RabbitMQ – Broadcasting
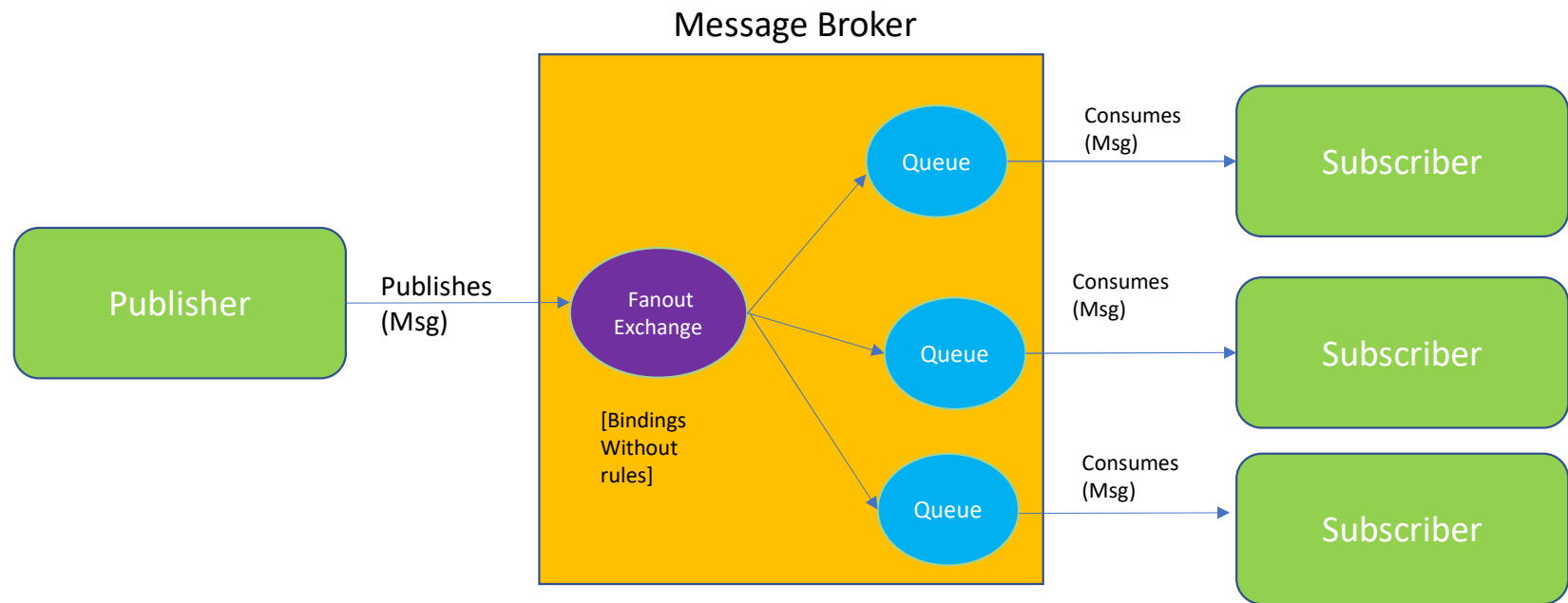
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Message Broker

Message Broker

Publisher

Publishes
(Msg)

Exchange

[Bindings]

Routes
(Msg)

Queue

Consumes
(Msg)
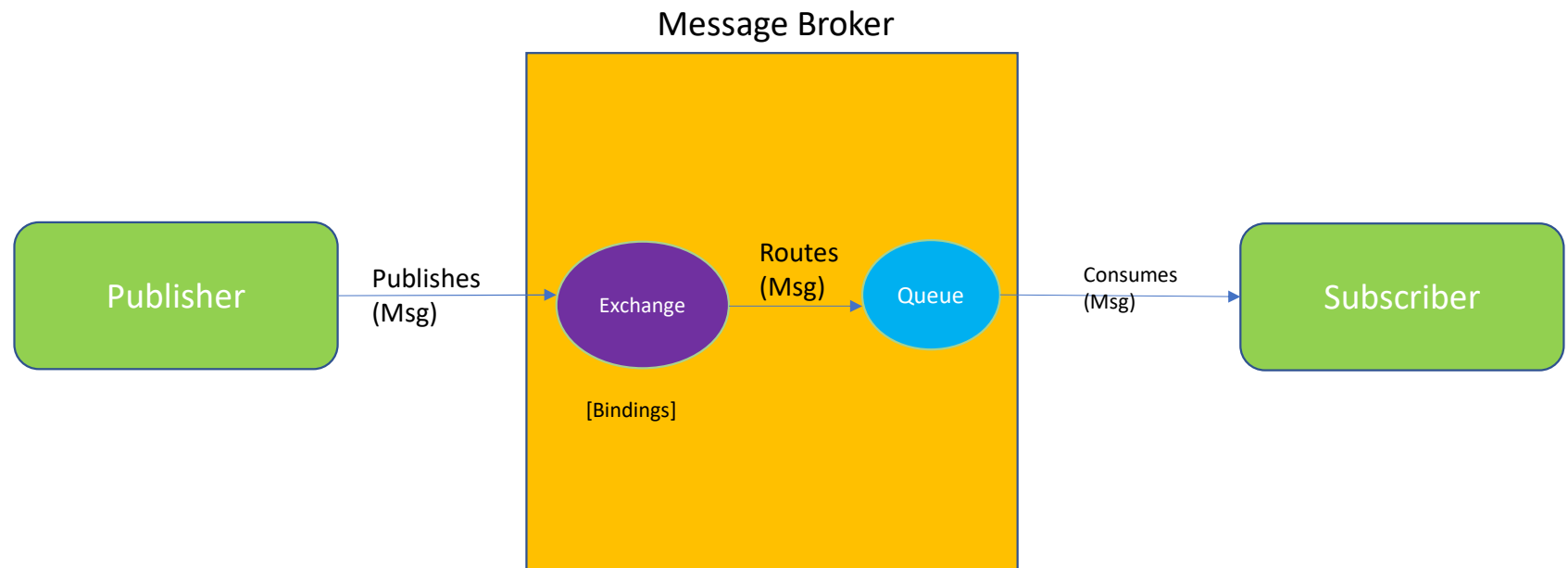
Subscriber

AMQP – Advanced Message Queuing Protocol

Fanout Exchange

Message Broker

Publisher

Publishes
(Msg)

Fanout
Exchange

[Bindings
Without
rules]

Queue

Queue

Queue

Consumes
(Msg)

Consumes
(Msg)

Consumes
(Msg)

Subscriber

Subscriber

Subscriber

Fanout Exchange

- Publisher is not aware who is the subscriber of the published message(s).

- Publisher is not even aware if there is any subscriber of the message at all.

- If there are no queues attached to the fanout exchange, the messages are dropped or discarded.

- No binding rules are required as all the attached queues to the exchange receive the messages.

- The binding of the queues with the exchange is required.

Steps

- Publisher
  - Create a connection, say CN
  - Create a channel in CN, say CH
  - ~~[Optional]~~ Create an Exchange
  - ~~If the queue does not exist already~~
    - ~~Create a queue through the channel~~
  - Publish the message
  - Close the connection
    - Automatically closes the channel

- Subscriber
  - Create a connection say CN
  - Create a channel in CN, say CH
  - Create the exchange (will not affect if exchange is already there)
  - Create the queue, if it does not exist already and associate it with the channel CH
  - Bind the queue with the exchange
  - Associate a call-back function with the message queue
  - Start consuming the messages