



Red Hat JBoss A-MQ 6.0

Performance Metrics Reference

Monitoring the broker's performance

Red Hat JBoss A-MQ 6.0 Performance Metrics Reference

Monitoring the broker's performance

JBoss A-MQ Docs Team

Content Services

fuse-docs-support@redhat.com

Legal Notice

Copyright © 2014 Red Hat.

The text of and illustrations in this document are licensed by Red Hat under a Creative Commons Attribution-Share Alike 3.0 Unported license ("CC-BY-SA"). An explanation of CC-BY-SA is available at

<http://creativecommons.org/licenses/by-sa/3.0/>

. In accordance with CC-BY-SA, if you distribute this document or an adaptation of it, you must provide the URL for the original version.

Red Hat, as the licensor of this document, waives the right to enforce, and agrees not to assert, Section 4d of CC-BY-SA to the fullest extent permitted by applicable law.

Red Hat, Red Hat Enterprise Linux, the Shadowman logo, JBoss, OpenShift, Fedora, the Infinity logo, and RHCE are trademarks of Red Hat, Inc., registered in the United States and other countries.

Linux ® is the registered trademark of Linus Torvalds in the United States and other countries.

Java ® is a registered trademark of Oracle and/or its affiliates.

XFS ® is a trademark of Silicon Graphics International Corp. or its subsidiaries in the United States and/or other countries.

MySQL ® is a registered trademark of MySQL AB in the United States, the European Union and other countries.

Node.js ® is an official trademark of Joyent. Red Hat Software Collections is not formally related to or endorsed by the official Joyent Node.js open source or commercial project.

The OpenStack ® Word Mark and OpenStack logo are either registered trademarks/service marks or trademarks/service marks of the OpenStack Foundation, in the United States and other countries and are used with the OpenStack Foundation's permission. We are not affiliated with, endorsed or sponsored by the OpenStack Foundation, or the OpenStack community.

All other trademarks are the property of their respective owners.

Abstract

Red Hat JBoss A-MQ provides a number of metrics that can be used to monitor a broker's performance.

Table of Contents

CHAPTER 1. ACTIVEMQ SERVER	4
OVERVIEW	4
PARENT RESOURCE TYPES	4
CHILD RESOURCE TYPES	4
AUTODISCOVERY PROCESS SCANS	4
CONNECTION PROPERTIES	4
METRICS	5
CONFIGURATION PROPERTIES	5
OPERATIONS	5
PACKAGE TYPES	5
CHAPTER 2. BROKER SERVICE	6
OVERVIEW	6
PARENT RESOURCE TYPES	6
CHILD RESOURCE TYPES	6
CONNECTION PROPERTIES	6
METRICS	7
CONFIGURATION PROPERTIES	8
OPERATIONS	8
PACKAGE TYPES	9
CHAPTER 3. CLIENT CONNECTOR SERVICE	10
OVERVIEW	10
PARENT RESOURCE TYPES	10
CHILD RESOURCE TYPES	10
CONNECTION PROPERTIES	10
METRICS	10
CONFIGURATION PROPERTIES	10
OPERATIONS	11
PACKAGE TYPES	11
CHAPTER 4. CONNECTOR SERVICE	12
OVERVIEW	12
PARENT RESOURCE TYPES	12
CHILD RESOURCE TYPES	12
CONNECTION PROPERTIES	12
METRICS	12
CONFIGURATION PROPERTIES	12
OPERATIONS	13
PACKAGE TYPES	13
CHAPTER 5. NETWORK CONNECTOR SERVICE	14
OVERVIEW	14
PARENT RESOURCE TYPES	14
CHILD RESOURCE TYPES	14
CONNECTION PROPERTIES	14
METRICS	14
CONFIGURATION PROPERTIES	14
OPERATIONS	15
PACKAGE TYPES	15
CHAPTER 6. QUEUE SERVICE	16
OVERVIEW	16

PARENT RESOURCE TYPES	16
CHILD RESOURCE TYPES	16
CONNECTION PROPERTIES	16
METRICS	16
CONFIGURATION PROPERTIES	17
OPERATIONS	17
PACKAGE TYPES	18
CHAPTER 7. TOPIC SERVICE	19
OVERVIEW	19
PARENT RESOURCE TYPES	19
CHILD RESOURCE TYPES	19
CONNECTION PROPERTIES	19
METRICS	19
CONFIGURATION PROPERTIES	20
OPERATIONS	20
PACKAGE TYPES	21

