Is RabbitMq a copy of Correos?

RabbitMq

ThoughtWorks®

Key concepts

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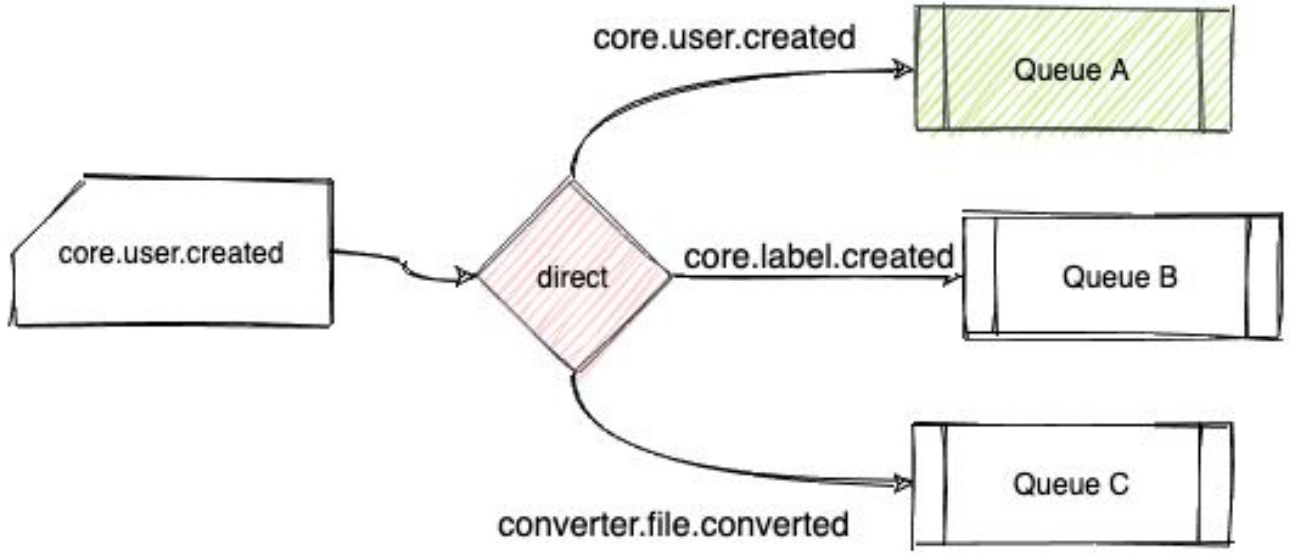
A friend sending you a mail

- **Producer**
  - Your friend
- **Exchange**
  - The correos Mailbox
- **Queue**
  - Mailbox in your front door
- **Routing key**
  - The address in the mail
- **Binding key**
  - The address in your front door
- **Consumer**
  - You

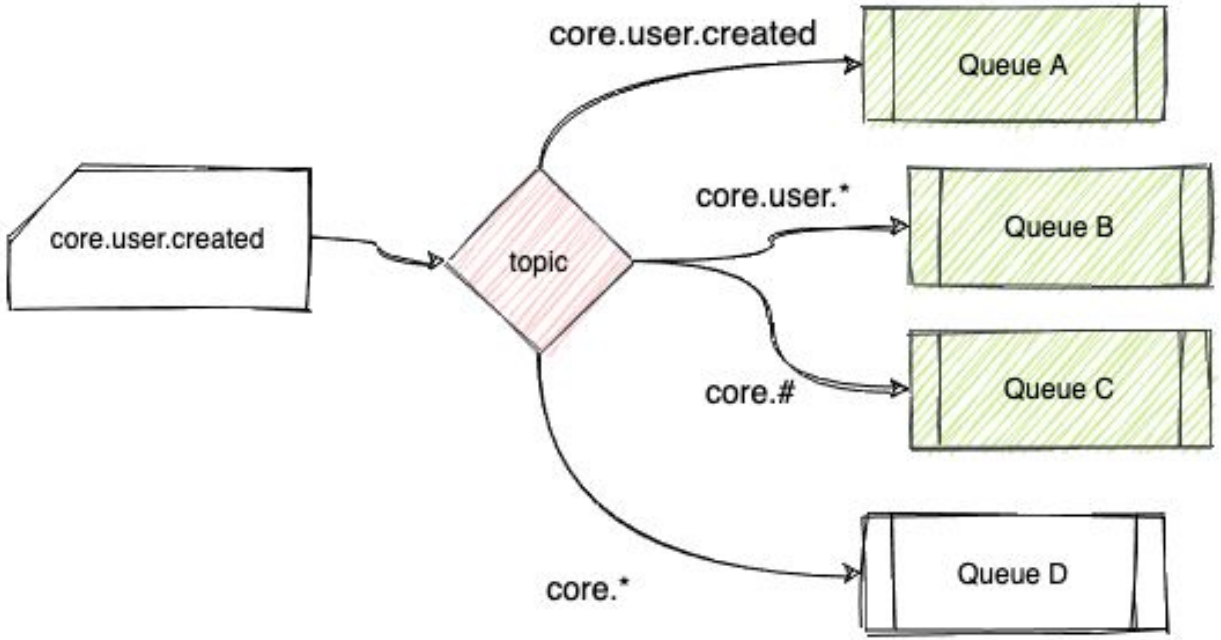
Exchange types - Direct - A friend sending you a mail

