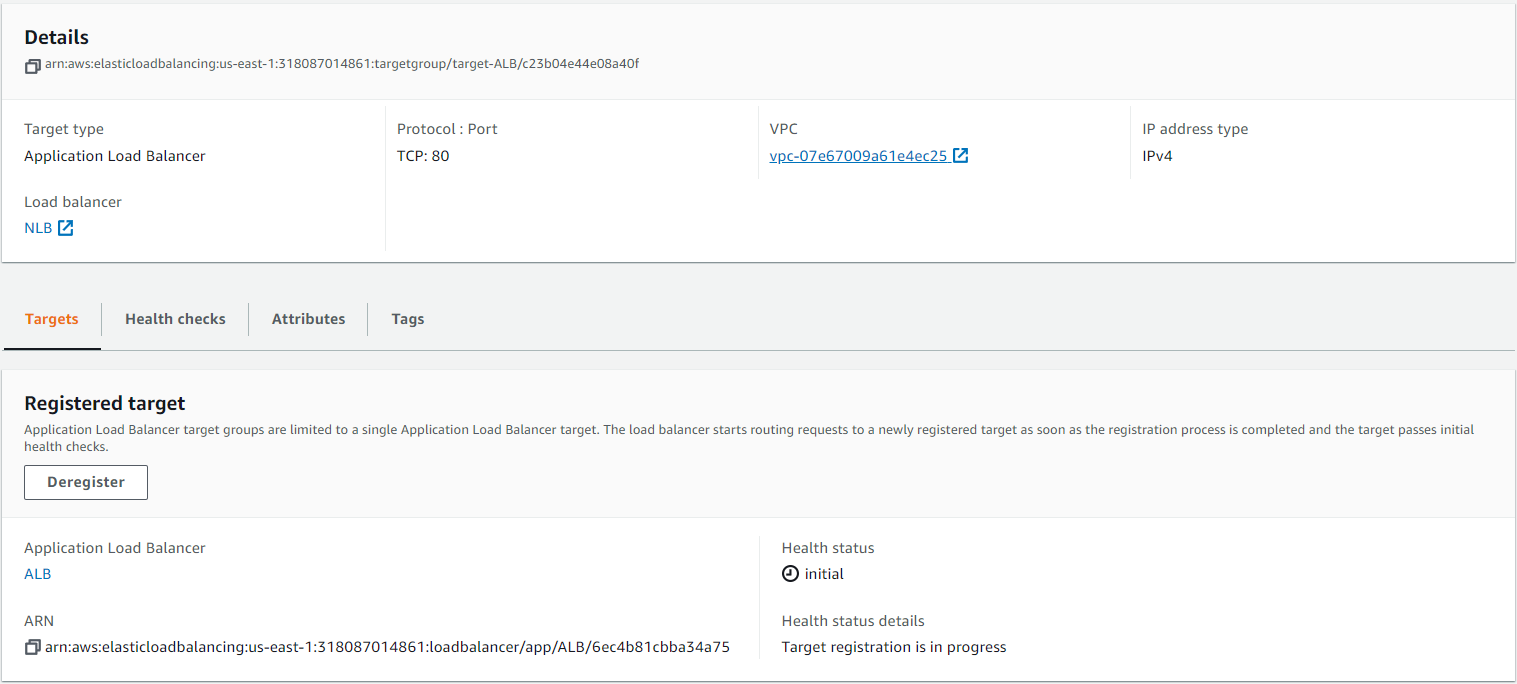
* GET /v1/students/{dni}: Obtiene las notas y promedio de un alumno.



