

# RabbitMQ 消息队列搭建与发送简单消息

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- 原文链接: https://ld246.com/article/1566548338010
- 来源网站:链滴
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## 本文主要介绍消息队列的基本应用demo 其他请移步至消息队列应用场景

#### RabbitMQ下载官网进行下载



#### 下载后还必须下载并搭建Erlang环境 因为RabbitMQ 是基于Erlang 开发的

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For a deeper dive into the hightligts of the OTP 22 release, you can read our blog here:	• OTP 18.2 1
	• OTP 18.2
http://blog.erlang.org/OTP-22-Highlights/	• OTP 18.1
	<ul> <li>OTP 18.0</li> </ul>
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r otential meoripationnes	<ul> <li>OTP 17.3</li> </ul>
<ul> <li>gen_* behaviours: If logging of the last N messages through sys:log/2,3 is active for the server, this log is included in the</li> </ul>	<ul> <li>OTP 17.1</li> </ul>
terminate report.	• OTP 17.0
· reltool: A new element, Opts, can now be included in a rel tuple in the reltool release specific configuration format: (re1,	<ul> <li>OTP R16B03-1</li> </ul>
Name, Van, RelApps, Opts).	<ul> <li>R16B03</li> </ul>
· All external pids/ports/refs created by erlang:list_to_pid and similar functions now compare equal to any other	<ul> <li>R16802</li> </ul>
pid/port/ref with same number from that node.	<ul> <li>R16B01</li> </ul>

# 下载完成之后

名称	修改日期	类型	大小
otp_win64_22.o.exe	2019/8/23 12:36	应用程序	91,890 KB
abbitmq-server-3.7.17.exe	2019/8/23 11:58	应用程序	9,876 KB

# 先安装并配置Erlang环境

## 一直点击下一步即可 都是默认

## 打开环境变量 在path后添加你的安装目录 + /bin (可以看到消息队列环境搭 就不上图了)

# 安装RabbitMQ 同Erlang一样 都是只用点击下一步即可

#### 安装完成后 win+R 进入cmd 再进入你安装RabbitMQ 下的目录 下的/sbin

选择C:\WINDOWS\system32\cmd.exe Microsoft Windows [版本 10.0.17134.950] (c) 2018 Microsoft Corporation。保留所有权利。 C:\Users\NiuGeH>cd C:\Program Files\RabbitMQ Server\rabbitmq\_server-3.7.17\sbin C:\Program Files\RabbitMQ Server\rabbitmq\_server-3.7.17\sbin>\_

#### 接着输入 rabbitmq-plugins enable rabbitmq\_management 进行 配置

#### 完成后如下

Microsoft Windows [版本 10.0.17134.950]
(c) 2018 Microsoft Corporation。保留所有权利。
C:\Users\NiuGeH>cd C:\Program Files\RabbitMQ Server\rabbitmq\_server-3.7.17\sbin
C:\Program Files\RabbitMQ Server\rabbitmq\_server-3.7.17\sbin>rabbitmq-plugins enable rabbitmq\_management
Enabling plugins on node rabbit@LAPTOP-6PIQBCJ0:
rabbitmq\_management
The following plugins have been configured:
rabbitmq\_management\_agent
rabbitmq\_management\_agent
rabbitmq\_web\_dispatch
Applying plugin configuration to rabbit@LAPTOP-6PIQBCJ0...
Plugin configuration unchanged.
C:\Program Files\RabbitMQ Server\rabbitmq\_server-3.7.17\sbin>\_

# 注意

#### 此时百分之99的人进不去如下这个页面

← → C O localhost:15672/#/connections
 Q ☆ I C I Connections
 C I Conne

你还需要显示隐藏的文件夹再进入你的 C:\Users\你的用户名\AppData\Roaming\RabbitMQ\db 将该文件夹下的所有文件删除删除后再此执行下面程序

冯 otp_win64_22.0.exe	2019/8/23 12:36	应用程序	91,890 KB
a rabbitmq-server-3.7.17.exe	2019/8/23 11:58	应用程序	9,876 KB

之后进入 安装RabbitMQ 的目录下sbin

名称	修改日期	类型	大小
cuttlefish	2019/7/29 11:28	文件	458 KB
🖲 rabbitmqctl.bat	2019/7/29 11:28	Windows 批处理	3 KB
💿 rabbitmq-defaults.bat	2019/7/29 11:28	Windows 批处理	2 KB
rabbitmq-diagnostics.bat	2019/7/29 11:28	Windows 批处理	3 KB
💿 rabbitmq-echopid.bat	2019/7/29 11:28	Windows 批处理	2 KB
rabbitmq-env.bat	2019/7/29 11:28	Windows 批处理	18 KB
rabbitmq-plugins.bat	2019/7/29 11:28	Windows 批处理	3 KB
rabbitmq-server.bat	2019/7/29 11:28	Windows 批处理	11 KB
rabbitmg-service.bat	2019/7/29 11:28	Windows 批处理	14 KB

