

# Readme for IBM MQ 9.1 and its maintenance

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This document contains the readme information for IBM MQ 9.1.0 Long Term Support release and its maintenance, and also for IBM MQ 9.1.x Continuous Delivery releases.

A PDF copy of this document, in English and in translation, is available for download here: <https://public.dhe.ibm.com/software/integration/wmq/docs/V9.1/Readme/>.

The English version of this document is the most up-to-date version.

## Content

The main sections of this document describe product limitations and known problems.

In addition to this document, you can find more information on the IBM MQ website: <https://www.ibm.com/products/mq>.

The SupportPac web page is here: <https://ibm.biz/mqsupportpacs>.

For current information about known problems and available fixes, see the IBM MQ Support page: [https://www.ibm.com/mysupport/s/topic/OTO5000000024cJGAQ/mq?language=en\\_US&productId=01t0z000006zdYXAAY](https://www.ibm.com/mysupport/s/topic/OTO5000000024cJGAQ/mq?language=en_US&productId=01t0z000006zdYXAAY).

Product documentation for all supported versions of IBM MQ is available through IBM Documentation: <https://www.ibm.com/docs/ibm-mq>. Specifically, the IBM MQ 9.1 product information is available in IBM Documentation: <https://www.ibm.com/docs/ibm-mq/9.1>.

### Announcement letters

The announcement letters for IBM MQ 9.1 (US English) are available at the following locations. The announcement letters provide these types of information:

- Detailed product description, including description of new function.
- Product-positioning statement.
- Ordering details.
- Hardware and software requirements.
- Hourly pricing.

### Announcement letters for Continuous Delivery Releases

IBM MQ for Multiplatforms V9.1.5 and IBM MQ on Cloud

<https://www.ibm.com/docs/en/announcements/ZP20-0119/index.html>

IBM MQ for z/OS, V9.1.5

<https://www.ibm.com/docs/en/announcements/ZP20-0121/index.html>

IBM MQ for z/OS Value Unit Edition V9.1.5, IBM MQ Advanced for z/OS, V9.1.5, and IBM MQ Advanced for z/OS Value Unit Edition V9.1.5

<https://www.ibm.com/docs/en/announcements/ZP20-0120/index.html>

IBM MQ V9.1.4 for Multiplatforms

<https://www.ibm.com/docs/en/announcements/archive/ENUS219-487>

IBM MQ for z/OS, 9.1.4

<https://www.ibm.com/docs/en/announcements/archive/ENUS219-444>

IBM MQ for z/OS VUE, IBM MQ Advanced for z/OS, and IBM MQ Advanced for z/OS VUE V9.1.4

<https://www.ibm.com/docs/en/announcements/archive/ENUS219-488>

Software withdrawal: IBM MQ for Multiplatforms selected part numbers

<https://www.ibm.com/docs/en/announcements/archive/ENUS919-192>

IBM MQ V9.1.3 for Multiplatforms

<https://www.ibm.com/docs/en/announcements/archive/ENUS219-254>

IBM MQ for z/OS, V9.1.3

<https://www.ibm.com/docs/en/announcements/archive/ENUS219-257>

IBM MQ for z/OS VUE, IBM MQ Advanced for z/OS, and IBM MQ Advanced for z/OS VUE V9.1.3  
<https://www.ibm.com/docs/en/announcements/archive/ENUS219-255>  
 Software withdrawal: IBM MQ Managed File Transfer for z/OS and IBM MQ Advanced Message Security for z/OS  
<https://www.ibm.com/docs/en/announcements/archive/ENUS919-089>  
 IBM MQ V9.1.2 for Multiplatforms  
<https://www.ibm.com/docs/en/announcements/archive/ENUS219-015>  
 IBM MQ V9.1.1 for Multiplatforms  
<https://www.ibm.com/docs/en/announcements/archive/ENUS218-511>  
 IBM MQ for z/OS, V9.1.1  
<https://www.ibm.com/docs/en/announcements/archive/ENUS218-508>  
 IBM MQ for z/OS, V9.1.1  
<https://www.ibm.com/docs/en/announcements/archive/ENUS218-510>

#### Announcement letters for IBM MQ 9.1.0

IBM MQ V9.1 for Multiplatforms  
<https://www.ibm.com/docs/en/announcements/archive/ENUS218-246>  
 IBM MQ for z/OS, V9.1  
<https://www.ibm.com/docs/en/announcements/archive/ENUS218-252>  
 IBM MQ Advanced for z/OS VUE, V9.1  
<https://www.ibm.com/docs/en/announcements/archive/ENUS218-213>  
 IBM MQ 9.1 hourly pricing for on-premises and public cloud containers  
<https://www.ibm.com/docs/en/announcements/archive/ENUS218-141>

