

# Software AG Universal Messaging 10.5 Readme

## October 2019

This file contains important information you must read before using Software AG Universal Messaging 10.5. You can find system requirements, user documentation, and installation and upgrade instructions on the Documentation website at <http://documentation.softwareag.com/> or the TECHcommunity website at <http://techcommunity.softwareag.com/>. At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the Empower website at <https://empower.softwareag.com/>.

No critical issues have been reported for the current release at the time of publishing.

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- NUM-18109  
A Universal Messaging client may fail to receive events sent to a Universal Messaging server over AMQP via the AMQPNetLite library. The client returns an `ArrayIndexOutOfBoundsException`. For a workaround to this issue, contact Software AG Global Support.
- NUM-10799 (Uninstallation may not remove UM Windows service.)  
Windows services created during or after installation of Universal Messaging may not be removed when the product is uninstalled. Users should check whether any such services still exist after uninstallation and manually remove them if so, using the Windows Services control panel.
- NUM-10210 (UM instance manager crashes if instance name is too long.)  
The Universal Messaging instance manager tool may crash when run on Windows with an instance name longer than 42 characters, although the instance may still be created. The only workaround is to use a shorter instance name.
- NUM-10177 (Clients may need to reconnect for changed realm properties to take effect.)  
Some Universal Messaging realm properties, such as the AMQP Message Transformation setting, are applied on a per-connection basis, meaning that clients must re-connect to pick up a change in the realm-wide value. The Universal Messaging documentation will be updated to reflect which configuration properties are affected by this behavior.
- NUM-8944 (Enterprise Manager should not be able to connect to two clusters with the same name.)  
If you sequentially create two clusters with the same name but with different realms in Enterprise Manager, Enterprise Manager displays a single cluster node that lists only the realms of the first cluster in the tree panel. If you have two existing clusters with the same name and sequentially add a realm from each cluster in Enterprise Manager, Enterprise Manager displays a single cluster node that lists the realms of both clusters in the tree panel.
- NUM-9489 (JMS API allows creation of multiple exclusive durables with the same name.)  
Since the 9.12 release, the `JMS Session.createDurableSubscriber` allows creating more than one exclusive durable subscriber with the same name, with no exception thrown or other indication that this has occurred.  
Workaround: Client code should ensure that all exclusive durables have unique names.

- NUM-9263  
When using the C++ client API, if you specify a number bigger than 16 (default) for the session thread pool size, creating the seventeenth session will result in an error because the Universal Messaging default thread pool size is exceeded.  
The workaround is to increase the thread pool size by calling `nSession::setThreadPoolSize` to ensure enough threads are available.
- NUM-7839 (If an exclusive asynchronous durable is created, closed and then re-subscribed immediately, it is possible for the client to receive an exception that the subscriber is already bound.)  
This is caused because the session disconnected operation does not wait for all resources to be cleaned. If a client waits for a while before the second subscription, all resources on the server are cleaned so the subscription is successful, but there is no way currently to ensure the exact point of time at which everything is cleaned.
- NUM-6873 (Out of order event after restarting shared durable receiver)  
Disordering of events can occur when re-starting a shared durable subscriber with unacknowledged events using the queued shared durable implementation.  
A workaround for this is to ensure that the “Fanout Config -> SyncQueuePublisher” realm configuration property is set to false. This however may cause excess events to build up on server queues in scenarios where consumers do not keep up with publishers.  
Note that for a Universal Messaging delivery as part of a webMethods bundle, the configuration property defaults to false anyway.
- NUM-6147 (P2P hidden channel appearing)  
When upgrading an installation from 9.10, a channel with the name “-p2p/serviceinfo” may be visible within the namespace of Universal Messaging. This channel can safely be removed as it is an artifact of a deprecated and now removed feature P2P. If not removed it will have no adverse effect on Universal Messaging.
- Shared memory drivers are currently not supported on HP-UX systems  
On HP-UX® systems, shared memory drivers are currently not supported.  
There is currently no workaround for this issue.
- NUM-2211 (Paged Store type is unsupported in Solaris / SPARC with JDK 1.8.)  
Currently, the Paged Storage feature is not supported in a Solaris® / SPARC® environment with JDK 1.8.  
Workaround: Consider using JDK 1.7 instead.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- The Java®-based components of Universal Messaging are now built to require a Java 8 virtual machine at runtime. Releases before 10.2 would run against older Java virtual machine versions but these are no longer supported in this release. The minimum Java virtual machine version that should be used is the one included in the product installation.
- Issues related to the “Pause Publishing” feature:
  - Modifying JNDI entries is not possible while publishing is paused. This is because JNDI entries are stored in a Universal Messaging channel.
  - Clients created using an API from a product release prior to v10.1 will not throw the intended `nSessionPauseException` while publishing is paused. Java® `publish / commit` operations will throw `nBaseClientException`, whereas C++ and C# will throw `nUnexpectedResponseException`.
  - If publishing is paused, editing a store through Enterprise Manager will cause the events on the store to be lost, as they cannot be republished on the re-created store.
- The set of Windows Start Menu entries created for each Universal Messaging instance has been simplified. Starting with the 10.3 release each instance will have a Start Menu entry for an “Examples Command Prompt” and for a “Realm Server Command Prompt”. The language-specific command prompt entries created by previous releases have been removed, and the documentation updated to describe how to configure the environment to develop with Universal Messaging using these languages.
- The server-side event filtering functionality in Universal Messaging does not support filtering of Google Protocol Buffer events using the “map” container type available in recent versions of the Google Protocol Buffer language.
- A significant number of realm server configuration properties were removed in the 10.3 release. See the Release Notes document for further details of these changes.

