

Some ways to delete all messages from an IBM MQ queue

<https://www.ibm.com/support/pages/node/6566477>

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+++ Objective

The purpose of this article is to describe some ways to delete all messages from an IBM MQ queue.

- a) MQ administrative runmqsc command: CLEAR QLOCAL
- b) MQ sample "amqsget" (local) or "amqsgetc" (remote)
- c) MQ Explorer
- d) RFHUTIL utility (from github)
- e) q.exe utility (old SupportPac MA01 - now available from github)
- f) MQ command: dmpmqmsg
- g) MQ samples amqsblst and blast

The rest of this document provides more details.

++ History of Changes:

29-Mar-2022:

- Add q.exe (old SupportPac MA01) as recommended by Norbert Pfister (Thanks!), who uses it for large queues due to its good performance profile.
- Add dmpmqmsg command
- Add amqsblst and blast samples.

a) The MQ runmqsc command "Clear QLocal" is the most efficient, but it can only be done if there are no applications that have opened that queue (else, the command will not complete indicating that the queue is in use).

The CLEAR QLOCAL command is run within the MQ runmqsc utility. An example is shown below, in which the 2 messages (see CURDEPTH attribute) in the local queue QUEUE1 in the queue manager QM1 are cleared:

```
runmqsc QM1
```

```
display ql(QUEUE1) curdepth
```

```
1 : display ql(QUEUE1) curdepth
```

```
AMQ8409: Display Queue details.
```

```
QUEUE(QUEUE1)                TYPE(QLOCAL)
```

```
CURDEPTH(2)
```

```
clear qlocal(QUEUE1)
```

```
3 : clear qlocal(QUEUE1)
```

```
AMQ8022: WebSphere MQ queue cleared.
```

```
display ql(QUEUE1) curdepth
```

```
4 : display ql(QUEUE1) curdepth
```

```
AMQ8409: Display Queue details.
```

```
QUEUE(QUEUE1)                TYPE(QLOCAL)
```

```
CURDEPTH(0)
```

a.1) If the queue is in use, then the CLEAR command will not complete.

You can review the following technote to find out the application that is using the queue,

<https://www.ibm.com/support/pages/node/358665>

Identify the application that has an IBM MQ queue opened

... and if necessary, review the tutorial on how to stop the connection from that application.

<https://www.ibm.com/support/pages/node/616249>

How to identify MQ client connections and stop them

b) A less efficient command is to run the MQ sample "amqsget" (local) or "amqsgetc" (remote).

This works by destructively reading each message from the queue, even if there are other applications using that queue.

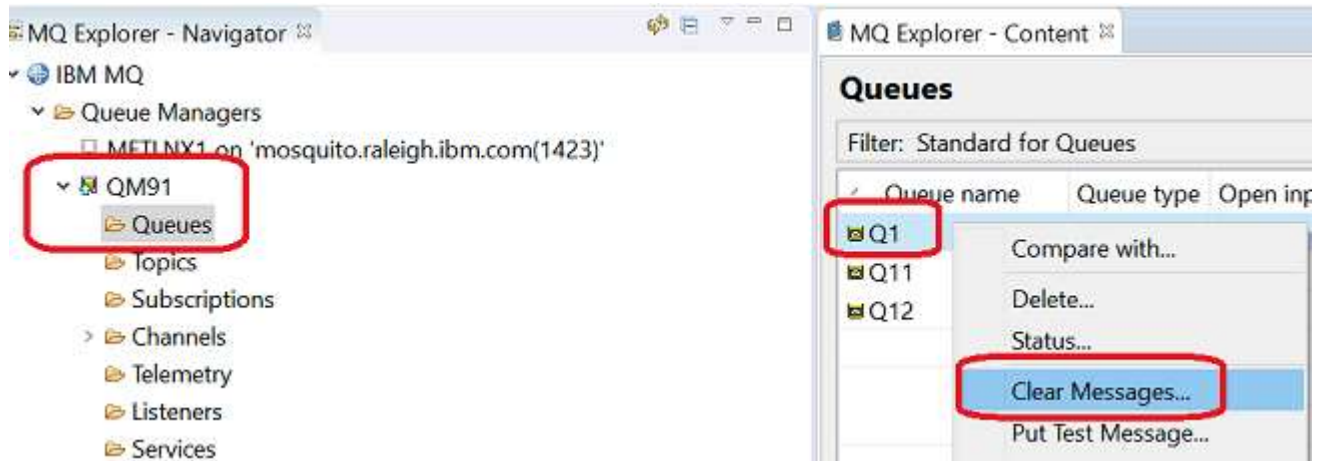
```
amqsget QueueName QmgrName
```

If you have 1000 messages in the queue, then this utility will do 1000 individual MQGET command, one for each message.

Correspondingly, if you have 10 million messages in the queue, then the utility will take a long time in issuing the individual 10 million MQGET commands!