## Update history

26 Jun 2024	Updates for IBM MQ 9.1.0.22 CSU
26 Apr 2024	Updates for IBM MQ 9.1.0.21 CSU
22 Feb 2024	Updates for IBM MQ 9.1.0.20
10 May 2023	Updates for IBM MQ 9.1.0.15
18 Oct 2022	Updates for IBM MQ 9.1.0.12
29 Mar 2022	Updates for IBM MQ 9.1.0.11
15 Dec 2021	Updates for IBM MQ 9.1.0.10
24 Aug 2021	Updates for IBM MQ 9.1.0.9
02 Jun 2021	Updates for IBM MQ 9.1.0.8
25 Feb 2021	Updates for IBM MQ 9.1.5
04 Dec 2020	Updates for IBM MQ 9.1.0.7
16 Sep 2020	Extra information for IBM MQ 9.1.4 and 9.1.5
21 Jul 2020	Updates for IBM MQ 9.1.0.6
06 Apr 2020	Updates for IBM MQ 9.1.0.5
02 Apr 2020	Updates for IBM MQ 9.1.5
05 Dec 2019	Updates for IBM MQ 9.1.4
03 Dec 2019	Updates for IBM MQ 9.1.0.4
31 Jul 2019	Updates for IBM MQ 9.1.0.3
11 Jul 2019	Updates for IBM MQ 9.1.3

09 Apr 2019	Updates for IBM MQ 9.1.0.2
14 Mar 2019	Updates for IBM MQ 9.1.2
30 Nov 2018	Updates for IBM MQ 9.1.1
14 Nov 2018	Updates for IBM MQ 9.1.0.1
25 Sep 2018	Added link to IBM MQ 9.1 hourly pricing announcement letter
16 Jul 2018	Created for IBM MQ 9.1.0

## Installation instructions

Installation instructions are available as part of the IBM MQ 9.1 product information published in IBM Documentation: [https://www.ibm.com/docs/SSFKSJ\\_9.1.0/com.ibm.mq.ins.doc/q008250\\_.html](https://www.ibm.com/docs/SSFKSJ_9.1.0/com.ibm.mq.ins.doc/q008250_.html)

## Limitations and known problems for Long Term Support releases

### LIMITATIONS AND KNOWN PROBLEMS FOR IBM MQ 9.1.0.22 CSU

#### On Windows, uninstalling a fix pack can cause IBM MQ Explorer to stop working

If you are running IBM MQ 9.1.0 Fix Pack 20 or later, uninstalling a fix pack or CSU can cause IBM MQ Explorer to stop working. For detailed information, see **LIMITATIONS AND KNOWN PROBLEMS FOR IBM MQ 9.1.0, FIX PACK 20**.

### LIMITATIONS AND KNOWN PROBLEMS FOR IBM MQ 9.1.0.21 CSU

#### On Windows, uninstalling a fix pack can cause IBM MQ Explorer to stop working

If you are running IBM MQ 9.1.0 Fix Pack 20 or later, uninstalling a fix pack or CSU can cause IBM MQ Explorer to stop working. For detailed information, see **LIMITATIONS AND KNOWN PROBLEMS FOR IBM MQ 9.1.0, FIX PACK 20**.

### Support is removed for RSA key exchange in FIPS mode

The IBM Java 8 JRE removes support for RSA key exchange when operating in FIPS mode. This removal applies to the following CipherSuites:

- TLS\_RSA\_WITH\_AES\_256\_GCM\_SHA384
- TLS\_RSA\_WITH\_AES\_256\_CBC\_SHA256
- TLS\_RSA\_WITH\_AES\_256\_CBC\_SHA
- TLS\_RSA\_WITH\_AES\_128\_GCM\_SHA256
- TLS\_RSA\_WITH\_AES\_128\_CBC\_SHA256
- TLS\_RSA\_WITH\_AES\_128\_CBC\_SHA
- TLS\_RSA\_WITH\_3DES\_EDE\_CBC\_SHA

To continue using FIPS mode, the following IBM MQ components should be changed to use a CipherSuite that is still supported:

- AMQP server
- Managed File Transfer (MFT)
- IBM MQ Console
- IBM MQ Explorer
- IBM MQ REST API
- IBM MQ Telemetry service

For details of supported CipherSuites, see [TLS CipherSpecs and CipherSuites in IBM MQ classes for JMS](#) in the IBM MQ product documentation.

