

Chapter 3: Exchange Types

This chapter is a quick overview of the RabbitMQ broker inner workings, and is especially dedicated to developers because it contains code samples of how to connect, push and consume messages from/to RabbitMQ broker.

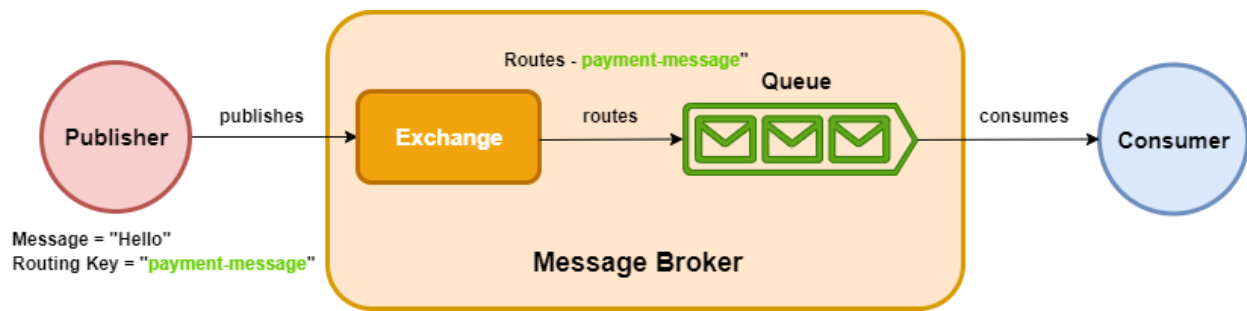
There are four types of exchanges:

1. Direct Exchanges
2. Fanout Exchanges
3. Topic Exchanges
4. Header Exchanges

We will look at each one separately with an code example written in C# using **RabbitMQ .NET Client library**.

3.1 Direct Exchanges

Direct exchange delivers the messages to the queues based on the message routing key. Every queue must be bound to an exchange. If you (as developer) do not specify an exchange and explicitly bind your queue to that exchange, then your queue will be bound to the default direct exchange, which will give you expression as if you push and consume messages directly from the queue.



- Definition and explanation
- Simple exchange with one queue (Image and code)
- Worker consumers on one queue (Image and code)
- 2 consumers on separate queues with specific routing key used in the exchange (Image and code)

3.2 Fanout Exchanges (Broadcast)

- Definition and explanation
- One exchange with multiple queues message copy (Image and code)

3.3 Topic Exchanges (Multicast)

- Definition and explanation
- One exchange with multiple queues with different routing keys with wildcards (Image and code)

3.4 Header Exchanges

Header exchanges

3.5 RPC (Remote Procedure Call)

Image and code sample