

## Displaying the version of IBM MQ

<https://www.ibm.com/support/pages/node/709281>

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### IBM MQ Support

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+++ Question +++

How do you display the version and maintenance level of IBM MQ?

+++ Answer +++

a) For most of the sections in this document, you can use the command:

`dspmqr`

b) For some scenarios, another utilities / approaches are used, and they are documented in the rest of this document.

c) It is extremely important that before you use "dspmqr", you need to issue the command "setmqenv", because it:

- establishes the proper MQ environment variables, including the one related to the desired MQ installation (such as Installation1),
- updates the PATH so that dspmqr runs from the intended installation, and
- sets the CLASSPATH so that dspmqr can display the level of IBM MQ Java components.

d) These are the sections in this document:

- How to interpret the maintenance level and release type
- Linux, AIX, Windows with IBM MQ V9.x and later, including Multiple Installations
- Linux x86 or Windows with IBM MQ Explorer
- MQ Appliance
- IBM i
- z/OS
- HPe NonStop Server (HP NSS / NSK / Tandem)
- Web Console
- IBM MQ Java/JMS environment, including Resource Adapter (RA)
- Use DISPLAY QMGR in runmqsc to display the version of the queue manager
- Troubleshooting dspmqr

**+ Reference:**

<https://www.ibm.com/docs/en/ibm-mq/9.3?topic=reference-dspmqrver-display-version-information>  
IBM MQ / 9.3

dspmqrver (display version information)

Display IBM® MQ version and build information.

**+ How to interpret the maintenance level and release type**

The following article has more explanation and concrete examples:

<https://www.ibm.com/support/pages/node/6600037>

Upgrade FAQs for IBM MQ release types: Long Term Support LTS and Continuous Delivery CD

- Since MQ 9.0 there are 2 release types:

- LTS = Long Term Support

- CD = Continuous Delivery

- The GA release is the starting point for both streams:

MQ 9.2.0.0 LTS = MQ 9.2.0 CD

MQ 9.3.0.0 LTS = MQ 9.3.0 CD

- If on top of MQ 9.2.0.0 you apply a delta Fix Pack, such as MQ 9.2.0.2 LTS (notice that the 3<sup>rd</sup> digit is zero), then you will be going thru the path of LTS.

- If on top of MQ 9.2.0.0 you want to install MQ 9.2.5.0 (notice that the 3<sup>rd</sup> digit is not zero), then you will be going thru the path of CD.

- MQ 9.2.0.1 LTS, 1st fix pack for MQ 9.2.0.x LTS.

If 3<sup>rd</sup> digit is zero, then it is LTS.

- MQ 9.2.1.0 CD, 1st release for MQ 9.2.x CD.

If 3<sup>rd</sup> digit is other than zero (that is, 1 or higher), then it is CD.

- MQ 9.2.1 CD, 1st release for MQ 9.2.x CD.

If 3<sup>rd</sup> digit is other than zero (that is, 1 or higher), then it is CD.

- MQ 9.3.0.1 LTS = 1st fix pack for MQ 9.3.0.x LTS.

If 3<sup>rd</sup> digit is zero, then it is LTS.

- MQ 9.3.1.1 CD = 1st CSU for MQ 9.3.1 CD.

If 3<sup>rd</sup> digit is other than zero (that is, 1 or higher), then it is CD.

Note: The first Cumulative Security Update (CSU) for a CD release is 9.3.1.1 (January 2023)

**++ Linux, AIX, Windows with IBM MQ V9.x and later, including Multiple Installations ++**

**Step 1: You must use "setmqenv" to setup the MQ environment variables.**

In Linux and AIX you must "source" it! (That is, type a dot, then a space, then the setmqenv command and parameters).

The following use the default Installation directories.

Linux:

```
. /opt/mqm/bin/setmqenv -n Installation
```

AIX:

```
. /usr/mqm/bin/setmqenv -n Installation
```

Windows:

```
"C:\Program Files\IBM\MQ\bin\setmqenv" -n Installation1
```

**Step 2: Use the command: dspmqver**

The lines in the output are similar for Linux, AIX and Windows.

