

kafkstreams-cep

Objective:

Build a rule-based engine that can read from kafka topics and apply rules on it.

Rules must support pattern matching and regex

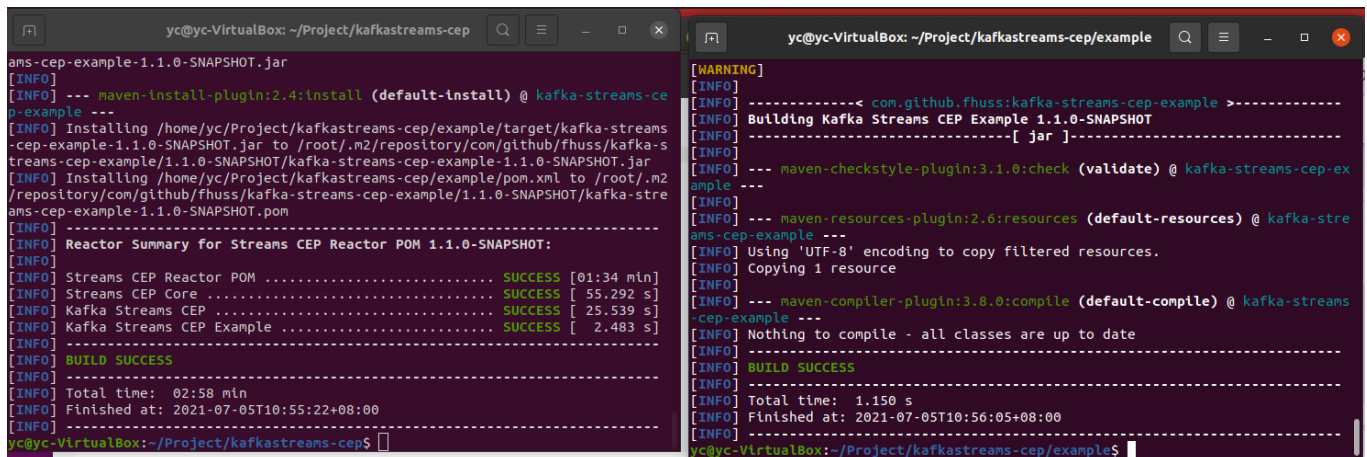
Pattern matching: Support

Regex: not mentioned.

Test on local Ubuntu20.04 VM

Kafka version: 2.13

Maven dependency install and program build result:



```
yc@yc-VirtualBox: ~/Project/kafkstreams-cep
[INFO] Installing /home/yc/Project/kafkstreams-cep/example/target/kafka-streams-cep-example-1.1.0-SNAPSHOT.jar to /root/.m2/repository/com/github/fhuss/kafka-streams-cep-example/1.1.0-SNAPSHOT/kafka-streams-cep-example-1.1.0-SNAPSHOT.jar
[INFO] Installing /home/yc/Project/kafkstreams-cep/example/pom.xml to /root/.m2/repository/com/github/fhuss/kafka-streams-cep-example/1.1.0-SNAPSHOT/kafka-streams-cep-example-1.1.0-SNAPSHOT.pom
[INFO] Reactor Summary for Streams CEP Reactor POM 1.1.0-SNAPSHOT:
[INFO] Streams CEP Reactor POM ..... SUCCESS [01:34 min]
[INFO] Streams CEP Core ..... SUCCESS [ 55.292 s]
[INFO] Kafka Streams CEP ..... SUCCESS [ 25.539 s]
[INFO] Kafka Streams CEP Example ..... SUCCESS [ 2.483 s]
[INFO] BUILD SUCCESS
[INFO] Total time: 02:58 min
[INFO] Finished at: 2021-07-05T10:55:22+08:00
yc@yc-VirtualBox:~/Project/kafkstreams-cep$

yc@yc-VirtualBox: ~/Project/kafkstreams-cep/example
[WARNING]
[INFO] -----< com.github.fhuss:kafka-streams-cep-example >-----
[INFO] Building Kafka Streams CEP Example 1.1.0-SNAPSHOT
[INFO] -----[ jar ]-----
[INFO] --- maven-checkstyle-plugin:3.1.0:check (validate) @ kafka-streams-cep-example ---
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ kafka-streams-cep-example ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 1 resource
[INFO] --- maven-compiler-plugin:3.8.0:compile (default-compile) @ kafka-streams-cep-example ---
[INFO] Nothing to compile - all classes are up to date
[INFO] BUILD SUCCESS
[INFO] Total time: 1.150 s
[INFO] Finished at: 2021-07-05T10:56:05+08:00
yc@yc-VirtualBox:~/Project/kafkstreams-cep/example$
```