## LIMITATIONS AND KNOWN PROBLEMS FOR IBM MQ 9.1.0, FIX PACK 20

### On Windows, uninstalling a fix pack can cause IBM MQ Explorer to stop working

If you are running IBM MQ 9.1.0 Fix Pack 20 or later, uninstalling a fix pack or CSU can cause IBM MQ Explorer to stop working. This happens under the following conditions:

- You are running on Windows.
- Your copy of IBM MQ Explorer uses EclipseSDK org.eclipse.help.R4150patch 1.0.11.
- You have run IBM MQ Explorer at this level.
- you attempt to uninstall the fix pack or CSU.

The error when uninstalling the fix pack or CSU looks like this:

```
Error uninstalling. Examine log file <varname>log_file_location</varname>\amqicsdn.txt (AMQ4761)
```

The workaround is to uninstall IBM MQ Explorer, or all of IBM MQ, then reinstall back up to the required fix level.

### **On Linux, after installing IBM MQ Explorer, a java.security.SignatureException error is displayed when viewing the error log**

To recreate this error on the Linux 64-bit platform, complete the following steps:

1. Install the IBM MQ 91 initial release, then apply Fix Pack 9.1.0.20.
2. Launch the IBM MQ Explorer using the VNC viewer.
3. Go to **Help tab > About Explorer**, then click "Installation details".
4. Go to **Configuration tab > View error log**.

A message similar to the following is displayed:

```
!ENTRY org.eclipse.osgi 4 0 2024-02-10 07:19:44.214
!MESSAGE Either the manifest file or the signature file has been tampered in this
jar: /opt/mqm/mqexplorer/eclipse/plugins/org.apache.ant_1.10.12.v20211102-1452
```

The error message can be ignored.

## LIMITATIONS AND KNOWN PROBLEMS FOR IBM MQ 9.1.0, FIX PACK 10/11/12/15

There are no new limitations or known problems.

## LIMITATIONS AND KNOWN PROBLEMS FOR IBM MQ 9.1.0, FIX PACK 9

### **Error message in the IBM MQ Explorer log after IBM MQ 9.1.0.9 is installed on Windows**

After IBM MQ 9.1.0, Fix Pack 9 is installed on Windows, you might see the following error message in the IBM MQ Explorer log file the first time the IBM MQ Explorer is started.

The error message can be ignored.

The log file is here:

```
USER_Home\IBM\WebSphereMQ\workspace-installation_name\.metadata\.log
```

```
!MESSAGE FrameworkEvent ERROR
!STACK 0
org.osgi.framework.BundleException: Could not resolve module:
org.eclipse.equinox.http.jetty [297]
Unresolved requirement: Import-Package: org.eclipse.jetty.servlet; version="[9.4.0,10.0.0)"
```

This issue was first identified in IBM MQ 9.1.0, Fix Pack 7, and a full listing of the error message is included in the 9.1.0.7 section of this readme file.

For IBM MQ 9.1.0.9, this issue is addressed by APAR IT37465.

## **IBM MQ Explorer installation details are not updated after IBM MQ 9.1.0.9 is uninstalled on Windows**

After IBM MQ 9.1.0, Fix Pack 9 is uninstalled on Windows, the information displayed on the "Installed Software" tab of the "IBM MQ Explorer Installation Details" panel still includes the following entry:

```
- HELP Patch (bugzillas 538020,547101,509819,568292,569227,569855,453379,573066)
```

This information is not correct. The HELP patch is no longer installed.

This issue was first identified in IBM MQ 9.1.0, Fix Pack 7.

For IBM MQ 9.1.0.9, this issue is addressed by APAR IT37465.

## **LIMITATIONS AND KNOWN PROBLEMS FOR IBM MQ 9.1.0, FIX PACK 8**

### **Error message in the IBM MQ Explorer log after IBM MQ 9.1.0.8 is installed on Windows**

After IBM MQ 9.1.0, Fix Pack 8 is installed on Windows, you might see the following error message in the IBM MQ Explorer log file the first time the IBM MQ Explorer is started.

The error message can be ignored.

The log file is here:

```
USER_Home\IBM\WebSphereMQ\workspace-installation_name\metadata\log
```

```
!MESSAGE FrameworkEvent ERROR
!STACK 0
org.osgi.framework.BundleException: Could not resolve module:
org.eclipse.equinox.http.jetty [297]
Unresolved requirement: Import-Package: org.eclipse.jetty.servlet; version="[9.4.0,10.0.0)"
```

This issue was first identified in IBM MQ 9.1.0, Fix Pack 7, and a full listing of the error message is included in the 9.1.0.7 section of this readme file.

