Determining if the IBM MQ client fileset package is installed

https://www.ibm.com/support/pages/node/97549

Date last updated: 10-Feb-2023

Angel Rivera
IBM MQ Support
https://www.ibm.com/products/mq/support
Find all the support you need for IBM MQ

++ Question ++

What are the operating system commands in AIX, Linux and Windows to determine if the MQ client fileset package is installed?

A common reason to ask this question is to confirm if the host or Virtual Machine (VM) in question is a Client-only installation, meaning that the MQ queue manager code has not been installed.

Note 1: If the "Client" fileset is installed, BUT if the "Server" fileset is also installed, then it is NOT a client-only installation.

Note 2: For historical purposes the details for HP-UX (MQ 9.0 was last version.release and Solaris (MQ 9.1 was last version.release) are mentioned in the last page of this document.

++ CAVEATS ++

- This document uses the normal facilities of the Operating System to query its database of what products have been installed, such as rpm in Linux.

- If MQ Components have been installed from packages that do not use the usual installer for the OS, such as the MQ Redistributable Components or standalone MQ jar files, then these installations do not update the internal product database of the OS and therefore, the OS cannot be queried if the MQ Client has been installed (well, yes, the query can be made but the answer will be "no, the OS does not have formal knowledge that the MQ client has been installed").

++ Answer ++

The following commands can be run by any userID (that is, they are not exclusively for the "root" userID).

Notes:

- The sample output below shows only a subset of the actual list obtained during the preparation of this document. It is not intended to show a comprehensive list.

- Even though the sample output shows a specific version.release, the same concept applies for all MQ version.releases.

- The strings such as "mqm.base.runtime" and the package description "MQ Runtime for Client and Server" are built into the MQ packages and are not translated into other languages; that is, these strings are shown in English.

++ AIX ++

The following is the most comprehensive command to list all the installed MQ filesets ACROSS the different USILs (if any) and including the normal location of /usr/mqm.

Note that ALL is in UPPERCASE!
```
lslpp -R ALL -al "mqm.*"
```

If you do not have USILs, then you can use this simpler command:
```
lslpp -al "mqm*"
```

Sample output:
```
 Fileset          Level    State     Description
 ----------------------------------------------------------------
Path: /usr/lib/objrepos
 mqm.amqp.rte    9.3.0.0  COMMITTED IBM MQ AMQP Service
 mqm.ams.rte     9.3.0.0  COMMITTED IBM MQ Advanced MessageSecurity
 mqm.client.rte  9.3.0.0  COMMITTED IBM MQ Client for AIX
```

To get only the MQ client fileset:
```
lslpp -al "mqm.client.rte"
```

Sample output:
```
 Fileset          Level    State     Description
 ----------------------------------------------------------------
Path: /usr/lib/objrepos
mqm.client.rte   9.3.0.0  COMMITTED IBM MQ Client for AIX
```

+ Reference:

https://www.ibm.com/support/pages/node/6407842
Summary of AIX commands to administrate MQ

++ Linux ++

To get the complete list of MQ filesets:

`rpm -qa | grep MQSeries | sort`

Sample output:
```
MQSeriesAMQP-9.3.0-0.x86_64
MQSeriesAMS-9.3.0-0.x86_64
MQSeriesBCBridge-9.3.0-0.x86_64
MQSeriesClient-9.3.0-0.x86_64
```

To get only the MQ client fileset:

`rpm -qa | grep MQSeriesClient`

Sample output:
```
MQSeriesClient-9.3.0-0.x86_64
```

Or even shorter:

`rpm -q MQSeriesClient`

Sample output:
```
MQSeriesClient-9.3.0-0.x86_64
```

+ Reference

https://www.ibm.com/support/pages/node/6209227
Summary of Linux commands to administrate MQ

++ Windows ++

ATTENTION: The following commands are very long and even though they are shown in multiple lines in this document, they MUST be entered in a SINGLE LONG LINE

To find out all the MQ components installed, enter:
reg.exe query "HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\IBM\WebSphere MQ\Installation" /s

Sample output:
```
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\IBM\WebSphere
MQ\Installation\Installation2\Components
    Server    REG_SZ    Installed
    AMS    REG_SZ    Installed
    Local Clients\Windows NT Client    REG_SZ    Installed
    JavaMsg    REG_SZ    Installed
```

To find out if the MQ Client component is installed, enter:
reg.exe query "HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\IBM\WebSphere MQ\Installation" /s | findstr -i client

Sample ooutut:
```
Local Clients\Windows NT Client    REG_SZ    Installed
```

+ Conclusion:

If you see an entry that looks like this, then it means that the server code for queue managers has been installed:
```
    Server REG_SZ Installed
```

If you see an entry that looks like this, then it means that the client code has been installed:
```
    Local Clients\Windows NT Client REG_SZ Installed
```

If you see the entry for "Local Clients\Windows NT Client" and if you do NOT see the entry for "Server", then this means that this is a Client-only installation.