## 4.0 Fixes Included in Each Release

For detailed information about available fixes that have been applied in current or previous product releases, go to the Knowledge Center on the Empower website.

## 5.0 Resolved Issues

The current release resolves many functional, robustness and performance issues that arose in previous releases. This section provides a short summary of the resolved issues that may be of most interest to customers.

### ***Release 10.5***

- NUM-10743 (MQTT QoS 2 connections are not downgraded to QoS 1)  
Universal Messaging doesn't support MQTT QoS 2 and will automatically downgrade client connections to QoS 1.  
This issue is resolved.
- NUM-11606 (Universal Messaging status shown as ERROR in CCE)  
Command Central displays an ERROR run-time status for a clustered Universal Messaging server when you replace interfaces on one or more of the realm servers in the cluster from outside Command Central.  
When you monitor a Universal Messaging realm server that is part of a cluster in Command Central, and you add a new interface and remove the previously active interface on one or more of the realm servers in the cluster from outside Command Central (for example, in Enterprise Manager), Command Central displays an ERROR status for the monitored realm and also displays offline cluster members until Platform Manager is restarted.  
The issue is resolved.
- NUM-11965 (Universal Messaging cluster formation may take too long to reform)  
Logic for purging events from a multi-file store is now optimized. Previously, events were read twice from disk although this was not really needed.  
The issue is resolved.
- NUM-11971 (NSPS connection from DotNet to UM)  
C# clients were not able to connect to NSPS interfaces using SASL authentication.  
The issue is resolved.
- NUM-12285 (Selectors starting with % sign are not parsed correctly)  
An error was thrown when parsing a selector which starts with the string "%\_". This was an unhandled case in the code, which is now corrected and this scenario is working properly.  
The issue is resolved.

- NUM-12300 (Batch consumption for serial durable consumers does not use the allowed batch size)  
Serial consumers did not correctly consume messages in batches even when there was a large backlog of events. For example, if the batch size was 50, a serial consumer could receive only 2 or 3 messages in a single batch instead of all 50.  
The issue is resolved.

