8.0

IBM MQ Reference

IBM

> **Note**
>
> Before using this information and the product it supports, read the information in "Notices" on page 1159.

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Reference

Use the reference information in this section to accomplish the tasks that address your business needs.

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The examples are `MQTTV3ASample.c` and `MQTTV3ASSample.c` in
`sdkroot\SDK\clients\c\samples`.
MQTT build options for different platforms
Install a C development environment on the platform on which you are building.
System requirements for IBM Messaging Telemetry Clients SupportPac
The client identifier must be unique across all clients that connect to the server, and must not be the same as the queue manager name on the server.
The configuration gives everyone permission to publish and subscribe to any topic. The configuration of security and access control is minimal and is intended only for a queue manager that is on a secure network with restricted access. To run IBM WebSphere® MQ and MQTT in an insecure environment, you must configure security. To configure security for IBM WebSphere MQ and MQTT, see the related links at the end of this task.
If you use the default `MqttConnectOptions`, or set `MqttConnectOptions.cleanSession` to `true` before connecting the client, any old subscriptions for the client are removed when the client connects. Any new subscriptions the client makes during the session are removed when it disconnects.
If you set `MqttConnectOptions.cleanSession` to `false` before connecting, any subscriptions the client creates are added to all the subscriptions that existed for the client before it connected. All the subscriptions remain active when the client disconnects.
Another way of understanding the way the `cleanSession` attribute affects subscriptions is to think of it as a modal attribute. In its default mode, `cleanSession=true`, the client creates subscriptions and receives publications only within the scope of the session. In the alternative mode, `cleanSession=false`, subscriptions are durable. The client can connect and disconnect and its subscriptions remain active. When the client reconnects, it receives any undelivered publications. While it is connected, it can modify the set of subscriptions that are active on its behalf.
You must set the `cleanSession` mode before connecting; the mode lasts for the whole session. To change its setting, you must disconnect and reconnect the client. If you change modes from using `cleanSession=false` to `cleanSession=true`, all previous subscriptions for the client, and any publications that have not been received, are discarded.
Example scripts to configure SSL certificates for Windows
Change `sdkroot` to suit your environment.

Install a Java development kit (JDK) at Version 7 or later.
Version 7 is required to run the **keytool** command to certify certificates. If you are not going to certify certificates, you do not require the Version 7 JDK.

```
# Build output is produced in the current directory.
# MQTTCLIENT_DIR must point to the base directory containing the MQTT client source code.
# Default MQTTCLIENT_DIR is the current directory
# Default TOOL_DIR is /Applications/Xcode.app/Contents/Developer/Platforms
# Default OPENSSL_DIR is sdkroot/openssl, relative to sdkroot/sdk/clients/c/mqttv3c/src
# OPENSSL_DIR must point to the base directory containing the OpenSSL build.
# Example:  make -f MQTTios.mak MQTTCLIENT_DIR=sdkroot/sdk/clients/c/mqttv3c/src all
ifndef TOOL_DIR
  TOOL_DIR = /Applications/Xcode.app/Contents/Developer/Platforms endif
IPHONE_SDK = iPhoneOS.platform/Developer/SDKs/iPhoneOS6.0.sdk
IPHONESIM_SDK = iPhoneSimulator.platform/Developer/SDKs/iPhoneSimulator6.0.sdk
SDK_ARM = ${TOOL_DIR}/${IPHONE_SDK}
SDK_i386 = ${TOOL_DIR}/${IPHONESIM_SDK}
MQTTLIB = mqttv3c
SOURCE_FILES = ${filter-out ${MQTTCLIENT_DIR}/MQTTAsync.c ${MQTTCLIENT_DIR}/SSLSocket.c, ${ALL_SOURCE_FILES}}
MQTTLIB_DARWIN = darwin_x86_64/lib${MQTTLIB}.a
MQTTLIB_S = mqttv3cs
SOURCE_FILES_S = ${filter-out ${MQTTCLIENT_DIR}/MQTTAsync.c, ${ALL_SOURCE_FILES}}
MQTTLIB_DARWIN_S = darwin_x86_64/lib${MQTTLIB_S}.a
MQTTLIB_A = mqttv3a
SOURCE_FILES_A = ${filter-out ${MQTTCLIENT_DIR}/MQTTClient.c ${MQTTCLIENT_DIR}/SSLSocket.c, ${ALL_SOURCE_FILES}}
MQTTLIB_DARWIN_A = darwin_x86_64/lib${MQTTLIB_A}.a
MQTTLIB_AS = mqttv3as
SOURCE_FILES_AS = ${filter-out ${MQTTCLIENT_DIR}/MQTTClient.c, ${ALL_SOURCE_FILES}}
MQTTLIB_DARWIN_AS = darwin_x86_64/lib${MQTTLIB_AS}.a
CC = iPhoneOS.platform/Developer/usr/bin/gcc
CC_armv7 = ${TOOL_DIR}/${CC} -arch armv7
CC_armv7s = ${TOOL_DIR}/${CC} -arch armv7s
CC_i386 = ${TOOL_DIR}/${CC} -arch i386
CCFLAGS = -Os -Wall -fomit-frame-pointer
CCFLAGS_SO_ARM =  ${CCFLAGS} -isysroot ${SDK_ARM} -I${OPENSSL_DIR}/include  -L${SDK_ARM}/usr/lib/system
CCFLAGS_SO_i386 = ${CCFLAGS} -isysroot ${SDK_i386} -I${OPENSSL_DIR}/include -L${SDK_i386}/usr/lib/system
all: ${MQTTLIB_DARWIN} ${MQTTLIB_DARWIN_A} ${MQTTLIB_DARWIN_AS} ${MQTTLIB_DARWIN_S}
${MQTTLIB_DARWIN}: ${SOURCE_FILES}
  -mkdir darwin_x86_64
  ${CC_armv7} ${CCFLAGS_SO_ARM} -c ${SOURCE_FILES} -DUSE_NAMED_SEMAPHORES -DNOSIGPIPE
  libtool -static -syslibroot ${SDK_ARM} -o $@.armv7 *.o
  rm *.o
  ${CC_armv7s} ${CCFLAGS_SO_ARM} -c ${SOURCE_FILES} -DUSE_NAMED_SEMAPHORES -DNOSIGPIPE
  libtool -static -syslibroot ${SDK_ARM} -o $@.armv7s *.o
  rm *.o
  ${CC_i386} ${CCFLAGS_SO_i386} -c ${SOURCE_FILES} -DUSE_NAMED_SEMAPHORES -DNOSIGPIPE
  libtool -static -syslibroot ${SDK_i386} -o $@.i386 *.o
  rm *.o
  lipo -create $@.armv7 $@.armv7s $@.i386 -output $@
${MQTTLIB_DARWIN_A}: ${SOURCE_FILES_A}
  -mkdir darwin_x86_64
  ${CC_armv7} ${CCFLAGS_SO_ARM} -c ${SOURCE_FILES_A} -DMQTT_ASYNC -DUSE_NAMED_SEMAPHORES -DNOSIGPIPE
```

```
    libtool -static -syslibroot ${SDK_ARM} -o $@.armv7 *.o
    rm *.o
    ${CC_armv7s} ${CCFLAGS_SO_ARM} -c ${SOURCE_FILES_A} -DMQTT_ASYNC
-DUSE_NAMED_SEMAPHORES -DNOSIGPIPE
    libtool -static -syslibroot ${SDK_ARM} -o $@.armv7s *.o
    rm *.o
    ${CC_i386} ${CCFLAGS_SO_i386} -c ${SOURCE_FILES_A} -DMQTT_ASYNC
-DUSE_NAMED_SEMAPHORES -DNOSIGPIPE
    libtool -static -syslibroot ${SDK_i386} -o $@.i386 *.o
    rm *.o
    lipo -create $@.armv7 $@.armv7s $@.i386 -output $@
${MQTTLIB_DARWIN_S}: ${SOURCE_FILES_S}
    -mkdir darwin_x86_64
    ${CC_armv7} ${CCFLAGS_SO_ARM} -c ${SOURCE_FILES_S} -DOPENSSL
-DUSE_NAMED_SEMAPHORES -DNOSIGPIPE
    libtool -static -syslibroot ${SDK_ARM} -L${OPENSSL_DIR}/armv7 -lssl -lcrypto -o $@.armv7 *.o
    rm *.o
    ${CC_armv7s} ${CCFLAGS_SO_ARM} -c ${SOURCE_FILES_S} -DOPENSSL
-DUSE_NAMED_SEMAPHORES -DNOSIGPIPE
    libtool -static -syslibroot ${SDK_ARM} -L${OPENSSL_DIR}/armv7s -lssl -lcrypto -o $@.armv7s *.o
    rm *.o
    ${CC_i386} ${CCFLAGS_SO_i386} -c ${SOURCE_FILES_S} -DOPENSSL -DUSE_NAMED_SEMAPHORES
-DNOSIGPIPE
    libtool -static -syslibroot ${SDK_ARM} -L${OPENSSL_DIR}/i386 -lssl -lcrypto -o $@.i386 *.o
    rm *.o
    lipo -create $@.armv7 $@.armv7s $@.i386 -output $@
${MQTTLIB_DARWIN_AS}: ${SOURCE_FILES_AS}
    -mkdir darwin_x86_64
    ${CC_armv7} ${CCFLAGS_SO_ARM} -c ${SOURCE_FILES_AS} -DMQTT_ASYNC -DOPENSSL
-DUSE_NAMED_SEMAPHORES -DNOSIGPIPE
    libtool -static -syslibroot ${SDK_ARM} -L${OPENSSL_DIR}/armv7 -lssl -lcrypto -o $@.armv7 *.o
    rm *.o
    ${CC_armv7s} ${CCFLAGS_SO_ARM} -c ${SOURCE_FILES_AS} -DMQTT_ASYNC -DOPENSSL
-DUSE_NAMED_SEMAPHORES -DNOSIGPIPE
    libtool -static -syslibroot ${SDK_ARM} -L${OPENSSL_DIR}/armv7s -lssl -lcrypto -o $@.armv7s *.o
    rm *.o
    ${CC_i386} ${CCFLAGS_SO_i386} -c ${SOURCE_FILES_AS} -DMQTT_ASYNC -DOPENSSL
-DUSE_NAMED_SEMAPHORES -DNOSIGPIPE
    libtool -static -syslibroot ${SDK_ARM} -L${OPENSSL_DIR}/i386 -lssl -lcrypto -o $@.i386 *.o
    rm *.o
    lipo -create $@.armv7 $@.armv7s $@.i386 -output $@
.PHONY : clean
clean:
    -rm -f *.obj
    -rm -f -r darwin_x86_64
```
Download and install the iOS development tools.

For links to client API documentation for the MQTT client libraries, see MQTT client programming reference.

You can run an MQTT client for Java app on any platform with JSE 1.5 or above that is "Java Compatible"

Log on with a user ID that has administrative authority to IBM WebSphere MQ.

The server is now ready for you to test your MQTT V3.1 app.

You must have access to an MQTT Version 3.1 server that supports the MQTT protocol over SSL.

 If there is a firewall between your client and the server, check that it does not block MQTT traffic.

You can run an MQTT client for Java app on any platform with JSE 1.5 or above that is "Java Compatible".

See System requirements for IBM Messaging Telemetry Clients SupportPac.

The SSL channels must be started.

Choose an MQTT server to which you can connect the client app.

The statement `rm *.o` deletes all the object files that are created for each library. `lipo` concatenates all

three libraries into one file.

Download the IBM Messaging Telemetry Clients SupportPac.

Download the IBM Messaging Telemetry Clients SupportPac and install the MQTT SDK.

either IBM MessageSight or IBM WebSphere MQ as the MQTT server

The server must support the MQTT Version 3.1 protocol.

The server must support the MQTT Version 3.1 protocol over SSL.

The MQTT Paho sample applications in the SDK are set up to connect to the Eclipse M2M server by default. See MQTT Sandbox Server. You do not have to configure a server to try the Paho sample applications out.

Create and run the scripts to generate key-pairs and certificates, and configure IBM WebSphere MQ as the MQTT server.

Check the SSL channels are running and are set up as you expect.

Connections between the MQTT client and the queue manager are always initiated by the MQTT client. The MQTT client is always the SSL client. Client authentication of the server and server authentication of the MQTT client are both optional.

As an alternative to using SSL, some kinds of Virtual Private Network (VPN), such as IPsec, authenticate the endpoints of a TCP/IP connection. VPN encrypts each IP packet that flows over the network. Once such a VPN connection is established, you have established a trusted network. You can connect MQTT clients to telemetry channels using TCP/IP over the VPN network.

The client always attempts to authenticate the server, unless the client is configured to use a CipherSpec that supports anonymous connection. If the authentication fails, then the connection is not established. By providing the client with a private signed digital certificate, you can authenticate the MQTT client to WebSphere MQ. The WebSphere MQ Administrator can force MQTT clients to authenticate themselves to the queue manager using SSL. You can only request client authentication as part of mutual authentication. Client authentication using SSL relies upon the client having a secret. The secret is the private key of the client in the case of a self-signed certificate, or a key provided by a certificate authority. The key is used to sign the digital certificate of the client. Anyone in possession of the corresponding public key can verify the digital certificate. Certificates can be trusted, or if they are chained, traced back through a certificate chain to a trusted root certificate. Client verification sends all the certificates in the certificate chain provided by the client to the server. The server checks the certificate chain until it finds a certificate it trusts. The trusted certificate is either the public certificate generated from a self-signed certificate, or a root certificate typically issued by a certificate authority. As a final, optional, step the trusted certificate can be compared with a "live" certificate revocation list.

The trusted certificate might be issued by a certificate authority and already included in the JRE certificate store. It might be a self-signed certificate, or any certificate that has been added to the telemetry channel keystore as a trusted certificate.

The telemetry channel has a combined keystore/truststore that holds both the private keys to one or more telemetry channels, and any public certificates needed to authenticate clients. Because an SSL channel must have a keystore, and it is the same file as the channel truststore, the JRE certificate store is never referenced. The implication is that if authentication of a client requires a CA root certificate, you must place the root certificate in the keystore for the channel, even if the CA root certificate is already in the JRE certificate store. The JRE certificate store is never referenced.

Think about the threats that client authentication is intended to counter, and the roles the client and server play in countering the threats. Authenticating the client certificate alone is insufficient to prevent unauthorized access to a system. If someone else has got hold of the client device, the client device is not necessarily acting with the authority of the certificate holder. Never rely on a single defense against unwanted attacks. At least use a two-factor authentication approach and supplement possession of a certificate with knowledge of private information. For example, use JAAS, and authenticate the client using a password issued by the server.

The primary threat to the client certificate is that it gets into the wrong hands. The certificate is held in a password protected keystore at the client. How does it get placed in the keystore? How does the MQTT client get the password to the keystore? How secure is the password protection? Telemetry devices are often easy to remove, and then can be hacked in private. Must the device hardware be tamper-proof? Distributing and protecting client-side certificates is recognized to be hard; it is called the key-management problem.

A secondary threat is that the device is misused to access servers in unintended ways. For example, if the MQTT application is tampered with, it might be possible to use a weakness in the server configuration using the authenticated client identity.

To authenticate an MQTT client using SSL, configure the telemetry channel, and the client.

The IBM MQ administrator configures telemetry channels at the server. Each channel is configured to accept a TCP/IP connection on a different port number. SSL channels are configured with passphrase protected access to key files. If an SSL channel is defined with no passphrase or key file, the channel does not accept SSL connections.

The client JVM must use the standard socket factory from JSSE. If you are using Java ME, you must ensure that the JSSE package is loaded. If you are using Java SE, JSSE has been included with the JRE since Java version 1.4.1.

The SSL connection requires a number of SSL properties to be set before connecting. You can set the properties either by passing them to the JVM using the `-D` switch, or you can set the properties using the `MqttConnectionOptions.setSSLProperties` method.

If you load a non-standard socket factory, by calling the method `MqttConnectOptions.setSocketFactory(javax.net.SocketFactory)`, then the way SSL settings are passed to the network socket is application defined.

Server authentication using SSL authenticates the server to which you are about to send confidential information to. The client performs the checks matching the certificates sent from the server, against certificates placed in its truststore, or in its JRE `cacerts` store.

The JRE certificate store is a JKS file, `cacerts`. It is located in `JRE InstallPath\lib\security\`. It is installed with the default password `changeit`. You can either store certificates you trust in the JRE certificate store, or in the client truststore. You cannot use both stores. Use the client truststore if you want to keep the public certificates the client trusts separate from certificates other Java applications use. Use the JRE certificate store if you want to use a common certificate store for all Java applications running on the client. If you decide to use the JRE certificate store review the certificates it contains, to make sure you trust them.

You can modify the JSSE configuration by supplying a different trust provider. You can customize a trust provider to perform different checks on a certificate. In some OGSi environments that have used the MQTT client, the environment provides a different trust provider.

To authenticate the telemetry channel using SSL, configure the server, and the client.

When SSLCIPH is used with a telemetry channel, it means "SSL Cipher Suite".

The SSL cipher suite is the one supported by the JVM that is running the telemetry (MQXR) service.

If the SSLCIPH parameter is blank, no attempt is made to use SSL on the channel.

SSLCIPH specifies the CipherSpec that is used on the channel. The maximum length is 32 characters. This parameter is valid on all channel types which use transport type TRPTYPE(TCP).

Specify the name of the CipherSpec you are using. The CipherSpecs that can be used with IBM MQ SSL support are shown in the following table. If a specific named CipherSpec is being used, the **SSLCIPH** values at the two ends of a channel must specify the same named CipherSpec.

On ▶ z/OS ◀ IBM MQ for z/OS®; ▶ IBM i ◀ IBM i; you can also specify the two digit hexadecimal code of a CipherSpec, whether or not it appears in the table. On IBM i, installation of AC3 is a prerequisite for the use of SSL.

If you plan to use SHA-2 cipher suites, see System requirements for using SHA-2 cipher suites with MQTT channels.

The value for this parameter is also used to set the value of SECPROT

Download and redistribution of the OpenSSL package is subject to stringent import and export regulation, and open source licensing conditions. Take careful note of the restrictions and warnings before you decide whether to download the package.

For the C samples, the store is a Privacy-Enhanced Mail (PEM) file. For the Java samples it is a Java keystore (JKS).

Create a script in the client samples directory to compile and run `Sample` on your chosen platform.

Install a Java development kit (JDK) Version 6 or later.

Because you are developing a Java app for Android, the JDK must come from Oracle. You can get the JDK from Java SE Downloads.

Each successive line that defines the implementation of a target must start with a tab character.

The default file persistence class in the Java SE MQTT client supplied with IBM MQ Telemetry creates a folder with the name: *clientIdentifier*-tcp*hostNameport* or *clientIdentifier*-ssl*hostNameport* in the client working directory. The folder name tells you the `hostName` and `port` used in the connection attempt

Open the MQTT client sample Java app for Android.

Connect to an MQTT server.

```
# Build output is produced in the current directory.
# MQTTCLIENT_DIR must point to the base directory containing the MQTT client source code.
# Default MQTTCLIENT_DIR is the current directory
# Default OPENSSL_DIR is sdkroot\openSSL, relative to sdkroot\sdk\clients\c\mqttv3c\src
# OPENSSL_DIR must point to the base directory containing the OpenSSL build.
# Example:  make -f MQTTwin.mak MQTTCLIENT_DIR=sdkroot/sdk/clients/c/mqttv3c/src
# Set the build environment, for example:
#    %comspec% /k ""C:\Program Files\Microsoft Visual Studio 9.0\VC\vcvarsall.bat"" x86
#    set path=%path%;C:\Program Files\GnuWin32\bin;C:\cygwin\bin
ifndef MQTTCLIENT_DIR
  MQTTCLIENT_DIR = ${CURDIR}
endif
VPATH = ${MQTTCLIENT_DIR}
ifndef OPENSSL_DIR
  OPENSSL_DIR = ${MQTTCLIENT_DIR}/../../../../../openssl-1.0.1c
endif
ALL_SOURCE_FILES = ${wildcard ${MQTTCLIENT_DIR}/*.c}
MQTTLIB = mqttv3c
MQTTDLL = windows_ia32/${MQTTLIB}.dll
SOURCE_FILES = ${filter-out ${MQTTCLIENT_DIR}/MQTTAsync.c ${MQTTCLIENT_DIR}/SSLSocket.c, $
{ALL_SOURCE_FILES}}
MANIFEST = mt -manifest ${MQTTDLL}.manifest -outputresource:${MQTTDLL}\;2
MQTTLIB_S = mqttv3cs
MQTTDLL_S  = windows_ia32/${MQTTLIB_S}.dll
SOURCE_FILES_S = ${filter-out ${MQTTCLIENT_DIR}/MQTTAsync.c, ${ALL_SOURCE_FILES}}
MANIFEST_S = mt -manifest ${MQTTDLL_S}.manifest -outputresource:${MQTTDLL_S}\;2
MQTTLIB_A = mqttv3a
MQTTDLL_A  = windows_ia32/${MQTTLIB_A}.dll
SOURCE_FILES_A = ${filter-out ${MQTTCLIENT_DIR}/MQTTClient.c ${MQTTCLIENT_DIR}/SSLSocket.c,
${ALL_SOURCE_FILES}}
MANIFEST_S = mt -manifest ${MQTTDLL_S}.manifest -outputresource:${MQTTDLL_S}\;2
MQTTLIB_AS = mqttv3as
MQTTDLL_AS  = windows_ia32/${MQTTLIB_AS}.dll
SOURCE_FILES_AS = ${filter-out ${MQTTCLIENT_DIR}/MQTTClient.c, ${ALL_SOURCE_FILES}}
MANIFEST_S = mt -manifest ${MQTTDLL_S}.manifest -outputresource:${MQTTDLL_S}\;2
CC = cl
CPPFLAGS = /D "WIN32" /D "_UNICODE" /D "UNICODE" /D "_CRT_SECURE_NO_WARNINGS"
CFLAGS = /nologo /c /O2 /W3 /Fd /MD /TC
INC =  /I ${MQTTCLIENT_DIR} /I ${MQTTCLIENT_DIR}/..
CPPFLAGS_S = ${CPPFLAGS} /D "OPENSSL"
INC_S = ${INC} /I ${OPENSSL_DIR}/inc32/
LD = link
LINKFLAGS = /nologo /machine:x86 /manifest /dll
WINLIBS = kernel32.lib user32.lib gdi32.lib winspool.lib comdlg32.lib\
      advapi32.lib shell32.lib ole32.lib oleaut32.lib uuid.lib\
      odbc32.lib odbccp32.lib ws2_32.lib
IMP = /implib:${@:.dll=.lib}
LIBPDB = /pdb:${@:.dll=.pdb}
LIBMAP = /map:${@:.dll=.map}
WINLIBS_S = ${WINLIBS} crypt32.lib ssleay32.lib libeay32.lib
LIBPATH_S = /LIBPATH:${OPENSSL_DIR}/lib
${MQTTDLL}: ${SOURCE_FILES}
   -mkdir windows_ia32
   -rm ${CURDIR}/MQTTAsync.obj
   ${CC} ${CPPFLAGS} ${CFLAGS} ${INC} /Fo ${SOURCE_FILES}
   ${LD} ${LINKFLAGS} ${IMP} ${LIBPDB} ${LIBMAP} ${WINLIBS} *.obj /out:${MQTTDLL}
   ${MANIFEST}
${MQTTDLL_A}: ${SOURCE_FILES_A}
```

```
  -mkdir windows_ia32
  -rm ${CURDIR}/MQTTClient.obj
  ${CC} ${CPPFLAGS} ${CFLAGS} ${INC} /Fo ${SOURCE_FILES_A}
  ${LD} ${LINKFLAGS} ${IMP} ${LIBPDB} ${LIBMAP} ${WINLIBS} *.obj /out:${MQTTDLL_A}
  ${MANIFEST_A}
${MQTTDLL_S}: ${SOURCE_FILES_S}
  -mkdir windows_ia32
  -rm ${CURDIR}/MQTTAsync.obj
  ${CC} ${CPPFLAGS_S} ${CFLAGS} ${INC_S} /Fo ${SOURCE_FILES}
  ${LD} ${LINKFLAGS} ${IMP} ${LIBPDB} ${LIBMAP} ${WINLIBS_S} ${LIBPATH_S} *.obj /out:$
{MQTTDLL_S}
  ${MANIFEST_S}
${MQTTDLL_AS}: ${SOURCE_FILES_AS}
  -rm ${CURDIR}/MQTTClient.obj
  ${CC} ${CPPFLAGS_S} ${CFLAGS} ${INC_S} /Fo ${SOURCE_FILES_AS}
  ${LD} ${LINKFLAGS} ${IMP} ${LIBPDB} ${LIBMAP} ${WINLIBS_S} ${LIBPATH_S} *.obj /out:$
(MQTTDLL_AS}
  $(MANIFEST_AS}
all: ${MQTTDLL} ${MQTTDLL_A} ${MQTTDLL_AS} ${MQTTDLL_S}
.PHONY : clean
clean:
  -rm -f *.obj
  -rm -f -r windows_ia32
```

This step is optional on Windows because you can administer IBM WebSphere MQ as a Windows administrator.

Set the location of the MQTT source code.

Run the makefile in the same directory as the MQTT source files, or set the `MQTTCLIENT_DIR` command-line parameter:

`make -f makefile MQTTCLIENT_DIR=`*sdkroot*`/SDK/clients/c/mqttv3c/src`

Add the following lines to the makefile:

The example sets VPATH to the directory where **make** searches for source files that are not explicitly identified; for example all the header files that are required in the build.

Set the location of the OpenSSL libraries.

This step is required to build the SSL versions of the MQTT client for C libraries.

Set the default path to the OpenSSL libraries to same directory as you expanded the MQTT SDK. Otherwise, set `OPENSSL_DIR` as a command-line parameter.

OpenSSL is the OpenSSL directory that contains all the OpenSSL subdirectories. You might have to move the directory tree from where you expanded it, because it contains unnecessary empty parent directories.

Select all the source files that are required to build each MQTT library. Also, set the name and location of the MQTT library to build.

The source files depend on whether you are building a synchronous or asynchronous library, and whether the library includes SSL or not.

Add the following line to the makefile to list all the MQTT source files:

Set the keystore location and attributes with MQ Explorer, or with the **DEFINE CHANNEL** command; see DEFINE CHANNEL (MQTT). Multiple channels can share a keystore.

MQTT non-phrases

```
MQTTClient mqttClient = new MqttClient( "ssl://www.example.org:8884", "clientId1");
mqttClient.connect();
```

SampleAsyncCallBack

SampleAsyncCallBack is in the `org.eclipse.paho.client.mqttv3` package. It calls the asynchronous MQTT API. The asynchronous API does not wait for MQTT to complete processing a call; it returns to the application. The application carries on with other tasks, then waits for the next event to arrive for it to process. MQTT posts an event notification back to the application

when it completes processing. The event driven MQTT interface is suited to the service and activity programming model of Android and other event driven operating systems.

As an example, look at how the `mqttExerciser` sample integrates MQTT into Android using the service and activity programming model.

SampleAsyncWait

SampleAsyncWait is in the `org.eclipse.paho.client.mqttv3` package. It uses the asynchronous MQTT API; it waits on a different thread until an action completes. The main thread can do other work until it synchronizes on the thread that is waiting for the MQTT action to complete.

The example command files create the certificates and certificate stores as described in the steps in the task. In addition, the example sets up the MQTT client queue manager to use the server certificate store. The example deletes and re-creates the queue manager by calling the `SampleMQM.bat` script that is provided with IBM WebSphere MQ.

initcert.bat

initcert.bat sets the names and paths to certificates and other parameters that are required by the **keytool** and **openSSL** commands. The settings are described in comments in the script.

```
@echo off
@rem Set the path where you installed the MQTT SDK
@rem and short cuts to the samples directories.
set SDKRoot=C:\MQTT
set jsamppath=%SDKRoot%\sdk\clients\java\samples
set csamppath=%SDKRoot%\sdk\clients\c\samples
```

```
@rem Set the paths to Version 7 of the JDK
@rem and to the directory where you built the openSSL package.
@rem Set short cuts to the tools.
set javapath=C:\Program Files\IBM\Java70
set keytool="%javapath%\jre\bin\keytool.exe"
set ikeyman="%javapath%\jre\bin\ikeyman.exe"
set openssl=%SDKRoot%\openSSL
set runopenssl="%openssl%\bin\openssl"
```

```
@rem Set the path to where certificates are to be stored,
@rem and set global security parameters.
@rem Omit set password, and the security tools prompt you for passwords.
@rem Validity is the expiry time of the certificates in days.
set certpath=%SDKRoot%\Certificates
set password=password
set validity=5000
set algorithm=RSA
```

```
@rem Set the certificate authority (CA) jks keystore and certificate parameters.
@rem Omit this step, unless you are defining your own certificate authority.
@rem The CA keystore contains the key-pair for your own certificate authority.
@rem You must protect the CA keystore.
@rem The CA certificate is the self-signed certificate authority public certificate.
@rem It is commonly known as the CA root certificate.
set caalias=caalias
set cadname="CN=mqttca.ibm.id.com, OU=ID, O=IBM, L=Hursley, S=Hants, C=GB"
set cakeypass=%password%
@rem ca key store
set cajkskeystore=%certpath%\cakeystore.jks
set cajkskeystorepass=%password%
@rem ca certificate (root certificate)
set cacert=%certpath%\cacert.cer
```

```
@rem Set the server jks keystore and certificate parameters.
@rem The server keystore contains the key-pair for the server.
@rem You must protect the server keystore.
@rem If you then export the server certificate it is self-signed.
@rem Alternatively, if you export a certificate signing request (CSR)
@rem from the server keystore for the server key,
@rem and import the signed certificate back into the same keystore,
@rem it forms a certificate chain.
@rem The certificate chain links the server certificate to the CA.
@rem When you now export the server certificate,
@rem the exported certificate includes the certificate chain.
set srvalias=srvalias
set srvdname="CN=mqttserver.ibm.id.com, OU=ID, O=IBM, L=Hursley, S=Hants, C=GB"
set srvkeypass=%password%
@rem server key stores
set srvjkskeystore=%certpath%\srvkeystore.jks
set srvjkskeystorepass=%password%
@rem server certificates
set srvcertreq=%certpath%\srvcertreq.csr
set srvcertcasigned=%certpath%\srvcertcasigned.cer
set srvcertselfsigned=%certpath%\srvcertselfsigned.cer
```

```
@rem Set the client jks keystore and certificate parameters
@rem Omit this step, unless you are authenticating clients.
@rem The client keystore contains the key-pair for the client.
@rem You must protect the client keystore.
@rem If you then export the client certificate it is self-signed.
@rem Alternatively, if you export a certificate signing request (CSR)
@rem from the client keystore for the client key,
@rem and import the signed certificate back into the same keystore,
@rem it forms a certificate chain.
@rem The certificate chain links the client certificate to the CA.
@rem When you now export the client certificate,
@rem the exported certificate includes the certificate chain.
set cltalias=cltalias
set cltdname="CN=mqttclient.ibm.id.com, OU=ID, O=IBM, L=Hursley, S=Hants, C=GB"
set cltkeypass=%password%
@rem client key stores
set cltjkskeystore=%certpath%\cltkeystore.jks
set cltjkskeystorepass=%password%
set cltcertreq=%certpath%\cltcertreq.csr
set cltcertcasigned=%certpath%\cltcacertsigned.cer
set cltcertselfsigned=%certpath%\cltcertselfsigned.cer
```

```
@rem Set the paths to the client truststores signed by CA and signed by server key.
@rem You only need to define one of the trust stores.
@rem A trust store holds certificates that you trust,
@rem which are used to authenticate untrusted certificates.
@rem In this example, when the client authenticates the MQTT server it connects to,
@rem it authenticates the certificate it is sent by the server
@rem with the certificates in its trust store.
@rem For example, the MQTT server sends its server certificate,
@rem and the client authenticates it with either the same server certificate
@rem that you have stored in the cltsrvtruststore.jks trust store,
```

cleancert.bat

The commands in the `cleancert.bat` script delete the MQTT client queue manager to ensure that the server certificate store is not locked, and then delete all the keystores and certificates that are created by the sample security scripts.

```
@rem Delete the MQTT sample queue manager, MQXR_SAMPLE_QM
call "%MQ_FILE_PATH%\bin\setmqenv" -s
endmqm -i %qm%
dltmqm %qm%
```

```
@rem Erase all the certificates and key stores created by the sample scripts.
erase %cajkskeystore%
erase %cacert%
erase %srvjkskeystore%
erase %srvcertreq%
erase %srvcertcasigned%
erase %srvcertselfsigned%
erase %cltjkskeystore%
erase %cltp12keystore%
erase %cltpemkeystore%
erase %cltcertreq%
erase %cltcertcasigned%
erase %cltcertselfsigned%
erase %cltcajkstruststore%
erase %cltcap12truststore%
erase %cltcapemtruststore%
erase %cltsrvjkstruststore%
erase %cltsrvp12truststore%
erase %cltsrvpemtruststore%
erase %mqlog%
@echo Cleared all certificates
dir %certpath%\*.* /b
```

Figure 2. `cleancert.bat`

genkeys.bat

The commands in the `genkeys.bat` script create key-pairs for your private certificate authority, the server, and a client.

```
@rem
@echo _____
@echo Generate %caalias%, %srvalias%, and %cltalias% key-pairs in %cajkskeystore%,
%srvjkskeystore%, and %cltjkskeystore%
@rem
@rem -- Generate a client certificate and a private key pair
@rem Omit this step, unless you are authenticating clients.
%keytool% -genkeypair -noprompt -alias %cltalias% -dname %cltdname% -keystore
%cltjkskeystore% -storepass %cltjkskeystorepass% -keypass %cltkeypass% -keyalg %algorithm%
 -validity %validity%
```

```
@rem -- Generate a server certificate and private key pair
%keytool% -genkeypair -noprompt -alias %srvalias% -dname %srvdname% -keystore
%srvjkskeystore% -storepass %srvjkskeystorepass% -keypass %srvkeypass% -keyalg %algorithm%
 -validity %validity%
```

```
@rem Create CA, client and server key-pairs
@rem  -- Generate a CA certificate and private key pair - The extension asserts this is a
certificate authority certificate, which is required to import into firefox
%keytool% -genkeypair -noprompt -ext bc=ca:true -alias %caalias%  -dname %cadname%
 -keystore %cajkskeystore% -storepass %cajkskeystorepass%  -keypass %cakeypass% -keyalg
%algorithm% -validity %validity%
```

Figure 3. `genkeys.bat`

sscerts.bat

The commands in the `sscerts.bat` script export the client and server self-signed certificates from their keystores, and import the server certificate into the client truststore, and the client certificate

into the server keystore. The server does not have a truststore. The commands create a client truststore in PEM format from the client JKS truststore.

```
@rem
@echo _____
@echo Export self-signed certificates:  %srvcertselfsigned% and %cltcertselfsigned%
@rem Export Server public certificate
%keytool% -exportcert -noprompt -rfc -alias %srvalias% -keystore %srvjkskeystore%
-storepass %srvjkskeystorepass% -file %srvcertselfsigned%
@rem Export Client public certificate
@rem Omit this step, unless you are authenticating clients.
%keytool% -exportcert -noprompt -rfc -alias %cltalias% -keystore %cltjkskeystore%
-storepass %cltjkskeystorepass% -file %cltcertselfsigned%
```

```
@rem
@echo _____
@echo Add selfsigned server certificate %srvcertselfsigned% to client trust store:
%cltsrvjkstruststore%
@rem Import the server certificate into the client-server trust store (for server self-
signed authentication)
%keytool% -import -noprompt -alias %srvalias% -file %srvcertselfsigned% -keystore
%cltsrvjkstruststore% -storepass %cltsrvjkstruststorepass%
```

```
@rem
@echo _____
@echo Add selfsigned client certificate %cltcertselfsigned% to server trust store:
%srvjkskeystore%
@rem Import the client certificate into the server trust store (for client self-signed
authentication)
@rem Omit this step, unless you are authenticating clients.
%keytool% -import -noprompt -alias %cltalias% -file %cltcertselfsigned% -keystore
%srvjkskeystore% -storepass %srvjkskeystorepass%
```

```
@rem
@echo _____
@echo Create a pem client-server trust store from the jks client-server trust store:
%cltsrvpemtruststore%
@rem
%keytool% -importkeystore -noprompt -srckeystore %cltsrvjkstruststore% -destkeystore
%cltsrvp12truststore% -srcstoretype jks -deststoretype pkcs12 -srcstorepass
%cltsrvjkstruststorepass% -deststorepass %cltsrvp12truststorepass%
%openssl%\bin\openssl pkcs12 -in %cltsrvp12truststore% -out %cltsrvpemtruststore% -passin
pass:%cltsrvp12truststorepass% -passout pass:%cltsrvpemtruststorepass%@rem
@rem
@echo _____
@echo Create a pem client key store from the jks client keystore
@rem Omit this step, unless you are configuring a C or iOS client.
@rem
%keytool% -importkeystore -noprompt -srckeystore %cltjkskeystore%     -destkeystore
%cltp12keystore%     -srcstoretype jks -deststoretype pkcs12 -srcstorepass
%cltjkskeystorepass%     -deststorepass %cltp12keystorepass%
%openssl%\bin\openssl pkcs12 -in %cltp12keystore%     -out %cltpemkeystore%     -passin
pass:%cltp12keystorepass% -passout pass:%cltpemkeystorepass%
```

Figure 4. `sscerts.bat`

cacerts.bat
The script imports the certificate authority root certificate into the private keystores. The CA root certificate is needed to create the keychain between the root certificate and the signed certificate. The `cacerts.bat` script exports the client and server certificate requests from their keystores. The script signs the certificate requests with the key of the private certificate authority in the `cajkskeystore.jks` keystore, then imports the signed certificates back into the same keystores from which the requests came. The import creates the certificate chain with the CA root certificate. The script creates a client truststore in PEM format from the client JKS truststore.

```
@rem
@echo _____
@echo Export self-signed certificates: %cacert%
@rem
@rem Export CA public certificate
%keytool% -exportcert -noprompt -rfc -alias %caalias%  -keystore %cajkskeystore% -storepass
%cajkskeystorepass%  -file %cacert%
```

```
@rem
@echo _____
@echo Add CA to server key and client key and trust stores: %srvjkskeystore%,
%cltjkskeystore%, %cltcajkstruststore%,
@rem The CA certificate is necessary to create key chains in the client and server key
stores,
@rem and to certify key chains in the server key store and the client trust store
@rem
@rem Import the CA root certificate into the server key store
%keytool% -import -noprompt -alias %caalias% -file %cacert% -keystore %srvjkskeystore%
-storepass %srvjkskeystorepass%
@rem Import the CA root certificate into the client key store
@rem Omit this step, unless you are authenticating clients.
%keytool% -import -noprompt -alias %caalias% -file %cacert% -keystore %cltjkskeystore%
-storepass %cltjkskeystorepass%
@rem Import the CA root certificate into the client ca-trust store (for ca chained
authentication)
%keytool% -import -noprompt -alias %caalias% -file %cacert% -keystore %cltcajkstruststore%
-storepass %cltcajkstruststorepass%
```

```
@rem
@echo _____
@echo Create certificate signing requests: %srvcertreq% and %cltcertreq%
@rem
@rem Create a certificate signing request (CSR) for the server key
%keytool% -certreq -alias %srvalias% -file %srvcertreq% -keypass %srvkeypass% -keystore
%srvjkskeystore% -storepass %srvjkskeystorepass%
@rem Create a certificate signing request (CSR) for the client key
%keytool% -certreq -alias %cltalias% -file %cltcertreq% -keypass %cltkeypass% -keystore
%cltjkskeystore% -storepass %cltjkskeystorepass%
```

```
@rem
@echo _____
@echo Sign certificate requests: %srvcertcasigned% and %cltcertcasigned%
@rem The requests are signed with the ca key in the cajkskeystore.jks keystore
@rem
@rem Sign server certificate request
%keytool% -gencert -infile %srvcertreq% -outfile %srvcertcasigned% -alias %caalias%
-keystore %cajkskeystore% -storepass %cajkskeystorepass% -keypass %cakeypass%
@rem Sign client certificate request
@rem Omit this step, unless you are authenticating clients.
%keytool% -gencert -infile %cltcertreq% -outfile %cltcertcasigned% -alias %caalias%
-keystore %cajkskeystore% -storepass %cajkskeystorepass% -keypass %cakeypass%
```

```
@rem
@echo _____
@echo Import the signed certificates back into the key stores to create the key chain:
%srvjkskeystore% and %cltjkskeystore%
@rem
@rem Import the signed server certificate
%keytool% -import -noprompt -alias %srvalias% -file %srvcertcasigned% -keypass %srvkeypass%
-keystore %srvjkskeystore% -storepass %srvjkskeystorepass%
@rem Import the signed client certificate and key chain back into the client keystore
%keytool% -import -noprompt -alias %cltalias% -file %cltcertcasigned% -keypass %cltkeypass%
-keystore %cltjkskeystore% -storepass %cltjkskeystorepass%
@rem
@rem The CA certificate is needed in the server key store, and the client trust store
@rem to verify the key chain sent from the client or server
@echo Delete the CA certificate from %cltjkskeystore%: it causes a problem in converting
keystore to pem
@rem Omit this step, unless you are authenticating clients.
%keytool% -delete -alias %caalias% -keystore %cltjkskeystore% -storepass
%cltjkskeystorepass%
```

```
@rem
@echo _____
@echo Create a pem client-ca trust store from the jks client-ca trust store:
%cltcapemtruststore%
```

mqcerts.bat
> The script lists the keystores and certificates in the certificate directory. It then creates the MQTT sample queue manager and configures the secure telemetry channels.

```
@echo _____
@echo List keystores and certificates
dir %certpath%\*.* /b
```

```
@rem
@echo Create queue manager and define mqtt channels and certificate stores
call "%MQ_FILE_PATH%\mqxr\Samples\SampleMQM" >> %mqlog%
echo DEFINE CHANNEL(%chlreq%)      CHLTYPE(MQTT) TRPTYPE(TCP) PORT(%portsslreq%)
SSLCAUTH(%authreq%) SSLKEYR('%srvjkskeystore%') SSLKEYP('%srvjkskeystorepass%')
MCAUSER(%mcauser%) | runmqsc %qm% >> %mqlog%
echo DEFINE CHANNEL(%chlopt%)      CHLTYPE(MQTT) TRPTYPE(TCP) PORT(%portsslopt%)
SSLCAUTH(%authopt%) SSLKEYR('%srvjkskeystore%') SSLKEYP('%srvjkskeystorepass%')
MCAUSER(%mcauser%) | runmqsc %qm% >> %mqlog%
echo DEFINE CHANNEL(%chlsslreqws%) CHLTYPE(MQTT) TRPTYPE(TCP) PORT(%portsslreqws%)
SSLCAUTH(%authreq%) SSLKEYR('%srvjkskeystore%') SSLKEYP('%srvjkskeystorepass%')
MCAUSER(%mcauser%) PROTOCOL(HTTP) | runmqsc %qm% >> %mqlog%
echo DEFINE CHANNEL(%chlssloptws%) CHLTYPE(MQTT) TRPTYPE(TCP) PORT(%portssloptws%)
SSLCAUTH(%authopt%) SSLKEYR('%srvjkskeystore%') SSLKEYP('%srvjkskeystorepass%')
MCAUSER(%mcauser%) PROTOCOL(HTTP) | runmqsc %qm% >> %mqlog%
echo DEFINE CHANNEL(%chlws%)       CHLTYPE(MQTT) TRPTYPE(TCP) PORT(%portws%)
MCAUSER(%mcauser%) PROTOCOL(HTTP) | runmqsc %qm% >> %mqlog%
@echo MQ logs saved in %mqlog%echo
```

Figure 6. mqcerts.bat

Get a copy of the IBM WebSphere MQ installation materials and a license in one of the following ways:

1. Ask your IBM WebSphere MQ administrator for the installation materials, and to confirm you can accept the license agreement.
2. Get a 90-day evaluation copy of IBM WebSphere MQ. See Evaluate: IBM WebSphere MQ.
3. Buy IBM WebSphere MQ. See IBM WebSphere MQ product page.

Secure the SSL channel with either certificate authority signed keys, or self-signed keys.

There is no installation program, you just expand the downloaded file.

1. Download the IBM Messaging Telemetry Clients SupportPac.
2. Create a folder where you are going to install the SDK.

   You might want to name the folder MQTT. The path to this folder is referred to here as *sdkroot*.
3. Expand the compressed IBM Messaging Telemetry Clients SupportPac file contents into *sdkroot*. The expansion creates a directory tree that starts at *sdkroot*\SDK.

There is a similar limitation for the MQTT client for Java. If the client code is running on a Java 1.6 JRE from IBM, the required SHA-2 cipher suites must be explicitly enabled. In order to use these suites, the client must also set the SSL context to a value that supports Version 1.2 of the Transport Layer Security (TLS) protocol. For example:

```
MqttConnectOptions mqttConnectOptions = new MqttConnectOptions();
java.util.Properties sslClientProps = new java.util.Properties();
sslClientProps.setProperty("com.ibm.ssl.keyStore", sslKeys.clientKeyStore);
sslClientProps.setProperty("com.ibm.ssl.keyStorePassword", sslKeys.clientStorePassword);
sslClientProps.setProperty("com.ibm.ssl.trustStore", sslKeys.clientKeyStore);
sslClientProps.setProperty("com.ibm.ssl.trustStorePassword", sslKeys.clientStorePassword);
sslClientProps.setProperty("com.ibm.ssl.protocol", "TLSv1.2");
sslClientProps.setProperty("com.ibm.ssl.enabledCipherSuites",
"SSL_RSA_WITH_AES_256_CBC_SHA256" );
mqttConnectOptions.setSSLProperties(sslClientProps);
```

On IBM WebSphere MQ, type the following command into a command window:

- ▶ Linux

```
echo  'DISPLAY  CHSTATUS(SSL*)  CHLTYPE(MQTT)  ALL'  |  runmqsc  MQXR_SAMPLE_QM
echo  'DISPLAY  CHANNEL(SSL*)   CHLTYPE(MQTT)  ALL'  |  runmqsc  MQXR_SAMPLE_QM
```

- **Windows**

```
echo  DISPLAY  CHSTATUS(SSL*)  CHLTYPE(MQTT)  ALL  |  runmqsc  MQXR_SAMPLE_QM
echo  DISPLAY  CHANNEL(SSL*)   CHLTYPE(MQTT)  ALL  |  runmqsc  MQXR_SAMPLE_QM
```

When you request a personal certificate, you specify a key size for the public and private key pair. The key size that is used during the SSL handshake can depend on the size stored in the certificate and on the CipherSpec:

- On **z/OS** z/OS, Windows, UNIX and Linux® systems, when a CipherSpec name includes _EXPORT, the maximum handshake key size is 512 bits. If either of the certificates exchanged during the SSL handshake has a key size greater than 512 bits, a temporary 512-bit key is generated for use during the handshake.
- On Windows, UNIX and Linux systems, when a CipherSpec name includes _EXPORT1024, the handshake key size is 1024 bits.
- Otherwise the handshake key size is the size stored in the certificate.

Configuration reference PDF

From May 2021, the configuration reference information has moved to a separate PDF.

`mq80.refconfig.pdf` is available in the same directory as `mq80.reference.pdf`.

Administration reference PDF

From May 2021, the administration reference information has moved to a separate PDF.

`mq80.refadmin.pdf` is available in the same directory as `mq80.reference.pdf`.

Developing applications reference PDF

From May 2021, the developing applications reference information has moved to a separate PDF.

`mq80.refdev.pdf` is available in the same directory as `mq80.reference.pdf`.

IBM MQ Telemetry Reference

Information about the MQTT format and protocol, the MQXR properties, and the AuthCallback MQXR class.

IBM MQ Telemetry Transport format and protocol

IBM MQ Telemetry Transport (MQTT) is a lightweight publish/subscribe protocol flowing over TCP/IP to connect large numbers of remote sensors and control devices. MQTT is used by specialized applications on small footprint devices that must tolerate low bandwidth and unreliable communication. You can use MQTT client apps from a business partner, or write your own client apps to use the published protocols. You can get sample client apps and supporting libraries from the free download IBM Messaging Telemetry Clients SupportPac, and from the Eclipse Paho project.

IBM MQ Telemetry in IBM MQ supports client apps that use the MQTT protocol. There are currently two specifications of this protocol:

- The MQTT Version 3.1.1 Oasis standard
- The MQTT V3.1 Protocol Specification from `mqtt.org`

The Oasis standard is more recent. The functionality is almost identical to the `mqtt.org` specification.
V 8.0.0.3 The MQTT Version 3.1.1 Oasis standard is supported in IBM MQ Version 8.0.0, Fix Pack 3 and later versions.

If your MQTT client comes from a source other than the IBM Messaging Telemetry Clients SupportPac or the Eclipse Paho project, check the version of the MQTT protocol supported by the client. If your client supports a different level of the MQTT protocol, and does not work correctly with the IBM MQ Telemetry service, a thin conversion layer is required. Check with the source of your client to see if the conversion layer is available as an update to the client you intend to use.

MQXR properties

MQXR property settings are stored in a platform-specific properties file: `mqxr_win.properties` or `mqxr_unix.properties`. You normally configure these properties by using MQSC admin commands or MQ Explorer.

When you start a queue manager for the first time, the template version of the MQXR properties file for your platform is copied from the *mqinstall*`/mqxr/config` directory to the *mqinstall*`/qmgrs/`*qmgr_name*`/mqxr/config` directory.

You do not normally need to edit the MQXR properties file directly, because all properties except one can be configured through MQSC admin commands or MQ Explorer. If you do decide to edit the file directly, stop the queue manager before you make your changes.

The property that you can only set by editing the file directly is **webcontentpath**. If your telemetry client app is a web app, you also need to serve the web app executable JavaScript to the browser. This requirement is explained in The MQTT messaging client for JavaScript(tm) and web apps. You use the **webcontentpath** property to specify the directory from which the web app executable files are served:

- By default, **webcontentpath** is not present in the MQXR properties file. If **webcontentpath** is not present, the MQ telemetry server serves the web app executable files from the following default location: *mqinstall*`/qmgrs/`*qmgr_name*`/mqxr/WebContent/`*your_client_app*
- if **webcontentpath** specifies a path, the MQ telemetry server serves the web app executable files from that location.
- if **webcontentpath** is present and blank, the MQ telemetry server does not serve the web app executable files.

Related reference
"AuthCallback MQXR class" on page 19
`AuthCallback` is the sole class in package `com.ibm.mq.mqxr`. It specifies the interface definition that a telemetry server administrator needs when they write an `AuthCallback` in the MQXR server.

Related information
Telemetry (MQXR) service

AuthCallback MQXR class

`AuthCallback` is the sole class in package `com.ibm.mq.mqxr`. It specifies the interface definition that a telemetry server administrator needs when they write an `AuthCallback` in the MQXR server.

Class AuthCallback

```
java.lang.Object
    |
    └─ com.ibm.mq.mqxr.AuthCallback
```

Implemented interface:

```
javax.security.auth.callback.Callback
```

```
public class AuthCallback
extends java.lang.Object
implements javax.security.auth.callback.Callback
```

Allows a JAAS login module (javax.security.auth.spi.LoginModule) to access WebsphereMQ Server objects.

Methods

getSSLSession

```
public javax.net.ssl.SSLSession getSSLSession()
```

Returns the `javax.net.ssl.SSLSession` associated with the client connection, or null if the client is connected using a plain text connection.

setSSLSession

```
public void setSSLSession(javax.net.ssl.SSLSession sslSession)
```

The `sslSession` parameter is set by the server to be the `sslSession` associated with the client connection, or null if the client is connected using a plain text connection.

Constructor

```
public AuthCallback()
```

Related reference
"MQXR properties" on page 19
MQXR property settings are stored in a platform-specific properties file: `mqxr_win.properties` or `mqxr_unix.properties`. You normally configure these properties by using MQSC admin commands or MQ Explorer.

Related information
Telemetry (MQXR) service
Telemetry channel JAAS configuration
Resolving problem: JAAS login module not called by the telemetry service

Security reference

Use the reference information in this section to help you configure security for IBM MQ.
Related concepts
"The API exit" on page 21
An *API exit* is a program module that monitors or modifies the function of MQI calls. An API exit comprises multiple *API exit functions*, each with its own entry point in the module.

"The API-crossing exit" on page 22
An *API-crossing exit* is a program that monitors or modifies the function of MQI calls issued by CICS applications on z/OS.

"Certificate validation and trust policy design on UNIX, Linux and Windows systems" on page 23
IBM MQ validates SSL or TLS certificates according to two types of policy, basic, and standard. Standard policy checking conforms to RFC 5280.

"Cryptographic hardware" on page 36
On UNIX, Linux and Windows systems, IBM MQ provides support for a variety of cryptographic hardware using the PKCS #11 interface. On IBM i and z/OS, the operating system provides the cryptographic hardware support.

"IBM MQ rules for SSLPEER values" on page 37

The SSLPEER attribute is used to check the Distinguished Name (DN) of the certificate from the peer queue manager or client at the other end of an IBM MQ channel. IBM MQ uses certain rules when comparing these values

Perform this task only if you are migrating from IBM MQ V7.0.1 using the AltGSKit configuration setting to load an alternative GSKit. The alternative GSKit used by IBM MQ V7.0.1 with the AltGSKit setting is separate from the GSKit used by IBM MQ V7.1; changes to each GSKit do not affect the other. This is because IBM MQ V7.1 uses a private local copy of GSKit in its installation directory and does not support the use of an alternative GSKit.

Both ends of an IBM MQ SSL channel must use the same CipherSpec. Mismatches can be detected during the SSL handshake or during channel startup.

There are a number common reasons for authentication failures during the SSL handshake.

Related reference

The API exit

An *API exit* is a program module that monitors or modifies the function of MQI calls. An API exit comprises multiple *API exit functions*, each with its own entry point in the module.

Note: The information in this section does not apply to IBM MQ for z/OS.

There are two categories of exit function:

An exit function that is associated with an MQI call
There are two exit functions in this category for each MQI call and an additional one for an MQGET call with the MQGMO_CONVERT option. The MQCONN and MQCONNX calls share the same exit functions.

For each MQI call, one of the two exit functions is invoked before the queue manager starts to process the call and the other is invoked after the queue manager has completed processing the call. The exit function for an MQGET call with the MQGMO_CONVERT option is invoked during the MQGET call, after the message has been retrieved from the queue by the queue manager but before any data conversion takes place. This allows, for example, a message to be decrypted before data conversion.

An exit function can inspect and modify any of the parameters on an MQI call. On an MQPUT call, for example, an exit function that is invoked before the processing of the call has started can:

- Inspect and modify the contents of the application data in the message being put
- Change the length of the application data in the message
- Modify the contents of the fields in the message descriptor structure, MQMD
- Modify the contents of the fields in the put message options structure, MQPMO

An exit function that is invoked before the processing of an MQI call has started can suppress the call completely. The exit function for an MQGET call with the MQGMO_CONVERT option can suppress data conversion of the message being retrieved.

Initialization and termination exit functions

There are two exit functions in this category, the initialization exit function and the termination exit function.

The initialization exit function is invoked by the queue manager when an application connects to the queue manager. Its primary purpose is to register exit functions and their entry points with the queue manager and perform any initialization processing. You do not have to register all the exit functions, only those that are required for this connection. When the application disconnects from the queue manager, the registrations are removed automatically.

The initialization exit function can also be used to acquire any storage required by the exit and examine the values of any environment variables.

The termination exit function is invoked by the queue manager when an application disconnects from the queue manager. Its purpose is to release any storage used by the exit and perform any required cleanup operations.

An API exit can issue calls to the MQI but, if it does, the API exit is not invoked recursively a second time. The following exit functions, however, are not able to issue MQI calls because the correct environment is not present at the time the exit functions are invoked:

- The initialization exit function
- The exit function for an MQCONN and MQCONNX call that is invoked *before* the queue manager starts to process the call
- The exit function for the MQDISC call that is invoked *after* the queue manager has completed processing the call
- The termination exit function

An API exit can also use other APIs that might be available; for example, it can issue calls to Db2®.

An API exit can be used with an IBM MQ client application, but it is important to note that the exit is invoked at the *server* end of an MQI channel. For more information, see Comparing link level security and application level security.

An API exit is written using the C programming language.

To enable an API exit, you must configure it. On IBM i, Windows, UNIX and Linux systems, you do this by editing the IBM MQ configuration file, mqs.ini, and the queue manager configuration file, qm.ini, for each queue manager.

For a client, modify the `ApiExitLocal` stanza in the mqclient.ini file to identify API exit routines for a queue manager.

You configure an API exit by providing the following information:

- The descriptive name of the API exit.
- The name of the module and its location; for example, the full path name.
- The name of the entry point for the initialization exit function.
- The sequence in which the API exit is invoked relative to other API exits. You can configure more than one API exit for a queue manager.
- Optionally, any data to be passed to the API exit.

For more information about how to configure an API exit, see Configuring API exits.

For information about how to write an API exit, see Using and writing API exits.

z/OS The API-crossing exit

An *API-crossing exit* is a program that monitors or modifies the function of MQI calls issued by CICS applications on z/OS.

Note: The information in this section applies only to CICS applications on z/OS.

The API-crossing exit program is invoked by the CICS adapter and runs in the CICS address space.

The API-crossing exit is invoked for the following MQI calls only:

```
MQBUFMH
MQCB
MQCB_FUNCTION
MQCLOSE
MQCRTMH
MQCTL
```

```
MQDLTMH
MQGET
MQINQ
MQOPEN
MQPUT
MQPUT1
MQSET
MQSTAT
MQSUB
MQSUBRQ
```

For each MQI call, it is invoked once before the processing of the call has started and once after the processing of the call has been completed.

The exit program can determine the name of an MQI call and can inspect and modify any of the parameters on the call. If it is invoked before an MQI call is processed, it can suppress the call completely.

The exit program can use any of the APIs that a CICS task-related user exit can use; for example, the IMS, Db2, and CICS APIs. It can also use any of the MQI calls except MQCONN, MQCONNX, and MQDISC. However, any MQI calls issued by the exit program do not invoke the exit program a second time.

You can write an API-crossing exit in any programming language supported by IBM MQ for z/OS.

Before an API-crossing exit can be used, the exit program load module must be available when the CICS adapter connects to a queue manager. The load module is a CICS program that must be named CSQCAPX and reside in a library in the DFHRPL concatenation sequence. CSQCAPX must be defined in the CICS system definition file (CSD), and the program must be enabled.

An API-crossing exit can be managed using the CICS adapter control panels, CKQC. When CSQCAPX is loaded, a confirmation message is written to the adapter control panels or to the system console. The adapter control panels can also be used to enable or disable the exit program.

For more information about how to write and implement an API-crossing exit, see 'The CICS-IBM MQ Adapter' section in the CICS Transaction Server for z/OS Version 4.1 product documentation at: CICS Transaction Server for z/OS Version 4.1, The CICS-IBM MQ adapter.

Certificate validation and trust policy design on UNIX, Linux and Windows systems

IBM MQ validates SSL or TLS certificates according to two types of policy, basic, and standard. Standard policy checking conforms to RFC 5280.

The information in these topics applies to the following systems:

• IBM MQ for UNIX and Linux systems

• IBM MQ for Windows systems

The following terms are used in this section:

Certificate policy
    Determines which fields in a certificate are understood and processed.

OCSP policy
    Determines which fields in an OCSP request or response are understood and processed.

CRL policy
    Determines which fields in a certificate revocation list are understood and processed.

Path validation policy
    Determines how the certificate, OCSP, and CRL policy types interact with each other to determine whether a certificate chain (a trust point "RootCA" to an end-entry "EE") is valid.

The basic and standard path validation policies are described separately because it reflects the implementation within IBM MQ for UNIX, Linux and Windows systems. However, the standard OCSP and

CRL policies are the same as the basic policies, and the standard certificate policy is an extended version of the basic policy, so these policies are not described separately.

By default, IBM MQ applies basic policy validation first. If basic policy validation fails, IBM MQ applies standard policy (RFC 5280) validation. If basic policy validation succeeds, standard policy validation is not applied. Thus, a validation failure means that both basic and standard policy validation failed, possibly for different reasons. A validation success means that either basic policy validation succeeded and standard policy validation was therefore not applied, or basic policy validation failed and standard policy validation succeeded.

Enforcing strict RFC 5280 compliance

To enforce strict RFC 5280 compliance, use the certificate validation policy configuration setting. This setting allows you to disable the basic policy, so that only the standard RFC 5280 policy is used. For more information about the certificate validation policy configuration setting, see Certificate validation policies in IBM MQ.

The following examples are digital certificates which are accepted by the basic certificate validation policy, but which are rejected by the RFC 5280 compliant standard policy. In order for a digital certificate chain to be trusted, the entire chain must satisfy the configured validation policy.

To view the full details of a digital certificate, use the **runmqakm** command:

```
runmqakm -cert -details -db key.kdb -pw password -label certificate_label
```

A certificate which has trust status enabled in the **runmqakm** output is not necessarily trusted for use in an SSL or TLS handshake. Trust status enabled means that the certificate is eligible to be used as a CA certificate to verify other certificates, if the certificate also satisfies the rules of the certificate validation policy. For more information about the RFC 5280 compliant standard certificate validation policy, see "Standard path validation policy" on page 32.

Example certificate 1 - incorrect key usage
This example shows a certificate where the key usage field does not comply with the standard certificate validation policy rules for a CA certificate. One of the requirements for a certificate to be valid for use as a CA certificate is that the key usage field must indicate that it is permitted to sign other certificates using the keyCertSign flag. A certificate without this flag cannot be used as a CA certificate.

```
Label : root
Key Size : 1024
Version : X509 V3
Serial : 54cb6f740c7ee410
Issuer : CN=Example Root CA,O=Example,C=GB
Subject : CN=Example Root CA,O=Example,C=GB
Not Before : 9 February 2012 17:19:00 GMT
Not After : 1 October 2019 18:19:00 GMT+01:00
Public Key
    30 81 9F 30 0D 06 09 2A 86 48 86 F7 0D 01 01 01
    05 00 03 81 8D 00 30 81 89 02 81 81 00 CC 44 D9
    25 6D 26 1C 9D B9 FF DE B8 AC 44 AB E3 64 80 44
    AF BE E0 00 93 53 92 33 F8 7E BD D7 71 ED 21 52
    24 75 DF D6 EE 3C 54 97 84 29 EA 93 4C 4A D1 19
    5D C1 A0 82 F5 74 E1 AD D9 87 10 D5 6A 2B 6F 90
    04 0F 7E 6E 85 6D 32 99 33 9C D9 BB 57 86 DE 68
    23 C9 F2 6D 53 E3 F5 FF D1 0B E7 23 19 3A F6 70
    6B C8 C7 EB DB 78 8E 8C 9E 55 58 66 B6 31 DB 40
    5F 6A 97 AB 12 D7 E2 3E 2E 79 EE 78 7B 02 03 01
    00 01
Public Key Type : RSA (1.2.840.113549.1.1.1)
Fingerprint : SHA1 :
    EE 68 D4 4F 73 4F F4 21 DE 1A 01 11 5E DE B1 B8
    DF 40 AA D8
Fingerprint : MD5 :
    50 B5 E9 B2 D7 35 05 6A DC 6D 4B 1E B2 F2 DF A4
Fingerprint : SHA256 :
    B4 D7 6E C4 47 26 24 C7 4F 41 C3 83 03 6F 5C C7
    07 11 61 E0 0E 36 59 1F 1C E6 69 39 2D 18 05 D2
Extensions
```

```
        basicConstraints
            ca = true
            pathLen = 1239876
            critical
        key usage: encipherOnly
Signature Algorithm : SHA256WithRSASignature (1.2.840.113549.1.1.11)
Value
    9D AE 54 A9 9D 68 01 68 15 B5 53 9F 96 C9 5B D1
    52 40 DB CB 33 AF FD B9 26 D5 90 3F 1E 0B FC A6
    D9 8C 04 90 EB AA FD A8 7A 3C AB 60 5F 20 4F 0D
    7B 73 41 27 6A 2B BF 8C 99 91 B6 49 96 82 6A 24
    0A E8 B9 A5 AF 69 3D 2C A3 3C C8 12 39 FB 56 58
    4E 2A FE AC AC 10 89 53 B1 8F 0F C0 50 BF 5E 00
    91 64 B4 A1 4C 9A 4E D5 1F 38 7C AD 32 A9 8A E1
    91 16 2C 6D 1E 4A CA 99 8D CC 22 CD BF 90 49 FC
Trust Status : Enabled
```

In this example, the key usage field contains only the encipherOnly flag. The keyCertSign flag is not set, so this certificate is not permitted to sign other certificates. It therefore cannot be used as a CA certificate.

Example certificate 2 - missing basic constraints extension

This example shows a certificate which lacks the basic constraints extension. The basic constraints extension is used to indicate whether this certificate is permitted for use as a CA. It is also used to indicate the maximum length of any certificate chain which can be signed by the certificate. The standard certificate validation policy requires that the certificate has a basic constraints extension with the isCA flag set in order to be used as a CA.

```
Label : root
Key Size : 1024
Version : X509 V3
Serial : 1c7dfea316570bf6
Issuer : CN=Second Example Root CA,O=Example,C=GB
Subject : CN=Second Example Root CA,O=Example,C=GB
Not Before : 9 February 2012 17:18:22 GMT
Not After : 1 October 2019 18:18:22 GMT+01:00
Public Key
    30 81 9F 30 0D 06 09 2A 86 48 86 F7 0D 01 01 01
    05 00 03 81 8D 00 30 81 89 02 81 81 00 B2 70 49
    7C AE 1B A7 B3 06 49 6C 99 19 BC A8 77 BE 86 33
    21 6B C9 26 CC A6 28 52 9F 7B CF 03 A4 37 A7 4D
    6B 06 AA ED 7D 58 E3 70 F3 F7 C1 06 DA E8 27 C6
    3D 1B AC FA EF AA 59 7A 9A AB C1 14 4E AF 13 14
    4B 71 CA 8D FE C3 F5 2F E8 AC AD EF 21 80 6D 12
    89 4A 2A 84 AA 9D E0 4F C1 93 B1 3E 16 E8 3C 75
    39 2A 74 1E 90 CC B1 C3 2B 1D 55 26 76 D2 65 C1
    06 47 2A BF 79 96 42 76 A9 6E 65 88 5F 02 03 01
    00 01
Public Key Type : RSA (1.2.840.113549.1.1.1)
Fingerprint : SHA1 :
    33 9F A1 81 43 F1 43 95 48 A5 66 B4 CD 98 E8 15
    9C B3 CA 90
Fingerprint : MD5 :
    91 EA D9 C0 2C 05 5B E2 CD 0B F6 DD 8A 11 44 23
Fingerprint : SHA256 :
    62 46 35 0B 0E A1 A7 2A D5 74 70 0F AA 47 9A 9C
    6B 80 1B F1 0B 4C 81 05 85 0E 91 11 A4 21 D2 34
Extensions
    key usage: digitalSignature, keyCertSign
Signature Algorithm : SHA256WithRSASignature (1.2.840.113549.1.1.11)
Value
    79 34 BA 5B 6F DC 06 A3 99 24 4E 8A 2B 27 05 47
    0D 4D BE 6A 77 D1 1D 5F 54 82 9D CC F6 92 D4 9A
    AB 4D B6 DD 6E AD 86 C3 6A A3 32 E3 B3 ED E0 62
    4A EB 51 08 AC BE 49 9E 9C D7 FE AE C8 9D 17 16
    68 31 6B F4 BA 74 1E 4F 5F 05 48 9F E7 46 BA DC
    17 7A 60 88 F8 5B DB 3C 51 D4 98 97 28 82 CF 36
    47 DA D2 0F 47 FF 70 EA 45 3A 49 66 E6 E2 F9 67
    2C C8 3E 24 A2 3B EC 76 1F D6 31 2B BD A9 B5 08
Trust Status : Enabled
```

In this example, the certificate lacks the basic constraints field entirely. Therefore this certificate cannot be used as a CA certificate.

Example certificate 3 - intermediate CA with old version of X.509

This example shows an intermediate CA certificate which is at X.509 version 1. The standard certificate validation policy requires that all intermediate CA certificates must be at least X.509 version 3. Root CA certificates are exempt from this requirement as there are still some commonly used version 1 root CA certificates in existence. However, this exemption might change in future.

```
Label : intermediate
Key Size : 1024
Version : X509 V1
Serial : 02
Issuer : CN=Test Root CA,O=Example,C=GB
Subject : CN=Test Intermediate CA,O=Example,C=GB
Not Before : 10 February 2012 17:33:45 GMT
Not After : 11 April 2018 18:33:45 GMT+01:00
Public Key
    30 81 9F 30 0D 06 09 2A 86 48 86 F7 0D 01 01 01
    05 00 03 81 8D 00 30 81 89 02 81 81 00 C0 07 C2
    D0 9F 84 DB 7C 20 8F 51 F9 C2 1A 3F CF E2 D7 F2
    F1 56 F2 A4 8F 8F 06 B7 3B 01 31 DE 7C CC 03 63
    AA D3 2F 1C 50 15 E3 56 80 40 7D FF 75 87 D3 F3
    00 89 9A 26 F5 57 05 FA 4F ED 3B DD 93 FA F2 DF
    38 26 D4 3A 92 51 CC F3 70 27 42 7A 9F AD 51 45
    67 B7 AE 11 AD 4F 2D AB D2 CF 73 E6 F0 45 92 F0
    47 16 66 7E 01 C7 76 A3 7B EC D2 76 3F E5 15 EC
    D7 72 2C FE 14 F5 78 83 AA C4 20 AB F7 02 03 01
    00 01
Public Key Type : RSA (1.2.840.113549.1.1.1)
Fingerprint : SHA1 :
    DE BB 75 4B 14 E1 44 B9 B6 44 33 97 49 D0 82 6D
    81 F2 2F DE
Fingerprint : MD5 :
    72 49 44 42 E2 E6 89 F1 CC 37 C9 F6 B5 8F F3 AE
Fingerprint : SHA256 :
    83 A4 52 AF 49 34 F1 DC 49 E6 95 AE 93 67 80 13
    C2 64 D9 26 22 A0 E8 0A 5A A9 71 EC E8 33 E1 D1
Signature Algorithm : SHA256WithRSASignature (1.2.840.113549.1.1.11)
Value
    40 4A 09 94 A0 18 07 5E 96 D7 A6 52 6B 8D 20 50
    E8 91 F7 7E EA 76 B4 08 DF 76 66 1F FA FF 91 79
    2E E0 66 8B 9F 40 FA 14 13 79 81 DB 31 A5 55 1D
    44 67 41 F4 EA 1A F7 83 4F 21 F4 43 78 4E F8 5E
    6F B2 B8 3A F7 6B B4 F5 C6 F8 EB 4C BF 62 6F 3E
    C7 20 EC 53 B3 40 51 36 C1 0A 4E 73 ED 74 D1 93
    02 C5 FB 61 F7 87 64 A5 94 06 7D 25 7C E3 73 DD
    08 D4 07 D0 A4 3F 77 88 12 59 DB A4 DB 68 8F C1
Trust Status : Enabled
```

In this example, the version field is X.509 V1. This certificate is an X.509 version 1 certificate and therefore cannot be used as an intermediate CA.

Basic and standard certificate policies

The basic and standard certificate policies support the same fields: the standard policy supports additional certificate extensions.

The supported fields for both the basic and standard policies are as follows:

- OuterSigAlgID [1]
- Signature [2]
- Version
- SerialNumber
- InnerSigAlgID [3]
- Issuer
- Validity

---

[1] This field is called *signatureAlgorithm* in RFC 5280.
[2] This field is called *signatureValue* in RFC 5280.
[3] This field is called *signature* in RFC 5280.

- SubjectName
- SubjectPublicKeyInfo
- IssuerUniqueID
- SubjectUniqueID

The supported extensions for the basic policy are as follows. Where an entry is marked as "not supported", IBM MQ does not attempt to process extensions containing a field of that specific type, but does process other types of the same extension.

- AuthorityKeyID
- AuthorityInfoAccess
- SubjectKeyID
- IssuerAltName
- SubjectAltName
- KeyUsage
- BasicConstraints
- PrivateKeyUsage
- CRLDistributionPoints
  - DistributionPoint
    - DistributionPointName (X.500 Name and LDAP Format URI only)
    - NameRelativeToCRLIssuer (not supported)
    - Reasons (ignored)
    - CRLIssuer fields (not supported)

The supported extensions for the standard policy are all those listed for the basic policy and those in the following list. Where an entry is marked as "not supported", IBM MQ does not attempt to process extensions containing a field of that specific type, but does process other types of the same extension.

- NameConstraints
- ExtendedKeyUsage
- CertificatePolicies
  - PolicyInformation
    - PolicyIdentifier
    - PolicyQualifiers (not supported)
- PolicyMappings
- PolicyConstraints

Basic and standard OCSP policies

The basic and standard OCSP policies support the same fields.

The supported fields for a request are as follows. Where an entry is marked as "not supported", IBM MQ does not attempt to process a request containing a field of that specific type, but does process other requests containing the same higher-level field.

- Signature (Optional)
- Version (Version 1 Only)
- RequesterName (Optional)
- RequestList (single request only)
  - CertID [4]
  - singleRequestExtensions (not supported)

- RequestExtensions
  - Nonce (if enabled)

The supported fields for a response are as follows:

- ResponseStatus
- Response
  - responseType (id-pkix-ocsp-basic)
  - BasicOCSPResponse
    - Signature
    - Certs
      - Extensions
      - extendedKeyUsage
        - id-kp-OCSPSigning
      - id-pkix-ocsp-nocheck
    - ResponseData
      - Version (Version 1 Only)
      - ResponderID (by name or by hash)
      - ProducedAt (ignored)
      - Responses (multiple responses supported)
        - SingleResponse
          - certID
          - certStatus
            - RevokedInfo (ignored)
          - thisUpdate (ignored)
          - nextUpdate
          - singleExtensions (ignored)
      - responseExtensions
        - Nonce (if enabled)

Basic and standard CRL policies

The basic and standard CRL policies support the same fields and extensions.

The supported fields for these policies are as follows:

- OuterSigAlgID [5]
- Signature [6]
- Version
- InnerSigAlgID [7]
- Issuer
- ThisUpdate
- NextUpdate

---

[4] This field is called reqCert in RFC 2560
[5] This field is called *signatureAlgorithm* in RFC 5280.
[6] This field is called *signatureValue* in RFC 5280.
[7] This field is called *signature* in RFC 5280.

- RevokedCertificate
  - UserCertificate
  - RevocationDate

There are no supported CRLEntry extensions.

The supported CRL extensions for these policies are as follows. Where an entry is marked as "not supported", IBM MQ does not attempt to process extensions containing a field of that specific type, but does process other types of the same extension.

- AuthorityKeyID
- IssuerAltName
- CRLNumber
- IssuingDistributionPoint
  - DistributionPoint
  - DistributionPointName
    - FullName (X.500 Name and LDAP Format URI only)
    - NameRelativeToCRLIssuer (not supported)
  - Reasons (ignored)
  - CRLIssuer
  - OnlyContainsUserCerts (not supported)
  - OnlyContainsCACerts (not supported)
  - OnlySomeReasons (not supported)
  - IndirectCRL [8] (rejected)

► ULW Basic path validation policy

The basic path validation policy determines how the certificate, OCSP, and CRL policy types interact with each other to determine if a certificate chain is valid.

The validation of a chain is performed in the following manner (but not necessarily in the following order):

1. Ensure that the name of the certificate's issuer is equal to the subject name in the previous certificate, and that there is not an empty issuer name in this certificate or the previous certificate subject name. If no previous certificate exists in the path and this is the first certificate in the chain, ensure that the issuer and subject name are identical and that the trust status is set for the certificate [9] .

   Note: IBM MQ for UNIX, Linux and Windows systems will fail path validation in situations where the previous certificate in a path has the same subject name as the current certificate.

2. Ensure that the signature algorithm used to actually sign the certificate matches the signature algorithm indicated within the certificate, by ensuring that the issuer signature algorithm identifier in the certificate matches the algorithm identifier in the signature data.

3. Ensure that the certificate was signed by the issuer, using the subject public key from the previous certificate in the path to verify the signature on the certificate. If no previous certificate exists and this is the first certificate, use the subject public key of the certificate to verify the signature on it.

---

[8] IndirectCRL extensions will result in CRL validation failing. IndirectCRL extensions must not be used because they cause identified certificates to not be rejected.

[9] Trust status is an administrative setting in the key database file. You can access and alter the trust status of a particular signer certificate in using **strmqikm**. Select the required certificate from the signer list and click **View/Edit**. The **Set the certificate as a trusted root** check box on the resulting panel indicates the trust status. You can also set Trust status using **runmqckm** with the `-trust` flag on the **-cert -modify** command. For further information about this command, see Managing keys and certificates.

IBM MQ supports DSA and RSA signature algorithms; however it does not support DSA Parameter Inheritance.

4. Ensure that the certificate is a known X509 version, unique IDs are not present for version 1 certificates, and extensions are not present for version 1 and version 2 certificates.

5. Ensure that the certificate has not expired, or not been activated yet, and that its validity period is good [10].

6. Ensure that there are no unknown critical extensions or any duplicate extensions.

7. Ensure that the certificate has not been revoked. Here, the following operations apply:

   a. If the OCSP connection is enabled and a Responder Address is configured or the Certificate has a valid AuthorityInfoAccess extension specifying a HTTP format GENERALNAME_uniformResourceID check revocation status with OCSP.

   b. If revocation status from "7.a" on page 30 above is undetermined the CRLDistributionPoints extension is checked for a list of X.500 distinguished name GENERALNAME_directoryname and URI GENERALNAME_uniformResourceID. Only LDAP, HTTP and FILE format URIs are supported. If the extension is not present, or use of the CRLDistributionPoints extension results in undetermined status and the extension is not Critical, the certificate's issuer's name is used to query revocation status. A CRL database (LDAP) is then queried for CRLs. If the certificate is not the last certificate, or if the last certificate has the basic constraint extension with the "isCA" flag turned on, the database is queried for ARLs and CRLs instead. If CRL checking is enabled, and no CRL database can be queried, the certificate is treated as revoked. Currently, the X500 directory name form and the LDAP/HTTP/FILE URI forms are the only supported name forms used to look up CRLs and ARLs [11].

   Note: RelativeDistinguishedNames are not supported.

   c. If revocation status from both "7.a" on page 30 and "7.b" on page 30 is undetermined, IBM MQ checks the *OCSPAuthentication* configuration setting to decide whether to allow the connection. [12]

8. If the issuerAltName extension is marked critical, ensure that the name forms are recognized. The following general name forms are currently recognized:

   • rfc822
   • DNS
   • directory
   • URI
   • IPAddress(v4/v6)

9. If the subjectAltName extension is marked critical, ensure that the name forms are recognized. The following general name forms are currently recognized:

   • rfc822
   • DNS
   • directory
   • URI
   • IPAddress(v4/v6)

10. If the KeyUsage extension is critical on a non-EE certificate, ensure that the keyCertSign flag is on, and ensure that if the BasicConstraints extension is present, the "isCA" flag is true.

11. If the BasicConstraints extension is present, the following checks are made:

---

[10] There are no checks to ensure the subject's validity is within bounds of the issuer's validity. This is not required, and it has been shown that certificates from some CAs do not pass such a check.

[11] After they are retrieved from the database, ARLs are evaluated in exactly the same fashion as CRLs. Many CAs do not issue ARLs. However, IBM MQ will look for ARLs and CRLs if checking a CA certificate for revocation status.

[12] If *OCSPAuthentication* is set to WARN, IBM MQ logs the unknown revocation status and allows the connection to continue.

- If the "isCA" flag is false, ensure the certificate is the last certificate in the chain and that the pathLength field is not present.
- If the "isCA" flag is true and the certificate is NOT the last certificate in the chain, ensure that the number of certificates until the last certificate in the chain is not greater than the pathLength field.

12. The AuthorityKeyID extension is not used for path validation, but is used when building the certificate chain.

13. The SubjectKeyID extension is not used for path validation, but is used when building the certificate chain.

14. The PrivateKeyUsagePeriod extension is ignored by the validation engine, because it cannot determine when the CA actually signed the certificate. The extension is always non-critical and therefore can be safely ignored.

An OCSP Response is also validated to ensure that the response itself is valid. Validation is performed in the following manner (but not necessarily the following order):

1. Ensure that response status is `Successful` and the response type is PKIX_AD_OCSP_basic.r

2. Ensure that response version data is present and the response is the correct version (Version 1)

3. Ensure that the response is correctly signed. The signature will be rejected if the signer does not meet at least one of the following criteria:

   - The signer matches a local configuration of OCSP signing authority [13] for the certificate.
   - The signer is using the CA key for which the public key is contained in the CA certificate, that is, the CA itself is directly signing the response.
   - The signer is a direct sub-ordinate of the CA that signed the certificate for which revocation information is being checked and is authorized by the CA by including the value of id-ad-ocspSigning in an ExtendedKeyUsage extension.

   Note: Revocation checking of the response signer certificate is not performed if the id-pkix-ocsp-nocheck extension is present.

4. Ensure that response hash algorithm, serialNumber, issuerNameHash, and issuerKeyHash match those of the request.

5. Ensure that the response has not expired, that is, that the nextUpdate time is greater than the current time. [14]

6. Ensure that the certificate has valid revocation status.

The validation of a CRL is also performed to ensure that the CRL itself is valid, and is performed in the following manner (but not necessarily the following order):

1. Ensure that the signature algorithm used to actually sign the CRL matches the signature algorithm indicated within the CRL, by ensuring that the issuer signature algorithm identifier in the CRL matches the algorithm identifier in the signature data.

2. Ensure that the CRL was signed by the issuer of certificate in question, verifying that the CRL has been signed with the key of the certificate issuer.

3. Ensure that the CRL has not expired [15], or not been activated yet, and that its validity period is good.

4. Ensure that if the version field is present, it is version 2. Otherwise the CRL is version 1 and must not have any extensions. However, IBM MQ for UNIX, Linux and Windows systems only verifies that no critical extensions are present for a version 1 CRL.

---

[13] This is a Certificate in the KeyStore a user has installed and that has Trust Status set.

[14] If no current OCSP responses are returned from the responder, IBM MQ will attempt to use out of date responses in determining the revocation status of a Certificate. IBM MQ attempts to use out of date Responses so that security will not be adversely reduced.

[15] If no current CRLs are found, IBM MQ for UNIX, Linux and Windows systems will attempt to use out of date CRLs to determine the revocation status of a Certificate. It is not clearly specified in RFC 5280 what action to take in the event of no current CRLs. IBM MQ for UNIX, Linux and Windows systems attempt to use out of date CRLs so that security will not be adversely reduced.

5. Ensure that the certificate in question is on the revokedCertificates field list and that the revocation date is not in the future.

6. Ensure that there are no duplicate extensions.

7. If unknown critical extensions, including critical entry extensions, are detected in the CRL, this causes identified certificates to be treated as revoked [16] (provided the CRL passes all other checks).

8. If the authorityKeyID extension in the CRL and the subjectKeyID in the CA certificate are present and if the keyIdentifier field is present within the authorityKeyID of the CRL, match it with the CACertificate's subjectKeyID.

9. If the issuerAltName extension is marked critical, ensure that the name forms are recognized. The following general name forms are currently recognized:

   - rfc822
   - DNS
   - directory
   - URI
   - IPAddress(v4/v6)

10. If the issuingDistributionPoint extension is present in the CRL, process as follows:

    - If the issuingDistributionPoint specifies an InDirectCRL then fail the CRL validation.
    - If the issuingDistributionPoint indicates that a CRLDistributionPoint is present but no DistributionPointName is found, fail the CRL validation
    - If the issuingDistributionPoint indicates that a CRLDistributionPoint is present and specifies a DistributionPointName ensure that it is a GeneralName or LDAP format URI that matches the name given by the certificate's CRLDistributionPoint or the certificate's issuer's name. If the DistributionPointName is not a GeneralName then the CRL validation will fail.

      Note: RelativeDistinguishedNames are not supported and will fail CRL validation if encountered.

▶ ULW Standard path validation policy

The standard path validation policy determines how the certificate, OCSP, and CRL policy types interact with each other to determine if a certificate chain is valid. Standard policy checking conforms to RFC 5280.

Path validation uses the following concepts:

- A certification path of length n, where the trust point or root certificate is certificate 1, and the EE is n.
- A set of initial policy identifiers (each comprising a sequence of policy element identifiers), that identifies one or more certificate policies, any one of which is acceptable for the purposes of certification path processing, or the special value "any-policy". Currently this is always set to "any-policy".

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[16] ITU X.509 and RFC 5280 are in conflict in this case because the RFC mandates that CRLs with unknown critical extensions must fail validation. However, ITU X.509 requires that identified certificates must still be treated as revoked provided the CRL passes all other checks. IBM MQ for UNIX, Linux and Windows systems adopt the ITU X.509 guidance so that security will not be adversely reduced.

A potential scenario exists where the CA that issues a CRL might set an unknown critical extension to indicate that even though all other validation checks are successful, a certificate which is identified must not be considered revoked and thus not rejected by the application. In this scenario, following X.509, IBM MQ for UNIX, Linux and Windows systems will function in a fail-secure mode of operation. That is, they might reject certificates that the CA did not intend to be rejected and therefore might deny service to some valid users. A fail-insecure mode ignores a CRL because it has an unknown critical extension and therefore certificates that the CA intended to be revoked are still accepted. The administrator of the system should then query this behavior with the issuing CA.

Note: IBM MQ for UNIX, Linux and Windows systems only supports policy identifiers that are created by IBM MQ for UNIX, Linux and Windows systems.

- Acceptable policy set: a set of certificate policy identifiers comprising the policy or policies recognized by the public key user, together with policies deemed equivalent through policy mapping. The initial value of the acceptable policy set is the special value "any-policy".
- Constrained subtrees: a set of root names defining a set of subtrees within which all subject names in subsequent certificates in the certification path can fall. The initial value is "unbounded".
- Excluded subtrees: a set of root names defining a set of subtrees within which no subject name in subsequent certificates in the certification path can fall. The initial value is "empty".
- Explicit policy: an integer which indicates if an explicit policy identifier is required. The integer indicates the first certificate in the path where this requirement is imposed. When set, this variable can be decreased, but cannot be increased. (That is, if a certificate in the path requires explicit policy identifiers, a later certificate cannot remove this requirement.) The initial value is $n+1$.
- Policy mapping: an integer which indicates if policy mapping is permitted. The integer indicates the last certificate on which policy mapping may be applied. When set, this variable can be decreased, but cannot be increased. (That is, if a certificate in the path specifies policy mapping is not permitted, it cannot be overridden by a later certificate.) The initial value is $n+1$.

The validation of a chain is performed in the following manner (but not necessarily the following order):

1. The information in the following paragraph is consistent with the basic path validation policy described in "Basic path validation policy" on page 29:

   Ensure that the name of the certificate's issuer is equal to the subject name in the previous certificate, and that there is not an empty issuer name in this certificate or the previous certificate subject name. If no previous certificate exists in the path and this is the first certificate in the chain, ensure that the issuer and subject name are identical and that the trust status is set for the certificate. [17]

   If the certificate does not have a subject name, the subjectAltName extension must be present and critical.

2. The information in the following paragraph is consistent with the basic path validation policy described in "Basic path validation policy" on page 29:

   Ensure that the signature algorithm used to actually sign the certificate matches the signature algorithm indicated within the certificate, by ensuring that the issuer signature algorithm identifier in the certificate matches the algorithm identifier in the signature data.

   If both the certificate's issuersUniqueID and the issuer's subjectUniqueID are present, ensure they match.

3. The following information is consistent with the basic path validation policy described in "Basic path validation policy" on page 29:

   Ensure that the certificate was signed by the issuer, using the subject public key from the previous certificate in the path to verify the signature on the certificate. If no previous certificate exists and this is the first certificate, use the subject public key of the certificate to verify the signature on it.

4. The following information is consistent with the basic path validation policy described in "Basic path validation policy" on page 29:

   Ensure that the certificate is a known X509 version, unique IDs are not present for version 1 certificates and extensions are not present for version 1 and version 2 certificates.

5. The following information is consistent with the basic path validation policy described in "Basic path validation policy" on page 29:

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[17] Trust status is an administrative setting in the key database file. You can access and alter the trust status of a particular signer certificate in **strmqikm**. Select the required certificate from the signer list and click **View/Edit**. The **Set the certificate as a trusted root** check box on the resulting panel indicates the trust status. You can also set Trust status using **runmqckm** with the -trust flag on the **-cert -modify** command. For further information about this command, see Managing keys and certificates.

Ensure that the certificate has not expired, or not been activated yet, and that its validity period is good [18]

6. The following information is consistent with the basic path validation policy described in "Basic path validation policy" on page 29:

Ensure that there are no unknown critical extensions, nor any duplicate extensions.

7. The following information is consistent with the basic path validation policy described in "Basic path validation policy" on page 29:

Ensure that the certificate has not been revoked. Here, the following operations apply:

a. If the OCSP connection is enabled and a Responder Address is configured or the Certificate has a valid AuthorityInfoAccess extension specifying an HTTP format GENERALNAME_uniformResourceID check revocation status with OCSP.

   i) IBM MQ for UNIX and Windows systems allows the OCSP Request to be optionally signed for preconfigured responders but this has otherwise no impact on OCSP Response processing.

b. If revocation status from 7a is undetermined the CRLDistributionPoints extension is checked for a list of X.500 distinguished name GENERALNAME_directoryname and URI GENERALNAME_uniformResourceID. If the extension is not present, the certificate's issuer's name is used. A CRL database (LDAP) is then queried for CRLs. If the certificate is not the last certificate, or if the last certificate has the basic constraint extension with the "isCA" flag turned on, the database is queried for ARL's and CRL's instead. If CRL checking is enabled, and no CRL database can be queried, the certificate is treated as revoked. Currently, the X500 directory name form and the LDAP/HTTP/FILE URI forms are the only supported name forms used to look up CRLs and ARLs15.

   Note: RelativeDistinguishedNames are not supported.

8. The following information is consistent with the basic path validation policy described in "Basic path validation policy" on page 29:

If the subjectAltName extension is marked critical, ensure that the name forms are recognized. The following general name forms are currently recognized:

- rfc822
- DNS
- directory
- URI
- IPAddress(v4/v6)

9. Ensure that the subject name and subjectAltName extension (critical or noncritical) is consistent with the constrained and excluded subtrees state variables.

10. If the EmailAddress OID is present in the subject name field as an IA5 string, and there is no subjectAltName extension, the EmailAddress must be consistent with the constrained and excluded subtrees state variable.

11. Ensure that policy information is consistent with the initial policy set :

a. If the explicit policy state variable is less than or equal to the current certificate's numeric sequence value, a policy identifier in the certificate shall be in the initial policy set.

b. If the policy mapping variable is less than or equal to the current certificate's numeric sequence value, the policy identifier cannot be mapped.

12. Ensure that policy information is consistent with the acceptable policy set:

a. If the certificate policies extension is marked critical [19] , the intersection of the policies extension and the acceptable policy set is non-null.

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[18] There are no checks to ensure the subject's validity is within bounds of the issuer's validity. This is not required, and certificates from some CAs have been shown to not pass such a check.

[19] This is maintained as a legacy requirement from RFC2459 (6.1 (e)(1))

b. The acceptable policy set is assigned the resulting intersection as its new value.

13. Ensure that the intersection of the acceptable policy set and the initial policy set is non-null. If the special Policy of anyPolicy is present then allow it only if it has not been inhibited by the inhibitAnyPolicy extension at this chain position.

14. If an inhibitAnyPolicy extension is present ensure that it is marked Critical and, if so, set the inhibitAnyPolicy state and chain position to the value of the integer value of the extension provided it is not greater than the current value. This is the number of certificates to allow with an anyPolicy Policy before disallowing the anyPolicy Policy.

15. The following steps are performed for all certificates except the last one:

    a. If the issuerAltName extension is marked critical, ensure that the name forms are recognized. The following general name forms are currently recognized:

      - rfc822
      - DNS
      - directory
      - URI
      - IPAddress(v4/v6)

    b. i) If the BasicConstraints extension is not present, the certificate is only valid as an EE certificate.

      ii) If the BasicConstraints extension is present, ensure that the "isCA" flag is true. Note that "isCA" is always checked to ensure it is true to be as part of the chain building itself, however this specific test is still made. If the pathLength field is present, ensure the number of certificates until the last certificate is not greater than the pathLength field.

    c. If the KeyUsage extension is critical, ensure that the keyCertSign flag is on, and ensure that if the BasicConstraints extension is present, that the "isCA" flag is true [20] .

    d. If a policy constraints extension is included in the certificate, modify the explicit policy and policy mapping state variables as follows:

      - i. If requireExplicitPolicy is present and has value r, the explicit policy state variable is set to the minimum of its current value and the sum of r and i (the current certificate in the sequence).
      - ii. If inhibitPolicyMapping is present and has value q, the policy mapping state variable is set to the minimum of its current value and the sum of q and i (the current certificate in the sequence).

    e. If the policyMappings extension is present (see 12(b)), ensure that it is not critical, and if policy mapping is allowed, these mappings are used to map between this certificate's policies and its signee's policies.

    f. If the nameConstraints extension is present , ensure that it is critical, and that the permitted and excluded subtrees adhere to the following rules before updating the chain's subtree's state in accordance with the algorithm described in RFC 5280 section 6.1.4 part (g):

      i) The minimum field is set to zero.

      ii) The maximum field is not present.

      iii) The base field name forms are recognized. The following general name forms are currently recognized:

        - rfc822
        - DNS
        - directory
        - URI
        - IPAddress(v4/v6)

16. The ExtendedKeyUsage extension is not checked by IBM MQ.

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[20] This check is in fact redundant because of step (b), but the check is still made.

17. The following information is consistent with the basic path validation policy described in "Basic path validation policy" on page 29:

   The AuthorityKeyID extension is not used for path validation, but is used when building the certificate chain.

18. The following information is consistent with the basic path validation policy described in "Basic path validation policy" on page 29:

   The SubjectKeyID extension is not used for path validation, but is used when building the certificate chain.

19. The following information is consistent with the basic path validation policy described in "Basic path validation policy" on page 29:

   The PrivateKeyUsagePeriod extension is ignored by the validation engine, because it cannot determine when the CA actually signed the certificate. The extension is always non-critical and therefore can be safely ignored.

Cryptographic hardware

On UNIX, Linux and Windows systems, IBM MQ provides support for a variety of cryptographic hardware using the PKCS #11 interface. On IBM i and z/OS, the operating system provides the cryptographic hardware support.

For a list of currently supported cryptography cards, see Cryptography Card List for IBM MQ.

On all platforms, cryptographic hardware is used at the SSL handshaking stage and at secret key reset.

On IBM i, when you use DCM to create or renew certificates, you can choose to store the key directly in the coprocessor or to use the coprocessor master key to encrypt the private key and store it in a special keystore file.

On z/OS, when you use RACF® to create certificates, you can choose to store the key using ICSF (Integrated Cryptographic Service Facility) to obtain improved performance and more secure key storage. During the SSL handshake, and secret key negotiations, a crypto express card, (if available) is used to do RSA operations. After the handshake completes and data begins to flow, data is decrypted in the CPACF and the crypto express card is not used.

On UNIX, Linux and Windows systems, IBM MQ support is also provided for SSL cryptographic hardware symmetric cipher operations. When using SSL cryptographic hardware symmetric cipher operations, data sent across an SSL or TLS connection is encrypted/decrypted by the cryptographic hardware product.

On the queue manager, this is switched on by setting the SSLCryptoHardware queue manager attribute appropriately (see ALTER QMGR and Change Queue Manager). On the Websphere MQ MQI client, equivalent variables are provided (see SSL stanza of the client configuration file). The default setting is off.

If this attribute is switched on, IBM MQ attempts to use symmetric cipher operations whether the cryptographic hardware product supports them for the encryption algorithm specified in the current CipherSpec or not. If the cryptographic hardware product does not provide this support, IBM MQ performs the encryption and decryption of data itself, and no error is reported. If the cryptographic hardware product supports symmetric cipher operations for the encryption algorithm specified in the current CipherSpec, this function is activated and the cryptographic hardware product performs the encryption and decryption of the data sent.

In a situation of low processor usage it is often quicker to perform the encryption/decryption in software, rather than copying the data onto the card, encrypting/decrypting it, and copying it back to the SSL protocol software. Hardware symmetric cipher operations become more useful when the processor usage is high.

On z/OS with cryptographic hardware, support is provided for symmetric cipher operations. This means that the user's data is encrypted and decrypted by the hardware if the hardware has this capability for the CipherSpec chosen, and is configured to support data encryption and decryption.

On IBM i, cryptographic hardware is not used for encryption and decryption of the user's data, even if the hardware has the capability of performing such encryption for the encryption algorithm specified in the current CipherSpec.

IBM MQ rules for SSLPEER values

The SSLPEER attribute is used to check the Distinguished Name (DN) of the certificate from the peer queue manager or client at the other end of an IBM MQ channel. IBM MQ uses certain rules when comparing these values

⚠️ **Attention:** The only peer values allowed for use in an SSLPEER filter are those shown in the table in Distinguished Names.

When SSLPEER values are compared with DNs, the rules for specifying and matching attribute values are as follows:

1. You can use either a comma or a semicolon as a separator.
2. Spaces before or after the separator are ignored. For example:

   ```
   CN=John Smith, O=IBM ,OU=Test , C=GB
   ```

3. The values of attribute types SERIALNUMBER, MAIL, E, UID OR USERID, CN, T, OU, DC, O, STREET, L, ST, SP, S, PC, C, UNSTRUCTUREDNAME, UNSTRUCTUREDADDRESS, DNQ are text strings that typically include only the following:

   - Uppercase and lowercase alphabetic characters A through Z and a through z
   - Numeric characters 0 through 9
   - The space character
   - Characters , . ; ' " ( ) / -

   To avoid conversion problems between different platforms, do not use other characters in an attribute value. The attribute types, for example CN, must be in uppercase characters.

4. Strings containing the same alphabetic characters match irrespective of case.
5. Spaces are not allowed between the attribute type and the = character.
6. Optionally, you can enclose attribute values in double quotation marks, for example CN="John Smith". The quotation marks are discarded when matching values.
7. Spaces at either end of the string are ignored unless the string is enclosed in double quotation marks.
8. The comma and semicolon attribute separator characters are considered to be part of the string when enclosed in double quotation marks, or when a backslash escape character (\) precedes them.
9. The names of attribute types, for example CN or OU, are considered to be part of the string when enclosed in double quotation marks.
10. Any of the attribute types ST, SP, and S can be used for the State or Province name.
11. Any attribute value can have an asterisk (*) as a pattern-matching character at the beginning, the end, or in both places. The asterisk character substitutes for any number of characters at the beginning or end of the string to be matched. This character enables your SSLPEER value specification to match a range of Distinguished Names. For example, OU=IBM* matches every Organizational Unit beginning with IBM, such as IBM Corporation.

    The asterisk character can also be a valid character in a Distinguished Name. To obtain an exact match with an asterisk at the beginning or end of the string, the backslash escape character (\ ) must precede the asterisk: *. Asterisks in the middle of the string are considered to be part of the string and do not require the backslash escape character.

12. The DN can contain multiple OU attributes and multiple DC attributes.
13. When multiple OU attributes are specified, all must exist and be in descending hierarchical order. For an example, see DEFINE CHANNEL.

14. A digital certificate Subject DN can additionally contain multiple attributes of the same type other than OU or DC, but only if the SSLPEER value does not filter on the repeated attribute type. For example, consider a certificate with the following Subject DN:

```
CN=First, CN=Second, O=IBM, C=US
```

An SSLPEER value of O=IBM, C=US does not filter on CN, so matches this certificate and allows the connection. An SSLPEER value of CN=First, O=IBM, C=US fails to match this certificate because the certificate contains multiple CN attributes. You cannot match multiple CN values.

Related information
Distinguished Names
Channel authentication records
Mapping an SSL or TLS Distinguished Name to an MCAUSER user ID

GSKit: Digital certificate signature algorithms compliant with FIPS 140-2

The list of digital certificate signature algorithms in GSKit that are compliant with FIPS 140-2

- RSA with SHA-1
- RSA with SHA-224
- RSA with SHA-256
- RSA with SHA-384
- RSA with SHA-512
- DSA with SHA-1
- ECDSA with SHA-1
- ECDSA with SHA-224
- ECDSA with SHA-256
- ECDSA with SHA-384
- ECDSA with SHA-512
- Curve P-192
- Curve P-224
- Curve P-256
- Curve P-384
- Curve P-521
- Curve K-163
- Curve K-233
- Curve K-283
- Curve K-409
- Curve K-571
- Curve B-163
- Curve B-233
- Curve B-283
- Curve B-409
- Curve B-571

Related information
Digital certificates and CipherSpec compatibility in IBM MQ

GSKit return codes used in AMS messages

This topic describes the IBM Global Security Kit (GSKit) return codes that appear in some Advanced Message Security (AMS) messages.

If you receive a numeric return code generated by GSKit, refer to the following table to determine the message code or the explanation.

Table 1. GSKit error messages sorted by decimal return code		
Decimal Return Code	**Message Code**	**Explanation**
0	GSS_S_MINOR_OK	OK. There is not an error.
0	GSS_S_MINOR_SUCCESS	OK. There is not an error
1	GSS_S_MINOR_MEMORY_ALLOCATION_FAILURE	A general purpose memory allocation failure has occurred.
1	GSS_S_MINOR_INSUFFICIENT_STORAGE	A general purpose memory allocation failure has occurred.
2	GSS_S_MINOR_NOT_MECHANISM_NAME	The name is not a mechanism name.
3	GSS_S_MINOR_INVALID_NAME	The provided name is invalid.
4	GSS_S_MINOR_GSK_ERROR	GSKit has returned an error.
5	GSS_S_MINOR_NO_MORE_NAME	There are no more names to parse from the name object.
6	GSS_S_MINOR_MEMBER_NOT_FOUND	An object was referenced from a set, but the requested object could not be found.
7	GSS_S_MINOR_BAD_QUALITY_OF_PROTECTION_ ALGORITHM	The Quality of Protection algorithm is bad.
8	GSS_S_MINOR_BAD_QUALITY_OF_SIGNING_ ALGORITHM	The Quality of Signing algorithm is bad.
9	GSS_S_MINOR_BAD_DIGEST_ENCRYPTION_ ALGORITHM	The digest encryption algorithm is bad.
10	GSS_S_MINOR_BAD_INPUT	One or more required input parameters is NULL.
11	GSS_S_MINOR_HANDLE_INVALID	The object handle is invalid.
12	GSS_S_MINOR_NO_PRIVKEY_IN_KEYRING	There is no entry with a private key in the database.
12	GSS_S_MINOR_NO_PRIVKEY_IN_DB	There is no entry with a private key in the database.
13	GSS_S_MINOR_BAD_KEYRING_TYPE	The database entry type is bad.

Decimal Return Code	Message Code	Explanation
14	GSS_S_MINOR_KEYRING_ACCESS_EXCEPTION	An exception in accessing the database has occurred. Additional information: ensure all GSKit libraries can be accessed and are not corrupted. Additionally, on HP-UX, ensure the SHLIB_PATH is correctly enabled for the program.
15	GSS_S_MINOR_API_NOT_SUPPORTED	The Application Interface (API) is not supported.
16	GSS_S_MINOR_CREDENTIAL_STILL_EXISTS	The credential still exists.
17	GSS_S_MINOR_ENV_STILL_EXISTS	The environment still exists.
18	GSS_S_MINOR_EXPIRED_CREDENTIAL	The credential has expired.
19	GSS_S_MINOR_NO_SIGNER	No signer is available for the specified credential.
20	GSS_S_MINOR_PIDU_HAD_INVALID_CONTENT_TYPE	The protected independent data unit (PIDU) has an invalid content type.
21	GSS_S_MINOR_PIDU_HAD_INVALID_CONTENT_ENCRYPTION_ALGORITHM	The protected independent data unit (PIDU) has an invalid content encryption algorithm.
22	GSS_S_MINOR_BLOB_ALREADY_EXISTS	The blob already exists.
23	GSS_S_MINOR_INVALID_MECH	A mechanism-type object identifier is syntactically invalid.
24	GSS_S_MINOR_MECH_NOT_SUPPORTED	The indicated mechanism type is not supported in this implementation.
25	GSS_S_MINOR_STATIC_OID	There is an attempt to free an object identifier (OID) which is static and cannot be freed.
26	GSS_S_MINOR_PIDU_INVALID_SESSION_KEY	The protected independent data unit (PIDU) has a session key that cannot be used to decrypt the data.
27	GSS_S_MINOR_PIDU_RECIPIENT_INFO_INVALID	The protected independent data unit (PIDU) refers to a certificate that cannot be used to decrypt the session key.
28	GSS_S_MINOR_PIDU_HAS_UNSUPPORTED_DIGEST_ALGORITHM	The protected independent data unit (PIDU) has an unsupported digest algorithm.
29	GSS_S_MINOR_PIDU_HAS_UNSUPPORTED_DIGEST_ENCRYPTION	The protected independent data unit (PIDU) has an unsupported digest encryption algorithm.

Table 1. GSKit error messages sorted by decimal return code (continued)

Decimal Return Code	Message Code	Explanation
		Table 1. GSKit error messages sorted by decimal return code (continued)
30	GSS_S_MINOR_SIGNING_NOT_ALLOWED_BY_ ENV	The environment is not set up to do a signing operation.

Additional information: the key usage bits in the certificate might not allow the specified operation. |
| 31 | GSS_S_MINOR_ENCRYPTION_NOT_ALLOWED_ BY_ ENV | The environment is not set up to do an encryption operation.

Additional information: the key usage bits in the certificate might not allow the specified operation. |
32	GSS_S_MINOR_NO_VALID_TARGET_NAMES_IN _ DATABASE	None of the specified names were found in the database.
33	GSS_S_MINOR_NO_VALID_SIGNERS	No signers could be validated while unprotecting a signed protected independent data unit (PIDU).
34	GSS_S_MINOR_MULTIPLE_SIGNERS	There are multiple signers in the signed protected independent data unit (PIDU); however, only the first one is being returned.
35	GSS_S_MINOR_BAD_SEQUENCE	The multi-buffer has been called out of order (For example, end_unprotect is called after start_protect).
36	GSS_S_MINOR_INVALID_NAMETYPE	The nametype argument provided is invalid.
37	GSS_S_MINOR_FAILURE	A general internal failure has occurred.
38	GSS_S_MINOR_BAD_OID	The object identifier provided is syntactically invalid.
39	GSS_S_MINOR_INVALID_CREDENTIAL	The credential is invalid.
40	GSS_S_MINOR_INVALID_ENVIRONMENT	The environment is invalid.
41	GSS_S_MINOR_VERIFY_NOT_ALLOWED_BY_E NV	The environment is not set up to verify the operation. The environment is not set up to verify the operation.

Additional information: the key usage bits in the certificate might not allow the specified operation. |
| 42 | GSS_S_MINOR_DECRYPTION_NOT_ALLOWED_ BY_ ENV | The environment is not set up to do a decryption operation.

Additional information: the key usage bits in the certificate might not allow the specified operation. |

Decimal Return Code	Message Code	Explanation
43	GSS_S_MINOR_UNABLE_TO_DECRYPT_PIDU	The protected independent data unit (PIDU) cannot be decrypted. Additional information: ensure the recipients extended attribute on the privacy-protected queue includes the certificate DN of the actual recipient of the message. Additionally, ensure that the public key that the sender has for the recipient DN matches the private key in the recipient's keystore.
44	GSS_S_MINOR_INVALID_PKCS7_MESSAGE	An Invalid PKCS7 message has been received.
45	GSS_S_MINOR_USAGE_VALIDATION_FAILED	The application was not built with the right level of GSKit/ACME or is not permitted to use ACME API interface.
46	GSS_S_MINOR_DIGEST_ERROR	An error occurred during the message digest and the message is possibly corrupted.
47	GSS_S_MINOR_ENCRYPTION_ERROR	An error occurred during the data encryption and the message is possibly corrupted.
48	GSS_S_MINOR_DECRYPTION_ERROR	An error occurred during the data decryption and the message is possibly corrupted.
49	GSS_S_MINOR_ACCELERATOR_NOT_SUPPORTED	The specified card is either not supported or has not been installed properly.
50	GSS_S_MINOR_PKCS11_TOKEN_NOTPRESENT	The PKCS #11 token could not be found.
51	GSS_S_MINOR_PKCS11_TOKEN__LABEL_MISMATCH	The PKCS #11 token label was not entered correctly.
52	GSS_S_MINOR_PKCS11_TOKEN_INVALID_PIN	The user PIN entered for the PKCS #11 token is invalid.
53	GSS_S_MINOR_PKCS11_LIBRARY_NOT_LOADED	The system could not load the PKCS #11 library.
54	GSS_S_MINOR_DECODING_ERROR	An error occurred during Base 64 or ASN.1 decoding for either the certificate or distinguished name.
55	GSS_S_MINOR_SIGN_ERROR	An error occurred during the signing process.
56	GSS_S_MINOR_VERIFY_ERROR	An error occurred during the signature verification process.
57	GSS_S_MINOR_RECIPIENT_CERT_NOT_FOUND	The application could not locate the recipient certificate.
58	GSS_S_MINOR_CERT_HpAS_NO_PRIVATE_KEY	The Certificate does not have a private encryption key.

Table 1. GSKit error messages sorted by decimal return code (continued)

Decimal Return Code	Message Code	Explanation
59	GSS_S_MINOR_CERT_HAS_BAD_VALIDITY_DATE	The Certificate has a wrong validity date.
60	GSS_S_MINOR_BAD_CERTIFICATE	The Certificate is not valid.
61	GSS_S_MINOR_FIPS_NOT_SUPPORTED	The FIPS mode is not supported in this version.
62	GSS_S_MINOR_SIGNER_CERT_BAD	The signer certificate is not trusted.
63	GSS_S_MINOR_SIGNER_CERT_BAD_DATE	The signer certificate has a bad validity date.

Table 1. GSKit error messages sorted by decimal return code (continued)

Migrating with AltGSKit from IBM MQ V7.0.1 to IBM MQ V7.1

Perform this task only if you are migrating from IBM MQ V7.0.1 using the AltGSKit configuration setting to load an alternative GSKit. The alternative GSKit used by IBM MQ V7.0.1 with the AltGSKit setting is separate from the GSKit used by IBM MQ V7.1; changes to each GSKit do not affect the other. This is because IBM MQ V7.1 uses a private local copy of GSKit in its installation directory and does not support the use of an alternative GSKit.

Overview of the main migration steps for AltGSKit

When migrating from IBM MQ V7.0.1 utilizing AltGSKit to IBM MQ V7.1 there are a number of tasks to be performed to enable the new GSKit to operate successfully. The main steps to consider when migrating:

1. Ensure that no applications require the use of the currently installed alternative GSKit before initiating removal.
2. Remove the AltGSKit setting from the SSL stanza of each queue manager and client configuration file.
3. Restart each MQI client application which is using the alternative GSKit to ensure that no client applications have the alternative GSKit loaded.
4. Issue the REFRESH SECURITY TYPE(SSL) on each queue manager which is using the alternative GSKit to ensure that no queue managers have the alternative GSKit loaded.
5. Uninstall the alternative GSKit as per the platform specific instructions outlined in this topic.
6. Install the alternative GSKit as per the platform specific instructions referred to in this topic.

Removing the AltGSKit setting

Before the alternative GSKit can be uninstalled, the AltGSKit setting must be removed from the SSL stanza of each queue manager and client configuration file.

To view the contents and for further information about the queue manager configuration files, see Queue manager configuration files, qm.ini

For information about the the SSL stanza of the client configuration file, see SSL stanza of the client configuration file.

Once the configuration file has been altered:

1. Restart each MQI client application which is using the alternative GSKit to ensure that no client applications have the alternative GSKit loaded.
2. Issue the REFRESH SECURITY TYPE(SSL) on each queue manager which is using the alternative GSKit to ensure that no queue managers have the alternative GSKit loaded.

Uninstalling GSKit

Here we outline the platform specific instructions for uninstalling the alternative GSKit:

Uninstalling GSKit V8 on Windows

You can uninstall GSKit Version 8 interactively using Add or Remove Programs in the Windows Control Panel. You can uninstall GSKit Version 8 silently using the Windows Installer **msiexec** utility or the GSKit installation file. If you want to use an accessible interface to uninstall GSKit Version 8, use either of the silent uninstallation methods.

Procedure

- To uninstall GSKit V8 by using **msiexec**:
  1. Issue the command

     ```
     msiexec /x PackageName
     ```

     PackageName is one of the values `GSKit8 SSL 32-bit`, `GSKit8 Crypt 32-bit`, `GSKit8 SSL 64-bit`, or `GSKit8 Crypt 64-bit`.
  2. Repeat for each package to be uninstalled.

Uninstalling GSKit V8 on Linux

You can uninstall GSKit V8 using the **rpm** command.

Procedure

Uninstall GSKit v8 by using the following command:

```
rpm -ev gskssl32-8.0.X.Y gskcrypt32-8.0.X.Y
```

X.Y represents the version number of GSKit installed.

On 64-bit Linux platforms run the following additional command:

```
rpm -ev gskssl64-8.0.X.Y gskcrypt64-8.0.X.Y
```

Uninstalling GSKit V8 on AIX

You can uninstall GSKit V8 using the **installp** command.

Procedure

Uninstall GSKit V8 by using the following command:

```
installp -u -g -V2 gskcrypt32.ppc.rte gskssl32.ppc.rte gskcrypt64.ppc.rte gskssl64.ppc.rte
```

Uninstalling GSKit V8 on HP-UX

You can uninstall GSKit Version 8 using the **swremove** command.

Procedure

Uninstall GSKit V8 by using the following command:

```
swremove gskcrypt32 gskssl32 gskcrypt64 gskssl64
```

Uninstalling GSKit V8 on Solaris

You can uninstall GSKit V8 using the **pkgrm** command.

Procedure

Uninstall GSKit V8 by using the following command:

```
pkgrm gsk8ssl32 gsk8cry32 gsk8ssl64 gsk8cry64
```

Installing GSKit on IBM MQ V 7.1

On IBM MQ V7.1 for Windows, GSKit is automatically installed.

To install GSKit on IBM MQ V 7.1 on Linux and UNIX platforms, refer to instructions outlined in the following topics:

- IBM MQ components for Linux systems
- IBM MQ components for HP-UX systems
- IBM MQ components for AIX® systems
- IBM MQ components for Solaris systems

CipherSpec mismatches

Both ends of an IBM MQ SSL channel must use the same CipherSpec. Mismatches can be detected during the SSL handshake or during channel startup.

A CipherSpec identifies the combination of the encryption algorithm and hash function. Both ends of an IBM MQ SSL channel must use the same CipherSpec, although they can specify that CipherSpec in a different manner. Mismatches can be detected at two stages:

During the SSL handshake
The SSL handshake fails when the CipherSpec specified by the SSL client is unacceptable to the SSL support at the SSL server end of the connection. A CipherSpec failure during the SSL handshake arises when the SSL client proposes a CipherSpec that is not supported by the SSL provision on the SSL server. For example, when an SSL client running on AIX proposes the DES_SHA_EXPORT1024 CipherSpec to an SSL server running on IBM i.

During channel startup
Channel startup fails when there is a mismatch between the CipherSpec defined for the responding end of the channel and the CipherSpec defined for the calling end of channel. Channel startup also fails when only one end of the channel defines a CipherSpec.

See Specifying CipherSpecs for more information.

Note: If Global Server Certificates are used, a mismatch can be detected during channel startup even if the CipherSpecs specified on both channel definitions match.

Global Server Certificates are a special type of certificate which require that a minimum level of encryption is established on all the communications links with which they are used. If the CipherSpec

requested by the IBM MQ channel configuration does not meet this requirement, the CipherSpec is renegotiated during the SSL handshake. This is detected as a failure during IBM MQ channel startup as the CipherSpec no longer matches the one specified on the channel.

In this case, change the CipherSpec at both sides of the channel to one which meets the requirements of the Global Server Certificate. To establish whether a certificate that has been issued to you is a Global Server Certificate, contact the certificate authority which issued that certificate.

SSL servers do not detect mismatches when an SSL client channel on UNIX, Linux or Windows systems specifies the DES_SHA_EXPORT1024 CipherSpec, and the corresponding SSL server channel on UNIX, Linux or Windows systems is using the DES_SHA_EXPORT CipherSpec. In this case, the channel runs normally.

Authentication failures

There are a number common reasons for authentication failures during the SSL handshake.

These reasons include, but are not limited to, those in the following list:

A certificate has been found in a Certificate Revocation List or Authority Revocation List
You can check certificates against the revocation lists published by the Certificate Authorities.

A Certificate Authority can revoke a certificate that is no longer trusted by publishing it in a Certificate Revocation List (CRL) or Authority Revocation List (ARL). For more information, see Working with revoked certificates.

An OCSP responder has identified a certificate as Revoked or Unknown
You can check certificates using OCSP. An OCSP responder can return a response of Revoked, indicating that a certificate is no longer valid, or Unknown, indicating that it has no revocation data for that certificate. For more information, see Working with revoked certificates.

A certificate has expired or is not yet active
Each digital certificate has a date from which it is valid and a date after which it is no longer valid, so an attempt to authenticate with a certificate that is outside its lifetime fails.

A certificate is corrupted
If the information in a digital certificate is incomplete or damaged, authentication fails.

A certificate is not supported
If the certificate is in a format that is not supported, authentication fails, even if the certificate is still within its lifetime.

The SSL client does not have a certificate
The SSL server always validates the client certificate if one is sent. If the SSL client does not send a certificate, authentication fails if the end of the channel acting as the SSL server is defined:

- With the SSLCAUTH parameter set to REQUIRED or
- With an SSLPEER parameter value

There is no matching CA root certificate or the certificate chain is incomplete
Each digital certificate is issued by a Certificate Authority (CA), which also provides a root certificate that contains the public key for the CA. Root certificates are signed by the issuing CA itself. If the key repository on the computer that is performing the authentication does not contain a valid root certificate for the CA that issued the incoming user certificate, authentication fails.

Authentication often involves a chain of trusted certificates. The digital signature on a user certificate is verified with the public key from the certificate for the issuing CA. If that CA certificate is a root certificate, the verification process is complete. If that CA certificate was issued by an intermediate CA, the digital signature on the intermediate CA certificate must itself be verified. This process continues along a chain of CA certificates until a root certificate is reached. In such cases, all certificates in the chain must be verified correctly. If the key repository on the computer that is performing the authentication does not contain a valid root certificate for the CA that issued the incoming root certificate, authentication fails.

However, certain SSL implementations such as GSKit, DCM, and RACF validate the certificates as long as the trust anchor (ROOT CA) is present, with some of the intermediate CA not present in the trust chain. Therefore, it is important to ensure that the server-side certificate store contains the complete trust chain. Also, the technique of selectively removing signer (CA) certificates must not be used to control connectivity to the queue manager.

For more information, see How certificate chains work.

For more information about the terms used in this topic, see:

- Secure Sockets Layer (SSL) and Transport Layer Security (TLS) concepts
- Digital certificates

Monitoring reference

Use the reference information in this section to help you monitor IBM MQ.

- "Structure data types" on page 47
- "Object attributes for event data" on page 71

Related information
Monitoring and performance

Structure data types

Use this topic to understand the structure data types used in the message data that IBM MQ monitoring techniques generate.

The following topics describe in a language-independent form the structure data types used in monitor message data. The declarations are shown in the following programming languages:

- C
- COBOL
- PL/I
- RPG (ILE) (IBM i only)
- S/390 assembler (z/OS only)
- Visual Basic (Windows platforms only)
- "MQCFBS - Byte string parameter" on page 47
- "MQCFGR - Group parameter" on page 49
- "MQCFH - PCF header" on page 51
- "MQCFIL - Integer list parameter" on page 55
- "MQCFIL64 - 64-bit integer list parameter" on page 57
- "MQCFIN - Integer parameter" on page 59
- "MQCFIN64 - 64-bit integer parameter" on page 61
- "MQCFSL - String list parameter" on page 63
- "MQCFST - String parameter" on page 65
- "MQEPH - Embedded PCF header" on page 68

MQCFBS - Byte string parameter

Use this page to view the structure of an MQCFBS parameter and the declarations for the following programming languages: C, COBOL, PL/I, RPG/ILE, and S/390 assembler

The MQCFBS structure describes a byte string parameter. Following the links to the declarations is a description of the fields making up the MQCFBS structure:

- C language
- COBOL language
- PL/I language (z/OS only)
- RPG/ILE language (IBM i only)
- S/390 assembler-language (z/OS only)

Type

Description:	This indicates that the structure is an MQCFBS structure describing a byte string parameter.
Data type:	MQLONG.
Value:	**MQCFT_BYTE_STRING** Structure defining a byte string.

StrucLength

Description:	This is the length in bytes of the MQCFBS structure, including the variable-length string at the end of the structure (the *String* field).
Data type:	MQLONG.

Parameter

Description:	This identifies the parameter with a value that is contained in the structure.
Data type:	MQLONG.

StringLength

Description:	This is the length in bytes of the data in the *String* field, and is zero or greater.
Data type:	MQLONG.

String

Description:	This is the value of the parameter identified by the *Parameter* field. The string is a byte string, and so is not subject to character-set conversion when sent between different systems. **Note:** A null byte in the string is treated as normal data, and does not act as a delimiter for the string.
Data type:	MQBYTE x *StringLength*.

C language declaration

```
struct tagMQCFBS {
  MQLONG   Type;          /* Structure type */
  MQLONG   StrucLength;   /* Structure length */
  MQLONG   Parameter;     /* Parameter identifier */
  MQLONG   StringLength;  /* Length of string */
  MQBYTE   String[1];     /* String value -- first character */
 } MQCFBS;
```

COBOL language declaration

```
**   MQCFBS structure
  10 MQCFBS.
**    Structure type
  15 MQCFBS-TYPE         PIC S9(9) BINARY.
**    Structure length
  15 MQCFBS-STRUCLENGTH  PIC S9(9) BINARY.
**    Parameter identifier
  15 MQCFBS-PARAMETER    PIC S9(9) BINARY.
**    Length of string
  15 MQCFBS-STRINGLENGTH PIC S9(9) BINARY.
```

PL/I language declaration (z/OS only)

```
dcl
 1 MQCFBS based,
  3 Type        fixed bin(31), /* Structure type */
  3 StrucLength  fixed bin(31), /* Structure length */
  3 Parameter    fixed bin(31), /* Parameter identifier */
  3 StringLength fixed bin(31); /* Length of string */
```

RPG/ILE language declaration (IBM i only)

```
     D*..1....:....2....:....3....:....4....:....5....:....6....:....7..
     D* MQCFBS Structure
     D*
     D* Structure type
     D  BSTYP             1      4I 0 INZ(9)
     D* Structure length
     D  BSLEN             5      8I 0 INZ(16)
     D* Parameter identifier
     D  BSPRM             9     12I 0 INZ(0)
     D* Length of string
     D  BSSTL            13     16I 0 INZ(0)
     D* String value -- first byte
     D  BSSRA            17     17    INZ
```

S/390 assembler-language declaration (z/OS only)

```
MQCFBS               DSECT
MQCFBS_TYPE          DS   F   Structure type
MQCFBS_STRUCLENGTH   DS   F   Structure length
MQCFBS_PARAMETER     DS   F   Parameter identifier
MQCFBS_STRINGLENGTH  DS   F   Length of string
*
MQCFBS_LENGTH        EQU  *-MQCFBS
                     ORG  MQCFBS
MQCFBS_AREA          DS   CL(MQCFBS_LENGTH)
```

MQCFGR - Group parameter

Use this page to view the structure of an MQCFGR parameter and the declarations for the following programming languages: C, COBOL, PL/I, RPG/ILE, S/390 assembler, and Visual Basic

The MQCFGR structure describes a group parameter. Following the links to the declarations is a description of the fields making up the MQCFGR structure:

- C language
- COBOL language
- PL/I language (z/OS only)
- RPG/ILE language (IBM i only)
- System/390 assembler-language (z/OS only)

- Visual Basic language (Windows only)

The MQCFGR structure is a group parameter in which the subsequent parameter structures are grouped together as a single logical unit. The number of subsequent structures that are included is given by *ParameterCount*. This structure, and the parameter structures it includes, are counted as one structure only in the *ParameterCount* parameter in the PCF header (MQCFH) and the group parameter (MQCFGR).

Type

Description:	Indicates that the structure type is MQCFGR describing which parameters are in this group.
Data type:	MQLONG.
Value:	**MQCFT_GROUP** Structure defining a group of parameters.

StrucLength

Description:	Length in bytes of the MQCFGR structure.
Data type:	MQLONG.
Value:	**MQCFGR_STRUC_LENGTH** Length of the command format group-parameter structure.

Parameter

Description:	This identifies the type of group parameter.
Data type:	MQLONG.

ParameterCount

Description:	The number of parameter structures following the MQCFGR structure that are contained within the group identified by the *Parameter* field. If the group itself contains one or more groups, each group and its parameters count as one structure only.
Data type:	MQLONG.

C language declaration

```
typedef struct tagMQCFGR {
  MQLONG  Type;            /* Structure type */
  MQLONG  StrucLength;     /* Structure length */
  MQLONG  Parameter;       /* Parameter identifier */
  MQLONG  ParameterCount;  /* Count of the grouped parameter structures */
 } MQCFGR;
```

COBOL language declaration

```
**   MQCFGR structure
  10 MQCFGR.
**    Structure type
  15 MQCFGR-TYPE           PIC S9(9) BINARY.
**    Structure length
  15 MQCFGR-STRUCLENGTH    PIC S9(9) BINARY.
**    Parameter identifier
  15 MQCFGR-PARAMETER      PIC S9(9) BINARY.
**    Count of grouped parameter structures
  15 MQCFGR-PARAMETERCOUNT PIC S9(9) BINARY.
```

PL/I language declaration (z/OS and Windows only)

```
dcl
 1 MQCFGR based,
  3 Type          fixed bin(31), /* Structure type */
  3 StrucLength   fixed bin(31), /* Structure length */
  3 Parameter     fixed bin(31), /* Parameter identifier */
  3 ParameterCount fixed bin(31), /* Count of grouped parameter structures */
```

RPG/ILE declaration (IBM i only)

```
    D*..1....:....2....:....3....:....4....:....5....:....6....:....7..
      D* MQCFGR Structure
    D*
    D* Structure type
    D  GRTYP                1      4I INZ(20)
    D* Structure length
    D  GRLEN                5      8I INZ(16)
    D* Parameter identifier
    D  GRPRM                9     12I INZ(0)
    D* Count of grouped parameter structures
    D  GRCNT               13     16I INZ(0)
    D*
```

S/390 assembler-language declaration (z/OS only)

```
MQCFGR                       DSECT
MQCFGR_TYPE                  DS   F        Structure type
MQCFGR_STRUCLENGTH           DS   F        Structure length
MQCFGR_PARAMETER             DS   F        Parameter identifier
MQCFGR_PARAMETERCOUNT        DS   F        Count of grouped parameter structures
MQCFGR_LENGTH                EQU  *-MQCFGR Length of structure
                             ORG  MQCFGR
MQCFGR_AREA                  DS   CL(MQCFGR_LENGTH)
```

Visual Basic language declaration (Windows only)

```
Type MQCFGR
  Type As Long            ' Structure type
  StrucLength As Long     ' Structure length
  Parameter As Long       ' Parameter identifier
  ParameterCount As Long  ' Count of grouped parameter structures
  End Type
```

MQCFH - PCF header

Use this page to view the structure of an MQCFH header and the declarations for the following programming languages: C, COBOL, PL/I, RPG/ILE, S/390 assembler, and Visual Basic

The MQCFH structure describes the information that is present at the start of the message data of a monitoring message. Following the links to the declarations is a description of the fields making up the MQCFH structure:

- C language
- COBOL language
- PL/I language (z/OS only)
- RPG/ILE language (IBM i only)
- S/390 assembler language (z/OS only)
- Visual Basic language (Windows only)

Type

Description: Structure type This indicates the content of the message.

Data type: MQLONG.

Values:

MQCFT_ACCOUNTING
Message is an accounting message.

MQCFT_EVENT
Message is reporting an event.

MQCFT_REPORT
Message is an activity report.

MQCFT_RESPONSE
Message is a response to a command.

MQCFT_STATISTICS
Message is a statistics message.

MQCFT_TRACE_ROUTE
Message is a trace-route message.

StrucLength

Description: This is the length in bytes of the MQCFH structure

Data type: MQLONG.

Value:

MQCFH_STRUC_LENGTH
Length of command format header structure.

Version

Description: Structure version number.

Data type: MQLONG.

Value:

MQCFH_VERSION_1
Version number for all events except configuration and command events.

MQCFH_VERSION_2
Version number for configuration events.

MQCFH_VERSION_3
Version number for command events, activity reports, trace-route messages, accounting and statistics messages.

Command

Description: Specifies the category of the message.

Data type: MQLONG.

Value: Refer to the *Command* values in the following structure descriptions:

- "Event message MQCFH (PCF header)" on page 121.
- Activity report MQCFH (PCF header).
- Trace-route message MQCFH (PCF header).
- Message data in accounting and statistics messages.

MsgSeqNumber

Description: Message sequence number. This is the sequence number of the message within a set of related messages.

Data type: MQLONG.

Control

Description: Control options.

Data type: MQLONG.

Value: **MQCFC_LAST**
Last message in the set.

MQCFC_NOT_LAST
Not the last message in the set.

CompCode

Description: Completion code.

Data type: MQLONG.

Value: **MQCC_OK**
Events reporting OK condition, activity reports, trace-route messages, accounting messages, or statistics messages.

MQCC_WARNING
Event reporting warning condition.

Reason

Description: Reason code qualifying completion code.

Data type: MQLONG.

Value: For event messages:

MQRC_*
Dependent on the event being reported.

Note: Events with the same reason code are further identified by the *ReasonQualifier* parameter in the event data.

For activity reports, trace-route messages, accounting messages, and statistics messages:

MQRC_NONE

ParameterCount

Description: Count of parameter structures. This is the number of parameter structures that follow the MQCFH structure.

Data type: MQLONG.

Value: 0 or greater.

C language declaration

```
typedef struct tagMQCFH {
  MQLONG  Type;            /* Structure type */
  MQLONG  StrucLength;     /* Structure length */
  MQLONG  Version;         /* Structure version number */
  MQLONG  Command;         /* Command identifier */
  MQLONG  MsgSeqNumber;    /* Message sequence number */
  MQLONG  Control;         /* Control options */
  MQLONG  CompCode;        /* Completion code */
  MQLONG  Reason;          /* Reason code qualifying completion code */
```

```
      MQLONG  ParameterCount;  /* Count of parameter structures */
    } MQCFH;
```

COBOL language declaration

```
**   MQCFH structure
  10 MQCFH.
**    Structure type
   15 MQCFH-TYPE          PIC S9(9) BINARY.
**    Structure length
   15 MQCFH-STRUCLENGTH   PIC S9(9) BINARY.
**    Structure version number
   15 MQCFH-VERSION       PIC S9(9) BINARY.
**    Command identifier
   15 MQCFH-COMMAND       PIC S9(9) BINARY.
**    Message sequence number
   15 MQCFH-MSGSEQNUMBER  PIC S9(9) BINARY.
**    Control options
   15 MQCFH-CONTROL       PIC S9(9) BINARY.
**    Completion code
   15 MQCFH-COMPCODE      PIC S9(9) BINARY.
**    Reason code qualifying completion code
   15 MQCFH-REASON        PIC S9(9) BINARY.
**    Count of parameter structures
   15 MQCFH-PARAMETERCOUNT PIC S9(9) BINARY.
```

PL/I language declaration (z/OS and Windows)

```
dcl
 1 MQCFH based,
  3 Type           fixed bin(31), /* Structure type */
  3 StrucLength    fixed bin(31), /* Structure length */
  3 Version        fixed bin(31), /* Structure version number */
  3 Command        fixed bin(31), /* Command identifier */
  3 MsgSeqNumber   fixed bin(31), /* Message sequence number */
  3 Control        fixed bin(31), /* Control options */
  3 CompCode       fixed bin(31), /* Completion code */
  3 Reason         fixed bin(31), /* Reason code qualifying completion
                                    code */
  3 ParameterCount fixed bin(31); /* Count of parameter structures */
```

RPG language declaration (IBM i only)

```
D*..1....:....2....:....3....:....4....:....5....:....6....:....7..
D* MQCFH Structure
D*
D* Structure type
D  FHTYP                 1      4I 0 INZ(1)
D* Structure length
D  FHLEN                 5      8I 0 INZ(36)
D* Structure version number
D  FHVER                 9     12I 0 INZ(1)
D* Command identifier
D  FHCMD                13     16I 0 INZ(0)
D* Message sequence number
D  FHSEQ                17     20I 0 INZ(1)
D* Control options
D  FHCTL                21     24I 0 INZ(1)
D* Completion code
D  FHCMP                25     28I 0 INZ(0)
D* Reason code qualifying completion code
D  FHREA                29     32I 0 INZ(0)
D* Count of parameter structures
D  FHCNT                33     36I 0 INZ(0)
D*
```

S/390 assembler language declaration (z/OS only)

```
MQCFH                        DSECT
MQCFH_TYPE                   DS   F        Structure type
MQCFH_STRUCLENGTH            DS   F        Structure length
MQCFH_VERSION               DS   F        Structure version number
MQCFH_COMMAND               DS   F        Command identifier
MQCFH_MSGSEQNUMBER          DS   F        Message sequence number
MQCFH_CONTROL               DS   F        Control options
MQCFH_COMPCODE              DS   F        Completion code
MQCFH_REASON                DS   F        Reason code qualifying
*                                         completion code
MQCFH_PARAMETERCOUNT        DS   F        Count of parameter
*                                         structures
MQCFH_LENGTH                EQU  *-MQCFH   Length of structure
                            ORG  MQCFH
MQCFH_AREA                  DS   CL(MQCFH_LENGTH)
```

Visual Basic language declaration (Windows only)

```
Type MQCFH
  Type As Long              'Structure type
  StrucLength As Long       'Structure length
  Version As Long           'Structure version number
  Command As Long           'Command identifier
  MsgSeqNumber As Long      'Message sequence number
  Control As Long           'Control options
  CompCode As Long          'Completion code
  Reason As Long            'Reason code qualifying completion code
  ParameterCount As Long    'Count of parameter structures
End Type
```

MQCFIL - Integer list parameter

Use this page to view the structure of an MQCFIL parameter and the declarations for the following programming languages: C, COBOL, PL/I, RPG/ILE, S/390 assembler, and Visual Basic

The MQCFIL structure describes an integer list parameter. Following the links to the declarations is a description of the fields making up the MQCFIL structure:

- C language
- COBOL language
- PL/I language (z/OS only)
- RPG/ILE language (IBM i only)
- System/390 assembler-language (z/OS only)
- Visual Basic language (Windows only)

Type

Description:	Indicates that the structure type is MQCFIL and describes an integer-list parameter.
Data type :	MQLONG.
Value:	**MQCFT_INTEGER_LIST** Structure defining an integer list.

StrucLength

Description:	Length in bytes of the MQCFIL structure, including the array of integers at the end of the structure (the *values* field).
Data type :	MQLONG.

Parameter

Description:	Identifies the parameter with a value that is contained in the structure.
Data type :	MQLONG.

Count

Description:	Number of elements in the *Values* array.
Data type :	MQLONG.
Values:	Zero or greater.

Values

Description:	Array of values for the parameter identified by the *Parameter* field.
Data type :	MQLONG x *Count*

The way that this field is declared depends on the programming language:

- For the C programming language, the field is declared as an array with one element. Storage for the structure must be allocated dynamically, and pointers used to address the fields within it.
- For the COBOL, PL/I, RPG, and System/390 assembler programming languages, the field is omitted from the structure declaration. When an instance of the structure is declared, you must include MQCFIL in a larger structure, and declare additional fields following MQCFIL, to represent the Values field as required.

C language declaration

```
typedef struct tagMQCFIL {
  MQLONG  Type;          /* Structure type */
  MQLONG  StrucLength;   /* Structure length */
  MQLONG  Parameter;     /* Parameter identifier */
  MQLONG  Count;         /* Count of parameter values */
  MQLONG  Values[1];     /* Parameter values - first element */
 } MQCFIL;
```

COBOL language declaration

```
**   MQCFIL structure
  10 MQCFIL.
**    Structure type
   15 MQCFIL-TYPE        PIC S9(9) BINARY.
**    Structure length
   15 MQCFIL-STRUCLENGTH PIC S9(9) BINARY.
**    Parameter identifier
   15 MQCFIL-PARAMETER   PIC S9(9) BINARY.
**    Count of parameter values
   15 MQCFIL-COUNT       PIC S9(9) BINARY.
```

PL/I language declaration

```
dcl
 1 MQCFIL based,
   3 Type       fixed bin(31), /* Structure type */
   3 StrucLength fixed bin(31), /* Structure length */
   3 Parameter   fixed bin(31), /* Parameter identifier */
   3 Count       fixed bin(31); /* Count of parameter values */
```

RPG/ILE declaration (IBM i only)

```
D*..1....:....2....:....3....:....4....:....5....:....6....:....7..
D* MQCFIL Structure
D*
D* Structure type
D  ILTYP                  1      4I 0
D* Structure length
D  ILLEN                  5      8I 0
D* Parameter identifier
D  ILPRM                  9     12I 0
D* Count of paramter valuee
D  ILCNT                 13     16I 0
```

S/390 assembler-language declaration

```
MQCFIL                      DSECT
MQCFIL_TYPE                 DS   F       Structure type
MQCFIL_STRUCLENGTH          DS   F       Structure length
MQCFIL_PARAMETER            DS   F       Parameter identifier
MQCFIL_COUNT                DS   F       Count of parameter values
MQCFIL_LENGTH               EQU  *-MQCFIL Length of structure
                            ORG  MQCFIL
MQCFIL_AREA                 DS   CL(MQCFIL_LENGTH)
```

Visual Basic language declaration

```
Type MQCFIL
  Type As Long         ' Structure type
  StrucLength As Long  ' Structure length
  Parameter As Long    ' Parameter identifier
  Count As Long        ' Count of parameter value
End Type
```

MQCFIL64 - 64-bit integer list parameter

Use this page to view the structure of an MQCFIL64 parameter and the declarations for the following programming languages: C, COBOL, PL/I, RPG/ILE, and S/390 assembler

The MQCFIL64 structure describes a 64-bit integer list parameter. Following the links to the declarations is a description of the fields making up the MQCFIL64 structure:

- C language
- COBOL language
- PL/I language (z/OS only)
- RPG/ILE language (IBM i only)
- System/390 assembler-language (z/OS only)

Type

Description:	Indicates that the structure is a MQCFIL64 structure describing a 64-bit integer list parameter.
Data type:	MQLONG.
Value:	**MQCFT_INTEGER64_LIST** Structure defining a 64-bit integer list.

StrucLength

Description:	Length in bytes of the MQCFIL64 structure, including the array of integers at the end of the structure (the *Values* field).

Data type:	MQLONG.

Parameter

Description:	Identifies the parameter with a value that is contained in the structure.
Data type:	MQLONG.

Count

Description:	Number of elements in the *Values* array.
Data type:	MQLONG.
Values:	0 or greater.

Values

Description:	Array of values for the parameter identified by the *Parameter* field.
Data type:	(MQINT64 x *Count*)

The way that this field is declared depends on the programming language:

- For the C programming language, the field is declared as an array with one element. Storage for the structure must be allocated dynamically, and pointers used to address the fields within it.
- For the COBOL, PL/I, RPG, and System/390 assembler programming languages, the field is omitted from the structure declaration. When an instance of the structure is declared, you must include MQCFIL64 in a larger structure, and declare additional fields following MQCFIL64, to represent the *Values* field as required.

For COBOL, additional fields should be declared as:

```
    PIC  S9(18)
```

For PL/I, additional fields should be declared as FIXED BINARY SIGNED with a precision of 63.

For System/390 assembler, additional fields should be declared D (double word) in the DS declaration.

C language declaration

```
typedef struct tagMQCFIN64 {
  MQLONG  Type;         /* Structure type */
  MQLONG  StrucLength;  /* Structure length */
  MQLONG  Parameter;    /* Parameter identifier */
  MQLONG  Count;        /* Count of parameter values */
  MQINT64 Values[1];       /* Parameter value */
 } MQCFIL64;
```

COBOL language declaration

```
**   MQCFIL64 structure
  10 MQCFIL64.
**    Structure type
  15 MQCFIL64-TYPE        PIC S9(9) BINARY.
**    Structure length
  15 MQCFIL64-STRUCLENGTH PIC S9(9) BINARY.
**    Parameter identifier
  15 MQCFIL64-PARAMETER   PIC S9(9) BINARY.
**    Count of parameter values
  15 MQCFIL64-COUNT       PIC S9(9) BINARY.
```

PL/I language declaration

```
dcl
 1 MQCFIL64 based,
   3 Type       fixed bin(31), /* Structure type */
   3 StrucLength fixed bin(31), /* Structure length */
   3 Parameter  fixed bin(31), /* Parameter identifier */
   3 Count      fixed bin(31)  /* Count of parameter values */
```

RPG/ILE language declaration (IBM i only)

```
    D*..1....:....2....:....3....:....4....:....5....:....6....:....7..
    D* MQCFIL64 Structure
    D*
    D* Structure type
    D  IL64TYP           1      4I 0 INZ(25)
    D* Structure length
    D  IL64LEN           5      8I 0 INZ(16)
    D* Parameter identifier
    D  IL64PRM           9     12I 0 INZ(0)
    D* Count of parameter values
    D  IL64CNT          13     16I 0 INZ(0)
    D* Parameter values -- first element
    D  IL64VAL          17     16   INZ(0)
```

S/390 assembler-language declaration (z/OS only)

```
MQCFIL64                      DSECT
MQCFIL64_TYPE                 DS   F       Structure type
MQCFIL64_STRUCLENGTH          DS   F       Structure length
MQCFIL64_PARAMETER            DS   F       Parameter identifier
MQCFIL64_COUNT                DS   F       Parameter value high
MQCFIL64_LENGTH               EQU  *-MQCFIL64 Length of structure
                             ORG  MQCFIL64
MQCFIL64_AREA                 DS   CL(MQCFIL64_LENGTH)
```

MQCFIN - Integer parameter

Use this page to view the structure of an MQCFIN parameter and the declarations for the following programming languages: C, COBOL, PL/I, RPG/ILE, S/390 assembler, and Visual Basic

The MQCFIN structure describes an integer parameter. Following the links to the declarations is a description of the fields making up the MQCFIN structure:

- C language
- COBOL language
- PL/I language (z/OS only)
- RPG/ILE language (IBM i only)
- S/390 assembler-language (z/OS only)
- Visual Basic language (Windows only)

Type

Description:	Indicates that the structure type is MQCFIN and describes an integer parameter.
Data type:	MQLONG.
Value:	**MQCFT_INTEGER** Structure defining an integer.

StrucLength

    Description: Length in bytes of the MQCFIN structure.

    Data type: MQLONG.

    Value: **MQCFIN_STRUC_LENGTH**
                      Length of MQCFIN structure.

Parameter

    Description: Identifies the parameter with a value that is contained in the structure.

    Data type: MQLONG.

Value

    Description: Value of parameter identified by the *Parameter* field.

    Data type: MQLONG.

C language declaration

```
typedef struct tagMQCFIN {
  MQLONG  Type;        /* Structure type */
  MQLONG  StrucLength; /* Structure length */
  MQLONG  Parameter;   /* Parameter identifier */
  MQLONG  Value;       /* Parameter value */
 } MQCFIN;
```

COBOL language declaration

```
**   MQCFIN structure
  10 MQCFIN.
**    Structure type
   15 MQCFIN-TYPE        PIC S9(9) BINARY.
**    Structure length
   15 MQCFIN-STRUCLENGTH PIC S9(9) BINARY.
**    Parameter identifier
   15 MQCFIN-PARAMETER   PIC S9(9) BINARY.
**    Parameter value
   15 MQCFIN-VALUE       PIC S9(9) BINARY.
```

PL/I language declaration

```
dcl
 1 MQCFIN based,
  3 Type       fixed bin(31), /* Structure type */
  3 StrucLength fixed bin(31), /* Structure length */
  3 Parameter   fixed bin(31), /* Parameter identifier */
  3 Value       fixed bin(31); /* Parameter value */
```

RPG/ILE declaration (IBM i only)

```
     D*..1....:....2....:....3....:....4....:....5....:....6....:....7..
     D* MQCFIN Structure
     D*
     D* Structure type
     D  INTYP              1      4I 0
     D* Structure length
     D  INLEN              5      8I 0
     D* Parameter identifier
```

```
D  INPRM                    9     12I 0
D* Parameter value
D  INVAL                   13     16I 0
```

S/390 assembler-language declaration

```
MQCFIN                          DSECT
MQCFIN_TYPE                     DS   F       Structure type
MQCFIN_STRUCLENGTH             DS   F       Structure length
MQCFIN_PARAMETER               DS   F       Parameter identifier
MQCFIN_VALUE                   DS   F       Parameter value
MQCFIN_LENGTH                  EQU  *-MQCFIN Length of structure
                               ORG  MQCFIN
MQCFIN_AREA                    DS   CL(MQCFIN_LENGTH)
```

Visual Basic language declaration

```
Type MQCFIN
  Type As Long          ' Structure type
  StrucLength As Long   ' Structure length
  Parameter As Long     ' Parameter identifier
  Value As Long         ' Parameter value
End Type
```

MQCFIN64 - 64-bit integer parameter

Use this page to view the structure of an MQCFIN64 parameter and the declarations for the following programming languages: C, COBOL, PL/I, RPG/ILE, and S/390 assembler

The MQCFIN64 structure describes a 64-bit integer parameter. Following the links to the declarations is a description of the fields making up the MQCFIN64 structure:

- C language
- COBOL language
- PL/I language (z/OS only)
- RPG/ILE language (IBM i only)
- System/390 assembler-language (z/OS only)

Type

Description:	Indicates that the structure is a MQCFIN64 structure describing a 64-bit integer parameter.
Data type:	MQLONG.
Value:	**MQCFT_INTEGER64** Structure defining a 64-bit integer.

StrucLength

Description:	Length in bytes of the MQCFIN64 structure.
Data type:	MQLONG.
Value:	**MQCFIN64_STRUC_LENGTH** Length of 64-bit integer parameter structure.

Parameter

Description:	Identifies the parameter with a value that is contained in the structure.
Data type:	MQLONG.

Values

Description: This is the value of the parameter identified by the *Parameter* field.

Data type: (MQINT64)

C language declaration

```
typedef struct tagMQCFIN64 {
  MQLONG  Type;         /* Structure type */
  MQLONG  StrucLength;  /* Structure length */
  MQLONG  Parameter;    /* Parameter identifier */
  MQLONG  Reserved;     /* Reserved */
  MQINT64 Value;        /* Parameter value */
 } MQCFIN64;
```

COBOL language declaration

```
**   MQCFIN64 structure
  10 MQCFIN64.
**     Structure type
   15 MQCFIN64-TYPE        PIC S9(9) BINARY.
**     Structure length
   15 MQCFIN64-STRUCLENGTH PIC S9(9) BINARY.
**     Parameter identifier
   15 MQCFIN64-PARAMETER   PIC S9(9) BINARY.
**     Reserved
   15 MQCFIN64-RESERVED    PIC S9(9) BINARY.
**     Parameter value
   15 MQCFIN64-VALUE       PIC S9(18) BINARY.
```

PL/I language declaration

```
dcl
 1 MQCFIN64 based,
  3 Type        fixed bin(31), /* Structure type */
  3 StrucLength fixed bin(31), /* Structure length */
  3 Parameter   fixed bin(31), /* Parameter identifier */
  3 Reserved    fixed bin(31)  /* Reserved */
  3 Value       fixed bin(63); /* Parameter value */
```

RPG/ILE language declaration (IBM i only)

```
    D*..1....:....2....:....3....:....4....:....5....:....6....:....7..
    D* MQCFIN64 Structure
    D*
    D* Structure type
    D  IN64TYP              1      4I 0 INZ(23)
    D* Structure length
    D  IN64LEN              5      8I 0 INZ(24)
    D* Parameter identifier
    D  IN64PRM              9     12I 0 INZ(0)
    D* Reserved field
    D  IN64RSV             13     16I 0 INZ(0)
    D* Parameter value
    D  IN64VAL             17     16   INZ(0)
```

S/390 assembler-language declaration (z/OS only)

```
MQCFIN64                         DSECT
MQCFIN64_TYPE                    DS   F      Structure type
MQCFIN64_STRUCLENGTH             DS   F      Structure length
MQCFIN64_PARAMETER               DS   F      Parameter identifier
MQCFIN64_RESERVED                DS   F      Reserved
```

```
MQCFIN64_VALUE                          DS    D       Parameter value
MQCFIN64_LENGTH                         EQU   *-MQCFIN64 Length of structure
                                        ORG   MQCFIN64
MQCFIN64_AREA                           DS    CL(MQCFIN64_LENGTH)
```

MQCFSL - String list parameter

Use this page to view the structure of an MQCFSL parameter and the declarations for the following programming languages: COBOL, PL/I, RPG/ILE, S/390 assembler, and Visual Basic

The MQCFSL structure describes a string list parameter. Following the links to the declarations is a description of the fields making up the MQCFSL structure:

- COBOL language
- PL/I language (z/OS only)
- RPG/ILE language (IBM i only)
- System/390 assembler-language (z/OS only)
- Visual Basic language (Windows only)

Type

Description:	This indicates that the structure is an MQCFSL structure describing a string-list parameter.
Data type:	MQLONG.
Value:	**MQCFT_STRING_LIST** Structure defining a string list.

StrucLength

Description:	This is the length in bytes of the MQCFSL structure, including the array of strings at the end of the structure (the *Strings* field).
Data type:	MQLONG.

Parameter

Description:	This identifies the parameter with values that are contained in the structure.
Data type:	MQLONG.

CodedCharSetId

Description:	This specifies the coded character set identifier of the data in the *Strings* field.
Data type:	MQLONG.

Count

Description:	This is the number of strings present in the *Strings* field; zero or greater.
Data type:	MQLONG.

StringLength

Description:	This is the length in bytes of one parameter value, that is the length of one string in the *Strings* field; all of the strings are this length.
Data type:	MQLONG.

String

Description:
: This is a set of string values for the parameter identified by the *Parameter* field. The number of strings is given by the *Count* field, and the length of each string is given by the *StringLength* field. The strings are concatenated together, with no bytes skipped between adjacent strings. The total length of the strings is the length of one string multiplied by the number of strings present (that is, *StringLength* x *Count*)

  In MQFMT_EVENT messages, trailing blanks can be omitted from string parameters (that is, the string may be shorter than the defined length of the parameter). *StringLength* gives the length of the string actually present in the message.

  Note: In the MQCFSL structure, a null character in a string is treated as normal data, and does not act as a delimiter for the string. This means that when a receiving application reads a MQFMT_EVENT message, the receiving application receives all of the data specified by the sending application. The data may, of course, have been converted between character sets (for example, by the receiving application specifying the MQGMO_CONVERT option on the MQGET call).

