

Using IBM MQ MQS\_REPORT\_NOAUTH environment variable to generate entries AMQ8077W in queue manager error log, for reason code 2035 MQRC\_NOT\_AUTHORIZED

<https://www.ibm.com/support/pages/node/97457>

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+++ Question +++

How do I enable and use the IBM MQ MQS\_REPORT\_NOAUTH environment variable for the MQ queue manager to add error entries in the error log of the queue manager related to the reason code MQRC 2035 (MQRC\_NOT\_AUTHORIZED) when dealing with MQ Client Applications?

+ Note:

Since MQ 7.1, the default behavior is to add warnings/entries related to security in the error log of the queue manager. Thus, you do NOT need to setup the MQS\_REPORT\_NOAUTH environment variable.

+++ Answer +++

#### **+ SECTION A: Default since MQ 7.1**

By default since MQ 7.1, the queue manager will generate errors in its error log whenever the reason code 2035 (MQRC\_NOT\_AUTHORIZED) is issued to an MQ client application.

For example, the user "alice" who belongs to group "mqviewer" tried to use the MQ sample amqsputc to connect to queue manager QMGR1, but gets a reason code 2035.

```
alice@riggioni1.fyre.ibm.com: /home/alice
$ amqsputc Q1 QMGR1
Sample AMQSPUT0 start
MQCONN ended with reason code 2035
```

By default, the queue manager will add appropriate entries at the bottom of its error log, such as:

```
mqm@riggioni1.fyre.ibm.com: /var/mqm/qmgrs/QMGR1/errors
$ tail -40 AMQERR01.LOG
----- cmqxfcxc.c : 1428 -----
09/22/2023 05:41:27 AM - Process(229205.14) User(mqm) Program(amqzlaa0)
      Host(riggioni1.fyre.ibm.com) Installation(Installation1)
      VRMF(9.3.3.0) QMgr(QMGR1)
      Time(2023-09-22T12:41:27.081Z)
      CommentInsert1(alice)
      CommentInsert2(QMGR1 [qmgr])
      CommentInsert3(connect)
```

**AMQ8077W: Entity 'alice' has insufficient authority to access object QMGR1 [qmgr].**

EXPLANATION:

**The specified entity is not authorized to access the required object. The following requested permissions are unauthorized: connect**

ACTION:

Ensure that the correct level of authority has been set for this entity against the required object, or ensure that the entity is a member of a privileged group.

```
----- amqzfubx.c : 1665 -----
09/22/2023 05:41:27 AM - Process(229539.3) User(mqm) Program(amqrmppa)
      Host(riggioni1.fyre.ibm.com) Installation(Installation1)
      VRMF(9.3.3.0) QMgr(QMGR1)
      Time(2023-09-22T12:41:27.082Z)
      ArithInsert1(2) ArithInsert2(2035)
      CommentInsert1(alice)
```

**AMQ9557E: Queue Manager User ID initialization failed for 'alice'.**

EXPLANATION:

The call to initialize the User ID 'alice' failed with CompCode 2 and Reason 2035. If an MQCSP block was used, the User ID in the MQCSP block was ". If a userID flow was used, the User ID in the UID header was " and any CHLAUTH rules applied prior to user adoption were evaluated case-sensitively against this value.

ACTION:

Correct the error and try again.

**+ SECTION B: Using MQ 7.0 or earlier.**

If you are using an older version (by now unsupported) of MQ and if you are not seeing the warnings/errors mentioned in item 'a' above, then you can set the following environment variable for the queue manager, in order to explicitly add those warnings/errors into the error log:

`MQS_REPORT_NOAUTH`

This environment variable was introduced in WebSphere MQ V5.3 Fix Pack 12, MQ V6.0.1.0 and IBM MQ V7.0.0.0.

**+ ENABLING AMQ8077W and the like**

Here are the steps:

1. Export the environment variable.

The MQ Administrator *MUST* set the `MQS_REPORT_NOAUTH` environment variable to `TRUE` for the trace to be output.

UNIX:        `export MQS_REPORT_NOAUTH=TRUE`  
Windows:    `set MQS_REPORT_NOAUTH=TRUE`

Note: Since MQ 7.1, the `MQS_REPORT_NOAUTH` environment variable does NOT need to be set, as the security related warnings/errors are added to the error log by default.

2. Start of the queue manager.
3. Recreate the authorization failure.
4. Browse the queue manager error log; looking for AMQ8077W.

**+ DISABLING AMQ8077W and the like**

**The disabling of the generation of security related warnings/errors in the error log is NOT recommended for Production queue managers!**

MQ 5.3, 6.0, 7.0.x: To disable the reporting, unset the environment variable and restart the queue manager.

UNIX:           unset MQS\_REPORT\_NOAUTH  
Windows:       set MQS\_REPORT\_NOAUTH=

For MQ 7.1 and older: To disable the reporting, you must set the MQS\_REPORT\_NOAUTH environment variable to FALSE (case sensitive).

You need to restart the queue manager.

UNIX:           export MQS\_REPORT\_NOAUTH=FALSE  
Windows:       set MQS\_REPORT\_NOAUTH=FALSE

HOWEVER, if the feature Channel Authentication Records (CHLAUTH) is used, which is the default, then you will not see the AMQ8077W and the like, but you will see warnings/errors related to the CHLAUTH records, such as:

```
09/22/2023 05:55:37 AM - Process(229776.3) User(mqm) Program(amqrmppa)
      Host(riggioni1.fyre.ibm.com) Installation(Installation1)
      VRMF(9.3.3.0) QMgr(QMGR1)
      Time(2023-09-22T12:55:37.158Z)
      ArithInsert1(2) ArithInsert2(2035)
      CommentInsert1(alice)
```

AMQ9557E: Queue Manager User ID initialization failed for 'alice'.

**EXPLANATION:**

The call to initialize the User ID 'alice' failed with CompCode 2 and Reason 2035. If an MQCSP block was used, the User ID in the MQCSP block was ". If a userID flow was used, the User ID in the UID header was " and any CHLAUTH rules applied prior to user adoption were evaluated case-sensitively against this value.

**ACTION:**

Correct the error and try again.

+ Usage Notes

The environment variable can be added in the .profile or .bashrc file for the user "mqm". You must export this environment variable prior to starting the queue manager. In MQ 7.1, if you find that the error logs contain many instances of AMQ8077, then you have the option to disable this generation by unsetting the variable.

**+ Related technote**

If you want to capture the occurrence of this situation, the environment variable MQSAUTHERRORS can be used, which generates FDC files related to the return code 2035.

For more details see:

<https://www.ibm.com/support/pages/node/622223>

Using IBM MQ MQSAUTHERRORS environment variable to generate FDC files when the queue manager encounters reason code 2035 MQRC\_NOT\_AUTHORIZED

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