

# AMQP Client

## Terms & Concepts

### Queue

- prefetch: Consumer ???? consumer ???? PUSH ?????????????????? consumer ? PUSH ?????????(?????)????? consumer ?????????????????????? Unacked ???? Unacked ?????????????????? ?????????consumer ???? prefetch ?????????? consumer ?????
- Lazy Queue: Queue ?????????(?)???????????? queue????????????????????????????

### Consume Message

- Consumer ????????????? Push (??) ? Poll (?) ?????
  - [????RabbitMQ\(?\)——????????QOS?C#?? - ?????? - ??? \(cnblogs.com\)](#)

### Publish Message

- ??? nodes ? Cluster ????????????????????? nodes????????????
- Publish Confirm:

## TTL (Time to Live)

?? TTL?? RabbitMQ ? TTL ???? Message ? Queue ???

### Message TTL

- ?? : ??????????????????
- ?? Message ????? Queues ????? Queue ? TTL ????????????????????????????? TTL ? Queue???????????? ?
- ??? : Millisecond (60 seconds = 60000)

### ??? : Policy

```
rabbitmqctl set_policy TTL ".*" '{"message-ttl":60000}' --apply-to queues
```

### ??? : Queue ??

- x-message-ttl: 60000

## Sample codes in C#

```
var args = new Dictionary<string, object>();
args.Add("x-message-ttl", 60000);
model.QueueDeclare("myqueue", false, false, false, args);
```

## Queue TTL

- ??: ???????? Queue?? Queue ??????
- ???: Millisecond (30 mins = 1800000)

## ???: Policy

```
rabbitmqctl set_policy expiry ".*" '{"expires":1800000}' --apply-to queues
```

## ???: Queue ??

- x-expires: 1800000

## Sample codes in Java

```
Map<String, Object> args = new HashMap<String, Object>();
args.put("x-expires", 1800000);
channel.queueDeclare("myqueue", false, false, false, args);
```

## rabbitmqadmin

- [Management Command Line Tool — RabbitMQ](#)

## Usage

```
# Publish a message
rabbitmqadmin -H <rabbitmq-server-ip> -u <user-name> -p <secret> -V <virtual-server> publish
exchange=amq.default routing_key=my-testq payload="This is Alang"

# Consume/Get a message
rabbitmqadmin -H <rabbitmq-server-ip> -u <user-name> -p <secret> -V <virtual-host> get queue=my-testq
ackmode=ack_requeue_false
```

## amqp-tools

A CLI tool is built-in Ubuntu.

## Install

```
sudo apt update
sudo apt install amqp-tools
```

## Usage

```
# Declare a queue
amqp-declare-queue --url="amqp://<user-name>:<secret>@<rabbitmq-server-ip>:<rabbitmq-server-
port>/<virtual-server>" -d -q "my-testq"

# Publish a message
amqp-publish --url="amqp://<user-name>:<secret>@<rabbitmq-server-ip>:<rabbitmq-server-port>/<virtual-
server>" --routing-key="my-testq" -b "Hello,World"

# Get the messages (Poll mode)
amqp-get --url="amqp://<user-name>:<secret>@<rabbitmq-server-ip>:<rabbitmq-server-port>/<virtual-
server>" --queue="my-testq"

# Get the messages (Push mode)
amqp-consume --url="amqp://<user-name>:<secret>@<rabbitmq-server-ip>:<rabbitmq-server-port>/<virtual-
server>" --queue="my-testq" -p 2 ./show.sh
```

## show.sh:

```
#!/usr/bin/env bash
read line
echo "Message: $line"
sleep 1
```

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