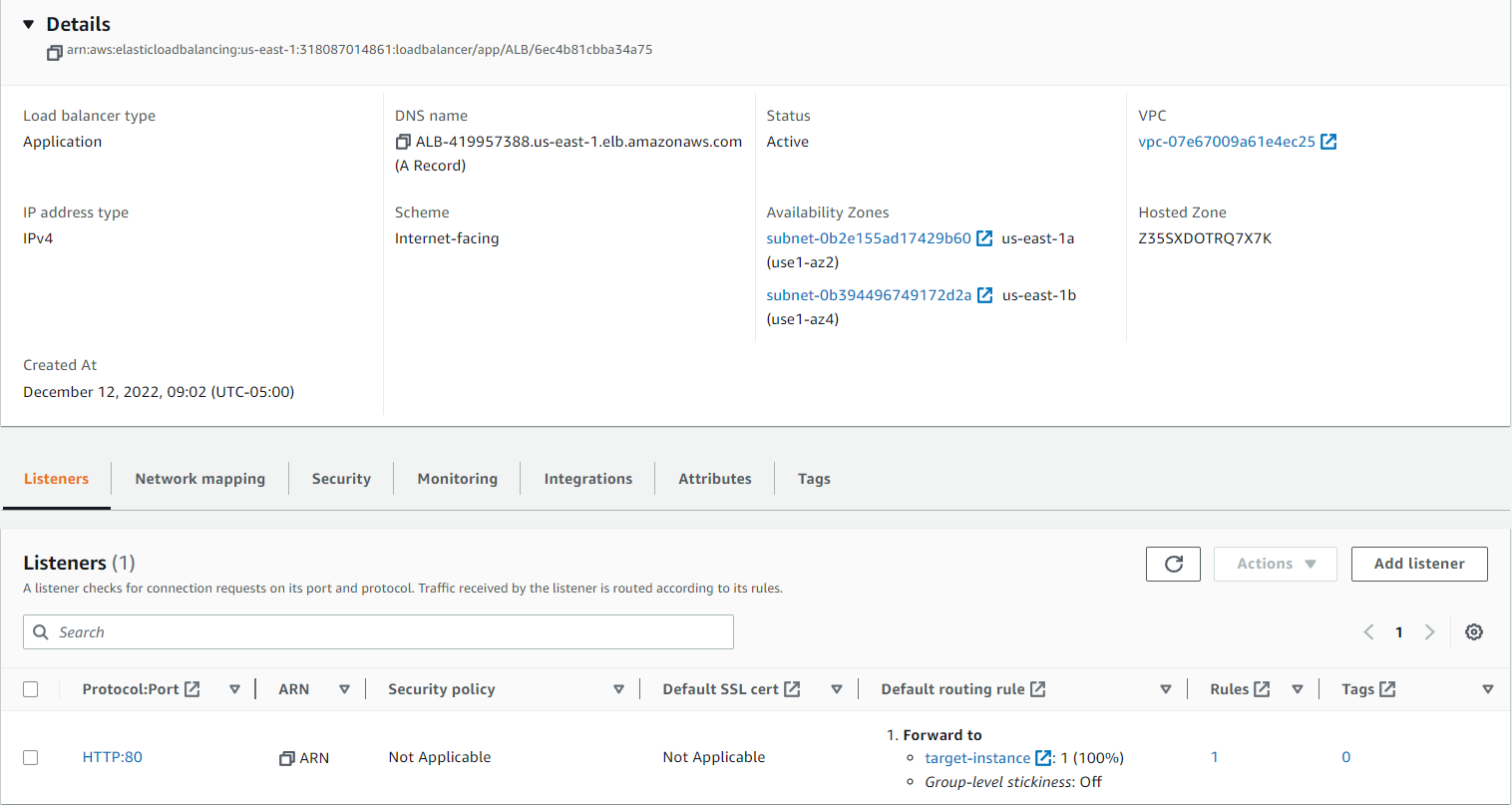
## Network Load Balancer



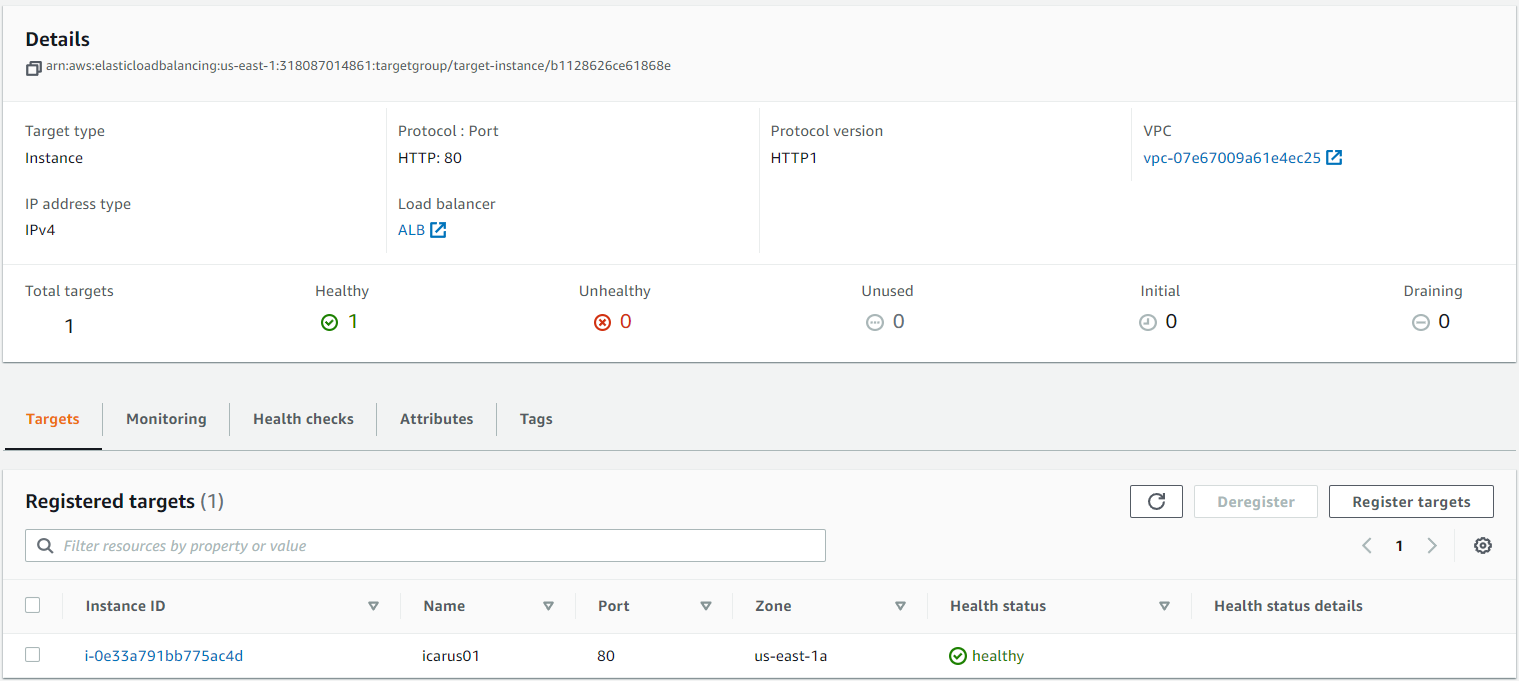
