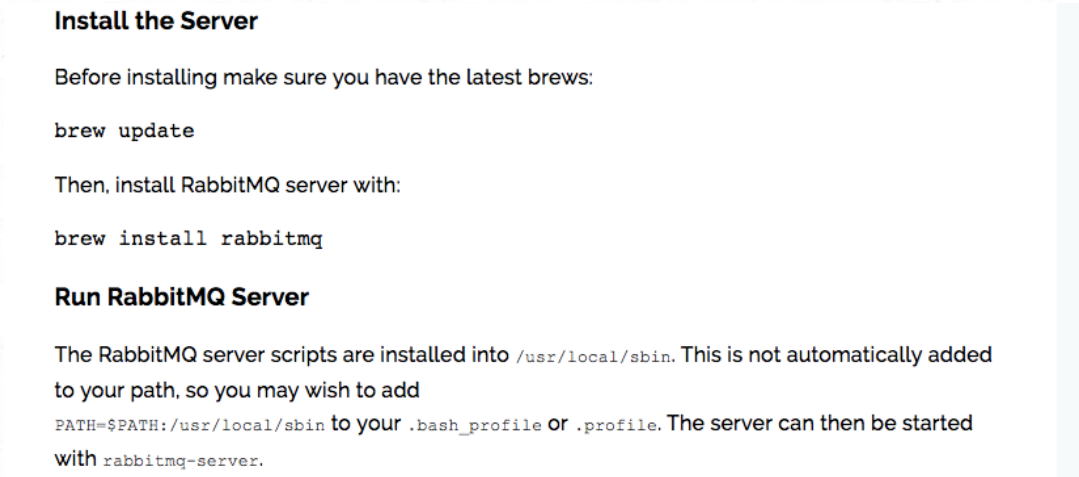
1

RabbitMQ的安装链接　http://www.rabbitmq.com/install-homebrew.html



Install the Server

Before installing make sure you have the latest brews:

```
brew update
```

Then, install RabbitMQ server with:

```
brew install rabbitmq
```

Run RabbitMQ Server

The RabbitMQ server scripts are installed into `/usr/local/sbin`. This is not automatically added to your path, so you may wish to add `PATH=$PATH:/usr/local/sbin` to your `.bash_profile` or `.profile`. The server can then be started with `rabbitmq-server`.