- The following is for the current installation:

```
C:\> dspmqver
```

```
Name:          IBM MQ
Version:       9.3.1.0
Level:        p931-I220929.1
BuildType:    IKAP - (Production)
Platform:     IBM MQ for Windows (x64 platform)
Mode:        64-bit
O/S:         Windows 11 Enterprise x64 Edition, Build 22000
InstName:     Installation2
InstDesc:
Primary:     No
InstPath:    C:\Program Files\IBM\MQ_1
DataPath:    C:\ProgramData\IBM\MQ
MaxCmdLevel: 931
LicenseType: Production
```

Note there are a number (1) of other installations, use the '-i' parameter to display them.

- The following is for the current installation, followed by a shorter output for extra installations (specify option: -i)

In this example, there are 2 installations.

```
C:\> dspmqver -i
```

```
Name:          IBM MQ
Version:       9.3.1.0
Level:        p931-L220929.1
BuildType:    IKAP - (Production)
Platform:     IBM MQ for Windows (x64 platform)
Mode:        64-bit
O/S:         Windows 11 Enterprise x64 Edition, Build 22000
InstName:    Installation2
InstDesc:
Primary:     No
InstPath:    C:\Program Files\IBM\MQ_1
DataPath:    C:\ProgramData\IBM\MQ
MaxCmdLevel: 931
LicenseType: Production
```

```
Name:          IBM MQ
Version:       9.3.0.0
InstName:     Installation1
InstDesc:
InstPath:    C:\Program Files\IBM\MQ
Primary:     No
```

- The following shows all components (option -a)

```
C:\> dspmqver -a
```

```
Name:      IBM MQ
Version:   9.3.1.0
Level:    p931-L220929.1
BuildType: IKAP - (Production)
Platform: IBM MQ for Windows (x64 platform)
Mode:     64-bit
O/S:     Windows 11 Enterprise x64 Edition, Build 22000
InstName: Installation2
InstDesc:
Primary:  No
InstPath: C:\Program Files\IBM\MQ_1
DataPath: C:\ProgramData\IBM\MQ
MaxCmdLevel: 931
LicenseType: Production
```

Note there are a number (1) of other installations, use the '-i' parameter to display them.

```
Name:      IBM MQ Java Runtime Environment
Version:   java full version JRE 1.8.0 IBM Windows AMD 64 build 8.0.7.15 - pwa6480sr7fp15-20220818_01(SR7 FP15)
Location:  file:/C:/Program Files/IBM/MQ_1/java/jre
```

```
Name:      IBM MQ classes for Java
Version:   9.3.1.0
Level:    p931-L220929.1
BuildType: Production
Location:  file:/C:/Program Files/IBM/MQ_1/java/lib/com.ibm.mq.jar
```

```
Name:      IBM MQ Classes for Jakarta Messaging Service
Version:   9.3.1.0
Level:    p931-L220929.1
BuildType: Production [Built on IBM Corporation 8.0.5.37 - pwa6480sr5fp37-20190618_01(SR5 FP37) Windows Server 2019]
Location:  file:/C:/Program Files/IBM/MQ_1/java/lib/com.ibm.mq.jakarta.client.jar
```

```
Name:      IBM MQ classes for Java Message Service
Version:   9.3.1.0
Level:    p931-L220929.1
BuildType: Production [Built on IBM Corporation 8.0.5.37 - pwa6480sr5fp37-20190618_01(SR5 FP37) Windows Server 2019]
Location:  file:/C:/Program Files/IBM/MQ_1/java/lib/com.ibm.mqjms.jar
```

```
Name:      Common Services for Java Platform, Standard Edition
Version:   9.3.1.0
Level:    p931-L220929.1
BuildType: Production
Location:  file:/C:/Program Files/IBM/MQ_1/java/lib/com.ibm.mq.jmqi.jar
```

```
Name:      Jakarta Messaging Client
Version:   9.3.1.0
Level:    p931-L220929.1
BuildType: Production
Location:  file:/C:/Program Files/IBM/MQ_1/java/lib/com.ibm.mq.jakarta.client.jar
```

```
Name:      IBM MQ Jakarta Messaging Provider
Version:   9.3.1.0
Level:    p931-L220929.1 mqjbnd=p931-L220929.1
BuildType: Production
Location:  file:/C:/Program Files/IBM/MQ_1/java/lib/com.ibm.mq.jakarta.client.jar
```