### Target-NLB



## Application Load Balancer

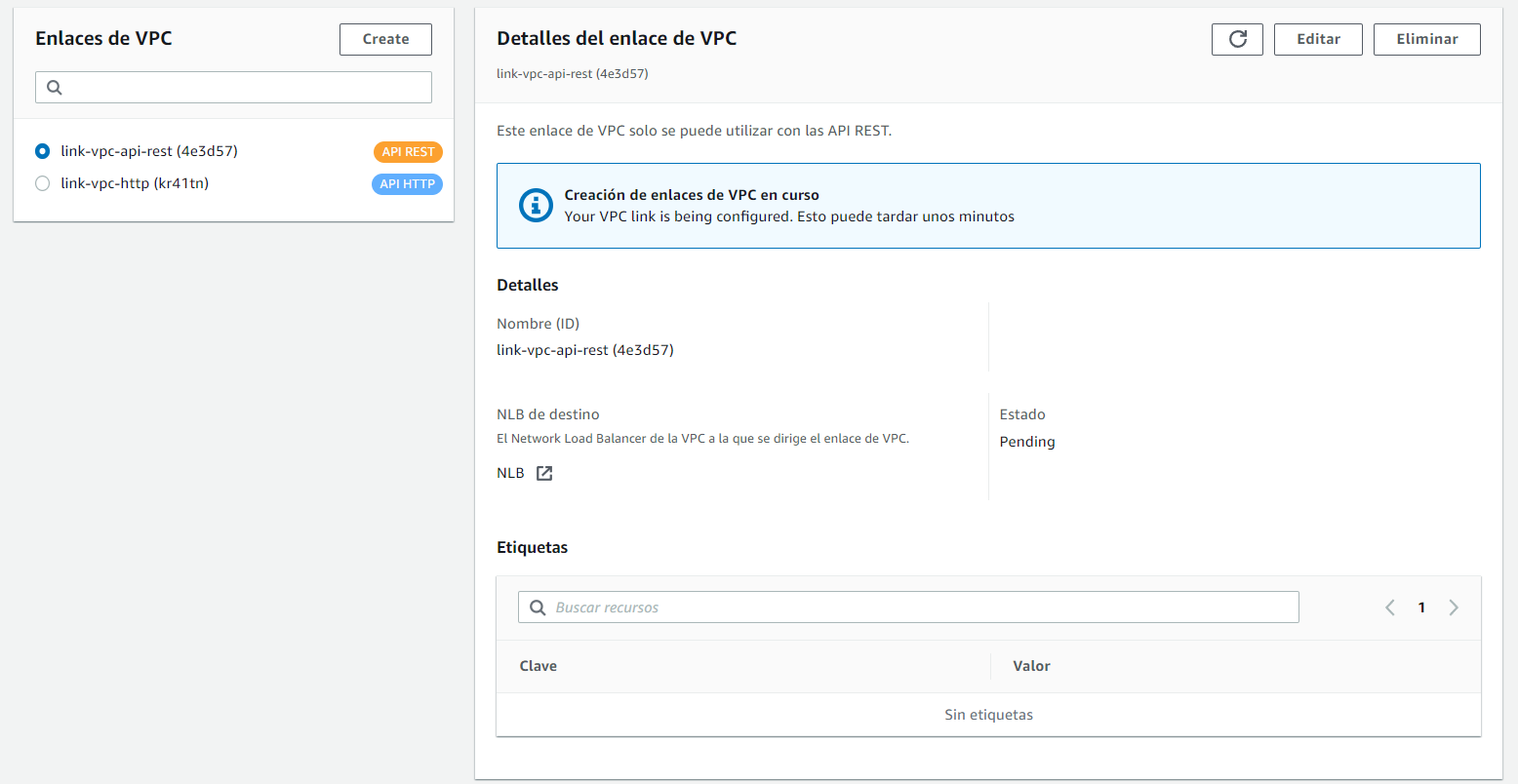