routingKey == bindingKey



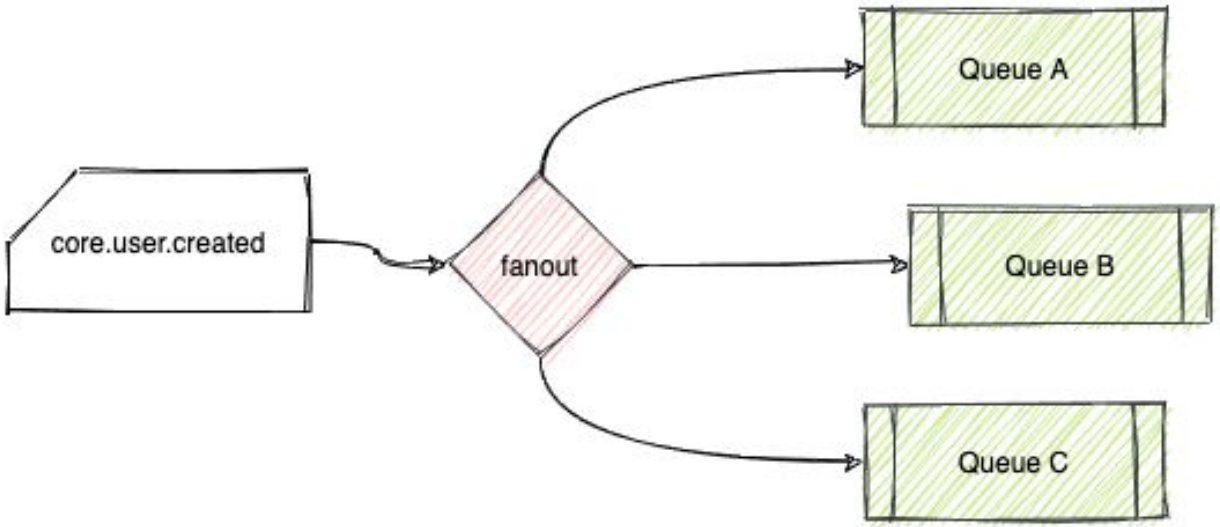
Exchange types - Topic - Sending the city business numbers

routingKey == regex(bindingKey.{*}.{#})



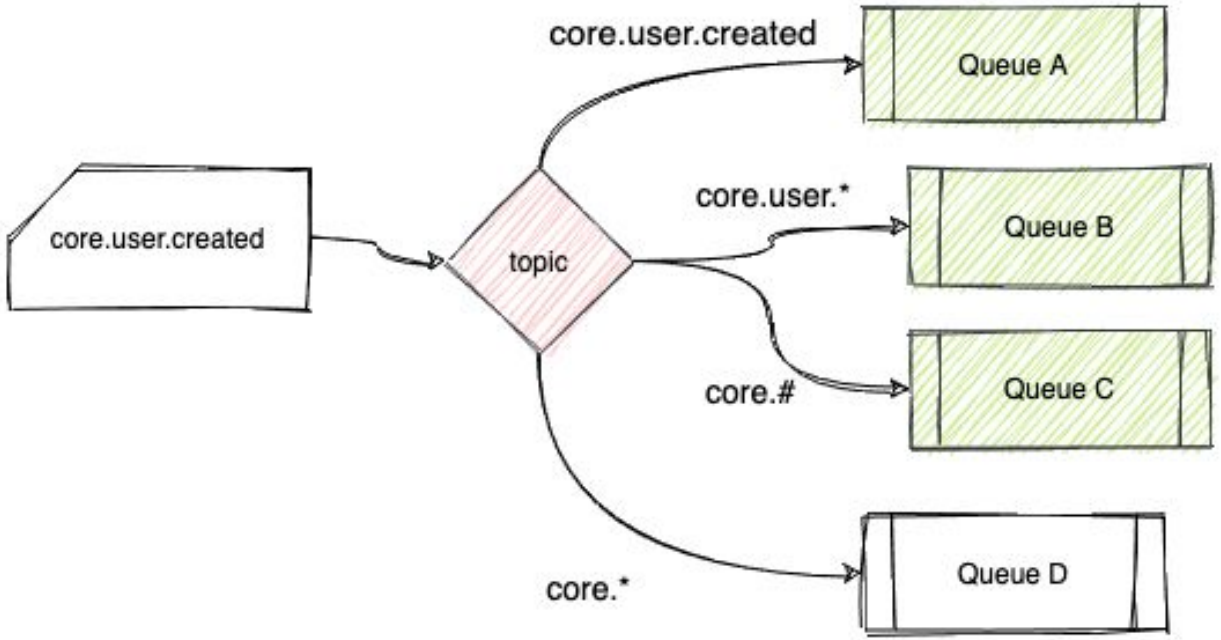
Exchange types - Fanout - Political propaganda