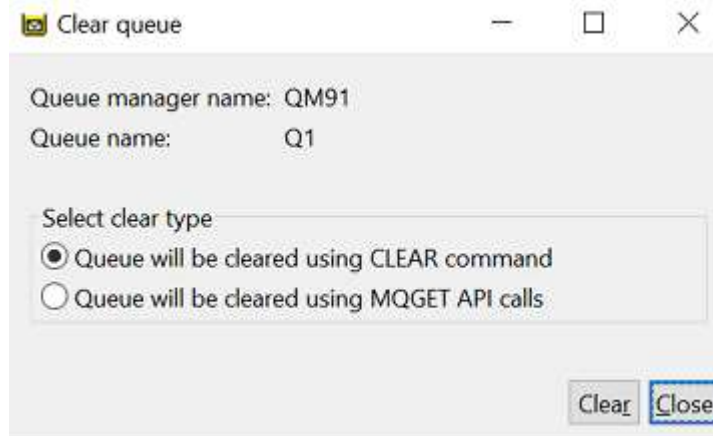
c) The MQ Explorer has an option to clear the messages. It allows you to choose which of the above 2 methods you want to choose.

Start by selecting the desired queue in the right panel and then right click. Select: Clear Messages ...



Then you will see the following dialog box:

- Using the CLEAR command (the default)
- Using MQGET API calls.



d) The RFHUTIL utility (from github) can be used to Purge all the messages from a given queue.

The code for the RFHutil set of utilities is now available from GitHub
The IBM MQ Support Team does not support it.

<https://github.com/ibm-messaging/mq-rfhutil>
mq-rfhutil

This repository contains the rfhutil program, originally released in SupportPac IH03. Both source code and binaries are included.
This program does NOT supply the MQ Client. Therefore, it is REQUIRED that you install the MQ Client code before you use RFHutil.

Please note: RFHUtil requires either MQ or the MQ client installed to start up. For MQ client only customers please use RFHUtilc.exe (the client version) all other customers should use RFHUtil.exe.

Running the programs may require that you run setmqenv to set a suitable environment for the programs to locate the MQ libraries.

Pre-built copies of the programs (rfhutil for connections to a local queue manager, rfhutilc for MQ client connections) are under the bin\Release directory. They can be run directly but you may first need to run the setmqenv program to set the environment variables that allow you to locate the MQ runtime libraries.

Download note: You need to visit the following web page to download individual components:

<https://github.com/ibm-messaging/mq-rfhutil/tree/master/bin/Release>

e) q.exe utility (old SupportPac MA01 - now available from github)

The code for q.exe from the old SupportPac MA01 was moved to GitHub:
<https://github.com/ibm-messaging/mq-q-qload>

This code is NOT maintained by the MQ Support Team.

In a Windows test machine, the code was downloaded into:
C:\MQ-SupportPac\MA01 Q program V6\V6.0\Windows

The following command will do a destructive get of all the messages in the queue Q1:

```
q -I Q1 -m QM92
MQSeries Q Program by Paul Clarke [ V6.0.0 Build:May 1 2012 ]
Connecting ...connected to 'QM92'.
1
2
3
No more messages.
```

f) MQ command: dmpmqmsg

The MQ “dmpmqmsg” command was introduced in MQ 8.0 and it is based on the old SupportPac “qload”.

The basic syntax is very similar to the one for q.exe.

In this example, there are 3 messages in the queue Q1.
The following command will do a destructive get on this queue.

```
C:\> dmpmqmsg -I Q1 -m QM92
```

```
5724-H72 (C) Copyright IBM Corp. 1994, 2021.  
IBM MQ Queue Load/Unload Utility  
Read   - Files:  0 Messages:3 Bytes:3072
```

Normally, the usage of this command is to “download” the messages from the queue into a file. This is done by adding the parameter: -f filename

Example:

```
dmpmqmsg -I Q1 -m QM92 -f c:\temp\unloadmsg.txt
```

g) MQ samples amqsblst and blast

g.1) Basic MQ sample amqsblst

It is shipped with the MQ samples installation fileset.

Example to put 50 messages into a queue Q1:

```
C:\> amqsblst QM92 Q1 -W -c 50
welcome to blast
Blast> successfully opened queue <Q1>
Blast> 50 messages have been put
Blast> 0 messages have been got
```

Example to get 50 messages into a queue Q1. The get is “destructive”.

```
C:\> amqsblst QM92 Q1 -R
welcome to blast
Blast> successfully opened queue <Q1>
Blast> 0 messages have been put
Blast> 50 messages have been got
```

g.2) Sample “blast”

The sample amqsblst does not have an option to explicitly put Persistent Messages.

The following sample (not shipped with MQ) is an enhancement to amqsblst.

<https://www.ibm.com/support/pages/node/6437003>

MQ sample "blast", enhancement for amqsblst which includes persistent messages

Example to put 50 messages into a queue Q1:

```
$ blast -m QM92 -q Q1 -W -n 50
Blast> Elapsed time = 0.002427 seconds
Blast> 50 messages successfully written.
```

Example to get 50 messages into a queue Q1. The get is “destructive”.

```
$ blast -m QM92 -q Q1 -R -n 50
Blast> Elapsed time = 0.020311 seconds
Blast> 50 messages successfully read.
```

+++ end