Data type:
: MQCHAR x *StringLength* x *Count*

COBOL language declaration

```
**   MQCFSL structure
  10 MQCFSL.
**    Structure type
  15 MQCFSL-TYPE          PIC S9(9) BINARY.
**    Structure length
  15 MQCFSL-STRUCLENGTH   PIC S9(9) BINARY.
**    Parameter identifier
  15 MQCFSL-PARAMETER     PIC S9(9) BINARY.
**    Coded character set identifier
  15 MQCFSL-CODEDCHARSETID PIC S9(9) BINARY.
**    Count of parameter values
  15 MQCFSL-COUNT         PIC S9(9) BINARY.
**    Length of one string
  15 MQCFSL-STRINGLENGTH  PIC S9(9) BINARY.
```

PL/I language declaration

```
dcl
 1 MQCFSL based,
  3 Type          fixed bin(31), /* Structure type */
  3 StrucLength   fixed bin(31), /* Structure length */
  3 Parameter     fixed bin(31), /* Parameter identifier */
  3 CodedCharSetId fixed bin(31), /* Coded character set identifier */
  3 Count         fixed bin(31), /* Count of parameter values */
  3 StringLength  fixed bin(31); /* Length of one string */
```

RPG/ILE declaration (IBM i only)

```
    D*..1....:....2....:....3....:....4....:....5....:....6....:....7..
    D* MQCFSL Structure
    D*
    D* Structure type
    D  SLTYP            1      4I 0
    D* Structure length
    D  SLLEN            5      8I 0
    D* Parameter identifier
    D  SLPRM            9     12I 0
```

```
D* Coded character set identifier
D  SLCSI                  13     16I 0
D* Count of parameter values
D  SLCNT                  17     20I 0
D* Length of one string
D  SLSTL                  21     24I 0
```

S/390 assembler-language declaration (z/OS only)

```
MQCFSL                    DSECT
MQCFSL_TYPE               DS   F  Structure type
MQCFSL_STRUCLENGTH        DS   F  Structure length
MQCFSL_PARAMETER          DS   F  Parameter identifier
MQCFSL_CODEDCHARSETID     DS   F  Coded character set identifier
MQCFSL_COUNT              DS   F  Count of parameter values
MQCFSL_STRINGLENGTH       DS   F  Length of one string
*
MQCFSL_LENGTH             EQU  *-MQCFSL
                          ORG  MQCFSL
MQCFSL_AREA               DS   CL(MQCFSL_LENGTH)
```

Visual Basic language declaration (Windows systems only)

```
Type MQCFSL
  Type          As Long 'Structure type'
  StrucLength   As Long 'Structure length'
  Parameter     As Long 'Parameter identifier'
  CodedCharSetId As Long 'Coded character set identifier'
  Count         As Long 'Count of parameter values'
  StringLength  As Long 'Length of one string'
End Type
```

MQCFST - String parameter

Use this page to view the structure of an MQCFST parameter and the declarations for the following programming languages: C, COBOL, PL/I, RPG/ILE, S/390 assembler, and Visual Basic

The MQCFST structure describes a string parameter. Following the links to the declarations is a description of the fields making up the MQCFST structure:

- C language
- COBOL language
- PL/I language (z/OS only)
- RPG/ILE language (IBM i only)
- System/390 assembler-language (z/OS only)
- Visual Basic language (Windows only)

The MQCFST structure ends with a variable-length character string; see the *String* field for further details.

Type

Description:	Indicates that the structure type is MQCFST and describes a string parameter.
Data type:	MQLONG.
Value:	**MQCFT_STRING** Structure defining a string.

StrucLength

Description:	Length in bytes of the MQCFST structure, including the string at the end of the structure (the *String* field).

Data type:	MQLONG.

Parameter

Description:	Identifies the parameter with a value that is contained in the structure.
Data type:	MQLONG.
Values:	Dependent on the event message.

CodedCharSetId

Description:	Coded character set identifier of the data in the _String_ field.
Data type:	MQLONG.

StringLength

Description:	Length in bytes of the data in the _String_ field; zero or greater.
Data type:	MQLONG.

String

Description:	The value of the parameter identified by the _Parameter_ field.
	In MQFMT_EVENT messages, trailing blanks can be omitted from string parameters (that is, the string may be shorter than the defined length of the parameter). _StringLength_ gives the length of the string actually present in the message.
Data type:	MQCHAR x _StringLength_
Value:	The string can contain any characters that are in the character set defined by _CodedCharSetId_, and that are valid for the parameter identified by _Parameter_.
Language considerations:	The way that this field is declared depends on the programming language:

- For the C programming language, the field is declared as an array with one element. Storage for the structure should be allocated dynamically, and pointers used to address the fields within it.
- For the COBOL, PL/I, System/390 assembler, and Visual Basic programming languages, the field is omitted from the structure declaration. When an instance of the structure is declared, the user should include MQCFST in a larger structure, and declare additional fields following MQCFST, to represent the _String_ field as required.

A null character in the string is treated as normal data, and does not act as a delimiter for the string. This means that when a receiving application reads an MQFMT_EVENT message, the receiving application receives all of the data specified by the sending application. The data may, of course, have been converted between character sets (for example, by the receiving application specifying the MQGMO_CONVERT option on the MQGET call).

C language declaration

```
typedef struct tagMQCFST {
  MQLONG  Type;            /* Structure type */
  MQLONG  StrucLength;     /* Structure length */
  MQLONG  Parameter;       /* Parameter identifier */
  MQLONG  CodedCharSetId;  /* Coded character set identifier */
  MQLONG  StringLength;    /* Length of string */
```

```
    MQCHAR  String[1];        /* String value - first
                                 character */
  } MQCFST;
```

COBOL language declaration

```
**   MQCFST structure
  10 MQCFST.
**    Structure type
   15 MQCFST-TYPE          PIC S9(9) BINARY.
**    Structure length
   15 MQCFST-STRUCLENGTH   PIC S9(9) BINARY.
**    Parameter identifier
   15 MQCFST-PARAMETER     PIC S9(9) BINARY.
**    Coded character set identifier
   15 MQCFST-CODEDCHARSETID PIC S9(9) BINARY.
**    Length of string
   15 MQCFST-STRINGLENGTH  PIC S9(9) BINARY.
```

PL/I language declaration

```
dcl
 1 MQCFST based,
   3 Type          fixed bin(31), /* Structure type */
   3 StrucLength    fixed bin(31), /* Structure length */
   3 Parameter      fixed bin(31), /* Parameter identifier */
   3 CodedCharSetId fixed bin(31), /* Coded character set identifier */
   3 StringLength   fixed bin(31); /* Length of string */
```

RPG/ILE declaration (IBM i only)

```
     D*..1....:....2....:....3....:....4....:....5....:....6....:....7..
     D* MQCFST Structure
     D*
     D* Structure type
     D  STTYP                1      4I 0
     D* Structure length
     D  STLEN                5      8I 0
     D* Parameter identifier
     D  STPRM                9     12I 0
     D* Coded character set identifier
     D  STCSI               13     16I 0
     D* Length of string
     D  STSTL               17     20I 0
```

S/390 assembler-language declaration

```
MQCFST                        DSECT
MQCFST_TYPE                   DS   F        Structure type
MQCFST_STRUCLENGTH           DS   F        Structure length
MQCFST_PARAMETER             DS   F        Parameter identifier
MQCFST_CODEDCHARSETID        DS   F        Coded character set
*                                          identifier
MQCFST_STRINGLENGTH          DS   F        Length of string
MQCFST_LENGTH                EQU  *-MQCFST Length of structure
                             ORG  MQCFST
MQCFST_AREA                  DS   CL(MQCFST_LENGTH)
```

Visual Basic language declaration

```
Type MQCFST
  Type As Long           ' Structure type
  StrucLength As Long    ' Structure length
  Parameter As Long      ' Parameter identifier
```

```
  CodedCharSetId As Long  ' Coded character set identifier
  StringLength As Long    ' Length of string
End Type
```

MQEPH - Embedded PCF header

Use this page to view the structure of an MQEPH embedded PCF header and the declarations for the following programming languages: C, COBOL, PL/I, RPG/ILE, S/390 assembler, and Visual Basic

The MQEPH structure describes the additional data that is present in a message when that message is a programmable command format (PCF) message. Following the links to the declarations is a description of the fields making up the MQEPH structure:

- C language
- COBOL language
- PL/I language (z/OS only)
- RPG/ILE language (IBM i only)
- S/390 assembler-language (z/OS only)
- Visual Basic language (Windows only)

The additional data consists of the MQEPH structure followed by an array of PCF parameter structures. To include the MQEPH structure in a message, the *Format* parameter in the message descriptor is set to MQFMT_EMBEDDED.

StrucId

Description:	Structure identifier.
Data type:	MQCHAR4.
Value:	**MQEPH_STRUC_ID** Identifier for distribution header structure.

Version

Description:	Structure version number.
Data type:	MQLONG.
Value:	**MQEPH_VERSION_1** Version number for embedded PCF header structure.

StrucLength

Description:	Structure length. This is the length in bytes of the MQEPH structure and is set to the amount of data preceding the next header structure.
Data type:	MQLONG.

Encoding

Description:	Numeric encoding. This specifies the numeric encoding of the data that follows the last PCF parameter structure.
Data type:	MQLONG.

CodedCharSetId

Description:	Coded character set identifier. This specifies the coded character set identifier of the data that follows the last PCF parameter structure.
Data type:	MQLONG.

Format

Description: Format. This specifies the format name of the data that follows the last PCF parameter structure.

Data type: MQCHAR8.

Flags

Description: Flags. This is a reserved field.

Data type: MQLONG.

Value:
MQEPH_NONE
No flags have been specified.

MQEPH_CCSID_EMBEDDED
The character set of the parameters containing character data is specified individually within the CodedCharSetId field in each structure. The character set of the StrucId and Format fields is defined by the CodedCharSetId field in the header structure that precedes the MQEPH structure, or by the CodedCharSetId field in the MQMD if the MQEPH is at the start of the message.

PCFHeader

Description: Command format header.

Data type: MQCFH.

C language declaration

```
struct tagMQEPH  {
  MQCHAR4 StrucId;          /* Structure identifier */
  MQLONG  Version;          /* Structure version number */
  MQLONG  StrucLength       /* Structure length */
  MQLONG  Encoding;         /* Numeric encoding */
  MQLONG  CodedCharSetId;   /* Coded character set identifier */
  MQCHAR8 Format;           /* Data format */
  MQLONG  Flags;            /* Flags */
  MQCFH   PCFHeader;        /* PCF header */
 } MQEPH;
```

COBOL language declaration

```
**   MQEPH structure
  10 MQEPH.
**    Structure identifier
  15 MQEPH-STRUCID        PIC X(4).
**    Structure version number
  15 MQEPH-VERSION        PIC S9(9) BINARY.
**    Structure length
  15 MQEPH-STRUCLENGTH    PIC S9(9) BINARY.
**    Numeric encoding
  15 MQEPH-ENCODING       PIC S9(9) BINARY.
**    Coded characeter set identifier
  15 MQEPH-CODEDCHARSETID PIC S9(9) BINARY.
**    Data format
  15 MQEPH-FORMAT         PIC X(8).
**    Flags
  15 MQEPH-FLAGS          PIC S9(9) BINARY.
**    PCF header
  15 MQEPH-PCFHEADER.
**    Structure type
   20 MQEPH-PCFHEADER-TYPE          PIC S9(9) BINARY.
```

```
**    Structure length
   20 MQEPH-PCFHEADER-STRUCLENGTH    PIC S9(9) BINARY.
**    Structure version number
   20 MQEPH-PCFHEADER-VERSION        PIC S9(9) BINARY.
**    Command identifier
   20 MQEPH-PCFHEADER-COMMAND        PIC S9(9) BINARY.
**    Message sequence number
   20 MQEPH-PCFHEADER-MSGSEQNUMBER   PIC S9(9) BINARY.
**    Control options
   20 MQEPH-PCFHEADER-CONTROL        PIC S9(9) BINARY.
**    Completion code
   20 MQEPH-PCFHEADER-COMPCODE       PIC S9(9) BINARY.
**    Reason code qualifying completion code
   20 MQEPH-PCFHEADER-REASON         PIC S9(9) BINARY.
**    Count of parameter structures
   20 MQEPH-PCFHEADER-PARAMETERCOUNT PIC S9(9) BINARY.
```

PL/I language declaration (z/OS and Windows)

```
dcl
 1 MQEPH based,
  3 StrucId        char(4),       /* Structure identifier */
  3 Version        fixed bin(31), /* Structure version number */
  3 StrucLength    fixed bin(31), /* Structure length */
  3 Encoding       fixed bin(31), /* Numeric encoding */
  3 CodedCharSetId fixed bin(31), /* Coded character set identifier */
  3 Format         char(8),       /* Data format */
  3 Flags          fixed bin(31), /* Flags */
  3 PCFHeader,                    /* PCF header */
   5 Type          fixed bin(31), /* Structure type */
   5 StrucLength   fixed bin(31), /* Structure length */
   5 Version       fixed bin(31), /* Structure version number */
   5 Command       fixed bin(31), /* Command identifier */
   5 MsgSeqNumber  fixed bin(31), /* Message sequence number */
   5 Control       fixed bin(31), /* Control options */
   5 CompCode      fixed bin(31), /* Completion code */
   5 Reason        fixed bin(31), /* Reason code qualifying completion
                                      code */
   5 ParameterCount fixed bin(31); /* Count of parameter structures */
```

RPG language declaration (IBM i only)

```
D*..1....:....2....:....3....:....4....:....5....:....6....:....7..
D* MQEPH Structure
D*
D* Structure identifier
D  EPSID              1      4    INZ('EPH ')
D* Structure version number
D  EPVER              5      8I 0 INZ(1)
D* Structure length
D  EPLEN              9     12I 0 INZ(68)
D* Numeric encoding
D  EPENC             13     16I 0 INZ(0)
D* Coded character set identifier
D  EPCSI             17     20I 0 INZ(0)
D* Format name
D  EPFMT             21     28I 0 INZ('        ')
D* Flags
D  EPFLG             29     32I 0 INZ(0)
D* Programmable Command Format Header
D*
D* Structure type
D  EP1TYPE           33     36I 0 INZ(0)
D* Structure length
D  EP1LEN            37     40I 0 INZ(36)
D* Structure version number
D  EP1VER            41     44I 0 INZ(3)
D* Command identifier
D  EP1CMD            45     48I 0 INZ(0)
D* Message sequence number
D  EP1SEQ            49     52I 0 INZ(1)
D* Control options
D  EP1CTL            53     56I 0 INZ(1)
D* Completion code
D  EP1CMP            57     60I 0 INZ(0)
```

```
D* Reason code qualifying completion code
D  EP1REA              61    64I 0 INZ(0)
D* Count of parameter structures
D  EP1CNT              65    68I 0 INZ(0)
```

S/390 assembler-language declaration (z/OS only)

```
MQEPH                         DSECT
MQEPH_STRUCID                 DS   CL4     Structure identifier
MQEPH_VERSION                 DS   F       Structure version number
MQEPH_STRUCLENGTH             DS   F       Structure length
MQEPH_ENCODING                DS   F       Numeric encoding
MQEPH_CODEDCHARSETID          DS   F       Coded character set identifier
MQEPH_FORMAT                  DS   CL8     Data format
MQEPH_FLAGS                   DS   F       Flags
MQEPH_PCFHEADER               DS   0F      Force fullword alignment
MQEPH_PCFHEADER_TYPE          DS   F       Structure type
MQEPH_PCFHEADER_STRUCLENGTH   DS   F       Structure length
MQEPH_PCFHEADER_VERSION       DS   F       Structure version number
MQEPH_PCFHEADER_COMMAND       DS   F       Command identifier
MQEPH_PCFHEADER_MSGSEQNUMBER  DS   F       Message sequence number
MQEPH_PCFHEADER_CONTROL       DS   F       Control options
MQEPH_PCFHEADER_COMPCODE      DS   F       Completion code
MQEPH_PCFHEADER_REASON        DS   F       Reason code qualifying completion code
MQEPH_PCFHEADER_PARAMETERCOUNT DS  F       Count of parameter structures
MQEPH_PCFHEADER_LENGTH        EQU  *-MQEPH_PCFHEADER
                              ORG  MQEPH_PCFHEADER
MQEPH_PCFHEADER_AREA          DS   CL(MQEPH_PCFHEADER_LENGTH)
*
MQEPH_LENGTH                  EQU  *-MQEPH
                              ORG  MQEPH
MQEPH_AREA                    DS   CL(MQEPH_LENGTH)
```

Visual Basic language declaration (Windows only)

```
Type MQEPH
  StrucId As String*4      'Structure identifier
  Version As Long          'Structure version number
  StrucLength As Long      'Structure length
  Encoding As Long         'Numeric encoding
  CodedCharSetId As Long   'Coded characetr set identifier
  Format As String*8       'Format name
  Flags As Long            'Flags
  Reason As Long           'Reason code qualifying completion code
  PCFHeader As MQCFH       'PCF header
End Type
```

Object attributes for event data

Use this page to view the object attributes that IBM MQ monitoring techniques can include in the configuration event data recorded in event messages. The amount of event data depends on the type of object to which the configuration event relates.

V 8.0.0.4 Authentication configuration attributes

Event messages relating to objects can include authentication configuration attributes

AuthorityRecordType **(MQCFIN)**
> Object type (parameter identifier: MQIACF_AUTH_REC_TYPE).
>
> Describes the object type whose profile is being updated, for example MQOT_Q.

AuthorizationList **(MQCFIL)**
> Authorization list (parameter identifier: MQIACF_AUTHORIZATION_LIST).
>
> Displays the MQAUTH_* values; see Inquire Authority Records (Response).

EntityName **(MQCFST)**
> Entity name (parameter identifier: MQCACF_ENTITY_NAME).

> The entity name can be either a principal name or a group name.

> The maximum length of the string is MQ_ENTITY_NAME_LENGTH.

EntityType **(MQCFIN)**
> Entity type (parameter identifier: MQIACF_ENTITY_TYPE).

> Displays the MQZAET_* values; see Inquire Authority Records (Response).

Authentication information attributes

Event messages relating to objects can include authentication information attributes

AlterationDate **(MQCFST)**
> Alteration date (parameter identifier: MQCA_ALTERATION_DATE).

> The date when the information was last altered.

AlterationTime **(MQCFST)**
> Alteration time (parameter identifier: MQCA_ALTERATION_TIME).

> The time when the information was last altered.

AuthInfoConnName **(MQCFST)**
> Authentication information connection name (parameter identifier:
> MQCA_AUTH_INFO_CONN_NAME).

> The maximum length of the string is 48.

AuthInfoDesc **(MQCFST)**
> Authentication information description (parameter identifier: MQCA_AUTH_INFO_DESC).

> The maximum length of the string is MQ_AUTH_INFO_DESC_LENGTH.

AuthInfoType **(MQCFIN)**
> Authentication information type (parameter identifier: MQIA_AUTH_INFO_TYPE).

> The value is MQAIT_CRL_LDAP.

LDAPPassword **(MQCFST)**
> LDAP password (parameter identifier: MQCA_LDAP_PASSWORD).

> The maximum length of the string is MQ_LDAP_PASSWORD_LENGTH.

LDAPUserName **(MQCFST)**
> LDAP user name (parameter identifier: MQCA_LDAP_USER_NAME).

> The maximum length of the string is 256.

CF structure attributes

Event messages relating to objects can include CF structure attributes

AlterationDate **(MQCFST)**
> Alteration date (parameter identifier: MQCA_ALTERATION_DATE).

> The date when the information was last altered.

AlterationTime **(MQCFST)**
> Alteration time (parameter identifier: MQCA_ALTERATION_TIME).

> The time when the information was last altered.

CFLevel **(MQCFIN)**
> CF level (parameter identifier: MQIA_CF_LEVEL).

CFStrucDesc **(MQCFST)**
  CF Structure description (parameter identifier: MQCA_CF_STRUC_DESC).

  The maximum length of the string is MQCA_CF_STRUC_DESC_LENGTH.

Recovery **(MQCFIN)**
  Recovery (parameter identifier: MQIA_CF_RECOVER).

Communication information attributes

AlterationDate **(MQCFST)**
  Alteration date (parameter identifier: MQCA_ALTERATION_DATE).

  The date when the information was last altered, in the form `yyyy-mm-dd`.

AlterationTime **(MQCFST)**
  Alteration time (parameter identifier: MQCA_ALTERATION_TIME).

  The time when the information was last altered, in the form `hh.mm.ss`.

Bridge **(MQCFIN)**
  Bridge (parameter identifier: MQIA_MCAST_BRIDGE).

  Specifies whether publications from applications not using Multicast are bridged to applications using multicast.

  The value can be any of the following values:

  MQMCB_DISABLED
    Bridging is disabled.
  MQMCB_ENABLED
    Bridging is enabled.

CCSID **(MQCFIN)**
  Coded character set identifier (parameter identifier: MQIA_CODED_CHAR_SET_ID).

  The CCSID that messages are transmitted on.

CommEvent **(MQCFIN)**
  Communication event (parameter identifier: MQIA_COMM_EVENT).

  Controls whether event messages are generated for multicast handles that are created using this COMMINFO object.

  The value can be any of the following values:

  MQEVR_DISABLED
    Event messages are not generated.
  MQEVR_ENABLED
    Event messages are generated.
  MQEVR_EXCEPTION
    Event messages are generated if the message reliability is below the reliability threshold.

CommInfoName **(MQCFST)**
  Communication information name (parameter identifier: MQCA_COMM_INFO_NAME).

  The name of the administrative communication information definition about which information is to be returned.

Description **(MQCFST)**
  Description (parameter identifier: MQCA_COMM_INFO_DESC).

  Plain-text comment that provides descriptive information about the communication information object.

Encoding **(MQCFIN)**
  Encoding (parameter identifier: MQIACF_ENCODING).

The encoding that the messages are transmitted in.

The value can be any of the following values:

MQENC_AS_PUBLISHED

MQENC_NORMAL

MQENC_REVERSED

MQENC_S390

MQENC_TNS

GrpAddress **(MQCFST)**

Group address (parameter identifier: MQCACH_GROUP_ADDRESS).

The group IP address or DNS name.

MonitorInterval **(MQCFIN)**

Frequency of monitoring (parameter identifier: MQIA_MONITOR_INTERVAL).

How frequently, in seconds, monitoring information is updated and event messages are generated.

MulticastHeartbeat **(MQCFIN)**

Multicast heartbeat (parameter identifier: MQIACH_MC_HB_INTERVAL).

Heartbeat interval measured in milliseconds.

MulticastPropControl **(MQCFIN)**

Multicast properties control (parameter identifier: MQIACH_MULTICAST_PROPERTIES).

Controls how many of the MQMD properties and user properties flow with the message.

The value can be any of the following values:

MQMCP_ALL

All properties are transmitted.

MQMCP_REPLY

Only user properties and MQMD fields that deal with replying to the messages are transmitted.

MQMCP_USER

Only user properties are transmitted.

MQMCP_NONE

No properties are transmitted.

MQMCP_COMPAT

Properties are transmitted in a format compatible with previous IBM MQ multicast clients.

MsgHistory **(MQCFIN)**

Message history (parameter identifier: MQIACH_MSG_HISTORY).

The amount of message history in kilobytes that is kept by the system to handle retransmissions in the case of NACKs.

NewSubHistory **(MQCFIN)**

New Subscriber History (parameter identifier: MQIACH_NEW_SUBSCRIBER_HISTORY).

Controls how much historical data a new subscriber receives. The value can be any of the following values:

MQNSH_NONE

Only publications from the time of the subscription are sent.

MQNSH_ALL

As much history as is known is retransmitted.

PortNumber **(MQCFIN)**

Port Number (parameter identifier: MQIACH_PORT).

The port number to transmit on.

Type **(MQCFIN)**

Type (parameter identifier: MQIA_COMM_INFO_TYPE).

The type of the communications information object.

Channel attributes

Event messages relating to objects can include channel attributes

Only those attributes that apply to the type of channel in question are included in the event data.

AlterationDate **(MQCFST)**

Alteration date (parameter identifier: MQCA_ALTERATION_DATE).

The date when the information was last altered.

AlterationTime **(MQCFST)**

Alteration time (parameter identifier: MQCA_ALTERATION_TIME).

The time when the information was last altered.

BatchHeartbeat **(MQCFIN)**

The value being used for the batch heartbeating (parameter identifier: MQIACH_BATCH_HB).

The value can be in the range 0 through 999999. A value of 0 indicates heartbeating is not in use.

BatchInterval **(MQCFIN)**

Batch interval (parameter identifier: MQIACH_BATCH_INTERVAL).

BatchSize **(MQCFIN)**

Batch size (parameter identifier: MQIACH_BATCH_SIZE).

ChannelDesc **(MQCFST)**

Channel description (parameter identifier: MQCACH_DESC).

The maximum length of the string is MQ_CHANNEL_DESC_LENGTH.

ChannelMonitoring **(MQCFIN)**

Level of monitoring data collection for the channel (parameter identifier: MQIA_MONITORING_CHANNEL).

The value can be any of the following values:

MQMON_OFF

Monitoring data collection is turned off.

MQMON_LOW

Monitoring data collection is turned on with a low ratio of data collection.

MQMON_MEDIUM

Monitoring data collection is turned on with a medium ratio of data collection.

MQMON_HIGH

Monitoring data collection is turned on with a high ratio of data collection.

MQMON_Q_MGR

The level of monitoring data collected is based on the queue manager attribute *ChannelMonitoring*.

ChannelName **(MQCFST)**

Channel name (parameter identifier: MQCACH_CHANNEL_NAME).

The maximum length of the string is MQ_CHANNEL_NAME_LENGTH.

ChannelStatistics (MQCFIN)

Level of statistics data collection for the channel (parameter identifier: **MQIA_STATISTICS_CHANNEL**).

The value can be any of the following values:

MQMON_OFF
Statistics data collection is turned off.

MQMON_LOW
Statistics data collection is turned on with a low ratio of data collection.

MQMON_MEDIUM
Statistics data collection is turned on with a medium ratio of data collection.

MQMON_HIGH
Statistics data collection is turned on with a high ratio of data collection.

MQMON_Q_MGR
The level of statistics data collected is based on the queue manager attribute
ChannelStatistics.

For platform specific details about this attribute, refer to the description of the STATCHL attribute in
the ALTER QMGR command.

ChannelType **(MQCFIN)**
Channel type (parameter identifier: MQIACH_CHANNEL_TYPE).

The value can be:

MQCHT_SENDER
Sender.

MQCHT_SERVER
Server.

MQCHT_RECEIVER
Receiver.

MQCHT_REQUESTER
Requester.

MQCHT_SVRCONN
Server-connection (for use by clients).

MQCHT_CLNTCONN
Client connection.

MQCHT_CLUSRCVR
Cluster-receiver.

MQCHT_CLUSSDR
Cluster-sender.

CipherSpec **(MQCFST)**
SSL cipher specification (parameter identifier: MQCACH_SSL_CIPHER_SPEC).

The maximum length of the string is MQ_SSL_CIPHER_SPEC_LENGTH.

ClusterName **(MQCFST)**
Cluster name (parameter identifier: MQCA_CLUSTER_NAME).

ClusterNamelist **(MQCFST)**
Cluster namelist (parameter identifier: MQCA_CLUSTER_NAMELIST).

CLWLChannelPriority **(MQCFIN)**
Cluster workload channel priority (parameter identifier: MQIACH_CLWL_CHANNEL_PRIORITY).

CLWLChannelRank **(MQCFIN)**
Cluster workload channel rank (parameter identifier: MQIACH_CLWL_CHANNEL_RANK).

CLWLChannelWeight **(MQCFIN)**
Cluster workload channel weight (parameter identifier: MQIACH_CLWL_CHANNEL_WEIGHT).

ConnectionName **(MQCFST)**
Connection name (parameter identifier: MQCACH_CONNECTION_NAME).

The maximum length of the string is MQ_CONN_NAME_LENGTH.

***DataConversion* (MQCFIN)**
Whether sender should convert application data (parameter identifier: MQIACH_DATA_CONVERSION).

The value can be any of the following values:

MQCDC_NO_SENDER_CONVERSION
No conversion by sender.

MQCDC_SENDER_CONVERSION
Conversion by sender.

***DiscInterval* (MQCFIN)**
Disconnection interval (parameter identifier: MQIACH_DISC_INTERVAL).

***HeaderCompression* (MQCFIL)**
Header data compression techniques supported by the channel (parameter identifier: MQIACH_HDR_COMPRESSION).

For sender, server, cluster-sender, cluster-receiver, and client-connection channels, the values specified are in order of preference.

The value can be one, or more, of the following:

MQCOMPRESS_NONE
No header data compression is performed.

MQCOMPRESS_SYSTEM
Header data compression is performed.

***HeartbeatInterval* (MQCFIN)**
Heartbeat interval (parameter identifier: MQIACH_HB_INTERVAL).

***KeepAliveInterval* (MQCFIN)**
Keep alive interval (parameter identifier: MQIACH_KEEP_ALIVE_INTERVAL).

***LocalAddress* (MQCFST)**
Local communications address for the channel (parameter identifier: MQCACH_LOCAL_ADDRESS).

The maximum length of the string is MQ_LOCAL_ADDRESS_LENGTH.

***LongRetryCount* (MQCFIN)**
Long retry count (parameter identifier: MQIACH_LONG_RETRY).

***LongRetryInterval* (MQCFIN)**
Long timer (parameter identifier: MQIACH_LONG_TIMER).

***MaxMsgLength* (MQCFIN)**
Maximum message length (parameter identifier: MQIACH_MAX_MSG_LENGTH).

***MCAName* (MQCFST)**
Message channel agent name (parameter identifier: MQCACH_MCA_NAME).

The maximum length of the string is MQ_MCA_NAME_LENGTH.

***MCAType* (MQCFIN)**
Message channel agent type (parameter identifier: MQIACH_MCA_TYPE).

The value can be any of the following values:

MQMCAT_PROCESS
Process

MQMCAT_THREAD
Thread

***MCAUserIdentifier* (MQCFST)**
Message channel agent user identifier (parameter identifier: MQCACH_MCA_USER_ID).

The maximum length of the MCA user identifier is MQ_MCA_USER_ID_LENGTH.

***MessageCompression* (MQCFIL)**
Message data compression techniques supported by the channel (parameter identifier: MQIACH_MSG_COMPRESSION).

For sender, server, cluster-sender, cluster-receiver, and client-connection channels, the values specified are in order of preference.

The value can be one, or more, of:

MQCOMPRESS_NONE
No message data compression is performed. This is the default value.

MQCOMPRESS_RLE
Message data compression is performed using run-length encoding.

MQCOMPRESS_ZLIBFAST
Message data compression is performed using ZLIB encoding with speed prioritized.

MQCOMPRESS_ZLIBHIGH
Message data compression is performed using ZLIB encoding with compression prioritized.

MQCOMPRESS_ANY
Any compression technique supported by the queue manager can be used. This is only valid for receiver, requester, and server-connection channels.

***ModeName* (MQCFST)**
Mode name (parameter identifier: MQCACH_MODE_NAME).

The maximum length of the string is MQ_MODE_NAME_LENGTH.

***MsgExit* (MQCFSL)**
Message exit name (parameter identifier: MQCACH_MSG_EXIT_NAME).

The number of names in the list is given by the *Count* field in the MQCFSL structure. It will be the same as the *Count* for *MsgUserData*. It may exceed the number of exit names specified for the channel, in which case the excess names are blank; the minimum is 1. The length of each name is given by the *StringLength* field in that structure.

The maximum length of the exit name is MQ_EXIT_NAME_LENGTH.

***MsgRetryCount* (MQCFIN)**
Message retry count (parameter identifier: MQIACH_MR_COUNT).

Specifies the number of times that a failing message should be retried.

This parameter is only valid for receiver, cluster-receiver, and requester channels.

***MsgRetryExit* (MQCFST)**
Message retry exit name (parameter identifier: MQCACH_MR_EXIT_NAME).

This parameter is only valid for receiver, cluster-receiver, and requester channels.

The maximum length of the string is MQ_MAX_EXIT_NAME_LENGTH.

***MsgRetryInterval* (MQCFIN)**
Message retry interval (parameter identifier: MQIACH_MR_INTERVAL).

Specifies the minimum time interval in milliseconds between retries of failing messages.

This parameter is only valid for receiver, cluster-receiver, and requester channels.

***MsgRetryUserData* (MQCFST)**
Message retry exit user data (parameter identifier: MQCACH_MR_EXIT_USER_DATA).

Specifies user data that is passed to the message retry exit.

This parameter is only valid for receiver, cluster-receiver, and requester channels.

The maximum length of the string is MQ_EXIT_DATA_LENGTH.

MsgUserData (MQCFSL)
Message exit user data (parameter identifier: MQCACH_MSG_EXIT_USER_DATA).

The number of names in the list is given by the *Count* field in the MQCFSL structure. It will be the same as the count for *MsgExit*. The length of each name is given by the *StringLength* field in that structure.

The maximum length of the string is MQ_EXIT_DATA_LENGTH.

NetworkPriority (MQCFIN)
Network priority (parameter identifier: MQIACH_NETWORK_PRIORITY).

NonPersistentMsgSpeed (MQCFIN)
Speed at which nonpersistent messages are to be sent (parameter identifier: MQIACH_NPM_SPEED).

The value can be any of the following values:

MQNPMS_NORMAL
Normal speed.

MQNPMS_FAST
Fast speed.

Password (MQCFST)
Password (parameter identifier: MQCACH_PASSWORD).

The maximum length of the string is MQ_PASSWORD_LENGTH.

PeerName (MQCFST)
SSL peer name (parameter identifier: MQCACH_SSL_PEER_NAME).

The maximum length of the string is 256.

PutAuthority (MQCFIN)
Put authority (parameter identifier: MQIACH_PUT_AUTHORITY).

The value can be:

MQPA_DEFAULT
Default user identifier is used.

MQPA_CONTEXT
Context user identifier is used.

MQPA_ALTERNATE_OR_MCA
Alternate or MCA user identifier is used.

MQPA_ONLY_MCA
Only MCA user identifier is used.

QMgrName (MQCFST)
Queue manager name (parameter identifier: MQCA_Q_MGR_NAME).

The maximum length of the string is MQ_Q_MGR_NAME_LENGTH.

ReceiveExit (MQCFSL)
Receive exit name (parameter identifier: MQCACH_RCV_EXIT_NAME).

The number of names in the list is given by the *Count* field in the MQCFSL structure. It will be the same as the *Count* for *ReceiveUserData*. It may exceed the number of exit names specified for the channel, in which case the excess names are blank; the minimum is 1. The length of each name is given by the *StringLength* field in that structure.

For a client-connection channel the maximum length of the exit name is MQ_MAX_EXIT_NAME_LENGTH. For all other channels, the maximum length of the exit name is MQ_EXIT_NAME_LENGTH.

ReceiveUserData (MQCFSL)
Receive exit user data (parameter identifier: MQCACH_RCV_EXIT_USER_DATA).

The number of names in the list is given by the *Count* field in the MQCFSL structure. It will be the same as the count for `ReceiveExit`. The length of each name is given by the `StringLength` field in that structure.

The maximum length of the string is MQ_EXIT_DATA_LENGTH.

***SecurityExit* (MQCFST)**
Security exit name (parameter identifier: MQCACH_SEC_EXIT_NAME).

For a client-connection channel the maximum length of the exit name is MQ_MAX_EXIT_NAME_LENGTH. For all other channels, the maximum length of the exit name is MQ_EXIT_NAME_LENGTH.

***SecurityUserData* (MQCFST)**
Security exit user data (parameter identifier: MQCACH_SEC_EXIT_USER_DATA).

The maximum length of the string is MQ_EXIT_DATA_LENGTH.

***SendExit* (MQCFSL)**
Send exit name (parameter identifier: MQCACH_SEND_EXIT_NAME).

The number of names in the list is given by the *Count* field in the MQCFSL structure. It will be the same as the *Count* for *SendUserData*. It may exceed the number of exit names specified for the channel, in which case the excess names are blank; the minimum is 1. The length of each name is given by the `StringLength` field in that structure.

For a client-connection channel the maximum length of the exit name is MQ_MAX_EXIT_NAME_LENGTH. For all other channels, the maximum length of the exit name is MQ_EXIT_NAME_LENGTH.

***SendUserData* (MQCFSL)**
Send exit user data (parameter identifier: MQCACH_SEND_EXIT_USER_DATA).

The number of names in the list is given by the *Count* field in the MQCFSL structure. It will be the same as the count for *SendExit*. The length of each name is given by the `StringLength` field in that structure.

The maximum length of the string is MQ_EXIT_DATA_LENGTH.

***SeqNumberWrap* (MQCFIN)**
Sequence wrap number (parameter identifier: MQIACH_SEQUENCE_NUMBER_WRAP).

***ShortRetryCount* (MQCFIN)**
Short retry count (parameter identifier: MQIACH_SHORT_RETRY).

***ShortRetryInterval* (MQCFIN)**
Short timer (parameter identifier: MQIACH_SHORT_TIMER).

***SSLClientAuthentication* (MQCFIN)**
SSL client authentication (parameter identifier: MQIACH_SSL_CLIENT_AUTH).

The value can be:

MQSCA_REQUIRED
Certificate required.

MQSCA_OPTIONAL
Certificate optional.

***TpName* (MQCFST)**
Transaction program name (parameter identifier: MQCACH_TP_NAME).

The maximum length of the string is MQ_TP_NAME_LENGTH.

***TransportType* (MQCFIN)**
Transmission protocol type (parameter identifier: MQIACH_XMIT_PROTOCOL_TYPE).

The value may be:

MQXPT_LU62
LU 6.2.

MQXPT_TCP
TCP.

MQXPT_NETBIOS
NetBIOS.

MQXPT_SPX
SPX.

UserIdentifier **(MQCFST)**
Task user identifier (parameter identifier: MQCACH_USER_ID).

The maximum length of the string is MQ_USER_ID_LENGTH.

XmitQName **(MQCFST)**
Transmission queue name (parameter identifier: MQCACH_XMIT_Q_NAME).

The maximum length of the string is MQ_Q_NAME_LENGTH.

Channel authentication attributes

Event messages relating to objects can include channel authentication attributes

Only those attributes that apply to the type of channel in question are included in the event data.

ChannelProfile **(MQCFST).**
Channel Profile (parameter identifier: MQCACH_CHANNEL_NAME).

Maximum length is MQ_CHANNEL_NAME_LENGTH.

Returned: Always.

ChannelAuthType **(MQCFIN).**
Channel Authentication Type (parameter identifier: MQIACF_CHLAUTH_TYPE).

Returned: Always.

Warning **(MQCFIN).**
Warning (parameter identifier: MQIACH_WARNING).

Returned: Always.

connectionNameList **(MQCFSL).**
Connection Name List (parameter identifier: MQCACH_CONNECTION_NAME_LIST).

Element length: MQ_CONN_NAME_LENGTH.

Returned: Only when Channel Auth Type is MQAUT_BLOCKADDR.

MCAUserIdList **(MQCFSL).**
MCA User Id List (parameter identifier: MQCACH_MCA_USER_ID_LIST).

Element length: MQ_MCA_USER_ID_LENGTH

Returned: Only when Channel Auth Type is MQAUT_BLOCKUSER

MCAUser **(MQCFST).**
MCA User (parameter identifier: MQCACH_MCA_USER_ID).

Maximum length: MQ_MCA_USER_ID_LENGTH.

Returned: Only when Channel Auth Type is of a mapping type (MQCAUT_SSLPEERMAP, MQCAUT_ADDRESSMAP, MQCAUT_USERMAP or MQCAUT_QMGRMAP).

ConnectionName **(MQCFST).**
Connection Name (parameter identifier: MQCACH_CONNECTION_NAME).

Maximum length: MQ_CONN_NAME_LENGTH

Returned: Only when Channel Auth Type is of a mapping type (MQCAUT_SSLPEERMAP, MQCAUT_ADDRESSMAP, MQCAUT_USERMAP or MQCAUT_QMGRMAP).

UserSource **(MQCFIN).**
User Source (parameter identifier: MQIACH_USER_SOURCE).

Returned: Only when Channel Auth Type is of a mapping type (MQCAUT_SSLPEERMAP, MQCAUT_ADDRESSMAP, MQCAUT_USERMAP or MQCAUT_QMGRMAP).

SSLPeerName **(MQCFST).**
SSL Peer Name (parameter identifier: MQCACH_SSL_PEER_NAME).

Maximum length: MQ_SSL_PEER_NAME_LENGTH.

Returned: Only when Channel Auth Type is MQCAUT_SSLPEERMAP.

ClientUserId **(MQCFST).**
Client User Id (parameter identifier: MQCACH_CLIENT_USER_ID).

Maximum length: MQ_MCA_USER_ID_LENGTH.

Returned: Only when Channel Auth Type is MQCAUT_USERMAP.

RemoteQueueManagerName **(MQCFST).**
Remote Queue Manager Name (parameter identifier: MQCA_REMOTE_Q_MGR_NAME).

Maximum length: MQ_Q_MGR_NAME_LENGTH.

Returned: Only when Channel Auth Type is MQCAUT_QMGRMAP.

Listener attributes

AlterationDate **(MQCFST)**
Alteration date (parameter identifier: MQCA_ALTERATION_DATE).

The date, in the form `yyyy-mm-dd`, on which the information was last altered.

AlterationTime **(MQCFST)**
Alteration time (parameter identifier: MQCA_ALTERATION_TIME).

The time, in the form `hh.mm.ss`, at which the information was last altered.

Adapter **(MQCIN)**
Adapter number (parameter identifier: MQIACH_ADAPTER).

The adapter number on which NetBIOS listens. This parameter is valid only on Windows.

Backlog **(MQCIN)**
Backlog (parameter identifier: MQIACH_BACKLOG).

The number of concurrent connection requests that the listener supports.

Commands **(MQCIN)**
Adapter number (parameter identifier: MQIACH_COMMAND_COUNT).

The number of commands that the listener can use. This parameter is valid only on Windows.

IPAddress **(MQCFST)**
IP address (parameter identifier: MQCACH_IP_ADDRESS).

IP address for the listener specified in IPv4 dotted decimal, IPv6 hexadecimal notation, or alphanumeric host name form.

ListenerDesc **(MQCFST)**
Description of listener definition (parameter identifier: MQCACH_LISTENER_DESC).

ListenerName **(MQCFST)**
Name of listener definition (parameter identifier: MQCACH_LISTENER_NAME).

LocalName **(MQCFST)**
NetBIOS local name (parameter identifier: MQCACH_LOCAL_NAME).

The NetBIOS local name that the listener uses. This parameter is valid only on Windows.

NetbiosNames **(MQCFIN)**
>NetBIOS names (parameter identifier: MQIACH_NAME_COUNT).

>The number of names that the listener supports. This parameter is valid only on Windows.

Port **(MQCFIN)**
>Port number (parameter identifier: MQIACH_PORT).

>The port number for TCP/IP. This parameter is valid only if the value of TransportType is MQXPT_TCP.

Sessions **(MQCFIN)**
>NetBIOS sessions (parameter identifier: MQIACH_SESSION_COUNT).

>The number of sessions that the listener can use. This parameter is valid only on Windows.

Socket **(MQCFIN)**
>SPX socket number (parameter identifier: MQIACH_SOCKET).

>The SPX socket on which to listen. This parameter is valid only if the value of TransportType is MQXPT_SPX.

StartMode **(MQCFIN)**
>Service mode (parameter identifier: MQIACH_LISTENER_CONTROL).

>Specifies how the listener is to be started and stopped. The value can be:

>**MQSVC_CONTROL_MANUAL**
>>The listener is started and stopped manually, by user command.

>**MQSVC_CONTROL_Q_MGR**
>>The listener is started and stopped when the queue manager starts and stops.

>**MQSVC_CONTROL_Q_MGR_START**
>>The listener is started when the queue manager starts, but does not stop when the queue manager stops.

TPName **(MQCFST)**
>Transaction program name (parameter identifier: MQCACH_TP_NAME).

>The LU 6.2 transaction program name. This parameter is valid only on Windows.

TransportType **(MQCFIN)**
>Transmission protocol (parameter identifier: MQIACH_XMIT_PROTOCOL_TYPE).

>The value can be any of the following values:

>**MQXPT_TCP**
>>TCP
>**MQXPT_LU62**
>>LU 6.2
>**MQXPT_NETBIOS**
>>NetBIOS
>**MQXPT_SPX**
>>SPX

Namelist attributes

Event messages relating to objects can include namelist attributes

AlterationDate **(MQCFST)**
>Alteration date (parameter identifier: MQCA_ALTERATION_DATE).

>The date when the information was last altered.

AlterationTime **(MQCFST)**
>Alteration time (parameter identifier: MQCA_ALTERATION_TIME).

>The time when the information was last altered.

***NameCount* (MQCFIN)**
Number of names in the namelist (parameter identifier: MQIA_NAME_COUNT).

The number of names contained in the namelist.

***NamelistDesc* (MQCFST)**
Description of namelist definition (parameter identifier: MQCA_NAMELIST_DESC).

The maximum length of the string is MQ_NAMELIST_DESC_LENGTH.

***NamelistName* (MQCFST)**
The name of the namelist definition (parameter identifier: MQCA_NAMELIST_NAME).

The maximum length of the string is MQ_NAMELIST_NAME_LENGTH.

***NamelistType* (MQCFIN)**
Namelist type (parameter identifier: MQIA_NAMELIST_TYPE).

***Names* (MQCFSL)**
The names contained in the namelist (parameter identifier: MQCA_NAMES).

The number of names in the list is given by the *Count* field in the MQCFSL structure. The length of each name is given by the *StringLength* field in that structure. The maximum length of a name is MQ_OBJECT_NAME_LENGTH.

Process attributes

Event messages relating to objects can include process attributes

***AlterationDate* (MQCFST)**
Alteration date (parameter identifier: MQCA_ALTERATION_DATE).

The date when the information was last altered.

***AlterationTime* (MQCFST)**
Alteration time (parameter identifier: MQCA_ALTERATION_TIME).

The time when the information was last altered.

***ApplId* (MQCFST)**
Application identifier (parameter identifier: MQCA_APPL_ID).

The maximum length of the string is MQ_PROCESS_APPL_ID_LENGTH.

***ApplType* (MQCFIN)**
Application type (parameter identifier: MQIA_APPL_TYPE).

***EnvData* (MQCFST)**
Environment data (parameter identifier: MQCA_ENV_DATA).

The maximum length of the string is MQ_PROCESS_ENV_DATA_LENGTH.

***ProcessDesc* (MQCFST)**
Description of process definition (parameter identifier: MQCA_PROCESS_DESC).

The maximum length of the string is MQ_PROCESS_DESC_LENGTH.

***ProcessName* (MQCFST)**
The name of the process definition (parameter identifier: MQCA_PROCESS_NAME).

The maximum length of the string is MQ_PROCESS_NAME_LENGTH.

***UserData* (MQCFST)**
User data (parameter identifier: MQCA_USER_DATA).

The maximum length of the string is MQ_PROCESS_USER_DATA_LENGTH.

Queue attributes

Event messages relating to objects can include queue attributes

Only those attributes that apply to the type of queue in question are included in the event data.

AlterationDate **(MQCFST)**
Alteration date (parameter identifier: MQCA_ALTERATION_DATE).

The date when the information was last altered.

AlterationTime **(MQCFST)**
Alteration time (parameter identifier: MQCA_ALTERATION_TIME).

The time when the information was last altered.

BackoutRequeueName **(MQCFST)**
Excessive backout requeue name (parameter identifier: MQCA_BACKOUT_REQ_Q_NAME).

The maximum length of the string is MQ_Q_NAME_LENGTH.

BackoutThreshold **(MQCFIN)**
Backout threshold (parameter identifier: MQIA_BACKOUT_THRESHOLD).

BaseQName **(MQCFST)**
Queue name to which the alias resolves (parameter identifier: MQCA_BASE_Q_NAME).

This is the name of a queue that is defined to the local queue manager.

The maximum length of the string is MQ_Q_NAME_LENGTH.

CFstructure **(MQCFST)**
CF structure name (parameter identifier: MQCA_CF_STRUC_NAME).

The maximum length of the string is MQ_CF_STRUC_NAME_LENGTH.

ClusterName **(MQCFST)**
Cluster name (parameter identifier: MQCA_CLUSTER_NAME).

ClusterNamelist **(MQCFST)**
Cluster namelist (parameter identifier: MQCA_CLUSTER_NAMELIST).

CLWLQueuePriority **(MQCFIN)**
Queue priority (parameter identifier: MQIA_CLWL_Q_PRIORITY).

CLWLQueueRank **(MQCFIN)**
Queue rank (parameter identifier: MQIA_CLWL_Q_RANK).

CLWLUseQ **(MQCFIN)**
This defines the behavior of an MQPUT when the target queue has both a local instance and at least one remote cluster instance (parameter identifier: MQIA_CLWL_USEQ).

The value can be any of the following values:

MQCLWL_USEQ_ANY
Use remote and local queues.

MQCLWL_USEQ_LOCAL
Do not use remote queues.

MQCLWL_USEQ_AS_Q_MGR
Inherit definition from the queue manager attribute *CLWLUseQ*.

CreationDate **(MQCFST)**
Queue creation date (parameter identifier: MQCA_CREATION_DATE).

The maximum length of the string is MQ_CREATION_DATE_LENGTH.

CreationTime **(MQCFST)**
Creation time (parameter identifier: MQCA_CREATION_TIME).

The maximum length of the string is MQ_CREATION_TIME_LENGTH.

***DefBind* (MQCFIN)**
Default binding (parameter identifier: MQIA_DEF_BIND).

The value can be:

MQBND_BIND_ON_OPEN
Binding fixed by MQOPEN call.

MQBND_BIND_NOT_FIXED
Binding not fixed.

MQBND_BIND_ON_GROUP
Allows an application to request that a group of messages are all allocated to the same destination instance.

***DefinitionType* (MQCFIN)**
Queue definition type (parameter identifier: MQIA_DEFINITION_TYPE).

The value can be any of the following values:

MQQDT_PREDEFINED
Predefined permanent queue.

MQQDT_PERMANENT_DYNAMIC
Dynamically defined permanent queue.

MQQDT_SHARED_DYNAMIC
Dynamically defined permanent queue that is shared.

***DefInputOpenOption* (MQCFIN)**
Default input open option for defining whether queues can be shared (parameter identifier: MQIA_DEF_INPUT_OPEN_OPTION).

The value can be:

MQOO_INPUT_EXCLUSIVE
Open queue to get messages with exclusive access.

MQOO_INPUT_SHARED
Open queue to get messages with shared access.

***DefPersistence* (MQCFIN)**
Default persistence (parameter identifier: MQIA_DEF_PERSISTENCE).

The value can be any of the following values:

MQPER_PERSISTENT
Message is persistent.

MQPER_NOT_PERSISTENT
Message is not persistent.

***DefPriority* (MQCFIN)**
Default priority (parameter identifier: MQIA_DEF_PRIORITY).

***HardenGetBackout* (MQCFIN)**
Whether to harden backout (parameter identifier: MQIA_HARDEN_GET_BACKOUT).

The value can be any of the following values:

MQQA_BACKOUT_HARDENED
Backout count remembered.

MQQA_BACKOUT_NOT_HARDENED
Backout count may not be remembered.

***IndexType* (MQCFIN)**
Index type (parameter identifier: MQIA_INDEX_TYPE).

InhibitGet (MQCFIN)
> Whether get operations are allowed (parameter identifier: MQIA_INHIBIT_GET).
>
> The value can be any of the following values:
>
> **MQQA_GET_ALLOWED**
>> Get operations are allowed.
>
> **MQQA_GET_INHIBITED**
>> Get operations are inhibited.

InhibitPut (MQCFIN)
> Whether put operations are allowed (parameter identifier: MQIA_INHIBIT_PUT).
>
> The value can be any of the following values:
>
> **MQQA_PUT_ALLOWED**
>> Put operations are allowed.
>
> **MQQA_PUT_INHIBITED**
>> Put operations are inhibited.

InitiationQName (MQCFST)
> Initiation queue name (parameter identifier: MQCA_INITIATION_Q_NAME).
>
> The maximum length of the string is MQ_Q_NAME_LENGTH.

MaxMsgLength (MQCFIN)
> Maximum message length (parameter identifier: MQIA_MAX_MSG_LENGTH).

MaxQDepth (MQCFIN)
> Maximum queue depth (parameter identifier: MQIA_MAX_Q_DEPTH).

MsgDeliverySequence (MQCFIN)
> Whether priority is relevant (parameter identifier: MQIA_MSG_DELIVERY_SEQUENCE).
>
> The value can be any of the following values:
>
> **MQMDS_PRIORITY**
>> Messages are returned in priority order.
>
> **MQMDS_FIFO**
>> Messages are returned in FIFO order (first in, first out).

ProcessName (MQCFST)
> Name of process definition for queue (parameter identifier: MQCA_PROCESS_NAME).
>
> The maximum length of the string is MQ_PROCESS_NAME_LENGTH.

QDepthHiEvent (MQCFIN)
> Controls whether Queue Depth High events are generated. (parameter identifier: MQIA_Q_DEPTH_HIGH_EVENT).
>
> The value can be any of the following values:
>
> **MQEVR_ENABLED**
>> Queue depth high events are enabled.
>
> **MQEVR_DISABLED**
>> Queue depth high events are disabled.

QDepthHighLimit (MQCFIN)
> High limit for queue depth (parameter identifier: MQIA_Q_DEPTH_HIGH_LIMIT).
>
> The threshold against which the queue depth is compared to generate a Queue Depth High event.

QDepthLoEvent (MQCFIN)
> Controls whether Queue Depth Low events are generated. (parameter identifier: MQIA_Q_DEPTH_LOW_EVENT).
>
> The value can be any of the following values:

MQEVR_ENABLED
Queue depth lowevents are enabled.

MQEVR_DISABLED
Queue depth low events are disabled.

QDepthLowLimit **(MQCFIN)**
Low limit for queue depth (parameter identifier: MQIA_Q_DEPTH_LOW_LIMIT).

The threshold against which the queue depth is compared to generate a Queue Depth Low event.

QDepthMaxEvent **(MQCFIN)**
Controls whether Queue Full events are generated. (parameter identifier: MQIA_Q_DEPTH_MAX_EVENT).

The value can be any of the following values:

MQEVR_ENABLED
Queue depth full events are enabled.

MQEVR_DISABLED
Queue depth full events are disabled.

QDesc **(MQCFST)**
Queue description (parameter identifier: MQCA_Q_DESC).

The maximum length of the string is MQ_Q_DESC_LENGTH.

QName **(MQCFST)**
Queue name (parameter identifier: MQCA_Q_NAME).

The maximum length of the string is MQ_Q_NAME_LENGTH.

QServiceInterval **(MQCFIN)**
Target for queue service interval (parameter identifier: MQIA_Q_SERVICE_INTERVAL).

The service interval used for comparison to generate Queue Service Interval High and Queue Service Interval OK events.

QType **(MQCFIN)**
Queue type (parameter identifier: MQIA_Q_TYPE).

The value can be:

MQQT_ALIAS
Alias queue definition.

MQQT_LOCAL
Local queue.

MQQT_REMOTE
Local definition of a remote queue.

MQQT_MODEL
Model queue definition.

QueueAccounting **(MQCFIN)**
Specifies whether accounting information is collected (parameter identifier: MQIA_ACCOUNTING_Q).

The value can be any of the following values:

MQMON_ON
Accounting information is collected for the queue.

MQMON_OFF
Accounting information is not collected for the queue.

MQMON_Q_MGR
The collection of accounting information for this queue is based is based on the queue manager attribute *QueueAccounting*.

QueueMonitoring (MQCFIN)

Level of monitoring data collection for the queue (parameter identifier: MQIA_MONITORING_Q).

The value can be any of the following values:

MQMON_OFF

Monitoring data collection is turned off.

MQMON_LOW

Monitoring data collection is turned on with a low ratio of data collection.

MQMON_MEDIUM

Monitoring data collection is turned on with a moderate ratio of data collection.

MQMON_HIGH

Monitoring data collection is turned on with a high ratio of data collection.

MQMON_Q_MGR

The level of monitoring data collected is based on the queue manager attribute *QueueMonitoring*.

RemoteQMgrName (MQCFST)

Name of remote queue manager (parameter identifier: MQCA_REMOTE_Q_MGR_NAME).

The maximum length of the string is MQ_Q_MGR_NAME_LENGTH.

RemoteQName (MQCFST)

Name of remote queue as known locally on the remote queue manager (parameter identifier: MQCA_REMOTE_Q_NAME).

The maximum length of the string is MQ_Q_NAME_LENGTH.

RetentionInterval (MQCFIN)

Retention interval (parameter identifier: MQIA_RETENTION_INTERVAL).

ServiceIntervalEvent (MQCFIN)

Controls whether Service Interval High or Service Interval OK events are generated. .

The value can be any of the following values:

MQQSIE_NONE

No service interval events are generated.

MQQSIE_OK

Service interval OK events are generated.

MQQSIE_HIGH

Service interval high events are generated.

Shareability (MQCFIN)

Whether queue can be shared (parameter identifier: MQIA_SHAREABILITY).

The value can be any of the following values:

MQQA_SHAREABLE

Queue is shareable.

MQQA_NOT_SHAREABLE

Queue is not shareable.

StorageClass (MQCFST)

Storage class name (parameter identifier: MQCA_STORAGE_CLASS).

The maximum length of the string is MQ_STORAGE_CLASS_LENGTH.

TriggerControl (MQCFIN)

Trigger control (parameter identifier: MQIA_TRIGGER_CONTROL).

The value can be any of the following values:

MQTC_OFF

Trigger messages not required.

MQTC_ON
> Trigger messages required.

TriggerData **(MQCFST)**
> Trigger data (parameter identifier: MQCA_TRIGGER_DATA).

> The maximum length of the string is MQ_TRIGGER_DATA_LENGTH.

TriggerDepth **(MQCFIN)**
> Trigger depth (parameter identifier: MQIA_TRIGGER_DEPTH).

TriggerMsgPriority **(MQCFIN)**
> Threshold message priority for triggers (parameter identifier: MQIA_TRIGGER_MSG_PRIORITY).

TriggerType **(MQCFIN)**
> Trigger type (parameter identifier: MQIA_TRIGGER_TYPE).

> The value can be:

MQTT_NONE
> No trigger messages.

MQTT_FIRST
> Trigger message when queue depth goes from 0 to 1.

MQTT_EVERY
> Trigger message for every message.

MQTT_DEPTH
> Trigger message when depth threshold exceeded.

Usage **(MQCFIN)**
> Usage (parameter identifier: MQIA_USAGE).

> The value can be any of the following values:

MQUS_NORMAL
> Normal usage.

MQUS_TRANSMISSION
> Transmission queue.

XmitQName **(MQCFST)**
> Transmission queue name (parameter identifier: MQCA_XMIT_Q_NAME).

> The maximum length of the string is MQ_Q_NAME_LENGTH.

Queue manager attributes

Event messages relating to objects can include queue manager attributes.

AccountingConnOverride **(MQCFIN)**
> Specifies whether applications can override the settings of the *QueueAccounting* and *MQIAccounting* queue manager parameters (parameter identifier: MQIA_ACCOUNTING_CONN_OVERRIDE).

> The value can be any of the following values:

MQMON_DISABLED
> Applications cannot override the settings of the *QueueAccounting* and *MQIAccounting* parameters.

> This value is the initial default value for the queue manager.

MQMON_ENABLED
> Applications can override the settings of the *QueueAccounting* and *MQIAccounting* parameters by using the options field of the MQCNO structure of the MQCONNX API call.

This parameter is valid only on IBM i, UNIX, Linux, and Windows.

AccountingInterval **(MQCFIN)**

The time interval, in seconds, at which intermediate accounting records are written (parameter identifier: MQIA_ACCOUNTING_INTERVAL).

Specify a value in the range 1 - 604,000.

This parameter is valid only on IBM i, UNIX, Linux, and Windows.

ActivityRecording **(MQCFIN)**

Specifies whether activity recording is enabled or disabled (parameter identifier: MQIA_ACTIVITY_RECORDING).

The value can be any of the following values:

MQRECORDING_MSG

Activity recording is enabled. Activity reports are delivered to the reply-to queue specified in the message descriptor of the message.

MQRECORDING_Q

Activity recording is enabled. Activity reports are delivered to a fixed name queue.

MQRECORDING_DISABLED.

Activity recording is disabled.

AdoptNewMCACheck **(MQCFIN)**

Procedure to determine if an existing receiver MCA is to be adopted when an inbound channel is detected of the same name (parameter identifier: MQIA_ADOPTNEWMCA_CHECK).

The value can be any of the following values:

MQADOPT_CHECK_Q_MGR_NAME

Compare the receiver MCA and the inbound channel. If the queue manager names match, the existing receiver MCA is adopted providing it is active. If they don't match, the existing receiver MCA is canceled, and a new MCA is created.

MQADOPT_CHECK_NET_ADDR

Compare the receiver MCA and the inbound channel. If the network addresses match, the existing receiver MCA is adopted providing it is active. If they don't match, the existing receiver MCA is canceled, and a new MCA is created.

MQADOPT_CHECK_ALL

Compare the receiver MCA and the inbound channel. If both the queue manager names, and the network addresses match, the existing receiver MCA is adopted providing it is active. If they don't match, the existing receiver MCA is canceled, and a new MCA is created.

MQADOPT_CHECK_NONE

If the existing receiver MCA is active it is adopted with no checks.

AdoptNewMCAType **(MQCFIN)**

Specifies whether orphaned receiver MCAs are to be restarted when an inbound channel matching the *AdoptNewMCACheck* procedure is detected (parameter identifier: MQIA_ADOPTNEWMCA_TYPE).

The value can be:

MQADOPT_TYPE_NO

Do not restart and adopt orphaned receiver MCAs.

MQADOPT_TYPE_ALL

Restart and adopt orphaned receiver MCAs.

AlterationDate **(MQCFST)**

Alteration date (parameter identifier: MQCA_ALTERATION_DATE).

The date when the information was last altered.

AlterationTime **(MQCFST)**

Alteration time (parameter identifier: MQCA_ALTERATION_TIME).

The time when the information was last altered.

AuthorityEvent (MQCFIN)
Controls whether authorization (Not Authorized) events are generated (parameter identifier: MQIA_AUTHORITY_EVENT).

The value can be any of the following values:

MQEVR_ENABLED
Authorization event reporting enabled.

MQEVR_DISABLED
Authorization event reporting disabled.

BridgeEvent (MQCFIN)
Determines whether IMS bridge events are generated (parameter identifier: MQIA_BRIDGE_EVENT).

The value can be any of the following values:

MQEVR_ENABLED
All IMS bridge events are enabled.

MQEVR_DISABLED
All IMS bridge events are disabled.

CertificateLabel (MQCFST)
Specifies the certificate label for this queue manager to use. The label identifies which personal certificate in the key repository has been selected (parameter identifier: MQCA_CERT_LABEL).

CertificateValPolicy (MQCFIN)
Specifies which TLS certificate validation policy is used to validate digital certificates received from remote partner systems (parameter identifier: MQIA_CERT_VAL_POLICY).

This attribute can be used to control how strictly the certificate chain validation conforms to industry security standards. For more information, see Certificate validation policies in IBM MQ.

The value can be any of the following values:

MQ_CERT_VAL_POLICY_ANY
Apply each of the certificate validation policies supported by the secure sockets library and accept the certificate chain if any of the policies considers the certificate chain valid. This setting can be used for maximum backwards compatibility with older digital certificates which do not comply with the modern certificate standards.

MQ_CERT_VAL_POLICY_RFC5280
Apply only the RFC 5280 compliant certificate validation policy. This setting provides stricter validation than the ANY setting, but rejects some older digital certificates.

This parameter is only valid on UNIX, Linux, and Windows and can be used only on a queue manager with a command level of 711, or higher.

Changes to **CertificateValPolicy** become effective either:

- When a new channel process is started.
- For channels that run as threads of the channel initiator, when the channel initiator is restarted.
- For channels that run as threads of the listener, when the listener is restarted.
- For channels that run as threads of a process pooling process, when the process pooling process is started or restarted and first runs a TLS channel. If the process pooling process has already run a TLS channel, and you want the change to become effective immediately, run the MQSC command **REFRESH SECURITY TYPE(SSL)**. The process pooling process is amqrmppa on UNIX, Linux, and Windows.
- When a **REFRESH SECURITY TYPE(SSL)** command is issued.

▶ **z/OS** ◀ **CFConlos** (MQCFIN)
Specifies the action to be taken when the queue manager loses connectivity to the administration structure, or any CF structure with CFConlos set to ASQMGR (parameter identifier: MQIA_QMGR_CFCONLOS).

The value can be:

MQCFCONLOS_TERMINATE
　　The queue manager terminates when connectivity to CF structures is lost.

MQCFCONLOS_TOLERATE
　　The queue manager tolerates loss of connectivity to CF structures without terminating.

This parameter applies to z/OS only.

You can select MQCFCONLOS_TOLERATE only if all the queue managers in the queue-sharing group are at command level 710 or greater and have OPMODE set to NEWFUNC.

ChannelAuthenticationRecords **(MQCFIN)**
　　Controls whether channel authentication records are used (parameter identifier: MQIA_CHLAUTH_RECORDS).

　　Channel authentication records can be set and displayed regardless of the value of this attribute.

　　The value can be any of the following values:

MQCHLA_DISABLED
　　Channel authentication records are not checked.

MQCHLA_ENABLED
　　Channel authentication records are checked.

ChannelAutoDef **(MQCFIN)**
　　Controls whether receiver and server-connection channels can be auto-defined (parameter identifier: MQIA_CHANNEL_AUTO_DEF).

　　Auto-definition for cluster-sender channels is always enabled.

　　This parameter is supported in the following environments: IBM i, UNIX, Linux, and Windows systems.

　　The value can be:

MQCHAD_DISABLED
　　Channel auto-definition disabled.

MQCHAD_ENABLED
　　Channel auto-definition enabled.

ChannelAutoDefEvent **(MQCFIN)**
　　Controls whether channel auto-definition events are generated (parameter identifier: MQIA_CHANNEL_AUTO_DEF_EVENT), when a receiver, server-connection, or cluster-sender channel is auto-defined.

　　This parameter is supported in the following environments: IBM i, UNIX, Linux, and Windows systems.

　　The value can be:

MQEVR_DISABLED
　　Event reporting disabled.

MQEVR_ENABLED
　　Event reporting enabled.

ChannelAutoDefExit **(MQCFST)**
　　Channel auto-definition exit name (parameter identifier: MQCA_CHANNEL_AUTO_DEF_EXIT).

　　The maximum length of the exit name is MQ_EXIT_NAME_LENGTH.

　　This parameter is supported only in the environments in which an MQSeries® Version 5.1 product, or later, is available.

ChannelEvent **(MQCFIN)**
　　Determines whether channel events are generated (parameter identifier: MQIA_CHANNEL_EVENT).

　　The value can be any of the following values:

MQEVR_ENABLED
All channel events are enabled.

MQEVR_EXCEPTION
Only the following channels events are enabled:

- MQRC_CHANNEL_ACTIVATED
- MQRC_CHANNEL_CONV_ERROR
- MQRC_CHANNEL_NOT_ACTIVATED
- MQRC_CHANNEL_STOPPED

MQEVR_DISABLED
All channel events are disabled.

ChannelInitiatorControl **(MQCFIN)**
Specifies whether the channel initiator is to be started when the queue manager starts (parameter identifier: MQIA_CHINIT_CONTROL).

The value can be:

MQSVC_CONTROL_MANUAL
The channel initiator is not to be started automatically.

MQSVC_CONTROL_Q_MGR
The channel initiator is to be started automatically when the queue manager starts.

This parameter is valid only on IBM i, UNIX, Linux, and Windows.

ChannelMonitoring **(MQCFIN)**
Level of real-time monitoring data collection for channels (parameter identifier: MQIA_MONITORING_CHANNEL).

The value can be any of the following values:

MQMON_NONE
Monitoring data collection is disabled, regardless of the setting for the *ChannelMonitoring* channel attribute.

MQMON_OFF
Monitoring data collection is turned off for channels specifying MQMON_Q_MGR in the *ChannelMonitoring* channel attribute.

MQMON_LOW
Monitoring data collection is turned on with a low ratio of data collection for channels specifying MQMON_Q_MGR in the *ChannelMonitoring* channel attribute.

MQMON_MEDIUM
Monitoring data collection is turned on with a moderate ratio of data collection for channels specifying MQMON_Q_MGR in the *ChannelMonitoring* channel attribute.

MQMON_HIGH
Monitoring data collection is turned on with a high ratio of data collection for channels specifying MQMON_Q_MGR in the *ChannelMonitoring* channel attribute.

ChannelStatistics **(MQCFIN)**
Controls whether statistics data is to be collected for channels (parameter identifier: MQIA_STATISTICS_CHANNEL).

The value can be:

MQMON_NONE
Statistics data collection is turned off for channels regardless of the setting of their *ChannelStatistics* parameter. This value is the initial default value of the queue manager.

MQMON_OFF
Statistics data collection is turned off for channels specifying a value of MQMON_Q_MGR in their *ChannelStatistics* parameter.

MQMON_LOW

Statistics data collection is turned on, with a low ratio of data collection, for channels specifying a value of MQMON_Q_MGR in their *ChannelStatistics* parameter.

MQMON_MEDIUM

Statistics data collection is turned on, with a moderate ratio of data collection, for channels specifying a value of MQMON_Q_MGR in their *ChannelStatistics* parameter.

MQMON_HIGH

Statistics data collection is turned on, with a high ratio of data collection, for channels specifying a value of MQMON_Q_MGR in their *ChannelStatistics* parameter.

On z/OS, this parameter simply turns on statistics data collection, regardless of the value you select. Specifying LOW, MEDIUM, or HIGH makes no difference to your results.

ChinitAdapters **(MQCFIN)**

Number of channel initiator adapter subtasks to use for processing IBM MQ calls (parameter identifier: MQIA_CHINIT_ADAPTERS).

This value must be in the range 0 through 9999.

ChinitDispatchers **(MQCFIN)**

Number of dispatchers to use for the channel initiator (parameter identifier: MQIA_CHINIT_DISPATCHERS).

ChinitServiceParm **(MQCFST)**

This attribute is reserved for use by IBM (parameter identifier: MQCA_CHINIT_SERVICE_PARM).

ChinitTraceAutoStart **(MQCFIN)**

Specifies whether the channel initiator trace should start automatically (parameter identifier: MQIA_CHINIT_TRACE_AUTO_START).

The value can be:

MQTRAXSTR_YES

Channel initiator trace starts automatically.

MQTRAXSTR_NO

Channel initiator trace does not starts automatically.

ChinitTraceTableSize **(MQCFIN)**

Size of the channel initiator's trace data space, in MB (parameter identifier: MQIA_CHINIT_TRACE_TABLE_SIZE).

ClusterSenderMonitoring **(MQCFIN)**

Level of real-time monitoring data collection for auto-defined cluster sender channels (parameter identifier: MQIA_MONITORING_AUTO_CLUSSDR).

The value can be any of the following values:

MQMON_Q_MGR

The collection of monitoring data is inherited from the setting of the *ChannelMonitoring* attribute in the queue manager object.

MQMON_OFF

Monitoring data collection is disabled.

MQMON_LOW

Monitoring data collection is turned on with a low ratio of data collection.

MQMON_MEDIUM

Monitoring data collection is turned on with a moderate ratio of data collection.

MQMON_HIGH

Monitoring data collection is turned on with a high ratio of data collection.

ClusterSenderStatistics **(MQCFIN)**

Controls whether statistics data is to be collected for auto-defined cluster-sender channels (parameter identifier: MQIA_STATISTICS_AUTO_CLUSSDR).

The value can be:

MQMON_Q_MGR
Collection of statistics data is inherited from the setting of the queue manager's *ChannelStatistics* parameter. This value is the initial default value of the queue manager.

MQMON_OFF
Statistics data collection for the channel is disabled.

MQMON_LOW
Unless *ChannelStatistics* is MQMON_NONE, this value specifies a low rate of data collection with a minimal effect on system performance.

MQMON_MEDIUM
Unless *ChannelStatistics* is MQMON_NONE, this value specifies a moderate rate of data collection.

MQMON_HIGH
Unless *ChannelStatistics* is MQMON_NONE, this value specifies a high rate of data collection.

On z/OS, this parameter simply turns on statistics data collection, regardless of the value you select. Specifying LOW, MEDIUM, or HIGH makes no difference to your results.

ClusterWorkLoadData **(MQCFST)**
Data passed to the cluster workload exit (parameter identifier: MQCA_CLUSTER_WORKLOAD_DATA).

ClusterWorkLoadExit **(MQCFST)**
Name of the cluster workload exit (parameter identifier: MQCA_CLUSTER_WORKLOAD_EXIT).

The maximum length of the exit name is MQ_EXIT_NAME_LENGTH.

ClusterWorkLoadLength **(MQCFIN)**
Cluster workload length (parameter identifier: MQIA_CLUSTER_WORKLOAD_LENGTH).

The maximum length of the message passed to the cluster workload exit.

CLWLMRUChannels **(MQCFIN)**
Maximum number of most recently used channels for cluster workload balancing (parameter identifier: MQIA_CLWL_MRU_CHANNELS).

CLWLUseQ **(MQCFIN)**
This defines the behavior of an MQPUT when the target queue has both a local instance and at least one remote cluster instance (parameter identifier: MQIA_CLWL_USEQ).

The value can be any of the following values:

MQCLWL_USEQ_ANY
Use remote and local queues.

MQCLWL_USEQ_LOCAL
Do not use remote queues.

CodedCharSetId **(MQCFIN)**
Coded character set identifier (parameter identifier: MQIA_CODED_CHAR_SET_ID).

CommandEvent **(MQCFIN)**
Controls whether command events are generated (parameter identifier: MQIA_COMMAND_EVENT).

The value can be any of the following values:

MQEVR_DISABLED
Command event generation disabled.

MQEVR_ENABLED
Command event generation enabled.

MQEVR_NO_DISPLAY
Command events are generated for all commands other than MQSC DISPLAY commands and PCF Inquire commands.

CommandEvent **(MQCFIN)**

Controls whether command events are generated (parameter identifier: MQIA_COMMAND_EVENT).

The value can be any of the following values:

MQEVR_DISABLED

Event reporting disabled.

MQEVR_ENABLED

Event reporting enabled.

MQEVR_NO_DISPLAY

Event reporting enabled for all successful commands except Inquire commands.

CommandInputQName **(MQCFST)**

Command input queue name (parameter identifier: MQCA_COMMAND_INPUT_Q_NAME).

The maximum length of the string is MQ_Q_NAME_LENGTH.

CommandLevel **(MQCFIN)**

Command level supported by queue manager (parameter identifier: MQIA_COMMAND_LEVEL).

 z/OS ***CommandScope*** **(MQCFIN)**

Command scope (parameter identifier: MQCACF_COMMAND_SCOPE). This parameter applies to z/OS only.

Specifies how the command is executed when the queue manager is a member of a queue-sharing group. You can specify one of the following values:

- Blank (or omit the parameter altogether). The command is executed on the queue manager on which it was entered.
- A queue manager name. The command is executed on the queue manager you specify, providing it is active within the queue sharing group. If you specify a queue manager name other than the queue manager on which it was entered, you must be using a queue-sharing group environment. The command server must be enabled.
- An asterisk " * ". The command is executed on the local queue manager and is also passed to every active queue manager in the queue-sharing group.

The maximum length is MQ_QSG_NAME_LENGTH.

CommandServerControl **(MQCFIN)**

Specifies whether the command server is to be started when the queue manager starts (parameter identifier: MQIA_CMD_SERVER_CONTROL).

The value can be:

MQSVC_CONTROL_MANUAL

The command server is not to be started automatically.

MQSVC_CONTROL_Q_MGR

The command server is to be started automatically when the queue manager starts.

This parameter is valid only on IBM i, UNIX, Linux, and Windows.

ConfigurationEvent **(MQCFIN)**

Controls whether configuration events are generated (parameter identifier: MQIA_CONFIGURATION_EVENT).

The value can be any of the following values:

MQEVR_DISABLED

Configuration event generation disabled.

MQEVR_ENABLED

Configuration event generation enabled.

***ConnAuth* (MQCFST)**
The name of an authentication information object that is used to provide the location of user ID and password authentication (parameter identifier: MQCA_CONN_AUTH).

The maximum length of the string is MQ_AUTH_INFO_NAME_LENGTH. Only authentication information objects with type IDPWOS or IDPWLDAP can be specified; other types result in an error message when the OAM (on UNIX, Linux, and Windows) or the security component (on z/OS) reads the configuration.

***Custom* (MQCFST)**
Custom attribute for new features (parameter identifier: MQCA_CUSTOM).

This attribute is reserved for the configuration of new features before separate attributes are introduced. It can contain the values of zero or more attributes as pairs of attribute name and value, separated by at least one space. The attribute name-value pairs have the form NAME(VALUE). Single quotation marks must be escaped with another single quotation mark.

This description is updated when features using this attribute are introduced. Currently there are no possible values for *Custom*.

The maximum length of the string is MQ_CUSTOM_LENGTH.

***CPILevel* (MQCFIN)**
CPI level (parameter identifier: MQIA_CPI_LEVEL).

***DeadLetterQName* (MQCFST)**
Dead letter (undelivered message) queue name (parameter identifier: MQCA_DEAD_LETTER_Q_NAME).

Specifies the name of the local queue that is to be used for undelivered messages. Messages are put on this queue if they cannot be routed to their correct destination.

The maximum length of the string is MQ_Q_NAME_LENGTH.

***DefXmitQName* (MQCFST)**
Default transmission queue name (parameter identifier: MQCA_DEF_XMIT_Q_NAME).

This is the name of the default transmission queue that is used for the transmission of messages to remote queue managers, if there is no other indication of which transmission queue to use.

The maximum length of the string is MQ_Q_NAME_LENGTH.

***DNSGroup* (MQCFST)**
This parameter is no longer used. Refer to WLM/DNS no longer supported (parameter identifier: MQCA_DNS_GROUP).

The maximum length of this name is MQ_DNS_GROUP_NAME_LENGTH.

***DNSWLM* (MQCFIN)**
This parameter is no longer used. Refer to WLM/DNS no longer supported (parameter identifier: MQIA_DNS_WLM).

The value can be any of the following values:

MQDNSWLM_YES
This value may be seen on a queue manager migrated from an earlier release. The value is ignored.

MQDNSWLM_NO
This is the only value supported by the queue manager.

***EncryptionPolicySuiteB* (MQCFIL)**
Specifies whether Suite B-compliant cryptography is used and what level of strength is employed (parameter identifier MQIA_SUITE_B_STRENGTH).

The value can be one or more of:

MQ_SUITE_B_NONE
Suite B-compliant cryptography is not used.

MQ_SUITE_B_128_BIT
Suite B 128-bit strength security is used.

MQ_SUITE_B_192_BIT
Suite B 192-bit strength security is used.

If invalid lists are specified, such as MQ_SUITE_B_NONE with MQ_SUITE_B_128_BIT, the error MQRCCF_SUITE_B_ERROR is issued.

ExpiryInterval **(MQCFIN)**
Expiry interval (parameter identifier: MQIA_EXPIRY_INTERVAL).

Force **(MQCFIN)**
Force changes (parameter identifier: MQIACF_FORCE).

Specifies whether the command is forced to complete if both of the following are true:

- *DefXmitQName* is specified, and
- An application has a remote queue open, the resolution for which is affected by this change.

GroupUR **(MQCFIN)**
Controls whether XA client applications can establish transactions with a GROUP unit of recovery disposition (parameter identifier: MQIA_GROUP_UR).

The value can be any of the following values:

MQGUR_DISABLED
XA client applications must connect using a queue manager name.

MQGUR_ENABLED
XA client applications can establish transactions with a group unit of recovery disposition by specifying a QSG name when they connect.

z/OS *IGQPutAuthority* **(MQCFIN)**
IGQ put authority (parameter identifier: MQIA_IGQ_PUT_AUTHORITY).

z/OS *IGQUserId* **(MQCFST)**
Intra-group queuing agent user identifier (parameter identifier: MQCA_IGQ_USER_ID). This parameter is valid only on z/OS when the queue manager is a member of a queue-sharing group.

Specifies the user identifier that is associated with the local intra-group queuing agent. This identifier is one of the user identifiers that might be checked for authorization when the IGQ agent puts messages on local queues. The actual user identifiers checked depend on the setting of the *IGQPutAuthority* attribute, and on external security options.

The maximum length is MQ_USER_ID_LENGTH.

InhibitEvent **(MQCFIN)**
Controls whether inhibit (Inhibit Get and Inhibit Put) events are generated (parameter identifier: MQIA_INHIBIT_EVENT).

The value can be:

MQEVR_DISABLED
Event reporting disabled.

MQEVR_ENABLED
Event reporting enabled.

IntraGroupQueuing **(MQCFIN)**
Intra group queuing (parameter identifier: MQIA_INTRA_GROUP_QUEUING).

IPAddressVersion **(MQCFIN)**
Specifies the IP version to be used (parameter identifier: MQIA_IP_ADDRESS_VERSION).

The value can be any of the following values:

MQIPADDR_IPV4
The IPv4 stack is used.

MQIPADDR_IPV6
The IPv6 stack is used.

ListenerTimer **(MQCFIN)**
The time interval, in seconds, between attempts to restart a listener following an APPC or TCP/IP failure (parameter identifier: MQCA_LISTENER_TIMER).

LocalEvent **(MQCFIN)**
Controls whether local error events are generated (parameter identifier: MQIA_LOCAL_EVENT).

The value can be any of the following values:

MQEVR_DISABLED
Event reporting disabled.

MQEVR_ENABLED
Event reporting enabled.

LoggerEvent **(MQCFIN)**
Controls whether recovery log events are generated (parameter identifier: MQIA_LOGGER_EVENT).

The value can be:

MQEVR_DISABLED
Event reporting disabled.

MQEVR_ENABLED
Event reporting enabled. This value is valid only on queue managers that use linear logging.

This parameter is valid only on IBM i, UNIX, Linux, and Windows.

z/OS *LUGroupName* **(MQCFST)**
Generic LU name for the LU 6.2 listener (parameter identifier: MQCA_LU_GROUP_NAME).

The generic LU name to be used by the LU 6.2 listener that handles inbound transmissions for the queue-sharing group.

This parameter applies to z/OS only.

The maximum length of the string is MQ_LU_NAME_LENGTH.

z/OS *LUName* **(MQCFST)**
LU name to use for outbound LU 6.2 transmissions (parameter identifier: MQCA_LU_NAME).

The name of the LU to use for outbound LU 6.2 transmissions. Set this parameter to be the same as the name of the LU to be used by the listener for inbound transmissions.

This parameter applies to z/OS only.

The maximum length of the string is MQ_LU_NAME_LENGTH.

LU62ARMSuffix **(MQCFST)**
The suffix of the SYS1.PARMLIB member APPCPMxx, that nominates the LUADD for this channel initiator (parameter identifier: MQCA_LU62_ARM_SUFFIX).

The maximum length of this name is MQ_ARM_SUFFIX_LENGTH.

LU62Channels **(MQCFIN)**
Maximum number of current channels that use the LU 6.2 transmission protocol, including clients connected to server connection channels (parameter identifier: MQIA_LU62_CHANNELS).

LUGroupName (MQCFST)
The generic LU name that the LU 6.2 listener that handles inbound transmissions for the queue sharing group is to use. This name must be the same as *LUName* (parameter identifier: MQCA_LU_GROUP_NAME).

The maximum length of this name is MQ_LU_NAME_LENGTH.

LUName (MQCFST)
The LU name that the LU 6.2 listener that handles outbound transmissions is to use. This name must be the same as *LUGroupName* (parameter identifier: MQCA_LU_NAME).

The maximum length of this name is MQ_LU_NAME_LENGTH.

MaxActiveChannels (MQCFIN)
Maximum number of channels that can be active at the same time (parameter identifier: MQIA_ACTIVE_CHANNELS).

MaxChannels (MQCFIN)
Maximum number of current channels, including clients connected to server connection channels (parameter identifier: MQIA_MAX_CHANNELS).

MaxHandles (MQCFIN)
Maximum number of handles (parameter identifier: MQIA_MAX_HANDLES).

Specifies the maximum number of handles that any one job can have open at the same time.

MaxMsgLength (MQCFIN)
Maximum message length (parameter identifier: MQIA_MAX_MSG_LENGTH).

MaxPriority (MQCFIN)
Maximum priority (parameter identifier: MQIA_MAX_PRIORITY).

MaxUncommittedMsgs (MQCFIN)
Maximum number of uncommitted messages within a unit of work (parameter identifier: MQIA_MAX_UNCOMMITTED_MSGS).

That is:

- The number of messages that can be retrieved, plus
- The number of messages that can be put on a queue, plus
- Any trigger messages generated within this unit of work

under any one syncpoint. This limit does not apply to messages that are retrieved or put outside syncpoint.

MQIAccounting (MQCFIN)
Controls whether accounting information for MQI data is to be collected (parameter identifier: MQIA_ACCOUNTING_MQI).

The value can be:

MQMON_OFF
MQI accounting data collection is disabled. This value is the initial default value of the queue manager.

MQMON_ON
MQI accounting data collection is enabled.

This parameter is valid only on IBM i, UNIX, Linux, and Windows.

MQIStatistics (MQCFIN)
Controls whether statistics monitoring data is to be collected for the queue manager (parameter identifier: MQIA_STATISTICS_MQI).

The value can be:

MQMON_OFF
Data collection for MQI statistics is disabled. This value is the initial default value of the queue manager.

MQMON_ON
Data collection for MQI statistics is enabled.

This parameter is valid only on IBM i, UNIX, Linux, and Windows.

MsgMarkBrowseInterval **(MQCFIN)**
Mark-browse interval (parameter identifier: MQIA_MSG_MARK_BROWSE_INTERVAL).

Specifies the time interval in milliseconds after which the queue manager can automatically unmark messages.

Specify a value in the range 0 - 999,999,999, or the special value MQMMBI_UNLIMITED.

A value of 0 causes the queue manager to unmark messages immediately.

MQMMBI_UNLIMITED indicates that the queue manager does not automatically unmark messages.

OutboundPortMax **(MQCFIN)**
Outbound port range maximum (parameter identifier: MQIA_OUTBOUND_PORT_MAX).

The upper limit for the range of port numbers used when binding outgoing channels.

OutboundPortMin **(MQCFIN)**
Outbound port range minimum (parameter identifier: MQIA_OUTBOUND_PORT_MIN).

The lower limit for the range of port numbers used when binding outgoing channels.

Parent **(MQCFST)**
The name of the queue manager to which this queue manager is to connect hierarchically as its child (parameter identifier: MQCA_PARENT).

A blank value indicates that this queue manager has no parent queue manager. If there is an existing parent queue manager it is disconnected. This value is the initial default value of the queue manager.

The maximum length of the string is MQ_Q_MGR_NAME_LENGTH.

Note:

- The use of IBM MQ hierarchical connections requires that the queue manager attribute PSMode is set to MQPSM_ENABLED.
- The value of *Parent* can be set to a blank value if PSMode is set to MQPSM_DISABLED.
- Before connecting to a queue manager hierarchically as its child, channels in both directions must exist between the parent queue manager and child queue manager.
- If a parent is defined, the **Change Queue Manager** command disconnects from the original parent and sends a connection flow to the new parent queue manager.
- Successful completion of the command does not mean that the action completed or that it is going to complete successfully. Use the **Inquire Pub/Sub Status** command to track the status of the requested parent relationship.

PerformanceEvent **(MQCFIN)**
Controls whether performance-related events are generated (parameter identifier: MQIA_PERFORMANCE_EVENT).

The value can be any of the following values:

MQEVR_DISABLED
Event reporting disabled.

MQEVR_ENABLED
Event reporting enabled.

Platform **(MQCFIN)**
Platform on which the queue manager resides (parameter identifier: MQIA_PLATFORM).

PubSubClus `(MQCFIN)`

Controls whether the queue manager participates in publish/subscribe clustering (parameter identifier: `MQIA_PUBSUB_CLUSTER`).

The value can be:

MQPSCLUS_ENABLED

The creating or receipt of clustered topic definitions and cluster subscriptions is permitted.

Note: The introduction of a clustered topic into a large IBM MQ cluster can cause a degradation in performance. This degradation occurs because all partial repositories are notified of all the other members of the cluster. Unexpected subscriptions might be created at all other nodes; for example; where `proxysub(FORCE)` is specified. Large numbers of channels might be started from a queue manager; for example, on resync after a queue manager failure.

MQPSCLUS_DISABLED

The creating or receipt of clustered topic definitions and cluster subscriptions is inhibited. The creations or receipts are recorded as warnings in the queue manager error logs.

PubSubMaxMsgRetryCount `(MQCFIN)`

The number of attempts to reprocess a message when processing a failed command message under sync point (parameter identifier: `MQIA_PUBSUB_MAXMSG_RETRY_COUNT`).

The value can be:

0 to 999 999 999

The initial value is 5.

PubSubMode `(MQCFIN)`

Specifies whether the publish/subscribe engine and the queued publish/subscribe interface are running. The publish/subscribe engine enables applications to publish or subscribe by using the application programming interface. The publish/subscribe interface monitors the queues used the queued publish/subscribe interface (parameter identifier: `MQIA_PUBSUB_MODE`).

The value can be:

MQPSM_COMPAT

The publish/subscribe engine is running. It is therefore possible to publish or subscribe by using the application programming interface. The queued publish/subscribe interface is not running. Therefore any message that is put to the queues that are monitored by the queued publish/subscribe interface is not acted on. MQPSM_COMPAT is used for compatibility with versions of IBM Integration Bus (formerly known as WebSphere Message Broker) prior to version 7 that use this queue manager.

MQPSM_DISABLED

The publish/subscribe engine and the queued publish/subscribe interface are not running. It is therefore not possible to publish or subscribe using the application programming interface. Any publish/subscribe messages that are put to the queues that are monitored by the queued publish/subscribe interface are not acted on.

MQPSM_ENABLED

The publish/subscribe engine and the queued publish/subscribe interface are running. It is therefore possible to publish or subscribe by using the application programming interface and the queues that are monitored by the queued publish/subscribe interface. This value is the initial default value of the queue manager.

PubSubNPInputMsg `(MQCFIN)`

Whether to discard (or keep) an undelivered input message (parameter identifier: `MQIA_PUBSUB_NP_MSG`).

The value can be:

MQUNDELIVERED_DISCARD

Non-persistent input messages are discarded if they cannot be processed.

MQUNDELIVERED_KEEP
Non-persistent input messages are not discarded if they cannot be processed. In this situation, the queued publish/subscribe interface continues to try the process again at appropriate intervals and does not continue processing subsequent messages.

PubSubNPResponse **(MQCFIN)**
Controls the behavior of undelivered response messages (parameter identifier: MQIA_PUBSUB_NP_RESP).

The value can be:

MQUNDELIVERED_NORMAL
Non-persistent responses that cannot be placed on the reply queue are put on the dead letter queue. If they cannot be placed on the dead letter queue they are discarded.

MQUNDELIVERED_SAFE
Non-persistent responses that cannot be placed on the reply queue are put on the dead letter queue. If the response cannot be sent and cannot be placed on the dead letter queue the queued publish/subscribe interface rolls back the current operation. The operation is tried again at appropriate intervals and does not continue processing subsequent messages.

MQUNDELIVERED_DISCARD
Non-persistent responses that are not placed on the reply queue are discarded.

MQUNDELIVERED_KEEP
Non-persistent responses are not placed on the dead letter queue or discarded. Instead, the queued publish/subscribe interface backs out the current operation and then try it again at appropriate intervals.

PubSubSyncPoint **(MQCFIN)**
Whether only persistent (or all) messages must be processed under sync point (parameter identifier: MQIA_PUBSUB_SYNC_PT).

The value can be:

MQSYNCPOINT_IFPER
This value makes the queued publish/subscribe interface receive non-persistent messages outside sync point. If the interface receives a publication outside sync point, the interface forwards the publication to subscribers known to it outside sync point.

MQSYNCPOINT_YES
This value makes the queued publish/subscribe interface receive all messages under sync point.

QMgrDesc **(MQCFST)**
Queue manager description (parameter identifier: MQCA_Q_MGR_DESC).

The maximum length of the string is MQ_Q_MGR_DESC_LENGTH.

QMgrIdentifier **(MQCFST)**
Queue manager identifier (parameter identifier: MQCA_Q_MGR_IDENTIFIER).

The unique identifier of the queue manager.

QMgrName **(MQCFST)**
Name of local queue manager (parameter identifier: MQCA_Q_MGR_NAME).

The maximum length of the string is MQ_Q_MGR_NAME_LENGTH.

QSGName **(MQCFST)**
Queue sharing group name (parameter identifier: MQCA_QSG_NAME).

The maximum length of the string is MQ_QSG_NAME_LENGTH.

z/OS *QSGCertificateLabel* **(MQCFST)**
Specifies the certificate label for the queue sharing group to use (parameter identifier: MQCA_QSG_CERT_LABEL).

QueueAccounting (MQCFIN)
Specifies whether accounting information is collected for queues (parameter identifier: MQIA_ACCOUNTING_Q).

The value can be any of the following values:

MQMON_ON
For all queues that have the queue parameter *QueueAccounting* specified as MQMON_Q_MGR, accounting information is collected.

MQMON_OFF
For all queues that have the queue parameter *QueueAccounting* specified as MQMON_Q_MGR, accounting information is not collected.

MQMON_NONE
Accounting information is not collected for queues.

QueueMonitoring (MQCFIN)
Level of real-time monitoring data collection for queues (parameter identifier: MQIA_MONITORING_Q).

The value can be any of the following values:

MQMON_NONE
Monitoring data collection is disabled, regardless of the setting for the *QueueMonitoring* queue attribute.

MQMON_OFF
Monitoring data collection is turned off for queues specifying MQMON_Q_MGR in the *QueueMonitoring* queue attribute.

MQMON_LOW
Monitoring data collection is turned on with a low ratio of data collection for queues specifying MQMON_Q_MGR in the *QueueMonitoring* queue attribute.

MQMON_MEDIUM
Monitoring data collection is turned on with a moderate ratio of data collection for queues specifying MQMON_Q_MGR in the *QueueMonitoring* queue attribute.

MQMON_HIGH
Monitoring data collection is turned on with a high ratio of data collection for queues specifying MQMON_Q_MGR in the *QueueMonitoring* queue attribute.

QueueStatistics (MQCFIN)
Controls whether statistics data is to be collected for queues (parameter identifier: MQIA_STATISTICS_Q).

The value can be:

MQMON_NONE
Statistics data collection is turned off for queues regardless of the setting of their *QueueStatistics* parameter. This value is the initial default value of the queue manager.

MQMON_OFF
Statistics data collection is turned off for queues specifying a value of MQMON_Q_MGR in their *QueueStatistics* parameter.

MQMON_ON
Statistics data collection is turned on for queues specifying a value of MQMON_Q_MGR in their *QueueStatistics* parameter.

This parameter is valid only on IBM i, UNIX, Linux, and Windows.

ReceiveTimeout (MQCFIN)
In conjunction with *ReceiveTimeoutType* specifies how long a TCP/IP channel will wait to receive data, including heartbeats, from its partner before returning to the inactive state (parameter identifier: MQIA_RECEIVE_TIMEOUT).

***ReceiveTimeoutMin* (MQCFIN)**

The minimum time, in seconds, that a TCP/IP channel will wait to receive data, including heartbeats, from its partner before returning to the inactive state (parameter identifier: MQIA_RECEIVE_TIMEOUT_MIN).

***ReceiveTimeoutType* (MQCFIN)**

In conjunction with *ReceiveTimeout* specifies how long a TCP/IP channel will wait to receive data, including heartbeats, from its partner before returning to the inactive state (parameter identifier: MQIA_RECEIVE_TIMEOUT_TYPE).

The value can be any of the following values:

MQRCVTIME_MULTIPLY

The *ReceiveTimeout* value is a multiplier to be applied to the negotiated value of *HeartbeatInterval* to determine how long a channel will wait. This is the queue manager's initial default value.

MQRCVTIME_ADD

ReceiveTimeout is a value, in seconds, to be added to the negotiated value of *HeartbeatInterval* to determine how long a channel will wait.

MQRCVTIME_EQUAL

ReceiveTimeout is a value, in seconds, representing how long a channel will wait.

***RemoteEvent* (MQCFIN)**

Controls whether remote error events are generated (parameter identifier: MQIA_REMOTE_EVENT).

The value can be any of the following values:

MQEVR_DISABLED

Event reporting disabled.

MQEVR_ENABLED

Event reporting enabled.

***RepositoryName* (MQCFST)**

Repository name (parameter identifier: MQCA_REPOSITORY_NAME).

The name of a cluster for which this queue manager is to provide a repository service.

***RepositoryNamelist* (MQCFST)**

Repository name list (parameter identifier: MQCA_REPOSITORY_NAMELIST).

The name of a list of clusters for which this queue manager is to provide a repository service.

***RevDns* (MQCFIN)**

Whether reverse lookup of the host name from a Domain Name Server is carried out. (parameter identifier: MQIA_REVERSE_DNS_LOOKUP).

This attribute has an effect only on channels using a transport type (TRPTYPE) of TCP.

The value can be:

MQRDNS_DISABLED

DNS host names are not reverse looked-up for the IP addresses of inbound channels. With this setting any CHLAUTH rules using host names are not matched.

MQRDNS_ENABLED

DNS host names are reverse looked-up for the IP addresses of inbound channels when this information is required. This setting is required for matching against CHLAUTH rules that contain host names, and for writing out error messages.

z/OS ***SecurityCase* (MQCFIN)**

Security case supported (parameter identifier: MQIA_SECURITY_CASE).

Specifies whether the queue manager supports security profile names in mixed case, or in uppercase only. The value is activated when a Refresh Security command is run with *SecurityType(MQSECTYPE_CLASSES)* specified. This parameter is valid only on z/OS.

The value can be:

MQSCYC_UPPER
Security profile names must be in uppercase.

MQSCYC_MIXED
Security profile names can be in uppercase or in mixed case.

> **z/OS** ***SharedQueueQueueManagerName* (MQCFIN)**
Specifies how messages are put on a shared queue that specifies another queue manager from a queue sharing group as the object queue manager (parameter identifier: MQIA_SHARED_Q_Q_MGR_NAME).

The value can be:

MQSQQM_USE
Messages are delivered to the object queue manager before being put on the shared queue.

MQSQQM_IGNORE
Messages are put directly on the shared queue.

***SSLCRLNameList* (MQCFST)**
TLS CRL name list (parameter identifier: MQCA_SSL_CRL_NAMELIST).

The maximum length of the string is MQ_NAMELIST_NAME_LENGTH.

***SSLEvent* (MQCFIN)**
Determines whether IMS bridge events are generated (parameter identifier: MQIA_SSL_EVENT).

The value can be any of the following values:

MQEVR_ENABLED
All TLS events are enabled.

MQEVR_DISABLED
All TLS events are disabled.

***SSLCryptoHardware* (MQCFST)**
The TLS cryptographic hardware (parameter identifier: MQCA_SSL_CRYPTO_HARDWARE).

The length of the string is MQ_SSL_CRYPTO_HARDWARE_LENGTH.

Sets the name of the parameter string required to configure the cryptographic hardware present on the system.

This parameter is valid only on UNIX, Linux, and Windows.

All supported cryptographic hardware supports the PKCS #11 interface. Specify a string of the following format:

```
GSK_PKCS11= <the PKCS #11 driver path and file name> >; <the PKCS #11 token label> ;
<the PKCS #11 token password>;<symmetric cipher setting> ;
```

The PKCS #11 driver path is an absolute path to the shared library providing support for the PKCS #11 card. The PKCS #11 driver file name is the name of the shared library. An example of the value required for the PKCS #11 driver path and file name is /usr/lib/pkcs11/PKCS11_API.so

To access symmetric cipher operations through GSKit, specify the symmetric cipher setting parameter. The value of this parameter is either:

SYMMETRIC_CIPHER_OFF
Do not access symmetric cipher operations.

SYMMETRIC_CIPHER_ON
Access symmetric cipher operations.

If the symmetric cipher setting is not specified, this value has the same effect as specifying SYMMETRIC_CIPHER_OFF.

The maximum length of the string is 256 characters. The default value is blank.

If you specify a string in the wrong format, you get an error.

When the *SSLCryptoHardware* (MQCFST) value is changed, the cryptographic hardware parameters specified become the ones used for new TLS connection environments. The new information becomes effective:

- When a new channel process is started.
- For channels that run as threads of the channel initiator, when the channel initiator is restarted.
- For channels that run as threads of the listener, when the listener is restarted.
- When a Refresh Security command is issued to refresh the contents of the TLS key repository.

SSLEvent **(MQCFIN)**
Controls whether TLS events are generated (parameter identifier: MQIA_SSL_EVENT).

The value can be:

MQEVR_DISABLED
Event reporting disabled.

MQEVR_ENABLED
Event reporting enabled.

SSLFipsRequired **(MQCFIN)**
SSLFIPS specifies whether only FIPS-certified algorithms are to be used if cryptography is carried out in IBM MQ, rather than in cryptographic hardware (parameter identifier: MQIA_SSL_FIPS_REQUIRED).

If cryptographic hardware is configured, the cryptographic modules used are those modules provided by the hardware product. These modules might, or might not, be FIPS-certified to a particular level depending on the hardware product in use. This parameter applies to z/OS, UNIX, Linux, and Windows platforms only.

The value can be any of the following values:

MQSSL_FIPS_NO
IBM MQ provides an implementation of TLS cryptography which supplies some FIPS-certified modules on some platforms. If you set *SSLFIPSRequired* to MQSSL_FIPS_NO, any CipherSpec supported on a particular platform can be used. This value is the initial default value of the queue manager.

If the queue manager runs without using cryptographic hardware, refer to the CipherSpecs listed in Specifying CipherSpecs employing FIPS 140-2 certified cryptography:

MQSSL_FIPS_YES
Specifies that only FIPS-certified algorithms are to be used in the CipherSpecs allowed on all TLS connections from and to this queue manager.

For a listing of appropriate FIPS 140-2 certified CipherSpecs; see Specifying CipherSpecs.

Changes to SSLFIPS become effective either:

- On UNIX, Linux, and Windows, when a new channel process is started.
- For channels that run as threads of the channel initiator on UNIX, Linux, and Windows, when the channel initiator is restarted.
- For channels that run as threads of the listener on UNIX, Linux, and Windows, when the listener is restarted.
- For channels that run as threads of a process pooling process, when the process pooling process is started or restarted and first runs a TLS channel. If the process pooling process has already run a TLS channel, and you want the change to become effective immediately, run the MQSC command **REFRESH SECURITY TYPE(SSL)**. The process pooling process is **amqrmppa** on UNIX, Linux, and Windows.
- On z/OS, when the channel initiator is restarted.

- When a **REFRESH SECURITY TYPE(SSL)** command is issued, except on z/OS.

SSLKeyRepository **(MQCFST)**
TLS key repository (parameter identifier: MQCA_SSL_KEY_REPOSITORY).

The maximum length of the string is MQ_SSL_KEY_REPOSITORY_LENGTH.

SSLKeyResetCount **(MQCFIN)**
TLS key reset count (parameter identifier: MQIA_SSL_RESET_COUNT).

The maximum length of the string is MQ_SSL_KEY_REPOSITORY_LENGTH.

SSLTasks **(MQCFIN)**
TLS tasks (parameter identifier: MQIA_SSL_TASKS).

StartStopEvent **(MQCFIN)**
Controls whether start and stop events are generated (parameter identifier: MQIA_START_STOP_EVENT).

The value can be any of the following values:

MQEVR_DISABLED
Event reporting disabled.

MQEVR_ENABLED
Event reporting enabled.

StatisticsInterval **(MQCFIN)**
The time interval, in seconds, at which statistics monitoring data is written to the monitoring queue (parameter identifier: MQIA_STATISTICS_INTERVAL).

Specify a value in the range 1 - 604,000.

This parameter is valid only on IBM i, UNIX, Linux, and Windows.

SyncPoint **(MQCFIN)**
Syncpoint availability (parameter identifier: MQIA_SYNCPOINT).

TCPChannels **(MQCFIN)**
Maximum number of current channels that use the TCP/IP transmission protocol, including clients connected to server connection channels (parameter identifier: MQIA_TCP_CHANNELS).

TCPKeepAlive **(MQCFIN)**
Specifies whether to use the TCP KEEPALIVE facility to check whether the MCA at the opposite end of a channel is available (parameter identifier: MQIA_TCP_KEEP_ALIVE).

The value can be any of the following values:

MQTCPKEEP_YES
Use the TCP KEEPALIVE facility as specified in the TCP profile configuration data set.

MQTCPKEEP_NO
Do not use the TCP KEEPALIVE facility.

TCPName **(MQCFST)**
TCP name (parameter identifier: MQIA_TCP_NAME).

The name of the current TCP/IP system in use.

The maximum length of this value is MQ_TCP_NAME_LENGTH.

TCPStackType **(MQCFIN)**
TCP stack type (parameter identifier: MQIA_TCP_STACK_TYPE).

Specifies whether the channel initiator uses the TCP/IP address space specified in TCPNAME only, or whether it can bind to any selected TCP/IP address.

The value can be:

MQTCPSTACK_SINGLE
The channel initiator uses the TCP/IP address space specified in TCPNAME only.

MQTCPSTACK_MULTIPLE
The initiator can use any TCP/IP address space available to it. If no other address spaces are available, the address space specified in TCPNAME is used.

TraceRouteRecording **(MQCFIN)**
Specifies whether trace-route messaging is enabled or disabled (parameter identifier: MQIA_TRACE_ROUTE_RECORDING).

The value can be:

MQRECORDING_MSG
Trace-route messaging is enabled. Trace-route reply messages are delivered to the reply-to queue specified in the message descriptor of the message.

MQRECORDING_Q
Trace-route messaging is enabled. Trace-route reply messages are delivered to a fixed name queue.

MQRECORDING_DISABLED.
Trace-route messaging is disabled.

TreeLifeTime **(MQCFIN)**
The lifetime, in seconds, of non-administrative topics (parameter identifier: MQIA_TREE_LIFE_TIME).

Non-administrative topics are those topics created when an application publishes to, or subscribes as, a topic string that does not exist as an administrative node. When this non-administrative node no longer has any active subscriptions, this parameter determines how long the queue manager waits before removing that node. Only non-administrative topics that are in use by a durable subscription remain after the queue manager is recycled.

Specify a value in the range 0 - 604,000. A value of 0 means that non-administrative topics are not removed by the queue manager. The initial default value of the queue manager is 1800.

TriggerInterval **(MQCFIN)**
Trigger interval (parameter identifier: MQIA_TRIGGER_INTERVAL).

Specifies the trigger time interval, expressed in milliseconds, for use only with queues where *TriggerType* has a value of MQTT_FIRST.

Storage class attributes

Event messages relating to objects can include storage class attributes

AlterationDate **(MQCFST)**
Alteration date (parameter identifier: MQCA_ALTERATION_DATE).

The date when the information was last altered.

AlterationTime **(MQCFST)**
Alteration time (parameter identifier: MQCA_ALTERATION_TIME).

The time when the information was last altered.

PageSetId **(MQCFIN)**
Page set identifier (parameter identifier: MQIA_PAGESET_ID).

PassTicketApplication **(MQCFST)**
Name of the application used to authenticate IMS bridge passtickets (parameter identifier: MQCA_PASS_TICKET_APPL).

The maximum length of the string is MQ_PASS_TICKET_APPL_LENGTH.

StgClassDesc **(MQCFST)**
Storage class description (parameter identifier: MQCA_STORAGE_CLASS_DESC).

The maximum length of the string is MQ_STORAGE_CLASS_DESC_LENGTH.

XCFGroupName **(MQCFST)**
XCF group name (parameter identifier: MQCA_XCF_GROUP_NAME).

The maximum length of the string is MQ_XCF_GROUP_NAME_LENGTH.

XCFMemberName **(MQCFST)**
XCF member name (parameter identifier: MQCA_XCF_MEMBER_NAME).

The maximum length of the string is MQ_XCF_MEMBER_NAME_LENGTH.

Topic attributes

Event messages relating to objects can include topic attributes

AlterationDate **(MQCFST)**
Alteration date (parameter identifier: MQCA_ALTERATION_DATE).

The date when the information was last altered, in the form `yyyy-mm-dd`.

AlterationTime **(MQCFST)**
Alteration time (parameter identifier: MQCA_ALTERATION_TIME).

The time when the information was last altered, in the form `hh.mm.ss`.

ClusterName **(MQCFST)**
The name of the cluster to which this topic belongs. (parameter identifier: MQCA_CLUSTER_NAME).

The maximum length of the string is MQ_CLUSTER_NAME_LENGTH. Setting this parameter to a cluster that this queue manager is a member of makes all queue managers in the cluster aware of this topic. Any publication to this topic or a topic string below it put to any queue manager in the cluster is propagated to subscriptions on any other queue manager in the cluster. For more details, see [Distributed publish/subscribe networks](#).

The value can be any of the following values:

Blank
If no topic object above this topic in the topic tree has set this parameter to a cluster name, then this topic does not belong to a cluster. Publications and subscriptions for this topic are not propagated to publish/subscribe cluster-connected queue managers. If a topic node higher in the topic tree has a cluster name set, publications and subscriptions to this topic are also propagated throughout the cluster.

This value is the default value for this parameter if no value is specified.

String
The topic belongs to this cluster. It is not recommended that this is set to a different cluster from a topic object above this topic object in the topic tree. Other queue managers in the cluster will honor this object's definition unless a local definition of the same name exists on those queue managers.

Additionally, if **PublicationScope** or **SubscriptionScope** are set to MQSCOPE_ALL, this value is the cluster to be used for the propagation of publications and subscriptions, for this topic, to publish/subscribe cluster-connected queue managers.

DefPersistence **(MQCFIN)**
Default persistence (parameter identifier: MQIA_TOPIC_DEF_PERSISTENCE).

The value can be:

MQPER_PERSISTENCE_AS_PARENT
The default persistence is based on the setting of the closest parent administrative topic object in the topic tree.

MQPER_PERSISTENT
Message is persistent.

MQPER_NOT_PERSISTENT
Message is not persistent.

DefPriority (MQCFIN)
Default priority (parameter identifier: MQIA_DEF_PRIORITY).

DefPutResponse (MQCFIN)
Default put response (parameter identifier: MQIA_DEF_PUT_RESPONSE_TYPE).

The value can be:

MQPRT_ASYNC_RESPONSE
The put operation is issued asynchronously, returning a subset of MQMD fields.

MQPRT_RESPONSE_AS_PARENT
The default put response is based on the setting of the closest parent administrative topic object in the topic tree.

MQPRT_SYNC_RESPONSE
The put operation is issued synchronously, returning a response.

DurableModelQName (MQCFST)
Name of the model queue to be used for durable managed subscriptions (parameter identifier: MQCA_MODEL_DURABLE_Q).

The maximum length of the string is MQ_Q_NAME_LENGTH.

DurableSubscriptions (MQCFIN)
Whether applications are permitted to make durable subscriptions (parameter identifier: MQIA_DURABLE_SUB).

The value can be:

MQSUB_DURABLE_AS_PARENT
Whether durable subscriptions are permitted is based on the setting of the closest parent administrative topic object in the topic tree.

MQSUB_DURABLE
Durable subscriptions are permitted.

MQSUB_NON_DURABLE
Durable subscriptions are not permitted.

InhibitPublications (MQCFIN)
Whether publications are allowed for this topic (parameter identifier: MQIA_INHIBIT_PUB).

The value can be:

MQTA_PUB_AS_PARENT
Whether messages can be published to this topic is based on the setting of the closest parent administrative topic object in the topic tree.

MQTA_PUB_INHIBITED
Publications are inhibited for this topic.

MQTA_PUB_ALLOWED
Publications are allowed for this topic.

InhibitSubscriptions (MQCFIN)
Whether subscriptions are allowed for this topic (parameter identifier: MQIA_INHIBIT_SUB).

The value can be:

MQTA_SUB_AS_PARENT
Whether applications can subscribe to this topic is based on the setting of the closest parent administrative topic object in the topic tree.

MQTA_SUB_INHIBITED
Subscriptions are inhibited for this topic.

MQTA_SUB_ALLOWED
Subscriptions are allowed for this topic.

NonDurableModelQName (MQCFST)
Name of the model queue to be used for non durable managed subscriptions (parameter identifier: MQCA_MODEL_NON_DURABLE_Q).

The maximum length of the string is MQ_Q_NAME_LENGTH.

NonPersistentMsgDelivery (MQCFIN)
The delivery mechanism for non-persistent messages published to this topic (parameter identifier: MQIA_NPM_DELIVERY).

The value can be:

MQDLV_AS_PARENT
The delivery mechanism used is based on the setting of the first parent administrative node found in the topic tree relating to this topic.

MQDLV_ALL
Non-persistent messages must be delivered to all subscribers, irrespective of durability for the MQPUT call to report success. If a delivery failure to any subscriber occurs, no other subscribers receive the message and the MQPUT fails.

MQDLV_ALL_DUR
Non-persistent messages must be delivered to all durable subscribers. Failure to deliver a non-persistent message to any non-durable subscribers does not return an error to the MQPUT call. If a delivery failure to a durable subscriber occurs, no other subscribers receive the message and the MQPUT fails.

MQDLV_ALL_AVAIL
Non-persistent messages are delivered to all subscribers that can accept the message. Failure to deliver the message to any subscriber does not prevent other subscribers from receiving the message.

PersistentMsgDelivery (MQCFIN)
The delivery mechanism for persistent messages published to this topic (parameter identifier: MQIA_PM_DELIVERY).

The value can be:

MQDLV_AS_PARENT
The delivery mechanism used is based on the setting of the first parent administrative node found in the topic tree relating to this topic.

MQDLV_ALL
Persistent messages must be delivered to all subscribers, irrespective of durability for the MQPUT call to report success. If a delivery failure to any subscriber occurs, no other subscribers receive the message and the MQPUT fails.

MQDLV_ALL_DUR
Persistent messages must be delivered to all durable subscribers. Failure to deliver a persistent message to any non-durable subscribers does not return an error to the MQPUT call. If a delivery failure to a durable subscriber occurs, no other subscribers receive the message and the MQPUT fails.

MQDLV_ALL_AVAIL
Persistent messages are delivered to all subscribers that can accept the message. Failure to deliver the message to any subscriber does not prevent other subscribers from receiving the message.

ProxySubscriptions (MQCFIN)
Whether a proxy subscription is to be sent for this topic, even if no local subscriptions exist, to directly connected queue managers (parameter identifier: MQIA_PROXY_SUB).

The value can be:

MQTA_PROXY_SUB_FORCE
A proxy subscription is sent to connected queue managers even if no local subscriptions exist.

MQTA_PROXY_SUB_FIRSTUSE
    A proxy subscription is sent for this topic only when a local subscription exists.

PublicationScope **(MQCFIN)**
    Whether this queue manager propagates publications to queue managers as part of a hierarchy or as part of a publish/subscribe cluster (parameter identifier: MQIA_PUB_SCOPE).

    The value can be:

MQSCOPE_ALL
    Publications for this topic are propagated to hierarchically connected queue managers and to publish/subscribe cluster-connected queue managers.

MQSCOPE_AS_PARENT
    Whether this queue manager will propagate publications to queue managers as part of a hierarchy or as part of a publish/subscribe cluster is based on the setting of the first parent administrative node found in the topic tree relating to this topic.

    This is the default value for this parameter if no value is specified.

MQSCOPE_QMGR
    Publications for this topic are not propagated to other queue managers.

Note: You can override this behavior on a publication-by-publication basis, using MQPMO_SCOPE_QMGR on the Put Message Options.

QMgrName **(MQCFST)**
    Name of local queue manager (parameter identifier: MQCA_CLUSTER_Q_MGR_NAME).

    The maximum length of the string is MQ_Q_MGR_NAME_LENGTH

SubscriptionScope **(MQCFIN)**
    Whether this queue manager propagates subscriptions to queue managers as part of a hierarchy or as part of a publish/subscribe cluster (parameter identifier: MQIA_SUB_SCOPE).

    The value can be:

MQSCOPE_ALL
    Subscriptions for this topic are propagated to hierarchically connected queue managers and to publish/subscribe cluster-connected queue managers.

MQSCOPE_AS_PARENT
    Whether this queue manager will propagate subscriptions to queue managers as part of a hierarchy or as part of a publish/subscribe cluster is based on the setting of the first parent administrative node found in the topic tree relating to this topic.

    This is the default value for this parameter if no value is specified.

MQSCOPE_QMGR
    Subscriptions for this topic are not propagated to other queue managers.

Note: You can override this behavior on a subscription-by-subscription basis, using MQSO_SCOPE_QMGR on the Subscription Descriptor or SUBSCOPE(QMGR) on DEFINE SUB.

TopicDesc **(MQCFST)**
    Topic description (parameter identifier: MQCA_TOPIC_DESC).

    The maximum length is MQ_TOPIC_DESC_LENGTH.

TopicName **(MQCFST)**
    Topic object name (parameter identifier: MQCA_TOPIC_NAME).

    The maximum length of the string is MQ_TOPIC_NAME_LENGTH

TopicString **(MQCFST)**
    The topic string (parameter identifier: MQCA_TOPIC_STRING).

    The '/' character within this string has special meaning. It delimits the elements in the topic tree. A topic string can start with the '/' character but is not required to. A string starting with the '/' character

is not the same as the string which starts without the '/' character. A topic string cannot end with the "/" character.

The maximum length of the string is MQ_TOPIC_STR_LENGTH.

TopicType **(MQCFIN)**
Whether this object is a local or cluster topic (parameter identifier: MQIA_TOPIC_TYPE).

The value can be:

MQTOPT_LOCAL
This object is a local topic.

MQTOPT_CLUSTER
This object is a cluster topic.

WildcardOperation **(MQCFIN)**
Behavior of subscriptions including wildcards made to this topic (parameter identifier: MQIA_WILDCARD_OPERATION).

The value can be any of the following values:

MQTA_PASSTHRU
Subscriptions made using wildcard topic names that are less specific than the topic string at this topic object will receive publications made to this topic and to topic strings more specific than this topic. This is the default supplied with IBM MQ.

MQTA_BLOCK
Subscriptions made using wildcard topic names that are less specific than the topic string at this topic object will not receive publications made to this topic or to topic strings more specific than this topic.

Event message reference

Use this page to obtain an overview of information about the format of event messages.

For each instrumentation event, information is returned in both the message descriptor and message data parts of the events messages.

Related concepts
"Event message descriptions" on page 123
The event message data contains information specific to the event that was generated. This data includes the name of the queue manager and, where appropriate, the name of the queue.

Related reference
"Event message format" on page 116
Event messages are standard IBM MQ messages containing a message descriptor and message data.

"Event message MQMD (message descriptor)" on page 117
The message descriptor for an event message contains information that a system monitoring application can use, such as the message type and format, and the date and time that the message was put on the event queue.

"Event message MQCFH (PCF header)" on page 121
The message data in event messages is in programmable command format (PCF), as used in PCF command inquiries and responses. The message data consists of two parts: the event header and the event data.

Related information
Instrumentation events

Event message format

Event messages are standard IBM MQ messages containing a message descriptor and message data.

Table 2 on page 116 shows the basic structure of event messages and, in the Event data column, the names of the fields in an event message for queue service interval events.

Table 2. Event message structure for queue service interval events		
Message descriptor	**Message data**	
MQMD structure	**PCF header** **MQCFH structure**	**Event data** [1]
Structure identifier Structure version Report options Message type Expiration time Feedback code Encoding Coded character set ID Message format Message priority Persistence Message identifier Correlation identifier Backout count Reply-to queue Reply-to queue manager User identifier Accounting token Application identity data Application type Application name Put date Put time Application origin data Group identifier Message sequence number Offset Message flags Original length	Structure type Structure length Structure version Command identifier Message sequence number Control options Completion code Reason code Parameter count	Queue manager name Queue name Time since last reset Maximum number of messages on queue Number of messages put to queue Number of messages retrieved from queue
Note:		
1. The parameters shown are those returned for a queue service interval event. The actual event data depends on the specific event.		

In general, you need only a subset of this information for any system management programs that you write. For example, your application might need the following data:

- The name of the application causing the event
- The name of the queue manager on which the event occurred
- The queue on which the event was generated
- The event statistics

Event message MQMD (message descriptor)

The message descriptor for an event message contains information that a system monitoring application can use, such as the message type and format, and the date and time that the message was put on the event queue.

The information in the descriptor informs a system management application that the message type is MQMT_DATAGRAM, and the message format is MQFMT_EVENT.

Many of the fields in an event message contain fixed data, which is supplied by the queue manager that generated the message. The MQMD also specifies the name of the queue manager (truncated to 28 characters) that put the message.

For an event message, the MQMD structure contains the following values:

StrucId

Description:	Structure identifier.
Data type:	MQCHAR4.
Value:	MQMD_STRUC_ID

Version

Description:	Structure version number.
Data type:	MQLONG.

Values:
> **MQMD_VERSION_1**
> Version-1 message descriptor structure, supported in all environments.
>
> **MQMD_VERSION_2**
> Version-2 message descriptor structure, supported on AIX, HP-UX, z/OS, IBM i, Solaris, Linux, Windows, and all IBM MQ MQI clients connected to these systems.

Report

Description:	Options for report messages.
Data type:	MQLONG.

Value:
> **MQRO_NONE**
> No reports required.

MsgType

Description:	Indicates type of message.
Data type:	MQLONG.
Value:	MQMT_DATAGRAM.

Expiry

Description:	Message lifetime.
Data type:	MQLONG.

Value:
> **MQEI_UNLIMITED**
> The message does not have an expiry time.

Feedback

Description:	Feedback or reason code.

Data type:	MQLONG.	
Value:	MQFB_NONE.	

Encoding

Description:	Numeric encoding of message data.
Data type:	MQLONG.
Value:	MQENC_NATIVE.

CodedCharSetId

Description:	Character set identifier of event message data.
Data type:	MQLONG.
Value:	Coded character set ID (CCSID) of the queue manager generating the event.

Format

Description:	Format name of message data.
Data type:	MQCHAR8.
Value:	**MQFMT_EVENT** Event message.

Priority

Description:	Message priority.
Data type:	MQLONG.
Value:	**MQPRI_PRIORITY_AS_Q_DEF** The priority is that of the event queue.

Persistence

Description:	Message persistence.
Data type:	MQLONG.
Value:	**MQPER_PERSISTENCE_AS_Q_DEF** The priority is that of the event queue.

MsgId

Description:	Message identifier.
Data type:	MQBYTE24.
Value:	A unique value generated by the queue manager.

CorrelId

Description:	Correlation identifier.
Data type:	MQBYTE24.

Value:
For performance, queue manager, logger, channel, bridge, and SSL events:

MQCI_NONE
No correlation identifier is specified. This is for private queues only.

For such events on a shared queue, a nonzero correlation identifier is set. This parameter is set so that you can track multiple event messages from different queue managers. The characters are specified in the following way:

1-4 Product identifier ('CSQ ')

5-8 Queue-sharing group name

9 Queue manager identifier

10-17 Time stamp

18-24 Nulls

For configuration and command events:

A unique nonzero correlation identifier
All messages relating to the same event have the same CorrelId.

BackoutCount

Description:	Backout counter.
Data type:	MQLONG.
Value:	0.

ReplyToQ

Description:	Name of reply queue.
Data type:	MQCHAR48.
Values:	Blank.

ReplyToQMgr

Description:	Name of reply queue manager.
Data type:	MQCHAR48.
Value:	The queue manager name at the originating system.

UserIdentifier

Description:	Identifies the application that originated the message.
Data type:	MQCHAR12.
Value:	Blank.

AccountingToken

Description:	Accounting token that allows an application to charge for work done as a result of the message.
Data type:	MQBYTE32.
Value:	MQACT_NONE.

ApplIdentityData

Description:	Application data relating to identity.
Data type:	MQCHAR32.
Values:	Blank.

PutApplType

Description:	Type of application that put the message.
Data type:	MQLONG.
Value:	**MQAT_QMGR** Queue manager generated message.

PutApplName

Description:	Name of application that put the message.
Data type:	MQCHAR28.
Value:	The queue manager name at the originating system.

PutDate

Description:	Date when message was put.
Data type:	MQCHAR8.
Value:	As generated by the queue manager.

PutTime

Description:	Time when message was put.
Data type:	MQCHAR8.
Value:	As generated by the queue manager.

ApplOriginData

Description:	Application data relating to origin.
Data type:	MQCHAR4.
Value:	Blank.

Note: If *Version* is MQMD_VERSION_2, the following additional fields are present:

GroupId

Description:	Identifies to which message group or logical message the physical message belongs.
Data type:	MQBYTE24.
Value:	**MQGI_NONE** No group identifier specified.

MsgSeqNumber

Description:	Sequence number of logical message within group.
Data type:	MQLONG.

Value:	1.

Offset

Description:	Offset of data in physical message from start of logical message.
Data type:	MQLONG.
Value:	0.

MsgFlags

Description:	Message flags that specify attributes of the message or control its processing.
Data type:	MQLONG.
Value:	MQMF_NONE.

OriginalLength

Description:	Length of original message.
Data type:	MQLONG.
Value:	MQOL_UNDEFINED.

Event message MQCFH (PCF header)

The message data in event messages is in programmable command format (PCF), as used in PCF command inquiries and responses. The message data consists of two parts: the event header and the event data.

The MQCFH header specifies the following information:

- The category of event: whether the event is a queue manager, performance, channel, configuration, command, or logger event.
- A reason code specifying the cause of the event. For events caused by MQI calls, this reason code is the same as the reason code for the MQI call.

Reason codes have names that begin with the characters MQRC_. For example, the reason code MQRC_PUT_INHIBITED is generated when an application attempts to put a message on a queue that is not enabled for puts.

For an event, the MQCFH structure contains the following values:

Type

Description:	Structure type that identifies the content of the message.
Data type:	MQLONG.
Value:	**MQCFT_EVENT** Message is reporting an event.

StrucLength

Description:	Structure length.
Data type:	MQLONG.
Value:	**MQCFH_STRUC_LENGTH** Length in bytes of MQCFH structure.

Version

Description:	Structure version number.
Data type:	MQLONG.
Values:	

MQCFH_VERSION_1
Version-1 in all events except configuration and command events.

MQCFH_VERSION_2
Version-2 for configuration events.

MQCFH_VERSION_3
Version-3 for command events.

Command

Description:	Command identifier. This identifies the event category.
Data type:	MQLONG.
Values:	

MQCMD_Q_MGR_EVENT
Queue manager event.

MQCMD_PERFM_EVENT
Performance event.

MQCMD_CHANNEL_EVENT
Channel event.

MQCMD_CONFIG_EVENT
Configuration event.

MQCMD_COMMAND_EVENT
Command event.

MQCMD_LOGGER_EVENT
Logger event.

MsgSeqNumber

Description:	Message sequence number. This is the sequence number of the message within a group of related messages.
Data type:	MQLONG.
Values:	

1
For change object configuration events with attribute values before the changes, and for all other types of events.

2
For change object configuration events with the attribute values after the changes

Control

Description:	Control options.
Data type:	MQLONG.

Values:	**MQCFC_LAST**
	For change object configuration events with attribute values after the changes, and for all other types of events.
	MQCFC_NOT_LAST
	For Change Object configurations events only, with the attribute values from before the changes.

CompCode

Description:	Completion code.
Data type:	MQLONG.
Values:	**MQCC_OK**
	Event reporting OK condition.
	MQCC_WARNING
	Event reporting warning condition. All events have this completion code, unless otherwise specified.

Reason

Description:	Reason code qualifying completion code.
Data type:	MQLONG.
Values:	MQRC_* Dependent on the event being reported.
	Note: Events with the same reason code are further identified by the *ReasonQualifier* parameter in the event data.

ParameterCount

Description:	Count of parameter structures. This is the number of parameter structures that follow the MQCFH structure. A group structure (MQCFGR), and its included parameter structures, are counted as one structure only.
Data type:	MQLONG.
Values:	0 or greater.

Event message descriptions

The event message data contains information specific to the event that was generated. This data includes the name of the queue manager and, where appropriate, the name of the queue.

The data structures returned depend on which particular event was generated. In addition, for some events, certain parameters of the structures are optional, and are returned only if they contain information that is relevant to the circumstances giving rise to the event. The values in the data structures depend on the circumstances that caused the event to be generated.

Note:

1. The PCF structures in the message data are not returned in a defined order. They must be identified from the parameter identifiers shown in the description.
2. Events are available on all platforms, unless specific limitations are shown at the start of an event description.

Alias Base Queue Type Error

Event name:	Alias Base Queue Type Error.
Reason code in MQCFH:	MQRC_ALIAS_BASE_Q_TYPE_ERROR (2001, X'7D1'). Alias base queue not a valid type.
Event description:	An MQOPEN or MQPUT1 call was issued specifying an alias queue as the destination, but the *BaseObjectName* in the alias queue definition resolves to a queue that is not a local queue, or local definition of a remote queue.
Event type:	Local.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

QName

Description:	Queue name from object descriptor (MQOD).
Identifier:	MQCA_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

BaseObjectName

Description:	Object name to which the alias resolves.
Identifier:	MQCA_BASE_OBJECT_NAME. For compatibility with existing applications you can still use MQCA_BASE_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

QType

Description:	Type of queue to which the alias resolves.
Identifier:	MQIA_Q_TYPE.
Data type:	MQCFIN.

Values:	**MQQT_ALIAS**
	Alias queue definition.
	MQQT_MODEL
	Model queue definition.
Returned:	Always.

ApplType

Description:	Type of the application making the call that caused the event.
Identifier:	MQIA_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Always.

ApplName

Description:	Name of the application making the call that caused the event.
Identifier:	MQCACF_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Always.

ObjectQMgrName

Description:	Name of the object queue manager.
Identifier:	MQCACF_OBJECT_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	If the *ObjectName* in the object descriptor (MQOD), when the object was opened, is not the queue manager currently connected.

ConnName

Description:	Connection name for client connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	If the application making the MQI call that caused the event is a client attached application.

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH
Returned:	If the application making the MQI call that caused the event is a client attached application.

Bridge Started

Event name:	Bridge Started.
Reason code in MQCFH:	MQRC_BRIDGE_STARTED (2125, X'84D'). Bridge started.
Event description:	The IMS bridge has been started.
Event type:	IMS bridge.
Platforms:	IBM MQ for z/OS only.
Event queue:	SYSTEM.ADMIN.CHANNEL.EVENT.

Event data

`QMgrName`

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

`BridgeType`

Description:	Bridge type.
Identifier:	MQIACF_BRIDGE_TYPE.
Data type:	MQCFIN.
Values:	**MQBT_OTMA** OTMA bridge.
Returned:	Always.

`BridgeName`

Description:	Bridge name. For bridges of type MQBT_OTMA, the name is of the form XCFgroupXCFmember, where XCFgroup is the XCF group name to which both IMS and IBM MQ belong. XCFmember is the XCF member name of the IMS system.
Identifier:	MQCACF_BRIDGE_NAME.
Data type:	MQCFST.
Maximum length:	MQ_BRIDGE_NAME_LENGTH.
Returned:	Always.

Bridge Stopped

Event name:	Bridge Stopped.
Reason code in MQCFH:	MQRC_BRIDGE_STOPPED (2126, X'84E'). Bridge stopped.

Event description:	The IMS bridge has been stopped.
Event type:	IMS bridge.
Platforms:	IBM MQ for z/OS only.
Event queue:	SYSTEM.ADMIN.CHANNEL.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ReasonQualifier

Description:	Identifier that qualifies the reason code in MQCFH.
Identifier:	MQIACF_REASON_QUALIFIER.
Data type:	MQCFIN.
Values:	**MQRQ_BRIDGE_STOPPED_OK** Bridge has been stopped with either a zero return code or a warning return code. For MQBT_OTMA bridges, one side or the other issued a normal IXCLEAVE request. **MQRQ_BRIDGE_STOPPED_ERROR** Bridge has been stopped but there is an error reported.
Returned:	Always.

BridgeType

Description:	Bridge type.
Identifier:	MQIACF_BRIDGE_TYPE.
Data type:	MQCFIN.
Value:	**MQBT_OTMA** OTMA bridge.
Returned:	Always.

BridgeName

Description:	Bridge name. For bridges of type MQBT_OTMA, the name is of the form XCFgroupXCFmember, where XCFgroup is the XCF group name to which both IMS and IBM MQ belong. XCFmember is the XCF member name of the IMS system.
Identifier:	MQCACF_BRIDGE_NAME.
Data type:	MQCFST.
Maximum length:	MQ_BRIDGE_NAME_LENGTH.
Returned:	Always.

ErrorIdentifier

Description:	When a bridge is stopped because of an error, this code identifies the error. If the event reports a bridge stop failure, the IMS sense code is set.
Identifier:	MQIACF_ERROR_IDENTIFIER.
Data type:	MQCFIN.
Returned:	If *ReasonQualifier* is MQRQ_BRIDGE_STOPPED_ERROR.

V8.0.0.4 *Change Authority Record*

Event name:	Change Authority Record
Reason code in MQCFH:	MQRC_CONFIG_CHANGE_OBJECT (2368, X'0940'). Object changed.
Event description:	A Set Authority Record command was issued that successfully changed an existing authority record.
Event type:	Configuration
Platforms:	All except z/OS.
Event queue:	SYSTEM.ADMIN.CONFIG.EVENT.

Note that two event messages are generated for the change authority record event. The first has the authority record attribute values *before* the change; the second has the attribute values *after* the change.

Event data

EventQMgr

Description:	The queue manager where the command or call was entered. That is, the queue manager where the command is processed and that generates the event is in the MQMD of the event message.
Identifier:	MQCACF_EVENT_Q_MGR
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

EventUserId

Description:	The user ID that issued the command or call that generated the event.
	This is the same user id that is used to check the authority to issue the command or call; for commands received from a queue, this is also the user identifier (**UserIdentifier**) from the message descriptor of the command message. .
Identifier:	MQCACF_EVENT_USER_ID
Data type:	MQCFST.
Maximum length:	MQ_USER_ID_LENGTH.
Returned:	Always.

EventOrigin

Description:	The origin of the action causing the event.
Identifier:	MQIACF_EVENT_ORIGIN
Data type:	MQCFIN.
Values:	**MQEVO_CONSOLE** Console command (runmqsc or setmqaut) **MQEVO_INTERNAL** Directly by queue manager **MQEVO_MSG** Command message on SYSTEM.ADMIN.COMMAND.QUEUE
Returned:	Always

EventAccountingToken

Description:	For commands received as a message (MQEVO_MSG), the accounting token (**AccountingToken**) from the message descriptor of the command message.
Identifier:	MQBACF_EVENT_ACCOUNTING_TOKEN
Data type:	MQCFBS
Maximum length:	MQ_ACCOUNTING_TOKEN_LENGTH
Returned:	Only if **EventOrigin** is MQEVO_MSG.

EventApplIdentity

Description:	For commands received as a message (MQEVO_MSG), application identity data (**ApplIdentityData**) from the message descriptor of the command message.
Identifier:	MQMQCACF_EVENT_APPL_IDENTITY
Data type:	MQCFST
Maximum length:	MQ_APPL_IDENTITY_DATA_LENGTH
Returned:	Only if **EventOrigin** is MQEVO_MSG.

EventApplType

Description:	For commands received as a message (MQEVO_MSG), the type of application (**PutApplType**) from the message descriptor of the command message.
Identifier:	MQIACF_EVENT_APPL_TYPE
Data type:	MQCFIN
Values:	
Returned:	Only if **EventOrigin** is MQEVO_MSG.

EventApplName

Description:	For commands received as a message (MQEVO_MSG), the name of the application (**PutApplName**) from the message descriptor of the command message.
Identifier:	MQCACF_EVENT_APPL_NAME
Data type:	MQCFST

Maximum length:	MQ_APPL_NAME_LENGTH
Returned:	Only if **EventOrigin** is MQEVO_MSG.

EventApplOrigin

Description:	For commands received as a message (MQEVO_MSG), the application origin data (**ApplOriginData**) from the message descriptor of the command message.
Identifier:	MQCACF_EVENT_APPL_ORIGIN
Data type:	MQCFST
Maximum length:	MQ_APPL_ORIGIN_DATA_LENGTH
Returned:	Only if **EventOrigin** is MQEVO_MSG.

ObjectType

Description:	Object type
Identifier:	MQIACF_OBJECT_TYPE
Data type:	MQCFIN
Values:	MQOT_AUTH_REC
Returned:	Always

ProfileName

Description:	Object or generic profile name
Identifier:	MQCACF_AUTH_PROFILE_NAME
Data type:	MQCFST
Maximum length:	MQ_AUTH_PROFILE_NAME_LENGTH
Returned:	Always

Object attributes

A parameter structure is returned for each attribute of the object. The attributes returned depend on the object type. For more information see "Object attributes for event data" on page 71.

Change object

Event name:	Change object.
Reason code in MQCFH:	MQRC_CONFIG_CHANGE_OBJECT (2368, X'940'). Existing object changed.
Event description:	An ALTER or DEFINE REPLACE command or an MQSET call was issued that successfully changed an existing object.
Event type:	Configuration.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.CONFIG.EVENT.

Note: Two event messages are generated for the change object event. The first has the object attribute values **before** the change, the second has the attribute values **after** the change.

Event data

EventUserId

Description:	The user id that issued the command or call that generated the event. (This is the same user id that is used to check the authority to issue the command or call; for commands received from a queue, this is also the user identifier (UserIdentifier) from the MQMD of the command message).
Identifier:	MQCACF_EVENT_USER_ID.
Datatype:	MQCFST.
Maximum length:	MQ_USER_ID_LENGTH.
Returned:	Always.

EventOrigin

Description:	The origin of the action causing the event.
Identifier:	MQIACF_EVENT_ORIGIN.
Datatype:	MQCFIN.
Values:	**MQEVO_CONSOLE** Console command. **MQEVO_INIT** Initialization input data set command. **MQEVO_INTERNAL** Directly by queue manager. **MQEVO_MQSET** MQSET call. **MQEVO_MSG** Command message on SYSTEM.COMMAND.INPUT. **MQEVO_OTHER** None of the above.
Returned:	Always.

EventQMgr

Description:	The queue manager where the command or call was entered. (The queue manager where the command is executed and that generates the event is in the MQMD of the event message).
Identifier:	MQCACF_EVENT_Q_MGR.
Datatype:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

EventAccountingToken

Description:	For commands received as a message (MQEVO_MSG), the accounting token (AccountingToken) from the MQMD of the command message.
Identifier:	MQBACF_EVENT_ACCOUNTING_TOKEN.
Datatype:	MQCFBS.
Maximum length:	MQ_ACCOUNTING_TOKEN_LENGTH.

Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplIdentity

Description:	For commands received as a message (MQEVO_MSG), application identity data (ApplIdentityData) from the MQMD of the command message.
Identifier:	MQCACF_EVENT_APPL_IDENTITY.
Datatype:	MQCFST.
Maximum length:	MQ_APPL_IDENTITY_DATA_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplType

Description:	For commands received as a message (MQEVO_MSG), the type of application (PutApplType) from the MQMD of the command message.
Identifier:	MQIACF_EVENT_APPL_TYPE.
Datatype:	MQCFIN.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplName

Description:	For commands received as a message (MQEVO_MSG), the name of the application (PutApplName) from the MQMD of the command message.
Identifier:	MQCACF_EVENT_APPL_NAME.
Datatype:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplOrigin

Description:	For commands received as a message (MQEVO_MSG), the application origin data (ApplOriginData) from the MQMD of the command message.
Identifier:	MQCACF_EVENT_APPL_ORIGIN.
Datatype:	MQCFST.
Maximum length:	MQ_APPL_ORIGIN_DATA_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

ObjectType

Description:	Object type:
Identifier:	MQIACF_OBJECT_TYPE.
Datatype:	MQCFIN.

Values:	**MQOT_CHANNEL** Channel. **MQOT_CHLAUTH** Channel authentication record. **MQOT_NAMELIST** Namelist. **MQOT_NONE** No object. **MQOT_PROCESS** Process. **MQOT_Q** Queue. **MQOT_Q_MGR** Queue manager. **MQOT_STORAGE_CLASS** Storage class. **MQOT_AUTH_INFO** Authentication information. **MQOT_CF_STRUC** CF structure. **MQOT_TOPIC** Topic. **MQOT_COMM_INFO** Communication information. **MQOT_LISTENER** Channel Listener.
Returned:	Always.

ObjectName

Description:	Object name:
Identifier :	Identifier will be according to object type.

- MQCACH_CHANNEL_NAME
- MQCA_NAMELIST_NAME
- MQCA_PROCESS_NAME
- MQCA_Q_NAME
- MQCA_Q_MGR_NAME
- MQCA_STORAGE_CLASS
- MQCA_AUTH_INFO_NAME
- MQCA_CF_STRUC_NAME
- MQCA_TOPIC_NAME
- MQCA_COMM_INFO_NAME
- MQCACH_LISTENER_NAME

Note: MQCACH_CHANNEL_NAME can also be used for channel authentication.

Datatype:	MQCFST.
Maximum length:	MQ_OBJECT_NAME_LENGTH.

Returned:	Always

Disposition

Description:	Object disposition:
Identifier:	MQIA_QSG_DISP.
Datatype:	MQCFIN.
Values:	**MQQSGD_Q_MGR** Object resides on page set of queue manager. **MQQSGD_SHARED** Object resides in shared repository and messages are shared in coupling facility. **MQQSGD_GROUP** Object resides in shared repository. **MQQSGD_COPY** Object resides on page set of queue manager and is a local copy of a GROUP object.
Returned:	Always, except for queue manager and CF structure objects.

Object attributes

A parameter structure is returned for each attribute of the object. The attributes returned depend on the object type. For more information see "Object attributes for event data" on page 71.

Channel Activated

Event name:	Channel Activated.
Reason code in MQCFH:	MQRC_CHANNEL_ACTIVATED (2295, X'8F7'). Channel activated.
Event description:	This condition is detected when a channel that has been waiting to become active, and for which a Channel Not Activated event has been generated, is now able to become active, because an active slot has been released by another channel. This event is not generated for a channel that is able to become active without waiting for an active slot to be released.
Event type:	Channel.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.CHANNEL.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.

ChannelName

Description:	Channel Name.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH.
Returned:	Always.

XmitQName

Description:	Transmission queue name.
Identifier:	MQCACH_XMIT_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	For sender, server, cluster-sender, and cluster-receiver channels only.

ConnectionName

Description:	If the channel has successfully established a TCP connection, this is the Internet address. Otherwise it is the contents of the *ConnectionName* field in the channel definition.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	Only for commands that do not contain a generic name.

Channel Auto-definition Error

Event name:	Channel Auto-definition Error.
Reason code in MQCFH:	MQRC_CHANNEL_AUTO_DEF_ERROR (2234, X'8BA'). Automatic channel definition failed.
Event description:	This condition is detected when the automatic definition of a channel fails; this may be because an error occurred during the definition process, or because the channel automatic-definition exit inhibited the definition. Additional information indicating the reason for the failure is returned in the event message.
Event type:	Channel.
Platforms:	All, except IBM MQ for z/OS.
Event queue:	SYSTEM.ADMIN.CHANNEL.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.

Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ChannelName

Description:	Name of the channel for which the auto-definiton has failed.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH.
Returned:	Always.

ChannelType

Description:	Channel Type. This specifies the type of channel for which the auto-definition has failed.
Identifier:	MQIACH_CHANNEL_TYPE.
Data type:	MQCFIN.
Values:	**MQCHT_RECEIVER** Receiver. **MQCHT_SVRCONN** Server-connection (for use by clients). **MQCHT_CLUSSDR** Cluster-sender.
Returned:	Always.

ErrorIdentifier

Description:	Identifier of the cause of the error. This contains either the reason code (MQRC_* or MQRCCF_*) resulting from the channel definition attempt or the value MQRCCF_SUPPRESSED_BY_EXIT if the attempt to create the definition was disallowed by the exit.
Identifier:	MQIACF_ERROR_IDENTIFIER.
Data type:	MQCFIN.
Returned:	Always.

ConnectionName

Description:	Name of the partner attempting to establish connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	Always.

AuxErrorDataInt1

Description:	Auxiliary error data. This contains the value returned by the exit in the *Feedback* field of the MQCXP to indicate why the auto definition has been disallowed.
Identifier:	MQIACF_AUX_ERROR_DATA_INT_1.
Data type:	MQCFIN.
Returned:	Only if *ErrorIdentifier* contains MQRCCF_SUPPRESSED_BY_EXIT.

Channel Auto-definition OK

Event name:	Channel Auto-definition OK.
Reason code in MQCFH:	MQRC_CHANNEL_AUTO_DEF_OK (2233, X'8B9'). Automatic channel definition succeeded.
Event description:	This condition is detected when the automatic definition of a channel is successful. The channel is defined by the MCA.
Event type:	Channel.
Platforms:	All, except IBM MQ for z/OS.
Event queue:	SYSTEM.ADMIN.CHANNEL.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ChannelName

Description:	Name of the channel being defined.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH.
Returned:	Always.

ChannelType

Description:	Type of channel being defined.
Identifier:	MQIACH_CHANNEL_TYPE.
Data type:	MQCFIN.

Values:	**MQCHT_RECEIVER**
	Receiver.
	MQCHT_SVRCONN
	Server-connection (for use by clients).
	MQCHT_CLUSSDR
	Cluster-sender.
Returned:	Always.

ConnectionName

Description:	Name of the partner attempting to establish connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	Always.

Channel Blocked

Event name:	Channel Blocked.
Reason code in MQCFH:	MQRC_CHANNEL_BLOCKED Channel blocked. MQRC_CHANNEL_BLOCKED_WARNING Channel blocked - warning mode.
Event description:	This event is issued when an attempt to start an inbound channel is blocked. For MQRC_CHANNEL_BLOCKED_WARNING, temporary access has been granted to the channel because the channel authentication record is defined with WARN set to YES.
Event type:	Channel.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.CHANNEL.EVENT

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

Reason qualifier

Description:	Identifier that qualifies the reason code
Identifier:	MQIACF_REASON_QUALIFIER
Data type:	MQCFIN.

Values:	**MQRQ_CHANNEL_BLOCKED_ADDRESS** Channel was blocked due to its IP address being in the list to be refused
	MQRQ_CHANNEL_BLOCKED_USERID Channel was blocked due to its asserted or mapped user ID being in the list to be refused.
	MQRQ_CHANNEL_BLOCKED_NOACCESS Channel was blocked due to its IP address; SSL Peer name; remote queue manager name or client user ID being mapped to have no access.
Returned:	Always.

ChannelName

Description:	Channel Name.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH.
Returned:	If the Reason Qualifier is not MQRQ_CHANNEL_BLOCKED_ADDRESS. In that case the inbound connection is blocked before the channel name is known.

UserIdentifier

Description:	User identifier that was blocked.
Identifier:	MQCACF_USER_IDENTIFIER
Data type:	MQCFST.
Maximum length:	MQ_USER_ID_LENGTH
Returned:	Only if the Reason Qualifier is MQRQ_CHANNEL_BLOCKED_USERID

ConnectionName

Description:	Address of the partner attempting to establish connection
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	Always

RemoteQMgrName

Description:	Name of the partner queue manager attempting to establish connection.
Identifier:	MQCA_REMOTE_Q_MGR_NAME
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH
Returned:	Only for inbound queue manager connections.

SSLPeerName

Description:	The Distinguished Name in the certificate sent from the remote system.
Identifier:	MQCACH_SSL_PEER_NAME
Data type:	MQCFST.

Maximum length:	MQ_DISTINGUISHED_NAME_LENGTH
Returned:	Whenever the channel is using SSL and the client has not connected anonymously.

SSLIssuerName

Description:	The Name of the Issuer in the certificate sent from the remote system.
Identifier:	MQCA_SSL_CERT_ISSUER_NAME
Data type:	MQCFST
Maximum length:	MQ_DISTINGUISHED_NAME_LENGTH
Returned:	Whenever the channel is using TLS and the client has not connected anonymously.

ClientUserIdentifier

Description:	Client side user identifier of the partner attempting to establish connection.
Identifier:	MQCACH_CLIENT_USER_ID
Data type:	MQCFST.
Maximum length:	MQ_USER_ID_LENGTH
Returned:	Only for inbound client connections, if the Reason Qualifier is not MQRQ_CHANNEL_BLOCKED_ADDRESS. In that case the inbound connection is blocked before the client user Id name is known.

ApplType

Description:	Type of application that made the API call.
Identifier:	MQIA_APPL_TYPE
Data type:	MQCFIN.
Returned:	Only for inbound client connections. If the Reason Qualifier is not MQRQ_CHANNEL_BLOCKED_ADDRESS. In that case the inbound connection is blocked before the application name is known.

ApplName

Description:	Name of the application that made the API call.
Identifier:	MQCACF_APPL_NAME
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH
Returned:	Only for inbound client connections. If the Reason Qualifier is not MQRQ_CHANNEL_BLOCKED_ADDRESS. In that case the inbound connection is blocked before the application name is known.

Channel Conversion Error

Event name:	Channel Conversion Error.
Reason code in MQCFH:	MQRC_CHANNEL_CONV_ERROR (2284, X'8EC'). Channel conversion error.

Event description:	This condition is detected when a channel is unable to carry out data conversion and the MQGET call to get a message from the transmission queue resulted in a data conversion error. The reason for the failure is identified by *ConversionReasonCode*.
Event type:	Channel.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.CHANNEL.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ConversionReasonCode

Description:	Identifier of the cause of the conversion error.
Identifier:	MQIACF_CONV_REASON_CODE.
Data type:	MQCFIN.
Values:	**MQRC_CONVERTED_MSG_TOO_BIG (2120, X'848')** Converted message too big for application buffer. **MQRC_FORMAT_ERROR (2110, X'83E')** Message format not valid. **MQRC_NOT_CONVERTED (2119, X'847')** Application message data not converted. **MQRC_SOURCE_CCSID_ERROR (2111, X'83F')** Source coded character set identifier not valid. **MQRC_SOURCE_DECIMAL_ENC_ERROR (2113, X'841')** Packed-decimal encoding in message not recognized. **MQRC_SOURCE_FLOAT_ENC_ERROR (2114, X'842')** Floating-point encoding in message not recognized. **MQRC_SOURCE_INTEGER_ENC_ERROR (2112, X'840')** Integer encoding in message not recognized. **MQRC_TARGET_CCSID_ERROR (2115, X'843')** Target coded character set identifier not valid. **MQRC_TARGET_DECIMAL_ENC_ERROR (2117, X'845')** Packed-decimal encoding specified by receiver not recognized.

MQRC_TARGET_FLOAT_ENC_ERROR (2118, X'846')
Floating-point encoding specified by receiver not recognized.

MQRC_TARGET_INTEGER_ENC_ERROR (2116, X'844')
Integer encoding specified by receiver not recognized.

MQRC_TRUNCATED_MSG_ACCEPTED (2079, X'81F')
Truncated message returned (processing completed).

MQRC_TRUNCATED_MSG_FAILED (2080, X'820')
Truncated message returned (processing not completed).

Returned:	Always.

ChannelName

Description:	Channel name.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH.
Returned:	Always.

Format

Description:	Format name.
Identifier:	MQCACH_FORMAT_NAME.
Data type:	MQCFST.
Maximum length:	MQ_FORMAT_LENGTH.
Returned:	Always.

XmitQName

Description:	Transmission queue name.
Identifier:	MQCACH_XMIT_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

ConnectionName

Description:	If the channel has successfully established a TCP connection, this is the Internet address. Otherwise it is the contents of the *ConnectionName* field in the channel definition.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	Always.

Channel Not Activated

Event name:	Channel Not Activated.

Reason code in MQCFH:	MQRC_CHANNEL_NOT_ACTIVATED (2296, X'8F8'). Channel cannot be activated.
Event description:	This condition is detected when a channel is required to become active, either because it is starting, or because it is about to make another attempt to establish connection with its partner. However, it is unable to do so because the limit on the number of active channels has been reached. See the following:
	• MaxActiveChannels parameter in the qm.ini file for AIX, HP-UX, and Solaris
	• MaxActiveChannels parameter in the Registry for Windows.
	• ACTCHL parameter on the ALTER QMGR command for z/OS
	The channel waits until it is able to take over an active slot released when another channel ceases to be active. At that time a Channel Activated event is generated.
Event type:	Channel.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.CHANNEL.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ChannelName

Description:	Channel name.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH.
Returned:	Always.

XmitQName

Description:	Transmission queue name.
Identifier:	MQCACH_XMIT_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	For sender, server, cluster-sender, and cluster-receiver channel types only.

ConnectionName

Description:	If the channel has successfully established a TCP connection, this is the Internet address. Otherwise it is the contents of the *ConnectionName* field in the channel definition.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	Only for commands that do not contain a generic name.