Name: Java Message Service Client  
Version: 9.3.1.0  
Level: p931-L220929.1  
BuildType: Production  
Location: file:/C:/Program Files/IBM/MQ\_1/java/lib/com.ibm.mqjms.jar

Name: IBM MQ JMS Provider  
Version: 9.3.1.0  
Level: p931-L220929.1 mqjbnd=p931-L220929.1  
BuildType: Production  
Location: file:/C:/Program Files/IBM/MQ\_1/java/lib/com.ibm.mqjms.jar

Name: IBM MQ Advanced Message Security  
Version: 9.3.1.0  
Level: p931-L220929.1  
BuildType: IKAP - (Production)

Name: IBM MQ AMQP Support  
Version: 9.3.1.0  
Level: p931-L220929.1  
BuildType: Production  
Location: file:/C:/Program Files/IBM/MQ\_1/amqp/lib/AMQPListener.jar

Name: IBM MQ Telemetry  
Version: 9.3.1.0  
Level: p931-L220929.1  
BuildType: Production  
Location: file:/C:/Program Files/IBM/MQ\_1/mqxr/lib/MQXRListener.jar

Name: IBM MQ custom channel for Windows Communication Foundation  
Version: 9.3.1.0  
Level: p931-L220929.1  
BuildType: Production

Name: IBM Message Service Client for .NET (XMS .NET)  
Version: 9.3.1.0  
Level: p931-L220929.1  
BuildType: Production

Name: IBM Message Service Client for .NET Standard  
Version: 9.3.1.0  
Level: p931-L220929.1  
BuildType: Production

Name: IBM Global Security Kit for IBM MQ  
Version: 8.0.55.28  
BuildType: Production  
Mode: 32-bit

Name: IBM Global Security Kit for IBM MQ  
Version: 8.0.55.28  
BuildType: Production  
Mode: 64-bit

Name: WebSphere Application Server  
Version: 22.0.0.9  
Location: file:/C:/Program Files/IBM/MQ\_1/web

Name: IBM MQ Managed File Transfer  
Version: 9.3.1.0

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Level: p931-L220929.1  
Build Type: Production

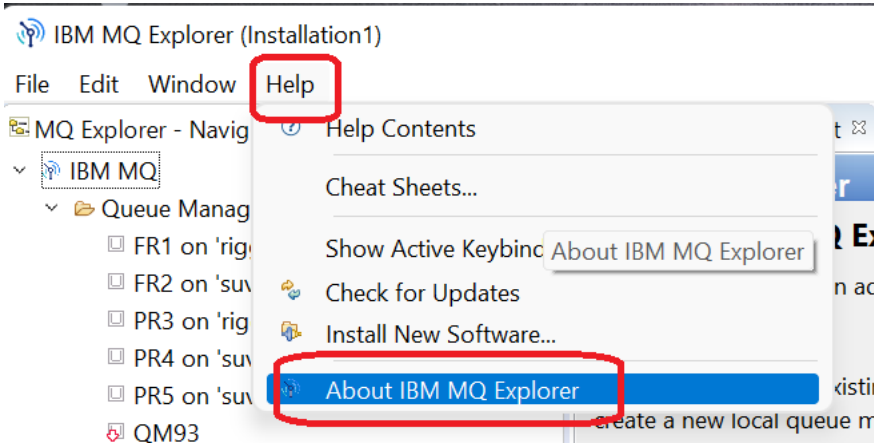
Name: libCurl  
Version: libcurl/7.85.0 GSKit 8.0.55.28 WinIDN  
Location: file:/C:/Program Files/IBM/MQ\_1/bin64/libcurl.dll