For IBM MQ 9.1.0.8, this issue is addressed by APAR IT36383.

### **Explorer Help browser might not open after IBM MQ 9.1.0.8 is installed on Windows**

After installing IBM MQ 9.1.0, Fix Pack 8 on Windows, navigate to **Explorer Help > Help Content**. The Help browser might not open, and you might see the following error message in the IBM MQ Explorer log file.

The log file is here:

```
USER_Home\IBM\WebSphereMQ\workspace-installation_name\metadata\log
```

```
java.lang.NoClassDefFoundError: org.eclipse.equinox.http.jetty.JettyConfigurator
    at
    org.eclipse.help.internal.server.JettyHelpServer$StartServerThread.run(JettyHelpServer.java:
    79)
    Caused by: java.lang.ClassNotFoundException:
    org.eclipse.equinox.http.jetty.JettyConfigurator cannot be found by
    org.eclipse.help.base_4.2.155.v20210319-0601
    at
    org.eclipse.osgi.internal.loader.BundleLoader.findClassInternal(BundleLoader.java:484)
    at
    org.eclipse.osgi.internal.loader.BundleLoader.findClass(BundleLoader.java:395)
    at
    org.eclipse.osgi.internal.loader.BundleLoader.findClass(BundleLoader.java:387)
    at
    org.eclipse.osgi.internal.loader.ModuleClassLoader.loadClass(ModuleClassLoader.java:150)
    at java.lang.ClassLoader.loadClass(ClassLoader.java:870)
```

To fix this issue, add the following line to the `bundles.info` file, which is located in `MQ_INSTALL_LOCATION\MQExplorer\eclipse\configuration\org.eclipse.equinox.simpleconfigurator`.

```
org.eclipse.jetty.util.ajax,9.4.35.v20201120,plugins/  
org.eclipse.jetty.util.ajax_9.4.35.v20201120.jar,4,false
```

This issue is addressed by APAR IT36383.

## **LIMITATIONS AND KNOWN PROBLEMS FOR IBM MQ 9.1.0, FIX PACK 7**

### **Error message in the IBM MQ Explorer log after IBM MQ 9.1.0.7 is installed on Windows**

After IBM MQ 9.1.0, Fix Pack 7 is installed on Windows, you might see the following error message in the IBM MQ Explorer log file the first time the IBM MQ Explorer is started.

The error message can be ignored.

The log file is here:

```
USER_Home\IBM\WebSphereMQ\workspace-installation_name\metadata\log
```

```
!MESSAGE FrameworkEvent ERROR  
!STACK 0  
org.osgi.framework.BundleException: Could not resolve module:  
org.eclipse.equinox.http.jetty [298]  
Unresolved requirement: Import-Package: org.eclipse.jetty.servlet; version="[9.4.0,10.0.0)"  
-> Export-Package: org.eclipse.jetty.servlet; bundle-symbolic-  
name="org.eclipse.jetty.servlet"; bundle-version="9.4.33.v20201020"; version="9.4.33";  
uses:="javax.servlet,javax.servlet.descriptor,javax.servlet.http,org.eclipse.jetty.http.path  
map,org.eclipse.jetty.security,org.eclipse.jetty.server,org.eclipse.jetty.server.handler,org  
.eclipse.jetty.server.handler.gzip,org.eclipse.jetty.server.session,org.eclipse.jetty.util,o  
rg.eclipse.jetty.util.annotation,org.eclipse.jetty.util.component,org.eclipse.jetty.util.res  
ource"  
    at org.eclipse.jetty.servlet [615]  
        Unresolved requirement: Import-Package: org.eclipse.jetty.jmx;  
version="[9.4.33,10.0.0)"; resolution="optional"  
        Unresolved requirement: Import-Package: org.eclipse.jetty.security;  
version="[9.4.33,10.0.0)"  
    at org.eclipse.osgi.container.Module.start(Module.java:444)  
    at  
org.eclipse.osgi.container.ModuleContainer$ContainerStartLevel.incStartLevel(ModuleContainer  
.java:1634)  
    at  
org.eclipse.osgi.container.ModuleContainer$ContainerStartLevel.incStartLevel(ModuleContainer  
.java:1613)  
    at  
org.eclipse.osgi.container.ModuleContainer$ContainerStartLevel.doContainerStartLevel(ModuleC  
ontainer.java:1585)  
    at  
org.eclipse.osgi.container.ModuleContainer$ContainerStartLevel.dispatchEvent(ModuleContainer  
.java:1528)  
    at  
org.eclipse.osgi.container.ModuleContainer$ContainerStartLevel.dispatchEvent(ModuleContainer  
.java:1)  
    at org.eclipse.osgi.framework.eventmgr.EventManager.dispatchEvent(EventManager.java:230)  
    at  
org.eclipse.osgi.framework.eventmgr.EventManager$EventThread.run(EventManager.java:340)
```

For IBM MQ 9.1.0.7, this issue is addressed by APAR IT34927.