Channel Not Available

Event name:	Channel Not Available.
Reason code in MQCFH:	MQRC_CHANNEL_NOT_AVAILABLE (2537, X'9E9'). Channel not available.
Event description:	This is issued when an attempt to start an inbound channel is rejected.
Event type:	Channel.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.CHANNEL.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ReasonQualifier

Description:	Identifier that qualifies the reason code.
Identifier:	MQIACF_REASON_QUALIFIER.
Data type:	MQCFIN.

Values:	**MQRQ_MAX_ACTIVE_CHANNELS**
	Channel was unavailable due to maximum active channel instances (MaxActiveChannels qm.ini stanza on distributed or ACTCHL MQSC keyword on z/OS) limit being reached for the queue manager.
	MQRQ_MAX_CHANNELS
	Channel was unavailable due to maximum channel instances (MaxChannels qm.ini stanza on distributed or MAXCHL MQSC keyword on z/OS) limit being reached for the queue manager.
	MQRQ_SVRCONN_INST_LIMIT
	Channel was unavailable due to maximum active channel instances (MAXINST) limit being reached for the channel.
	MQRQ_CLIENT_INST_LIMIT
	Channel was unavailable due to maximum active channel instances (MAXINSTC) limit being reached for the client for the channel.
Returned:	Always.

ChannelName

Description:	Channel name.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH.
Returned:	Always.

ConnectionName

Description:	Address of the partner attempting to establish connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	Always.

MaximumActiveChannels

Description:	Maximum active channels.
Identifier:	MQIA_ACTIVE_CHANNELS
Data type:	MQCFIN.
Returned:	Only where reason qualifier MQRQ_MAX_ACTIVE_CHANNELS.

MaximumChannels

Description:	Maximum channels.
Identifier:	MQIA_MAX_CHANNELS
Data type:	MQCFIN
Returned:	Only where reason qualifier MQRQ_MAX_CHANNELS.

MaximumInstances

Description:	Maximum channel instances.

Identifier:	MQIACH_MAX_INSTANCES
Data type:	MQCFIN
Returned:	Only where reason qualifier MQRQ_SVRCONN_INST_LIMIT.

MaximumClientInstances

Description:	Maximum channel instances per client.
Identifier:	MQIACH_MAX_INSTS_PER_CLIENT
Data type:	MQCFIN
Returned:	Only where reason qualifier MQRQ_CLIENT_INST_LIMIT.

Channel SSL Error

Event name:	Channel SSL Error.
Reason code in MQCFH:	MQRC_CHANNEL_SSL_ERROR (2371, X'943'). Channel SSL Error.
Event description:	This condition is detected when a channel using Secure Sockets Layer (SSL) or Transport Layer Security (TLS) fails to establish a connection. *ReasonQualifier* identifies the nature of the error.
Event type:	SSL.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.CHANNEL.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ReasonQualifier

Description:	Identifier that qualifies the reason code.
Identifier:	MQIACF_REASON_QUALIFIER.
Data type:	MQCFIN.

Values:	**MQRQ_SSL_HANDSHAKE_ERROR**
	The key exchange / authentication failure arose during the SSL or TLS handshake.
	MQRQ_SSL_CIPHER_SPEC_ERROR
	This error can mean any one of the following:

- The SSL or TLS client CipherSpec does not match that on the SSL or TLS server channel definition.
- An invalid CipherSpec has been specified.
- A CipherSpec has only been specified on one end of the SSL or TLS channel.

	MQRQ_SSL_PEER_NAME_ERROR
	The Distinguished Name in the certificate sent by one end of the SSL or TLS channel does not match the peer name on the end of the channel definition at the other end of the SSL or TLS channel.
	MQRQ_SSL_CLIENT_AUTH_ERROR
	The SSL or TLS server channel definition specified either SSLCAUTH(REQUIRED) or a SSLPEER value that was not blank, but the SSL or TLS client did not provide a certificate.
Returned:	Always.

ChannelName

Description:	Channel Name.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH.
Returned:	The *ChannelName* might not be available if the channel has not yet got far enough through its start-up process, in this case the channel name will not be returned. Otherwise always.

XmitQName

Description:	Transmission queue name.
Identifier:	MQCACH_XMIT_Q_NAME.
Data type:	MQCFST.
Returned:	For sender, server, cluster-sender and cluster-receiver channels only.

ConnectionName

Description:	If the channel has successfully established a TCP connection, this is the Internet address. Otherwise it is the contents of the ConnectionName field in the channel definition.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	The *ConnectionName* might not be available if the channel has not yet got far enough through its start-up process, in this case the connection name will not be returned. Otherwise always.

SSLHandshakeStage

Description:	Information about the SSL or TLS function call giving the error. For z/OS, details of function names can be found in the *System Secure Sockets Layer Programming Guide and Reference* SC24-5877.
Identifier:	MQCACH_SSL_HANDSHAKE_STAGE.
Data type:	MQCFST.
Maximum length:	MQ_SSL_HANDSHAKE_STAGE_LENGTH.
Returned:	This field is only present if *ReasonQualifier* is set to MQRQ_SSL_HANDSHAKE_ERROR.

SSLReturnCode

Description:	A numeric return code from a failing SSL or TLS call.
	Details of SSL or TLS Return Codes for specific platforms can be found as follows:
	• **z/OS** For z/OS, see Secure Sockets Layer (SSL) return codes (z/OS).
	• For platforms other than z/OS, see Secure Sockets Layer (SSL) return codes.
Identifier:	MQIACH_SSL_RETURN_CODE.
Data type:	MQCFIN.
Returned:	This field is only present if *ReasonQualifier* is set to MQRQ_SSL_HANDSHAKE_ERROR.

SSLPeerName

Description:	The Distinguished Name in the certificate sent from the remote system.
Identifier:	MQCACH_SSL_PEER_NAME.
Data type:	MQCFST.
Maximum length:	MQ_DISTINGUISHED_NAME_LENGTH.
Returned:	This field is only present if *ReasonQualifier* is set to MQRQ_SSL_PEER_NAME_ERROR and is not always present for this reason qualifier.

Channel SSL Warning

Event name:	Channel SSL Warning.
Reason code in MQCFH:	MQRC_CHANNEL_SSL_WARNING (2552, X'9F8'). Channel SSL Warning.
Event description:	This condition is detected when a channel using Secure Sockets Layer (SSL) or Transport Layer Security (TLS) experiences a problem that does not cause it to fail to establish an SSL or TLS connection. *ReasonQualifier* identifies the nature of the event.
Event type:	SSL.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.CHANNEL.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ReasonQualifier

Description:	Identifier that qualifies the reason code.
Identifier:	MQIACF_REASON_QUALIFIER.
Data type:	MQCFIN.
Values:	**MQRQ_SSL_UNKNOWN_REVOCATION** An OCSP responder returned a response of Unknown. IBM MQ is configured to produce warnings but allow the connection to continue.
Returned:	Always.

ChannelName

Description:	Channel Name.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH.
Returned:	The *ChannelName* might not be available if the channel has not yet got far enough through its start-up process, in this case the channel name will not be returned. Otherwise always.

XmitQName

Description:	Transmission queue name.
Identifier:	MQCACH_XMIT_Q_NAME.
Data type:	MQCFST.
Returned:	For sender, server, cluster-sender and cluster-receiver channels only.

ConnectionName

Description:	If the channel has successfully established a TCP connection, this is the Internet address. Otherwise it is the contents of the ConnectionName field in the channel definition.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	The *ConnectionName* may not be available if the channel has not yet got far enough through its start-up process, in this case the connection name will not be returned. Otherwise always.

Channel Started

Event name:	Channel Started.
Reason code in MQCFH:	MQRC_CHANNEL_STARTED (2282, X'8EA'). Channel started.
Event description:	Either an operator has issued a Start Channel command, or an instance of a channel has been successfully established. This condition is detected when Initial Data negotiation is complete and resynchronization has been performed where necessary, such that message transfer can proceed.
Event type:	Channel.
Platforms:	All. Client connections do not produce this event.
Event queue:	SYSTEM.ADMIN.CHANNEL.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ChannelName

Description:	Channel name.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH.
Returned:	Always.

XmitQName

Description:	Transmission queue name.
Identifier:	MQCACH_XMIT_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	For sender, server, cluster-sender, and cluster-receiver channels only.

ConnectionName

Description:	If the channel has successfully established a TCP connection, this is the Internet address. Otherwise it is the contents of the *ConnectionName* field in the channel definition.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.

Returned:	Only for commands that do not contain a generic name.

Channel Stopped

Event name:	Channel Stopped.
Reason code in MQCFH:	MQRC_CHANNEL_STOPPED (2283, X'8EB'). Channel stopped.
Event description:	This is issued when a channel instance stops. It will only be issued if the channel instance previously issued a channel started event.
Event type:	Channel.
Platforms:	All. Client connections do not produce this event.
Event queue:	SYSTEM.ADMIN.CHANNEL.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ReasonQualifier

Description:	Identifier that qualifies the reason code.
Identifier:	MQIACF_REASON_QUALIFIER.
Data type:	MQCFIN.
Values:	**MQRQ_CHANNEL_STOPPED_OK** Channel has been closed with either a zero return code or a warning return code. **MQRQ_CHANNEL_STOPPED_ERROR** Channel has been closed but there is an error reported and the channel is not in stopped or retry state. **MQRQ_CHANNEL_STOPPED_RETRY** Channel has been closed and it is in retry state. **MQRQ_CHANNEL_STOPPED_DISABLED** Channel has been closed and it is in a stopped state.
Returned:	Always.

ChannelName

Description:	Channel name.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH.

Returned:	Always.

ErrorIdentifier

Description: Identifier of the cause of the error. If a channel is stopped due to an error, this is the code that identifies the error. If the event message is because of a channel stop failure, the following fields are set:

1. *ReasonQualifier*, containing the value MQRQ_CHANNEL_STOPPED_ERROR
2. *ErrorIdentifier*, containing the code number of an error message that describes the error
3. *AuxErrorDataInt1*, containing error message integer insert 1
4. *AuxErrorDataInt2*, containing error message integer insert 2
5. *AuxErrorDataStr1*, containing error message string insert 1
6. *AuxErrorDataStr2*, containing error message string insert 2
7. *AuxErrorDataStr3*, containing error message string insert 3

The meanings of the error message inserts depend on the code number of the error message. Details of error-message code numbers and the inserts for specific platforms can be found as follows:

- **z/OS** For z/OS, see Distributed queuing message codes.
- For platforms other than z/OS, the last four digits of *ErrorIdentifier* when displayed in hexadecimal notation indicate the decimal code number of the error message.

  For example, if *ErrorIdentifier* has the value X'xxxxyyyy', the message code of the error message explaining the error is AMQyyyy. See "IBM MQ AMQ messages" on page 245 for a description of these error messages.

Identifier:	MQIACF_ERROR_IDENTIFIER.
Data type:	MQCFIN.
Returned:	Always.

AuxErrorDataInt1

Description: First integer of auxiliary error data for channel errors. If a channel is stopped due to an error, this is the first integer parameter that qualifies the error. This information is for use by IBM service personnel; include it in any problem report that you submit to IBM regarding this event message.

Identifier:	MQIACF_AUX_ERROR_DATA_INT_1.
Data type:	MQCFIN.
Returned:	Always.

AuxErrorDataInt2

Description: Second integer of auxiliary error data for channel errors. If a channel is stopped due to an error, this is the second integer parameter that qualifies the error. This information is for use by IBM service personnel; include it in any problem report that you submit to IBM regarding this event message.

Identifier:	MQIACF_AUX_ERROR_DATA_INT_2.
Data type:	MQCFIN.

Returned: Always.

AuxErrorDataStr1

Description:	First string of auxiliary error data for channel errors. If a channel is stopped due to an error, this is the first string parameter that qualifies the error. This information is for use by IBM service personnel; include it in any problem report that you submit to IBM regarding this event message.
Identifier:	MQCACF_AUX_ERROR_DATA_STR_1.
Data type:	MQCFST.
Returned:	Always.

AuxErrorDataStr2

Description:	Second string of auxiliary error data for channel errors. If a channel is stopped due to an error, this is the second string parameter that qualifies the error. This information is for use by IBM service personnel; include it in any problem report that you submit to IBM regarding this event message.
Identifier:	MQCACF_AUX_ERROR_DATA_STR_2.
Data type:	MQCFST.
Returned:	Always.

AuxErrorDataStr3

Description:	Third string of auxiliary error data for channel errors. If a channel is stopped due to an error, this is the third string parameter that qualifies the error. This information is for use by IBM service personnel; include it in any problem report that you submit to IBM regarding this event message.
Identifier:	MQCACF_AUX_ERROR_DATA_STR_3.
Data type:	MQCFST.
Returned:	Always.

XmitQName

Description:	Transmission queue name.
Identifier:	MQCACH_XMIT_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	For sender, server, cluster-sender, and cluster-receiver channels only.

ConnectionName

Description:	If the channel has successfully established a TCP connection, this is the Internet address. Otherwise it is the contents of the *ConnectionName* field in the channel definition.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST or MQCFSL.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	Only for commands that do not contain a generic name.

Channel Stopped By User

Event name:	Channel Stopped By User.
Reason code in MQCFH:	MQRC_CHANNEL_STOPPED_BY_USER (2279, X'8E7'). Channel stopped by user.
Event description:	This is issued when a user issues a STOP CHL command. *ReasonQualifier* identifies the reasons for stopping.
Event type:	Channel.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.CHANNEL.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ReasonQualifier

Description:	Identifier that qualifies the reason code.
Identifier:	MQIACF_REASON_QUALIFIER.
Data type:	MQCFIN.
Values:	**MQRQ_CHANNEL_STOPPED_DISABLED** Channel has been closed and it is in a stopped state.
Returned:	Always.

ChannelName

Description:	Channel name.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH.
Returned:	Always.

Command

Event name:	Command.
Reason code in MQCFH:	MQRC_COMMAND_MQSC (2412, X'96C'). MQSC command successfully issued, or, MQRC_COMMAND_PCF (2413, X'96D'). PCF command successfully issued.

Event description:	Command successfully issued.
Event type:	Command.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.COMMAND.EVENT.

Event data

The event data consists of two groups, *CommandContext* and *CommandData*.

CommandContext

Description:	PCF group containing the elements related to the context of the issued command.
Identifier:	MQGACF_COMMAND_CONTEXT.
Data type:	MQCFGR.
PCF elements in group:	• *EventUserId* • *EventSecurityId* • *EventOrigin* • *EventQMgr* • *EventAccountingToken* • *EventIdentityData* • *EventApplType* • *EventApplName* • *EventApplOrigin* • *Command*
Returned:	Always.

EventUserId

Description:	The user ID that issued the command or call that generated the event. (This is the same user ID that is used to check the authority to issue the command; for commands received from a queue, this is also the user identifier (UserIdentifier) from the MQMD of the command message).
Identifier:	MQCACF_EVENT_USER_ID.
Data type:	MQCFST.
Maximum length:	MQ_USER_ID_LENGTH.
Returned:	Always.

Windows *EventSecurityId*

Description:	The security ID (an extension to the user ID) that issued the command or call that generated the event.
Identifier:	MQBACF_EVENT_SECURITY_ID.
Data type:	MQCFBS.
Maximum length:	MQ_SECURITY_ID_LENGTH.
Returned:	Only on Windows.

EventOrigin

Description:	The origin of the action causing the event.
Identifier:	MQIACF_EVENT_ORIGIN.
Data type:	MQCFIN.
Values:	**MQEVO_CONSOLE** Console command. **MQEVO_INIT** Initialization input data set command. **MQEVO_MSG** Command message on SYSTEM.COMMAND.INPUT. **MQEVO_INTERNAL** Directly by queue manager. **MQEVO_OTHER** None of the above.
Returned:	Always.

EventQMgr

Description:	The queue manager where the command was entered. (The queue manager where the command is executed and that generates the event is in the MQMD of the event message).
Identifier:	MQCACF_EVENT_Q_MGR.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

EventAccountingToken

Description:	For commands received as a message (MQEVO_MSG), the accounting token (AccountingToken) from the MQMD of the command message.
Identifier:	MQBACF_EVENT_ACCOUNTING_TOKEN.
Data type:	MQCFBS.
Maximum length:	MQ_ACCOUNTING_TOKEN_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventIdentityData

Description:	For commands received as a message (MQEVO_MSG), application identity data (ApplIdentityData) from the MQMD of the command message.
Identifier:	MQCACF_EVENT_APPL_IDENTITY.
Data type:	MQCFST.
Maximum length:	MQ_APPL_IDENTITY_DATA_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplType

Description:	For commands received as a message (MQEVO_MSG), the type of application (PutApplType) from the MQMD of the command message.

Identifier:	MQIACF_EVENT_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplName

Description:	For commands received as a message (MQEVO_MSG), the name of the application (PutApplName) from the MQMD of the command message.
Identifier:	MQCACF_EVENT_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplOrigin

Description:	For commands received as a message (MQEVO_MSG), the application origin data (ApplOriginData) from the MQMD of the command message.
Identifier:	MQCACF_EVENT_APPL_ORIGIN.
Data type:	MQCFST.
Maximum length:	MQ_APPL_ORIGIN_DATA_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

Command

Description:	The command code.
Identifier:	MQIACF_COMMAND.
Data type:	MQCFIN.
Values:	• If the event relates to a PCF command, then the value is that of the Command parameter in the MQCFH structure in the command message. • If the event relates to an MQSC command, then the value is as follows:

MQCMD_ARCHIVE_LOG
   ARCHIVE LOG

MQCMD_BACKUP_CF_STRUC
   BACKUP CFSTRUCT

MQCMD_CHANGE_AUTH_INFO
   ALTER AUTHINFO

MQCMD_CHANGE_BUFFER_POOL
   ALTER BUFFPOOL

MQCMD_CHANGE_CF_STRUC
   ALTER CFSTRUCT

MQCMD_CHANGE_CHANNEL
   ALTER CHANNEL

MQCMD_CHANGE_COMM_INFO
   ALTER COMMINFO

MQCMD_CHANGE_LISTENER
   ALTER LISTENER

MQCMD_CHANGE_NAMELIST
   ALTER NAMELIST

MQCMD_CHANGE_PAGE_SET
   ALTER PSID

MQCMD_CHANGE_PROCESS
   ALTER PROCESS

MQCMD_CHANGE_Q
   ALTER QLOCAL/QREMOTE/QALIAS/QMODEL

MQCMD_CHANGE_Q_MGR
   ALTER QMGR, DEFINE MAXSMSGS

MQCMD_CHANGE_SECURITY
   ALTER SECURITY

MQCMD_CHANGE_SERVICE
   ALTER SERVICE

MQCMD_CHANGE_STG_CLASS
   ALTER STGCLASS

MQCMD_CHANGE_SUBSCRIPTION
   ALTER SUBSCRIPTION

MQCMD_CHANGE_TOPIC
   ALTER TOPIC

MQCMD_CHANGE_TRACE
   ALTER TRACE

MQCMD_CLEAR_Q
   CLEAR QLOCAL

MQCMD_CLEAR_TOPIC_STRING
   CLEAR TOPICSTR

MQCMD_CREATE_AUTH_INFO
   DEFINE AUTHINFO

MQCMD_CREATE_BUFFER_POOL
   DEFINE BUFFPOOL

MQCMD_CREATE_CF_STRUC
DEFINE CFSTRUCT

MQCMD_CREATE_CHANNEL
DEFINE CHANNEL

MQCMD_CREATE_COMM_INFO
DEFINE COMMINFO

MQCMD_CREATE_LISTENER
DEFINE LISTENER

MQCMD_CREATE_NAMELIST
DEFINE NAMELIST

MQCMD_CREATE_PAGE_SET
DEFINE PSID

MQCMD_CREATE_PROCESS
DEFINE PROCESS

MQCMD_CREATE_Q
DEFINE QLOCAL/QREMOTE/QALIAS/QMODEL

MQCMD_CREATE_SERVICE
DEFINE SERVICE

MQCMD_CREATE_STG_CLASS
DEFINE STGCLASS

MQCMD_CREATE_SUBSCRIPTION
DEFINE SUB

MQCMD_CREATE_TOPIC
DEFINE TOPIC

MQCMD_DELETE_AUTH_INFO
DELETE AUTHINFO

MQCMD_DELETE_CF_STRUC
DELETE CFSTRUCT

MQCMD_DELETE_CHANNEL
DELETE CHANNEL

MQCMD_DELETE_COMM_INFO
DELETE COMMINFO

MQCMD_DELETE_LISTENER
DELETE LISTENER

MQCMD_DELETE_NAMELIST
DELETE NAMELIST

MQCMD_DELETE_PAGE_SET
DELETE PSID

MQCMD_DELETE_PROCESS
DELETE PROCESS

MQCMD_DELETE_Q
DELETE QLOCAL/QREMOTE/QALIAS/QMODEL

MQCMD_DELETE_SERVICE
DELETE SERVICE

MQCMD_DELETE_STG_CLASS
DELETE STGCLASS

MQCMD_DELETE_SUBSCRIPTION
DELETE SUBSCRIPTION

MQCMD_DELETE_TOPIC
DELETE TOPIC

MQCMD_INQUIRE_ARCHIVE
DISPLAY ARCHIVE

MQCMD_INQUIRE_AUTH_INFO
DISPLAY AUTHINFO

MQCMD_INQUIRE_CF_STRUC
DISPLAY CFSTRUCT

MQCMD_INQUIRE_CF_STRUC_STATUS
DISPLAY CFSTATUS

MQCMD_INQUIRE_CHANNEL
DISPLAY CHANNEL

MQCMD_INQUIRE_CHANNEL_INIT
DISPLAY CHINIT

MQCMD_INQUIRE_CHANNEL_STATUS
DISPLAY CHSTATUS

MQCMD_INQUIRE_CHLAUTH_RECS
DISPLAY CHLAUTH

MQCMD_INQUIRE_CLUSTER_Q_MGR
DISPLAY CLUSQMGR

MQCMD_INQUIRE_CMD_SERVER
DISPLAY CMDSERV

MQCMD_INQUIRE_COMM_INFO
DISPLAY COMMINFO

MQCMD_INQUIRE_CONNECTION
DISPLAY CONN

MQCMD_INQUIRE_LISTENER
DISPLAY LISTENER

MQCMD_INQUIRE_LOG
DISPLAY LOG

MQCMD_INQUIRE_NAMELIST
DISPLAY NAMELIST

MQCMD_INQUIRE_PROCESS
DISPLAY PROCESS

MQCMD_INQUIRE_PUBSUB_STATUS
DISPLAY PUBSUB

MQCMD_INQUIRE_Q
DISPLAY QUEUE

MQCMD_INQUIRE_Q_MGR
DISPLAY QMGR, DISPLAY MAXSMSGS

MQCMD_INQUIRE_QSG
DISPLAY GROUP

MQCMD_INQUIRE_Q_STATUS
DISPLAY QSTATUS

MQCMD_INQUIRE_SECURITY
DISPLAY SECURITY

MQCMD_INQUIRE_SERVICE
DISPLAY SERVICE

MQCMD_INQUIRE_STG_CLASS
DISPLAY STGCLASS

MQCMD_INQUIRE_SUBSCRIPTION
DISPLAY SUB

MQCMD_INQUIRE_SUB_STATUS
DISPLAY SBSTATUS

MQCMD_INQUIRE_SYSTEM
DISPLAY SYSTEM

MQCMD_INQUIRE_THREAD
DISPLAY THREAD

MQCMD_INQUIRE_TOPIC
DISPLAY TOPIC

MQCMD_INQUIRE_TOPIC_STATUS
DISPLAY TPSTATUS

MQCMD_INQUIRE_TRACE
DISPLAY TRACE

MQCMD_INQUIRE_USAGE
DISPLAY USAGE

MQCMD_MOVE_Q
MOVE QLOCAL

MQCMD_PING_CHANNEL
PING CHANNEL

MQCMD_RECOVER_BSDS
RECOVER BSDS

MQCMD_RECOVER_CF_STRUC
RECOVER CFSTRUCT

MQCMD_REFRESH_CLUSTER
REFRESH CLUSTER

MQCMD_REFRESH_Q_MGR
REFRESH QMGR

MQCMD_REFRESH_SECURITY
REFRESH SECURITY

MQCMD_RESET_CHANNEL
RESET CHANNEL

MQCMD_RESET_CLUSTER
RESET CLUSTER

MQCMD_RESET_Q_MGR
RESET QMGR

MQCMD_RESET_Q_STATS
RESET QSTATS

MQCMD_RESET_TPIPE
RESET TPIPE

MQCMD_RESOLVE_CHANNEL
  RESOLVE CHANNEL

MQCMD_RESOLVE_INDOUBT
  RESOLVE INDOUBT

MQCMD_RESUME_Q_MGR
  RESUME QMGR other than CLUSTER/CLUSNL

MQCMD_RESUME_Q_MGR_CLUSTER
  RESUME QMGR CLUSTER/CLUSNL

MQCMD_REVERIFY_SECURITY
  REVERIFY SECURITY

MQCMD_SET_ARCHIVE
  SET ARCHIVE

MQCMD_SET_CHLAUTH_REC
  SET CHLAUTH

MQCMD_SET_LOG
  SET LOG

MQCMD_SET_SYSTEM
  SET SYSTEM

MQCMD_START_CHANNEL
  START CHANNEL

MQCMD_START_CHANNEL_INIT
  START CHINIT

MQCMD_START_CHANNEL_LISTENER
  START LISTENER

MQCMD_START_CMD_SERVER
  START CMDSERV

MQCMD_START_SERVICE
  START SERVICE

MQCMD_START_TRACE
  START TRACE

MQCMD_STOP_CHANNEL
  STOP CHANNEL

MQCMD_STOP_CHANNEL_INIT
  STOP CHINIT

MQCMD_STOP_CHANNEL_LISTENER
  STOP LISTENER

MQCMD_STOP_CMD_SERVER
  STOP CMDSERV

MQCMD_STOP_CONNECTION
  STOP CONN

MQCMD_STOP_SERVICE
  STOP SERVICE

MQCMD_STOP_TRACE
  STOP TRACE

MQCMD_SUSPEND_Q_MGR
  SUSPEND QMGR other than CLUSTER/CLUSNL

MQCMD_SUSPEND_Q_MGR_CLUSTER
  SUSPEND QMGR CLUSTER/CLUSNL

Returned:	Always.

CommandData

Description:	PCF group containing the elements related to the command data.
Identifier:	MQGACF_COMMAND_DATA.
Data type:	MQCFGR.
PCF elements in group:	• If generated for an MQSC command, this group only contains the PCF element *CommandMQSC*. • If generated for a PCF command, this group contains the PCF elements that make up the PCF command, exactly as in the command message.
Returned:	Always.

CommandMQSC

Description:	The text of the MQSC command.
Identifier:	MQCACF_COMMAND_MQSC.
Data type:	MQCFST.
Maximum length:	MQ_COMMAND_MQSC_LENGTH.
Returned:	Only if Reason in the message descriptor is MQRC_COMMAND_MQSC.

Create object

Event name:	Create object.
Reason code in MQCFH:	MQRC_CONFIG_CREATE_OBJECT (2367, X'93F'). New object created.
Event description:	A DEFINE or DEFINE REPLACE command was issued which successfully created a new object.
Event type:	Configuration.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.CONFIG.EVENT.

Event data

EventUserId

Description:	The user id that issued the command or call that generated the event. (This is the same user id that is used to check the authority to issue the command or call; for commands received from a queue, this is also the user identifier (UserIdentifier) from the MQMD of the command message).
Identifier:	MQCACF_EVENT_USER_ID.
Data type:	MQCFST.
Maximum length:	MQ_USER_ID_LENGTH.
Returned:	Always.

EventOrigin

Description:	The origin of the action causing the event.
Identifier:	MQIACF_EVENT_ORIGIN.
Data type:	MQCFIN.
Values:	**MQEVO_CONSOLE** Console command. **MQEVO_INIT** Initialization input data set command. **MQEVO_INTERNAL** Directly by queue manager. **MQEVO_MQSET** MQSET call. **MQEVO_MSG** Command message on SYSTEM.COMMAND.INPUT. **MQEVO_OTHER** None of the above.
Returned:	Always.

EventQMgr

Description:	The queue manager where the command or call was entered. (The queue manager where the command is executed and that generates the event is in the MQMD of the event message).
Identifier:	MQCACF_EVENT_Q_MGR.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

EventAccountingToken

Description:	For commands received as a message (MQEVO_MSG), the accounting token (AccountingToken) from the MQMD of the command message.
Identifier:	MQBACF_EVENT_ACCOUNTING_TOKEN.
Data type:	MQCFBS.
Maximum length:	MQ_ACCOUNTING_TOKEN_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplIdentity

Description:	For commands received as a message (MQEVO_MSG), application identity data (ApplIdentityData) from the MQMD of the command message.
Identifier:	MQCACF_EVENT_APPL_IDENTITY.
Data type:	MQCFST.
Maximum length:	MQ_APPL_IDENTITY_DATA_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplType

Description:	For commands received as a message (MQEVO_MSG), the type of application (PutApplType) from the MQMD of the command message.
Identifier:	MQIACF_EVENT_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplName

Description:	For commands received as a message (MQEVO_MSG), the name of the application (PutApplName) from the MQMD of the command message.
Identifier:	MQCACF_EVENT_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplOrigin

Description:	For commands received as a message (MQEVO_MSG), the application origin data (ApplOriginData) from the MQMD of the command message.
Identifier:	MQCACF_EVENT_APPL_ORIGIN.
Data type:	MQCFST.
Maximum length:	MQ_APPL_ORIGIN_DATA_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

ObjectType

Description:	Object type:
Identifier:	MQIACF_OBJECT_TYPE.
Data type:	MQCFIN.

Values:	**MQOT_CHANNEL**
	Channel.
	MQOT_CHLAUTH
	Channel authentication record.
	MQOT_NAMELIST
	Namelist.
	MQOT_NONE
	No object.
	MQOT_PROCESS
	Process.
	MQOT_Q
	Queue.
	MQOT_STORAGE_CLASS
	Storage class.
	MQOT_AUTH_INFO
	Authentication information.
	MQOT_CF_STRUC
	CF structure.
	MQOT_TOPIC
	Topic.
	MQOT_COMM_INFO
	Communication information.
	MQOT_LISTENER
	Channel Listener.
Returned:	Always.

ObjectName

Description:	Object name:
Identifier :	Identifier will be according to object type.

- MQCACH_CHANNEL_NAME
- MQCA_NAMELIST_NAME
- MQCA_PROCESS_NAME
- MQCA_Q_NAME
- MQCA_STORAGE_CLASS
- MQCA_AUTH_INFO_NAME
- MQCA_CF_STRUC_NAME
- MQCA_TOPIC_NAME
- MQCA_COMM_INFO_NAME
- MQCACH_LISTENER_NAME

Note: MQCACH_CHANNEL_NAME can also be used for channel authentication.

Data type:	MQCFST.
Maximum length:	MQ_OBJECT_NAME_LENGTH.
Returned:	Always

Disposition

Description:	Object disposition:
Identifier:	MQIA_QSG_DISP.
Data type:	MQCFIN.

Values:

MQQSGD_Q_MGR
Object resides on page set of queue manager.

MQQSGD_SHARED
Object resides in shared repository and messages are shared in coupling facility.

MQQSGD_GROUP
Object resides in shared repository.

MQQSGD_COPY
Object resides on page set of queue manager and is a local copy of a GROUP object.

Returned:	Always, except for CF structure objects.

Object attributes

A parameter structure is returned for each attribute of the object. The attributes returned depend on the object type. For more information see "Object attributes for event data" on page 71

Default Transmission Queue Type Error

Event name:	Default Transmission Queue Type Error.
Reason code in MQCFH:	MQRC_DEF_XMIT_Q_TYPE_ERROR (2198, X'896'). Default transmission queue not local.
Event description:	An MQOPEN or MQPUT1 call was issued specifying a remote queue as the destination. Either a local definition of the remote queue was specified, or a queue-manager alias was being resolved, but in either case the *XmitQName* attribute in the local definition is blank.
	No transmission queue is defined with the same name as the destination queue manager, so the local queue manager has attempted to use the default transmission queue. However, although there is a queue defined by the *DefXmitQName* queue-manager attribute, it is not a local queue. See Defining a transmission queue for more information about transmission queues.
Event type:	Remote.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.

Returned:	Always.

QName

Description:	Queue name from object descriptor (MQOD).
Identifier:	MQCA_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

XmitQName

Description:	Default transmission queue name.
Identifier:	MQCA_XMIT_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

QType

Description:	Type of default transmission queue.
Identifier:	MQIA_Q_TYPE.
Data type:	MQCFIN.
Values:	**MQQT_ALIAS** Alias queue definition. **MQQT_REMOTE** Local definition of a remote queue.
Returned:	Always.

ApplType

Description:	Type of application making the MQI call that caused the event.
Identifier:	MQIA_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Always.

ApplName

Description:	Name of the application making the MQI call that caused the event.
Identifier:	MQCACF_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Always.

ObjectQMgrName

Description:	Name of the object queue manager.
Identifier:	MQCACF_OBJECT_Q_MGR_NAME.

Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	If the *ObjectName* in the object descriptor (MQOD), when the object was opened, is not the queue manager currently connected.

ConnName

Description:	Connection name for client connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	If the application making the MQI call that caused the event is a client attached application.

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH
Returned:	If the application making the MQI call that caused the event is a client attached application.

Related information

Defining a transmission queue
Sample definitions supplied with IBM MQ
DefXmitQName (MQCHAR48)
DefXmitQName (48-byte character string)
DefaultTransmissionQueueName property
Defining system objects

Default Transmission Queue Usage Error

Event name:	Default Transmission Queue Usage Error.
Reason code in MQCFH:	MQRC_DEF_XMIT_Q_USAGE_ERROR (2199, X'897'). Default transmission queue usage error.
Event description:	An MQOPEN or MQPUT1 call was issued specifying a remote queue as the destination. Either a local definition of the remote queue was specified, or a queue-manager alias was being resolved, but in either case the *XmitQName* attribute in the local definition is blank.
	No transmission queue is defined with the same name as the destination queue manager, so the local queue manager has attempted to use the default transmission queue. However, the queue defined by the *DefXmitQName* queue-manager attribute does not have a *Usage* attribute of MQUS_TRANSMISSION. See the Defining a transmission queue for more information about default transmission queues.
Event type:	Remote.

Platforms:	All.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

QName

Description:	Queue name from object descriptor (MQOD).
Identifier:	MQCA_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

XmitQName

Description:	Default transmission queue name.
Identifier:	MQCA_XMIT_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

ApplType

Description:	Type of application making the MQI call that caused the event.
Identifier:	MQIA_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Always.

ApplName

Description:	Name of the application making the MQI call that caused the event.
Identifier:	MQCACF_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Always.

ObjectQMgrName

Description:	Name of the object queue manager.
Identifier:	MQCACF_OBJECT_Q_MGR_NAME.

Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	If the *ObjectName* in the object descriptor (MQOD), when the object was opened, is not the queue manager currently connected.

ConnName

Description:	Connection name for client connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	If the application making the MQI call that caused the event is a client attached application.

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH
Returned:	If the application making the MQI call that caused the event is a client attached application.

Related information

Defining a transmission queue
Sample definitions supplied with IBM MQ
DefXmitQName (MQCHAR48)
DefXmitQName (48-byte character string)
DefaultTransmissionQueueName property
Defining system objects

V 8.0.0.4 *Delete Authority Record*

Event name:	Delete Authority Record
Reason code in MQCFH:	MQRC_CONFIG_DELETE_OBJECT (2369, X'0941'). Object deleted.
Event description:	A Delete Authority Record command was issued, or an object was deleted, which successfully deleted an authority record.
Event type:	Configuration
Platforms:	All except z/OS.
Event queue:	SYSTEM.ADMIN.CONFIG.EVENT.

Event data

EventQMgr

Description:	The queue manager where the command or call was entered. That is, the queue manager where the command is processed and that generates the event is in the MQMD of the event message.
Identifier:	MQCACF_EVENT_Q_MGR
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

EventUserId

Description:	The user ID that issued the command or call that generated the event.
	This is the same user id that is used to check the authority to issue the command or call; for commands received from a queue, this is also the user identifier (**UserIdentifier**) from the message descriptor of the command message.
	.
Identifier:	MQCACF_EVENT_USER_ID
Data type:	MQCFST.
Maximum length:	MQ_USER_ID_LENGTH.
Returned:	Always.

EventOrigin

Description:	The origin of the action causing the event.
Identifier:	MQIACF_EVENT_ORIGIN
Data type:	MQCFIN.
Values:	**MQEVO_CONSOLE**
	Console command (runmqsc or setmqaut)
	MQEVO_INTERNAL
	Directly by queue manager
	MQEVO_MSG
	Command message on SYSTEM.ADMIN.COMMAND.QUEUE
Returned:	Always

EventAccountingToken

Description:	For commands received as a message (MQEVO_MSG), the accounting token (**AccountingToken**) from the message descriptor of the command message.
Identifier:	MQBACF_EVENT_ACCOUNTING_TOKEN
Data type:	MQCFBS
Maximum length:	MQ_ACCOUNTING_TOKEN_LENGTH
Returned:	Only if **EventOrigin** is MQEVO_MSG.

EventApplIdentity

Description:	For commands received as a message (MQEVO_MSG), application identity data (**ApplIdentityData**) from the message descriptor of the command message.
Identifier:	MQMQCACF_EVENT_APPL_IDENTITY
Data type:	MQCFST
Maximum length:	MQ_APPL_IDENTITY_DATA_LENGTH
Returned:	Only if **EventOrigin** is MQEVO_MSG.

EventApplType

Description:	For commands received as a message (MQEVO_MSG), the type of application (**PutApplType**) from the message descriptor of the command message.
Identifier:	MQIACF_EVENT_APPL_TYPE
Data type:	MQCFIN
Values:	
Returned:	Only if **EventOrigin** is MQEVO_MSG.

EventApplName

Description:	For commands received as a message (MQEVO_MSG), the name of the application (**PutApplName**) from the message descriptor of the command message.
Identifier:	MQCACF_EVENT_APPL_NAME
Data type:	MQCFST
Maximum length:	MQ_APPL_NAME_LENGTH
Returned:	Only if **EventOrigin** is MQEVO_MSG.

EventApplOrigin

Description:	For commands received as a message (MQEVO_MSG), the application origin data (**ApplOriginData**) from the message descriptor of the command message.
Identifier:	MQCACF_EVENT_APPL_ORIGIN
Data type:	MQCFST
Maximum length:	MQ_APPL_ORIGIN_DATA_LENGTH
Returned:	Only if **EventOrigin** is MQEVO_MSG.

ObjectType

Description:	Object type
Identifier:	MQIACF_OBJECT_TYPE
Data type:	MQCFIN
Values:	MQOT_AUTH_REC
Returned:	Always

ProfileName

Description:	Object or generic profile name

Identifier:	MQCACF_AUTH_PROFILE_NAME
Data type:	MQCFST
Maximum length:	MQ_AUTH_PROFILE_NAME_LENGTH
Returned:	Always

Object attributes

A parameter structure is returned for each attribute of the object. The attributes returned depend on the object type. For more information see "Object attributes for event data" on page 71.

Delete object

Event name:	Delete object.
Reason code in MQCFH:	MQRC_CONFIG_DELETE_OBJECT (2369, X'941'). Object deleted.
Event description:	A DELETE command or MQCLOSE call was issued that successfully deleted an object.
Event type:	Configuration.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.CONFIG.EVENT.

Event data

EventUserId

Description:	The user id that issued the command or call that generated the event. (This is the same user id that is used to check the authority to issue the command or call; for commands received from a queue, this is also the user identifier (UserIdentifier) from the MQMD of the command message).
Identifier:	MQCACF_EVENT_USER_ID.
Data type:	MQCFST.
Maximum length:	MQ_USER_ID_LENGTH.
Returned:	Always.

EventOrigin

Description:	The origin of the action causing the event.
Identifier:	MQIACF_EVENT_ORIGIN.
Data type:	MQCFIN.

Values: **MQEVO_CONSOLE**
Console command.

MQEVO_INIT
Initialization input data set command.

MQEVO_INTERNAL
Directly by queue manager.

MQEVO_MSG
Command message on SYSTEM.COMMAND.INPUT.

MQEVO_OTHER
None of the above.

Returned: Always.

EventQMgr

Description:	The queue manager where the command or call was entered. (The queue manager where the command is executed and that generates the event is in the MQMD of the event message).
Identifier:	MQCACF_EVENT_Q_MGR.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

EventAccountingToken

Description:	For commands received as a message (MQEVO_MSG), the accounting token (AccountingToken) from the MQMD of the command message.
Identifier:	MQBACF_EVENT_ACCOUNTING_TOKEN.
Data type:	MQCFBS.
Maximum length:	MQ_ACCOUNTING_TOKEN_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplIdentity

Description:	For commands received as a message (MQEVO_MSG), application identity data (ApplIdentityData) from the MQMD of the command message.
Identifier:	MQCACF_EVENT_APPL_IDENTITY.
Data type:	MQCFST.
Maximum length:	MQ_APPL_IDENTITY_DATA_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplType

Description:	For commands received as a message (MQEVO_MSG), the type of application (PutApplType) from the MQMD of the command message.
Identifier:	MQIACF_EVENT_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplName

Description:	For commands received as a message (MQEVO_MSG), the name of the application (PutApplName) from the MQMD of the command message.
Identifier:	MQCACF_EVENT_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplOrigin

Description:	For commands received as a message (MQEVO_MSG), the application origin data (ApplOriginData) from the MQMD of the command message.
Identifier:	MQCACF_EVENT_APPL_ORIGIN.
Data type:	MQCFST.
Maximum length:	MQ_APPL_ORIGIN_DATA_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

ObjectType

Description: Object type:

Identifier: MQIACF_OBJECT_TYPE.

Data type: MQCFIN.

Values:

MQOT_CHANNEL
Channel.

MQOT_CHLAUTH
Channel authentication record.

MQOT_NAMELIST
Namelist.

MQOT_NONE
No object.

MQOT_PROCESS
Process.

MQOT_Q
Queue.

MQOT_STORAGE_CLASS
Storage class.

MQOT_AUTH_INFO
Authentication information.

MQOT_CF_STRUC
CF structure.

MQOT_TOPIC
Topic.

MQOT_COMM_INFO
Communication information.

MQOT_LISTENER
Channel Listener.

Returned: Always.

ObjectName

Description:	Object name:
Identifier :	Identifier will be according to object type.

- MQCACH_CHANNEL_NAME
- MQCA_NAMELIST_NAME
- MQCA_PROCESS_NAME
- MQCA_Q_NAME
- MQCA_STORAGE_CLASS
- MQCA_AUTH_INFO_NAME
- MQCA_CF_STRUC_NAME
- MQCA_TOPIC_NAME
- MQCA_COMM_INFO_NAME
- MQCACH_LISTENER_NAME

Note: MQCACH_CHANNEL_NAME can also be used for channel authentication.

Data type:	MQCFST.
Maximum length:	MQ_OBJECT_NAME_LENGTH.
Returned:	Always

Disposition

Description:	Object disposition:
Identifier:	MQIA_QSG_DISP.
Data type:	MQCFIN.
Values:	**MQQSGD_Q_MGR** Object resides on page set of queue manager.
	MQQSGD_SHARED Object resides in shared repository and messages are shared in coupling facility.
	MQQSGD_GROUP Object resides in shared repository.
	MQQSGD_COPY Object resides on page set of queue manager and is a local copy of a GROUP object.
Returned:	Always, except for CF structure objects.

Object attributes

A parameter structure is returned for each attribute of the object. The attributes returned depend on the object type. For more information see "Object attributes for event data" on page 71.

Get Inhibited

Event name:	Get Inhibited.
Reason code in MQCFH:	MQRC_GET_INHIBITED (2016, X'7E0'). Gets inhibited for the queue.

Event description:	MQGET calls are currently inhibited for the queue (see InhibitGet (MQLONG) for the *InhibitGet* queue attribute) or for the queue to which this queue resolves.
Event type:	Inhibit.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

QName

Description:	Queue name from object descriptor (MQOD).
Identifier:	MQCA_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

ApplType

Description:	Type of application that issued the get.
Identifier:	MQIA_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Always.

ApplName

Description:	Name of the application that issued the get.
Identifier:	MQCACF_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Always.

ConnName

Description:	Connection name for client connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.

Returned:	If the application making the MQI call that caused the event is a client attached application.

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH
Returned:	If the application making the MQI call that caused the event is a client attached application.

Related information

Setting queue attributes

InhibitGet property

IBM i InhibitGet (10-digit signed integer)

Logger

Event name:	Logger.
Reason code in MQCFH:	MQRC_LOGGER_STATUS (2411, X'96B'). New log extent started.
Event description:	Issued when a queue manager starts writing to a new log extent IBM i or on IBM i a new journal receiver.
Event type:	Logger.
Platforms:	All, except IBM MQ for z/OS.
Event queue:	SYSTEM.ADMIN.LOGGER.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

CurrentLogExtent

Description:	Name of the log extent IBM i , or on IBM i the journal receiver being written, when the event message was generated.
Identifier:	MQCACF_CURRENT_LOG_EXTENT_NAME.
Data type:	MQCFST.
Maximum length:	MQ_LOG_EXTENT_NAME_LENGTH.
Returned:	Always.

RestartRecoveryLogExtent

Description:	Name of the oldest log extent **IBM i**, or on IBM i the oldest journal receiver, required by the queue manager to perform restart recovery.
Identifier:	MQCACF_RESTART_LOG_EXTENT_NAME.
Data type:	MQCFST.
Maximum length:	MQ_LOG_EXTENT_NAME_LENGTH.
Returned:	Always.

MediaRecoveryLogExtent

Description:	Name of the oldest log extent **IBM i**, or on IBM i the oldest journal receiver, required by the queue manager to perform media recovery.
Identifier:	MQCACF_MEDIA_LOG_EXTENT_NAME.
Data type:	MQCFST.
Maximum length:	MQ_LOG_EXTENT_NAME_LENGTH.
Returned:	Always.

LogPath

Description:	The directory where log files are created by the queue manager.
Identifier:	MQCACF_LOG_PATH.
Data type:	MQCFST.
Maximum length:	MQ_LOG_PATH_LENGTH.
Returned:	Always.

Not Authorized (type 1)

Event name:	Not Authorized (type 1).
Reason code in MQCFH:	MQRC_NOT_AUTHORIZED (2035, X'7F3'). Not authorized for access.
Event description:	On an MQCONN or system connection call, the user is not authorized to connect to the queue manager. *ReasonQualifier* identifies the nature of the error.
Event type:	Authority.
Platforms:	All, except IBM MQ for z/OS.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.

Returned: Always.

ReasonQualifier

Description:	Identifier for type 1 authority events.
Identifier:	MQIACF_REASON_QUALIFIER.
Data type:	MQCFIN.

Values:
MQRQ_CONN_NOT_AUTHORIZED
Connection not authorized.

MQRQ_SYS_CONN_NOT_AUTHORIZED
Missing system authority.

MQRQ_CSP_NOT_AUTHORIZED
MQCSP user identifier and password not authorized.

Returned: Always.

UserIdentifier

Description:	User identifier that caused the authorization check.
Identifier:	MQCACF_USER_IDENTIFIER.
Data type:	MQCFST.
Maximum length:	MQ_USER_ID_LENGTH.
Returned:	Always.

ApplType

Description:	Type of application causing the event.
Identifier:	MQIA_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Always.

ApplName

Description:	Name of the application causing the event.
Identifier:	MQCACF_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Always.

ConnName

Description:	Connection name for client connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	If the application making the MQI call that caused the event is a client attached application.

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH
Returned:	If the application making the MQI call that caused the event is a client attached application.

CSPUserIdentifier

Description:	The user identifier from the Connection Security Parameters (MQCSP) structure.
Identifier:	MQCACF_CSP_USER_IDENTIFIER.
Data type:	MQCFST.
Maximum length:	MQ_CLIENT_USER_ID_LENGTH
Returned:	Only for MQRQ_CSP_NOT_AUTHORIZED.

Not Authorized (type 2)

Event name:	Not Authorized (type 2).
Reason code in MQCFH:	MQRC_NOT_AUTHORIZED (2035, X'7F3'). Not authorized for access.
Event description:	On an MQOPEN or MQPUT1 call, the user is not authorized to open the object for the options specified.
Event type:	Authority.
Platforms:	All, except IBM MQ for z/OS.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ReasonQualifier

Description:	Identifier for type 2 authority events.	
Identifier:	MQIACF_REASON_QUALIFIER.	
Data type:	MQCFIN.	
Values:	MQRQ_OPEN_NOT_AUTHORIZED	Open not authorized.
Returned:	Always.	

Options

Description:	Options specified on the MQOPEN call.
Identifier:	MQIACF_OPEN_OPTIONS.
Data type:	MQCFIN.
Returned:	Always.

UserIdentifier

Description:	User identifier that caused the authorization check.
Identifier:	MQCACF_USER_IDENTIFIER.
Data type:	MQCFST.
Maximum length:	MQ_USER_ID_LENGTH.
Returned:	Always.

ApplType

Description:	Type of application that caused the authorization check.
Identifier:	MQIA_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Always.

ApplName

Description:	Name of the application that caused the authorization check.
Identifier:	MQCACF_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Always.

ObjectQMgrName

Description:	Object queue manager name from object descriptor (MQOD).
Identifier:	MQCACF_OBJECT_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	If the *ObjectQMgrName* in the object descriptor (MQOD) when the object was opened is not the queue manager currently connected.

QName

Description:	Object name from object descriptor (MQOD).
Identifier:	MQCA_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	If the object opened is a queue object.

ProcessName

Description: Name of process object from object descriptor (MQOD).

Identifier: MQCA_PROCESS_NAME.

Data type: MQCFST.

Maximum length: MQ_PROCESS_NAME_LENGTH.

Returned: If the object opened is a process object.

TopicString

Description: Topic string being subscribed to, or opened.

Identifier: MQCA_TOPIC_STRING.

Data type: MQCFST.

Maximum length: MQ_TOPIC_STR_LENGTH.

Returned: If the object opened is a topic object.

AdminTopicNames

Description: List of topic admin objects against which authority is checked.

Identifier: MQCA_ADMIN_TOPIC_NAME.

Data type: MQCFSL.

Maximum length: MQ_TOPIC_NAME_LENGTH.

Returned: If the object opened is a topic object.

ObjectType

Description: Object type from object descriptor (MQOD).

Identifier: MQIACF_OBJECT_TYPE.

Data type: MQCFIN.

Values: MQOT_NAMELIST Namelist.

MQOT_PROCESS Process.

MQOT_Q Queue.

MQOT_Q_MGR Queue manager.

MQOT_TOPIC Topic.

Returned: Always.

NamelistName

Description: Object name from object descriptor (MQOD).

Identifier: MQCA_NAMELIST_NAME.

Data type: MQCFST.

Maximum length: MQ_NAMELIST_NAME_LENGTH.

Returned: If the object opened is a namelist object.

ConnName

Description: Connection name for client connection.

Identifier:	MQCACH_CONNECTION_NAME.	
Data type:	MQCFST.	
Maximum length:	MQ_CONN_NAME_LENGTH.	
Returned:	If the application making the MQI call that caused the event is a client attached application.	

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH
Returned:	If the application making the MQI call that caused the event is a client attached application.

Not Authorized (type 3)

Event name:	Not Authorized (type 3).
Reason code in MQCFH:	MQRC_NOT_AUTHORIZED (2035, X'7F3'). Not authorized for access.
Event description:	When closing a queue using the MQCLOSE call, the user is not authorized to delete the object, which is a permanent dynamic queue, and the *Hobj* parameter specified on the MQCLOSE call is not the handle returned by the MQOPEN call that created the queue. When closing a subscription using an MQCLOSE call, the user has requested that the subscription is removed using the MQCO_REMOVE_SUB option, but the user is not the creator of the subscription or does not have *sub* authority on the topic associated with the subscription.
Event type:	Authority.
Platforms:	All, except IBM MQ for z/OS.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ReasonQualifier

Description:	Identifier for type 3 authority events.
Identifier:	MQIACF_REASON_QUALIFIER.
Data type:	MQCFIN.

Values: **MQRQ_CLOSE_NOT_AUTHORIZED**
Close not authorized.

Returned: Always.

UserIdentifier

Description: User identifier that caused the authorization check

Identifier: MQCACF_USER_IDENTIFIER

Data type: MQCFST.

Maximum length: MQ_USER_ID_LENGTH.

Returned: Always.

ApplType

Description: Type of application causing the authorization check.

Identifier: MQIA_APPL_TYPE.

Data type: MQCFIN.

Returned: Always.

ApplName

Description: Name of the application causing the authorization check.

Identifier: MQCACF_APPL_NAME.

Data type: MQCFST.

Maximum length: MQ_APPL_NAME_LENGTH.

Returned: Always.

QName

Description: Object name from object descriptor (MQOD).

Identifier: MQCA_Q_NAME.

Data type: MQCFST.

Maximum length: MQ_Q_NAME_LENGTH.

Returned: If the handle being closed is a queue

SubName

Description: Name of subscription being removed.

Identifier: MQCACF_SUB_NAME.

Data type: MQCFST.

Maximum length: MQ_SUB_NAME_LENGTH.

Returned: If the handle being closed is a subscription.

TopicString

Description: Topic string of the subscription.

Identifier: MQCA_TOPIC_STRING

Data type:	MQCFST.
Maximum length:	MQ_TOPIC_STR_LENGTH.
Returned:	If the handle being closed is a subscription.

AdminTopicNames

Description:	List of topic administration objects against which authority was checked.
Identifier:	MQCACF_ADMIN_TOPIC_NAMES.
Data type:	MQCFSL.
Maximum length:	MQ_TOPIC_NAME_LENGTH.
Returned:	If the handle being closed is a subscription.

ConnName

Description:	Connection name for client connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	If the application making the MQI call that caused the event is a client attached application.

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH
Returned:	If the application making the MQI call that caused the event is a client attached application.

Not Authorized (type 4)

Event name:	Not Authorized (type 4).
Reason code in MQCFH:	MQRC_NOT_AUTHORIZED (2035, X'7F3'). Not authorized for access.
Event description:	Indicates that a command has been issued from a user ID that is not authorized to access the object specified in the command.
Event type:	Authority.
Platforms:	All, except IBM MQ for z/OS.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.

Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ReasonQualifier

Description:	Identifier for type 4 authority events.
Identifier:	MQIACF_REASON_QUALIFIER.
Data type:	MQCFIN.
Values:	**MQRQ_CMD_NOT_AUTHORIZED** Command not authorized.
Returned:	Always.

Command

Description:	Command identifier. See the MQCFH header structure, described in "Event message MQCFH (PCF header)" on page 121.
Identifier:	MQIACF_COMMAND.
Data type:	MQCFIN.
Returned:	Always.

UserIdentifier

Description:	User identifier that caused the authorization check.
Identifier:	MQCACF_USER_IDENTIFIER.
Data type:	MQCFST.
Maximum length:	MQ_USER_ID_LENGTH.
Returned:	Always.

Not Authorized (type 5)

Event name:	Not Authorized (type 5).
Reason code in MQCFH:	MQRC_NOT_AUTHORIZED (2035, X'7F3'). Not authorized for access.
Event description:	On an MQSUB call, the user is not authorized to subscribe to the specified topic.
Event type:	Authority.
Platforms:	All, except IBM MQ for z/OS.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.

Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ReasonQualifier

Description:	Identifier for type 5 authority events.
Identifier:	MQIACF_REASON_QUALIFIER.
Data type:	MQCFIN.
Values:	**MQRQ_SUB_NOT_AUTHORIZED** Subscribe not authorized.
Returned:	Always.

Options

Description:	Options specified on the MQSUB call.
Identifier:	MQIACF_SUB_OPTIONS
Data type:	MQCFIN.
Returned:	Always.

UserIdentifier

Description:	User identifier that caused the authorization check.
Identifier:	MQCACF_USER_IDENTIFIER.
Data type:	MQCFST.
Maximum length:	MQ_USER_ID_LENGTH.
Returned:	Always.

ApplType

Description:	Type of application that caused the authorization check.
Identifier:	MQIA_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Always.

ApplName

Description:	Name of the application that caused the authorization check.
Identifier:	MQCACF_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Always.

TopicString

Description:	Topic string being opened or subscribed to.

Identifier:	MQCA_TOPIC_STRING.
Data type:	MQCFST.
Maximum length:	MQ_TOPIC_STR_LENGTH.
Returned:	Always.

AdminTopicNames

Description:	List of topic administration objects against which authority is checked.
Identifier:	MQCACF_ADMIN_TOPIC_NAMES.
Data type:	MQCFSL.
Maximum length for each member of the string list:	MQ_TOPIC_NAME_LENGTH.
Returned:	Always.

ConnName

Description:	Connection name for client connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	If the application making the MQI call that caused the event is a client attached application.

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH
Returned:	If the application making the MQI call that caused the event is a client attached application.

Not Authorized (type 6)

Event name:	Not Authorized (type 6).
Reason code in MQCFH:	MQRC_NOT_AUTHORIZED (2035, X'7F3'). Not authorized for access.

Event description:	On an MQSUB call, the user is not authorized to use the destination queue with the required level of access. This event is only returned for subscriptions using non-managed destination queues.
	When creating, altering, or resuming a subscription, and a handle to the destination queue is supplied on the request, the user does not have PUT authority on the destination queue provided.
	When resuming or alerting a subscription and the handle to the destination queue is to be returned on the MQSUB call, and the user does not have PUT, GET and BROWSE authority on the destination queue.
Event type:	Authority.
Platforms:	All, except IBM MQ for z/OS.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ReasonQualifier

Description:	Identifier for type 6 authority events.
Identifier:	MQIACF_REASON_QUALIFIER.
Data type:	MQCFIN.
Values:	**MQRQ_SUB_DEST_NOT_AUTHORIZED** Subscription destination queue usage not authorized.
Returned:	Always.

Options

Description:	Options specified on the MQSUB call.
Identifier:	MQIACF_SUB_OPTIONS
Data type:	MQCFIN.
Returned:	Always.

UserIdentifier

Description:	User identifier that caused the authorization check.
Identifier:	MQCACF_USER_IDENTIFIER.
Data type:	MQCFST.
Maximum length:	MQ_USER_ID_LENGTH.
Returned:	Always.

ApplType

Description:	Type of application that caused the authorization check.
Identifier:	MQIA_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Always.

ApplName

Description:	Name of the application that caused the authorization check.
Identifier:	MQCACF_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Always.

TopicString

Description:	Topic string being subscribed to.
Identifier:	MQCA_TOPIC_STRING.
Data type:	MQCFST.
Maximum length:	MQ_TOPIC_STR_LENGTH.
Returned:	Always.

DestQMgrName

Description:	Hosting queue manager name of the subscription's destination queue.
Identifier:	MQCACF_OBJECT_Q_MGR_NAME
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	If the queue manager hosting the destination queue is not the queue manager to which the application is currently connected.

DestQName

Description:	The name of the destination queue of the subscription..
Identifier:	MQCA_Q_NAME
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

DestOpenOptions

Description:	The open options requested for the destination queue.
Identifier:	MQIACF_OPEN_OPTIONS
Data type:	MQCFIN.
Returned:	Always.

ConnName

Description:	Connection name for client connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	If the application making the MQI call that caused the event is a client attached application.

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH
Returned:	If the application making the MQI call that caused the event is a client attached application.

Put Inhibited

Event name:	Put Inhibited.
Reason code in MQCFH:	MQRC_PUT_INHIBITED (2051, X'803'). Put calls inhibited for the queue or topic.
Event description:	MQPUT and MQPUT1 calls are currently inhibited for the queue or topic (see the *InhibitPut* queue attribute in InhibitPut (MQLONG) or the *InhibitPublications* topic attribute in "Topic attributes" on page 111 for the queue to which this queue resolves.
Event type:	Inhibit.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

QName

Description:	Queue name from object descriptor (MQOD).
Identifier:	MQCA_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.

Returned:	If the object opened is a queue object

ApplType

Description:	Type of application that issued the put.
Identifier:	MQIA_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Always.

ApplName

Description:	Name of the application that issued the put.
Identifier:	MQCACF_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Always.

ObjectQMgrName

Description:	Name of queue manager from object descriptor (MQOD).
Identifier:	MQCACF_OBJECT_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Only if this parameter has a value different from *QMgrName*. This occurs when the *ObjectQMgrName* field in the object descriptor provided by the application on the MQOPEN or MQPUT1 call is neither blank nor the name of the application's local queue manager. However, it can also occur when *ObjectQMgrName* in the object descriptor is blank, but a name service provides a queue-manager name that is not the name of the application's local queue manager.

TopicString

Description:	Topic String being opened
Identifier:	MQCA_TOPIC_STRING
Data type:	MQCFST.
Maximum length:	MQ_TOPIC_STR_LENGTH.
Returned:	If the object opened is a topic.

ConnName

Description:	Connection name for client connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	If the application making the MQI call that caused the event is a client attached application.

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH
Returned:	If the application making the MQI call that caused the event is a client attached application.

Related information

InhibitPut property

IBM i InhibitPut (10-digit signed integer)
Inquire Queue (Response)
Inquire Topic (Response)
Inquire Topic Status (Response)
Change, Copy, and Create Topic

Queue Depth High

Event name:	Queue Depth High.
Reason code in MQCFH:	MQRC_Q_DEPTH_HIGH (2224, X'8B0'). Queue depth high limit reached or exceeded.
Event description:	An MQPUT or MQPUT1 call has caused the queue depth to be incremented to or above the limit specified in the *QDepthHighLimit* attribute.
Event type:	Performance.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.PERFM.EVENT.

Note:

1. IBM MQ for z/OS supports queue depth events on shared queues. You might receive a NULL event message for a shared queue if a queue manager has performed no activity on that shared queue.

2. For shared queues, the correlation identifier, *CorrelId* in the message descriptor (MQMD) is set. See "Event message MQMD (message descriptor)" on page 117 for more information.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

QName

Description:	Name of the queue on which the limit has been reached.

Identifier:	MQCA_BASE_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

TimeSinceReset

Description:	Time, in seconds, since the statistics were last reset. The value recorded by this timer is also used as the *interval time* in queue service interval events.
Identifier:	MQIA_TIME_SINCE_RESET.
Data type:	MQCFIN.
Returned:	Always.

HighQDepth

Description:	Maximum number of messages on the queue since the queue statistics were last reset.
Identifier:	MQIA_HIGH_Q_DEPTH.
Data type:	MQCFIN.
Returned:	Always.

MsgEnqCount

Description:	Number of messages enqueued. This is the number of messages put on the queue since the queue statistics were last reset.
Identifier:	MQIA_MSG_ENQ_COUNT.
Data type:	MQCFIN.
Returned:	Always.

MsgDeqCount

Description:	Number of messages removed from the queue since the queue statistics were last reset.
Identifier:	MQIA_MSG_DEQ_COUNT.
Data type:	MQCFIN.
Returned:	Always.

Queue Depth Low

Event name:	Queue Depth Low.
Reason code in MQCFH:	MQRC_Q_DEPTH_LOW (2225, X'8B1'). Queue depth low limit reached or exceeded.
Event description:	A get operation has caused the queue depth to be decremented to or below the limit specified in the *QDepthLowLimit* attribute.
Event type:	Performance.
Platforms:	All.

Event queue: SYSTEM.ADMIN.PERFM.EVENT.

Note:

1. IBM MQ for z/OS supports queue depth events on shared queues. You might receive a NULL event message for a shared queue if a queue manager has performed no activity on that shared queue.

2. For shared queues, the correlation identifier, *CorrelId* in the message descriptor (MQMD) is set. See "Event message MQMD (message descriptor)" on page 117 for more information.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

QName

Description:	Name of the queue on which the limit has been reached.
Identifier:	MQCA_BASE_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

TimeSinceReset

Description:	Time, in seconds, since the statistics were last reset. The value recorded by this timer is also used as the *interval time* in queue service interval events.
Identifier:	MQIA_TIME_SINCE_RESET.
Data type:	MQCFIN.
Returned:	Always.

HighQDepth

Description:	Maximum number of messages on the queue since the queue statistics were last reset.
Identifier:	MQIA_HIGH_Q_DEPTH.
Data type:	MQCFIN.
Returned:	Always.

MsgEnqCount

Description:	Number of messages enqueued. This is the number of messages put on the queue since the queue statistics were last reset.
Identifier:	MQIA_MSG_ENQ_COUNT.
Data type:	MQCFIN.
Returned:	Always.

MsgDeqCount

Description:	Number of messages removed from the queue since the queue statistics were last reset.
Identifier:	MQIA_MSG_DEQ_COUNT.
Data type:	MQCFIN.
Returned:	Always.

Queue Full

Event name:	Queue Full.
Reason code in MQCFH:	MQRC_Q_FULL (2053, X'805'). Queue already contains maximum number of messages.
Event description:	On an MQPUT or MQPUT1 call, the call failed because the queue is full. That is, it already contains the maximum number of messages possible (see the *MaxQDepth* local-queue attribute
Event type:	Performance.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.PERFM.EVENT.

Note:

1. IBM MQ for z/OS supports queue depth events on shared queues. You might receive a NULL event message for a shared queue if a queue manager has performed no activity on that shared queue.

2. For shared queues, the correlation identifier, *CorrelId* in the message descriptor (MQMD) is set. See "Event message MQMD (message descriptor)" on page 117 for more information.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

QName

Description:	Name of the queue on which the put was rejected.
Identifier:	MQCA_BASE_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

TimeSinceReset

Description:	Time, in seconds, since the statistics were last reset.
Identifier:	MQIA_TIME_SINCE_RESET.

Data type:	MQCFIN.
Returned:	Always.

HighQDepth

Description:	Maximum number of messages on a queue.
Identifier:	MQIA_HIGH_Q_DEPTH.
Data type:	MQCFIN.
Returned:	Always.

MsgEnqCount

Description:	Number of messages enqueued. This is the number of messages put on the queue since the queue statistics were last reset.
Identifier:	MQIA_MSG_ENQ_COUNT.
Data type:	MQCFIN.
Returned:	Always.

MsgDeqCount

Description:	Number of messages removed from the queue since the queue statistics were last reset.
Identifier:	MQIA_MSG_DEQ_COUNT.
Data type:	MQCFIN.
Returned:	Always.

Queue Manager Active

Event name:	Queue Manager Active.
Reason code in MQCFH:	MQRC_Q_MGR_ACTIVE (2222, X'8AE'). Queue manager active.
Event description:	This condition is detected when a queue manager becomes active.
Event type:	Start And Stop.
Platforms:	All, except the first start of an IBM MQ for z/OS queue manager. In this case it is produced only on subsequent restarts. ▶ V 8.0.0.3 ◀ The *ReasonQualifier* and *HostName* fields apply only to those platforms that support multi-instance availability; that is not z/OS
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.

Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

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ReasonQualifier

Description:	Identifier of causes for this reason code. This specifies the type of start that is happening.
Identifier:	MQIACF_REASON_QUALIFIER.
Data type:	MQCFIN.
Values:	**MQRQ_FAILOVER_PERMITTED**
	Queue manager has started normally and allows a standby instance.
	MQRQ_FAILOVER_NOT_PERMITTED
	Queue manager has started normally but does not allow a standby instance.
	MQRQ_STANDBY_ACTIVATED
	Queue manager has moved out of standby mode into active mode.
Returned:	Always.

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HostName

Description:	The host name of the machine on which the queue manager is running.
Identifier:	MQCACF_HOST_NAME.
Data type:	MQCFST.
Returned:	Always.

Queue Manager Not Active

Event name:	Queue Manager Not Active.
Reason code in MQCFH:	MQRC_Q_MGR_NOT_ACTIVE (2223, X'8AF'). Queue manager unavailable.
Event description:	This condition is detected when a queue manager is requested to stop or quiesce.
Event type:	Start And Stop.
Platforms:	All, except IBM MQ for z/OS.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.

Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ReasonQualifier

Description:	Identifier of causes of this reason code. This specifies the type of stop that was requested.
Identifier:	MQIACF_REASON_QUALIFIER.
Data type:	MQCFIN.
Values:	**MQRQ_Q_MGR_STOPPING** Queue manager stopping. **MQRQ_Q_MGR_QUIESCING** Queue manager quiescing.
Returned:	Always.

Queue Service Interval High

Event name:	Queue Service Interval High.
Reason code in MQCFH:	MQRC_Q_SERVICE_INTERVAL_HIGH (2226, X'8B2'). Queue service interval high.
Event description:	No successful get operations or MQPUT calls have been detected within an interval greater than the limit specified in the *QServiceInterval* attribute.
Event type:	Performance.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.PERFM.EVENT.

Note: IBM MQ for z/OS does not support service interval events on shared queues.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

QName

Description:	Name of the queue specified on the command that caused this queue service interval event to be generated.
Identifier:	MQCA_BASE_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

TimeSinceReset

Description:	Time, in seconds, since the statistics were last reset. For a service interval high event, this value is greater than the service interval.
Identifier:	MQIA_TIME_SINCE_RESET.
Data type:	MQCFIN.
Returned:	Always.

HighQDepth

Description:	Maximum number of messages on the queue since the queue statistics were last reset.
Identifier:	MQIA_HIGH_Q_DEPTH.
Data type:	MQCFIN.
Returned:	Always.

MsgEnqCount

Description:	Number of messages enqueued. This is the number of messages put on the queue since the queue statistics were last reset.
Identifier:	MQIA_MSG_ENQ_COUNT.
Data type:	MQCFIN.
Returned:	Always.

MsgDeqCount

Description:	Number of messages removed from the queue since the queue statistics were last reset.
Identifier:	MQIA_MSG_DEQ_COUNT.
Data type:	MQCFIN.
Returned:	Always.

Queue Service Interval OK

Event name:	Queue Service Interval OK.
Reason code in MQCFH:	MQRC_Q_SERVICE_INTERVAL_OK (2227, X'8B3'). Queue service interval OK.
Event description:	A successful get operation has been detected within an interval less than or equal to the limit specified in the *QServiceInterval* attribute.
Event type:	Performance.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.PERFM.EVENT.

Note: IBM MQ for z/OS does not support service interval events on shared queues.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

QName

Description:	Queue name specified on the command that caused this queue service interval event to be generated.
Identifier:	MQCA_BASE_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

TimeSinceReset

Description:	Time, in seconds, since the statistics were last reset.
Identifier:	MQIA_TIME_SINCE_RESET.
Data type:	MQCFIN.
Returned:	Always.

HighQDepth

Description:	Maximum number of messages on the queue since the queue statistics were last reset.
Identifier:	MQIA_HIGH_Q_DEPTH.
Data type:	MQCFIN.
Returned:	Always.

MsgEnqCount

Description:	Number of messages enqueued. This is the number of messages put on the queue since the queue statistics were last reset.
Identifier:	MQIA_MSG_ENQ_COUNT.
Data type:	MQCFIN.
Returned:	Always.

MsgDeqCount

Description:	Number of messages removed from the queue since the queue statistics were last reset.
Identifier:	MQIA_MSG_DEQ_COUNT.
Data type:	MQCFIN.
Returned:	Always.

Queue Type Error

Event name:	Queue Type Error.
Reason code in MQCFH:	MQRC_Q_TYPE_ERROR (2057, X'809'). Queue type not valid.
Event description:	On an MQOPEN call, the *ObjectQMgrName* field in the object descriptor specifies the name of a local definition of a remote queue (in order to specify a queue-manager alias). In that local definition the *RemoteQMgrName* attribute is the name of the local queue manager. However, the *ObjectName* field specifies the name of a model queue on the local queue manager, which is not allowed. See the Queue manager events for more information.
Event type:	Remote.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

QName

Description:	Queue name from object descriptor (MQOD).
Identifier:	MQCA_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

ApplType

Description:	Type of application making the MQI call that caused the event.
Identifier:	MQIA_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Always.

ApplName

Description:	Name of the application making the MQI call that caused the event.
Identifier:	MQCACF_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Always.

ObjectQMgrName

Description:	Name of the object queue manager.
Identifier:	MQCACF_OBJECT_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ConnName

Description:	Connection name for client connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	If the application making the MQI call that caused the event is a client attached application.

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH
Returned:	If the application making the MQI call that caused the event is a client attached application.

▶ V 8.0.0.4 *Refresh Authority Record*

Event name:	Refresh Authority Record
Reason code in MQCFH:	MQRC_CONFIG_REFRESH_OBJECT (2370, X'0942'). Refresh queue manager configuration - authority records.
Event description:	A REFRESH QMGR command specifying **TYPE**(*CONFIGEV*) was issued.
Event type:	Configuration
Platforms:	All except z/OS.
Event queue:	SYSTEM.ADMIN.CONFIG.EVENT.

Note that the REFRESH QMGR command can produce many configuration events; one event is generated for each authority record that is selected by the command.

Event data

EventQMgr

Description:	The queue manager where the command or call was entered. That is, the queue manager where the command is processed and that generates the event is in the MQMD of the event message.
Identifier:	MQCACF_EVENT_Q_MGR

Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

EventUserId

Description:	The user ID that issued the command or call that generated the event.
	This is the same user id that is used to check the authority to issue the command or call; for commands received from a queue, this is also the user identifier (**UserIdentifier**) from the message descriptor of the command message.
	.
Identifier:	MQCACF_EVENT_USER_ID
Data type:	MQCFST.
Maximum length:	MQ_USER_ID_LENGTH.
Returned:	Always.

EventOrigin

Description:	The origin of the action causing the event.
Identifier:	MQIACF_EVENT_ORIGIN
Data type:	MQCFIN.
Values:	**MQEVO_CONSOLE**
	Console command (runmqsc or setmqaut)
	MQEVO_INTERNAL Directly by queue manager
	MQEVO_MSG Command message on SYSTEM.ADMIN.COMMAND.QUEUE
Returned:	Always

EventAccountingToken

Description:	For commands received as a message (MQEVO_MSG), the accounting token (**AccountingToken**) from the message descriptor of the command message.
Identifier:	MQBACF_EVENT_ACCOUNTING_TOKEN
Data type:	MQCFBS
Maximum length:	MQ_ACCOUNTING_TOKEN_LENGTH
Returned:	Only if **EventOrigin** is MQEVO_MSG.

EventApplIdentity

Description:	For commands received as a message (MQEVO_MSG), application identity data (**ApplIdentityData**) from the message descriptor of the command message.
Identifier:	MQMQCACF_EVENT_APPL_IDENTITY
Data type:	MQCFST
Maximum length:	MQ_APPL_IDENTITY_DATA_LENGTH

Returned: Only if **EventOrigin** is MQEVO_MSG.

EventApplType

Description:	For commands received as a message (MQEVO_MSG), the type of application (**PutApplType**) from the message descriptor of the command message.
Identifier:	MQIACF_EVENT_APPL_TYPE
Data type:	MQCFIN
Values:	
Returned:	Only if **EventOrigin** is MQEVO_MSG.

EventApplName

Description:	For commands received as a message (MQEVO_MSG), the name of the application (**PutApplName**) from the message descriptor of the command message.
Identifier:	MQCACF_EVENT_APPL_NAME
Data type:	MQCFST
Maximum length:	MQ_APPL_NAME_LENGTH
Returned:	Only if **EventOrigin** is MQEVO_MSG.

EventApplOrigin

Description:	For commands received as a message (MQEVO_MSG), the application origin data (**ApplOriginData**) from the message descriptor of the command message.
Identifier:	MQCACF_EVENT_APPL_ORIGIN
Data type:	MQCFST
Maximum length:	MQ_APPL_ORIGIN_DATA_LENGTH
Returned:	Only if **EventOrigin** is MQEVO_MSG.

ObjectType

Description:	Object type
Identifier:	MQIACF_OBJECT_TYPE
Data type:	MQCFIN
Values:	MQOT_AUTH_REC
Returned:	Always

ProfileName

Description:	Object or generic profile name
Identifier:	MQCACF_AUTH_PROFILE_NAME
Data type:	MQCFST
Maximum length:	MQ_AUTH_PROFILE_NAME_LENGTH
Returned:	Always

Object attributes

A parameter structure is returned for each attribute of the object. The attributes returned depend on the object type. For more information see "Object attributes for event data" on page 71.

Refresh object

Event name:	Refresh object.
Reason code in MQCFH:	MQRC_CONFIG_REFRESH_OBJECT (2370, X'942'). Refresh queue manager configuration.
Event description:	A REFRESH QMGR command specifying TYPE (CONFIGEV) was issued.
Event type:	Configuration.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.CONFIG.EVENT.

Note: The REFRESH QMGR command can produce many configuration events; one event is generated for each object that is selected by the command.

Event data

EventUserId

Description:	The user id that issued the command or call that generated the event. (This is the same user id that is used to check the authority to issue the command or call; for commands received from a queue, this is also the user identifier (UserIdentifier) from the MQMD of the command message).
Identifier:	MQCACF_EVENT_USER_ID.
Data type:	MQCFST.
Maximum length:	MQ_USER_ID_LENGTH.
Returned:	Always.

EventOrigin

Description:	The origin of the action causing the event.
Identifier:	MQIACF_EVENT_ORIGIN.
Data type:	MQCFIN.
Values:	**MQEVO_CONSOLE** Console command.
	MQEVO_INIT Initialization input data set command.
	MQEVO_INTERNAL Directly by queue manager.
	MQEVO_MSG Command message on SYSTEM.COMMAND.INPUT.
	MQEVO_OTHER None of the above.
Returned:	Always.

EventQMgr

Description:	The queue manager where the command or call was entered. (The queue manager where the command is executed and that generates the event is in the MQMD of the event message).
Identifier:	MQCACF_EVENT_Q_MGR.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

EventAccountingToken

Description:	For commands received as a message (MQEVO_MSG), the accounting token (AccountingToken) from the MQMD of the command message.
Identifier:	MQBACF_EVENT_ACCOUNTING_TOKEN.
Data type:	MQCFBS.
Maximum length:	MQ_ACCOUNTING_TOKEN_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplIdentity

Description:	For commands received as a message (MQEVO_MSG), application identity data (ApplIdentityData) from the MQMD of the command message.
Identifier:	MQCACF_EVENT_APPL_IDENTITY.
Data type:	MQCFST.
Maximum length:	MQ_APPL_IDENTITY_DATA_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplType

Description:	For commands received as a message (MQEVO_MSG), the type of application (PutApplType) from the MQMD of the command message.
Identifier:	MQIACF_EVENT_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplName

Description:	For commands received as a message (MQEVO_MSG), the name of the application (PutApplName) from the MQMD of the command message.
Identifier:	MQCACF_EVENT_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

EventApplOrigin

Description:	For commands received as a message (MQEVO_MSG), the application origin data (ApplOriginData) from the MQMD of the command message.

Identifier:	MQCACF_EVENT_APPL_ORIGIN.
Data type:	MQCFST.
Maximum length:	MQ_APPL_ORIGIN_DATA_LENGTH.
Returned:	Only if EventOrigin is MQEVO_MSG.

ObjectType

Description:	Object type:
Identifier:	MQIACF_OBJECT_TYPE.
Data type:	MQCFIN.
Values:	**MQOT_CHANNEL** Channel.
	MQOT_CHLAUTH Channel authentication record.
	MQOT_NAMELIST Namelist.
	MQOT_NONE No object.
	MQOT_PROCESS Process.
	MQOT_Q Queue.
	MQOT_Q_MGR Queue manager.
	MQOT_STORAGE_CLASS Storage class.
	MQOT_AUTH_INFO Authentication information.
	MQOT_CF_STRUC CF structure.
	MQOT_TOPIC Topic.
	MQOT_COMM_INFO Communication information.
	MQOT_LISTENER Channel Listener.
Returned:	Always.

ObjectName

Description:	Object name:

Identifier :	Identifier will be according to object type.
	• MQCACH_CHANNEL_NAME
	• MQCA_NAMELIST_NAME
	• MQCA_PROCESS_NAME
	• MQCA_Q_NAME
	• MQCA_Q_MGR_NAME
	• MQCA_STORAGE_CLASS
	• MQCA_AUTH_INFO_NAME
	• MQCA_CF_STRUC_NAME
	• MQCA_TOPIC_NAME
	• MQCA_COMM_INFO_NAME
	• MQCACH_LISTENER_NAME
	Note: MQCACH_CHANNEL_NAME can also be used for channel authentication.
Data type:	MQCFST.
Maximum length:	MQ_OBJECT_NAME_LENGTH.
Returned:	Always

Disposition

Description:	Object disposition:
Identifier:	MQIA_QSG_DISP.
Data type:	MQCFIN.
Values:	**MQQSGD_Q_MGR** Object resides on page set of queue manager.
	MQQSGD_SHARED Object resides in shared repository and messages are shared in coupling facility.
	MQQSGD_GROUP Object resides in shared repository.
	MQQSGD_COPY Object resides on page set of queue manager and is a local copy of a GROUP object.
Returned:	Always, except for queue manager and CF structure objects.

Object attributes

A parameter structure is returned for each attribute of the object. The attributes returned depend on the object type. For more information see "Object attributes for event data" on page 71.

Remote Queue Name Error

Event name:	Remote Queue Name Error.
Reason code in MQCFH:	MQRC_REMOTE_Q_NAME_ERROR (2184, X'888'). Remote queue name not valid.

Event description:	On an MQOPEN or MQPUT1 call one of the following occurs:

- A local definition of a remote queue (or an alias to one) was specified, but the *RemoteQName* attribute in the remote queue definition is blank. Note that this error occurs even if the *XmitQName* in the definition is not blank.
- The *ObjectQMgrName* field in the object descriptor is not blank and not the name of the local queue manager, but the *ObjectName* field is blank.

Event type:	Remote.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

QName

Description:	Queue name from object descriptor (MQOD).
Identifier:	MQCA_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

ApplType

Description:	Type of application making the MQI call that caused the event.
Identifier:	MQIA_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Always.

ApplName

Description:	Name of the application making the MQI call that caused the event.
Identifier:	MQCACF_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Always.

ObjectQMgrName

Description:	Name of the object queue manager.
Identifier:	MQCACF_OBJECT_Q_MGR_NAME.

Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	If the *ObjectName* in the object descriptor (MQOD), when the object was opened, is not the queue manager currently connected.

ConnName

Description:	Connection name for client connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	If the application making the MQI call that caused the event is a client attached application.

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH
Returned:	If the application making the MQI call that caused the event is a client attached application.

Transmission Queue Type Error

Event name:	Transmission Queue Type Error.
Reason code in MQCFH:	MQRC_XMIT_Q_TYPE_ERROR (2091, X'82B'). Transmission queue not local.
Event description:	On an MQOPEN or MQPUT1 call, a message is to be sent to a remote queue manager. The *ObjectName* or *ObjectQMgrName* field in the object descriptor specifies the name of a local definition of a remote queue but one of the following applies to the *XmitQName* attribute of the definition. Either: *XmitQName* is not blank, but specifies a queue that is not a local queue, or *XmitQName* is blank, but *RemoteQMgrName* specifies a queue that is not a local queue This also occurs if the queue name is resolved through a cell directory, and the remote queue manager name obtained from the cell directory is the name of a queue, but this is not a local queue.
Event type:	Remote.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.

Identifier:	MQCA_Q_MGR_NAME.	
Data type:	MQCFST.	
Maximum length:	MQ_Q_MGR_NAME_LENGTH.	
Returned:	Always.	

QName

Description:	Queue name from object descriptor (MQOD).
Identifier:	MQCA_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

XmitQName

Description:	Transmission queue name.
Identifier:	MQCA_XMIT_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

QType

Description:	Type of transmission queue.
Identifier:	MQIA_Q_TYPE.
Data type:	MQCFIN.
Values:	**MQQT_ALIAS** Alias queue definition. **MQQT_REMOTE** Local definition of a remote queue.
Returned:	Always.

ApplType

Description:	Type of application making the MQI call that caused the event.
Identifier:	MQIA_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Always.

ApplName

Description:	Name of the application making the MQI call that caused the event.
Identifier:	MQCACF_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Always.

ObjectQMgrName

Description:	Name of the object queue manager.
Identifier:	MQCACF_OBJECT_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	If the *ObjectName* in the object descriptor (MQOD), when the object was opened, is not the queue manager currently connected.

ConnName

Description:	Connection name for client connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	If the application making the MQI call that caused the event is a client attached application.

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH
Returned:	If the application making the MQI call that caused the event is a client attached application.

Transmission Queue Usage Error

Event name:	Transmission Queue Usage Error.
Reason code in MQCFH:	MQRC_XMIT_Q_USAGE_ERROR (2092, X'82C'). Transmission queue with wrong usage.

Event description:	On an MQOPEN or MQPUT1 call, a message is to be sent to a remote queue manager, but one of the following occurred. Either:
	
	 • *ObjectQMgrName* specifies the name of a local queue, but it does not have a *Usage* attribute of MQUS_TRANSMISSION.
	
	 • The *ObjectName* or *ObjectQMgrName* field in the object descriptor specifies the name of a local definition of a remote queue but one of the following applies to the *XmitQName* attribute of the definition:
	
	   – *XmitQName* is not blank, but specifies a queue that does not have a *Usage* attribute of MQUS_TRANSMISSION
	
	   – *XmitQName* is blank, but *RemoteQMgrName* specifies a queue that does not have a *Usage* attribute of MQUS_TRANSMISSION
	
	 • The queue name is resolved through a cell directory, and the remote queue manager name obtained from the cell directory is the name of a local queue, but it does not have a *Usage* attribute of MQUS_TRANSMISSION.

Event type:	Remote.

Platforms:	All.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

QName

Description:	Queue name from object descriptor (MQOD).
Identifier:	MQCA_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

XmitQName

Description:	Transmission queue name.
Identifier:	MQCA_XMIT_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

ApplType

Description:	Type of application making the MQI call that caused the event.
Identifier:	MQIA_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Always.

ApplName

Description:	Name of the application making the MQI call that caused the event.
Identifier:	MQCACF_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Always.

ObjectQMgrName

Description:	Name of the object queue manager.
Identifier:	MQCACF_OBJECT_Q_MGR_NAME.

Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	If the *ObjectName* in the object descriptor (MQOD), when the object was opened, is not the queue manager currently connected.

ConnName

Description:	Connection name for client connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	If the application making the MQI call that caused the event is a client attached application.

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH
Returned:	If the application making the MQI call that caused the event is a client attached application.

Unknown Alias Base Queue

Event name:	Unknown Alias Base Queue.
Reason code in MQCFH:	MQRC_UNKNOWN_ALIAS_BASE_Q (2082, X'822'). Unknown alias base queue or topic.
Event description:	An MQOPEN or MQPUT1 call was issued specifying an alias queue as the destination, but the *BaseObjectName* in the alias queue attributes is not recognized as a queue or topic name.
Event type:	Local.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

QName

Description:	Queue name from object descriptor (MQOD).
Identifier:	MQCA_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

BaseObjectName

Description:	Object name to which the alias resolves.
Identifier:	MQCA_BASE_OBJECT_NAME. For compatibility with existing applications, you can still use MQCA_BASE_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

ApplType

Description:	Type of application making the MQI call that caused the event.
Identifier:	MQIA_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Always.

ApplName

Description:	Name of the application making the MQI call that caused the event.
Identifier:	MQCACF_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Always.

ObjectQMgrName

Description:	Name of the object queue manager.
Identifier:	MQCACF_OBJECT_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	If the *ObjectName* in the object descriptor (MQOD), when the object was opened, is not the queue manager currently connected.

BaseType

Description:	Type of object to which the alias resolves.
Identifier:	MQIA_BASE_TYPE.
Data type:	MQCFIN.

Values:	**MQOT_Q**
	Base object type is a queue
	MQOT_TOPIC
	Base object type is a topic
Returned:	Always.

ConnName

Description:	Connection name for client connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	If the application making the MQI call that caused the event is a client attached application.

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH
Returned:	If the application making the MQI call that caused the event is a client attached application.

Unknown Default Transmission Queue

Event name:	Unknown Default Transmission Queue.
Reason code in MQCFH:	MQRC_UNKNOWN_DEF_XMIT_Q (2197, X'895'). Unknown default transmission queue.
Event description:	An MQOPEN or MQPUT1 call was issued specifying a remote queue as the destination. If a local definition of the remote queue was specified, or if a queue-manager alias is being resolved, the *XmitQName* attribute in the local definition is blank.
	No queue is defined with the same name as the destination queue manager. The queue manager has therefore attempted to use the default transmission queue. However, the name defined by the *DefXmitQName* queue-manager attribute is not the name of a locally-defined queue.
Event type:	Remote.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.

Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

QName

Description:	Queue name from object descriptor (MQOD).
Identifier:	MQCA_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

XmitQName

Description:	Default transmission queue name.
Identifier:	MQCA_XMIT_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

ApplType

Description:	Type of application attempting to open the remote queue.
Identifier:	MQIA_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Always.

ApplName

Description:	Name of the application attempting to open the remote queue.
Identifier:	MQCACF_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Always.

ObjectQMgrName

Description:	Name of the object queue manager.
Identifier:	MQCACF_OBJECT_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	If the *ObjectName* in the object descriptor (MQOD), when the object was opened, is not the queue manager currently connected.

ConnName

Description:	Connection name for client connection.
Identifier:	MQCACH_CONNECTION_NAME.

Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	If the application making the MQI call that caused the event is a client attached application.

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH
Returned:	If the application making the MQI call that caused the event is a client attached application.

Unknown Object Name

Event name:	Unknown Object Name.
Reason code in MQCFH:	MQRC_UNKNOWN_OBJECT_NAME (2085, X'825'). Unknown object name.
Event description:	On an MQOPEN or MQPUT1 call, the *ObjectQMgrName* field in the object descriptor MQOD is set to one of the following options. It is either: • Blank • The name of the local queue manager • The name of a local definition of a remote queue (a queue-manager alias) in which the *RemoteQMgrName* attribute is the name of the local queue manager However, the *ObjectName* in the object descriptor is not recognized for the specified object type.
Event type:	Local.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

ApplType

Description:	Type of application making the MQI call that caused the event.
Identifier:	MQIA_APPL_TYPE.

Data type: MQCFIN.

Returned: Always.

ApplName

Description: Name of the application making the MQI call that caused the event.

Identifier: MQCACF_APPL_NAME.

Data type: MQCFST.

Maximum length: MQ_APPL_NAME_LENGTH.

Returned: Always.

QName

Description: Queue name from object descriptor (MQOD).

Identifier: MQCA_Q_NAME.

Data type: MQCFST.

Maximum length: MQ_Q_NAME_LENGTH.

Returned: If the object opened is a queue object. Either *QName* or *TopicName* is returned.

ProcessName

Description: Process object name from object descriptor (MQOD).

Identifier: MQCA_PROCESS_NAME.

Data type: MQCFST.

Maximum length: MQ_PROCESS_NAME_LENGTH.

Returned: If the object opened is a process object. One of *ProcessName*, *QName*, or *TopicName* is returned.

ObjectQMgrName

Description: Name of the object queue manager.

Identifier: MQCACF_OBJECT_Q_MGR_NAME.

Data type: MQCFST.

Maximum length: MQ_Q_MGR_NAME_LENGTH.

Returned: If the *ObjectName* in the object descriptor (MQOD), when the object was opened, is not the queue manager currently connected.

TopicName

Description: Topic object name from object descriptor (MQOD).

Identifier: MQCA_TOPIC_NAME.

Data type: MQCFST.

Maximum length: MQ_TOPIC_NAME_LENGTH.

Returned: If the object opened is a topic object. One of *ProcessName*, *QName*, or *TopicName* is returned.

ConnName

Description:	Connection name for client connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	If the application making the MQI call that caused the event is a client attached application.

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH
Returned:	If the application making the MQI call that caused the event is a client attached application.

Unknown Remote Queue Manager

Event name:	Unknown Remote Queue Manager.
Reason code in MQCFH:	MQRC_UNKNOWN_REMOTE_Q_MGR (2087, X'827'). Unknown remote queue manager.

Event description:	On an MQOPEN or MQPUT1 call, an error occurred with queue-name resolution, for one of the following reasons:

- *ObjectQMgrName* is either blank or the name of the local queue manager, and *ObjectName* is the name of a local definition of a remote queue that has a blank *XmitQName*. However, there is no (transmission) queue defined with the name of *RemoteQMgrName*, and the *DefXmitQName* queue-manager attribute is blank.

- *ObjectQMgrName* is the name of a queue-manager alias definition (held as the local definition of a remote queue) that has a blank *XmitQName*. However, there is no (transmission) queue defined with the name of *RemoteQMgrName*, and the *DefXmitQName* queue-manager attribute is blank.

- *ObjectQMgrName* specified is not:
  - Blank
  - The name of the local queue manager
  - The name of a local queue
  - The name of a queue-manager alias definition (that is, a local definition of a remote queue with a blank *RemoteQName*)

  and the *DefXmitQName* queue-manager attribute is blank.

- *ObjectQMgrName* is blank or is the name of the local queue manager, and *ObjectName* is the name of a local definition of a remote queue (or an alias to one), for which *RemoteQMgrName* is either blank or is the name of the local queue manager. This error occurs even if the *XmitQName* is not blank.

- *ObjectQMgrName* is the name of a local definition of a remote queue. In this case, it should be a queue-manager alias definition, but the *RemoteQName* in the definition is not blank.

- *ObjectQMgrName* is the name of a model queue.

- The queue name is resolved through a cell directory. However, there is no queue defined with the same name as the remote queue manager name obtained from the cell directory. Also, the *DefXmitQName* queue-manager attribute is blank.

- On z/OS only: a message was put to a queue manager in a queue-sharing group and *SQQMNAME* is set to USE. This routes the message to the specified queue manager in order to be put on the queue. If *SQQMNAME* is set to IGNORE, the message is put to the queue directly.

Event type:	Remote.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

QName

Description:	Queue name from object descriptor (MQOD).
Identifier:	MQCA_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

ApplType

Description:	Type of application attempting to open the remote queue.
Identifier:	MQIA_APPL_TYPE.
Data type:	MQCFIN.
Returned:	Always.

ApplName

Description:	Name of the application attempting to open the remote queue.
Identifier:	MQCACF_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Always.

ObjectQMgrName

Description:	Name of the object queue manager.
Identifier:	MQCACF_OBJECT_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	If the *ObjectName* in the object descriptor (MQOD), when the object was opened, is not the queue manager currently connected.

ConnName

Description:	Connection name for client connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	If the application making the MQI call that caused the event is a client attached application.

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH

Returned:	If the application making the MQI call that caused the event is a client attached application.

Unknown Transmission Queue

Event name:	Unknown Transmission Queue.
Reason code in MQCFH:	MQRC_UNKNOWN_XMIT_Q (2196, X'894'). Unknown transmission queue.
Event description:	On an MQOPEN or MQPUT1 call, a message is to be sent to a remote queue manager. The *ObjectName* or the *ObjectQMgrName* in the object descriptor specifies the name of a local definition of a remote queue (in the latter case queue-manager aliasing is being used). However, the *XmitQName* attribute of the definition is not blank and not the name of a locally-defined queue.
Event type:	Remote.
Platforms:	All.
Event queue:	SYSTEM.ADMIN.QMGR.EVENT.

Event data

QMgrName

Description:	Name of the queue manager generating the event.
Identifier:	MQCA_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	Always.

QName

Description:	Queue name from object descriptor (MQOD).
Identifier:	MQCA_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

XmitQName

Description:	Transmission queue name.
Identifier:	MQCA_XMIT_Q_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_NAME_LENGTH.
Returned:	Always.

ApplType

Description:	Type of application making the MQI call that caused the event.
Identifier:	MQIA_APPL_TYPE.

| Data type: | MQCFIN. |
| Returned: | Always. |

ApplName

Description:	Name of the application making the MQI call that caused the event.
Identifier:	MQCACF_APPL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_APPL_NAME_LENGTH.
Returned:	Always.

ObjectQMgrName

Description:	Name of the object queue manager.
Identifier:	MQCACF_OBJECT_Q_MGR_NAME.
Data type:	MQCFST.
Maximum length:	MQ_Q_MGR_NAME_LENGTH.
Returned:	If the _ObjectName_ in the object descriptor (MQOD), when the object was opened, is not the queue manager currently connected.

ConnName

Description:	Connection name for client connection.
Identifier:	MQCACH_CONNECTION_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CONN_NAME_LENGTH.
Returned:	If the application making the MQI call that caused the event is a client attached application.

ChannelName

Description:	Channel name for client connection.
Identifier:	MQCACH_CHANNEL_NAME.
Data type:	MQCFST.
Maximum length:	MQ_CHANNEL_NAME_LENGTH
Returned:	If the application making the MQI call that caused the event is a client attached application.

Troubleshooting and support reference

Use the reference information in this section to help you diagnose errors with IBM MQ.

Select the appropriate topic from the following list to diagnose problems and errors in IBM MQ:

- "An example of IBM MQ for Windows trace data" on page 228
- "Example trace data for IBM MQ for UNIX and Linux systems" on page 229
- "Examples of trace output" on page 232
- "Examples of CEDF output" on page 234

An example of IBM MQ for Windows trace data

An extract from an IBM MQ for Windows trace file.

```
Counter  TimeStamp        PID.TID    Ident       Data
=========================================================
00000EF7 16:18:56.381367  2512.1          :      !! - Thread stack
00000EF8 16:18:56.381406  2512.1          :      !! - -> InitProcessInitialisation
00000EF9 16:18:56.381429  2512.1          :      --{  InitProcessInitialisation
00000EFA 16:18:56.381514  2512.1          :      ---{  xcsReleaseThreadMutexSem
00000EFB 16:18:56.381529  2512.1          :      ---}  xcsReleaseThreadMutexSem (rc=OK)
00000EFC 16:18:56.381540  2512.1          :      ---{  xcsGetEnvironmentString
00000EFD 16:18:56.381574  2512.1          :
xcsGetEnvironmentString[AMQ_REUSE_SHARED_THREAD] = NULL
00000EFE 16:18:56.381587  2512.1          :      ---}! xcsGetEnvironmentString
(rc=xecE_E_ENV_VAR_NOT_FOUND)
00000EFF 16:18:56.381612  2512.1          :      ---{  xcsGetEnvironmentInteger
00000F00 16:18:56.381622  2512.1          :      ----{  xcsGetEnvironmentString
00000F01 16:18:56.381647  2512.1          :
xcsGetEnvironmentString[AMQ_AFFINITY_MASK] = NULL
00000F02 16:18:56.381660  2512.1          :      ----}! xcsGetEnvironmentString
(rc=xecE_E_ENV_VAR_NOT_FOUND)
00000F03 16:18:56.381673  2512.1          :      ---}! xcsGetEnvironmentInteger
(rc=xecE_E_ENV_VAR_NOT_FOUND)
00000F04 16:18:56.381684  2512.1          :      ---{  xcsGetEnvironmentString
00000F05 16:18:56.381708  2512.1          :      xcsGetEnvironmentString[AMQ_FFSTINFO] =
NULL
00000F06 16:18:56.381747  2512.1          :      ---}! xcsGetEnvironmentString
(rc=xecE_E_ENV_VAR_NOT_FOUND)
00000F07 16:18:56.381760  2512.1          :      ---{  xcsIsEnvironment
00000F08 16:18:56.381783  2512.1          :      xcsIsEnvironment[AMQ_DEBUG_MTIME] = FALSE
00000F09 16:18:56.381793  2512.1          :      ---}  xcsIsEnvironment (rc=OK)
00000F0A 16:18:56.381804  2512.1          :      ---{  xcsGetEnvironmentInteger
00000F0B 16:18:56.381811  2512.1          :      ----{  xcsGetEnvironmentString
00000F0C 16:18:56.381835  2512.1          :
xcsGetEnvironmentString[AMQ_CBM_REUSE_FACTOR] = NULL
00000F0D 16:18:56.381848  2512.1          :      ----}! xcsGetEnvironmentString
(rc=xecE_E_ENV_VAR_NOT_FOUND)
00000F0E 16:18:56.381861  2512.1          :      ---}! xcsGetEnvironmentInteger
(rc=xecE_E_ENV_VAR_NOT_FOUND)
00000F0F 16:18:56.381874  2512.1          :      ---{  xcsGetEnvironmentInteger
00000F10 16:18:56.381885  2512.1          :      ----{  xcsGetEnvironmentString
00000F11 16:18:56.381908  2512.1          :
xcsGetEnvironmentString[AMQ_CBM_MAX_CACHEABLE_SIZE] = NULL
00000F12 16:18:56.381919  2512.1          :      ----}! xcsGetEnvironmentString
(rc=xecE_E_ENV_VAR_NOT_FOUND)
00000F13 16:18:56.381929  2512.1          :      ---}! xcsGetEnvironmentInteger
(rc=xecE_E_ENV_VAR_NOT_FOUND)
00000F14 16:18:56.381941  2512.1          :      ---{  xcsGetEnvironmentInteger
00000F15 16:18:56.381952  2512.1          :      ----{  xcsGetEnvironmentString
00000F16 16:18:56.381976  2512.1          :      xcsGetEnvironmentString[AMQ_CBM_LEN] =
NULL
00000F17 16:18:56.381992  2512.1          :      ----}! xcsGetEnvironmentString
(rc=xecE_E_ENV_VAR_NOT_FOUND)
00000F18 16:18:56.382003  2512.1          :      ---}! xcsGetEnvironmentInteger
(rc=xecE_E_ENV_VAR_NOT_FOUND)
00000F19 16:18:56.382016  2512.1          :      --}  InitProcessInitialisation (rc=OK)
00000F1A 16:18:56.383045  2512.1          :      --{  DLLMain
00000F1B 16:18:56.383059  2512.1          :      ---{  MCSInitCriticalSection
00000F1C 16:18:56.383068  2512.1          :      ---} MCSInitCriticalSection (rc=OK)
```

Figure 7. Sample IBM MQ for Windows trace

Example trace data for IBM MQ for UNIX and Linux systems

An extract from an IBM MQ for HP-UX trace file.

```
Timestamp        Process.Thread  Trace Ident  Trace Data
=============================================================
 10:36:38.973286    11352.1           :           Header.v02:7.0:HP-UX B.11.31:64:0:1:GMT
 10:36:38.973328    11352.1           :           Version : 7.0.1.3    Level :
p701-103-100814
 10:36:38.973347    11352.1           :           UTC   Date : 02/28/12  Time :
10:36:38.973271
 10:36:38.973356    11352.1           :           Local Date : 02/28/12  Time :
10:36:38.973271  GMT
 10:36:38.973378    11352.1           :           PID : 11352 Process : dltmqm_nd (64-bit)
 10:36:38.973384    11352.1           :           Host : myhost
 10:36:38.973389    11352.1           :           Operating System : HP-UX B.11.31
 10:36:38.973394    11352.1           :           Product Long Name : WebSphere MQ for HP-UX
(Itanium platform)
 10:36:38.973399    11352.1           :           --------------------------------
 10:36:38.973405    11352.1           :           xtrNullFd: 4, xihTraceFileNum: 5
 10:36:38.973434    11352.1           :           Thread stack
 10:36:38.974303    11352.1           :           -> InitProcessInitialisation
 10:36:38.974309    11352.1           :        {  InitProcessInitialisation
 10:36:38.974314    11352.1           :        -{  xcsIsEnvironment
 10:36:38.974338    11352.1           :           xcsIsEnvironment[AMQ_NO_CS_RELOAD] = FALSE
 10:36:38.974343    11352.1           :        -}  xcsIsEnvironment rc=OK
 10:36:38.974356    11352.1           :        -{  xcsLoadFunction
 10:36:38.974362    11352.1           :           LibName(libmqmcs_r.so) LoadType(2097200)
 10:36:38.974368    11352.1           :           General, comms, CS, OAM, or WAS
 10:36:38.974388    11352.1           :        --{  xcsQueryValueForSubpool
 10:36:38.974401    11352.1           :        --}  xcsQueryValueForSubpool rc=OK
 10:36:38.974451    11352.1           :           FullPathLibName(/opt/mqm/lib64/
libmqmcs_r.so) loaded with dlopen
 10:36:38.974456    11352.1           :        --{  xcsGetMemFn
 10:36:38.974463    11352.1           :           component:24 function:176 length:2088
options:0 cbmindex:-1 *pointer:600000000003b198
 10:36:38.974468    11352.1           :        --}  xcsGetMemFn rc=OK
 10:36:38.974475    11352.1           :           Handle(0000000000000000)
Function(0000000000000000) FullPathLibName(/opt/mqm/lib64/libmqmcs_r.so)
 10:36:38.974480    11352.1           :        -}  xcsLoadFunction rc=OK
 10:36:38.974486    11352.1           :           SystemPageSize is 4096.
 10:36:38.974493    11352.1           :           getrlimit for RLIMIT_NOFILE returned
rlim_cur=2048 rlim_max=4096
```

Figure 8. Sample IBM MQ for HP-UX trace

shows an extract from an IBM MQ for Solaris trace:

```
Timestamp        Process.Thread  Trace Ident  Trace Data
============================================================
 11:48:57.905466     7078.1         :          Header.v02:7.0:SunOS 5.9:64:-1:1:GMT
 11:48:57.905625     7078.1         :          Version : 7.0.0.0    Level : p000-L090514
 11:48:57.905770     7078.1         :          UTC   Date : 05/15/09  Time :
10:48:57.905364
 11:48:57.905816     7078.1         :          Local Date : 05/15/09  Time :
11:48:57.905364  GMT
 11:48:57.906104     7078.1         :          PID : 7078 Process : dltmqm_nd (64-bit)
 11:48:57.906129     7078.1         :          Host : computer.v6.hursley.ibm.com
 11:48:57.906148     7078.1         :          Operating System : SunOS 5.9
 11:48:57.906167     7078.1         :          Product Long Name : WebSphere MQ for
Solaris (SPARC platform)
 11:48:57.906184     7078.1         :          --------------------------------
 11:48:57.906203     7078.1         :          xtrNullFd: 4, xihTraceFileNum: 5
 11:48:57.906276     7078.1         :          Thread stack
 11:48:57.906353     7078.1         :       {  xcsInitialize
 11:48:57.906385     7078.1         :       -{  InitPrivateServices
 11:48:57.906439     7078.1         :       --{  xcsGetEnvironmentString
 11:48:57.906566     7078.1         :
xcsGetEnvironmentString[MQS_ACTION_ON_EXCEPTION] = NULL
 11:48:57.906608     7078.1         :       --}! xcsGetEnvironmentString
rc=xecE_E_ENV_VAR_NOT_FOUND
 11:48:57.906709     7078.1         :       --{  xcsIsEnvironment
 11:48:57.906738     7078.1         :          xcsIsEnvironment[AMQ_SIGCHLD_SIGACTION] =
FALSE
 11:48:57.906755     7078.1         :       --}  xcsIsEnvironment rc=OK
 11:48:57.906771     7078.1         :          AMQ_SIGCHLD_SIGACTION is not set
 11:48:57.906835     7078.1         :       --{  xcsIsEnvironment
 11:48:57.906862     7078.1         :
xcsIsEnvironment[MQS_NO_SYNC_SIGNAL_HANDLING] = FALSE
 11:48:57.906878     7078.1         :       --}  xcsIsEnvironment rc=OK
 11:48:57.907000     7078.1         :          FPE Handler installed, New=7e0b0f38, Old=0
 11:48:57.907035     7078.1         :          SEGV Handler installed, New=7e0b0f38, Old=0
 11:48:57.907063     7078.1         :          BUS Handler installed, New=7e0b0f38, Old=0
 11:48:57.907091     7078.1         :          ILL Handler installed, New=7e0b0f38, Old=0
 11:48:57.907109     7078.1         :          Synchronous Signal Handling Activated
```

Figure 9. Sample IBM MQ for Solaris trace

shows an extract from an IBM MQ for Linux trace:

```
 Timestamp          Process.Thread  Trace Ident  Trace Data
 ============================================================
  11:02:23.643879      1239.1           :              Header.v02:7.0:Linux 2.6.5-7.276-
smp:32:-1:1:GMT
  11:02:23.643970      1239.1           :              Version : 7.0.0.0     Level : p000-L090514
  11:02:23.644025      1239.1           :              UTC   Date : 05/15/09  Time :
10:02:23.643841
  11:02:23.644054      1239.1           :              Local Date : 05/15/09  Time :
11:02:23.643841  GMT
  11:02:23.644308      1239.1           :              PID : 1239 Process : dltmqm (32-bit)
  11:02:23.644324      1239.1           :              Host : hal1
  11:02:23.644334      1239.1           :              Operating System : Linux 2.6.5-7.276-smp
  11:02:23.644344      1239.1           :              Product Long Name : WebSphere MQ for Linux
(x86 platform)
  11:02:23.644353      1239.1           :              --------------------------------
  11:02:23.644363      1239.1           :              xtrNullFd: 3, xihTraceFileNum: 4
  11:02:23.644394      1239.1           :              Thread stack
  11:02:23.644412      1239.1           :              -> InitProcessInitialisation
  11:02:23.644427      1239.1           :          {  InitProcessInitialisation
  11:02:23.644439      1239.1           :          -{  xcsIsEnvironment
  11:02:23.644469      1239.1           :              xcsIsEnvironment[AMQ_NO_CS_RELOAD] = FALSE
  11:02:23.644485      1239.1           :          -}  xcsIsEnvironment rc=OK
  11:02:23.644504      1239.1           :          -{  xcsLoadFunction
  11:02:23.644519      1239.1           :              LibName(libmqmcs_r.so) LoadType(2097200)
  11:02:23.644537      1239.1           :              General, comms, CS, OAM, or WAS
  11:02:23.644558      1239.1           :          --{  xcsQueryValueForSubpool
  11:02:23.644579      1239.1           :          --}  xcsQueryValueForSubpool rc=OK
  11:02:23.644641      1239.1           :              FullPathLibName(/opt/mqm/lib/
libmqmcs_r.so) loaded with dlopen
  11:02:23.644652      1239.1           :          --{  xcsGetMem
  11:02:23.644675      1239.1           :              component:24 function:176 length:8212
options:0 cbmindex:-1 *pointer:0x8065908
  11:02:23.644685      1239.1           :          --}  xcsGetMem rc=OK
  11:02:23.644722      1239.1           :              Handle((nil)) Function((nil))
FullPathLibName(/opt/mqm/lib/libmqmcs_r.so)
  11:02:23.644732      1239.1           :          -}  xcsLoadFunction rc=OK
  11:02:23.644753      1239.1           :              SystemPageSize is 4096.
```

Figure 10. Sample IBM MQ for Linux trace

shows an extract from an IBM MQ for AIX trace:

```
 Timestamp         Process.Thread  Trace Ident  Trace Data
 ===========================================================
  12:06:32.904335   622742.1            :              Header.v02:7.0:AIX 5.3:64:-1:1:GMT
  12:06:32.904427   622742.1            :              Version : 7.0.0.0    Level : p000-L090514
  12:06:32.904540   622742.1            :              UTC   Date : 05/15/09   Time :
 11:06:32.904302
  12:06:32.904594   622742.1            :              Local Date : 05/15/09   Time :
 12:06:32.904302   GMT
  12:06:32.904697   622742.1            :              PID : 622742 Process : dltmqm_nd (64-bit)
  12:06:32.904728   622742.1            :              Host : dynamo
  12:06:32.904755   622742.1            :              Operating System : AIX 5.3
  12:06:32.904781   622742.1            :              Product Long Name : WebSphere MQ for AIX
  12:06:32.904806   622742.1            :              --------------------------------
  12:06:32.904832   622742.1            :              xtrNullFd: 3, xihTraceFileNum: 5
  12:06:32.904916   622742.1            :              Data: 0x00000000
  12:06:32.904952   622742.1            :              Thread stack
  12:06:32.904982   622742.1            :              -> InitProcessInitialisation
  12:06:32.905007   622742.1            :          {   InitProcessInitialisation
  12:06:32.905033   622742.1            :          -{  xcsIsEnvironment
  12:06:32.905062   622742.1            :              xcsIsEnvironment[AMQ_NO_CS_RELOAD] = FALSE
  12:06:32.905088   622742.1            :          -}  xcsIsEnvironment rc=OK
  12:06:32.905117   622742.1            :          -{  xcsLoadFunction
  12:06:32.905145   622742.1            :              LibName(libmqmcs_r.a(shr.o))
 LoadType(2097200)
  12:06:32.905178   622742.1            :              General, comms, CS, OAM, or WAS
  12:06:32.905204   622742.1            :          --{  xcsQueryValueForSubpool
  12:06:32.905282   622742.1            :          --}  xcsQueryValueForSubpool rc=OK
  12:06:32.905504   622742.1            :              FullPathLibName(/usr/mqm/lib64/
 libmqmcs_r.a(shr.o)) loaded with load
  12:06:32.905540   622742.1            :          --{  xcsGetMem
  12:06:32.905575   622742.1            :              component:24 function:176 length:2088
 options:0 cbmindex:-1 *pointer:110011408
  12:06:32.905601   622742.1            :          --}  xcsGetMem rc=OK
  12:06:32.905638   622742.1            :              Handle(0) Function(0)
 FullPathLibName(/usr/mqm/lib64/libmqmcs_r.a(shr.o))
  12:06:32.905665   622742.1            :          -}  xcsLoadFunction rc=OK
```

Figure 11. Sample IBM MQ for AIX trace

Examples of trace output

Use this topic as an example of how to interpret trace output.
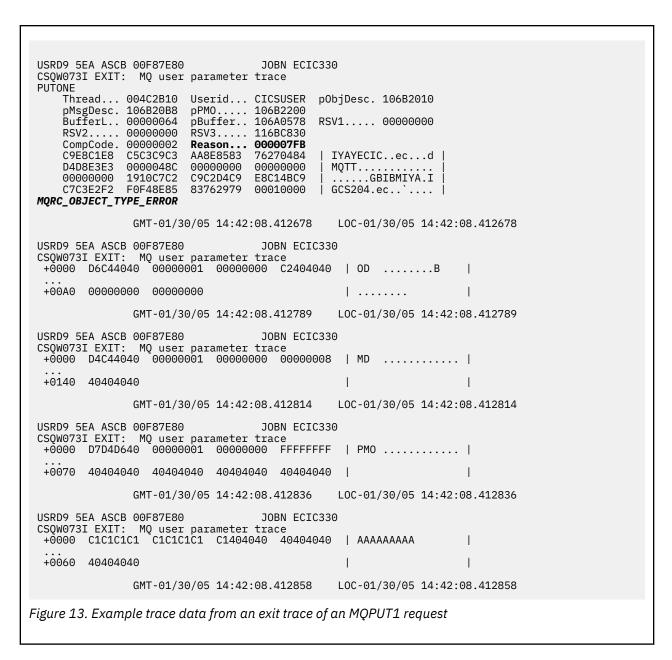
Figure 12 on page 233 shows an example of a trace taken on entry to an MQPUT1 call. The following items have been produced:

- Queue request parameter list
- Object descriptor (MQOD)
- Message descriptor (MQMD)
- Put message options (MQPMO)
- The first 256 bytes of message data

Compare this to Figure 13 on page 234, which illustrates the same control blocks on exit from IBM MQ.

```
USRD9 5E9 ASCB 00F87E80              JOBN ECIC330
CSQW072I ENTRY: MQ user parameter trace
PUTONE
    Thread... 004C2B10  Userid... CICSUSER  pObjDesc. 106B2010
    pMsgDesc. 106B20B8  pPMO..... 106B2200
    BufferL.. 00000064  pBuffer.. 106A0578  RSV1..... 00000000
    RSV2..... 00000000  RSV3..... 116BC830
    C9E8C1E8  C5C3C9C3  AA8E8583  76270484  | IYAYECIC..ec...d |
    D4D8E3E3  0000048C  00000000  00000000  | MQTT............ |
    00000000  1910C7C2  C9C2D4C9  E8C14BC9  | ......GBIBMIYA.I |
    C7C3E2F2  F0F48E85  83762979  00010000  | GCS204.ec..`.... |

             GMT-01/30/05 14:42:08.412320    LOC-01/30/05 14:42:08.412320

USRD9 5E9 ASCB 00F87E80              JOBN ECIC330
CSQW072I ENTRY: MQ user parameter trace
 +0000  D6C44040  00000001  00000000  C2404040  | OD  ........B    |
 +0010  40404040  40404040  40404040  40404040  |                 |
 ...
 +00A0  00000000  00000000                      | ........        |

             GMT-01/30/05 14:42:08.412345    LOC-01/30/05 14:42:08.412345

USRD9 5E9 ASCB 00F87E80              JOBN ECIC330
CSQW072I ENTRY: MQ user parameter trace
 +0000  D4C44040  00000001  00000000  00000008  | MD  ............ |
 ...
 +0130  40404040  40404040  40404040  40404040  |                 |
 +0140  40404040                                |                 |

             GMT-01/30/05 14:42:08.412370    LOC-01/30/05 14:42:08.412370

USRD9 5E9 ASCB 00F87E80              JOBN ECIC330
CSQW072I ENTRY: MQ user parameter trace
 +0000  D7D4D640  00000001  00000000  FFFFFFFF  | PMO ............ |
 ...
 +0070  40404040  40404040  40404040  40404040  |                 |

             GMT-01/30/05 14:42:08.412393    LOC-01/30/05 14:42:08.412393

USRD9 5E9 ASCB 00F87E80              JOBN ECIC330
CSQW072I ENTRY: MQ user parameter trace
 +0000  C1C1C1C1  C1C1C1C1  C1404040  40404040  | AAAAAAAAA       |
 ...
 +0060  40404040                                |                 |

             GMT-01/30/05 14:42:08.412625    LOC-01/30/05 14:42:08.412625
```

Figure 12. Example trace data from an entry trace of an MQPUT1 request

```
USRD9 5EA ASCB 00F87E80              JOBN ECIC330
CSQW073I EXIT:  MQ user parameter trace
PUTONE
    Thread... 004C2B10  Userid... CICSUSER  pObjDesc. 106B2010
    pMsgDesc. 106B20B8  pPMO..... 106B2200
    BufferL.. 00000064  pBuffer.. 106A0578  RSV1..... 00000000
    RSV2..... 00000000  RSV3..... 116BC830
    CompCode. 00000002  Reason... 000007FB
    C9E8C1E8  C5C3C9C3  AA8E8583  76270484  | IYAYECIC..ec...d |
    D4D8E3E3  0000048C  00000000  00000000  | MQTT............ |
    00000000  1910C7C2  C9C2D4C9  E8C14BC9  | ......GBIBMIYA.I |
    C7C3E2F2  F0F48E85  83762979  00010000  | GCS204.ec..`.... |
MQRC_OBJECT_TYPE_ERROR

             GMT-01/30/05 14:42:08.412678    LOC-01/30/05 14:42:08.412678

USRD9 5EA ASCB 00F87E80              JOBN ECIC330
CSQW073I EXIT:  MQ user parameter trace
 +0000  D6C44040  00000001  00000000  C2404040  | OD  ........B    |
 ...
 +00A0  00000000  00000000                       | ........         |

             GMT-01/30/05 14:42:08.412789    LOC-01/30/05 14:42:08.412789

USRD9 5EA ASCB 00F87E80              JOBN ECIC330
CSQW073I EXIT:  MQ user parameter trace
 +0000  D4C44040  00000001  00000000  00000008  | MD  ............ |
 ...
 +0140  40404040                                 |                 |

             GMT-01/30/05 14:42:08.412814    LOC-01/30/05 14:42:08.412814

USRD9 5EA ASCB 00F87E80              JOBN ECIC330
CSQW073I EXIT:  MQ user parameter trace
 +0000  D7D4D640  00000001  00000000  FFFFFFFF  | PMO ............ |
 ...
 +0070  40404040  40404040  40404040  40404040  |                 |

             GMT-01/30/05 14:42:08.412836    LOC-01/30/05 14:42:08.412836

USRD9 5EA ASCB 00F87E80              JOBN ECIC330
CSQW073I EXIT:  MQ user parameter trace
 +0000  C1C1C1C1  C1C1C1C1  C1404040  40404040  | AAAAAAAAA        |
 ...
 +0060  40404040                                 |                 |

             GMT-01/30/05 14:42:08.412858    LOC-01/30/05 14:42:08.412858
```

Figure 13. Example trace data from an exit trace of an MQPUT1 request

Examples of CEDF output

Use this topic as a reference for example CEDF output from MQI calls.

This topic gives examples of the output produced by the CICS execution diagnostic facility (CEDF) when using IBM MQ. The examples show the data produced on entry to and exit from the following MQI calls, in both hexadecimal and character format. Other MQI calls produce similar data.

Example CEDF output for the MQOPEN call

The parameters for this call are:

Parameter	Description
ARG 000	Connection handle
ARG 001	Object descriptor
ARG 002	Options

Parameter	Description
ARG 003	Object handle
ARG 004	Completion code
ARG 005	Reason code

```
   STATUS:  ABOUT TO EXECUTE COMMAND
 CALL TO RESOURCE MANAGER MQM
  001: ARG 000 (X'00000000000000010000000200004044')          AT X'05ECAFD8'
  001: ARG 001 (X'D6C44040000000010000001C3C5C4C6')           AT X'00144910'
  001: ARG 002 (X'00000072000000000000000000000000')          AT X'001445E8'
  001: ARG 003 (X'00000000000000720000000000000000')          AT X'001445E4'
  001: ARG 004 (X'00000000000000000000000000000000')          AT X'001445EC'
  001: ARG 005 (X'00000000000000000000000000000000')          AT X'001445F0'
```

Figure 14. Example CEDF output on entry to an MQOPEN call (hexadecimal)

```
 STATUS:  COMMAND EXECUTION COMPLETE
 CALL TO RESOURCE MANAGER MQM
  001: ARG 000 (X'00000000000000010000000200004044')          AT X'05ECAFD8'
  001: ARG 001 (X'D6C44040000000010000001C3C5C4C6')           AT X'00144910'
  001: ARG 002 (X'00000072000000000000000000000000')          AT X'001445E8'
  001: ARG 003 (X'00000001000000720000000000000000')          AT X'001445E4'
  001: ARG 004 (X'00000000000000000000000000000000')          AT X'001445EC'
  001: ARG 005 (X'00000000000000000000000000000000')          AT X'001445F0'
```

Figure 15. Example CEDF output on exit from an MQOPEN call (hexadecimal)

```
   STATUS:  ABOUT TO EXECUTE COMMAND
   CALL TO RESOURCE MANAGER MQM
    001: ARG 000 ('.............. .')
    001: ARG 001 ('OD  ........CEDF')
    001: ARG 002 ('................')
    001: ARG 003 ('................')
    001: ARG 004 ('................')
    001: ARG 005 ('................')
```

Figure 16. Example CEDF output on entry to an MQOPEN call (character)

```
   STATUS:  COMMAND EXECUTION COMPLETE
   CALL TO RESOURCE MANAGER MQM
    001: ARG 000 ('.............. .')
    001: ARG 001 ('OD  ........CEDF')
    001: ARG 002 ('................')
    001: ARG 003 ('................')
    001: ARG 004 ('................')
    001: ARG 005 ('................')
```

Figure 17. Example CEDF output on exit from an MQOPEN call (character)

Example CEDF output for the MQCLOSE call

The parameters for this call are:

Parameter	Description
ARG 000	Connection handle
ARG 001	Object handle
ARG 002	Options
ARG 003	Completion code
ARG 004	Reason code

```
STATUS:   ABOUT TO EXECUTE COMMAND
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 (X'00000000000000010000007200000000')          AT X'001445E0'
 001: ARG 001 (X'00000001000000720000000000000000')          AT X'001445E4'
 001: ARG 002 (X'00000000000000010000000200004044')          AT X'05ECAFD8'
 001: ARG 003 (X'00000000000000000000000800000008')          AT X'001445EC'
 001: ARG 004 (X'00000000000000080000000800000060')          AT X'001445F0'
```
Figure 18. Example CEDF output on entry to an MQCLOSE call (hexadecimal)

```
STATUS:   COMMAND EXECUTION COMPLETE
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 (X'00000000000000000000007200000000')          AT X'001445E0'
 001: ARG 001 (X'00000000000000720000000000000000')          AT X'001445E4'
 001: ARG 002 (X'00000000000000010000000200004044')          AT X'05ECAFD8'
 001: ARG 003 (X'00000000000000000000000800000008')          AT X'001445EC'
 001: ARG 004 (X'00000000000000080000000800000060')          AT X'001445F0'
```
Figure 19. Example CEDF output on exit from an MQCLOSE call (hexadecimal)

```
STATUS:   ABOUT TO EXECUTE COMMAND
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 ('................')
 001: ARG 001 ('................')
 001: ARG 002 ('.............. .')
 001: ARG 003 ('................')
 001: ARG 004 ('...............-')
```
Figure 20. Example CEDF output on entry to an MQCLOSE call (character)

```
STATUS:   COMMAND EXECUTION COMPLETE
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 ('................')
 001: ARG 001 ('................')
 001: ARG 002 ('.............. .')
 001: ARG 003 ('................')
 001: ARG 004 ('...............-')
```
Figure 21. Example CEDF output on exit from an MQCLOSE call (character)

Example CEDF output for the MQPUT call

The parameters for this call are:

Parameter	Description
ARG 000	Connection handle
ARG 001	Object handle
ARG 002	Message descriptor
ARG 003	Put message options
ARG 004	Buffer length
ARG 005	Message data
ARG 006	Completion code
ARG 007	Reason code

```
STATUS:  ABOUT TO EXECUTE COMMAND
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 (X'0000000000000001000000720000000000')          AT X'001445E0'
 001: ARG 001 (X'0000000100000072000000000000000000')          AT X'001445E4'
 001: ARG 002 (X'D4C4404000000001000000000000000008')          AT X'001449B8'
 001: ARG 003 (X'D7D4D640000000010000002400000000')            AT X'00144B48'
 001: ARG 004 (X'00000008000000000000000000040000')            AT X'001445F4'
 001: ARG 005 (X'5C5CC8C5D3D3D640E6D6D9D3C45C5C5C')             AT X'00144BF8'
 001: ARG 006 (X'0000000000000000000000800000000')             AT X'001445EC'
 001: ARG 007 (X'0000000000000008000000000000000')             AT X'001445F0'
```

Figure 22. Example CEDF output on entry to an MQPUT call (hexadecimal)

```
STATUS:  COMMAND EXECUTION COMPLETE
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 (X'0000000000000001000000720000000000')          AT X'001445E0'
 001: ARG 001 (X'0000000100000072000000000000000000')          AT X'001445E4'
 001: ARG 002 (X'D4C4404000000001000000000000000008')          AT X'001449B8'
 001: ARG 003 (X'D7D4D640000000010000002400000000')            AT X'00144B48'
 001: ARG 004 (X'00000008000000000000000000040000')            AT X'001445F4'
 001: ARG 005 (X'5C5CC8C5D3D3D640E6D6D9D3C45C5C5C')             AT X'00144BF8'
 001: ARG 006 (X'0000000000000000000000800000000')             AT X'001445EC'
 001: ARG 007 (X'0000000000000008000000000000000')             AT X'001445F0'
```

Figure 23. Example CEDF output on exit from an MQPUT call (hexadecimal)

```
STATUS:  ABOUT TO EXECUTE COMMAND
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 ('................')
 001: ARG 001 ('................')
 001: ARG 002 ('MD  ............')
 001: ARG 003 ('PMO ............')
 001: ARG 004 ('................')
 001: ARG 005 ('**HELLO WORLD***')
 001: ARG 006 ('................')
 001: ARG 007 ('................')
```

Figure 24. Example CEDF output on entry to an MQPUT call (character)

```
STATUS:  COMMAND EXECUTION COMPLETE
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 ('................')
 001: ARG 001 ('................')
 001: ARG 002 ('MD  ............')
 001: ARG 003 ('PMO ............')
 001: ARG 004 ('................')
 001: ARG 005 ('**HELLO WORLD***')
 001: ARG 006 ('................')
 001: ARG 007 ('................')
```

Figure 25. Example CEDF output on exit from an MQPUT call (character)

Example CEDF output for the MQPUT1 call

The parameters for this call are:

Parameter	Description
ARG 000	Connection handle
ARG 001	Object descriptor
ARG 002	Message descriptor
ARG 003	Put message options
ARG 004	Buffer length
ARG 005	Message data
ARG 006	Completion code
ARG 007	Reason code

```
STATUS:  ABOUT TO EXECUTE COMMAND
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 (X'00000000000000000000007200000000')        AT X'001445E0'
 001: ARG 001 (X'D6C4404000000001000000001C3C5C4C6')       AT X'00144910'
 001: ARG 002 (X'D4C4404000000001000000000000000008')      AT X'001449B8'
 001: ARG 003 (X'D7D4D64000000001000000 2400000000')       AT X'00144B48'
 001: ARG 004 (X'00000008000000080000006000040000')        AT X'001445F4'
 001: ARG 005 (X'5C5CC8C5D3D3D640E6D6D9D3C45C5C5C')         AT X'00144BF8'
 001: ARG 006 (X'00000000000000000000000800000008')        AT X'001445EC'
 001: ARG 007 (X'00000000000000080000000800000060')        AT X'001445F0'
```

Figure 26. Example CEDF output on entry to an MQPUT1 call (hexadecimal)

```
 STATUS:   COMMAND EXECUTION COMPLETE
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 (X'00000000000000000000007200000000')            AT X'001445E0'
 001: ARG 001 (X'D6C44040000000100000001C3C5C4C6')            AT X'00144910'
 001: ARG 002 (X'D4C44040000000100000000000000008')            AT X'001449B8'
 001: ARG 003 (X'D7D4D640000000100000002400000000')            AT X'00144B48'
 001: ARG 004 (X'00000008000000080000006000040000')            AT X'001445F4'
 001: ARG 005 (X'5C5CC8C5D3D3D640E6D6D9D3C45C5C5C')            AT X'00144BF8'
 001: ARG 006 (X'00000000000000000000000800000008')            AT X'001445EC'
 001: ARG 007 (X'00000000000000080000000800000060')            AT X'001445F0'
```

Figure 27. Example CEDF output on exit from an MQPUT1 call (hexadecimal)

```
 STATUS:   ABOUT TO EXECUTE COMMAND
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 ('................')
 001: ARG 001 ('OD  ........CEDF')
 001: ARG 002 ('MD  ............')
 001: ARG 003 ('PMO ............')
 001: ARG 004 ('...........-....')
 001: ARG 005 ('**HELLO WORLD***')
 001: ARG 006 ('................')
 001: ARG 007 ('...............-')
```

Figure 28. Example CEDF output on entry to an MQPUT1 call (character)

```
 STATUS:   COMMAND EXECUTION COMPLETE
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 ('................')
 001: ARG 001 ('OD  ........CEDF')
 001: ARG 002 ('MD  ............')
 001: ARG 003 ('PMO ............')
 001: ARG 004 ('...........-....')
 001: ARG 005 ('**HELLO WORLD***')
 001: ARG 006 ('................')
 001: ARG 007 ('...............-')
```

Figure 29. Example CEDF output on exit from an MQPUT1 call (character)

Example CEDF output for the MQGET call

The parameters for this call are:

Parameter	Description
ARG 000	Connection handle
ARG 001	Object handle
ARG 002	Message descriptor
ARG 003	Get message options
ARG 004	Buffer length
ARG 005	Message buffer
ARG 006	Message length
ARG 007	Completion code

Parameter	Description
ARG 008	Reason code

```
 STATUS:   ABOUT TO EXECUTE COMMAND
 CALL TO RESOURCE MANAGER MQM
  001: ARG 000 (X'00000000000000010000007200000000')         AT X'001445E0'
  001: ARG 001 (X'00000001000000720000000000000000')         AT X'001445E4'
  001: ARG 002 (X'D4C440400000000100000000000000000')        AT X'001449B8'
  001: ARG 003 (X'C7D4D640000000000100004044FFFFFFFF')        AT X'00144B00'
  001: ARG 004 (X'00000008000000000000000000040000')         AT X'001445F4'
  001: ARG 005 (X'00000000000000000000000000000000')         AT X'00144C00'
  001: ARG 006 (X'00000000000000000004000000000000')         AT X'001445F8'
  001: ARG 007 (X'00000000000000000000000800000000')         AT X'001445EC'
  001: ARG 008 (X'00000000000000080000000000000000')         AT X'001445F0'
```

Figure 30. Example CEDF output on entry to an MQGET call (hexadecimal)

```
 STATUS:   COMMAND EXECUTION COMPLETE
 CALL TO RESOURCE MANAGER MQM
  001: ARG 000 (X'00000000000000010000007200000000')         AT X'001445E0'
  001: ARG 001 (X'00000001000000720000000000000000')         AT X'001445E4'
  001: ARG 002 (X'D4C440400000000100000000000000008')        AT X'001449B8'
  001: ARG 003 (X'C7D4D640000000000100004044FFFFFFFF')        AT X'00144B00'
  001: ARG 004 (X'00000008000000080000000000040000')         AT X'001445F4'
  001: ARG 005 (X'5C5CC8C5D3D3D640E6D6D9D3C45C5C5C')          AT X'00144C00'
  001: ARG 006 (X'00000008000000000004000000000000')         AT X'001445F8'
  001: ARG 007 (X'00000000000000000000000800000008')         AT X'001445EC'
  001: ARG 008 (X'00000000000000080000000800000000')         AT X'001445F0'
```

Figure 31. Example CEDF output on exit from an MQGET call (hexadecimal)

```
 STATUS:   ABOUT TO EXECUTE COMMAND
 CALL TO RESOURCE MANAGER MQM
  001: ARG 000 ('................')
  001: ARG 001 ('................')
  001: ARG 002 ('MD    ..........')
  001: ARG 003 ('GMO ...... .....')
  001: ARG 004 ('................')
  001: ARG 005 ('................')
  001: ARG 006 ('................')
  001: ARG 007 ('................')
  001: ARG 008 ('................')
```

Figure 32. Example CEDF output on entry to an MQGET call (character)

```
 STATUS:  COMMAND EXECUTION COMPLETE
 CALL TO RESOURCE MANAGER MQM
  001: ARG 000 ('................')
  001: ARG 001 ('................')
  001: ARG 002 ('MD  ............')
  001: ARG 003 ('GMO ...... .....')
  001: ARG 004 ('................')
  001: ARG 005 ('**HELLO WORLD***')
  001: ARG 006 ('................')
  001: ARG 007 ('................')
  001: ARG 008 ('...............')
```

Figure 33. Example CEDF output on exit from an MQGET call (character)

Example CEDF output for the MQINQ call

The parameters for this call are:

Parameter	Description
ARG 000	Connection handle
ARG 001	Object handle
ARG 002	Count of selectors
ARG 003	Array of attribute selectors
ARG 004	Count of integer attributes
ARG 005	Integer attributes
ARG 006	Length of character attributes buffer
ARG 007	Character attributes
ARG 008	Completion code
ARG 009	Reason code

```
 STATUS:  ABOUT TO EXECUTE COMMAND
 CALL TO RESOURCE MANAGER MQM
  001: ARG 000 (X'000000000000000010000000200004044')         AT X'05ECAFCC'
  001: ARG 001 (X'00000001000000720000000000000000')          AT X'001445E4'
  001: ARG 002 (X'000000020000404485ECA00885ECA220')          AT X'05ECAFD4'
  001: ARG 003 (X'0000000D0000000C0000000000000000')          AT X'00144C08'
  001: ARG 004 (X'00000002000040448SECA00885ECA220')          AT X'05ECAFD4'
  001: ARG 005 (X'00000000000000000000000000000000')          AT X'00144C10'
  001: ARG 006 (X'000000000000000010000000200004044')         AT X'05ECAFCC'
  001: ARG 007 (X'00000000000000000000000000000000')          AT X'00144C18'
  001: ARG 008 (X'00000000000000000000000800000008')          AT X'001445EC'
  001: ARG 009 (X'00000000000000080000000800040000')          AT X'001445F0'
```

Figure 34. Example CEDF output on entry to an MQINQ call (hexadecimal)

```
STATUS:   COMMAND EXECUTION COMPLETE
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 (X'00000000000000010000000200004044')          AT X'05ECAFCC'
 001: ARG 001 (X'00000001000000720000000000000000')          AT X'001445E4'
 001: ARG 002 (X'000000020000404485ECA00885ECA220')          AT X'05ECAFD4'
 001: ARG 003 (X'0000000D0000000C0040000000000000')          AT X'00144C08'
 001: ARG 004 (X'000000020000404485ECA00885ECA220')          AT X'05ECAFD4'
 001: ARG 005 (X'00400000000000000000000000000000')          AT X'00144C10'
 001: ARG 006 (X'00000000000000010000000200004044')          AT X'05ECAFCC'
 001: ARG 007 (X'00000000000000000000000000000000')          AT X'00144C18'
 001: ARG 008 (X'00000000000000000000000800000008')          AT X'001445EC'
 001: ARG 009 (X'00000000000000080000000800040000')          AT X'001445F0'
```

Figure 35. Example CEDF output on exit from an MQINQ call (hexadecimal)

```
STATUS:   ABOUT TO EXECUTE COMMAND
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 ('.............. .')
 001: ARG 001 ('................')
 001: ARG 002 ('...... .e...e.s.')
 001: ARG 003 ('................')
 001: ARG 004 ('...... .e...e.s.')
 001: ARG 005 ('................')
 001: ARG 006 ('.............. .')
 001: ARG 007 ('................')
 001: ARG 008 ('................')
 001: ARG 009 ('................')
```

Figure 36. Example CEDF output on entry to an MQINQ call (character)

```
STATUS:   COMMAND EXECUTION COMPLETE
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 ('.............. .')
 001: ARG 001 ('................')
 001: ARG 002 ('...... .e...e.s.')
 001: ARG 003 ('......... ......')
 001: ARG 004 ('...... .e...e.s.')
 001: ARG 005 ('. ..............')
 001: ARG 006 ('.............. .')
 001: ARG 007 ('................')
 001: ARG 008 ('................')
 001: ARG 009 ('................')
```

Figure 37. Example CEDF output on exit from an MQINQ call (character)

Example CEDF output for the MQSET call

The parameters for this call are:

Parameter	Description
ARG 000	Connection handle
ARG 001	Object handle
ARG 002	Count of selectors
ARG 003	Array of attribute selectors
ARG 004	Count of integer attributes

Parameter	Description
ARG 005	Integer attributes
ARG 006	Length of character attributes buffer
ARG 007	Character attributes
ARG 008	Completion code
ARG 009	Reason code

```
STATUS:  ABOUT TO EXECUTE COMMAND
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 (X'00000000000000010000007200000000')          AT X'001445E0'
 001: ARG 001 (X'00000001000000720000000000000000')          AT X'001445E4'
 001: ARG 002 (X'00000001000000020000404485ECA008')          AT X'05ECAFDC'
 001: ARG 003 (X'00000018000007DF0000000000000000')          AT X'00144C08'
 001: ARG 004 (X'00000001000000020000404485ECA008')          AT X'05ECAFDC'
 001: ARG 005 (X'00000000000000000000000000000000')          AT X'00144C10'
 001: ARG 006 (X'00000000000000010000000200004044')          AT X'05ECAFD8'
 001: ARG 007 (X'00000000000000000000000000000000')          AT X'00144C18'
 001: ARG 008 (X'00000000000000000000000800000008')          AT X'001445EC'
 001: ARG 009 (X'00000000000000080000000800000060')          AT X'001445F0'
```

Figure 38. Example CEDF output on entry to an MQSET call (hexadecimal)

```
STATUS:  COMMAND EXECUTION COMPLETE
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 (X'00000000000000010000007200000000')          AT X'001445E0'
 001: ARG 001 (X'00000001000000720000000000000000')          AT X'001445E4'
 001: ARG 002 (X'00000001000000020000404485ECA008')          AT X'05ECAFDC'
 001: ARG 003 (X'00000018000007DF0000000000000000')          AT X'00144C08'
 001: ARG 004 (X'00000001000000020000404485ECA008')          AT X'05ECAFDC'
 001: ARG 005 (X'00000000000000000000000000000000')          AT X'00144C10'
 001: ARG 006 (X'00000000000000010000000200004044')          AT X'05ECAFD8'
 001: ARG 007 (X'00000000000000000000000000000000')          AT X'00144C18'
 001: ARG 008 (X'00000000000000000000000800000008')          AT X'001445EC'
 001: ARG 009 (X'00000000000000080000000800000060')          AT X'001445F0'
```

Figure 39. Example CEDF output on exit from an MQSET call (hexadecimal)

```
STATUS:  ABOUT TO EXECUTE COMMAND
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 ('................')
 001: ARG 001 ('................')
 001: ARG 002 ('..........  .e...')
 001: ARG 003 ('................')
 001: ARG 004 ('..........  .e...')
 001: ARG 005 ('................')
 001: ARG 006 ('..............  .')
 001: ARG 007 ('................')
 001: ARG 008 ('................')
 001: ARG 009 ('...............-')
```

Figure 40. Example CEDF output on entry to an MQSET call (character)

```
STATUS:   COMMAND EXECUTION COMPLETE
CALL TO RESOURCE MANAGER MQM
 001: ARG 000 ('................')
 001: ARG 001 ('................')
 001: ARG 002 ('..........  .e...')
 001: ARG 003 ('................')
 001: ARG 004 ('..........  .e...')
 001: ARG 005 ('................')
 001: ARG 006 ('.............  .')
 001: ARG 007 ('................')
 001: ARG 008 ('................')
 001: ARG 009 ('..............-')
```

Figure 41. Example CEDF output on exit from an MQSET call (character)

`z/OS` Return code 00000461 for TCP/IP

There is a channel failure, and you receive the following: CSQX208E TRPTYPE=TCP RC=00000461, or CSQX208E TRPTYPE=TCP RC=00000461 reason=76650446.

Cause

Return code 10054 or RC 461 means the connection is reset by peer (ECONNRESET). This return code is often the results of a problem in the TCP/IP network. There are various reasons for TCP/IP sending a reset:

- An unorderly connection termination, such as a rebooting the client box, can cause a reset.
- An application requests a connect to a port and IP address on which no server is listening.
- An application closes a socket with data still in the application receive buffer. The connection is reset to allow the remote partner to know that the data was not delivered.
- Any data that arrives for a connection that has been closed can cause a reset.
- An application closes a socket and sets the linger socket option to zero. This notifies TCP/IP that the connection should not linger.

  Note: IBM MQ does not code the linger time = 0, therefore IBM MQ itself does not cause a reset.

- A TCP segment that is not valid arrives for a connection. For example, a bad acknowledge or sequence number can cause a reset.
- The connect request times out. TCP stops trying to connect to a particular port and IP address and reset the connection.
- A firewall can reset connections if the packet does not adhere to the firewall rules and policies. For example, a source or destination port, or IP address does not match the firewall rule or policy.
- The retransmit timer expires. TCP stops trying to retransmit a packet and reset the connection.
- A bad hardware device can cause resets.

You need to be aware that the effect of your configuration at higher levels, for example, the channel initiator dispatching priority being too low, could exhibit itself as a reset. Therefore, you should also consider the effect of your configuration when trying to determine why a reset is happening.

Diagnosing the problem

Use TCP/IP packet traces to determine why the reset occurred.

See z/OS UNIX reason codes for the last two bytes of the reason code found in the CSQX208E error message.

Messages

You can use the following messages to help you solve problems with your IBM MQ components or applications.

IBM MQ AMQ messages

IBM MQ diagnostic messages (for platforms other than z/OS) are listed in this section in numerical order, grouped according to the part of IBM MQ from which they originate.

Note: If a message is specific to a single platform, this is indicated after the message identifier. Although some messages are listed several times, each instance relates to a different platform. If present, the version common to a number of platforms is listed first, followed by versions for individual platforms. Ensure that you read the appropriate version.

For details of these messages, see IBM Documentation:

- AMQ3xxx: Utilities and tools
- AMQ4xxx: User interface messages (Windows and Linux systems)
- AMQ5xxx: Installable services
- AMQ6xxx: Common services
- AMQ7xxx: IBM MQ product
- AMQ8xxx: Administration
- AMQ9xxx: Remote

Reading a message

The following information is provided for each message:

Message identifier
The message identifier is in two parts:

1. The characters "AMQ", which identify the message as being from IBM MQ
2. A four-digit decimal code

Message text
A summary of the message

Severity

0: Informational
10: Warning
20: Error
30: Error
40: Severe
50: Terminating

Explanation
An explanation of the message giving further information.

Response
The response required from the user. In some cases, particularly for information messages, this might be "none".

Message variables

Some messages display text or numbers that vary according to the circumstances giving rise to the message; these are known as *message variables*. The message variables are indicated as <insert_1>, <insert_2>, and so on.

In some cases a message might have variables in the Explanation or Response. Find the values of the message variables by looking in the error log. The complete message, including the Explanation and the Response, is recorded there.

Related concepts

"IBM MQ for z/OS messages, completion, and reason codes" on page 256
Use this topic to interpret and understand the messages and codes issued by IBM MQ for z/OS.

Related information

API completion and reason codes
PCF reason codes
Secure Sockets Layer (SSL) return codes
WCF custom channel exceptions

AMQXR Messages

AMQCO1001E

MQXR service unexpectedly caught communications exception={0}(Exception).

Explanation

An exception was caught by the Communications Manager and it was not able to take a reasonable action in response to the exception.

User action

Investigate and resolve the cause of the underlying exception.

AMQCO1002E

A selection key={0} was found in an unexpected state.

Explanation

A selection key was found in a state that was not expected.

User action

Contact your IBM support center.

AMQCO1003E

Connection={0}(Connection) has insufficient data available to satisfy a get request.

Explanation

The application tried to read more data than is immediately available. After the application has processed the information available to it, it should release control and wait to be called again when more data is available.

User action

Change the application to handle this exception, or use Connection.available() before the get() method is called in order to determine if the get() will succeed.

AMQCO1004E

Connection Close error: {0}.

Explanation

An error occurred when a connection was closed. The session might not have completed normally.

User action

Check that the session completed normally.

AMQCO1005E

SSL key repository file invalid or not found for channel ''{1}''. The following exception was thrown: {0}

Explanation

The SSL key repository file specified for the channel is not valid.

User action

Check the validity of the specified SSL key repository file.

AMQCO1006I

Channel ''{0}'' has stopped.

Explanation

The channel has stopped. No further communication with clients will occur on this channel.

User action

No action is required.

AMQCO1007E

Connection ''{0}'' did not send or receive data for ''{1}'' milliseconds and has been closed.

Explanation

The application set the idle timer on the connection to {1} milliseconds, but did not send or receive any data within this time, so the connection was closed.

User action

Determine why the connection did not send or receive data and if appropriate set the idleTimer to a longer value.

AMQCO1008E

An SSL Handshake error occurred when a client at ''{1}'' attempted to connect to channel ''{0}'': {2}.

Explanation

An error occurred when performing an SSL handshake with a client application. This is often because the client is presenting certificates that the MQXR service does not trust.

User action

Use the information in the exception to diagnose and fix the problem.

AMQCO1009E

An invalid Key Store name=''{1}'' was specified.

Explanation

The key store name or the pass phrase specified is not valid.

User action

Specify a valid key store file name and password.

AMQCO1010E

An SSL Exception occurred when a client at ''{1}'' attempted to connect to channel ''{0}'': {2}.

Explanation

An error occurred when performing an SSL operation with a client application.

User action

Use the information in the exception to diagnose and fix the problem.

AMQCO2001E

An error (probe: {0}) occurred and a Failure Data Capture (FDC) file has been written.

Explanation

A problem was detected and a FDC file was written to aid diagnostics.

User action

Look at the FDC file and attempt to resolve the problem. If the problem cannot be resolved, contact your IBM support center.

AMQCO2002I

Trace is disabled.

Explanation

Tracing the MQXR Service (used in order to diagnose problems) is not currently running.

User action

No action is required.

AMQCO2003I

Trace is enabled.

Explanation

Tracing the MQXR Service (used in order to diagnose problems) is currently running.

User action

No action is required.

AMQCO2004I

''{0}'' instances of message ''{1}'' were suppressed.

Explanation

The number {0} of message identifier ''{1}'' were suppressed from the log since the last message with this identifier was written.

User action

No additional action is required beyond that for the suppressed message.

AMQCO9999E

{0}

Explanation

If the message does not give sufficient information, check previous messages for further help.

User action

See previous messages for further information.

AMQHT1001E

Invalid text={0}(String) was found in an HTTP request or response.

Explanation

An HTTP request or response contained unexpected data not described in "http://www.w3.org/pub/WWW/Protocols/".

User action

Check that the originator or source of the HTTP request or response is producing valid requests or responses.

AMQHT1002E

HTTP header text={0}(String) was invalid.

Explanation

An HTTP request or response contained unexpected text.

User action

Check that the originator or source of the HTTP request or response is producing valid requests or responses.

AMQHT1003E

Invalid text at location={0} in string={1}(String).

Explanation

A Java Script Object Notation (JSON) string contained unexpected data not described in "http://www.json.org/".

User action

Check that the originator or JSON is producing valid data.

AMQHT2001E

WebSocket Close, status code= {0}

Explanation

The websocket was closed by the remote end.

User action

Examine the Websocket status code and determine why the Websocket was closed if this was not expected.

AMQHT9999E

{0}

Explanation

If the message does not give sufficient information, check previous messages for further help.

User action

See previous messages for further information.

AMQXR0001I

Client {0} disconnected normally.

Explanation

An MQTT disconnect flow was received and processed.

User action

None.

AMQXR0002E

On channel {2}, a throwable {1} resulted when the MQXR service received a message from an MQTT client {0}.

Explanation

Bad data was received from a network connection and could not be processed, the connection is closed by the server.

User action

Determine why the client sent the uninterpretable data.

AMQXR0003I

MQXR JAAS {0} : {1}.

Explanation

The JAAS callback in the MQXR service requested that the message is displayed to the user.

User action

Determine the cause of the security problem described in the text of the message issued by JAAS.

AMQXR0004E

MQSeries verb={0}(String) returned cc={1}(int) {2} rc={3}(int) {4}.

Explanation

A WebSphere MQ verb returned an unexpected reason and completion code.

User action

Look up the reason code to determine what caused the error.

AMQXR0005I

Running {0} version {1}.

Explanation

The command is running.

User action

None.

AMQXR0006E

Invalid argument {0} Usage: runMQXRService -m <queueManagerName> -d <Qmgr Data Directory> -g <MQ Global Data directory>

Explanation

The runMQXRService command arguments are incorrect.

User action

Correct the command.

AMQXR0007E

Invalid argument {0} Usage: endMQXRService -m <queueManagerName> -d <Qmgr Data Directory> -g <MQ Global Data directory>

Explanation

The endMQXRService command arguments are incorrect.

User action

Correct the command.

AMQXR0008E

Exception during start of MQXR service: {0}

Explanation

The MQXR service was starting but encountered a problem. Previous errors or FDCs will provide more detail.

User action
Use previous errors or FDCs to diagnose and address the problem then restart the MQXR service.

AMQXR0009E
Exception during shutdown of MQXR service: {0}

Explanation
The MQXR service was shutting down but encountered a problem. Previous errors or FDCs will provide more detail.

User action
Use previous errors or FDCs to diagnose and address the problem.

AMQXR0010E
An invalid ClientIdentifier {0} was received from ''{1}'' in an MQTT CONNECT packet on channel {2}.

Explanation
The MQXR service received a ClientIdentifier that is not valid because it contains too few, or too many characters, or the characters are not valid in a queue manager name.

User action
Change the ClientIdentifier to use valid characters.

AMQXR0011E
An error occurred during a publish on topic ''{3}'' from ClientIdentifier ''{0}'' UserName ''{1}'' on channel ''{2}''. A reason code of ''{5}'' ''{6}'' was received during an ''{4}'' operation.

Explanation
The publication from the client was not able to be completed

User action
Using the reason code, diagnose the cause of the problem, alter the configuration (of the client or the server as appropriate) and then retry the publish.

AMQXR0012E
An error occurred whilst subscribing on topic(s) ''{3}'' for ClientIdentifier ''{0}'' userNamer ''{1}''on channel ''{2}''. A reason code of ''{5}'' ''{6}'' was received during an ''{4}'' operation.

Explanation
The subscription from the client was not able to be completed

User action
Using the reason code, diagnose the cause of the problem, alter the configuration (of the client or the server as appropriate) and then reconnect the client and retry the subscription.

