

COUCHE SIMULATION



COUCHE MESSAGING (Kafka)

Topic: kubernetes-logs

Partition 0
server-01
server-04
server-07
server-10

Partition 1
server-02
server-05
server-08

Partition 2
server-03
server-06
server-09

COUCHE TRAITEMENT (Spark Streaming)

Spark Consumer (micro-batch 10s)

Executor 1
Part. 0

Executor 2
Part. 1

Executor 3
Part. 2

DataFrame Operations: Parse JSON • Validate • Aggregate • Detect Anomalies

COUCHE STOCKAGE

HDFS/S3

Raw logs

Database

Aggregates

Dashboard

Real-time