### **IBM MQ Explorer installation details are not updated after IBM MQ 9.1.0.7 is uninstalled on Windows**

After IBM MQ 9.1.0, Fix Pack 7 is uninstalled on Windows, the information displayed on the "Installed Software" tab of the "IBM MQ Explorer Installation Details" panel still includes the following entry:

```
- HELP Patch (bugzillas 538020,547101,509819,568292)
```

This information is not correct. The HELP patch is no longer installed.

For IBM MQ 9.1.0.7, this issue is addressed by APAR IT35052.

## LIMITATIONS AND KNOWN PROBLEMS FOR IBM MQ 9.1.0, FIX PACK 6

There are no new limitations or known problems.

## LIMITATIONS AND KNOWN PROBLEMS FOR IBM MQ 9.1.0, FIX PACK 5

### Case-insensitive matching of user names in the CLNTUSER and USERLIST attributes

Some LDAP schemas are implemented such that the "short username" for the connection comes from a field that is case-sensitive for lookups (configured this way in the LDAP schema). Before IBM MQ 9.1.0, Fix Pack 4, the behavior of the queue manager on Linux and UNIX platforms was to fold short user names from their original case returned by LDAP to be all lowercase. In IBM MQ 9.1.0.4, in situations where LDAP is the definitive source of user information, APAR IT29065 changed this behavior and kept short user names in their original case as returned by LDAP. However, this change affected the operation of the **CHLAUTH** rules of TYPE (USERMAP) and TYPE (BLOCKUSER). This is described in more detail in a readme file entry for IBM MQ 9.1.0.4.

In IBM MQ 9.1.0, Fix Pack 5, APAR IT31578 allows user names in **CHLAUTH** rules to be matched case-insensitively.

To enable the new behavior, add `ChlauthIgnoreUserCase=Y` in the Channels stanza of the `qm.ini` file. If there is no Channels stanza, you have to create one. Refer to IBM Documentation for details of adding stanzas to the `qm.ini` file.

To enable the new behavior on the IBM MQ Appliance, issue the following command, with your real queue manager name in the place of *YOUR-QMNAME*:

```
setmqini -m YOUR-QMNAME -s Channels -k ChlauthIgnoreUserCase -v Y
```

### Issues when using RPM to verify the MQSeriesWeb package

When you run the verification with `rpm -V` after you install the product, verification failures are reported. They do not affect the integrity of the installed component.

This issue was discovered in the IBM MQ 9.1.0.5 timeframe, and affects all IBM MQ 9.1 versions. The issue is described in detail in the readme file section "LIMITATIONS AND KNOWN PROBLEMS FOR THE INITIAL IBM MQ 9.1.0 RELEASE".

### Minor modification made to system message AMQ7056

In this fix pack only, the following message is modified from this:

```
AMQ7056: Transaction number n,m is in-doubt.
```

to this:

```
AMQ7056: Transaction number n,m. The external identifier follows this message.
```

This modification is reversed in IBM MQ 9.1.0, Fix Pack 6.

## LIMITATIONS AND KNOWN PROBLEMS FOR IBM MQ 9.1.0, FIX PACK 4

### User names in the CLNTUSER and USERLIST attributes are now case-sensitive

If your configuration is as follows, you need to alter some of your **CHLAUTH** rules, to correct the case of the user names in the **CLNTUSER** and **USERLIST** attributes:

- The queue manager is running on a Linux or UNIX platform.
- The queue manager is using LDAP as the source of user names. That is, you configured the queue manager's **CONNAUTH** to use an **AUTHINFO** object with TYPE (IDPWLDAP) and one of: **AUTHORMD (SEARCHGRP)** or **AUTHORMD (SEARCHUSR)**
- These user names provided by LDAP are uppercase, or mixed case.