## **Release 10.4**

- NUM-10669 (Channels and queues are not sorted in the EM tree)  
The Universal Messaging Enterprise Manager previously did not display newly added channels or queues in alphabetical order.  
The issue is resolved.
- NUM-10754 (UM Tools for manipulation of JMS artifacts fail when used with authentication)  
The issue is that beside the usual connection which is properly supported for authentication, there is a JNDI connection required where credentials were hardcoded. The credentials provided via the command line are now also used by the JNDI connection.  
The issue is resolved.
- NUM-10872 (Enterprise Manager slows down while editing channels or queues)  
Previously, when editing channels or queues in the Enterprise Manager, the processing became slower after each save operation. When you edited channels or queues nested in several containers (folders) in the Enterprise Manager, the time for saving your changes increased with each save operation.  
The issue is resolved.
- NUM-10944 (Batch Purge performance)  
Event purge performance has been improved in the case where there is an indexed durable (Shared or Serial) attached to a store.
- NUM-10945 (Problem when editing a queue in Enterprise Manager)  
Editing a queue in the Universal Messaging Enterprise Manager could previously cause some events on the queue to be lost.  
The issue is resolved.
- NUM-11166 (Cluster manager doesn't throttle events when queue becomes big)  
Previously, in inter-cluster communication, one node could send events faster than the receiving node could process them. This could lead to an out of memory exception.  
Now if the event queue becomes too big, the receiving node will throttle.
- NUM-11381 (Universal Messaging C# client only supports secure connection TLS 1.0 and SSL 3.0 protocols)  
This issue is now resolved. The Universal Messaging C# client now also supports TLS 1.1 and TLS 1.2 protocols.

## ***Release 10.3***

- NUM-10389 (Possible memory leak when deleting channels.)  
A memory leak of cached Google Protocol Buffer definitions that could be triggered by deleting channels from the Universal Messaging realm server has been resolved.
- NUM-10317 (JAVA\_HOME environment variable not tailored correctly on Windows.)  
The JAVA\_HOME environment variable was not being correctly tailored to point to the installed Java Virtual Machine when opening one of the Universal Messaging command prompts from the Windows Start Menu. The variable will now be set correctly.
- NUM-10313 (Enterprise Manager hangs after 10 minutes.)  
The Universal Messaging Enterprise Manager tool could hang after a period of time when connected to a realm server under heavy load. This issue has been resolved.
- NUM-9719 (AMQP/JMS mapping header mismatch.)  
The AMQP to JMS mapping supported by Universal Messaging has been updated to include some additional mappings defined in the latest updates to the AMQP specification.

## ***Release 10.2***

- NUM-9143 (It is not possible to import a realm configuration exported from UM 10.1.)  
Previous releases allowed realm configurations containing clustered Simple and Transient channels to be imported even though these configurations are unsupported. The import tooling has been updated to detect such invalid configurations and allow automatic upgrading of these channels to Mixed type if requested by the user.
- NUM-9326 (UM's SPM should set connection name for admin connection.)  
The Software AG Platform Manager (SPM) plugin for Universal Messaging will now set the "connection name" property when making an administrative connect to the Universal Messaging server. This allows easier identification of the clients connecting to a particular server.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### ***Release 10.5***

There are no major content changes in the documentation set for the current release.

### ***Release 10.4***

- The documentation set has been extended to include a new Operations Guide. This guide contains information on standard procedures related to the smooth running of the Universal Messaging system. The guide covers daily operations, special operations, monitoring, troubleshooting, as well as other active and proactive tasks.

### ***Release 10.3***

- The Universal Messaging Clustering Guide, which was previously released as a PDF file complementing the product documentation set, has now been incorporated into the Universal Messaging Concepts Guide.
- Detailed documentation of the AMQP (Advanced Message Queueing Protocol) implementation in Universal Messaging has been added to the product documentation set.
- The differences in functionality available through the Universal Messaging management UIs in Enterprise Manager and Command Central have been documented.

### ***Release 10.2***

In previous releases of the documentation, the terms “named object” and “durable subscription” were used to mean the same thing. In this release all use of “named object” has been dropped in favor of the terms “durable subscription” or just “durable”.

### ***Release 9.12***

The description of how to use Command Central to perform administrative tasks on Universal Messaging has moved from the Command Central documentation set to the Administration Guide of the Universal Messaging documentation set.



## **7.0 Terminology Changes**

Information for a release is listed in this section only if changes occurred in that release. Added, Removed, Deprecated, or Changed Items

See the *Release Notes* document in the Universal Messaging documentation.

## **8.0 Added, Removed, Deprecated, or Changed Items**

See the Release Notes document in the Universal Messaging documentation.

## **9.0 Added, Removed, Deprecated, or Changed Parameters**

See the *Release Notes* document in the Universal Messaging documentation.

## **10.0 Added, Removed, Deprecated, or Changed APIs**

See the *Release Notes* document in the Universal Messaging documentation.

## 11.0 Copyright Information

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## 12.0 Support

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