Name: json-c  
Version: 0.16  
Location: built-in

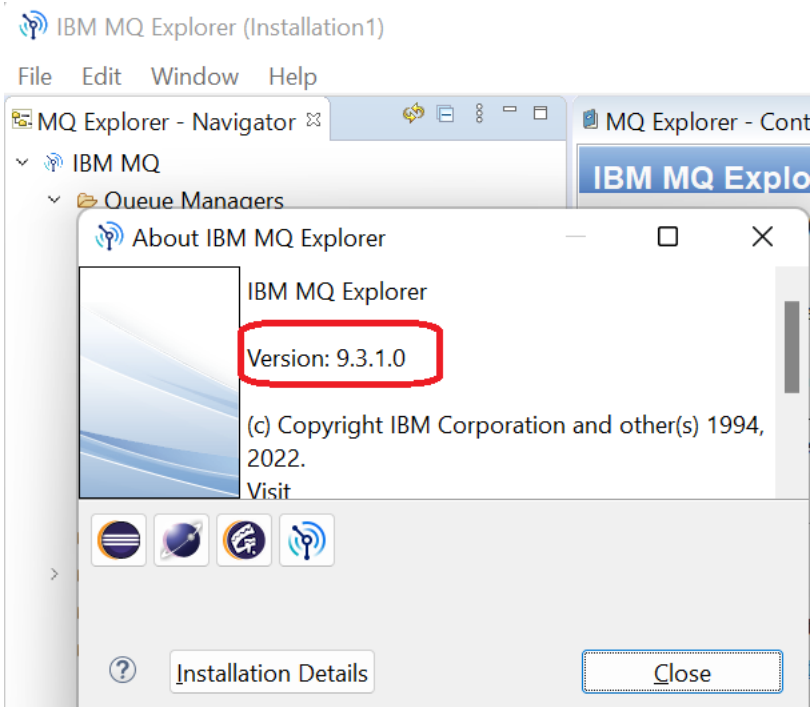
Name: zlib  
Version: 1.2.12  
Location: built-in

**++ Linux x86 or Windows with IBM MQ Explorer ++**

From the menu bar of the MQ Explorer GUI, select "Help" and then "About IBM MQ Explorer"



Then a dialog will be displayed with the version.

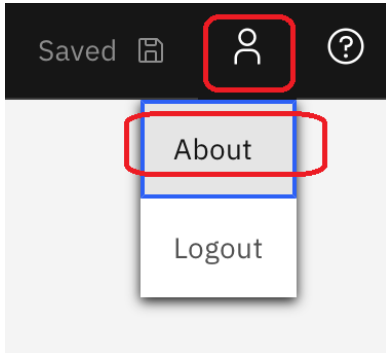




## ++ IBM MQ Appliance ++

### + MQ 9.3

To see the firmware version select the Person Icon (next to the question mark):



Then click on the "About" option.

About

### IBM MQ Appliance

---

**Release:** MQ00.9.3.1.0

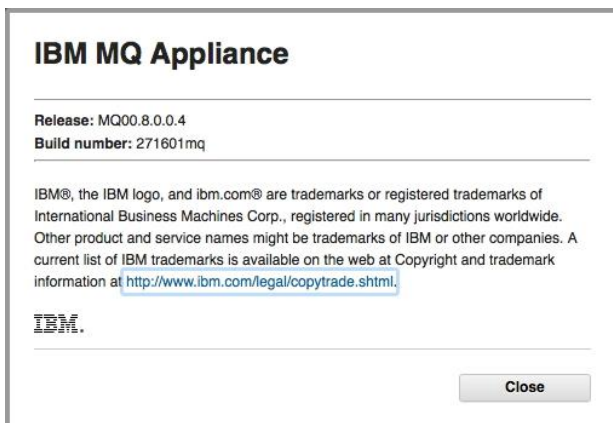
**Build number:** 345347mq

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### + MQ Appliance 9.2 and earlier

In the IBM MQ Appliance Web UI, up to Version 9.2, select the "Question mark in a circle" menu on the upper right, then click "About".



+ MQ Appliance, command line (all version.releases)

In the MQ Appliance command-line, for example if you ssh to the appliance, you can view the same firmware information and the MQ version as described below.

- Example in MQ 9.3.1 of the output for "mqa# show version"

```
mqa# show version
  Serial: 7803162
  Version: MQ00.9.3.1.0
  Level: p931-L220929.1
  Build: 345347mq
  Build date: 2022/09/12 12:15:14
  Watchdog build: MQ00.9.3.1.0
  Installed DPOS: MQ00.9.3.1.0
  Running DPOS: MQ00.9.3.1.0
  XML accelerator: embedded
  Machine type: 8441
  Model type: 54X
```

- Example in MQ 9.3.1 of the output for "mqa(mqcli)# dspmqver -a"