- The queue manager has **CHLAUTH** rules of TYPE (USERMAP), and you provided user names in lowercase in the **CLNTUSER** attribute (as was mandatory before IBM MQ 9.1.0.4).
- The queue manager has **CHLAUTH** rules of TYPE (BLOCKUSER), and you provided user names in lowercase in the **USERLIST** attribute (as was mandatory before IBM MQ 9.1.0.4).

Some LDAP schemas are implemented such that the "short user name" for the connection comes from a field that is case-sensitive for lookups (configured this way in the LDAP schema).

Before this fix pack, the behavior of the queue manager on Linux and UNIX platforms was to fold short user names from their original case returned by LDAP to be all lowercase. However, if the LDAP field is case-sensitive, this behavior causes later interactions with the LDAP server to fail.

In this fix pack, in situations where LDAP is the definitive source of user information, APAR IT29065 changes this behavior and keeps short user names in their original case as returned by LDAP. However, this change affects the operation of the **CHLAUTH** rules of TYPE (USERMAP) and TYPE (BLOCKUSER). These will have been specified in all lowercase, which was required before the APAR fix. If the true short user names coming from the LDAP repository are mixed case, or all uppercase, then the **CHLAUTH** rules no longer match correctly.

In IBM MQ 9.1.0, Fix Pack 5, APAR IT31578 allows user names in **CHLAUTH** rules to be matched case-insensitively. How to configure this option is described in a readme file entry for IBM MQ 9.1.0.5.

### **Limits of support for IBM MQ Explorer and RDQM on Red Hat and Ubuntu systems**

IBM MQ Explorer and replicated data queue managers (RDQM) are not supported on version 8 of Red Hat Enterprise Linux for System x (64 bit) or Red Hat Enterprise Linux Server for IBM Z. IBM MQ Explorer is not supported on version 18.04 of Ubuntu Linux for System x (64 bit) or Ubuntu Linux for IBM Z.

### **Incompatibility between GSKit 8.0.55.3 and later, and the version 8 IBM JRE on AIX**

This issue affects only AIX systems that are running an IBM MQ Java or JMS application that meets all of the following criteria:

- Not using the JRE supplied with IBM MQ
- Using a version 8 IBM JRE earlier than version 8.0 Service Refresh 5 Fix Pack 40
- Using a bindings mode connection to the queue manager
- Using AMS

The incompatibility is caused by an **IBMJCEPlus** name space change for GSKit, as described in JRE APAR IJ17282 (<https://www.ibm.com/support/docview.wss?uid=swg1IJ17282>).

If your system meets all these criteria, update your JRE to version 8.0 Service Refresh 5 Fix Pack 40 or later, or use the JRE supplied with the IBM MQ fix pack.

### **LIMITATIONS AND KNOWN PROBLEMS FOR IBM MQ 9.1.0, FIX PACK 3 and earlier**

There are no new limitations or known problems.

## **Limitations and known problems for Continuous Delivery releases**

### **LIMITATIONS AND KNOWN PROBLEMS FOR IBM MQ 9.1.5**

#### **Channel names are blank in MQSC and IBM MQ Explorer after direct migration from IBM MQ 8.0.0.1, 8.0.0.2, or 8.0.0.3**

When you migrate from IBM MQ 8.0.0 Fix Pack 1, 2 or 3 directly to IBM MQ 9.1.5 or later, channel objects are not migrated correctly when the queue manager is started at the new code level. Channels continue to work normally, but channel names are not displayed by **runmqsc** or IBM MQ Explorer.

#### **Case-insensitive matching of user names in the CLNTUSER and USERLIST attributes**

Some LDAP schemas are implemented such that the "short user name" for the connection comes from a field that is case-sensitive for lookups (configured this way in the LDAP schema). Before IBM



MQ 9.1.4, the behavior of the queue manager on Linux and UNIX platforms was to fold short user names from their original case returned by LDAP to be all lowercase. In IBM MQ 9.1.4, in situations where LDAP is the definitive source of user information, APAR IT29065 changed this behavior and kept short user names in their original case as returned by LDAP. However, this change affected the operation of the **CHLAUTH** rules of TYPE (USERMAP) and TYPE (BLOCKUSER). This is described in more detail in a readme file entry for IBM MQ 9.1.4.

In IBM MQ 9.1.5, APAR IT31578 allows user names in **CHLAUTH** rules to be matched case-insensitively.

To enable the new behavior, add `ChlauthIgnoreUserCase=Y` in the Channels stanza of the `qm.ini` file. If there is no Channels stanza, you have to create one. Refer to IBM Documentation for details of adding stanzas to the `qm.ini` file.

