Spring Cloud Stream Configuration

Project Dependencies for RabbitMQ

- spring-cloud-stream
- spring-cloud-stream-binder-rabbit
- spring-boot-starter-test
- spring-cloud-stream-test-binder

Steps to create Messaging Server

1. Add following properties in application.yml file –

   ```
   server.port = 9010
   spring.application.name = “message”
   spring.cloud.function.definition = email|sms
   spring.cloud.stream.bindings.emailsms-in-0.destination = send-
   communication
   spring.cloud.stream.bindings.emailsms-in-0.group =
   ${spring.application.name}
   spring.rabbitmq.host = localhost
   spring.rabbitmq.port = 5672
   spring.rabbitmq.username = guest
   spring.rabbitmq.password = guest
   spring.rabbitmq.connection-timeout = 10s
   ```

2. Add below dependencies in other microservices to connect with rabbitmq –
   a. spring-cloud-stream
   b. spring-cloud-stream-binder-rabbit
3. Create DTO (`AccountsMsgDto`) in other Microservices as well
4. Add below properties in application.yml file in other microservices –

   ```
   spring.cloud.stream.bindings.sendCommunication-out-0.destination =send-
   communication
   spring.rabbitmq.host = localhost
   spring.rabbitmq.port = 5672
   spring.rabbitmq.username = guest
   spring.rabbitmq.password = guest
   spring.rabbitmq.connection-timeout = 10s
   ```

5. Inject **`StreamBridge`** dependency in other microservice service impl class
6. Invoke **`streamBrideg.send(“sendCommunication-out-0”, AccountsMsgDto)`**
7. Run RabbitMQ using below docker command –

   ```
   docker run -d -it --rm --name rabbitmq -p 5672:5672 -p 15672:15672
   rabbitmq:3.13-management
   ```

8. Check for RabbitMQ console by visiting below link –

```
http://localhost:15672 (username / password - guest)
```

Apache Kafka Configuration

Project Dependency: (remove rabbit related dependency)

- spring-cloud-stream-binder-kafka

1. Add Kafka related properties inside application.yml file of both accounts and message services –

   ```
   spring.cloud.stream.kafka.binder.brokers (- localhost:9092 )
   ```

2. Remove all properties related to RabbitMQ