CHAPTER 1. ACTIVEMQ SERVER

OVERVIEW

Description:	ActiveMQ Server Process
Singleton:	no
Plugin:	ActiveMQ

PARENT RESOURCE TYPES

- Managed Platforms

CHILD RESOURCE TYPES

- ActiveMQ Server JVM Server

AUTODISCOVERY PROCESS SCANS

Table 1.1. Metrics

Name	Query
<code>#{processScan.name}</code>	<code>process basename match=^java.* , arg - Dactivemq.home match=.*</code>

CONNECTION PROPERTIES

Table 1.2. Connection Properties

Name	Required	Description	Internal Name
Log Event Sources	yes	The list of log files that can be tracked	logEventSources
ActiveMQ Home	yes	The home directory of the Server	activemq.home
Server Resource Key	yes	Java system property that uniquely identifies this Server	resourceKey
Version File Pattern	yes	File name with Server version	versionFile

Name	Required	Description	Internal Name
Home Directory	yes	System property for home directory	homeProperty
Log File	yes	Name of the log file to track	logFile
Connector Address	no	JMX Service URL	connectorAddress
Principal	no	JMX login principal/username	principal
Credentials	no	JMX login credentials/password	credentials

**NOTE**

You must use the internal name to reference Configuration Properties in Dynamic Group Definition expressions.

METRICS

none

CONFIGURATION PROPERTIES

none

OPERATIONS

none

PACKAGE TYPES

none

CHAPTER 2. BROKER SERVICE

OVERVIEW

Description:	ActiveMQ Broker
Singleton:	no
Plugin:	ActiveMQ

PARENT RESOURCE TYPES

- ActiveMQ Server Platform
- JMX Server Platform
- Servicemix 3 Server Platform
- Servicemix 4 Server Platform
- Fabric Container Platform
- JBoss Fuse Container Platform
- JBossAS Server Platform

CHILD RESOURCE TYPES

- [Chapter 3, Client Connector Service](#)
- [Chapter 4, Connector Service](#)
- [Chapter 5, Network Connector Service](#)
- [Chapter 6, Queue Service](#)
- [Chapter 7, Topic Service](#)

CONNECTION PROPERTIES

Table 2.1. Connection Properties

Name	Required	Description	Internal Name
Broker Version	yes	The version of the broker	BrokerVersion
Object Name	yes		objectName
Object Name 1	yes		objectName1

Name	Required	Description	Internal Name
Name Template	yes		nameTemplate
Description Template	yes		descriptionTemplate
Broker Name	yes	The name of the broker	brokerName

**NOTE**

You must use the internal name to reference Configuration Properties in Dynamic Group Definition expressions.

METRICS**Table 2.2. Metrics**

Name	Type	Description	Internal Name
Total Consumer Count	measurement	Number of message consumers subscribed to destinations on the broker.	TotalConsumerCount
Total Enqueue Count	measurement	Number of messages that have been sent to the broker.	TotalEnqueueCount
Total Enqueue Count per Minute	measurement	Number of messages that have been sent to the broker.	TotalEnqueueCount
Total Dequeue Count	measurement	Number of messages that have been acknowledged on the broker.	TotalDequeueCount
Total Dequeue Count per Minute	measurement	Number of messages that have been acknowledged on the broker.	TotalDequeueCount
Total Message Count	measurement	Number of unacknowledged messages on the broker.	TotalMessageCount

Name	Type	Description	Internal Name
Total Message Count per Minute	measurement	Number of unacknowledged messages on the broker.	TotalMessageCount
Memory Percent Usage	measurement	Percent of memory limit used.	MemoryPercentUsage
Memory Limit	measurement	Memory limit, in bytes, used for holding undelivered messages before paging to temporary storage.	MemoryLimit

**NOTE**

You must use the internal name to reference Traits in Dynamic Group Definition expressions.

CONFIGURATION PROPERTIES

none

OPERATIONS

Table 2.3. Operations

Name	Description
Start	Starts the Broker
Stop	Stops the Broker and all its components
Gc	Flushes Broker caches so that the garbage collector can reclaim more memory
Add Connector	Adds a Connector to the broker.
Remove Connector	Removes a Connector from the broker.
Reset Statistics	Reset all broker statistics.
Enable Statistics	Enable broker statistics.
Disable Statistics	Disable broker statistics.

