

JmsXaSupportEvaluation

JMS servers XA support evaluation

Those are the information collected while testing BTM against some JMS servers. Also included:

- An overall evaluation of the database's XA support
- Special features and/or limitations

XA only

JMS servers not providing an implementation of `javax.jms.XAConnectionFactory` have not been included.

If you find mistakes, inconsistencies or simply want some other database to be tested (as long as there is at least a free trial version available) just let us know via the [mailing list](#) and we'll consider your request.

Contents

- [ActiveMQ](#)
- [SwiftMQ](#)
- [HornetQ](#)
- [SonicMQ \(Progress Software\)](#)

ActiveMQ

Supported version(s)

Tested against versions 4.2 and 5.1. All 4.x version prior to 4.1.1 are broken regarding recovery and cannot be used.

Settings

Local transactions cannot be mixed well with global transactions thus you should not enable `allowLocalTransactions` or ActiveMQ will throw an exception.

Heuristics

I could not find how to list in-doubt transactions nor how to manually terminate them.

Example ResourceLoader configuration

```
resource.ds.className=org.apache.activemq.ActiveMQXAConnectionFactory
resource.ds.uniqueName=amq
resource.ds.maxPoolSize=5
resource.ds.driverProperties.brokerURL=tcp://localhost:61616
```

SwiftMQ

Supported version(s)

Tested against versions 6.2 but works fine with more recent versions too. You need the JMS XA/ASF Swiftlet extension to be able to use XA transactions.

Settings

All default settings are fine.

Heuristics

The console can be used to list in-doubt transactions and to heuristically terminate and forget them.

Example ResourceLoader configuration

```
resource.ds.className=bitronix.tm.resource.j
ms.JndiXAConnectionFactory
resource.ds.uniqueName=smq
resource.ds.maxPoolSize=5
resource.ds.driverProperties.initialContextF
actory=com.swiftmq.jndi.InitialContextFactor
yImpl
resource.ds.driverProperties.providerUrl=smq
p://localhost:4001/timeout=10000
resource.ds.driverProperties.name=QueueConne
ctionFactory
```

HornetQ

Supported version(s)

Tested against versions 2.0.0.BETA5. The JndiXAConnectionFactory included in BTM 1.3.2 and lower is too limited, you need BTM 1.3.3 or higher to use HornetQ.

Settings

All default settings are fine.

Heuristics

A JMX console (like the JDK jconsole tool) can be used to list in-doubt transactions and to heuristically terminate them. Just have a look at the org.hornetq/Server/Core JMX object which contains 3 interesting operations: listPreparedTransactions, commitPreparedTransaction, rollbackPreparedTransaction.

Still under investigation.

Example ResourceLoader configuration

```
resource.ds.className=bitronix.tm.resource.j
ms.JndiXAConnectionFactory
resource.ds.uniqueName=hornet
resource.ds.maxPoolSize=5
resource.ds.driverProperties.initialContextF
actory=org.jnp.interfaces.NamingContextFacto
ry
resource.ds.driverProperties.providerUrl=jnp
://localhost:1099
resource.ds.driverProperties.extraJndiProper
ties.java.naming.factory.url.pkgs=org.jboss.
naming:org.jnp.interfaces
resource.ds.driverProperties.name=XAConnecti
onFactory
```

SonicMQ (Progress Software)

Supported version(s)

Tested against versions 7.6. The JndiXAConnectionFactory included in BTM 1.3.2 and lower is too limited (extraJndiProperties), you need BTM 1.3.3 or higher to use SonicMQ. Seems to support local transactions.

Settings

All default settings are fine.

Heuristics

Still under investigation.

Example ResourceLoader configuration

```
resource.cf.className=bitronix.tm.resource.j
ms.JndiXAConnectionFactory
resource.cf.uniqueName=sonicmq
resource.cf.maxPoolSize=5
resource.cf.driverProperties.initialContextF
actory=com.sonicsw.jndi.mfcontext.MFContextF
actory
resource.cf.driverProperties.providerUrl=tcp
://localhost:2506
resource.cf.driverProperties.securityPrincip
al=username
resource.cf.driverProperties.securityCredent
ials=password
resource.cf.driverProperties.name=xaConnecti
onFactory
resource.cf.driverProperties.extraJndiProper
ties.com.sonicsw.jndi.mfcontext.domain=domai
n
```

Required Jars

mfcontext-7.6.jar, sonic_Client-7.6.jar (warning JMS API is included in the Jar), sonic_Crypto-7.6.jar, sonic_XA-7.6.jar, sonic_XMessage-7.6.jar