true == true



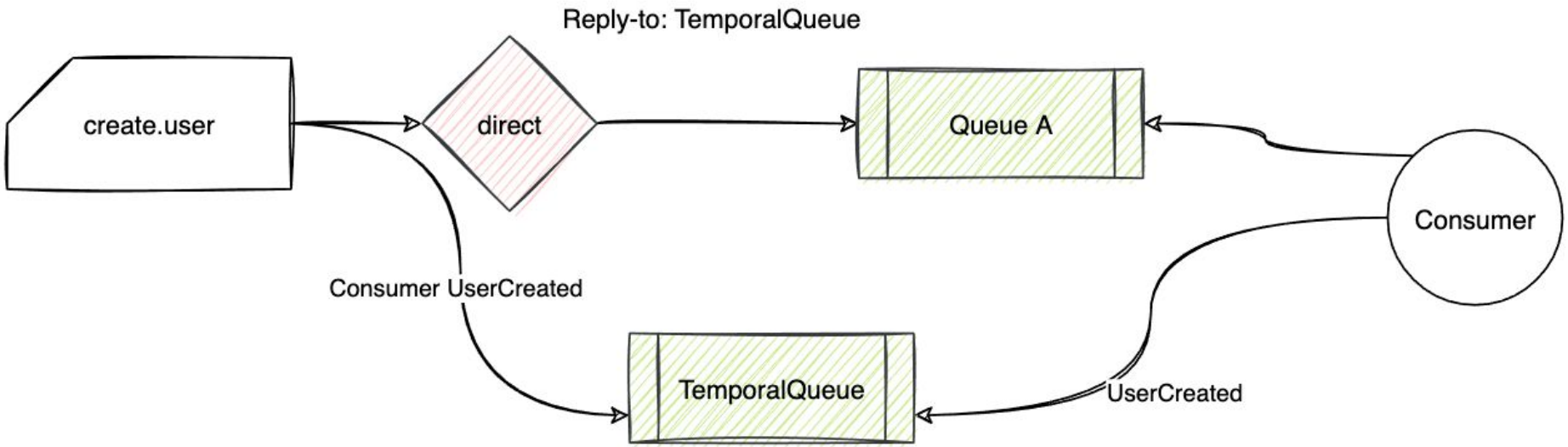
Exchange types - Headers

X-match { any, all }



RPC (Remote procedure call)

Expect a response from the consumer



Simulator!

http://tryrabbitmq.com/

Event bus

Create a RabbitMq architecture for the following problem

You need an event bus in your company to communicate between microservices. All the microservices should publish to the same event bus and can subscribe to the events on it.

Every consumer should be able to subscribe/consume to:

- An specific event
- All the events of an aggregate type
- All the events of the bounded context
- The event names are something like shipments.order.created

1. Cars for the people

Create a RabbitMq architecture for the following problem

You are selling cards for different markets (coches.com, cars.com, segundamano.es). So in your company you have a backoffice to create a car listing and you want to populate that listing to the different markets. Can we make it so we don't need to modify the backoffice everytime that a new market is added?

2. File types

Create a RabbitMq architecture for the following problem

In your company you convert files (doc, xls, csv, etc..) to pdf. So, create an arc to be able to add new file types convertors easily.

Code!

Sending a letter

Create all the components to send real time messages using rabbitMq

- Create an exchange with name <your_name>-messages-exchange
- Create a queue with name <your_name>-messages-queue
- Create a consumer that listen all the messages from the queue and print the word on it into the screen
- Create a producer that sends messages to to que exchange (as a command line)
    - The message payload should contain a word

Our questions

- What happens if the consumer fail while processing a message?
- When is the message removed from the queue?
- What happens if there are no consumers in a queue?

RPC

Remote procedure call

Sending a letter with RSVP

We need a confirmation that the letter has arrived

- When the consumer has printed(received) the message, it should send back to the producer a confirmation. The confirmation answer can be either accept or reject (make it random)
- Then the producer should print the confirmation status

Other messaging systems

SNS + SQS

RabbitMq

Kafka

Tuk Tuk

THANKYOU

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