### Target-ALB

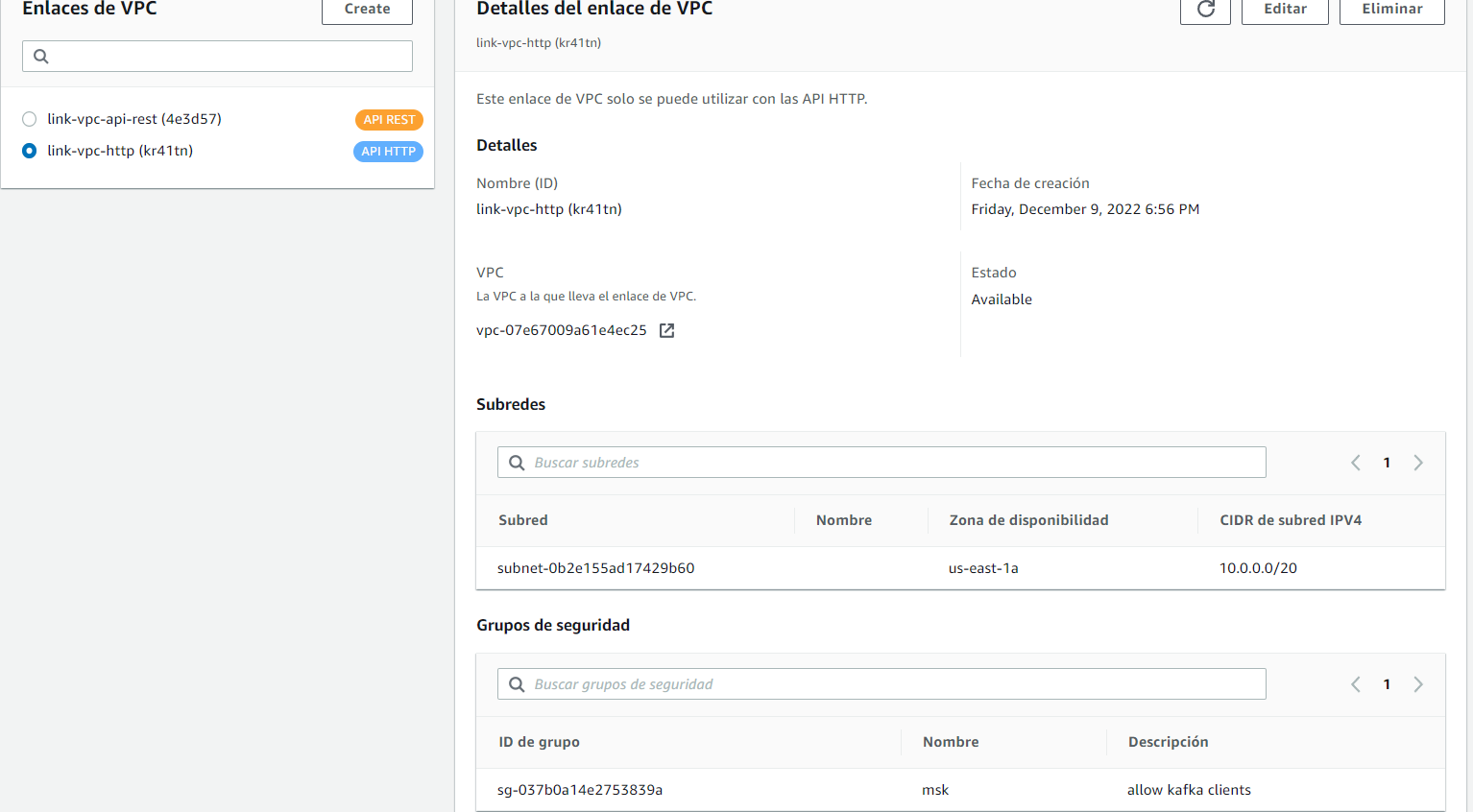


## VPC-LINKS

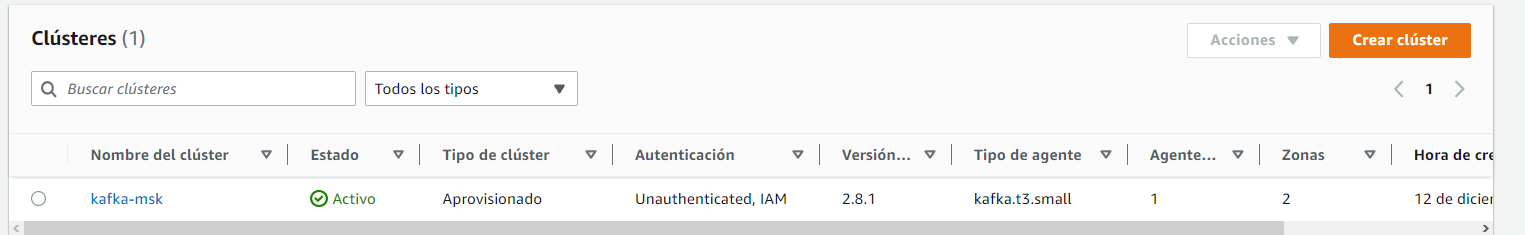