### 双击运行 等待 等待 等待

● 浏览器访问 http://localhost:15672/

输入 guest 密码与用户名相同

# 简单的消息队列Demo

- 创建 maven 项目
- pom.xml 添加

```
<dependency>
<groupId>com.rabbitmq</groupId>
<artifactId>amqp-client</artifactId>
<version>5.7.2</version>
</dependency>
```

• 创建生产者实例

```
public static void main(String[] args) {
    // 创建连接工厂
    ConnectionFactory factory = new ConnectionFactory();
    // 设置端口
```

```
factory.setHost("localhost");
    factory.setVirtualHost("/");
    // 用户名 密码
  factory.setUsername("guest");
    factory.setPassword("guest");
    try {
       Connection connection = factory.newConnection();
      //Connection 来创建 Channel
    Channel channel = connection.createChannel();
      for (int i = 0; i < 10; i++){
       //生产模式中多为 json 格式
         String msg = "Rabbit消息"+i;
         channel.basicPublish("", "NiuMsg", null, msg.getBytes());
         Thread.sleep(1000);
       }
      if (channel != null){
         channel.close();
         connection.close();
      }
    }catch (Exception e){
      e.printStackTrace();
    }
  }

    创建消费者实例(接受消息)
```

```
public static void main(String[] args) throws Exception{
    //1. 创建连接工厂
    ConnectionFactory factory = new ConnectionFactory();
    factory.setHost("localhost");
    factory.setVirtualHost("/");
    factory.setUsername("guest");
    factory.setPassword("guest");
```

```
//2. 创建连接
Connection connection = factory.newConnection();
```

//3. 通过 Connection 来创建 Channel Channel channel = connection.createChannel();

```
//4. 声明一个队列
//此处参数下面为大家介绍
channel.queueDeclare("NiuMsg", true, false, false, null);
```

```
}
};
//6. 为消费者绑定队列
channel.basicConsume("NiuMsg", true, consumer);
}
```

#### 总结运行结果

● 队列声明queueDeclare的参数:第一个参数表示队列名称、第二个参数为是否持久化(true表示,队列将在服务器重启时生存)、第三个参数为是否是独占队列(创建者可以使用的私有队列,断开自动删除)、第四个参数为当所有消费者客户端连接断开时是否自动删除队列、第五个参数为队列的他参数。

- 先运行消费者实例 然后再接着运行生产者实例
- 消费者就会接收到生产者发送来的消息



● 进入Queues NiuMsg就会进入running 状态 表示正在发送消息

Overview	Connection	ns Ch	nannels	Exchange	es Qu	eues	Admin			
Queues	3									
<ul> <li>All queue</li> </ul>	s (2)									
agination										
Page 1 🔻	of 1 - Filter:			🗐 Reg	ex ?					
Overview				Messages			Message ra	ites		+/-
Virtual host	Name	Features	State	Ready	Unacked	Total	incoming	deliver / get	ack	
/	ITEM_QUEUE	D	idle	0	0	0	0.00/s	0.00/s	0.00/s	
	NiuMca	D	I running	0	0	0	1.2/s	1.2/s	0.00/s	
/	минэу	100								

● 当生产者发送完消息 Queues 中的NiuMsg 的状态就会变为空闲状态

Overview	Connectio	ns Cl	hannels	Exchang	les Qu	ieues	Admin			
Queues	;									
✓ All queue	s (2)									
Pagination										
Page 1 V	of 1 - Filter:			Reg	gex ?					
Overview		Messages			Messag	e rates		+/		
Virtual host	Name	Features	State	Ready	Unacked	Total	incomi	ng deliver / get	t ack	
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	A CARDON CONTRACTOR		1.16					0.00/	0.00/-	

Add a new queue

# ● 而在Connection 中只要消费者一直处于接受消息状态 连接就一直会存在

Ra	bbitM	0 3.7	.17 Erlan	g 22.0						
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Page 1 T	of 1 - Filter:			R	egex ?					
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Page 1 Overview Virtual host	of 1 - Filter:	User name	State	Details	rLS Proto	col Char	nnels	Network From client	To client	+/-

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