Execute Error with the kafka topic (kafkasteams-cep stocks example):

```
yc@yc-VirtualBox: ~/Project/kafkasteams-cep/example/target/...
com logback.xml
yc@yc-VirtualBox:~/Project/kafkasteams-cep/example/target/classes$ java com.git
hub.fhuss.kafka.streams.cep.CEPStockDemo
Error: Unable to initialize main class com.github.fhuss.kafka.streams.cep.CEPSto
ckDemo
Caused by: java.lang.NoClassDefFoundError: org/apache/kafka/streams/Topology
yc@yc-VirtualBox:~/Project/kafkasteams-cep/example/target/classes$ la
com logback.xml
yc@yc-VirtualBox:~/Project/kafkasteams-cep/example/target/classes$ ls
com logback.xml
yc@yc-VirtualBox:~/Project/kafkasteams-cep/example/target/classes$ cd ..
yc@yc-VirtualBox:~/Project/kafkasteams-cep/example/target$ ls
checkstyle-cachefile      kafka-streams-cep-example-1.1.0-SNAPSHOT.jar
checkstyle-checker.xml    maven-archiver
checkstyle-result.xml     maven-status
classes                   surefire-reports
generated-sources         test-classes
generated-test-sources
yc@yc-VirtualBox:~/Project/kafkasteams-cep/example/target$ cd ../ls
bash: cd: ../ls: No such file or directory
yc@yc-VirtualBox:~/Project/kafkasteams-cep/example/target$ java -jar kafka-stre
ams-cep-example-1.1.0-SNAPSHOT.jar
no main manifest attribute, in kafka-streams-cep-example-1.1.0-SNAPSHOT.jar
yc@yc-VirtualBox:~/Project/kafkasteams-cep/example/target$
```

```
yc@yc-VirtualBox: /usr/local/kafka/bin
yc@yc-VirtualBox: /usr/local/kafka/bin x yc@yc-VirtualBox: /usr/local/kafka x
testtopic
yc@yc-VirtualBox:/usr/local/kafka$ bin/kafka-console-producer --topic Stocks --property parse
.key=true --property key.separator=, --broker-list localhost:9092
bash: bin/kafka-console-producer: No such file or directory
yc@yc-VirtualBox:/usr/local/kafka$ bin/kafka-console-producer.sh --topic Stocks --property pa
rse.key=true --property key.separator=, --broker-list localhost:9092
>^C^Cyc@yc-VirtualBox:/usr/local/kafka$ ^C
yc@yc-VirtualBox:/usr/local/kafka$ cd ..
yc@yc-VirtualBox:/usr/local$ ls
bin etc games include kafka lib man sbin share src
yc@yc-VirtualBox:/usr/local$ cd kafka/
yc@yc-VirtualBox:/usr/local/kafka$ ls
bin config libs LICENSE logs NOTICE site-docs
yc@yc-VirtualBox:/usr/local/kafka$ bin/kafka-console-producer.sh --topic Stocks --property pa
rse.key=true --property key.separator=, --broker-list localhost:9092
>key1,{"name":"e1","price":100,"volume":1010}
>^C^Cyc@yc-VirtualBox:/usr/local/kafka$ ^C
yc@yc-VirtualBox:/usr/local/kafka$ ls
bin config libs LICENSE logs NOTICE site-docs
yc@yc-VirtualBox:/usr/local/kafka$ ls
bin config libs LICENSE logs NOTICE site-docs
yc@yc-VirtualBox:/usr/local/kafka$ cd bin/
yc@yc-VirtualBox:/usr/local/kafka/bin$ ./kafka-broker-api-versions.sh
This tool helps to retrieve broker version information.
```