Legal Notice

Copyright © 2020 Red Hat, Inc.

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, the Red Hat 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 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

These release notes contain the latest information about new features, enhancements, fixes, and issues contained in the AMQ Clients 2.6 release.
# Table of Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FEATURES</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>ENHANCEMENTS</td>
<td>4</td>
</tr>
<tr>
<td>2.1</td>
<td>AMQ JMS</td>
<td>4</td>
</tr>
<tr>
<td>2.2</td>
<td>AMQ PYTHON</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>FIXED ISSUES</td>
<td>5</td>
</tr>
<tr>
<td>3.1</td>
<td>AMQ JMS</td>
<td>5</td>
</tr>
<tr>
<td>3.2</td>
<td>AMQ PYTHON</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>IMPORTANT NOTES</td>
<td>6</td>
</tr>
<tr>
<td>4.1</td>
<td>AMQ C++</td>
<td>6</td>
</tr>
<tr>
<td>4.2</td>
<td>PREFERRED CLIENTS</td>
<td>6</td>
</tr>
<tr>
<td>4.3</td>
<td>LEGACY CLIENTS</td>
<td>7</td>
</tr>
<tr>
<td>4.4</td>
<td>UPSTREAM VERSIONS</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>IMPORTANT LINKS</td>
<td>8</td>
</tr>
</tbody>
</table>
CHAPTER 1. FEATURES

- The clients have a new suite of examples and expanded documentation.
CHAPTER 2. ENHANCEMENTS

2.1. AMQ JMS

- **ENTMQCL-1726** - Improve performance when using simulated anonymous producers
  When connected to servers that do not support anonymous senders, the client now caches senders in order to improve performance.

2.2. AMQ PYTHON

- **ENTMQCL-1361** - Convert strings in the API to AMQP symbols where required
  The client now converts Python strings to AMQP symbols in contexts where symbols are required.
CHAPTER 3. FIXED ISSUES

3.1. AMQ JMS

- **ENTMQCL-1835** - Consumers using a `CLIENT_ACKNOWLEDGE` session do not increment the remote delivery count after session recovery
  
  In earlier releases of the product, consumers created with a session in `CLIENT_ACKNOWLEDGE` mode did not increment the remote delivery count if the session was lost and recovered and the deliveries were not acknowledged after recovery.

  In this release, the client sends delivery state updates for messages as the consumer or session is closed to ensure the delivery count is correctly updated.

3.2. AMQ PYTHON

- **ENTMQCL-1364** - The client abruptly disconnects after a TCP half-close
  
  In earlier releases of the product, a TCP half-close from a remote peer triggered an AMQP framing error. This appeared as an error even though it was a normal connection close condition.

  In this release, the client correctly closes the connection without error in this case.

- **ENTMQCL-1578** - The client leaks transport and selectable objects
  
  In earlier releases of the product, circular references in the client implementation caused memory use to increase over time.

  In this release, the circularity of the references is broken so that memory is correctly freed.
CHAPTER 4. IMPORTANT NOTES

4.1. AMQ C++

- **Unsettled interfaces**
  The AMQ C++ messaging API includes classes and methods that are not yet proven and can change in future releases. Be aware that use of these interfaces might require changes to your application code in the future.

  These interfaces are marked **Unsettled API** in the API reference. They include the interfaces in the `proton::codec` and `proton::io` namespaces and the following interfaces in the `proton` namespace.

  - `listen_handler`
  - The `on_sender_drain_start` and `on_sender_drain_finish` methods on `messaging_handler`
  - The `draining` and `return_credit` methods on `sender`
  - The `draining` and `drain` methods on `receiver`

  API elements present in header files but not yet documented are considered unsettled and are subject to change.

- **Deprecated interfaces**
  Interfaces marked **Deprecated** in the API reference are scheduled for removal in a future release.

  This release deprecates the following interfaces in the `proton` namespace.

  - `void_function0` - Use the `work` class or C++11 lambdas instead.
  - `default_container` - Use the `container` class instead.
  - `url` and `url_error` - Use a third-party URL library instead.

4.2. PREFERRED CLIENTS

In general, AMQ clients that support the AMQP 1.0 standard are preferred for new application development. However, the following exceptions apply:

- If your implementation requires distributed transactions, use the AMQ Core Protocol JMS client.
- If you require MQTT or STOMP in your domain (for IoT applications, for instance), use community-supported MQTT or STOMP clients.

The considerations above do not necessarily apply if you are already using:

- The AMQ OpenWire JMS client (the JMS implementation previously provided in A-MQ 6)
- The AMQ Core Protocol JMS client (the JMS implementation previously provided with HornetQ)
4.3. LEGACY CLIENTS

- **Deprecation of the CMS and NMS APIs**
  The ActiveMQ CMS and NMS messaging APIs are deprecated in AMQ 7. It is recommended that users of the CMS API migrate to AMQ C++, and users of the NMS API migrate to AMQ .NET. The CMS and NMS APIs might have reduced functionality in AMQ 7.

- **Deprecation of the legacy AMQ C++ client**
  The legacy AMQ C++ client (the C++ client previously provided in MRG Messaging) is deprecated in AMQ 7. It is recommended that users of this API migrate to AMQ C++.

- **The Core API is unsupported**
  The Artemis Core API client is not supported. This client is distinct from the AMQ Core Protocol JMS client, which is supported.

4.4. UPSTREAM VERSIONS

- AMQ C++, AMQ Python, and AMQ Ruby are now based on Qpid Proton 0.30.0
- AMQ JavaScript is now based on Rhea 1.0.16
- AMQ JMS is now based on Qpid JMS 0.48.0
- AMQ .NET is now based on AMQP.Net Lite 2.3.0
CHAPTER 5. IMPORTANT LINKS

- Red Hat AMQ 7 Supported Configurations
- Red Hat AMQ 7 Component Details
- AMQ Clients 2.5 Release Notes
- AMQ Clients 2.4 Release Notes
- AMQ Clients 2.3 Release Notes
- AMQ Clients 2.2 Release Notes
- AMQ Clients 2.1 Release Notes
- AMQ Clients 2.0 Release Notes
- AMQ Clients 1.2 Release Notes
- AMQ Clients 1.1 Release Notes

Revised on 2020-02-26 17:29:47 UTC