2

启动 停止mq 没有配置环境变量情况下

./rabbitmqctl start_app　　./rabbitmqctl stop_app

3

访问http://localhost:15672/ 默认账户guest 密码guest

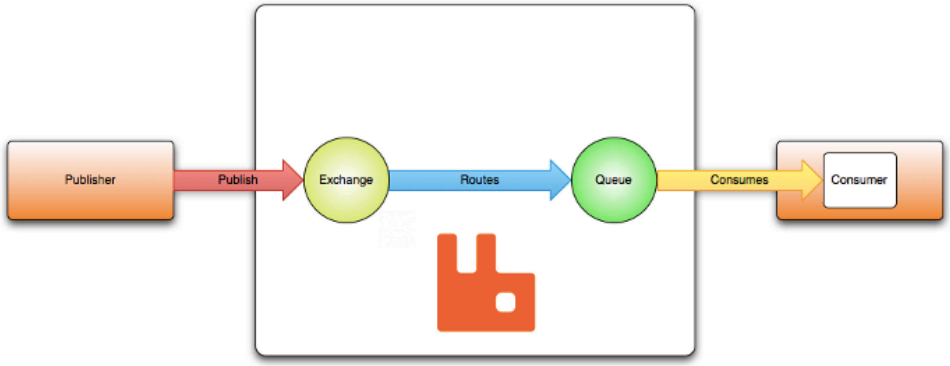
4

项目地址

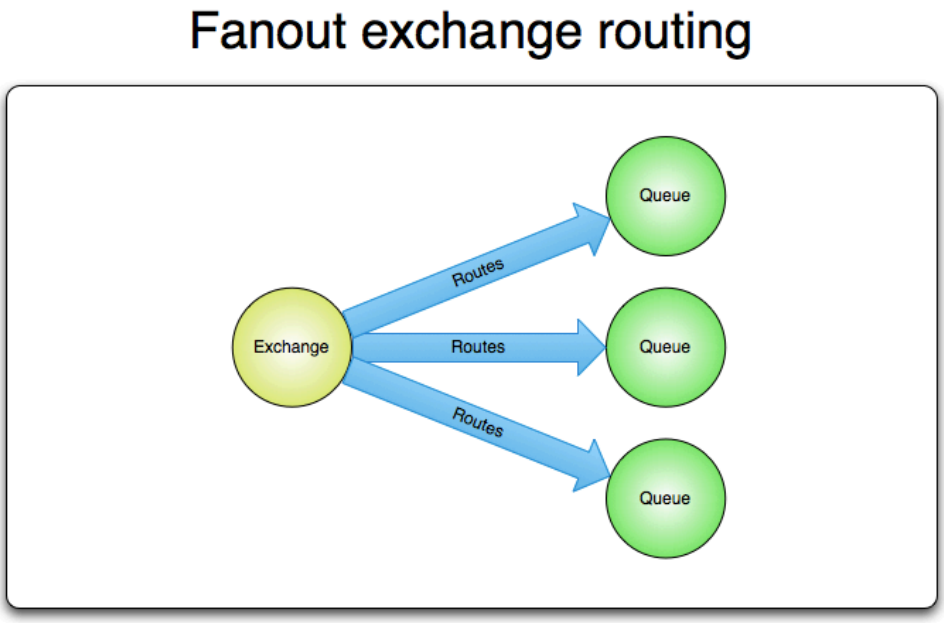
（1）生产者 https://github.com/yan-huan/MQ-producer.git

（2）消费者 https://github.com/yan-huan/MQ-customer.git

5 MQ生产消费流程

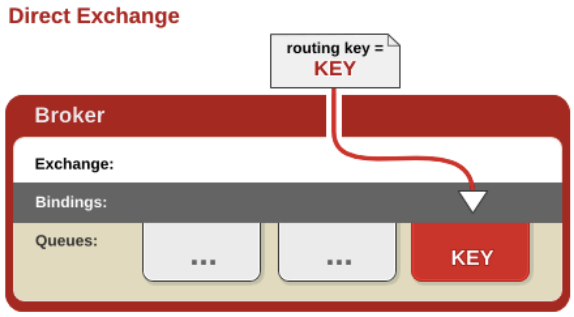


6 exchange路由

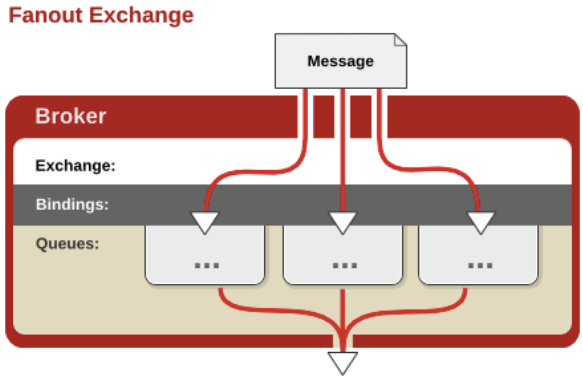


7 exchange类型topic

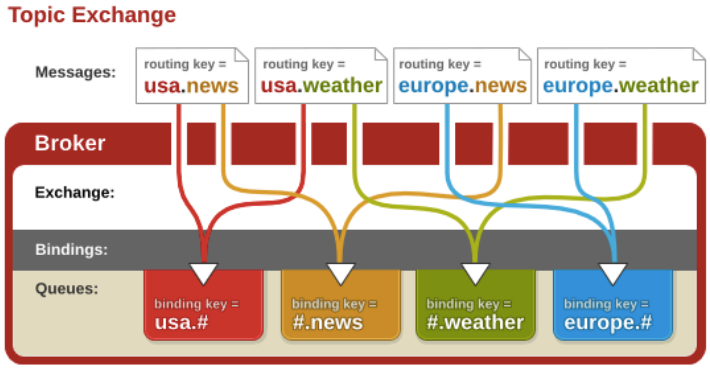
Direct Exchange – 处理路由键。需要将一个队列绑定到交换机上，要求该消息与一个特定的路由键完全匹配。这是一个完整的匹配。如果一个队列绑定到该交换机上要求路由键 “dog”，则只有被标记为“dog”的消息才被转发，不会转发dog.puppy，也不会转发dog.guard，只会转发dog。