To enable the new behavior on the IBM MQ Appliance, issue the following command, with your real queue manager name in the place of *YOUR-QMNAME*:

```
setmqini -m YOUR-QMNAME -s Channels -k ChlauthIgnoreUserCase -v Y
```

### **"failed to link" error message is issued when the updateRDQMSupport script is running**

When the **updateRDQMSupport** script runs under IBM MQ 9.1.0.5, the following error message is issued:

```
failed to link /usr/bin/parallax-askpass -> /etc/alternatives/parallax-askpass:
/usr/bin/parallax-askpass exists and it is not a symlink
```

The install scripts are trying to create a **symlink** in `/usr/bin/` to `/etc/alternatives/parallax-askpass`. The link fails because there is already a file called `/usr/bin/parallax-askpass` from the previous install, and this earlier version of the file is left in place. The contents of this file is not changed in the new version of the package, so this does not cause any problems and the error message can be ignored.

### **Issues when using RPM to verify the MQSeriesWeb package**

When you run the verification with `rpm -V` after you install the product, verification failures are reported. They do not affect the integrity of the installed component.

This issue was discovered in the IBM MQ 9.1.5 timeframe, and affects all IBM MQ 9.1 versions. The issue is described in detail in the readme file section "LIMITATIONS AND KNOWN PROBLEMS FOR THE INITIAL IBM MQ 9.1.0 RELEASE"

### **GTK+ Messages issued by IBM MQ Explorer**

In some Linux environments, messages from the GTK+ graphical user interface library might be seen in the UNIX console window from which IBM MQ Explorer was started. For example:

```
(:16073): Gtk-CRITICAL **: 17:09:00.159: gtk_box_gadget_distribute: assertion
'size >= 0' failed in GtkScrollbar
```

These messages are caused by errors in the gtk3 libraries, and do not cause any functional failures in IBM MQ Explorer itself.

## **LIMITATIONS AND KNOWN PROBLEMS FOR IBM MQ 9.1.4**

### **User names in the CLNTUSER and USERLIST attributes are now case-sensitive**

If your configuration is as follows, you need to alter some of your **CHLAUTH** rules, to correct the case of the user names in the **CLNTUSER** and **USERLIST** attributes:

- The queue manager is running on a Linux or UNIX platform.
- The queue manager is using LDAP as the source of user names. That is, you configured the queue manager's **CONNAUTH** to use an **AUTHINFO** object with TYPE (IDPWLDP) and one of: **AUTHORMD (SEARCHGRP)** or **AUTHORMD (SEARCHUSR)**.

- These user names provided by LDAP are uppercase, or mixed case.
- The queue manager has **CHLAUTH** rules of TYPE (USERMAP), and you provided user names in lowercase in the **CLNTUSER** attribute (as was mandatory before IBM MQ 9.1.4).
- The queue manager has **CHLAUTH** rules of TYPE (BLOCKUSER), and you provided user names in lowercase in the **USERLIST** attribute (as was mandatory before IBM MQ 9.1.4).

Some LDAP schemas are implemented such that the "short user name" for the connection comes from a field that is case-sensitive for lookups (configured this way in the LDAP schema).

Before this release, the behavior of the queue manager on Linux and UNIX platforms was to fold short user names from their original case returned by LDAP to be all lowercase. However, if the LDAP field is case-sensitive, this behavior causes later interactions with the LDAP server to fail.

In this release, in situations where LDAP is the definitive source of user information, APAR IT29065 changes this behavior and keeps short user names in their original case as returned by LDAP. However, this change affects the operation of the **CHLAUTH** rules of TYPE (USERMAP) and TYPE (BLOCKUSER). These will have been specified in all lowercase, which was required before the APAR fix. If the true short user names coming from the LDAP repository are mixed case, or all uppercase, then the **CHLAUTH** rules no longer match correctly.

In IBM MQ 9.1.5, APAR IT31578 allows user names in **CHLAUTH** rules to be matched case-insensitively. How to configure this option is described in a readme file entry for IBM MQ 9.1.5.

### **Limits of support for IBM MQ Explorer and RDQM on Red Hat and Ubuntu systems**

IBM MQ Explorer and replicated data queue managers (RDQM) are not supported on version 8 of Red Hat Enterprise Linux for System x (64 bit) or Red Hat Enterprise Linux Server for IBM Z. IBM MQ Explorer is not supported on version 18.04 of Ubuntu Linux for System x (64 bit) or Ubuntu Linux for IBM Z.