AMQXR0013E
Error starting channel ''{0}'' (on host: ''{1}'' and port ''{2}''). The exception was ''{3}''.

Explanation
The service was unable to listen for connections on the specified port

User action
Use the exception to diagnose and rectify the problem then restart the affected channel.

AMQXR0014E
Error starting channel ''{0}''. See earlier errors or FDCs for more details.

Explanation
The service was unable to listen for connections on the specified port because of problems that have been reported in earlier errors or FDCs.

User action
Use the preceding errors or FDCs to diagnose and rectify the problem then restart the affected channel.

AMQXR0015I
MQXR Service started successfully ({0} channels running, {1} channels stopped)

Explanation
The MQXR service has completed the processing that occurs on startup

User action

No action is required.

AMQXR0016I

Channel ''{0}'' has started

Explanation

This channel is now available for client connections

User action

No action is required

AMQXR0017I

A new channel (called ''{0}'') has been created

Explanation

In response to a request from a user, a new channel has been created

User action

No action is required

AMQXR0018I

Channel ''{0}'' has been altered

Explanation

In response to a request from a user, some settings on the channel were changed. Some settings do not take effect until the channel is restarted.

User action

No action is required

AMQXR0019I

Channel ''{0}'' has been deleted

Explanation

In response to a request from a user, a new channel has been deleted

User action

No action is required

AMQXR0020I

Channel ''{0}'' has been purged

Explanation

Clients have been disconnected from this channel and state associated with them has been removed

User action

No action is required

AMQXR0021W

Client ''{0}'' at network address ''{1}'' disconnected abnormally with exception ''{2}''.

Explanation

An MQTT client was disconnected from the network for the reason shown by the exception.

User action

Look into the exception cause to determine if action is required.

AMQXR0022I

Client ''{0}'' previously connected at network address ''{1}'' now connected at ''{2}''.

Explanation

A new connection has been made for the client taking over from an existing one.

User action

None, if this was intentional.

AMQXR0023I

Unsupported MQTT protocol version on channel {1}, the exception {0} was thrown.

Explanation

An MQTT client attempted to connect using an unsupported protocol version, the connection is closed by the server.

User action

Reconfigure the client to use a supported protocol version.

AMQXR0024I

A Telemetry Daemon for devices attempted to connect using its private protocol on channel {1}, the exception {0} was thrown.

Explanation

The Telemetry daemon for devices has a private protocol for communication. This protocol is not supported and the connection has been closed by the server.

User action

No user action is required, the daemon should reconnect with a supported protocol. To remove this message, reconfigure the Telemetry daemon for devices to not use the private protocol for this connection.

AMQXR0030W

Invalid Will Message from ClientIdentifier ''{0}''

Explanation

The Will Message in the Connect packet is malformed, the client connection is closed by the server.

User action

Check the client application and make sure the will message has a non zero length topic name, and a valid Qos.

AMQXR1001E

MQTTV3Exception message={0}(String).

Explanation

An instance of com.ibm.mqttv3.internal.MQTTException has been caught and wrapped.

User action

Contact your IBM support center.

AMQXR1002E

MQTTV5Exception message={0}(String).

Explanation

An instance of com.ibm.mqtt.encoding.internal.MQTTException has been caught and wrapped.

User action

Contact your IBM support center.

AMQXR1003E

An invalid message type={0}(byte) was received.

Explanation

An invalid MQTT message type was received. The connection is disconnected.

User action

The client connected to the MQXR service is sending invalid MQTT messages. \ Find out what client has connected to the MQXR service and what data it has sent. Contact the provider of the client code. If you are using a client provided in the WebSphere MQ installation, \ contact your IBM support center.

AMQXR1004E

An invalid message version={0}(byte) subVersion={1}(byte) was received.

Explanation

An invalid MQTT message version was received. The connection is disconnected.

User action

The client connected to the MQXR service is sending invalid MQTT messages. Find out what client has connected to the MQXR service and what data it has sent. Contact the provider of the client code. If you are using a client provided in the WebSphere MQ installation, contact your IBM support center.

AMQXR1005E

An invalid message message={0}(Hex) was received.

Explanation

An invalid MQTT message was received. The connection is disconnected.

User action

The client connected to the MQXR service is sending invalid MQTT messages. Find out what client has connected to the MQXR service and what data it has sent. Contact the provider of the client code. If you are using a client provided in the WebSphere MQ installation, contact your IBM support center.

AMQXR10006E

An MQTT message with an invalid MultiByteLength={0}(long) was received.

Explanation

An invalid MQTT message containing an invalid multi-byte length was received. The connection is disconnected.

User action

The MQTT client application might have sent incorrect data, which is interpreted as an incorrect length. Check your MQTT client application, and verify that it is sending correct data. Contact the provider of the client code. If you are using a client provided in the WebSphere MQ installation, contact your IBM support center.

AMQXR1007E

An invalid Attribute type={0}(int) was found.

Explanation

An invalid MQTT attribute was found processing of this message is abandoned and the connection closed.

User action

Gather diagnostics and contact your IBM support center.

AMQXR1008E

An invalid mapped message was detected because of {0}(String).

Explanation

An invalid Mapped message was found, it cannot be processed.

User action

Determine where the message came from and correct the messages so that they are not mapped messages or are created with the correct format.

AMQXR1009E

An invalid WebSocket message was detected because of {0}(String).

Explanation

An invalid WebSocket message was found, it cannot be processed.

User action

Determine where the message came from and correct the messages so that they are correctly formed.

AMQXR1010E

An invalid message qos={0}(int) was received.

Explanation

An invalid MQTT qos was received.

User action

The client connected to the MQXR service is sending invalid MQTT messages. Find out what client has connected to the MQXR service and what data it has sent. Contact the provider of the client code. If you are using a client provided in the WebSphere MQ installation, contact your IBM support center.

AMQXR2001E

The command to end the MQXR service failed connecting to queue manager {0}. Exception: {1}

Explanation

The administrative layer could not connect to the queue manager.

User action

If the queue manager is no longer running, no action is required. If the queue manager is still running, check why the administrative layer is unable to connect.

AMQXR2002E

The command to end the MQXR service failed opening queue {0}. Exception: {1}

Explanation

The administrative layer could not open the queue that is required to send a request end the MQXR service.

User action

Determine why the queue could not be opened and retry stopping the service.

AMQXR2003E

The command to end the MQXR service failed: Failed Operation: {0} Exception ({1}): {2}

Explanation

The administrative layer failed to put or get a message that is required to stop the MQXR service.

User action

Correct the problem and then try stopping the service again.

AMQXR2004E

An error occurred while stopping the MQXR service. Completion Code: {0} Reason: {1}

Explanation

An error occurred while the MQXR service was shutting down.

User action

Use the reason code to diagnose the problem.

AMQXR2005E

An error occurred while releasing queue manager resources. Object: {0} Exception: {1}

Explanation

While cleaning up resources the EndMQXRService command encountered a transient problem.

User action

None.

AMQXR2010E

The MQXR service could not access the file: {0}. Exception: {1}

Explanation

The file is invalid, has an invalid format, or incorrect permissions.

User action

Check the file permissions and ensure the file is valid.

AMQXR2011I

Property {0} value {1}

Explanation

The runMQXRService command has read a property with the assigned value.

User action

None.

AMQXR2012E

Invalid property key={0} value={1}

Explanation

The runMQXRService command read an incorrect properties file.

User action

Look at the property in error, correct it, and reissue the command.

AMQXR2014E

Failed to rename {0} to {1}

Explanation

The file could not be renamed

User action

Look at the permissions on the target file and directory and alter them if necessary

AMQXR2013E

Duplicate authentication methods specified for channel={0}, previous={1} duplicate={2}

Explanation

The runMQXRService command read a properties file that specifies two authentication methods, only one is allowed.

User action

Look at the properties file and locate the definition of the named channel. Correct the file to specify a single authentication method and restart the channel.

AMQXR2014E

The following exception was thrown during the starting of an MQXR channel, channelName = ''{0}'' : {1}

Explanation

An MQXR channel was starting up but encountered a problem. Previous errors or FDCs will provide more detail.

User action

Use earlier errors or FDCs to diagnose and address the problem then restart the MQXR channel.

AMQXR2015E

The following exception was thrown during the stopping of an MQXR channel, channelName = ''{0}'' : {1}

Explanation

An MQXR channel was stopping but encountered a problem. Previous errors or FDCs will provide more detail.

User action

Use earlier errors or FDCs to diagnose and address the problem then restart the MQXR channel.

AMQXR2020E

Client {0} attempted to unsubscribe from the topic ''{1}'' which it is not subscribed to.

Explanation

An MQTT client attempted to unsubscribe from a topic it is not subscribed to.

User action

Check that the application logic is correct, and check for earlier errors that could have caused the application to get into an inconsistent state.

AMQXR2021E

Client {0} attempted to unsubscribe from the queue ''{1}'' which it is not subscribed to.

Explanation

An MQTT client attempted to unsubscribe from a queue it is not subscribed to.

User action

Check that the application logic is correct, and check for earlier errors that could have caused the application to get into an inconsistent state.

AMQXR2050E

Unable to load JAAS config: {0}. The following exception occurred {1}

Explanation

The JAAS configuration tried to authenticate a user on a connection that was unable to load

User action

Check that the JAAS config selected by the channel exists in the jaas.config file and is valid.

AMQXR2051E

Login failed for ClientIdentifier {0} with exception {1}.

Explanation

The JAAS login failed with the exception shown.

User action

Check that the username and password sent by the client are correct.

AMQXR2053E

Error in a trace factory. The following exception occurred {1}

Explanation

There was a problem starting or stopping trace.

User action

Use the exception to diagnose and rectify the problem and then restart trace.

AMQXR9999E

{0}

Explanation

If the message does not give sufficient information, check previous messages for further help.

User action

See previous messages for further information.

z/OS IBM MQ for z/OS messages, completion, and reason codes

Use this topic to interpret and understand the messages and codes issued by IBM MQ for z/OS.

The information in this topic can be used to understand a message or code produced by the IBM MQ for z/OS product. The topic is divided into the following parts:

"Messages for IBM MQ for z/OS" on page 258

Describes all IBM MQ messages in alphanumeric order.

All IBM MQ message identifiers are eight characters long. The first three characters are always CSQ. If you get a message with a different prefix, see "Messages from other products" on page 1142 to find out which product issued the message.

The fourth character is the component identifier; this identifies the component of IBM MQ that issued the message. These are shown in "IBM MQ component identifiers" on page 1123. The fifth through seventh characters represent the numeric identifier, which is unique within the component. The last character is the message type code; this indicates the type of response that the message requires. Table 3 on page 256 shows the four type codes used by IBM MQ for z/OS.

Table 3. Message type codes		
Type code	**Response type**	**Response required**
A	Immediate action	System operator action is required immediately. The associated task does not continue until the requested action has been taken.
D	Immediate decision	System operator decision or action is required immediately. The operator is requested to select from specific options, such as **retry** or **cancel**. The associated task does not continue until the requested decision has been made or action has been taken.
E	Eventual action	System operator action *will* be required; however, the associated task continues independently of system operator action.
I	Information only	No operator action is required. However, certain messages may be significant - please review Console message monitoring for further information.

In messages issued by the queue manager itself and the mover, the message identifier is normally followed by the *command prefix* (CPF); this indicates which IBM MQ queue manager issued the message. These messages have prefixes starting CSQE, CSQH, CSQI, CSQM, CSQN, CSQP, CSQR, CSQV, CSQX, CSQY, CSQ2, CSQ3, CSQ5, and CSQ9; some messages with prefixes CSQJ and CSQW also have the CPF. In certain exceptional cases, the CPF might show as blank.

Messages from CICS-related components (CSQC) show the CICS application ID or transaction ID if applicable.

Messages from other components, that is messages with prefixes CSQO, CSQQ, CSQU, and CSQ1 (and some with prefixes CSQJ and CSQW) have no indicator.

"IBM MQ for z/OS codes" on page 935

Describes all IBM MQ abend reason codes, and subsystem termination reason codes, in alphanumeric order.

The codes are four bytes long. The first byte is always 00; this is the high-order byte. The second byte is the hexadecimal identifier (Hex ID) of the IBM MQ component. These are shown in "IBM MQ component identifiers" on page 1123. The last two bytes are the numeric identifier, which is unique within the component.

"IBM MQ CICS adapter abend codes" on page 1118 and "IBM MQ CICS bridge abend codes" on page 1119

Describe the CICS abend codes issued by the IBM MQ CICS adapter, and the IBM MQ CICS bridge.

Accompanying each message and code is the following information, when applicable:

Explanation:
This section tells what the message or code means, why it occurred, and what caused it.

Severity:
Severity values have the following meanings:

0

An information message. No error has occurred.

4

A warning message. A condition has been detected of which the user should be aware. The user might need to take further action.

8

An error message. An error has been detected and processing could not continue.

12

A severe error message. A severe error has been detected and processing could not continue.

System action:
This part tells what is happening as a result of the condition causing the message or code. If this information is not shown, no system action is taken.

User response:
If a response by the user is necessary, this section tells what the appropriate responses are, and what their effect is. If this information is not shown, no user response is required.

Operator response:
If an operator response is necessary, this section tells what the appropriate responses are, and what their effect is. If this information is not shown, no operator response is required.

System programmer response:
If a response by the system programmer is required, this part tells what the appropriate responses are, and what their effect is. If this information is not shown, no system programmer response is required.

Programmer response:
If a programmer response is necessary, this part tells what the appropriate responses are, and what their effect is. If this information is not shown, no programmer response is required.

Problem determination:
> This section lists the actions that can be performed to obtain adequate data for support personnel to diagnose the cause of the error. If this information is not shown, no problem determination is required.

Related reference

"IBM MQ AMQ messages" on page 245
IBM MQ diagnostic messages (for platforms other than z/OS) are listed in this section in numerical order, grouped according to the part of IBM MQ from which they originate.

"Communications protocol return codes" on page 1124
The communication protocols used by IBM MQ for z/OS can issue their own return codes. Use these tables to identify the return codes used by each protocol.

"Distributed queuing message codes" on page 1139
Distributed queuing is one of the components of IBM MQ for z/OS. Use this topic to interpret the message codes issued by the distributed queuing component.

"Secure Sockets Layer (SSL) and Transport Layer Security (TLS) return codes for z/OS" on page 1135
IBM MQ for z/OS can use Secure Sockets Layer (SSL) with the various communication protocols. Use this topic to identify the error codes that can be returned by SSL.

Related information
API completion and reason codes
PCF reason codes
Secure Sockets Layer (SSL) and Transport Layer Security (TLS) return codes
WCF custom channel exceptions

Messages for IBM MQ for z/OS

Each component of IBM MQ for z/OS can issue messages and each component uses a unique four character prefix for its messages. Use this topic to identify and interpret the messages for IBM MQ for z/OS components.

The following message types are described:

Batch adapter messages (CSQB...)

CSQB001E

> Language environment programs running in z/OS batch or USS must use the DLL interface to WebSphere MQ

Severity
> 4

Explanation

> Application programs using IBM MQ and Language Environment® services from z/OS Batch or Unix System Services must use the DLL interface to IBM MQ. This message is issued once per connection. The program which caused this message to be issued is using the stub interface to IBM MQ.

System action

> Processing continues. The Async Consume feature of IBM WebSphere MQ is not supported when using the non-DLL stub interface to IBM WebSphere MQ.

CICS adapter and Bridge messages (CSQC...)

When using the CICS code for the adapter and bridge for CICS TS 3.2 and later, the messages have a DFHMQ0 prefix instead of a CSQC prefix. See the DFHMQnnnn messages section of the CICS documentation for these messages.

CSQC100D

cics-applid csect-name Cannot retrieve data from a START command. EIBFN=*eibfn* EIBRESP=*eibresp*
EIBRESP2=*eibresp2*

Severity
8

Explanation

CKTI has attempted to retrieve data from a CICS START command, but the retrieve was unsuccessful.

System action

CKTI ends.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values. Use the data contained in these fields to resolve the problem, and retry.

CSQC101D

cics-applid csect-name Cannot open the initiation queue. MQCC=*mqcc* MQRC=*mqrc*

Severity
8

Explanation

CKTI has attempted to open an initiation queue, but the attempt was unsuccessful (for example, because the queue was not defined). *mqcc* and *mqrc* give the reason for the problem.

System action

CKTI ends.

CSQC102D

cics-applid csect-name Cannot start the CICS transaction tran-id. EIBFN=*eibfn* EIBRESP=*eibresp*
EIBRESP2=*eibresp2*

Severity
8

Explanation

A trigger message has been retrieved from the initiation queue which defines a CICS transaction to be started. However, the transaction cannot be started (for example, it cannot be found).

System action

The trigger message is sent to the dead-letter queue. CKTI processes the next message.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values. Determine the reason for the problem, and restart the transaction.

CSQC103E

cics-applid csect-name CKTI has read a trigger message with an incorrect MQTM-StrucId of *struc-id*

Severity
4

Explanation

A trigger message has been retrieved, but the structure identifier of the message is not
MQTM_STRUC_ID and so is not compatible with this version of CSQCTASK.

System action

The trigger message is sent to the dead-letter queue. CKTI processes the next message.

System programmer response

Check the header of the message on the dead-letter queue. This will tell you where the trigger message came from. Correct the process that created the trigger message.

CSQC104E

cics-applid csect-name CKTI does not support version *version-id*

Severity
4

Explanation

A trigger message has been retrieved, but the version identifier in MQTM is not version 1, and so is not compatible with this version of CSQCTASK.

System action

The trigger message is sent to the dead-letter queue. CKTI processes the next message.

System programmer response

Check the header of the message on the dead-letter queue. This will tell you where the trigger message came from. Correct the process that created the trigger message.

CSQC105E

cics-applid csect-name CKTI cannot start a process type of *process-type*

Severity
4

Explanation

A trigger message has been retrieved, but the process type in MQTM is not CICS, and so cannot be processed by this version of CSQCTASK.

System action

The trigger message is sent to the dead-letter queue. CKTI processes the next message.

System programmer response

Check the header of the message on the dead-letter queue. This will tell you where the trigger message came from. Correct the process that created the trigger message.

CSQC106D

cics-applid csect-name MQGET failure. CKTI will end. MQCC=*mqcc* MQRC=*mqrc*

Severity
8

Explanation

An attempt to issue an MQGET call on the initiation queue has been unsuccessful.

System action

CKTI ends.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* to determine the cause of the problem, and use CKQC to restart CKTI.

CSQC107I

cics-applid csect-name A request to end CKTI has been received. CKTI ended

Severity

0

Explanation

A request to end CKTI has been sent from the IBM MQ CICS adapter. This is a normal completion of CKTI.

System action

CKTI ends.

CSQC108D

cics-applid csect-name Unexpected invocation. CKTI terminated

Severity

8

Explanation

An attempt has been made to start CKTI, but not from CKCN or CKSQ. This is not allowed.

System action

CKTI ends.

CSQC109D

cics-applid csect-name MQCLOSE failed. MQCC=*mqcc* MQRC=*mqrc*

Severity

8

Explanation

An attempt has been made to close a queue, but the MQCLOSE call was unsuccessful. This message is followed by message CSQC110I, indicating the name of the queue.

System action

An implicit close of the queue will take place when the transaction ends.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* to determine the cause of the problem.

CSQC110I

cics-applid csect-name Queue name = *q-name*

Severity

8

Explanation

This message is issued to indicate the queue in error if an operation on a queue (for example, an MQOPEN) is unsuccessful. The accompanying messages indicate the cause of the problem.

CSQC111D

cics-applid csect-name CKTI has read a trigger message with an incorrect length of length

Severity

8

Explanation

This message is issued if the transaction CKTI receives a trigger message that does not match the MQTM control block.

System action

The message is sent to the dead-letter queue.

System programmer response

Look at the message on the dead-letter queue to establish why it did not match MQTM.

CSQC112A

cics-applid csect-name MQOPEN error. MQCC=*mqcc* MQRC=*mqrc*

Severity
8

Explanation

An **MQOPEN** call has been unable to open a queue. This message is followed by message CSQC110I indicating the name of the queue.

System action

CKTI ends.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* to determine the cause of the problem.

CSQC113I

cics-applid csect-name This message cannot be processed

Severity
0

Explanation

When an attempt to process a message using an IBM MQ API call was unsuccessful, an attempt was made to put the message on the dead-letter queue. This was also unsuccessful and the *message-id* has been sent to the system console.

System action

Processing continues.

System programmer response

Check the console for previous messages explaining why the dead-letter queue was not available (if a dead-letter queue has not been defined, no other messages relating to the problem will have been issued).

CSQC114A

cics-applid csect-name MQINQ failed. MQCC=*mqcc* MQRC=*mqrc*

Severity
8

Explanation

An attempt to use the MQINQ call to inquire about the attributes of a queue was unsuccessful. This message is followed by message CSQC110I indicating the name of the queue.

System action

CKTI ends.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* to determine why an MQINQ call could not be made on the queue.

CSQC116A

cics-applid csect-name Cannot open the queue manager. MQCC=*mqcc* MQRC=*mqrc*

Severity
> 8

Explanation
> An MQOPEN call to the queue manager was unsuccessful.

System action
> CKTI ends.

System programmer response
> Refer to API completion and reason codes for information about *mqcc* and *mqrc* to determine the cause of the problem.

CSQC117A

cics-applid csect-name Cannot query the queue manager. MQCC=*mqcc* MQRC=*mqrc*

Severity
> 8

Explanation
> An MQINQ call to the queue manager was unsuccessful.

System action
> CKTI ends.

System programmer response
> Refer to API completion and reason codes for information about *mqcc* and *mqrc* to determine the cause of the problem.

CSQC118I

cics-applid csect-name MsgID=*msg-id*

Severity
> 0

Explanation
> This message follows message CSQC113I, indicating the hexadecimal identifier of the message that could not be processed.

CSQC119A

cics-applid csect-name CICS detected an IRC failure. Cannot start transaction *tran-id*

Severity
> 8

Explanation
> A trigger message was retrieved from the initiation queue which defined a CICS transaction to be started, and the transaction is defined to run in a remote CICS region. The EXEC CICS START request for this transaction ended abnormally because of a failure in the IRC connection between the local and remote CICS regions.

System action
> The trigger message is sent to the dead-letter queue, and CKTI continues processing the next message.

System programmer response
> Investigate the reason for the IRC failure.

CSQC120A

cics-applid csect-name MQPUT failed. MQCC=*mqcc* MQRC=*mqrc*

Severity
8

Explanation

An attempt was made to put a message on a queue with an MQPUT call, but the attempt was unsuccessful. This message is followed by message CSQC110I indicating the name of the queue.

System action

CKTI ends.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* to determine why an MQPUT call could not be made for the queue.

CSQC121A

cics-applid csect-name No dead-letter queue defined for queue manager

Severity
8

Explanation

A dead-letter queue has not been defined for the queue manager.

System action

The trigger message is discarded, and the process cannot be started.

System programmer response

Define a dead-letter queue if one is required.

CSQC122A

cics-applid csect-name Cannot close the queue manager. MQCC=*mqcc* MQRC=*mqrc*

Severity
8

Explanation

CKTI was unable to close the queue manager after inquiring about the dead-letter queue.

System action

CKTI ends.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* to determine the cause of the problem.

CSQC123A

cics-applid csect-name The dead-letter queue is not of type local

Severity
8

Explanation

The dead-letter queue defined was not of type local. This message is followed by message CSQC110I, indicating the name of the queue.

System action

The message is not put to the dead-letter queue.

System programmer response

Define the dead-letter queue as a local queue.

CSQC124A

cics-applid csect-name The dead-letter queue is not of usage normal

Severity
8

Explanation

The dead-letter queue defined is not of usage type normal. This message is followed by message CSQC110I, indicating the name of the queue.

System action

The message is not put to the dead-letter queue.

System programmer response

Define the dead-letter queue to have usage type normal.

CSQC211D

cics-applid csect-name Unable to LINK to program CSQCPARM. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE= *eibrcode*

Severity
8

Explanation

An attempt to link to CSQCPARM was unsuccessful.

System action

The connection process terminates, and control returns to CICS.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values. Determine the reason for the problem, and use the IBM MQ CICS adapter control panels (the CKQC transaction) to retry the connection process.

CSQC212D

cics-applid csect-name CSQCPARM missing in SIT/SIT Override INITPARM

Severity
8

Explanation

CSQCQCON attempted to connect to IBM MQ, but the attempt was unsuccessful because the CSQCPARM keyword in the INITPARM statement was not found in the system initialization table (SIT) (or the SIT override INITPARM statement).

System action

The connection process terminates, and control returns to CICS.

System programmer response

Add CSQCPARM keyword to the INITPARM statement of the SIT table (or the SIT override), restart CICS, and use the IBM MQ CICS adapter control panels (the CKQC transaction) to retry the connection process.

CSQC213D

cics-applid csect-name Queue manager name missing in CSQCPARM. Command rejected

Severity

8

Explanation

An attempt was made to connect to IBM MQ, but it was unsuccessful because the CSQCPARM keyword in the `INITPARM` statement did not contain the name of the required queue manager.

System action

The connection process terminates, and control returns to CICS.

System programmer response

Use the IBM MQ CICS adapter control panels (the CKQC transaction) to specify the queue manager name, and retry the connection process.

CSQC214E

cics-applid csect-name Initiation queue name not found. CKTI not started

Severity

0

Explanation

A connection has been made to IBM MQ, but CKTI cannot be started as no initiation queue name has been specified.

System action

The queue manager is connected, but CKTI is not started.

System programmer response

Add the initiation queue name to `INITPARM` statement if you want to start CKTI automatically next time you connect CICS to IBM MQ.

CSQC216D

cics-applid csect-name Queue manager name invalid. Connection rejected

Severity

8

Explanation

An attempt has been made to connect to IBM MQ, but it was unsuccessful because the queue manager name given was more than 4 characters long.

System action

The connection process terminates, and control returns to CICS.

System programmer response

Use the IBM MQ CICS adapter control panels to specify the correct queue manager name, or correct the CSQCPARM keyword in the `INITPARM` statement, and retry the connection process.

CSQC217E

cics-applid csect-name Initiation queue name invalid. CKTI not started

Severity

8

Explanation

An attempt has been made to connect to IBM MQ, but it was unsuccessful because the initiation queue name given was more than 48 characters long.

System action

The connection process terminates, and control returns to CICS.

System programmer response

Use the IBM MQ CICS adapter control panels (the CKQC transaction) to specify the correct initiation queue name, and retry the connection process.

CSQC218I

cics-applid csect-name No trace number specified in CSQCPARM. The default of 0 will be used

Severity
0

Explanation

A connection has been made to IBM MQ but no trace number was specified in the CSQCPARM keyword of the `INITPARM` statement. The default of 0 will be used.

System action

The queue manager is connected with a trace number of 0.

System programmer response

Use the IBM MQ CICS adapter control panels (the CKQC transaction) to specify the required trace number. Add the trace number to the CSQCPARM keyword of the `INITPARM` statement to set it automatically next time you connect CICS to IBM MQ.

CSQC219E

cics-applid csect-name Trace number specified in CSQCPARM is not valid. The default of 0 will be used

Severity
4

Explanation

A connection has been made to IBM MQ but the trace number specified in the CSQCPARM keyword of the `INITPARM` statement was not valid. The default of 0 will be used.

System action

The queue manager is connected with a trace number of 0.

System programmer response

Use the CICS adapter control panels (the CKQC transaction) to specify the required trace number. Correct the trace number in the CSQCPARM keyword of the `INITPARM` statement to set it automatically next time you connect CICS to IBM MQ.

CSQC220D

cics-applid csect-name Unable to LINK to program CSQCCON. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE= *eibrcode*

Severity
8

Explanation

An attempt to link to CSQCCON was unsuccessful.

System action

The connection process terminates, and control returns to CICS.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values. Determine the reason for the problem, and use the IBM MQ CICS adapter control panels (the CKQC transaction) to retry the connection process.

CSQC223D

cics-applid csect-name Unable to LINK to program CSQCQCON. EIBFN=*eibfn* EIBRESP=*eibresp*
EIBRESP2=*eibresp2* EIBRCODE= *eibrcode*

Severity

8

Explanation

An attempt to link to CSQCQCON was unsuccessful.

System action

The connection process terminates, and control returns to CICS.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application
Programming Reference* manual for an explanation of these values. Determine the reason for the
problem, and use the IBM MQ CICS adapter control panels (the CKQC transaction) to retry the
connection process.

CSQC230D

cics-applid csect-name Unable to receive input. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2*
EIBRCODE=*eibrcode*

Severity

8

Explanation

The CICS adapter is unable to receive input from the CKQC transaction.

System action

The requested function is not performed.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application
Programming Reference* manual for an explanation of these values, and take the appropriate action.

CSQC232D

cics-applid csect-name Unable to RETURN TRANSID *tran-id* IMMEDIATE. EIBFN=*eibfn*
EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE=*eibrcode*

Severity

8

Explanation

An attempt was made to issue an EXEC CICS RETURN TRANSID *tran-id* IMMEDIATE command, but it
was unsuccessful.

System action

The function terminates, and control returns to CICS.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application
Programming Reference* manual for an explanation of these values, and reissue the command.

CSQC235D

cics-applid csect-name Unrecognizable screen. Re-submit CKQC

Severity

8

Explanation

CICS cannot determine the identifier of the screen currently displayed. Because of this, it cannot interpret the screen contents (including any input fields).

System action

The input is ignored, and the transaction finishes.

System programmer response

Resubmit CKQC to restart from the beginning of the CICS transaction.

CSQC236A

cics-applid csect-name Display functions only supported using panel interface

Severity
8

Explanation

The display function was requested; this function can only be used from the IBM MQ CICS adapter control panels (the CKQC transaction).

System action

The request is ignored.

CSQC237A

cics-applid csect-name Panel interface not supported on console

Severity
8

Explanation

The IBM MQ CICS adapter control panels (the CKQC transaction) are not supported on the console.

System action

The panel request is ignored.

CSQC239D

cics-applid csect-name Unable to LINK to program CSQCBASE. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE= *eibrcode*

Severity
8

Explanation

CKQC could not display the panel because it could not link to CSQCBASE.

System action

CKQC ends.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values. Determine the reason for the problem, and retry the operation.

CSQC240D

cics-applid csect-name Task not associated with a terminal. Request rejected

Severity
8

Explanation

The request was issued by a task that was not associated with a terminal. This is not allowed.

System action

The request is ignored.

CSQC241D

cics-applid csect-name Unable to receive input. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE=*eibrcode*

Severity
8

Explanation

The system cannot receive input from the screen.

System action

The input is ignored, and the transaction is finished.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values. Determine the reason for the problem, and retry the operation.

CSQC242D

cics-applid csect-name Invalid input. Connect rejected

Severity
8

Explanation

A connection request was issued with incorrect parameters specified.

System action

The request is ignored.

CSQC243D

cics-applid csect-name Unsupported terminal type. Must be a console or 3270 device

Severity
8

Explanation

A request was made by a task that is not associated with a console or 3270 device.

System action

The request is ignored.

CSQC244E

cics-applid csect-name CICS is being quiesced. Connect rejected

Severity
8

Explanation

An attempt has been made to connect to IBM MQ, but CICS is shutting down so the connection request has been rejected.

System action

The connection process terminates, and control returns to CICS.

CSQC300D

cics-applid csect-name Already connected to queue manager qmgr-name. Connect rejected

Severity
8

Explanation

An attempt has been made to connect to a queue manager, but CICS is already connected to another queue manager so the connection request has been rejected.

System action

The connection process terminates, and control returns to CICS.

CSQC301I

cics-applid csect-name API exit CSQCAPX found and will be used

Severity
0

Explanation

The CICS API exit program CSQCAPX has been activated.

CSQC302D

cics-applid csect-name Unable to EXTRACT EXIT CSQCTRUE. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE= *eibrcode*

Severity
8

Explanation

An attempt to issue an EXEC CICS EXTRACT EXIT CSQCTRUE command was unsuccessful.

System action

The function terminates, and control returns to CICS.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values, and take the appropriate action (for example, use CKQC to restart the connection).

CSQC303I

cics-applid csect-name CSQCSERV loaded. Entry point is address

Severity
0

Explanation

Module CSQCSERV has been loaded. *address* is the address of the entry point. You might find this information useful during problem determination.

CSQC304D

cics-applid csect-name Failed to ENABLE CSQCTRUE. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE=*eibrcode*

Severity
8

Explanation

An attempt to issue an EXEC CICS ENABLE CSQCTRUE command was unsuccessful during a connect process.

System action

The connection process terminates, and control returns to CICS.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values, and take the appropriate action.

CSQC305D

cics-applid csect-name Unable to INQUIRE MAXTASKS. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE=*eibrcode*

Severity
8

Explanation

An attempt to issue an EXEC CICS INQUIRE MAXTASKS command was unsuccessful.

System action

The connection process terminates, and control returns to CICS.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values, and take the appropriate action.

CSQC306E

cics-applid csect-name Unable to START transaction CKTI. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE= *eibrcode*

Severity
8

Explanation

During the connection process, the IBM MQ CICS adapter was unable to start CKTI.

System action

The queue manager is connected, but CKTI is not started.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values, and take the appropriate action.

CSQC307I

cics-applid csect-name Successful connection to queue manager *qmgr-name*

Severity
0

Explanation

The connection to queue manager *qmgr-name* was successful.

CSQC308D

cics-applid csect-name Queue manager *qmgr-name* is stopped. Connect request deferred

Severity
0

Explanation

An attempt to connect to queue manager (*qmgr-name*) was unsuccessful because *qmgr-name* was not active.

System action

The connection will be made when *qmgr-name* becomes active.

CSQC309D

cics-applid csect-name Unable to connect to queue manager qmgr-name. MQCC=*mqcc* MQRC=*mqrc*

Severity
8

Explanation

An attempt to connect to queue manager *qmgr-name* was unsuccessful.

System action

The connection process terminates, and control returns to CICS.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc*, and take the appropriate action.

CSQC310D

cics-applid csect-name Duplicate connect to queue manager qmgr-name. Connect rejected

Severity
8

Explanation

An attempt to connect to a queue manager was unsuccessful because the queue manager is already connected.

System action

The connection process terminates, and control returns to CICS.

CSQC311D

cics-applid csect-name Unable to start alert monitor CKAM. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE=*eibrcode*

Severity
8

Explanation

During the connection process, the IBM MQ CICS adapter was unable to start the alert monitor CKAM.

System action

The queue manager is connected, but CKAM is not started so the function of the IBM MQ CICS adapter is restricted.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values. When the error has been corrected, use the CKQC transaction to reinitiate the connection.

CSQC312E

cics-applid csect-name Unable to GETMAIN CLOC storage. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE= *eibrcode*

Severity
8

Explanation

The IBM MQ CICS adapter was unable to obtain storage for the CLOC control block.

System action

The connection request is rejected.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values. This is probably a CICS 'short on storage' problem. Use the procedure followed at your installation to resolve the problem.

CSQC313I

cics-applid csect-name *UOWID=*conn-name.uow-id* is in doubt

Severity

0

Explanation

This message is issued at connection time. The unit of work shown is in doubt. An asterisk character preceding the unit-of-work identifier indicates that the unit of work will not be resolved automatically.

System action

The units of work will be resolved by the distributed queuing component when remote queuing starts.

System programmer response

See Recovering CICS units of recovery manually for information about resolving the IBM MQ unit of recovery associated with the in-doubt CICS unit of work.

CSQC314I

cics-applid csect-name UOWIDs highlighted with * will not be automatically resolved

Severity

0

Explanation

This message appears when there are unresolved in-doubt units of work. Refer to message CSQC313I.

CSQC315E

cics-applid csect-name Unable to LOAD API exit CSQCAPX. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE= *eibrcode*

Severity

8

Explanation

The IBM MQ CICS adapter is unable to use the API-crossing exit program CSQCAPX. This can be a normal situation if you do not intend to use the API-crossing exit, and have disabled the program CSQCAPX.

System action

The API-crossing exit is not used.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values. If you are trying to use the API-crossing exit, use the data contained in these fields to resolve the problem.

CSQC316I

cics-applid csect-name More messages. Check console for full display

Severity

0

Explanation

This message is displayed if too many messages have been issued to be displayed on the screen.

CSQC318I

cics-applid csect-name UOWID=*conn-name.uow-id* created by Transid *trans-id* Taskid *task-id* is in doubt.

Severity
0

Explanation

This message is issued at connection time. The unit of work shown is in doubt.

System programmer response

See Recovering CICS units of recovery manually for information about resolving the IBM MQ unit of recovery associated with the in-doubt CICS unit of work.

CSQC319D

cics-applid csect-name Unable to INQUIRE SYSTEM RELEASE. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE= *eibrcode*

Severity
8

Explanation

An attempt to issue an EXEC CICS INQUIRE SYSTEM RELEASE command was unsuccessful.

System action

The connection process terminates, and control returns to CICS.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS System Programming Reference* manual for an explanation of these values, and take the appropriate action.

CSQC320E

cics-applid csect-name CICS Version version Release *release* is not supported

Severity
8

Explanation

The version of CICS that you are running is not supported by the version of the IBM MQ CICS adapter that you are using.

System action

The connection process terminates, and control returns to CICS.

CSQC321D

cics-applid csect-name There is no active connection. Stop connection rejected

Severity
8

Explanation

An attempt was made to shut down a connection, but there was no connection active. This could be caused by one of the following:

- A connection had not been made
- The connection had already been shut down
- The connection is still being made (that is, it is pending)

System action

The request is ignored, and control returns to CICS.

CSQC322D

cics-applid csect-name Invalid input. Stop connection rejected

Severity
8

Explanation

A request to shut down the IBM MQ CICS adapter was made, but it was rejected because the syntax of the shutdown request was not valid.

System action

The request is ignored.

CSQC323I

cics-applid csect-name command received from TERMID=*termid* TRANID=*tranid* USERID=*userid*

Severity
0

Explanation

The request to connect or disconnect was received from terminal *termid*. The originating transaction was *tranid* (this could be CKAM). *userid* is the user ID of the operator who used the terminal to initiate the operation. This message is issued on the console for audit trail purposes.

CSQC326D

cics-applid csect-name Connection status status is not valid for command. Command rejected

Severity
8

Explanation

A request to shut down the IBM MQ CICS adapter was made, but it was rejected because a STOP FORCE shutdown had already been requested.

System action

The request is ignored.

CSQC330E

cics-applid csect-name CICS Transaction Server Version version Release *release* is not supported

Severity
8

Explanation

The version of CICS Transaction Server that you are running is not supported by the version of the IBM MQ CICS adapter that you are using .

System action

The connection process terminates, and control returns to CICS.

CSQC331I

cics-applid csect-name Adapter shutdown completed

Severity
4

Explanation

The IBM MQ CICS adapter has been shut down. However, it was not able to disconnect from IBM MQ (for example, because the queue manager had already shut down).

CSQC332I

cics-applid csect-name Queue manager *qmgr-name* is already stopped. MQCC=*mqcc* MQRC=*mqrc*

Severity
0

Explanation

A request was made to shut down the IBM MQ CICS adapter, but the queue manager has already shut down. For example, the operator shuts down both the queue manager and the IBM MQ CICS adapter simultaneously. If the queue manager stops first, it cannot receive the disconnect request from the CICS adapter.

System action

The adapter shutdown process continues.

CSQC333E

cics-applid csect-name Unable to disconnect from queue manager qmgr-name. MQCC=*mqcc* MQRC=*mqrc*

Severity
8

Explanation

A request has been made to disconnect from queue manager *qmgr-name* but it was unsuccessful.

System action

The adapter shutdown process continues.

CSQC334I

cics-applid csect-name Adapter shutdown successful

Severity
0

Explanation

The shutdown process has completed successfully.

CSQC336I

cics-applid csect-name command received from a PLT program

Severity
0

Explanation

The *command* request was received from a PLT program. This message is issued on the console for audit trail purposes.

CSQC341I

cics-applid csect-name shutdown-type requested by alert monitor CKAM

Severity
0

Explanation

The request to shut down the IBM MQ CICS adapter was issued by the alert monitor CKAM. *shutdown-type* is either STOP or STOP FORCE. This message is issued on the console for audit trail purposes.

CSQC342I

cics-applid csect-name request received from alert monitor

Severity
 0

Explanation

Request *request* was received from the alert monitor (CKAM). This message is issued on the console for audit trail purposes.

CSQC350I

cics-applid csect-name Unable to LOAD API exit CSQCAPX. Program not found

Severity
 0

Explanation

The IBM MQ CICS adapter is unable to use the API-crossing exit program CSQCAPX because it cannot be found. This is a normal situation if you do not intend to use the API-crossing exit.

System action

The API-crossing exit is not used.

System programmer response

If you wish to use the API-crossing exit:

- Ensure that CSQCAPX is in the DFHRPL concatenation.
- Issue the CICS command CEMT SET PROGRAM(CSQCAPX) NEWCOPY ENABLE.
- Activate the exit using the Modify Connection option of the CKQC transaction.

CSQC351I

cics-applid csect-name Unable to LOAD API exit CSQCAPX. Program is disabled

Severity
 0

Explanation

The IBM MQ CICS adapter is unable to use the API-crossing exit program CSQCAPX because it is disabled. This is a normal situation if you do not intend to use the API-crossing exit, and have therefore disabled the program CSQCAPX.

System action

The API-crossing exit is not used.

System programmer response

If you wish to use the API-crossing exit:

- Ensure that CSQCAPX is in the DFHRPL concatenation.
- Issue the CICS command CEMT SET PROGRAM(CSQCAPX) NEWCOPY ENABLE.
- Activate the exit using the Modify Connection option of the CKQC transaction.

CSQC360D

cics-applid csect-name Unable to RETRIEVE RTRANSID. Monitor terminated. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE= *eibrcode*

Severity
 8

Explanation

An attempt to issue an EXEC CICS RETRIEVE RTRANSID was unsuccessful (for example, an unauthorized user has tried to start the alert monitor).

System action

Processing continues (including the alert monitor if one is already running).

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values.

CSQC361D

cics-applid csect-name Unexpected invocation. Monitor terminated

Severity
8

Explanation

An attempt was made to start the alert monitor by an unrecognized transaction.

System action

The request is ignored.

CSQC362D

cics-applid csect-name Unable to EXTRACT EXIT CSQCTRUE. Monitor terminated. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE=*eibrcode*

Severity
8

Explanation

An attempt to issue an EXEC CICS EXTRACT EXIT CSQCTRUE command was unsuccessful.

System action

The alert monitor terminates.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values. Take the appropriate action, and use the IBM MQ CICS adapter control panels (the CKQC transaction) to restart the IBM MQ CICS adapter.

CSQC363D

cics-applid csect-name Unable to perform WAIT EXTERNAL. Monitor terminated. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE=*eibrcode*

Severity
8

Explanation

An attempt to perform an EXEC CICS WAIT EXTERNAL was unsuccessful.

System action

The alert monitor terminates.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values, and take the appropriate action.

CSQC364I

cics-applid csect-name Monitor terminated normally

Severity

0

Explanation

There are no remaining active or deferred connections, so the alert monitor has terminated.

CSQC365E

cics-applid csect-name Unable to LINK to program CSQCQCON. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE= *eibrcode*

Severity

8

Explanation

The alert monitor has detected that a deferred connection has been activated, but it cannot link to CSQCQCON.

System action

The connection process is terminated, and control returns to CICS.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values. Use the IBM MQ CICS adapter control panels (the CKQC transaction) to make the connection.

CSQC366E

cics-applid csect-name Unable to LINK to program CSQCDSC. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE= *eibrcode*

Severity

8

Explanation

The alert monitor has detected that the IBM MQ CICS adapter is ready to shut down but cannot link to CSQCDSC.

System action

The disconnection process is continued, and control returns to CICS.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values. Use the IBM MQ CICS adapter control panels (the CKQC transaction) to disconnect from IBM MQ.

CSQC368E

cics-applid csect-name Invalid PEB type type at location location. PEB ignored

Severity

8

Explanation

A pending event was not of the type expected by the alert monitor.

System action

The pending event is discarded.

CSQC369E

cics-applid csect-name More than 99 notify messages outstanding. This message is postponed temporarily

Severity
8

Explanation

More than 99 pending events have been established. (For example, attempts have been made to connect to more than 99 systems that are not running.)

System action

The event is not processed until one of the other 99 events has expired.

CSQC380D

cics-applid csect-name No active connection. command rejected

Severity
8

Explanation

An attempt to start or stop CKTI or to use the DISPLAY/RESET function, was unsuccessful because there was no active connection between IBM MQ and CICS.

System action

The request is ignored.

CSQC381D

cics-applid csect-name No initiation queue name specified at connect time. command rejected

Severity
8

Explanation

An attempt was made to start or stop CKTI using the default queue name, but the default queue name was not found. This was because the current connection does not have an initiation queue name associated with it.

System action

The request is ignored.

System programmer response

If you require a default queue name, specify one when you perform the connection process.

CSQC382D

cics-applid csect-name CKTI with the same initiation queue name is being started. command rejected

Severity
8

Explanation

An attempt was made to start CKTI specifying the name of an initiation queue that is used by another CKTI being started.

System action

The request is ignored.

CSQC383D

cics-applid csect-name Another CKTI with the same initiation queue name is still running. command rejected

Severity

8

Explanation

An attempt was made to start CKTI specifying the name of an initiation queue that is already used by a CKTI which is still running.

System action

The reqeust is ignored.

CSQC384D

cics-applid csect-name Another CKTI with the same initiation queue name is being stopped. command rejected

Severity

8

Explanation

Either:

- An attempt was made to start CKTI with an initiation queue name the same as the one that is currently being stopped.
- An attempt was made to stop an initiation queue that was already in the process of stopping.

System action

The request is ignored.

CSQC385D

cics-applid csect-name CKTI not found. command rejected

Severity

8

Explanation

An attempt to stop CKTI was unsuccessful because the queue name specified was not found. This is because either:

- The name of the initiation queue was specified incorrectly
- The CKTI has already stopped

System action

The request is ignored.

CSQC386I

cics-applid csect-name command initiated from TERMID=*term-id* TRANID=*tran-id* USERID=*user-id* and is accepted

Severity

0

Explanation

The IBM MQ CICS adapter has processed the *command* request. However, the CICS task might not have completed its processing yet (for example, CKTI could be waiting for a certain event to occur before it can be stopped). *command* can be STARTCKTI, STOPCKTI, or RESET.

CSQC389D

cics-applid csect-name Invalid input. Start/Stop CKTI rejected

Severity

8

Explanation

The syntax of the CICS adapter request entered was incorrect.

System action

The request is rejected.

System programmer response

Correct the syntax, or use the IBM MQ CICS adapter control panels (the CKQC transaction) to request the function.

CSQC390I

cics-applid csect-name CICS Transaction Server is Version version Release *release*

Severity
 0

Explanation

This message is issued to show which version of CICS Transaction Server you are using.

CSQC400I

cics-applid csect-name UOWID=*conn-name.uow-id*

Severity
 0

Explanation

This message gives the connection name and the identifier of a unit of work and appears with one of the following messages:

- CSQC402I
- CSQC403I
- CSQC404E
- CSQC405E
- CSQC406E
- CSQC407E

You can use the connection name when using IBM MQ commands (for example, RESOLVE INDOUBT).

CSQC402I

cics-applid csect-name Resolved with COMMIT

Severity
 0

Explanation

The syncpoint coordinator has informed IBM MQ that the unit of work indicated by the accompanying CSQC400I message has been committed.

CSQC403I

cics-applid csect-name Resolved with BACKOUT

Severity
 0

Explanation

The syncpoint coordinator has informed IBM MQ that the unit of work indicated by the accompanying CSQC400I message has been backed out.

CSQC404E

cics-applid csect-name Resolve failed. MQCC=*mqcc* MQRC=*mqrc*

Severity
8

Explanation

The syncpoint coordinator requested that the unit of work indicated by the accompanying CSQC400I message be committed or backed out. However, IBM MQ was unable to do this.

System action

The unit of work remains in doubt.

System programmer response

If you want to resolve the unit of work:

- Diagnose the cause of the problem and correct it (refer to API completion and reason codes for information about *mqcc* and *mqrc*)
- Disconnect IBM MQ.
- Use the IBM MQ CICS adapter control panels (the CKQC transaction) to reconnect IBM MQ.

CSQC405E

cics-applid csect-name Execute resolve failed. MQCC=*mqcc* MQRC=*mqrc*

Severity
8

Explanation

The syncpoint coordinator requested that resolution of the units of work be executed. However, IBM MQ was unable to do this.

System action

The units of work remain in doubt.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* to determine the cause of the problem.

CSQC406E

cics-applid csect-name Cannot resolve, syncpoint *disposition*dispositionlost

Severity
8

Explanation

The syncpoint coordinator has been subjected to a cold start, and information regarding units of work has been lost (syncpoint state UERTDGCS). The coordinator cannot inform the IBM MQ CICS adapter whether to commit or back out the unit of work indicated by the accompanying CSQC400I message.

For information about UERTDGCS, see the *CICS Customization Guide*.

System action

The unit of work remains in doubt.

CSQC407E

cics-applid csect-name Cannot resolve, syncpoint *disposition*dispositionunknown

Severity
8

Explanation

The syncpoint coordinator cannot find a decision about resolving the unit of work indicated by the accompanying CSQC400I message (syncpoint state UERTDGNK). The coordinator cannot inform the IBM MQ CICS adapter whether to commit or back out the unit of work.

For information about UERTDGNK, see the *CICS Customization Guide.*

System action

The unit of work remains in-doubt.

CSQC408I

cics-applid csect-name Only partial resynchronization achieved. Check above messages

Severity

0

Explanation

Total resynchronization was not achieved; some units of work remain in doubt.

CSQC409I

cics-applid csect-name Resynchronization completed successfully

Severity

0

Explanation

Resynchronization has completed successfully; all units of work have been resolved.

CSQC410I

cics-applid csect-name CICS immediate shutdown detected. Adapter terminated

Severity

0

Explanation

CICS has notified the IBM MQ CICS adapter that it is shutting down immediately.

System action

The IBM MQ CICS adapter initiates an immediate shutdown. Any in-flight tasks using IBM MQ are backed out when the connection is broken by CICS.

CSQC411I

cics-applid csect-name CICS warm shutdown detected. Adapter is quiescing

Severity

0

Explanation

CICS has notified the IBM MQ CICS adapter that it has initiated a warm shutdown.

System action

The IBM MQ CICS adapter initiates a quiesced shutdown.

CSQC412I

cics-applid csect-name CICS abend detected. Adapter terminated

Severity

0

Explanation

The IBM MQ CICS adapter detected a CICS abend.

System action

The IBM MQ CICS adapter is terminated.

CSQC413I

cics-applid csect-name Task ID id force purge deferred until its current request has completed

Severity

0

Explanation

The task with an identifier of *id* is being force purged by the operator while it is waiting for an outstanding request to complete. The force purge will not be processed until the outstanding request completes.

System action

If the task reaches a must-complete state (for example, syncpoint) the task is not ended after the request has been completed. Otherwise, it will terminate with an abend code of AEXY. For more information about these CICS abend codes, see the relevant *CICS Messages and Codes* manual.

CSQC414I

cics-applid csect-name Abending task ID id *abend-code*

Severity

0

Explanation

The task with an identifier of *id* has been force purged by the operator, and abends with *abend-code*.

System action

The outstanding task has been completed and, because it is not in a must-commit state, the IBM MQ CICS adapter ends the task abnormally. For more information about the CICS abend code, see the *CICS Messages and Codes* manual.

CSQC415I

cics-applid csect-name Task ID id will continue. Force purge ignored

Severity

0

Explanation

The task with an identifier of *id* has been force purged by the operator.

System action

The outstanding task has been completed but, because it is in a must-commit state (for example, syncpoint), the IBM MQ CICS adapter does not end the task.

CSQC416I

cics-applid csect-name Address address is out of range. Area of length length is not traced

Severity

0

Explanation

An address (*address*) passed from an application was out of range for one of the following reasons:

- The address plus the length of the area to be traced exceeds the 2GB addressing limit
- The address is not within the private area storage of the CICS region as regarded by z/OS

Because of this, the CICS trace facility is unable to trace the area.

System action

This message is inserted into the CICS trace, and processing continues.

System programmer response

If the address is in error, correct the application.

CSQC417I

cics-applid csect-name CICS is Version version Release *release*

Severity
0

Explanation

This message is issued to show which version of CICS you are using.

CSQC418D

cics-applid csect-name Unable to LOAD program CSQAVICM. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE= *eibrcode*

Severity
8

Explanation

An attempt to load CSQAVICM was unsuccessful.

System action

The process terminates, and control returns to CICS.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values.

CSQC419I

cics-applid csect-name No server subtasks available. Task will abend

Severity
0

Explanation

A task has issued an IBM MQ API call that requires task switching, but there are no server subtasks available. This might be because the subtasks have not yet started, or did not start successfully. (Message CSQC472I is issued for each subtask started; there should be eight subtasks.)

System action

The task is ended abnormally with code QNST.

CSQC420D

cics-applid csect-name Unable to send map *map-id* mapset CSQCMS. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE=*eibrcode*

Severity
8

Explanation

The program was unable to send map *map-id* from the map set CSQCMS to the screen.

System action

The task is terminated.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values, and take the appropriate action.

CSQC421A

cics-applid csect-name Tab cursor was not on a valid object

Severity
8

Explanation

The cursor was not in the correct position when the enter key was pressed.

System action

The input is ignored.

CSQC422D

cics-applid csect-name Unable to RETURN TRANSID CKBM. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE=*eibrcode*

Severity
8

Explanation

An attempt was made to issue an EXEC CICS RETURN TRANSID CKBM command, but it was unsuccessful.

System action

The transaction terminates, and control returns to CICS.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values, and take the appropriate action.

CSQC423D

cics-applid csect-name Unable to XCTL to program pgm-name. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE= *eibrcode*

Severity
8

Explanation

An attempt to transfer control to program *pgm-name* was unsuccessful.

System action

The transaction terminates, and control returns to CICS.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values, and take the appropriate action.

CSQC424D

cics-applid csect-name Invalid key entered

Severity
8

Explanation

The function key pressed was not valid for this panel.

System action

The key is ignored.

CSQC425D

cics-applid csect-name No parameter window for this function

Severity
8

Explanation

An attempt was made to display a parameter window. There are no parameters for the function selected, so there is no parameter window to display.

System action

The request is ignored.

CSQC430D

cics-applid csect-name Unknown map name map-name. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE=*eibrcode*

Severity
8

Explanation

CICS was unable to locate the map specified (for example, because the map was not defined during the installation procedure). *map-name* is the name of the map in question.

System action

The transaction terminates.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values, and take the appropriate action.

CSQC431D

cics-applid csect-name Invalid action number. Re-enter

Severity
8

Explanation

The action number specified was out of the range available.

System action

The request is ignored.

CSQC432D

cics-applid csect-name Invalid task number. Re-enter

Severity
8

Explanation

The task number specified was out of the range requested.

System action

The request is ignored.

System programmer response

Specify a task number in the range displayed.

CSQC433D

cics-applid csect-name Invalid option. Must be 1, 2, 3 or 4

Severity

8

Explanation

The value entered was not 1, 2, 3, or 4.

System action

The value is rejected.

CSQC434D

cics-applid csect-name Queue manager name missing. Must be entered

Severity

8

Explanation

The queue manager name was not specified on the connection parameter panel.

System action

The connection request is rejected.

System programmer response

If a default name is required, specify the queue manager name in **CSQCPARM**.

CSQC435D

cics-applid csect-name Invalid trace number. Must be numeric

Severity

8

Explanation

The trace number entered was not numeric.

System action

The request is ignored.

CSQC436D

cics-applid csect-name Invalid trace number. Must be < 200

Severity

8

Explanation

The trace number entered was not in the valid range.

System action

The request is ignored.

CSQC438D

cics-applid csect-name Trace number missing. Must be entered

Severity

8

Explanation

Option 4 has been selected to change the trace number, but the new trace number has not been entered.

System action

The request is rejected.

CSQC439D

cics-applid csect-name Invalid Stop option. Must be 1 or 2

Severity
8

Explanation

The shutdown option number was not a valid value.

System action

The request is ignored.

CSQC440D

cics-applid csect-name Unable to send map map-name mapset CSQCMSH. EIBFN=*eibfn*
EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE= *eibrcode*

Severity
8

Explanation

The program was unable to send map *map-name* from the mapset CSQCMSH to the screen.

System action

The task is terminated.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values, and take the appropriate action.

CSQC443D

cics-applid csect-name Unable to RETURN TRANSID CKRT. EIBFN=*eibfn* EIBRESP=*eibresp*
EIBRESP2=*eibresp2* EIBRCODE=*eibrcode*

Severity
8

Explanation

An attempt to issue an EXEC CICS RETURN TRANSID CKRT command was unsuccessful.

System action

The command is ignored.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values, and take the appropriate action.

CSQC450E

cics-applid csect-name Unable to ENTER TRACENUM. EIBFN=*eibfn* EIBRESP=*eibresp*
EIBRESP2=*eibresp2* EIBRCODE=*eibrcode*

Severity
8

Explanation

An attempt to issue an EXEC CICS ENTER TRACENUM command was unsuccessful.

System action

The trace number specified is accepted, but the adapter cannot perform tracing.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values.

CSQC451I

cics-applid csect-name Nothing to reset. Reset completed

Severity
8

Explanation

A reset request was made, but no values were specified to indicate what should be reset.

System action

Nothing is reset.

CSQC452D

cics-applid csect-name Invalid input. Reset rejected

Severity
8

Explanation

A request was made to the reset function without using the IBM MQ CICS adapter control panels, but the syntax was incorrect.

System action

The request is ignored.

System programmer response

For details of the correct syntax, see: CICS Transaction Server for z/OS Version 5.2, The CICS-WebSphere MQ adapter.

CSQC453I

cics-applid csect-name Status of connection to *qmgr-name* is status. number tasks are in-flight

Severity
0

Explanation

This message is issued as the reply to the CKQC DISPLAY request, and gives the status of the connection to queue manager *qmgr-name* and the number of tasks that are in-flight on that connection.

CSQC455D

cics-applid csect-name Unable to WRITEQ TS. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2* EIBRCODE=eibrcode. Queue name is *q-name*

Severity
8

Explanation

An attempt to issue an EXEC CICS WRITEQ TS command was unsuccessful.

System action

The display function is terminated.

System programmer response

The EIB fields contain information about the cause of the problem. See the *CICS Application Programming Reference* manual for an explanation of these values, and take the appropriate action.

CSQC456I

cics-applid csect-name No tasks found. Display completed

Severity

0

Explanation

A request was made to display tasks, but there are no current tasks using IBM MQ services.

CSQC457I

cics-applid csect-name No CKTI found. Display rejected

Severity

0

Explanation

A request was made to display CKTI, but there were no instances of CKTI started.

CSQC458D

cics-applid csect-name Invalid input. Display rejected

Severity

8

Explanation

An attempt was made to request a display function, but not using the IBM MQ CICS adapter control panels. This is not supported.

System action

The request is rejected.

System programmer response

Use the IBM MQ CICS adapter control panels to request the display function.

CSQC460I

cics-applid csect-name Bottom of display

Severity

0

Explanation

An attempt was made to scroll forward, but the bottom of the display has already been reached.

CSQC461I

cics-applid csect-name Top of display

Severity

0

Explanation

An attempt was made to scroll backward, but the top of the display has already been reached.

CSQC462D

cics-applid csect-name Invalid input. Request rejected

Severity

8

Explanation

An attempt was made to issue the internal transaction CKRT by direct terminal input, or in an otherwise invalid way.

System action

The request is rejected.

System programmer response

Do not use CKRT in this way.

CSQC470I

cics-applid csect-name Server subtask (TCB address=address) terminated

Severity

0

Explanation

The IBM MQ CICS adapter is being shut down, and the server task with TCB address *address* has been terminated.

CSQC471A

cics-applid csect-name Server subtask (TCB address=address) unable to establish ESTAE, RC=rc

Severity

8

Explanation

The server subtask was trying to establish a z/OS ESTAE but failed with return code *rc*. This error occurred while the server subtask was undergoing its initialization phase, so no CICS tasks will have been affected.

System action

The server subtask terminates. The IBM MQ CICS adapter continues without that particular server.

System programmer response

See the *MVS Programming: Assembler Services Reference* to determine the reason why the ESTAE call failed and take appropriate action if possible. Restart the connection using the CKQC transaction.

If you are unable to resolve the problem, contact your IBM support center.

CSQC472I

cics-applid csect-name Server subtask (TCB address=address) connect successful

Severity

0

Explanation

The IBM MQ CICS adapter is starting, and the server task with the TCB address *address* has made a connection to IBM MQ.

CSQC480I

cics-applid csect-name MQCC=*mqcc* MQRC=*mqrc* QRPL at qrpl-address FRB at *frb-address*

Severity

0

Explanation

This message is used as the title for an IBM MQ CICS adapter dump if an unexpected error occurs. *qrpl-address* is the address of the queue request parameter list and *frb-address* is the address of the function request block.

CSQC481I

cics-applid csect-name Unexpected error. MQCC=*mqcc* MQRC=*mqrc* FRB at *frb-address*

Severity

0

Explanation

This message is used as the title for an IBM MQ CICS adapter dump if an unexpected error occurs. *frb-address* is the address of the function request block.

CSQC700I

transid taskid IBM WebSphere MQ for z/OS version - CICS bridge

Explanation

This message is issued when the CICS bridge starts, and shows the release level.

CSQC702I

transid taskid Monitor initialization complete

Explanation

Bridge monitor initialization completed successfully.

CSQC703I

transid taskid Auth=auth-option, WaitInterval=interval, Q=*q-name*

Explanation

This confirms the bridge monitor start options. Although the WAIT parameter is supplied in seconds, *Interval* is shown in milliseconds; -1 implies WaitUnlimited.

CSQC704E

transid taskid EXEC CICS call error. EIBFN=*eibfn* EIBRESP=*eibresp* EIBRESP2=*eibresp2*

Explanation

An error occurred in a CICS call issued by the bridge.

System programmer response

See the *CICS Application Programming* manual for an explanation of *eibfn*, *eibresp*, and *eibresp2*.

CSQC705E

transid taskid Parameter at offset n in input string is invalid

Explanation

The parameter at offset *n* in the start parameter string for the bridge monitor is invalid. The incorrect parameter is shown in message CSQC784E.

System programmer response

Correct the parameter and restart the bridge monitor.

CSQC706E

transid taskid Authentication option invalid for this *release* of CICS

Explanation

The authentication option requested is not supported. CICS/ESA 3.3 only supports the LOCAL and VERIFY_UOW authentication options. Other versions of the bridge can only support LOCAL.

System programmer response

Choose a supported authentication option for the release of CICS and restart the bridge monitor.

CSQC707I

transid taskid Bridge not supported on non-z/OS platforms. Results are unpredictable

Explanation

The bridge is being run on a platform other than z/OS. This might work, but is not supported.

CSQC708E
transid taskid Monitor must run at a terminal to use AUTH=VERIFY_UOW on CICS/ESA V3

Explanation

AUTH=VERIFY_UOW was requested. AUTH=VERIFY_UOW on CICS/ESA 3.3 requires that the bridge monitor is run at a terminal.

System programmer response

Restart the bridge monitor from a terminal or set AUTH=LOCAL.

CSQC709E
transid taskid Preset security not valid for AUTH=VERIFY_UOW on CICS/ESA V3

Explanation

AUTH=VERIFY_UOW was requested. AUTH=VERIFY_UOW on CICS/ESA 3.3 requires that the bridge monitor is run at a terminal, but that terminal might not have preset security.

System programmer response

Redefine the terminal, or use a different one, before restarting the bridge monitor, or set AUTH=LOCAL.

CSQC710E
transid taskid mq-call failed, MQCC=*mqcc* MQRC=*mqrc*

Explanation

An error occurred in an IBM MQ API call issued by the bridge.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc*.

CSQC711E
transid taskid Unable to open bridge queue, *q-name*

Explanation

The bridge queue specified is not known to the queue manager.

System programmer response

Check the bridge queue is defined correctly and specified on the Q= parameter of the bridge startup for CKBR.

CSQC712I
transid taskid Bridge quiescing

Explanation

Bridge monitor quiesce has been initiated, typically because CICS or the queue manager is shutting down or because the operator has set the bridge queue GET(DISABLED).

CSQC713I
transid taskid Bridge terminated normally

Explanation

Bridge monitor shutdown completed normally.

CSQC714I
transid taskid Bridge task starting

Explanation

Bridge monitor is starting.

CSQC715E

transid taskid Invalid COMMAREA length length in message

Explanation

The COMMAREA length calculated by the bridge is not valid. It probably exceeds the maximum of 32767. This error can also occur if a negative length was calculated.

System programmer response

If OutputDataLength is set within the MQCIH, check it does not exceed 32759 (allowing 8 bytes for the program name). If it is not set, check the total request message length (also allowing 8 bytes for the program name). The length of any MQCIH must not exceed 32767. Note that the length of the MQCIH is taken from the MQCIH length field.

CSQC716E

transid taskid MQCIH required for UOW middle and last messages

Explanation

A bridge task has received a message for a second or subsequent MQGET call within a multipart unit of work. The correlation identifier matches the message identifier of the first message within the unit of work, but the message does not contain an MQCIH. The unit of work is backed out.

System programmer response

Make sure that all messages within a multipart unit of work contain an MQCIH and rerun the unit of work.

CSQC717E

transid taskid UOW first or only received when UOW middle or last expected

Explanation

A bridge task has received a message for a second or subsequent MQGET call within a multipart unit of work. The correlation identifier matches the message identifier of the first message within the unit of work, but the UOWControl field within the MQCIH is invalid. It is set to MQCUOWC_FIRST or MQCUOWC_ONLY when MQCUOWC_MIDDLE, MQCUOWC_LAST, MQCUOWC_COMMIT, or MQCUOWC_BACKOUT is required. The unit of work is backed out.

System programmer response

Correct the UOWControl field and rerun the unit of work.

CSQC718E

transid taskid UOW middle or last received when UOW first or only expected

Explanation

The bridge monitor has received a request message for a new unit of work, the correlation identifier is set to MQCI_NEW_SESSION but the UOWControl field within the MQCIH is set to something other than MQCUOWC_FIRST or MQCUOWC_ONLY.

System programmer response

Correct the UOWControl field and rerun the unit of work.

CSQC720E

transid taskid Authentication option IDENTIFY or VERIFY_ requires a security manager to be active

Explanation

An attempt has been made to start the bridge monitor with AUTH=IDENTIFY or VERIFY_ but security is not active for the CICS system.

System programmer response

Activate security, or choose a different authentication option.

CSQC721E

transid taskid Invalid MQCIH

Explanation

A message has been received by the bridge with an MQMD format field of MQFMT_CICS but the data does not begin with a valid MQCIH. Either the StrucId, Version, or StrucLength is incorrect.

System programmer response

Check the version of the header and compare with the level supported by the bridge. Correct the format or the user data as appropriate.

CSQC724E
transid taskid Bridge queue *q-name* not defined as local

Explanation

The bridge queue specified is not defined as a local queue.

System programmer response

Redefine the bridge request queue as a local queue.

CSQC725I
transid taskid Messages on bridge queue are not persistent by default

Explanation

The bridge queue is defined with DEFPSIST(NO). Request messages should be persistent to guarantee that they will be processed. The message is for information only.

CSQC726I
transid taskid Bridge queue backout count not hardened

Explanation

The bridge queue is defined with NOHARDENBO.

System programmer response

Alter the queue definition to set HARDENBO. The queue should be defined with HARDENBO to ensure that the bridge does not try to process a unit of work a second time following a CICS emergency restart.

CSQC727I
transid taskid Bridge queue defined with MSGDLVSQ(PRIORITY), but should be FIFO for efficiency

Explanation

The bridge queue is defined with PRIORITY message delivery sequence. Processing of high priority messages could be delayed if they are added to the queue ahead of the bridge monitor's browse cursor.

System programmer response

Alter the queue definition to set MSGDLVSQ(FIFO).

CSQC728E
transid taskid Bridge queue already open. Check no CKBR or bridge tasks are active for this queue

Explanation

An MQINQ call for the bridge queue found that another process had the queue open for input. This is not allowed when the bridge monitor starts.

System programmer response

Check that no bridge monitor task (CKBR) is already active for this queue. Message CSQC703I can be used to check which queue a bridge monitor is servicing. If no bridge monitor is active, check if any bridge tasks that were started by a previous bridge monitor are still active (see CSQC743I messages).

CSQC729I
transid taskid No dead-letter queue defined to queue manager

Explanation

There is no dead-letter queue defined to the queue manager. The bridge will be terminated if any error occurs that would result in a message being sent to the dead-letter queue.

System programmer response

Alter the queue manager to define a dead-letter queue if dead-letter processing is required.

CSQC730I
transid taskid Unable to open dead-letter queue, MQRC=*mqrc*

Explanation

The dead-letter queue defined to the queue manager could not be opened. The bridge will be terminated if any error occurs that would result in a message being sent to the dead-letter queue.

System programmer response

Refer to API completion and reason codes for information about *mqrc*.

CSQC731I
transid taskid Unable to inquire on dead-letter queue, MQRC=*mqrc*

Explanation

An MQINQ call on the dead-letter queue failed. The bridge will be terminated if any error occurs that would result in a message being sent to the dead-letter queue.

System programmer response

Refer to API completion and reason codes for information about *mqrc*.

CSQC732I
transid taskid Unable to put message to dead-letter queue, MQRC=*mqrc*

Explanation

An MQPUT to the dead-letter queue failed. If this error occurs in a bridge task, the unit of work is backed out. If this error occurs in the bridge monitor, it will be abnormally terminated.

System programmer response

Refer to API completion and reason codes for information about *mqrc*.

CSQC733I
transid taskid Dead-letter queue not defined with USAGE(NORMAL)

Explanation

The dead-letter queue is not defined correctly. The bridge will be terminated if any error occurs that would result in a message being sent to the dead-letter queue.

System programmer response

Ensure the dead-letter queue is not defined as a transmission queue.

CSQC734I
transid taskid Dead-letter queue max message length length is too small

Explanation

The maximum message length allowed for the dead-letter queue is less than the size of the dead-letter header, MQDLH. The bridge will be terminated if any error occurs that would result in a message being sent to the dead-letter queue.

System programmer response

Increase the MAXMSGL of the dead-letter queue to at least the size of the MQDLH but, to be effective, make it large enough to hold the largest request message expected plus the MQDLH.

CSQC735I
transid taskid CICS or queue manager quiesced before bridge task started

Explanation

The bridge task received a quiescing return code from an MQOPEN call of the request queue or an MQGET call for the first message within a unit of work.

The request will be processed when CICS, the queue manager, or the bridge monitor are restarted.

CSQC736I
transid taskid Bridge quiesced before task started

Explanation

The bridge quiesced before a bridge task could get the first message within a unit of work.

The request will be processed when the bridge monitor is restarted.

CSQC737E
transid taskid CICS or queue manager quiesced, bridge task backed out

Explanation

The bridge task received a quiescing return code from an MQGET for a second or subsequent message within a unit of work. The unit of work is backed out and the bridge task terminated.

System programmer response

Rerun the unit of work.

CSQC738E
transid taskid Bridge quiesced, task backed out

Explanation

The bridge task quiesced while a bridge task was waiting to get a second or subsequent message within a unit of work because the queue was not enabled for getting messages. The unit of work is backed out and the bridge task terminated.

System programmer response

Rerun the unit of work.

CSQC739E
transid taskid Bridge terminated, timeout interval expired before middle or last UOW message received

Explanation

The bridge task did not receive a second or subsequent message for a unit of work within the wait interval specified (or as overridden on the first request for the unit of work) at bridge monitor startup.

System programmer response

Either:

- Increase the WAIT parameter on bridge monitor startup.
- Correct the program that failed to send a subsequent request for a unit of work.
- Set the UOWControl field correctly for the previous request.

CSQC740E
transid taskid Client application requested backout

Explanation

The bridge task backed out a unit of work on receipt of a MQCUOWC_BACKOUT request.

CSQC745E
transid taskid Unable to put message to reply queue, MQRC=*mqrc*

Explanation

An MQPUT call to the reply-to queue failed.

System action

The response message will be sent to the dead-letter queue.

System programmer response

Refer to API completion and reason codes for information about *mqrc*.

CSQC746E
transid taskid Invalid CCSID, *ccsid* expected, *ccsid* received

Explanation

A request message was received with an invalid value for the CCSID field in the MQMD.

System programmer response

Correct the MQMD and reissue the request.

CSQC747E
transid taskid Invalid encoding, *encoding* expected, *encoding* received

Explanation

A request message was received with an invalid value for the encoding field in the MQMD.

System programmer response

Correct the MQMD and reissue the request.

CSQC748E
transid taskid Message removed from the request queue during backout processing

Explanation

The bridge has sent this request message to the dead-letter queue during backout processing.

System programmer response

See the associated messages to determine the cause of the problem.

CSQC749E
transid taskid Authentication error, *userid user-id*

Explanation

The bridge monitor is being run with AUTH=VERIFY_UOW or AUTH=VERIFY_ALL. An EXEC CICS SIGNON or EXEC CICS VERIFY PASSWORD command failed.

System programmer response

Check that the correct user ID was specified, and that the appropriate authorizations are defined for it.

CSQC750E
transid taskid Bridge monitor internal error

Explanation

An unexpected condition was detected by the bridge.

System programmer response

Contact your IBM support center if the problem persists.

CSQC751E
transid taskid Unable to LINK to program program-name, EIBRESP=*eibresp* EIBRESP2=*eibresp2*

Explanation

An EXEC CICS LINK command for the user requested program failed.

System programmer response

See the *CICS Application Programming* manual for an explanation of *eibresp* and *eibresp2*.

CSQC752E

transid taskid Bridge queue cannot be used for reply-to queue

Explanation

The reply-to queue name in a request message is the same as the bridge-request queue name. This is not allowed.

System programmer response

Specify a different reply-to queue in the request.

CSQC753E

transid taskid Message has been processed previously and returned to the queue using backout

Explanation

The bridge already attempted to process this request but the request failed and was backed out. This could be because backout processing failed for a bridge task that ended abnormally or because there was a CICS failure while this request was in progress. No attempt is made to process the request a second time.

System programmer response

Look at previous error messages for this message on the CSMT log to determine the cause for the previous failure, and rerun the request.

CSQC754E

transid taskid Bridge task abend *abend-code* in program *program-name*

Explanation

A bridge task terminated abnormally.

System programmer response

The associated transaction dump can be used to assist problem determination. Correct the problem and rerun the unit of work. If the program name begins with CSQCB and the problem persists, contact your IBM support center.

CSQC755E

transid taskid Bridge queue is not shareable

Explanation

The bridge request queue does not have the SHARE attribute.

System programmer response

Alter the queue definition and restart the bridge monitor.

CSQC756E

transid taskid Dead-letter queue not defined as local

Explanation

The dead-letter queue is not defined as a local queue. The bridge will be terminated if any error occurs that would result in a message being sent to the dead-letter queue.

System programmer response

Redefine the dead-letter queue as a local queue.

CSQC757E

transid taskid Unable to open reply-to queue, *q-name* MQRC=*mqrc*

Explanation

The reply-to queue specified is not known to the queue manager.

System programmer response

Refer to API completion and reason codes for information about *mqrc*. Check you have provided the necessary queue definitions.

CSQC758E

transid taskid Unable to START bridge task, *userid user-id* not authorized. EIBRESP=*eibresp* EIBRESP2=*eibresp2*

Explanation

The bridge monitor is being run with the IDENTIFY or VERIFY authorization option. An EXEC CICS START command for the bridge task failed with NOTAUTH or USERIDERR because the user ID is not authorized to start bridge transactions or has been revoked.

System programmer response

See the *CICS Application Programming* manual for an explanation of *eibresp* and *eibresp2*. Correct the security definitions if this userid should be authorized to run requests using the bridge.

CSQC759E

transid taskid Transaction *transid* not defined to CICS

Explanation

An request has been received to run the transaction listed but it is not defined to this CICS system.

System programmer response

Correct the request or define the transaction.

CSQC760I

transid taskid MsgId=MsgId

Explanation

This message gives the identifier of a message to which a previous error message relates.

System programmer response

See the associated message.

CSQC761I

transid taskid CorrelId=CorrelId

Explanation

This message gives the correlation identifier of a message to which a previous error message relates.

System programmer response

See the associated message.

CSQC762I

transid taskid Queue name *q-name*

Explanation

This message gives the name of the queue to which a previous error message relates.

System programmer response

See the associated message.

CSQC763I

transid taskid Queue manager *queue-manager-name*

Explanation

This message gives the name of the queue manager to which a previous error message relates.

System programmer response

See the associated message.

CSQC764E
transid taskid Invalid userid, *user-id* expected, *user-id* received

Explanation

A user ID is required in all request messages when AUTH=VERIFY_ALL is being used; this must be the same for all requests within a unit of work. This message is issued because the bridge task detected a missing or changed user ID.

System programmer response

Correct the user ID and rerun the unit of work.

CSQC766I
transid taskid Bridge queue not defined with INDXTYPE(CORRELID)

Explanation

The bridge queue should be defined with an index type of CORRELID. This is required if the queue is a shared queue and strongly suggested for private queues.

System action

If the bridge queue is shared, the bridge monitor does not start. Otherwise, processing continues.

System programmer response

Alter the queue definition to specify the required index type and restart the bridge monitor.

CSQC767I
transid taskid Unable to open backout-requeue queue, MQRC=*mqrc*

Explanation

The backout-requeue queue defined to the bridge queue could not be opened.

System action

Messages will be sent to the dead-letter queue instead.

System programmer response

Refer to API completion and reason codes for information about *mqrc*.

CSQC768E
transid taskid Backout-requeue queue not defined as local

Explanation

The backout-requeue queue is not defined as a local queue.

System action

Messages will be sent to the dead-letter queue instead.

System programmer response

Redefine the backout-requeue queue as a local queue.

CSQC769I
transid taskid Unable to inquire on backout-requeue queue, MQRC=*mqrc*

Explanation

An MQINQ call on the backout-requeue queue failed.

System action

Messages will be sent to the dead-letter queue instead.

System programmer response

Refer to API completion and reason codes for information about *mqrc*.

CSQC770I
transid taskid Backout-requeue queue not defined with USAGE(NORMAL)

Explanation

The backout-requeue queue is not defined correctly.

System action

Messages will be sent to the dead-letter queue instead.

System programmer response

Ensure the backout-requeue queue is not defined as a transmission queue.

CSQC771I
transid taskid Unable to put message to backout-requeue queue, MQRC=*mqrc*

Explanation

An MQPUT to the backout-requeue queue failed.

System action

Messages will be sent to the dead-letter queue instead.

System programmer response

Refer to API completion and reason codes for information about *mqrc*.

CSQC772E
transid taskid Invalid FacilityLike value (xxx) in message

Explanation

The CICS Link3270 program DFHL3270 returned code BRIHRC_FACILITYLIKE_INVALID, because the FacilityLike field of the MQCIH header in the input message was invalid. It must correspond to an installed terminal that is to be used as a model for the bridge facility.

System action

The input messages are backed out to the backout-requeue queue or dead-letter queue.

System programmer response

Correct the FacilityLike field to specify the name of a terminal installed on the CICS system or install a terminal with the required name.

CSQC773E
transid taskid Invalid or expired Facility token in message

Explanation

The CICS Link3270 program DFHL3270 returned code BRIHRC_INVALID_FACILITYTOKEN or BRIHRC_FACILITYTOKEN_IN_USE, because the Facility field of the MQCIH header in the input message was invalid. The value must be zero on the first request of a sequence of 3270 bridge messages, and the value that is returned in the reply message must then be used in subsequent messages. The token expires after the time specified in the FacilityKeepTime field of the first message. The token cannot be used by more than one sequence of bridge messages.

System action

The input messages are backed out to the backout-requeue queue or dead-letter queue.

System programmer response

Check the application to ensure that the correct Facility token is being used and that it has not expired. If necessary, increase the FacilityKeepTime so that the token does not expire before the sequence of messages has been processed.

CSQC774E
transid taskid Unable to start transaction on CICS system sys-name

Explanation

The RemoteSysId field of the MQCIH message header is non-blank, but the specified name *sys-name* is not known to CICS or there is no active CICS connection to that remote system.

System action

The input messages are backed out to the backout-requeue queue or dead-letter queue.

System programmer response

Ensure that the specified CICS system is running and that there is an active CICS Intersystem communication connection to it from the system running the bridge monitor.

CSQC775I
transid taskid Unable to start transaction on this CICS system

Explanation

The RemoteSysId field of the MQCIH message header is blank, but the specified Facility token is not known to CICS. The bridge monitor does not know which CICS system allocated the token and so leaves the message on the queue for another bridge monitor to process. If the token is invalid or expired this may result in the message never being processed.

System programmer response

Ensure that the RemoteSysId field of all messages except the first of a sequence contains the RemoteSysId returned in the previous reply message. This will ensure messages are routed directly to the correct CICS region, improve performance, and prevent the possibility of unprocessed messages.

CSQC776E
transid taskid Invalid FacilityKeepTime value (*nnn*) in message

Explanation

The CICS Link3270 program DFHL3270 returned code BRIHRC_INVALID_KEEPTIME, because the FacilityKeepTime field of the MQCIH message header was zero or greater than the maximum allowed keep time (as controlled by the BRMAXKEEPTIME CICS system initialization parameter).

System action

The input messages are backed out to the backout-requeue queue or dead-letter queue.

System programmer response

Ensure that the FacilityKeepTime field of the first message in a 3270 transaction sequence contains a value within the valid range.

CSQC777E
transid taskid Link3270 error, RC=*code*

Explanation

The CICS Link3270 program DFHL3270 returned an unexpected return code.

System action

The input messages are backed out to the backout-requeue queue or dead-letter queue.

System programmer response

Use the CICS COBOL copy book DFHBRIHO to find the symbolic name of the return code from the numeric value *code* reported in the message. Then refer to 'BRIH-RETURNCODE values' in the *CICS External Interfaces Guide* to determine the meaning of the return code from DFHL3270. Correct the input message accordingly.

CSQC778E
transid taskid Abend *abend-code* in transaction *tran-id*

Explanation

A CICS abend occurred in a transaction running under the CICS link bridge.

System action

The input messages are backed out to the backout-requeue queue or dead-letter queue.

System programmer response

Determine the cause of the abend and correct the underlying problem using normal CICS diagnostic techniques.

CSQC779E
transid taskid Mapset does not match, *mapset-id* expected, *mapset-id* received

Explanation

The mapset name in a receive map vector does not match the name requested. The bridge task cannot interpret the application data structure.

System action

The input messages are backed out to the backout-requeue queue or dead-letter queue.

System programmer response

Ensure the mapset name in the input message matches the name expected by the CICS transaction and returned in the preceding receive map request vector.

CSQC780E
transid taskid Map name does not match, *map-id* expected, *map-id* received

Explanation

The map name in a receive map vector does not match the name requested. The bridge task cannot interpret the application data structure.

System action

The input messages are backed out to the backout-requeue queue or dead-letter queue.

System programmer response

Ensure the map name in the input message matches the name expected by the CICS transaction and returned in the preceding receive map request vector.

CSQC781E
transid taskid Invalid bridge vector

Explanation

The bridge input vector was invalid. Possible errors are:

- The vector length is greater than the message length
- The vector type is not recognized
- A field length is greater than its defined length
- A field input data length is greater than the defined length of the field

The ErrorOffset field of the MQCIH header indicates the position within the message where the error was detected (although the actual error may have caused by a problem earlier in the message).

System action

The input messages are backed out to the backout-requeue queue or dead-letter queue.

System programmer response

Ensure the map name in the input message matches the name expected by the CICS transaction and returned in the preceeding receive map request vector.

CSQC782E
transid taskid File DFHBRNSF not available

Explanation

The CICS Link3270 program DFHL3270 returned code BRIHRC_DHFBRNSF_UNAVAILABLE, because the CICS bridge facility name space file, DFHBRNSF, was not available for use by CICS.

System action

The input messages are backed out to the backout-requeue queue or dead-letter queue.

System programmer response

Ensure the DFHBRNSF file is defined and avaliable to CICS.

For information about defining this file, see "Defining the bridge facility" in the *CICS External Interfaces Guide*.

CSQC783I
transid taskid Msg= *msgdest*, PassTktA=*applid*

Explanation

This confirms the bridge monitor start options.

CSQC784E
transid taskid Input= *parm_string*

Explanation

An error was found in the bridge start input parameters. *parm_string* shows the input parameters starting at the point where the error was detected.

System programmer response

Correct the parameter in error and restart the bridge monitor.

CSQC785E
transid taskid Link3270 routing failed - not supported by CICS system

Explanation

The CICS Link3270 program DFHL3270 returned code BRIHRC_ROUTING_BACKLEVEL_CICS, because the Link3270 request was routed to a CICS system that does not support Link3270.

System programmer response

Correct the CICS transaction routing definitions. The target CICS system must be CICS Transaction Server Version 2 Release 2 or higher.

For information about Link3270 see "Bridging to 3270 transactions" in the *CICS External Interfaces Guide*.

CSQC786E
transid taskid Link3270 routing failed - connection error

Explanation

The CICS Link3270 program DFHL3270 returned code BRIHRC_ROUTING_CONNECTION, because a connection error did not allow the Link3270 request to be routed to the remote region.

System programmer response

Correct the CICS transaction routing definitions. The target CICS system must be active and connected.

For information about Link3270 see "Bridging to 3270 transactions" in the *CICS External Interfaces Guide*.

CSQC787E
transid taskid Link3270 routing failed - TERMERR

Explanation

The CICS Link3270 program DFHL3270 returned code BRIHRC_ROUTING_TERMERR, because the EXEC CICS LINK from the DFHL3270 to the target region failed with TERMERR.

System programmer response

Correct the CICS transaction routing definitions.

For information about Link3270 see "Bridging to 3270 transactions" in the *CICS External Interfaces Guide*.

CSQC788E
transid taskid Link3270 routing failed - TRANDEF error

Explanation

The CICS Link3270 program DFHL3270 returned code BRIHRC_ROUTING_TRANDEF_ERROR, because the TRANSACTION resource definition in the routing region did not allow the transaction to be routed to the chosen target region.

System programmer response

Correct the CICS transaction routing definitions.

For information about Link3270 see "Bridging to 3270 transactions" in the *CICS External Interfaces Guide*.

CSQC789E
transid taskid Link3270 routing failed - URM error, RC=*code* CompCode= *compcode*

Explanation

The CICS Link3270 program DFHL3270 returned code BRIHRC_ROUTING_URM_LINK_FAILED or BRIHRC_ROUTING_URM_REJECTED, because the link to the dynamic routing User Replaceable Module (URM) failed or was rejected by the URM.

System programmer response

Correct the CICS transaction routing definitions.

For information about the codes *code* and *compcode* from Link3270 see 'BRIH-RETURNCODE values' in the *CICS External Interfaces Guide*.

CSQC790E
transid taskid Transaction not running

Explanation

The CICS Link3270 program DFHL3270 returned code BRIHRC_TRANSACTION_NOT_RUNNING, because there was no transaction currently running on the bridge facility so the data from the IBM MQ message could not be passed to the transaction.

System programmer response

Check the state of the CICS system.

For information about Link3270 see "Bridging to 3270 transactions" in the *CICS External Interfaces Guide*.

CSQC791E
transid taskid Invalid header format found in message

Explanation

The length field in the header is less than the minimum header length or greater than the actual message message length.

System programmer response

Ensure that the input message contains only valid IBM MQ headers. Only MQH-type headers with standard header-chaining fields might appear in a bridge message before the MQCIH header and application data.

CSQC792I
transid taskid RouteMEM=Y/N

Explanation

This confirms the bridge monitor start options.

Coupling Facility manager messages (CSQE...)

The value shown for *struc-name* in the coupling facility manager messages that follow is the 12-character name as used by IBM MQ. The external name of such CF structures for use by z/OS is formed by prefixing the IBM MQ name with the name of the queue-sharing group to which the queue manager is connected.

CSQE005I
Structure *struc-name* connected as *conn-name*, version=*version*

Explanation

The queue manager has successfully connected to structure *struc-name*.

System action

Processing continues. The queue manager can now access the CF structure.

CSQE006I
Structure *struc-name* connection name *conn-name* disconnected

Explanation

The queue manager has disconnected from CF structure *struc-name*.

System action

Processing continues.

CSQE007I
event-type event received for structure *struc-name* connection name *conn-name*

Explanation

The queue manager has received XES event *event-type* for CF structure *struc-name*.

System action

Processing continues.

System programmer response

Examine the event code to determine what event was issued. The event codes are described in the *z/OS MVS Programming: Sysplex Services Reference* manual.

CSQE008I
Recovery event from *qmgr-name* received for structure *struc-name*

Explanation

The queue manager issued a peer level recovery event for CF structure *struc-name*.

System action

Processing continues. The queue manager will begin peer level recovery processing.

CSQE011I
Recovery phase 1 started for structure *struc-name* connection name *conn-name*

Explanation

Peer level recovery has started phase one of its processing, following the failure of another queue manager in the queue-sharing group.

System action

Processing continues.

System programmer response

Determine why a queue manager within the queue-sharing group failed.

CSQE012I

Recovery phase 2 started for structure *struc-name* connection name *conn-name*

Explanation

Peer level recovery has started phase two of its processing.

System action

Processing continues.

CSQE013I

Recovery phase 1 completed for structure *struc-name* connection name *conn-name*

Explanation

Peer level recovery has completed phase one of its processing.

System action

Processing continues.

CSQE014I

Recovery phase 2 completed for structure *struc-name* connection name *conn-name*

Explanation

Peer level recovery has completed phase two of its processing.

System action

Processing continues.

CSQE015I

Recovery phase 2 not attempted for structure *struc-name* connection name *conn-name*

Explanation

Phase two of peer level recovery processing was not attempted because of a previous error in phase one on one of the participating queue managers.

System action

Processing continues. The connection will be recovered by the failed queue manager when it restarts.

System programmer response

Investigate the cause of the error, as reported in the preceding messages.

CSQE016E

Structure *struc-name* connection name *conn-name* disconnected, RC=*return-code* reason=reason

Explanation

The queue manager has disconnected from CF structure *struc-name*.

System action

Processing continues.

System programmer response

Examine the return and reason codes to determine why the CF structure was disconnected. The codes are described in the *z/OS MVS Programming: Sysplex Services Reference* manual.

CSQE018I
Admin structure data building started

Explanation

The queue manager is building its own data for the administration structure.

System action

Processing continues.

CSQE019I
Admin structure data building completed

Explanation

The queue manager has built its own data for the administration structure.

System action

Processing continues.

CSQE020E
Structure *struc-name* connection as *conn-name* failed, RC=*return-code* reason= *reason* codes=*s1 s2 s3*

Explanation

The queue manager failed to connect to CF structure *struc-name*.

System action

This depends on the component that caused the connection request (queue manager or channel initiator) and the reason for connecting to the CF structure. The component might terminate, or might continue processing but with functions that require the structure inhibited.

System programmer response

Examine the return and reason codes to determine why the connect failed. Codes *s1 s2 s3* are the XES IXLCONN diagnosis codes, which are described in the *z/OS MVS Programming: Sysplex Services Reference* manual.

CSQE021I
Structure *struc-name* connection as *conn-name* warning, RC=*return-code* reason=*reason* codes=*s1 s2 s3*

Explanation

The queue manager has successfully connected to CF structure *struc-name*, but the XES IXLCONN call returned with a warning.

System action

Processing continues.

System programmer response

Examine the return and reason codes to determine why the connect warning message was issued. Codes *s1 s2 s3* are the XES IXLCONN diagnosis codes, which are described in the *z/OS MVS Programming: Sysplex Services Reference* manual.

CSQE022E
Structure *struc-name* unusable, size is too small

Explanation

The queue manager cannot use the named (coupling facility) (CF) structure because its size is less than the minimum that IBM MQ requires.

System action

The queue manager disconnects from the coupling facility (CF) structure, which becomes unusable. If it is an application structure, the queues that use the structure are not usable. If it is the administration structure, the queue manager terminates with completion code X'6C6' and reason code X'00C53000'.

System programmer response

Increase the size of the CF structure to at least the minimum size required. See Planning your coupling facility and offload storage environment for guidance on required structure sizes.

If the structure is allocated and the coupling facility Resource Manager policy allows the size of it to be increased, use the z/OS command SETXCF START,ALTER,STRNAME=*ext-struc-name*,SIZE=*newsize*. If the policy does not so allow, or there is insufficient space in the coupling facility that hosts the structure, the policy must be altered; then the structure can be rebuilt using the z/OS command SETXCF START,REBUILD,STRNAME=*ext-struc-name*. (In these commands, *ext-struc-name* is formed by prefixing *struc-name* with the queue-sharing group name.)

If the structure is not allocated, alter the policy to specify a larger INITSIZE for the structure.

CSQE024E
Incorrect coupling facility level *level1*, required *level2*

Explanation

The queue manager cannot join the queue-sharing group because the version of z/OS being used supports only CF level *level1*, but MQ requires at least level *level2*.

System action

CF support is not active.

System programmer response

Upgrade z/OS and the coupling facility as necessary.

CSQE025E
Invalid UOW for *qmgr-name* in list *list-id* cannot be recovered, key=*uow-key*

Explanation

A unit-of-work descriptor was read during recovery processing that contained unexpected data. The descriptor was for the indicated queue manager; it was in the coupling facility list *list-id* and had key *uow-key* (shown in hexadecimal).

System action

The unit-of-work in error cannot be processed and the descriptor is marked as being in error. Processing continues.

System programmer response

Take a memory dump of the indicated list in your coupling facility administration structure for queue manager *qmgr-name* and contact your IBM support center.

CSQE026E
Structure *struc-name* unusable, incorrect coupling facility level *level1*, required *level2*

Explanation

The queue manager cannot use the named CF structure because it has been allocated in a CF which supports level *level1*, but MQ requires at least level *level2*.

System action

The queues that use the CF structure are not usable.

System programmer response

Either upgrade the coupling facility, or use a CF structure which is in a CF running level *level2* or above.

CSQE027E
Structure *struc-name* unusable, vector size *n1* incorrect, required *n2*

Explanation

The queue manager cannot use the named CF structure because it has been allocated a list notification vector of size *n1*, but MQ requires at least size *n2*. This is probably because there is not enough available hardware storage area (HSA) for the vector.

System action

The queues that use the CF structure are not usable.

System programmer response

You cannot adjust the amount of HSA defined for your processor. Instead, retry the application (or other process) which was attempting to open the shared queue. If the problem persists, contact your IBM support center for assistance.

CSQE028I
Structure *struc-name* reset, all messages discarded

Explanation

When it tried to connect to the named CF structure, the queue manager detected that the structure had been deleted, so a new empty structure has been created.

System action

All the messages on the queues that use the CF structure are deleted.

CSQE029E
Structure *struc-name* unusable, version *v1* differs from group version *v2*

Explanation

The queue manager cannot use the named CF structure because the version number of the structure differs from that of the queue-sharing group.

System action

The queue manager disconnects from the CF structure, which becomes unusable. If it is an application structure, the queues that use the structure are not usable. If it is the administration structure, the queue manager terminates with completion code X'6C6' and reason code X'00C51057'.

System programmer response

Check that the configuration of your queue manager, queue-sharing group, and data-sharing group is correct. If so, deallocate the CF structure using the z/OS commands **SETXCF FORCE,CON** and **SETXCF FORCE,STRUCTURE**. When you use these commands, the structure name is formed by prefixing *struc-name* with the queue-sharing group name.

You might need to stop and restart the queue manager(s).

Note:

You can also use the **D XCF** command, for example **D XCF,STR,STRNAME=MQ7@CSQ_ADMIN** to show information about the structure and any connections.

CSQE030I
Serialized application cannot start, admin structure data incomplete

Explanation

A serialized application attempted to start, but it could not do so because one or more queue managers in the queue-sharing group has not completed building its data for the administration structure. Messages CSQE031I and CSQE032I precede this message to identify such queue managers.

System action

The application is not started. The MQCONNX call that it issued to connect to the queue manager fails with a completion code of MQCC_FAILED and a reason code of MQRC_CONN_TAG_NOT_USABLE. (See API completion and reason codes for more information about these codes.)

System programmer response

The administration structure is automatically rebuilt. The rebuild can occur on any member of the QSG. Restart the application after the administration structure is successfully rebuilt, which is shown by message CSQE037I on the system performing the rebuild.

CSQE031I
Admin structure data from *qmgr-name* incomplete

Explanation

Some functions are not yet available because the indicated queue manager has not completed building its data for the administration structure.

System action

Processing continues. The functions will be available when all the queue managers identified by messages CSQE031I and CSQE032I have issued message CSQE019I.

CSQE032I
Admin structure data from *qmgr-name* unavailable

Explanation

Some functions are not yet available because the indicated queue manager is not active and therefore its data for the administration structure is not available.

System action

Processing continues.

System programmer response

The rebuild of the administration structure can occur on any member of the QSG. The functions will be available after the administration structures have been successfully rebuilt. Check the log for the messages CSQE036I and CSQE037I, which will indicate the start and completion of the administration structure rebuild.

CSQE033E
Recovery phase 1 failed for structure *struc-name* connection name *conn-name*, RC=*return-code* reason= *reason*

Explanation

An error occurred during phase one of peer level recovery processing. The recovery attempt is terminated. *return-code* and *reason* are the diagnosis codes (in hexadecimal) from an XES IXL call.

System action

Processing continues. The connection will be recovered by the failed queue manager when it restarts.

System programmer response

See the *z/OS MVS Programming: Sysplex Services Reference* manual for information about the XES IXL diagnosis codes. Restart the queue manager that failed; if it is unable to recover, contact your IBM support center.

CSQE034E

Recovery phase 2 failed for structure *struc-name* connection name *conn-name*, RC=*return-code* reason=*reason*

Explanation

An error occurred during phase two of peer level recovery processing. The recovery attempt is terminated. *return-code* and *reason* are the diagnosis codes (in hexadecimal) from an XES IXL call.

System action

Processing continues. The connection will be recovered by the failed queue manager when it restarts.

System programmer response

See the *z/OS MVS Programming: Sysplex Services Reference* manual for information about the XES IXL diagnosis codes. Restart the queue manager that failed; if it is unable to recover, contact your IBM support center.

CSQE035E

csect-name Structure *struc-name* in failed state, recovery needed

Explanation

The queue manager attempted to use CF structure *struc-name*, but it is in a failed state. The failure occurred previously; it was not caused by the current use of the structure.

System action

Processing continues, but queues that use this CF structure will not be accessible.

System programmer response

Check the console for messages from XES relating to the earlier failure, and investigate the cause. See the *z/OS MVS Programming: Sysplex Services Reference* manual for information about diagnosing problems in XES.

When the problem is resolved, issue a RECOVER CFSTRUCT command specifying TYPE(NORMAL) for this and any other failed CF structure.

CSQE036I

Admin structure data building started for *qmgr-name*

Explanation

The queue manager is building the indicated queue manager's data for the administration structure.

System action

Processing continues.

CSQE037I

Admin structure data building completed for *qmgr-name*

Explanation

The queue manager has built the indicated queue manager's data for the administration structure.

System action

Processing continues.

CSQE038E

Admin structure is full

Explanation

The queue manager cannot write to the administration structure in the coupling facility (CF) because it is full.

System action

The queue manager periodically retries the write attempt. If after a number of retries the structure is still full, this message is reissued and the queue manager terminates with a completion code X'5C6' and a reason code 00C53002.

System programmer response

Increase the size of the CF structure to at least the minimum size required. See the Defining coupling facility resources for guidance on required structure sizes.

If the structure is allocated and the coupling facility Resource Manager policy allows the size of it to be increased, use the z/OS command SETXCF START,ALTER,STRNAME=*ext-struc-name*,SIZE=*newsize*. If the policy does not allow this change, or there is insufficient space in the coupling facility that hosts the structure, the policy must be altered, then the structure can be rebuilt using the z/OS command SETXCF START,REBUILD,STRNAME=*ext-struc-name*. (In these commands, *ext-struc-name* is formed by prefixing CSQ_ADMIN with the queue-sharing group name.)

If the structure is not allocated, alter the policy to specify a larger INITSIZE for the structure.

CSQE040I
Structure *struc-name* should be backed up

Explanation

The latest backup for the named CF structure is not very recent. Unless backups are taken frequently, the time to recover persistent messages on shared queues may become excessive.

The message is issued at checkpoint time if the queue manager was the one that took the last backup, or if it has used the structure since the last backup was taken.

System action

Processing continues.

System programmer response

Use the BACKUP CFSTRUCT command (on any queue manager in the queue-sharing group) to make a new CF structure backup. You are recommended to set up a procedure to take frequent backups automatically.

CSQE041E
Structure *struc-name* backup is more than a day old

Explanation

The latest backup for the named CF structure is more than one day old. Unless backups are taken frequently, the time to recover persistent messages on shared queues might become excessive.

The message is issued at checkpoint time if the queue manager was the one that took the last backup, or if it has used the structure since the last backup was taken.

System action

Processing continues.

System programmer response

Use the BACKUP CFSTRUCT command (on any queue manager in the queue-sharing group) to make a new CF structure backup. It is suggested you set up a procedure to take frequent backups automatically.

CSQE042E
csect-name Structure *struc-name* unusable, no EMC storage available

Explanation

The queue manager cannot use the named CF structure because its size is less than the minimum that IBM MQ requires. Specifically, the coupling facility allocation algorithms were unable to make any event monitor control (EMC) storage available during the allocation.

System action

The queue manager disconnects from the CF structure, and the CF structure becomes unusable. If it is an application structure, the queues that use the structure are not usable. If it is the administration structure, the queue manager terminates with completion code X'6C6' and reason code X'00C53003'.

System programmer response

Disconnect all connectors from the structure, and then issue

```
SETXCF FORCE,STR,STRNAMEname
```

to get the structure deallocated from the CF before you resize the structure.

Increase the size of the CF structure to at least the minimum size required. See Planning your coupling facility and offload storage environment for further information.

If the structure is allocated and the Coupling Facility Resource Manager policy allows the size of it to be increased, use the z/OS system command:

```
SETXCF START,ALTER,STRNAME=ext-struc-name,SIZE=newsize
```

If the CFRM policy does not allow an increase in size, or there is insufficient space in the coupling facility that hosts the structure, the policy must be altered. The structure can then be rebuilt using the z/OS system command:

```
SETXCF START,REBUILD,STRNAME=ext-struc-name
```

In these commands, *ext-struc-name* is formed by prefixing *struc-name* with the queue-sharing group name.

If the structure is not allocated, alter the CFRM policy to specify a larger INITSIZE for the structure.

CSQE101I
csect-name Unable to backup or recover structure *struc-name*, structure in use

Explanation

A BACKUP or RECOVER CFSTRUCT command was issued, or automatic recovery started, for a CF structure that is in use by another process. The most likely cause is that another BACKUP or RECOVER CFSTRUCT command, or automatic recovery, is already in progress on one of the active queue managers in the queue-sharing group.

This message can also be issued when new connections to the CF structure are being prevented by the system.

System action

Processing of the command, or automatic recovery for the identified structure, is terminated.

System programmer response

Check that the correct CF structure name was entered on the command. If so, wait until the current process ends before reissuing the command if required.

If there is no other BACKUP or RECOVER CFSTRUCT already in progress, check for previous messages that indicate why connections to the CF structure are being prevented.

CSQE102E
csect-name Unable to recover structure *struc-name*, not in failed state

Explanation

A RECOVER CFSTRUCT command was issued for a CF structure that is not in a failed state. Only a CF structure that has previously failed can be recovered.

System action

Processing of the command is terminated.

System programmer response

Check that the correct CF structure name was entered on the command.

CSQE103E
csect-name Unable to recover structures, admin structure data incomplete

Explanation

A RECOVER CFSTRUCT command was issued, but recovery could not be performed because one or more queue managers in the queue-sharing group has not completed building its data for the administration structure.

System action

Messages CSQE031I and CSQE032I are sent to the z/OS console to identify such queue managers. Processing of the command is terminated.

System programmer response

The administration structure is automatically rebuilt. The rebuild can occur on any member of the QSG. Reissue the command after the administration structure is successfully rebuilt, which is shown by message CSQE037I on the system performing the rebuild.

CSQE104I
csect-name RECOVER task initiated for structure *struc-name*

Explanation

The queue manager has successfully started a task to process the RECOVER CFSTRUCT command for the named CF structure.

System action

Processing continues.

CSQE105I
csect-name BACKUP task initiated for structure *struc-name*

Explanation

The queue manager has successfully started a task to process the BACKUP CFSTRUCT command for the named CF structure.

System action

Processing continues.

CSQE106E
csect-name Unable to backup structure *struc-name*, reason=*reason*

Explanation

A BACKUP CFSTRUCT command was issued for a CF structure, but the backup could not be performed.

System action

Processing of the command is terminated.

System programmer response

Examine the reason code to determine why the CF structure could not be backed-up. The codes are described in "IBM MQ for z/OS codes" on page 935 and the *z/OS MVS Programming: Sysplex Services Reference* manual.

CSQE107E
csect-name Unable to back up or recover structure *struc-name*, structure has never been used

Explanation

A BACKUP or RECOVER CFSTRUCT command was issued, or automatic recovery started, for a CF structure that has never been used, and so does not contain any messages or data.

System action

Processing of the command, or automatic recovery for the identified structure, is terminated.

System programmer response

Check that the correct CF structure name was entered on the command.

CSQE108E

csect-name Unable to backup or recover structure *struc-name*, structure does not support recovery

Explanation

A BACKUP or RECOVER CFSTRUCT command was issued, or automatic recovery started, for a CF structure with a functional capability that is incompatible with this process; for example, the CF structure level is not high enough to support recovery, or the RECOVER attribute is set to NO.

System action

Processing of the command, or automatic recovery for the identified structure, is terminated.

System programmer response

Ensure that the CF structure is at a level of functional capability that allows the use of the BACKUP or RECOVER CFSTRUCT command and that its MQ RECOVER attribute is set to YES. You can check the values using the DIS CFSTRUCT(*) ALL command. Check that the correct CF structure name was entered on the command.

CSQE109E

csect-name Unable to recover structure *struc-name*, no backup information available

Explanation

A RECOVER CFSTRUCT command was issued or automatic recovery started for a CF structure, but no backup information could be found.

System action

Processing of the command, or automatic recovery for the identified structure, is terminated.

System programmer response

Check that the correct CF structure name was entered on the command. If so, issue a BACKUP CFSTRUCT command to ensure that backup information is available.

CSQE110E

csect-name PURGE not allowed for structure *struc-name*

Explanation

A RECOVER CFSTRUCT command was issued for CF structure *struc-name* using TYPE(PURGE). This CF structure is a system application structure. To prevent loss of messages on system queues TYPE(PURGE) is not allowed for system application structures.

System action

Processing of the command is terminated.

System programmer response

Reissue the command without the TYPE(PURGE) option.

If structure recovery fails contact your IBM support center.

CSQE111I

csect-name Structure *struct-name* will be set to failed state to allow recovery of failed SMDS data sets

Severity

0

Explanation

The **RECOVER CFSTRUCT** command was issued for a structure which is not in the failed state, but at least one of the related SMDS data sets is currently marked as failed, requiring recovery. The structure will be put into the failed state to make it unavailable for normal use so recovery can proceed.

System action

The structure is marked as failed and recovery processing continues.

CSQE112E

csect-name Unable to recover structure *struct-name*, failed to read required logs.

Explanation

A RECOVER CFSTRUCT command or automatic structure recovery was unable to read the logs required to recover a structure.

System action

Processing of the command is terminated.

Automatic recovery of the structure will not be attempted.

System programmer response

Check that the logs containing the RBA range indicated in message CSQE130I are available, and reissue the command.

Check for any prior errors or abends reporting problems using the logs.

Issue RECOVER CFSTRUCT(*struct-name*) to retry structure recovery.

CSQE120I

Backup of structure *struc-name* started at RBA=*rba*

Explanation

The named CF structure is being backed-up in response to a BACKUP CFSTRUCT command. The backup begins at the indicated RBA.

System action

Processing continues.

CSQE121I

csect-name Backup of structure *struc-name* completed at RBA=*rba*, size *n* MB

Explanation

The named CF structure has been backed-up successfully. The backup ends at the indicated RBA, and *n* is its approximate size in megabytes.

System action

Processing continues.

CSQE130I

Recovery of structure *struc-name* started, using *qmgr-name* log range from RBA=*from-rba* to RBA=*to-rba*

Explanation

CF structure recovery is starting in response to a RECOVER CFSTRUCT command. It must read the log range shown to determine how to perform recovery. The logs are read backwards, from the latest failure time of the structures to be recovered to the earliest last successful backup time of those structures.

System action

Processing continues.

CSQE131I

csect-name Recovery of structure *struc-name* completed

Explanation

The named CF structure has been recovered successfully. The structure is available for use again.

CF structure recovery was started in response to a RECOVER CFSTRUCT command. The log range determined how to perform recovery. The logs are read backwards, from the latest failure time of the structures to be recovered to the earliest last successful backup time of those structures.

System action

Processing continues.

CSQE132I

Structure recovery started, using log range from LRSN=*from-lrsn* to LRSN=*to-lrsn*

Explanation

CF structure recovery is starting in response to a RECOVER CFSTRUCT command. It must read the log range shown to determine how to perform recovery. The logs are read backwards, from the latest failure time of the structures to be recovered to the earliest last successful backup time of those structures.

See Recovering a CF structure for more information.

System action

Processing continues.

CSQE133I

Structure recovery reading log backwards, LRSN= *lrsn*

Explanation

This is issued periodically during log reading by CF structure recovery to show progress. The log range that needs to be read is shown in the preceding CSQE132I message.

CF structure recovery is starting in response to a RECOVER CFSTRUCT command. It must read the log range shown to determine how to perform recovery. The logs are read backwards, from the latest failure time of the structures to be recovered to the earliest last successful backup time of those structures.

System action

Processing continues.

System programmer response

If this message is issued repeatedly with the same LRSN value, investigate the cause; for example, MQ might be waiting for a tape with an archive log data set to be mounted.

CSQE134I

Structure recovery reading log completed

Explanation

CF structure recovery is started in response to a RECOVER CFSTRUCT command. It must read the log range shown to determine how to perform recovery. The logs are read backwards, from the latest failure time of the structures to be recovered, to the earliest last successful backup time of those structures.

CF structure recovery has completed reading the logs. The individual structures can now be recovered.

System action

Each CF structure is recovered independently, as shown by messages CSQE130I and CSQE131I.

CSQE135I

Recovery of structure *struc-name* reading log, RBA=*rba*

Explanation

This is issued periodically during log reading for recovering the named CF structure to show progress. The log range that needs to be read is shown in the preceding CSQE130I message.

System action

Processing continues.

System programmer response

If this message is issued repeatedly with the same RBA value, investigate the cause; for example, MQ might be waiting for a tape with an archive log data set to be mounted.

CSQE136I

Error returned by Db2 when clearing queue *queue-name*, list header number=*list header number*, structure number=*strucnum*

Severity
4

Explanation

Shared queue messages greater than 63 KB in size have their message data held as one or more binary large objects (BLOBs) in a Db2 table. An error was returned by Db2 when clearing these messages from the table.

Note that the list header number, and structure number, are output in hexadecimal format.

System action

Processing continues.

System programmer response

The messages have been deleted from the coupling facility but message data might remain in Db2 as orphaned BLOBs. This message is normally preceded by message CSQ5023E. Examine the Db2 job log to determine why the error occurred. The orphaned messages can be deleted by issuing the '**DISPLAY GROUP OBSMSGS(YES)**' command after 24 hours.

CSQE137E

csect-name Db2 and CF structure out of sync for queue *queue-name*, list header number=*list header number*, structure number=*strucnum*

Severity
4

Explanation

The queue manager has identified a discrepancy between the information stored about a queue in the coupling facility and the corresponding information in Db2.

Note that the list header number, and structure number, are output in hexadecimal format.

System action

Processing continues, but applications are unable to open the affected queue until the discrepancy is resolved by the System Programmer.

System programmer response

If the queue manager has recently been recovered from a backup then the recovery process should be reviewed to ensure that everything was correctly restored, including any Db2 tables associated with the queue manager.

If the cause of the problem cannot be determined then contact your IBM support center for assistance.

CSQE138I
csect-name Structure struc-name is already in the failed state

Explanation

A **RESET CFSTRUCT ACTION(FAIL)** command was issued for a CF structure that is already in the failed state.

System action

Processing of the command is terminated.

CSQE139I
csect-name Unable to fail structure struc-name, structure in use

Explanation

A **RESET CFSTRUCT ACTION(FAIL)** command was issued for a CF structure that is in use by another process

System action

Processing of the command is terminated.

System programmer response

Check that the correct CF structure name was entered on the command. If so, wait until the process ends before reissuing the command if required.

CSQE140I

csect-name Started listening for ENF 35 events for structure *structure-name*

Severity
0

Explanation

The queue manager has registered to receive ENF 35 events and will attempt to reconnect to the identified structure if it is notified that a coupling facility resource has become available.

System action

Processing continues.

CSQE141I
csect-name Stopped listening for ENF 35 events for structure *structure-name*

Explanation

The queue manager has de-registered from receiving ENF 35 events for the identified structure, and will not attempt to reconnect to it if notified that a coupling facility resource has become available.

System action

Processing continues.

CSQE142I
csect-name Total loss of connectivity reported for structure *structure-name*

Explanation

The queue manager has been notified that no systems in the sysplex have connectivity to the coupling facility in which the identified structure is allocated.

System action

If automatic recovery has been enabled for the identified structure one of the queue managers in the queue-sharing group will attempt to recover the structure in an alternative coupling facility, if one is available.

System programmer response

Investigate and resolve the loss of connectivity to the coupling facility on which the structure is allocated.

CSQE143I

csect-name Partial loss of connectivity reported for structure *structure-name*

Explanation

The queue manager has lost connectivity to the coupling facility in which the identified structure is allocated, and has been notified that the coupling facility is still available on other systems in the sysplex.

System action

A system-managed rebuild will be scheduled to rebuild the structure in an alternative coupling facility, if one is available.

System programmer response

Investigate and resolve the loss of connectivity to the coupling facility on which the structure is allocated.

CSQE144I

csect-name System-managed rebuild initiated for structure *structure-name*

Explanation

The queue manager has initiated a system-managed rebuild for the identified structure on an alternative coupling facility.

System action

Processing continues and when the process has completed, you receive message CSQE005I.

CSQE145E

csect-name Auto recovery for structure *structure-name* is not possible, no alternative CF defined in CFRM policy

Severity
8

Explanation

The queue manager has lost connectivity to the coupling facility in which the identified structure is allocated, but cannot automatically recover the structure because there is no alternative coupling facility in the CFRM preference list.

System action

Processing continues without connectivity to the structure. Any queues that reside on the application structure remain unavailable.

System programmer response

Investigate and resolve the loss of connectivity to the Coupling Facility on which the structure is allocated.

CSQE146E

csect-name System-managed rebuild for structure *structure-name* failed, reason=*reason*

Severity
8

Explanation

The queue manager attempted to initiate a system-managed rebuild for the identified structure but the rebuild could not be performed.

System action

Processing continues without connectivity to the structure. Any queues that reside on the application structure remain unavailable.

System programmer response

Examine the reason code to determine why the system-managed rebuild could not be completed. The codes are described in the z/OS MVS™ Programming: Sysplex Services Reference manual.

CSQE147I
csect-name System-managed rebuild for structure *structure-name* is already in progress

Explanation

The queue manager attempted to initiate a system-managed rebuild for the identified structure but determined that another queue manager in the queue-sharing group has initiated it already.

System action

Processing continues.

CSQE148I
csect-name Loss of connectivity processing for structure *structure-name* deferred

Explanation

The queue manager has lost connectivity to the coupling facility in which the identified structure is allocated, but MVS has requested that the queue manager should not take action until a subsequent notification is received.

System action

Processing continues without connectivity to the structure. Any queues that reside on the application structure remain unavailable.

CSQE149I
csect-name Waiting for other queue managers to disconnect from structure *structure-name*

Explanation

The queue manager has lost connectivity to the coupling facility, in which the identified structure is allocated, but cannot delete the structure or initiate a system-managed rebuild because one or more queue managers that also lost connectivity remain connected to it.

System action

The queue manager will periodically retry the attempted operation until all of the queue managers have disconnected.

CSQE150I
csect-name System-managed rebuild already completed for structure *structure-name*

Explanation

A system-managed rebuild for the identified structure is unnecessary as another request to rebuild the structure has been completed.

System action

Processing continues.

CSQE151I
csect-name Loss of admin structure connectivity toleration enabled

Explanation

If any queue manager in the queue-sharing group loses connectivity to the administration structure the structure will be rebuilt in an alternative CF, if one is available.

If the structure cannot be rebuilt, some shared queue functions on queue managers that have lost connectivity will be unavailable until connectivity to the structure has been restored. Access to private queues will not be affected.

System action

Processing continues.

CSQE152I
csect-name Loss of admin structure connectivity toleration disabled

Explanation

If the queue manager loses connectivity to the administration structure no attempt to rebuild it is made. The queue manager terminates with abend code 5C6-00C510AB.

This can occur if the CFCONLOS queue manager attribute is set to TERMINATE.

System action

Processing continues.

CSQE153I
csect-name Auto recovery for structure *struct-name* has been scheduled

Explanation

The queue manager has detected that the identified structure which has automatic recovery enabled, has failed, or connectivity to it has been lost on all systems in the sysplex.

The queue manager has scheduled an attempt to recover the structure.

System action

One of the active queue managers in the queue-sharing group will attempt to recover the identified structure.

CSQE154I
csect-name Structure *struct-name* has been deleted

Explanation

The queue manager has successfully deleted the identified structure from the coupling facility.

System action

Processing continues.

CSQE155I
csect-name Structure *struct-name* has already been deleted

Explanation

The queue manager attempted to delete the identified structure from the coupling facility. It could not be deleted because it was not allocated.

System action

Processing continues.

CSQE156I
csect-name Structure *struct-name* has already been reallocated

Explanation

The queue manager lost connectivity to the identified structure. When attempting to delete the structure the queue manager found that the structure had been reallocated since connectivity was lost.

System action

Processing continues.

CSQE157E

csect-name Unable to recover structure *struc-name,* no suitable CF available

Severity
8

Explanation

A RECOVER CFSTRUCT command was issued or automatic recovery started for the identified structure, but there was no suitable Coupling Facility available in which to allocate it.

System action

Processing of the command, or automatic recovery for the identified structure, is terminated.

System programmer response

Ensure that a suitable Coupling Facility in the CFRM preference list for the identified structure is available, then reissue the command.

CSQE158E

csect-name Recovery of structure *struc-name* failed, reason=*reason*

Severity
8

Explanation

Recovery of the identified (coupling facility) CF structure has failed.

System action

Processing continues, but queues that use the identified (coupling facility) CF structure will not be accessible.

System programmer response

Refer to coupling facility codes (X'C5') for information about the reason code. Use this information to solve the problem, then reissue the RECOVER CFSTRUCT command for structures that do not have automatic recovery enabled.

CSQE159I

csect-name Waiting for structure rebuild to complete for structure *structure-name*

Explanation

The queue manager has lost connectivity to the coupling facility, in which the identified structure is allocated, but cannot delete the structure or initiate a system-managed rebuild, because a structure rebuild is currently in progress.

System action

The queue manager will periodically retry the attempted operation, until the structure rebuild is finished.

CSQE160I

csect-name Auto recovery for structure *struc-name* is suspended

Explanation

The queue manager detected that recovery for structure *struc-name* is not possible. Automatic recovery of the structure is suspended.

System action

Automatic recovery for structure *struc-name* is suspended. Automatic recovery is resumed when a successful connection to the structure is established.

System programmer response

Check for any previous errors or abends reporting problems recovering the structure.

Issue RECOVER CFSTRUCT(*struct-name*) to retry structure recovery.

CSQE161E

csect-name QSG state is inconsistent; no XCF data for queue manager *qmgr-number*

Explanation

A RECOVER CFSTRUCT command or automatic structure recovery could not read all the log data required for recovery, because there was no XCF data for one of the queue managers in the QSG. *qmgr-number* is the number of the affected queue manager in the MQ Db2 tables.

System action

Processing of the command is terminated. Automatic recovery of the structure will not be attempted.

System programmer response

If the queue manager with number *qmgr-number* in the MQ Db2 tables has been force removed from the QSG then added back into the QSG, start the queue manager and issue the RECOVER CFSTRUCT command again. Otherwise, reset the structure to an empty state by issuing the RECOVER CFSTRUCT TYPE(PURGE) command.

CSQE201E

Media manager request failed with return code *ccccffss* processing *req* request for control interval *rci* in SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname*

Severity
8

Explanation

An error occurred when attempting the indicated media manager request (READ, UPDATE or FORMAT) for the data set.

ccccffss
: is the media manager return code in hexadecimal. The last byte *ss* indicates the overall type of error:

    08
    : Extent error

    0C
    : Logic error

    10
    : Permanent I/O error

    14
    : Undetermined error

    The *cccc* field identifies the specific error and the *ff* field identifies the function which returned the error. See the *z/OS DFSMSdfp Diagnosis* manual for further details of media manager return codes.

req
: specifies the type of request:

    READ
    : Read one or more control intervals.

    UPDATE
    : Rewrite one or more control intervals.

FORMAT
> Format one or more control intervals.

rci
> identifies the relative control interval (RCI) number of the control interval being accessed, in hexadecimal.

qmgr-name
> identifies the queue manager which owns the shared message data set.

struc-name
> identifies the application structure associated with the shared message data set.

dsname
> shows the full name of the shared message data set.

System action

> This typically results in the **SMDS** status being set to **FAILED** (if it is the data set owned by the current queue manager) or the **SMDSCONN** status being set to **ERROR** (if it is a data set owned by a different queue manager).

System programmer response

> If the problem is a permanent I/O error caused by damage to the data set and recovery logging was enabled, the data set can be recovered by the recreating it from a backup and reapplying the logged changes using the **RECOVER CFSTRUCT** command.

> If the data set is temporarily unavailable (for example because of a device connectivity problem) but is not damaged, then when the data set is available again, it can be put back into normal use by using the **RESET SMDS** command to set the status to **RECOVERED**.

CSQE202E

> Media manager service failed with return code *ret-code*, feedback code *feedback-code*, processing *function* for SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname*

Severity
> 8

Explanation

> A media manager support services (MMGRSRV) function gave an unexpected error.

ret-code
> indicates the MMGRSRV return code, in hexadecimal.

> **08**
> > Media Manager Services error.

> **14**
> > Indeterminate error

feedback-code
> indicates the 8-byte MMGRSRV internal feedback code, in hexadecimal.

> For CONNECT processing, the first byte of this feedback code is the same as the VSAM OPEN error information returned in ACBERFLG.

function
> indicates the type of function requested, which can be any of the following:

> **CONNECT**
> > Open the data set.

> **DISCONNECT**
> > Close the data set.

> **EXTEND**
> > Extend the data set being written by the current queue manager, or obtain access to recently added extents for a data set which has been extended by another queue manager.

CATREAD
> Obtain the highest allocated and highest used control interval numbers from the catalog entry for the current data set.

CATUPDT
> Update the highest used control interval in the catalog entry for the current data set, after formatting new extents.

qmgr-name
> identifies the queue manager which owns the shared message data set.

struc-name
> identifies the application structure associated with the shared message data set.

dsname
> shows the full name of the shared message data set.

System action

This typically results in the **SMDS** status being set to **FAILED** (if it is the data set owned by the current queue manager) or the **SMDSCONN** status being set to **ERROR** (if it is a data set owned by a different queue manager).

System programmer response

This message is normally preceded by a system message such as IEC161I from VSAM or DFP indicating the nature of the error.

If the problem is a permanent I/O error caused by damage to the data set and recovery logging was enabled, the data set can be recovered by the recreating it from a backup and reapplying the logged changes using the **RECOVER CFSTRUCT** command.

If the data set is temporarily unavailable (for example because of a device connectivity problem) but is not damaged, then when the data set is available again, it can be put back into normal use by using the **RESET SMDS** command to set the status to **RECOVERED**.

CSQE211I

Formatting is in progress for *count* pages in SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname*

Severity
0

Explanation

The data set is being formatted from the current highest used page to the highest allocated page. This message occurs either when a new extent has been allocated or immediately after opening an existing data set which has not been fully formatted (that is, the highest used page is less than the highest allocated page).

count
> indicates the number of pages which need to be formatted (in decimal).

qmgr-name
> identifies the queue manager which owns the shared message data set.

struc-name
> identifies the application structure associated with the shared message data set.

dsname
> shows the full name of the shared message data set.

System action

Formatting continues.

CSQE212I

Formatting is complete for SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname*

Severity

0

Explanation

Formatting of the data set has completed and the highest used page has been successfully updated in the catalog.

dsname
identifies the shared message data set.

struc-name
identifies the application structure associated with the shared message data set.

System action

The newly formatted space is made available for use.

CSQE213I

SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* is now *percentage*% full

Severity

0

Explanation

The data set is nearly full.

qmgr-name
identifies the queue manager which owns the shared message data set.

struc-name
identifies the application structure associated with the shared message data set.

dsname
shows the full name of the shared message data set.

percentage
shows the percentage of data blocks in the data set which are currently in use.

This message is issued when the data set becomes 90% full, 92% full, and so on, up to 100%. After this message has been issued for a particular percentage, it is not issued again until the usage has changed in either direction by at least 2%. If the usage then decreases to 88% or less (as a result of messages being deleted or as a result of the data set being expanded) a final message is issued to indicate the new usage percentage.

System action

If expansion is allowed, the data set is expanded. If the data set reaches 100% full, then requests to put new messages that require space in the data set are rejected with return code MQRC_STORAGE_MEDIUM_FULL.

System programmer response

You can check the usage in more detail using the **DISPLAY USAGE** command with the **SMDS** keyword.

CSQE215I

Further expansion of SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* is not possible because the maximum number of extents have been allocated

Severity

0

Explanation

The media manager interface has indicated that the data set has reached the maximum number of extents, and cannot be expanded any further.

qmgr-name
identifies the queue manager that owns the shared message data set.

struc-name
> identifies the application structure associated with the shared message data set.

dsname
> shows the full name of the shared message data set.

This message can be issued when the data set is opened, or following an expansion attempt, which might have been successful, as indicated by previous messages.

System action

The expansion option for the data set is changed to **DSEXPAND(NO)** to prevent further expansion attempts.

System programmer response

The only way to expand the data set further is to make it temporarily unavailable by using the **RESET SMDS** command to mark the status as **FAILED**, copy it to a new location using larger extents, then make it available again using the **RESET SMDS** command to mark the status as **RECOVERED**.

CSQE217I

Expansion of SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* was successful, *count* pages added, total pages *total*

Severity
> 0

Explanation

The data set was expanded, and one or more new extents have been successfully added.

qmgr-name
> identifies the queue manager, which owns the shared message data set.

struc-name
> identifies the application structure associated with the shared message data set.

dsname
> shows the full name of the shared message data set.

count
> indicates the number of new pages that have been allocated (in decimal).

total
> indicates the total number of pages currently allocated (in decimal).

System action

The queue manager formats the newly allocated space.

CSQE218E

Expansion of SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* was unsuccessful

Severity
> 8

Explanation

An attempt was made to expand the data set, but it was unsuccessful, typically because insufficient space was available.

qmgr-name
> identifies the queue manager, which owns the shared message data set.

struc-name
> identifies the application structure associated with the shared message data set.

dsname
> shows the full name of the shared message data set.

System action

The expansion option for the data set is changed to **DSEXPAND(NO)** to prevent further expansion attempts.

System programmer response

Check for messages from VSAM or DFP that explain why the request was unsuccessful, and do the required actions.

If space is made available later, change the expansion option back to allow expansion to be tried again.

CSQE219I

Extents refreshed for SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname*, *count* pages added, total pages *total*

Severity
0

Explanation

The data set was extended by another queue manager. The current queue manager used media manager services to update the extent information for the open data set to read message data within the new extents.

qmgr-name
identifies the queue manager that owns the shared message data set.

struc-name
identifies the application structure associated with the shared message data set.

dsname
shows the full name of the shared message data set.

count
indicates the number of new page that have been allocated (in decimal).

total
indicates the total number of pages currently allocated (in decimal).

System action

The new extents are made visible to the current queue manager.

CSQE222E

Dynamic allocation of SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* failed with return code *ret-code*, reason code *eeeeiiii*

Severity
8

Explanation

An attempt was made to allocate the data set using the data set name formed by taking the generic **DSGROUP** name and inserting the queue manager name, but the DYNALLOC macro returned an error.

qmgr-name
identifies the queue manager which owns the shared message data set.

struc-name
identifies the application structure associated with the shared message data set.

dsname
shows the full name of the shared message data set.

ret-code
shows the return code from DYNALLOC, in decimal.

eeeeiiii
> shows the reason code, consisting of the error and information codes returned by DYNALLOC, in hexadecimal.

System action

> This typically results in the **SMDS** status being set to **FAILED** (if it is the data set owned by the current queue manager) or the **SMDSCONN** status being set to **ERROR** (if it is a data set owned by a different queue manager).

System programmer response

> Check the job log for dynamic allocation error messages giving more details about the problem.

> After any changes, use the **START SMDSCONN** command to trigger a new attempt to use the data set.

> When the reason code is '02540000', indicating that the allocation failed due to a required ENQ being unavailable, the queue manager will automatically retry the allocation request on subsequent attempts to access the SMDS.

CSQE223E

> Dynamic deallocation of SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* failed with return code *ret-code*, reason code *eeeeiiii*

Severity
> 8

Explanation

> An attempt was made to deallocate the data set but the DYNALLOC macro returned an error.

qmgr-name
> identifies the queue manager which owns the shared message data set.

struc-name
> identifies the application structure associated with the shared message data set.

dsname
> shows the full name of the shared message data set.

ret-code
> shows the return code from DYNALLOC, in decimal.

eeeeiiii
> shows the reason code, consisting of the error and information codes returned by DYNALLOC, in hexadecimal.

System action

> No further action is taken, but problems can occur if an attempt is made to use the data set, either from another job or from the same queue manager.

System programmer response

> Check the job log for dynamic allocation error messages giving more details about the problem.

CSQE230E

> *csect-name* SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* saved space map cannot be used the time stamp *time1* does not match the last CLOSE time stamp *time2* in the SMDS object

Severity
> 8

Explanation

> The shared message data set owned by this queue manager appears to have been closed normally last time it was used, with a saved space map, but the time stamp in the data set does not match the time stamp stored in the SMDS object in Db2 the last time this queue manager closed the data

set. This means that the saved space map may not be consistent with the current messages in the coupling facility, so it needs to be rebuilt.

The most probable cause for this message is that the data set has been copied or restored from a copy which was not completely up to date.

qmgr-name
    identifies the queue manager that owns the shared message data set.

struc-name
    identifies the application structure associated with the shared message data set.

dsname
    shows the full name of the shared message data set.

time1
    shows the time stamp found in the data set header.

time2
    shows the time stamp found in the SMDS object in Db2.

System action

The existing saved space map is ignored and the space map is rebuilt by scanning the messages in the coupling facility structure which refer to the data set.

The rebuild scan process keeps track of the most recent message in the coupling facility that refers to the data set, and at the end of the scan it checks that the matching message data is found in the data set. If so, it is assumed that all changes up to at least that time are present in the data set, so no data has been lost, and the data set can be opened normally. Otherwise, message CSQI034E is issued and the data set is marked as failed.

CSQE231E

SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* cannot be used because it is not a VSAM linear data set with control interval size 4096 and SHAREOPTIONS(2 3)

Severity
8

Explanation

The specified data set is not a VSAM linear data set, or the control interval size is not the default value 4096, or the wrong sharing options have been specified.

qmgr-name
    identifies the queue manager that owns the shared message data set.

struc-name
    identifies the application structure associated with the shared message data set.

dsname
    shows the full name of the shared message data set.

If the data set was initially empty, the sharing options are not checked until the data set has been initialized, closed, and reopened.

System action

The data set is closed and the **SMDS** status is set to **FAILED**.

System programmer response

Delete the incorrect data set, and create a one of the same name with the correct attributes.

After any changes, use the **START SMDSCONN** command to trigger a new attempt to use the data set.

CSQE232E

csect-name SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* cannot be used because the identification information (*field-name*) in the header record is incorrect

Severity

    8

Explanation

    When the data set was opened, there was existing information in the header record (so the data set was not newly formatted) but the information did not match the expected data set identification. The identification information includes a marker "CSQESMDS" for a shared message data set followed by the names of the queue sharing group, the application structure and the queue manager which owns the shared message data set.

qmgr-name
    identifies the queue manager that owns the shared message data set.

struc-name
    identifies the application structure associated with the shared message data set.

dsname
    shows the full name of the shared message data set.

field-name
    identifies the first header identification field which did not have the expected value.

System action

    The data set is closed and the connection is marked as **AVAIL(ERROR)**. If the data set status is **ACTIVE** or **RECOVERED**, indicating that it was currently in use, the status is changed to **FAILED**.

System programmer response

    If the data set was already in use, this probably indicates that it has been overwritten in some way, in which case any persistent messages can be recovered using the **RECOVER CFSTRUCT** command.

    If the data set was not yet in use, or was currently empty, ensure that it is either formatted or emptied before trying to use it again. After any changes, use the **START SMDSCONN** command to trigger a new attempt to use the data set.

    To display the data set header record, you can use the Access Method Services **PRINT** command, for example as follows:

```
PRINT INDATASET('dsname') TOADDRESS(4095)
```

    The format of the identification information within the data set header record is as follows:

Table 4. Format of identification information within the data set header record.					
Offset: Dec	**Offset: Hex**	**Type**	**Length**	**Field**	**Description**
8	8	Character	8	MARKER	Marker 'CSQESMDS'
16	10	Character	4	QSG	QSG name
20	14	Character	12	CFSTRUCT	Structure name
32	20	Character	4	SMDS	Owning queue manager
36	24	Integer	4	VERSION	Header version 1

CSQE233E

    SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* cannot be used because the header record indicates a newly formatted data set but it was already being used

Severity

8

Explanation

When the data set was opened, the identification information in the header record was zero, indicating a new empty data set, but the data set was already in use, so it should not now be empty.

qmgr-name
identifies the queue manager that owns the shared message data set.

struc-name
identifies the application structure associated with the shared message data set.

dsname
shows the full name of the shared message data set.

System action

The data set is closed and marked as **FAILED**.

System programmer response

Any persistent messages can be recovered using the **RECOVER CFSTRUCT** command.

CSQE234I

SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* was empty so it requires formatting

Severity

0

Explanation

When the data set was opened, it was found to be empty, with no existing data and no pre-formatted space. In this case, VSAM does not allow shared access to the data set. The queue manager needs to initialize the data set.

qmgr-name
identifies the queue manager that owns the shared message data set.

struc-name
identifies the application structure associated with the shared message data set.

dsname
shows the full name of the shared message data set.

System action

The data set is pre-formatted up to the end of the existing extents. There is a short delay before the data set is fully available.

CSQE235I

SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* was not fully formatted so it requires additional formatting

Severity

0

Explanation

This occurs if the existing data set extents have not been fully formatted when the data set is opened.

qmgr-name
identifies the queue manager that owns the shared message data set.

struc-name
identifies the application structure associated with the shared message data set.

dsname
shows the full name of the shared message data set.

System action

The data set is formatted up to the end of the existing extents. There is a short delay before the data set is fully available.

CSQE236I

SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* cannot be used because there is not enough main storage available to build the space map

Severity

8

Explanation

The queue manager needs to build a space map in main storage to manage the free space in the data set, but it was unable to obtain sufficient main storage.

qmgr-name
identifies the queue manager which owns the shared message data set.

struc-name
identifies the application structure associated with the shared message data set.

dsname
shows the full name of the shared message data set.

System action

The data set is not opened.

System programmer response

Consider increasing the queue manager's MEMLIMIT.

If necessary, use the START SMDSCONN command to request another attempt to open the data set.

For more details see Address space storage.

CSQE237I

SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* cannot be extended because there is not enough main storage available to build the space map

Severity
8

Explanation

The queue manager needs to build space map blocks in main storage to manage the additional space in the extended data set, but it was unable to obtain sufficient main storage.

qmgr-name
identifies the queue manager which owns the shared message data set.

struc-name
identifies the application structure associated with the shared message data set.

dsname
shows the full name of the shared message data set.

System action

The new extents of the data set are not available for use.

System programmer response

Consider increasing the queue manager's MEMLIMIT.

If necessary, use the START SMDSCONN command to request another attempt to open the data set.

For more details see Address space storage.

CSQE238I

SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* is too small to use because the initial space allocation is less than two logical blocks

Severity
8

Explanation

The minimum supported data set size requires at least one logical block for control information and one logical block for data, but the data set is smaller than two logical blocks.

qmgr-name
identifies the queue manager which owns the shared message data set.

struc-name
identifies the application structure associated with the shared message data set.

dsname
shows the full name of the shared message data set.

System action

The data set is not opened.

System programmer response

Delete the data set and recreate it with a larger space allocation.

After making changes, use the **START SMDSCONN** command to request another attempt to open the data set.

CSQE239I

SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* has become full so new large messages can no longer be stored in it

Severity
8

Explanation

A message written to a shared queue contains data which is large enough to require offloading to a data set, but there is insufficient space in the data set. Further requests are likely to fail until existing messages have been read and deleted from the data set.

qmgr-name
identifies the queue manager which owns the shared message data set.

struc-name
identifies the application structure associated with the shared message data set.

dsname
shows the full name of the shared message data set.

System action

Any requests encountering this problem are rejected with MQRC_STORAGE_MEDIUM_FULL. This message is not issued again until the data set has been below 90% full since the previous time it was issued.

System programmer response

This problem means that the backlog of unprocessed large shared messages exceeds the size of the data set, but the data set could not be extended in time to avoid the problem.

Ensure that applications to remove large messages from the shared queues are running. Check also for previous problems relating to extending the data set, for example if there was insufficient space on eligible volumes.

CSQE241I

SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) now has STATUS(*status*)

Severity
0

Explanation

The status of the shared message data set for the specified queue manager and application structure has been changed to the indicated value, either by automatic status management or by a **RESET SMDS** command.

qmgr-name
identifies the queue manager that owns the shared message data set.

struc-name
identifies the application structure associated with the shared message data set.

status
shows the new status value. For details of specific status values, see the DISPLAY CFSTATUS command with the **TYPE(SMDS)** option.

System action

All queue managers connected to the structure are notified of the status change. The queue managers take appropriate action if necessary, for example opening or closing the data set.

CSQE242I

SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) now has ACCESS(*access*)

Severity
0

Explanation

The access availability setting for the shared message data set for the specified queue manager, and application structure has been changed to the indicated value, either by automatic status management or by a **RESET SMDS** command.

qmgr-name
identifies the queue manager, which owns the shared message data set.

struc-name
identifies the application structure associated with the shared message data set.

access
shows the new access availability setting. For details of specific settings, see the **DISPLAY CFSTATUS** command with the **TYPE(SMDS)** option.

System action

All queue managers connected to the structure are notified of the change. The queue managers take appropriate action if necessary, for example opening or closing the data set.

CSQE243I

SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) now has DSBUFS(*value*)

Severity
0

Explanation

The number of shared message data set buffers to be used by the specified queue manager for this application structure has been changed to the indicated value. This message can either occur as a result of an **ALTER SMDS** command or when a previously specified **DSBUFS** target value cannot be achieved, in which case a warning message is issued, and the **DSBUFS** option is automatically set to the actual value achieved.

qmgr-name
　　identifies the queue manager, which owns the shared message data set.

struc-name
　　identifies the application structure associated with the shared message data set.

value
　　shows the new **DSBUFS** setting, which can either be a decimal number, giving the number of
　　buffers to be used, or **DEFAULT**, indicating that the default **DSBUFS** value specified on the
　　CFSTRUCT definition for the application structure is to be used. For more information, see the
　　ALTER SMDS and **DISPLAY SMDS** commands.

System action

The queue manager identified by the **SMDS** keyword is notified, if active, and adjusts the size of its
buffer pool as indicated.

CSQE244I

csect-name SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) now has DSEXPAND(*value*)

Severity
　　0

Explanation

The option to allow automatic expansion of a specific shared message data set has been changed as
indicated. This message can occur either as a result of an **ALTER SMDS** command or when expansion
was attempted but failed, in which case the option is automatically changed to **DSEXPAND(NO)** to
prevent further expansion attempts. In the latter case, when the problem has been fixed, the **ALTER
SMDS** command can be used to turn automatic expansion on again.

qmgr-name
　　identifies the queue manager which owns the shared message data set.

struc-name
　　identifies the application structure associated with the shared message data set.

value
　　shows the new **DSEXPAND** setting, which is **DEFAULT**, **YES** or **NO**. For more information, see the
　　ALTER SMDS and **DISPLAY SMDS** commands.

System action

The queue manager identified by the **SMDS** keyword is notified, if that queue manager is active. If
the change results in expansion being enabled, and the data set is already in need of expansion, an
immediate expansion is attempted.

CSQE245I

CFSTRUCT(*struc-name*) now has OFFLDUSE(*offload-usage*)

Severity
　　0

Explanation

The **OFFLOAD** method for an application structure was recently changed and the queue manager has
now determined that there are no more messages stored using the old offload method, so there is no
longer any need for the old offload method to remain active. The offload usage indicator, displayed
as the **OFFLDUSE** keyword on the **DISPLAY CFSTATUS** command, has been updated to indicate that
only the new offload method is now in use.

For a transition from **OFFLOAD(SMDS** to **OFFLOAD(DB2)**, this message occurs when all active data
sets have been changed to the **EMPTY** state, which occurs if the data set is closed normally at a time
when it does not contain any messages. In this case, the offload usage indicator is changed from **BOTH**
to **DB2**, and the queue managers will no longer use the SMDS data sets, which can be deleted if no
longer required.

For a transition from **OFFLOAD(DB2)** to **OFFLOAD(SMDS)**, this message occurs when the queue manager disconnects normally from the structure at a time when there are no large messages for the structure stored in Db2. In this case, the offload usage indicator is changed from **BOTH** to **SMDS**.

struc-name
identifies the application structure.

offload-usage
shows the new offload usage indicator.

System action

All queue managers connected to the structure are notified of the change. The queue managers take appropriate action if necessary, for example opening or closing data sets.

CSQE246I

csect-name SMDSCONN(*qmgr-name*) CFSTRUCT(*struc-name*) now has STATUS(*status*)

Severity
0

Explanation

The current queue manager was unable to connect to a shared message data set, usually for reasons indicated by a previous message. The error status for the data set connection has now been set to indicate the type of problem which occurred. It will be reset next time an attempt is made to open the data set.

This message is only issued for error status values, which are shown instead of normal status if the data set has been closed because of an error. No message is issued for normal status values (**CLOSED**, **OPENING**, **OPEN** or **CLOSING**).

qmgr-name
identifies the queue manager that owns the shared message data set.

struc-name
identifies the application structure associated with the shared message data set.

status
shows the new error status. For details of the possible status values, see the **STATUS** keyword on the **DISPLAY SMDSCONN** command.

System action

The **SMDSCONN** availability is set to **AVAIL(ERROR)** and message CSQE247I is issued.

No further attempt is made to connect to the data set until the availability value is changed back to **AVAIL(NORMAL)**. This can occur as a result of the queue manager being restarted, or data set availability changing, or in response to the **START SMDSCONN** command. If this happens while the queue manager is running, another message CSQE247I is issued showing **AVAIL(NORMAL)**.

CSQE247I

csect-name SMDSCONN(*qmgr-name*) CFSTRUCT(*struc-name*) now has AVAIL(*availability*)

Severity
0

Explanation

The availability setting for the connection between the current queue manager and a shared message data set has been changed to the indicated value. This can be changed either by automatic status management, for example if the queue manager is unable to open the data set, or by one of the commands **STOP SMDSCONN** or **START SMDSCONN**.

qmgr-name
identifies the queue manager that owns the shared message data set.

struc-name
    identifies the application structure associated with the shared message data set.

availability
    shows the new availability setting. For details of the possible values, see the **AVAIL** keyword on the **DISPLAY SMDSCONN** command.

System action

The current queue manager takes appropriate action if necessary, for example opening or closing the data set.

CSQE252I

SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* space map will be rebuilt by scanning the structure

Severity
    0

Explanation

The data set space map needs to be reconstructed either following queue manager abnormal termination or data set recovery, so there will be a delay while this scan is completed.

qmgr-name
    identifies the queue manager which owns the shared message data set.

struc-name
    identifies the application structure associated with the shared message data set.

dsname
    shows the full name of the shared message data set.

System action

The queue manager will scan the contents of the structure to determine which blocks in the data set are being referenced so that it can reconstruct the space map.

CSQE255I

SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* space map has been rebuilt, message count *msg-count*

Severity
    0

Explanation

The scan to rebuild the data set space map has completed.

qmgr-name
    identifies the queue manager which owns the shared message data set.

struc-name
    identifies the application structure associated with the shared message data set.

dsname
    shows the full name of the shared message data set.

msg-count
    indicates the number of large messages currently stored in the data set.

System action

The data set is made available for use.

CSQE256E

SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* space map rebuild processing failed because a referenced message data block is beyond the end of the data set

Severity
8

Explanation

During the scan to rebuild the data set space map, a message was found in the structure which referenced a message data block with a control interval number greater than the size of the current data set. It is likely that the data set has been truncated.

qmgr-name
identifies the queue manager that owns the shared message data set.

struc-name
identifies the application structure associated with the shared message data set.

dsname
shows the full name of the shared message data set.

System action

The data set is closed and marked as **FAILED**.

System programmer response

This message indicates that the data set has been damaged, for example by copying it to a smaller data set, causing one or more message data blocks to be lost.

If the original copy is still available, the problem can be fixed without loss of data by reallocating the data set at the original size, copying in the original data, and then using the **RESET SMDS** command to mark the data set as **RECOVERED**.

Otherwise, any persistent messages can be recovered by recreating the data set at the original size and recovering the structure and the data set using the **RECOVER CFSTRUCT** command.

CSQE257E

SMDS(*qmgr-name*) CFSTRUCT(*struc-name*) data set *dsname* is smaller than the size recorded in the space map. The saved space map cannot be used

Severity
8

Explanation

The data set contained a saved space map, but the current size of the data set is smaller than the size recorded in the space map. It is likely that the data set has been truncated.

qmgr-name
identifies the queue manager that owns the shared message data set.

struc-name
identifies the application structure associated with the shared message data set.

dsname
shows the full name of the shared message data set.

System action

The saved space map is ignored and an attempt is made to rebuild the space map for the truncated data set. If all active message data is within the current extents of the data set the rebuild attempt will be successful, otherwise it will fail with message **CSQE256E**.

CSQE274E

The SMDS buffer pool for CFSTRUCT(*struc-name*) could not be created because insufficient storage was available

Severity
8

Explanation

Insufficient main storage was available to allocate the SMDS data buffer pool for the structure.

struc-name
> identifies the application structure associated with the shared message data set.

System action

The data sets for this structure cannot be opened.

System programmer response

Consider increasing the queue manager's MEMLIMIT.

For more details about address space storage, see Address space storage.

CSQE275E

The SMDS buffer pool for CFSTRUCT(*struc-name*) has been created with *actual-buffers* rather than the requested *buffer-count* because insufficient storage was available

Severity
8

Explanation

Insufficient main storage was available to allocate the requested number of buffers in the SMDS data buffer pool for the structure. A smaller number of buffers were successfully allocated.

struc-name
> identifies the application structure associated with the shared message data set.

actual-buffers
> shows the number of buffers allocated.

buffer-count
> shows the requested number of buffers.

System action

The buffer pool is created with a smaller number of buffers.

System programmer response

If the specified number of buffers is enough, change the requested value to match, to avoid similar problems in future.

Consider increasing the queue manager's MEMLIMIT.

For more details see Address space storage.

CSQE276I

The SMDS buffer pool for CFSTRUCT(*struc-name*) has been increased to *buffer-count* buffers

Severity
0

Explanation

The request to alter the **SMDS** buffer pool size has completed normally.

struc-name
> identifies the application structure associated with the shared message data set.

buffer-count
> shows the requested number of buffers.

System action

The additional buffers are made available for use.

CSQE277I

The SMDS buffer pool for CFSTRUCT(*struc-name*) has been increased to *actual-buffers* buffers rather than the requested *buffer-count* because insufficient storage was available

Severity
0

Explanation

The request to alter the **SMDS** buffer pool size has completed but the target number of buffers was not reached because insufficient main storage was available

struc-name
identifies the application structure associated with the shared message data set.

actual-buffers
shows the number of buffers allocated.

buffer-count
shows the requested number of buffers.

System action

The additional buffers are made available for use.

CSQE278I

The SMDS buffer pool for CFSTRUCT(*struc-name*) has been decreased to *buffer-count* buffers

Severity
0

Explanation

The request to reduce the **SMDS** buffer pool size has completed normally.

struc-name
identifies the application structure associated with the shared message data set.

buffer-count
shows the requested number of buffers.

System action

The storage for the excess buffers is released back to the system.

CSQE279I

The SMDS buffer pool for CFSTRUCT(*struc-name*) has been decreased to *actual-buffers* buffers rather than the requested *buffer-count* because the rest of the buffers are in use

Severity
0

Explanation

The request to reduce the **SMDS** buffer pool size could not reach the target number of buffers because the current number of buffers in use exceeded that number, and active buffers cannot be released.

struc-name
identifies the application structure associated with the shared message data set.

actual-buffers
shows the number of buffers allocated.

buffer-count
shows the requested number of buffers.

System action

If the number of buffers was at least partly reduced, the storage for the excess buffers is released back to the system.

CSQE280I

SMDS usage ...

Severity

0

Explanation

This message is issued in response to a **DISPLAY USAGE** command with **TYPE(SMDS)**. It shows the data set space usage information for the shared message data sets owned by the current queue manager for each application structure which is currently using SMDS support. The information is in the following format:

```
Application  Offloaded  Total   Total data  Used data  Used structure   messages  blocks
blocks  blocks   part _name
n          n         n          n           n%  :
End of SMDS report
```

The columns of information are as follows:

Application structure
This is the name of the application structure.

Offloaded messages
This shows the number of shared messages in the structure for which the message data has been stored in the data set owned by this queue manager.

Total blocks
This is the current total size of the owned data set in logical blocks, including blocks used to store the space map.

Total data blocks
This is the number of blocks in the owned data set which can be used to store data, excluding those used to store the space map.

Used data blocks
This is the number of blocks in the owned data set which are currently in use (that is, one or more pages of those blocks contain active message data).

Used part
This is the ratio of the number of used data blocks to the total data blocks, expressed as a percentage.

CSQE285I

SMDS buffer usage ...

Severity

0

Explanation

This message is issued in response to a **DISPLAY USAGE** command with **TYPE(SMDS)**. It shows the shared message data set buffer pool usage information for each application structure which is currently using SMDS support. The information is in the following format:

```
Application  Block  --------- Buffers --------- Reads  Lowest  Wait  structure  size
Total  In use  Saved  Empty  saved  free  rate _name
nK         n        n        n       n       n%          n          n%
End of SMDS buffer report
```

The columns of information are as follows:

Application structure
This is the name of the application structure.

Block size

This shows the size of each buffer in Kbytes. This is equal to the logical block size of the shared message data set.

Buffers: Total

This is the actual number of buffers in the pool.

Buffers: In use

This is the number of buffers which are currently being used by requests to transfer data to or from the data set.

Buffers: Saved

This is the number of buffers which are free but currently contain saved data for recently accessed blocks.

Buffers: Empty

This is the number of buffers which are free and empty. When a new buffer is required, empty buffers are used first, but if there are no empty buffers, the least recently used saved buffer is reset to empty and used instead.

Reads saved

This is the percentage of read requests (during the current statistics interval) where the correct block was found in a saved buffer, avoiding the need to read the data from the data set.

Lowest free

This is the smallest number of free buffers during the current statistics interval, or zero if all buffers were used but no request had to wait for an empty buffer, or a negative number indicating the maximum number of requests which were waiting for a free buffer at the same time. If this value is negative, it indicates the number of additional buffers that would have been needed in order to avoid waits for a free buffer.

