
Message Queueing

Web Developer Meetup - August 20, 2013
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Agenda

Message Queueing

RabbitMQ

ZeroMQ

IronMQ (by Chris Turner)

Message Queueing

1 "Hello World!"

The simplest thing that does
something



Work queues

2 Work queues

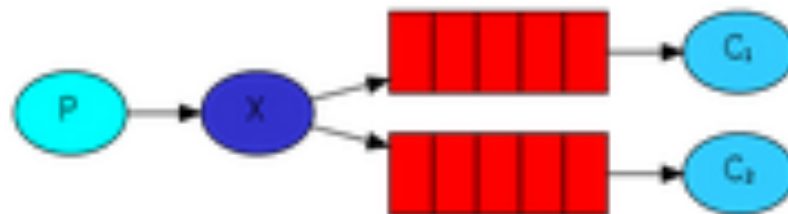
Distributing tasks among workers



Publisher / Subscriber

3 Publish/Subscribe

Sending messages to many consumers at once



RabbitMQ

- Open Source
 - Runs on Erlang VM
 - Implements *Advanced Message Queueing Protocol* (AMQP)
 - Developed and supported by Springsource (now a division of VMware)
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Erlang

- Developed at by Joe Armstrong in 1986
 - Released Open Source in 1998
 - Originally used by Ericsson to provide highly available phone systems
 - <http://www.erlang.org>
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RabbitMQ: Installing Rabbit

1. Install Erlang
 2. Install Rabbit
 3. Enable Management Plugin
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- Management plugin runs on port 15672
 - Try <http://10.192.1.67:15672> while on the guest wifi
 - User: guest Password: guest
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RabbitMQ: Lessons Learned

- Clustering over an unreliable network: Split Brain!
 - *At-Least-Once* is not the same as *Once-and-Only-Once*
 - Logging
 - Manage Rabbit via Puppet
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ZeroMQ

- “*The simplest way to connect pieces*” - <http://zeromq.org/>
 - Blazing Fast
 - Native code in 40+ languages
 - Brokerless
 - Socket based
 - Non-durable queues (unless you implement durability yourself!)
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IronMQ

<http://www.iron.io/mq>

Other Message Queues

- RabbitMQ
 - ZeroMQ
 - IronMQ
 - MSMQ - Microsoft license
 - ActiveMQ - Apache project AMQP and JMS
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Questions

Images are taken from the excellent tutorials on <http://www.rabbitmq.com/getstarted.html>
