

# **TDMQ for RabbitMQ**

## **Development Guide**

### **Product Documentation**



## Copyright Notice

©2013-2024 Tencent Cloud. All rights reserved.

Copyright in this document is exclusively owned by Tencent Cloud. You must not reproduce, modify, copy or distribute in any way, in whole or in part, the contents of this document without Tencent Cloud's the prior written consent.

## Trademark Notice



All trademarks associated with Tencent Cloud and its services are owned by Tencent Cloud Computing (Beijing) Company Limited and its affiliated companies. Trademarks of third parties referred to in this document are owned by their respective proprietors.

## Service Statement

This document is intended to provide users with general information about Tencent Cloud's products and services only and does not form part of Tencent Cloud's terms and conditions. Tencent Cloud's products or services are subject to change. Specific products and services and the standards applicable to them are exclusively provided for in Tencent Cloud's applicable terms and conditions.

# Contents

Development Guide

Delayed Message

# Development Guide

## Delayed Message

Last updated : 2024-01-03 11:45:32

This document describes the feature, use cases, and usage of delayed message in TDMQ for RabbitMQ.

## Glossary

**Delayed message:** After a message is sent to the server, the business may want the consumer to receive it after a period of time rather than immediately. This type of message is called "delayed message".

## Use Cases

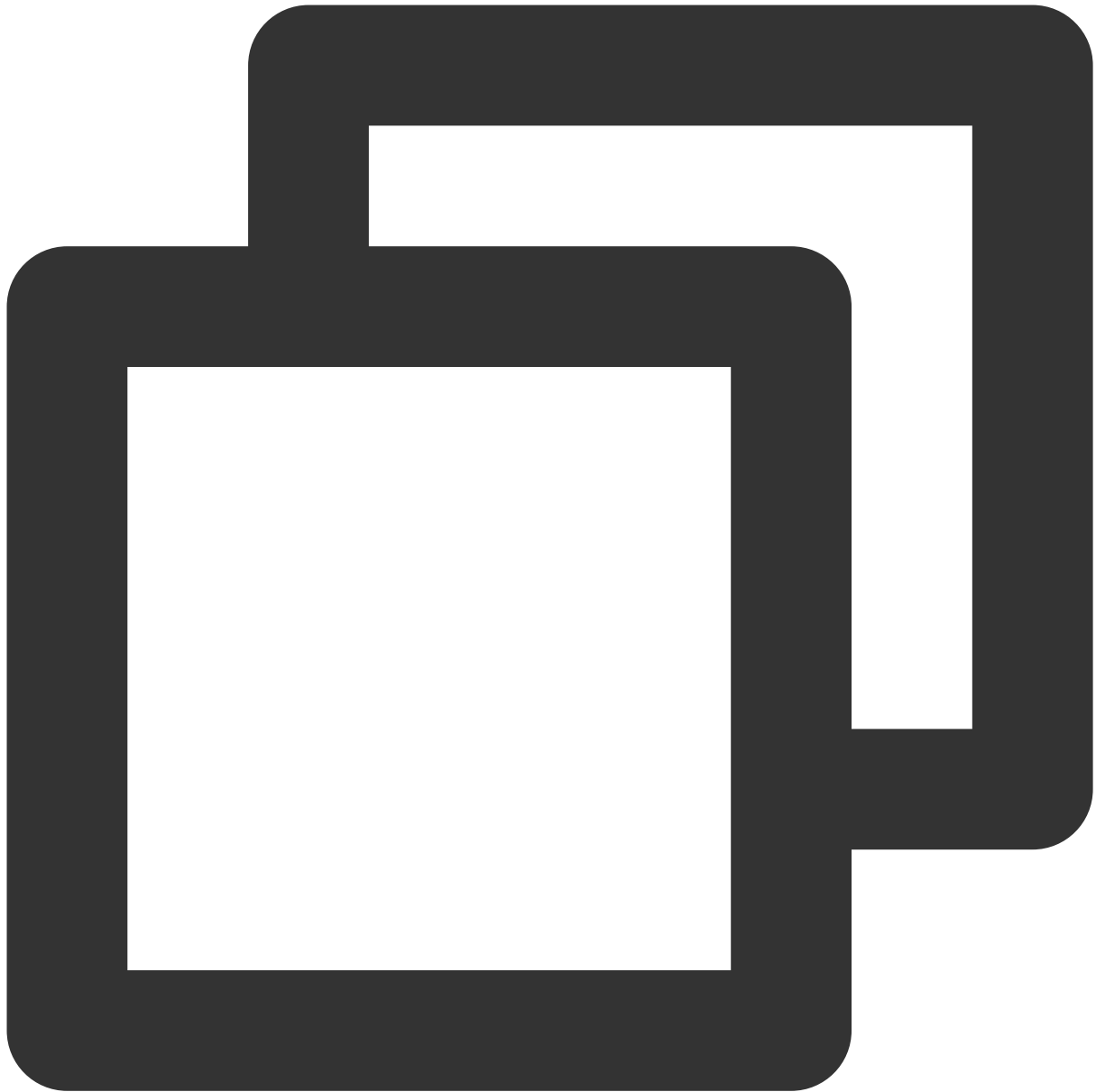
Use case 1: Scenarios with requirements for message consumption time. For example, if a user fails to pay within 30 minutes after placing an order in an ecommerce system, the order will be automatically canceled.