Wait rate

This is the fraction of requests to acquire a buffer which had to wait for a free buffer, expressed as a percentage. The numbers are reset when statistics are collected.

Security manager messages (CSQH...)

CSQH001I

Security using uppercase classes

Severity
0

Explanation

This message is issued to inform you that security is currently using the uppercase classes MQPROC, MQNLIST, MQQUEUE and MQADMIN.

CSQH002I

Security using mixed case classes

Severity
0

Explanation

This message is issued to inform you that security is currently using the mixed case classes MXPROC, MXNLIST, MXQUEUE and MXADMIN.

CSQH003I

Security refresh did not take place for class *class-name*

Severity
4

Explanation

This message follows message CSQH004I when an attempt to refresh class MQPROC, MQNLIST, or MQQUEUE was unsuccessful because of a return code from a SAF RACROUTE REQUEST=STAT call. The return code is given in message CSQH004I.

System action

The refresh does not occur.

System programmer response

Check that the class in question (*class-name*) is set up correctly. See message CSQH004I for the reason for the problem.

CSQH004I

csect-name STAT call failed for class *class-name*, SAF return code= *saf-rc*, ESM return code=*esm-rc*

Severity
8

Explanation

This message is issued as a result of a SAF RACROUTE REQUEST=STAT call to your external security manager (ESM) returning a non-zero return code at one of the following times:

• During initialization, or in response to a REFRESH SECURITY command

  If the return codes from SAF and your ESM are not zero, and are unexpected, this will cause abnormal termination with one of the following reason codes:

  – X'00C8000D'
  – X'00C80032'
  – X'00C80038'

• In response to a REFRESH SECURITY command.

  If the return codes from SAF and your ESM are not zero (for example, because a class is not active because you are not going to use it) this message is returned to the issuer of the command to advise that the STAT call failed.

Possible causes of this problem are:

• The class is not installed

• The class is not active

• The external security manager (ESM) is not active

• The RACF z/OS router table is incorrect

System programmer response

To determine if you need to take any action, see the *Security Server External Security Interface (RACROUTE) Macro Reference* for more information about the return codes.

CSQH005I

csect-name resource-type In-storage profiles successfully listed

Severity
0

Explanation

This message is issued in response to a REFRESH SECURITY command that caused the in-storage profiles to be RACLISTED (that is, rebuilt); for example, when the security switch for a resource is set on, or a refresh for a specific class is requested that requires the in-storage tables to be rebuilt.

System programmer response

This message is issued so that you can check the security configuration of your queue manager.

CSQH006I

Error returned from CSQTTIME, security timer not started

Severity
8

Explanation

An error was returned from the MQ timer component, so the security timer was not started.

System action

The queue manager terminates abnormally, with a reason code of X'00C80042'.

System programmer response

See "Security manager codes (X'C8')" on page 950 for an explanation of the reason code.

CSQH007I

Reverify flag not set for user-id *userid*, no entry found

Severity
0

Explanation

A user identifier (*user-id*) specified in the RVERIFY SECURITY command was not valid because there was no entry found for it in the internal control table. This could be because the identifier was entered incorrectly in the command, or because it was not in the table (for example, because it had timed-out).

System action

The user identifier (*user-id*) is not flagged for reverify.

System programmer response

Check that the identifier was entered correctly.

CSQH008I

Subsystem security not active, no userids processed

Severity
0

Explanation

The RVERIFY SECURITY command was issued, but the subsystem security switch is off, so there are no internal control tables to flag for reverification.

CSQH009I

Errors occurred during security timeout processing

Severity
8

Explanation

This message is sent to the system log either:

- If an error occurs during security timeout processing (for example, a nonzero return code from the external security manager (ESM) during delete processing)
- Prior to a message CSQH010I if a nonzero return code is received from the timer (CSQTTIME) during an attempt to restart the security timer

System action

Processing continues.

System programmer response

Contact your IBM support center to report the problem.

CSQH010I

csect-name Security timeout timer not restarted

Severity
8

Explanation

This message is issued to inform you that the security timeout timer is not operational. The reason for this depends on which of the following messages precedes this one:

CSQH009I
An error occurred during timeout processing

CSQH011I
The timeout interval has been set to zero

System action

If this message follows message CSQH009I, the queue manager ends abnormally with one of the following reason codes:

csect-name
Reason code

CSQHTPOP
X'00C80040'

CSQHPATC
X'00C80041'

System programmer response

See "Security manager codes (X'C8')" on page 950 for information about the reason code.

CSQH011I

csect-name Security interval is now set to zero

Severity
0

Explanation

The ALTER SECURITY command was entered with the INTERVAL attribute set to 0. This means that no user timeouts will occur.

System programmer response

This message is issued to warn you that no security timeouts will occur. Check that this is what was intended.

CSQH012I

Errors occurred during ALTER SECURITY timeout processing

Severity
8

Explanation

This message is issued in response to an ALTER SECURITY command if errors have been detected during timeout processing (for example, a nonzero return code from the external security manager (ESM) during timeout processing).

System action

Processing continues.

System programmer response

Contact your IBM support center to report the problem.

CSQH013E

csect-name Case conflict for class *class-name*

Severity
8

Explanation

A REFRESH SECURITY command was issued, but the case currently in use for the class *class-name* differs from the system setting and if refreshed would result in the set of classes using different case settings.

System action

The refresh does not occur.

System programmer response

Check that the class in question (*class-name*) is set up correctly and that the system setting is correct. If a change in case setting is required, issue the REFRESH SECURITY(*) command to change all classes.

CSQH015I

Security timeout = *number* minutes

Severity
0

Explanation

This message is issued in response to the DISPLAY SECURITY TIMEOUT command, or as part of the DISPLAY SECURITY ALL command.

CSQH016I

Security interval = *number* minutes

Severity
0

Explanation

This message is issued in response to the DISPLAY SECURITY INTERVAL command, or as part of the DISPLAY SECURITY ALL command.

CSQH017I

Security refresh completed with errors in signoff

Severity
8

Explanation

This message is issued when an error has been detected in refresh processing; for example, a nonzero return code from the external security manager (ESM) during signoff or delete processing.

System action

Processing continues.

System programmer response

Contact your IBM support center to report the problem.

CSQH018I

csect-name Security refresh for *resource-type* not processed, security switch set OFF

Severity
0

Explanation

A REFRESH SECURITY command was issued for resource type *resource-type*. However, the security switch for this type or the subsystem security switch is currently set off.

Note: This message is issued only for resource types MQQUEUE, MQPROC, and MQNLIST, because MQADMIN is always available for refresh.

System programmer response

Ensure that the REFRESH SECURITY request was issued for the correct resource type.

CSQH019I

Keyword values are incompatible

Severity
8

Explanation

The REFRESH SECURITY command was issued, but the command syntax is incorrect because a keyword value that is specified conflicts with the value for another keyword.

System action

The command is not executed.

System programmer response

See REFRESH SECURITY for more information.

CSQH021I

csect-name switch-type security switch set OFF, profile '*profile-type*' found

Severity
0

Explanation

This message is issued during queue manager initialization and in response to a REFRESH SECURITY command for each security switch that is set OFF because the named security profile has been found.

System action

If the subsystem security switch is set off, you will get only one message (for that switch).

System programmer response

Messages CSQH021I through CSQH026I are issued so that you can check the security configuration of your queue manager. See Switch profiles for information about setting security switches.

CSQH022I

csect-name switch-type security switch set ON, profile '*profile-type*' found

Severity
0

Explanation

This message is issued during queue manager initialization and in response to a REFRESH SECURITY command for each security switch that is set ON because the named security profile has been found.

System programmer response

Messages CSQH021I through CSQH026I are issued so that you can check the security configuration of your queue manager. See Switch profiles for information about setting security switches.

CSQH023I

csect-name switch-type security switch set OFF, profile '*profile-type*' not found

Severity
0

Explanation

This message is issued during queue manager initialization and in response to a REFRESH SECURITY command for each security switch that is set OFF because the named security profile has not been found.

System action

If the subsystem security switch is set off, you will get only one message (for that switch).

System programmer response

Messages CSQH021I through CSQH026I are issued so that you can check the security configuration of your queue manager. See Switch profiles for information about setting security switches.

CSQH024I

csect-name switch-type security switch set ON, profile '*profile-type*' not found

Severity
0

Explanation

This message is issued during queue manager initialization and in response to a REFRESH SECURITY command for each security switch that is set ON because the named security profile has not been found.

System programmer response

Messages CSQH021I through CSQH026I are issued so that you can check the security configuration of your queue manager. See Switch profiles for information about setting security switches.

CSQH025I

csect-name switch-type security switch set OFF, internal error

Severity
0

Explanation

This message is issued during queue manager initialization and in response to a REFRESH SECURITY command for each security switch that is set OFF because an error occurred.

System action

The message might be issued with message CSQH004I when an unexpected setting is encountered for a switch.

System programmer response

See message CSQH004I for more information.

Messages CSQH021I through CSQH026I are issued so that you can check the security configuration of your queue manager.

CSQH026I

csect-name switch-type security switch forced ON, profile '*profile-type*' overridden

Severity

0

Explanation

This message is issued during queue manager initialization and in response to a REFRESH SECURITY command for each security switch that was forced ON. This happens when an attempt was made to turn off both the queue manager and queue-sharing group security switches for the named profile, which is not allowed.

System programmer response

Correct the profiles for the queue manager and queue-sharing group security switches, and refresh security if required.

Messages CSQH021I through CSQH026I are issued so that you can check the security configuration of your queue manager. See Switch profiles for information about setting security switches.

CSQH030I

Security switches ...

Severity

0

Explanation

This is issued in response to a DISPLAY SECURITY ALL or DISPLAY SECURITY SWITCHES command and is followed by messages CSQH031I through CSQH036I for each security switch to show its setting and the security profile used to establish it.

System action

If the subsystem security switch is set off, you will get only one message (for that switch). Otherwise, a message is issued for each security switch.

CSQH031I

switch-type OFF, '*profile-type*' found

Severity

0

Explanation

This message is issued in response to a DISPLAY SECURITY ALL or DISPLAY SECURITY SWITCHES command for each security switch that is set OFF because the named security profile has been found.

System action

If the subsystem security switch is set off, you will get only one message (for that switch).

CSQH032I

switch-type ON, '*profile-type*' found

Severity

0

Explanation

This message is issued in response to a DISPLAY SECURITY ALL or DISPLAY SECURITY SWITCHES command for each security switch that is set ON because the named security profile has been found.

CSQH033I

switch-type OFF, '*profile-type*' not found

Severity

0

Explanation

This message is issued in response to a DISPLAY SECURITY ALL or DISPLAY SECURITY SWITCHES command for each security switch that is set OFF because the named security profile has not been found.

System action

If the subsystem security switch is set off, you will get only one message (for that switch).

CSQH034I

switch-type ON, '*profile-type*' not found

Severity

0

Explanation

This message is issued in response to a DISPLAY SECURITY ALL or DISPLAY SECURITY SWITCHES command for each security switch that is set ON because the named security profile has not been found.

CSQH035I

switch-type OFF, internal error

Severity

0

Explanation

This message is issued in response to a DISPLAY SECURITY ALL or DISPLAY SECURITY SWITCHES command for each security switch that is set OFF because an error occurred during initialization or when refreshing security.

System action

The message is be issued when an unexpected setting is encountered for a switch.

System programmer response

Check all your security switch settings. Review the z/OS system log file for other CSQH messages for errors during IBM MQ startup or when running RUNMQSC security refresh commands.

If required, correct them and refresh your security.

CSQH036I

switch-type ON, '*profile-type*' overridden

Severity

0

Explanation

This message is issued in response to a DISPLAY SECURITY ALL or DISPLAY SECURITY SWITCHES command for each security switch that was forced ON. This happens when an attempt was made to turn off both the queue manager and queue-sharing group security switches for the named profile, which is not allowed.

System programmer response

Correct the profiles for the queue manager and queue-sharing group security switches, and refresh security if required.

CSQH037I

Security using uppercase classes

Severity

0

Explanation

This message is issued in response to a DISPLAY SECURITY ALL or DISPLAY SECURITY SWITCHES command to inform you that security is currently using the uppercase classes MQPROC, MQNLIST, MQQUEUE and MQADMIN.

CSQH038I

Security using mixed case classes

Severity
0

Explanation

This message is issued in response to a DISPLAY SECURITY ALL or DISPLAY SECURITY SWITCHES command to inform you that security is currently using the mixed case classes MXPROC, MXNLIST, MXQUEUE and MXADMIN.

CSQH040I

Connection authentication ...

Severity
0

Explanation

This message is issued during queue manager initialization, in response to a DISPLAY SECURITY command, and in response to a REFRESH SECURITY TYPE(CONNAUTH) command. It is followed by messages CSQH041I and CSQH042I to show the value of the connection authentication settings.

CSQH041I

Client checks: *check-client-value*

Severity
0

Explanation

This message is issued during queue manager initialization, in response to a DISPLAY SECURITY command, and in response to a REFRESH SECURITY TYPE(CONNAUTH) command. It shows the current value of connection authentication client checks.

If the value shown is '????' this means that the connection authentication settings were not able to be read. Preceding error messages will explain why. Any applications which connect while the queue manager is in this state will result in error message CSQH045E.

CSQH042I

Local bindings checks: *check-local-value*

Severity
0

Explanation

This message is issued during queue manager initialization, in response to a DISPLAY SECURITY command, and in response to a REFRESH SECURITY TYPE(CONNAUTH) command. It shows the current value of connection authentication local bindings checks.

If the value shown is '????' this means that the connection authentication settings were not able to be read. Preceding error messages will explain why. Any applications which connect while the queue manager is in this state will result in error message CSQH045E.

CSQH043E

csect-name Object AUTHINFO(*object-name*) does not exist or has wrong type

Severity
8

Explanation

During queue manager initialization or while processing a REFRESH SECURITY TYPE(CONNAUTH) command, the authentication information object named in the queue manager's CONNAUTH field was referenced. It was found to either not exist, or not have AUTHTYPE(IDPWOS).

System action

If this message is issued in response to a REFRESH SECURITY TYPE(CONNAUTH) command, the command fails and the connection authentication settings remain unchanged.

If this message is issued during queue manager initialization, all connection attempts are refused with reason MQRC_NOT_AUTHORIZED until the connection authentication settings have been corrected.

System programmer response

Ensure the authentication information object *object-name* has been defined correctly. Ensure the queue manager's CONNAUTH field is referencing the correct object name. Correct the configuration, then issue a REFRESH SECURITY TYPE(CONNAUTH) command for the changes to become active.

CSQH044E

csect-name Access to AUTHINFO(*object-name*) object failed, reason=*mqrc (mqrc-text)*

Severity
8

Explanation

During queue manager initialization or while processing a REFRESH SECURITY TYPE(CONNAUTH) command, the authentication information object named in the queue manager's CONNAUTH field could not be accessed for the reason given by *mqrc* (*mqrc-text* provides the MQRC in textual form).

System action

If this message is issued in response to a REFRESH SECURITY TYPE(CONNAUTH) command, the command fails and the connection authentication settings remain unchanged.

If this message is issued during queue manager initialization, all connection attempts are refused with reason MQRC_NOT_AUTHORIZED until the connection authentication settings have been corrected.

System programmer response

Ensure the authentication information object *object-name* has been defined correctly. Ensure the queue manager's CONNAUTH field is referencing the correct object name. Refer to API completion and reason codes for information about *mqrc* to determine why the object cannot be accessed. Correct the configuration, then issue a REFRESH SECURITY TYPE(CONNAUTH) command for the changes to become active.

CSQH045E

csect-name application did not provide a password

Severity
8

Explanation

An application connected without supplying a user id and password for authentication and the queue manager is configured to require this type of application to supply one.

If this is a client application, the configuration attribute CHCKCLNT. *application* is identified as *channel name/connection details*.

If this is a locally bound application, the configuration attribute CHCKLOCL. *application* is identified as *user id/application name*.

If the connection authentication configuration was unable to be read, this message will also be seen. See messages CSQH041I and CSQH042I.

System action

The connection fails and the application is returned MQRC_NOT_AUTHORIZED.

System programmer response

Ensure all applications are updated to supply a user id and password, or alter the connection authentication configuration to OPTIONAL instead of REQUIRED, to allow applications to connect that have not supplied a user id and password.

If the connection authentication configuration was unable to be read, check for earlier error messages and make corrections based on what is reported.

After making configuration changes, issue a REFRESH SECURITY TYPE(CONNAUTH) command for the changes to become active.

If the application is a client application, the user id and password can be supplied without changing the application code, by using a security exit, such as mqccred, which is supplied with the IBM MQ MQI client.

CSQH046E

csect-name application supplied a password for user ID *userid* that has expired

Severity
8

Explanation

An application connected and supplied a user id *userid* and password for authentication. The password supplied has expired.

If this is a client application, *application* is identified as 'channel name'/'connection details'.

If this is a locally bound application, *application* is identified as 'running user id'/'application name'.

System action

The connection fails and the application is returned MQRC_NOT_AUTHORIZED.

System programmer response

Set a new password for *userid* using O/S facilities and retry the connect from the application using the new password.

Data manager messages (CSQI...)

CSQI002I

csect-name Page set *psid* value out of range

Severity
8

Explanation

One of the following commands has been issued:

- DEFINE STGCLASS
- DISPLAY STGCLASS
- DISPLAY USAGE

The value given for the page-set identifier was not in the range 0 through 99.

System action

The command is ignored.

System programmer response

Reissue the command using the correct syntax. (See MQSC commands for information about the command.)

CSQI003I

csect-name 'PSID' not allowed with TYPE (*usage-type*)

Severity
8

Explanation

A DISPLAY USAGE command was issued specifying both the PSID keyword and either TYPE(DATASET), or TYPE(SMDS), which is not allowed.

System action

The command is ignored.

System programmer response

Reissue the command using the correct syntax; see DISPLAY USAGE for additional information.

CSQI004I

csect-name Consider indexing *queue-name* by *index-type* for *connection-type* connection *connection-name*, *num-msgs* messages skipped

Severity
0

Explanation

The queue manager has detected an application receiving messages by message ID or correlation ID from a queue that does not have an index defined.

The type of index that should be established for the queue is indicated by *index-type*, and is either MSGID or CORRELID. The type of application that is affected is identified by *connection-type*, and is either BATCH, CHIN, CICS or IMS.

- For batch applications *connection-name* contains the job name.
- For the channel initiator *connection-name* contains the channel name.
- For CICS applications *connection-name* contains the region and transaction names.
- For IMS applications *connection-name* contains the IMS sysid, PSTID and PSB names.

The number of messages skipped while searching for the requested message, shown as *num-msgs*, is an indication of the impact of not having an index defined.

System action

Processing continues.

System programmer response

Investigate the application to determine whether an index is required for the queue.

The parameter to use with the DEFINE QLOCAL or ALTER QLOCAL command is **INDXTYPE**. Set it to *MSGID* or *CORRELID*, as indicated by the output you received for this message.

Applications that receive messages by message ID or correlation ID might encounter a performance degradation if an index is not defined and the depth of the queue is large.

CSQI005I

csect-name PAGE SET *nn* OFFLINE. RECOVERY RBA = *rba*

Severity
0

Explanation

This message indicates that the page set *nn* is currently not accessible by the queue manager. This might be because the page set has not been defined to the queue manager with the DEFINE PSID command.

This message can also be issued if the pageset has been marked suspended. If this is the case a CSQP059E: Page set *n* is suspended because it uses suspended buffer pool *n* message is issued.

Note: *rba* is the restart RBA for page set *nn*.

This situation can cause problems, so you should take action to correct it as soon as possible.

System action

Processing continues.

System programmer response

If the page set is required, bring it online; this can be done without stopping the queue manager. Use the FORMAT function of the utility program CSQUTIL, specifying TYPE(REPLACE). Then issue a DEFINE PSID command to bring the page set back into use. Note that all units of recovery (except those that are indoubt) that involved the offline page set will have been backed out by the queue manager when the page set was last used. These indoubt units of recovery may be resolved once the page set is back in use by the queue manager.

CSQI006I

csect-name COMPLETED IN-STORAGE INDEX FOR QUEUE *q-name*

Severity
0

Explanation

During restart, in-storage indexes are built for non-shared queues that have the INDXTYPE attribute, which might take some time. This message records that index-building has been completed for the specified queue.

System action

Processing continues.

CSQI007I

csect-name BUILDING IN-STORAGE INDEX FOR QUEUE *q-name*

Severity
0

Explanation

During restart, in-storage indexes are built for non-shared queues that have the INDXTYPE attribute, which might take some time. This message records that an index is being built for the specified queue.

System action

The in-storage index is built.

CSQI010I

Page set usage ...

Severity
0

Explanation

This message is the response to the DISPLAY USAGE command. It provides information about the page set usage, as follows:

```
   Page ...
   set
_  n    page-set-information :
   End of page set report
```

where *n* is the page set identifier. The columns of *page-set-information* are:

Buffer pool
> The buffer pool used by the page set.

Total pages
> The total number of 4 KB pages in the page set (this relates to the records parameter on the VSAM definition of the page set).

Unused pages
> The number of pages that are not used (that is, available page sets).

Persistent data pages
> The number of pages holding persistent data (these pages are being used to store object definitions and persistent message data).

Nonpersistent data pages
> The number of pages holding nonpersistent data (these pages are being used to store nonpersistent message data).

Expansion count
> The type of expansion used for the page set (SYSTEM, USER, or NONE), and the number of times the page set has been dynamically expanded since restart. (The maximum number of times the page set can be expanded is constrained by the maximum number of extents allowable for the type of VSAM data set allocation and your operating system version.) If the count is large, your page set allocation might be wrong, or you might have some message processing problem.

Note: The page numbers are approximate because other threads might be altering the status of pages in this page set while the command is being processed.

If a page set is unavailable, *page-set-information* is one of:

has never been online
> if the page set has been defined, but has never been used.

OFFLINE, recovery RBA=*rba*
> if the page set is currently not accessible by the queue manager, for example because the page set has not been defined to the queue manager with the DEFINE PSID command; *rba* is the restart RBA for the page set.

is not defined
> if the command was issued for a specific page set that is not defined to the queue manager.

is suspended, buffer pool *buffer pool number*, recovery RBA=*rba*
> if the page set is suspended; *rba* is the restart RBA for the page set. For further information about suspended page sets see message CSQP059E: Page set *n* is suspended because it uses suspended buffer pool *n*.

Exceptionally, the last line of the report might be:

```
   Page set report terminated
```

if there was an error in obtaining the information. The error is described in the following messages.

CSQI012E

csect-name COULD NOT COMPLETE COMMAND. STORAGE EXHAUSTED

Severity
> 8

Explanation

A display of page set usage could not complete because all the available storage was exhausted.

System action

The output terminates at this point. There might be more information that has not been displayed. If this is in response to a DISPLAY USAGE command without the PSID keyword, try it again, specifying a page set identifier. This could decrease the amount of information produced, enabling it all to be displayed.

CSQI020I

MAXSMSGS(*number*)

Severity

0

Explanation

This message is issued in response to a DISPLAY MAXSMSGS command, and displays the maximum number of messages that a task can get or put within a single unit of recovery.

CSQI021I

csect-name PAGE SET *psid* IS EMPTY. MEDIA RECOVERY STARTED

Severity

0

Explanation

The queue manager has recognized a page set with a recovery RBA of zero. It will update the page set using information in the log data sets.

System action

The queue manager rebuilds the page set.

CSQI022I

csect-name PAGE SET *psid* NEWLY ADDED

Severity

0

Explanation

The queue manager has recognized that page set *psid* is new to the system.

CSQI023I

csect-name PAGE SET *psid* ONLINE AGAIN. MEDIA RECOVERY STARTED

Severity

0

Explanation

A page set has been redefined to the queue manager after a period offline or suspended.

System action

Any updates to the page set that are necessary are applied.

CSQI024I

csect-name Restart RBA for system as configured = *restart-rba*

Severity

0

Explanation

This message gives the restart RBA (relative byte address) for the queue manager, but does not include any offline or suspended page sets in the calculation of this restart point.

This value can be used to determine where to truncate logs, if you have no offline or suspended page sets.

If you have offline or suspended page sets that you wish to add to your system at some time in the future, you must use the restart RBA given in message CSQI025I. If you truncate your logs at *rba* you might make it impossible to add the offline or suspended page sets back to the system.

CSQI025I

csect-name Restart RBA including offline page sets = *restart-rba*

Severity
0

Explanation

This message gives the restart RBA (relative byte address) for the queue manager, including any offline or suspended page sets.

This value can be used to determine where to truncate logs, if you have offline or suspended page sets that you want to add to the system in the future.

CSQI026I

csect-name PAGE SET *nn* DEFINED, BUT HAS NEVER BEEN ONLINE

Severity
0

Explanation

This message indicates that the page set *nn* has been defined, but it has never been used. Consequently, there is no restart RBA for the page set.

System action

Processing continues.

CSQI027I

csect-name PAGE SET *nn* TREATED AS A NEW PAGE SET

Severity
0

Explanation

This message indicates that the page set *nn* has been formatted using TYPE(NEW). It is treated as if it has been newly-added to the system, so all historical information relating to this page set is discarded. In particular, all queues that use storage classes that reference the page set will be cleared of all messages.

System action

Processing continues.

CSQI028E

csect-name PAGE SET CONFLICT FOR QUEUE queue

Severity
8

Explanation

The named queue contains messages that are on a different page set from that associated with the storage class for the queue.

System action

This message might be issued more than once, each occurrence naming a different queue. The queue manager ends abnormally with reason code X'00C93800'.

System programmer response

Contact your IBM support center for assistance.

CSQI029I

csect-name PAGE SET *psid* IS AN OLD COPY. MEDIA RECOVERY STARTED

Severity

0

Explanation

The queue manager has recognized that the media recovery RBA held within the page set is older than the media recovery RBA checkpointed for the page set. This is because the queue manager was started with an old copy of the page set.

System action

Any updates to the page set that are necessary are applied. Restart processing continues.

CSQI030I

csect-name PAGE SET *nn* TREATED AS A REPLACEMENT PAGE SET

Severity

0

Explanation

This message indicates that the page set *nn* has been formatted using TYPE(REPLACE). No media recovery will be performed on the page set.

System action

Processing continues.

CSQI031I

csect-name THE NEW EXTENT OF PAGE SET *psid* HAS FORMATTED SUCCESSFULLY

Severity

0

Explanation

Following the dynamic extension of page set *psid*, the new extent has been formatted successfully.

System action

Processing continues.

CSQI032I

csect-name NEW EXTENT(S) OF *nnn* PAGES DISCOVERED ON PAGE SET *psid* WILL NOW BE FORMATTED

Severity

0

Explanation

During restart, it was discovered that page set *psid* had been extended dynamically, but that *nnn* pages had not been formatted. This formatting will now be done.

System action

Processing continues.

CSQI033E

csect-name Block *block-number* of the message data for entry id *entry-id* in CFSTRUCT(*struc-name*) was not found in Db2

Severity
8

Explanation

A shared message was read which referred to message data in Db2, but the corresponding data was not found in the Db2 table.

block-number
identifies the block number within the message of the data block which was not found.

entry-id
identifies the coupling facility entry for the shared message.

struc-name
identifies the application structure.

System action

If the message was persistent, the structure is marked as failed, requiring recovery, and messages CSQI036I and CSQE035E are issued.

If the message was nonpersistent, the damaged message is deleted and message CSQI037I is issued.

In both cases, a dump is produced.

CSQI034E

csect-name Block *block-number* of the message data for entry id *entry-id* in CFSTRUCT(*struc-name*) refers to SMDS(*qmgr-id*) control interval *rci* but the stored data does not match the entry id

Severity
8

Explanation

A shared message was read which referred to message data stored in a shared message data set (SMDS), but when the data was read from the referenced location in the data set, the entry id in the block prefix did not match the entry id of the message.

block-number
identifies the block number within the message of the data block which was not found.

entry-id
identifies the coupling facility entry for the shared message.

struc-name
identifies the application structure.

qmgr-id
identifies the queue manager which owns the shared message data set.

rci
identifies the relative control interval number within the data set where the message block was expected to start.

System action

If the message was being retrieved for backup purposes, a dump is produced and the queue manager terminates.

Otherwise, action is taken as follows:

- If the message was persistent, the shared message data set and the structure are marked as failed, requiring recovery, and messages CSQI036I and CSQE035E are issued.

- If the message was nonpersistent, the damaged message is deleted and message CSQI037I is issued.

In both cases, a dump is produced.

CSQI035E

csect-name Block *block-number* of the message data for entry id *entry-id* in CFSTRUCT(*struc-name*) refers to SMDS but the data set id is not valid

Severity
8

Explanation

A shared message was read which referred to message data stored in a shared message data set (SMDS), but the relevant queue manager id (identified by the last byte of the entry id) is not one which currently owns a shared message data set.

block-number
identifies the block number within the message of the data block which could not be read.

entry-id
identifies the coupling facility entry for the shared message.

struc-name
identifies the application structure.

System action

If the message was persistent, the structure is marked as failed, requiring recovery, and messages CSQI036I and CSQE035E are issued.

If the message was nonpersistent, the damaged message is deleted and message CSQI037I is issued.

In both cases, a dump is produced.

CSQI036I

csect-name CFSTRUCT(*struc-name*) has been marked as failed because the data for persistent message with entry id *entry-id* could not be retrieved

Severity
0

Explanation

A damaged persistent message was found, so the structure has been marked as failed, requiring recovery.

struc-name
identifies the application structure.

entry-id
identifies the coupling facility entry for the shared message.

System action

The structure is marked as failed and message CSQE035E is issued.

CSQI037I

csect-name The nonpersistent message with entry id *entry-id* has been deleted from CFSTRUCT(*struc-name*) because the data could not be retrieved

Severity
0

Explanation

A damaged nonpersistent message was found which could not be successfully retrieved, so it has been deleted.

entry-id
> identifies the coupling facility entry for the shared message.

struc-name
> identifies the application structure.

System action

The damaged message is deleted. No attempt is made to delete any associated SMDS message data.

CSQI038I

csect-name The damaged message with entry id *entry-id* in CFSTRUCT(*struct-name*) is for queue *queue-name*

Severity
> 0

Explanation

A damaged shared message entry has been found, as indicated by a previous message, and this message indicates the corresponding queue name.

struc-name
> identifies the application structure.

entry-id
> identifies the coupling facility entry for the shared message.

queue-name
> identifies the queue for which the message cannot be retrieved.

System action

Processing continues. This message will be followed by message CSQI036I or CSQI037I, depending on whether the damaged message was persistent or not.

CSQI039E

csect-name LRSN required for structure recovery not available for one or more CF structures

Explanation

The LRSN required for structure recovery for one or more CF structures could not be located within the logs indexed in the BSDS.

Previous CSQE040I and CSQE041E messages might indicate which CF structures are causing this error to occur.

System action

Processing continues.

System programmer response

Use the **BACKUP CFSTRUCT** command, on any queue manager in the queue-sharing group, to make a new CF structure backup. You might consider setting up a procedure to take frequent backups automatically.

CSQI041I

csect-name JOB *jobname* USER *userid* HAD ERROR ACCESSING PAGE SET *psid*

Severity
> 0

Explanation

This message is issued when there is an error on a page set. The message identifies the job name, user ID, and page set identifier associated with the error.

CSQI042E

csect-name WLM IWMCONN request failed, rc=*rc* reason=*reason*

Severity
8

Explanation

A Workload Management Services (WLM) connect call failed. *rc* is the return code and *reason* is the reason code (both in hexadecimal) from the call.

System action

Processing continues, but WLM services are not available.

System programmer response

See the *MVS Programming: Workload Management Services* manual for information about the return and reason codes from the WLM call. When you have resolved the problem, you will need to restart the queue manager. If you are unable to solve the problem, contact your IBM support center for assistance.

CSQI043E

csect-name WLM *call-name* request for process *process-name* failed, rc=*rc* reason=*reason*

Severity
8

Explanation

A Workload Management Services (WLM) call failed. *rc* is the return code and *reason* is the reason code (both in hexadecimal) from the call.

System action

Processing continues, but WLM services are not available.

System programmer response

See the *MVS Programming: Workload Management Services* manual for information about the return and reason codes from the WLM call. When you have resolved the problem, you will need to restart the queue manager. If you are unable to solve the problem, contact your IBM support center for assistance.

CSQI044I

csect-name Process *process-name* used by queue *q-name* was not found

Severity
0

Explanation

The named queue is indexed by message tokens. An action was being performed for the queue that required the use of the Workload Management Services (WLM) IWMCLSFY service. However, the process specified by the queue does not exist, so the service name for WLM cannot be determined.

System action

A blank service name is passed to the Workload Management Services (WLM) IWMCLSFY service.

System programmer response

Correct the queue or process definitions.

CSQI045I

csect-name Log RBA has reached *rba*. Plan a log reset

Severity
4

Explanation

The current log RBA is approaching the end of the log RBA.

System action

Processing continues, unless the RBA value reaches FFF800000000 (if 6-byte log RBAs are in use) or FFFFFFFC000000000 (if 8-byte log RBAs are in use) when the queue manager terminates with reason code 00D10257.

System programmer response

Plan to stop the queue manager at a convenient time and reset the logs. See RESETPAGE for information on how to reset the logs using the CSQUTIL utility program and resetting the queue manager's log.

If your queue manager is using 6-byte log RBAs, consider converting the queue manager to use 8-byte log RBAs. See Planning to increase the maximum addressable log range for further information.

CSQI046E

csect-name Log RBA has reached *rba*. Perform a log reset

Severity
8

Explanation

The current log RBA is approaching the end of the log RBA.

System action

Processing continues, unless the RBA value reaches FFF800000000 (if 6-byte log RBAs are in use) or FFFFFFFC000000000 (if 8-byte log RBAs are in use) when the queue manager terminates with reason code 00D10257.

System programmer response

Stop the queue manager as soon as it is convenient and reset the logs. See RESETPAGE for information on how to reset the logs using the CSQUTIL utility program and resetting the queue manager's log.

If your queue manager is using 6-byte log RBAs, consider converting the queue manager to use 8-byte log RBAs. See Planning to increase the maximum addressable log range for further information.

CSQI047E

csect-name Log RBA has reached *rba*. Stop queue manager and reset logs

Severity
8

Explanation

The current log RBA is too close to the end of the log RBA range.

System action

Processing continues, unless the RBA value reaches FFF800000000 (if 6-byte log RBAs are in use) or FFFFFFFC000000000 (if 8-byte log RBAs are in use) when the queue manager terminates with reason code 00D10257.

System programmer response

Stop the queue manager immediately and reset the logs. See RESETPAGE for information on how to reset the logs using the CSQUTIL utility program and resetting the queue manager's log.

If your queue manager is using 6-byte log RBAs, consider converting the queue manager to use 8-byte log RBAs. See Planning to increase the maximum addressable log range for further information.

CSQI048I

csect-name WLM reached maximum enclave limit

Severity
4

Explanation

Workload Management Services (WLM) reported that no more enclaves could be created, so a message could not be notified to WLM. (An IWMECREA call gave a return code of 8 with a reason code of X'xxxx0836'.)

Note: This message might be issued repeatedly during the scan of the indexes for WLM-managed queues.

System action

The queue manager will attempt to notify the message to WLM again on the next scan of the indexes for WLM-managed queues. This will be after the interval specified by the WLMTIME system parameter. For information about the system parameters for the CSQ6SYSP macro, see Using CSQ6SYSP.

System programmer response

See the *MVS Programming: Workload Management Services* manual for information about the return and reason codes from the WLM call.

CSQI049I

Page set *psid* has media recovery RBA=*rcvry-rba*, checkpoint RBA= *chkpt-rba*

Severity
0

Explanation

During restart, the queue manager opened the indicated page set. The media recovery RBA from the page set itself and the check pointed RBA from the logs are as shown.

If the RBAs differ, it indicates that an old copy of the page set is being used. If the checkpoint RBA and the prior checkpoint RBA shown in message CSQR003I differ, it indicates that the page set has been offline or suspended.

System action

Processing continues. Media recovery is performed if necessary to bring the page set up to date.

CSQI052E

Invalid spacemap RBA found during restart for page set *psid*

Severity
8

Explanation

A space map page containing an invalid RBA was detected on the indicated page set during startup, indicating the page set is not in a consistent state.

This is normally as a result of the page set not being correctly processed during a past cold start operation or RESETPAGE operation.

System action

Processing continues.

System programmer response

When *psid* specifies page set 0, contact IBM Service.

For page sets other than 0, plan to stop the queue manager as soon as it is convenient, then follow the procedure to restore the page set or sets to a consistent state:

- Run CSQUTIL with SCOPY PSID(x) to save persistent messages on the page set to a data set
- Format the page set with TYPE(NEW)
- Start the queue manager and reload the messages from the data set using SCOPY LOAD

CSQI059E

Unable to increase cluster cache

Severity
8

Explanation

The dynamic cluster cache cannot be increased because the queue manager cluster cache task encountered an error.

System action

The cluster cache task terminates. The channel initiator will probably terminate.

System programmer response

Investigate the problem reported in any preceding messages.

CSQI060E

QSG names differ, log=*log-name* queue manager=*qmgr-name*

Severity
8

Explanation

The queue-sharing group name recorded in the log does not match the name being used by the queue manager.

Possible causes are:

- The queue manager was restarted using the log from another queue manager.
- The queue manager was restarted with the wrong QSGDATA system parameter.
- The queue manager was not removed correctly from its previous queue-sharing group.

System action

Restart is terminated abnormally with completion code X'5C6' and reason code X'00C94505'.

System programmer response

Restart the queue manager using the correct logs and BSDS, or change the QSGDATA system parameter. Note that you cannot change the name of the queue-sharing group that a queue manager uses, or remove it from a queue-sharing group, unless it has been shut down normally and the further procedures for removal described in Managing queue-sharing groups have been followed.

CSQI061E

Queue manager QSG numbers differ, log=*log-num* queue manager=*qmgr-num*

Severity
8

Explanation

The queue manager was restarted using the log from another queue manager. The queue-sharing group queue manager number recorded in the log does not match that being used by the queue manager.

System action

Restart is terminated abnormally with completion code X'5C6' and reason code X'00C94506'.

System programmer response

Restart the queue manager using the correct logs and BSDS. If the correct logs are being used, correct the entry for the queue manager in the Db2 CSQ.ADMIN_B_QMGR table. If you cannot resolve the problem, contact your IBM Support Center for assistance.

CSQI062I

Queue *q-name* deleted by another queue manager during restart

Severity
0

Explanation

During restart processing the queue manager detected that the named queue has been deleted by another queue manager in the queue-sharing group.

System action

Processing continues.

CSQI063E

Queue *q-name* is both PRIVATE and SHARED

Severity
0

Explanation

During restart processing the queue manager detected that the named queue exists both as a locally-defined queue on this queue manager and as a shared queue in the queue-sharing group. Opening a queue with this name will therefore not be allowed.

System action

Processing continues.

System programmer response

Delete one of the instances of the queue. See Shared queue problems for more information.

CSQI064E

Cannot get information from Db2. *obj-type* COPY objects not refreshed

Severity
8

Explanation

During queue manager or channel initiator startup, objects of type *obj-type* with a disposition of COPY were being refreshed from those with a disposition of GROUP. However, the necessary information could not be obtained from Db2; this may be because Db2 is not available or no longer available, or because the connection to Db2 is suspended, or because there was an error in accessing Db2, or because a Db2 table was temporarily locked.

System action

The COPY objects of type *obj-type* are not refreshed. Startup continues.

System programmer response

Refer to the console log for messages giving more information about the error.

When the error condition has cleared, refresh the objects manually, or restart the queue manager or channel initiator.

CSQI065I

Buffer pool attributes ...

Severity

0

Explanation

This message displays the current state of buffer pool attributes, based on the page set number passed into the **DISPLAY USAGE PSID** command. It provides information about the number of available buffers, buffers free (stealable), shown as a number and as a percentage of the buffers in the pool, and the memory LOCATION for the specified buffer pool.

```
CSQI065I !MQ21 Buffer pool attributes ...  321
  Buffer  Available  Stealable   Stealable  Page       Location
    pool    buffers    buffers   percentage  class
_       0       5000       4989          99  FIXED4KB   ABOVE
_       1       5000       4995          99  4KB        ABOVE
_       2       5000       4999          99  4KB        BELOW
_       3       5000       4995          99  4KB        BELOW
_       4       5000       4999          99  4KB        BELOW
_       5       1000        999          99  4KB        BELOW
```

Buffer pool
>   The number of the buffer pool.

Available buffers
>   The total number of available buffers defined for a specified buffer pool.
>
>   If location is SWITCHING_ABOVE or SWITCHING_BELOW, the value is the sum of the numbers above and below.

Stealable buffers
>   The number of buffers free (stealable) for a defined buffer pool.

Stealable percentage
>   The amount of buffers free (stealable), as a percentage, for a defined buffer pool.

Page class
>   The type of virtual storage pages used for backing the buffers in the buffer pool. The page class value is one of the following:
>
>   **4KB**
>>   Buffers are backed by standard pageable 4 KB pages
>
>   **FIXED4KB**
>>   Buffers are backed by permanently page-fixed 4 KB page

Location
>   The location value of the memory used by individual buffer pools. The location value is one of the following:
>
>   **ABOVE**
>>   ABOVE is displayed when OPMODE(NEWFUNC, 800) is in effect. Memory is used above the bar for buffer pools.
>
>   **BELOW**
>>   BELOW is the default. Memory is used below the bar for buffer pools.
>
>   **SWITCHING_ABOVE**
>>   The buffer pool is in the process of switching to a location ABOVE the bar.
>
>   **SWITCHING_BELOW**
>>   The buffer pool is in the process of switching to a location BELOW the bar.

CSQI070I

Data set usage ...

Severity

0

Explanation

This message is the response to the DISPLAY USAGE command. It provides information about the data sets relating to various circumstances, as follows:

```
Data set  RBA/LRSN  DSName
data-set-type:
       rrr       dsname
End of data set report
```

where:

data-set-type
:   The type of data set and circumstance, which can be:

    Log, oldest with active unit of work
    :   The log data set containing the beginning RBA of the oldest active unit of work for the queue manager.

    Log, oldest for page set recovery
    :   The log data set containing the oldest restart RBA of any page set for the queue manager.

    Log, oldest for CF structure recovery
    :   The log data set containing the LRSN which matches the time of the oldest current backup of any CF structure in the queue-sharing group. If the oldest current backup is not found, you must back up all of your structures.

rrr
:   The RBA or LRSN corresponding to the circumstance.

dsname
:   The name of the copy 1 data set. If no data set relates to a circumstance, this is shown as **None**; if the data set name cannot be determined, this is shown as **Not found**.

System programmer response

This information can be used to help manage data sets; see Tips for backup and recovery for more information.

CSQI965I

modulename Backward migration required for msgs on pageset *ps-name*

Explanation

During queue manager restart it has been detected that one or more of the page sets that have been connected has been used at a higher version of queue manager code.

System action

The queue manager will automatically perform special processing during restart to alter any messages stored on the indicated page set so they can be read by the current version of the queue manager.

CSQI966I

modulename Backward migration failed for msgs on Queue *qname*, pageset *ps-name*. Reason *reason-code*

Explanation

During backward migration of messages on the indicated queue and page set a problem was encountered which prevents further backward migration of messages.

The type of problem, for example page set full, is indicated by the reason code.

System action

The indicated page set is taken offline. Queues and messages on that page set will not be available while the queue manager is running at Version 6.

CSQI967I

modulename Backward migration completed for msgs on *ps-name*

Explanation

The indicated page set has had all messages successfully migrated to a format where they can be processed by applications running on an WebSphere MQ V6 queue manager.

The following limitations still applies:

- If SYSTEM.RETAINED.PUB.QUEUE is defined on this pageset, all messages on that queue will have been deleted.
- If the queue manager is subsequently restarted at V7, then all retained publications are lost.

CSQI968I
modulename Alias queue *aq-name* to TARGQ *tq-name* has TARGTYPE *ttype* which is not supported. *aq-name* has been deleted

Explanation

During object migration, an alias queue was found which had an invalid **TARGTYPE**, for example an alias queue to a topic object.

System action

The alias queue indicated is deleted.

CSQI969I
Data set *ds-name* for page set *ps-name* was used for a higher version of IBM MQ and cannot be added dynamically

Explanation

During dynamic connection to a pageset which was offline at queue manager restart, it has been detected that it requires backward migration processing.

The pageset is not dynamically added.

CSQI970E
csect-name object-type(*object-name*) COULD NOT BE MIGRATED

Explanation

Migration of the identified object could not be performed because of locks held by in-doubt transactions.

Some functions will not be available until migration of the object can be performed. For example, the object cannot be altered or deleted, and if it is a transmission queue, the associated channel may not start.

System action

The object is not migrated.

System programmer response

Use the DISPLAY CONN or the DISPLAY THREAD command to identify the list of in-doubt transactions and then resolve them via either the transaction coordinator or the RESOLVE INDOUBT command. Once the in-doubt transactions are resolved, either restart the queue manager or issue an ALTER command against the object to re-attempt its migration.

Message CSQI971I will be issued when the object has been successfully migrated.

CSQI971I
csect-name object-type(*object-name*) MIGRATED

Explanation

The identified object could not be migrated when the queue manager was first started at the current version because of locks held by in-doubt transactions (see message CSQI970E for more information).

This message is issued during a subsequent restart of the queue manager, or when the object is subsequently altered, to indicate that migration of the object has now occurred.

System action

The object is migrated.

System programmer response

none.

Recovery log manager messages (CSQJ...)

CSQJ001I
CURRENT COPY *n* ACTIVE LOG DATA SET IS DSNAME=*dsname*, STARTRBA=*sss* ENDRBA=*ttt*

Explanation

This message is generated for one of two reasons:

1. When the queue manager starts, this information message is sent to identify the current active log data sets (copy 1 and, if dual logging is used, copy 2).
2. When the current active log data set is full (or when an ARCHIVE LOG command is issued), MQ will switch to the next available active log data set. This message identifies the next available active log data set that will be used for logging.

The value specified by STARTRBA is the RBA of the first byte of log data in the named data set. The value specified by ENDRBA is the RBA of the last possible byte in the data set.

System programmer response

None required. However, if recovery is required, information from this message might be required as input to the change log inventory utility (CSQJU003).

CSQJ002I
END OF ACTIVE LOG DATA SET DSNAME=*dsname*, STARTRBA=*sss* ENDRBA=*ttt*

Explanation

This message is sent when logging switches to a new empty data set. The message shows the name and log RBA range of the full data set.

System programmer response

None required. However, if recovery is required, information from this message might be required as input to the change log inventory utility (CSQJU003).

CSQJ003I
FULL ARCHIVE LOG VOLUME DSNAME=*dsname*, STARTRBA=*sss* ENDRBA=*ttt*, STARTTIME=*ppp* ENDTIME=*qqq*, UNIT=*unitname*, COPY*n*VOL=*vvv* VOLSPAN=*xxx* CATLG=*yyy*

Explanation

Offloading for the specified archive log data set was successfully completed for the given volume. If the data set spans multiple tape volumes, this message is generated for each tape volume.

System action

An archive log data set has been created, and the archive log data set inventory in the BSDS has been updated with the information in the message:

DSNAME
The name of the archive log data set

STARTRBA
The starting RBA contained in the volume

ENDRBA
The ending RBA contained in the volume

STARTTIME
The starting store-clock value of the log records in the volume

ENDTIME
The ending store-clock value of the log records in the volume

UNIT
The device unit to which the data set was allocated

COPY*n*VOL
The name of the volume; this is displayed as COPY1VOL if this is the copy-1 archive log data set, and as COPY2VOL if this is the copy-2 archive log data set

VOLSPAN
An indicator to denote one of four conditions:

NO
The data set is entirely contained on the volume specified by COPYnVOL

FIRST
This is the first entry of a multivolume data set

MIDDLE
This is the middle entry of a multivolume data set

LAST
This is the last entry of a multivolume data set

CATLG
An indicator to denote one of two conditions:

NO
The archive log data set is uncataloged

YES
The archive log data set is cataloged

The BSDS is automatically updated with the information contained in this message; however, if recovery is required, information from this message might be required as input to the change log inventory utility (CSQJU003).

CSQJ004I
ACTIVE LOG COPY *n* INACTIVE, LOG IN SINGLE MODE, ENDRBA=*ttt*

Explanation

This message is sent when the dual active logging option is selected and copy *n* becomes inactive. A log copy becomes inactive when the next active log data set is not ready when required. ENDRBA is the last byte of log data written on copy *n*. This is usually caused by a delay in offload.

System action

The log is switched to single mode until the next data set for copy *n* is ready for logging.

If the queue manager is shut down or terminates abnormally while in single mode with the system parameter option still set for dual active data sets, the previous state of the active log data sets determines what happens when the queue manager is started, as follows:

- If fewer than two data sets are available (not flagged as STOPPED) for each set of active logs, queue manager startup terminates and message CSQJ112E is issued.

- If an active log data set is in NOTREUSABLE state, the queue manager can be started in single logging mode, but dual mode takes effect when the other active log data set becomes available after offloading.

System programmer response

Perform a display request to ensure that there are no outstanding requests that are related to the log offload process. Take the necessary action to satisfy any requests, and permit offload to continue.

If the switch to single mode was caused by the lack of a resource required for offload, the necessary resource should be made available to allow offload to complete and thus permit dual logging to

proceed. If recovery is required, information from this message might be required as input to the change log inventory utility (CSQJU003).

CSQJ005I
ACTIVE LOG COPY *n* IS ACTIVE, LOG IN DUAL MODE, STARTRBA=*sss*

Explanation

This message is sent when copy *n* of the log becomes active after previously being flagged as inactive. STARTRBA is the RBA of the first byte of log data written on copy *n* after it was activated.

System programmer response

None required. However, if recovery is required, information from this message might be required as input to the change log inventory utility (CSQJU003).

CSQJ006I
ALLOCATION FOR NEW ARCHIVE LOG DATA SET HAS BEEN CANCELED BY OPERATOR

Explanation

This message is sent if the operator answers 'N' to message CSQJ008E.

System action

If the allocation is for the first copy of the archive log data set, offload terminates processing until the next time it is activated. If the first copy has already been allocated and this request is for the second copy, offload switches to single offload mode for this data set only.

CSQJ007I
ALLOCATION FOR ARCHIVE VOL SER=*volser* HAS BEEN CANCELED BY OPERATOR

Explanation

If the operator answers 'N' to message CSQJ009E, this message is issued. *volser* is the volume serial of an archive log volume required to satisfy the read request. The name of the archive data set is given by message CSQJ022I which follows.

System action

The read request that needed the archive volume is unsuccessful. If the request was issued with the *COND=YES* parameter, the log manager returns to its invoker with return code 12 and reason code X'00D1032B'. Otherwise, the log manager's invoker ends abnormally with the same reason code.

CSQJ008E
nn OF *mm* ACTIVE LOGS ARE FULL, *qmgr-name* NEEDS ARCHIVE SCRATCH

Explanation

MQ needs a scratch volume for offloading an active log data set. *qmgr-name* is the name of the queue manager. *nn* is the number of full active log data sets. *mm* is the total number of active log data sets.

System action

The offload task issues message CSQJ021D and waits for the operator's reply.

CSQJ009E
qmgr-name NEEDS VOL SER= *nnnnnn*

Explanation

MQ needs the specified archive volume for a read operation. *qmgr-name* is the name of the queue manager.

System action

The archive log read service task issues message CSQJ021D and waits for the operator's reply. This wait affects the agent for which the log read was issued and any other agents that might be waiting on the log read service task queue.

CSQJ010I

INVALID RESPONSE - NOT Y OR N

Explanation

During archive data set allocation, a reply message was issued. The user did not respond correctly to the reply message. Either 'Y' or 'N' must be entered.

System action

The original message is repeated.

CSQJ011D

RESTART CONTROL *rrr* CREATED AT *date time* FOUND. REPLY Y TO USE, N TO CANCEL

Explanation

During queue manager initialization, a conditional restart control record was found in the BSDS data set. Both the record identifier (a 4-byte hexadecimal number) and the creation time stamp are displayed to help identify the conditional restart record which will be used. If you want a conditional restart using that record, reply 'Y' to the message. Otherwise, reply 'N'.

System action

If 'Y' is the response, the queue manager is started conditionally, using the record found. If 'N' is the response, startup is terminated.

System programmer response

Respond as indicated.

If a normal restart has failed and you have created a conditional restart record with the change log inventory utility, check whether the time and date in the message agree with when you created that record. If they do, reply 'Y'. If they do not, reply 'N' and investigate the discrepancy.

CSQJ012E

ERROR *ccc* READING RBA *rrr* IN DATA SET *dsname*, CONNECTION-ID=*xxxx* THREAD-XREF=*yyyyyy*

Explanation

While scanning log records read into a buffer, MQ detected a logical error with reason code *ccc*. *rrr* is the log RBA of the segment in the buffer at which the error was detected. *dsname* is the name of the active or archive log data set from which the record was read. If *dsname* is blank, the data was read from an active log output buffer.

The connection ID and thread-xref identify the user or application that encountered the problem. Messages that have the same connection ID and thread-xref relate to the same user.

System action

The application program is terminated with reason code *ccc*. However, information in this message might be useful in diagnosing the abnormal termination that will follow.

System programmer response

See Active log problems for information about dealing with problems on the log.

CSQJ013E

TERMINAL ERROR *ccc* IN BUFFER *rrr* BEFORE ACTIVE LOG WRITE

Explanation

A scan of the log output buffer, just prior to writing the buffer, detected an inconsistency in the log data. *ccc* is the reason code associated with the SDUMP that is produced. *rrr* is the log RBA at which the error was detected.

System action

The queue manager will terminate with a dump, and will not write the damaged buffer to either COPY 1 or COPY 2 active log data set.

System programmer response

Restart the queue manager after it terminates.

Because the damaged buffer has not been written to a log data set, the queue manager can be restarted. No corrective action is required.

CSQJ014E
TERMINAL ERROR *ccc* IN BUFFER *rrr* AFTER ACTIVE LOG WRITE

Explanation

A scan of the log output buffer, after writing to the first copy of the active log data set and before writing to the second copy, detected an inconsistency in the log data. *ccc* is the reason code associated with the SDUMP that is produced. *rrr* is the log RBA at which the error was detected.

System action

The queue manager terminates with a dump, and does not write the damaged buffer to the COPY 2 data set.

System programmer response

The block containing the indicated log RBA might be damaged. The buffer was found to be in error at the completion of the write to the COPY 1 data set of the active log.

If dual active logs are being used, use the print log map utility (CSQJU004) to list the active log data sets for both copies of the active log. Find the COPY 2 data set with the corresponding RBA, and copy that data set (using Access Method Services REPRO) to the COPY 1 data set. Start the queue manager.

If only a single active log is used, contact the IBM support center for assistance. An attempt to start the queue manager might succeed if the damage to the buffer occurred after completion of the write to DASD.

CSQJ020I
csect-name RECEIVED REPLY OF N TO *msg-num*. QUEUE MANAGER STARTUP IS TERMINATED

Explanation

The operator chose to terminate queue manager startup by answering 'N' to *msg-num*.

System action

The queue manager will not restart.

CSQJ021D
REPLY Y WHEN DEVICE READY OR N TO CANCEL

Explanation

An archive log data set needs allocating, as indicated in the preceding CSQJ008E or CSQJ009E message.

System action

The log service task waits for the operator's reply.

CSQJ022I
DSNAME=*dsname*

Explanation

dsname is the name of the archive data set to which the preceding message refers.

CSQJ030E
RBA RANGE *startrba* TO *endrba* NOT AVAILABLE IN ACTIVE LOG DATA SETS

Explanation

Previous errors have made the active log data sets (that contain the RBA range reported in the message) unavailable. The status of these logs is STOPPED in the BSDS.

System action

The queue manager terminates with a dump.

System programmer response

The log RBA range must be available for the queue manager to be recoverable. Correct the previous errors and restore the active log data sets that contain the RBA range reported in the message.

- If the log data sets are recoverable, the active log data set inventory in the BSDS must be modified to reset the STOPPED status. Use the print log map utility (CSQJU004) to obtain a copy of the BSDS log inventory. Next, use the change log inventory utility (CSQJU003) to delete the active log data sets marked STOPPED (use the DELETE statement), then add them again (use the NEWLOG statement). The starting and ending RBA for each active log data set must be specified on the NEWLOG statement when the logs are added back to the BSDS using the change log inventory utility.
- If the log data sets are not recoverable, see Active log problems for information about dealing with problems on the log.

CSQJ031D
csect-name, THE LOG RBA RANGE MUST BE RESET. REPLY 'Y' TO CONTINUE STARTUP OR 'N' TO SHUTDOWN.

Explanation

If, during queue manager initialization, the current log RBA value is equal or higher than FF8000000000 (if 6-byte log RBAs are in use) or FFFFFC0000000000 (if 8-byte log RBAs are in use) this message is issued for the operator to confirm if the restart of the queue manager should continue.

System action

If 'Y' is the response, the queue manager startup continues.

If 'N' is the response, the queue manager startup terminates.

System programmer response

Stop the queue manager and reset the logs as soon as possible. See RESETPAGE for information on how to reset the logs using the CSQUTIL utility program and resetting the queue manager's log.

If your queue manager is using 6-byte log RBAs, consider converting the queue manager to use 8-byte log RBAs. See Planning to increase the maximum addressable log range for further information.

CSQJ032E
csect-name alert-lvl - APPROACHING END OF THE LOG RBA RANGE OF *max-rba*. CURRENT LOG RBA IS *current-rba*.

Explanation

The current log RBA is approaching the end of the log RBA range. *current-rba* is the current log RBA value. The current log RBA should not be allowed to advance to the maximum log RBA value of *max-rba*.

This message is issued during queue manager initialization, or after the active log dataset is full and the queue manager switches to the next available log dataset.

`alert-lvl` indicates one of the following:

WARNING
Issued when the current log RBA reaches the F80000000000 value (if 6-byte log RBAs are in use) or FFFFC00000000000 (if 8-byte log RBAs are in use).

CRITICAL
Issued after the log RBA value reaches FF8000000000 (if 6-byte log RBAs are in use) or FFFFFC0000000000 (if 8-byte log RBAs are in use).

System action

Processing continues, unless the RBA value reaches FFF800000000 (if 6-byte log RBAs are in use) or FFFFFFC000000000 (if 8-byte log RBAs are in use) when the queue manager terminates with reason code 00D10257.

System programmer response

Plan to stop the queue manager and reset the logs as soon as possible; see RESETPAGE for information on how to reset the logs using the CSQUTIL utility program and resetting the queue manager's log.

If your queue manager is using 6-byte log RBAs, consider converting the queue manager to use 8-byte log RBAs. See Planning to increase the maximum addressable log range for further information.

CSQJ033I
FULL ARCHIVE LOG VOLUME DSNAME=*dsname*, STARTRBA= *sss* ENDRBA=*ttt*, STARTLRSN=*ppp* ENDLRSN=*qqq*, UNIT=*unitname*, COPYnVOL=*vvv* VOLSPAN=*xxx* CATLG=*yyy*

Explanation

Offloading for the specified archive log data set was successfully completed for the given volume. If the data set spans multiple tape volumes, this message is generated for each tape volume.

This message is issued in place of CSQJ003I for queue-sharing groups.

System action

See message CSQJ003I. STARTTIME and ENDTIME are replaced by the following:

STARTLRSN
The starting LRSN contained in the volume for queue-sharing groups.

ENDLRSN
The ending LRSN contained in the volume for queue-sharing groups.

CSQJ034I
csect-name END OF LOG RBA RANGE IS *max-rba*

Explanation

This message is issued during queue manager startup, to indicate the end of the log RBA range that can be addressed using the current log RBA size.

A *max-rba* value of 0000FFFFFFFFFFFF indicates that the queue manager is configured to use 6 byte RBAs, while a value of FFFFFFFFFFFFFFFF indicates that the queue manager is configured to use 8 byte RBAs.

You must reset the queue manager's log before the highest used log RBA reaches the end of the log RBA range.

System action

Processing continues

System programmer response

If *max-rba* is 0000FFFFFFFFFFFF, consider converting the queue manager to use an 8-byte log RBA, to maximize the period of time until a reset of the queue manager's log is required. See Planning to increase the maximum addressable log range for further information.

CSQJ060E
parm-name system parameters are unusable

Explanation

The format of the parameters set by *parm-name* in the system parameter load module is invalid, so they cannot be used.

System action

The queue manager is terminated with abnormally with reason code X'00E80084'.

System programmer response

Ensure that the queue manager is started with a correct system parameter module, for example CSQZPARM. If necessary, reassemble the module that uses the indicated parameters, and relink-edit your system parameter load module.

CSQJ061I
parm-name system parameters are obsolete

Explanation

The parameters set by *parm-name* in the system parameter load module use some values which are now obsolete.

System action

Processing continues. The obsolete parameters are ignored, and default values are used for new parameters.

System programmer response

Review your system parameter settings. If necessary, reassemble the module that uses the indicated parameters, and relink-edit your system parameter load module.

CSQJ070E
csect-name ARCHIVE LOG DSN PREFIX NOT IN PROPER FORMAT TO RECEIVE TIME STAMP DATA. TIME STAMPING OF *dsname* BYPASSED

Explanation

The system parameters (set by CSQ6ARVP) specify that the date and time of creation of an archive log data set be included as part of the archive log data set name (DSN). To accomplish this, MQ requires that the length of the archive log data set name prefix is limited. If the prefix requirement is not met, this message is issued just prior to the allocation of the archive log data set specified in the message.

System action

The archive log data set will be allocated using the archive log prefix. However, the archive log DSN will not contain the date and time as the user requested.

System programmer response

The system parameters for the log archive function must be changed. Specifically, the TSTAMP and ARCPFXn fields are not consistent with one another. For information about the actions required to eliminate this problem, see Using CSQ6ARVP.

CSQJ071E
csect-name TIMER FAILURE CAUSED TIME STAMPING OF ARCHIVE *dsname* TO BE BYPASSED

Explanation

The system parameters (set by CSQ6ARVP) specify that the date and time of creation of an archive log data set be included as part of the archive log data set name (DSN). However, an attempt to get the current date and time from the system was unsuccessful. This message is issued just prior to the allocation of the archive log data set specified in the message.

System action

The archive log data set will be allocated using the archive log prefix. However, the archive log DSN will not contain the date and time as the user requested.

CSQJ072E
ARCHIVE LOG DATA SET *dsname* HAS BEEN ALLOCATED TO NON-TAPE DEVICE AND CATALOGED, OVERRIDING CATALOG PARAMETER

Explanation

The system parameters (set by CSQ6ARVP) specify that all archive log data sets should be uncataloged (CATALOG=NO). However, MQ requires that all archive log data sets allocated to non-tape devices must be cataloged. The archive log data set specified by *dsname* has been allocated to a non-tape device, and has thus been cataloged. The user's system parameter CATALOG setting of NO has been overridden.

System action

The archive log data set has been allocated to a nontape device, and has been cataloged. The system parameter CATALOG=NO setting has been overridden. The BSDS reflects that the data set has been cataloged.

System programmer response

The archive system parameters must be changed. Specifically, the CATALOG and UNIT parameters are not consistent with one another. For information about the actions required to eliminate this problem, see Using CSQ6ARVP.

CSQJ073E
LOG ARCHIVE UNIT ALLOCATION FAILED, REASON CODE= *ccc*. ALLOCATION OR OFFLOAD OF ARCHIVE LOG DATA SET MAY FAIL

Explanation

While building the SVC99 text entries to allocate a new archive log data set dynamically, a unit allocation error was detected. The reason code, indicated by *ccc* in the message, further clarifies the problem as follows:

4-28 (X'4'-X'1C')
Return code from z/OS IEFGB4UV macro. Common values are:

> **4 (X'04')**
> Invalid unit name
>
> **8 (X'08')**
> Unit name has incorrect units assigned
>
> **16 (X'10')**
> No storage available
>
> **20 (X'14')**
> Device numbers not valid

32 (X'20')
MQ was able to obtain a list of devices corresponding to the device type (unit name) specified in the system parameters. However, it was determined that this list contained a mixture of tape and nontape devices.

36 (X'24')
Nonfetch-protected storage could not be obtained to build a parameter list for a z/OS service.

40 (X'28')
The device type (unit name) specified by the user in the system parameters is valid. However, no devices are currently associated with the given device type (unit name).

44 (X'2C')
The device type (unit name) specified by the user in the system parameters is valid. However, no DASD volumes are available with a volume use attribute of *storage*.

System action

This message is issued after the SVC99 text entries are built, but prior to the allocation of the new archive log data set. As a result of the error, the dynamic allocation of the archive log data set will be attempted using standard default values. The standard default values are generally acceptable; however, the allocation might be unsuccessful or the subsequent offload might produce undesirable processing results. For example:

- A reason code of 4 or 44 (X'2C') indicates an allocation error (CSQJ103E) when the SVC99 is issued for the archive data set.
- Offload processing to tape might be unsuccessful. MQ uses a volume count of 20 when allocating to tape, and uses the standard z/OS volume count default of 5 volumes when writing to non-tape devices. In the case of most of the above errors, it would be impossible for MQ to determine the device type on which the data set is to be allocated. Therefore, the standard z/OS default is assumed for the volume count. If the data set is successfully allocated to a tape device, and the volume of data is such that more than five volumes will be used for the archive data set, the offload processing will receive a z/OS completion code X'837-08' with message IEC028I when attempting to write to the sixth tape volume.
- Offload processing to a direct access device might be unsuccessful. When allocating a new archive log data set on a direct access device, MQ will use a unit count to facilitate multivolume archive data sets. With most of the above errors, it might be impossible for MQ to correctly determine the type of device on which the data set is to be allocated. Therefore, the standard default (1) is assumed for the unit count. If the data set is successfully allocated to a direct access device, and during the offload processing it becomes necessary to extend the data set to another device, the offload processing will receive a z/OS X'B37' (out of space) completion code, and the archive log data set will be deallocated.

System programmer response

The required action is based on the reason code indicated in the message:

4-28 (X'4'-X'1C')
See the *MVS Authorized Assembler Services Guide* for more info about the return code from the z/OS IEFGB4UV macro. The most likely causes for the common values are:

4 (X'04')
Incorrect specification in the archive system parameters. Correct the UNIT parameter. If the UNIT parameter from the archive system parameters appears to be correct, check the EDT to ensure that the esoteric or generic unit name specified in the parameters is actually in the EDT. Subsequent offload processing will archive the log data which could not be previously archived due to the allocation error (CSQJ103E).

8 (X'08')
Incorrect specification in archive system parameters, incorrect operational setup.

16 (X'10')
This is usually a temporary problem. If the allocation of the archive log data set is successful, no action is required to correct this situation. If this is a recurring problem, sufficient page space is not available, and the region size for the queue manager address space might have to be increased, or standard z/OS diagnostic procedures might have to be used to correct the problem.

20 (X'14')
Incorrect specification in archive system parameters, incorrect operational

32 (X'20') or 40 (X'28')
To correct this situation, change the archive system parameter UNIT to use a device type (unit name) that contains homogenous devices, or modify the device list associated with the device type (unit name) using a system generation to supply a list of homogenous devices.

44 (X'2C')
To correct this situation, issue the z/OS command MOUNT to change the volume use attribute of a mounted private volume to storage. If this is a recurring problem, you might have to do one of the following:

- Perform a system generation to add permanently resident volumes with a volume use attribute of storage to the esoteric or generic unit
- Change the archive system parameters to use a different esoteric or generic unit name for the UNIT

CSQJ077E

LOG OR BSDS READ ERROR FOR QMGR *qmgr-name*, REASON CODE=*ccc*

Explanation

This message identifies a queue manager with log data that cannot be accessed. The logs or BSDSs of other queue managers in a queue-sharing group might be accessed during a RECOVER CFSTRUCT operation or during the rebuild of peer administration structures that might occur on a queue manager in a queue-sharing group.

System action

The execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

Look for earlier messages which might identify more specifically the data set being accessed and the problem.

If you are unable to solve the problem, note the reason code, collect the following items, and contact your IBM support center:

- System dump
- Console output for the issuing queue manager
- Console output for the other queue manager
- Printout of SYS1.LOGREC

CSQJ098E

csect-name RESTART CONTROL ENDLRSN *rrr* IS NOT IN KNOWN LRSN RANGE. QUEUE MANAGER STARTUP IS TERMINATED

Explanation

A conditional restart control record requests truncation, but it cannot take place because the end LRSN was not in the range of LRSN values known to either the active or archive logs. *rrr* is the end LRSN specified in the active record. The end LRSN is either higher than the end LRSN of the most recent active log data set, or lower than the starting LRSN of the oldest archive log data set.

System action

Queue manager startup is terminated.

System programmer response

Check the ENDLRSN value specified in the conditional restart control record. If it is not correct, run the change log inventory utility (CSQJU003) using CRESTART CANCEL cancel the conditional restart, and a new CRESTART specifying the correct ENDLRSN.

CSQJ099I

LOG RECORDING TO COMMENCE WITH STARTRBA= *sss*

Explanation

This message is generated during queue manager startup. The value specified by STARTRBA is the RBA of the next byte of log data to be recorded in the active log data sets.

This message is preceded by one (if single logging) or two (if dual logging) CSQJ001I messages.

System programmer response

None required. However, if recovery is required, information from this message might be required as input to the change log inventory utility (CSQJU003).

CSQJ100E

csect-name ERROR OPENING BSDS*n* DSNAME= *dsname*, ERROR STATUS=*eeii*

Explanation

During startup, or while processing a RECOVER BSDS command, MQ could not open the specified BSDS. BSDS*n* matches the DDname in the queue manager started task JCL procedure (xxxxMSTR) of the data set that cannot be opened. The value of *n* is 1 or 2. The error status contains the VSAM open return code in *ee*, and the VSAM open reason code in *ii*.

System action

When this error occurs at initialization time, startup must be terminated, because the log data sets cannot be determined and allocated without the BSDS. When this error occurs during RECOVER BSDS processing, the command is terminated, and the queue manager continues in single BSDS mode.

System programmer response

Recover the BSDS that cannot be opened. See Active log problems for information about dealing with problems on the BSDS or the log.

CSQJ101E
csect-name RESTART CONTROL ENDRBA *rrr* IS NOT IN KNOWN RBA RANGE. QUEUE MANAGER STARTUP IS TERMINATED

Explanation

A conditional restart control record requests truncation, but it cannot take place because the end RBA was not in the range of RBA values known to either the active or archive logs. *rrr* is the end RBA specified in the active record. The end RBA is either higher than the end RBA of the most recent active log data set, or lower than the starting RBA of the oldest archive log data set.

System action

Queue manager startup is terminated.

System programmer response

Check the ENDRBA value specified in the conditional restart control record. If it is not correct, run the change log inventory utility (CSQJU003) using CRESTART CANCEL cancel the conditional restart, and a new CRESTART specifying the correct ENDRBA.

Otherwise, then most likely, the archive log data set that contained the requested RBA has been deleted from the BSDS data set by the change log inventory utility. Locate the output from an old print log map utility and identify the data set that contains the missing RBA. If the data set has not been reused, run the change log inventory utility to add this data set back into the inventory of log data sets. Restart the queue manager.

CSQJ102E
LOG RBA CONTENT OF LOG DATA SET DSNAME= *dsname*, STARTRBA= *sss* ENDRBA=*ttt*, DOES NOT AGREE WITH BSDS INFORMATION

Explanation

The log RBA range shown in the BSDS for the specified data set does not agree with the content of the data set.

System action

Startup processing is terminated.

System programmer response

Use the print log map and change log inventory utilities to make the BSDS consistent with the log data sets.

CSQJ103E
csect-name LOG ALLOCATION ERROR DSNAME=*dsname*, ERROR STATUS=*eeeeiiii*, SMS REASON CODE=*ssssssss*

Explanation

An error occurred while attempting to allocate the active or archive log data set indicated by DSNAME. STATUS indicates the error reason code returned by z/OS dynamic allocation (SVC99).

This message might be preceded by message CSQJ073E.

System action

Subsequent actions depend on the type of data set involved.

For active log data sets, if the error is encountered during queue manager initialization, startup is terminated. If two copies of the active log data sets are defined, this message appears only once.

For archive log data sets, if two copies of the archive log data sets are defined, processing continues on the remaining archive log data set.

System programmer response

The error status portion of this message contains a 2-byte error code (*eeee*, S99ERROR) followed by the 2-byte information code (*iiii*, S99INFO) from the SVC99 request block. If the S99ERROR code indicates an SMS allocation error ('97xx'), then *sssssss* contains additional SMS reason code information obtained from S99ERSN. See the *MVS Authorized Assembler Services Guide* manual for a description of these codes.

For active log data sets, if the problem occurred during queue manager initialization, you can resolve the problem by doing one of the following:

- Resolve the error associated with the active log data set as indicated by STATUS
- Provide another copy of the active log data set, using Access Method Services
- Update the BSDS with the change log inventory utility (CSQJU003)
- Restart the queue manager

For archive log data sets:

- If the problem occurred during allocation with the intent to write the data set, no immediate action is required. However, if you do not resolve the SVC99 error (indicated by the STATUS value in the message), the available space in the active log could eventually be exhausted (CSQJ111A) because all future offloads might be unsuccessful because of the same error.
- If the problem occurred during allocation with the intent to read the data set, determine the problem, and use the change log inventory utility (CSQJU003) DELETE function to delete the archive log data set from the BSDS archive log inventory. Then use the NEWLOG function to add the data set back into the archive log inventory, pointing to the correct volume and device.

See Active log problems for information about dealing with problems on the log.

This message might also be issued as the result of a user error. If STATUS displays a value of '17080000', you might have one or more active log data sets defined in the BSDS, but not allocated on DASD. To correct the situation, print the contents of the current active log data set inventory using the print log map utility (CSQJU004), then either:

- Use Access Method Services to allocate the active log data set for each active log data set listed in the BSDS, but not actually allocated on DASD. You can find the Access Method Services command syntax for active log data sets in the CSQ4BSDS sample JCL.
- Use the change log inventory utility (CSQJU003) DELETE statement to delete the errant active log data set name, and the NEWLOG statement to add the correct name to the active log data set inventory. The name specified on the NEWLOG statement must be the same as the name of the actual active log data set allocated on DASD.

CSQJ104E
csect-name RECEIVED ERROR STATUS *nnn* FROM *macro-name* FOR DSNAME *dsname*

Explanation

An error ocurred while issuing macro *macro-name*. Error status is the return code from the specified macro:

- For an OPEN of a VSAM data set, the return code in the error field of the Access Method Services control block is included in this message as the error status value. See the *DFSMS/MVS Macro Instructions for Data Sets* manual for a description of these values.
- If the OPEN was for a non-VSAM data set, the error status is zero.
- For MMSRV errors, error status contains the error information returned by media manager services. If an MMSRV CATUPDT error occurs attempting to truncate an active log data set, the log data set will be unavailable and the status of the log data set will be flagged as STOPPED in the BSDS.
- For VSAM OPEN and MMSRV errors, this message is preceded by an IEC161I message that defines the error that occurred.
- For a PROTECT of an archive log data set, the return code is from DADSM PROTECT. See the *MVS/ESA System - Data Administration* manual for details of the return code.

See Active log problems for information about dealing with problems on the log.

System action

Subsequent actions depend on when the error occurred.

During queue manager initialization, startup is terminated.

When using the data set either for offload or for input operations, processing continues. If a second copy of the data is available, MQ attempts to allocate and open the second data set.

When using the data set as an active log data set, MQ attempts to retry the request. If the retry is unsuccessful, the queue manager is terminated.

During checkpoint processing, where MQ attempts to locate the oldest active or archive log data sets that are required for restart recovery of page sets and restart and media recovery of CF structures, processing continues. The message is a warning that either restart recovery would fail or media recovery of CF structures would fail. It is most likely to occur when all CF application structures are not being regularly backed up, thereby requiring excessively old log data sets for recovery.

System programmer response

If the error occurred during initialization, either correct the problem so that the data set is available or provide another copy of the data set and change the BSDSs to point to the new data set.

If the error occurred after startup, the return code should be reviewed and the appropriate action taken to correct the problem, so that the data set can be used at a later time, or the data set entry can be removed from the BSDS using the change log inventory utility.

If the error was received from PROTECT, there might be a problem with the PASSWORD data set. See the appropriate DADSM publication to determine the cause of the problem. When the problem has been corrected, ensure the archive log data sets receiving the error are added to the PASSWORD data set. If these archive log data sets are not added to the PASSWORD data set, archive read will not be able to OPEN these data sets. If you do not have information about the named macro, note the macro name and the return code and contact your IBM support center for help.

If the error occurred during checkpoint processing, issue the DISPLAY USAGE TYPE(DATASET) command to show which log data sets are currently required for page set and media recovery, and ensure that they are available. If applicable, use the BACKUP CFSTRUCT command for your CF structures, and institute a procedure to back up your CF structures frequently.

CSQJ105E
csect-name LOG WRITE ERROR DSNAME= *dsname*, LOGRBA=*rrr*, ERROR STATUS=*ccccffss*

Explanation

An error occurred while writing a log data set. If *csect-name* is CSQJW107, the error occurred writing the log buffers to an active log data set. If *csect-name* is CSQJW207, the error occurred while preformatting the next control area before writing log data into it.

Error status contains the error information returned by media manager in the form *ccccffss*, where *cccc* is a 2-byte return code that describes the error, *ff* is a 1-byte code that defines the functional routine that detected the error, and *ss* is the 1-byte status code that defines a general category of error.

System action

If the dual active logging option is selected, the MQ switches to the next data set for this copy. If the next data set is not ready, MQ temporarily enters single logging mode and allocates a replacement data set for the one that encountered the error. Dual logging is resumed as soon as possible.

If single active logging option is selected and the next data set is not ready, MQ waits for that data set to be available. In this case, log writing is inhibited until the replacement is ready for output.

System programmer response

See the *MVS/DFP Diagnosis Reference* manual for information about return codes from the media manager. If you are unable to resolve the problem, note the return code, and contact your IBM support center.

CSQJ106E
LOG READ ERROR DSNAME=*dsname*, LOGRBA=*rrr*, ERROR STATUS=*ccccffss*

Explanation

An error occurred while reading an active log data set. The error status contains the error information returned by the media manager in the form *ccccffss*, where *cccc* is a 2-byte return code that describes the error, *ff* is a 1-byte code that defines the functional routine that detected the error, and *ss* is the 1-byte status code that defines a general category of error. (See the *MVS/DFP Diagnosis Reference* manual for information about return codes from the media manager.)

System action

If another log data set contains the data, MQ attempts to read the data from the alternate source. If an alternate source is not available, a read error return code is sent to the program requesting the log data. Depending on the circumstances under which the failure occurred, the queue manager might continue with the alternate log data set if dual logging is used, or end abnormally.

System programmer response

If you are using dual logging, the requested RBA was probably retrieved from the corresponding dual active log data set, and no immediate response is necessary. However, if this error occurs frequently, or if you are using single logging, immediate attention might be required. If so, note the contents of the error status field, and contact your IBM support center for help.

It might be necessary to replace the data set in error with a new data set containing the log data, and to update the BSDSs to reflect the new data set using the change log inventory (CSQJU003) NEWLOG operation.

See Active log problems for information about dealing with problems on the log.

This message might also be issued as the result of a user error. If the data set name specified by DSNAME is missing, and STATUS displays a value of '00180408' or '00100408', you are using dual logging, but only one set of active log data sets is defined in the BSDS. To resolve this condition, do either of the following:

• Define a second set of active log data sets using Access Method Services (if they are not defined already), and update the BSDS log inventory, using the change log inventory (CSQJU003) NEWLOG operation.

- Reset the log system parameters to indicate single logging. You can do this by setting TWOACTV to 'NO' in the CSQ6LOGP system parameters.

CSQJ107E
READ ERROR ON BSDS DSNAME=*dsname* ERROR STATUS=*eee*

Explanation

An error occurred while reading the specified BSDS. Error Status contains the VSAM return and feedback codes. It is a 2-byte field with the first byte containing the hexadecimal return code and the second containing the hexadecimal feedback code. See the *DFSMS/MVS Macro Instructions for Data Sets* manual for a description of VSAM return and reason codes.

See Active log problems for information about dealing with problems on the BSDS or the log.

System action

If dual BSDSs are available, MQ attempts to read from the other BSDSs. If the read from the second BSDS fails or if there is only one BSDS, an error code is returned to the log request that caused access to the BSDS.

If the read error is detected during startup, the queue manager terminates.

System programmer response

It might be necessary to replace or repair the BSDS, depending on what conditions resulted from the read error. To replace a BSDS, first delete the BSDS in error, then define the new BSDS with the same name and attributes. If a new name is used for the new BSDS, change the queue manager started task JCL procedure (xxxxMSTR) to specify the new BSDS name.

CSQJ108E
WRITE ERROR ON BSDS DSNAME=*dsname* ERROR STATUS=*eee*

Explanation

An error occurred while writing to the specified BSDS. Error Status contains the VSAM return and feedback codes. It is a 2-byte field with the first containing the hexadecimal return code and the second containing the hexadecimal feedback code. See the *DFSMS/MVS Macro Instructions for Data Sets* manual for a description of VSAM return and reason codes.

System action

If dual BSDSs are available, MQ enters single BSDS mode using the remaining good BSDS. Otherwise, an error code is returned to the log request that caused access to the BSDS.

System programmer response

If dual BSDS mode is being used, run an offline Access Method Services job to rename the error BSDS and define a new BSDS with the same name. Then enter the RECOVER BSDS command to reestablish dual BSDS mode.

If dual BSDS mode is not being used, the queue manager must be shut down, and the BSDS must be recovered from a backup copy. To recover the BSDS, use the change log inventory utility.

CSQJ109E
OUT OF SPACE IN BSDS DSNAME=*dsname*

Explanation

There is no more space in the specified BSDS. The operation that encountered the out-of-space condition did not complete properly.

System action

If dual BSDSs are available, MQ enters single BSDS mode using the remaining good BSDS. Otherwise, an error code is returned to the log request that caused access to the BSDS.

System programmer response

If dual BSDS mode is being used, run an offline Access Method Services job to rename the full BSDS and define a new, larger BSDS with the same name. Enter the RECOVER BSDS command to reestablish dual BSDS mode.

If dual BSDS mode is not being used, the queue manager must be shut down and the BSDS recovered offline. In this case, run the same Access Method Services job mentioned above to rename the full data set and define a larger data set. Next, run an Access Method Services REPRO job to copy the full BSDS into the new BSDS.

CSQJ110E
LAST COPY*n* ACTIVE LOG DATA SET IS *nnn* PERCENT FULL

Explanation

This message is issued when the last available active log data set is 5% full, and is reissued after each additional 5% of the data set space is filled.

System action

Each time the message is issued, the offload processing will be re-attempted. If the situation is not corrected, the active log data set will fill to capacity, message CSQJ111A will be issued, and MQ processing will stop.

System programmer response

To clear this condition, you must take steps to complete other waiting offload tasks. Once an active log data set is made available (reusable) by completing the offload process for it, the MQ logging activity can continue.

Perform a display request to determine the outstanding requests related to the log offload process. Take the necessary action to satisfy any requests, and permit offload to continue.

Consider whether there are sufficient active log data sets. If necessary, additional log data sets can be added dynamically using the DEFINE LOG command.

If offload does not complete normally or cannot be initiated, either correct the problem that is causing the offload process error, increase the size of the allocated data sets, or add more active log data sets. Note that the latter action requires the queue manager to be inactive and the change log inventory utility to be run.

Possible causes for the shortage of active log data space are:

- Excessive logging. For example, there is a lot of persistent message activity.
- Delayed or slow offloading. For example, failure to mount archive volumes, incorrect replies to offload messages, or slow device speeds.
- Excessive use of the ARCHIVE LOG command. Each invocation of this command causes MQ to switch to a new active log data set and to initiate an offload of the active log. Although the command will not be processed when only one active log data set remains in a copy of the active log (see CSQJ319I), excessive use of the command could have consumed all space in the active log except the current active log data sets.
- Offloads were unsuccessful.
- Insufficient active log space.

CSQJ111A
OUT OF SPACE IN ACTIVE LOG DATA SETS

Explanation

Due to delays in offload processing, all available space in all active log data sets has been exhausted. Recovery logging cannot continue.

System action

MQ waits for an available data set. Any tasks performing MQ API calls that require logging will wait.

System programmer response

Perform a display request to ensure that there are no outstanding requests that are related to the log offload process. Take the necessary action to satisfy any requests, and permit offload to continue.

Consider whether there are sufficient active log data sets. If necessary, additional log data sets can be added dynamically using the DEFINE LOG command.

If the delay was caused by the lack of a resource required for offload, the necessary resource must be made available to allow offload to complete and thus permit logging to proceed. For information about recovery from this condition, see Archive log problems.

If the problem occurred because archiving was set off, or because archive data sets could not be allocated, or for any other reason that requires the system parameters to be changed, the queue manager must be canceled as neither STOP MODE(QUIESCE) nor STOP MODE(FORCE) commands will work.

To free any tasks that are waiting because they were performing MQ API calls that require logging, you must solve the underlying problem, or cancel the queue manager.

If the offload process has stalled because some resource is not available or for some other reason, it may be possible to resolve the problem by canceling the currently executing offload task using the ARCHIVE LOG CANCEL OFFLOAD command, and then starting another. If there are hardware problems, it may be necessary to use z/OS commands to cancel the devices with problems.

CSQJ112E
csect-name INSUFFICIENT ACTIVE LOG DATA SETS DEFINED IN BSDS

Explanation

There are not enough active log data sets defined in the BSDS to start the queue manager. This condition usually exists for one of the following reasons:

- Fewer than two data sets are defined for one of the active log copy sets.
- The CSQ6LOGP system parameters specified TWOACTV=YES but data sets for two copies of active log are not defined in BSDS.
- Fewer than two data sets are available (not flagged as STOPPED) for one of the active log copy sets.

System action

Startup is terminated.

System programmer response

Use the change log inventory utility to make the number of active log data sets defined in the BSDS consistent with the system parameters specified in CSQ6LOGP, or to add further active log data sets so that there are two or more active log data sets available for use in each active log copy. Restart the queue manager.

Note: Log data sets that are flagged as STOPPED will not be reused by IBM MQ. Once the queue manager has been restarted you might need to recover STOPPED log data sets. To clear the STOPPED status:

1. Stop the queue manager
2. Recover the log data set (either redefined or recovered from the other copy of the log)
3. Delete and re-add to the BSDS (using the change log inventory utility) with the appropriate RBAs

CSQJ113E
RBA *log-rba* NOT IN ANY ACTIVE OR ARCHIVE LOG DATA SET, CONNECTION-ID=*xxxx* THREAD-XREF=*yyyyyy*

Explanation

There was a request to read the log record starting at this RBA. However, this log record cannot be found in any active or archive log data set. The connection ID and thread-xref identify the user or

application that encountered the problem (this could be an internal IBM MQ task). See Active log problems for information about dealing with problems on the log.

System action

Depending upon what log record is being read and why, the requestor might end abnormally with a reason code of X'00D1032A'.

System programmer response

Probable user error. Most likely, the archive log data set that contained the requested RBA has been deleted from the BSDS by the change log inventory utility. Locate the output from an old print log map run, and identify the data set that contains the missing RBA. If the data set has not been reused, run the change log inventory utility to add this data set back into the inventory of log data sets. Restart the queue manager.

CSQJ114I
ERROR ON ARCHIVE DATA SET, OFFLOAD CONTINUING WITH ONLY ONE ARCHIVE DATA SET BEING GENERATED

Explanation

An error occurred while accessing one of the archive data sets being created by offload. Because the dual archive option is specified, offload is continuing with the other archive data set. For the RBA range being offloaded, there is only one copy of archive instead of the usual two copies.

System action

Offload produces a single archive data set.

System programmer response

A second copy of this archive log data set can be made, and the BSDSs can be updated with the change log inventory utility.

CSQJ115E
OFFLOAD FAILED, COULD NOT ALLOCATE AN ARCHIVE DATA SET

Explanation

Offload could not allocate an archive log data set. The offload was not performed. This message is preceded by message CSQJ103E or CSQJ073E.

Note: If you are using the dual archiving option, neither copy is made.

System action

Offload will be tried at a later time.

System programmer response

Review the error status information of message CSQJ103E or CSQJ073E. Correct the condition that caused the data set allocation error so that, on retry, the offload can take place.

CSQJ116E
ERROR ADDING ARCHIVE ENTRY TO BSDS

Explanation

Offload could not add an archive entry to the BSDS. The offload is considered incomplete. The active log data set is not marked as reusable for new log data. This message is preceded by message CSQJ107E, CSQJ108E, or CSQJ109E.

System action

Offload will be retried at a later time.

System programmer response

See the specific preceding message for action.

CSQJ117E

INITIALIZATION ERROR READING BSDS DSNAME= *dsname*, ERROR STATUS=*eee*

Explanation

An error occurred during initialization reading from the specified BSDS. Error Status contains the VSAM return and feedback codes. It is a 2-byte field with the first containing the hexadecimal return code and the second byte containing the hexadecimal feedback code. See the *DFSMS/MVS Macro Instructions for Data Sets* manual for a description of VSAM return and reason codes.

System action

Startup is terminated.

System programmer response

Determine the cause of the read error using the VSAM error status information provided. Restart the queue manager.

CSQJ118E

MACRO *xxx* FAILED IN LOG INITIALIZATION, RC=*ccc*

Explanation

Log initialization received a return code from the named macro.

System action

Startup is terminated.

System programmer response

Determine the problem from the documentation on the named macro and return code. Then take appropriate steps, and restart the queue manager. If you do not have information about the named macro, note the macro name and the return code and contact your IBM support center for help.

CSQJ119E

BOOTSTRAP ACCESS INITIALIZATION PROCESSING FAILED

Explanation

During queue manager initialization, the BSDS access function was unable to complete its initialization process. See Active log problems for information about dealing with problems on the BSDS or the log.

System action

Startup is terminated.

System programmer response

One or more error messages describing the specific error have preceded this message. See the specific messages for error analysis and the appropriate action to take.

CSQJ120E

DUAL BSDS DATA SETS HAVE UNEQUAL TIME STAMPS, SYSTEM BSDS1=*sys-bsds1*, BSDS2=*sys-bsds2*, UTILITY BSDS1=*uty-bsds1*, BSDS2=*uty-bsds2*

Explanation

When the queue manager was initialized, the time stamps of the dual BSDS did not agree. The time stamps from the system and from the change log inventory utility are shown for each BSDS. The time stamps have the format `date hh:mm:ss.th`.

System action

The queue manager attempts to re-synchronize the BSDS data sets to restore dual BSDS mode. If re-synchronization is successful, message CSQJ130I is issued and startup continues. Otherwise, startup is terminated.

System programmer response

If startup fails, run the print log map utility against each BSDS. From the output, determine which data set is obsolete, delete it, define a replacement for it, and copy the remaining BSDS to the replacement.

If output from the print log map utility for both data sets is similar, delete the data set with the oldest time stamp, and copy the data set with the most recent time stamp.

CSQJ121E
INITIALIZATION ERROR READING JFCB, DDNAME=*ddd*

Explanation

During queue manager initialization (if dual BSDS data sets are specified), the job file control block (JFCB) in z/OS is read to obtain the data set names associated with DDnames BSDS1 and BSDS2. This error is caused by a missing DD statement.

System action

Startup is terminated.

System programmer response

Ensure that a DD statement exists in the queue manager started task JCL procedure xxxxMSTR for DDname BSDS1. If dual BSDS data sets are used, ensure that a DD statement also exists in the queue manager started task JCL procedure xxxxMSTR for DDname BSDS2.

CSQJ122E
DUAL BSDS DATA SETS ARE OUT OF SYNCHRONIZATION

Explanation

During queue manager initialization, or when running a utility, the dual BSDSs were found to differ in content.

System action

The program or queue manager startup is terminated.

System programmer response

If the error occurred during queue manager initialization, run the print log map utility against each BSDS to determine which data set was last used as the first copy. Delete the second copy data set, define a replacement for the deleted data set, and copy the remaining BSDS to the replacement.

If the error occurred when running the BSDS conversion utility after the queue manager terminated abnormally, first attempt to restart the queue manager and shut it down cleanly before attempting to run the BSDS conversion utility again. If this does not solve the problem, run the print log map utility against each BSDS to determine which data set was last used as the first copy. Change the JCL used to invoke the BSDS conversion utility to specify this BSDS in the SYSUT1 DD statement, and remove the SYSUT2 DD statement, before submitting the job again.

CSQJ123E
CHANGE LOG INVENTORY FAILURE DETECTED

Explanation

During queue manager initialization, the BSDSs was found to have been incompletely processed by the change log inventory utility.

System action

Startup is terminated.

System programmer response

Run the print log map utility to determine what operation against the BSDS did not complete. Run the change log inventory utility against the BSDSs to allow any unfinished processing to be completed.

CSQJ124E
OFFLOAD OF ACTIVE LOG SUSPENDED FROM RBA *xxxxxx* TO RBA *xxxxxx* DUE TO I/O ERROR

Explanation

During offload, an unrecoverable input/output error was encountered on an active log data set. The data set experiencing the error is marked unusable, and no further logging is done to that data set.

System action

Active log data sets continue to be offloaded as they become full.

System programmer response

Recover the data manually from the data set, copy it to an archive data set, run the change log inventory utility to make the new archive data set available to the queue manager, and remove the error-prone active log data set.

CSQJ125E
ERROR COPYING BSDS, OFFLOAD CONTINUING WITHOUT THE BSDS COPY

Explanation

An error occurred while copying the BSDS data set during the offload process. The data set is not produced, and the volume containing the offloaded data set does not contain a BSDS for recovery use.

System action

The queue manager continues the offload process without producing a copy of the BSDS.

System programmer response

When archiving occurs, both a copy of the active log data set, and the BSDS at that time, are dumped. The BSDS is not critical because it will be copied again with the next archive log (the missing one simply means an extended restart time). However, the underlying data management problem (for example, not enough space allocated) should be resolved for subsequent BSDS offloads to occur.

CSQJ126E
BSDS ERROR FORCED SINGLE BSDS MODE

Explanation

An input/output error or a VSAM logical error occurred on a BSDS. This message is preceded by message CSQJ107E or CSQJ108E.

System action

IBM MQ enters single BSDS mode using the remaining BSDS.

System programmer response

Run an offline Access Method Services job to rename the error BSDS and define a new BSDS with the same name. Then enter the RECOVER BSDS command to reestablish dual BSDS mode.

CSQJ127I
SYSTEM TIME STAMP FOR BSDS=*date time*

Explanation

When the queue manager is initialized, the system time stamp for the BSDS is displayed. The time stamp is of the format `date hh:mm:ss.th`. This time stamp should be close to the last time at which this queue manager was stopped. If not, it might indicate a restart is being attempted with the wrong BSDS.

The time stamp will show as '****' if the BSDS has not been used before.

System action

Startup continues.

System programmer response

If the time displayed is not close to the time this queue manager was last stopped, and you cannot explain any time discrepancy, cancel the queue manager. From the queue manager started task JCL procedure xxxxMSTR, determine the data set names of the BSDSs and run the print log map utility. Check whether the active and archive log data sets all belong to this queue manager. If not, then change the started task JCL procedure xxxxMSTR for the queue manager to use the correct BSDSs.

CSQJ128E
LOG OFFLOAD TASK FAILED FOR ACTIVE LOG *dsname*

Explanation

The offload task ended abnormally while attempting to offload the RBA range in active log data set *dsname*.

System action

The offload task terminates and the archive data sets allocated to the offload task are deallocated and deleted. The status of the active log data sets involved in the unsuccessful offload processing remains set to 'not reusable'.

The log offload task will be reinitiated by one of several events. The most common are:

- All the available space in the current active log data set has been used (normal case)
- A CSQJ110E message is issued
- The queue manager address space is started, but data in the active log has not been archived
- An I/O error occurs on the active log, which will force the queue manager to truncate and offload the active log data set, and switch to a new active log data set

System programmer response

This message is the result of an offload error, and will be preceded by one or more IBM MQ messages (for example, CSQJ073E) and z/OS messages (for example, IEC030I, IEC031I, IEC032I). If the queue manager is operating with restricted active log resources (see message CSQJ110E), quiesce the system to restrict logging activity until the abnormal termination or the CSQJ110E condition can be resolved.

Investigate and correct the cause of the abnormal termination before the offload is attempted again by the queue manager.

CSQJ129E
END OF LOG RBA *eol-rba* COULD NOT BE FOUND IN ANY ACTIVE LOG DATA SET, HIGHEST RBA FOUND WAS *hi-rba*

Explanation

There was a request to find *eol-rba*, the log record that has been recorded in the BSDS as the highest RBA written. This RBA cannot be found in any active log data set. The highest RBA which could be found in any active data set was *hi-rba*.

System action

Startup processing is terminated.

System programmer response

Most likely, the active log data set containing the requested RBA has been deleted from the BSDS by the change log inventory utility. If the data set has not been reused, run the change log inventory utility to add this data set back into the BSDS. Restart the queue manager.

If the data set is not available, contact your IBM support center.

CSQJ130I
DUAL BSDS MODE RESTORED FROM BSDS*n*

Explanation

Dual BSDS mode was restored using BSDS copy *n*. This is the BSDS data set with the most recent system time stamp.

System action

Startup continues.

CSQJ131E
csect-name ERROR WRITING QUEUE MANAGER INFORMATION TO Db2

Explanation

During command processing, a failure occurred attempting to write queue manager information to Db2.

System action

Processing of the command is terminated.

System programmer response

Check the console for messages relating to the problem.

CSQJ132E
csect-name ERROR READING QUEUE MANAGER INFORMATION FROM Db2

Explanation

During command processing, a failure occurred attempting to read queue manager information from Db2.

System action

Processing of the command is terminated.

System programmer response

Check the console for messages relating to the problem.

CSQJ133E
LRSN *rrr* NOT IN ANY ACTIVE OR ARCHIVE LOG DATA SET, CONNECTION-ID=*xxxx* THREAD-XREF= *yyyyyy*, QMGR=*qmgr-name*

Explanation

There was a request to read the log record starting at this LRSN for the indicated queue manager (which might not be the issuer of the message). However, this log record cannot be found in any active or archive log data set. The connection ID and thread-xref identify the user or application that encountered the problem (this could be an internal IBM MQ task). See Active log problems for information about dealing with problems on the log.

System action

Depending upon what log record is being read and why, the requestor might end abnormally with a reason code of X'00D1032A'.

System programmer response

This is probably a user error. Most likely, the archive log data set that contained the requested RBA has been deleted from the BSDS by the change log inventory utility. Locate the output from an old print log map run, and identify the data set that contains the missing LRSN. If the data set has not been reused, run the change log inventory utility to add this data set back into the inventory of log data sets. Restart the queue manager.

CSQJ134E
RBA *log-rba* NOT IN ANY ACTIVE OR ARCHIVE LOG DATA SET, CONNECTION-ID=*xxxx* THREAD-XREF=*yyyyyy*, QMGR=*qmgr-name*

Explanation

There was a request to read the log record starting at this RBA for the indicated queue manager. However, this log record cannot be found in any active or archive log data set. The connection ID and thread-xref identify the user or application that encountered the problem (this could be an internal IBM MQ task). See Active log problems for information about dealing with problems on the log.

System action

Depending upon what log record is being read and why, the requestor might end abnormally with a reason code of X'00D1032A'.

System programmer response

This problem can occur for the following reasons:

1. The entry with the log range in the BSDS has been deleted from the BSDS

2. The entry with the log range is in BSDS, but the archive log data set has been deleted. When an archive log is created, the CSQ6ARVP parameter ARCRETN is used to specify when the data set can be deleted. When this date has passed MVS deletes the dataset, so if you are trying to use this data set after this date, the data set cannot be found.

See BSDS problems for further information.

CSQJ136I
UNABLE TO ALLOCATE TAPE UNIT FOR CONNECTION-ID=*xxxx* CORRELATION-ID= *yyyyyy*, *m* ALLOCATED *n* ALLOWED

Explanation

An attempt to allocate a tape unit for the indicated connection ID failed. The current maximum tape unit specified is *n*, but only *m* are physically available.

System action

The process for the connection ID and correlation ID is held until either an allocated tape unit becomes free or more tape units are varied online and made available to the archive read task. This situation rectifies itself over time as currently allocated tape units become available.

CSQJ139I
LOG OFFLOAD TASK ENDED

Explanation

Processing of the active log offload ended.

System action

This message is written to the z/OS console.

CSQJ140I
Data set *dsname* successfully added to active log copy *n*

Explanation

A DEFINE LOG command has dynamically added a new log data set, *dsn*, and added it to either the LOGCOPY1 or LOGCOPY2 ring of active log data sets, as indicated by *n*.

The new active log data set is eligible to be used when the current active log data set fills and logging switches to the next active log data set in the ring.

Information about the data set is stored in the BSDS and will persist over a restart of the queue manager.

CSQJ141E
Error adding new active log data set *dsname*

Explanation

A DEFINE LOG command failed to add a new log data set. Further information about the failure is given in the preceding messages.

System programmer response

Investigate and correct the cause of the failure, then enter the command again.

CSQJ142I
Data set *dsname* has been used previously

Explanation

IBM MQ checks that a data set being added by a DEFINE LOG command has not been previously used as a log data set, as this might be an indication of operator error. The requested data set *dsname* was found to have been previously so used.

System action

The data set is closed and deallocated. Dynamic addition of a new active log data set fails.

System programmer response

Ensure that the data set being added as an active log data set is newly allocated, or has been formatted with the active log preformat utility, CSQJUFMT.

CSQJ143I
BSDS active log data set record is full

Explanation

The maximum number of active log data sets is fixed. No further entries can be inserted in the BSDS after the maximum has been reached.

System action

Dynamic addition of a new active log data set fails.

CSQJ144I
Active log data set allocation error

Explanation

It was not possible for IBM MQ to dynamically allocate the requested data set (named in the following CSQJ141E message) for use as a new active log data set.

System action

Dynamic addition of a new active log data set fails.

System programmer response

Ensure that the data set being added as a new active log data set is a VSAM linear data set with SHAREOPTIONS(2 3) and that it is not in use by any other jobs.

CSQJ150E
LOG CAPTURE EXIT ABEND, EXIT DEACTIVATED

Explanation

An abnormal program interrupt was detected while executing in the installation-supplied log capture exit code (that is entry point CSQJW117 in load module CSQJL004). As a result of this, the log capture exit will no longer be active; log data will no longer be available for exit capture/processing.

This message can only occur when an *installation-supplied* log capture exit (entry CSQJW117) is active for this queue manager.

System action

The log capture exit (entry point CSQJW117) is terminated. No further calls will be attempted for this queue manager. A full dump is provided for diagnostic purposes.

System programmer response

Determine the cause of the CSQJL004 load module (CSQJW117 entry point) abend and take corrective action.

Note: A correctly-functioning copy of load module CSQJL004/entry CSQJW117 *must* be available to start the queue manager. If the problem that caused this error cannot be corrected, ensure that the default CSQJW117 entry (load module CSQJL004 - supplied with IBM MQ) is available during the next queue manager start.

CSQJ151I
csect-name ERROR READING RBA *rrr*, CONNECTION-ID=*xxxx* CORRELATION-ID=*yyyyyy* REASON CODE=*ccc*

Explanation

The queue manager could not successfully complete the read of the indicated RBA due to reason code *ccc*. The user or application that encountered the error is identified by the connection and correlation IDs. Messages that have the same connection ID and correlation ID relate to the same application. Correlation IDs beginning with '0nn', where nn is a number from 01 to 28, identify system agents.

System action

The queue manager attempts to recover from the error.

System programmer response

If the queue manager was able to recover from the error and successfully complete the application, no further action is required. If the application abnormally terminated or the queue manager could not recover successfully, this message is followed by one or more messages. Refer to the information in this message and the subsequent messages to determine the appropriate corrective action. .

CSQJ152I
csect-name ERROR BUILDING ARCHIVE LOG VOLUME REPORT, CONNECTION-ID=*xxxx* CORRELATION-ID=*yyyyyy* REASON CODE=*ccc*

Explanation

An error occurred while attempting to create the archive log volume report. An RBA range could not be successfully mapped into one or more archive data sets due to reason code *ccc*. The user or application that encountered the error is identified by the connection and correlation IDs. This message might be preceded by one or more related error messages. Messages that have the same connection ID and correlation ID relate to the same application. Correlation IDs beginning with '0nn', where nn is a number from 01 to 28, identify system agents.

This failure could be caused by one or more missing archive log data sets, or a system error (for example, an I/O error reading the BSDS).

System action

The archive log volume report (see message CSQJ330I) is not produced. In addition, no premounting of tapes is possible.

The user or application continues processing. The physical read process for the user or application continues until the job completes normally or terminates abnormally. The job can terminate abnormally if the error is encountered again when the data set is physically required for the read process.

System programmer response

If the user or application completes successfully, no further action is necessary. If the user or application does not complete successfully, refer to the messages related to the actual failure to determine the appropriate corrective action.

CSQJ153I
csect-name ERROR READING LRSN *rrr*, CONNECTION-ID=*xxxx* CORRELATION-ID=*yyyyyy* REASON CODE=*ccc*, QMGR=*qmgr-name*

Explanation

The queue manager could not successfully complete the read of the indicated LRSN for the indicated queue manager (which might not be the issuer of the message) due to reason code *ccc*. The user or application that encountered the error is identified by the connection and correlation IDs. Messages that have the same connection ID and correlation ID relate to the same application. Correlation IDs beginning with '0nn', where nn is a number from 01 to 28, identify system agents.

System action

The queue manager attempts to recover from the error.

System programmer response

If the queue manager was able to recover from the error and successfully complete the application, no further action is required. If the application abnormally terminated or the queue manager could not recover successfully, this message is followed by one or more messages. Refer to the information in this message and the subsequent messages to determine the appropriate corrective action..

CSQJ154I
csect-name ERROR READING RBA *rrr*, CONNECTION-ID=*xxxx* CORRELATION-ID=*yyyyyy* REASON CODE=*ccc*, QMGR=*qmgr-name*

Explanation

The queue manager could not successfully complete the read of the indicated RBA for the indicated queue manager due to reason code *ccc*. The user or application that encountered the error is identified by the connection ID and correlation ID. Messages that have the same connection ID and correlation ID relate to the same application. Correlation IDs beginning with '0nn', where nn is a number from 01 to 28, identify system agents.

System action

The queue manager attempts to recover from the error.

System programmer response

If the queue manager was able to recover from the error and successfully complete the application, no further action is required. If the application abnormally terminated or the queue manager could not recover successfully, this message is followed by one or more messages. Refer to the information in this message and the subsequent messages to determine the appropriate corrective action.

CSQJ155E
csect-name ACTIVE LOG DSNAME=*xxxxx* IS LARGER THAN 4GB

Explanation

The queue manager has opened a LOG dataset that has space allocated that is larger than 4GB. The maximum LOG size supported is 4GB.

System action

Processing continues. The LOG dataset continues to be used but the space used is smaller than the space allocated. The allocated highest RBA value overflows a 32bit word and it is truncated. The truncated highest RBA is used resulting in a smaller LOG dataset.

System programmer response

The LOG dataset should be allocated with space not exceeding 4GB. Use Access Method Services to define the data set with a maximum size of 4 GB. Refer to Log dataset definitions to determine the LOG dataset size.

To reallocate LOG datasets with space smaller or equal to 4GB, carry out these steps:

1. Allocate and format new COPY1, and COPY2 if used, active log datasets with a maximum size of 4GB, and run CSQJUFMT if required.
2. Dynamically add the new logs to the queue manager with command DEFINE LOG.
3. Use command ARCHIVE LOG to roll into the new logs.

4. Shut down the queue-manager when one of the new logs is the current active log dataset.

5. Use the CSQJU003 utility to remove the active logs which are too small. First run CSQJU004 to display the log status in BSDS to make sure the ones to be removed are 'REUSABLE', that is they have been successfully archived.

6. Restart the queue manager. There should not be any CSQJ115E messages issued.

CSQJ160I
LONG-RUNNING UOW FOUND, URID=*urid* CONNECTION NAME=*name*

Explanation

During log switch processing an uncommitted unit of recovery, spanning more than two active log switches, has been encountered. The unit of recovery identifier *urid* together with the connection name *name* identify the associated thread.

System action

Processing continues.

System programmer response

Consult with the application programmer to determine if there is a problem with the unit of recovery, and to ensure that the application commits work frequently enough. Uncommitted units of recovery can lead to difficulties later.

CSQJ161I
UOW UNRESOLVED AFTER *n* OFFLOADS, URID=*urid* CONNECTION NAME=*name*

Explanation

During log switch processing, an uncommitted unit of recovery was encountered that now has activity spanning several log data sets. The unit of recovery identifier *urid* together with the connection name *name* identify the associated thread.

System action

Processing continues.

System programmer response

Consult with the application programmer to determine if there is a problem with the unit of recovery, and to ensure that the application commits work frequently enough. Uncommitted units of recovery can lead to difficulties later.

CSQJ163E
COPY(2) specified but TWOACTV(NO)

Explanation

A DEFINE LOG command specified the COPY(2) parameter but the dual logging parameter (TWOACTV=YES) was not specified in CSQ6LOGP at queue manager startup.

System action

Dynamic addition of the new active log data set fails.

System programmer response

Either specify COPY(1) on the DEFINE LOG command or configure the queue manager to use dual logging.

CSQJ164I
csect-name Log archiving delayed, all available offload tasks in use

Explanation

The offload of one or more active logs has been delayed because all available offload tasks are in use.

A maximum of 31 offload tasks can concurrently write new archive log data sets. The number of offload tasks can be tuned using the MAXCNOFF parameter, which is set using either CSQ6LOGP

or the SET LOG command. MAXCNOFF is provided to tailor the offloading of IBM MQ logs to match system constraints, such as the number of available tape units.

System action

Processing continues. The offload will complete when an offload task becomes available. Message CSQJ168I will be issued when the offload of active logs is no longer being delayed.

System programmer response

This is most likely a transient situation as a result of IBM MQ suddenly being able to archive a large number of full active logs, for example after problems with archiving have been resolved.

In other circumstances, review the MAXCNOFF parameter setting.

Consider increasing the active log capacity to match the active and archive log rates. The DEFINE LOG command can be used to provide additional active log capacity.

CSQJ168I

csect-name Log archiving is no longer delayed

Explanation

The offload of active logs is no longer being delayed by a shortage of available offload tasks.

System action

Processing continues.

CSQJ200I
csect-name UTILITY PROCESSING COMPLETED SUCCESSFULLY

Explanation

The utility completed successfully.

CSQJ201I
csect-name UTILITY PROCESSING WAS UNSUCCESSFUL

Explanation

The utility was unable to complete processing successfully.

System action

The current utility is terminated.

System programmer response

Review other messages produced by the utility to determine the appropriate action to be taken.

CSQJ202E
INSUFFICIENT STORAGE AVAILABLE TO CONTINUE

Explanation

A request for storage was unsuccessful because no more storage is available.

System action

The current utility is terminated.

System programmer response

Rerun the utility after increasing the storage available.

CSQJ203E
oper OPERATION IS INVALID

Explanation

The user entered a utility control statement operation (*oper*) that is invalid.

System action

The current utility is terminated.

System programmer response

Correct the control statement, and rerun the utility.

CSQJ204E
xxxx PARAMETER IS INVALID

Explanation

The user specified a utility control statement parameter (*xxxx*) that is invalid.

System action

The current utility is terminated.

System programmer response

Correct the control statement, and rerun the utility.

CSQJ205E
xxxx PARAMETER HAS NO ARGUMENT

Explanation

xxxx contains the name of a parameter that requires an argument.

System action

The current utility is terminated.

System programmer response

Specify an argument for the identified parameter and then rerun the utility.

CSQJ206E
xxxx PARAMETER REQUIRES NO ARGUMENT

Explanation

xxxx contains the name of the parameter that has been incorrectly followed by an = symbol.

System action

The current utility is terminated.

System programmer response

Correct the control statement, and rerun the utility.

CSQJ207E
PARAMETERS INCONSISTENT WITH SPECIFIED OPERATION

Explanation

The user has specified utility control statement parameters that are inconsistent with the specified utility operation.

System action

The current utility is terminated.

System programmer response

Correct the control statement, and rerun the utility.

CSQJ211E
UNEXPECTED END OF DATA ON SYSIN DATA SET

Explanation

Additional control statements were expected, but could not be found.

System action

The current utility is terminated.

System programmer response

Correct the control statements, and rerun the utility.

CSQJ212E
ERROR RETURNED FROM BSDS READ, RPLERRCD= *yy*, DDNAME=*ddd*

Explanation

A VSAM GET was issued that resulted in a nonzero return code. *yy* contains the error code returned by VSAM. *ddd* contains the DDname of the BSDS encountering the error.

System action

The current utility is terminated.

System programmer response

The action taken is dictated by the reason code. See RPLERRCD for information about the reason code in RPLERRCD. The BSDS might have to be recovered by use of a backup copy.

CSQJ213E
ERROR RETURNED FROM BSDS WRITE, RPLERRCD= *yy*, DDNAME=*ddd*

Explanation

A VSAM PUT was issued that resulted in a nonzero return code. *yy* contains the error code returned by VSAM. *ddd* contains the DDname of the BSDS encountering the error.

System action

The current utility is terminated.

System programmer response

The action to be taken is dictated by the reason code. See RPLERRCD for information about the reason code in RPLERRCD. The BSDS might have to be recovered by use of a backup copy.

If this error occurs when running the BSDS conversion utility (CSQJUCNV), and RPLERRCD indicates that the reason was an attempt to store a record with a duplicate key, ensure that the output BSDS is empty before running the utility.

CSQJ214E
SPECIFIED DSNAME ALREADY EXISTS IN BSDS, DDNAME=*ddd*

Explanation

You attempted a NEWLOG operation with a data set name that already exists in the BSDS. An entry is never made in a BSDS if the specified DSNAME currently exists in either the active or archive records of that BSDS. *ddd* contains the DDname of the subject BSDS.

System action

The current utility is terminated.

System programmer response

Either correct the control statement and rerun the utility, or delete the existing DSNAME from the BSDS and rerun the utility.

CSQJ215I
modname timestamps formatted with no local correction

Explanation

The parameter TIME(RAW) was specified on the invocation of utility *modname*. Where possible, timestamps formatted as date and time in the output will have no local timezone, or leapsecond adjustment performed so will be the UTC time of the event on the source system.

This mode of processing is most useful when the log, or BSDS being formatted has been produced on a remote system in a different timezone, or in a different daylight saving regime.

System action

Processing continues.

System programmer response

Either correct the control statement and rerun the utility, or delete the existing DSNAME from the BSDS and rerun the utility.

CSQJ216E
BSDS ACTIVE LOG DATA SET RECORD IS FULL, DDNAME=*ddd*

Explanation

The maximum number of active log data sets is fixed. No further entries can be inserted in the BSDS after the maximum has been reached. *ddd* contains the DDname of the subject BSDS.

System action

The current utility is terminated.

System programmer response

Run the print log map utility to determine the current status of the BSDS. Subsequent actions can then be formulated, depending upon the status of the BSDS.

CSQJ217E
SPECIFIED DSNAME DOES NOT EXIST IN BSDS, DDNAME=*ddd*

Explanation

The DELETE operation specifies a DSNAME that cannot be found in the BSDS. *ddd* contains the DDname of the subject BSDS.

System action

The current utility is terminated.

System programmer response

Correct the control statement, and rerun the utility.

CSQJ218E
SPECIFIED VOLUME DOES NOT EXIST IN BSDS, DDNAME=*ddd*

Explanation

The DELETE operation specifies a COPY1VOL or COPY2VOL argument that cannot be found in the BSDS. *ddd* contains the DDname of the subject BSDS.

System action

The current utility is terminated.

System programmer response

Correct the control statement, and rerun the utility.

CSQJ219E
OPEN ERROR, DDNAME=*ddd*

Explanation

An error occurred when *csect-name* tried to open a data set named *ddd*.

This error can be caused by a number of different conditions. The most probable conditions are:

1. The DDname of the SYSPRINT, SYSIN, or SYSUT1 data set was not specified in the user's job control language (JCL)
2. The queue manager is currently active

3. The BSDS has been allocated by another job with a disposition (DISP) that conflicts with the DISP specified in the user's JCL

4. The data set associated with *ddd* is already open, possibly due to an earlier error

5. The user is not authorized to access the data set associated with *ddd*

6. Insufficient storage is available to perform the OPEN operation

7. The catalog indicates that the data set associated with *ddd* has an invalid physical record size

System action

The current utility is terminated.

System programmer response

The user's action depends on the condition that caused the OPEN error. The following is a list of appropriate actions corresponding to the conditions listed in the explanation:

1. Provide the missing data definition (DD) statements, and then rerun the utility. See the section Preparing your program to run for further information.

2. Wait until the queue manager is inactive before running the utility again because the log utility cannot run while it is active.

3. Correct the disposition conflict and then rerun the utility.

4. Submit an Access Method Services (IDCAMS) VERIFY job against the data set associated with *ddd*. Rerun the log utility job.

5. In the case of an authorization problem, a separate message is usually generated from the authorization facility (RACF, for example). Investigate the authorization messages and obtain the proper authorization before running the utility again.

6. Insufficient storage is usually accompanied by a separate error from z/OS. Increase the storage available and rerun the utility.

7. Reallocate the data set with a suitable physical record size.

CSQJ220E
BSDS IN CREATE MODE. NO DATA TO MAP, DDNAME=*ddd*

Explanation

A utility found the BSDS to be in create mode, so it cannot contain data to map. *ddd* contains the DDname of the data set.

System action

The current utility is terminated.

System programmer response

Correct the JCL so that a non-null data set can be processed.

CSQJ221I
PREVIOUS ERROR CAUSED *oper* OPERATION TO BE BYPASSED

Explanation

Errors were encountered errors during utility processing. These errors subsequently caused *oper* to be bypassed.

This message is a warning only and is displayed after messages that specify the error or errors that occurred. Note that the error or errors might not be associated with the current *oper* operation; rather, under log utility processing, a significant error in any operation causes the control statements for this and any subsequent operations to be checked for syntax only. BSDS updates do not occur for any operation specified in this message.

System action

The log utility continues to process. However, for this and all subsequent operations, the BSDS is not updated and the utility only checks the syntax of the control statements.

System programmer response

Consult the previous messages and correct any errors that caused this message to be generated. Resubmit the log utility job for all operations that have been bypassed.

CSQJ222E
INVALID SPECIFICATION OF *xxxx* PARAMETER ARGUMENT

Explanation

You specified the parameter *xxxx*. This parameter is not valid for the argument.

System action

The current utility is terminated.

System programmer response

Correct the parameter argument on the control statement, and rerun the utility.

CSQJ223E
xxxx PARAMETER ARGUMENT EXCEEDS MAXIMUM ALLOWABLE LENGTH

Explanation

xxxx specifies the name of the parameter with an argument value that exceeded the maximum length allowed.

System action

The current utility is terminated.

System programmer response

Correct the parameter argument on the control statement, and rerun the utility.

CSQJ224E
xxxx PARAMETER APPEARS TOO OFTEN

Explanation

xxxx gives the name of the parameter that you have specified more than once on the same control statement.

System action

The current utility is terminated.

System programmer response

Remove the redundant parameter, and rerun the utility.

CSQJ225I
oper OPERATION SUCCESSFULLY COMPLETED

Explanation

The *oper* specified in the message identifies the name of the change log inventory utility operation that has been successfully completed.

CSQJ226E
SPECIFIED VOLUME ALREADY EXISTS IN BSDS, DDNAME=*ddd*

Explanation

The specified volume currently exists in the archive log records of the BSDS. *ddd* specifies the DDname of the subject BSDS.

System action

The current utility is terminated.

System programmer response

Either correct the parameter argument on the control statement, or delete the specified volume and rerun the utility.

CSQJ227E
NO SPACE IN BSDS FOR ADDITIONAL ARCHIVE ENTRIES, DDNAME=*ddd*

Explanation

The maximum number of archive volumes has been exceeded, and no more space is available for volume entries in the copy specified.

System action

The current utility is terminated.

System programmer response

Delete some of the archive entries in the specified copy number, and rerun the utility.

CSQJ228E
csect-name LOG DEALLOCATION ERROR DSNAME=*dsname,* ERROR STATUS=*eeeeiiii,* SMS REASON CODE=*ssssssss*

Explanation

An error occurred when trying to dynamically deallocate the data set. Error status is the error reason code returned by z/OS dynamic allocation.

System action

Processing continues.

System programmer response

The error status portion of this message contains a 2-byte error code (*eeee,* S99ERROR) followed by the 2-byte information code (*iiii,* S99INFO) from the SVC99 request block. If the S99ERROR code indicates an SMS allocation error ('97xx'), then *ssssssss* contains additional SMS reason code information obtained from S99ERSN. See the *MVS Authorized Assembler Services Guide* manual for a description of these codes.

CSQJ230E
LOG OFFLOAD INITIALIZATION PROCESSING FAILED

Explanation

During queue manager initialization, the offload function was unable to complete its initialization process.

System action

Startup is terminated.

System programmer response

One or more error messages describing the specific error preceded this message. See the specific messages for error analysis and the appropriate actions to take.

CSQJ231E
LOG COMMAND INITIALIZATION PROCESSING FAILED

Explanation

During queue manager initialization, the command function was unable to complete its initialization process.

System action

Startup is terminated.

System programmer response

One or more error messages describing the specific error preceded this message. See the specific messages for error analysis and the appropriate action to take.

CSQJ232E
OUTPUT DATA SET CONTROL INITIALIZATION PROCESSING FAILED

Explanation

During queue manager initialization, the output data set control function was unable to complete its initialization process.

System action

Startup is terminated.

System programmer response

One or more error messages describing the specific error preceded this message. See the specific message for error analysis and the appropriate action to take.

CSQJ233E
ARCHIVE LOG READ INITIALIZATION PROCESSING FAILED

Explanation

During queue manager initialization, the archive log read function was unable to complete its initialization process.

System action

Startup is terminated.

System programmer response

One or more error messages describing the specific error preceded this message. See the specific messages for error analysis and the appropriate action to take.

CSQJ234E
ARCHIVE LOG COMMAND QUIESCE INITIALIZATION PROCESSING FAILED

Explanation

During queue manager initialization, the quiesce function which supports the ARCHIVE LOG MODE(QUIESCE) command processing was unable to complete its initialization process.

System action

Startup is terminated.

System programmer response

One or more error messages describing the specific error preceded this message. See the specific messages for error analysis and the appropriate action to take.

CSQJ235E
OUTPUT BUFFER WRITER INITIALIZATION PROCESSING FAILED

Explanation

During queue manager initialization, the output buffer writer function was unable to complete its initialization process.

System action

Startup is terminated.

System programmer response

One or more error messages describing the specific error preceded this message. See the specific messages for error analysis and the appropriate action to take.

CSQJ236E
BOOTSTRAP ACCESS TERMINATION PROCESSING FAILED

Explanation

During queue manager termination, the BSDS access function was unable to complete its termination process.

System action

Termination processing continues.

System programmer response

One or more error messages describing the specific error preceded this message. See the specific messages for error analysis and the appropriate action to take.

CSQJ238E
LOG OFFLOAD TERMINATION PROCESSING FAILED

Explanation

During queue manager termination, the offload function was unable to complete its termination process.

System action

Termination processing continues.

System programmer response

One or more error messages describing the specific error preceded this message. See the specific messages for error analysis and the appropriate action to take.

CSQJ239E
LOG COMMAND TERMINATION PROCESSING FAILED

Explanation

During queue manager termination, the command function was unable to complete its termination process.

System action

Termination processing continues.

System programmer response

One or more error messages describing the specific error preceded this message. See the specific messages for error analysis and the appropriate action to take.

CSQJ240E
OUTPUT DATA SET CONTROL TERMINATION PROCESSING FAILED

Explanation

During queue manager termination, the output data set control function was unable to complete its termination process.

System action

Termination processing continues.

System programmer response

One or more error messages describing the specific error preceded this message. See the specific messages for error analysis and the appropriate action to take.

CSQJ241E
ARCHIVE LOG READ TERMINATION PROCESSING FAILED

Explanation

During queue manager termination, the archive log read function was unable to complete its termination process.

System action

Termination processing continues.

System programmer response

One or more error messages describing the specific error preceded this message. See the specific messages for error analysis and the appropriate action to take.

CSQJ242E
ARCHIVE LOG COMMAND QUIESCE TERMINATION PROCESSING FAILED

Explanation

During queue manager termination, the quiesce function which supports the ARCHIVE LOG MODE(QUIESCE) command processing was unable to complete its termination process.

System action

Termination processing continues.

System programmer response

One or more error messages describing the specific error preceded this message. See the specific messages for error analysis and the appropriate action to take.

CSQJ243E
OUTPUT BUFFER WRITER TERMINATION PROCESSING FAILED

Explanation

During queue manager termination, the output buffer writer function was unable to complete its termination process.

System action

Termination processing continues.

System programmer response

One or more error messages describing the specific error preceded this message. See the specific messages for error analysis and the appropriate action to take.

CSQJ244E
MACRO *xxx* FAILED IN LOG TERMINATION, RC=*ccc*

Explanation

During termination, there was a return code from the named macro that indicated an error.

System action

Termination processing continues.

System programmer response

If the problem persists, contact your IBM support center for assistance.

CSQJ245D
RESTART CONTROL INDICATES TRUNCATION AT RBA *rrr*. REPLY Y TO CONTINUE, N TO CANCEL

Explanation

The conditional restart control record in use indicates that the log should be truncated at the specified RBA.

System action

If 'Y', queue manager startup continues. If 'N', startup is terminated.

System programmer response

Run the change log inventory utility (CSQJU003) to modify the conditional restart record.

CSQJ246D
RESTART CONTROL INDICATES COLD START AT RBA *rrr*. REPLY Y TO CONTINUE, N TO CANCEL

Explanation

The conditional restart control record in use indicates that the queue manager is to be restarted and that logging is to begin at the specified RBA.

System action

If 'Y', queue manager startup continues. If 'N', startup is terminated.

System programmer response

Run the change log inventory utility (CSQJU003) to modify the conditional restart record.

CSQJ247E
csect-name I/O ERROR PROCESSING BSDS ARCHIVE LOG RECORD, RC=*rc* REASON=*reason*

Explanation

An input/output error occurred while processing a BSDS record. *rc* indicates the return code received from the input/output operation. *reason* indicates the reason code received from the operation.

Return code 4 indicates that IBM MQ detected a problem. Return code 8 indicates a VSAM error.

System action

Startup is terminated.

System programmer response

For a return code of 4, if the problem persists, contact your IBM support centre for assistance. For a return code of 8, run an offline Access Method Services job to determine the cause of the VSAM error.

CSQJ250I
csect-name DATA SET *dsname* HAS SHAREOPTIONS LESS THAN (2 3) - CF STRUCTURE RECOVERY NOT POSSIBLE

Explanation

An active log data set was detected with share options that do not permit CF structure recovery in a queue-sharing group environment. All active log data sets must be have SHAREOPTIONS(2 3) at least to allow CF structure recovery.

This can occur when the queue manager's own log data sets are checked during startup, or when a RECOVER CFSTRUCT command is issued that requires to access another queue manager's log data sets.

System action

If this is a result of a RECOVER CFSTRUCT command, the command is terminated. Otherwise, startup continues, but CF structure recovery will not be possible.

System programmer response

If you want CF structure recovery, use the Access Method Services ALTER function to correct the SHAREOPTIONS for the data set; for example

```
ALTER dsname.DATA SHAREOPTIONS(2 3)
```

Then restart the queue manager that owns the data set.

CSQJ295D
RESTART CONTROL INDICATES TRUNCATION AT LRSN *rrr*. REPLY Y TO CONTINUE, N TO CANCEL

Explanation

The conditional restart control record in use indicates that the log should be truncated at the specified LRSN.

System action

If 'Y', queue manager startup continues. If 'N', startup is terminated.

System programmer response

Run the change log inventory utility (CSQJU003) to modify the conditional restart record.

CSQJ301E
csect-name ERROR USING ONLINE BOOTSTRAP DATA SET (ACTION CODE *a*)

Explanation

During command processing for the RECOVER BSDS command or the ARCHIVE LOG command, an error occurred while performing an operation on the BSDS. The type of operation is specified by the code *a*:

1

Unable to OPEN the BSDS

2

Unable to read a required record from the BSDS

3

Unable to write a required record to the BSDS

4

The contents of the stable BSDS was successfully copied to the replacement BSDS; however, the queue manager was unable to successfully restore dual BSDS operation

System action

If this message was received during processing of the RECOVER BSDS command, then the queue manager will continue in single BSDS mode. If this message was received during processing of the ARCHIVE LOG command, the archive log history record in the BSDS will not be updated to reflect the occurrence of an ARCHIVE LOG command; logging and the offload processing will continue.

System programmer response

If this message was received during processing of the RECOVER BSDS command, recovery action must be performed on the BSDS before re-entering the command. If this message was received during processing of the ARCHIVE LOG command, no action is necessary.

CSQJ302E
ALLOCATION ERROR ON REPLACEMENT BSDS DSNAME=*dsname* ERROR STATUS=*eee*

Explanation

The RECOVER BSDS command encountered an error while trying to allocate the specified data set dynamically. DSNAME is the data set name. Error Status is the error code and information code returned by z/OS dynamic allocation.

System action

Processing of the command is terminated. The queue manager continues in single BSDS mode.

System programmer response

Determine the cause of the error from the error status contained in the message, and correct the condition. Then re-enter the RECOVER BSDS command.

Go to the *z/OS MVS Authorized Assembler Services Guide* and select the Interpreting DYNALLOC return codes topic for information about these codes .

CSQJ303E
WRITE ERROR ON REPLACEMENT BSDS DSNAME=*dsname* ERROR STATUS=*eee*

Explanation

The RECOVER BSDS command encountered an error while attempting to write to the specified BSDS. Error status contains the VSAM return and feedback codes. It is a 2-byte field with the first containing the hexadecimal return code and the second containing the hexadecimal feedback code.

System action

Processing of the command is terminated. The queue manager continues in single BSDS mode.

System programmer response

Run an offline Access Method Services job to delete or rename the replacement BSDS and define a new BSDS with the same name. Re-enter the RECOVER BSDS command to reestablish dual BSDS mode.

CSQJ304E
ERROR CLOSING REPLACEMENT BSDS DSNAME=*dsname* ERROR STATUS=*eee*

Explanation

The RECOVER BSDS command encountered an error while attempting to close the specified BSDS. Error Status contains the VSAM return and feedback codes. It is a 2-byte field with the first containing the hexadecimal return code and the second containing the hexadecimal feedback code.

System action

Processing of the command is terminated. The queue manager continues in single BSDS mode.

System programmer response

Run an offline Access Method Services job to delete or rename the replacement BSDS and define a new BSDS with the same name. Re-enter the RECOVER BSDS command to reestablish dual BSDS mode.

CSQJ305E
REPLACEMENT BSDS NOT EMPTY DSNAME=*dsname*

Explanation

The RECOVER BSDS command was issued, but the replacement BSDS was not empty; that is, it contained data.

System action

Processing of the command is terminated. The queue manager continues in single BSDS mode.

System programmer response

Run an offline Access Method Services job to delete or rename the error BSDS and define a new BSDS with the same name. Re-enter the RECOVER BSDS command to reestablish dual BSDS mode.

CSQJ306I
DUAL BSDS MODE ALREADY ESTABLISHED

Explanation

The RECOVER BSDS command was issued, but the queue manager was already in dual BSDS mode.

System action

The command is ignored.

CSQJ307I
LOG INITIALIZED IN SINGLE BSDS MODE

Explanation

The RECOVER BSDS command was issued, but the queue manager was initialized in single BSDS mode.

System action

Processing of the command is terminated. The queue manager continues in single BSDS mode.

CSQJ308I
LOG NOT OFFLOADED FOR ARCHIVE LOG COMMAND, ARCHIVING IS OFF

Explanation

The ARCHIVE LOG command was issued, but archiving is off (that is, OFFLOAD is set to 'NO' in the CSQ6LOGP system parameters).

System action

The current active log data set is not offloaded. However, it is truncated and logging continues using the next active log data set.

CSQJ309I
QUIESCING FOR ARCHIVE LOG COMMAND WITH WAIT(YES) STARTED FOR MAXIMUM OF *xxx* SECONDS

Explanation

An ARCHIVE LOG command with the MODE(QUIESCE) and WAIT(YES) options has been accepted by the queue manager. The quiesce processing has commenced.

WAIT(YES) means that quiesce processing will be synchronous to the user; that is, the user can enter additional commands, but they will not be processed until the quiesce processing has ended.

System action

The queue manager attempts to stop all updates to IBM MQ resources within the time period specified in the message. Users and jobs using the queue manager are allowed to reach a point of consistency (commit point) before being blocked from further update activity. Users and jobs are suspended until they are released by the queue manager following the initiation of the offload processing. If the queue manager can effectively block all users from performing updates before the maximum specified time, the offload is initiated immediately, and normal processing is resumed.

This message will be followed by message CSQJ311I or CSQJ317I.

CSQJ310I
QUIESCING FOR ARCHIVE LOG COMMAND WITH WAIT(NO) STARTED FOR MAXIMUM OF *xxx* SECONDS

Explanation

An ARCHIVE LOG command with the MODE(QUIESCE) and WAIT(NO) by the queue manager. The quiesce processing has commenced.

WAIT(NO) means that quiesce processing will be asynchronous to the user; that is, control will be returned to the invoker as soon as the quiesce task has been started. Thus, the queue manager will accept, and process, any new commands while the quiesce task is running.

System action

The queue manager attempts to stop all updates to IBM MQ resources within the time period specified in the message. Users and jobs using the queue manager are allowed to reach a point of consistency (commit point) before being blocked from further update activity. Users and jobs are suspended until they are released by the queue manager following the initiation of the offload processing. If the queue manager can effectively block all users from performing updates before the maximum specified time, the offload is initiated immediately, and normal processing is resumed.

This message will be followed by message CSQJ311I or CSQJ317I.

CSQJ311I
csect-name LOG ARCHIVE (OFFLOAD) TASK INITIATED

Explanation

A user-initiated ARCHIVE LOG command has been accepted by the queue manager. A task to archive (offload) the active log data set has been started.

System action

The current active log data sets will be truncated and switched to the next available active log data sets. The task has been started will archive the active log data sets asynchronously, allowing the queue manager to continue processing.

This message will be followed by the CSQJ312I message if the MODE(QUIESCE) option was used with the ARCHIVE LOG command.

CSQJ312I
ARCHIVE LOG QUIESCE ENDED. UPDATE ACTIVITY IS NOW RESUMED

Explanation

An ARCHIVE LOG command with the MODE(QUIESCE) option was processed by the queue manager. As part of the MODE(QUIESCE) processing, an attempt was made to stop all new update activity against IBM MQ resources. This message signals the end of the quiesce processing, and the resumption of normal activity for all users and jobs which were blocked during the quiesce period.

This message will follow the CSQJ311I message or CSQJ317I message.

System action

The queue manager has now resumed all normal activity for all users and jobs which were blocked during the quiesce period.

CSQJ314E
'*kwd1*' requires '*kwd2*' to be specified too

Explanation

A command was entered that specified the *kwd1* keyword. However, use of this keyword requires that the *kwd2* keyword is also used.

System action

Processing for the command is terminated.

CSQJ315I
STOP QMGR MODE(FORCE) IN PROGRESS

Explanation

An attempt was made to issue an ARCHIVE LOG command when a STOP QMGR MODE(FORCE) command was already in progress.

System action

Command processing will terminate for the ARCHIVE LOG command. The STOP QMGR MODE(FORCE) processing will continue.

CSQJ316I
SYSTEM QUIESCE ALREADY IN PROGRESS

Explanation

An ARCHIVE LOG command with the MODE(QUIESCE) option or a SUSPEND QMGR LOG command was issued when a system quiesce was already in progress. The system quiesce could be the result of processing by another ARCHIVE LOG MODE(QUIESCE) command, or by a STOP QMGR MODE(QUIESCE) command.

System action

Command processing will terminate. The system quiesce currently in progress will continue.

CSQJ317I
QUIESCE PERIOD EXPIRED WITH *nn* OUTSTANDING URS AT *time*. ARCHIVE LOG PROCESSING TERMINATED

Explanation

An ARCHIVE LOG MODE(QUIESCE) command was processed by the queue manager. However, the queue manager was not able to quiesce all update activity in the user-specified quiesce time interval.

System action

This message is for information only. The queue manager determined that *nn* units of recovery did not reach a point of consistency during the quiesce period, and therefore could not be stopped from continuing their associated update processing.

Consequently, the ARCHIVE LOG processing will be terminated. The current active log data sets will not be truncated, and will not be switched to the next available active log data sets. The log archive (offload) task will not be created. All jobs and users suspended during the quiesce will be resumed, and normal update activity against IBM MQ resources will be commenced.

This message will be followed by the CSQJ312I message.

System programmer response

You must decide whether the outstanding (non-quiesced) units of recovery represent significant work.

Each user on the system has a unit of recovery if they are modifying IBM MQ resources. Units of recovery are also created by the queue manager itself for internal processing. Because the purpose of the MODE(QUIESCE) option is to have all units of recovery reach a point of consistency (commit point) before the active log data set is truncated and offloaded, determine all outstanding non-queued jobs and users by using DISPLAY THREAD and the z/OS command DISPLAY ACTIVE,LIST.

Note that units of recovery might be outstanding due to lock contention between a user or job that holds a resource (and has reached a point of consistency), and a user or job that wants a lock (and therefore cannot reach a point of consistency).

Before resubmitting the ARCHIVE LOG command with the MODE(QUIESCE) option, either:

- Wait until the threads have been deallocated
- Wait until the queue manager is less busy
- Force the offending threads to terminate
- Use the TIME option to override and extend the maximum quiesce time period specified in the system parameters
- If having all units of recovery reach a point of consistency in the active log is no longer critical, issue the ARCHIVE LOG command without the MODE(QUIESCE) option

Note: If you decide to use the ARCHIVE LOG command without the MODE(QUIESCE) option, the active log data sets will be truncated without regard to quiescing activity on the queue manager. If the resulting archive log data set is used for recovery, it is possible that some units of recovery might be found to be in-flight, in-backout, in-commit, or in-doubt during queue manager initialization.

If expiration of the quiesce period before all units of recovery reach a consistent point is a problem, you might have to adjust the QUIESCE value in the CSQ6ARVP system parameters. For more information, see Using CSQ6ARVP.

CSQJ318I
ARCHIVE LOG COMMAND ALREADY IN PROGRESS

Explanation

An attempt was made to issue an ARCHIVE LOG command when another ARCHIVE LOG command was already in progress.

System action

Command processing will terminate. The ARCHIVE LOG command currently in progress will continue.

CSQJ319I

csect-name CURRENT ACTIVE LOG DATA SET IS THE LAST AVAILABLE ACTIVE LOG DATA SET. ARCHIVE LOG PROCESSING WILL BE TERMINATED

Explanation

The ARCHIVE LOG command was rejected because the current active log is the last available active log data set. To process the command when these conditions exist would cause the queue manager to exhaust its available active log resources and immediately halt processing.

System action

Processing for the command is terminated.

If the situation is not corrected, the queue manager will issue the CSQJ110E message (if it has not already done so) when the available active log data space reaches critically low levels. Ultimately, message CSQJ111A will be issued when the available active log data space is exhausted, and processing will stop until active log space is made available.

System programmer response

To clear this condition, steps must be taken to complete other waiting offload tasks. Once another active log is made available (re-usable) by completing the offload process for it, the command processing for the current active log can proceed.

Perform a display request to determine the outstanding requests related to the log offload process. Take the necessary action to satisfy any requests, and permit offload to continue.

If offload does not complete normally, or cannot be initiated, either correct the problem that is causing the offload problem, or consider whether there are sufficient active log data sets. If necessary, additional log data sets can be added dynamically using the DEFINE LOG command.

Possible causes for the shortage of active log data space are:

- Excessive logging. For example, there is a lot of persistent message activity.
- Delayed or slow offloading. For example, failure to mount archive volumes, incorrect replies to offload messages, or slow device speeds.
- Excessive use of the ARCHIVE LOG command. Each invocation of the command causes the queue manager to switch to a new active log data set. Excessive use could consume the available active log data space if the resulting offloads were not processed in a timely manner.
- Offloads unsuccessful.
- Insufficient active log space.

CSQJ320E

csect-name UNABLE TO PROCESS LOG TRUNCATION REQUEST DUE TO INTERNAL ERROR. (ERROR DATA=*ddd*)

Explanation

While processing an ARCHIVE LOG command, an internal request was made of the log buffer output routine to force-write the log buffers and to truncate and switch the active log to the next available active log data sets.

System action

Processing for the command is terminated.

System programmer response

This is an internal error detected by the queue manager. The error might be caused by an unrelated error in the log buffer writer component (CSQJWxxx), by a STOP QMGR MODE(FORCE) command, or by abnormal termination. See any messages that precede this message.

CSQJ321E

UNABLE TO CONTINUE ARCHIVE LOG QUIESCE DUE TO INTERNAL ERROR. ARCHIVE LOG PROCESSING TERMINATED

Explanation

An ARCHIVE LOG command with the MODE(QUIESCE) option was processed by the queue manager. As part of the MODE(QUIESCE) processing, an attempt was made to stop all new update activity against IBM MQ resources. During the processing, an internal error occurred.

System action

The ARCHIVE LOG MODE(QUIESCE) processing is terminated. This message will be followed by message CSQJ312I after all users and jobs quiesced by the MODE(QUIESCE) processing are resumed.

System programmer response

This error is an internal error detected by the queue manager. Retry the ARCHIVE LOG MODE(QUIESCE) command. If the error persists, the active log data sets can be switched using the ARCHIVE LOG command without the MODE(QUIESCE) option.

CSQJ322I
DISPLAY parm-type report ...

Explanation

This message is part of the response to the DISPLAY and SET *parm-type* commands (where *parm-type* is SYSTEM, LOG, or ARCHIVE). It provides information about the corresponding system parameters. For example:

```
Parameter   Initial value   SET value
LOGLOAD     500000          400000
CMDUSER     CSQOPR
EXCLMSG     X500,X501,X528,X208,
            X519,X599
End of parm-type report
```

where:

LOGLOAD
was set in CSQ6SYSP and changed using the SET SYSTEM LOGLOAD command.

CMDUSER
was set in CSQ6SYSP and has not been changed.

EXCLMSG
was set to the default in CSQ6SYSP, and has been changed using the SET SYSTEM EXCMSG command.

System action

Processing continues.

CSQJ325I
ARCHIVE tape unit report ...

Explanation

This message is part of the response to the DISPLAY and SET ARCHIVE commands. It provides information about tape units used for archive logging, as follows:

```
Addr St CorrelID VolSer DSName   addr st correlid volser dsname |   End of tape unit report
```

where:

addr
The physical address of a tape unit allocated to read the archive log.

st
The status of the tape unit:

B
Busy, actively processing an archive log data set.

P

> Premount, active and allocated for premounting.

A

> Available, inactive and waiting for work.

*

> Unknown.

correlid
> The correlation ID associated with the user of the tape being processed; '*****' if there is no current user.

volser
> The volume serial number of the tape that is mounted.

dsname
> The data set name on the tape volume that is being processed or was last processed.

If no tape units are allocated, the list is replaced by:

```
No tape archive reading activity
```

System action

Processing continues.

CSQJ330I
ARCHIVE LOG VOLUMES required for connection-ID *xxxx*, correlation-ID *yyyyyy*:

Explanation

This message lists the names of the archive log volumes needed by the indicated correlation ID for the given connection ID. The archive log volumes are listed with a maximum of six on each line. It is generated automatically by the archive read process at the first archive log tape mount for that correlation ID. The connection ID is an identifier representing the connection name used to establish the thread; the correlation ID is an identifier associated with a specified thread, such as a job name.

A volume name prefixed with an '*' signifies that the data on the archive log volume is also mapped by an active log data set. As such, the volume might not be required for the read process, because the data is read from the active log if possible.

The following is an example of the output produced by message CSJ330I::

```
CSQJ330I: ARCHIVE LOG VOLUMES required for connection-ID xxxx,
 correlation-ID yyyyyy: volume1, volume2, volume3, volume4, volume5, volume6 End of ARCHIVE
LOG VOLUMES report
```

System action

Processing continues.

CSQJ334E
Parameter value is unacceptable for ' *kwd*'

Explanation

The parameter value specified is not an acceptable value for the named keyword, or is incompatible with values set for other keywords.

System action

Processing for the command is terminated.

CSQJ335E
Invalid command syntax

Explanation

No keywords or an unacceptable combination of keywords was specified on a command.

System action

Processing for the command is terminated.

CSQJ337I
parm-type parameters set

Explanation

The SET command completed successfully, setting system parameter values for the indicated *parm-type* (SYSTEM, LOG, or ARCHIVE).

CSQJ364I
IMS Bridge facility suspended for XCFGNAME=*gname* XCFMNAME=*mname*

Explanation

This is issued as part of the response to a DISPLAY SYSTEM command if the MQ-IMS Bridge facility to the partner IMS system identified by *gname* and *mname* is suspended.

System programmer response

Use the RESUME QMGR FACILITY(IMSBRIDGE) command when ready to resume the IBM MQ-IMS Bridge.

CSQJ365I
Db2 connection suspended

Explanation

This is issued as part of the response to a DISPLAY SYSTEM command if the connection to Db2 is suspended.

System programmer response

Use the RESUME QMGR FACILITY(Db2) command when ready to resume the connection to Db2.

CSQJ366I
Logging already suspended

Explanation

A SUSPEND QMGR LOG command was issued, but logging was already suspended by a previous command.

System action

The command is ignored.

CSQJ367I
Queue manager stopping

Explanation

A SUSPEND QMGR LOG command was issued, but the queue manager is stopping.

System action

The command is ignored.

CSQJ368I
Logging not suspended

Explanation

A RESUME QMGR LOG command was issued, but logging was not suspended.

System action

The command is ignored.

CSQJ369E

csect-name Failure while suspending logging

Explanation

A SUSPEND QMGR LOG command was issued, but it terminated abnormally.

System action

The command is ignored, and logging is not suspended.

System programmer response

Verify the command entry, and reissue the command. If it fails again, collect the items listed in the Problem Determination section, and contact your IBM support center.

CSQJ370I

LOG status report ...

Explanation

This message is part of the response to the DISPLAY and SET LOG commands. It provides information about the status of the log data sets, as follows:

```
Copy %Full DSName
1    k     dsname
2    k     dsname
Restarted at date time using RBA=sss
Latest RBA=rrr
Offload task is xxx
Full logs to offload - m of n
```

where:

1, 2

Information for the current active log copy 1 and copy 2 data sets.

k

The percentage of the active log data set that has been used.

dsname

The data set name of the active log data set. If the copy is not currently active, this is shown as **Inactive**.

date time

The time that the queue manager was started.

sss

The RBA from which logging began when the queue manager was started.

rrr

The RBA of the most recently written log record. If logging is suspended, this line is replaced by

```
    Logging suspended at RBA=rrr
```

xxx

The status of the offload task, which can be:

BUSY, allocating archive data set

This could indicate that a tape mount request is pending.

BUSY, copying BSDS

Copying the BSDS data set.

BUSY, copying active log

Copying the active log data set.

BUSY

Other processing.

AVAILABLE
> Waiting for work.

m, n
> The number of full active log data sets that have not yet been archived, and the total number of active log data sets.

System action

Processing continues.

CSQJ372I
Logging suspended for *qmgr-name* at RBA=*rrr*

Explanation

This is issued in response to a SUSPEND QMGR LOG command if it completed successfully.

It is also issued in response to other commands if logging is suspended, indicating that the command cannot be processed while logging is suspended.

System action

All log update activity is suspended for the queue manager named. *rrr* is the RBA of the last log record written.

For commands other than SUSPEND QMGR LOG, the command is ignored.

System programmer response

Use the RESUME QMGR LOG command when ready to resume logging.

CSQJ373I
Logging resumed for *qmgr-name*

Explanation

The RESUME QMGR LOG command completed successfully.

System action

All log update activity is resumed for the queue manager named.

CSQJ401E
RECORD NOT FOUND - *rrr*

Explanation

An attempt was made to read the *rrrr* record from the BSDS. In doing so, the read routine (CSQJU01B) could not find the record.

This is not necessarily an error; for example, if you have never used CSQJU003 CRESTART, there will not be any CRCR records, so you will get this message from CSQJU004 for the RESTART CONTROL records.

System action

Utility processing continues.

CSQJ404E
kwd NOT ALLOWED FOR *oper* OPERATION

Explanation

An invalid keyword was used during the *oper* operation.

System action

The current utility processing is terminated.

CSQJ405E
KEYWORDS *kwd1* AND *kwd2* CANNOT BOTH BE SPECIFIED

Explanation

Keywords *kwd1* and *kwd2* cannot appear on the same control statement.

System action

The current utility processing is terminated.

CSQJ406E
EITHER KEYWORD *kwd1* OR *kwd2* MUST BE SPECIFIED

Explanation

A required keyword was not used on the control statement. Use either *kwd1* or *kwd2* with that control statement type.

System action

The current utility processing is terminated.

CSQJ407E
NO VALID CHECKPOINT RBA FOUND

Explanation

After completing its search through the resource manager status table and the checkpoint queue, no valid checkpoint RBA was found within the specified range.

System action

The current utility processing is terminated.

System programmer response

The last 100 checkpoints are recorded in the BSDS, including the log STARTRBA and log ENDRBA of the checkpoint range. The utility attempts to locate a valid checkpoint in the range. In this case the utility was unsuccessful in finding a valid checkpoint.

Use the Print Log Map Utility (CSQJU004) to determine the valid RBA ranges, and rerun the job with a suitable RBA specification.

CSQJ408I
CHECKPOINT RBA FOUND, RBA=*rba*, TIME=*date time*

Explanation

After completing its search through the resource manager status table and the checkpoint queue, *rba* was the most recent checkpoint RBA in the specified range, and *date time* was the time of the checkpoint.

System action

Utility processing continues.

CSQJ409E
I/O ERROR DURING READ PROCESSING OF RECORD - *yyy*

Explanation

An input/output error occurred during a READ of a record. *yyy* specifies the record in question.

System action

The current utility processing is terminated. This message is accompanied by message CSQJ212E.

System programmer response

Determine the cause of the error based on the error status information provided in message CSQJ212E.

CSQJ410E
I/O ERROR DURING WRITE PROCESSING OF RECORD - *yyy*

Explanation

An input/output error occurred during a WRITE of a record. *yyy* specifies the record in question.

System action

The current utility processing is terminated. This message is accompanied by message CSQJ213E.

System programmer response

Determine the cause of the error based upon the error status information provided in message CSQJ213E.

CSQJ411I
CRESTART CREATE FOR CRCRID=*yyyy*, DDNAME=*ddd*

Explanation

A CRESTART CREATE request has just completed. *yyyy* is the restart control record hexadecimal identifier and *ddd* is the BSDS data set (SYSUT1 or SYSUT2) associated with the request.

System action

Current® utility processing continues.

System programmer response

Note the record identifier for future reference.

CSQJ412E
RESTART CONTROL RECORD NOT FOUND IN BSDS

Explanation

A CRESTART CANCEL keyword was specified but the conditional restart control record does not exist in the BSDS data set.

System action

Current utility processing is terminated.

System programmer response

None necessary, if CANCEL was the intended action. Otherwise, correct the control statement and rerun the utility.

CSQJ413E
INVALID LOG RANGE SCOPE OR CHECKPOINT SPECIFIED

Explanation

The values specified through the STARTRBA and ENDRBA keywords are invalid.

System action

Current utility processing is terminated.

System programmer response

Ensure that the log range values are correct and correspond to the other log range values either specified or defaulted. The STARTRBA must be less than or equal to the ENDRBA.

CSQJ414I
COLD START WILL RESULT FROM THIS RESTART CONTROL RECORD. FORWARD AND BACKOUT SET TO NO

Explanation

STARTRBA and ENDRBA are equal. A cold start will result if this restart control record is used during restart. No forward or backout processing will be performed.

