

TDMQ for RabbitMQ

Quick Start



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Contents

Quick Start

Using SDK to Send/Receive Message

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Operation scenarios

This document describes how to use open-source SDK to send and receive messages using the SDK for Java as an example and helps you better understand the message sending and receiving processes.

Prerequisites

- [You have created the required resources.](#)
- [You have installed JDK 1.8 or later.](#)
- [You have installed Maven 2.5 or later.](#)
- [Download the demo](#)

Operation step

Step 1. Install the Java dependency library

Add the following dependencies to pom.xml:

```
<!-- in your <dependencies> block -->
<dependency>
    <groupId>com.rabbitmq</groupId>
    <artifactId>amqp-client</artifactId>
    <version>5.13.0</version>
</dependency>
```

Step 2. Produce a message

Compile and run MessageProducer.java.

```
import com.rabbitmq.client.Channel;
import com.rabbitmq.client.Connection;
import com.rabbitmq.client.ConnectionFactory;
import com.tencent.tdmq.demo.cloud.Constant;
```

```
/**  
  
 * Message producer  
 */  
  
public class MessageProducer {  
  
    /**  
  
     * Exchange name  
     */  
  
    private static final String EXCHANGE_NAME = "exchange_name";  
  
    public static void main(String[] args) throws Exception {  
        // Connection factory  
        ConnectionFactory factory = new ConnectionFactory();  
        // Set the service address (replace with the access point address  
copied in the console)  
        factory.setUri("amqp://****");  
        // Set virtual hosts (copy the complete vhost name from the open-  
source RabbitMQ console)  
        factory.setVirtualHost(VHOST_NAME);  
        // Set the username (user name in the permission configuration of  
the vhost in the open-source RabbitMQ console)  
        factory.setUsername(USERNAME);  
        // Set the password (key for the corresponding user)  
        factory.setPassword("*****");  
        // Get the connection address and establish the channel  
        try (Connection connection = factory.newConnection(); Channel  
channel = connection.createChannel()) {  
            // Bind the message exchange (EXCHANGE_NAME must exist in the  
TDMQ for RabbitMQ console, and the exchange type must be the same as  
that in the console)  
            channel.exchangeDeclare(EXCHANGE_NAME, "fanout");  
            for (int i = 0; i < 10; i++) {  
                String message = "this is rabbitmq message " + i;  
                // Publish a message to the exchange, which will  
automatically deliver the message to the corresponding queue  
                channel.basicPublish(EXCHANGE_NAME, "", null,  
message.getBytes());  
                System.out.println(" [producer] Sent '" + message + "'");  
            }  
        } catch (Exception e) {  
    }  
}
```

```
        e.printStackTrace();
    }
}
}
```

Parameter	Description
EXCHANGE_NAME	Exchange name, which can be obtained from the exchange list in the console.
factory设置	Cluster access address, obtained from the Client Access section on the cluster basic information page. 
fac	Vhost name, obtained from the Vhost list in the console.

t o r y. s e t V i r t u a l H o s t	
f a c t o r y. s e t U s e r n a m e	Username, as created in the console.
f a c t o r y. s e t P	User password, as set when creating the user in the console.

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Step 3. Consume the message

Compile and run `MessageConsumer.java`.

```
import com.rabbitmq.client.AMQP;
import com.rabbitmq.client.Channel;
import com.rabbitmq.client.Connection;
import com.rabbitmq.client.ConnectionFactory;
import com.rabbitmq.client.DefaultConsumer;
import com.rabbitmq.client.Envelope;
import com.tencent.tdmq.demo.cloud.Constant;

import java.io.IOException;
import java.nio.charset.StandardCharsets;

/**
 * Message consumer
 */
public class MessageConsumer1 {

    /**
     * Queue name
     */
    public static final String QUEUE_NAME = "queue_name";

    /**
     * Exchange name
     */
    private static final String EXCHANGE_NAME = "exchange_name";

    public static void main(String[] args) throws Exception {
        // Connection factory
        ConnectionFactory factory = new ConnectionFactory();
    }
}
```

```
// Set the service address (replace with the access point address
// copied in the console)
factory.setUri("amqp://****");
// Set virtual hosts (copy the complete vhost name from the open-
// source RabbitMQ console)
factory.setVirtualHost(VHOST_NAME);
// Set the username (user name in the permission configuration of
// the vhost in the open-source RabbitMQ console)
factory.setUsername(USERNAME);
// Set the password (key for the corresponding user)
factory.setPassword("*****");
// Get the connection address
Connection connection = factory.newConnection();
// Establish a channel
Channel channel = connection.createChannel();
// Bind the message exchange
channel.exchangeDeclare(EXCHANGE_NAME, "fanout");
// Declare the queue message
channel.queueDeclare(QUEUE_NAME, true, false, false, null);
// Bind the message exchange (EXCHANGE_NAME must exist in the
// TDMQ for RabbitMQ console, and the exchange type must be the same as
// that in the console)
channel.queueBind(QUEUE_NAME, EXCHANGE_NAME, "");
System.out.println(" [Consumer1] Waiting for messages.");
// Subscribe to the message
channel.basicConsume(QUEUE_NAME, false, "ConsumerTag", new
DefaultConsumer(channel) {
    @Override
    public void handleDelivery(String consumerTag, Envelope
envelope,
                                AMQP.BasicProperties properties,
                                byte[] body)
        throws IOException {
        // Process received messages with business logic.
        System.out.println("Received: " + new String(body,
StandardCharsets.UTF_8) + ", deliveryTag: " + envelope.getDeliveryTag()
+ ", messageId: " + properties.getMessageId());
        channel.basicAck(envelope.getDeliveryTag(), false);
    }
});
```

Parameter	Description
QUEUE NAME	Queue name, which can be obtained from the queue list in the console.
EXCHANGE NAME	Exchange name, which can be obtained from the exchange list in the console.
factory setting	Cluster access address, obtained from the Client Access section on the cluster basic information page. 

U ri	
f a c t o r y. s e t V i r t u a l H o s t	Vhost name, obtained from the Vhost list in the console.
f a c t o r y. s e t U s e r n a m e	Username, as created in the console.
f a c t o	User password, as set when creating the user in the console.

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