Using the "mqcli" command line interface, you can use the dspmqver command to display the MQ version provided by the appliance firmware:

```
mqa(mqcli) # dspmqver -a
Name:      IBM MQ Appliance
Version:   9.3.1.0
Level:     p931-L220929.1
BuildType: IKAP - (Production)
Platform:  IBM MQ Appliance
MaxCmdLevel: 931

Name:      IBM MQ Java Runtime Environment
Version:   java full version JRE 1.8.0 IBM Linux build 8.0.7.15 - pxa6480sr7fp15-
20220818_01(SR7 FP15)
Location:  built-in
...
```

## ++ IBM i ++

### IBM i Command Line

This is the most usual way to get the version.release.level.

```
====> DSPMQMVER
```

Example output of DSPMQMVER:

```
                                Display MQ Version
Name . . . . . : IBM MQ
Version . . . . . : 9.3.0.0
Level . . . . . : p930-L220606
BuildType . . . . . : IKAP - (Production)
```

### IBM i Qshell

This provides the most complete output.

```
====> /QSYS.LIB/QMQM.LIB/DSPMQMVER.PGM -a
```

Example output from MQ 9.3 (GA, no Fix Pack)

```
$ /qsys.lib/qmqm.lib/dspmqver.pgm -a
```

```
Name:          IBM MQ
Version:       9.3.0.0
Level:        p930-L220606
BuildType:    IKAP - (Production)
Platform:     IBM MQ for IBM i
O/S:         OS400 V7R5M0
InstName:     Installation1
InstDesc:
Primary:      Yes
InstPath:    /QIBM/ProdData/mqm
DataPath:    /QIBM/UserData/mqm
MaxCmdLevel: 930
LicenseType: Production
```

...

++ z/OS ++

For z/OS, there are a couple of options:

- Check the ssidMSTR job log where "ssid" is the subsystem name for the queue manager. Look for the message CSQY000I IBM MQ for z/OS *Vn release\_type*
- Issue the MQ command:  
`DISPLAY QMGR VERSION`

In the output, VERSION has the format VVRRMMFF:

VV: Version  
RR: Release  
MM: Maintenance level  
FF: Fix level

An example of the output is:

```
CSQM201I +CSQ1 CSQMDRTC DISPLAY QMGR DETAILS
QMNAME(CSQ1)
VERSION(09030000)
END QMGR DETAILS
```

**++ HPe NonStop Server (HP NSS / NSK / Tandem) ++**

Guardian users should run the osh TACL command to switch to the OSS environment first.

In MQ 8.1, you need to source the profile:

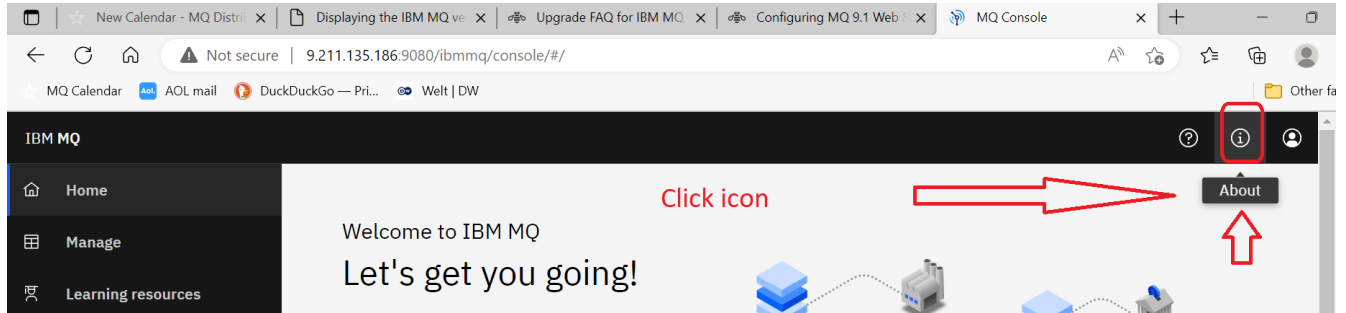
```
osh> . /path/to/var/mqm/mqprofile
```

The following output is from a Itanium system, but the output should be the same on an X86 64bit system.