System action

CRESTART processing continues.

System programmer response

No additional actions are required if a cold start of the queue manager is desired. If a cold start is not desired, reissue the CRESTART and either CANCEL the current restart control record, or CREATE a new restart control record.

CSQJ415E
ENDRBA=*rba* IS INVALID, MUST BE A MULTIPLE OF 4K

Explanation

The specified ENDRBA at *rba* is not a multiple of 4K.

System action

CRESTART processing is terminated.

System programmer response

Correct the ENDRBA value on the CRESTART statement and rerun the utility.

CSQJ416I
WARNING - BSDS UTILITY TIME STAMP MISMATCH DETECTED. PROCESSING CONTINUES

Explanation

As a result of a change log inventory update, it was discovered that the SYSUT1 BSDS and SYSUT2 BSDS time stamps are unequal. Their inequality indicates the possibility of a BSDS mismatch.

System action

Current utility processing continues.

System programmer response

Run the print log map utility against the SYSUT1 BSDS and SYSUT2 BSDS. Determine if each BSDS is current. If each BSDS is current, this warning can be ignored. If either BSDS is not current, delete the obsolete data set and define a replacement data set, then copy the current BSDS into the replacement data set.

CSQJ417E
REQUIRED *xxxx* PARAMETER FOR *oper* OPERATION IS MISSING

Explanation

Required parameter *xxxx* for a log utility operation was missing from the log utility control statement. The attempted operation is *oper*.

System action

The log utility *oper* operation does not perform its function. All subsequent log utility control statements are processed. A nonzero return code is issued by the utility.

System programmer response

Add the missing parameter to the control statements associated with the specified operation and rerun the utility.

CSQJ418I
NOTREUSABLE ACTIVE LOG DELETED FROM THE BSDS LOG INVENTORY, STARTRBA=*sss* ENDRBA=*ttt*

Explanation

The data set name specified on the DSNAME parameter of the change log inventory utility DELETE statement was a NOTREUSABLE active log.

System action

The change log inventory utility processing continues. It will terminate with a return code of 4.

System programmer response

No additional actions are required if you want to delete a NOTREUSABLE active log. If not, re-create the deleted log by using the NEWLOG statement with the RBA values specified in the warning message.

CSQJ421I
CRESTART CANCEL FOR CRCRID=*yyyy*, DDNAME=*ddd*

Explanation

A CRESTART CANCEL request has just completed. *yyyy* is the restart control record hexadecimal identifier and *ddd* is the BSDS data set (SYSUT1 or SYSUT2) associated with the request.

System action

Current utility processing continues.

System programmer response

Note the record identifier for future reference.

CSQJ425E
INVALID VALUE OR FORMAT FOR *xxxx* PARAMETER (YYYYDDDHHMMSST)

Explanation

The *xxxx* parameter contains an incorrect value or incorrect format for the date and time.

System action

The current utility is terminated.

System programmer response

Correct the control statement and rerun the utility.

CSQJ426E
ENDTIME VALUE CANNOT BE LESS THAN STARTIME VALUE

Explanation

The STARTIME and ENDTIME parameters specify a time range. Therefore, the ENDTIME value must be equal to or greater than STARTIME value.

System action

The current utility is terminated.

System programmer response

Correct the control statement and rerun the utility.

CSQJ427I
CHECKPOINT RECORD ADDED TO QUEUE

Explanation

The checkpoint record specified has been added to the checkpoint queue in the BSDS.

System action

Processing continues.

CSQJ428I
CHECKPOINT RECORD DELETED FROM QUEUE, STARTRBA= *ssss* ENDRBA=*ttt*

Explanation

The checkpoint record specified has been deleted from the checkpoint queue in the BSDS. *sss* and *ttt* was the RBA range indicated in the deleted checkpoint record.

System action

Processing continues.

CSQJ429E
RBA RANGE CONFLICTS WITH EXISTING CHECKPOINT RECORD RBA RANGE

Explanation

The specified RBA range for the new checkpoint record either exists, or overlaps an existing RBA range in the checkpoint queue in the BSDS.

System action

The current utility is terminated.

System programmer response

Run the print log map utility against the SYSUT1 BSDS and SYSUT2 BSDS. Determine the correct RBA range, correct the STARTRBA and ENDRBA parameters, and rerun the utility.

CSQJ430E
SPECIFIED ENTRY CANNOT BE ADDED WITHOUT OVERLAYING EXISTING LOWEST ENTRY

Explanation

The specified RBA range for the new checkpoint record is less than the lowest existing entry. The checkpoint queue in the BSDS is currently full and cannot add the new entry without overlaying the lowest entry.

System action

The current utility is terminated.

System programmer response

Run the print log map utility against the SYSUT1 BSDS and SYSUT2 BSDS. Determine the lowest existing entry, either change the STARTRBA and ENDRBA parameters or delete the lowest existing entry and add a new low checkpoint entry, and rerun the utility.

CSQJ431E
STARTRBA SPECIFIED CANNOT BE FOUND IN CHECKPOINT QUEUE

Explanation

The specified STARTRBA could not be located in the checkpoint queue in the BSDS.

System action

The current utility is terminated.

System programmer response

Run the print log map utility against the SYSUT1 BSDS and SYSUT2 BSDS. Determine the correct STARTRBA value, correct the STARTRBA parameter, and rerun the utility.

CSQJ432E
kwd VALUE MUST END WITH ' *xxx*'

Explanation

The value specified for keyword *kwd* is not valid. It must end with '*xxx*'.

System action

The current utility is terminated.

System programmer response

Correct the control statement and rerun the utility.

CSQJ440I
csect-name IBM WebSphere MQ for z/OS version

Explanation

This message is issued as part of the header to reports issued by the utility programs.

CSQJ443I

csect-name CHANGE LOG INVENTORY UTILITY - *date time*

Explanation

This message is issued as a header to the report issued by the utility program.

CSQJ444I

csect-name PRINT LOG MAP UTILITY - *date time*

Explanation

This message is issued as a header to the report issued by the utility program.

CSQJ445I

csect-name BSDS CONVERSION UTILITY - *date time*

Explanation

This message is issued as a header to the report issued by the utility program.

CSQJ450E

csect-name VERSION *n* BSDS NOT SUPPORTED BY ALL QSG MEMBERS

Explanation

The BSDS conversion utility detected that at least one queue manager in the queue-sharing group does not support the version of BSDS that will be produced as a result of the conversion.

System action

The current utility is terminated with no action taken.

System programmer response

Migrate all queue managers in the queue-sharing group to a level that supports the new BSDS version and change the setting of OPMODE if necessary, then run the conversion utility again.

CSQJ451E

csect-name BSDS CI SIZE NOT CORRECT, DDNAME=*ddd*

Explanation

A data set provided to the BSDS conversion utility is unusable because the CI size is not correct. The CI size of the BSDS must be 4096. The variable *ddd* contains the DD name of the data set..

System action

The current utility is terminated with no action taken.

System programmer response

Ensure that the DD statement refers to a valid BSDS. If the DD name refers to an output data set, delete and redefine the output BSDS, then rerun the utility.

CSQJ452E

csect-name BSDS UTILITY TIMESTAMP MISMATCH DETECTED

Explanation

A mismatch was detected in the timestamps for the SYSUT1 and SYSUT2 BSDS copies during execution of the BSDS conversion utility. This mismatch indicates the possibility that the dual BSDSs are out of sync.

System action

The current utility is terminated with no action taken.

System programmer response

Run the print log map utility (CSQJU004) against each BSDS. From the output, determine which data set is obsolete, delete it, and define a replacement for it. Then copy the remaining data set into the replacement and try the utility again.

If output from the print log map utility for both data sets is similar, delete the data set with the oldest timestamp, then copy the data set with the most recent timestamp into the replacement.

CSQJ453E
csect-name INPUT BSDS NOT IN CORRECT FORMAT, DDNAME=*ddd*

Explanation

The BSDS conversion utility detected that the input BSDS was not in the correct format to be converted. The input BSDS must be in version 1 format. The variable *ddd* contains the DD name of the data set.

System action

The current utility is terminated with no action taken.

System programmer response

Run the print log map utility (CSQJU004) against the BSDS to determine its version. Ensure that the DD statement refers to an input BSDS in version 1 format, then rerun the utility if necessary.

CSQJ454E
csect-name UNRECOGNIZED BSDS RECORD, KEY=*key-value*

Explanation

During conversion of the BSDS, a record was found that is not a known format. The *key-value* is the VSAM KSDS key of the BSDS record that was not recognized.

System action

The current utility is terminated.

System programmer response

To determine the operation that inserted the record into the BSDS, use IDCAMS PRINT and specify this key value. If the record is not needed, delete it then rerun the BSDS conversion.

CSQJ455E
INVALID BSDS CONVERSION

Explanation

This message is issued when a utility, attempting to access the BSDS data set, encounters an invalid BSDS. An invalid BSDS is the result of a failure during a prior attempt to run the BSDS conversion utility.

System action

The current utility is terminated with no action taken.

System programmer response

The procedure for running the BSDS conversion utility involves renaming the original BSDS. Restore the BSDS to the original pre-conversion copy, by renaming the data sets, then try the conversion again.

CSQJ456E
xxxx PARAMETER ARGUMENT EXCEEDS MAXIMUM VALUE FOR BSDS VERSION *n*

Explanation

The *xxxx* parameter specifies the name of the parameter with a value that exceeds the maximum that can be specified for a BSDS in version *n* format.

System action

The current utility is terminated.

System programmer response

Correct the parameter argument on the control statement, then rerun the utility.

CSQJ491I
csect-name Log Data Set Preformatter Utility - *date time*

Explanation

This message is issued as a header to the report issued by the utility program.

CSQJ492I
Log data set name = *dsname*

Explanation

This identifies the name of the log data set to be preformatted.

CSQJ493I
Log data set is not VSAM

Explanation

The input log data set is not a VSAM data set.

System action

Utility processing is terminated.

System programmer response

Check that the SYSUT1 DD statement and the data set name is specified correctly. Use Access Method Services to define the data set as a VSAM linear data set.

CSQJ494E
VSAM OPEN failed, ACBERRFLG=*ee*

Explanation

Opening the log data set failed with the indicated ACB error code.

System action

Utility processing is terminated if the error code is 128 or more; otherwise processing continues.

System programmer response

See the *DFSMS/MVS Macro Instructions for Data Sets* for information about the VSAM error code.

CSQJ495E
VSAM PUT failed, RPLERREG=*ee* reason code=*reason*

Explanation

Writing the log data set failed with the indicated RPL error code and reason code.

System action

Utility processing is terminated.

System programmer response

See the *DFSMS/MVS Macro Instructions for Data Sets* for information about the VSAM error code and reason code.

CSQJ496I
Log preformat completed successfully, *n* records formatted

Explanation

The active log data set has been preformatted successfully.

System action

Utility processing is complete.

CSQJ497I
Log preformat terminated

Explanation

Preformatting the active log data set did not complete successfully.

System action

Utility processing is terminated.

System programmer response

See the preceding error messages for more information.

CSQJ498I
Log data set is not empty

Explanation

The input log data set is not an empty data set.

System action

Utility processing is terminated.

System programmer response

Check that the SYSUT1 DD statement and the data set name is specified correctly. Use Access Method Services to define the data set as a VSAM linear data set.

CSQJ499I

Log data set is larger than 4GB

Severity
0

Explanation

The log preformat utility, CSQJUFMT, detected that the VSAM data set to be formatted is greater than 4 GB in size.

System action

Processing continues. The entire data set will be pre-formatted, but IBM MQ for z/OS log data sets are restricted to a maximum of 4 GB. Any additional space in the data set is not used to hold log data.

System programmer response

Check that the data set name is specified correctly. Use Access Method Services to define the data set with a maximum size of 4 GB.

Message manager messages (CSQM...)

CSQM001E

csect-name MSTR user ID cannot invoke USS callable services

Severity
8

Explanation

The IBM MQ queue manager MSTR address space is running under a user ID that has not been configured with authority to execute callable Unix System Services (USS).

In RACF, the user ID requires an OMVS segment with a UID assigned.

System action

This message is issued and the process of Unix System Services calls, for reverse DNS hostname lookup, are disabled in the MSTR address space.

System programmer response

Refer to Planning your z/OS UNIX or UNIX System Services environment, where queue manager MSTR and CHIN address spaces require user IDs with OMVS segments defined with a valid UID.

Correct the configuration of the queue manager MSTR address space user ID and restart the queue manager.

CSQM050I

csect-name Intra-group queuing agent starting, TCB=*tcb-name*

Severity
0

Explanation

The intra-group queuing (IGQ) agent was started during the initialization of a queue manager that is in a queue-sharing group. The agent uses TCB *tcb-name*.

The IGQ agent handles SYSTEM.QSG.TRANSMIT.QUEUE.

System action

Processing continues. The IGQ agent starts asynchronously.

CSQM051I

csect-name Intra-group queuing agent stopping

Severity
0

Explanation

The intra-group queuing (IGQ) agent is stopping because:

- the queue manager is stopping
- it has retried a failing request repeatedly without success
- it was unable to recover from an abnormal ending

System action

The IGQ agent stops.

System programmer response

If the queue manager is not stopping, investigate the cause of the error as reported in the preceding messages. To restart the IGQ agent, issue an ALTER QMGR command specifying IGQ(ENABLED).

CSQM052I

csect-name Shared channel recovery completed for *qmgr-name*, *n* channels found, *p* FIXSHARED, *r* recovered

Severity
0

Explanation

The queue manager successfully recovered some shared channels that were owned by queue manager *qmgr-name* in the queue-sharing group when it or its channel initiator terminated abnormally. This recovery process might occur when:

- another queue manager or its channel initiator terminates abnormally
- the channel initiator is started, for channels that were owned by other queue managers

- the channel initiator is started, for channels that were owned by itself

n channels were found that needed recovery, of which *p* were originally started as FIXSHARED. The number recovered, *r*, might be less than *n* (or even 0) because other active queue managers are also recovering the channels and because FIXSHARED channels cannot be recovered by another queue manager.

For more information about shared channel recovery, see Shared channels.

System action

Processing continues.

CSQM053E

csect-name Shared channel recovery terminated, Db2 not available

Severity
8

Explanation

Because Db2 is not available or no longer available, the queue manager was unable to recover some shared channels that were owned by a queue manager in the queue-sharing group when it or its channel initiator terminated abnormally. This recovery process might occur when:

- another queue manager or its channel initiator terminates abnormally
- the channel initiator is started, for channels that were owned by other queue managers
- the channel initiator is started, for channels that were owned by itself

System action

The recovery process is terminated; some channels might have been recovered, while others have not.

System programmer response

Use the preceding messages on the z/OS console to investigate why Db2 is not available, and resume the connection or restart Db2 if necessary. Any channels that were not recovered will be recovered when the recovery process next runs; alternatively, they can be restarted manually.

CSQM054E

csect-name Shared channel recovery terminated, error accessing Db2

Severity
8

Explanation

Because there was an error in accessing Db2, the queue manager was unable to recover some shared channels that were owned by a queue manager in the queue-sharing group when it or its channel initiator terminated abnormally. This recovery process might occur when:

- another queue manager or its channel initiator terminates abnormally
- the channel initiator is started, for channels that were owned by other queue managers
- the channel initiator is started, for channels that were owned by itself

System action

The recovery process is terminated; some channels might have been recovered, while others have not.

System programmer response

Resolve the error reported in the preceding messages. Any channels that were not recovered will be recovered when the recovery process next runs; alternatively, they can be restarted manually.

CSQM055E

csect-name Shared channel recovery terminated, error putting command, MQRC=*mqrc (mqrc-text)*

Severity
8

Explanation

Because there was an error putting a message on the system-command input queue, the queue manager was unable to recover some shared channels that were owned by a queue manager in the queue-sharing group when it or its channel initiator terminated abnormally. This recovery process might occur when:

- another queue manager or its channel initiator terminates abnormally
- the channel initiator is started, for channels that were owned by other queue managers
- the channel initiator is started, for channels that were owned by itself

System action

The recovery process is terminated; some channels might have been recovered, while others have not.

System programmer response

Refer to API completion and reason codes for information about *mqrc* (*mqrc-text* provides the MQRC in textual form), and resolve the error. Any channels that were not recovered will be recovered when the recovery process next runs; alternatively, they can be restarted manually.

CSQM056E

csect-name mqapi-call failed for queue *q-name*, MQRC=*mqrc (mqrc-text)*

Severity
8

Explanation

The indicated IBM MQ API call for the named queue, failed for the specified reason, which might be an IBM MQ reason code (MQRC_) or a signal completion code (MQEC_).

System action

If the queue is SYSTEM.ADMIN.CONFIG.EVENT or SYSTEM.ADMIN.COMMAND.EVENT, processing continues but events are not generated; message CSQM071E follows to show how many event messages have not been generated since the problem first occurred. These messages are generated on the first occurrence of the problem, and at intervals thereafter while the problem persists.

Depending on the queue involved and the type of error, it might continue processing, try the request again at regular intervals until the error is corrected, or terminate.

System programmer response

See the API completion and reason codes for information about IBM MQ reason codes. For information about signal completion codes, see Signaling. Correct the problem with the queue, or use the ALTER QMGR command to disable the events.

CSQM057E

csect-name MQPUT of trigger message failed for queue *q-name,* MQRC=*mqrc (mqrc-text)*

Severity
8

Explanation

The queue manager could not deliver a trigger message to the indicated initiation queue for the specified IBM MQ reason code (MQRC_).

System action

The queue manager attempts to put the trigger message on to the dead-letter queue if one has been defined.

System programmer response

Refer to API completion and reason codes for information about IBM MQ reason codes, and what action to take to correct the problem with the initiation queue.

CSQM058E

csect-name Unable to start channel *channel-name*

Severity
8

Explanation

An attempt was made to start cluster channel *channel-name* because a message was placed on the SYSTEM.CLUSTER.TRANSMIT.QUEUE. If the channel could not be started because of an internal queuing error this message is preceded by CSQM056E. This message is also issued if the queue manager encounters a storage shortage.

System action

The message remains queued on the SYSTEM.CLUSTER.TRANSMIT.QUEUE queue and the original MQPUT completes successfully. If the cluster channel is not already running it is not automatically started.

System programmer response

If required, manually start the channel using the START CHANNEL command. Stopping and restarting the Channel Initiator or the Queue Manager, or placing another message on the transmission queue for this cluster destination triggers another START request.

If message CSQM056E is issued because of an internal queuing error, action might be needed to ensure that future start channel requests can be processed correctly.

If there is a lack of storage and the problem persists, you might need to increase the region size used by your queue manager, or you might need to reduce the number of jobs running in your system.

CSQM059E

csect-name Queue *q-name* has incorrect attributes

Severity
8

Explanation

The named queue, used by the intra-group queuing (IGQ) agent, has incorrect attributes. For example, SYSTEM.QSG.TRANSMIT.QUEUE must have attributes USAGE(XMITQ), INDXTYPE(CORRELID), QSGDISP(SHARED).

System action

The IGQ agent retries at regular intervals until the error is corrected.

System programmer response

Redefine the queue with the correct attributes.

CSQM060E

csect-name Cluster cache is full

Severity
8

Explanation

No more space is available in the cluster cache area.

System action

The application call that resulted in the need for more space will fail with MQRC_CLUSTER_RESOURCE_ERROR. Processing continues, and existing users of clustering will be unaffected unless their actions are such as to need more cluster cache space.

System programmer response

The problem may be temporary. If it persists, the queue manager must be restarted; this will cause more space to be allocated for the cluster cache area.

Consider changing the cluster cache type system parameter CLCACHE to dynamic, so that more space for the cache will be obtained automatically as required. (If you are using a cluster workload exit, ensure that it supports a dynamic cluster cache.) For information about the system parameters for the CSQ6SYSP macro, see Using CSQ6SYSP.

CSQM061E

csect-name Cluster workload exit *exit-name* does not support dynamic cache

Severity
8

Explanation

In response to the initialization call (using ExitReason MQXR_INIT), the cluster workload exit returned the value MQCLCT_STATIC in the ExitResponse2 field, indicating that it does not support a dynamic cluster cache.

System action

The cluster workload exit is suppressed.

System programmer response

Either change the cluster cache type system parameter CLCACHE to static, or rewrite the exit to be compatible with a dynamic cache. For information about the system parameters for the CSQ6SYSP macro, see Using CSQ6SYSP.

CSQM062I

csect-name INDXTYPE(*index-type*) not allowed for shared transmission queue *shared-xmitq*

Severity
4

Explanation

A shared transmission queue is a queue that is defined with both USAGE(XMITQ) and QSGDISP(SHARED). To support recovery of messages that are in-doubt after a channel failure, the index type (INDXTYPE) for shared transmission queues must be either NONE or MSGID.

System action

Processing continues.

System programmer response

Modify the INDXTYPE attribute for the shared transmission queue to NONE or MSGID.

CSQM063E

csect-name Specified dead-letter queue name is unacceptable

Severity
4

Explanation

The intra-group queuing (IGQ) agent has attempted to put a persistent message on the dead-letter queue that is defined to the queue manager. The dead-letter queue specified is either SYSTEM.QSG.TRANSMIT.QUEUE or there is no dead-letter queue name specified.

System action

The put of the message to the dead-letter queue does not take place, the get of the message from the SYSTEM.QSG.TRANSMIT.QUEUE is backed out and the intra-group queuing (IGQ) agent goes into retry.

System programmer response

Ensure the queue manager has a dead-letter queue defined which is neither blank nor SYSTEM.QSG.TRANSMIT.QUEUE. Examine the message to determine the reason for its placement on the dead-letter queue.

CSQM064I

csect-name Intra-group queuing agent put messages to dead-letter queue

Severity
4

Explanation

The intra-group queuing (IGQ) agent was unable to deliver some messages to the required destination queue, so has put them on the dead-letter queue.

System action

Processing continues.

System programmer response

Examine the contents of the dead-letter queue. Each message is contained in a structure that describes why the message was put to the queue, and to where it was originally addressed.

CSQM065E

csect-name mqapi-call failed, MQRC=*mqrc (mqrc-text)*

Severity
8

Explanation

The indicated MQ API call failed for the specified reason, which is an MQ reason code *mqrc* (mqrc-text provides the MQRC in textual form).

System action

It is the intra-group queuing (IGQ) agent that issued the call; it was unable to commit or backout a batch of messages for the specified reason. Depending on the type of error, it may retry the request at regular intervals until the error is corrected, or terminate.

System programmer response

Refer to API completion and reason codes for information about MQ reason codes. Correct the problem if required.

CSQM067E

csect-name Intra-group queuing agent ended abnormally. Restarting

Severity
8

Explanation

The intra-group queuing (IGQ) agent has ended abnormally because a severe error occurred, as reported in the preceding messages.

System action

The IGQ agent attempts to restart a number of times. If it fails persistently, it terminates.

System programmer response

Investigate the reason for the abnormal termination, as reported in the preceding messages.

CSQM070E

csect-name Queue *q-name* available again, *n* events not generated

Severity
4

Explanation

An earlier problem with putting messages on the configuration or command event queue has been corrected. *n* is the number of event messages that have not been generated since the problem first occurred.

System action

Processing continues and event messages for that queue will be generated again.

System programmer response

If the queue is SYSTEM.ADMIN.CONFIG.EVENT, and complete configuration information is required, use the REFRESH QMGR TYPE(CONFIGEV) command to generate events to replace those that were not generated; specify the INCLINT parameter to cover the period when the problem was occurring.

If the queue is SYSTEM.ADMIN.COMMAND.EVENT, a limited number of the missed event messages may be recovered automatically, as reported by message CSQM072I.

CSQM071E

csect-name Queue *q-name* unavailable, *n* events not generated

Severity
8

Explanation

There was an error putting a message on the configuration or command event queue, as reported in the preceding CSQM056E message; *n* is the number of event messages that have not been generated since the problem first occurred.

System action

Processing continues but event messages for that queue are not generated. This message is issued on the first occurrence of the problem, and at intervals thereafter while the problem persists.

System programmer response

Correct the problem with the event queue, or use the ALTER QMGR command to set the CONFIGEV or CMDEV attribute to DISABLED if events are not required.

CSQM072I

csect-name Queue *q-name*, *n* events recovered

Severity
0

Explanation

An earlier problem with putting messages on the command event queue has been corrected. *n* event messages that were not generated have been automatically recovered and generated.

Only a limited number of the missed event messages can be recovered in this way. If *n* is less than the value reported in message CSQM070E, the remaining event messages are lost, and there is no way to recover them.

System action

Processing continues.

CSQM073I

csect-name Loading of durable subscribers started

Severity
0

Explanation

Information about the durable subscribers on a queue manager is stored on the SYSTEM.DURABLE.SUBSCRIBER.QUEUE queue. During the restart of the queue manager the durable subscriptions are remade on the queue manager.

System action

Processing continues.

CSQM074I

csect-name Loading of durable subscribers finished

Severity
0

Explanation

The queue manager has finished reloading all of the durable subscribers.

System action

Processing continues.

CSQM075I

csect-name Consolidation of durable subscribers started

Severity
0

Explanation

Information about the durable subscribers on a queue manager is stored on the SYSTEM.DURABLE.SUBSCRIBER.QUEUE queue. To aid in restart processing and to speed up the time it takes to reload all of the durable subscribers, these messages are consolidated into fewer messages.

System action

Processing continues.

CSQM076I

csect-name Consolidation of durable subscribers finished

Severity
0

Explanation

The queue manager has finished consolidating the messages on the SYSTEM.DURABLE.SUBSCRIBER.QUEUE queue. The processing might be restarted at a later stage if there is a change in the number of durable subscribers.

System action

Processing continues

CSQM077I

csect-name PUBLISH/SUBSCRIBE ENGINE HAS SHUTDOWN

Severity

0

Explanation

The publish/subscribe engine has been shutdown.

System action

The publish/subscribe engine has shutdown.

System programmer response

No action is required if the queue manager is stopping. If the publish/subscribe engine has shutdown because you have disabled it, updating the PSMODE queue manager attribute from the value DISABLED will restart it.

CSQM078E

csect-name Unable to create thread structures for connection-type *connection* from *jobname*, insufficient ACE storage

Severity

8

Explanation

jobname attempted to create a new connection to IBM MQ as the result of issuing the first IBM MQ API call on a new thread. The connection-type is likely to be RRSBATCH.

There was insufficient common storage available to build the control blocks to represent the connection and the connect attempt failed.

There might be a system wide ECSA shortage, or the storage available for creating new queue manager connections might be limited by the ACELIM system parameter.

This message can be seen for CICS and the channel initiator, as well as for RRS applications; for example, Db2 stored procedures and WebSphere Application Server.

System action

IBM MQ API request fails with return code MQRC_STORAGE_NOT_AVAILABLE 2071

Queue manager processing continues

CSQM079I

csect-name Policy access attempt rejected due to incompatible AMS version, jobname *jobname*

Severity

4

Explanation

An incompatible version of Advanced Message Security (AMS), identified by *jobname*, attempted to open the policy queue, SYSTEM.PROTECTION.POLICY.QUEUE.

System action

The request to open the policy queue is rejected.

System programmer response

Update the incompatible version of AMS so it does not attempt to connect to the queue manager. From version 8.0, AMS is provided as an integrated feature of IBM MQ for z/OS. For information about

how to configure AMS as an integrated feature, see IBM WebSphere MQ Advanced Message Security for z/OS.

CSQM084I

csect-name COMMAND INHIBITED DURING RESTART/TERMINATION

Severity
8

Explanation

A command that will affect a recoverable object was requested either too early in queue manager startup, or too late in termination.

The usual reason for receiving this message is that some prohibited command was issued in the initialization input data set CSQINP1.

System action

Message CSQM085I is also issued and the command is ignored.

System programmer response

Wait until the queue manager is in a state where it is possible to reissue the prohibited commands. If appropriate, remove the command from CSQINP1, and place it in CSQINP2, to ensure that this problem does not recur.

CSQM085I

csect-name ABNORMAL COMPLETION

Severity
8

Explanation

This message is issued with message CSQM084I, and indicates that the command requested has not been actioned.

System action

The command is not actioned.

System programmer response

Wait until the queue manager is in a state where it is possible to use the prohibited commands.

CSQM086E

QUEUE MANAGER CREATE ERROR, CODE=*reason-code*, RESTART UNSUCCESSFUL

Severity
8

Explanation

During restart, the creation of the queue manager object has failed. The reason code is of the form '00D44xxx'.

System action

The queue manager fails to restart.

System programmer response

See "Message manager codes (X'D4')" on page 1006 for an explanation of the reason code, and what action to take. Reissue the START QMGR command to restart the queue manager. If the error persists note this reason code, and contact your IBM support center.

CSQM090E

csect-name FAILURE REASON CODE *reason-code*

Severity

8

Explanation

A command has failed. The reason code is of the form '00D44xxx'. This message is accompanied by one or more other more specific messages, which indicate the reason for the failure.

System action

The command is ignored.

System programmer response

See the explanations of the accompanying messages for more information. See "Message manager codes (X'D4')" on page 1006 for an explanation of the reason code, and what action to take. If the reason code is not one of those listed, make a note of it and contact your IBM support center.

CSQM091E

csect-name FAILURE MQRC=*mqrc (mqrc-text)*

Severity

8

Explanation

A command has failed. The reason code is an IBM MQ reason code. This message is accompanied by one or more other more specific messages, which indicate the reason for the failure.

System action

The command is ignored.

System programmer response

See the explanations of the accompanying messages for more information. Refer to API completion and reason codes for an explanation of *mqrc*, (*mqrc-text* provides the MQRC in textual form), and what action to take.

CSQM092I

csect-name keyword(*value*) VALUE INVALID OR OUT OF RANGE

Severity

8

Explanation

Either:

- A keyword was entered that takes a bounded numeric value but the value specified is outside the bounds.
- A keyword was entered that takes a pair of numeric values defining a range, but only one value is specified or the values are not in ascending order.

System action

The command is ignored.

System programmer response

Reissue the command with the parameter specified correctly. For more information about the command, see MQSC commands.

CSQM093I

csect-name keyword(value) NAME CONTAINS INVALID CHARACTERS

Severity

8

Explanation

A name was specified that contains one or more invalid characters. See MQSC commands for information about validation required for the name in question to correct this.

System action

The command is ignored.

System programmer response

Reissue the command with the correct name. For more information about the command, see MQSC commands.

CSQM094I

csect-name keyword(value) WAS NOT FOUND

Severity
   8

Explanation

A command was issued that refers to an object that does not exist. That is, no object could be found with the specified name and type (and subtype, for queues and channels) and with any disposition in the queue-sharing group.

System action

The command is ignored.

System programmer response

Check that you specified the correct name for the object, and the correct subtype (for queues and channels). If a queue-sharing group is in use, check that Db2 is available and not suspended. Define the object if necessary.

   Note:

   1. If you are dealing with a queue or channel object, an object of the same name, but of a different subtype, might already exist.
   2. Remember that the object might have recently been deleted by someone else, or from another queue manager in the queue-sharing group.

CSQM095I

csect-name keyword(value) existing-disposition ALREADY EXISTS

Severity
   8

Explanation

A DEFINE command was issued, but an object of that type with the specified name already exists, although it might not necessarily have the same subtype, or the same disposition in the queue-sharing group. (You cannot have a locally-defined object and a local copy of a group object with the same name; for local queues, you cannot have a shared queue with the same name as a queue with any other disposition.) Where applicable, *existing-disposition* identifies the QSG disposition of the existing object.

System action

The command is ignored.

System programmer response

Reissue the command with another name or with the REPLACE option, or use the existing object, as appropriate.

CSQM096I

csect-name keyword(value) NAME HAS INVALID LENGTH

Severity

8

Explanation

A name was specified that is of an incorrect length.

System action

The command is ignored.

System programmer response

Reissue the command with a name of the correct length. For more information about the command, see MQSC commands.

CSQM097I

csect-name keyword(value) NAME CANNOT BE COMPLETELY BLANK

Severity

8

Explanation

A name was specified that is blank. This is not allowed.

System action

The command is ignored.

System programmer response

Reissue the command with a non-blank name. For more information about the command, see MQSC commands.

CSQM098I

csect-name keyword(value) FIELD TOO LONG

Severity

8

Explanation

Either a numeric or character parameter was specified but it is too long, or (if *value* is blank) a list of character parameters was specified with a total length that is too long.

System action

The command is ignored.

System programmer response

Reissue the command with the correct field length. For more information about the command, see MQSC commands.

CSQM099I

csect-name keyword(value) NAME IN USE AS A DIFFERENT TYPE

Severity

8

Explanation

An object was specified as one particular subtype, but it already exists as another subtype, although it might not necessarily have the same disposition in the queue-sharing group. (You cannot have a locally-defined object and a local copy of a group object with the same name; for local queues, you cannot have a shared queue with the same name as a queue with any other disposition.)

System action

The command is ignored.

System programmer response

Reissue the command with the correct name and subtype. For more information about the command, see MQSC commands.

CSQM100I

csect-name keyword(value) VALUE INVALID OR OUT OF RANGE

Severity
8

Explanation

A value is invalid or out of range. This could be because:

- A keyword was entered that takes a series of character values, but the value specified is not one of them.
- A keyword was entered that takes a series of character values, but the value specified is not valid for the particular subtype of object.
- A keyword was entered that takes a bounded numeric value, but the value specified is outside the bounds.
- A keyword was entered that takes a character or hexadecimal value, but the value specified is invalid for that keyword.

System action

The command is ignored.

System programmer response

Reissue the command with the parameter specified correctly. For more information about the command, see MQSC commands.

CSQM101I

csect-name keyword(value) IS CURRENTLY IN USE

Severity
8

Explanation

The object specified is in use. This could be because:

- It is open through the API.
- A trigger message is presently being written to it.
- It is in the process of being deleted.
- When it is a storage class, there is a queue defined as using the storage class, and there are messages currently on the queue.
- When it is a CF structure, there is a queue defined as using the CF structure, and there are messages currently on the queue or the queue is open.
- When altering the index type of a queue, the necessary conditions regarding messages and uncommitted activity are not satisfied.
- When altering the default transmission queue, the old queue is currently being used as a transmission queue by default.
- Although the FORCE option was specified to overcome the object being open through the API, the object was created with a previous version of IBM MQ.
- There is no connection from the queue manager to the structure.

System action

The command is ignored.

System programmer response

Either:

- Wait until the object has been closed or deleted.

    Note: MCAs for receiver channels, or the intra-group queuing (IGQ) agent, can keep the destination queues open for a while even when messages are not being transmitted, and so such queues might appear to be in use.

- Wait until all the queues that use a storage class are empty
- Wait until the queue is empty
- Wait until use of the queue as a default transmission queue has ended

It is not possible to use the FORCE option of the ALTER command to overcome the situations that cause this message.

For more information about the command, see MQSC commands.

CSQM102E

csect-name SSLCIPH *sslciph* IS A WEAK OR BROKEN CIPHERSPEC

Severity
8

Explanation

A channel could not be defined or altered, because the specified SSLCIPH parameter contains a CipherSpec that is potentially insecure.

System action

The named channel is not defined or altered

System programmer response

Examine the CipherSpec specified in the SSLCIPH parameter and consider using a more secure CipherSpec.

If you want to re-enable the use of weak CipherSpecs, you can do so by adding a dummy Data Definition (DD) statement named CSQWEAK to the channel initiator JCL. For example:

```
//CSQWEAK DD DUMMY
```

If you want to re-enable the disabled SSLv3 support in IBM MQ, you can do so by adding a dummy Data Definition (DD) statement named CSQXSSL3 to the channel initiator JCL. For example:

```
//CSQXSSL3 DD DUMMY
```

You need to specify both of the preceding dummy DD statements, if you want to enable a weak SSLv3-based CipherSpec.

There are alternative mechanisms that can be used to forcibly re-enable weak CipherSpecs, and SSLv3 support,if the Data Definition change is unsuitable. Contact IBM Service for further information.

⚠️ **Attention:** Re-enabling CipherSpecs in this manner leaves systems exposed to possible security problems. You should use CipherSpecs that utilize only the TLS protocol, rather than SSLv3.

CSQM103I

csect-name keyword(value) QSGDISP(*disposition*) HAS MESSAGES ASSOCIATED WITH IT

Severity

8

Explanation

A local queue specified for deletion has messages associated with it, and the DELETE request did not include the PURGE option.

System action

The command is ignored.

System programmer response

Either delete the local queue when it is empty, or reissue the request specifying the PURGE option. If the queue is a local copy of a group object, you must issue the request specifying PURGE explicitly for the local copy; specifying PURGE on the request to delete the group object has no effect.

CSQM104I

csect-name keyword(value) FLAGGED FOR DEFERRED DELETION

Severity

8

Explanation

A local dynamic queue specified on a DEFINE, ALTER, or DELETE request has been flagged for deferred deletion because it was found to be in use at the time of deletion.

System action

The queue is no longer available to new users, and will be deleted when all existing users of it have relinquished access.

CSQM105I

csect-name 'keyword' VALUE IS SAME AS QALIAS NAME

Severity

8

Explanation

An attempt was made to DEFINE or ALTER an alias queue so that the queue itself was named on the TARGQ keyword. Unless the queue is a cluster queue, this is not allowed because an alias queue can only resolve to a local or remote queue.

System action

The command is ignored.

System programmer response

Reissue the command with a different name for the TARGQ keyword.

CSQM106I

csect-name DEFXMITQ(*q-name*) IS NOT ALLOWED

Severity

8

Explanation

The specified queue is not allowed to be used as the default transmission queue because it is reserved for use exclusively by clustering.

System action

The command is ignored.

System programmer response

Reissue the command with a different DEFXMITQ name.

CSQM107I

csect-name STGCLASS ACTIVE OR QUEUE IN USE

Severity
8

Explanation

A request to ALTER or DEFINE REPLACE a local queue involving a change to the STGCLASS field is not allowed because there are messages on the queue, or other threads have the queue open.

System action

The command is ignored.

System programmer response

If there are messages on the queue, you must remove them before changing the storage class.

Note: If you remove all the messages from the queue, there might be a short delay before the command can be processed successfully.

If other threads have the queue open, wait until they have closed the queue before reissuing the command.

CSQM108I

csect-name keyword(value) NOT ALLOWED, INCOMPATIBLE NAME AND TYPE

Severity
8

Explanation

An attempt was made to issue a DEFINE command on a reserved object name, using an incorrect object type or subtype. The object is only allowed to be of the predetermined type listed in this topic:

Type	Object
Any Queue	SYSTEM.ADMIN.ACTIVITY.QUEUE SYSTEM.ADMIN.CHANNEL.EVENT SYSTEM.ADMIN.COMMAND.EVENT SYSTEM.ADMIN.CONFIG.EVENT SYSTEM.ADMIN.PERFM.EVENT SYSTEM.ADMIN.QMGR.EVENT SYSTEM.ADMIN.PUBSUB.EVENT SYSTEM.ADMIN.TRACE.ROUTE.QUEUE
Alias queue	SYSTEM.DEFAULT.ALIAS.QUEUE
Alias or local queue	SYSTEM.ADMIN.COMMAND.QUEUE SYSTEM.COMMAND.INPUT
Local queue	SYSTEM.CHANNEL.INITQ SYSTEM.CHANNEL.SYNCQ SYSTEM.CHLAUTH.DATA.QUEUE SYSTEM.CLUSTER.COMMAND.QUEUE SYSTEM.CLUSTER.REPOSITORY.QUEUE SYSTEM.CLUSTER.TRANSMIT.QUEUE SYSTEM.DEFAULT.LOCAL.QUEUE SYSTEM.QSG.CHANNEL.SYNCQ SYSTEM.QSG.TRANSMIT.QUEUE
Model queue	SYSTEM.COMMAND.REPLY.MODEL SYSTEM.DEFAULT.MODEL.QUEUE SYSTEM.JMS.TEMPQ.MODEL SYSTEM.MQEXPLORER.REPLY.MODEL
Remote queue	SYSTEM.DEFAULT.REMOTE.QUEUE

Type	Object
Cluster-sender channel	SYSTEM.DEF.CLUSSDR
Cluster-receiver channel	SYSTEM.DEF.CLUSRCVR
Sender channel	SYSTEM.DEF.SENDER
Server channel	SYSTEM.DEF.SERVER
Receiver channel	SYSTEM.DEF.RECEIVER
Requester channel	SYSTEM.DEF.REQUESTER
Client-connection channel	SYSTEM.DEF.CLNTCONN
Server-connection channel	SYSTEM.ADMIN.SVRCONN SYSTEM.DEF.SVRCONN
Authentication information	SYSTEM.DEFAULT.AUTHINFO.CRLLDAP
Namelist	SYSTEM.DEFAULT.NAMELIST
Process	SYSTEM.DEFAULT.PROCESS
Storage class	SYSTEMST

System action

The command is ignored.

System programmer response

Ensure that reserved objects are defined with the correct object type or subtype.

CSQM109E

csect-name DYNAMIC QUEUE *value* NOT DELETED, MQRC=*mqrc (mqrc-text)*

Severity
8

Explanation

A dynamic queue could not be deleted during normal close processing, thread termination, or the end of queue manager restart, because an error occurred whilst attempting to delete it. *mqrc* gives the reason code for the error.

System action

The named dynamic queue is not deleted.

System programmer response

Refer to API completion and reason codes for information about the reason code to determine why the queue could not be deleted, and take the appropriate action as necessary. The most likely reason codes are:

- MQRC_OBJECT_IN_USE
- MQRC_PAGESET_ERROR
- MQRC_Q_NOT_EMPTY

CSQM110I

csect-name keyword(value) QSGDISP(*disposition*) HAS INCOMPLETE UNITS OF RECOVERY

Severity
8

Explanation

A command was issued that refers to a local queue that has incomplete units of recovery outstanding for it.

System action

The command is ignored.

System programmer response

Wait until all units of recovery for this queue are complete before attempting to issue the command again.

CSQM111E

csect-name COULD NOT PUT TO THE DEAD QUEUE, MQRC=*mqrc (mqrc-text)*

Severity
4

Explanation

An attempt to put a message to the dead letter queue was unsuccessful. *mqrc* gives the reason code for the error.

System action

Processing continues.

System programmer response

Refer to API completion and reason codes for information about *mqrc* (*mqrc-text* provides the MQRC in textual form) to determine the cause of the problem.

CSQM112E

csect-name ERROR ACCESSING *keyword(value)*

Severity
4

Explanation

While processing a command for an object, object information could not be accessed. This may be because of an error on page set zero, or in the coupling facility information, or because a coupling facility structure has failed, or because Db2 is not available or is suspended. This message is issued with message CSQM090E or CSQM091E, which include a reason code that gives more information about the error.

System action

The command is ignored.

System programmer response

Check for error messages on the console log that might relate to the problem. Verify that page set zero is set up correctly; for information about this, see Page sets. If a queue-sharing group is in use, check whether the coupling facility structure has failed and check that Db2 is available and not suspended. If the accompanying message is CSQM091E, refer to API completion and reason codes for an explanation of the *mqrc* in that message, and what action to take.

CSQM113E

csect-name NO SPACE FOR *keyword(value)* QSGDISP(*disposition*)

Severity
8

Explanation

A command failed because page set zero is full, or because the application structure is full, or because no more application structures are available in the coupling facility (the limit is 63).

System action

The command is not actioned.

System programmer response

Do one of the following, depending on the cause of the error:

- Increase the size of page set zero or the application structure. Refer to Managing page sets for information about how to do this.
- Reduce the number of application structures you are using.

CSQM114E

csect-name keyword(value) EXCEEDED LOCAL QUEUE LIMIT

Severity
8

Explanation

A command failed because no more local queues could be defined. There is an implementation limit of 524 287 for the total number of local queues that can exist. For shared queues, there is a limit of 512 queues in a single coupling facility structure.

System action

The command is not actioned.

System programmer response

Delete any existing queues that are no longer required.

CSQM115I

csect-name keyword(value) IS CURRENTLY IN USE, ALTER WITH FORCE NEEDED

Severity
8

Explanation

The object specified is in use. This could be because:

- It is open through the API.
- When altering the USAGE attribute of a local queue, there are messages currently on the queue.
- When altering the default transmission queue, the old queue is currently being used as a transmission queue by default.

System action

The command is ignored.

System programmer response

Either:

- Wait until the object has been closed or deleted.

  Note: MCAs for receiver channels, or the intra-group queuing (IGQ) agent, can keep the destination queues open for a while even when messages are not being transmitted, and so such queues might appear to be in use.
- Wait until the queue is emptied.
- Wait until use of the queue as a default transmission queue has ended.

- Use the ALTER command with the FORCE option.

    Note: Any subsequent API calls referencing the object will fail with a reason code of MQRC_OBJECT_CHANGED.

    For more information about the command, see [MQSC commands](#).

CSQM117E

csect-name ERROR ACCESSING *keyword(value)* QSGDISP(*disposition*)

Severity
4

Explanation

While processing a command for an object, object information could not be accessed. This may be because of an error on page set zero, or in the coupling facility information, or because a coupling facility structure has failed, or because Db2 is not available or is suspended. This message is issued with message CSQM090E or CSQM091E, which include a reason code that gives more information about the error.

System action

The command is ignored.

System programmer response

Check for error messages on the console log that might relate to the problem. If *disposition* is QMGR, COPY, or PRIVATE, verify that page set zero is set up correctly; for information about this, see [Page sets](#). If *disposition* is GROUP or SHARED, check whether the coupling facility structure has failed and check that Db2 is available and is not suspended. If the accompanying message is CSQM091E, see [API completion and reason codes](#) for an explanation of the *mqrc* in that message, and what action to take.

CSQM118I

csect-name keyword(value) QSGDISP(*disposition*) LEVEL IS INCOMPATIBLE

Explanation

The definition level of the specified object is incompatible with that of the queue manager or other members of the queue-sharing group.

System action

Processing of the command is terminated.

System programmer response

For information about migration and compatibility between releases, see [Migrating](#).

CSQM119I
csect-name keyword(value) LEVEL IS INCOMPATIBLE

Explanation

The definition level of the specified object is incompatible with that of the queue manager or other members of the queue-sharing group.

System action

Processing of the command is terminated.

System programmer response

For information about migration and compatibility between releases, see [Migrating](#).

CSQM120I

csect-name keyword(value) NOT ALLOWED FOR SHARED QUEUE

Severity

8

Explanation

The specified value for the object name or attribute is not allowed for a local queue with a disposition that is shared or a model queue used to create a dynamic queue that is shared.

System action

Processing of the command is terminated.

System programmer response

Reissue the command correctly.

CSQM121I

csect-name keyword(value) NOT ALLOWED, NOT IN QUEUE-SHARING GROUP

Severity

8

Explanation

The specified value for the attribute requires a queue-sharing group, but the queue manager is not in a group.

System action

Processing of the command is terminated.

System programmer response

Reissue the command correctly.

CSQM122I

csect-name '*verb-name object*' COMPLETED FOR QSGDISP(*disposition*)

Severity

0

Explanation

Processing for the specified command that refers to an object with the indicated disposition has completed successfully.

System action

A command is generated specifying CMDSCOPE(*) to perform further processing on all queue managers in the queue-sharing group. For example, if *disposition* is GROUP, the corresponding processing must be performed for local copies of the group object.

CSQM123I

csect-name '*keyword*' VALUE CANNOT BE CHANGED

Severity

8

Explanation

The value for the specified attribute cannot be changed.

System action

Processing of the command is terminated.

System programmer response

To change the attribute, the object must be deleted and then redefined with the new value.

CSQM124I

csect-name keyword(value) ALLOWED ONLY WITH QSGDISP(*disposition*)

Severity
8

Explanation

The specified value for the attribute is allowed only for an object that has the indicated disposition.

System action

Processing of the command is terminated.

System programmer response

Reissue the command correctly.

CSQM125I

csect-name keyword(value) QSGDISP(*disposition*) WAS NOT FOUND

Severity
8

Explanation

A command was issued that refers to an object that does not exist. That is, no object could be found with the specified name and type (and subtype, for queues and channels) and disposition in the queue-sharing group.

System action

The command is ignored.

System programmer response

Check that you specified the correct name for the object, and the correct subtype (for queues and channels) or channel definition table (for deleting channels). If *disposition* is GROUP or SHARED, check that Db2 is available and is not suspended. Define the object if necessary.

Note:

1. An object of the same name and type, but of a different disposition, might already exist.
2. If you are dealing with a queue or channel object, an object of the same name, but of a different subtype, might already exist.
3. Remember that the object might have recently been deleted by someone else, or from another queue manager in the queue-sharing group.

CSQM126I

csect-name '*keyword*' ONLY APPLICABLE TO LU62 PROTOCOL

Severity
8

Explanation

The named keyword can only be specified when TRPTYPE(LU62) is specified.

System action

Processing of the command is terminated.

System programmer response

Reissue the command without the named keyword.

CSQM127I

csect-name keyword(value) IS EMPTY OR WRONG TYPE

Severity

8

Explanation

A namelist used to specify a list of clusters has no names in it or does not have type CLUSTER or NONE.

System action

Processing of the command is terminated.

System programmer response

Reissue the command specifying a namelist that is not empty and has type CLUSTER or NONE.

CSQM128E

csect-name MQPUT FAILED FOR QUEUE *q-name*, MQRC=*mqrc (mqrc-text)*

Severity

8

Explanation

During the processing of a command, an attempt to put a message to the named queue failed for the specified reason.

System action

In general, the command is not actioned. If the command was REFRESH QMGR for configuration events, it might be partially completed as indicated by the preceding CSQM169I messages.

System programmer response

Refer to API completion and reason codes for information about *mqrc* (*mqrc-text* provides the MQRC in textual form). If *mqrc* is 2003, the message could not be committed.

CSQM129I

csect-name keyword(value) HAS WRONG CHANNEL TYPE

Severity

8

Explanation

The command (or the command with the particular disposition) cannot be used with the named channel because it cannot be used for channels of that type.

System action

The command is not actioned.

System programmer response

Check that the correct channel name and disposition was specified on the command. For more information about the command, see MQSC commands.

CSQM130I

csect-name CLUSTER REQUEST QUEUED

Severity

0

Explanation

Initial processing for a command completed successfully. The command requires further action by the cluster repository manager, for which a request was queued.

This message is followed by message CSQ9022I to indicate that the command has completed successfully, in that a request has been sent. It does **not** indicate that the cluster request has

completed successfully. Such requests are processed asynchronously by the cluster repository manager; any errors are reported to the z/OS console, not to the command issuer.

System action

A request was queued for the cluster repository manager, which will process it asynchronously.

CSQM131I

csect-name CHANNEL INITIATOR NOT ACTIVE, CLUSTER AND CHANNEL COMMANDS INHIBITED

Severity
8

Explanation

A command was issued that required the channel initiator to be started.

System action

The command is not actioned.

System programmer response

Issue the START CHINIT command to start the channel initiator, and reissue the command.

CSQM132I

csect-name CHANNEL INITIATOR ALREADY ACTIVE

Severity
8

Explanation

The START CHINIT command was issued but the channel initiator is already active.

System action

The command is not actioned.

CSQM133I

csect-name UNABLE TO START CHANNEL INITIATOR

Severity
8

Explanation

A START CHINIT command was issued but the channel initiator could not be started.

This could be for one of the following reasons:

- The system did not allow the channel initiator address space to be created at this time due to a heavy system workload
- There was not enough storage to start the channel initiator address space
- The system tried to obtain more address spaces than the maximum number supported
- The queue manager was quiescing or shutting down.

System action

The command is not actioned.

System programmer response

Reissue the command when the system workload is reduced and when the queue manager is not shutting down.

CSQM134I

csect-name command keyword(value) COMMAND ACCEPTED

Severity

0

Explanation

Initial processing for a command has completed successfully. The command requires further action by the channel initiator, for which a request has been queued. Messages reporting the success or otherwise of the action will be sent to the command issuer subsequently.

System action

A request was queued for the channel initiator. Further messages will be produced when the command has been completed.

CSQM135I

csect-name NO CHANNEL INITIATOR AVAILABLE

Severity

8

Explanation

A command was issued for a shared channel, but there was no suitable channel initiator available for any active queue manager in the queue-sharing group. This could be because:

• no channel initiators are running
• the channel initiators that are running are too busy to allow any channel, or a channel of the particular type, to be started

System action

The command is not actioned.

System programmer response

Start a new channel initiator (on an active queue manager where there is no channel initiator running), or try again when there are fewer channels running.

CSQM136I
COMMAND NOT ALLOWED, COMMAND SERVER UNAVAILABLE

Explanation

A command for the channel initiator was entered, but the command server is not running and not enabled so the command cannot be processed.

System action

The command is not actioned.

System programmer response

Use the START CMDSERV command to start the command server, and reissue the command.

CSQM137I

csect-name command keyword COMMAND ACCEPTED

Severity

0

Explanation

Initial processing for a command has completed successfully. The command requires further action by the channel initiator, for which a request has been queued. Messages reporting the success or otherwise of the action will be sent to the command issuer subsequently.

System action

A request was queued for the channel initiator. Further messages will be produced when the command has been completed.

CSQM138I

csect-name CHANNEL INITIATOR STARTING

Severity
0

Explanation

A START CHINIT command was issued and the channel initiator address space has been started successfully.

System action

Further messages will be produced when the channel initiator itself has started.

CSQM139I

csect-name INDXTYPE(MSGTOKEN) NOT ALLOWED FOR TEMPORARY DYNAMIC QUEUE

Severity
8

Explanation

An attempt was made to define or alter a temporary-dynamic queue from which messages could be retrieved using message tokens. This combination is not allowed.

System action

Processing of the command is terminated.

System programmer response

Reissue the command with correct values.

CSQM140I

csect-name '*keyword*' NOT ALLOWED WITH TRPTYPE(*value*)

Severity
8

Explanation

The named keyword cannot be used on a START LISTENER command for the transport type shown.

System action

The command is not actioned.

System programmer response

Reissue the command with the correct keywords.

CSQM141I

csect-name 'LUNAME' REQUIRED WITH TRPTYPE(LU62)

Severity
8

Explanation

A START LISTENER command was issued specifying TRPTYPE(LU62) but without the LUNAME keyword. The LUNAME keyword is required with TRPTYPE(LU62).

System action

The command is not actioned.

System programmer response

Reissue the command with the correct keywords.

CSQM142I

csect-name CLUSTER(*cluster-name*) REPOSITORY IS NOT ON THIS QUEUE MANAGER

Severity
8

Explanation

A RESET CLUSTER command was issued, but the queue manager does not provide a full repository management service for the specified cluster. That is, the REPOS attribute of the queue manager is not *cluster-name*, or the namelist specified by the REPOSNL attribute of the queue manager does not contain *cluster-name* or is not of type CLUSTER or NONE.

System action

Processing of the command is terminated.

System programmer response

Reissue the command with the correct values or on the correct queue manager.

CSQM143I

csect-name CLUSTER TOPICS INHIBITED DUE TO PSCLUS(DISABLED)

Severity
8

Explanation

An attempt was made to define a cluster topic when the PSCLUS queue manager attribute is set to DISABLED.

System action

Processing of the command is terminated.

System programmer response

If you wish to enable publish/subscribe clustering, alter the PSCLUS attribute on all queue managers in the cluster to ENABLED.

CSQM144I

csect-name keyword(value) CANNOT BE A CLUSTER QUEUE

Severity
8

Explanation

An attempt was made to define or alter a queue to make it part of a cluster. This is not allowed if the queue is dynamic or is one of the following reserved queues:

- SYSTEM.CHANNEL.INITQ
- SYSTEM.CHANNEL.SYNCQ
- SYSTEM.CLUSTER.COMMAND.QUEUE
- SYSTEM.CLUSTER.REPOSITORY.QUEUE
- SYSTEM.COMMAND.INPUT
- SYSTEM.QSG.CHANNEL.SYNCQ
- SYSTEM.QSG.TRANSMIT.QUEUE

System action

Processing of the command is terminated.

System programmer response

Reissue the command with the correct values.

CSQM145I

csect-name '*keyword*' VALUE REQUIRED FOR SHARED QUEUE

Severity
8

Explanation

A non-blank value must be specified for the named keyword for a local queue with a disposition that is shared or a model queue used to create a dynamic queue that is shared.

System action

Processing of the command is terminated.

System programmer response

Reissue the command with a value for the keyword added.

CSQM146I

csect-name keyword(value) VALUE IS REPEATED

Severity
8

Explanation

A keyword was entered that takes a list of values, and the named value appears more than once in the list.

System action

The command is ignored.

System programmer response

Reissue the command with the parameter specified correctly. For more information about the command, see MQSC commands.

CSQM147I

csect-name '*keyword1*' AND '*keyword2*' VALUES MUST BOTH BE BLANK OR NON-BLANK

Severity
8

Explanation

An attempt was made to define or alter an object so that it had a blank value for one of the specified keywords and a non-blank value for the other. Both of those values must either be blank or non-blank.

System action

Processing of the command is terminated.

System programmer response

Reissue the command with correct values.

CSQM148I

csect-name '*keyword*' NOT ALLOWED WITH TYPE '*value*'

Severity
8

Explanation

The named keyword cannot be specified for queues or channels of the type shown.

System action

Processing of the command is terminated.

System programmer response

Reissue the command without the named keyword.

CSQM149I

csect-name '*keyword*' REQUIRED WITH TYPE '*value*'

Severity
8

Explanation

The named keyword was not specified but is required for queues or channels of the type shown.

System action

Processing of the command is terminated.

System programmer response

Reissue the command with the named keyword added.

CSQM150I

csect-name '*keyword1*' AND '*keyword2*' VALUES ARE INCOMPATIBLE

Severity
8

Explanation

An attempt was made to define or alter an object so that it had incompatible values for the specified keywords.

System action

Processing of the command is terminated.

System programmer response

Reissue the command with correct values. For information about the restrictions on the values for the keywords, see MQSC commands.

CSQM151I

csect-name '*keyword1*' AND '*keyword2*' VALUES CANNOT BOTH BE NON-BLANK

Severity
8

Explanation

An attempt was made to define or alter an object so that it had non-blank values for both of the specified keywords. At most one of those values can be non-blank.

System action

Processing of the command is terminated.

System programmer response

Reissue the command with correct values.

CSQM152I

csect-name USAGE(XMITQ) NOT ALLOWED FOR CLUSTER QUEUE

Severity
8

Explanation

An attempt was made to define or alter a queue so that it was both a transmission queue and in a cluster. This is not allowed.

System action

Processing of the command is terminated.

System programmer response

Reissue the command with correct values.

CSQM153E

csect-name Db2 NOT AVAILABLE

Severity
8

Explanation

Because Db2 is not available or no longer available, the queue manager cannot handle the command for a CF structure or shared channel.

System action

Processing of the command is terminated.

System programmer response

Use the preceding messages on the z/OS console to investigate why Db2 is not available, and resume the connection or restart Db2 if necessary.

CSQM154E

csect-name ERROR ACCESSING Db2

Severity
8

Explanation

Because there was an error in accessing Db2, the queue manager cannot handle the command for a CF structure or shared channel.

System action

Processing of the command is terminated.

System programmer response

Resolve the error reported in the preceding messages.

CSQM155I

csect-name STATUS(STOPPED) NOT ALLOWED WITH QMNAME OR CONNAME

Severity
8

Explanation

An attempt was made to stop a channel using STATUS(STOPPED), but a queue manager name or connection name was also specified. This is not allowed.

System action

Processing of the command is terminated.

System programmer response

Reissue the command with correct values.

CSQM156I

csect-name INDXTYPE(GROUPID) NOT ALLOWED FOR *keyword(value)*

Severity
8

Explanation

An attempt was made to define or alter a queue with a reserved name so that it had an index type of GROUPID. This is not allowed.

System action

Processing of the command is terminated.

System programmer response

Reissue the command with correct values.

CSQM157E

csect-name NO SPACE FOR *keyword(value)*

Severity
8

Explanation

An IBM MQ DEFINE CFSTRUCT command failed because no more application structures are available in the coupling facility (the limit is 63).

System action

The command is not actioned.

System programmer response

Reduce the number of application structures you are using.

CSQM158I

csect-name RECOVER(YES) NOT ALLOWED WITH CFLEVEL(*value*)

Severity
8

Explanation

An attempt was made to define or alter a CF structure to support recovery, but the level of the CF structure was less than 3. This is not allowed.

System action

Processing of the command is terminated.

System programmer response

Reissue the command with correct values. You cannot alter the level of a CF structure; you must delete the structure and then redefine it.

CSQM159I

csect-name verb-name object(obj-name) NOT ALLOWED, INCOMPATIBLE QUEUE MANAGER CMDLEVELS

Severity
8

Explanation

An attempt was made to alter the CF level of a CF structure, or to delete the structure. This action requires that all queue managers in the queue-sharing group must have a certain command level. Some of the queue managers have a lower level.

System action

Processing of the command is terminated.

System programmer response

Ensure all the queue managers in the queue-sharing group have the appropriate command level. For information about restrictions on the command, see MQSC commands.

CSQM160I

csect-name keyword(value) IS NOT UNIQUE

Severity
  8

Explanation

A command was issued that refers to an object that exists with more that one disposition in the queue-sharing group, so the object to be used cannot be determined.

System action

The command is not executed.

System programmer response

Delete one of the objects.

CSQM161I

csect-name QUEUE ATTRIBUTES ARE INCOMPATIBLE

Severity
  8

Explanation

A MOVE QLOCAL command was issued, but the queues involved have different values for one or more of these attributes: DEFTYPE, HARDENBO, INDXTYPE, USAGE. Messages cannot be moved safely if these attributes differ.

System action

The command is not executed.

System programmer response

Check that the queue names have been entered correctly. Change the queue attributes as necessary.

CSQM162I

csect-name keyword(value) MAXDEPTH IS TOO SMALL

Severity
  8

Explanation

A MOVE QLOCAL command was issued, but the MAXDEPTH attribute value for the target queue is too small to allow all the messages to be moved.

System action

The command is not executed.

System programmer response

Change the MAXDEPTH value for the queue.

CSQM163I

csect-name ERROR USING *keyword(value)*, MQRC=*mqrc (mqrc-text)*

Severity
  8

Explanation

During the processing of a MOVE QLOCAL command, an attempt to open the named queue or to get or put a message for it failed for the specified reason. For example, a put to the target queue will fail if a message is too long.

System action

The command stops processing. If some messages have already been moved and committed, they will remain on the target queue; the rest of the messages will not be moved.

System programmer response

Refer to API completion and reason codes for information about *mqrc* (*mqrc-text* provides the MQRC in textual form), and take the appropriate action to resolve the problem.

CSQM164I

csect-name keyword(value) HAS MESSAGES ASSOCIATED WITH IT

Severity
8

Explanation

A MOVE QLOCAL command was issued specifying TYPE(MOVE), the target queue already has messages associated with it.

System action

The command is not executed.

System programmer response

Check that the queue name was entered correctly. Determine if it is safe to add messages to the queue, then reissue the command using the TYPE(ADD) option.

CSQM165I

csect-name n MESSAGES MOVED

Severity
0

Explanation

A MOVE QLOCAL command was issued, and moved the indicated number of messages.

If the command completed successfully and moved all the messages on the queue, this confirms the number moved. If an error occurred while moving the messages, this shows how many messages were successfully moved to the target queue and committed.

System action

Processing continues.

System programmer response

If the command did not complete successfully, as shown by the following CSQ9023E message, investigate the problem reported in the preceding messages.

CSQM166I

csect-name keyword(value) NOT AUTHORIZED

Severity
8

Explanation

You do not have proper authorization to use the command for the specified object.

System action

The command is not executed for that object.

System programmer response

Check that the object name was entered correctly. If required, arrange for someone who is authorized to use the object to issue the command for you, or get the necessary authority granted to you.

CSQM167I

csect-name PERFORMANCE EVENTS DISABLED

Severity
8

Explanation

A command was issued that required performance events to be enabled.

System action

The command is not executed.

System programmer response

Use the ALTER QMGR command to set the PERFMEV attribute to ENABLED if performance events are required.

CSQM168I

csect-name CONFIGURATION EVENTS DISABLED

Severity
8

Explanation

A command was issued that required configuration events to be enabled.

System action

The command is not executed.

System programmer response

Use the ALTER QMGR command to set the CONFIGEV attribute to ENABLED if configuration events are required.

CSQM169I

csect-name object-type OBJECTS: *m* FOUND, *n* EVENTS GENERATED

Severity
0

Explanation

A REFRESH QMGR command was issued for configuration events. *m* objects of the indicated type were found that matched the specified selection criteria (such as name or time of alteration), and *n* event messages were generated. The number of event messages might be less than the number of objects found because certain objects might be excluded, such as temporary dynamic queues or objects in the process of being deleted. It might also be less than the number of objects found if there was a problem with the event queue.

System action

Processing continues.

System programmer response

If *n* is less than *m*, but message CSQ9022I follows these messages to indicate that the command completed successfully, no action is needed. Otherwise, investigate the problem with the event queue as reported in the preceding messages.

CSQM170I

csect-name REFRESHING CONFIGURATION EVENTS SINCE *date time*

Severity
0

Explanation

A REFRESH QMGR command was issued for configuration events specifying a refresh interval with the INCLINT keyword. Event messages will be generated for all objects with an alteration date and time later than *date time* (provided they match any other specified selection criteria, such as name or type). However, event messages will not be generated for objects deleted after that time.

CSQM171I

csect-name CONFIGURATION EVENTS REFRESH NEEDED

Severity
0

Explanation

An ALTER QMGR command was issued that enables configuration events. Event messages need to be generated to ensure that the configuration information is complete and up to date.

System action

Processing continues.

System programmer response

If complete configuration information is required, do one of the following, as appropriate:

- If this is the first time that configuration events have been enabled, use the REFRESH QMGR TYPE(CONFIGEV) command to generate configuration events for **all** objects. If you have many objects, it may be preferable to use several such commands each with a different selection of objects, but such that all are included.

- Otherwise, use the REFRESH QMGR TYPE(CONFIGEV) command to generate events to replace those that were not generated while configuration events were disabled; specify the INCLINT parameter to cover this period.

CSQM172I

csect-name '*keyword*' NOT ALLOWED WITH TYPE(*value*)

Severity
8

Explanation

The named keyword cannot be specified with the TYPE value shown.

System action

Processing of the command is terminated.

System programmer response

Reissue the command without the named keyword.

CSQM173I

csect-name EXPIRED MESSAGE SCAN REQUESTED FOR *m* QUEUES

Severity

0

Explanation

A REFRESH QMGR command was issued for expired message scanning. *m* queues were found that matched the specified selection criteria.

System action

Processing continues.

CSQM174E

csect-name '*keyword*' is not allowed with CFLEVEL(*cflevel*) - this keyword requires CFLEVEL(5)

Severity

8

Explanation

An attempt was made to define or alter the value of a structure attribute related to SMDS, but the level of the structure was less than CFLEVEL(5). This is not allowed.

System action

Processing for the command is terminated.

System programmer response

Issue the command again with correct values. You cannot alter the level of a CF structure; you must delete the structure, and then define it again.

CSQM175E

csect-name '*keyword*' cannot be altered because a data set is currently active for this structure

Severity

8

Explanation

The keywords DSGROUP and DSBLOCK can only be altered before the first data set has been allocated for the structure. Once an SMDS data set has become active for this structure then these attribute values cannot be changed.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry and reissue the command correctly.

CSQM176E

csect-name SMDS cannot currently be reset to *keyword*(*value*)

Severity

8

Explanation

A **RESET SMDS** command requested a change of status which is not compatible with the existing status.

- The option **STATUS(FAILED)** is only allowed when the current status is **ACTIVE** or **RECOVERED** (or already **FAILED**, in which case the command has no effect).
- The option **STATUS(RECOVERED)** is only allowed when the current status is **FAILED** (or already **RECOVERED**).

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command correctly.

CSQM177I

csect-name '*keyword*' NOT ALLOWED WITH ACTION '*value*'

Severity
8

Explanation

The named keyword cannot be specified for channel authentication settings of the action shown.

System action

Processing for the command is terminated.

System programmer response

Reissue the command without the named keyword.

CSQM178I

csect-name ACTION NOT ALLOWED FOR CHANNEL *channel-type*(*channel-name*)

Severity
8

Explanation

The MATCH(RUNCHECK) action that you requested cannot be performed on the channel with the specified parameters. This may be because either: -

- The channel is a SVRCONN and the QMNAME parameter was supplied.
- The channel is not a SVRCONN and the CLNTUSER parameter was supplied

System action

Processing of the command is terminated.

System programmer response

Either correct the specified parameters or alter the channel to the appropriate channel type and then reissue the command.

CSQM179I

csect-name CHANNEL WILL RUN USING MCAUSER(*userid*)

Severity
0

Explanation

No matching channel authentication (CHLAUTH) records were found that match the given fields.

Note:

1. The returned MCAUSER value does not take into account possible actions by a channel security exit.
2. Channel authentication rules that match the host name apply only if the queue manager REVDNS attribute is enabled and the DNS server returns a valid host name for the IP address.

CSQM181I

csect-name INSUFFICIENT STORAGE TO COMPLETE COMMAND

Severity
8

Explanation

There was insufficient storage available to complete processing for the command.

System action

The command terminates. Any processing already completed may be retained or backed out.

System programmer response

Refer to the accompanying messages to determine what processing has been done. Retry the command, if appropriate, when your queue manager is less busy. If the problem persists, you might need to increase the region size used by your queue manager, or you might need to reduce the number of jobs running in your system.

CSQM182E

csect-name DURABLE SUBSCRIPTIONS NOT ALLOWED

Severity
8

Explanation

A DEFINE SUB command was issued, but it was not possible to make a durable subscription.

This could be for one of the following reasons:

- The topic subscribed to is defined as DURSUB(NO)
- The queue named SYSTEM.DURABLE.SUBSCRIBER.QUEUE is not available
- The CSQINP2 data sets are in the wrong order, the order is:

```
  //CSQINP2  DD DSN=hlq.SCSQPROC(CSQ4INYS),DISP=SHR //         DD
DSN=hlq.SCSQPROC(CSQ4INSX),DISP=SHR
  //         DD DSN=hlq.SCSQPROC(CSQ4INSG),DISP=SHR
```

System action

The command is not executed.

System programmer response

Durable subscriptions are stored on the SYSTEM.DURABLE.SUBSCRIBER.QUEUE. Ensure that this queue is available for use. Possible reasons for failure include the queue being full, the queue being put inhibited, or the queue not existing.

If the topic subscribed to is defined as DURSUB(NO) then it is not possible to administratively define a subscription. The topic can be altered to DURSUB(YES) to enable the subscription to be defined.

CSQM183E

csect-name SUBSCRIPTION INHIBITED

Severity
8

Explanation

A DEFINE SUB command was issued, but it was not possible to make a subscription because the topic subscribed to is defined as SUB(DISABLED).

System action

The command is not executed.

System programmer response

If the topic subscribed to is defined as SUB(DISABLED) then it is not possible to administratively define a subscription. The topic can be altered to SUB(ENABLED) to enable the subscription to be defined.

CSQM184I

csect-name '*keyword1*' AND '*keyword2*' VALUES CANNOT BOTH BE BLANK

Severity
8

Explanation

An attempt was made to define or alter an object so that it had blank values for both of the specified keywords. One of those values must be provided.

System action

Processing of the command is terminated.

System programmer response

Reissue the command with correct values.

CSQM185E

csect-name SUBSCRIPTION HAS FIXED SUBUSER

Severity
8

Explanation

An ALTER SUB command was issued, but it was not possible to ALTER the target subscription because the userid performing the ALTER did not match the SUBUSER attribute of the subscription and the subscription has had the VARUSER(FIXED) attribute set.

System action

The command is not executed.

System programmer response

The subscription can be altered only by the owning userid that is displayed in the SUBUSER attribute.

CSQM186E

csect-name DESTCLAS VALUE CANNOT BE ALTERED

Severity
8

Explanation

An ALTER SUB command was issued, but it was not possible to ALTER the target subscription because the DESTCLAS attribute specified on the request did not match the one in the existing subscription. DESTCLAS cannot be altered.

System action

The command is not executed.

System programmer response

Ensure that the DESTCLAS attribute matches the existing subscription and rerun the request.

CSQM187E

csect-name GROUPING VALUE CANNOT BE ALTERED

Severity
8

Explanation

An ALTER SUB command was issued, but it was not possible to ALTER the target subscription because the GROUPING attribute specified on the request did not match the one in the existing subscription. GROUPING attributes cannot be altered.

System action

The command is not executed.

System programmer response

Ensure that the GROUPING attribute matches the existing subscription and rerun the request.

CSQM188E

csect-name SUBSCOPE VALUE CANNOT BE ALTERED

Severity
8

Explanation

An ALTER SUB command was issued, but it was not possible to ALTER the target subscription because the SUBSCOPE attribute specified on the request did not match the one in the existing subscription. SUBSCOPE cannot be altered.

System action

The command is not executed.

System programmer response

Ensure that the SUBSCOPE attribute matches the existing subscription and rerun the request.

CSQM189E

csect-name SELECTOR VALUE CANNOT BE ALTERED

Severity
8

Explanation

An ALTER SUB command was issued, but it was not possible to ALTER the target subscription because the SELECTOR attribute specified on the request did not match the one in the existing subscription. SELECTOR cannot be altered.

System action

The command is not executed.

System programmer response

Ensure that the SELECTOR attribute matches the existing subscription and rerun the request.

CSQM190E

csect-name TOPIC STRING IS INVALID

Severity
8

Explanation

A DEFINE SUB command was issued, but it was not possible to make a subscription because the topic string was invalid.

This could be because the WSCHEMA attribute was set to CHAR and either:

- The TOPICSTR attribute contains an invalid escape character, or
- The TOPICOBJ attribute refers to a TOPIC object with a TOPICSTR attribute that contains an invalid escape character.

System action

The command is not executed.

System programmer response

Correct the TOPICSTR attribute on the **DEFINE SUB** command to correctly use escape characters. If the problem is with the TOPICSTR in a TOPIC object, correct that TOPIC object or refer to a different TOPIC object. If the TOPICSTR needs to use the characters in that way, set the WSCHEMA attribute to *TOPIC* to avoid errors with escape characters.

CSQM191E

csect-name TOPIC STRING CANNOT BE ALTERED

Severity
8

Explanation

A DEFINE TOPIC command using the REPLACE keyword was issued, providing a value for TOPICSTR that was different from the value in the existing object. This is not allowed.

System action

The command is not executed.

System programmer response

Reissue the command with correct values. You cannot alter the topic string in a topic object; you must delete the object and then redefine it.

CSQM192I

csect-name Address '*address*' is invalid.

Severity
8

Explanation

The IP address or hostname *address* contains invalid characters.

System action

Processing of the command is terminated.

System programmer response

Reissue the command with the parameter specified correctly. Note that the BLOCKADDR list may contain only IP addresses: host name addresses are not permitted.

CSQM193I

csect-name IP address '*ipaddress*' contains an invalid range.

Severity
8

Explanation

The IP address *ipaddress* contains an invalid range. For example, the lower number is greater than or equal to the upper number for the range.

System action

Processing of the command is terminated.

System programmer response

Reissue the command with the parameter specified correctly.

CSQM194I

csect-name IP address '*ipaddress1*' overlaps existing IP address '*ipaddress2*'.

Severity
8

Explanation

The IP address *ipaddress1* overlaps with an existing IP address *ipaddress2*. For example, addresses 1.2.3.4-7 and 1.2.3.6-8 overlap.

System action

Processing of the command is terminated.

System programmer response

Reissue the command with the parameter specified correctly.

CSQM195I

csect-name MATCH RUNCHECK FOUND A GENERIC VALUE IN *field-name*

Severity
8

Explanation

A DISPLAY **CHLAUTH** command was issued using the MATCH(RUNCHECK) parameter and the *field-name* parameter was found to contain a generic value, which is not allowed.

System action

Processing of the command is terminated.

System programmer response

Reissue the command with a value in *field-name* which is not generic.

CSQM196I

csect-name REQUIRED KEYWORD MISSING FOR *keyword*(*value*)

Severity
8

Explanation

A required additional keyword was not specified in conjunction with *keyword* (*value*).

This message can be returned in the following scenarios:

- A **DISPLAY CHLAUTH** command, specifying **MATCH(RUNCHECK)** did not specify the **ADDRESS** keyword or one of the keywords **CLNTUSR** or **QMNAME**.
- A **SET CHLAUTH** command, the **MCAUSER** is missing when **USERSRC(MAP)** is specified or **USERSRC** is missing as **USERSRC(MAP)** is the default.

System action

Processing of the command is terminated.

System programmer response

Reissue the command specifying one of the required keywords

CSQM197I

csect-name '*keyword*' NOT ALLOWED WITH MATCH '*value*'

Severity
8

Explanation

The named keyword cannot be specified for **DISPLAY CHLAUTH** in conjunction with the identified value for the **MATCH** keyword.

System action

Processing of the command is terminated.

System programmer response

Reissue the command without the named keyword.

CSQM198I

csect-name CHANNEL AUTHENTICATION PROFILE NAME IS INVALID

Severity
8

Explanation

The channel profile name used in the command was not valid.

System action

Processing of the command is terminated.

System programmer response

Check that the characters entered for the profile are valid and reissue the command. If TYPE(BLOCKADDR) is specified, check that CHLAUTH('*') is also specified

CSQM199I

csect-name CFCONLOS (TOLERATE) NOT ALLOWED, INCOMPATIBLE QUEUE MANAGER CMDLEVELS

Severity
8

Explanation

An attempt was made to change the **CFCONLOS** queue manager attribute to a value of **TOLERATE**, which enables toleration of loss of connectivity to Coupling Facility structures. This action requires that all queue managers in the queue-sharing group must have a command level of at least 710. Some of the queue managers have a lower level.

System action

Processing of the command is terminated.

System programmer response

Ensure all the queue managers in the queue-sharing group have the appropriate command level. For information about restrictions on the command, see MQSC commands.

CSQM201I

csect-name verb-name *obj-type* DETAILS

Severity
0

Explanation

This message is the response to a command that displays attributes or other information about objects, when that command was entered from either the console, or the command server initialization server. It shows the attributes requested for *obj-type,* as follows:

```
obj-type(name)  attribute-value  attribute-value :  END obj-type DETAILS
```

See the specific command for details of the attributes and values.

csect-name might include the command prefix (CPF), depending on how the command was entered.

Exceptionally, the last line might be:

```
obj-type TERMINATED WITH MAX LINES
```

if the number of lines allowed in a multiple line WTO to be issued on the console (255) was exceeded. This figure includes the first and last lines of the display. The only object that might cause this message is namelist because displaying a complete namelist would require 263 lines in total. (This only occurs when the command was issued from the console.) For details of the fields reported, see the command description.

CSQM224I

csect-name verb-name obj-type DETAILS - CURRENTLY DISABLED

Severity

0

Explanation

This message is issued instead of CSQM201I for channel authentication (CHLAUTH) records if the CHLAUTH queue manager attribute has been set to DISABLED.

See the explanation of message CSQM201I for more information.

CSQM292I

csect-name PUBLISH/SUBSCRIBE ENGINE IS DISABLED

Severity

0

Explanation

The publish/subscribe engine is unavailable because it has been disabled.

System action

The command is actioned, but no results are returned because the publish/subscribe engine has been disabled.

System programmer response

This message occurs because you are attempting to query the publish/subscribe engine but you have disabled it. To use the publish/subscribe engine, set the PSMODE queue manager attribute to a value other than DISABLED.

CSQM293I

csect-name m obj-type FOUND MATCHING REQUEST CRITERIA

Severity

0

Explanation

A command that displays attributes or other information about objects has been issued. *m* objects were found that matched the specified selection criteria.

System action

For each object found, a message follows giving its details.

CSQM294I

csect-name CANNOT GET INFORMATION FROM Db2

Severity

8

Explanation

While processing a command that displays attributes or other information about objects with a disposition of GROUP or SHARED, information could not be obtained from Db2. This might be because Db2 is not available or no longer available, or because it is suspended, or because there was an error in accessing Db2, or because a Db2 table was temporarily locked.

System action

Information about objects with a disposition of GROUP or SHARED is not displayed, so the information displayed might therefore be incomplete.

System programmer response

Refer to the console log for messages giving more information about the error.

CSQM295I

csect-name UNEXPECTED ERROR DURING DISPLAY

Severity
8

Explanation

A severe error occurred while processing a command that displays attributes or other information about objects.

System action

The command is terminated.

System programmer response

Refer to the console log for messages giving more information about the error.

CSQM297I

csect-name NO *item* FOUND MATCHING REQUEST CRITERIA

Severity
0

Explanation

A command that displays attributes or other information about objects or runtime status found that there are no items that match the specified name and satisfy any other criteria requested (such as subtype or disposition in a queue-sharing group).

CSQM298I

csect-name TOTAL MESSAGE LENGTH ALLOWED ON CONSOLE EXCEEDED

Severity
8

Explanation

The total message length for the command allowed on the console (32 K) was exceeded.

System action

The command is actioned, but the display of the command is terminated.

System programmer response

This error occurs if a command that displays attributes or other information about objects is entered using a generic name (for example, DIS Q(*) ALL), and the total amount of data to be displayed exceeds 32 K. To avoid this problem, try to be more selective about the information requested (for example, DIS Q(PAY*) ALL).

CSQM299I

csect-name INSUFFICIENT STORAGE TO COMPLETE DISPLAY

Severity
8

Explanation

There was insufficient storage available to complete processing of a command that displays attributes or other information about objects.

System action

The command is actioned, but the display of the information is terminated before completion. The data returned is a subset of the requested information. Refer to message CSQM293I, which indicates how many objects have information returned. The message does not indicate how many matching objects were found.

System programmer response

If this error occurs when a generic name is used in the command (for example, DIS QUEUE(*) ALL), try to be more selective about the information requested (for example, DIS QUEUE(PAY*) ALL). If the problem persists, you might need to increase the region size used by your queue manager or channel initiator, or you might need to reduce the number of jobs running in your system.

CSQM4nnI

object details

Severity
0

Explanation

This message consists of the entire object or object status details formatted for use by applications. It is issued in response to commands entered from the command server. Message CSQ9022I follows this message.

The message number depends on the object or object status type, as follows:

Number	Object or status type
CSQM400I	Storage class object
CSQM401I	Local queue object
CSQM402I	Model queue object
CSQM403I	Alias queue object
CSQM406I	Remote queue object
CSQM407I	Namelist object
CSQM408I	Process object
CSQM409I	Queue manager object
CSQM410I	Sender channel object
CSQM411I	Server channel object
CSQM412I	Receiver channel object
CSQM413I	Requester channel object
CSQM415I	Server-connection channel object
CSQM416I	Client-connection channel object

Number	Object or status type
CSQM417I	Cluster-receiver channel object
CSQM418I	Cluster-sender channel object
CSQM420I	Sender channel status
CSQM421I	Server channel status
CSQM422I	Receiver channel status
CSQM423I	Requester channel status
CSQM425I	Server-connection channel status
CSQM427I	Cluster-receiver channel status
CSQM428I	Cluster-sender channel status
CSQM430I	CF structure object
CSQM431I	Cluster queue object
CSQM437I	Authentication information object
CSQM438I	Topic object
CSQM439I	Cluster queue manager object
CSQM440I	CF structure status
CSQM441I	Local queue status
CSQM442I	Connection information
CSQM443I	Topic status
CSQM444I	Subscription
CSQM445I	Subscription status
CSQM446I	Publish/Subscribe status
CSQM451I	Local queue statistics
CSQM452I	Shared message data set
CSQM453I	Shared message data set connection
CSQM454I	Channel authentication record

CSQM500I

csect-name GROUPUR agent starting TCB=*tcb-name*

Severity
   0

Explanation

The group unit of recovery (GROUPUR) agent was started during the initialization of a queue manager that is in a queue-sharing group. The agent uses TCB *tcb-name*.

The GROUPUR agent monitors the SYSTEM.QSG.UR.RESOLUTION.QUEUE to process requests from other queue managers within the QSG.

System action

Processing continues. The GROUPUR agent is started.

CSQM501I

csect-name GROUPUR agent stopping

Severity
4

Explanation

The group unit of recovery (GROUPUR) agent is stopping because of one the following reasons:

- the queue manager is stopping
- it was unable to recover from an IBM MQ API error or an abnormal ending

System action

The GROUPUR agent stops.

If the agent has stopped due to an error it will be automatically restarted.

System programmer response

If the queue manager is not stopping, investigate the cause of the error as reported in the preceding messages.

CSQM502I

csect-name processed BACKOUT request from *qmgr-name* for in-doubt UOW, URID=*urid*, CONNECTION-NAME=*name*

Severity
0

Explanation

This message is generated during queue manager startup when the GROUPUR agent has processed a message on the SYSTEM.QSG.UR.RESOLUTION.QUEUE from another queue manager in the queue-sharing group requesting that the specified UOW be backed out.

System action

Processing continues.

CSQM503I

csect-name processed COMMIT request from *qmgr-name* for in-doubt UOW, URID=*urid*, CONNECTION-NAME=*name*

Severity
0

Explanation

This message is generated during queue manager startup when the GROUPUR agent has processed a message on the SYSTEM.QSG.UR.RESOLUTION.QUEUE from another queue manager in the queue-sharing group requesting that the specified UOW be committed.

System action

Startup continues.

CSQM504I

csect-name GROUPUR support enabled

Severity
0

Explanation

This message is generated during queue manager startup, or in response to an ALTER QMGR command, if the GROUPUR queue manager attribute is enabled and all of the configuration checks performed by the GROUPUR agent are satisfied.

System action

The queue manager permits applications to establish transactions with a GROUP unit of recovery disposition.

CSQM505I

csect-name GROUPUR support disabled

Severity
0

Explanation

This message is generated during queue manager startup or in response to an ALTER QMGR command if the GROUPUR queue manager attribute is disabled.

System action

The queue manager inhibits applications from establishing transactions with a GROUP unit of recovery disposition.

CSQM506I

csect-name GROUPUR qmgr attribute has been disabled CODE=*code*

Severity
4

Explanation

This message is generated at queue manager startup if the GROUPUR queue manager attribute is enabled but one of the configuration checks performed by the GROUPUR agent failed. CODE=*code* contains an identifier indicating which configuration check failed.

System action

The GROUPUR queue manager attribute is disabled.

System programmer response

The system programmer should use the code specified to identify what configuration check failed. If support for group units of recovery is required, they should take corrective action and then re-enable the GROUPUR queue manager attribute.

CSQM507E

csect-name GROUPUR qmgr attribute was not enabled CODE=*code*

Severity
8

Explanation

This message is generated in response to an ALTER QMGR command if an attempt to enable the GROUPUR queue manager attribute fails because one of the configuration checks performed by the GROUPUR agent are not satisfied. CODE=*code* contains an identifier indicating which configuration check failed.

System action

The GROUPUR queue manager attribute remains disabled and the ALTER QMGR command fails.

System programmer response

The system programmer should use the code specified to identify what configuration check failed. They should then take corrective action and then re-issue the ALTER QMGR command.

When you enable group units of recovery (GROUPUR support) a number of configuration checks are performed to ensure the configuration steps have been completed. You cannot enable this support if any of these checks fail.

These checks are also performed at queue manager startup if GROUPUR queue manager attribute is enabled. If one of these checks fails during startup then group units of recovery will be disabled until you correct the error and re-enable the GROUPUR queue manager attribute.

If a check fails it will be identified with a return code (number). You can use this code to identify the failing check using the following list:

1. This queue manager is not a member of a queue-sharing group.
2. The SYSTEM.QSG.UR.RESOLUTION.QUEUE does not exist.
3. The SYSTEM.QSG.UR.RESOLUTION.QUEUE does not support persistent messages.
4. The SYSTEM.QSG.UR.RESOLUTION.QUEUE is not indexed by correlation id.
5. The SYSTEM.QSG.UR.RESOLUTION.QUEUE does not reside on the system application coupling facility structure, CSQSYSAPPL.
6. The queue manager name is the same as the name of the queue-sharing group.

CSQM508E

csect-name GROUPUR agent ended abnormally. Restarting

Severity
8

Explanation

The group unit of recovery (GROUPUR) agent has ended abnormally because a severe error occurred, as reported in the preceding messages.

System action

The group unit of recovery (GROUPUR) agent attempts to restart a number of times. If it fails persistently, it terminates.

System programmer response

Ensure the CFSTRUCT called CSQSYSAPPL is configured for GROUPUR operation. See Enabling GROUP units of recovery.

Investigate the reason for the abnormal termination, as reported in the preceding messages.

CSQM520I

csect-name PSCLUS CANNOT BE ALTERED, CLUSTER TOPICS EXIST

Severity
8

Explanation

An attempt was made to set the PSCLUS queue manager attribute to DISABLED, indicating that Publish/Subscribe activity is not expected in this cluster between queue managers, but a cluster topic exists so the setting cannot be modified.

System action

Processing of the command is terminated.

System programmer response

If you wish to disable publish/subscribe clustering delete all cluster topic objects before altering the PSCLUS attribute on all queue managers in the cluster to DISABLED.

CSQM521I

csect-name CLCHNAME MUST BE BLANK FOR DYNAMIC QUEUE

Severity
8

Explanation

An attempt was made to define or alter a dynamic queue with a non blank value for the CLCHNAME attribute, which is not allowed.

System action

Processing of the command is terminated.

System programmer response

Reissue the command with compatible attribute values.

CSQM522I

csect-name NOSHARE NOT ALLOWED WITH NON-BLANK CLCHNAME

Severity
8

Explanation

An attempt was made to define or alter a queue with a non-blank value for the CLCHNAME attribute, but NOSHARE was specified or implied.

System action

Processing of the command is terminated.

System programmer response

Reissue the command, specifying either SHARE or a blank value for the CLCHNAME attribute.

CSQM523I

csect-name CLUSTER OR CLROUTE CANNOT CURRENTLY BE ALTERED

Severity
8

Explanation

An attempt was made to alter an administered topic that is currently in a named cluster. While a topic is in a cluster it is not permitted to modify the CLROUTE attribute, or to modify the CLUSTER attribute to an alternative cluster name if CLROUTE is set to TOPICHOST.

System action

Processing of the command is terminated.

System programmer response

To alter the CLROUTE or CLUSTER attribute, perform the following actions:

1. Quiesce publish/subscribe messaging for the topic.
2. Remove the topic from the cluster by setting the value of the CLUSTER attribute to blank.
3. Set the CLROUTE and CLUSTER attributes to their required value once the topic has been removed from the cluster.
4. Resume publish/subscribe messaging once the change is visible in the cluster and the queue manager has received proxy subscriptions for any remote subscriptions.

CSQM524I

csect-name CLROUTE CONFLICT DETECTED FOR CLUSTER TOPIC

Severity
8

Explanation

An attempt was made to define a cluster topic but the value of the CLROUTE attribute conflicts with an existing topic, either above or below it, in the topic tree.

System action

Processing of the command is terminated.

System programmer response

Review the cluster routing requirements for the topic tree, then correct and reissue the command.

CSQM525I

csect-name obj-type(obj-name) DOES NOT EXIST OR IS DEFINED INCORRECTLY

Severity
8

Explanation

The queue manager could not complete a requested operation because an object named *obj-name* of type *obj-type* does not exist or is defined incorrectly.

System action

Processing of the operation is terminated.

System programmer response

Check the object has been defined correctly, then try the operation again.

For information on how to define system objects, see Sample definitions supplied with IBM MQ.

If this message has been issued for the model queue SYSTEM.CLUSTER.TRANSMIT.MODEL.QUEUE, and the queue has been defined, ensure it has the following attributes:

- The **USAGE** attribute must be set to **XMITQ**
- The **QSGDISP** attribute must not be **SHARED**
- The **DEFTYPE** attribute must be set to **PERMDYN**
- The **INDXTYPE** attribute must be set to **CORRELID**
- The **SHARE** attribute must be set

CSQM526I

csect-name CERTIFICATE LABEL NOT ALLOWED FOR SSL 3.0 CHANNEL

Severity
8

Explanation

An attempt was made to specify a certificate label for an inbound channel that uses a SSL 3.0 CipherSpec, which is not allowed. Certificate labels for inbound channels are only supported for TLS channels.

System action

Processing of the command is terminated.

System programmer response

If you need to configure a certificate label, alter the channel to use a TLS CipherSpec.

CSQM550I

csect-name Switch of transmission queue for channel *channel-name* from *old-xmitq* to *new-xmitq* started

Severity

0

Explanation

A switch of transmission queue for the channel identified by *channel-name* is required due to a change to the default cluster transmission queue configuration of the queue manager, or to the cluster channel name attribute of a cluster transmission queue. This message is issued by the queue manager when the process of switching the transmission queue from *old-xmitq* to *new-xmitq* is started.

System action

Processing continues.

System programmer response

None.

CSQM551I

csect-name Switch of transmission queue for channel *channel-name* completed - *num-msgs* messages moved from *old-xmitq* to *new-xmitq*

Severity

0

Explanation

A switch of transmission queue for the channel identified by *channel-name* was required due to a change to the default cluster transmission queue configuration of the queue manager, or to the cluster channel name attribute of a cluster transmission queue. This message is issued by the queue manager when the process of switching the transmission queue from *old-xmitq* to *new-xmitq* has completed.

During the switching process the queue manager moved *num-msgs* messages from *old-xmitq* to *new-xmitq*.

System action

Processing continues.

System programmer response

None.

CSQM552E

csect-name Switch of transmission queue for channel *channel-name* from *old-xmitq* to *new-xmitq* failed

Severity

4

Explanation

A switch of transmission queue for the channel identified by *channel-name* is required due to a change to the default cluster transmission queue configuration of the queue manager, or to the cluster channel name attribute of a cluster transmission queue. This message is issued if an error occurs when attempting to start the process of switching the transmission queue from *old-xmitq* to *new-xmitq*.

System action

The process of switching the transmission queue is not started and the channel continues to use the transmission queue *old-xmitq*.

The queue manager will retry to start the switching process the next time the channel starts.

System programmer response

Investigate why the process of switching the transmission queue could not be started, as reported in the preceding messages.

CSQM553I

csect-name Moving messages for channel *channel-name* from transmission queue *old-xmitq* to *new-xmitq*

Severity
0

Explanation

A switch of transmission queue for the channel identified by *channel-name* is required due to a change to the default cluster transmission queue configuration of the queue manager, or to the cluster channel name attribute of a cluster transmission queue. This message is issued when the process of moving messages from the old transmission queue, *old-xmitq*, to the new transmission queue, *new-xmitq*, is started.

System action

Processing continues.

System programmer response

None.

CSQM554I

csect-name Moved *num-msgs* messages for channel *channel-name* from transmission queue *old-xmitq* to *new-xmitq* - *remaining-msgs* messages remaining

Severity
0

Explanation

A switch of transmission queue for the channel identified by *channel-name* is required due to a change to the default cluster transmission queue configuration of the queue manager, or to the cluster channel name attribute of a cluster transmission queue. The switch of transmission queue requires that messages be moved from the old transmission queue, *old-xmitq*, to the new transmission queue, *new-xmitq*. This message is periodically issued to report the progress of this operation.

System action

Processing continues.

System programmer response

If this message is repeatedly issued it might indicate the old transmission queue cannot be drained of messages for the channel, which means the switching process can not complete. Applications continue to put messages to the old transmission queue during the switching process to preserve ordering. If the switching process cannot complete this might indicate that messages are being put to the old transmission queue faster than they can be moved by the switching process, or uncommitted messages remain on the old transmission queue for the channel.

CSQM555E

csect-name Moving of messages for channel *channel-name* from transmission queue *old-xmitq* to *new-xmitq* failed

Severity
8

Explanation

A switch of transmission queue for the channel identified by *channel-name* is required due to a change to the default cluster transmission queue configuration of the queue manager, or to the

cluster channel name attribute of a cluster transmission queue. The switch of transmission queue requires that messages for the channel be moved from the old transmission queue, *old-xmitq*, to the new transmission queue, *new-xmitq*. This message is issued if an error occurs while moving these messages.

System action

Moving of messages from the old transmission queue to the new transmission queue is stopped. Any existing messages on the old transmission queue and any new messages put by applications remain on the old transmission queue and are not available to be sent by the cluster-sender channel until action is taken to restart the switching process.

System programmer response

You can use preceding messages to identify and resolve the cause of the error, then restart the switching process by either stopping and starting the channel, or by using The CSQUTIL utility to restart the switching operation.

CSQM556E

csect-name Unable to open transmission queue *xmitq-name* for channel *channel-name*, MQRC=*mqrc (mqrc-text)*

Severity
8

Explanation

The switch of transmission queue requires that messages for the channel be moved from the old transmission queue to the new transmission queue. This message is issued if the old transmission queue, *xmitq-name*, cannot be opened due to reason *mqrc* when attempting to perform this operation (*mqrc-text* provides the MQRC in textual form).

System action

The switching operation fails because the moving of messages from the old transmission queue to the new transmission queue cannot be completed.

System programmer response

You can use the reason code to identify and resolve the cause of the error, then restart the switching process by either stopping and starting the channel, or by using The CSQUTIL utility to restart the switching operation. If the error cannot be resolved, or the old transmission queue has been deleted, the CSQUTIL utility can be used to perform the switching operation without moving messages from the old transmission queue to the new transmission queue. If this option is used it is the responsibility of the IBM MQ administrator to deal with any messages for this channel on the old transmission queue.

CSQM557E

csect-name Unable to open new transmission queue *xmitq-name* for channel *channel-name*, MQRC=*mqrc (mqrc-text)*

Severity
8

Explanation

The switch of transmission queue requires that messages for the channel be moved from the old transmission queue to the new transmission queue. This message is issued if the new transmission queue, *xmitq-name*, cannot be opened due to reason *mqrc* when attempting to perform this operation (*mqrc-text* provides the MQRC in textual form).

System action

The switching operation fails because the moving of messages from the old transmission queue to the new transmission queue cannot be completed.

System programmer response

You can use the reason code to identify and resolve the cause of the error, then restart the switching process by either stopping and starting the channel, or by using The CSQUTIL utility to restart the switching operation.

CSQM558E

csect-name Unable to persist transmission queue state for channel *channel-name,* MQRC=*mqrc* (*mqrc-text*)

Severity
8

Explanation

The queue manager uses persistent messages on the queue SYSTEM.CHANNEL.SYNCQ to track which transmission queue is used by each cluster-sender channel. This message is issued if state information cannot be updated on this queue due to reason *mqrc* (*mqrc-text* provides the MQRC in textual form).

System action

The operation requiring the persisted transmission queue state to be updated fails.

System programmer response

You can use the reason code to identify and resolve the cause of the error, then review subsequent messages to identify any additional actions that are required.

CSQM559I

csect-name Loading of cluster transmission queue state started

Severity
0

Explanation

The queue manager uses persistent messages on the queue SYSTEM.CHANNEL.SYNCQ to track which transmission queue is used by each cluster-sender channel. This message is issued during queue manager startup to indicate that loading of this information has started.

System action

Processing continues.

System programmer response

None.

CSQM560I

csect-name Loading of cluster transmission queue state completed - *num-records* records processed

Severity
0

Explanation

The queue manager uses persistent messages on the queue SYSTEM.CHANNEL.SYNCQ to track which transmission queue is used by each cluster-sender channel. This message is issued during queue manager startup to indicate loading of this information has completed. The number of cluster-sender channel records that were processed is identified by *num-records*.

System action

Processing continues.

System programmer response

None.

CSQM561E

csect-name Loading of cluster transmission queue state failed

Severity
8

Explanation

The queue manager uses persistent messages on the queue SYSTEM.CHANNEL.SYNCQ to track which transmission queue is used by each cluster-sender channel. This message is issued during queue manager startup to indicate that an error has occurred when loading this information.

System action

Processing continues with restricted clustering function. The queue manager is unable to determine which transmission queue should be used by each cluster-sender channel, so these channels are unable to start. Any requests to put a message to a remote cluster queue will fail with MQRC_CLUSTER_RESOURCE_ERROR.

System programmer response

Investigate why the transmission queue state information could not be loaded, as reported in preceding messages. Resolve the error, then restart the queue manager to restore clustering function. If you are unable to resolve the error contact your IBM support center.

CSQM562E

csect-name Duplicate cluster transmission queue record found for channel *channel-name*

Severity
8

Explanation

The queue manager uses persistent messages on the queue SYSTEM.CHANNEL.SYNCQ to track which transmission queue is used by each cluster-sender channel. This message is issued during queue manager startup if a duplicate record is found for a channel.

System action

The duplicate record is ignored and processing continues, but the channel may use an incorrect transmission queue if the duplicated record should not have been used.

System programmer response

This condition should not occur. Contact your IBM support center.

CSQM563E

csect-name Failed to create dynamic cluster transmission queue *xmitq-name*, MQRC=*mqrc (mqrc-text)*

Severity
4

Explanation

A channel is required to switch to a permanent-dynamic transmission queue due to a change to the default cluster transmission queue configuration of the queue manager, or to the cluster channel name attribute of a cluster transmission queue. The queue manager could not create the permanent-dynamic transmission queue, *xmitq-name*, due to reason *mqrc*.

The cluster-sender channel that is affected can be identified from the name of the transmission queue because the queue name is in the format SYSTEM.CLUSTER.TRANSMIT<channel name>.

System action

Processing continues.

System programmer response

You can use the reason code to identify and resolve the error that has prevented the permanent-dynamic cluster transmission queue from being created. Additional messages might be issued to provide further information. If the reason code is MQRC_UNKNOWN_OBJECT_NAME this means the model queue SYSTEM.CLUSTER.TRANSMIT.MODEL.QUEUE has not been defined. The definition for this model queue can be found in the supplied sample **CSQ4INSX**.

Refer to API completion and reason codes for information about *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQM564E

csect-name Cluster transmission model queue *model-xmitq* has incorrect attributes

Severity
4

Explanation

The queue manager failed to create a permanent-dynamic transmission queue for a cluster-sender channel because the model queue *model-xmitq* has been defined incorrectly.

The model queue must have the following attributes:

- The **USAGE** attribute must be set to **XMITQ**
- The **QSGDISP** attribute must not be **SHARED**
- The **DEFTYPE** attribute must be set to **PERMDYN**
- The **INDXTYPE** attribute must be set to **CORRELID**
- The **SHARE** attribute must be set

System action

Processing continues.

System programmer response

Review and correct the definition of the model transmission queue. The definition for the model queue can be found in the supplied sample **CSQ4INSX**.

CSQM565E

csect-name Delivery delay processor initialization failed, reason *reason-code*

Severity
8

Explanation

Initialization of the delivery delay processor task failed with the specified *reason-code*. As a result, any messages sent with delivery delay, using JMS 2.0, will not be processed and will be left on the delivery delay staging queue.

System action

The delivery delay processor task will end and will not restart. Messages can still be sent to the delivery delay staging queue by JMS 2 applications, however, the messages will not be processed until the delivery delay task is restarted. See system programmer response for instructions on how to restart the delivery delay processor.

System programmer response

The most likely reason for this message is a shortage of storage below the bar, in which case *reason-code* will be 4. Review the amount of storage used below the bar, and if possible try and reduce it. You can attempt to restart the delivery delay processor by altering the delivery delay staging queue state from 'get enabled' to 'get inhibited', and back to the 'get enabled' state again.

CSQM566I

csect-name Delivery delay processor started

Severity

0

Explanation

The delivery delay processor has started and is available to process messages from the delivery delay staging queue.

System action

Processing continues.

System programmer response

None.

CSQM567I

csect-name Delivery delay processor stopped

Severity

0

Explanation

The delivery delay processor has stopped and is no longer available to process messages from the delivery delay staging queue. This message is output in the following situations:

- The queue manager is shutting down.
- The delivery delay staging queue has been deleted, or does not exist.

System action

Processing continues.

System programmer response

None.

CSQM568E

csect-name Delivery delay processor ended abnormally, MQRC=*mqrc*

Severity

4

Explanation

The delivery delay processor has detected an error, indicated by *mqrc*, and has shut down.

System action

The delivery delay processor task ends and will not restart. Messages can still be sent to the delivery delay staging queue by JMS 2 applications, however, they will not be processed until the delivery delay task is restarted. See system programmer response for instructions on how to restart the delivery delay processor.

System programmer response

This message is output for many reasons, some of which will be expected and some will not. For example, if the delivery delay staging queue state is altered to 'get inhibited' this message will be output, and *mqrc* will be *MQRC_GET_INHIBITED*. If the message is expected then no action is required. If the message is unexpected use the value of *mqrc*, and any other messages to attempt to rectify the situation. You can attempt to restart the delivery delay processor by altering the delivery delay staging queue state from 'get enabled' to' get inhibited', and back to the 'get enabled' state again.

CSQM569I

csect-name Delivery delay processor failed to get a message with correlation ID *correlid*, MQRC=*mqrc* (*mqrc-text*)

Severity

4

Explanation

The delivery delay processor attempted to perform a destructive MQGET for the message with the specified correlation ID from the delivery delay staging queue, SYSTEM.DDELAY.LOCAL.QUEUE. The message was no longer on the queue.

System action

Processing continues.

System programmer response

Investigate whether the message was taken off the delivery delay staging queue for a valid reason, for example, it was put there by mistake. Validate the security settings for the delivery delay staging queue to ensure that only authorized users have access to it.

CSQM570E

csect-name Delivery delay processor failed to process a message with correlation ID *correlid*, for queue *q-name*, according to its report options *report-options*, MQRC=*mqrc* (*mqrc-text*)

Severity

8

Explanation

The delivery delay processor could not put the specified message to the specified queue and, so, was attempting to either send the message to the dead-letter-queue or discard the message according to the disposition options specified in the report field of the message.

The message might have also requested an exception report. Some part of the processing of the disposition options, or the report, failed with the specified return code.

System action

The message is rolled back to the delivery delay staging queue, SYSTEM.DDELAY.LOCAL.QUEUE, and reprocessed at a time decided by the system.

System programmer response

Use the information from the message to establish the cause of the problem. Some possible explanations are:

- The specified queue might no longer exist, be full, or be put disabled.
- If the message should have been put to the dead-letter-queue, check that the dead-letter-queue is defined, is not full, and is put enabled.
- If an exception report message was to be generated, check that the queue the report was to be put to is defined, is not full, is put enabled, and that the user ID in the message has access to the queue.

Otherwise, check that the dead-letter-queue is defined, is not full, and is put enabled.

CSQM571I

csect-name Delivery delay processor received an unexpected message with message ID *msgid*

Severity

4

Explanation

The delivery delay processor received a message from the delivery delay staging queue, SYSTEM.DDELAY.LOCAL.QUEUE, that was not in the correct format.

The delivery delay processor either sends the message to the dead-letter-queue, or discards it according to the disposition options specified in the report field of the message.

System action

The delivery delay processor either sends the message to the dead-letter-queue, or discards it according to the disposition options specified in the report field of the message. If the message specified an exception report, this will be generated.

System programmer response

Investigate why unexpected messages are being sent to the delivery delay staging queue. Validate the security settings for the delivery delay staging queue to ensure that only authorized users have access to it.

CSQM580I

csect-name Cluster object name *object_name* located at QMID *qmid_name* is resolved using old cached information.

Severity
0

Explanation

The cluster object referenced has been resolved using old cached information.

System action

Processing continues.

System programmer response

None.

CSQM999E

csect-name UNRECOGNIZED RETURN CODE *ret-code* FOR '*keyword*'

Severity
8

Explanation

An unexpected return code was issued from a command, relating to the named keyword.

System action

The command is ignored.

System programmer response

Note the return code *ret-code* (which is shown in hexadecimal) and contact your IBM support center.

Command server messages (CSQN...)

CSQN001I

COMMAND SERVER STARTED

Severity
0

Explanation

A request to start the command server with the START CMDSERV command has been accepted.

System action

The command server is triggered to start.

CSQN002I

COMMAND SERVER ALREADY STARTED

Severity

0

Explanation

A START CMDSERV command has been entered, but the command server is already running.

System action

The command is ignored.

CSQN003I

COMMAND SERVER ENABLED

Severity

0

Explanation

In response to a START CMDSERV command in an initialization file, the command server has been put in to an enabled state.

System action

The command server will be started automatically when initialization finishes.

CSQN004I

COMMAND SERVER ALREADY ENABLED

Severity

0

Explanation

A START CMDSERV command has been entered, but the command server was already enabled.

System action

The command is ignored.

CSQN005I

COMMAND SERVER STOPPED

Severity

0

Explanation

A request to stop the command server with a STOP CMDSERV command has been accepted.

System action

The command server shuts down when it finishes processing the current command (or immediately if it is not processing a command). This message is followed by message CSQN201I to confirm that the stop has started.

CSQN006I

COMMAND SERVER ALREADY STOPPED

Severity

0

Explanation

A STOP CMDSERV command was entered, but the command server was not running.

System action

The command is ignored.

CSQN007I

COMMAND SERVER DISABLED

Severity

0

Explanation

In response to a STOP CMDSERV command in an initialization file, the command server has been put in to a disabled state.

System action

The command server will not start automatically when initialization finishes.

CSQN008I

COMMAND SERVER ALREADY DISABLED

Severity

0

Explanation

A STOP CMDSERV command has been entered, but the command server was already disabled.

System action

The command is ignored.

CSQN009I

csect-nameverb-namepkw-name COMMAND DISABLED

Severity

4

Explanation

The command was not processed because it was not allowed during this stage of initialization or termination. *verb-name* might include the command prefix (CPF). This depends on how the command was entered.

System action

The command is ignored.

CSQN011I

COMMAND SERVER STATUS IS ENABLED

Severity

0

Explanation

The command server is in an enabled state; that is, the command server will be started automatically when initialization finishes.

CSQN012I

COMMAND SERVER STATUS IS DISABLED

Severity

0

Explanation

The command server is in a disabled state; that is, the command server will not be started automatically when initialization finishes.

CSQN013I

COMMAND SERVER STATUS IS RUNNING

Severity

0

Explanation

The command server is in a running state; that is, the command server is currently processing a command.

CSQN014I

COMMAND SERVER STATUS IS WAITING

Severity

0

Explanation

The command server is in a waiting state; that is, the command server is waiting for a message to be put onto the system-command input queue.

CSQN015I

COMMAND SERVER STATUS IS STOPPED

Severity

0

Explanation

The command server is in a stopped state; that is, the command server will not process any commands until a START CMDSERV command is entered.

CSQN016I

COMMAND SERVER STATUS IS STARTING

Severity

0

Explanation

The command server is in a starting state; that is, a START CMDSERV command has been entered, but the command server has not yet started up.

CSQN017I

COMMAND SERVER STATUS IS STOPPING

Severity

0

Explanation

The command server is in a stopping state; that is, a STOP CMDSERV command has been entered, but the command server has not yet stopped.

CSQN018E

csect-name INTERNAL ERROR FOR *identifier*, RETURN CODE=*rc*

Severity

8

Explanation

This message could be caused by the following:

Identifier
> **Description**

INSSRV01
> During the early part of initialization, the queue manager was unable to start the task that processes commands in CSQINP1.

INSSRV02
> During the later part of initialization, the queue manager was unable to start the task that processes commands in CSQINP2.

RTSSRV01
> After initialization has completed with the command server enabled, or in response to a START CMDSERV command, the queue manager was unable to start the command server task that processes commands in the system-command input queue.

GRSSRV01
> After initialization has completed with the command server enabled, or in response to a START CMDSERV command, the queue manager was unable to start the command server task that processes commands using CMDSCOPE.

System action

The task is not started.

System programmer response

Stop and restart the queue manager. Check the console for other messages regarding this error, and note the message number, *identifier*, and *rc*. Also collect the system dump (if one was produced). Contact your IBM support center to report the problem.

CSQN019E

csect-name INTERNAL ERROR FOR *identifier*, RETURN CODE=*rc*

Severity
> 8

Explanation

This message could be caused by the following:

Identifier
> **Description**

INSSRV01
> During the early part of initialization an error occurred when trying to delete the task that processes commands in CSQINP1.

INSSRV02
> During the later part of initialization an error occurred when trying to delete the task that processes commands in CSQINP2.

RTSSRV01
> During termination with the command server running, or in response to a START CMDSERV command, an error occurred when trying to delete the command server task that processes commands in the system-command input queue.

GRSSRV01
> During termination with the command server running, or in response to a START CMDSERV command, an error occurred when trying to delete the command server task that processes commands using CMDSCOPE.

System action

If the value of *identifier* was INSSRV01 or INSSRV02, the error is ignored, and startup continues.

If the value of *identifier* was RTSSRV01 or GRSSRV01 and *csect-name* was CSQNESTP, the command server could have terminated while processing a command.

System programmer response

Check the console for other messages regarding this error. If you are unable to resolve the problem, note the message number, *identifier*, and *rc*, collect the system dump (if one was produced), and contact your IBM support center.

CSQN020E

csect-name UNABLE TO START COMMAND SERVER *identifier*

Severity
8

Explanation

csect-name was unable to start the command server task *identifier*.

System action

If *identifier* is INSSRV01 or INSSRV02, initialization is not completed and a dump might be produced. In other cases, the command server is not started.

System programmer response

Stop and restart the queue manager. Contact your IBM support center with details of this message, any previous messages pertaining to this error, and the dump (if applicable).

CSQN021E

csect-name COMMAND SERVER *identifier* ABNORMAL COMPLETION

Severity
8

Explanation

The command server task *identifier* was unable to complete its processing during startup.

System action

Queue manager startup continues.

System programmer response

Check the z/OS console for related messages (probably concerning the CSQINPx data sets). The CSQOUTx data sets should also be checked to determine how much command processing was done before the error occurred. If required, reissue any unprocessed commands, or resolve the problem and restart the queue manager.

CSQN100I

COMMAND EXCEEDS MAXIMUM SIZE, COMMAND IGNORED

Severity
4

Explanation

The command string was too long.

System action

The command is ignored, and processing of CSQINP1 or CSQINP2 continues.

System programmer response

The command in question precedes this message in the CSQOUT1 or CSQOUT2 data set. For details about forming a command string, see Initialization commands.

CSQN101I

COMMAND ENDS WITH A CONTINUATION MARK, COMMAND IGNORED

Severity
4

Explanation

The last command in the CSQINP1 or CSQINP2 data set ended with a continuation mark.

System action

The command is ignored.

System programmer response

The command in question precedes this message in the CSQOUT1 or CSQOUT2 data set. For details about forming a command string, see Initialization commands.

CSQN102I

COMMAND BUFFER INVALID, ERROR UNKNOWN, COMMAND IGNORED

Severity
4

Explanation

An internal error has occurred.

System action

This command is ignored, and the next command is processed.

System programmer response

The command in question precedes this message in the CSQOUT1 or CSQOUT2 data set. If you are unable to solve the problem, contact your IBM support center.

CSQN103I

COMMAND PROCESSOR RETURN CODE=*rc*, REASON CODE=*reason*

Severity
4

Explanation

An error occurred while processing the command preceding this message in the CSQOUT1 or CSQOUT2 data set. The possible values of *rc* are as follows:

Return code
  Description

00000004
  Internal error

00000008
  Syntax or command preprocessor error, see the following lines in the CSQOUTx data set

0000000C
  Command processor error, see the following lines in the CSQOUTx data set

00000010
  Command processor abnormal termination

00000014
  Command completed, but there is insufficient storage for the messages

00000018
  Command preprocessor has insufficient storage (there could be further messages about this error)

0000001C
   The command processor has insufficient storage (the command could be partially completed)

00000020
   Security check

00D50102
   See "Command server codes (X'D5')" on page 1024

Note: If the return code is '00000010', the reason code has no meaning.

If *reason* is 00000004 and *return code* is 00000000, the command has been accepted and will be completed later. Further messages will be produced when the command has been completed.

Otherwise the reason code indicates the command result as follows:

Reason
   Description

00000000
   Command completed

00000004
   Partial completion

00000008
   Command not actioned

0000000C
   Command processor abend

FFFFFFFF
   Command not actioned

System action

The next command is processed, if possible.

System programmer response

If *reason* indicates that the command did not complete, examine the command and all associated messages. ▶ z/OS ◀ See IBM MQ for z/OS messages, completion, and reason codes for further information about the commands.

If you are unable to solve the problem, collect the input and output data sets and contact your IBM support center.

CSQN104I

INITIALIZATION RETURN CODE=*rc*, REASON CODE=*reason*

Severity
   8

Explanation

An error occurred while processing one of the initialization data sets.

System action

The system action depends on the reason code (*reason*). See "Command server codes (X'D5')" on page 1024 for information the code you have received.

System programmer response

The response you should make depends on the reason code (*reason*). See "Command server codes (X'D5')" on page 1024 for information about the code you have received.

CSQN105I

Commands from *ddname* for queue manager *qmgr-name - date time*

Severity

0

Explanation

This message forms the header for the output data sets CSQOUT1 and CSQOUT2.

CSQN121I

'*verb-namepkw-name*' command responses from *qmgr-name*

Explanation

The following messages are responses from queue manager *qmgr-name* to the indicated command - either entered or generated by another command - that specified CMDSCOPE.

CSQN122I

'*verb-namepkw-name*' command for CMDSCOPE(*qmgr-name*) normal completion

Explanation

Processing for the indicated command that specified CMDSCOPE(*qmgr-name*) - either entered or generated by another command - has completed successfully on all requested queue managers.

CSQN123E

'*verb-name pkw-name*' command for CMDSCOPE(*qmgr-name*) abnormal completion

Explanation

Processing for the indicated command that specified CMDSCOPE(*qmgr-name*) - either entered or generated by another command - has completed, but not successfully. If the command was sent to more than one queue manager, it might have completed successfully on some and not on others.

System programmer response

Examine the preceding responses from the command. Reissue the command correctly if necessary for the queue managers where it failed.

CSQN127E

Queue-sharing group error, reason=*reason*

Severity

8

Explanation

While processing a command that specified CMDSCOPE, the command server experienced an error while trying to send data to the coupling facility.

System action

The command is not processed.

System programmer response

The response you should make depends on the reason code (*reason*). See "Coupling Facility codes (X'C5')" on page 938 for information about the code.

CSQN128E

Insufficient storage for CMDSCOPE(*qmgr-name*)

Explanation

While processing a command that specified CMDSCOPE, the command server was unable to obtain storage needed.

System action

The command is not processed.

System programmer response

If the problem persists, you might need to restart the queue manager after making more storage available.

CSQN129E

Error saving command reply information

Severity
8

Explanation

While processing a command that specified CMDSCOPE or a command for the channel initiator, the command server experienced an error while trying to save information about the command.

System action

The command is not processed.

System programmer response

The most likely cause is insufficient storage. If the problem persists, you may need to restart the queue manager after making more storage available.

CSQN130E
Command exceeds maximum size for CMDSCOPE(*qmgr-name*)

Explanation

A command that specified CMDSCOPE(*qmgr-name*) was too long.

System action

The command is not processed.

System programmer response

Reissue the command correctly.

CSQN131E
CMDSCOPE(qmgr-name) not allowed during restart

Explanation

A command that specified CMDSCOPE(*qmgr-name*) was issued in the initialization input data set CSQINP1. This is not allowed.

System action

The command is not processed.

System programmer response

Reissue the command later.

CSQN132E
CMDSCOPE(*qmgr-name*) not allowed with disposition *disposition*

Explanation

A command that specified CMDSCOPE(*qmgr-name*) with QSGDISP(*disposition*) or CHLDISP(*disposition*) was issued. This combination of values is not allowed.

System action

The command is not processed.

System programmer response

Reissue the command correctly.

CSQN133E

CMDSCOPE(*qmgr-name*) not allowed, command server unavailable

Explanation

A command that specified CMDSCOPE(*qmgr-name*) was entered or generated by another command, but the command server is not running and not enabled.

System action

The command is not processed.

System programmer response

Use the START CMDSERV command to start the command server, and reissue the command.

CSQN135E

Queue manager *qmgr-name* not active in queue-sharing group

Explanation

A command specifying CMDSCOPE(*qmgr-name*) was entered or generated by another command, but that queue manager is not currently active in the group.

System action

The command is not processed.

System programmer response

Start the queue manager and reissue the command if required.

CSQN136E

Not in queue-sharing group

Explanation

A command that requires a queue-sharing group was entered, but the queue manager is not in a group.

System action

The command is not processed.

System programmer response

Reissue the command correctly.

CSQN137I

'*verb-name pkw-name*' accepted for CMDSCOPE(*qmgr-name*), sent to *n*

Explanation

A command that specified CMDSCOPE was entered. It has been passed to the requested queue manager(s) for processing; *n* is the number of queue managers.

System action

Processing continues.

CSQN138I

'*verb-name pkw-name*' generated for CMDSCOPE(*qmgr-name*), sent to *n*

Explanation

A command that specified CMDSCOPE was generated in response to the command originally entered. It has been passed to the indicated queue manager(s) for processing; *n* is the number of queue managers.

System action

Processing continues.

CSQN201I

COMMAND SERVER IS SHUTTING DOWN

Severity
0

Explanation

This message confirms that the command server is shutting down after an error.

System action

The command server shuts down and will not process any more commands.

System programmer response

Correct the errors reported in the preceding messages, and use the START CMDSERV command to restart the command server.

CSQN202I

COMMAND SERVER RETURN CODE=*rc*, REASON=*reason*

Severity
8

Explanation

An error occurred in the command server, as indicated by the preceding messages.

System action

The system action depends on the reason code (*reason*). See "Command server codes (X'D5')" on page 1024 or "Coupling Facility codes (X'C5')" on page 938 for information about the code.

System programmer response

The response you should make depends on the reason code (*reason*).

The return code *rc* is dependent on *reason*, and is of use to IBM service personnel.

CSQN203I

QUEUE *queuename*, MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Severity
8

Explanation

An API call, as indicated in the preceding message, did not complete successfully. The completion code is *mqcc*, and the reason code is *mqrc* (*mqrc-text* provides the MQRC in textual form).

System programmer response

See API completion and reason codes for information about completion codes and reason codes.

If you are unable to resolve the problem, note the numbers of any messages and codes associated with the error, and contact your IBM support center.

Reason codes above 8000 are internal queue manager error codes. If such a code persists, report it to your IBM support centre.

CSQN205I

COUNT=*count*, RETURN=*rc*, REASON=*reason*

Severity
0

Explanation

This message reports the results from the command processor (refer to the section Writing programs to administer IBM MQ for further information). *count* is the number of messages (including this one) to be written to the reply-to queue in response to the command. Possible values of *rc* are as follows:

Return code
  Description

00000000
  Normal completion

00000004
  Internal error

00000008
  Syntax or command preprocessor error, see the following messages

0000000C
  Command processor error, see the following messages

00000010
  Command processor abnormal termination

00000014
  Command completed, but there is insufficient storage for the messages

00000018
  Command preprocessor has insufficient storage, (there could be further messages about this error)

0000001C
  The command processor has insufficient storage (the command could be partially completed)

00000020
  Security check, check userid authority

00000024
  Command too long, see the following messages

00000028
  Queue-sharing group error, see the following messages

00D5xxxx
  See "Command server codes (X'D5')" on page 1024

Note: If the return code is '00000010', the reason code has no meaning.

If *reason* is 00000004 and *return code* is 00000000, the set of reply messages is incomplete. Further sets of messages, each including another CSQN205I message, will be produced later. The results of the command will be shown by the codes in the CSQN205I message included with the final set of messages.

Otherwise the reason code indicates the command result as follows:

Reason
  Description

00000000
  Command completed

00000004
  Partial completion

00000008
  Command not actioned

0000000C
  Command processor abend

FFFFFFFF
  Command not actioned

System action

The next command is processed, if possible.

System programmer response

If *reason* indicates that the command did not complete, examine the command and all associated messages. **z/OS** See IBM MQ for z/OS messages, completion, and reason codes for further information about the commands.

If you are unable to solve the problem, collect the input and output data sets and contact your IBM support center.

CSQN206I

COMMAND SERVER ECBLIST, STOP=*ecb1*, WAIT=*ecb2*

Severity
8

Explanation

This message reports the ECB values associated with an error in the command server.

System action

The command server terminates.

System programmer response

This message is usually preceded by a CSQN202I message. Refer to the preceding messages for more information about the cause of the problem.

CSQN207I
COMMAND SERVER UNABLE TO OPEN REPLY TO QUEUE

Explanation

The command server was unable to open the reply-to queue while processing a command.

System action

Message CSQN203I is sent to the z/OS console reporting the completion and reason codes from the MQOPEN request. The command responses are discarded.

System programmer response

See API completion and reason codes for information about the completion and reason codes. Use this information to solve the problem, and restart the command server. If this does not help you to solve the problem, collect the following items, and contact your IBM support center.

- Return and reason codes from the message produced
- Any trace information collected

CSQN208E
COMMAND SERVER UNABLE TO OPEN COMMAND INPUT QUEUE

Explanation

The command server was unable to open the system-command input queue while starting.

System action

Message CSQN203I is sent to the z/OS console reporting the completion and reason codes from the MQOPEN request. The command server stops, without processing any commands.

System programmer response

See API completion and reason codes for information about the completion and reason codes. Use this information to solve the problem, and restart the command server. If this does not help you to solve the problem, collect the following items, and contact your IBM support center.

- Return and reason codes from the message produced
- Any trace information collected

CSQN209E
COMMAND SERVER ERROR CLOSING COMMAND INPUT QUEUE

Explanation

While the command server was shutting down, an error occurred when closing the system-command input queue.

System action

Message CSQN203I is sent to the z/OS console reporting the completion and reason codes from the MQCLOSE request. The shutdown procedure continues.

System programmer response

See API completion and reason codes for information about the completion and reason codes. If this does not help you to solve the problem, collect the following items, and contact your IBM support center:

- Return and reason codes from the message produced
- Any trace information collected

CSQN210E
COMMAND SERVER ERROR CLOSING REPLY TO QUEUE

Explanation

The command server was unable to close the reply-to queue while processing a command.

System action

Message CSQN203I is sent to the z/OS console reporting the completion and reason codes from the MQCLOSE request.

The command server continues.

System programmer response

See API completion and reason codes for information about the completion and reason codes.

CSQN211E
COMMAND SERVER ERROR GETTING FROM COMMAND INPUT QUEUE

Explanation

The command server experienced an error while trying to get a message from the system-command input queue.

System action

Message CSQN203I is sent to the z/OS console, reporting the completion and reason codes from the MQGET request.

The command server terminates.

System programmer response

See API completion and reason codes for information about the completion and reason codes. Use this information to solve the problem, and restart the command server. If this does not help you to solve the problem, collect the following items, and contact your IBM support center:

- Return and reason codes from the console message
- Any trace information collected

CSQN212E
COMMAND SERVER ERROR PUTTING TO REPLY TO QUEUE

Explanation

The command server was unable to put a response message onto a reply-to queue while processing a command.

System action

Message CSQN203I is sent to the z/OS console reporting the completion and reason codes from the MQPUT request. If possible, the command server sends the response message to the dead-letter queue, otherwise the response is discarded.

The command server continues.

System programmer response

See API completion and reason codes for information about the completion and reason codes. If this does not help you to solve the problem, collect the following items, and contact your IBM support center:

- Return and reason codes from the message produced
- Any trace information collected

CSQN213E
COMMAND SERVER ERROR, COMMAND INPUT QUEUE DISABLED

Explanation

While waiting for a command the system-command input queue has been disabled.

System action

Message CSQN203I is sent to the console containing the return and reason codes from the request function. The command server terminates.

System programmer response

Change the system-command input queue to be enabled, and issue the START CMDSERV command.

If the problem persists, collect the following items, and contact your IBM support center:

- Return and reason codes
- Any trace data collected
- Printout of SYS1.LOGREC

CSQN219E

Unable to find command reply information

Severity
8

Explanation

While processing responses from a command that specified CMDSCOPE or a command for the channel initiator, the command server could not find the information to determine where to send the responses.

System action

The command might not be processed; any command responses are discarded. The command server continues.

System programmer response

If the problem persists, contact your IBM support center with details of this message, any previous messages pertaining to this error, and the dump (if applicable).

CSQN220E
Error monitoring CMDSCOPE command data

Explanation

The command server experienced an error while monitoring command data in the coupling facility.

System action

Message CSQN202I is sent to the z/OS console, reporting the return and reason codes from the request.

The command server terminates.

System programmer response

See "Coupling Facility codes (X'C5')" on page 938 for information about the reason code. Use this information to solve the problem, and restart the command server. If this does not help you to solve the problem, collect the following items, and contact your IBM support center:

- Return and reason codes from the console message
- Any trace information collected

CSQN221E
Error receiving CMDSCOPE command data

Explanation

The command server experienced an error while trying to get command data from the coupling facility.

System action

Message CSQN202I is sent to the z/OS console, reporting the return and reason codes from the request.

The command server terminates.

System programmer response

See "Coupling Facility codes (X'C5')" on page 938 for information about the reason code. Use this information to solve the problem, and restart the command server. If this does not help you to solve the problem, collect the following items, and contact your IBM support center:

- Return and reason codes from the console message
- Any trace information collected

CSQN222E
Error sending CMDSCOPE command data

Explanation

The command server experienced an error while trying to send command data to the coupling facility.

System action

Message CSQN202I is sent to the z/OS console, reporting the return and reason codes from the request.

The command server terminates.

System programmer response

See "Coupling Facility codes (X'C5')" on page 938 for information about the reason code. Use this information to solve the problem, and restart the command server. If this does not help you to solve the problem, collect the following items, and contact your IBM support center:

- Return and reason codes from the console message
- Any trace information collected

CSQN223E
Insufficient storage for CMDSCOPE command data

Explanation

The command server was unable to obtain storage needed for command data in the coupling facility.

System action

The command server terminates.

System programmer response

Use the START CMDSERV command to restart the command server. If the problem persists, you might need to restart the queue manager after making more storage available.

CSQN224E

GROUP COMMAND SERVER ENDED ABNORMALLY. RESTARTING

Severity

8

Explanation

The Group Command Server has ended abnormally because a severe error occurred.

System action

The Group Command Server is automatically restarted.

System programmer response

Investigate the reason for abnormal termination. If the problem persists contact your IBM support center.

Operations and control messages (CSQO...)

CSQO001I

'*' may only be final character.

Severity

8

Explanation

A character string entered in the Name field contains an asterisk character that is not in the last position. This is not allowed.

System action

The main menu is redisplayed.

CSQO002I

Action *action* is not allowed.

Severity

8

Explanation

An incorrect action number was entered in the action code field. The number must be in the range shown on the panel.

System action

The panel is redisplayed.

CSQO003I

Use the ISPF command PFSHOW to display F-key settings

Severity

0

Explanation

On entry to Operations and Control, F-key settings are not being displayed. This tells you how to display the settings; you need to use F-keys to use the Operations and Control panels.

System action

None.

CSQO004I

Object *object-type* is not allowed.

Severity

8

Explanation

The value entered in the Object type field was invalid.

System action

The main menu is redisplayed.

CSQO005I

Multiple replies returned. Press F10 to view.

Severity

4

Explanation

Several error messages were returned by the queue manager in response to an action from Operations and Control.

System action

The main menu is redisplayed.

CSQO006I

Blank name is not allowed with action queue manager *.

Severity

8

Explanation

The Define action was selected and the Name field was left blank to define a new object using default attributes. However, an asterisk (*) was entered for the action queue manager, which is not allowed in this case.

System action

The main menu is redisplayed.

CSQO007I

'*field*' must be supplied.

Severity

8

Explanation

Nothing was entered in the named field. This value is required to continue.

System action

The current panel is displayed again.

CSQO008I

F-key is not active.

Severity

4

Explanation

A function key that is not currently available was pressed.

System action

The current panel is redisplayed.

CSQO009I

Action *action* is not allowed for object type *object-type*.

Severity

8

Explanation

The action number that you entered is not allowed for *object-type* objects.

System action

The current panel is redisplayed.

CSQO010I

Queue manager or group is not available.

Severity

8

Explanation

An attempt to connect to a queue manager was unsuccessful. If a queue manager name was specified, the queue manager is not running. If a queue-sharing group name was specified, there are no queue managers running in that group.

System action

None, the panel is redisplayed.

CSQO011E

MQCONN unsuccessful. Reason code=*mqrc*.

Severity

8

Explanation

An attempt to connect to a queue manager or queue-sharing group was unsuccessful for one of the following reasons:

1. Insufficient storage is available
2. A severe error has occurred

System action

None, the panel is redisplayed.

System programmer response

Refer to API completion and reason codes for information about *mqrc*.

CSQO012I

Connect name is invalid or unknown.

Severity

8

Explanation

An attempt to connect to a queue manager or queue-sharing group was unsuccessful because the name specified is not known, or not valid. If a blank name was specified, this means that there was no default queue manager or group defined for your installation.

System action

None, the panel is redisplayed.

CSQO013I

Not authorized to use queue manager.

Severity
8

Explanation

An attempt to connect to a queue manager was unsuccessful because the connection security failed, or you are not authorized to do so.

System action

None, the panel is redisplayed.

CSQO014E

MQOPEN of *q-name* unsuccessful. Reason code=*mqrc*.

Severity
8

Explanation

An attempt to open *q-name* was unsuccessful. *mqrc* is the reason code returned by MQOPEN; seeAPI completion and reason codes for more information. *q-name* is one of the following:

- SYSTEM.COMMAND.INPUT
- SYSTEM.COMMAND.REPLY.MODEL; the requested dynamic queue name is appended in parentheses.
- The name of a transmission queue (if you are attempting to send commands to a remote system)

Likely causes of this problem are:

- One or both of the required queues is not defined on the queue manager that you have connected to.
- An attempt was made to send commands to a remote system, but no transport queue is defined.
- You are not authorized to open one of the required queues. If the message indicates that it is the SYSTEM.COMMAND.REPLY.MODEL queue that you are not authorized to open, it could be that you are not authorized to open the SYSTEM.CSQOREXX.* dynamic queue.
- There is insufficient storage available.

System action

The main menu is redisplayed.

CSQO015E

Command issued but no reply received.

Severity
8

Explanation

The reply to a command could not be retrieved from the reply-to queue using MQGET because the response wait time was exceeded.

System action

The panel is redisplayed. The command was sent to the queue manager, but it might not have been executed successfully.

CSQO016E

MQPUT to *q-name* unsuccessful. Reason code=*mqrc*.

Severity
8

Explanation

An attempt to put a command on a queue (*q-name*) using MQPUT was unsuccessful. *q-name* is the name of either the system-command input queue, or a transmission queue if you are sending commands to a remote queue manager. *mqrc* is the reason code returned from MQPUT; see API completion and reason codes for more information.

The most likely causes of this problem are:

1. Put requests are inhibited for the system-command input queue or the transmission queue.
2. The system-command input queue or transmission queue is full, because the command server is not running.
3. There is insufficient storage available.

System action

The command is not sent to the queue manager and the panel is redisplayed.

CSQO017E

MQGET from *reply-q* unsuccessful. Reason code=*mqrc*.

Severity
8

Explanation

The reply to a command could not be retrieved from the reply-to queue using MQGET. (The reply-to queue is a local queue generated from the model queue SYSTEM.COMMAND.REPLY.MODEL.) *mqrc* is the reason code returned from MQGET; see API completion and reason codes for more information.

A possible cause of this problem is that get requests are inhibited on the reply-to queue.

System action

The panel is redisplayed. The command was sent to the queue manager, but it might not have been executed successfully.

CSQO018E

Queue manager is invalid or unknown or unavailable.

Severity
8

Explanation

An attempt to send a command was unsuccessful because the target or action queue manager was not known or not valid or not running.

System action

The command is not sent the queue manager and the panel is redisplayed.

CSQO019E

Queue manager is no longer available.

Severity

8

Explanation

The queue manager that you were using is no longer running. The action that you requested might not have been actioned.

System action

The main menu is redisplayed.

CSQO020I

'*field*' truncated due to quotes. Press Enter to continue.

Severity

0

Explanation

The value in field *field* contains one or more quotation marks. In order that these are treated as quotation marks instead of indicators of the beginning or end of a string, each quotation mark is converted into two quotation marks (doubling up) in the command for the queue manager. However, this conversion has made the string too long, and it has been truncated.

System action

The value is truncated. The panel may be displayed again with *field-name* set to the truncated value.

CSQO021I

Generic name not allowed.

Severity

8

Explanation

You entered a name ending with an asterisk, but generic names are only allowed on the Main Menu panel.

System action

The panel is redisplayed.

CSQO022I

Filter value invalid.

Severity

8

Explanation

You asked to list objects with filtering, but the value entered for the attribute to be used was invalid.

System action

The main menu panel or an empty list panel is displayed.

CSQO023I

Command *command* not recognized.

Severity

4

Explanation

The command entered in the panel command area (or using a function key) is not valid.

System action

The panel is redisplayed.

CSQO025I

There are no messages to view.

Severity

0

Explanation

The MSGVIEW panel command was entered in the command area, or the messages function key was pressed, but there are no messages from the queue manager to view.

System action

The panel is redisplayed.

CSQO027I

Function *function* not allowed for object type *object-type*.

Severity

8

Explanation

The function number that you entered is not allowed for *object-type* objects.

System action

The current panel is redisplayed.

CSQO028I

One of '*field1*' or '*field2*' but not both must be supplied.

Severity

0

Explanation

Nothing was entered in the two named fields, or something was entered in both of them. Either one or the other must have a value.

System action

The current panel is redisplayed.

CSQO029I

Command exceeds maximum allowable length of 32762 bytes.

Severity

4

Explanation

While defining or altering a namelist, too many names are added causing the necessary command to exceed the maximum allowable length.

System action

The panel is redisplayed.

CSQO030I

No objects of type *objtype* match *name*.

Severity

0

Explanation

You asked to display or list the objects of type *objtype* and name *name,* but no matching objects were found.

System action

The current panel is redisplayed.

CSQO031E

ALLOCATE of data set *dsname* unsuccessful. Return code = *rc*.

Severity
8

Explanation

An ALLOCATE error occurred when processing the data set allocated during an attempt to edit the names in a namelist. *dsname* is the name of the data set, and is of the form *userid*.NAMELIST.NAMES*n* (where *userid* is the TSO userid involved, and *n* is a number). *rc* is the return code from the TSO command ALLOCATE.

The most likely cause of this problem is that another data set with the same name already exists, or that DDname CSQONL*n* is in use.

System action

The panel is redisplayed.

System programmer response

This message will be accompanied by one or more messages from TSO, giving more information about the cause of the problem. The return code is documented in the *TSO/E Command Reference* manual.

If you are unable to resolve the problem, contact your IBM support center.

CSQO032E

Serious error returned. Press F10 to view.

Severity
12

Explanation

A command was sent to the queue manager, but message CSQN205I was received in reply, indicating a severe error.

System action

Message CSQN205I is saved. The current panel is redisplayed.

System programmer response

Look up message CSQN205I and take the appropriate action.

CSQO033E

Format of first reply not recognized. Press F10 to view.

Severity
8

Explanation

A command was sent to the queue manager, but the first reply message received is not CSQN205I.

System action

The messages received are saved. If it is not possible to continue, the current panel is redisplayed.

CSQO034E

Reply format not recognized. Press F10 to view.

Severity

8

Explanation

A command was sent to the queue manager. The first reply message received was CSQN205I as expected, but a subsequent message was not as expected.

System action

The message that caused the problem, and any subsequent messages are saved. If it is not possible to continue, the current panel is redisplayed.

CSQO035E

Unable to get storage (return code = *rc*).

Severity

12

Explanation

An attempt to get storage was unsuccessful.

System action

The system is unable to acquire enough storage.

System programmer response

Determine why there was insufficient storage available to satisfy the request.

CSQO036I

List is not filtered.

Severity

0

Explanation

You asked for a secondary list from a list that was filtered (for example, status from a list of queues or channels). The filter condition is not applied to the secondary list; all items that match the originally requested name, type, and disposition are included.

CSQO037I

Locally-defined channel will be used.

Severity

4

Explanation

You selected an action from the List Cluster queue manager Channels panel for an auto-defined cluster channel, but there is a locally-defined channel of the same name. In such a case, if you decide to take the action, it will be performed against the locally-defined channel instead.

System action

The action panel is displayed.

CSQO038I

Function is recursive.

Severity

4

Explanation

The function you requested would cause recursion; that is, it would take you to a panel that you have previously come from. This is not allowed.

System action

The current panel is redisplayed.

CSQO039E

EDIT of data set *dsname* failed. Return code = *rc*.

Severity
8

Explanation

An EDIT error occurred when processing the data set allocated during an attempt to edit the names in a namelist. *dsname* is the name of the data set, and is of the form *userid*.NAMELIST.NAMES*n* (where *userid* is the TSO userid involved, and *n* is a number). *rc* is the return code from the ISPF command EDIT.

System action

The panel is redisplayed.

System programmer response

This message will be accompanied by one or more messages from TSO, giving more information about the cause of the problem. The return code is documented in the *TSO/E Command Reference* manual.

If you are unable to resolve the problem, contact your IBM support center.

CSQO040I

No open queues with disposition *disptype* match *name*.

Severity
0

Explanation

You asked to list the open queues with disposition (or dispositions) *disptype* and name *name,* but no matching objects were found.

System action

The empty list panel is displayed.

CSQO041I

Action requires a specific object type.

Severity
4

Explanation

A define request was issued for object type QUEUE or CHANNEL.

System action

The secondary window or main panel is redisplayed.

CSQO042I

On the first panel.

Severity
0

Explanation

A function key was pressed that requests scrolling back to the previous panel, but the first panel is already being displayed.

System action

The panel is redisplayed.

CSQO043I

On the last panel.

Severity

0

Explanation

A function key was pressed that requests scrolling forward to the next panel, but the last panel is already being displayed.

System action

The panel is redisplayed.

CSQO044I

Function not available for objects with type *objtype*.

Severity

0

Explanation

The function you requested (for example, status or cluster information) is not available for objects with type *objtype*.

System action

The panel is redisplayed.

CSQO045I

Name too long for object type *type*.

Severity

8

Explanation

You specified a name that was longer than 20 characters for a channel object or longer than 16 characters for a connection object or longer than 8 characters or longer than 12 characters for a CF structure object or longer than 8 characters for a storage class object.

System action

The panel is redisplayed.

CSQO046I

No channels with saved status for *name*.

Severity

0

Explanation

You asked to list the saved status for channel *name*, but there was none.

System action

The empty list panel is displayed.

CSQO047I

No current channels for *name.*

Severity

0

Explanation

You asked to list the current instances for channel *name,* but there were none.

System action

The empty list panel is displayed.

CSQO048I

Channel initiator is not active.

Severity

0

Explanation

The action you requested needs the channel initiator to be active on the action queue manager, but it is not.

System action

The panel is redisplayed.

CSQO049I

EXEC cannot be invoked as a TSO command.

Severity

4

Explanation

An attempt was made to issue one of the Operations and Control execs as a TSO command.

System action

The request is ignored.

System programmer response

Use CSQOREXX to invoke the Operations and Control panels.

CSQO050I

No objects of type *objtype* disposition *disptype* match *name.*

Severity

0

Explanation

You asked to display or list the objects of type *objtype,* with disposition (or dispositions) *disptype* and name *name,* but no matching objects were found.

System action

The current panel is redisplayed or the empty list panel is displayed.

CSQO051I

Like object name with disposition *disptype* not found. Name assumed to be for defining new object with default attributes.

Severity

0

Explanation

You asked to define an object of type *objtype*, using as a basis an object with disposition *disptype* and name *name*, but no such object was found.

(In earlier releases, you could specify the name of a new object to define on the Main Menu panel, and a 'like' name to use as a basis for your definition. Now, only the 'like' name can be specified for Define on the Main Menu panel; you specify the new object name on the Define panel.)

System action

The Define panel is displayed, initialized with the name you specified and the default attributes for that type of object, on the assumption that you intended to define a new object with default attributes.

CSQO052I

Queue manager names changed because connect name changed.

Severity
0

Explanation

The Connect name field was changed but the Target queue manager field was not, and the new connect name was different from the target queue manager name. It is assumed you have forgotten to change the target queue manager.

System action

The target queue manager is changed to the queue manager you are connected to; the action queue manager might also be changed. The 'Queue Manager Names' secondary window is displayed, showing the new names that will be used.

CSQO053I

Blank connect or queue manager names specified.

Severity
0

Explanation

One or more of Connect name, Target queue manager, or Action queue manager fields was blank, specifying that the default name should be used.

System action

The Queue Manager Names secondary window is displayed, showing the actual names that will be used.

CSQO054I

Function not available for objects with disposition *disptype*.

Severity
0

Explanation

The function you requested (for example, status or cluster information) is not available for objects with disposition (or dispositions) *disptype*.

System action

The panel is redisplayed.

CSQO055I

Connect name is a queue-sharing group.

Severity
0

Explanation

The Connect name field specified the name of a queue-sharing group, to connect to any queue manager in the group.

System action

The Queue Manager Names secondary window is displayed, showing the queue manager you are connected to.

CSQO056I

Queue sharing group is needed.

Severity

0

Explanation

The action you requested needs the queue manager to be part of a queue sharing group, but it is not.

System action

The panel is redisplayed.

CSQO057I

Function *function* is not allowed for disposition *disposition*.

Severity

8

Explanation

The function number that you entered is not allowed with the specified disposition. This is the disposition of the object you are working with if you are using the Manage action, or the disposition you chose if you are performing a channel function.

System action

The current panel is redisplayed.

CSQO058I

Action *action* is not allowed for channels with disposition *disposition*.

Severity

8

Explanation

The action number that you entered is not allowed for channel objects with the specified disposition.

System action

The current panel is redisplayed.

CSQO059I

Disposition *disposition* is not allowed for object type *object-type*.

Severity

8

Explanation

The disposition that you entered is not allowed for *object-type* objects.

System action

The current panel is redisplayed.

CSQO060I

Platform for target queue manager *qmgr-name* is not z/OS or OS/390®.

Severity
4

Explanation

The target queue manager is running on a plaform that is not z/OS or OS/390. With such a queue manager, it is likely that actions will work only partially, incorrectly, or not at all, and that the replies from the queue manager will not be recognized.

System action

The Confirm Target Queue Manager secondary window is displayed.

CSQO061I

Target queue manager *qmgr-name* command level is not supported.

Severity
4

Explanation

The target queue manager has a command level which is not one of those supported by the Operations and Control panels. With such a queue manager, it is likely that actions will work only partially, incorrectly, or not at all, and that the replies from the queue manager will not be recognized.

System action

The Confirm Target Queue Manager secondary window is displayed.

CSQO062I

Action queue manager *qmgr-name* command level is not the current level.

Severity
4

Explanation

The action queue manager has a command level which is not the current level supported by the Operations and Control panels. If an action is directed to such a queue manager most actions will work, but some fields will be ignored; a few objects and actions will be disallowed.

System action

The Confirm Action Queue Manager secondary window is displayed.

CSQO063I

Command level of some queue managers in the queue-sharing group is not the current level.

Severity
4

Explanation

The action queue manager is * and one or more queue managers in the queue-sharing group has a command level which is not the current level supported by the Operations and Control panels. If an action is directed to such a queue manager or to all queue managers in the queue-sharing group, most actions will work, but some fields will be ignored; a few objects and actions will be disallowed.

System action

The Confirm Action Queue Manager secondary window is displayed.

CSQO064I

Object type *object-type* is not allowed with command level of action or target queue manager.

Severity
4

Explanation

The action or target queue manager has a command level which does not support *object-type* objects.

System action

The 'Confirm Action Queue Manager' secondary window is displayed.

CSQO065I

Object name *name* is invalid.

Severity
8

Explanation

The value entered in the Name field was invalid.

System action

The panel is redisplayed.

CSQO066I

No status of this type for CF structures matching *name*.

Severity
0

Explanation

You asked to list status for CF structures with name *name*, but there were none with status of that type.

System action

The empty list panel is displayed.

CSQO067I

Some channel initiators not active in queue-sharing group. List may be incomplete.

Severity
4

Explanation

The action you requested requires information from the channel initiators on all the queue managers in the queue-sharing group, but some of those channel initiators are not active. The information might therefore be incomplete.

System action

The list panel is displayed, but might be incomplete.

CSQO068I

No channel initiators active in queue-sharing group.

Severity
4

Explanation

The action you requested requires information from the channel initiators on all the queue managers in the queue-sharing group, but none of those channel initiators are active. No information can therefore be displayed.

System action

The empty list panel is displayed.

CSQO069I

Action or function or object type is not allowed because of queue manager command level.

Severity

4

Explanation

The action queue manager has a command level which is not the current level supported by the Operations and Control panels. The action, function, or object type you chose is not allowed at that command level.

System action

The panel is redisplayed.

CSQO070I

No field value supplied.

Severity

0

Explanation

You asked to list objects with filtering, but no value was entered into any of the fields on the filter panels. A value must be entered into one (and only one) field to specify the filtering you want.

System action

The panel is redisplayed.

CSQO071I

More than one field value supplied.

Severity

0

Explanation

You asked to list objects with filtering, but a value was entered into more than one of the fields on the filter panels. Only one field value may be entered to specify the filtering you want.

System action

The panel is redisplayed.

CSQO072I

No current channels for *name* match filter condition.

Severity

0

Explanation

You asked to list the current instances for channel *name* with a filter condition, but there were none that satisfied the condition.

System action

The empty list panel is displayed.

CSQO073I

No channels with saved status for *name* match filter condition.

Severity

0

Explanation

You asked to list the saved status for channel *name* with a filter condition, but there were none with saved status that satisfied the condition.

System action

The empty list panel is displayed.

CSQO074I

No objects of type *objtype* match *name* and filter condition.

Severity

0

Explanation

You asked to display or list the objects of type *objtype* and name *name,* with a filter condition, but no matching objects were found that satisfied the condition.

System action

The current panel is redisplayed.

CSQO075I

No objects of type *objtype* disposition *disptype* match *name* and filter condition.

Severity

0

Explanation

You asked to display or list the objects of type *objtype,* with disposition (or dispositions) *disptype* and name *name,* with a filter condition, but no matching objects were found that satisfied the condition.

System action

The current panel is redisplayed or the empty list panel is displayed.

CSQO076I

No connections match *name.*

Severity

0

Explanation

You asked to list connections with name *name,* but there were none.

System action

The empty list panel is displayed.

CSQO077I

No open handles for connection name match *name.*

Severity

0

Explanation

You asked to list the open handles for the connection *name,* but no such handles were found.

System action

The empty list panel is displayed.

CSQO078I

No connections match *name* and filter condition.

Severity

0

Explanation

You asked to list connections with name *name*, but there were none that satisfied the condition.

System action

The empty list panel is displayed.

CSQO079I

No open queues with disposition *disptype* match *name* and filter condition.

Severity

0

Explanation

You asked to list the open queues with disposition (or dispositions) *disptype* and name *name* with a filter condition, but no matching objects were found that satisfied the condition.

System action

The empty list panel is displayed.

CSQO085E

Error in *pgm-name*. TBCREATE *table-name* failed, return code = *rc*.

Severity

12

Explanation

An attempt by *pgm-name* to call the ISPF TBCREATE service was unsuccessful. *table-name* is the name of the table that *pgm-name* was attempting to create.

System action

An internal error has occurred. The current panel is redisplayed. An ISPF message giving more details about the error might be shown first.

System programmer response

An internal error has occurred, note the message number and the values contained in it, together with any associated ISPF message, and contact your IBM support center to report the problem.

CSQO086E

Error in *pgm-name*. TBDISPL *panel-name* failed, return code = *rc*.

Severity

12

Explanation

An attempt by *pgm-name* to call the ISPF TBDISPL service was unsuccessful. *panel-name* is the name of the panel that *pgm-name* was attempting to display.

System action

The system is unable to display the panel, and the last panel is redisplayed (if applicable). An ISPF message giving more details about the error might be shown first.

System programmer response

If *rc*=12, the system is unable to find the panel. If you receive this message when you are trying to display the 'Main Menu' panel it could be that you do not have the data set containing the panels in your library concatenation. Find the name of the data set containing the panels, then check your ISPPLIB library definitions. This will probably be in your TSO logon procedure unless you are calling CSQOREXX from a higher level exec or CLIST that has the ISPF LIBDEF calls in it.

If you are already using the panels when you get this message, either a panel is missing from your ISPPLIB library, or an internal error has occurred. If you are unable to solve the problem, contact your IBM support center for assistance.