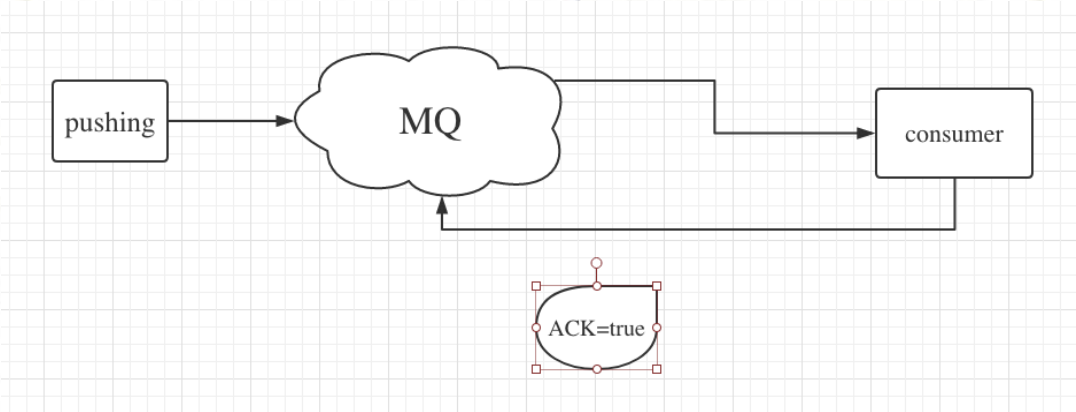
Fanout Exchange – 不处理路由键。你只需要简单的将队列绑定到交换机上。一个发送到交换机的消息都会被转发到与该交换机绑定的所有队列上。很像子网广播，每台子网内的主机都获得了一份复制的消息。Fanout交换机转发消息是最快的。



Topic Exchange – 将路由键和某模式进行匹配。此时队列需要绑定要一个模式上。符号“#”匹配一个或多个词，符号“*”匹配不多不少一个词。因此“audit.#”能够匹配到“audit.irs.corporate”，但是“audit.*” 只会匹配到“audit.irs”。我在RedHat的朋友做了一张不错的图，来表明topic交换机是如何工作的：



8 ack 消息应答机制



9 durable 持久化

消费者停掉或者MQ停掉，消息仍然保留，不丢失

10 Routing key

匹配规则

-----1

```
rabbit:
  bindings:
    input:
      consumer:
        bindingRoutingKey: gold.a
```

消费者

-----2

```
    output:
      producer:
        bindingRoutingKey: gold.#  # 需要用这个来指定 RoutingKey
binders:
```

生产者

10集群配置

（1）节点创建和加入主节点操作

http://www.zhimengzhe.com/mac/333192.html

（2）节点删除（注意必须先停掉此节点）

./rabbitmqctl forget_cluster_node rabbit2@yanhuans-MacBook-Air

（3）查看集群节点

./rabbitmqctl status -n rabbit1 这里需要指定节点名称

后台启动也可以./rabbitmq-server -detached

-----配置方法简化-----

（1）添加节点并且后台启动

```
RABBITMQ_NODE_PORT=5672 RABBITMQ_NODENAME=rabbit1 rabbitmq-server -detached
RABBITMQ_NODE_PORT=5673 RABBITMQ_NODENAME=rabbit2 rabbitmq-server -detached
RABBITMQ_NODE_PORT=5674 RABBITMQ_NODENAME=rabbit3 rabbitmq-server -detached
```

