RocketMQ Deployment Guide

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| 1.0 | Li Zhanhui | 2014/12/16 |

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# **Prerequisite Software**

OS: 64bit

Java SDK 1.7.x 64bit

Git

Maven 3.2.x

Jetty

Make sure you have set JAVA\_HOME, PATH, M2\_HOME properly.

# **Clone Source Repository**

Source code of this project is hosted on github: [link](https://github.com/lizhanhui/Alibaba_RocketMQ)

To clone the source, execute the following command:

git clone <https://github.com/lizhanhui/Alibaba_RocketMQ.git>

# **Build**

cd Alibaba\_RocketMQ

sh install.sh

# **Deploy Name Server Cluster Manager Server**

At present we have two management portals: rocketmq-cockpit(referred as cockpit) and rocketmq-console(referred as console). Cockpit is to manage name server list, internal and public IP mapping. Future planned features will include monitoring running status of the whole cluster status. Console contains tools of MQ administration tools. These are identical to console commands like “mqadmin sub-command option-list”.

To deploy these two web application, we need a web container, say jetty. Latest version of jetty is preferred. You may download jetty <http://www.eclipse.org/downloads/>

Unzip and add a soft link in user home folder, pointing to the folder of your jetty.

Modify start.ini, change default port to 80.

104 ## HTTP port to listen on

105 jetty.port=80

Execute shell script Alibaba\_RocketMQ/deploy\_webapps.sh

Use root account to start jetty:

**cd ~/jetty**

**screen java -jar start.jar**

Open a browser, visit <http://localhost>

Login as root/password

You may manage name server list and IP mapping later on.

# **Deploy RocketMQ**

1. Configure And Build

* Generate two Java key stores, both of which contain private-public key pair: one for server side and one for client side. Make sure each key store has the counterpart public key trusted. For now, key store and trust key store are the same. You may refer to the following class for security settings: com.alibaba.rocketmq.remoting.netty. SslHelper
* Put the two key stores into ${Alibaba\_RocketMQ}/rocketmq-remoting/src/main/resources, naming them as existing.

Make sure your start up scripts has the following system property properly set:

-DRocketMQServerKeyStorePassword

-DRocketMQServerTrustKeyStorePassword

-DRocketMQServerKeyPassword

-DRocketMQClientKeyStorePassword

-DRocketMQClientTrustKeyStorePassword

-DRocketMQClientKeyPassword

* Configure SSL Settings

Enable ROCKETMQ\_ENABLE\_SSL=true environment variable or add -Denable\_ssl=true option while starting up.

You may refer to bin/tools.sh to enable SSL.

* sh install.sh
* Set ROCKETMQ\_HOME, pointing this environment variable to ~/Alibaba\_RocketMQ/devenv.

1. Deploy Name Server

* Edit System hosts file by adding the following entry, pointing to the Name Server Manager Site:

rocketmq.api IP

* Go to devenv/bin folder and execute the following command:

**sh start.sh nameserver**

* Go to <http://COCKPIT-IP/cockpit/name-server/> add this name server to the list.

1. Deploy Broker

Go to devenv/bin and execute the following command to start master sync broker:

**sh start.sh broker mast async**

Execute the following command to start slave sync broker:

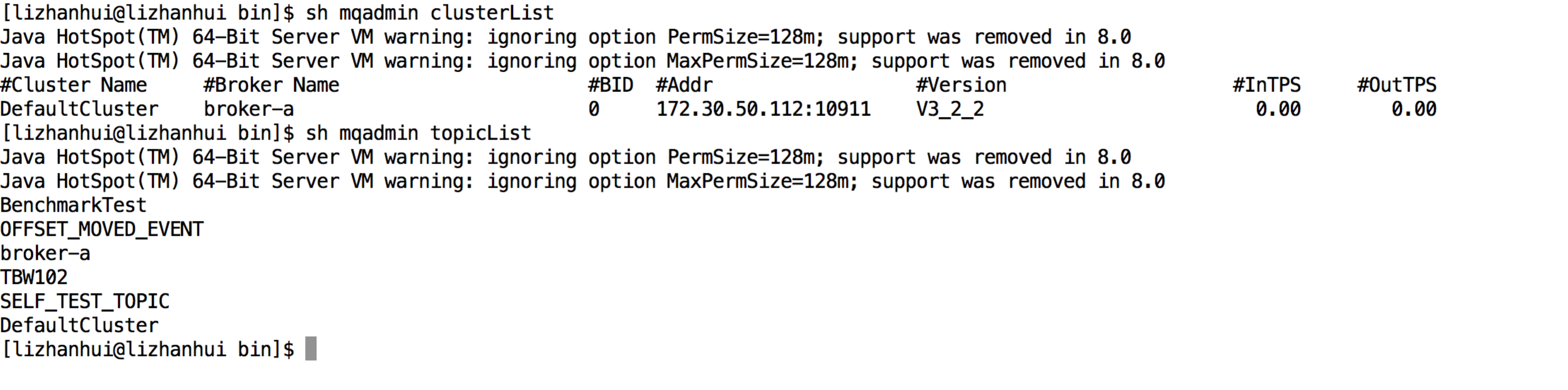
**sh start.sh broker master async**

Add IP Mapping

Go to <http://COCKPIT-IP/cockpit/ip/> to add internal IP and public IP mapping for this broker.

1. Verification

At devenv/bin, execute the following commands; you should see the following cluster list once your broker is running correctly:



# **Application Example**

For clients, these java options are required to set properly:

JAVA\_OPT="${JAVA\_OPT} -Drocketmq.namesrv.domain=rocketmq.api"

JAVA\_OPT="${JAVA\_OPT} -Denable\_ssl=true"

JAVA\_OPT="${JAVA\_OPT} -DRocketMQClientKeyStorePassword=changeit"

JAVA\_OPT="${JAVA\_OPT} -DRocketMQClientTrustKeyStorePassword=changeit"

JAVA\_OPT="${JAVA\_OPT} -DRocketMQClientKeyPassword=changeit"

JAVA\_OPT="${JAVA\_OPT} -Duse\_elastic\_ip=true"

On default, Java key store ${Alibaba\_RocketMQ}conf/**client.ks** should be copied to **/home/dev/Alibaba\_RocketMQ/devenv/conf/client.ks**

1. Producer

See <https://github.com/lizhanhui/Alibaba_RocketMQ/blob/ssl/rocketmq-example/src/main/java/com/alibaba/rocketmq/example/quickstart/Producer.java>

1. Consumer

See <https://github.com/lizhanhui/Alibaba_RocketMQ/blob/ssl/rocketmq-example/src/main/java/com/alibaba/rocketmq/example/quickstart/Consumer.java>

# **Contact**

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