If *rc*=20, the most likely cause of the problem is that the system was unable to find the key-list which goes with the panel that it is trying to display. All the key lists are in an ISPF table (CSQOKEYS) that should be in a library in your ISPTLIB concatenation.

CSQO087E

Error in *pgm-name*. SELECT *program* failed, return code = *rc*.

Severity
12

Explanation

An attempt by *pgm-name* to call the ISPF SELECT service was unsuccessful. *program* is the name of the program that *pgm-name* was attempting to select.

System action

The current panel is redisplayed. An ISPF message giving more details about the error might be shown first.

System programmer response

The system is unable to find a load module. Check your ISPLLIB library concatenation.

CSQO088E

Error in *pgm-name*. DISPLAY *panel-name* failed, return code = *rc*.

Severity
12

Explanation

An attempt by *pgm-name* to call the ISPF DISPLAY service was unsuccessful. *panel-name* is the name of the panel that *pgm-name* was attempting to display.

System action

The system is unable to display the panel, and the last panel is redisplayed (if applicable). An ISPF message giving more details about the error might be shown first.

System programmer response

If *rc*=12, the system is unable to find the panel. If you receive this message when you are trying to display the 'Main Menu' panel it could be that you do not have the data set containing the panels in your library concatenation. Find the name of the data set containing the panels, then check your ISPPLIB library definitions. This will probably be in your TSO logon procedure unless you are calling CSQOREXX from a higher level exec or CLIST that has the ISPF LIBDEF calls in it.

If you are already using the panels when you get this message, either a panel is missing from your ISPPLIB library, or an internal error has occurred. If you are unable to solve the problem, contact your IBM support center for assistance.

If *rc*=20, the most likely cause of the problem is that the system was unable to find the key-list which goes with the panel that it is trying to display. All the key lists are in an ISPF table (CSQOKEYS) that should be in a library in your ISPTLIB concatenation.

CSQO089E

Error in *pgm-name*. *service* failed, return code = *rc*.

Severity
12

Explanation

An attempt by *pgm-name* to call the ISPF service (*service*) was unsuccessful.

System action

The current panel is redisplayed. An ISPF message giving more details about the error might be shown first.

System programmer response

service=VDEFINE, VPUT, or TBADD
An internal error has occurred, note the message number and the values contained in it, and contact your IBM support center for assistance.

If *service* is anything else, note the message number and the values contained in it, together with any associated ISPF message, and contact your IBM support center to report the problem.

CSQO090E

Internal error in *program*. Action field is not valid.

Severity
12

Explanation

An internal error has occurred.

System action

The current panel is redisplayed.

System programmer response

Collect the following items, and contact your IBM support center:

- The number of the message, and the value of *program*
- The name of the panel involved
- A description of the actions that led to the problem

CSQO091E

Internal error in *program*. Object field is not valid.

Severity
12

Explanation

An internal error has occurred.

System action

The last panel is redisplayed.

System programmer response

Collect the following items, and contact your IBM support center:

- The number of the message, and the value of *program*
- The name of the panel involved
- A description of the actions that led to the problem

CSQO092E

Internal error in *program*. Error in reply translation.

Severity
12

Explanation

> An internal error has occurred.

System action

> The last panel is redisplayed.

System programmer response

> Collect the following items, and contact your IBM support center:

- The number of the message, and the value of *program*
- The name of the panel involved
- A description of the actions that led to the problem

CSQO093E

> Internal error in *program*. Command request is not valid.

Severity
> 12

Explanation

> An internal error has occurred.

System action

> The last panel is redisplayed.

System programmer response

> Collect the following items, and contact your IBM support center:

- The number of the message, and the value of *program*
- The name of the panel involved
- A description of the actions that led to the problem

CSQO095E

> Internal error in *program*. *service* failed, return code = *rc*.

Severity
> 12

Explanation

> An internal error has occurred.

System action

> The last panel is redisplayed.

System programmer response

> Collect the following items, and contact your IBM support center:

- The number of the message, and the values of *program* and *service*
- The name of the panel involved
- A description of the actions that led to the problem
- Any associated ISPF message shown

CSQO096E

> Internal error in *program*. *att-name* not in keyword table.

Severity
> 12

Explanation

An internal error has occurred.

System action

The last panel is redisplayed.

System programmer response

Collect the following items, and contact your IBM support center:

- The number of the message, and the values of *program* and *att-name*
- The name of the panel involved
- A description of the actions that led to the problem

CSQO097E

Internal error in *program*. No handle for required system queue.

Severity
12

Explanation

An internal error has occurred.

System action

The last panel is redisplayed.

System programmer response

Collect the following items, and contact your IBM support center:

- The number of the message
- The name of the panel involved
- A description of the actions that led to the problem

Buffer manager messages (CSQP...)

CSQP002I

BUFFPOOL VALUE OUT OF RANGE

Severity
8

Explanation

One of the following commands has been issued incorrectly:

- DEFINE BUFFPOOL(n)
- ALTER BUFFPOOL(n)
- DELETE BUFFPOOL(n)
- DEFINE PSID(x) BUFFPOOL(n)

The value of n depends on OPMODE and can be either 0 to 15 or 0 to 99.

System action

The command is ignored.

System programmer response

See MQSC commands for information about the command, and reissue the command correctly.

CSQP003I

PSID VALUE OUT OF RANGE

Severity
8

Explanation

One of the following commands has been issued incorrectly:

- DEFINE PSID(x)
- ALTER PSID(x)
- DELETE PSID(x)

The value of x must be in the range 0 through 99.

System action

The command is ignored.

System programmer response

See MQSC commands for information about the command, and reissue the command correctly.

CSQP004E

csect-name I/O ERROR STATUS *ret-code* PSID *psid* RBA *rba*

Severity
8

Explanation

An I/O error has occurred. *ret-code* is the return code from the Media Manager. *psid* is the identifier of the page set for which the error occurred and *rba* is the RBA (in hexadecimal) of the record on which the error occurred.

System action

The queue manager can be abended. For example, in the case of a failing MQGET or MQPUT, the queue-manager is not terminated if the CSQP004E I/O error occurs during a IBM MQ API call. However, if the I/O error occurs during checkpoint processing, the queue-manager is terminated.

System programmer response

See the *MVS/DFP Diagnosis Reference* manual for information about return codes from the Media Manager. If you do not have access to the required manual, contact your IBM support center, quoting the return code from the Media Manager.

CSQP005I

BUFFERS VALUE OUT OF RANGE

Severity
8

Explanation

One of the following commands has been issued incorrectly:

- DEFINE BUFFPOOL(n) BUFFERS(x)
- ALTER BUFFPOOL(n) BUFFERS(x)

If the value of the LOCATION parameter is BELOW, the minimum value of buffers is 100 and the maximum value is 500,000. If the value of the LOCATION parameter is ABOVE then valid values are in the range of 100 to 999999999 (nine nines).

System action

The command is ignored.

System programmer response

Reissue the command correctly. The total number of buffers that it is possible to define in all the buffer pools is determined by the amount of storage available in the queue manager address space.

CSQP006I

LOG CHECKPOINT NAME *log-name* DOES NOT MATCH QUEUE MANAGER NAME *qmgr-name*

Severity
8

Explanation

An attempt to restart with a log from another queue manager was detected. The name recorded in the log during checkpoint does not match the name of the queue manager using that log for restart.

System action

Restart is abnormally terminated with completion code X'5C6' and reason code X'00D70102'.

System programmer response

Change the started task JCL procedure xxxxMSTR for the queue manager to name the appropriate bootstrap and log data sets.

CSQP007I

Page set *x* uses buffer pool *n*

Severity
0

Explanation

This message gives the buffer pool used by the specified page set.

It is sent in response to a DEFINE PSID(x) command.

CSQP009I

PAGE RECOVERY STARTED FOR PAGE SET *psid* PAGE *page-number*

Severity
0

Explanation

An incomplete update operation was detected for page *page-number* of page set *psid*. The page is being restored to a consistent state from information on the log.

Message CSQP010I will be issued when the page recovery operation has completed.

CSQP010I

PAGE RECOVERY COMPLETE FOR PAGE SET *psid* PAGE *page-number*

Severity
0

Explanation

An incomplete update operation was detected for page *page-number* of page set *psid*. The page has been restored to a consistent state from information on the log.

CSQP011E

CONNECT ERROR STATUS *ret-code* FOR PAGE SET *psid*

Severity
8

Explanation

An attempt to open a page set was unsuccessful. *psid* is the page set identifier and *ret-code* is the return code from the Data Facilities Product (DFP) CONNECT function.

This can occur during queue manager startup, where the most likely cause is that there is no DD statement for the page set included in the queue manager started task JCL, or in response to a DEFINE PSID command used to add a page set dynamically.

System action

If this occurs during queue manager startup, MQ attempts to dynamically allocate the page set and retry the open, on the assumption that the DD statement for the page set is missing. Messages following message CSQI010I at the end of restart indicate whether the dynamic page set allocation was successful, or whether such page sets still remain offline.

If the page set cannot be opened, the queue manager continues running, but you will be unable to access the data in that page set. You could encounter problems during restart, or when attempting to open a queue.

System programmer response

If applicable, ensure that there is a DD statement for the page set included in the queue manager started task JCL.

If the page set cannot be opened, see the *MVS/DFP Diagnosis Reference* manual for information about return codes from the Media Manager. If you do not have access to the required manual, contact your IBM support center, quoting the return code from the Media Manager.

CSQP012I

DISCONNECT ERROR STATUS *ret-code* FOR PAGE SET *psid*

Severity
8

Explanation

An attempt to close a page set was unsuccessful. *psid* is the page set identifier and *ret-code* is the return code from the Media Manager.

System action

Queue manager shutdown continues, but some information might be missing from the page set. This will be corrected from the log during restart.

System programmer response

See the *MVS/DFP Diagnosis Reference* manual for information about return codes from the Media Manager. If you do not have access to the required manual, contact your IBM support center, quoting the return code from the Media Manager.

CSQP013I

csect-name NEW EXTENT CREATED FOR PAGE SET psid. NEW EXTENT WILL NOW BE FORMATTED

Severity
0

Explanation

Page set *psid* has been successfully dynamically expanded by creating a new extent.

System action

The new extent is formatted; message CSQI031I will be issued when formatting completes successfully.

System programmer response

The page set can only be expanded 123 times. After this you will have to reallocate the page set using larger primary and secondary extents. For information about managing page sets, see Managing page sets.

CSQP014E

csect-name EXPANSION FAILED FOR PAGE SET psid. FUTURE REQUESTS TO EXTEND IT WILL BE REJECTED

Severity
8

Explanation

An attempt to expand a page set dynamically was unsuccessful.

System action

Processing continues.

System programmer response

Look for messages from VSAM or DFP that explain why the request was unsuccessful, and do the required actions.

Determine why the page set needs to expand:

- Review Planning your page sets and buffer pools to make sure your page set allocation is large enough for your application queues.
- If there is a large depth on the Dead Letter Queue (DLQ) either implement the DLQ Handler, CSQUDLQH, or clear the queue with CLEAR QLOCAL command if you don't need to take further action with the messages. Similarly, SYSTEM.EVENT.* queues can fill a page set.
- Look in joblogs or application logs to see if an error is preventing the getting application from running.
- See if an application is failing to commit its gets or puts. You can tell if there are uncommitted messages by using the following command:

```
DISPLAY QSTATUS(qname) UNCOM CURDEPTH
```

  Notes:

  1. The display does not show how many messages are uncommitted, and whether they are for gets or puts.
  2. A message that is subject to an uncommitted MQGET still takes up space on the page set, although the message no longer contributes to the depth of the queue.

- If the getting application is a channel, is the channel starting, and is the channel able to successfully move messages? Use the command

```
DISPLAY CHSTATUS(channelname) ALL
```

  to verify the channel status attributes including STATUS, SUBSTATE, and INDOUBT.

- If the messages use an integer in MQMD.EXPIRY, there might be expired messages that need to be cleaned up. If EXPRYINT is set to OFF in the QMGR definition, the command

```
REFRESH QMGR TYPE(EXPIRY) NAME(big.queue)
```

  causes an EXPIRY scan of the queue that matches the name provided in the NAME() field. This command can take some time to process. Issue the command

```
DISPLAY USAGE PSID(n)
```

  where n is the page set number, at regular intervals, to monitor progress.

- Check for any third party products on the system that get involved with EOV or EXTEND processing.

If you have received message IEC070I, and the *return code* (the first value in that message) is:

034(004):

End of volume - Non-extended addressable. The new allocation amount would exceed 4 GB.

If the message volume or size requires a larger page set , follow the instructions at Defining a page set to be larger than 4 GB

104

No more volumes are available on which to allocate space (no more candidate volumes).

Use the following commands to add space and switch off the internal "page not expandable" flag:

- The TSO ALTER ADDVOLUME command to add space for extents.
- ALTER PSID() EXPAND()

  You must supply valid syntax, that is, a pageset number and expand value. See ALTER PSID for more information.

203

An extend was attempted, but no secondary space allocation quantity was specified.

204

An extend was attempted, but the maximum number of extents was reached.

The maximum number of extents for a VSAM data set cataloged in an ICF catalog is between 119 and 123, depending upon the number of extents (1-5) allocated by DADSM per allocate/extend request.

209

- An extend was attempted, but no space was available on user volume.
- No secondary space quantity was specified and no candidate volumes are available.

You can follow the directions in How to increase the size of a page set as IBM MQ for z/OS allows you to enable dynamic page set expansion, or add candidate volumes using IDCAMS ALTER ADDVOL.

The data set then needs to be closed and reopened so that the TIOT is rebuilt; otherwise IEC070I 211(8,306)-221 and IGD306I UNEXPECTED ERROR DURING IEFAB4C2 PROCESSING RETURN CODE 24 REASON CODE 0 might occur.

The close can be done without a recycle of the queue manager by using the following JCL:

```
//STEP1 EXEC PGM=IDCAMS
//DSFILE DD DSN=your.dataset.name,DISP=SHR
//SYSPRINT DD SYSOUT=*
//SYSIN DD *
VERIFY FILE(DSFILE)
/*
```

You might need to run the JCL twice to complete with a non-zero return code. Some flags might not be reset during the first run.

Note: DFP uses up to five non-contiguous areas of disk to satisfy the total space requirements of a primary or secondary extent. This means, in the worst case of badly fragmented disk space, that you might only get around 22 times the secondary space allocated before you reach the maximum space limit.

If you believe that there is sufficient free space that could be used by another secondary extent, contact your IBM support center for assistance.

220-220

IBM MQ for z/OS requested that Media Manager extend the page set (a linear data set) and passed Media Manager extend parameters that are not valid.

One cause for this is that the page set has reached the 64GB limit. Formatting page sets (FORMAT) equates a 64 GB page set with a maximum of 16,777,213 4K pages. You can observe the size of the page set using the DISPLAY USAGE command.

CSQP016E

csect-name PAGE SET *psid* HAS REACHED THE MAXIMUM NUMBER OF EXTENTS. IT CANNOT BE EXTENDED AGAIN

Severity

8

Explanation

An attempt to expand page set *psid* dynamically was unsuccessful because the maximum number of extents had been used.

System action

The page set cannot be extended again. When the messages on the full page set are retrieved, the existing space will be reused.

System programmer response

Copy the page set to a new page set with larger primary and secondary extents. By defining the page set as a multivolume data set, you can take advantage of the free space on as many disk volumes as possible. See the Planning on z/OS. For more information about page set organization and management, see Managing page sets.

CSQP017I

csect-name EXPANSION STARTED FOR PAGE SET *psid*

Severity

0

Explanation

Page set *psid* is being expanded dynamically, by creating a new extent.

System action

All threads that are currently adding message to page set *psid* are suspended until the page set expansion completes (this is indicated by message CSQP013I).

CSQP018I

csect-name CHECKPOINT STARTED FOR ALL BUFFER POOLS

Severity

0

Explanation

A checkpoint is being taken for all defined buffer pools.

CSQP019I

csect-name CHECKPOINT COMPLETED FOR BUFFER POOL *n*, *pages* PAGES WRITTEN

Severity

0

Explanation

A checkpoint has been successfully taken for buffer pool *n*.

CSQP020E

csect-name Buffer pool *n* is too small

Severity

8

Explanation

Contention is taking place for buffers in a buffer pool. Messages will have to be read from and written to the page sets, which increases the time to process an application request and increases the amount of processor time used.

System action

Processing continues.

System programmer response

If required, use the ALTER BUFFPOOL command to add more buffers to the buffer pool. Consider first altering other buffer pools to reduce the total number of buffers in use. Refer to the latest CSQY220I message on the z/OS console to see how much virtual storage is free, and hence how many extra buffers may be safely added to a buffer pool. If you do change the number of buffers in the buffer pool, you should also change the DEFINE BUFFPOOL commands in the CSQINP1 initialization input data set used by the queue manager.

Alternatively, specify DEFINE BUFFPOOL(X) REPLACE as this option does not use the log checkpoint record.

If the buffer pool has a LOCATION value of BELOW and there is insufficient storage below the bar then consider moving the buffer above the bar by setting its LOCATION value to ABOVE. This might require altering the value of the MEMLIMIT parameter. For more information, see Address space storage.

CSQP021I

Page set *psid* new media recovery RBA=*rcvry-rba*, checkpoint RBA=*chkpt-rba*

Severity
0

Explanation

During checkpoint processing, buffers have been flushed from the buffer pools to the indicated page set, establishing a new media recovery RBA. This RBA is the point from which log data would be required to perform media recovery for the page set. It should be the same as the checkpoint RBA.

System action

Processing continues.

System programmer response

If the media recovery and checkpoint RBAs differ, contact your IBM support center.

CSQP022I

Buffer pool *n* is not defined

Severity
8

Explanation

A command has been issued specifying a buffer pool that is not defined.

System action

The command is ignored.

System programmer response

See MQSC commands for information about the command, and reissue the command correctly.

CSQP023I

Request completed for buffer pool *n*, now has *k* buffers

Severity
0

Explanation

The size of the specified buffer pool has been successfully changed.

CSQP024I

Request initiated for buffer pool *n*

Severity

0

Explanation

The request to change the buffer pool has been accepted. One of the messages CSQP023I, CSQP052I, or CSQP053I will be sent to the z/OS console when the change is complete,

CSQP025I

Page set *n* is not defined or offline

Severity

8

Explanation

A command has been issued specifying a page set that is not available to the queue manager.

System action

The command is ignored.

System programmer response

See MQSC commands for information about the command, and reissue the command correctly.

CSQP026I

Page set *n* is in use by a storage class

Severity

8

Explanation

The page set specified is referenced by a storage class, and so cannot be deleted.

System action

The command is ignored.

System programmer response

Change or delete all the storage classes that reference the page set, and then reissue the command.

CSQP027I

Page set *n* has buffers in use

Severity

8

Explanation

The page set specified has buffers that are still in use, and so cannot be deleted.

System action

The command is ignored.

System programmer response

Wait until three checkpoints have been completed, and then reissue the command.

CSQP028I

Request initiated for page set *n*

Severity

0

Explanation

The request to define or delete the page set has been accepted. Message CSQP042I or CSQP032I will be sent to the z/OS console when the change is complete. If the change fails, messages CSQP041E or CSQP031E will be sent.

CSQP030E

Deallocation failed for data set *dsname*, error status=*eeeeiiii*, SMS reason code=*ssssssss*

Severity

8

Explanation

An error occurred when trying to dynamically deallocate the page set data set. Error status is the error reason code returned by z/OS dynamic allocation.

System action

The page set is deleted and is no longer available for use.

System programmer response

The error status portion of this message contains a 2-byte error code (*eeee*, S99ERROR) followed by the 2-byte information code (*iiii*, S99INFO) from the SVC99 request block. If the S99ERROR code indicates an SMS allocation error ('97xx'), then *ssssssss* contains additional SMS reason code information obtained from S99ERSN. See the *MVS Authorized Assembler Services Guide* manual for a description of these codes.

CSQP031E

Page set *n* deletion failed

Severity

8

Explanation

An error occurred while deleting the specified page set.

System action

Processing continues.

System programmer response

See the preceding error messages for more information about the error.

CSQP032I

Page set *n* deletion completed

Severity

0

Explanation

The specified page set has been successfully deleted.

CSQP033E

Error deleting page set *n*, code=*rrr*

Severity

8

Explanation

An error occurred while deleting the specified page set.

System action

The page set is not deleted, and is still available for use.

System programmer response

Note the error code and contact your IBM support center.

CSQP034E

Page set *n* is already defined

Severity
8

Explanation

The specified page set is already in use by the queue manager, and so cannot be dynamically defined.

System action

The command is ignored.

System programmer response

See MQSC commands for information about the command, and reissue the command correctly.

CSQP035E

Allocation failed for data set *dsname*, error status=*eeeeiiii*, SMS reason code=*ssssssss*

Severity
8

Explanation

An error occurred when trying to dynamically allocate the page set data set. Error status is the error reason code returned by z/OS dynamic allocation.

System action

The page set is not defined.

System programmer response

The error status portion of this message contains a 2-byte error code (*eeee*, S99ERROR) followed by the 2-byte information code (*iiii*, S99INFO) from the SVC99 request block. If the S99ERROR code indicates an SMS allocation error ('97xx'), then *ssssssss* contains additional SMS reason code information obtained from S99ERSN. See the *MVS Authorized Assembler Services Guide* manual for a description of these codes.

CSQP036I

Data set *dsname* for page set *n* is not formatted with RECOVER or REPLACE

Severity
8

Explanation

The named page set data set was not formatted correctly. A data set that is to be used for adding a page set dynamically must be one that is newly formatted (using TYPE(RECOVER)), or one that has previously been used to hold messages and has been formatted using TYPE(REPLACE).

System action

The page set is not defined.

System programmer response

Format the data set as required. If you are adding a previously unused page set to the queue manager, use the FORMAT function of the utility program CSQUTIL, specifying TYPE(RECOVER). If the page set was previously used to hold messages, use the FORMAT function specifying TYPE(REPLACE).

In the latter case, if the queue manager terminated abnormally, the formatting may fail, and message CSQU160E will be issued. It is not possible to add such a page set data set dynamically, but the page set can be brought into use again by including it in the started task JCL procedure xxxxMSTR for the queue manager, and then restarting the queue manager.

CSQP037E

OPEN failed for page set *n*, VSAM return code=*rc* reason code=*reason*

Severity
8

Explanation

A VSAM error occurred when trying to open the page set data set.

System action

The page set is not defined.

System programmer response

See the *DFSMS/MVS Macro Instructions for Data Sets* for information about the return and reason codes from VSAM. If necessary, reissue the request.

CSQP038E

GET failed for page set *n,* VSAM return code=*rc* reason code=*reason*

Severity
8

Explanation

A VSAM error occurred when trying to get a record from the page set data set.

System action

The page set is not defined.

System programmer response

See the *DFSMS/MVS Macro Instructions for Data Sets* for information about the return and reason codes from VSAM. If necessary, reissue the request.

CSQP039E

CLOSE failed for page set *n,* VSAM return code=*rc* reason code=*reason*

Severity
8

Explanation

A VSAM error occurred when trying to close the page set data set.

System action

The page set is not defined.

System programmer response

See the *DFSMS/MVS Macro Instructions for Data Sets* for information about the return and reason codes from VSAM. If necessary, reissue the request.

CSQP041E

Page set *n* definition failed

Severity
8

Explanation

An error occurred while defining the specified page set.

System action

Processing continues.

System programmer response

See the preceding error messages for more information about the error.

CSQP042I

Page set *n* definition completed

Severity
0

Explanation

The specified page set has been successfully defined.

CSQP043I

Buffer pool *n* is in use by a page set

Severity
8

Explanation

The buffer pool specified is in use by a page set, and so cannot be deleted.

System action

The command is ignored.

System programmer response

Change or delete all the page sets that reference the buffer pool, and then reissue the command.

CSQP045I

Buffer pool *n* is not in use by any page set

Severity
8

Explanation

The buffer pool specified is not in use by any page set, and so cannot have buffers added or removed.

System action

The command is ignored.

System programmer response

Define at least one page set that references the buffer pool, and then reissue the command, or delete the buffer pool.

CSQP046I

Request already in progress for buffer pool *n*

Severity
8

Explanation

The buffer pool specified is being altered or deleted by another command.

System action

The command is ignored.

System programmer response

Wait until the other command has completed processing, and then reissue the command if appropriate.

CSQP047E

Unavailable page sets can cause problems - take action to correct this situation

Severity
4

Explanation

One or more page sets are unavailable, as reported in the preceding messages; they are either offline having been used previously, not defined, suspended, or otherwise inaccessible. For example, MQ may have attempted to open a page set at restart, but failed perhaps because it was in use by another application.

This situation can cause problems, so you should take action to correct it as soon as possible.

System action

Processing continues.

System programmer response

Use the DISPLAY USAGE command to get a list of the unavailable page sets.

If a previously-used page set is required, bring it online; this can be done without stopping the queue manager. Use the FORMAT function of the utility program CSQUTIL, specifying TYPE(REPLACE). Then issue a DEFINE PSID command to bring the page set back into use. Note that all units of recovery (except those that are indoubt) that involved the offline page set will have been backed out by the queue manager when the page set was last used. These indoubt units of recovery may be resolved once the page set is back in use by the queue manager.

If a page set is not required, issue a DELETE PSID command to remove it. Also remove any DEFINE PSID command for it from the CSQINP1 initialization input data set.

CSQP048E

PUT failed for page set *n*, VSAM return code=*rc* reason code=*reason*

Severity
8

Explanation

A VSAM error occurred when trying to get a record from the page set data set.

System action

The page set is not defined.

System programmer response

See the *DFSMS/MVS Macro Instructions for Data Sets* for information about the return and reason codes from VSAM. If necessary, reissue the request.

CSQP049I

Data set *dsname* is formatted for a different page set *n*

Severity
8

Explanation

The page set data set was formatted using TYPE(REPLACE), and as such may contain messages for a specific page set *n*. It cannot be added dynamically with a different page set identifier.

System action

The page set is not defined.

System programmer response

Reissue the command specifying the correct data set and page set. If you intended adding a previously unused page set, reformat the data set with use the FORMAT function of the utility program CSQUTIL, specifying TYPE(RECOVER).

CSQP051I

Insufficient storage for buffer pool *n* request

Severity

4

Explanation

The size of the specified buffer pool has not been changed as requested because insufficient storage is available.

System programmer response

The DISPLAY USAGE command can be used to determine the current sizes of all buffer pools defined to the system. It may be possible to reduce the size of other buffer pools, so freeing storage, which can then be assigned to this buffer pool by reissuing the command.

Message CSQY220I shows the storage information. Refer to Managing buffer pools for more information on how to alter your buffer pool.

CSQP052I

Request partially completed for buffer pool *n*, now has *k* buffers

Severity

4

Explanation

The size of the specified buffer pool has been changed. The number of buffers is not that requested because, for example, insufficient storage is available.

CSQP053I

Request completed for buffer pool *n*, buffers not changed

Severity

0

Explanation

The size of the specified buffer pool has not been changed. This could be because the number of buffers requested was the same as the existing size, or because there was insufficient storage available to change the size or location of the buffer pool (as shown by preceding message CSQP051I).

CSQP054I

Buffer pool *n* is now located above the bar

Severity

0

Explanation

The specified buffer pool has now been moved so that it is located above the bar.

CSQP055I

Buffer pool *n* is now located below the bar

Severity

0

Explanation

The specified buffer pool has now been moved so that it is located below the bar.

CSQP056E

The ALTER BUFFPOOL command for buffer pool *n* has failed

Severity

8

Explanation

An unexpected error occurred while processing the ALTER BUFFPOOL command. The buffer pool will be left with the number of buffers that were in it at the time the error occurred.

System action

Processing continues.

System programmer response

Use the DISPLAY USAGE PSID(*) command to view the current state of the buffer pool. If necessary reissue the ALTER BUFFPOOL command again.

If any abends have been issued, look at the abend code to see if the error is caused by the queue manager being short of storage. Changing the LOCATION parameter from BELOW to ABOVE for a buffer pool might require you to increase the MEMLIMIT parameter in the JCL of the queue manager stored procedure, xxxxMSTR. For more details, see Address space storage.

If switching a buffer pool from above to below the bar you might need to decrease the number of buffers in the buffer pool.

CSQP057E

Buffer pool *n* is suspended because of the current value of OPMODE

Severity

4

Explanation

The queue manager was previously running with OPMODE(NEWFUNC,800) specified in the CSQ6SYSP macro when the buffer pool was created. The buffer pool has an ID in the range of 16 to 99. Subsequently, the **OPMODE** parameter has been changed to OPMODE(COMPAT,800), the CSQ6SYSP macro assembled, and the queue manager restarted.

Buffer pools with an ID greater than 15 are not supported by OPMODE(COMPAT,800) because this support is available only from IBM MQ version 8 onwards.

The specified buffer pool is marked as suspended. As a result, any page sets that use this buffer pool are also suspended and message CSQP059E: Page set *n* is suspended because it uses suspended buffer pool *n* is issued.

The buffer pool remains suspended and information is kept in checkpoint records until OPMODE(NEWFUNC,800) is specified in the CSQ6SYSP macro and the queue manager is restarted. The buffer pool and any page sets that use the buffer pool are no longer suspended.

It is not possible to use the **ALTER** or **DELETE** MQSC commands on a suspended buffer pool. Additionally, information about the suspended buffer pool is not available when you use the **DISPLAY USAGE PSID** command.

System action

Any page sets that use the specified buffer pool are suspended and message CSQP059E: Page set *n* is suspended because it uses suspended buffer pool *n* is issued.

System programmer response

To use the buffer pool again, set OPMODE(NEWFUNC,800) and restart the queue manager.

To remove the buffer pool, set the OPMODE parameter to OPMODE(NEWFUNC,800), change the **DEFINE PSID** command in the CSQINP1 initialization input data set to use a different buffer pool. Restart the queue manager, delete the buffer pool, then change the OPMODE parameter to OPMODE(COMPAT,800) and restart the queue manager.

CSQP058E

Buffer pool *n* has had its LOCATION forced to BELOW because of the current value of OPMODE

Severity
4

Explanation

> **z/OS** The queue manager was previously running with OPMODE(NEWFUNC,800) specified in the CSQ6SYSP macro when the buffer pool was created. The buffer pool had the LOCATION attribute set to ABOVE. Subsequently, the z/OS: OPMODE parameter has been changed to OPMODE(COMPAT,800), the CSQ6SYSP macro assembled, and the queue manager restarted.

Buffer pools with a LOCATION value of ABOVE are not supported by OPMODE(COMPAT,800) because this support is available only from IBM MQ version 8 onwards.

The specified buffer pool has had its LOCATION value set to BELOW. Additionally, the number of available buffers in the buffer pool is set to 1000 so that the storage limit below the bar is not exceeded. If the number of buffers in the buffer pool was originally less than 1000, then the number is not changed.

System action

Processing continues.

System programmer response

Consider increasing the number of buffers in the specified buffer pool by using the ALTER BUFFPOOL MQSC command.

CSQP059E

Page set *n* is suspended because it uses suspended buffer pool *n*

Severity
4

Explanation

> **z/OS** The queue manager was previously running with OPMODE(NEWFUNC,800) specified in the CSQ6SYSP macro when the buffer pool was created. The buffer pool has an ID in the range of 16 to 99. Subsequently the z/OS: OPMODE parameter has been changed to OPMODE(COMPAT,800), the CSQ6SYSP macro assembled, and the queue manager restarted.

Buffer pools with an IDgreater than 15 are not supported by OPMODE(COMPAT,800) because this support is available only from IBM MQ version 8 onwards.

The specified buffer pool is marked as suspended. As a result, the specified page set that uses this buffer pool is suspended too.

Information about the suspended page set is kept in checkpoint records until OPMODE(NEWFUNC,800) is specified in the CSQ6SYSP macro and the queue manager is restarted. The page set is then no longer suspended. Until OPMODE(NEWFUNC,800) is specified, and the queue manager restarted, any object definitions and messages on the page set are unavailable. An attempt to use a queue or topic that uses the page set results in an MQRC_PAGESET_ERROR message.

Note: You can delete a suspended page set only if the page set has no messages on it.

System action

Processing continues.

System programmer response

You can revert to OPMODE(NEWFUNC,800) to take all buffer pools and associated page sets out of suspend mode.

Alternatively, bring the page set back online by associating the page set with a new buffer pool. You can do this without stopping the queue manager by using the FORMAT function of the utility program CSQUTIL, specifying TYPE(REPLACE). Issue a **DEFINE PSID** command to bring the page set back into use.

Note: All units of recovery that involved the suspended page set, except those units that are indoubt, were backed out by the queue manager when the page set was last used. Indoubt units of recovery can be resolved when the page set is again in use by the queue manager.

CSQP060E

Page set 0 must use one of buffer pools 0 to 15

Severity
12

Explanation

Page set 0 must be defined so that it uses buffer pool 0 to 15.

System action

Queue manager start up fails.

System programmer response

Define page set 0 so that it uses buffer pool 0 to 15. Generally, use buffer pool 0.

CSQP061I

ALTER BUFFPOOL n in progress, elapsed time m minutes

Severity
4

Explanation

The ALTER BUFFPOOL command has been issued for the specified buffer pool. If the command takes longer than approximately five minutes to process, this message is output approximately every five minutes until the command is complete.

Once the command is complete one or more of the following messages is output: CSQP023I, CSQP051I, CSQP052I, or CSQP053I.

This message might be output in the following scenarios:

- The specified buffer pool has had its LOCATION parameter changed from ABOVE to BELOW
- The specified buffer pool had its LOCATION parameter set to ABOVE and the number of buffers has been reduced by a large number

In most cases the ALTER BUFFPOOL command completes very quickly, and this message is not output. If this message is output, it should not be a cause for concern unless the value of the elapsed time becomes a large value - more than 30 minutes.

System action

Processing continues.

System programmer response

Monitor the job log for further output of this message, or a message indicating that the ALTER BUFFPOOL command has completed.

If this message is continually output and the elapsed time grows to a large value (more than 30 minutes) this might indicate a problem, so contact your IBM Service representative.

CSQP062I

Buffer pool *n* PAGECLAS changed, restart required to take effect

Severity
4

Explanation

The PAGECLAS attribute of the specified buffer pool has changed.

This change does not dynamically affect the type of pages used by the buffer pool, unless the LOCATION attribute is changed from BELOW to ABOVE at the same time. However the change is logged, and is applied when the queue manager is restarted.

System action

Processing continues. The buffer pool uses the previous value of the PAGECLAS attribute.

System programmer response

None, unless you require that the new PAGECLAS attribute of the specified buffer pool takes immediate effect.

In this case, either restart the queue manager or perform both of the following steps:

1. Buffer pool so that its LOCATION attribute is BELOW and its PAGECLAS is 4KB, and
2. Change the LOCATION attribute of the buffer pool to ABOVE, at the same time as changing the PAGECLAS attribute.

CSQP063E

PAGECLAS value must be 4KB if specified with LOCATION(BELOW)

Severity
8

Explanation

A buffer pool with a LOCATION value of ABOVE and PAGECLAS attribute that is not 4KB has been altered so that its LOCATION value is BELOW.

The only value of PAGECLAS that is valid with a LOCATION value of BELOW is 4KB.

System action

The command is ignored.

System programmer response

In addition to altering the LOCATION attribute to the value BELOW, alter the PAGECLAS attribute to the value 4KB.

CSQP064I

Buffer pool *n* definition in CSQINP1 data set used

Severity
4

Explanation

This message is issued at start up when the queue manager reads its log.

A buffer pool has been defined in the CSQINP1 data set, with the REPLACE attribute specified, so the definition for the buffer pool in the log of the queue manager is ignored.

Changes made to the buffer pool, using the ALTER BUFFPOOL command, when the queue manager was previously running have not occurred.

This message is only output if there is a difference between the definition for the buffer pool in the CSQINP1 data set and the log of the queue manager.

System action

The attribute values for the specified buffer pool are taken from the CSQINP1 data set rather than using the values stored in the log of the queue manager.

System programmer response

If the buffer pool definition in the CSQINP1 data set is the one you require, ignore the message.

Otherwise:

- Use the ALTER BUFFPOOL command to change the definition of the buffer pool, and also change its definition in CSQINP1 to match, or
- Remove the REPLACE attribute on the buffer pool definition in the CSQINP1 data set.

  Note, that instead of removing the REPLACE attribute you can specify the NOREPLACE attribute instead.

IMS adapter messages (CSQQ...)

CSQQ000I

IMS/TM *iiii* connected to queue manager *qqqq*

Severity
0

Explanation

This message is produced at the IMS master terminal when the IMS control region for IMS system *iiii* has successfully connected to queue manager *qqqq*.

CSQQ001I

IMS/TM *iiii* not connected to queue manager *qqqq*. Notify message accepted

Severity
0

Explanation

This message is produced at the IMS master terminal when the IMS control region for IMS system *iiii* has tried to connect to queue manager *qqqq* but the queue manager is not yet ready to make connections.

System action

The queue manager has accepted the notify message from IMS and when it is ready to make connections it will issue the z/OS command MODIFY IMS to cause IMS to attempt to make the connection again. IMS applications cannot access IBM MQ resources until the connection is made.

System programmer response

Resolve any other IBM MQ problems.

CSQQ002E

IMS/TM *iiii* failed to connect to queue manager *qqqq*, MQRC=*mqrc*

Severity
12

Explanation

This message is produced at the IMS master terminal when the IMS control region for IMS system *iiii* has failed to connect to queue manager *qqqq*. *mqrc* is the IBM MQ reason code for the failure.

System action

The IMS control region, and dependent regions are not connected to the queue manager. Any request from IMS applications for IBM MQ resources will fail.

System programmer response

Refer to API completion and reason codes for information about *mqrc* to determine the nature of the error.

CSQQ003E

IMS/TM *iiii* create thread failed while connecting to queue manager *qqqq*, MQRC=*mqrc*

Severity
12

Explanation

This message is produced at the IMS master terminal when the IMS control region for IMS system *iiii* has failed to connect to queue manager *qqqq*. *mqrc* is the IBM MQ reason code for the failure from theIBM MQ create thread function.

System action

The IMS control region, and dependent regions are not connected to the queue manager. Any request from IMS applications for IBM MQ resources will fail.

System programmer response

Refer to API completion and reason codes for information about *mqrc* to determine the cause of the problem.

CSQQ004E

IMS/TM *iiii* inquire indoubt failed while connecting to queue manager *qqqq*, MQRC=*mqrc*

Severity
12

Explanation

This message is produced at the IMS master terminal when the IMS control region for IMS system *iiii* has failed to connect to queue manager *qqqq*. *mqrc* is the IBM MQ reason code for the failure from the IBM MQ inquire indoubt function.

System action

The IMS control region, and dependent regions are not connected to the queue manager. Any request from IMS applications for IBM MQ resources will fail.

System programmer response

Refer to API completion and reason codes for information about *mqrc* to determine the nature of the error.

CSQQ005E

IMS/TM *iiii* establish exit failed while connecting to queue manager *qqqq*, MQRC=*mqrc*

Severity
12

Explanation

This message is produced at the IMS master terminal when the IMS control region for IMS system *iiii* has failed to connect to queue manager *qqqq*. *mqrc* is the IBM MQ reason code for the failure from IBM MQ establish exit function.

System action

The IMS control region, and dependent regions are not connected to the queue manager. Any request from IMS applications for IBM MQ resources will fail.

System programmer response

Refer to API completion and reason codes for information about *mqrc* to determine the cause of the error.

CSQQ007E

IMS/TM *iiii* resolve indoubt failed while connecting to queue manager *qqqq*, MQRC=*mqrc*

Severity

4

Explanation

This message is produced at the IMS master terminal when the queue manager has failed to resolve indoubt units of recovery during the connection process. *mqrc* is the IBM MQ reason code for the resolve in-doubt function failure.

System action

The IMS control region, and dependent regions are connected to the queue manager. IMS applications can access IBM MQ resources.

System programmer response

For information about resolving the IBM MQ unit of recovery associated with the in-doubt IMS unit of work, see Recovering IMS units of recovery manually.

CSQQ008I

nn units of recovery are still in doubt in queue manager *qqqq*

Severity

4

Explanation

This message is produced at the IMS master terminal when the queue manager has units of recovery still in doubt after all the IMS units of work have been resolved.

System action

The IMS control region, and dependent regions are connected to the queue manager. IMS applications can access IBM MQ resources.

System programmer response

See How in-doubt units of recovery are resolved from IMS for information about resolving the IBM MQ unit of recovery associated with the in-doubt IMS unit of work.

CSQQ010E

Error resolving unit of recovery *uuuu* (OASN *nnnn*) in queue manager *qqqq*, MQRC=*mqrc*

Severity

4

Explanation

This message is produced at the IMS master terminal when the queue manager is unable to resolve an indoubt unit of recovery. *uuuu* is the unit of work identifier in the same format as the reply from the DISPLAY THREAD command. *nnnn* is the IMS OASN (origin application sequence number), in decimal format.

System action

The IMS control region, and dependent regions are connected to the queue manager. IMS applications can access IBM MQ resources.

System programmer response

See the How in-doubt units of recovery are resolved from IMS for information about resolving the IBM MQ unit of recovery associated with the in-doubt IMS unit of work.

CSQQ011E

IMS/TM *iiii* terminate identify failed for connection to queue manager *qqqq*, MQRC=*mqrc*

Severity
12

Explanation

This message is produced at the IMS master terminal when the IMS control region for IMS system *iiii* has failed to disconnect from the queue manager *qqqq*. *mqrc* is the return code for the failure from the IBM MQ terminate identify function.

System action

The IMS control region, and dependent regions are not connected to the queue manager. Any request from IMS applications for IBM MQ resources will fail.

System programmer response

Refer to API completion and reason codes for information about *mqrc* to determine the cause of the error.

CSQQ013I

MQ commands cannot be issued using the /SSR command

Severity
4

Explanation

This message is produced at the IMS master terminal when the /SSR IMS command is used to issue an IBM MQ command; IBM MQ commands cannot be issued in this way.

System action

None

CSQQ014E

Unit of recovery *uuuu* (OASN *nnnn*) was not committed in queue manager *qqqq*

Severity
4

Explanation

This message is produced at the IMS master terminal when, following the abnormal termination of an application, the queue manager is unable to commit an indoubt unit of recovery as requested by IMS. *uuuu* is the unit of work identifier in the same format as the reply from the DISPLAY THREAD command. *nnnn* is the IMS OASN (origin application sequence number), in decimal format.

System action

The IMS control region, and dependent regions are connected to the queue manager. IMS applications can access IBM MQ resources.

System programmer response

See How in-doubt units of recovery are resolved from IMS for information about resolving the IBM MQ unit of recovery associated with the in-doubt IMS unit of work.

CSQQ015E

Unit of recovery *uuuu* (OASN *nnnn*) was not backed out in queue manager *qqqq*

Severity
4

Explanation

This message is produced at the IMS master terminal when, following the abnormal termination of an application, the queue manager is unable to back out an indoubt unit of recovery as requested by IMS. *uuuu* is the unit of work identifier in the same format as the reply from the DISPLAY THREAD command. *nnnn* is the IMS OASN (origin application sequence number), in decimal format.

System action

The IMS control region, and dependent regions are connected to the queue manager. IMS applications can access IBM MQ resources.

System programmer response

See How in-doubt units of recovery are resolved from IMS for information about resolving the IBM MQ unit of recovery associated with the in-doubt IMS unit of work.

CSQQ100I

psb-name region-id Processing queue manager *name*

Severity
0

Explanation

This message identifies the queue manager that this instance of the IMS trigger monitor is connected to. *region-id* is the last four digits of the region identifier, or blank. This message is followed by message CSQQ110I, indicating the name of the initiation queue.

CSQQ101E

psb-name region-id Cannot open the initiation queue, MQCC=*mqcc* MQRC=*mqrc*

Severity
8

Explanation

CSQQTRMN has attempted to open an initiation queue, but the attempt was unsuccessful (for example, because the queue was not defined). *mqcc* and *mqrc* give the reason for the problem. *region-id* is the last four digits of the region identifier, or blank.

System action

CSQQTRMN ends.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc*, determine the cause of the problem, and restart CSQQTRMN.

CSQQ102E

psb-name region-id An IMS dl1-function call returned *pcb-status*

Severity
4

Explanation

A trigger message has been retrieved from the initiation queue which defines an IMS transaction to be started. However, the transaction cannot be started (for example, it cannot be found). *region-id* is the last four digits of the region identifier, or blank. *pcb-status* is the status code returned by IMS from the last *dl1-function* call.

System action

The trigger message is sent to the dead-letter queue. CSQQTRMN processes the next message.

System programmer response

See the *IMS/ESA® Application Programming: Data Communication* manual for information about *pcb-status*. Examine the trigger message on the dead-letter queue to find the IMS transaction name. Determine the reason for the problem, and restart the transaction.

CSQQ103E

psb-name region-id CSQQTRMN read a trigger message with an incorrect MQTM-StrucId of *struc-id*

Severity
4

Explanation

A trigger message has been retrieved, but the structure identifier of the message is not MQTM_STRUC_ID and so is not compatible with this version of CSQQTRMN. *region-id* is the last four digits of the region identifier, or blank.

System action

The trigger message is sent to the dead-letter queue. CSQQTRMN processes the next message.

System programmer response

Check the header of the message on the dead-letter queue. This will tell you where the trigger message came from. Correct the process that created the trigger message.

CSQQ104E

psb-name region-id CSQQTRMN does not support version *version*

Severity
4

Explanation

A trigger message has been retrieved, but the version identifier in MQTM is not version 1, and so is not compatible with this version of CSQQTRMN. *region-id* is the last four digits of the region identifier, or blank.

System action

The trigger message is sent to the dead-letter queue. CSQQTRMN processes the next message.

System programmer response

Check the header of the message on the dead-letter queue. This will tell you where the trigger message came from. Correct the process that created the trigger message.

CSQQ105E

psb-name region-id CSQQTRMN cannot start a process type of *type*

Severity
4

Explanation

A trigger message has been retrieved, but the process type in MQTM is not IMS, and so cannot be processed by this version of CSQQTRMN. *region-id* is the last four digits of the region identifier, or blank.

System action

The trigger message is sent to the dead-letter queue. CSQQTRMN processes the next message.

System programmer response

Check the header of the message on the dead-letter queue. This will tell you where the trigger message came from. Correct the process that created the trigger message.

CSQQ106E

psb-name region-id MQGET error, MQCC=*mqcc* MQRC=*mqrc*. CSQQTRMN will end

Severity
8

Explanation

An attempt to issue an MQGET call on the initiation queue has been unsuccessful. *region-id* is the last four digits of the region identifier, or blank. This message is followed by message CSQQ110I, indicating the name of the queue.

System action

CSQQTRMN ends.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* to determine the cause of the problem. Restart CSQQTRMN.

CSQQ107E

psb-name region-id Cannot connect to the queue manager, MQCC=*mqcc* MQRC=*mqrc*

Severity
8

Explanation

An attempt by the trigger monitor to connect to the queue manager identified in message CSQQ100I was unsuccessful. *region-id* is the last four digits of the region identifier, or blank.

System action

CSQQTRMN ends.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* to determine the cause of the problem.

CSQQ108I

psb-name region-id LTERM *lterm-name* not available. Switched to MASTER

Severity
4

Explanation

The LTERM specified to receive diagnostic messages cannot be used.

System action

Messages are sent to the master terminal.

System programmer response

Resolve why *lterm-name* was not available.

CSQQ109E

psb-name region-id MQCLOSE error, MQCC=*mqcc* MQRC=*mqrc*

Severity
8

Explanation

An attempt has been made to close a dead-letter queue, but the MQCLOSE call was unsuccessful. *region-id* is the last four digits of the region identifier, or blank. This message is followed by message CSQQ110I, indicating the name of the queue.

System action

CSQQTRMN ends.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* to determine the cause of the problem.

CSQQ110I

Queue name = *q-name*

Severity

0

Explanation

This message follows other messages and identifies the name of the queue in question. The accompanying messages indicate the event or problem associated with the queue.

CSQQ111E

psb-name region-id CSQQTRMN read a trigger message with an incorrect length of length

Severity

4

Explanation

This message is issued if the transaction CSQQTRMN receives a trigger message that does not match the MQTM control block. *region-id* is the last four digits of the region identifier, or blank.

System action

The message is sent to the dead-letter queue.

System programmer response

Look at the message on the dead-letter queue to establish why it did not match MQTM.

CSQQ112E

psb-name region-id MQOPEN error, MQCC=*mqcc* MQRC=*mqrc*

Severity

8

Explanation

An **MQOPEN** call has been unable to open a queue. *region-id* is the last four digits of the region identifier, or blank. This message is followed by message CSQQ110I indicating the name of the queue.

System action

CSQQTRMN ends.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* to determine the cause of the problem.

CSQQ113I

psb-name region-id This message cannot be processed

Severity

0

Explanation

When an attempt to process a message using an IBM MQ API call was unsuccessful, an attempt was made to put the message on the dead-letter queue. This was also unsuccessful and the *message-id* has been sent to the LTERM. *region-id* is the last four digits of the region identifier, or blank. This message is followed by message CSQ118I, indicating the message identifier.

System action

Processing continues.

System programmer response

Check for previous messages explaining why the dead-letter queue was not available (if a dead-letter queue has not been defined, no other messages relating to the problem will have been issued).

CSQQ114E

psb-name region-id MQINQ error, MQCC=*mqcc* MQRC=*mqrc*

Severity
8

Explanation

An attempt to use the MQINQ call to inquire about the attributes of a queue was unsuccessful. *region-id* is the last four digits of the region identifier, or blank. This message is followed by message CSQQ110I indicating the name of the queue.

System action

CSQQTRMN ends.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* to determine why an MQINQ call could not be made on the queue.

CSQQ115I

psb-name region-id Ending following termination of queue manager connection

Severity
0

Explanation

CSQQTRMN has terminated because the connection to the queue manager is no longer available.

CSQQ116E

psb-name region-id Cannot open the queue manager, MQCC=*mqcc* MQRC=*mqrc*

Severity
8

Explanation

An MQOPEN call to the queue manager was unsuccessful. *region-id* is the last four digits of the region identifier, or blank.

System action

CSQQTRMN ends.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* to determine the cause of the problem.

CSQQ117E

psb-name region-id Cannot query the queue manager, MQCC=*mqcc* MQRC=*mqrc*

Severity

8

Explanation

An MQINQ call to the queue manager was unsuccessful. *region-id* is the last four digits of the region identifier, or blank.

System action

CSQQTRMN ends.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* to determine the cause of the problem.

CSQQ118I

MsgID=*msg-id*

Severity

0

Explanation

This message follows message CSQQ113I, indicating the hexadecimal identifier of the message that could not be processed.

CSQQ119E

psb-name region-id Error *rc* from STORAGE OBTAIN

Severity

8

Explanation

CSQQTRMN tried to obtain storage, but received return code *rc* from z/OS.

System action

CSQQTRMN ends.

System programmer response

Determine the reason for the return code from the STORAGE OBTAIN request, and restart CSQQTRMN.

CSQQ120E

psb-name region-id MQPUT error, MQCC=*mqcc* MQRC=*mqrc*

Severity

8

Explanation

An attempt was made to put a message on a queue with an MQPUT call, but the attempt was unsuccessful. *region-id* is the last four digits of the region identifier, or blank. This message is followed by message CSQQ110I indicating the name of the queue.

System action

CSQQTRMN ends.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* to determine why an MQPUT call could not be made for the queue.

CSQQ121E

psb-name region-id Dead-letter queue is not defined for the queue manager

Severity
4

Explanation

A dead-letter queue has not been defined for the queue manager. *region-id* is the last four digits of the region identifier, or blank.

System action

The trigger message is discarded, and the process cannot be started.

System programmer response

Define a dead-letter queue if one is required.

CSQQ122E

psb-name region-id Cannot close the queue manager, MQCC=*mqcc* MQRC=*mqrc*

Severity
8

Explanation

CSQQTRMN was unable to close the queue manager after inquiring about the dead-letter queue. *region-id* is the last four digits of the region identifier, or blank.

System action

CSQQTRMN ends.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* to determine the cause of the problem.

CSQQ123E

psb-name region-id The dead-letter queue type is not QLOCAL

Severity
4

Explanation

The dead-letter queue defined was not of type local. *region-id* is the last four digits of the region identifier, or blank. This message is followed by message CSQQ110I, indicating the name of the queue.

System action

The message is not put to the dead-letter queue.

System programmer response

Define the dead-letter queue as a local queue.

CSQQ124E

psb-name region-id The dead-letter queue usage is not NORMAL

Severity
4

Explanation

The dead-letter queue defined is not of usage type normal. *region-id* is the last four digits of the region identifier, or blank. This message is followed by message CSQQ110I, indicating the name of the queue.

System action

The message is not put to the dead-letter queue.

System programmer response

Define the dead-letter queue to have usage type normal.

CSQQ125E

psb-name region-id No initiation queue identified

Severity

8

Explanation

CSQQTRMN did not find the initiation queue name in the input parameters.

System action

CSQQTRMN ends.

System programmer response

Examine the input parameters and look for other error messages to determine the reason for the failure. Restart CSQQTRMN.

CSQQ126E

psb-name region-id An IMS *call* call returned *pcb-status*

Severity

8

Explanation

A status code of *pcb-status* was returned from a DLI call.

System action

CSQQTRMN ends.

System programmer response

Determine the reason for the status code, and restart CSQQTRMN.

CSQQ150I

csect-name IBM WebSphere MQ for z/OS V*n*

Severity

0

Explanation

This message is issued as part of the header to the report issued by the IMS trigger monitor program.

CSQQ151I

csect-name Trigger Monitor Input Report - *date time*

Severity

0

Explanation

This message is issued as part of the header to the report issued by the IMS trigger monitor program.

CSQQ152I

csect-name Unable to OPEN CSQQUT1 data set

Severity

8

Explanation

The IMS trigger monitor was unable to open the data set containing input control statements.

System action

Default values are used for the options.

System programmer response

Examine the error message that has been sent to the JES log to determine the reason for the error. Check that the data set has been correctly specified.

CSQQ153I

csect-name First token is not a valid keyword

Severity

8

Explanation

The input control statement does not start with a valid keyword.

System action

The statement is ignored.

System programmer response

Correct the syntax for the statement.

CSQQ159I

csect-name Trigger monitor options:

Severity

0

Explanation

The IMS trigger monitor has finished processing input control statements. The options that will be used follow.

Recovery manager messages (CSQR...)

CSQR001I
RESTART INITIATED

Explanation

This message delimits the beginning of the restart process within startup. The phases of restart are about to begin. These phases are necessary to restore the operational environment to that which existed at the time of the previous termination and to perform any recovery actions that might be necessary to return MQ-managed resources to a consistent state.

CSQR002I
RESTART COMPLETED

Explanation

This message delimits the completion of the restart process within startup.

System action

Startup continues.

CSQR003I
RESTART - PRIOR CHECKPOINT RBA=*rba*

Explanation

The message indicates the first phase of the restart process is in progress and identifies the log positioning RBA of the checkpoint from which the restart process will obtain its initial recovery information.

System action

Restart processing continues.

CSQR004I
RESTART - UR COUNTS - IN COMMIT=*nnnn*, INDOUBT=*nnnn*, INFLIGHT=*nnnn*, IN BACKOUT=*nnnn*

Explanation

This message indicates the completion of the first phase of the restart process. The counts indicate the number of units of recovery with an execution state during a previous queue manager termination that indicates (to ensure MQ resource consistency) some recovery action must be performed during this restart process. The counts might provide an indication of the time required to perform the remaining two phases of restart (forward and backward recovery).

The IN COMMIT count specifies the number that had started, but not completed, phase-2 of the commit process. These must undergo forward recovery to complete the commit process.

The INDOUBT count specifies the number that were interrupted between phase-1 and phase-2 of the commit process. These must undergo forward recovery to ensure that resources modified by them are unavailable until their INDOUBT status is resolved.

The INFLIGHT count specifies the number that neither completed phase-1 of the commit process nor began the process of backing out. These must undergo backward recovery to restore resources modified by them to their previous consistent state.

The IN BACKOUT count specifies the number that were in the process of backing out. These must undergo backward recovery to restore resources modified by them to their previous consistent state.

System action

Restart processing continues.

CSQR005I
RESTART - FORWARD RECOVERY COMPLETE - IN COMMIT= *nnnn*, INDOUBT=*nnnn*

Explanation

The message indicates the completion of the forward recovery restart phase. The counts indicate the number of units of recovery with recovery actions that could not be completed during the phase. Typically, those in an IN COMMIT state remain because the recovery actions of some subcomponents have not been completed. Those units of recovery in an INDOUBT state will remain until connection is made with the subsystem that acts as their commit coordinator.

System action

Restart processing continues.

CSQR006I
RESTART - BACKWARD RECOVERY COMPLETE - INFLIGHT= *nnnn*, IN BACKOUT=*nnnn*

Explanation

The message indicates the completion of the backward recovery restart phase. The counts indicate the number of units of recovery with recovery actions that could not be completed during the phase. Typically, those in either state remain because the recovery actions of some subcomponents have not been completed.

System action

Restart processing continues.

CSQR007I
UR STATUS

Explanation

This message precedes a table showing the status of units of recovery (URs) after each restart phase. The message and the table will accompany the CSQR004I, CSQR005I, or CSQR006I message after each nested phase. At the end of the first phase, it shows the status of any URs that require

processing. At the end of the second (forward recovery) and third (backout) phases, it shows the status of only those URs which needed processing but were not processed. The table helps to identify the URs that were active when the queue manager stopped, and to determine the log scope required to restart.

The format of the table is:

```
T  CON-ID    THREAD-XREF    S    URID     TIME
```

The columns contain the following information:

T

Connection type. The values can be:

B

Batch: From an application using a batch connection

R

RRS: From an RRS-coordinated application using a batch connection

C

CICS: From CICS

I

IMS: From IMS

S

System: From an internal function of the queue manager or from the channel initiator.

CON-ID

Connection identifier for related URs. Batch connections are not related to any other connection. Subsystem connections with the same identifier indicate URs that originated from the same subsystem.

THREAD-XREF

The recovery thread cross-reference identifier associated with the thread; see the Administering WebSphere MQ for z/OS for more information.

S

Restart status of the UR. When the queue manager stopped, the UR was in one of these situations:

B

INBACKOUT: the UR was in the must-complete phase of backout, and is yet to be completed

C

INCOMMIT: the UR was in the must-complete phase of commit, and is yet to be completed

D

INDOUBT: the UR had completed the first phase of commit, but IBM MQ had not received the second phase instruction (the UR must be remembered so that it can be resolved when the owning subsystem reattaches)

F

INFLIGHT: the UR had not completed the first phase of commit, and will be backed out.

URID

UR identifier, the log RBA of the beginning of this unit of recovery. It is the earliest RBA required to process the UR during restart.

TIME

The time the UR was created, in the format *yyyymmdd hhmmss*. It is approximately the time of the first MQ API call of the application or the first MQ API call following a commit point.

CSQR009E
NO STORAGE FOR UR STATUS TABLE, SIZE REQUESTED= *xxxx*, REASON CODE=*yyyyyyyy*

Explanation

There was not enough storage available during the creation of the recoverable UR (unit of recovery) display table.

System action

Restart continues but the status table is not displayed.

System programmer response

Increase the region size of the xxxxMSTR region before restarting the queue manager.

CSQR010E
ERROR IN UR STATUS TABLE SORT/TRANSLATE, ERROR LOCATION CODE=*xxxx*

Explanation

An internal error has occurred.

System action

Restart continues but the status table is not displayed.

System programmer response

Note the error code in the message and contact your IBM support center.

CSQR011E
ERROR IN UR STATUS TABLE DISPLAY, ERROR LOCATION CODE=*xxxx*

Explanation

An internal error has occurred.

System action

Restart continues but the status table is not displayed.

System programmer response

Note the error code in the message and contact your IBM support center.

CSQR015E
CONDITIONAL RESTART CHECKPOINT RBA *rba* NOT FOUND

Explanation

The checkpoint RBA in the conditional restart control record, which is deduced from the end RBA or LRSN value that was specified, is not available. This is probably because the log data sets available for use at restart do not include that end RBA or LRSN.

System action

Restart ends abnormally with reason code X'00D99001' and the queue manager terminates.

System programmer response

Run the change log inventory utility (CSQJU003) specifying an ENDRBA or ENDLRSN value on the CRESTART control statement that is in the log data sets that are to be used for restarting the queue manager.

CSQR020I
OLD UOW FOUND

Explanation

During restart, a unit of work was found that predates the oldest active log. Information about the unit of work is displayed in a table in the same format as in message CSQR007I.

Old units of work can lead to extended restart times, as restart processing need to read archive logs to correctly process the unit of work. IBM MQ offers the opportunity to avoid this delay by allowing old units of work to be force committed.

Note: Force committing a unit of work can break the transactional integrity of updates between IBM MQ, and other resource managers involved in the original unit of work described in this message.

System action

Message CSQR021D is issued and the operator's reply is awaited.

CSQR021D
REPLY Y TO COMMIT OR N TO CONTINUE

Explanation

An old unit of work was found, as indicated in the preceding CSQR020I message.

System action

The queue manager waits for the operator's reply.

CSQR022I
OLD UOW COMMITTED, URID=*urid*

Explanation

This message is sent if the operator answers 'Y' to message CSQR021D.

System action

The indicated unit of work is committed.

CSQR023I
OLD UOW UNCHANGED, URID=*urid*

Explanation

This message is sent if the operator answers 'N' to message CSQR021D.

CSQR023I is also sent when an old unit of work which is already in the 'in-backout' state is identified. Units of work in the 'in-backout' state are ineligible for force commit processing as it can lead to a queue becoming unusable. For such units of work, the message CSQR021D is not issued, and no choice is possible.

System action

The indicated unit of work is left for handling by the normal restart recovery process.

CSQR026I
Long-running UOW shunted to RBA=*rba*, URID=*urid* connection name=*name*

Explanation

During checkpoint processing, an uncommitted unit of recovery was encountered that has been active for at least 3 checkpoints. The associated log records have been rewritten ('shunted') to a later point in the log, at RBA *rba*. The unit of recovery identifier *urid* together with the connection name *name* identify the associated thread.

System action

Processing continues.

System programmer response

Uncommitted units of recovery can lead to difficulties later, so consult with the application programmer to determine if there is a problem that is preventing the unit of recovery from being committed, and to ensure that the application commits work frequently enough.

CSQR027I
Long-running UOW shunting failed, URID=*urid* connection name=*name*

Explanation

During checkpoint processing, an uncommitted unit of recovery was encountered that has been acvtive for at least 3 checkpoints. However, the associated log records could not be rewritten

('shunted') to a later point in the log. The unit of recovery identifier *urid* together with the connection name *name* identify the associated thread.

System action

The unit of recovery is not shunted, and will not participate in any future log shunting.

System programmer response

The most likely cause is insufficient active log data sets being available, in which case you should add more log data sets for the queue manager to use. Use the DISPLAY LOG command or the print log map utility (CSQJU004) to determine how many log data sets there are and what their status is.

Uncommitted units of recovery can lead to difficulties later, so consult with the application programmer to determine if there is a problem that is preventing the unit of recovery from being committed, and to ensure that the application commits work frequently enough.

CSQR029I
INVALID RESPONSE - NOT Y OR N

Explanation

The operator did not respond correctly to the reply message CSQR021D. Either 'Y' or 'N' must be entered.

System action

The original message is repeated.

CSQR030I
Forward recovery log range from RBA=*from-rba* to RBA=*to-rba*

Explanation

This indicates the log range that must be read to perform forward recovery during restart.

System action

Restart processing continues.

CSQR031I
Reading log forwards, RBA=*rba*

Explanation

This is issued periodically during restart recovery processing to show the progress of the forward recovery phase and the current status rebuild phase. For the forward recovery phase the log range that needs to be read is shown in the preceding CSQR030I message.

For the current status rebuild phase, the starting log RBA is shown in the preceding CSQR003I message and the end log RBA is shown in the preceding CSQJ099I message. The RBA represents the position in the recovery log during the forward recovery phase of current status rebuild.

System action

Restart processing continues.

CSQR032I
Backward recovery log range from RBA=*from-rba* to RBA=*to-rba*

Explanation

This indicates the log range that must be read to perform backward recovery during restart.

System action

Restart processing continues.

CSQR033I
Reading log backwards, RBA=*rba*

Explanation

This is issued periodically during restart recovery processing to show the progress of the backward recovery phase. The log range that needs to be read is shown in the preceding CSQR032I message.

System action

Restart processing continues.

CSQR034I

Backward migration detected

Explanation

During queue manager restart it has been detected that one or more of the page sets that have been connected has been used at a higher version of queue manager code.

System action

The queue manager will automatically perform special processing during restart to alter any messages stored on those page sets so they can be read by the current version of the queue manager. This special processing is dependent on there being no unresolved units of work found at the end of restart, so you might be prompted by way of further messages during restart to force commit these.

Restart processing continues.

Topic manager messages (CSQT...)

CSQT806I

csect-name Queued Pub/Sub Daemon started

Severity
0

Explanation

Queued Pub/Sub Daemon started

System action

None

System programmer response

None

CSQT807I

csect-name Queued Pub/Sub Daemon ended

Severity
0

Explanation

The Queued Pub/Sub Daemon has ended.

System programmer response

None

CSQT809E

csect-name Unable to process publication, Queued Pub/Sub stream queue *queue-name* is GET(DISABLED)

Severity
8

Explanation

The stream queue, *queue-name,* has been GET(DISABLED) preventing the Queued Pub/Sub Daemon from processing publication messages.

System action

The Queued Pub/Sub Daemon will continue to process publication messages on other stream queues and subscriptions on all streams.

System programmer response

To resume processing publication messages alter the stream queue to be GET(ENABLED).

To quiesce the stream remove its name from SYSTEM.QPUBSUB.QUEUE.NAMELIST.

To quiesce the Queued Pub/Sub Daemon alter the queue manager to have PSMODE(COMPAT).

CSQT810E

csect-name Unable to process subscription requests, Queued Pub/Sub control queue is GET(DISABLED)

Severity
8

Explanation

The SYSTEM.BROKER.CONTROL.QUEUE has been GET(DISABLED) preventing the Queued Pub/Sub Daemon from processing subscription requests.

System action

The Queued Pub/Sub Daemon will continue to process publication messages on stream queues.

System programmer response

To resume processing subscription requests alter the SYSTEM.BROKER.CONTROL.QUEUE to be GET(ENABLED).

To quiesce the Queued Pub/Sub Daemon alter the queue manager to have PSMODE(COMPAT).

CSQT814E

csect-name Unable to resolve parent *queue-manager-name*

Severity
8

Explanation

In establishing a publish/subscribe hierarchy, the Queued Pub/Sub Daemon has been unable to resolve the parent *queue-manager-name*.

System action

The status of the publish/subscribe parent connection will be set to error.

System programmer response

Check that the parent queue manager is correctly specified.

Ensure that broker is able to resolve the queue manager name of the parent broker.

To resolve the queue manager name, at least one of the following resources must be configured:
- A transmission queue with the same name as the parent queue manager name.
- A queue manager alias definition with the same name as the parent queue manager name.
- A cluster with the parent queue manager a member of the same cluster as this queue manager.
- A cluster queue manager alias definition with the same name as the parent queue manager name.

- A default transmission queue, modify the parent queue manager name to blank, then set with the parent queue manager name.

CSQT816E

csect-name Unable to open Queued Pub/Sub control queue MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Severity
8

Explanation

The queue manager failed to open the Queued Publish/Subscribe control queue, SYSTEM.BROKER.CONTROL.QUEUE. The attempt to open the queue failed with completion code *mqcc* and reason *mqrc*. The most likely reasons for this error are that an application program has opened the control queue for exclusive access, or that the control queue has been defined incorrectly.

System action

The Queued Publish/Subscribe Daemon terminates.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form), then correct the problem and restart the Queued Publish/Subscribe interface.

CSQT817E

csect-name An invalid stream queue has been detected, queue *queue-name*

Severity
8

Explanation

The Pub/Sub Daemon attempted to use queue *queue-name* as a stream queue. The most likely reason for this error is that the queue is:

- Not a local queue.
- A shareable queue.
- A temporary dynamic queue.

System programmer response

Correct the problem with the queue *queue-name* or, if you do not intend to use it as a stream queue, remove it from the namelist SYSTEM.QPUBSUB.QUEUE.NAMELIST.

CSQT818E

csect-name Unable to open Queued Pub/Sub stream, queue *queue-name* MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity
8

Explanation

The queue manager has failed to open a stream queue *queue-name*. The attempt to open the queue failed with completion code *mqcc* and reason *mqrc*. The most likely reasons for this error are:

1. A new stream name has been added to SYSTEM.QPUBSUB.QUEUE.NAMELIST but the stream queue does not exist.
2. An application has the queue open for exclusive access.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQT819E

csect-name Queued Pub/Sub stream *stream-name* ended abnormally, reason=*mqrc*

Severity
8

Explanation

The Pub/Sub Daemon stream (*stream-name*) has ended abnormally for reason *mqrc*. The *mqrc* could be an internal return code. The queue manager will attempt to restart the stream. If the stream should repeatedly fail then the Pub/Sub Daemon will progressively increase the time between attempts to restart the stream.

System programmer response

Investigate why the problem occurred and take appropriate action to correct the problem. If the problem persists, save any generated output files and use the MQ Support site to see whether a solution is already available. If you are unable to find a match, contact your IBM support center.

CSQT820E

csect-name Queued Pub/Sub stream *stream-name* restarted

Severity
8

Explanation

The queue manager has restarted a stream that ended abnormally. This message will frequently be preceded by message CSQT819E indicating why the stream ended.

System programmer response

Correct the problem.

CSQT821E

csect-name Unable to contact parent *queue-manager-name*, reason=*mqrc*

Severity
8

Explanation

In establishing a publish/subscribe hierarchy, the Queued Pub/Sub Daemon is unable to send a message to the parent *queue-manager-name* for reason *mqrc*.

System action

The status of the publish/subscribe parent connection will be set to error.

System programmer response

Investigate why the problem occurred and determine a resolution.

To reattempt a parent queue manager connection:

- Set the parent queue manager name to blank.
- Take appropriate action to correct the problem.
- Re-specify the parent queue manager name

CSQT822E

csect-name Failed to register with parent *queue-manager-name*, reason *mqrc (mqrc-text)*

Severity
8

Explanation

The Queued Pub/Sub Daemon started and the PARENT queue manager was set to *queue-manager-name* in a queue manager attribute. The queue manager attempted to register as a child of the parent, but received an exception response indicating that it was not possible. The queue manager will retry to register periodically as a child. The child may not be able to process global publications or subscriptions correctly until this registration process has completed normally.

System programmer response

Investigate why the problem occurred and take appropriate action to correct the problem. The problem is likely to be caused by the parent queue manager not yet existing, or a problem with the transmission queue at the parent queue manager.

CSQT824I

csect-name Topic *topic-1* is dependent on PROXYSUB(FORCE) of topic *topic-2* from a different Pub/Sub hierarchy stream

Severity
4

Explanation

Topic object *topic-1* is a publish/subscribe hierarchy stream. Topic object *topic-2* is higher in the topic tree and has been configured with **PROXYSUB(FORCE)**, which results in a single wildcard proxy subscription being sent to the neighboring queue managers in the publish/subscribe hierarchy that support the *topic-2* stream. No further individual proxy subscriptions will be sent for any subscriptions made below *topic-2* in the topic tree, including below topic object *topic-1*. If a neighboring queue manager supports the *topic-1* stream, but not the *topic-2* stream, publications will not be sent to subscriptions to topic *topic-1* on this queue manager from that neighbor.

System programmer response

If the behavior described in the explanation is intended then no action is required. If not, alter the **PROXYSUB** attribute on topic *topic-1*, or *topic-2*, so both, or neither topics, are configured with the value **FORCE**.

CSQT826E

csect-name Failed to propagate subscription, stream *stream-name*, to queue manager *qm-name*, MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity
8

Explanation

The queue manager failed to propagate subscription to stream *stream-name* at queue manager *queue-manager-name* with reason code *mqrc*. An application has either registered or unregistered a subscription to stream *stream-name*. The queue manager has attempted to propagate the subscription change to the queue manager, but the request has not been successful. Messages published on the stream through the queue manager might not reach this queue manager.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

Investigate why the problem occurred and take appropriate action to correct the problem.

Use the following command to refresh proxy subscriptions:

```
REFRESH QMGR TYPE(PROXYSUB)
```

CSQT827E

csect-name Queued Pub/Sub internal subscription failed. Stream *stream-name* to queue manager *queue-manager-name* reason=*reason* MQRC= *mqrc*

Severity
8

Explanation

The queue manager failed to subscribe to stream *stream-name* at queue manager *queue-manager-name* with reason code *mqrc*. Related queue managers learn about each others configuration by subscribing to information published by each other. A queue manager discovered that one of these internal subscriptions has failed. The queue manager will reissue the subscription immediately. The queue manager cannot function correctly without knowing some information about neighboring queue managers. The information that this broker has about queue manager *queue-manager-name* is not complete and this could lead to subscriptions and publications not being propagated around the network correctly.

System programmer response

Investigate why the problem occurred and take appropriate action to correct the problem. The most likely cause of this failure is a problem with the transmission queue at the queue manager *queue-manager-name* or a problem with the definition of the route between this queue manager and queue manager *queue-manager-name*

CSQT831E

csect-name Unable to make subscription, reason=*mqrc* (*mqrc-text*), subscription name *sub-name*, topic *topic-string*

Severity
8

Explanation

A failure occurred while attempting to create a subscription to topic string *topic-string* using the subscription name *sub-name*. The associated reason code is *mqrc*. The *mqrc* could be an internal return code.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQT833E

csect-name Queue manager *queue-manager-name* introduced a loop into the Pub/Sub hierarchy

Severity
8

Explanation

The queue manager *queue-manager-name* introduced a loop in the Pub/Sub hierarchy. The Queued Publish/Subscribe Daemon on this queue manager will terminate immediately.

System programmer response

Remove queue manager *queue-manager-name* from the hierarchy, either by deleting the queue manager, or by removing knowledge of the queue manager's parent, using the ALTER QMGR PARENT(' ') command, or in exceptional circumstances, RESET QMGR TYPE(PUBSUB) PARENT(*queue-manager-name*).

CSQT834E

csect-name Conflicting queue manager names in the Pub/Sub hierarchy

Severity
8

Explanation

The names of the queue managers (*queue-manager-name*) and (*queue-manager-name*) in the Pub/Sub hierarchy both start with the same 12 characters. The first 12 characters of a queue manager name should be unique to ensure that no confusion arises within the hierarchy, and to guarantee unique message ID allocation.

CSQT835E

csect-name Unable to inform parent *parent-name* of new relation *queue-manager-name*, reason=*mqrc (mqrc-text)*

Severity
8

Explanation

The queue manager failed to notify its parent queue manager *parent-name* of the relation *queue-manager-name* in the Pub/Sub hierarchy. The notification message will be put to the parent's dead-letter queue. A failure to notify a queue manager of a new relation will mean that no loop detection can be performed for the new relation.

System programmer response

Diagnose and correct the problem on the parent queue manager. One possible reason for this is that the parent queue manager does not yet exist.

CSQT836E

csect-name Duplicate queue manager name *queue-manager-name* located in the Pub/Sub hierarchy

Severity
8

Explanation

Multiple instances of the queue manager name *queue-manager-name* have been located. This could either be the result of a previously resolved loop in the Pub/Sub hierarchy, or multiple queue managers in the Pub/Sub hierarchy having the same name.

System programmer response

If this queue manager introduced a loop in the hierarchy (typically identified by message CSQT833E), this message can be ignored. It is strongly recommended that every queue manager in a Pub/Sub hierarchy has a unique name. It is not recommended that multiple queue managers use the same name.

CSQT839E

csect-name Unexpected topology information received from queue manager *queue-manager-name*

Severity
8

Explanation

A queue manager has received a distributed publish/subscribe communication that it did not expect. The message was sent by queue manager *queue-manager-name*. The message will be processed according to the report options in that message. The most likely reason for this message is that the queue manager topology has been changed while distributed publish/subscribe communication messages were in transit (for example, on a transmission queue) and that a message relating to the previous queue manager topology has arrived at a queue manager in the new topology. This message may be accompanied by an informational FFST including details of the unexpected communication.

System programmer response

If the queue manager topology has changed and the queue manager named in the message is no longer related to the queue manager issuing this message, this message can be ignored. If the **RESET QMGR TYPE(PUBSUB)** command was issued to unilaterally remove knowledge of queue manager

queue-manager-name from this queue manager, the **RESET QMGR TYPE(PUBSUB)** command should also be used to remove knowledge of this queue manager from queue manager *queue-manager-name*.

CSQT844E

csect-name The relation with *queue-manager-name* is unknown

Severity
8

Explanation

The RESET QMGR TYPE(PUBSUB) command has been issued in an attempt to remove a queue manager's knowledge of a relation of that queue manager. The relative *queue-manager-name* is unknown at queue manager *queue-manager-name*. If the parent KEYWORD was specified, the queue manager does not currently have a parent. If the CHILD keyword was specified, the queue manager does not recognize the named child.

System programmer response

Investigate why the queue manager is unknown.

CSQT848E

csect-name Failed to register proxy subscription for queue manager *qmgr-name*, stream *stream-name*, topic string *topic-string*, reason=*mqrc* (*mqrc-text*)

Severity
8

Explanation

The queue manager received a proxy subscription request for stream *stream-name* and topic *topic-string* from queue manager *qmgr-name*. The attempt to register the subscription was unsuccessful for reason *mqrc* (*mqrc-text* provides the MQRC in textual form). Messages published upon this topic will not be delivered to subscriptions on the relation queue manager.

System programmer response

Use the reason code to investigate why the failure occurred and take appropriate action to correct the problem. Use the command REFRESH QMGR TYPE(PROXYSUB) on the relation queue manager to refresh it's proxy subscriptions.

CSQT852E

csect-name Unable to propagate delete publication command, topic *topic-name*, stream *stream-name*, to queue manager *queue-manager-name*, reason=*mqrc* (*mqrc-text*)

Severity
8

Explanation

The queue manager failed to propagate delete publication command for stream *stream-name* to related queue manager *queue-manager-name* for reason *mqrc*. When an application issues a delete publication command to delete a global publication, the command has to be propagated to all queue managers in the sub-hierarchy supporting the stream. The queue manager reporting the error has failed to forward a delete publication command to a related queue manager *queue-manager-name* who supports stream *stream-name*. Delete publication commands are propagated without MQRO_DISCARD_MSG and the command message might have been written to a dead-letter queue. The topic for which the delete publication has failed is *topic-name*.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

If the delete publication has failed because the stream has been deleted at the related queue manager, this message can be ignored. Investigate why the delete publication has failed and take the appropriate action to recover the failed command.

CSQT853E

csect-name Unable to propagate delete publication command, topic *topic-name*, stream *stream-name*, relation *relation-name*, reason = *mqrc* (*mqrc-text*)

Severity
8

Explanation

The queue manager failed to propagate a delete publication command for stream *stream-name* to a previously related queue manager *relation-name*. In some cases the stream or the relation cannot be determined and so is shown as '????'.

When an application issues a delete publication command to delete a global publication, the command is propagated to all queue managers in the sub-hierarchy supporting the stream. The queue manager topology was changed after deleting the publication, but before a queue manager removed by the topology change processed the propagated delete publication message. The topic for which the delete publication has failed is *topic-name*. In some cases the topic cannot be determined and so is shown as '????'.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

It is the user's responsibility to quiesce queue manager activity before changing the queue manager topology using the RESET QMGR TYPE(PUBSUB) command. Investigate why this delete publication activity was not quiesced. The delete publication command will have been written to the dead-letter queue at the queue manager that was removed from the topology. In this case, further action might be necessary to propagate the delete publication command that was not quiesced before the RESET QMGR TYPE(PUBSUB) command was issued.

CSQT854E

csect-name Unable to propagate delete publication command, topic *topic-name*, stream *stream-name* to queue manager *queue-manager-name*

Severity
8

Explanation

When an application issues a delete publication command, the command has to be propagated to all queue managers in the sub-hierarchy supporting the stream. At the time the delete publication was propagated, queue manager *queue-manager-name* was a known relation of this message queue manager supporting stream *stream-name*. Before the delete publication command arrived at the related queue manager, the queue manager topology was changed so that queue manager *queue-manager-name* no longer supported stream *stream-name*. The topic for which the delete publication has failed is *topic-name*.

System programmer response

It is the user's responsibility to quiesce queue manager activity before changing the stream topology of the queue manager. Investigate why this delete publication activity was not quiesced. The delete publication command will have been written to the dead-letter queue at queue manager *queue-manager-name*.

CSQT855E

csect-name Queued Pub/Sub Daemon failed, reason=*mqrc*

Severity

8

Explanation

An attempt has been made to run the queued publish/subscribe interface (Queued Pub/Sub Daemon) but the interface has ended for reason *mqrc*.

If *mqrc* is a number in the range of 2000 - 3000, it is an API reason code. If it is of the form 5*nnn*, it is a queued publish/subscribe message code associated with the message CSQT *nnn*E, which is normally issued previously.

System programmer response

If *mqrc* is an API reason code, see API completion and reason codes for more information about the *mqrc*. If *mqrc* is a queued publish/subscribe message code, see the corresponding message explanation for more information. Where no such message exists, see "Queued Publish/Subscribe message codes" on page 1142 for the corresponding message number.

Determine why the queued publish/subscribe daemon ended. The message logs for the Channel Initiator might contain more detailed information about why the queued publish/subscribe daemon cannot be started. Resolve the problem that is preventing the daemon from completing and restart the Channel Initiator.

CSQT856E

csect-name Unable to process publish command message for stream *stream-name*, reason=*mqrc (mqrc-text)*

Severity

8

Explanation

The Queued Pub/Sub Daemon failed to process a publish message for stream *stream-name*. The queue manager was unable to write the publication to the dead-letter queue and was not permitted to discard the publication. The queue manager will temporarily stop the stream and will restart the stream and consequently retry the publication after a short interval.

System programmer response

Investigate why the error has occurred and why the publication cannot be written to the dead-letter queue. Either manually remove the publication from the stream queue, or correct the problem that is preventing the queue manager from writing the publication to the dead-letter queue.

CSQT857E

csect-name Unable to process control command message, reason=*mqrc (mqrc-text)*

Severity

8

Explanation

The Queued Pub/Sub Daemon failed to process a command message on the SYSTEM.BROKER.CONTROL.QUEUE. The queue manager was unable to write the command message to the dead-letter queue and was not permitted to discard the command message. The queue manager will temporarily stop the stream and will restart the stream and consequently retry the command message after a short interval. Other queue manager control commands cannot be processed until this command message has been processed successfully or removed from the control queue.

System programmer response

Investigate why the error has occurred and why the command message cannot be written to the dead-letter queue. Either, manually remove the command message from the stream queue, or correct the problem that is preventing the broker from writing the command message to the dead-letter queue.

CSQT858E

> *csect-name* Unable to send publication to subscriber queue, queue *queue-name*, to queue manager *queue-manager-name*, reason=*mqrc* (*mqrc-text*)

Severity
> 8

Explanation

> A failure has occurred sending a publication to subscriber queue *queue-name* at queue manager *queue-manager-name* for reason *mqrc*. The broker configuration options prevent it from recovering from this failure by discarding the publication or by sending it to the dead-letter queue. Instead the queue manager will back out the unit of work under which the publication is being sent and retry the failing command message a fixed number of times. If the problem still persists, the queue manager will then attempt to recover by failing the command message with a negative reply message. If the issuer of the command did not request negative replies, the queue manager will either discard or send to the dead-letter queue the failing command message. If the queue manager configuration options prevent this, the queue manager will restart the affected stream, which will reprocess the failing command message again. This behavior will be repeated until such time as the failure is resolved. During this time the stream will be unable to process further publications or subscriptions.

System programmer response

> Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

> Usually the failure will be due to a transient resource problem, for example, the subscriber queue, or an intermediate transmission queue, becoming full. Use reason code *mqrc* to determine what remedial action is required. If the problem persists for a long time, you will notice the stream being continually restarted by the queue manager. Evidence of this occurring will be a large number of CSQT820E messages, indicating stream restart, being written to the Channel Initiator log. In such circumstances, manual intervention will be required to allow the queue manager to dispose of the failing publication. To do this, you will need to end the Queued Pub/Sub Daemon using the ALTER QMGR PSMODE(COMPAT), change the appropriate queue manager attributes; PSNPMSG, PSNPRES, PSSYNCPT, and restart it using ALTER QMGR PSMODE(ENABLED). This will allow the publication to be sent to the rest of the subscribers, while allowing the Queued Pub/Sub Daemon to discard or send to the dead-letter queue the publication that could not be sent.

CSQT859E

> *csect-name* Queued Pub/Sub stream *stream-name* terminating, reason=*mqrc* (*mqrc-text*)

Severity
> 8

Explanation

> The stream *stream-name* has run out of internal resources and will terminate with reason code *mqrc* (*mqrc-text* provides the MQRC in textual form). If the command in progress was being processed under syncpoint control, it will be backed out and retried when the stream is restarted by the queue manager. If the command was being processed out of syncpoint control, it will not be able to be retried when the stream is restarted.

System programmer response

> This message should only be issued in very unusual circumstances. If this message is issued repeatedly for the same stream, and the stream is not especially large in terms of subscriptions, topics, and retained publications, save all generated diagnostic information and use either the WebSphere MQ Support site, or IBM Support Assistant (ISA) to see whether a solution is already available. If you are unable to find a match, contact your IBM support center.

CSQT864E

> *csect-name* Unable to put a reply message, queue *queue-name* queue manager(*qm-name*) MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity

8

Explanation

While processing a publish/subscribe command, the queue manager could not send a reply message to the queue *queue-name* at the queue manager *qm-name* for MQRC=*mqrc*. The queue manager was also unable to write the message to the dead-letter queue. Since the command is being processed under syncpoint control, the queue manager will attempt to retry the command in the hope that the problem is only of a transient nature. If, after a set number of retries, the reply message still could not be sent, the command message will be discarded if the report options allow it. If the command message cannot be discarded, the stream will be restarted, and processing of the command message recommenced.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

Use reason code *mqrc* to determine what remedial action is required. If the failure is due to a resource problem (for example, a queue being full), you might find that the problem has already cleared itself. If not, this message will be issued repeatedly each time the command is retried. In this case you are strongly advised to define a dead-letter queue to receive the reply message so that the Queued Pub/Sub Daemon can process other commands while the problem is being investigated. Check the application from which the command originated and ensure that it is specifying its reply-to queue correctly.

CSQT866E

csect-name Queued Pub/Sub command message discarded. Reason=*mqrc (mqrc-text)*

Severity

8

Explanation

The queue manager failed to process a publish/subscribe command message, which has now been discarded. The queue manager will begin to process new command messages again.

System programmer response

Look for previous error messages to indicate the problem with the command message. Correct the problem to prevent the failure from happening again.

CSQT875E

csect-name Unable to put message to the dead-letter-queue, reason=*mqrc (mqrc-text)* (DLH reason=*mqrc2 (mqrc2-text)*)

Severity

8

Explanation

The queue manager attempted to put a message to the dead-letter queue *queue-name* but the message could not be written to the dead-letter queue for reason *mqrc (mqrc-text* provides the MQRC in textual form). The message was being written to the dead-letter-queue with a reason of *mqrc2* (*mqrc2-text* provides the MQRC in textual form).

System programmer response

Determine why the message cannot be written to the dead-letter-queue. Also, if the message was not deliberately written to the dead-letter-queue, for example by a channel exit, determine why the message was written to the dead-letter-queue and resolve the problem that is preventing the message from being sent to its destination.

CSQT876E

csect-name Parent conflict detected in Pub/Sub hierarchy with queue manager *queue-manager-name*

Severity

8

Explanation

The queue manager *queue-manager-name* has been started, naming this queue manager as its parent. This queue manager has already named queue manager *queue-manager-name* as its parent. The queue manager will send an exception message to the queue manager *queue-manager-name* indicating that a conflict has been detected. The most likely reason for this message is that the queue manager topology has been changed while distributed publish/subscribe communication messages were in transit (for example, on a transmission queue) and that a message relating to the previous queue manager topology has arrived at a queue manager in the new topology. This message might be accompanied by an informational FFST including details of the unexpected communication.

System programmer response

If the queue manager topology has changed and the queue manager named in the message no longer identifies this queue manager as its parent, this message can be ignored - for example, if the command ALTER QMGR PARENT(' ') was issued. If queue manager *queue-manager-name* has been defined as this queue manager's parent, and this queue manager has been defined as queue manager *queue-manager-name*'s parent, the ALTER QMGR command should be used to resolve the conflict by specifying the correct PARENT.

CSQT882E

csect-name Message written to the dead-letter queue, for reason=*mqrc (mqrc-text)*

Severity

8

Explanation

The queue manager has written a message to the dead-letter queue for reason *mqrc* (*mqrc-text* provides the MQRC in textual form). Note. After the first occurrence of this message for a stream, it will only be written periodically.

System programmer response

Determine why the message was written to the dead-letter queue, and resolve the problem that is preventing the message from being sent to its destination.

CSQT883E

csect-name Queued Pub/Sub state not recorded

Severity

0

Explanation

The Queued Pub/Sub state on stream *stream-name* not recorded while processing a publication outside of syncpoint. A nonpersistent publication has requested a change to either a retained message or a publisher registration. This publication is being processed outside of syncpoint because the queue manager has been configured with the queue manager attribute PSSYNCPT set to IFPER. A failure has occurred hardening either the publisher registration or the retained publication to the queue manager's local queue. All state changes attempted as a result of this publication will be backed-out. Processing of the publication will continue and the queue manager will attempt to deliver it to all subscribers.

System programmer response

Investigate why the failure occurred. It is probably due to a resource problem occurring on the queue manager. The most likely cause is 'queue full' on a queue. If your publications also carry state changes, you are advised to send them either as persistent publications or set the queue manager attribute PSSYNCPT to YES. In this way, they will be carried out under syncpoint and the queue manager can retry them in the event of a failure such as this.

CSQT884E

csect-name Queued Pub/Sub control queue is not a local queue

Severity
8

Explanation

The Queue Manager has detected that the queue SYSTEM.BROKER.CONTROL.QUEUE exists and is not a local queue. This makes the queue unsuitable for use as the control queue. The Pub/Sub Daemon task will terminate immediately.

System programmer response

Delete the definition of the existing queue and, if required, re-create the queue to be of type MQQT_LOCAL.

CSQT895I

csect-name Queued Pub/Sub Daemon detected missing retained messages

Severity
4

Explanation

The Queued Pub/Sub Daemon uses retained messages to communicate with other members of publish subscribe hierarchies.

The retained message was missing and has been republished.

System action

Retained messages seem to have been removed from the SYSTEM.RETAINED.PUB.QUEUE. The Queued Pub/Sub Daemon has attempted to recover by republishing retained messages.

System programmer response

If you are unaware of a reason why retained messages have been removed this might be a symptom of a more serious problem that requires further investigation.

CSQT899E

csect-name Unable to establish parent relationship to child queue manager *qmname*

Severity
8

Explanation

The queue manager is unable to establish the requested parent relationship to queue manager *qmname* because that queue manager is already a child.

System action

The existing child relationship to queue manager *qmname* remains unaffected.

System programmer response

To prevent this message being issued, the parent definition on the queue manager must be removed by issuing the **ALTER QMGR PARENT(' ')** MQSC command. To ensure that the required topology is established, review the existing parent definitions and update appropriately.

CSQT960I

csect-name Distributed Pub/Sub command processor stopped

Severity
0

Explanation

The distributed Pub/Sub command processor stopped. This may be for one of three reasons:

- The channel initiator is stopping.
- The channel initiator is starting and the queues used by the distributed Pub/Sub command processor have not been defined because distributed Pub/Sub command processor is not required.
- An error has occurred

System action

Processing continues, but distributed Pub/Sub is not available.

System programmer response

If an error has occurred, investigate the problem reported in the preceding messages.

CSQT961I

csect-name Distributed Pub/Sub publication processor stopped

Severity
0

Explanation

The distributed Pub/Sub publication processor stopped. This can be for one of three reasons:

- The channel initiator is stopping.
- The channel initiator is starting and the queues used by the distributed Pub/Sub command processor have not been defined because distributed Pub/Sub publication processor is not required.
- An error has occurred

System action

Processing continues, but distributed Pub/Sub is not available.

System programmer response

If an error has occurred, investigate the problem reported in the preceding messages.

CSQT962I

csect-name Distributed Pub/Sub proxy-subscription fan out processor stopped

Severity
0

Explanation

The distributed Pub/Sub proxy-subscription stopped. This can be for one of three reasons:

- The channel initiator is stopping.
- The channel initiator is starting and the queues used by the distributed pub/sub proxy-subscription fan out processor have not been defined because distributed pub/sub proxy-subscription fan out processor is not required.
- An error has occurred

System action

Processing continues, but distributed Pub/Sub is not available.

System programmer response

If an error has occurred, investigate the problem reported in the preceding messages.

CSQT963E

csect-name Queued pub/sub daemon unavailable

Severity

8

Explanation

The Distributed publish/subscribe process was unable to contact the Queued Pub/Sub Daemon. The problem will be reported in preceding messages.

System action

Hierarchical connections cannot be processed until the problem is rectified.

System programmer response

Investigate the problem reported in the preceding messages. When the Daemon becomes available, it might be necessary to issue the REFRESH QMGR TYPE(PROXYSUB) command to resynchronize subscriptions.

CSQT964I

csect-name Pub/Sub hierarchy relation connected, (queue manager *qmgr-name*)

Severity

0

Explanation

A publish/subscribe hierarchy connection has been established with child or parent queue manager *qmgr-name*.

CSQT965I

csect-name Pub/Sub hierarchy relation disconnected, (queue manager *qmgr-name*)

Severity

0

Explanation

A publish/subscribe hierarchy connection has ended with child or parent queue manager *qmgr-name*.

CSQT966E

csect-name A previous publication is being incorrectly processed again

Severity

8

Explanation

A publication, previously processed by this queue manager, has been received.

This is caused by an invalid configuration of a hierarchy and a pub/sub cluster.

System action

This message will not be re-published and will be processed according to the message's report options. Additional messages might be written if this publication is sent to the dead-letter queue.

System programmer response

Correct the configuration to remove the loop. Check the message properties in the dead-letter queue to determine the route taken.

CSQT967E

csect-name Unable to deliver proxy subscription to queue manager *queue-manager*, reason=*mqrc (mqrc-text)*

Severity

8

Explanation

Unable to deliver proxy subscription to queue manager *queue-manager*. Reason code: *mqrc* (*mqrc-text* provides the MQRC in textual form).

This might result in subscriptions not receiving publications from *queue-manager*.

System programmer response

Correct the configuration to allow proxy subscriptions to be delivered to *queue-manager*. When the problem has been resolved, it will be necessary to perform a **REFRESH QMGR TYPE(PROXYSUB)** to resynchronize subscriptions.

CSQT968I

csect-name Topic *topic-1* in cluster *cluster-name* is dependent on PROXYSUB(FORCE) of topic *topic-2*

Severity
4

Explanation

Topic object *topic-1* is defined in cluster *cluster-name*, and is below topic object *topic-2* in the topic tree. Topic object *topic-2* has been configured with **PROXYSUB(FORCE)** to generate a wildcard proxy subscription, so no further individual proxy subscriptions are sent for any subscriptions made below *topic-2* in the topic tree. However, *topic-2* is not in the same cluster as *topic-1*, and the wildcard proxy subscription is not sent to neighboring queue managers in the cluster in which *topic-1* is defined. Therefore, publications from cluster *cluster-name* might not be sent to subscriptions to *topic-1* on this queue manager.

System programmer response

If the behavior described in the explanation is intended no action is required. If not, alter the **PROXYSUB** attribute on topic *topic-1*, or *topic-2*, so both, or neither topics, are configured with the value **FORCE**.

CSQT971E

csect-name task failed to quiesce

Severity

8

Explanation

The indicated Distributed Publish/Subscribe task was requested to quiesce but failed to do so within the timeout interval.

There are four classes of task:

Distributed Pub/Sub Publish Task
Receives publications from remote queue managers in a Publish/Subscribe cluster and republishes into the local queue manager

Distributed Pub/Sub Command Task
Receives command messages from remote queue managers in a Publish/Subscribe cluster to create or cancel proxy subscriptions on behalf of remote queue managers.

Distributed Pub/Sub Fan Out Task
Sends command messages to remote queue managers in Publish/Subscribe clusters and Publish/Subscribe hierarchies in response to changes in the local queue manager state.

Distributed Pub/Sub Controller
Controls the starting and stopping of the Distributed Publish/Subscribe tasks during channel initiator startup and shutdown and also when enabling and disabling Publish/Subscribe.

System action

The Queued Pub/Sub Daemon will be forcibly closed.

System programmer response

Check the job log for additional messages, or an FFST™, that might explain why the task has failed to quiesce.

CSQT972E

csect-name Unable to put Distributed Pub/Sub fan-out request to *q-name*, reason=*mqrc (mqrc-text)*

Severity
8

Explanation

An attempt to put a subscription fan-out request on the distributed publish/subscribe fan-out request queue *q-name* failed with reason code *mqrc (mqrc-text* provides the MQRC in textual form).

CSQT973E

csect-name Distributed Pub/Sub subscribing inhibited, topic string *topic-string,* (queue manager *qm-name*)

Severity
8

Explanation

Topic *topic-string* has been disabled for subscribe. This prevents distributed publish/subscribe from creating a subscription on behalf of another queue manager *qm-name* within the topology.

CSQT974E

csect-name Distributed Pub/Sub publication inhibited, topic string *topic-string*

Severity
8

Explanation

Topic *topic-string* has been disabled for publish. This prevents distributed publish/subscribe from publishing a message received from another queue manager within the topology. This message will not be re-published and will be processed according to the report options in the message. Additional messages will be written if this publication is sent to the dead-letter queue.

CSQT975I

csect-name task has started

Severity
0

Explanation

The indicated Distributed Publish/Subscribe task has started. This message typically occurs during channel initiator startup, or when enabling Publish/Subscribe.

There are four classes of task:

Distributed Pub/Sub Publish Task
Receives publications from remote queue managers in a Publish/Subscribe cluster and republishes into the local queue manager

Distributed Pub/Sub Command Task
Receives command messages from remote queue managers in a Publish/Subscribe cluster to create or cancel proxy subscriptions on behalf of remote queue managers.

Distributed Pub/Sub Fan Out Task
Sends command messages to remote queue managers in Publish/Subscribe clusters and Publish/Subscribe hierarchies in response to changes in the local queue manager state.

Distributed Pub/Sub Controller

Controls the starting and stopping of the Distributed Publish/Subscribe tasks during channel initiator startup and shutdown, and also when enabling and disabling Publish/Subscribe.

System action

None.

System programmer response

None.

CSQT976I

csect-name task has stopped

Severity

0

Explanation

The indicated Distributed Publish/Subscribe task has stopped. This message typically occurs during channel initiator shutdown, or when disabling Publish/Subscribe.

There are four classes of task:

Distributed Pub/Sub Publish Task

Receives publications from remote queue managers in a Publish/Subscribe cluster and republishes into the local queue manager

Distributed Pub/Sub Command Task

Receives command messages from remote queue managers in a Publish/Subscribe cluster to create or cancel proxy subscriptions on behalf of remote queue managers.

Distributed Pub/Sub Fan Out Task

Sends command messages to remote queue managers in Publish/Subscribe clusters and Publish/Subscribe hierarchies in response to changes in the local queue manager state.

Distributed Pub/Sub Controller

Controls the starting and stopping of the Distributed Publish/Subscribe tasks during channel initiator startup and shutdown and also when enabling and disabling Publish/Subscribe.

System action

None.

System programmer response

None.

CSQT977I

csect-name Establishing Pub/Sub hierarchy relation, (queue manager *qmgr-name*)

Severity

0

Explanation

The queue manager is establishing a Publish/Subscribe hierarchy connection with a child or parent queue manager *qmgr-name*.

System action

None.

System programmer response

None.

CSQT978E

csect-name Unable to create/cancel proxy subscription, for queue manager *queue-manager-name*, topic string *topic-string*, reason=*mqrc* (*mqrc-text*)

Severity

8

Explanation

The Distributed Pub/Sub Command Task is unable to create or cancel a proxy subscription for queue manager *queue-manager-name* on topic *topic-string* for reason code *mqrc* (*mqrc-text* provides the MQRC in textual form).

A failure to create or cancel a proxy subscription will result in this queue manager not having a correct knowledge of subscriptions on other queue managers in the Publish/Subscribe topology. This may result in this queue manager not delivering publications to other queue managers.

System programmer response

Correct the cause of the indicated reason code.

Once the problem has been resolved it may be necessary to perform a REFRESH QMGR TYPE(PROXYSUB) command to resynchronise any subscriptions.

CSQT979E

csect-name Distributed Pub/Sub proxy subscription from qmgr-name rejected due to PSCLUS(DISABLED)

Explanation

A cluster subscription has been sent to this queue manager over a channel from qmgr-name but the queue manager attribute PSCLUS has been set to DISABLED, indicating that Publish/Subscribe activity is not expected between queue managers in this cluster.

System action

The proxy subscription request is ignored and no subscription is locally registered.

System programmer response

If you wish to enable publish/subscribe clustering, alter the PSCLUS attribute on all queue managers in the cluster to ENABLED. You may also need to issue **REFRESH CLUSTER** and **REFRESH QMGR** commands as detailed in the documentation for the PSCLUS attribute. If you are not using publish/subscribe clusters you should delete the clustered topic object, and ensure PSCLUS is DISABLED on all queue managers.

CSQT980I

csect-name Distributed Pub/Sub proxy subscription re-synchronization completed

Severity

0

Explanation

During restart processing the Distributed Pub/Sub process was unable to determine that the proxy subscription state was consistent so a re-synchronization with remote queue managers has been performed.

This is usually seen when a queue manager was not quiesced cleanly during its previous shutdown, or when the system was particularly busy at that time.

System action

Processing continues.

System programmer response

None.

CSQT981E

csect-name Distributed Pub/Sub disabled whilst in a Pub/Sub cluster

Severity
4

Explanation

This queue manager is a member of a Publish/Subscribe cluster but Publish/Subscribe has been disabled.

System action

Other queue managers within the Publish/Subscribe Cluster will continue to send publications and proxy subscriptions to this queue manager. They will accumulate on the Publish/Subscribe Cluster system queues and will not be processed until Publish/Subscribe is enabled. If these queues become full channel failure may occur, which will affect the operation of Publish/Subscribe on other queue managers in the cluster. This will also affect the delivery of other messages, unrelated to Publish/Subscribe, that are sent to this queue manager from other queue managers within the cluster.

System programmer response

Enable Publish/Subscribe by setting **PSMODE** to **ENABLED** or **COMPAT** with the **ALTER QMGR** command then the **REFRESH QMGR TYPE(PROXYSUB)** command should be issued to resynchronise subscriptions.

CSQT982E

csect-name Queued Pub/Sub disabled whilst in a Pub/Sub hierarchy

Severity
4

Explanation

This queue manager is a member of a Publish/Subscribe hierarchy but Queued Publish/Subscribe has been disabled.

System action

Any parent-child relations within the Publish/Subscribe hierarchy will continue to send publications and proxy subscriptions to this queue manager. They will accumulate on the Queued Publish/Subscribe system queues and will not be processed until Queued Publish/Subscribe is enabled. If the Queued Publish/Subscribe system queues become full channel failure may occur, which will affect the operation of Publish/Subscribe on parent-child relations sending messages to this queue manager. This will also affect the delivery of other messages, unrelated to Publish/Subscribe, that are to be delivered using the same channels.

System programmer response

Enable Queued Publish/Subscribe by setting **PSMODE** to **ENABLED** with the **ALTER QMGR** command. Once Queued Publish/Subscribe has been restarted, use the **DISPLAY PUBSUB ALL** command to confirm this has completed, the **REFRESH QMGR TYPE(PROXYSUB)** command must be issued to resynchronize

CSQT983E

csect-name task failed, reason *mqrc (mqrc-text)*, retry in *n* minutes

Severity
4

Explanation

The *task* encountered a problem and will retry the command in *n* minutes. Earlier messages might have been issued in the queue manager or system error logs providing additional detail.

This message might be issued by a number of tasks:

Distributed Pub/Sub Publish Task

Other queue managers within the cluster will continue to send publications to this queue manager. The publications will accumulate on the Publish/Subscribe Cluster system queue (SYSTEM.INTER.QMGR.PUBS) and will not be processed until the problem is resolved. If these queues become full channel failure might occur, which will affect the operation of Publish/ Subscribe on other queue managers in the cluster. This will also affect the delivery of other messages, unrelated to Publish/Subscribe, that are sent to this queue manager from other queue managers in the cluster.

Distributed Pub/Sub Command Task

Other queue managers within the cluster will continue to send proxy subscriptions to this queue manager. Subscriptions will accumulate on the Publish/Subscribe Cluster system queue (SYSTEM.INTER.QMGR.CONTROL) and will not be processed until the problem is resolved. Other queue managers will not receive publications from this queue manager on topics for which proxy subscriptions have yet to be processed. If the Publish/Subscribe Cluster system queue becomes full channel failure might occur, which will affect the operation of Publish/Subscribe on other queue managers in the cluster. This will also affect the delivery of other messages, unrelated to Publish/Subscribe, that are sent to this queue manager from other queue managers in the cluster.

Distributed Pub/Sub Fan Out Task

This task will not send proxy subscription messages to other queue managers in a Publish/ Subscribe Cluster or parent-child relations within a Publish/Subscribe hierarchy until the problem is rectified. On topics for which proxy subscriptions have yet to be sent, this queue manager will not receive publications from other queue managers in a Publish/Subscribe Cluster, or parent-child relations in a Publish/Subscribe hierarchy.

System action

None

System programmer response

If possible, rectify the identified problem, or contact your IBM support center.

When the problem has been rectified wait for *task* to retry the command.

CSQT984E

csect-name task has encountered *n* occurrences of reason *mqrc (mqrc-text)* while attempting to process a message.

Severity
4

Explanation

The *task* is currently unable to process a message due to reason *mqrc* (*mqrc-text* provides the MQRC in textual form). The task has encountered this *n* times; it will continue to retry the command until the problem has been rectified.

This message might be issued by a number of tasks:

Distributed Pub/Sub Publish Task

Other queue managers within the cluster will continue to send publications to this queue manager. Publications will accumulate on the Publish/Subscribe Cluster system queue (SYSTEM.INTER.QMGR.PUBS) and will not be processed until the problem is resolved. If these queues become full channel failure might occur, which will affect the operation of Publish/ Subscribe on other queue managers in the cluster. This will also affect the delivery of other messages, unrelated to Publish/Subscribe, that are sent to this queue manager from other queue managers within the cluster.

Distributed Pub/Sub Command Task

Other queue managers within the cluster will continue to send proxy subscriptions to this queue manager. Subscriptions will accumulate on the Publish/Subscribe Cluster system queue (SYSTEM.INTER.QMGR.CONTROL) and will not be processed until the problem is resolved. Other queue managers will not receive publications from this queue manager on topics for which proxy

subscriptions have yet to be processed. If the Publish/subscriber Cluster system queue becomes full channel failure might occur, which will affect the operation of Publish/Subscribe on other queue managers in the cluster. This will also affect the delivery of other messages, unrelated to Publish/Subscribe, that are sent to this queue manager from other queue managers within the cluster.

Distributed Pub/Sub Fan Out Task
This task will not send proxy subscription messages to other queue managers in a Publish/Subscribe Cluster or parent-child relations within a Publish/Subscribe hierarchy until the problem is rectified. On topics for which proxy subscriptions have yet to be sent this queue manager will not receive publications from other queue managers in a Publish/Subscribe Cluster or parent-child relations within a Publish/Subscribe hierarchy.

System action

None

System programmer response

If possible, rectify the identified problem, or contact your IBM support center.

When the problem has been rectified wait for *task* to retry the command.

CSQT987E

csect-name task failed due to reason *mqrc (mqrc-text)* Retry in *n* minutes

Severity
4

Explanation

The *task* encountered a problem. Earlier messages might have been issued in the queue manager or system error logs providing additional detail. The task will retry the command in *n* minutes.

Other queue managers within the cluster will continue to send proxy subscriptions to this queue manager. They will accumulate on the Publish/Subscribe cluster system queue and will not be processed until the problem is resolved.

Other queue managers will not receive publications from this queue manager on topics for which proxy subscriptions have yet to be processed.

If the Publish/subscriber cluster system queue becomes full, channel failure might occur, which will affect the operation of Publish/Subscribe on other queue managers in the cluster. This will also affect the delivery of other messages, unrelated to Publish/Subscribe, that are sent to this queue manager from other queue managers within the cluster.

System action

None

System programmer response

If possible, rectify the identified problem, or contact your IBM support center.

When the problem has been rectified wait for *task* to retry the command.

CSQT988E

csect-name task failed due to reason *mqrc (mqrc-text)* Retry in *n* minutes

Severity
4

Explanation

The *task* encountered a problem. Earlier messages might have been issued in the queue manager or system error logs providing additional detail. The task will retry the command in *n* minutes.

This task will not send proxy subscription messages to other queue managers in a Publish/Subscribe cluster or parent-child relations within a Publish/Subscribe hierarchy until the problem is rectified.

On topics for which proxy subscriptions have yet to be sent, this queue manager will not receive publications from other queue managers in a Publish/Subscribe cluster or parent-child relations within a Publish/Subscribe hierarchy.

System action

None

System programmer response

If possible, rectify the identified problem, or contact your IBM support center.

When the problem has been rectified wait for *task* to retry the command.

CSQT989E

csect-name task has encountered *n* occurrences of reason *mqrc (mqrc-text)* while attempting to process a message.

Severity
4

Explanation

The *task* is currently unable to process a message due to reason *mqrc (mqrc-text)*. Note that (*(mqrc-text)* provides the MQRC in textual form).

The task has encountered this *n* times. The task continues to retry the command until the problem has been rectified.

Other queue managers within the cluster continue to send proxy subscriptions to this queue manager. The subscriptions will accumulate on the Publish/Subscribe cluster system queue and will not be processed until the problem is resolved.

Other queue managers will not receive publications from this queue manager on topics for which proxy subscriptions have yet to be processed.

If the Publish/subscriber cluster system queue becomes full, channel failure might occur, which will affect the operation of Publish/Subscribe on other queue managers in the cluster.

This will also affect the delivery of other messages, unrelated to Publish/Subscribe, that are sent to this queue manager from other queue managers within the cluster.

System action

None

System programmer response

If possible, rectify the identified problem, or contact your IBM support center.

When the problem has been rectified wait for *task* to retry the command.

CSQT990E

csect-name task has encountered *n* occurrences of reason *mqrc (mqrc-text)* while attempting to process a message.

Severity
4

Explanation

The *task* is currently unable to process a message due to reason *mqrc (mqrc-text)*. Note that (*(mqrc-text)* provides the MQRC in textual form).

The task has encountered this *n* times. The task continues to retry the command until the problem has been rectified.

This task will not send proxy subscription messages to other queue managers in a Publish/Subsccribe Cluster or parent-child relations within a Publish/Subscribe hierarchy until the problem is rectified.

On topics for which proxy subscriptions have yet to be sent this queue manager will not receive publications from other queue managers in a Publish/Subscribe cluster or parent-child relations within a Publish/Subscribe hierarchy.

System action

None

System programmer response

If possible, rectify the identified problem, or contact your IBM support center.

When the problem has been rectified wait for *task* to retry the command.

CSQT991I

csect-name task has recovered from previous error condition

Severity

0

Explanation

The *task* has recovered from the previously reported error condition.

System action

Processing continues.

System programmer response

None.

CSQT992E

csect-name task has written a message to the dead-letter queue, reason *mqrc (mqrc-text)*

Severity

8

Explanation

The *task* has written a message to the dead-letter queue due to reason *mqrc* (*mqrc-text* provides the MQRC in textual form).

If *task* is the Distributed Pub/Sub Command Task, other queue managers will not receive publications from this queue manager on any topics for which this message is requesting proxy subscriptions be created.

If *task* is the Distributed Pub/Sub Fan Out Task, this queue manager will not receive publications from other queue managers on any topics for which this is requesting a proxy subscription be created.

System programmer response

Determine why the message was written to the dead-letter queue, and resolve the problem that is preventing the message from being sent to its destination.

If *task* is the Distributed Pub/Sub Command Task, or the Distributed Pub/Sub Fan Out Task, it may be necessary to issue the **REFRESH QMGR TYPE(PROXYSUB)** command when the problem has been resolved to resynchronize the subscription state with other queue managers.

CSQT996E

csect-name Creation of proxy subscription failed on queue manager *qmgr-name*, cluster *cluster-name*, topic string *topic-string*, reason=*mqrc (mqrc-text)*

Severity

8

Explanation

The proxy subscription in publish/subscribe cluster *cluster-name* on topic *topic-string* could not be created on queue manager *qmgr-name* due to reason *mqrc* (*mqrc-text* provides the MQRC in textual

form). The failure to create the proxy subscription will prevent publications made on queue manager *qmgr-name* to topic *topic-string* being delivered to subscriptions on this queue manager. If this queue manager is also participating as a member of a publish/subscribe hierarchy any subscriptions to topic *topic-string* on other members of the publish/subscribe hierarchy will not receive publications from queue manager *qmgr-name*.

System programmer response

Correct the cause of the indicated reason code on queue manager *qmgr-name*. When the problem has been resolved issue the **REFRESH QMGR TYPE(PROXYSUB)** command on the remote queue manager to resynchronize the subscription state with other queue managers.

CSQT997E

csect-name Cancellation of proxy subscription failed on queue manager *qmgr-name*, cluster *cluster-name*, topic string *topic-string*, reason=*mqrc (mqrc-text)*

Severity
8

Explanation

The proxy subscription in publish/subscribe cluster *cluster-name* on topic *topic-string* could not be canceled on queue manager *qmgr-name* due to reason *mqrc* (*mqrc-text* provides the MQRC in textual form). The failure to cancel the proxy subscription will result in publications made on queue manager *qmgr-name* to topic *topic-string* to continue being delivered to this queue manager.

System programmer response

Correct the cause of the indicated reason code on queue manager *qmgr-name*. When the problem has been resolved issue the **REFRESH QMGR TYPE(PROXYSUB)** command on the remote queue manager to resynchronize the subscription state with other queue managers.

CSQT998E

csect-name Proxy subscription re-synchronization failed on queue manager *qmgr-name*, cluster *cluster-name*, reason=*mqrc (mqrc-text)*

Severity
8

Explanation

The request to resynchronize the subscription state with other queue managers in publish/subscribe cluster *cluster-name* failed on queue manager *qmgr-name* due to reason *mqrc* (*mqrc-text* provides the MQRC in textual form). There might be topic strings for which proxy subscriptions have not been created. Publications made on queue manager *qmgr-name* to those topics will not be delivered to subscriptions on this queue manager. If this queue manager is also participating as a member of a publish/subscribe hierarchy any subscriptions to those topics on other members of the publish/ subscribe hierarchy will not receive publications from queue manager *qmgr-name*. There might also be topic strings for which proxy subscriptions have not been canceled on queue manager *qmgr-name*. Any publications made on that queue manager will continue to be delivered to this queue manager.

System programmer response

Correct the cause of the indicated reason code on queue manager *qmgr-name*. When the problem has been resolved issue the **REFRESH QMGR TYPE(PROXYSUB)** command on the remote queue manager to resynchronize the subscription state with other queue managers.

CSQT999E

csect-name task has encountered a message that is not valid on queue *queue*

Severity
4

Explanation

The queue *queue* is for exclusive use by the internal queue manager task *task*, and is used to maintain a distributed publish/subscribe topology. The task has encountered a message on the queue that is not valid

System action

The message is processed according to its report options. Additional console messages might be output if the message is put to the dead-letter queue.

An informational FFST, including details of the message that is not valid, might also be generated.

System programmer response

Ensure no applications put messages directly to the named queue, and ensure message exits do not alter system messages put to the queue. If the problem persists contact your IBM support center.

Utilities messages (CSQU...)

CSQU000I
csect-name IBM WebSphere MQ for z/OS V*n*

Explanation

This is part of the header to the report issued by the utility program.

CSQU001I
csect-name Queue Manager Utility - *date time*

Explanation

This is part of the header to the report issued by the utility program.

System action

The message is followed by a copy of the function statements from the SYSIN data set.

CSQU002E
Unable to get storage of size *n* bytes, return code=*ret-code*

Explanation

An attempt to obtain some storage failed.

System action

The function is terminated, and any queue updates are backed out.

System programmer response

If you encounter this error when submitting JCL to run CSQUTIL functions, make sure that you have defined an adequate value for the **REGION** size parameter or set the **REGION** size to 0M in the JCL. For example:

```
//SCOPY EXEC PGM=CSQUTIL,REGION=0M //STEPLIB DD DISP=SHR,DSN=thlqual.SCSQANLE
  //DD DISP=SHR,DSN=thlqual.SCSQAUTH ...
```

For more details about setting the **REGION** parameter, see Copying queues into a data set while the queue manager is running (COPY).

See the *MVS Programming: Assembler Services Reference* manual for information about the return code from the STORAGE or GETMAIN request.

CSQU003E
Unable to free storage at *address*, return code=*ret-code*

Explanation

An attempt to release storage at address *address* back to the system failed.

System action

The program usually ignores the error and continues with its function.

System programmer response

See the *MVS Programming: Assembler Services Reference* manual for information about the return code from the STORAGE or FREEMAIN request.

CSQU005I
COMMIT successfully completed

Explanation

An MQCMIT call returned a completion code of MQCC_OK.

CSQU006I
BACKOUT successfully completed

Explanation

An MQBACK call returned a completion code of MQCC_OK.

System action

The function is terminated.

System programmer response

Investigate the error that caused the backout to be done.

CSQU007E
MQCMIT failed. MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

The utility program was unable to commit the last set of changes.

System action

The updates are backed out, and the function is terminated.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form). Resubmit the job if required.

CSQU008E
MQBACK failed. MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

The utility program was unable to back out the last set of changes.

System action

None, the function is already being terminated because of the error that led to attempting the backout.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form). Resubmit the job if required.

CSQU009E
MQCONN failed for *conn-id*. MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

An attempt to connect to a queue manager or queue-sharing group named *conn-id* was unsuccessful.

System action

The requested function is not performed.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form). Resubmit the job if required.

CSQU010E
MQDISC failed for *conn-id*. MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

An attempt to disconnect from a queue manager or queue-sharing group named *conn-id* was unsuccessful.

System action

The utility program terminates. (This is not an error, because the disconnection request is the last function that the utility program processes.)

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQU011I
Commands from CSQINPX - *date time*

Explanation

This follows message CSQU000I as part of the header to the messages that indicate the progress of the utility program.

It is produced when the utility is invoked by distributed queuing to handle the CSQINPX data set.

CSQU012I
Initialization command handling completed

Explanation

The initialization command handler, which processes the CSQINPX command data set, completed successfully.

CSQU013E
Initialization command handling failed, RC=*return-code*

Explanation

The initialization command handler, which processes the CSQINPX command data set, did not complete successfully. *return-code* shows the type of error:

00000008
Some or all of the commands were not processed.

0000000C
Severe error; this is most likely because the CSQINPX or CSQOUTX data sets are defined erroneously.

System action

The initialization command handler ends, but the channel initiator continues.

System programmer response

Refer to the CSQOUTX data set and to the preceding messages for more information about the error.

For information about the initialization command handler and the CSQINPX or CSQOUTX data sets, see Initialization and configuration files. For information about the COMMAND statement, see Issuing commands to WebSphere MQ (COMMAND).

CSQU020E
Unable to OPEN *ddname* data set

Explanation

The program was unable to open data set *ddname*.

System action

If the SYSPRINT or SYSIN data sets cannot be opened, the utility program terminates. For other data sets, the function requesting them is not performed.

System programmer response

Examine the error message that was sent to the job log to determine the reason for the error. Check that the data set was correctly specified.

CSQU021E

Data set *ddname* does not have a record format of VBS

Explanation

The program opened the data set *ddname*, but the data set did not have a record format of VBS.

System action

If the LOAD input data set cannot be opened, the utility program terminates.

System programmer response

Examine the error message that was sent to the job log to determine the reason for the error. Check that the data set was correctly specified and is of the correct record format.

CSQU023E

Unable to CLOSE *ddname* data set

Explanation

The input data set *ddname* is still open after a request was made to close it.

System action

The program continues with its termination procedures.

System programmer response

Examine the error message that was sent to the job log to determine the reason for the error. Check that the data set was correctly specified.

CSQU030E

Page *nn* in data set *ddname* is invalid

Explanation

The utility program encountered a page that is invalid in the page set data set *ddname*. If the page number is 0, it might be that the data set is not the page set that is implied by *ddname*.

System action

The function is terminated.

System programmer response

Check that the page set has not been corrupted, and that the page set number corresponds to the DDname.

CSQU031E

Queue *q-name* with disposition QMGR or COPY does not exist

Explanation

The specified queue does not exist with disposition QMGR or COPY. (There might be such a queue with disposition SHARED, but the SCOPY function does not operate on shared queues.)

System action

The function is terminated.

System programmer response

Check the queue name that was specified.

CSQU032E
Page set *psid* is invalid

Explanation

The utility program encountered a page set that is invalid. The page set is in an inconsistent state and so the stand-alone utility functions cannot process it.

System action

The function is terminated.

System programmer response

This might be the result of performing a fuzzy backup (as described in How to back up and recover pagesets) or because the queue manager terminated abnormally. Restart the queue manager and then terminate it normally.

CSQU036E
Utility not available - restricted functionality

Explanation

The utility cannot operate because the installation and customization options chosen for WebSphere MQ do not allow all functions to be used.

System action

The utility is terminated.

CSQU037I
function has been stabilized with *version* function

Explanation

The utility function identified by *function* has been stabilized with the functional capabilities of version *version*.

System action

Processing continues and additional messages might be output providing further information.

System programmer response

Review the use of the utility function.

CSQU038I
Use runmqsc -n on your client machine for client channel definitions from version 8.0.

Explanation

The MAKECLNT utility function of CSQUTIL, that generates a client channel definition table (CCDT), has been stabilized.

From version 8.0, use the runmqsc utility on the client machine to generate the CCDT instead.

CSQU040E
Unable to GET from *ddname* data set

Explanation

The program was unable to read a record from the *ddname* data set.

System action

The function is terminated, and any queue updates are backed out.

System programmer response

Examine the error message that was sent to the job log to determine the reason for the error. Check that the data set was correctly specified.

CSQU043E
Unable to PUT to *ddname* data set

Explanation

The program was unable to write the next record to the *ddname* data set. Either the data set was not opened, or there was a QSAM error.

System action

The function is terminated, and any queue updates are backed out.

System programmer response

Examine the error message that was sent to the job log to determine the reason for the error. Check that the data set was correctly specified.

CSQU044I
Commands cannot be made for queue managers other than the target, *qmgr-name*

Explanation

Some of the DISPLAY object commands for the COMMAND function with MAKEDEF, MAKEREP, MAKEALT, or MAKEDEL used the CMDSCOPE option, and so information about objects for queue managers other than the target queue manager *qmgr-name* was received. Commands are not generated for such objects.

System programmer response

Avoid using CMDSCOPE in conjunction with the MAKEDEF, MAKEREP, MAKEALT, or MAKEDEL options. Use a separate COMMAND function for each target queue manager, with separate data sets for each set of generated commands.

CSQU045I
n data records read

Explanation

This indicates how many data records were read from the input data set specified by the DATA keyword for the current function.

CSQU046I
Making client channel definitions in *ddname* data set using CCSID *ccsid*

Explanation

This indicates that the COMMAND function will build client channel definitions in data set *ddname*, and that the data will have a coded character set identifier of *ccsid*.

CSQU047E
Unable to convert data for client channel definitions. MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

When building a client channel definition file, data for a channel or authentication information object could not be converted from the character set used by the queue manager to that requested by the CCSID keyword.

System action

The channel or authentication information definition is not built.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form). Resubmit the job if required.

CSQU048I

n authentication objects included, *m* excluded

Explanation

This indicates, for the current function, how many sets of authentication information were included in the client channel definition file, and how many were excluded. Authentication information may be excluded because:

- the LDAPUSER and LDAPPWD attributes are not blank
- there are too many sets of information
- there was a data conversion error.

System programmer response

If some information was excluded, check that the authentication information objects were selected correctly.

CSQU049I

n client channel definitions made

Explanation

This indicates how many client channel definitions were made by the current function.

CSQU050E

Command of length *length* is too long. Command rejected

Explanation

In the COMMAND function, the assembled command had more than 32 762 characters.

System action

The command is ignored, and no more commands are processed.

System programmer response

Check that the command is correctly formed according to the concatenation rules

CSQU051E

Command responses not received after *n* seconds

Explanation

In the COMMAND function, get processing for a response was timed out whilst more responses were expected.

System action

The next command will be processed, unless there have been too many timeouts.

System programmer response

Increase the value of RESPTIME, especially if the command is being sent to a remote queue manager, and check the remote queue definitions.

If the problem persists, check the definitions of the system-command input queue and the system-command reply queue; ensure that they are enabled for MQGET and MQPUT. If the definitions are correct, stop and restart the command server.

CSQU052E

Too many timeouts

Explanation

In the COMMAND function, get processing for a response timed out four times.

System action

No more commands are processed.

System programmer response

See message CSQU051E.

CSQU053E
DISPLAY command response not recognized

Explanation

In the COMMAND function, the responses to a DISPLAY command were not as expected.

System action

The DISPLAY command response is shown as is, rather than being formatted. The next command is processed.

System programmer response

Check the load libraries used are consistent with the queue manager being used.

Contact your IBM support center to report the problem.

CSQU054I
Executing function for object type *objtyp*

Explanation

The utility program is executing function *function* to process objects of the type indicated.

CSQU055I
Target queue manager is *qmgr-name*

Explanation

This indicates which queue manager your commands are directed to.

CSQU056I
Making commands in *ddname* data set

Explanation

This indicates that commands for the COMMAND function with MAKEDEF, MAKEREP, MAKEALT, or MAKEDEL, or for the SDEFS function will be built in data set *ddname*.

CSQU057I
n commands read

Explanation

This indicates how many commands were read from the command input data set by the current function.

CSQU058I
n commands issued and responses received, *m* failed

Explanation

This indicates, for the current function, how many commands were sent and produced responses, and how many of these did not execute successfully.

CSQU059I
n cmd commands made

Explanation

This indicates how many commands (called *cmd*) were made for the current function.

CSQU060E

Incorrect data length for message *msg-no*. *act-length* bytes found, *exp-length* bytes expected

Severity
8

Explanation

In the LOAD or SLOAD function, when attempting to read the record for message number *msg-no* for the queue being processed, the actual record length was found to be different to the expected record length.

System action

Processing for the command is terminated.

System programmer response

Check that the data set was created by the COPY function.

CSQU061E
An error occurred accessing the *in-ddname* data set for message *msg-no*. Reason=*reason-code*

Explanation

When executing the LOAD, SLOAD or ANALYZE function and attempting to read message *msg-no* for queue being processed, an error was detected. The reason code specifies the specific error, as follows:

4
First record in the dataset does not identify a queue

8
Unexpected end-of-file

12
Unknown record type

System action

Processing for the command is terminated.

System programmer response

Check that the data set was created by the COPY function, and is not corrupted.

CSQU062E
Incorrect format data record

Explanation

In the LOAD function, the utility program encountered a record that it does not recognize while reading from the input data set.

System action

The function is terminated, and any queue updates are backed out.

System programmer response

Check that the data set was created by the COPY function, and is not corrupted.

CSQU063E
The *in-ddname* data set is empty

Severity
8

Explanation

When executing the LOAD, SLOAD or ANALYZE function, the input data set (DDname *in-ddname*) was empty.

System action

Processing for the command is terminated.

System programmer response

Check that the data set was successfully created by the COPY function.

CSQU070I
Command processing stopped

Explanation

In the COMMAND function, with FAILURE(STOP) specified, a command did not execute successfully.

System action

No more commands are processed.

CSQU071E
Incomplete command

Explanation

In the COMMAND function, end of data on the input data set was reached before the building of a command was complete.

System action

The command is ignored. There are no more commands to process.

System programmer response

Check that the command is correctly formed according to the concatenation rules.

CSQU080E
MQCLOSE failed for queue *q-name*. MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

The MQCLOSE call for *q-name* was unsuccessful. If this is for the system-command input queue when using the COMMAND function, message CSQU055I follows showing the target queue manager that was being used.

System action

The function is terminated.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form). Resubmit the job if required.

CSQU082E
MQGET failed for queue *q-name*. MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

The MQGET call for *q-name* was unsuccessful.

System action

The function is terminated, and any queue updates are backed out.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form). Resubmit the job if required.

CSQU083E
MQOPEN failed for queue *q-name*. MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

The MQOPEN call for *q-name* was unsuccessful. If the queue is a model queue, the requested dynamic queue name is appended in parentheses. If this is for the system-command input queue

when using the COMMAND function, message CSQU055I follows showing the target queue manager that was being used.

System action

The function is terminated, and all queue updates are backed out.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form). Resubmit the job if required.

CSQU085E
MQPUT failed for queue *q-name*. MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

The MQPUT call for *q-name* was unsuccessful. If this is for the system-command input queue when using the COMMAND function, message CSQU055I follows showing the target queue manager that was being used.

System action

The function is terminated, and all queue updates are backed out.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form). Resubmit the job if required.

CSQU087I
MAXUMSGS reached. A syncpoint has been forced

Explanation

Because MAXUMSGS was reached, a syncpoint was taken which commits the queue changes made so far.

System action

The function continues, but no further functions will be processed.

System programmer response

None, unless the function fails for some reason after this message. In that case, note that some queue changes will have been committed, and you should make appropriate adjustments before rerunning the job.

CSQU090E
OPEN failed for *ddname* data set. VSAM return code=*rc* reason code=*reason*

Explanation

The utility program received a VSAM OPEN error for the page set it was attempting to process (pointed to by *ddname*).

System action

The page set is not processed.

System programmer response

See the *DFSMS/MVS Macro Instructions for Data Sets* for information about the return and reason codes from VSAM. If necessary, resubmit the job.

CSQU091E
ddname data set is non-empty. Page set not formatted

Explanation

Data set *ddname* was opened, but it is not empty.

System action

The page set is not formatted.

System programmer response

Ensure that the data sets specified are empty, and resubmit the job if necessary.

CSQU092I
function completed for *ddname* data set

Explanation

Processing of *ddname* data set for function *function* has completed.

System action

Processing continues with the next page set.

CSQU093E
PUT failed for *ddname* data set. VSAM return code=*rc* reason code=*code*

Explanation

The utility program received a VSAM PUT error for the page set it was attempting to process (pointed to by *ddname*).

System action

Processing for the page set is terminated, and the function continues with the next page set.

System programmer response

See the *DFSMS/MVS Macro Instructions for Data Sets* for information about the return and reason codes from VSAM. If necessary, resubmit the job.

CSQU094E
CLOSE failed for *ddname* data set. VSAM return code=*rc* reason code=*reason*

Explanation

The utility program received a VSAM CLOSE error for the page set it was attempting to process (pointed to by *ddname*).

System action

Processing for the page set is terminated, and the function continues with the next page set.

System programmer response

See the *DFSMS/MVS Macro Instructions for Data Sets* for information about the return and reason codes from VSAM. If necessary, resubmit the job.

CSQU095E
No page sets identified. *function* terminated

Explanation

A request to format or reset a page set was unsuccessful because there were no page set data sets with DD names in the range CSQP0000 through CSQP0099.

System action

Processing is terminated.

System programmer response

Add DD statements for the required page set data sets, and resubmit the job.

CSQU100E
ddname DD statement missing

Explanation

Data set *ddname* does not have a DD statement in the JCL.

System action

The utility is terminated.

System programmer response

Add the required statement to the JCL, and resubmit the job.

CSQU101E
DD statement missing for page set *psid*

Explanation

A page set is referenced, but there is no DD statement for it in the JCL. The DD name required is CSQP00*nn*, where *nn* is the page set number.

System action

The utility is terminated.

System programmer response

Add the required statement to the JCL, and resubmit the job.

CSQU102E
No functions requested

Explanation

There are no function statements in the SYSIN data set.

System action

The utility is terminated.

CSQU103E
Either keyword *keyword1* or *keyword2* must be specified

Explanation

The statement syntax is incorrect because it requires that one of the keywords *keyword1* or *keyword2* be specified, but not both.

System action

The utility is terminated.

System programmer response

See MQSC commands for information about the correct syntax required for the statement, then resubmit the job.

CSQU104E
Invalid value *value* for keyword *keyword*

Explanation

The statement syntax is incorrect because the value given for keyword *keyword* is not valid.

System action

The utility is terminated.

System programmer response

See MQSC commands for information about the correct syntax required for the statement, and resubmit the job.

CSQU105E
Incompatible keywords or values for function *function*

Explanation

The statement syntax is incorrect because a keyword or its value that is specified conflicts with another keyword or its value.

System action

The utility is terminated.

System programmer response

See MQSC commands for information about the correct syntax required for the statement, and resubmit the job.

CSQU106E
Invalid function *function*

Explanation

The statement syntax is incorrect because the function *function* is not recognized.

System action

The utility is terminated.

System programmer response

See MQSC commands for a list of valid functions, and resubmit the job.

CSQU107E
Invalid *function* statement syntax

Explanation

The syntax of the *function* statement is incorrect:

- there are too many keywords or values
- required keywords are missing
- it cannot be parsed.

System action

The utility is terminated.

System programmer response

See MQSC commands for information about the correct syntax required for the statement, and resubmit the job.

CSQU108E
Value missing for keyword *keyword*

Explanation

Keyword *keyword* should be followed by a value, but the value is missing.

System action

The utility is terminated.

System programmer response

See MQSC commands for information about the correct syntax required for the statement, and resubmit the job.

CSQU109E
Value not allowed for keyword *keyword*

Explanation

Keyword *keyword* should not be followed by a value, but a value is specified.

System action

The utility is terminated.

System programmer response

See Configuring z/OS for information about the correct syntax required for the statement, and resubmit the job.

CSQU110E
Required keyword missing for keyword *keyword*

Explanation

The statement syntax is incorrect because keyword *keyword* can be specified only if some other keyword is also specified, but that other keyword is missing.

System action

The utility is terminated.

System programmer response

See MQSC commands for information about the correct syntax required for the statement, then resubmit the job.

CSQU111E
Invalid keyword *keyword* for function *function*

Explanation

The statement syntax is incorrect because the keyword *keyword* is not valid for function *function*.

System action

The utility is terminated.

System programmer response

See MQSC commands for information about the correct syntax required for the statement, and resubmit the job.

CSQU112E
Incomplete statement

Explanation

End of data on the input data set was reached before the building of a statement was complete.

System action

The utility is terminated.

System programmer response

Check that the statement is correctly formed according to the concatenation rules.

CSQU113E
Too many statement continuations

Explanation

The statement has more than 10 continuations.

System action

The utility is terminated.

System programmer response

Check that the statement is correctly formed according to the concatenation rules.

CSQU114E
Keyword *keyword* repeated

Explanation

The statement syntax is incorrect because a keyword is repeated.

System action

The utility program is terminated.

System programmer response

Check the syntax in the input data set. See CSQUTIL for further information about the utility program.

CSQU115E
Unable to find queues for page set *psid* - command responses not received

Explanation

In the COPY or EMPTY function, the queue manager could not determine which queues are in page set *psid* because the response to a command was not received in time.

System action

The function is terminated.

System programmer response

Check the definitions of the system-command input queue and the system-command reply queue; ensure that they are enabled for MQGET and MQPUT. If the definitions are correct, stop and restart the command server.

CSQU116I
No storage classes found for page set *psid*

Explanation

The page set specified has no storage classes associated with it.

System action

The function is terminated.

System programmer response

Define a storage class for the page set, and rerun the job if required.

CSQU117I
No queues found for page set *psid*

Explanation

The page set specified has no queues associated with it that are eligible for the requested function. For the COPY and EMPTY functions, there are no local queues; for the SCOPY function, there are no local queues with messages.

System action

The function is terminated.

System programmer response

If required, correct the page set specified, and rerun the job.

CSQU120I
Connecting to *conn-id*

Explanation

The utility program is connecting to the named queue manager or queue-sharing group.

CSQU121I
Connected to queue manager *qmgr-name*

Explanation

The utility program connected successfully to queue manager *qmgr-name*.

CSQU122I
Executing *function-name*

Explanation

The utility program is executing function *function-name*.

CSQU123I
Processing *ddname* data set, mode FORCE

Explanation

The current function of the utility program is handling data set *ddname* using the FORCE option.

CSQU124I
Processing *ddname* data set

Explanation

The current function of the utility program is handling data set *ddname*.

CSQU125I
n page sets attempted

Explanation

This indicates how many page sets the current function attempted to process.

CSQU126I
n page sets processed successfully

Explanation

This indicates how many page sets were processed successfully by the current function.

CSQU127I
Executing *function* using input from *ddname* data set

Explanation

The utility program is executing function *function* using input from *ddname*.

CSQU128I
Executing *function* outputting to *ddname* data set

Explanation

The utility program is executing function *function*, and is writing the output to *ddname*.

CSQU129I
Copying page set *psid*

Explanation

The utility program is copying page set *psid*.

CSQU130I
Copying queue *q-name*

Explanation

The utility program is copying queue *q-name*.

CSQU131I
n messages copied successfully

Explanation

This indicates how many messages were copied successfully when copying a queue.

CSQU133I
n queues attempted

Explanation

This indicates how many queues the program attempted to copy while copying a page set.

CSQU134I
n queues copied successfully

Explanation

This indicates how many queues were copied successfully while copying a page set.

CSQU135I

Loading queue *sourceq* to *targetq*

Severity
0

Explanation

When executing the LOAD or SLOAD function, identifies the name of the target queue being loaded, and the name of the queue on the input data set from which messages are being copied.

CSQU136I

msg-count messages (*msg-from-msg-to*) have been loaded (total size *text-length*)

Severity
0

Explanation

When executing the LOAD or SLOAD function, this error code indicates that a number of messages have been successfully loaded on to the target queue from the input data set.

- *msg-count* is the number of messages loaded
- *msg-from-msg-to* is the message number range in the messages for the queue on the input data set.
- *text-length* is the total length of the message texts loaded (in MB or KB)

CSQU137I
Skipping queue *q-name*

Explanation

This indicates that queue *q-name* is being bypassed, because of the SKIPQS or FROMQ option used with the LOAD function.

CSQU138I
n queues loaded successfully

Explanation

This indicates how many queues were loaded successfully.

CSQU139I
Emptying page set *psid*

Explanation

The utility program is emptying page set *psid*.

CSQU140I
Emptying queue *q-name*

Explanation

The utility program is emptying queue *q-name*.

CSQU141I
n messages deleted successfully

Explanation

This indicates how many messages were deleted while emptying a queue.

CSQU142I
n queues emptied successfully

Explanation

This indicates how many queues were emptied.

CSQU143I
n function statements attempted

Explanation

This indicates the number of *function* statements attempted by the utility program.

CSQU144I
n function statements executed successfully

Explanation

This indicates the number of *function* statements executed successfully by the utility program.

CSQU145I
function statement failed

Explanation

The utility program experienced an error while executing function *function*.

System action

The utility program terminates.

System programmer response

Check the other messages issued to determine where the error occurred, and what caused it.

CSQU146I

msg-count messages (*msg-from-msg-to*) skipped (total size *text-length*). Reason=*reason-code*

Severity
0

Explanation

When executing the LOAD or SLOAD function, indicates that a number of messages have been ignored from the input data set.

- *msg-count* is the number of messages ignored
- *msg-from-msg-to* is the message number range in the messages for the queue on the input data set.
- *text-length* is the total length of the message texts ignored (in MB or KB)

The reason code indicates why the messages were ignored:

4
messages skipped due to *skipmsgs* parameter in LOAD or SLOAD command

8
messages skipped due to an MQPUT error

12
messages skipped due to an error on MQOPEN

16
messages skipped due to an MQPUT error immediately following a sync point

20
messages skipped due to an error on MQCLOSE

24
> messages skipped due to an error when taking a sync point

28
> messages skipped due to *MSGCOUNT* limit (in the LOAD or SLOAD command) being reached

CSQU147I
> *csect-name* Utility terminated, return code=*ret-code*

Explanation

The utility has terminated because a severe error or forced syncpoint occurred meaning that no further functions should be run. *ret-code* is the return code from the utility.

System action

The utility ends.

System programmer response

See IBM MQ for z/OS codes for information about the return code from the utility.

CSQU148I
> *csect-name* Utility completed, return code=*ret-code*

Explanation

The utility completed, all required functions having been attempted. *ret-code* is the return code from the utility.

System action

The utility ends.

System programmer response

Check any functions that failed.

CSQU150I
> *function* completed for data set *ddname1* to data set *ddname2*

Explanation

Processing for data set *ddname1* has completed, with output to *ddname2*.

System action

Processing continues with the next page set.

CSQU151I
> No matching CSQSnnnn and CSQTnnnn DD statements. *function* terminated

Explanation

A COPYPAGE or RESETPAGE function was unsuccessful because there were no matching pairs of page set data sets with names CSQS0000 through CSQS0099 and CSQT0000 through CSQT0099.

System action

The function is terminated.

System programmer response

Add DD statements for the required page set data sets, and resubmit the job.

CSQU152I
> *ddname1* DD statement missing. No action taken for *ddname2* data set

Explanation

Only one of the source-target pair of page set data sets (CSQSnnnn and CSQTnnnn) was specified.

System action

The function continues.

System programmer response

Add DD statements for the required page set data sets, and resubmit the job.

CSQU154E

Target data set *ddname* is smaller than source data set. Function terminated

Explanation

A COPYPAGE or RESETPAGE function could not process a page set data set because the target data set *ddname* was too small.

System action

Processing continues with the next page set.

CSQU155I

Processing queue *queue-name*

Severity

0

Explanation

When executing the ANALYZE function, indicates the start of processing queue *queue-name* from the input data set.

CSQU156E

GET failed for *ddname* data set. VSAM return code=*rc* reason code=*code*

Explanation

The utility program received a VSAM GET error for the page set it was attempting to process (pointed to by *ddname*).

System action

Processing for the page set is terminated, and the function continues with the next page set.

System programmer response

See the *DFSMS/MVS Macro Instructions for Data Sets* manual for information about the return and reason codes from VSAM. If necessary, resubmit the job.

CSQU157I

Processing data set *ddname1* to *ddname2*

Explanation

The current function is handling data set *ddname1*, with output to *ddname2*.

CSQU158E

Target data set *ddname2* is not newly formatted

Explanation

The COPYPAGE and RESETPAGE functions can only be used with a newly formatted target page set.

System action

Processing continues with the next page set.

System programmer response

Specify a valid target page set, and resubmit the job.

CSQU159E

Source data set *ddname1* is not a page set

Explanation

CSQUTIL COPYPAGE or RESETPAGE functions were unable to recognize the dataset as an IBM MQ Page set. This could be due to an invalid dataset, or a back level version of IBM MQ libraries being used.

System action

Processing continues with the next page set.

System programmer response

Check the dataset is a valid IBM MQ page set.

Check the IBM MQ libraries being used are the same as the libraries used by the queue manager.

CSQU160E
Data set *ddname* is not suitable for use with the function

Explanation

The function should only be used with page sets for a queue manager that terminated normally.

System action

Processing continues with the next page set.

System programmer response

Specify a valid page set, and resubmit the job.

CSQU161I
ddname contains *pp* pages and was formatted as page set *nn*

Explanation

This is part of the response to the PAGEINFO function for data set *ddname*.

It shows the size of the page set, and the page set number that was assumed when it was formatted. The number is derived from the DD name used when formatting, which was CSQP00*nn*.

CSQU162I
ddname is used as page set *psid* for queue manager *qmgr-name*

Explanation

This is part of the response to the PAGEINFO function for data set *ddname*.

The page set has been used by the queue manager shown. The page set number is not necessarily the same as that with which it was formatted, as shown in message CSQU161I.

CSQU163I
ddname has page set recovery RBA = *rba*

Explanation

This is part of the response to the PAGEINFO function for data set *ddname*.

CSQU164I
ddname System recovery RBA for all page sets successfully processed = *rba*

Explanation

This is part of the response to the PAGEINFO function. Note that this RBA relates only to those page sets processed; it does not relate to the whole queue manager unless all the page sets for the queue manager are included.

CSQU165I
Processing *ddname* data set, TYPE(*type*)

Explanation

This current function of the utility program is handling data set *ddname* with the options shown.

CSQU166I

Processing *ddname* data set, TYPE(*type*), mode FORCE

Explanation

This current function of the utility program is handling data set *ddname* with the options shown.

CSQU167I

ddname has never been initialized by a queue manager

Explanation

This is part of the response to the PAGEINFO function for data set *ddname*.

CSQU168E

Requested page sets are for more than one queue manager

Explanation

The page sets for which information was requested are associated with more than one queue manager. No system recovery RBA can therefore be determined.

System action

Processing continues.

System programmer response

Specify a set of page sets for a single queue manager, and resubmit the job.

CSQU169E

MQPUT of message *msg-no* failed. MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Severity
8

Explanation

When executing the LOAD or SLOAD function, an MQPUT failed for message number *msg-no* in the queue currently being processed on the input data. The *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form) indicate the reason for failure.

System action

Processing for the command is terminated.

System programmer response

Using the MQ completion code and reason code in the message, determine the cause of error and correct the problem. Then rerun the LOAD or SLOAD, starting with the queue being processed at the time of the error. If any messages had been successfully loaded from the input queue before the failure, use the *SKIPMSGS* parameter on the LOAD or SLOAD command to bypass those messages.

CSQU170I

msg-count messages (*msg-from-msg-to*) found (total size *text-length*)

Severity
0

Explanation

When executing the ANALYZE function, this message is displayed for the queue being processed from the input data set. The number of messages and the total length of the message text are shown.

CSQU171E

Queue *queue-name* was not found in the input data set

Severity
8

Explanation

The LOAD or SLOAD function being executed specified a source queue name of *queue-name* which was not found on the input data set.

System action

Processing for the command is terminated.

System programmer response

Specify the correct input file, correct queue name in the command, and try again.

CSQU172I
Processing *function-name* for data set *ddname*, *current-page* of *total-pages* pages processed, *percentage*% complete

Explanation

If a CSQUTIL function to process a page set is long-running, this message is issued periodically to indicate how many pages have been processed so far.

CSQU179E

The transmission queue cannot be switched because the channel initiator is not active

Severity

8

Explanation

The utility program is unable to initiate a switch of transmission queue for the channel identified in the preceding CSQU183I message because the channel initiator is not active.

System action

Processing continues, however, the transmission queue for the affected channel is not switched.

System programmer response

Start the channel initiator, then either restart the channel or rerun the command to initiate the switch of transmission queue.

CSQU180E
csect-name Unable to load module *module-name*, reason=*sssssrrrr*

Explanation

The utility program was unable to load the requested channel initiator parameter module. *ssss* is the completion code and *rrrr* is the reason code (both in hexadecimal) from the z/OS LOAD service.

System action

The function is terminated.

System programmer response

Check the member name specified on the XPARM fumction, and ensure that the module is in the library specified by the DDNAME keyword.

CSQU181E

csect-name module-name is not a valid channel initiator parameter module

Severity

8

Explanation

The module specified for channel initiator parameters is not in the correct format.

System action

The function is terminated.

System programmer response

Check the member name specified on the XPARM function.

CSQU182E

An error occurred obtaining the list of channels, reason *mqrc (mqrc-text)*

Severity
8

Explanation

The utility program was unable to identify the list of channels to process.

System action

Processing for the command is terminated.

System programmer response

Use the reason code to identify and resolve the error, then rerun the command if required.

See API completion and reason codes for information about *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQU183I

Channel *channel-name*

Severity
0

Explanation

The utility program is processing the requested function for the channel named *channel-name*.

System action

Processing continues.

System programmer response

Check subsequent messages to determine whether the requested function was processed successfully.

CSQU184I

n channels processed

Severity
0

Explanation

This message identifies the number of channels that were processed by the requested function.

System action

Processing continues.

System programmer response

None required.

CSQU185I

A switch of transmission queue is not required for this channel

Severity
0

Explanation

This message identifies that a switch of transmission queue is not required for the channel identified in the preceding CSQU183I message. This indicates the channel uses the currently configured transmission queue.

System action

Processing continues.

System programmer response

None required.

CSQU186I

A switch of transmission queue is pending for this channel

Severity
 0

Explanation

This message identifies that a switch of transmission queue is pending for the channel identified in the preceding CSQU183I message. This indicates the configured transmission queue for the channel has been changed, either by updating the **DEFCLXQ** queue manager attribute, or by altering the value of the **CLCHNAME** attribute of a transmission queue, since the channel last started.

The switch of transmission queue will occur the next time the channel starts or if the switch is initiated using the CSQUTIL function **SWITCH CHANNEL**.

A switch operation is also reported as pending if the operation was previously initiated, but the queue manager was stopped while messages were being moved from the old transmission queue to the new transmission queue. To resume the switch operation either start the channel or use CSQUTIL to initiate the switch.

System action

Processing continues.

System programmer response

None required.

CSQU187I

A switch of transmission queue is in progress for this channel

Severity
 0

Explanation

This message identifies that a switch of transmission queue isin progress for the channel identified in the preceding CSQU183I message.

System action

Processing continues.

System programmer response

Use console messages issued by the queue manager to determine the status of the switch operation, if required.

CSQU188I

From transmission queue *xmit-qname*

Severity
 0

Explanation

This message is issued with other messages, such as CSQU186I, CSQU187I, and CSQU195I. It identifies the name of the transmission queue a channel is switching, or will switch, from.

System action

Processing continues.

System programmer response

None required.

CSQU189I

To transmission queue *xmit-qname*

Severity

0

Explanation

This message is issued with other messages, such as CSQU186I, CSQU187I, and CSQU195I. It identifies the name of the transmission queue a channel is switching, or will switch, to.

System action

Processing continues.

System programmer response

None required.

CSQU190I

There are *num-msgs* messages queued for this channel on *xmitq-name*

Severity

0

Explanation

This message is issued with CSQU186I and identifies there are currently *num-msgs* messages queued for the channel on the transmission queue *xmitq-name*, that need to be moved when the transmission queue is switched.

System action

Processing continues.

System programmer response

None required.

CSQU191E

Unable to access transmission queue *xmitq-name*, reason *mqrc (mqrc-text)*

Severity

8

Explanation

This message is issued with CSQU186I if the transmission queue, *xmitq-name*, that is currently used by the channel, cannot be accessed for the reason *mqrc* (*mqrc-text* provides the MQRC in textual form). This transmission queue must be accessible to move messages for the channel to the new transmission queue.

System action

Processing for the command is terminated.

System programmer response

Use the reason code to identify and resolve the error, then rerun the command if required.

See API completion and reason codes for information about *mqrc* (*mqrc-text* provides the MQRC in textual form).

Alternatively, use the CSQUTIL function **SWITCH CHANNEL** with the **MOVEMSGS(NO)** option to switch transmission queue without moving messages. If this option is selected it is the responsibility of the system programmer to resolve any messages for the channel on the transmission queue, *xmitq-name*, after the switch has completed.

CSQU192E

The status of this channel is unavailable, reason *mqrc (mqrc-text)*

Severity
8

Explanation

The utility program was unable to identify the current status of the channel identified in the preceding CSQU183I message to determine if a switch of transmission queue is pending or in progress.

System action

Processing continues, but the transmission queue for the affected channel is not switched if this was requested.

System programmer response

Use the reason code to identify and resolve the error, then rerun the command if required.

See API completion and reason codes for information about *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQU193E

The transmission queue cannot be switched because the channel is active

Severity
8

Explanation

The utility program was unable to initiate a switch of transmission queue for the channel identified in the preceding CSQU183I message because the channel status was neither **STOPPED** nor **INACTIVE**.

If the cluster sender channel is showing STOPPED status, but message CSQU193E is still reporting, the channel cannot stop immediately. Message reallocation is taking place while a request to STOP CHANNEL *channel-name* is made.