### Tipo: API REST

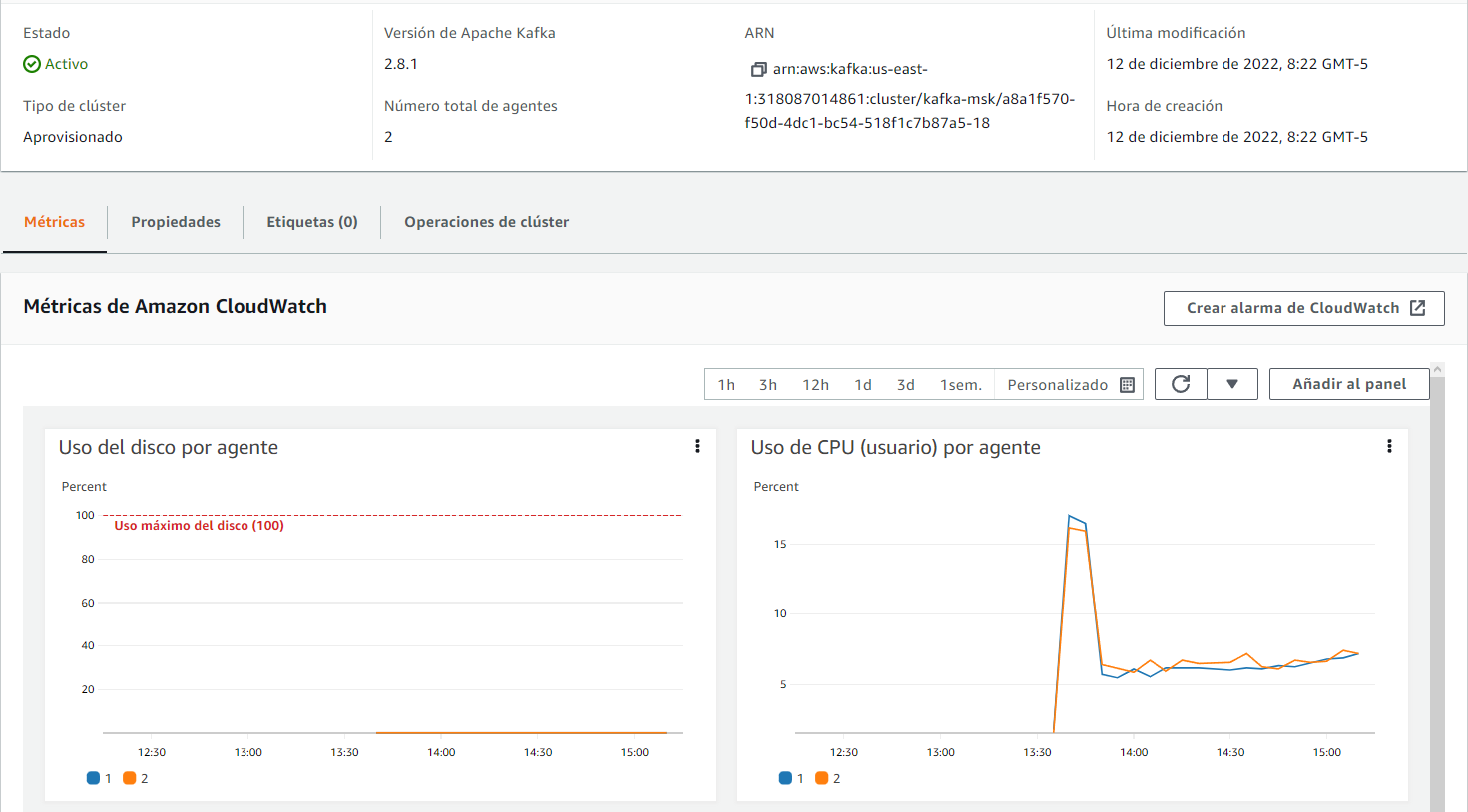


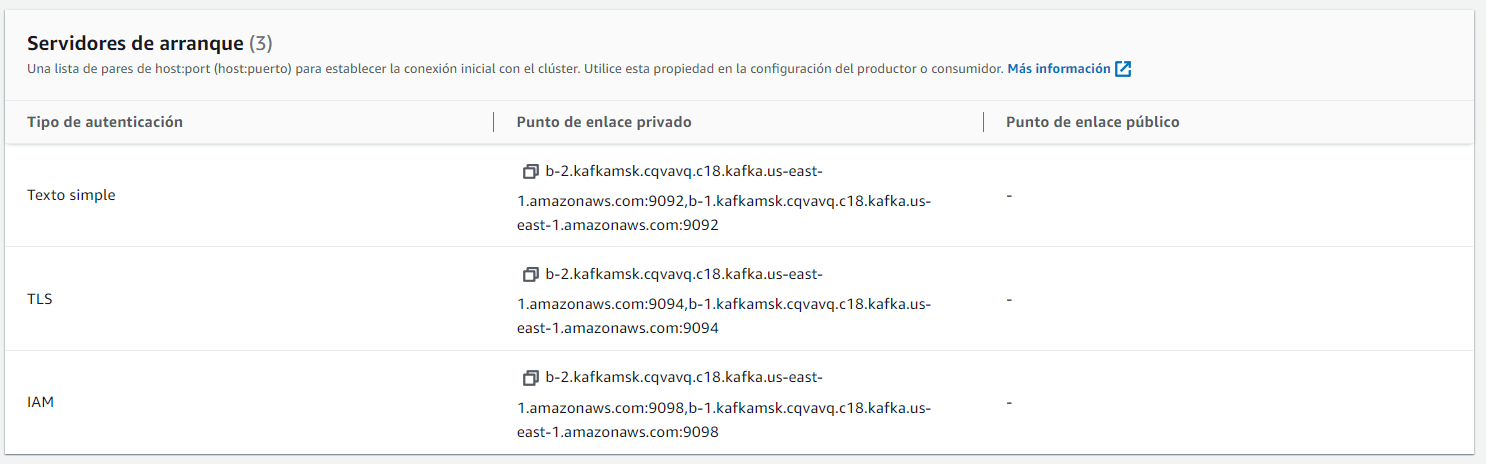
### Tipo: API HTTP



## 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