+ References:

https://www.ibm.com/support/pages/node/6565783
Using Windows wmic and reg to find the IBM MQ Installations and their IBM MQ Components (Specific objective: how to determine if it is a Client-only installation)

+++ Solaris and HP-UX

Note: This section is included for historical purposes.

+ EOS Announcements

https://www.ibm.com/support/pages/node/3379905
MQ 9.1 is the last version for Solaris and MQ 9.0 was the last version for HP-UX
MQ 9.0 is out of support (EOS Sep-2021) and the EOS for MQ 9.1 is Sep-2023
.
For more information for the End Of Support (EOS) for MQ 9.1 (EOS 30-Sep-2023) see:
https://www.ibm.com/support/pages/node/1205242?myns=swgws&mynp=OCSSYHRD&mync=E&cm_sp=swgws-_-OCSSYHRD-_-E
End Of Support (EOS) for MQ 9.1 (EOS 30-Sep-2023)
.
For more information for the End Of Support (EOS) for MQ 9.0 (EOS 30-Sep-2021) see:
https://www.ibm.com/support/pages/node/6190011
Announcement: End of Support for IBM MQ 9.0.0 LTS and IBM MQ 9.0.x CD

++ Solaris

To get the complete list of MQ filesets:

```
pkgparam mqm CLASSES
```

Sample output:
```
none base java javasdk keyman man runtime samples server sol_client txclient
```

To get only the MQ client fileset:

```
pkgparam mqm CLASSES
```

Note: The output is the same as above. If the following value is present, then the client is installed:
```
      sol_client
```

Sample output:
```
none base java javasdk keyman man runtime samples server sol_client txclient
```

++ HP-UX

To get the complete list of MQ filesets:

/usr/sbin/swlist -R MQSERIES

Sample output:
```
# Initializing...
# Contacting target "aemhp1"...
#
# Target:  aemhp1:/
#

# MQSERIES                             6.0.0.0       WebSphere MQ for HP-UX
  MQSERIES.MQM-BASE                    6.0.0.0       WebSphere MQ SDK fileset
  MQSERIES.MQM-CL-HPUX                 6.0.0.0       WebSphere MQ Client for HP-UX
  MQSERIES.MQM-JAVA                    6.0.0.0       WebSphere MQ Java™ Client,
JMS and SOAP support
  MQSERIES.MQM-JAVASDK                 6.0.0.0       HP SDK for J2SE HP-UX 11i
platform
  MQSERIES.MQM-KEYMAN                  6.0.0.0       WebSphere MQ SSL Key
management
  MQSERIES.MQM-MAN                     6.0.0.0       WebSphere MQ man pages
  MQSERIES.MQM-RUNTIME                 6.0.0.0       WebSphere MQ Runtime fileset
  MQSERIES.MQM-SAMPLES                 6.0.0.0       WebSphere MQ Sample programs
  MQSERIES.MQM-SERVER                  6.0.0.0       WebSphere MQ Server fileset
  MQSERIES.MQM-TXCLIENT                6.0.0.0       WebSphere MQ Transactional
Client
# MQSERIES                             6.0.1.1       WebSphere MQ update for HP-UX
(U805233)
  MQSERIES.MQM-BASE-U805233            6.0.1.1       WebSphere MQ Update for HP-UX
  MQSERIES.MQM-CL-HPUX-U805233         6.0.1.1       WebSphere MQ Update for HP-UX
```

To get only the MQ client fileset:

/usr/sbin/swlist -R MQSERIES | grep MQSERIES.MQM-CL-HPUX

Sample output:
```
  MQSERIES.MQM-CL-HPUX                 6.0.0.0       WebSphere MQ Client for HP-UX
  MQSERIES.MQM-CL-HPUX-U805233         6.0.1.1       WebSphere MQ Update for HP-UX
```

+++ end +++