我们从刚刚贴出的第一个节点的status 可以看到，这样的一段记录

```
zhanghuilongdeMacBook-Pro:sbin zhanghuilong$ ./rabbitmqctl status
Status of node rabbit@localhost ...
....略...

{listeners,
     [{clustering,25672,"::"},
      {amqp,5672,"127.0.0.1"},
      {mqtt,1883,"::"},
      {stomp,61613,"::"},
      {http,15672,"::"}]},
```

默认启动的是rabbit@localhost

如果在启动过程，你不指定hostname,那默认都是localhost,假如你的hosts又没有配置127.0.0.1 localhost 的话，就会报下面的错了。

```
ERROR: epmd error for host localhost: nxdomain (non-existing domain)
```

（2）

#启动第二个节点2 因为有端口冲突所以才指定端口启动

15673指定的是http端口

5673是amqp的端口

1844是mqtt端口

61614是mqtt端口

```
RABBITMQ_NODE_PORT=5675 RABBITMQ_SERVER_START_ARGS="-rabbitmq_management listener [{port,15675}] -rabbitmq_stomp tcp_listeners [61615] -rabbitmq_mqtt  tcp_listeners [1885]" RABBITMQ_NODENAME=rabbit5 ./rabbitmq-server -detached
```

如果启动正常,会显示下面的提示:

```
zhanghuilongdeMacBook-Pro:sbin zhanghuilong$ RABBITMQ_NODE_PORT=5673 RABBITMQ_SERVER_STAR
T_ARGS="-rabbitmq_management listener [{port,15673}] -rabbitmq_stomp tcp_listeners [6161
4] -rabbitmq_mqtt  tcp_listeners [1884]" RABBITMQ_NODENAME=rabbit1@zhanghuilongdeMacBook-
Pro ./rabbitmq-server -detached
Warning: PID file not written; -detached was passed.
zhanghuilongdeMacBook-Pro:sbin zhanghuilong$
```

（3）查看是否正常启动 需要指定节点名称

./rabbitmqctl status -n rabbit1

（4）加入节点到主节点

--1停掉加入节点 `./rabbitmqctl -n rabbit1@`yanhuans-MacBook-Air `stop_app`

--2 清空节点数据 `./rabbitmqctl -n rabbit1@`yanhuans-MacBook-Air `reset`

--3 加入到主节点 `./rabbitmqctl -n rabbit1@`yanhuans-MacBook-Air `join_cluster rabbit3@`yanhuans-MacBook-Air

（5）整体操作流程

```
  zhanghuilongdeMacBook-Pro:sbin zhanghuilong$ ./rabbitmqctl -n rabbit1@zhanghuilongdeMac
Book-Pro stop_app
Stopping rabbit application on node 'rabbit1@zhanghuilongdeMacBook-Pro' ...
zhanghuilongdeMacBook-Pro:sbin zhanghuilong$ ./rabbitmqctl -n rabbit1@zhanghuilongdeMacBo
ok-Pro reset
Resetting node 'rabbit1@zhanghuilongdeMacBook-Pro' ...
zhanghuilongdeMacBook-Pro:sbin zhanghuilong$ ./rabbitmqctl -n rabbit1@zhanghuilongdeMacBo
ok-Pro join_cluster rabbit@zhanghuilongdeMacBook-Pro
Clustering node 'rabbit1@zhanghuilongdeMacBook-Pro' with 'rabbit@zhanghuilongdeMacBook-Pr
o' ...
zhanghuilongdeMacBook-Pro:sbin zhanghuilong$ ./rabbitmqctl -n rabbit1@zhanghuilongdeMacBo
ok-Pro start_app
Starting node 'rabbit1@zhanghuilongdeMacBook-Pro' ...
zhanghuilongdeMacBook-Pro:sbin zhanghuilong$
```

（6）查看所有节点　注意需要指定主节点名称

./rabbitmqctl cluster_status -n rabbit1@yanhuans-MacBook-Air

（7）效果