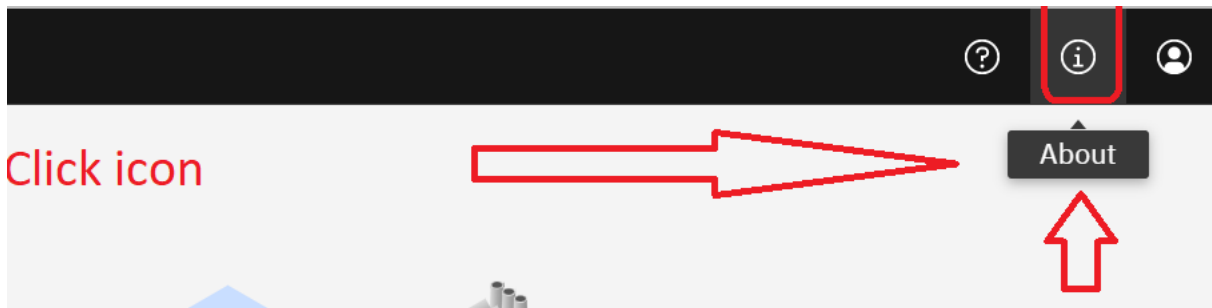
```
osh> dspmqver
Name:          IBM MQ
Version:       8.1.0.6
Level:        p800-L200731-155126
BuildType:    IKAP - (Production)
Platform:     IBM MQ for HPE NonStop I (ia64)
Mode:        64-bit
O/S:         HPE NonStop J06.20, NSE-AB 069194
InstName:    Installation1
InstDesc:
Primary:     Yes
InstPath:    /home/user/mq81/opt/mqm
InstPathG:   $DATA09.MQ81
DataPath:    /home/user/mq81/var/mqm
MaxCmdLevel: 802
LicenseType: Production
```

### +++ Web Console +++

Use a web browser to access the MQ Web Console.



Move the cursor to the right top corner:



Click the icon (i) to display the "About" dialog.



**+++ IBM MQ Java/JMS environment +++**

a) Assuming that you download the jar file 9.3.0.3-IBM-MQ-Install-Java-All, then after it is unpacked, you can look at the MANIFEST.MF file:

```
C:\9.3.0.3-IBM-MQ-Install-Java-All>
  META-INF\
  META-INF\MANIFEST.MF
View the file and search for "Implementation-Version"
"
Implementation-Version: 9.3.0.3-p930-003-230106
"
```

b) You can also use the following pattern to run the MQJMSLevel method.  
Go to the directory that has the desired jar file and issue:

```
C:\9.3.0.3-IBM-MQ-Install-Java-All\wmq\JavaSE\lib
java -cp com.ibm.mq.allclient.jar com.ibm.mq.jms.MQJMSLevel
Name:          IBM MQ classes for Java Message Service
Version:       9.3.0.3
Level:        p930-003-230106
BuildType:    Production [Built on IBM Corporation 8.0.5.37 - pwa6480sr5fp37-
20190618_01(SR5 FP37) Windows Server 2019]
Location:     file:/C:/downloads/MQ-downloads/9.3.0.3/9.3.0.3-IBM-MQ-Install-Java-
All/wmq/JavaSE/lib/com.ibm.mq.allclient.jar
```

c) Another example:

```
C:\Program Files\IBM\MQ\java\lib>
java -cp ./com.ibm.mqjms.jar com.ibm.mq.jms.MQJMSLevel
Name:          IBM MQ classes for Java Message Service
Version:       9.3.0.0
Level:        p930-L220606
BuildType:    Production [Built on IBM Corporation 8.0.5.37 - pwa6480sr5fp37-
20190618_01(SR5 FP37) Windows Server 2019]
Location:     file:/C:/Program Files/IBM/MQ/java/lib/com.ibm.mqjms.jar

Name:          Common Services for Java Platform, Standard Edition
Version:       9.3.0.0
Level:        p930-L220606
BuildType:    Production
Location:     file:/C:/Program Files/IBM/MQ/java/lib/com.ibm.mq.jmqi.jar
```

d) Example for the Resource Adapter .rar file

d.1) By extracting the files and looking at the MANIFEST.MF file

Assuming that you downloaded the rar file and extracted its files.

Look for the file:

```
META-INF\MANIFEST.MF
```

.

View the file and search for "Implementation-Version", for example:

"

```
Implementation-Title: IBM MQ Resource Adapter
```

```
Implementation-Version: 9.3.0.3-p930-003-230106
```

"

d.2) In Linux, if you do not want to extract the files, you can use "unzip -c" as shown below.