Name	Description
Add Network Connector	Adds a Network Connector to the broker.
Remove Network Connector	Removes a Network Connector from the broker.
Stop Gracefully	Poll for queues matching queueName are empty before stopping
Terminate JVM	Shuts down the JVM.
Add Topic	Adds a Topic destination to the broker.
Add Queue	Adds a Queue destination to the broker.
Remove Topic	Removes a Topic destination from the Broker
Remove Queue	Removes a Queue destination from the Broker
Reload Log 4j Properties	Reloads log4j.properties from the classpath.
Get Transport Connector By Type	The url of transport connector by it's type; e.g. tcp, stomp, ssl, etc.

PACKAGE TYPES

none

CHAPTER 3. CLIENT CONNECTOR SERVICE

OVERVIEW

Description:	ActiveMQ Connector
Singleton:	no
Plugin:	ActiveMQ

PARENT RESOURCE TYPES

- [Chapter 2, Broker Service](#)

CHILD RESOURCE TYPES

none

CONNECTION PROPERTIES

Table 3.1. Connection Properties

Name	Required	Description	Internal Name
Object Name	yes		objectName
Name Template	yes		nameTemplate
Description Template	yes		descriptionTemplate
Connector Name	yes	The name of the connector	connectorName



NOTE

You must use the internal name to reference Configuration Properties in Dynamic Group Definition expressions.

METRICS

none

CONFIGURATION PROPERTIES

none

OPERATIONS

Table 3.2. Operations

Name	Description
Connection Count	Returns the connection count
Reset Statistics	Resets the statistics
Enable Statistics	Enables statistics gathering
Disable Statistics	Disables statistics gathering
Start	Starts the Connector
Stop	Stops the Connector

PACKAGE TYPES

none

CHAPTER 4. CONNECTOR SERVICE

OVERVIEW

Description:	ActiveMQ Connector
Singleton:	no
Plugin:	ActiveMQ

PARENT RESOURCE TYPES

- [Chapter 2, Broker Service](#)

CHILD RESOURCE TYPES

none

CONNECTION PROPERTIES

Table 4.1. Connection Properties

Name	Required	Description	Internal Name
Object Name	yes		objectName
Name Template	yes		nameTemplate
Description Template	yes		descriptionTemplate
Connector Name	yes	The name of the connector	connectorName



NOTE

You must use the internal name to reference Configuration Properties in Dynamic Group Definition expressions.

METRICS

none

CONFIGURATION PROPERTIES

none

OPERATIONS

Table 4.2. Operations

Name	Description
Connection Count	Returns the connection count
Reset Statistics	Resets the statistics
Enable Statistics	Enables statistics gathering
Disable Statistics	Disables statistics gathering
Start	Starts the Connector
Stop	Stops the Connector

PACKAGE TYPES

none

CHAPTER 5. NETWORK CONNECTOR SERVICE

OVERVIEW

Description:	ActiveMQ Connector
Singleton:	no
Plugin:	ActiveMQ

PARENT RESOURCE TYPES

- [Chapter 2, Broker Service](#)

CHILD RESOURCE TYPES

none

CONNECTION PROPERTIES

Table 5.1. Connection Properties

Name	Required	Description	Internal Name
Object Name	yes		objectName
Object Name 1	yes		objectName1
Name Template	yes		nameTemplate
Description Template	yes		descriptionTemplate
Connector Name	yes	The name of the connector	connectorName



NOTE

You must use the internal name to reference Configuration Properties in Dynamic Group Definition expressions.

METRICS

none

CONFIGURATION PROPERTIES

none

OPERATIONS

Table 5.2. Operations

Name	Description
Start	Starts the Connector
Stop	Stops the Connector

PACKAGE TYPES

none

CHAPTER 6. QUEUE SERVICE

OVERVIEW

Description:	ActiveMQ Queue
Singleton:	no
Plugin:	ActiveMQ

PARENT RESOURCE TYPES

- [Chapter 2, Broker Service](#)

CHILD RESOURCE TYPES

none

CONNECTION PROPERTIES

Table 6.1. Connection Properties

Name	Required	Description	Internal Name
Object Name	yes		objectName
Object Name 1	yes		objectName1
Name Template	yes		nameTemplate
Description Template	yes		descriptionTemplate
Destination	yes		destination



NOTE

You must use the internal name to reference Configuration Properties in Dynamic Group Definition expressions.