### **Incompatibility between GSKit 8.0.55.3 and later, and the version 8 IBM JRE on AIX**

This issue affects only AIX systems that are running an IBM MQ Java or JMS application that meets all of the following criteria:

- Not using the JRE supplied with IBM MQ
- Using a version 8 IBM JRE earlier than version 8.0 Service Refresh 5 Fix Pack 40
- Using a bindings mode connection to the queue manager
- Using AMS

The incompatibility is caused by an **IBMJCEPlus** name space change for GSKit, as described in JRE APAR IJ17282 (<https://www.ibm.com/support/docview.wss?uid=swg1IJ17282>).

If your system meets all these criteria, update your JRE to version 8.0 Service Refresh 5 Fix Pack 40 or later, or use the JRE supplied with IBM MQ 9.1.4.

### **LIMITATIONS AND KNOWN PROBLEMS FOR IBM MQ 9.1.3 and earlier**

There are no new limitations or known problems.

## **Limitations and known problems for the initial IBM MQ 9.1.0 release**

### **Issues when using RPM to verify the MQSeriesWeb package**

This applies to the full product media, rather than the fix pack installer.

When you run the verification with `rpm -V` after you install the product, you get the following messages:

```
# rpm -Vp MQSeriesWeb-9.1.0-0.x86_64.rpm
S.5....T.    /opt/mqm/bin/dspmqweb
S.5....T.    /opt/mqm/bin/endmqweb
S.5....T.    /opt/mqm/bin/setmqweb
```

```
S.5...T.    /opt/mqm/bin/stirmqweb
S.5...T.    /opt/mqm/web/etc/server.env
```

These specific verification failures are caused by the need to modify these files during installation, based on the detected environment. They do not affect the integrity of the installed component.

### **For traditional Chinese, the IBM MQ Explorer MFT plug-in displays an "assertion failed" error message**

For the traditional Chinese locale zh\_TW, when using the Managed File Transfer (MFT) plug-in to monitor file transfers using the Transfer Progress view, the IBM MQ Explorer continually displays an error message with the following text:

```
assertion failed: Column 7 has no label provider.
```

This error was introduced when an update to the traditional Chinese translation for the title of Column 7 ("Started", in English) was not also applied to a control file used by the MFT plug-in.

This issue is fixed in IBM MQ 9.1.3, and in IBM MQ 9.1.0, Fix Pack 3, by APAR IT28289.

This issue can also be resolved by applying either of the following local fixes.

#### *Local Fix Method One:*

1. Temporarily open the IBM MQ Explorer in a different language and locale.

One way to do this is to configure the Java system properties **user.language** and **user.region**. You do this for the IBM MQ Explorer by opening the `MQExplorer.ini` file located in the `/bin` directory of the IBM MQ installation, and adding these entries to the end of the file after the following line:

```
-vmargs
```

For example, to open the IBM MQ Explorer in US English, add the following lines to the `MQExplorer.ini` file:

```
-Duser.language=en
-Duser.region=US
```

The end of the file now looks similar to the following example:

```
-vmargs
-Xmx512M
-Duser.language=en
-Duser.region=US
```

Save and close the file.

2. In the new locale:
  - a. Open IBM MQ Explorer.
  - b. Connect to the MFT configuration.
  - c. Open the Transfer Log page listed under the MFT configuration.
  - d. Ensure the "Current Transfer Progress" view is also displayed. It is, by default, located directly beneath the Transfer Log content view.
3. Close IBM MQ Explorer then reopen it in the zh\_TW locale. If zh\_TW is your system locale, remove the specific **user.language** and **user.region** system properties from the `MQExplorer.ini` file.

#### *Local Fix Method Two:*

1. Close IBM MQ Explorer.
2. Open the `dialog_settings.xml` file from the IBM MQ Explorer workspace. This is located in a directory similar to the following:

```
[on Linux]
/home/user1/IBM/WebSphereMQ/workspace-Installation1/.metadata/.plugins/
com.ibm.wmqfte.explorer
[on Windows]
C:\Users\Administrator\IBM\WebSphereMQ\workspace-
Installation1\.metadata\.plugins\com.ibm.wmqfte.explorer\
```

3. Delete any one of the items listed under the following XML entry for "COLUMNS", so that the list contains seven items, rather than the original eight.

```
<section name="TRANSFER_PROGRESS_VIEW_SETTINGS">
  <item value="zh" key="LOCALE"/>
  <list key="COLUMNS">
    <!-- Delete any one of the items here -->
  </list>
```

For example, delete the first item in the list for "COLUMNS":

```
<item value=""/>
```

4. Save and close the file.
5. Restart IBM MQ Explorer.

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