



# **Red Hat JBoss A-MQ 6.3**

## **Migration Guide**

Migrating to Red Hat JBoss A-MQ 6.3



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## Abstract

This guide lays out the issues a user will encounter when upgrading to the latest version of Red Hat JBoss A-MQ.

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# CHAPTER 1. MIGRATION OVERVIEW

## Abstract

This chapter highlights some of the key points that might affect your applications, when migrating to JBoss A-MQ 6.3.

## 1.1. UPGRADED COMPONENTS

### Version upgrades

Some of the major components in JBoss Fuse and JBoss A-MQ 6.3 have been upgraded. The following versions are used in JBoss A-MQ:

**Table 1.1. Component Versions**

Component	Version for 6.3	
Apache ActiveMQ	5.11.0	
Apache Karaf	2.4.0	
Fabric8 (was Fuse Fabric)	1.2.0	

## CHAPTER 2. DEPRECATED AND REMOVED FEATURES

### OPENWIRE JMS IS THE ONLY OPENWIRE CLIENT THAT WILL CONTINUE TO BE SUPPORTED IN THE NEXT MAJOR RELEASE OF JBOSS A-MQ

In the next major release of JBoss A-MQ (JBoss A-MQ 7.0), support for most of the OpenWire clients will be dropped. The only OpenWire client that will continue to be supported is OpenWire JMS.

### SUPPORT FOR KAHADB AND LEVELDB WILL BE DROPPED IN THE NEXT MAJOR RELEASE OF JBOSS A-MQ

In the next major release of JBoss A-MQ (JBoss A-MQ 7.0), both the KahaDB message store and the LevelDB message store will be dropped. JBoss AMQ 7 has its own message store implementation and data model.

### THE IMPLEMENTATION OF THE JDBC PERSISTENCE ADAPTER WILL CHANGE IN THE NEXT MAJOR RELEASE OF JBOSS A-MQ

While JBoss AMQ 7 will support a JDBC adapter, the JBoss A-MQ 6.x JDBC adapter will not be supported on JBoss AMQ 7. A new JDBC store will need to be created.

### SUPPORT FOR APACHE KARAF (OSGI) CONTAINER WILL BE DROPPED IN THE NEXT MAJOR RELEASE OF JBOSS A-MQ

In the next major release of JBoss A-MQ (JBoss A-MQ 7.0), the Apache Karaf (OSGi) container will be dropped. JBoss A-MQ 7.0 will be packaged as a standalone application, without any container technology.

### SUPPORT FOR FABRIC8 1.X WILL BE DROPPED IN THE NEXT MAJOR RELEASE OF JBOSS A-MQ

In the next major release of JBoss A-MQ (planned as JBoss A-MQ 7.0), Fabric8 version 1 will be dropped, to be replaced by Fabric8 version 2. The Fabric8 version 2 upgrade is a new generation of distributed container technology that is entirely cloud-based and leverages the OpenShift technology stack to provide the foundation for containerized JBoss A-MQ applications.

### BIN/DELETEFABRIC8 SCRIPT HAS BEEN REMOVED

The `bin/deletefabric8` script has been removed in this release.

### TANUKI BASED WRAPPER FOR INSTALLING JBOSS A-MQ AS A SERVICE IS DEPRECATED

The Tanuki based wrapper scripts—generated using the `wrapper:install` Karaf console command—for installing JBoss A-MQ as a service are deprecated since JBoss A-MQ 6.3 and will be removed in a future release of JBoss A-MQ. To install the Apache Karaf container as a service, it is recommended that you use the new `karaf-service-*.sh` scripts from the `bin/contrib` directory instead.



## **BIN/PATCH SCRIPT IS DEPRECATED**

The `bin/patch` script (`bin\patch.bat` on Windows O/S) is deprecated and will be removed in a future release.

## **SPRING DYNAMIC MODULES (SPRING-DM) IS DEPRECATED**

Spring-DM (which integrates Spring XML with the OSGi service layer) is deprecated since 6.2.1 and you should use the Blueprint framework instead. Using Blueprint does not prevent you from using the Java libraries from the Spring framework: the latest version of Spring is compatible with Blueprint.

## **REST API IS NOT SUPPORTED**

REST API is *not* supported in JBoss A-MQ 6.x and never has been. The REST API described in the Apache ActiveMQ community documentation, <http://activemq.apache.org/rest.html>, is only a demonstration, not a fully-developed feature. It cannot be used with JBoss A-MQ 6.x and has multiple gaps in its functionality that make it unsuitable for production use.

## CHAPTER 3. APACHE ACTIVEMQ ISSUES

### Abstract

JBoss A-MQ 6.3 still uses Apache ActiveMQ 5.11.0.

### 3.1. MIGRATING CLIENTS

#### Migrating Apache ActiveMQ clients

In general, it is recommended that you update your Apache ActiveMQ clients at the same time that you update the brokers, in order to guarantee compatibility between clients and brokers.

It is possible, in some cases, that older client versions might be interoperable with later broker versions. The Openwire protocol supports version negotiation, such that an old client can negotiate the lowest common version with its peer and use that version. But JBoss A-MQ does not have a comprehensive test suite for testing compatibility between all of the different versions of Apache ActiveMQ. Hence, to be sure of compatibility, it is recommended that you upgrade your clients along with your brokers to use the same version.

### 3.2. DEPENDENCY UPGRADES

#### Apache Karaf

JBoss A-MQ and JBoss Fuse use Apache Karaf version 2.4.0.

## CHAPTER 4. MIGRATE DATA STORE

### OVERVIEW

JBoss A-MQ on Apache Karaf uses a KahaDB data store. There is an automatic migration facility that enables the KahaDB data store to be migrated to the new JBoss A-MQ version.

The Aries transaction module must be installed and enabled before it can be used. See [Fuse Transaction Guide](#) for more details. Ignore the Aries transaction files instructions below if you do not have Aries installed.

### MIGRATE THE KAHADB DATA STORE



#### NOTE

When migrating or patching JBoss A-MQ, always back up the KahaDB files and Aries transaction files.

1. Backup the KahaDB files and Aries transaction files from the old container. The files can be found at:
  - KahaDB files - *InstallDir/data/amq/kahadb/\*.\**
  - Aries transaction files - *InstallDir/data/txlog/\*.\**
2. Manually copy all of the KahaDB files from the old container to the same location in the new container.
3. Manually copy all Aries transaction log files from the same location in the old container to the new container.

Auto-migration will take place when the new container is started.