METRICS

Table 6.2. Metrics

Name	Type	Description	Internal Name
Enqueue Count	measurement	Number of messages that have been sent to the destination	EnqueueCount
Enqueue Count per Minute	measurement	Number of messages that have been sent to the destination	EnqueueCount
Dequeue Count	measurement	Number of messages that have been acknowledged (and removed from) from the destination.	DequeueCount
Dequeue Count per Minute	measurement	Number of messages that have been acknowledged (and removed from) from the destination.	DequeueCount
Consumer Count	measurement	Number of consumers subscribed to this destination	ConsumerCount
Queue Size	measurement	Number of messages in the destination which are yet to be consumed. Potentially dispatched but unacknowledged.	QueueSize
Memory Percent Usage	measurement	The percentage of the memory limit used	MemoryPercentUsage

**NOTE**

You must use the internal name to reference Traits in Dynamic Group Definition expressions.

CONFIGURATION PROPERTIES

none

OPERATIONS

Table 6.3. Operations

Name	Description
Purge	Removes all of the messages in the queue
Remove Message	Remove a message from the destination by JMS message ID. If the message has been dispatched, it cannot be deleted and false is returned.
Remove Matching Messages	Removes up to a specified number of messages from the destination based on an SQL-92 selection on the message headers or XPATH on the body.
Copy Message To	Copies a message with the given JMS message ID into the specified destination.
Copy Matching Messages To	Copies up to a specified number of messages based on an SQL-92 selecton on the message headers or XPATH on the body into the specified destination.
Move Message To	Moves a message with the given JMS message ID into the specified destination.
Move Matching Messages To	Moves up to a specified number of messages based on an SQL-92 selecton on the message headers or XPATH on the body into the specified destination.
Retry Message	Moves a message with the given JMS message back to its original destination
Does Cursor Have Space	Message cursor has memory space available
Does Cursor Have Messages Buffered	Message cursor has buffered messages to deliver
Cursor Size	Number of messages available to be paged in by the cursor.
Reset Statistics	Resets statistics
Send Text Message	Sends a text message to this destination

PACKAGE TYPES

none

CHAPTER 7. TOPIC SERVICE

OVERVIEW

Description:	ActiveMQ Topic
Singleton:	no
Plugin:	ActiveMQ

PARENT RESOURCE TYPES

- [Chapter 2, Broker Service](#)

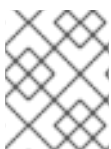
CHILD RESOURCE TYPES

none

CONNECTION PROPERTIES

Table 7.1. Connection Properties

Name	Required	Description	Internal Name
Object Name	yes		objectName
Object Name 1	yes		objectName1
Name Template	yes		nameTemplate
Description Template	yes		descriptionTemplate
Destination	yes		destination



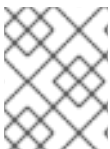
NOTE

You must use the internal name to reference Configuration Properties in Dynamic Group Definition expressions.

METRICS

Table 7.2. Metrics

Name	Type	Description	Internal Name
Enqueue Count	measurement	Number of messages that have been sent to the destination	EnqueueCount
Enqueue Count per Minute	measurement	Number of messages that have been sent to the destination	EnqueueCount
Dequeue Count	measurement	Number of messages that have been acknowledged (and removed from) from the destination.	DequeueCount
Dequeue Count per Minute	measurement	Number of messages that have been acknowledged (and removed from) from the destination.	DequeueCount
Consumer Count	measurement	Number of consumers subscribed to this destination	ConsumerCount
Queue Size	measurement	Number of messages in the destination which are yet to be consumed. Potentially dispatched but unacknowledged.	QueueSize
Memory Percent Usage	measurement	The percentage of the memory limit used	MemoryPercentUsage

**NOTE**

You must use the internal name to reference Traits in Dynamic Group Definition expressions.

CONFIGURATION PROPERTIES

none

OPERATIONS

Table 7.3. Operations

Name	Description
Reset Statistics	Resets statistics
Send Text Message	Sends a text message to this destination

PACKAGE TYPES

none