Use case 2: Scenarios where delayed tasks need to be triggered by messages. For example, if a user hasn't placed an order after viewing an item for over 20 minutes after logging in to an app, an item review message will be automatically pushed, and a coupon for the item will be issued.

## Usage

The delayed message feature in TDMQ for RabbitMQ can be used in the same way as the delayed message plugin of RabbitMQ, so you don't need to modify your business when migrating it.

1. Declare an exchange and specify its route type.



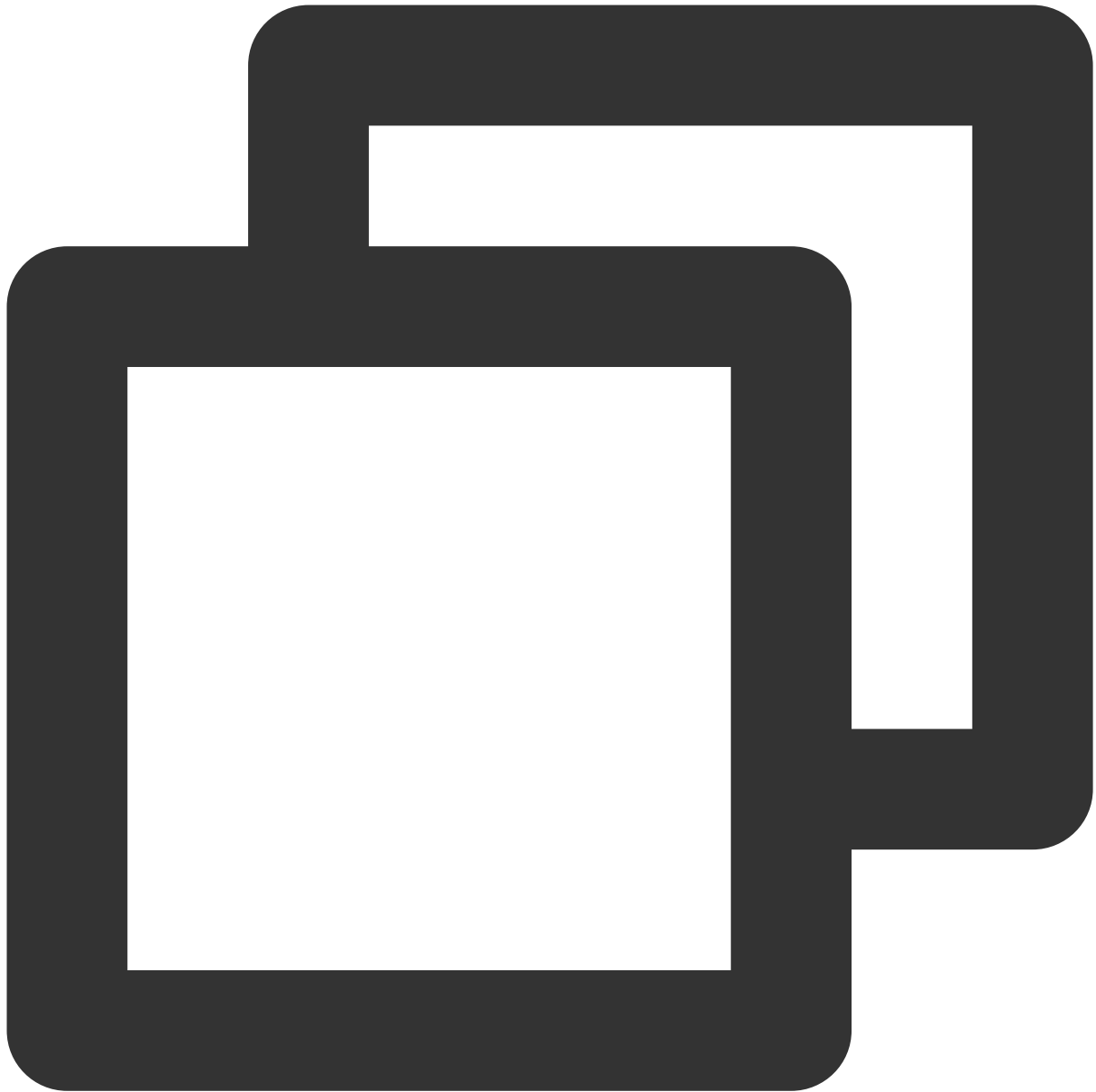
```
Map<String, Object> args = new HashMap<String, Object>();  
args.put("x-delayed-type", "direct");  
channel.exchangeDeclare("ExchangeName", "x-delayed-message", true, false, args);
```

The parameters are described as follows:

Parameter	Description
x-delayed-type	Exchange type, which specifies the routing rule. Valid values: direct fanout

	topic For more information, see <a href="#">Exchange</a> .
ExchangeName	Exchange name, which can be obtained from the exchange list in the console.
x-delayed-message	Specified exchange type for delayed message delivery.

2. Send a delayed message. Add a key-value pair (key: x-delay; value: number of milliseconds) to the `Header` attribute of the message and specify the target exchange as the one declared in the previous step.



```
byte[] messageBodyBytes = "delayed payload".getBytes("UTF-8");  
Map<String, Object> headers = new HashMap<String, Object>();  
headers.put("x-delay", 4000);  
AMQP.BasicProperties.Builder props = new AMQP.BasicProperties.Builder().headers(headers);  
channel.basicPublish("ExchangeName", "", props.build(), messageBodyBytes);
```

After the message arrives at the exchange, it will be delivered to the corresponding queue in 4,000 milliseconds.