1 KAFKA K8S DEPLOYMENT

This document provides instructions to deploy Kafka inside a Kubernetes cluster. The deployment of Kafka is formed by 3 files:

-**Deployment**: The file "*kafka-tfm-app.yaml*" deploys the app of Kafka.

-**Service**: The file "*kafka-tfm-service.yaml*" makes the app of Kafka accessible.

-**Ingress**: The file "*kafka-tfm-ingress.yaml*" publishes the service in Traefik so it becomes externally accessible through DNS.

For deploying Kafka, we have two options, use the Kubernetes UI, or use the Kubectl command line.

1.1 Kubernetes UI

Using the Kubernetes UI:

1. Click in "create" label, and copy there the "*kafka-tfm-app.yaml*" file and deploy.
2. Repeat the same with the "*kafka-tfm-service.yaml*" and "*kafka-tfm-ingress.yaml*" files.

Once we have deployed Kafka, we have to check it is running, so we can see in the Kubernetes UI, the labels "deployments", "services" and "ingresses"

1.2 Kubectl command line

Using the Kubectl command line we can use the next commands to deploy Kafka:

```
$ kubectl apply –f kafka-tfm-app.yaml
$ kubectl apply –f kafka-tfm-service.yaml
$ kubectl apply –f kafka-tfm-ingress.yaml
```

Once we have deployed the service, we have to check it is running, so we can see it using the next commands:

```
#Deployments
$ kubectl get deployments
$ kubectl describe deployments

#Services
$ kubectl get services
$ kubectl describe services

#Ingresses
$ kubectl get ingresses
$ kubectl describe ingresses
```