



## Red Hat AMQ 7.7

# Release Notes for AMQ Online 1.5 on OpenShift

Release Notes for AMQ Online 1.5 on OpenShift Container Platform



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## Abstract

These release notes contain the latest information about new features, enhancements, fixes, and issues contained in the AMQ Online 1.5 on OpenShift Container Platform release.

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## CHAPTER 1. FEATURES

### 1.1. SETTING PER-ADDRESS TTL RESTRICTIONS

The **queue** and **topic** address types now support a message time-to-live (TTL) configuration that overrides a TTL specification provided by the publisher of the message. You can configure TTL restrictions at either the address plan or address level. For more information, see [Address TTL restriction example](#).

## CHAPTER 2. ENHANCEMENTS

### 2.1. LATER VERSIONS OF AMQ BROKER AND AMQ INTERCONNECT

AMQ Online 1.5 on OpenShift Container Platform is based on AMQ Broker 7.7 and AMQ Interconnect 1.8.

### 2.2. CONFIGURING AND VIEWING MESSAGING ENDPOINTS USING THE RED HAT AMQ CONSOLE

You can now use the Red Hat AMQ Console to configure the endpoints of an address space and to view information about the endpoints configured for a given address space. Clients connected to the endpoints of an address space can send messages to or receive messages from any authorized address within that address space. For more information, see [Creating an address space using the Red Hat AMQ Console](#) and [Viewing endpoint information using the Red Hat AMQ Console](#).

### 2.3. CLOSING CONNECTIONS USING THE RED HAT AMQ CONSOLE

You can now force an application's messaging connections to close using the Red Hat AMQ Console. This intervention might help return a system to a working state following an unexpected condition, such as an application with a stuck connection or a stuck message. For more information, see [Closing connections using the Red Hat AMQ Console](#).

### 2.4. CONFIGURING CPU LIMITS FOR BROKERED AND STANDARD INFRASTRUCTURES

You can now configure CPU limits for brokered and standard infrastructures.

### 2.5. PER-ADDRESS MEMORY LIMITS IN BROKER

AMQ Online 1.5 adds support for per-address broker memory limits, which are calculated from the address plan configuration. For more information, see [Address sizing](#).

### 2.6. END-TO-END ADDRESS MONITORING FOR STANDARD ADDRESS SPACE

Added the following address space controller metrics to monitor addresses end-to-end for standard address spaces. For more information, see [Standard controller and agent metrics](#).

- **enmasse\_address\_canary\_health\_failures\_total**
- **enmasse\_address\_canary\_health\_check\_failures\_total**



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## CHAPTER 3. TECHNOLOGY PREVIEW

### 3.1. INTERNET OF THINGS (IOT) CONNECTIVITY

The Internet of Things (IoT) connectivity in AMQ Online provides remote service interfaces for connecting large numbers of IoT devices to a messaging back end. This Technology Preview feature includes the ability to use protocols common to IoT and to enable common IoT use cases, allowing you to register devices and credentials. For more information, see [Getting Started with Internet of Things \(IoT\) on AMQ Online](#).

AMQ Online 1.5 contains the following IoT connectivity enhancements:

- Eclipse Hono is the base component for the AMQ Online IoT functionality. With AMQ Online 1.5, the Eclipse Hono dependencies have been upgraded to 1.2.3. For more information, see the [Eclipse Hono Release Notes](#).
- IoT components support reporting application-level tracing using the OpenTracing API. With AMQ Online 1.5, you can also enable application-level tracing in the IoT infrastructure using Jaeger. For more information, see [IoT tracing](#).
- IoT devices can now be authenticated using X.509 client certificates. You can upload X.509 trust anchors to IoT tenants and use certificates on devices for authenticating with the IoT backend system.
- AMQ Online 1.5 implements a device registry, backed by an external PostgreSQL database. This device registry service allows IoT devices to be managed using the Eclipse Hono Device Management API. It can be used in conjunction with any PostgreSQL compatible database instance and supports different replication and deployment modes. For more information, see [Deploy JDBC external device registry](#).
- With AMQ Online 1.5, you can configure logging systems for IoT components. For more information, see [Configuring logging](#).
- Added ability to configure Pod affinities and anti-affinities and to automatically restart components when keys or certificates are being renewed.
- Added IoT-related metrics and alerts, which are configured automatically when this type of support is installed in AMQ Online. For more information, see [IoT-specific metrics](#).

## CHAPTER 4. RESOLVED ISSUES

### 4.1. BROKER POD FAILS WITH AN `OutOfMemoryError` MESSAGE

When restarted, the broker was using more memory to read messages from the journal than to process the same messages at runtime. This issue was causing the broker pod to fail with an **OutOfMemoryError** message. This issue was related to [ENTMQBR-2313](#). With AMQ Broker 7.7, [ENTMQBR-2313](#) has been resolved and therefore the workaround documented for [ENTMQMAAS-1952](#) is not required for AMQ Online 1.5.

### 4.2. RESOLVED ISSUES FOR AMQ ONLINE 1.5.1

The AMQ Online 1.5.1 patch release is now available. This micro release updates the Operator Metadata that is used to install AMQ Online 1.5.1 from the OpenShift OperatorHub or OLM.

For additional details about the issues resolved in AMQ Online 1.5.1, see [AMQ Online 1.5.x Resolved Issues](#).

### 4.3. RESOLVED ISSUES FOR AMQ ONLINE 1.5.2

For additional details about the issues resolved in AMQ Online 1.5.2, see [AMQ Online 1.5.x Resolved Issues](#).

### 4.4. RESOLVED ISSUES FOR AMQ ONLINE 1.5.3

For additional details about the issues resolved in AMQ Online 1.5.3, see [AMQ Online 1.5.x Resolved Issues](#).

### 4.5. RESOLVED ISSUES FOR AMQ ONLINE 1.5.4

For additional details about the issues resolved in AMQ Online 1.5.4, see [AMQ Online 1.5.x Resolved Issues](#).

## CHAPTER 5. KNOWN ISSUES

This section lists the known issues for AMQ Online 1.5.

- [ENTMQMAAS-1281](#): Resources not deleted when uninstalling AMQ Online using OLM on OpenShift Container Platform 4.1  
**Workaround:** For the workaround about how to remove all resources when uninstalling AMQ Online using the Operator Lifecycle Manager (OLM), see [Removing remaining resources after uninstalling AMQ Online using the Operator Lifecycle Manager](#).

- [ENTMQMAAS-1799](#): Possible to define duplicate addresses using router pattern-matching syntax

When defining addresses in a standard address space instance, be aware that the following restrictions affect the composition of the **spec.address** field in the **address** resource.

The router specifies both period (.) and forward slash (/) characters as address separator characters and that both characters are equivalent. In addition, the router infers a leading address separator character even if it is not explicitly included.

Since AMQ Online does not encode these rules, care must be taken to avoid defining addresses that collide on the router network.

**Workaround:** One way to avoid this collision is to follow these guidelines for defining addresses:

- Use either a period or a forward slash in the addresses, but do not use both.
- Do not begin addresses with an address separator character.

For more information about address pattern matching on the router, see the Red Hat AMQ Interconnect documentation, [Address pattern matching](#).

- [ENTMQMAAS-2646](#): Missing auto links following an upgrade from AMQ Online 1.5.3 to 1.5.4  
To learn how to work around this issue, see the following Red Hat Knowledgebase Solution: <https://access.redhat.com/solutions/5686051>

## CHAPTER 6. IMPORTANT LINKS

- [Red Hat AMQ 7 Supported Configurations](#)
- [Red Hat AMQ 7 Component Details](#)

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