**Note: Thanks to Chris Andrews for his feedback on this command.**

For example, the file wmq.jmsra.rar was copied into /tmp, then:

```
mqm@riggioni1.fyre.ibm.com: /tmp
```

```
$ ls *.rar
```

```
wmq.jmsra.rar
```

```
mqm@riggioni1.fyre.ibm.com: /tmp
```

```
$ unzip -c ./wmq.jmsra.rar META-INF/MANIFEST.MF | grep Implementation-Version
```

```
Implementation-Version: 9.3.3.0-p933-L230531
```



**+++ Use DISPLAY QMGR in runmqsc to display the version of the queue manager +++**

Issue the MQ command in runmqsc:

**DISPLAY QMGR VERSION**

In the output, VERSION has the format VVRRMMFF:

VV: Version

RR: Release

MM: Maintenance level

FF: Fix level

a) Linux, AIX, Windows, IBM i

An example of the output for MQ 9.3.1.0 is:

**DISPLAY QMGR VERSION**

1 : DISPLAY QMGR VERSION

AMQ8408I: Display Queue Manager details.

QMNAME(QM931)

VERSION(09030100)

b) z/OS

An example of the output for 9.2.0.0 is:

CSQM201I +RTP9 CSQMDRTC DISPLAY QMGR DETAILS

QMNAME(RTP9)

VERSION(09020000)

END QMGR DETAILS

### +++ Troubleshooting dspmqver +++

a) If you have no idea what version of IBM MQ is installed on your system, try running the command dspmqver with no flags.

```
dspmqver
```

b) If the dspmqver command is not found:

```
$ dspmqver  
bash: dspmqver: command not found...
```

... check the following:

- \* Most likely, you forgot to issue the command "setmqenv" to set the environment variables and the PATH.

- \* Ask your system administrator if MQ has been installed and perhaps was installed in a non-default location.

c) If in Linux/AIX you issue setmqenv but failed to "source it", you will get the following error:

```
$ /opt/mqm/bin/setmqenv -n Installation1  
AMQ8595E: The setmqenv command was not preceded by the source command.
```

The correct invocation is by entering a dot, then a space and then the rest of the command:

```
$ . /opt/mqm/bin/setmqenv -n Installation1  
| |  
| +---- space  
+- dot
```

After sourcing it correctly, you can try again. In the following example, only the 2<sup>nd</sup> line is shown in the output, the one with the version.release and level.

```
$ dspmqver -f 2  
Version: 9.3.0.2
```

d) If dspmqver prints a message like:

```
"Exception in thread "main" java.lang.UnsupportedClassVersionError:  
com/ibm/mq/MQJavaLevel (Unsupported major.minor version 48.0) "
```

... then your JVM is too old.

\* Run 'java -version' to check its level and compare it against the IBM MQ System Requirements.

\* Install a newer Java runtime or modify your PATH to use a newer Java runtime if one is already on the system.

\* For more information see:

<https://www.ibm.com/support/pages/node/157337>

Runtime Java error: Unsupported major.minor - UnsupportedClassVersionError

e) If dspmqver prints the message:

```
AMQ8351: IBM MQ Java environment has not been configured properly
```

\* then you must set or double-check your CLASSPATH as shown below. On IBM i, Linux and UNIX you must ensure you are exporting the CLASSPATH variable so that it will be seen by dspmqver.

\* If you are using the utility setmqenv in AIX/Linux, then make sure you "source it", that is using the dot syntax.

\* For more information see:

<https://www.ibm.com/support/pages/node/133265>

AMQ8568 RC=2495 mqjbnd was not found, or AMQ8351 Java environment has not been configured correctly

f) If dspmqver prints a message like:

```
"mqjbnd=CC=2;RC=2495;AMQ8568: The native JNI library 'mqjbnd' was not found.  
[3=mqjbnd]::Can't find library mqjbnd (libmqjbnd.a or .so)
```

\* then you must update the library path.

\* For more information see:

<https://www.ibm.com/support/pages/node/133265>

AMQ8568 RC=2495 mqjbnd was not found, or AMQ8351 Java environment has not been configured correctly

+++ end +++