The channel continues to reallocate messages, and stops once this process is complete. This process can take some length of time if there are a large number of messages on the queue assigned to this channel.

You should wait for sufficient time to ensure that message reallocation completes, then switch the transmission queue.

System action

Processing continues, but the transmission queue for the affected channel is not switched.

System programmer response

Stop the channel, then either restart the channel or rerun the command to initiate the switch of transmission queue.

CSQU194E

The switch of transmission queue failed, reason *mqrc (mqrc-text)*

Severity

8

Explanation

The utility program was unable to switch the transmission queue for the channel identified in the preceding CSQU183I message.

System action

Processing continues, but the transmission queue for the affected channel is not switched.

System programmer response

Use the reason code to identify and resolve the error, then rerun the command if required.

See API completion and reason codes for information about *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQU195I

Switching the transmission queue for this channel

Severity

0

Explanation

A switch of transmission queue has been initiated for the channel identified in the preceding CSQU183I message.

System action

Processing continues.

System programmer response

Use subsequent messages to determine if the switch of transmission queue completes successfully

CSQU196I

Moving messages for this channel - *num-msgs* messages moved

Severity

0

Explanation

A switch of transmission queue requires that messages for a channel are moved from the old transmission queue to the new transmission queue. This message is periodically issued during a switch of transmission queue to report the progress of this operation for the channel identified in the preceding CSQU183I message.

System action

Processing continues.

System programmer response

If this message is repeatedly issued it might indicate the old transmission queue cannot be drained of messages for the channel, which means the switching process can not complete. Applications continue to put messages to the old transmission queue during the switching process to preserve ordering.

If the switching process cannot complete, this might indicate that messages are being put to the old transmission queue faster than they can be moved by the switching process, or uncommitted messages remain on the old transmission queue for the channel.

Use console messages issued by the queue manager, such as CSQM554I, and commands such as **DISPLAY QSTATUS**, to determine why the switch operation is unable to complete.

CSQU197I

Moving of messages complete - *num-msgs* messages moved

Severity

0

Explanation

A switch of transmission queue requires that messages for a channel are moved from the old transmission queue to the new transmission queue. This message indicates the process of moving messages for the channel identified in the preceding CSQU183I message has completed. The number of messages that were moved to the new transmission queue is identified by *num-msgs*.

System action

Processing continues.

System programmer response

None required.

CSQU198I

The transmission queue has been switched successfully

Severity

0

Explanation

A switch of transmission queue for the channel identified in the preceding CSQU183I message has completed successfully.

System action

Processing continues.

System programmer response

None required.

CSQU199E

Function requires command level *required-cmdlevel*, the queue manager's command level is *qmgr-cmdlevel*

Severity

8

Explanation

The utility program was unable to perform the requested function, identified by *function*, because this is not supported by the queue manager to which it is connected. To perform the requested function the queue manager's command level must be *required-cmdlevel* or greater, but the queue manager's command level is *qmgr-cmdlevel*.

System action

Processing for the command is terminated.

System programmer response

Ensure the utility program connected to the required queue manager. If this was correct, the queue manager must be upgraded before the requested function can be used.

CSQU200I

csect-name Dead-letter Queue Handler Utility - *date time*

Explanation

This is part of the header to the report issued by the utility program.

CSQU201I

Processing queue *q-name*

Explanation

The dead-letter queue handler has parsed the rules table without detecting any errors and is about to start processing the queue identified in the message.

CSQU202I

Dead-letter queue handler ending. Successful actions: *n1* retries, *n2* forwards, *n3* discards

Explanation

The dead-letter queue handler is ending because there are no more messages on the dead-letter queue, or because the queue manager is shutting down, or because the dead-letter queue handler detected an error. The message indicates how many dead-letter queue messages were successfully handled.

System action

The utility terminates.

System programmer response

If the utility ended because of an error, investigate the problem reported in the preceding messages.

CSQU203I

n messages remain on the dead-letter queue

Explanation

The message indicates how many messages are left on the dead-letter queue when the dead-letter queue handler ends.

CSQU210I

Message does not have a valid MQDLH

Explanation

The dead-letter queue handler retrieved a message from the dead-letter queue, but the message was not prefixed by a valid dead-letter queue header (MQDLH). This typically occurs because an application is writing directly to the dead-letter queue but is not prefixing messages with a valid MQDLH.

System action

The message is left on the dead-letter queue and the dead-letter queue handler continues to process the dead-letter queue.

This message is issued only once the first time such a message is encountered.

System programmer response

Remove all the invalid messages from the dead-letter queue. Do not write messages to the dead-letter queue unless they are prefixed by a valid MQDLH.

CSQU211I

Unable to put message, line *n* MQRC=*mqrc (mqrc-text)*

Explanation

The dead-letter queue handler tried to redirect a message to another queue as requested, but the MQPUT call was unsuccessful.

System action

The retry count for the message is incremented; processing continues.

System programmer response

Refer to API completion and reason codes for information about *mqrc* (*mqrc-text* provides the MQRC in textual form). The line number *n* of the rules table used to determine the action for the message will help identify the queue to which the message was being put.

CSQU212I

Unable to inquire dead-letter queue, MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

An MQINQ call for the dead-letter queue was unsuccessful.

System action

Processing continues.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQU213I

Unable to convert message, MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

An MQGET call encountered a data conversion problem.

System action

The message is rolled back and remains on the queue. Processing of the remaining messages on the queue continues. Use an alternative means to remove this message from the dead-letter queue.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQU220E

Unable to connect to queue manager qmgr-name, MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

The dead-letter queue handler could not connect to the requested queue manager.

System action

The utility is terminated.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQU221E

Unable to open queue manager, MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

An MQOPEN call for the queue manager was unsuccessful.

System action

The utility is terminated.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQU222E

Unable to inquire queue manager, MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

An MQINQ call for the queue manager was unsuccessful.

System action

The utility is terminated.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQU223E
Unable to close queue manager, MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

An MQCLOSE call for the queue manager was unsuccessful.

System action

The utility is terminated.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQU224E
Unable to browse dead-letter queue *q-name*, MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

An MQOPEN call for browsing the dead-letter queue was unsuccessful. This is typically because of one of the following reasons:

- Another process has opened the queue for exclusive access.
- An invalid queue name was specified.
- The alias name for one of the following modules has been lost:
  - CSQBSRV
  - CSQAPEPL
  - CSQBCRMH
  - CSQBAPPL

System action

The utility is terminated.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQU225E
Unable to close dead-letter queue, MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

An MQCLOSE call for the dead-letter queue was unsuccessful.

System action

The utility is terminated.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQU226E
Line *n*: *keyword*(*value*) invalid or outside permitted range

Explanation

The value supplied for the specified keyword in line *n* of the rules table was outside the valid range of values or otherwise invalid.

System action

The utility is terminated.

System programmer response

Correct the rules table and restart the dead-letter queue handler.

CSQU227E
Unable to get message from dead-letter queue, MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

An MQGET call for the dead-letter queue was unsuccessful.

System action

The utility is terminated.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQU228E
Unable to commit or backout dead-letter queue action, MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

An MQCMIT or MQBACK call for the dead-letter queue was unsuccessful.

System action

The utility is terminated.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQU229E
Rules table is invalid or missing

Explanation

The rules table contained no valid message templates or was not supplied at all.

System action

The utility is terminated.

System programmer response

Correct the rules table as indicated in the preceding messages and restart the dead-letter queue handler.

CSQU230E
Unable to obtain storage

Explanation

The dead-letter queue handler was unable to obtain storage.

This problem would typically arise as a result of some wider problem. For example, if there is a persistent problem that is causing messages to be written to the dead-letter queue and the same

problem (for example, queue full) is preventing the dead-letter queue handler from taking the requested action with the message, ever-increasing amounts of storage would be required.

System action

The utility is terminated.

System programmer response

Increase the storage available to the utility. Investigate whether some wider problem exists, and if the dead-letter queue contains a large number of messages.

CSQU231E
Line *n*: parameter *keyword* exceeds maximum length

Explanation

The value for the specified parameter in line *n* of the rules table is too long.

System action

The utility is terminated.

System programmer response

Correct the rules table and restart the dead-letter queue handler.

CSQU232E
Line *n*: parameter *keyword* is duplicated

Explanation

Two or more parameters of the same type were supplied in line *n* of the rules table.

System action

The utility is terminated.

System programmer response

Correct the rules table and restart the dead-letter queue handler.

CSQU233E
Line *n*: syntax error

Explanation

There is a syntax error in line *n* of the rules table.

System action

The utility is terminated.

System programmer response

Correct the rules table and restart the dead-letter queue handler.

CSQU234E
Unable to release storage

Explanation

The dead-letter queue handler was unable to release storage.

System action

The utility is terminated.

System programmer response

Investigate the problem reported in the preceding messages.

CSQU235E
Line *n*: *keyword* value invalid or outside permitted range

Explanation

The value supplied for the specified parameter in line *n* of the rules table was outside the valid range of values or otherwise invalid.

System action

The utility is terminated.

System programmer response

Correct the rules table and restart the dead-letter queue handler.

CSQU236E
n error(s) in rules table

Explanation

Errors were detected in the rules table.

System action

The utility is terminated.

System programmer response

Correct the rules table as indicated in the preceding messages and restart the dead-letter queue handler.

CSQU237E
Line *n*: invalid keyword combination

Explanation

There is an invalid combination of parameters in line *n* of the rules table. For example: no ACTION specified, ACTION(FWD) specified without FWDQ, HEADER specified without ACTION(FWD).

System action

The utility is terminated.

System programmer response

Correct the rules table and restart the dead-letter queue handler.

CSQU249E
Unable to disconnect from queue manager, MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Explanation

An MQDISC call for the queue manager was unsuccessful.

System action

The utility is terminated.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQU500I
csect-name Queue-sharing Group Utility - *date time*

Explanation

This is part of the header to the report issued by the utility program.

CSQU501I
function function requested

Explanation

This identifies the utility function requested.

CSQU502I

Queue manager=*qmgr-name*

Explanation

This identifies the queue manager name for which the function is requested.

CSQU503I

QSG=*qsg-name*, Db2 DSG=*dsg-name*, Db2 ssid=*db2-name*

Explanation

This identifies the queue-sharing group, Db2 data-sharing group, and Db2 subsystem names for which the function is requested.

CSQU504E

Unable to LOAD *module-name*, reason=*ssssrrrr*

Explanation

The utility was unable to load a required module. *ssss* is the completion code and *rrrr* is the reason code (both in hexadecimal) from the z/OS LOAD service.

System action

The utility terminates.

System programmer response

Check the console for messages indicating why the module was not loaded. See the *MVS Programming: Assembler Services Reference* manual for information about the codes from the LOAD request.

Ensure that the module is in the required library, and that it is referenced correctly. The utility attempts to load this module from the library data sets under the STEPLIB DD statement.

CSQU505E

No EXEC PARM parameters

Explanation

No parameters for the utility were specified in EXEC PARM field.

System action

The utility program is terminated.

System programmer response

Specify the required parameters and rerun the job.

CSQU506E

Invalid EXEC PARM function parameter

Explanation

The function requested for the utility, as the first parameter in EXEC PARM field, was invalid.

System action

The utility program is terminated.

System programmer response

Correct the parameter and rerun the job.

CSQU507E

Wrong number of EXEC PARM parameters for function

Explanation

The number of parameters for the utility specified in EXEC PARM field was incorrect for the function requested.

System action

The utility program is terminated.

System programmer response

Correct the parameters and rerun the job.

CSQU508E
Invalid EXEC PARM parameter *n*

Explanation

The *n*th parameter for the utility specified in EXEC PARM field was invalid for the function requested, or omitted but required by the function requested.

System action

The utility program is terminated.

System programmer response

Correct the parameter and rerun the job.

CSQU509E
Too many EXEC PARM parameters

Explanation

The number of parameters for the utility specified in EXEC PARM field was too many for the function requested.

System action

The utility program is terminated.

System programmer response

Correct the parameters and rerun the job.

CSQU510I
SQL error information

Explanation

An SQL error has occurred. Diagnostic information follows in message CSQU511I.

System action

See the preceding utility error message.

System programmer response

Look at the information in message CSQU511I to determine the reason for the SQL error.

CSQU511I
DSNT408I SQLCODE = `-sql-code`, explanation

Explanation

This message provides additional diagnostic information direct from Db2. It is followed by further CSQU511I messages, similar to the following example block:

```
CSQU511I   DSNT408I SQLCODE = -805, ERROR:  DBRM OR PACKAGE NAME DSNV11P1..CSQ5B9-
CSQU511I            00.1A47B13F08B31B99 NOT FOUND IN PLAN CSQ5B900. REASON 03
CSQU511I   DSNT418I SQLSTATE   = 51002 SQLSTATE RETURN CODE
CSQU511I   DSNT415I SQLERRP    = DSNXEPM SQL PROCEDURE DETECTING ERROR
CSQU511I   DSNT416I SQLERRD    = -251  0  0  -1  0  0 SQL DIAGNOSTIC INFORMATION
CSQU511I   DSNT416I SQLERRD    = X'FFFFFF05'  X'00000000'  X'00000000'
CSQU511I            X'FFFFFFFF'  X'00000000'  X'00000000' SQL DIAGNOSTIC
CSQU511I            INFORMATION
```

System action

The utility program is terminated.

System programmer response

Use the diagnostic information to determine the reason for the SQL error and correct the problem.

CSQU512E
Utility terminated, Db2 tables in use

Explanation

The queue-sharing group utility cannot run because the Db2 tables it uses are reserved by another job. The most likely reason is that another instance of the utility is running, or that a queue manager in the queue-sharing group is in the process of starting.

System action

The utility program is terminated.

System programmer response

Rerun the job later.

CSQU513E
Utility terminated, not APF authorized

Explanation

The queue-sharing group utility is not APF authorized.

System action

The utility program is terminated.

System programmer response

Ensure that the library data sets under the STEPLIB DD statement comply with the rules for APF authorization, and rerun the job.

CSQU514E
RRSAF function *call-name* failed, RC=*rc*

Explanation

The RRS function specified by *call-name* returned an unexpected reason code specified by *rc*.

System action

The utility program is terminated.

System programmer response

Consult the *Db2 messages* and *Db2 codes* sections within the Db2 for z/OS product documentation for an explanation of the RRSAF reason code.

Take corrective action if necessary and resubmit the job.

CSQU515E
Unable to access Db2 tables, RC=*rc* reason=*reason*

Explanation

The call to CSQ5ARO2 module failed with a return code specified by *rc* and reason code specified by *reason*.

System action

The utility program is terminated.

System programmer response

Resubmit the job. If the problem persists, note the error codes in the message and contact your IBM support center.

CSQU517I

XCF group *xcf-name* already defined

Explanation

Informational message indicating that the XCF group name specified by *xcf-name* already exists.

CSQU518E

XCF IXCQUERY member error, RC=*rc* reason=*reason*

Explanation

An unexpected return code specified by *rc* with reason code specified by *reason* was returned from an IXCQUERY request.

System action

The utility program is terminated.

System programmer response

See the *z/OS MVS Sysplex Services Reference* manual for an explanation of the IXCQUERY return and reason codes.

Take corrective action if necessary and resubmit the job.

CSQU520I

Summary information for XCF group *xcf-name*

Explanation

Informational message indicating that summary data for the XCF group specified by *xcf-name* follows.

CSQU521I

Group contains *n* members:

Explanation

Informational message indicating that the group specified by message CSQU517I contains *n* members.

CSQU522I

Member=*xcf-name*, state=*sss*, system=*sys-name*

Explanation

Informational message indicating that the XCF group member specified by *xcf-name* has a state of *sss* and last executed on system *sys-name*.

CSQU523I

User data=*xxx*

Explanation

Informational message containing the 32 bytes of XCF user data to accompany informational message CSQU522I.

CSQU524I

QMGR number=nn

Explanation

Informational message containing the number of the QMGR in the QSG to accompany informational message CSQU522I. The QMGR number is stored in the Db2 tables, the XCF group member and the connections to the CF structures. It is generated when a QMGR is added to a QSG using CSQ5PQSG.

CSQU525E

Db2 *db2-name* is not a member of data-sharing group *dsg-name*

Explanation

There was an inconsistency between the Db2 ssid and data-sharing group name provided in the EXEC PARM field. Db2 ssid specified by *db2-name* is not a member of the Db2 data-sharing group specified by *dsg-name*.

System action

The utility program is terminated.

System programmer response

Ensure that the Db2 ssid specified is a member of the Db2 data-sharing group specified.

CSQU526I
Connected to Db2 *db2-name*

Explanation

The utility program connected successfully to Db2 subsystem *db2-name*.

CSQU527E
No eligible Db2 currently active

Explanation

If a Db2 ssid was specified in the EXEC PARM field this indicates that the Db2 subsystem is not currently active on the z/OS system on which the utility job executed.

If a Db2 data-sharing group name was specified in the EXEC PARM field then no eligible Db2 subsystem was active on the z/OS system on which the utility job executed.

System action

The utility program is terminated.

System programmer response

If a Db2 ssid was specified in the EXEC PARM field then ensure that it is active on the z/OS system on which the utility job will execute.

If a Db2 data-sharing group name was specified in the EXEC PARM field then ensure that at least one eligible Db2 subsystem is active on the z/OS system on which the utility job will execute.

CSQU528I
Disconnected from Db2 *db2-name*

Explanation

The utility program disconnected successfully from Db2 subsystem *db2-name*.

CSQU529E
QSG *qsg-name* entry cannot be removed, *n* members are still defined

Explanation

A request to remove the queue-sharing group name in *qsg-name* failed because *n* members are still defined to it.

System action

The utility program is terminated.

System programmer response

All members of the queue-sharing group must be removed from it before the queue-sharing group itself can be deleted. Use the preceding CSQU522I message to identify which queue-sharing group members are still defined to the queue-sharing group.

Note: Members in a state of ACTIVE or FAILED cannot be removed from a queue-sharing group.

CSQU530E
QMGR *qmgr-name* entry cannot be removed from QSG *qsg-name*, status is *sss*

Explanation

The queue manager named by *qmgr-name* cannot be removed from the queue-sharing group named by *qsg-name* because it is in an incorrect XCF member state as specified by *sss*.

System action

The utility program is terminated.

System programmer response

To remove a queue manager from the queue-sharing group it must have XCF member state CREATED or QUIESCED.

If the XCF member state is ACTIVE then stop the queue manager with a STOP QMGR command and resubmit the job.

If the XCF member state is FAILED then start the queue manager and stop it normally using the STOP QMGR command and resubmit the job.

CSQU531E
QSG *qsg-name* entry cannot be removed, not found in Db2 table *table-name*

Explanation

An attempt to remove the queue-sharing group *qsg-name* failed because no entry for it was found in the Db2 table *table-name*.

System action

The utility program is terminated.

System programmer response

Ensure that the queue-sharing group *qsg-name* was originally defined in the table *table-name*.

Check that the utility job connected to the correct Db2 data-sharing group. If necessary resubmit the job.

CSQU532E
QSG *qsg-name* entry cannot be deleted, Db2 entries still exist for it

Explanation

An attempt to remove the queue-sharing group *qsg-name* was returned a Db2 constraint failure because queue manager entries still exist in the CSQ.ADMIN_B_QMGR table.

System action

The utility program is terminated.

System programmer response

Examine the CSQ.ADMIN_B_QMGR table to determine which queue managers are still defined to the queue-sharing group *qsg-name*.

Use the REMOVE QMGR function of the CSQ5PQSG utility to remove the entries and then resubmit the job.

CSQU533E
SQL error. Db2 table=*table-name*, code=*sqlcode*, state=*sss*, data=*sqlerrcd*

Explanation

An unexpected SQL error was returned from Db2. An operation on the table named by *table-name* was returned an SQLCODE specified by *sqlcode* with STATE specified by *sss* and SQLERRCD values specified by *sqlerrcd*.

System action

The utility program is terminated.

System programmer response

See the *Db2 for z/OS Messages and Codes* manual for an explanation of the SQL codes.

Resubmit the job if required.

CSQU534E
SQL services error, Db2 table=*table-name* RC=`rc`

Explanation

An SQL error occurred during an operation on the table specified by *table-name*, as reported in the preceding CSQU533E message. A return code of *rc* was returned from the internal service routine.

System action

The utility program is terminated.

System programmer response

See message CSQU533E.

CSQU535I
QSG *qsg-name* entry successfully removed from Db2 table *table-name*

Explanation

Informational message indicating that the queue-sharing group named by *qsg-name* was successfully removed.

CSQU536E
Unable to add QSG *qsg-name* entry, entry already exists in Db2 table *table-name*

Explanation

An attempt to add the queue-sharing group *qsg-name* failed because an entry already exists in the Db2 table *table-name*.

System action

The utility program is terminated.

CSQU537I
csect-name QSG *qsg-name* entry successfully added to Db2 table *table-name*

Explanation

The request to add the queue-sharing group *qsg-name* to the Db2 table *table-name* completed successfully.

CSQU538E
Member record found for QMGR *qmgr-name* XCF group *xcf-name*

Explanation

Informational message indicating that a member record for the queue manager named in *qmgr-name* already exists in the XCF group named by *xcf-name*.

CSQU539E
No QMGR *qmgr-name* entry found in QSG *qsg-name*

Explanation

An attempt to remove the queue manager named by *qmgr-name* from the queue-sharing group named by *qsg-name* failed because no entry was found in the Db2 tables.

System action

The utility program is terminated.

CSQU540E
Unable to remove QMGR *qmgr-name* - not terminated normally, or needed for recovery

Explanation

The queue manager named by *qmgr-name* cannot be removed from the queue-sharing group because it is currently active, or because it terminated abnormally during its last execution, or because it is needed for backup and recovery purposes.

System action

The utility program is terminated.

System programmer response

If the queue manager is active then stop the queue manager with a STOP QMGR command and resubmit the job.

If the queue manager terminated abnormally during its last execution then start the queue manager and stop it normally using the STOP QMGR command and resubmit the job.

If neither of these cases applies, or if it still cannot be removed, it must be needed for backup and recovery purposes. See Managing queue-sharing groups for information about removing such a queue manager from a queue-sharing group.

CSQU541E
QSG array manipulation error, RC=`rc`

Explanation

An internal error occurred during manipulation of the queue-sharing group array data.

An internal routine returned a completion code specified by *rc*.

System action

The utility program is terminated.

System programmer response

Resubmit the job. If the problem persists, note the error codes in the message and contact your IBM support center.

CSQU542E
Update unsuccessful for QSG *qsg-name*, RC=*rc*

Explanation

An attempt to update the Db2 row for the queue-sharing group named by *qsg-name* failed with return code *rc*.

rc shows the type of failure:

00F5000C
Queue-sharing group row no longer exists

00F50010
Internal error

00F50018
Referential constraint failure

00F50028
Internal error

System action

The utility program is terminated.

System programmer response

Resubmit the job. If the problem persists contact your IBM support center.

CSQU543E
Delete unsuccessful for QMGR *qmgr-name*, RC=*rc*

Explanation

The attempt to delete the queue manager *qmgr-name* failed with return code *rc*.

rc shows the type of failure: 00F5000C, queue manager row no longer exists.

System action

Processing continues.

System programmer response

This might be an indication that the request was made against the wrong Db2 data-sharing group or that a previous attempt terminated prematurely. For the former, the utility should be executed against the correct Db2 data-sharing group. For the latter, no further action need be taken.

CSQU544E
IXCDELET request for QMGR *qmgr-name* unsuccessful, RC=*rc* reason=*reason*

Explanation

During an attempt to delete queue manager *qmgr-name*, an IXCDELET request was returned an IXC return code of *rc* and reason code of *reason*.

System action

The utility program is terminated.

System programmer response

See the *z/OS MVS Sysplex Services Reference* manual for an explanation of the IXCDELET return and reason codes.

Take corrective action if necessary and resubmit the job.

CSQU545E
IXCCREAT request for QMGR *qmgr-name* unsuccessful, RC=*rc* reason=*reason*

Explanation

During an attempt to add queue manager *qmgr-name*, an IXCCREAT request was returned an IXC return code of *rc* and reason code of *reason*.

System action

The utility program is terminated.

System programmer response

See the *z/OS MVS Sysplex Services Reference* manual for an explanation of the IXCCREAT return and reason codes.

Take corrective action if necessary and resubmit the job.

CSQU546E
Unable to add QMGR *qmgr-name* entry, already exists in Db2 table *table-name*

Explanation

The attempt to add an entry for queue manager *qmgr-name* to the Db2 table *table-name* failed because a row already exists for the queue manager.

System action

The utility program is terminated.

System programmer response

Examine the Db2 table specified by *table-name* and determine whether the entry for the queue manager specified by *qmgr-name* is for the correct queue-sharing group. If it is, no further action is required.

CSQU547E

Unable to add QMGR *qmgr-name* entry, no QSG *qsg-name* entry exists in Db2 table *table-name*

Explanation

The attempt to add queue manager *qmgr-name* failed because there is no queue-sharing group entry for the queue-sharing group *qsg-name* in the Db2 table *table-name*.

System action

The utility program is terminated.

System programmer response

To add a queue manager to a queue-sharing group the Db2 CSQ.ADMIN_B_QSG table must contain a queue-sharing group record for the queue-sharing group named by *qsg-name*.

Examine the Db2 tables and if necessary run the CSQ5PQSG utility ADD QSG function prior to resubmitting this job.

CSQU548E

QMGR *qmgr-name* cannot be added to QSG *qsg-name*, no unassigned QMGR number

Explanation

The attempt to add queue manager *qmgr-name* to the queue-sharing group *qsg-name* failed because all queue manager numbers are in use.

System action

The utility program is terminated.

System programmer response

A maximum of 32 queue managers can be defined to a queue-sharing group at any one time. If the queue-sharing group named by *qsg-name* already contains 32 queue managers then the only course of action is to create a new queue-sharing group or remove an existing queue manager.

CSQU549I

QMGR *qmgr-name* entry successfully added to QSG *qsg-name*

Explanation

The request to add queue manager *qmgr-name* to the queue-sharing group *qsg-name* completed successfully.

CSQU550I

QMGR *qmgr-name* entry successfully removed from QSG *qsg-name*

Explanation

The request to remove queue manager *qmgr-name* from the queue-sharing group *qsg-name* completed successfully.

CSQU551I

QSG *qsg-name* entry successfully added

Explanation

The request to add queue-sharing group *qsg-name* completed successfully.

CSQU552I

QSG *qsg-name* entry successfully removed

Explanation

The request to remove queue-sharing group *qsg-name* completed successfully.

CSQU553E

QMGR *qmgr-name* exists in Db2 table *table-name* as a member of a different QSG

Explanation

An attempt to add the queue manager specified by *qmgr-name* into a queue-sharing group failed because the Db2 table specified by *table-name* indicates that the queue manager is already a member of a different queue-sharing group.

System action

The utility program is terminated.

System programmer response

A queue manager can be a member of only one queue-sharing group at any one time. Examine the CSQ.ADMIN_B_QMGR table to determine which queue-sharing group the queue manager is already a member of.

Either remove the queue manager from the queue-sharing group it is in and resubmit the job or take no further action.

CSQU554E
QMGR *qmgr-name* entry cannot be removed from QSG *qsg-name*, needed for structure *struc-name* backup

Explanation

The queue manager named by *qmgr-name* cannot be removed from the queue-sharing group named by *qsg-name* because it has information about backups for structure *struc-name*. (The value shown for *struc-name* is the 12-character name as used by IBM MQ not the external name used by z/OS which includes the queue-sharing group name.)

If the queue manager is needed for more than one structure, this message will be issued for each one.

System action

The utility program is terminated.

System programmer response

Using another queue manager in the queue-sharing group, take a backup of the structure. Ensure that the EXCLINT time value used in the BACKUP CFSTRUCT command is less than the time since the queue manager that you are trying to remove was last stopped. Then resubmit the job.

When removing the last queue manager in a queue sharing group, you must use the FORCE option, rather than REMOVE. This removes the queue manager from the queue sharing group, whilst not performing the consistency checks of the queue manager logs being required for recovery. You should only perform this action if you are going to be deleting the queue sharing group; see Removing a queue manager from a queue-sharing group for more information on managing queue sharing groups.

CSQU555E
QMGR *qmgr-name release* level is incompatible with QSG *qsg-name* in Db2 table *table-name*

Explanation

An attempt to add the queue manager specified by *qmgr-name* into a queue-sharing group failed because the Db2 table specified by *table-name* indicates that another queue manager in the queue-sharing group is at an incompatible release level.

System action

The utility program is terminated.

System programmer response

Only queue managers with compatible release levels can be members of the same queue-sharing group. For information about migration and compatibility between releases, see Migrating.

CSQU556I
QSG *qsg-name* may contain unexpected characters

Explanation

The queue-sharing group *qsg-name* being added specifies a queue-sharing group name that either contains the '@' character, or is shorter than four characters and therefore has '@' characters appended to the short name to make the name four characters in length.

System action

Processing to add the queue-sharing group continues. The utility will complete with return code 4.

System programmer response

Verify that the queue-sharing group name specified by *qsg-name* is the intended name to be used for the queue-sharing group. If not, use the utility to remove the queue-sharing group, correct the queue-sharing group name, and resubmit the request to add the queue-sharing group.

The '@' character, although allowed in the *qsg-name*, is inadvisable as it is not supported as a character in a WebSphere MQ object name. Any definition such as queue manager alias definitions or other objects that need to refer to the *qsg-name*, will be unable to refer to the *qsg-name*. If possible, avoid using these characters.

CSQU557E
The QMGR and QSG names must be different

Explanation

The attempt to add a queue manager to a queue-sharing group failed because queue managers cannot have the same name as the queue-sharing group to which they belong.

System action

The utility program is terminated.

CSQU558E
QMGR *qmgr-name* entry cannot be removed from QSG *qsg-name*, SMDS for structure *struc-name* is not empty

Explanation

The queue manager named by *qmgr-name* cannot be removed from the queue-sharing group named by *qsg-name* because it owns a shared message data set for structure *struc-name* which is not marked as empty, so it may still contain current message data. (The value shown for *struc-name* is the 12-character name as used by WebSphere MQ, not the external name used by z/OS which includes the queue-sharing group name.)

System action

The utility program is terminated.

System programmer response

The queue manager cannot be removed until the owned shared message data set has been marked as empty, indicating that it has been closed normally by the owning queue manager at a time when it does not contain any message data. All shared messages with message data in the data set must have been read or marked as deleted first, and the owning queue manager must be connected to the structure in order to remove the deleted messages and free the data set space.

The current status of each shared message data set for the structure can be displayed using the command **DISPLAY CFSTATUS(struc-name) TYPE(SMDS)**.

CSQU560I
Full name of admin structure is *admin-strname*

Explanation

This shows the full external name of the administration structure as used by z/OS, which includes the queue-sharing group name.

CSQU561E
Unable to get attributes for admin structure, IXLMG RC=*rc* reason code=*reason*

Explanation

An attempt to add a queue manager to a queue-sharing group failed; it was not possible to check the attributes of the administration structure because there was an XES IXLMG service error. The full name of the administration structure is given in the following CSQ570I message.

System action

The utility program terminates. The queue manager is not added to the queue sharing group.

System programmer response

Investigate the return and reason codes from the IXLMG service (both shown in hexadecimal), which are described in the *z/OS MVS Programming: Services Reference* manual. If you are unable to resolve the problem, contact your IBM service center.

CSQU562E
Admin structure attributes temporarily unavailable

Explanation

An attempt to add a queue manager to a queue-sharing group failed; it was not possible to check the attributes of the administration structure because they were currently unavailable. The full name of the administration structure is given in the following CSQ570I message.

System action

The utility program terminates. The queue manager is not added to the queue sharing group.

System programmer response

Rerun the job later.

CSQU563I
Admin structure is defined in CF *cf-name*, allocated size *mm* KB, maximum entries *nn*

Explanation

This shows the current attributes of the administration structure for the queue sharing group. It is defined in the coupling facility named *cf-name*.

CSQU564E
Queue managers cannot be added to QSG *qsg-name*, admin structure too small

Explanation

An attempt to add a queue manager to a queue-sharing group failed; the current administration structure allocation is too small for a queue-sharing group with the requested number of queue managers. The full name of the administration structure is given in the following CSQ570I message.

System action

The utility program terminates. The queue manager is not added to the queue sharing group.

System programmer response

See Specifying offload options for shared messages for information about coupling facility structure sizes for use with queue-sharing groups.

The administration structure allocation must be increased before a new queue manager can be added to the queue-sharing group. This may involve one or more of the following steps:

- Update the administration structure definition using the IXLMIAPU utility.
- Refresh the currently active CFRM policy.
- Dynamically alter the current allocation of the administration structure using the z/OS SETXCF START,ALTER command.

Rerun the job when the administration structure allocation has been increased.

CSQU565E

Unable to get attributes for admin structure, CF in failed state

Explanation

An attempt to add a queue manager to a queue-sharing group failed; it was not possible to check the attributes of the administration structure because it is in a failed state. The full name of the administration structure is given in the following CSQ570I message.

System action

The utility program terminates. The queue manager is not added to the queue sharing group.

System programmer response

Use the z/OS DISPLAY XCF,STRUCTURE command to display the status of all structures in the currently active CFRM policy.

If the administration structure has failed, starting a queue manager in the queue-sharing group will cause the structure to be allocated according to the current CFRM policy.

CSQU566I

Unable to get attributes for admin structure, CF not found or not allocated

Explanation

In attempting to add a queue manager to a queue-sharing group, it was not possible to check the attributes of the administration structure because it has not yet been defined to the CFRM policy, or is not currently allocated in a coupling facility. The full name of the administration structure is given in the following CSQ570I message. If the structure is not allocated, then the structure will be allocated when the first queue manager starts.

System action

Processing continues.

System programmer response

Use the z/OS command DISPLAY XCF,STRUCTURE,STRNAME=<CFSTRNAME> to display the status (including size) of all structures in the currently active CFRM policy.

Ensure a structure definition exists in the CFRM policy. It will be needed before the queue manager can be started.

CSQU567E

QMGR *qmgr-name* not added to Db2 table due to a number mismatch.

Explanation

The QMGR qmgr-name could not be added to Db2 tables due to a mismatch in the QMGR numbers as indicated by message CSQU568E issued earlier.

System action

The utility terminates.

System programmer response

Add the QMGRs in the order corresponding to their QMGR number values in the XCF group, as can be seen by message CSQU524I when running CSQ5PQSG queue sharing group utility with the "VERIFY QSG" parameter.

If the issue is linked to a persistent failing connection to the CSQ_ADMIN structure, the problem can be resolved by clearing the CF structure using the SETXCF FORCE command.

CSQU568E

QMGR number mismatch for QMGR *qmgr-name* in QSG *qsg-name*: Db2 value=*nn*, XCF member value=*nn*, CSQ_ADMIN connection value=*nn*

Explanation

The QMGR number is stored in the Db2 tables, the XCF group member, and the connections to the CF structures. The QMGR number is created when a QMGR is added to a QSG by using the queue sharing group utility (CSQ5PQSG).

This message indicates that there is a mismatch in the stored values for QMGR *qmgr-name* in QSG *qsg-name* which will prevent the QMGR from starting.

System action

The utility terminates after all members in the XCF group have been processed.

System programmer response

If the QMGR number value is -1, the entry does not exist. Use the CSQ5PQSG utility with "ADD QMGR" parameter to add the missing entry.

If the QMGR number value is 0, the value has not been initialised (XCF group member and CSQ_ADMIN connection values only). Start the QMGR to initialize the value.

If QMGR number value is greater than 0, collect the items listed in the Coupling Facility problem determination guide and contact your IBM support center.

CSQU569E
Unexpected CSQ_ADMIN connection found for QMGR *qmgr-name*

Explanation

For each QMGR in the QSG there should only be one connection to the CSQ_ADMIN structure. This message is issued for each additional connection found.

System action

The utility terminates after all members in the XCF group have been processed.

System programmer response

This situation should not occur. The connections can be displayed using the display XCF command for the CSQ_ADMIN structure.

Collect the items listed in the Coupling Facility problem determination guide and contact your IBM support center.

CSQU570I
QSG *qsg-name* successfully verified

Explanation

The request to verify information for queue-sharing group *qsg-name* completed successfully. All the information is consistent.

CSQU571E
QSG *qsg-name* entry cannot be verified, not found in Db2 table *table-name*

Explanation

An attempt to verify the queue-sharing group *qsg-name* failed because no entry for it was found in the Db2 table *table-name*.

System action

The utility program is terminated.

System programmer response

Ensure that the queue-sharing group *qsg-name* was originally defined in the table *table-name*. Check that the utility job connected to the correct Db2 data-sharing group.

If necessary resubmit the job.

CSQU572E

Usage map *map-name* and Db2 table *table-name* inconsistent

Explanation

While verifying a queue-sharing group, an inconsistency was found between the information in the usage map *map=name* and the Db2 table *table-name*. The following messages give more details about the inconsistency.

System action

Processing continues.

System programmer response

Check that the utility job connected to the correct Db2 data-sharing group. If necessary resubmit the job.

Contact your IBM support center for assistance.

CSQU573E

QMGR *qmgr-name* in table entry *entry-number* not set in usage map

Explanation

While verifying a queue-sharing group, an inconsistency was found between the information in a usage map and the corresponding Db2 table. The inconsistency is described in the message; preceding message CSQU572E identifies the usage map and table.

System action

Processing continues.

System programmer response

See message CSQU572E.

CSQU574E

QMGR *qmgr-name* in usage map has no entry in table

Explanation

While verifying a queue-sharing group, an inconsistency was found between the information in a usage map and the corresponding Db2 table. The inconsistency is described in the message; preceding message CSQU572E identifies the usage map and table.

System action

Processing continues.

System programmer response

See message CSQU572E.

CSQU575E

Structure *struc-name* in table entry *entry-number* not set in usage map

Explanation

While verifying a queue-sharing group, an inconsistency was found between the information in a usage map and the corresponding Db2 table. The inconsistency is described in the message; preceding message CSQU572E identifies the usage map and table. (The value shown for *struc-name* is the 12-character name as used by WebSphere MQ, not the external name used by z/OS which includes the queue-sharing group name.)

System action

Processing continues.

System programmer response

See message CSQU572E.

CSQU576E

Structure *struc-name* in usage map has no entry in table

Explanation

While verifying a queue-sharing group, an inconsistency was found between the information in a usage map and the corresponding Db2 table. The inconsistency is described in the message; preceding message CSQU572E identifies the usage map and table. (The value shown for *struc-name* is the 12-character name as used by IBM MQ, not the external name used by z/OS which includes the queue-sharing group name.)

System action

Processing continues.

System programmer response

See message CSQU572E.

CSQU577E

Queue *q-name* in table entry *entry-number* not set in usage map for structure *struc-name*

Explanation

While verifying a queue-sharing group, an inconsistency was found between the information in a usage map and the corresponding Db2 table. The inconsistency is described in the message; preceding message CSQU572E identifies the usage map and table. (The value shown for *struc-name* is the 12-character name as used by IBM MQ, not the external name used by z/OS which includes the queue-sharing group name.)

System action

Processing continues.

System programmer response

See message CSQU572E.

CSQU578E

Queue *q-name* in usage map for structure *struc-name* has no entry in table

Explanation

While verifying a queue-sharing group, an inconsistency was found between the information in a usage map and the corresponding Db2 table. The inconsistency is described in the message; preceding message CSQU572E identifies the usage map and table. (The value shown for *struc-name* is the 12-character name as used by IBM MQ, not the external name used by z/OS which includes the queue-sharing group name.)

System action

Processing continues.

System programmer response

See message CSQU572E.

CSQU580I

DSG *dsg-name* is ready for migration

Explanation

The request to migrate the data-sharing group *dsg-name* to use new Db2 tables successfully verified that the data-sharing group is ready to be migrated.

System programmer response

Perform the migration. You should do this as a conditional step in the same job as the utility migration request, as shown in the sample jobs CSQ4570T and CSQ4571T in the SCSQPROC library.

CSQU581E
DSG *dsg-name* has incompatible QMGR levels in QSG *qsg-name*

Explanation

The data-sharing group *dsg-name* cannot be migrated to use new Db2 tables because the levels of the queue managers in queue-sharing group *qsg-name,* which uses the data-sharing group, are incompatible.

System action

The utility program is terminated.

System programmer response

To perform the migration, all the queue managers in all the queue-sharing groups that use the data-sharing group must have installed a PTF and been started, to bring them to the necessary level. Examine the CSQ.ADMIN_B_QMGR Db2 table to determine the levels of the queue managers and those which need to be upgraded. Look at the fields QMGRNAME, MVERSIONL, MVERSIONH and investigate the queue managers with the lower values in MVERSIONH.

For information about migration and compatibility between releases, see Migrating.

CSQU582E
DSG *dsg-name* has already been migrated

Explanation

The data-sharing group *dsg-name* cannot be migrated to use new Db2 tables because it has already been migrated.

System action

The utility program is terminated.

System programmer response

As part of the migration, the CSQ.OBJ_B_CHANNEL Db2 table will have its row size increased above 4 KB. The utility found that such a row size slready exists. Examine the CSQ.OBJ_B_CHANNEL Db2 table to verify that the migration has already occurred.

For information about migration and compatibility between releases, see Migrating.

CSQU583I
QSG *qsg-name* in DSG *dsg-name* is ready for migration

Explanation

The request to migrate the queue-sharing group *qsg-name* in data-sharing group *dsg-name* to use new Db2 tables successfully verified that the queue-sharing group is ready to be migrated.

System programmer response

Perform the migration. You should do this as a conditional step in the same job as the utility migration request, as shown in the sample jobs CSQ4570T and CSQ4571T in the SCSQPROC library.

CSQU584E
QSG *qsg-name* in DSG *dsg-name* has incompatible QMGR levels

Explanation

The queue-sharing group *qsg-name* in data-sharing group *dsg-name* cannot be migrated to use new Db2 tables because the levels of the queue managers using the data-sharing group are incompatible.

System action

The utility program is terminated.

System programmer response

To perform the migration, all the queue managers in all the queue-sharing groups that use the data-sharing group must have installed a PTF and been started, to bring them to the necessary level.

Examine the CSQ.ADMIN_B_QMGR Db2 table to determine the levels of the queue managers and those which need to be upgraded.

For information about migration and compatibility between releases, see Migrating.

CSQU585E

QSG *qsg-name* entry cannot be migrated, not found in Db2 table *table-name*

Explanation

The queue-sharing group, *qsg-name*, cannot be migrated because no entry was found for it in the Db2 table, *table-name*.

System action

The utility program is terminated.

System programmer response

Ensure that the queue-sharing group *qsg-name* was originally defined in the table *table-name*.

Check that the utility job is connected to the correct Db2 data-sharing group. If necessary resubmit the job.

CSQU586I

QMGR *qmgr-name* entry being removed from QSG *qsg-name*, needed for structure *struc-name* backup

Explanation

The queue manager named by *qmgr-name* is being force removed from the queue-sharing group named by *qsg-name* and it has information about backups for structure *struc-name*. (The value shown for *struc-name* is the 12-character name as used by WebSphere MQ, not the external name used by z/OS which includes the queue-sharing group name.)

If the queue manager *qmgr-name* is added back to the queue-sharing group it will cause an inconsistent state that could prevent structure *struct-name* from being recovered should it fail before a structure backup is taken.

If the queue manager is needed for more than one structure, this message is issued for each one.

System action

The queue manager is removed from the queue-sharing group, and the utility program ends with return code 4.

System programmer response

If CF structure *struc-name* is usable, take a backup of CF structure *struc-name* as soon as possible using another queue manager in the queue-sharing group. Otherwise, if the queue manager *qmgr-name* is added back to the queue-sharing group it should be restarted before recovering structure *struc-name*.

CSQU587I

QMGR *qmgr-name* entry being removed from QSG *qsg-name*, SMDS for structure *struc-name* is not empty

Explanation

The queue manager named by *qmgr-name* is being removed from the queue-sharing group named by *qsg-name* while it owns a shared message data set for structure *struc-name* that is not marked as empty, so it may still contain current message data. (The value shown for *struc-name* is the 12-character name as used by WebSphere MQ, not the external name used by z/OS which includes the queue-sharing group name.)

System action

The queue manager is removed from the queue-sharing group, and the utility program ends with return code 4.

Messages on the SMDS for queue manager *qmgr-name* will remain accessible as long as the SMDS is retained.

CSQU680E

Db2 and CF structure out of sync for list header *list-header-number* in structure *struc-name*

Severity
8

Explanation

The row for the shared queue in Db2 represents a different queue than the one found in the CF structure for list *header list-header-number* in structure *struc-name*. This inconsistency causes the queue manager to abend with 5C6-00C51053 and issue message CSQE137E. Messages CSQU681I and CSQU682I are also issued, providing further details.

System action

The mismatch is reported and the utility continues processing.

System programmer response

Collect the items listed in Coupling facility problem determination and in Db2 manager problem determination and contact your IBM support center.

CSQU681I

Db2 entry for list header *list-header-number* in structure *struc-name: queue-name*

Severity
0

Explanation

This message is issued with message CSQU680E. *Queue-name* is the name of the queue found in Db2 for list header *list-header-number* in structure *struc-name*.

System action

The mismatch is reported and the utility continues processing.

System programmer response

Collect the items listed in Coupling facility problem determination and in Db2 manager problem determination and contact your IBM support center.

CSQU682I

CF entry for list header *list-header-number* in structure *struc-name: queue-name*

Severity
0

Explanation

This message is issued with message CSQU680E. *Queue-name* is the name of the queue found in the CF for list header *list-header-number* in structure *struc-name*.

System action

The mismatch is reported and the utility continues processing.

System programmer response

Collect the items listed in Coupling facility problem determination and in Db2 manager problem determination and contact your IBM support center.

CSQU683E

Missing CF entry for list header *list-header-number* in structure *struc-name*

Severity

8

Explanation

The Db2 entry for list header *list-header-number* in structure *struc-name* indicates that a current copy is available in the CF, however, the copy is not found. This inconsistency causes return code 2085 for applications trying to use this queue.

System action

The mismatch is reported and the utility continues processing.

System programmer response

Starting or restarting one of the queue managers in the QSG will resolve the problem. If the problem persists, collect the items listed in Coupling facility problem determination and in Db2 manager problem determination and contact your IBM support center.

CSQU684I

Structure *struc-name* has not yet been allocated by a queue manager

Severity

0

Explanation

The CF structure *struc-name* is not allocated. This happens when the first **IXLCONN** to the structure is issued, and should only be issued by a queue manager in the QSG.

System action

The utility continues processing.

System programmer response

None.

CSQU685I

Structure *struc-name* connected

Severity

0

Explanation

The utility has successfully connected to CF structure *struc-name*.

System action

The utility continues processing.

System programmer response

None.

CSQU686E

Structure *struc-name* connection failed, **IXLCONN** RC=*return-code* reason=*reason*

Severity

8

Explanation

The utility failed to connect to CF structure *struc-name*.

System action

The utility skips any further queues for this structure and continues processing.

System programmer response

Examine the return and reason codes to determine why the **IXLCONN** connect command failed.

CSQU687I

Structure *struc-name* disconnected

Severity

0

Explanation

The utility has disconnected from CF structure *struc-name*.

System action

The utility continues processing.

System programmer response

None.

CSQU688E

Missing Db2 entry for list header *list-header-number* in structure *struc-name*

Severity

0

Explanation

The CF entry for list header *list-header-number* in structure *struc-name* indicates that a current copy is available in Db2, however, the copy is not found. This inconsistency causes a problem if a new queue is defined for the same list header.

System action

The mismatch is reported and the utility continues processing.

System programmer response

Collect the items listed in Coupling facility problem determination and in Db2 manager problem determination and contact your IBM support center.

CSQU689E

Unexpected return code for structure *struc-name*, **IXLLSTE** RC=*return-code* reason=*reason*

Severity

8

Explanation

The utility failed to read a list entry from the CF structure *struc-name*.

System action

The utility skips any further queues for this structure and continues processing.

System programmer response

Examine the return and reason codes to determine why the **IXLLSTE** read failed.

CSQU950I
csect-name IBM WebSphere MQ for z/OS V*n*

Explanation

This is part of the header to the report issued by the utility program.

CSQU951I
csect-name Data Conversion Exit Utility - *date time*

Explanation

This is part of the header to the report issued by the utility program.

CSQU952I
csect-name Utility completed, return code=*ret-code*

Explanation

The utility completed. The return code is 0 if all the input was processed successfully, or 8 if any errors were found.

System action

The utility ends.

System programmer response

If the return code is non-zero, investigate the errors that were reported.

CSQU954I
n structures processed

Explanation

This indicates how many data structures were processed by the utility program.

CSQU956E
Line *line-number*: structure array field has incorrect dimension

Explanation

The dimension specified for a structure array field was not correct.

System action

Processing stops.

System programmer response

Correct the field specification and resubmit the job.

CSQU957E
Line *line-number*: structure has field following a variable length field

Explanation

There was an error in the indicated line. A variable length field must be the last field of a structure.

System action

Processing continues.

System programmer response

Correct the field specification and resubmit the job.

CSQU958E
Line *line-number*: structure field name has unsupported type 'float'

Explanation

There was an error in the indicated line. A field had a type of 'float', which is not supported.

System action

Processing continues.

System programmer response

Correct the field specification and resubmit the job, or provide your own routine for converting such fields.

CSQU959E
Line *line-number*: structure field name has unsupported type 'double'

Explanation

There was an error in the indicated line. A field had a type of 'double', which is not supported.

System action

Processing continues.

System programmer response

Correct the field specification and resubmit the job, or provide your own routine for converting such fields.

CSQU960E
Line *line-number*: structure field name has unsupported type 'pointer'

Explanation

There was an error in the indicated line. A field had a type of 'pointer', which is not supported.

System action

Processing continues.

System programmer response

Correct the field specification and resubmit the job, or provide your own routine for converting such fields.

CSQU961E
Line *line-number*: structure field name has unsupported type 'bit'

Explanation

There was an error in the indicated line. A field had a type of 'bit', which is not supported.

System action

Processing continues.

System programmer response

Correct the field specification and resubmit the job, or provide your own routine for converting such fields.

CSQU965E
Invalid EXEC PARM

Explanation

The EXEC PARM field was not blank.

System action

The utility is terminated.

System programmer response

Change the JCL, and resubmit the job.

CSQU968E
Unable to OPEN *ddname* data set

Explanation

The program was unable to open data set *ddname*.

System action

The utility is terminated.

System programmer response

Examine the error message that was sent to the job log to determine the reason for the error. Check that the data set was correctly specified.

CSQU970E
Line `line-number`: syntax error

Explanation

There was a syntax error in the indicated line.

System action

Processing stops.

System programmer response

Correct the error and resubmit the job.

CSQU971E
Unable to GET from *ddname* data set

Explanation

The program was unable to read a record from the *ddname* data set.

System action

The utility is terminated.

System programmer response

Examine the error message that was sent to the job log to determine the reason for the error. Check that the data set was correctly specified.

CSQU972E
Unable to PUT to *ddname* data set

Explanation

The program was unable to write the next record to the *ddname* data set.

System action

The utility is terminated.

System programmer response

Examine the error message that was sent to the job log to determine the reason for the error. Check that the data set was correctly specified.

CSQU999E
Unrecognized message code *ccc*

Explanation

An unexpected error message code was issued by the utility.

System action

Processing continues.

System programmer response

Note the code *ccc* (which is shown in hexadecimal) and contact your IBM support center to report the problem.

Agent services messages (CSQV...)

CSQV086E
QUEUE MANAGER ABNORMAL TERMINATION REASON= *reason-code*

Explanation

The queue manager is ending abnormally, because an error that cannot be corrected has occurred. This message, which is not automatically deleted from the operator console, is issued during abnormal termination. *reason-code* is the termination reason code. If this abnormal termination is

invoked multiple times, the termination reason code that accompanies this message is the reason associated with the first invocation.

System action

Abnormal termination processing continues.

System programmer response

For additional information, look up the reason code in "IBM MQ for z/OS codes" on page 935.

This message is accompanied by one or more dumps. Obtain a copy of SYS1.LOGREC after the queue manager completely terminates, and the dumps. If you suspect an error in IBM MQ, see Troubleshooting and support for information about identifying and reporting the problem.

CSQV400I
ARCHIVE LOG QUIESCE CURRENTLY ACTIVE

Explanation

An ARCHIVE LOG MODE(QUIESCE) command is currently active. This message is part of the DISPLAY LOG or DISPLAY THREAD command report.

System action

This message is issued as information only. It indicates that the ARCHIVE LOG MODE(QUIESCE) command has not completed and, consequently, updates against IBM MQ resources have been temporarily suspended. This might result in active threads being suspended awaiting termination of the quiesce period. Processing otherwise continues normally.

CSQV401I
DISPLAY THREAD REPORT FOLLOWS -

Explanation

This message is issued as the title for the DISPLAY THREAD command report output. It precedes the other messages generated by this command:

- Message CSQV402I provides the formatted report when the detailed status of active threads is requested using TYPE(ACTIVE).
- Message CSQV432I provides the formatted report when the summary status of active threads is requested using TYPE(REGIONS).
- Message CSQV406I provides the formatted report when the status of in-doubt threads is requested using TYPE(INDOUBT).
- Message CSQV436I provides the formatted report when the status of in-doubt threads on another queue manager is requested using TYPE(INDOUBT) with QMNAME.

System action

Processing continues normally.

CSQV402I
ACTIVE THREADS -

Explanation

This message is the response to the DISPLAY THREAD TYPE(ACTIVE) command. It provides the status information for each active thread, as follows:

```
  NAME S T REQ THREAD-XREF USERID ASID URID  name s t req thread-xref userid asid urid :
DISPLAY ACTIVE REPORT COMPLETE
```

where:

name
    The connection name, which is one of the following:

- z/OS batch job name

- TSO user ID
- CICS APPLID
- IMS region name
- Channel initiator job name

s

Connection status code:

N

The thread is in IDENTIFY status.

T

The thread has issued CREATE THREAD.

Q

The CREATE THREAD request has been queued. The associated allied task is placed in a wait state.

C

The thread is queued for termination as a result of the termination of the associated allied task. If this thread is also the last (or only) IBM MQ thread for the address space, the associated allied task is placed in a wait state.

D

The thread is in the process of termination as a result of the termination of the associated allied task. If this thread is also the last (or only) IBM MQ thread for the address space, the associated allied task is placed in a wait state.

An asterisk is appended if the thread is active within IBM MQ.

t

Connection type code:

B

Batch: From an application using a batch connection

R

RRS: From an RRS-coordinated application using a batch connection

C

CICS: From CICS

I

IMS: From IMS

S

System: From an internal function of the queue manager or from the channel initiator.

req
A wraparound counter to show the number of IBM MQ requests.

thread-xref
The recovery thread cross-reference identifier associated with the thread.

userid
The user ID associated with a connection. If not signed-on, this field is blank.

asid
A hexadecimal number representing the ASID of the home address space.

urid
Unit of recovery identifier. This is the log RBA of the current unit of recovery associated with the thread. If there is no current unit of recovery, it is shown as 0000000000000000.

Exceptionally, the last line might be:

```
DISPLAY ACTIVE TERMINATED WITH MAX LINES
```

if the report was generated in response to a command from a z/OS console and more than 252 response messages were generated. Only 252 response messages are returned.

System action

Processing continues normally.

CSQV406I
INDOUBT THREADS -

Explanation

This message is the response to the DISPLAY THREAD TYPE(INDOUBT) command. It provides the status information for each in-doubt thread, as follows:

```
   NAME THREAD-XREF URID NID   name thread-xref urid origin-id :   DISPLAY INDOUBT REPORT
COMPLETE
```

where:

name
The connection name, which is one of the following:

- z/OS batch job name

- TSO user ID

- CICS APPLID

- IMS region name

- Channel initiator job name

thread-xref
The recovery thread cross-reference identifier associated with the thread. See Connecting from the IMS control region for more information.

urid
Unit of recovery identifier. This is the log RBA of the current unit of recovery associated with the thread. (This is omitted if the command was issued from a z/OS console with a non-specific connection name.)

origin-id
The origin identifier, a unique token identifying the unit of recovery within the queue manager. This has the form *origin-node.origin-urid*, where:

origin-node
A name that identifies the originator of the thread. (This is omitted for batch RRS connections.)

origin-urid
The hexadecimal number assigned to the unit of recovery for this thread by the originating system.

Exceptionally, the last line might be:

```
   DISPLAY INDOUBT TERMINATED WITH MAX LINES
```

if the report was generated in response to a command from a z/OS console and more than 252 in-doubt threads were eligible for display.

System action

Processing continues normally.

CSQV410I
NO ACTIVE CONNECTION FOUND FOR NAME=*connection-name*

Explanation

The DISPLAY THREAD command was unable to find any active connection associated with *connection-name*.

System action

Command processing continues.

CSQV411I
NO ACTIVE THREADS FOUND FOR NAME=*connection-name*

Explanation

The DISPLAY THREAD command was unable to locate any active threads associated with *connection-name*.

System action

Command processing continues.

CSQV412I
csect-name NO INDOUBT THREADS FOUND FOR NAME=connection name

Explanation

The DISPLAY THREAD command was unable to locate any in-doubt threads associated with *connection name*.

System action

Command processing continues.

CSQV413E
csect-name CONNECTION NAME MISSING

Explanation

A connection name was not supplied with the command, and a default connection name cannot be determined.

System action

Command processing terminates.

CSQV414I
THREAD NID=*origin-id* COMMIT SCHEDULED

Explanation

The thread specified by the recovery origin identifier *origin-id* is scheduled for COMMIT recovery action.

System action

Processing continues.

CSQV415I
THREAD NID=*origin-id* BACKOUT SCHEDULED

Explanation

The thread specified by the recovery origin identifier *origin-id* is scheduled for BACKOUT recovery action.

System action

Processing continues.

CSQV416E
THREAD NID=*origin-id* IS INVALID

Explanation

The RESOLVE INDOUBT command determined that the input format for the specified thread *origin-id* is invalid.

System action

Command processing continues.

CSQV417I
THREAD NID=*origin-id* NOT FOUND

Explanation

The RESOLVE INDOUBT command was unable to locate the thread specified by the recovery origin identifier *origin-id* to be scheduled for recovery. Either the thread identifier is incorrect, or the thread is no longer in an in-doubt state.

System action

Command processing continues.

CSQV419I
NO ACTIVE CONNECTIONS FOUND

Explanation

A DISPLAY THREAD(*) TYPE(ACTIVE) or TYPE(REGIONS) command was issued for all threads, but no active connections were found.

System action

Command processing continues.

CSQV420I
NO INDOUBT THREADS FOUND

Explanation

A DISPLAY THREAD(*) TYPE(INDOUBT) command was issued for all threads, but no in-doubt threads were found.

System action

Command processing continues.

CSQV423I
cmd MESSAGE POOL SIZE EXCEEDED

Explanation

The storage requirement needed to generate responses for the command *cmd* exceeded the maximum size of the message buffer pool.

System action

Processing is terminated.

CSQV424I
THREAD ID=*thread-xref* COMMIT SCHEDULED

Explanation

The thread specified by the recovery thread cross-reference identifier *thread-xref* is scheduled for COMMIT recovery action.

System action

Processing continues.

CSQV425I
THREAD ID=*thread-xref* BACKOUT SCHEDULED

Explanation

The thread specified by the recovery thread cross-reference identifier *thread-xref* is scheduled for BACKOUT recovery action.

System action

Processing continues.

CSQV427I
THREAD ID=*thread-xref* NOT FOUND

Explanation

The RESOLVE INDOUBT command was unable to locate the thread specified by the recovery thread cross-reference identifier *thread-xref* to be scheduled for recovery. Either the thread identifier is incorrect, or the thread is no longer in an in-doubt state.

System action

Command processing continues.

CSQV428I
CURRENT THREAD LIMIT OF *nnn* EXCEEDED. CREATE THREAD FOR JOB *jobname* DEFERRED

Explanation

A job requested a connection to the queue manager, but the current number of connections is the maximum allowed.

System action

The request for a connection is suspended, and waits until another connection ends.

System programmer response

If this situation occurs frequently, contact your IBM support center for assistance.

CSQV432I
ACTIVE THREADS -

Explanation

This message is the response to the DISPLAY THREAD TYPE(REGIONS) command. It provides the status information for each active connection, as follows:

```
  NAME TYPE USERID ASID THREADS   name type userid asid threads :  DISPLAY ACTIVE REPORT
COMPLETE
```

where:

name
The connection name, which is one of the following:

- z/OS batch job name
- TSO user ID
- CICS APPLID
- IMS region name
- Channel initiator job name

type
The connection type:

CICS
From CICS.

IMS
From IMS.

BATCH
From an application using a batch connection.

RRSBATCH
From an RRS-coordinated application using a batch connection.

CHINIT
From the channel initiator.

userid
The user ID associated with a connection. If not signed-on, this field is blank.

asid
A hexadecimal number representing the ASID of the home address space.

threads
The number of active threads associated with the connection. This excludes fixed internal threads, such as those for the CICS adapter tasks, or the channel initiator listeners.

Exceptionally, the last line might be:

```
DISPLAY ACTIVE TERMINATED WITH MAX LINES
```

if the report was generated in response to a command from a z/OS console and more than 252 response messages were generated. Only 252 response messages are returned.

System action

Processing continues normally.

CSQV433I
'QMNAME' NOT ALLOWED, NOT IN QUEUE-SHARING GROUP

Explanation

A DISPLAY THREAD TYPE(INDOUBT) or RESOLVE INDOUBT command specifying the QMNAME keyword was issued, but the requesting queue manager *qmgr-name* is not in a queue-sharing group or the requested queue manager *qmgr-name* is not a member of the queue-sharing group.

System action

Processing for the command is terminated.

CSQV434E
'QMNAME' ALLOWED ONLY WITH TYPE(INDOUBT)

Explanation

A DISPLAY THREAD command specifying the QMNAME keyword was issued, but TYPE(INDOUBT) was not specified.

System action

Processing for the command is terminated.

CSQV435I
QMNAME(qmgr-name) IS ACTIVE, COMMAND IGNORED

Explanation

A DISPLAY THREAD TYPE(INDOUBT) or RESOLVE INDOUBT command specifying the QMNAME keyword was issued, but the requested queue manager *qmgr-name* is active.

System action

Processing for the command is terminated.

CSQV436I
INDOUBT THREADS FOR *qmgr-name* -

Explanation

This message comprises the response to the DISPLAY THREAD TYPE(INDOUBT) command when the QMNAME keyword was specified. It provides the status information for each in-doubt unit-of-work on the requested queue manager; the information is displayed in the same format as in message CSQV406I.

System action

Processing continues normally.

CSQV437I
CANNOT RESOLVE THREAD NID=*origin-id*, SOME RESOURCES UNAVAILABLE

Explanation

The RESOLVE INDOUBT command was unable to schedule the thread specified by the recovery origin identifier *origin-id* for recovery, because not all the resources necessary for recovery were available.

System action

The identified thread will remain in-doubt.

CSQV450I
csect-name Unable to open *ddname* data set

Explanation

The *ddname* data set could not be opened, as reported in the preceding messages.

System action

Processing continues, but functions that require the data set will be inhibited. For example, if the exit library data set CSQXLIB cannot be opened, cluster workload user exits will not be available.

System programmer response

Investigate the problem reported in the preceding messages.

CSQV451I
csect-name Unable to get storage for exits, RC=*return-code*

Explanation

An attempt to obtain some storage for use by exits failed. *return-code* is the return code (in hexadecimal) from the z/OS STORAGE service.

System action

Processing continues, but cluster workload user exits will not be available.

System programmer response

Go to the appropriate volume of the *z/OS MVS Programming: Assembler Services Reference* manual for information about the return code from the STORAGE request.

CSQV452I
csect-name Cluster workload exits not available

Explanation

Cluster workload user exit functions will not be available, because:

- There is no CSQXLIB DD statement in the started task JCL procedure for the queue manager, xxxxMSTR
- The EXITTCB system parameter is zero.

System action

Processing continues, but cluster workload user exits will not be available.

System programmer response

If you want to use cluster workload exits, add the required statement to the queue manager started task JCL procedure and specify a non-zero value for the EXITTCB system parameter. For more information about cluster workload exits, see Cluster workload exit programming.

CSQV453I

csect-name Unable to load *module-name*, reason=*ssssrrrr*

Explanation

The queue manager was unable to load a module required for exits. *ssss* is the completion code and *rrrr* is the reason code (both in hexadecimal) from the z/OS LOAD service.

System action

Processing continues, but cluster workload user exits will not be available.

System programmer response

Check the console for messages indicating why the module was not loaded.

Go to the appropriate volume of the *z/OS MVS Programming: Assembler Services Reference* manual for information about the codes from the LOAD request.

Ensure that the module is in the required library, and that it is referenced correctly. The queue manager attempts to load this module from the library data sets under the STEPLIB DD statement of its started task JCL procedure xxxxMSTR.

CSQV455E

csect-name Cluster workload exit `exit-name` timed out

Explanation

A cluster workload user exit did not return to the queue manager within the allowed time, as specified by the EXITLIM system parameter.

System action

The exit is disabled until its load module in the CSQXLIB data set is refreshed.

System programmer response

Investigate why your exit is not returning in time.

CSQV456E

csect-name Cluster workload exit error, TCB=*tcb-name* reason=*sssuuu-reason*

Explanation

The exit subtask using TCB *tcb-name* is ending abnormally because an error that cannot be corrected has occurred in a cluster workload user exit. *sss* is the system completion code, *uuu* is the user completion code, and *reason* is the associated reason code (all in hexadecimal).

System action

The subtask ends abnormally, and a dump is normally issued. The exit is disabled until its load module in the CSQXLIB data set is refreshed.

System programmer response

User completion codes are generally the result of errors detected by the exit itself. If a system completion code is shown, see the *MVS System Codes* manual for information about the problem in your exit.

CSQV457E

csect-name Unable to establish ESTAE, RC=*return-code*

Severity
8

Explanation

During startup processing, the recovery environment for a cluster workload user exit task could not be set up. *return-code* is the return code (in hexadecimal) from the z/OS ESTAE service.

System action

The task does not start. Cluster workload user exits will be available providing at least one task starts.

System programmer response

See the *MVS Programming: Assembler Services Reference* manual for information about the return code from the ESTAE request. If you are unable to solve the problem, contact your IBM support center for assistance.

CSQV459I
csect-name Unable to free storage for exits, RC=*return-code*

Explanation

An attempt to release some storage that was used by exits failed. *return-code* is the return code (in hexadecimal) from the z/OS STORAGE service.

System action

Processing continues.

System programmer response

See the *MVS Programming: Assembler Services Reference* manual for information about the return code from the STORAGE request.

CSQV460I
csect-name Cluster workload exits are disabled but **CLWLEXIT** is set.

Explanation

A **CLWLEXIT** value is on the queue manager when it is started, however cluster workload exits are not enabled, and are prevented from operating.

System action

Message CSQV461D is issued, but **CLWLEXITs** are not enabled.

CSQV461D
csect-name

Reply Y to continue startup with CLWLEXIT not enabled, or N to shutdown.

Explanation

Issued after message CSQV460I. Due to a **CLWLEXIT** being set in the queue manager with cluster workload exits not enabled, a reply is required to continue startup with cluster workload exits not enabled.

System action

Queue manager startup waits for the reply from the operator. Replying Y allows the queue manager to continue startup with cluster workload exists not enabled. Replying N shuts down the queue manager with abend reason 00D40039.

While cluster workload exits are not enabled, the **CLWLEXIT** value can only be changed to a blank value, and the exit will not function. You should use the IBM MQ supplied workload balancing algorithm and attributes, to alter how objects are selected, and remove the **CLWLEXIT** value. See Workload balancing in clusters for more information.

For further information contact IBM Support.

Instrumentation facilities messages (CSQW...)

CSQW001I
ASYNCHRONOUSLY GATHERED DATA IS BEING FORMATTED

Explanation

The dump formatting exit is not using summary dump records for formatting. The formatted control blocks might not contain the same values as they did at the time of the error.

System action

Dump formatting continues.

System programmer response

If you want summary dump records to be used, do not specify the 'SUMDUMP=NO' operand on the MQ DUMP DISPLAY MAIN MENU (if you are using the dump display panels), or in the CSQWDMP verbexit (if you are using line mode IPCS).

CSQW002I
SUMMARY DUMP RECORDS ARE BEING FORMATTED

Explanation

The dump formatting exit is using MQ summary dump record information to format its control blocks.

System action

Dump formatting continues.

System programmer response

If you do not want MQ summary dump records to be used in formatting, specify the 'SUMDUMP=NO' and 'SUBSYS=subsystem name' on the MQ DUMP DISPLAY MAIN MENU (if you are using the dump display panels), or in the CSQWDMP verbexit (if you are using line mode IPCS). Both operands are required.

CSQW004E
ONE OR MORE OPERANDS ARE NOT VALID. FORMATTING TERMINATED

Explanation

An invalid operand was specified on the MQ DUMP DISPLAY MAIN MENU (if you are using the dump display panels), or in the CSQWDMP verbexit (if you are using line mode IPCS).

System action

The dump formatting exit terminates.

System programmer response

Correct the operand specified by message CSQW007E.

CSQW006E
THE ERLY BLOCK CANNOT BE ACCESSED OR IT IS INVALID

Explanation

The dump formatting exit could not locate its anchor block.

System action

The dump formatting exit terminates.

System programmer response

Specify 'SUBSYS=subsystem name', and 'SUMDUMP=NO' on the MQ DUMP DISPLAY MAIN MENU (if you are using the dump display panels), or in the CSQWDMP verbexit if you are using line mode IPCS.

CSQW007E
OPERAND IS NOT VALID: *xxxx*

Explanation

The specified operand was not a valid dump formatting operand.

System action

The dump formatting exit terminates.

System programmer response

Check the dump formatting operands.

CSQW008E
THE SCOM CANNOT BE ACCESSED OR IT IS INVALID

Explanation

An error was encountered while trying to retrieve the SCOM.

System action

The dump formatting exit terminates.

System programmer response

If 'SUMDUMP=NO' was specified on the MQ DUMP DISPLAY MAIN MENU (if you are using the dump display panels), or in the CSQWDMP verbexit (if you are using line mode IPCS) omit it and resubmit the request. Otherwise, specify this operand, and resubmit the request.

CSQW009E
THE ADDRESS SPACE REQUESTED IS NOT AVAILABLE

Explanation

The MQ control blocks for the address space specified could not be located.

System action

Formatting continues of any other requested dump segment.

System programmer response

Check the ASID specified. The ASID must be specified in hexadecimal.

CSQW010E
THE TRACE RMFT CANNOT BE ACCESSED OR IT IS INVALID

Explanation

The MQ trace table could not be located.

System action

Formatting of the MQ trace table is bypassed, and formatting continues of any other requested dump segment.

System programmer response

If 'SUMDUMP=NO' was specified try formatting the dump again using the summary dump because it could contain the information required to access this data.

If 'SUMDUMP=NO' was not specified, and the summary dump was used, try formatting the dump again specifying this option because the summary dump data could have been corrupted.

CSQW011I
A LARGER REGION SIZE IS REQUIRED FOR THIS JOB

Explanation

The dump formatting exit could not obtain a large enough work buffer to process the summary dump records.

System action

The dump formatting exit terminates.

System programmer response

Rerun the job, specifying a larger TSO region size (or a larger region size if running in batch).

CSQW013I
DMPW NOT FOUND IN SUMMARY DUMP

Explanation

The dump formatting exit was unable to locate the DMPW control block in the summary record portion of the dump data set. Because the DMPW provides the main anchor block for the dump formatter, processing is terminated.

System action

The dump formatting exit terminates.

System programmer response

Specify 'SUBSYS=xxxx' to identify which address space to format information for.

CSQW014I
REQUIRED SUMMARY DUMP RECORDS ARE NOT IN THIS DUMP. WILL ATTEMPT TO FORMAT FROM NON-SUMMARY DUMP

Explanation

Expected data could not be found in the summary dump. This message is issued for information only. Dump formatting continues.

System action

Formatting is attempted using information found from the full dump instead of the summary dump.

CSQW015I
SSCVT NOT LOCATED, CHECK THE SUBSYSTEM NAME SPECIFIED

Explanation

In a search through the SSCVT chain, a match of the subsystem name in the SSCVTs and the subsystem name specified was not found.

System action

Formatting for the named subsystem is not done.

System programmer response

Specify the subsystem name correctly.

CSQW016I
THE RMVT CANNOT BE ACCESSED OR IT IS INVALID

Explanation

The dump formatting exit could not locate the RMVT. The RMVT is required for formatting the MQ trace table and a number of other MQ control blocks.

System action

Formatting of the MQ trace table is bypassed, and formatting of other requested dump segments continues.

System programmer response

If 'SUMDUMP=NO' was specified try formatting the dump again using the summary dump because it could contain the information required to access this data.

If 'SUMDUMP=NO' was not specified, and the summary dump was used, try formatting the dump again specifying this option because the summary dump data could have been corrupted.

CSQW017E
MAXIMUM STACK LEVEL EXCEEDED

Explanation

This condition is usually caused by the MQ control block formatter looping. The stack array is depleted and can no longer accommodate control blocks.

System action

Dump formatting is terminated.

System programmer response

Contact your IBM support center.

CSQW018I
SUBSYS= SPECIFIED INCORRECTLY OR MISSING. REQUIRED IF SUMDUMP=NO SPECIFIED

Explanation

The 'SUMDUMP=NO' option was specified, but either the 'SUBSYS=' operand is missing, or it was incorrectly specified.

System action

Dump formatting is terminated.

System programmer response

Specify the name of the subsystem in the 'SUBSYS=' operand, and resubmit the request.

CSQW020I
UNSUCCESSFUL SEARCH FOR THE ERLY CONTROL BLOCK

Explanation

A key control block could not be located in the dump.

System action

Dump formatting is terminated.

System programmer response

Check that the 'SUBSYS=' operand was correctly specified, and resubmit the request.

CSQW022I
THE RESIDENT TRACE WAS NOT ACTIVE AT THE TIME OF DUMP

Explanation

Trace table formatting has been attempted, but no trace table existed at the time of the dump.

System action

Dump formatting continues with any other control blocks that were to be formatted.

CSQW023I
THE TRACE TABLE ENTRY IS OUT OF SEQUENCE OR OVERLAID

Explanation

A trace entry is overlaid by another trace entry of a different time stamp. This message is issued to flag an unrecognized trace entry. This error can occur if the dump is initiated by operator command, because the MQ address space continues to run while the dump is being taken.

System action

Formatting of the trace table continues.

CSQW024I
TRACE TABLE

Explanation

This identifies the start of the formatted trace table.

System action

Trace table formatting follows.

CSQW025I
ERROR ACCESSING THE TRACE TABLE

Explanation

A nonzero return code was returned from the storage access routine when accessing the trace table.

System action

Trace table formatting is bypassed.

CSQW026I
CONTROL BLOCK SUMMARY (ALL ADDRESS SPACES)

Explanation

This messages provides descriptive information about the type of formatting being produced.

System action

Dump formatting continues.

CSQW027I
CONTROL BLOCK SUMMARY (SINGLE ADDRESS SPACE)

Explanation

This messages provides descriptive information about the type of formatting being produced.

System action

Dump formatting continues.

CSQW028I
CONTROL BLOCK SUMMARY (LONG FORM GLOBAL)

Explanation

This messages provides descriptive information about the type of formatting being produced.

System action

Dump formatting continues.

CSQW029I
CONTROL BLOCK SUMMARY (SHORT FORM GLOBAL)

Explanation

This messages provides descriptive information about the type of formatting being produced.

System action

Dump formatting continues.

CSQW030E
DUMP ACCESS ERROR ACCESSING THE CONTROL BLOCK STRUCTURE TABLE IN THE DUMP

Explanation

A control block identifying the structure of MQ control blocks could not be found.

System action

Control block formatting is terminated.

System programmer response

Check the z/OS console to see if any messages were produced to indicate that there was a problem when the dump was taken. If you suspect an error in MQ, see Troubleshooting and support for information about reporting the problem.

CSQW032E
ERROR ACCESSING ANCHOR CONTROL BLOCK

Explanation

A control block cannot be accessed from the dump.

System action

Control block formatting is terminated.

System programmer response

Check the z/OS console to see if any messages were produced to indicate that there was a problem when the dump was taken. If you suspect an error in MQ, see Troubleshooting and support for information about reporting the problem.

CSQW033I
BEGINNING FORMATTING

Explanation

Formatting of MQ control blocks is beginning.

CSQW034I
TRACE TABLE AND GLOBAL BLOCKS ALREADY FORMATTED

Explanation

An indicative dump is being requested. The MQ trace table and the global blocks have already been formatted with first dump (full dump) for this abend dump (SNAP) invocation. These are, therefore, not formatted for this task.

CSQW035I
WARNING - NO TASK RELATED CONTROL BLOCKS FOR THIS TASK

Explanation

The task for which the dump is being requested is not identified to MQ. Task-related control blocks are not dumped. The MQ trace table and global blocks are dumped only if the SYSABEND DD statement is present and only if this is the first of the dumps (full dump) for this abend dump (SNAP) invocation.

System action

No MQ formatting is done for the specified task.

CSQW036I
CONTROL BLOCKS FOR TASKS ASSOCIATED WITH THE ABOVE RECOVERY COORDINATOR TASK

Explanation

The formatted blocks following this message are associated with tasks that have been identified to MQ with the 'recovery coordinator = no' option. These tasks might not have invoked SNAP, but they are associated with the task that did.

System action

The appropriate control blocks are formatted.

System programmer response

Examine the control blocks for relevant information.

CSQW037I
TASK RELATED CONTROL BLOCKS FOR THIS TASK

Explanation

The formatted blocks following this message are associated with the current task.

System action

The appropriate control blocks are formatted.

System programmer response

Examine the control blocks for relevant information.

CSQW038I
END OF FORMATTING

Explanation

Formatting of MQ control blocks is completed.

CSQW039I
FORMATTING COMPLETE FOR THIS DUMP

Explanation

The dump formatting exit has completed its processing for this dump data set.

CSQW041E
THE TAB CANNOT BE ACCESSED OR IT IS INVALID

Explanation

The MQ trace table anchor block could not be located.

System action

Formatting of the MQ trace table is bypassed, and formatting of any other requested dump segment continues.

System programmer response

If 'SUMDUMP=NO' was specified try formatting the dump again using the summary dump because it could contain the information required to access this data.

If 'SUMDUMP=NO' was not specified, and the summary dump was used, try formatting the dump again specifying this option because the summary dump data could have been corrupted.

Check the z/OS console to see if any messages were produced to indicate that there was a problem when the dump was taken. If you suspect an error in MQ, see Troubleshooting and support for information about reporting the problem.

CSQW042E
REQUIRED SUMMARY DUMP RECORDS ARE NOT IN THIS DUMP. RERUN SPECIFYING SUBSYS= PARAMETER

Explanation

The summary dump records were not found in the dump. When this occurs the dump formatter needs the subsystem name to be able to identify which address space is to be formatted.

System action

Dump formatting is terminated.

System programmer response

Rerun the formatting specifying the parameter the subsystem name (using 'SUBSYS=').

CSQW049I
OLDEST SLOT ADDRESS INVALID, FORMATTING TRACE TABLE FROM FIRST ENTRY

Explanation

There are several pointers in the control block that defines the trace. One points to the start of the storage that contains the trace data, one to the end, and one to the next free record. The formatter has detected that the pointer to the next free record is outside the range indicated by the pointers to the start and end of the storage.

System action

Dump formatting continues, but from the physical start of the trace table, not the oldest record.

System programmer response

If the time of day values are meaningful, and in sequence, scan down the formatted trace to find the latest trace record written.

CSQW050I

ssnm NO SDWA/LOGREC, ABN=*comp-reason*, U=*userid*, M=*module*, C=*compid.vrm.comp-function*

Explanation

This message provides the default SVC dump title (SDUMP) associated with the SYS1.DUMP data set, when an SDWA was unavailable during recovery processing. The individual variable fields contain:

Field
  Contents

ssnm
  MQ subsystem name

ABN
  The abend completion code, followed by the abend reason code

U
  The user ID for the individual subsystem user

M
  The function recovery routine responsible for the dump

C
  The component-ID

vrm
  The MQ version, release number, and modification level

comp-function
  The component-ID function

System action

Dump processing continues.

System programmer response

Since the SDWA provides important diagnostic information to assist in problem determination, the recovery environment at time of error should be examined to determine why an SDWA was not provided for this ABEND.

In a non-recovery environment, there might be valid reasons for the lack of an SDWA (for example, the operator could have initiated the dump).

CSQW051E

ERROR DURING DUMP PROCESSING

Explanation

This message is generated by the recovery routine of the SDUMP dump data gathering service when an error is encountered during dump processing.

System action

Processing of the SUMLSTA user storage areas is terminated, an SVC dump is requested, and control is returned to RTM.

System programmer response

This error is documented in a SYS1.LOGREC record. This message can be issued because of an error in the invocation of SDUMP, or because of an error in SDUMP itself, or during control block examination and access.

CSQW053I
VRA DIAGNOSTIC INFORMATION REPORT

Explanation

The variable recording area (VRA) is part of the system diagnostic work area (SDWA) and contains MQ diagnostic information. The VRA is extracted and displayed in this report.

For information about this report, see Troubleshooting and support .

System action

Dump formatting continues.

CSQW054I
NO VRA DATA RECORDED IN SDWA

Explanation

The SDWA obtained from the SYS1.DUMP data set contained no diagnostic information in the VRA.

System action

VRA report generation is bypassed, dump format processing continues.

CSQW055I
UNABLE TO LOCATE SDWA

Explanation

The z/OS summary dump data access service routine (IEAVTFRD) was unable to locate the SDWA in the summary data portion of the SYS1.DUMP data set. SVC dumps only contain an SDWA if they are initiated by MQ. If the dump was initiated by any other means (such as the operator) the SDWA will not be present.

System action

No VRA is produced, and dump formatting continues.

CSQW056I
VRA DIAGNOSTIC REPORT COMPLETE

Explanation

The dump formatter has completed processing of the VRA diagnostic report.

System action

Dump formatting continues.

CSQW059I
SUMMARY OF CONNECTED JOBS

Explanation

A summary of information about connected jobs follows.

System action

Job summary information follows.

CSQW060I
BEGIN SAVE AREA TRACE

Explanation

This message identifies the start of the MQ register save area trace report which appears in the formatted section of an MQ SVC dump. This report is useful for problem determination because it contains the save areas for the agent execution block (EB) in error, and all associated agent EBs, traced from the point of error and displayed in order of invocation.

System action

Save area trace format processing continues for the agent EB in error, and all associated agent EBs.

CSQW061I
SAVE AREA TRACE COMPLETE

Explanation

This message indicates that the MQ formatted save area trace report (CSQW060I) is complete.

System action

Dump formatting continues.

CSQW062I
R6 (*R6-contents*) DOES NOT CONTAIN A VALID EB ADDRESS

Explanation

During dump format processing of the MQ formatted save area trace report (CSQW060I), register 6 (R6) did not contain the address of a valid agent execution block (EB).

System action

Save area trace format processing is terminated for the current agent EB, and all prior EBs.

CSQW063E
name (*address*) ASID (*asid*) NOT FOUND IN DUMP

Explanation

During processing of the save area trace report (CSQW060I), a control block or save area was not found in the dump data set.

Because the dump formatter utilizes the MQ and z/OS control blocks defined under the *name* field of this message to locate individual register save areas, subsequent save areas located using the *named* control block or save area will not be displayed in the report.

name
Identifies the name of the control block or save area that was not found in the dump data set:

SA
Indicates a save area

ASCE
MQ address space control element

EB
MQ execution block

TCB
z/OS task control block

RB
z/OS request block

XSB
z/OS extended status block

PSA
z/OS prefix save area

SDWA
z/OS system diagnostic work area

STSV
z/OS SRB status save area

STKE
z/OS cross memory stack element

address
The address of the named control block or save area.

asid
The address space identifier associated with the control block or save area.

Due to the execution structures and environmental restrictions of selected MQ and z/OS control structures, some control blocks and save areas associated with these execution environments will not be included in the dump data set.

System action

Register save area trace format processing for the current save area chains is terminated. Subsequent save area processing will vary depending on the specific control block or save area that was available, and the MQ agent execution environments at the time of the error.

CSQW064I
ERROR BLOCK NOT FOUND IN DUMP

Explanation

The dump formatter was unable to format a control block because the storage could not be found.

System action

Dump formatting continues.

CSQW065I
ERROR BLOCK LENGTH INCORRECT

Explanation

During the formatting of a control block, a mismatch was found between the expected length and the value determined from the dump.

System programmer response

You might find this message helpful when solving a more serious problem because it might indicate that a control block has been corrupted.

CSQW066I
ERROR BLOCK ID INCORRECT

Explanation

Each control block type has a unique identifier for verification. During the formatting of the control block, a mismatch occurred between the value expected and the value found in the control block in the dump.

System programmer response

This message could indicate that storage has been overlaid, and you might find it helpful when solving a more serious problem because it might indicate that a control block has been corrupted.

CSQW067I
ERROR BLOCK CHAINED FROM THIS BLOCK NOT FOUND IN DUMP

Explanation

Control blocks can contain pointers to other control blocks. A control block pointed to by the current control block could not be found in the dump.

System programmer response

This message could indicate that storage has been overlaid, and you might find it helpful when solving a more serious problem. The control block pointed to will have error message CSQW064I associated with it.

CSQW068I
    ERROR BLOCK CHAINED FROM THIS BLOCK HAS INCORRECT ID

Explanation

Each control block type has a unique identifier for verification. During the formatting of a control block pointed to by the current control block, a mismatch occurred between the value expected and the value found in the control block in the dump.

System programmer response

This message could indicate that storage has been overlaid, and you might find it helpful when solving a more serious problem because it might indicate that a control block has been corrupted. The control block in error has error message CSQW066I associated with it.

CSQW069I
    ERROR BLOCK EYECATCHER INCORRECT

Explanation

Each control block type has a unique eyecatcher for verification. During the formatting of the control block, a mismatch occurred between the value expected and the value found in the control block in the dump.

System programmer response

This message could indicate that storage has been overlaid, and you might find it helpful when solving a more serious problem because it might indicate that a control block has been corrupted.

CSQW070I
    DUMP TITLE *dump-title*

Explanation

This shows the title of the dump.

CSQW072I
    ENTRY: MQ user parameter trace

Explanation

This message is inserted into the formatted MQ trace to indicate that the control block was traced on entry to MQ.

CSQW073I
    EXIT: MQ user parameter trace

Explanation

This message is inserted into the formatted MQ trace to indicate that the control block was traced on exit from MQ.

CSQW074I
    ERROR: MQ user parameter trace

Explanation

This message is inserted into the formatted MQ trace to indicate that the control block was traced because it was determined to be in error.

CSQW075I
    WARNING - data was truncated at 256 bytes

Explanation

This message is inserted into the formatted MQ trace when a control block has exceeded a 256 byte length limit.

CSQW076I
Return code was *mqrc*

Explanation

This message is inserted into the formatted MQ trace when an error has been detected. *mqrc* is the return code. Refer to API completion and reason codes for information about this code.

CSQW105E
ERROR DURING LOAD OR VALIDATION OF A CONTROL BLOCK STRUCTURE TABLE MODULE

Explanation

The MQ dump formatting facility cannot be used to format control blocks. An error occurred during the startup process while attempting to LOAD one of the Control Block Structures Table modules (CSQWDST1, CSQWDST2, CSQWDST3, and CSQWDST4) from the MQ program library.

System action

Queue manager startup processing continues.

System programmer response

If you expect to experience problems, stop your queue manager, resolve the problem, and restart. If you do not anticipate that this error will cause problems, you can stop and restart the queue manager at a convenient time.

CSQW108E
UNABLE TO AUTOMATICALLY START '*type*' TRACE

Explanation

System parameters indicated that an MQ trace should be started automatically during queue manager initialization, but the queue manager was unable to start the trace.

System action

Queue manager initialization continues.

System programmer response

Start the trace with the START TRACE command after queue manager initialization is complete.

CSQW109E
TRACE INITIALIZATION PARAMETERS UNAVAILABLE, DEFAULTS USED FOR '*type*' TRACE

Explanation

The trace function was unable to access the trace initialization parameters defined by the CSQ6SYSP macro. Default values as defined by that macro are assumed for trace parameters.

System action

Queue manager initialization continues.

System programmer response

Determine if the system parameter load module (the default version is called CSQZPARM) is missing or inaccessible. Trace can be started with the START TRACE command.

CSQW120E
DEST VALUE IS INVALID FOR '*type*' TRACE

Explanation

A trace command has been entered, but the specified destination value is not valid for the trace type requested.

System action

Processing for the TRACE command is terminated.

System programmer response

If a START TRACE command was entered, specify a valid destination for the trace. Otherwise, a DISPLAY TRACE command can be issued to determine what traces are currently active. See MQSC commands for information about valid destinations.

CSQW121E
CLASS VALUE IS INVALID FOR '*type*' TRACE

Explanation

A trace command has been entered, but the specified class value is not valid for the trace type requested.

System action

Processing for the TRACE command is terminated.

System programmer response

If a START TRACE command was entered, specify a valid class for the trace. Otherwise, a DISPLAY TRACE command can be issued to determine what options are currently active. See MQSC commands for information about valid classes.

CSQW122E
'*keyword*' IS NOT VALID FOR '*type*' TRACE

Explanation

A trace command has been entered, but *keyword* is not valid for the trace type specified.

System action

Processing for the TRACE command is terminated.

System programmer response

Either the named keyword must be omitted from the command, or a different type of trace must be specified. See MQSC commands for information about valid combinations of keywords and trace types.

CSQW123I
csect-name TRACE RECORDING HAS BEEN RESUMED ON *dest*

Explanation

dest destination has resumed acceptance of trace data after an error.

System action

Data recording is resumed.

CSQW124E
csect-name '*type*' TRACE TERMINATED RC=*code* RMID=*nn*

Explanation

During processing *type* trace, processing ended due to an error. A trace type of blank indicates all tracing has stopped. RMID, displayed in decimal, identifies the resource manager. For information on IBM MQ RMIDs, see the TRACE commands in MQSC commands.

code, displayed in hexadecimal, specifies the return, reason, or abend code associated with the action. Refer to "IBM MQ for z/OS codes" on page 935 for information about these codes.

Further collection of the named trace is stopped. If it is necessary to resume collection of the trace, a START TRACE command can be issued. However if another error is experienced, the problem should be resolved before starting the trace collection again.

System action

Processing for the named trace type is stopped. The message is not externalized by the functional recovery routine, but is output whenever an IFC event is driven at a later time. A trace type of blank indicates all tracing has stopped.

System programmer response

Investigate the reasons for the error. If necessary to collect the named trace, issue a START TRACE command to resume processing.

CSQW125E
MULTIPLE VALUES NOT ALLOWED FOR *keyword* AND *keyword*

Explanation

Multiple values were specified for both of the named keywords. At most one of these keywords is allowed multiple values on a single command.

System action

Processing for the command is terminated.

System programmer response

Reenter a valid command. See MQSC commands for additional information.

CSQW126E
'*type*' TRACE NOT ALLOWED, ACTIVE TRACE TABLE FULL

Explanation

The *type* trace cannot be started because the active trace table has reached the maximum number of active traces allowed.

System action

Processing for the command is terminated.

System programmer response

Use the DISPLAY TRACE command to see if an active trace could be stopped. An active trace must be stopped before any other start trace command will be processed.

CSQW127I
CURRENT TRACE ACTIVITY IS -

Explanation

This message is issued in response to the DISPLAY TRACE command. For each trace that is active, the message indicates the trace number, the type of trace, the class(es) within type, the destination(s) for the trace entries, the user ID, and the RMID(s), as follows:

```
TNO TYPE CLASS DEST USERID RMID   tno type class dest userid rmid :   END OF TRACE REPORT
```

The trace number *tno* can be:

01-03
A trace started automatically when the queue manager started, or a trace started by a START TRACE command.

04-32
A trace started by a START TRACE command.

00
The global trace started automatically when the channel initiator started.

Notes:

1. For TRACE(S) CLASS(4) (channel initiator statistics), the traces will only be gathered when the channel initiator is active and message CSQX128I has been output.

2. For TRACE(A) CLASS(4) (channel accounting), the traces will only be gathered when the channel initiator is active and message CSQX126I has been output.

CSQW130I
    '*type*' TRACE STARTED, ASSIGNED TRACE NUMBER *tno*

Explanation

In response to a command, or automatically during queue manager initialization, a *type* trace has been started and assigned the trace number *tno*. Multiple messages are possible when the start command specifies multiple user identifiers.

System action

Processing for the request continues. If the specified trace applies to the channel initiator, a request will be queued: see message CSQW152I.

CSQW131I
    STOP TRACE SUCCESSFUL FOR TRACE NUMBER(S) *tno*,...

Explanation

In response to a command, the trace number(s), *tno,...*, have been stopped. Up to five trace numbers can be listed. If more than five traces have been stopped, another CSQW131I message is sent.

System action

Processing for the request continues. If the specified trace applies to the channel initiator, a request will be queued: see message CSQW152I.

CSQW132I
    ALTER TRACE SUCCESSFUL FOR TRACE NUMBER *tno*

Explanation

The trace number *tno* has been altered.

System action

Processing for the request continues.

CSQW133E
    csect-name TRACE DATA LOST, *dest* NOT ACCESSIBLE RC=*code*

Explanation

The destination specified stopped accepting trace data during a trace. Some external condition caused the data rejection. The reason for the error is defined by the return code (RC). The value of *code* can be:

- The hexadecimal return code from SMF. See the *MVS System Management Facilities (SMF)* manual for the specific value.
- The hexadecimal return code from the GTF request

    04
        GTF trace and/or USR tracing is not active

- The hexadecimal return code from the SRV request

    10
        The serviceability routine is absent

    xx
        The serviceability routine return code

System action

Trace processing continues, although data is lost.

System programmer response

Investigate the GTF or SMF facility to determine why data is not being accepted. You can issue a START TRACE command to record the data at another destination. The DISPLAY TRACE command shows what types of data were recorded at the specified destination.

See the *MVS System Management Facilities (SMF)* manual for an explanation of the return code value.

CSQW135I
'*type*' TRACE ALREADY ACTIVE, TRACE NUMBER *tno*

Explanation

type trace was already active with trace number *tno*.

System action

Processing for the trace already in progress will continue.

CSQW137I
SPECIFIED TRACE NOT ACTIVE

Explanation

Either:

- A command requested action for a specific trace, but that trace could not be found in the active trace table.
- A command requested action for all traces, but there are no traces active.

System action

Processing for the command continues.

System programmer response

Issue an unqualified DISPLAY TRACE command (that is, DISPLAY TRACE(*) without any other keywords) to determine all the active trace entries.

CSQW138E
IFCID *ifcid-number* IS INVALID

Explanation

The specified IFCID number is outside the range of valid IFCID numbers or is an IFCID number which is not allowed on a trace command.

System action

Processing of the trace command is terminated before any trace functions are performed.

System programmer response

See the TRACE commands in MQSC commands and Line trace for more information.

CSQW144E
CHANNEL INITIATOR NOT ACTIVE

Explanation

TRACE(CHINIT) was specified, but the channel initiator is not active.

System action

The command is not actioned.

System programmer response

Issue the START CHINIT command to start the channel initiator, and reissue the command.

CSQW149E
RMID 231 IS OBSOLETE - USE TRACE(CHINIT)

Explanation

The command specifies RMID 231, which was formerly used for channel initiator traces, but is now obsolete. For channel initiator traces, specify TRACE(CHINIT).

System action

The command is not actioned.

System programmer response

Issue the command correctly. If both queue manager and channel initiator tracing is required, issue two separate commands.

CSQW152I
TRACE REQUEST FOR CHANNEL INITIATOR QUEUED

Explanation

Initial processing for a trace command has completed successfully. The command requires further action by the channel initiator, for which a request has been queued.

System action

A request has been queued for the channel initiator. Further messages will be produced when the command has been completed.

CSQW153E
csect-name STORAGE NOT AVAILABLE FOR NEW TRACE TABLE

Explanation

There is insufficient storage in ECSA for a new global trace table as requested by a previous SET SYSTEM TRACTBL command.

System action

Processing continues using the existing global trace table.

System programmer response

Investigate how ECSA storage is being used. Issue a further SET SYSTEM TRACTBL command to set the trace table size to an acceptable value.

CSQW200E
Error during STORAGE OBTAIN macro. Return code= *rc*

Explanation

The z/OS STORAGE macro was issued to obtain storage for the trace formatter. The request failed with return code *rc*.

System action

Formatting of control blocks stops, and a hexadecimal dump of the record is produced. (This might be only part of the logical record.)

System programmer response

See the *MVS Assembler Services Reference* manual for information about *rc*. You can usually resolve this problem by increasing the size of your TSO or batch region. When the problem has been solved, retry the operation.

CSQW201E
Error during STORAGE RELEASE macro. Return code= *rc*

Explanation

The z/OS STORAGE macro was issued to release some storage. The request failed with return code *rc*.

System action

Formatting of control blocks stops, and a hexadecimal dump of the record is produced. (This might be only part of the logical record.)

System programmer response

Try processing the dump again. If the problem persists, note the value of *rc*, and contact your IBM support center.

CSQW202E
Incomplete trace record detected

Explanation

A long trace record has been segmented, and the start record for the record currently being processed has not been processed.

This usually occurs when records within a time range have been selected for processing. The record with the start of segment flag is probably before the start of the selected time interval. This can also occur if the Generalized Trace Facility (GTF) is unable to write all records to the GTF data set.

System action

A hexadecimal dump of the record is produced, and formatting continues with the next record. (You will receive this message for each subsequent part of this logical record.)

System programmer response

Select a slightly earlier start time for your time interval (one tenth of a second for example) and retry the operation. If this is not successful, it is possible that your trace table has wrapped, and the start record has been overwritten.

CSQW204E
Internal error

Explanation

An internal error has occurred.

System action

A hexadecimal dump of the record is produced, and formatting continues with the next record. This message might be followed by message CSQW202E.

System programmer response

Try processing the dump again. If the problem persists, contact your IBM support center.

CSQW205E
Internal error

Explanation

An internal error has occurred.

System action

This, and all subsequent records are displayed in hexadecimal. IBM MQ trace formatting is suppressed.

System programmer response

Try processing the dump again. If the problem persists, contact your IBM support center.

CSQW206I
Accounting record

Explanation

This message identifies this record as an accounting record.

System action

A hexadecimal dump of the record is produced, and formatting continues with the next record.

CSQW207I

A Null Self Defining section was detected

Explanation

The MQ trace formatter has detected a self-defining section of zero length.

System action

Formatting continues with the next self-defining section.

CSQW208E

Invalid address detected

Explanation

The MQ trace formatter has been passed an invalid address. The address is in low storage.

System action

Formatting of the record is suppressed. Formatting continues with the next record.

CSQW209I

A null length data item was detected

Explanation

The MQ trace formatter detected a data item of zero length.

System action

Formatting continues with the next data item.

CSQW210E

Invalid record detected

Explanation

The format of a record was different from the format expected by the IBM MQ trace formatter.

System action

A hexadecimal dump is produced, and formatting continues with the next record.

System programmer response

Try processing the dump again. If the problem persists, contact your IBM support center.

CSQW701E

csect-name ENFREQ request failed, RC=*rc*

Explanation

A z/OS ENFREQ request failed. *rc* is the return code (in hexadecimal) from the request.

System action

Processing continues.

System programmer response

See the *z/OS MVS Authorized Assembler Services Reference* manual for information about the return codes from the ENFREQ LISTEN and ENFREQ DELETE requests.

Distributed queuing messages (CSQX...)

CSQX000I

IBM WebSphere MQ for z/OS V*n*

Severity

0

Explanation

This message is issued when the channel initiator starts, and shows the release level.

CSQX001I

csect-name Channel initiator starting

Severity

0

Explanation

The channel initiator address space is starting, in response to a START CHINIT command.

System action

Channel initiator startup processing begins. Message CSQX022I is sent when the startup process has completed.

CSQX002I

csect-name Queue-sharing group is *qsg-name*

Severity

0

Explanation

This is issued during channel initiator startup processing or in response to the DISPLAY CHINIT command if the queue manager that the channel initiator uses is in a queue-sharing group.

System action

Processing continues.

CSQX003I

csect-name Obsolete parameter module ignored

Severity

0

Explanation

The START CHINIT command specified a parameter module name using the PARM keyword. The use of a channel initiator parameter module is obsolete, so the name is ignored.

System action

Processing continues.

System programmer response

Channel initiator parameters are specified by queue manager attributes. Use the ALTER QMGR command to set the values you want.

CSQX004I

Channel initiator is using *mm* MB of local storage, *nn* MB are free

Explanation

Displays the amount of virtual storage currently used and available in the extended private region. Both values are displayed in megabytes (1048576 bytes), and are approximations.

This message is logged at channel initiator start and then either every hour if the usage does not change or when the memory usage changes (up or down) by more than 2%.

The amount of currently used extended private region storage is also given in the *qcctstus* field in the SMF 115, subtype 231, record.

System action

Processing continues.

System programmer response

No action is required at this time. However, a frequent occurrence of this message might be an indication that the system is operating beyond the optimum region for the current configuration.

CSQX005E

csect-name Channel initiator failed to start

Severity
8

Explanation

A severe error, as reported in the preceding messages, occurred during channel initiator startup processing.

System action

The channel initiator started task terminates.

System programmer response

Investigate the problem reported in the preceding messages.

CSQX006E

csect-name Channel initiator failed while stopping

Severity
8

Explanation

A severe error, as reported in the preceding messages, occurred during channel initiator termination processing.

System action

The channel initiator started task terminates.

System programmer response

Investigate the problem reported in the preceding messages.

CSQX007E

csect-name Unable to connect to queue manager *qmgr-name*, MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity
8

Explanation

An attempt by the channel initiator to connect to the queue manager was unsuccessful.

System action

If the error occurred during the channel initiator startup procedure, the channel initiator does not start. In other cases, the component where the error occurred (message channel agent, dispatcher, adapter subtask, SSL server subtask, repository manager, or listener) does not start and the function it provides is unavailable; in most cases, the end result is that the channel initiator terminates.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

If you are unable to solve the problem, contact your IBM support center.

CSQX008E

csect-name Unable to disconnect from queue manager *qmgr-name*, MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity
4

Explanation

An attempt by the channel initiator to disconnect from the queue manager was unsuccessful.

System action

Processing continues.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

If you are unable to solve the problem, contact your IBM support center.

CSQX009I

csect-name Channel initiator stopping

Severity
8

Explanation

A severe error, as reported in the preceding messages, occurred during channel initiator processing; the channel initiator is unable to continue.

System action

The channel initiator terminates.

System programmer response

Investigate the problem reported in the preceding messages.

CSQX010I

csect-name Channel initiator stopped

Severity
0

Explanation

The channel initiator terminated following an error, as reported in the preceding messages.

System action

None.

CSQX011I

csect-name Client attachment available

Severity
0

Explanation

Clients can be attached to and MQI channels can be used with the channel initiator.

System action

The channel initiator startup processing continues.

CSQX012E

csect-name Unable to open *ddname* data set

Severity
4

Explanation

The *ddname* data set could not be opened, as reported in the preceding messages.

System action

Processing continues, but functions that require the data set will be inhibited. For example, if the exit library data set CSQXLIB cannot be opened, user channel and channel auto-definition exits will not be available, and channels that use them will not start. If the error information data set CSQSNAP cannot be opened, the error information will be lost.

System programmer response

Investigate the problem reported in the preceding messages.

CSQX013I

csect-name Address conflict for listener, port *port* address *ip-address*, TRPTYPE=TCP INDISP=*disposition*

Severity
4

Explanation

A STOP LISTENER or START LISTENER command was issued specifying TRPTYPE(*trptype*) and INDISP(*disposition*), but that listener was already active for a port and IP address combination that conflicted with the requested port and IP address. If *ip-address* is '*', all IP addresses were requested.

The port and IP address combination specified must match a combination for which the listener is active. It cannot be a superset or a subset of that combination.

System action

None.

System programmer response

Reissue the command correctly if necessary.

CSQX014E

csect-name Listener exceeded channel limit, TRPTYPE=*trptype* INDISP=*disposition*

Severity
8

Explanation

The number of current channels using the indicated communications system *trptype* is the maximum allowed. The listener cannot accept an incoming request to start another channel; if the maximum is 0, the listener itself cannot start. (The name of the channel requested cannot be determined because the listener could not accept the request.) Current channels include stopped and retrying channels as well as active channels.

disposition shows which type of incoming requests the listener was handling:

QMGR
those directed to the target queue manager

GROUP
those directed to the queue-sharing group.

The maximum allowed is specified in the TCPCHL or LU62CHL queue manager attribute, but may be reduced if a dispatcher fails, or if TCP/IP resources are restricted (as reported by message CSQX118I).

System action

The channel or listener does not start.

System programmer response

If the maximum allowed is zero, communications using the indicated system *trptype* are not allowed, and no such channels can be started. The listener also cannot be started. If the maximum allowed is non-zero, wait for some of the operating channels to terminate before restarting the remote channel, or use the ALTER QMGR command to increase TCPCHL or LU62CHL.

CSQX015I

csect-name started dispatchers started, *failed* failed

Severity

0

Explanation

The channel initiator startup procedure has started the requested number of dispatchers; *started* dispatchers started successfully and *failed* dispatchers did not start.

System action

The channel initiator startup processing continues. The number of current TCP/IP and LU 6.2 channels allowed will be reduced proportionately if some dispatchers did not start.

System programmer response

If the message indicates that some dispatchers failed, investigate the problem reported in the preceding messages.

CSQX016I

csect-name Listener already started, TRPTYPE=*trptype* INDISP=*disposition*

Severity

0

Explanation

A START LISTENER command was issued specifying TRPTYPE(*trptype*) and INDISP(*disposition*), but that listener was already active.

System action

None.

CSQX017I

csect-name Listener already started, port *port* address *ip-address*, TRPTYPE=TCP TRPTYPE=TCP INDISP=*disposition*

Severity

0

Explanation

A START LISTENER command was issued specifying TRPTYPE(TCP) and INDISP(*disposition*), but that listener was already active for the requested port and IP address. If *ip-address* is '*', all IP addresses were requested.

System action

None.

CSQX018I

csect-name Listener already stopped or stopping, TRPTYPE=*trptype* INDISP=*disposition*

Severity

0

Explanation

A STOP LISTENER or START LISTENER command was issued specifying TRPTYPE(*trptype*) and INDISP(*disposition*), but that listener was already stopped or in the process of stopping.

System action

None.

CSQX019I

csect-name Listener already stopped or stopping, port *port* address *ip-address*, TRPTYPE=TCP INDISP=*disposition*

Severity

0

Explanation

A STOP LISTENER or START LISTENER command was issued specifying TRPTYPE(*trptype*) and INDISP(*disposition*), but that listener was already stopped or in the process of stopping for the requested port and IP address. If *ip-address* is '*', all IP addresses were requested.

System action

None.

CSQX020I

csect-name Shared channel recovery completed

Severity

0

Explanation

The channel initiator startup procedure has successfully completed the shared channel recovery process, for channels that were owned by itself and for channels that were owned by other queue managers.

System action

Processing continues.

System programmer response

See message CSQM052I issued by the queue manager for more details.

CSQX021E

csect-name Shared channel recovery error

Severity

0

Explanation

The channel initiator startup procedure did not complete the shared channel recovery process, because an error occurred.

System action

The recovery process is terminated; some channels might have been recovered, while others have not.

System programmer response

See the error messages (such as CSQM053E) issued by the queue manager for more details. When the problem has been resolved, either start any unrecovered channels manually, or restart the channel initiator.

CSQX022I

csect-name Channel initiator initialization complete

Severity

0

Explanation

Initialization of the channel initiator completed normally, and the channel initiator is ready for use. Note, however, that processing of the CSQINPX command data set might still be in progress; its completion is shown by message CSQU012I.

System action

None.

CSQX023I

csect-name Listener started, port *port* address *ip-address* TRPTYPE=*trptype* INDISP=*disposition*

Severity

0

Explanation

A listener has been started specifying TRPTYPE(*trptype*) and INDISP(*disposition*). This could either be because a START LISTENER command was issued, or because the listener was retrying. That listener is now active for the requested port and IP address. If *ip-address* is *, all IP addresses were requested.

System action

None.

CSQX024I

csect-name Listener stopped, port *port* address *ip-address* TRPTYPE=*trptype* INDISP=*disposition*

Severity

0

Explanation

A STOP LISTENER command was issued specifying TRPTYPE(*trptype*) and INDISP(*disposition*), or IBM MQ has tried to stop a listener because of a failure. That listener is no longer active for the requested port and IP address. If *ip-address* is *, all IP addresses were requested.

System action

None.

CSQX026E

csect-name Unable to locate the trace header, RC=12

Severity

8

Explanation

The trace formatting routine was unable to locate the trace control information in the trace data space in a dump of the channel initiator address space.

System action

Formatting terminates.

System programmer response

The most likely cause is that the dump has not been produced correctly. Re-create the dump, and try again.

CSQX027E

csect-name Unable to get storage, RC=*return-code*

Severity
8

Explanation

An attempt to obtain some storage failed. *return-code* is the return code (in hexadecimal) from the z/OS STORAGE service.

System action

The component where the error occurred (message channel agent, dispatcher, adapter subtask, SSL server subtask, listener, repository manager, supervisor, or trace formatter) usually terminates; in many cases, the end result will be that the channel initiator terminates.

System programmer response

Go to the appropriate volume of the *z/OS MVS Programming: Assembler Services Reference* manual for information about the return code from the STORAGE request.

CSQX028E

csect-name Unable to free storage, RC=*return-code*

Severity
8

Explanation

An attempt to release some storage failed. *return-code* is the return code (in hexadecimal) from the z/OS STORAGE service.

System action

The component where the error occurred (message channel agent, dispatcher, adapter subtask, SSL server subtask, repository manager, or listener) usually ignores the error and continues processing.

System programmer response

Go to the appropriate volume of the *z/OS MVS Programming: Assembler Services Reference* manual for information about the return code from the STORAGE request.

CSQX029I

csect-name Queue manager *qmgr-name* stopping, MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity
0

Explanation

In response to an MQ API call, the queue manager notified the channel initiator that it is stopping.

System action

The channel initiator terminates.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQX030I
csect-name '*type*' trace started, assigned trace number *tno*

Explanation

During channel initiator initialization, a *type* trace has been started automatically and assigned the trace number *tno*.

System action

Processing continues.

CSQX031E

csect-name Initialization command handler ended abnormally, reason=*00sssuuu*

Severity
8

Explanation

The initialization command handler, which processes the CSQINPX command data set, is ending abnormally. *sss* is the system completion code, and *uuu* is the user completion code (both in hexadecimal).

System action

The initialization command handler ends abnormally, but the channel initiator continues.

System programmer response

If a system completion code is shown, see the *MVS System Codes* manual for information about the problem; the message will normally be preceded by other messages giving additional information.

The most likely cause is erroneous definition of the CSQINPX and CSQOUTX data sets. For information about the initialization command handler and these data sets, see Initialization commands. If you are unable to solve the problem, contact your IBM support center.

CSQX032I

csect-name Initialization command handler terminated

Severity
4

Explanation

The initialization command handler, which processes the CSQINPX command data set, was terminated before completing all the commands because the channel initiator is stopping, and so cannot process any more commands.

System action

The initialization command handler ends.

System programmer response

Refer to the CSQOUTX data set for information about the commands that were processed. If the channel initiator is not stopping because of a STOP command, refer to the preceding messages for information about the problem causing it to stop.

For information about the initialization command handler, see Initialization commands.

CSQX033E

csect-name Channel initiator stopping because of errors

Severity
8

Explanation

A severe error, as reported in the preceding messages, occurred during channel initiator processing; the channel initiator is unable to continue.

System action

The channel initiator terminates.

System programmer response

Investigate the problem reported in the preceding messages.

CSQX034I

csect-name Channel initiator stopping because queue manager is stopping

Severity
0

Explanation

The queue manager notified the channel initiator that it is stopping.

System action

The channel initiator terminates.

CSQX035I

csect-name Connection to queue manager *qmgr-name* stopping or broken, MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity
0

Explanation

In response to an MQ API call, the channel initiator found that its connection to the queue manager was no longer available.

System action

The channel initiator terminates.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQX036E

csect-name Unable to open *object-type*(*name*), MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity
8

Explanation

An MQOPEN call for *name* was unsuccessful; *object-type* indicates whether *name* is a queue name, queue manager name, namelist name, channel name, topic name, or authentication information name. (The channel initiator can access channel definitions and authentication information as objects using the MQ API.)

System action

The component where the error occurred (message channel agent, dispatcher, adapter subtask, SSL server subtask, repository manager, listener, or supervisor) terminates. In the case of a message channel agent, the associated channel will be stopped.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

The most common cause of the problem will be that the channel and queue definitions are incorrect.

CSQX037E

csect-name Unable to get message from *name,* MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity

8

Explanation

An MQGET call for queue *name* was unsuccessful.

System action

The component where the error occurred (message channel agent, dispatcher, adapter subtask, SSL server subtask, repository manager, listener, or supervisor) terminates. In the case of a message channel agent, the associated channel will be stopped.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQX038E

csect-name Unable to put message to *name*, MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity

8

Explanation

An MQPUT call for queue *name* was unsuccessful.

System action

The component where the error occurred (message channel agent, dispatcher, adapter subtask, SSL server subtask, repository manager, listener, or supervisor) terminates. In the case of a message channel agent, the associated channel will be stopped.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQX039E

csect-name Unable to close *name*, MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity

4

Explanation

An MQCLOSE call for *name* was unsuccessful; *name* can be a queue name, queue manager name, namelist name, channel name, or authentication information name. (The channel initiator can access channel definitions and authentication information as objects using the IBM MQ API.)

System action

Processing continues.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQX040E

csect-name Unable to inquire attributes for *name*, MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity

8

Explanation

An MQINQ call for *name* was unsuccessful; *name* may be a queue name, queue manager name, namelist name, channel name, or authentication information name. (The channel initiator can access channel definitions and authentication information as objects using the MQ API.)

System action

The component where the error occurred (message channel agent, dispatcher, adapter subtask, SSL server subtask, repository manager, listener, or supervisor) terminates. In the case of a message channel agent, the associated channel will be stopped.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQX041E

csect-name Unable to set attributes for *name*, MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity
8

Explanation

An MQSET call for queue *name* was unsuccessful.

System action

The component where the error occurred (message channel agent, dispatcher, adapter subtask, SSL server subtask, listener, or supervisor) terminates. In the case of a message channel agent, the associated channel will be stopped.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQX042E

csect-name Unable to define *comp* to CTRACE, RC=*rc* reason=*reason*

Severity
8

Explanation

The CTRACE component definitions (for component *comp*) required by the channel initiator could not be defined. *rc* is the return code and *reason* is the reason code (both in hexadecimal) from the z/OS CTRACE service.

System action

The channel initiator does not start.

System programmer response

Go to the appropriate volume of the *z/OS MVS Programming: Assembler Services Reference* manual for information about the return code from the CTRACE request.

If you are unable to solve the problem, contact your IBM support center.

CSQX043E

csect-name Unable to delete *comp* from CTRACE, RC=*rc* reason=*reason*

Severity
4

Explanation

The CTRACE component definitions (for component *comp*) used by the channel initiator could not be deleted. *rc* is the return code and *reason* is the reason code (both in hexadecimal) from the z/OS CTRACE service.

System action

Channel initiator termination processing continues.

System programmer response

Go to the appropriate volume of the *z/OS MVS Programming: Assembler Services Reference* manual for information about the return code from the CTRACE request.

If you are unable to solve the problem, contact your IBM support center.

CSQX044E

csect-name Unable to initialize PC routines, RC=*rc* reason=*reason*

Severity
8

Explanation

The PC routines required by the channel initiator could not be defined. The reason code *reason* shows which z/OS service failed:

00E74007
　　LXRES failed

00E74008
　　ETCRE failed

00E74009
　　ETCON failed

rc is the return code (in hexadecimal) from the indicated z/OS service.

System action

The channel initiator does not start.

System programmer response

See the *MVS Authorized Assembler Services Reference* manual for information about the return codes from the z/OS services. If you are unable to solve the problem, contact your IBM support center.

CSQX045E
csect-name Unable to load *module-name*, reason=*ssssrrrr*

Explanation

The channel initiator was unable to load a required module. *ssss* is the completion code and *rrrr* is the reason code (both in hexadecimal) from the z/OS LOAD service.

System action

The component where the error occurred (message channel agent, dispatcher, adapter subtask, SSL server subtask, repository manager, or listener) does not start and the function it provides is unavailable; in many cases, the end result is that the channel initiator terminates.

System programmer response

Check the console for messages indicating why the module was not loaded. See the *MVS Programming: Assembler Services Reference* manual for information about the codes from the LOAD request.

Ensure that the module is in the required library, and that it is referenced correctly. The channel initiator attempts to load this module from the library data sets under the STEPLIB DD statement of its started task JCL procedure xxxxCHIN.

CSQX046E

csect-name Unable to initialize data conversion services, reason=*reason*

Severity
8

Explanation

The data conversion services required by the channel initiator could not be initialized. The reason code *reason* shows why:

00C10002
Unable to load modules

00C10003
Insufficient storage

other
Internal error

System action

The channel initiator does not start.

System programmer response

Check the console for messages indicating that a module was not loaded. Ensure that the module is in the required library, and that it is referenced correctly. The channel initiator attempts to load this module from the library data sets under the STEPLIB DD statement of its started task JCL procedure xxxxCHIN.

If you are unable to solve the problem, contact your IBM support center.

CSQX047E

csect-name Unable to commit messages for *name*, MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity
8

Explanation

An MQCMIT call involving messages for queue *name* was unsuccessful.

System action

The component where the error occurred (supervisor) terminates.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQX048I

csect-name Unable to convert message for *name*, MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity
0

Explanation

A message being put to an IMS bridge queue *name* required data conversion, but the conversion was not successful.

System action

The message is put without conversion, and processing continues.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQX049E

csect-name Unable to retrieve token for name *name*, RC=*rc*

Severity
8

Explanation

A token in a name/token pair required by the channel initiator could not be retrieved. *rc* is the return code (in hexadecimal) from the z/OS IEANTRT service.

System action

The channel initiator does not start.

System programmer response

Check the console for messages indicating why the module was not loaded.

Go to the appropriate volume of the *z/OS MVS Programming: Assembler Services Reference* manual for information about the return code from the IEANTRT request.

If you are unable to solve the problem, contact your IBM support center.

CSQX050E

csect-name Unable to create access list for queue manager, RC=*rc*

Severity
8

Explanation

The channel initiator could not create the necessary storage access list for the queue manager to use. *rc* is the return code (in hexadecimal) from the z/OS ALESERV service.

System action

The channel initiator does not start.

System programmer response

Go to the appropriate volume of the *z/OS MVS Programming: Assembler Services Reference* manual for information about the return code from the ALESERV request.

If you are unable to solve the problem, contact your IBM support center.

CSQX051E

csect-name Unable to share storage with the queue manager, RC=*rc*

Severity
8

Explanation

A request by the channel initiator to allow the queue manager to share some storage failed. *rc* is the return code (in hexadecimal) from the z/OS IARVSERV service.

System action

The channel initiator does not start.

System programmer response

Go to the appropriate volume of the *z/OS MVS Programming: Assembler Services Reference* manual for information about the return code from the IARVSERV request.

If you are unable to solve the problem, contact your IBM support center.

CSQX052E

csect-name Timer task attach failed, RC=*return-code*

Severity
8

Explanation

The repository manager task could not be attached. *return-code* is the return code (in hexadecimal) from the z/OS ATTACH service.

System action

The channel initiator terminates.

System programmer response

See the *MVS Programming: Assembler Services Reference* manual for information about the return code from the ATTACH request. If you are unable to solve the problem, contact your IBM support center.

CSQX053E

csect-name Error information recorded in CSQSNAP data set

Severity
8

Explanation

An internal error has occurred. Information about the error is written to the data set identified by the CSQSNAP DD statement of the channel initiator started task JCL procedure, xxxxCHIN.

System action

Processing continues.

System programmer response

Collect the items listed in the Problem Determination section and contact your IBM support center.

CSQX054E

csect-name Repository manager ended abnormally, reason=*sssuuu-reason*

Severity
8

Explanation

The repository manager is ending abnormally because an error that cannot be corrected has occurred. *sss* is the system completion code, *uuu* is the user completion code, and *reason* is the associated reason code (all in hexadecimal).

System action

The repository manager ends abnormally, and a dump is normally issued. The channel initiator will attempt to restart it.

System programmer response

User completion codes are generally the result of errors detected by the Language Environment; see the *Language Environment for z/OS Debugging Guide and Runtime Messages* for information about these codes. Otherwise, contact your IBM support center to report the problem.

CSQX055E

csect-name Repository manager attach failed, RC=*return-code*

Severity

8

Explanation

The repository manager task could not be attached. *return-code* is the return code (in hexadecimal) from the z/OS ATTACH service.

System action

The channel initiator terminates.

System programmer response

See the *MVS Programming: Assembler Services Reference* manual for information about the return code from the ATTACH request. If you are unable to solve the problem, contact your IBM support center.

CSQX056E

csect-name Preinitialization services request failed, function code=*func*, RC=*rc*

Severity

8

Explanation

A preinitialization services (CEEPIPI) call failed. *func* is the function code used (in decimal) and *rc* is the return code (in hexadecimal) from the call.

System action

The component where the error occurred (message channel agent or SSL server subtask) terminates. In the case of a message channel agent, the associated channel will be stopped.

System programmer response

See the *Language Environment for z/OS & VM Programming Guide* for information about the return code from the CEEPIPI call. If you are unable to solve the problem, contact your IBM support center.

CSQX057E

csect-name Cluster cache task attach failed, RC=*return-code*

Severity

8

Explanation

The channel initiator cluster cache task could not be attached. *return-code* is the return code (in hexadecimal) from the z/OS ATTACH service.

System action

The channel initiator terminates.

System programmer response

See the *MVS Programming: Assembler Services Reference* manual for information about the return code from the ATTACH request. If you are unable to solve the problem, contact your IBM support center.

CSQX058E

csect-name Pause service *service-name* failed, RC=*return-code*

Severity

8

Explanation

An error occurred processing a pause element. *return-code* is the return code (in hexadecimal) from the z/OS pause service *service-name*.

System action

The component where the error occurred (message channel agent, repository manager, cluster cache extension task,) usually terminates; in many cases, the end result will be that the channel initiator terminates.

System programmer response

See the *MVS Programming: Assembler Services Reference* manual for information about the return code from the request. If you are unable to solve the problem, contact your IBM support center.

CSQX059E

csect-name Unable to increase cluster cache

Severity
8

Explanation

The dynamic cluster cache cannot be increased because the channel initiator cluster cache task encountered an error.

System action

The channel initiator terminates.

System programmer response

Investigate the problem reported in any preceding messages.

CSQX060E

csect-name Queued Pub/Sub task attach failed, RC=*reason-code*

Severity
8

Explanation

The queued Publish/Subscribe task could not be attached. The *return-code* is the return code (in hexadecimal) from the z/OS ATTACH service.

System action

The channel initiator terminates.

System programmer response

See the *MVS Programming: Assembler Services Reference* manual for information about the return code from the ATTACH request. If you are unable to solve the problem, contact your IBM support center.

CSQX061E

csect-name Distributed Pub/Sub Offloader task attach failed, RC=*return-code*

Severity
8

Explanation

The Distributed Pub/Sub Offloader task could not be attached. *Return-code* is the return code (in hexadecimal) from the z/OS ATTACH service.

System action

The channel initiator terminates.

System programmer response

See the *MVS Programming: Assembler Services Reference* manual for information about the return code from the ATTACH request. If you are unable to solve this problem, contact your IBM support center.

CSQX062E

csect-name Distributed Pub/Sub tasks have insufficient command authority

Severity
8

Explanation

The PSMODE queue manager attribute has a value other than DISABLED but the channel initiator has insufficient authority to issue the DISPLAY PUBSUB command. Until such authority is granted, distributed publish/subscribe is unavailable.

System action

The channel initiator attempts to restart the distributed Pub/Sub tasks at 1 minute intervals. This message is issued on each subsequent attempt until the required authority has been granted or publish/subscribe is disabled.

System programmer response

Grant the channel initiator the required authority to access the command server queues and issue the DISPLAY PUBSUB command. For the required security definitions, see Security considerations for the channel initiator on z/OS. Alternatively, if no publish subscribe operation is required, setting the PSMODE queue manager attribute to DISABLED prevents this message from being issued.

CSQX063I

csect-name Distributed Pub/Sub Offloader started

Severity
0

Explanation

The Distributed Pub/Sub Offloader task has started successfully.

System programmer response

None

CSQX064I

csect-name Distributed Pub/Sub Offloader stopped

Severity
0

Explanation

The Distributed Pub/Sub command Offloader task has stopped. This can be for one of three reasons:

- The channel initiator is stopping.
- The channel initiator is starting and the queues used by the distributed pub/sub offloader have not been defined because distributed pub/sub command processing is not required.
- An error has occurred.

System action

Processing continues, but distributed pub/sub is not available.

System programmer response

If an error has occurred, investigate the problem reported in the preceding messages.

CSQX065E

csect-name Unexpected error in distributed pub/sub Offloader

Severity
8

Explanation

The Distributed Pub/Sub command Offloader encountered an unexpected error

System action

Distributed publish/subscribe might no longer be available.

System programmer response

Investigate the problem reported in the preceding messages. If there are none or this does not resolve the problem contact IBM support.

CSQX066E

csect-name Refresh proxy subscriptions failed

Severity
8

Explanation

A REFRESH QMGR TYPE(PROXYSUB) was issued, but could not complete. This could be because the Channel Initiator is shutting down, or as a result of an error.

System action

Processing continues, but remote subscriptions are not resynchronized.

System programmer response

If an error has occurred, investigate the problem reported in the preceding messages.

CSQX067E

csect-name Error removing non durable remote subscriptions

Severity
8

Explanation

The Pub/Sub Offloader task is ending but was unable to remove one or more remote proxy subscriptions. If no previous error has occurred, this is likely to have been triggered by Queue Manager shut down.

System action

Processing continues, but remote subscriptions might continue to exist which are no longer valid. This could cause a build-up of publications for this Queue Manager on remote transmission queues.

System programmer response

If the Queue Manager is to be restarted immediately, these subscriptions will be cleaned up when initial resynchronization with the cluster occurs. If this is not the case, proxy subscriptions might need to be manually removed using DELETE SUB on other Queue Managers in the cluster. Investigate the problem reported in the preceding messages to see why resynchronization failed.

CSQX068I
csect-name Channel initiator has scavenged *mm* MB of transmission buffers

Explanation

Displays the amount of virtual storage that has been freed by the channel initiator transmission buffer scavenger task. This virtual storage value is displayed in megabytes (1048576 bytes), and is an approximation.

This message is logged when the amount of virtual storage used by the channel initiator is more than 75%. If storage has been freed the CSQX004I message is issued.

System action

Processing continues.

System programmer response

No action is required at this time. However, a frequent occurrence of this message might indicate the system is operating beyond the optimum region for the current configuration.

CSQX070I

csect-name CHINIT parameters ...

Severity
0

Explanation

The channel initiator is being started with the parameter values shown in the following messages: CSQX071I, CSQX072I, CSQX073I, CSQX074I, CSQX075I, CSQX076I, CSQX078I, CSQX079I, CSQX080I, CSQX081I, CSQX082I, CSQX085I, CSQX090I, CSQX091I, CSQX092I, CSQX094I, CSQX099I.

System action

The channel initiator startup processing continues.

System programmer response

Channel initiator parameters are specified by queue manager attributes. Use the ALTER QMGR command to set the values you want.

CSQX093I

csect-name WLM/DNS is no longer supported

Severity
4

Explanation

The QMGR attribute DNSWLM is set to YES. This feature is no longer supported by z/OS Communications Server.

System action

Processing continues, but registration to the WLM/DNS server will not be attempted.

System programmer response

Issue the command

```
ALTER QMGR DNSWLM(NO)
```

and consider using Sysplex Distributor instead. See Establishing a TCP connection Using Sysplex Distributor.

CSQX100E

csect-name Dispatcher failed to start, TCB=*tcb-name*

Severity
8

Explanation

A severe error, as reported in the preceding messages, occurred during dispatcher startup processing.

System action

The channel initiator will attempt to restart the dispatcher. The number of current TCP/IP and LU 6.2 channels allowed will be reduced proportionately.

System programmer response

Investigate the problem reported in the preceding messages.

CSQX101E

csect-name Dispatcher unable to schedule essential process *process*

Severity
8

Explanation

During dispatcher startup processing, one of the essential dispatcher processes (named *process*) could not be scheduled.

System action

The dispatcher does not start.

System programmer response

The most likely cause is insufficient storage. If increasing the available storage does not solve the problem, contact your IBM support center.

CSQX102E

csect-name Dispatcher linkage stack error, TCB=*tcb-name*

Severity
8

Explanation

The dispatcher using TCB *tcb-name* found an inconsistency in the linkage stack.

System action

The dispatcher ends abnormally with completion code X'5C6' and reason code X'00E7010E', and a dump is issued. The channel initiator will attempt to restart it.

System programmer response

The most likely cause is incorrect use of the linkage stack by a user channel exit; exits must issue any MQ API calls and return to the caller at the same linkage stack level as they were entered. If exits are not being used, or if they do not use the linkage stack, contact your IBM support center to report the problem.

CSQX103E

csect-name Dispatcher unexpected error, TCB=*tcb-name* RC=*return-code*

Severity
8

Explanation

The dispatcher using TCB *tcb-name* had an internal error.

System action

The dispatcher ends abnormally with completion code X'5C6' and reason code X'00E7010F', and a dump is issued. The channel initiator will attempt to restart it.

System programmer response

Contact your IBM support center to report the problem.

CSQX104E

csect-name Unable to establish ESTAE, RC=*return-code*

Severity
8

Explanation

During startup processing, the recovery environment could not be set up. *return-code* is the return code (in hexadecimal) from the z/OS ESTAE service.

System action

The component that was starting (dispatcher, adapter subtask, SSL server subtask, supervisor, repository manager, or channel initiator itself) does not start.

System programmer response

See the *MVS Programming: Assembler Services Reference* manual for information about the return code from the ESTAE request. If you are unable to solve the problem, contact your IBM support center.

CSQX106E

csect-name Unable to connect to TCP/IP using USS, service '*serv*' RC=*return-code* reason=*reason*

Severity
4

Explanation

Use of TCP/IP with the UNIX System Services (USS) sockets interface was requested, but an error occurred. *return-code* and *reason* are the return and reason codes (both in hexadecimal) from the USS service *serv* that gave the error.

The most likely causes are:

- The user ID that the channel initiator uses is not set up correctly for use with USS. For example, it may not have a valid OMVS segment defined or its security profile may be incomplete.
- The TCPNAME queue manager attribute does not specify a valid TCP/IP stack name. These stack names are defined in the SUBFILESYSTYPE NAME parameter in member BPXPRMxx for SYS1.PARMLIB.
- The MAXFILEPROC or MAXPROCUSER parameter in member BPXPRMxx for SYS1.PARMLIB is too small.

System action

Processing continues, but communications using TCP/IP with the USS sockets interface will not be available.

System programmer response

See the *z/OS UNIX System Services Messages and Codes* manual for information about the codes from the service request.

CSQX110E

csect-name User data conversion exit error, TCB=*tcb-name* reason=*sssuuu-reason*

Severity
8

Explanation

A process for the dispatcher using TCB *tcb-name* is ending abnormally because an error that cannot be corrected has occurred in a user data conversion exit. *sss* is the system completion code, *uuu* is the user completion code, and *reason* is the associated reason code (all in hexadecimal).

System action

The process ends abnormally, and a dump is normally issued. The channel is stopped, and must be restarted manually.

System programmer response

User completion codes are generally the result of errors detected by the Language Environment; see the *Language Environment for z/OS Debugging Guide and Runtime Messages* for information about these codes. If a system completion code is shown, see the *MVS System Codes* manual for information about the problem in your exit.

CSQX111E

csect-name User channel exit error, TCB=*tcb-name* reason=*sssuuu-reason*

Severity
8

Explanation

A process for the dispatcher using TCB *tcb-name* is ending abnormally because an error that cannot be corrected has occurred in a user channel exit. *sss* is the system completion code, *uuu* is the user completion code, and *reason* is the associated reason code (all in hexadecimal).

System action

The process ends abnormally, and a dump is normally issued. The channel is stopped, and must be restarted manually. For auto-defined channels, the channel does not start.

System programmer response

User completion codes are generally the result of errors detected by the Language Environment; see the *Language Environment for z/OS Debugging Guide and Runtime Messages* for information about these codes. If a system completion code is shown, see the *MVS System Codes* manual for information about the problem in your exit.

CSQX112E

csect-name Dispatcher process error, TCB=*tcb-name* reason=*sssuuu-reason*

Severity
8

Explanation

A process run by the dispatcher using TCB *tcb-name* is ending abnormally because an error that cannot be corrected has occurred. *sss* is the system completion code, *uuu* is the user completion code, and *reason* is the associated reason code (all in hexadecimal).

System action

The process ends abnormally, and a dump is normally issued. If the process is a message channel agent, the channel is stopped, and will need to be restarted manually.

System programmer response

User completion codes are generally the result of errors detected by the Language Environment; see the *Language Environment for z/OS Debugging Guide and Runtime Messages* for information about these codes. If a system completion code is shown, and you are using user channel exits, check that your exit is setting its parameter lists correctly; otherwise, contact your IBM support center.

CSQX113E

csect-name Dispatcher ended abnormally, TCB=*tcb-name* reason=*sssuuu-reason*

Severity
8

Explanation

The dispatcher using TCB *tcb-name* is ending abnormally because an error that cannot be corrected has occurred. *sss* is the system completion code, *uuu* is the user completion code, and *reason* is the associated reason code (all in hexadecimal).

System action

The dispatcher ends abnormally, and a dump is normally issued. The channel initiator will attempt to restart it.

System programmer response

User completion codes are generally the result of errors detected by the Language Environment; see the *Language Environment for z/OS Debugging Guide and Runtime Messages* for information about these codes. Otherwise, contact your IBM support center.

CSQX114E

csect-name Dispatcher failed, reason=*reason*

Severity
8

Explanation

A dispatcher ended abnormally, as reported in the preceding messages, and could not be restarted. *reason* shows the type of failure:

0000000A
Startup error

0000000B
Linkage stack error

0000000D
Uncorrectable error

other
Completion code in the form 00*sssuuu*, where *sss* is the system completion code and *uuu* is the user completion code (both in hexadecimal).

System action

The channel initiator will attempt to restart the dispatcher. The number of current TCP/IP and LU 6.2 channels allowed will be reduced proportionately.

System programmer response

Investigate the problem reported in the preceding messages.

CSQX115E

csect-name Dispatcher not restarted - too many failures

Severity
8

Explanation

A dispatcher failed; because it had already failed too many times, the channel initiator did not attempt to restart it.

System action

The dispatcher is not restarted. The number of current TCP/IP and LU 6.2 channels allowed is reduced proportionately, and other processing capacity might be reduced.

System programmer response

Investigate the problems causing the dispatcher failures.

CSQX116I

csect-name Dispatcher restarted, *number* dispatchers active

Severity
0

Explanation

A dispatcher failed, but was successfully restarted by the channel initiator. *number* dispatchers are now active.

System action

Processing continues. The number of current TCP/IP and LU 6.2 channels allowed will be increased proportionately.

CSQX117I

csect-name Outgoing shared channels are restricted from starting for TCP communication

Severity
0

Explanation

A CHISERVP() service parm flag has been set which restricts the ability for this queue manager from being able to start an outgoing shared TCP channel. For more details on this flag contact IBM support. .

System action

Processing continues. This queue manager is unable to start outgoing shared TCP channels, and will not be selected during WebSphere MQ workload balanced start of a shared channel. This restriction persists until the flag is disabled and the channel initiator is restarted.

CSQX118I

csect-name TCP/IP channel limit reduced to *nn*

Severity
0

Explanation

This is issued during channel initiator startup processing and in response to the DISPLAY CHINIT command if the maximum number of current TCP/IP channels allowed is less than is specified in the TCPCHL queue manager attribute. This error can occur because:

- TCP/IP resources are restricted. The UNIX Systems Services MAXFILEPROC parameter (specified in the BPXPRMxx member of SYS1.PARMLIB) controls how many sockets each task is allowed: that is, how many channels each dispatcher is allowed

- Some dispatchers have failed and not been restarted; the number of current TCP/IP channels allowed is reduced proportionately

System programmer response

If TCP/IP resources are restricted, consider increasing either the UNIX Systems Services MAXFILEPROC parameter or the number of dispatchers if you need more current TCP/IP channels.

CSQX119I

csect-name LU 6.2 channel limit reduced to *nn*

Severity
0

Explanation

This is issued during channel initiator startup processing and in response to the DISPLAY CHINIT command if the maximum number of current LU 6.2 channels allowed is less than is specified in the

LU62CHL queue manager attribute. This can occur because some dispatchers have failed and not been restarted; the number of current LU 6.2 channels allowed will be reduced proportionately.

CSQX120I

csect-name Shared channel recovery started for channels owned by this queue manager

Severity

0

Explanation

The channel initiator startup procedure is starting the shared channel recovery process, for channels that are owned by itself.

System action

Processing continues

System programmer response

See message CSQM052I issued by the queue manager for more details.

CSQX121I

csect-name Shared channel recovery started for channels owned by other queue managers in the same QSG

Severity

0

Explanation

The channel initiator startup procedure is starting the shared channel recovery process, for channels that are owned by other queue managers.

System action

Processing continues

System programmer response

See message CSQM052I issued by the queue manager for more details.

CSQX122E

csect-name Failed to process channel accounting, RC=*retcode*

Severity

8

Explanation

The channel initiator SMF task encountered an error processing channel accounting data. *retcode* contains the hexadecimal return code.

System action

Processing continues.

System programmer response

Contact your IBM Support Center.

CSQX123E

csect-name Failed to process channel initiator statistics, RC=*retcode*

Severity

8

Explanation

The channel initiator SMF task encountered an error processing channel initiator statistics data. *retcode* contains the hexadecimal return code.

System action

Processing continues.

System programmer response

Contact your IBM Support Center.

CSQX124E

csect-name SMF task ended abnormally, RC=*retcode*, reason=*reason*

Severity
8

Explanation

The channel initiator SMF task ended abnormally. Possible values for *reason* are:

C59592
The channel initiator failed to notify the SMF task to shutdown. *retcode* is the return code from the z/OS IEAVRLS service.

C59593
The SMF task encountered an error entering, or resuming from, the paused state. *retcode* is the return code from the z/OS IEAVPSE service.

C59594
During initialization of the SMF task an error occurred obtaining a pause element token (PET). *retcode* is the return code from the z/OS IEAVAPE service.

C59595
During initialization of the SMF task an error occurred obtaining storage.

System action

The channel initiator attempts to reattach the SMF task, unless the error occurred during:

- Channel initiator shutdown
- Obtaining storage (reason C59595)

System programmer response

For reason C59595, check MEMLIMIT for the channel initiator, or refer to the 256MB recommended limit.

For the other reasons, contact your IBM Support Center.

CSQX126I

csect-name Channel accounting collection started

Severity
0

Explanation

The channel initiator has started collecting channel accounting data.

System action

Channel accounting data for channels with STATCHL (HIGH|MED|LOW) is collected and written to the System Management Facility (SMF).

CSQX127I

csect-name Channel accounting collection stopped

Severity

0

Explanation

The channel initiator has stopped collecting channel accounting data.

System action

Channel accounting data that has been collected for channels with STATCHL (HIGH|MED|LOW) is written to the System Management Facility (SMF).

CSQX128I

csect-name Channel initiator statistics collection started

Severity

0

Explanation

The channel initiator has started collecting channel initiator statistics data.

System action

Channel initiator statistics data is collected and written to the System Management Facility (SMF).

CSQX129I

csect-name Channel initiator statistics collection stopped

Severity

0

Explanation

The channel initiator has stopped collecting channel initiator statistics data.

System action

Channel initiator statistics data that has been collected is written to the System Management Facility (SMF).

CSQX140E

csect-name Adapter failed to start

Severity

8

Explanation

A severe error, as reported in the preceding messages, occurred during adapter subtask startup processing.

System action

The channel initiator will attempt to restart the adapter subtask.

System programmer response

Investigate the problem reported in the preceding messages.

CSQX141I

csect-name started adapter subtasks started, *failed* failed

Severity

0

Explanation

The channel initiator startup procedure has started the requested number of adapter subtasks; *started* adapter subtasks started successfully and *failed* adapter subtasks did not start.

System action

The channel initiator startup processing continues.

System programmer response

If the message indicates that some adapter subtasks failed, investigate the problem reported in the preceding messages.

CSQX142E

csect-name Adapter subtask failed to start, TCB=*tcb-name*

Severity
8

Explanation

A severe error, as reported in the preceding messages, occurred during adapter subtask startup processing.

System action

The channel initiator will attempt to restart the adapter subtask.

System programmer response

Investigate the problem reported in the preceding messages.

CSQX143E

csect-name Adapter subtask ended abnormally, TCB=*tcb-name* reason=*sssuuu-reason*

Severity
8

Explanation

The adapter subtask using TCB *tcb-name* is ending abnormally because an error that cannot be corrected has occurred. *sss* is the system completion code, *uuu* is the user completion code, and *reason* is the associated reason code (all in hexadecimal).

System action

The adapter subtask ends abnormally, and a dump is normally issued. The channel initiator will attempt to restart it.

System programmer response

If you are using user channel exits, check that your exit is setting its parameter lists correctly. User completion codes are generally the result of errors detected by the Language Environment; see the *Language Environment for z/OS Debugging Guide and Runtime Messages* for information about these codes. Otherwise, contact your IBM support center.

CSQX144E

csect-name Adapter subtask attach failed, RC=*return-code*

Severity
8

Explanation

An adapter subtask could not be attached. *return-code* is the return code (in hexadecimal) from the z/OS ATTACH service.

System action

The adapter subtask is not restarted.

System programmer response

See the *MVS Programming: Assembler Services Reference* manual for information about the return code from the ATTACH request. If you are unable to solve the problem, contact your IBM support center.

CSQX145E

csect-name Adapter subtask not restarted - too many failures

Severity
8

Explanation

An adapter subtask failed; because it had already failed too many times, the channel initiator did not attempt to restart it.

System action

The adapter subtask is not restarted; processing capacity might therefore be reduced.

System programmer response

Investigate the problems causing the adapter subtask failures.

CSQX146I

csect-name Adapter subtask restarted, *active* subtasks active

Severity
0

Explanation

A adapter subtask failed, but was successfully restarted by the channel initiator. *active* adapter subtasks are now active.

System action

Processing continues.

CSQX150E

csect-name SSL server failed to start

Severity
8

Explanation

A severe error, as reported in the preceding messages, occurred during SSL server subtask startup processing.

System action

The channel initiator will attempt to restart the SSL server subtask.

System programmer response

Investigate the problem reported in the preceding messages.

CSQX151I

csect-name started SSL server subtasks started, *failed* failed

Severity
0

Explanation

The channel initiator startup procedure has started the requested number of SSL server subtasks; *started* SSL server subtasks started successfully and *failed* SSL server subtasks did not start.

System action

The channel initiator startup processing continues.

System programmer response

If the message indicates that some SSL server subtasks failed, investigate the problem reported in the preceding messages.

CSQX152E

csect-name SSL server subtask failed to start, TCB=*tcb-name*

Severity
8

Explanation

A severe error, as reported in the preceding messages, occurred during SSL server subtask startup processing.

System action

The channel initiator will attempt to restart the SSL server subtask.

System programmer response

Investigate the problem reported in the preceding messages.

CSQX153E

csect-name SSL server subtask ended abnormally, TCB=*tcb-name* reason=*sssuuu-reason*

Severity
8

Explanation

The SSL server subtask using TCB *tcb-name* is ending abnormally because an error that cannot be corrected has occurred. *sss* is the system completion code, *uuu* is the user completion code, and *reason* is the associated reason code (all in hexadecimal).

System action

The SSL server subtask ends abnormally, and a dump is normally issued. The channel initiator will attempt to restart it.

System programmer response

If you are using user channel exits, check that your exit is setting its parameter lists correctly. User completion codes are generally the result of errors detected by the Language Environment; see the *Language Environment for z/OS Debugging Guide and Runtime Messages* for information about these codes. Otherwise, contact your IBM support center.

CSQX154E

csect-name SSL server subtask attach failed, RC=*return-code*

Severity
8

Explanation

An SSL server subtask could not be attached. *return-code* is the return code (in hexadecimal) from the z/OS ATTACH service.

System action

The SSL server subtask is not restarted.

System programmer response

See the *MVS Programming: Assembler Services Reference* manual for information about the return code from the ATTACH request. If you are unable to solve the problem, contact your IBM support center.

CSQX155E

csect-name SSL server subtask not restarted - too many failures

Severity
8

Explanation

An SSL server subtask failed; because it had already failed too many times, the channel initiator did not attempt to restart it.

System action

The SSL server subtask is not restarted; processing capacity might therefore be reduced.

System programmer response

Investigate the problems causing the SSL server subtask failures.

CSQX156I

csect-name SSL server subtask restarted, *active* subtasks active

Severity
0

Explanation

A SSL server subtask failed, but was successfully restarted by the channel initiator. *active* SSL server subtasks are now active.

System action

Processing continues.

CSQX160E

csect-name SSL communications unavailable

Severity
4

Explanation

SSL communications are requested but an error, as reported in the preceding messages, occurred during channel initiator startup processing.

System action

Processing continues.

System programmer response

Investigate the problem reported in the preceding messages. If you do not want to use SSL communications, set the SSLTASKS queue manager attribute to 0.

CSQX161E

csect-name SSL key repository name not specified

Severity
4

Explanation

SSL communications are requested but no SSL key repository name is specified; that is, the SSLTASKS queue manager attribute is non-zero, but the SSLKEYR queue manager attribute is blank.

System action

Processing continues, but communications using SSL will not be available.

System programmer response

Use the ALTER QMGR command to specify a name for the SSL key repository with the SSLKEYR attribute, and restart the channel initiator. If you do not want to use SSL communications, set the SSLTASKS queue manager attribute to 0.

CSQX162E

csect-name SSL CRL namelist is empty or wrong type

Severity

4

Explanation

SSL communications are requested but the SSL authentication namelist specified by the SSLCRLNL queue manager attribute is empty or not of type AUTHINFO.

System action

If this message is displayed during CHINIT startup, then MQ communications using SSL are not available.

If the message is displayed after a change to the existing MQ SSL configuration and issuing the REFRESH SECURITY TYPE(SSL) command, then the changed MQ SSL configuration is rejected and the current MQ SSL configuration remains in force. This is to prevent a set of valid and working MQ SSL definitions being inadvertently deactivated by an incorrect change.

Processing continues.

System programmer response

Correct the definitions of the namelist, and start the channel initiator again. If you do not want to use SSL communications, set the SSLTASKS queue manager attribute to 0.

CSQX163I

csect-name SSL CRL namelist has too many names - first *n* used

Severity

4

Explanation

The SSL authentication namelist specified by the SSLCRLNL queue manager attribute has more names than are supported. The number supported is *n*.

System action

Processing continues; the excess names are ignored.

System programmer response

Correct the definitions of the namelist.

CSQX164E

csect-name Unable to access SSL key repository

Severity

4

Explanation

The SSL key repository, with a name that is specified by the SSLKEYR queue manager attribute, could not be accessed.

The most likely causes are:

- The specified key repository does not exist.
- The channel initiator does not have permission to read the specified key repository.
- The channel initiator was unable to connect to the LDAP server specified in an authentication information object listed in the SSL CRL namelist.
- When using shared key rings, the name is not prefixed with 'userid/'.

System action

Processing continues, but communications using SSL will not be available. Channels using SSL communications will not start.

System programmer response

Check that:

- the SSL key repository name is specified correctly; if using a shared key ring, it is prefixed with 'userid/'
- the key ring specified as the SSL key repository exists, and the channel initiator has permission to read it
- the LDAP name is specified correctly and that it is available.

For more information, refer to System SSL RC 202.

CSQX165I

csect-name SSL key repository refresh already in progress

Severity
0

Explanation

A REFRESH SECURITY TYPE(SSL) command was issued, but an SSL key repository refresh was already in progress.

System action

The command is ignored. The refresh currently in progress continues.

CSQX166E

csect-name AuthInfo *auth-info-name* has wrong type

Severity
4

Explanation

The SSL authentication namelist specified by the SSLCRLNL queue manager attribute contains the name of an authentication information object that has an AUTHTYPE of OCSP.

System action

Processing continues, but communications using SSL will not be available.

System programmer response

Correct the definitions supplied in the namelist so that only authentication information objects with AUTHTYPE of CRLLDAP are named, and restart the channel initiator. If you do not want to use SSL communications, set the SSLTASKS queue manager attribute to 0.

CSQX179I

csect-name Channel *channel-name* message reallocation is in progress, *msg-progress* messages of *msg-total* processed

Severity
0

Explanation

The channel *channel-name* is currently in message reallocation and the progression of this processing is *msg-progress* message processed out of *msg-total* number of messages total to be processed.

System action

The channel continues to reallocate messages. This process can take some time to complete if there are a large number of messages assigned to the channel on its transmission queue. An increase in CPU utilization might be observed during this time. Upon completion of the reallocation process the channel ends.

System programmer response

If reallocation is not required, for example because the destination queue manager is now available, reallocation can be interrupted using the command STOP CHANNEL MODE(FORCE).

CSQX180I

csect-name Channel *channel-name* completed message reallocation, *msg-processed* messages processed

Severity
0

Explanation

The channel *channel-name* has completed message reallocation processing, and processed *msg-processed* number of messages during this processing.

System action

The channel reallocation for this channel has finished and the channel ends.

System programmer response

Determine if messages have been successfully reallocated, and if the channel can be started again.

CSQX181E

csect-name Invalid response *response* set by exit *exit-name*

Severity
8

Explanation

The user exit *exit-name* returned an invalid response code (*response*, shown in hexadecimal) in the *ExitResponse* field of the channel exit parameters (MQCXP).

System action

Message CSQX190E is issued giving more details, and the channel stops. For auto-defined channels, the channel does not start.

System programmer response

Investigate why the user exit program set an invalid response code.

CSQX182E

csect-name Invalid secondary response *response* set by exit *exit-name*

Severity
8

Explanation

The user exit *exit-name* returned an invalid secondary response code (*response*, shown in hexadecimal) in the *ExitResponse2* field of the channel exit parameters (MQCXP).

System action

Message CSQX190E is issued giving more details, and the channel stops. For auto-defined channels, the channel does not start.

System programmer response

Investigate why the user exit program set an invalid secondary response code.

CSQX184E

csect-name Invalid exit buffer address *address* set by exit *exit-name*

Severity
8

Explanation

The user exit *exit-name* returned an invalid address for the exit buffer when the secondary response code in the *ExitResponse2* field of the channel exit parameters (MQCXP) is set to MQXR2_USE_EXIT_BUFFER.

System action

Message CSQX190E is issued giving more details, and the channel stops. For auto-defined channels, the channel does not start.

System programmer response

Investigate why the user exit program set an invalid exit buffer address. The most likely cause is failing to set a value, so that it is 0.

CSQX187E

csect-name Invalid header compression value set by exit *exit-name*

Severity
8

Explanation

The user exit *exit-name* returned a header compression value that was not one of those which were negotiated as acceptable when the channel started.

System action

Message CSQX190E is issued giving more details, and the channel stops. For auto-defined channels, the channel does not start.

System programmer response

Investigate why the user exit program set an invalid value. If necessary, alter the channel definitions so that the desired compression value is acceptable.

CSQX188E

csect-name Invalid message compression value set by exit *exit-name*

Severity
8

Explanation

The user exit *exit-name* returned a message compression value that was not one of those which were negotiated as acceptable when the channel started.

System action

Message CSQX190E is issued giving more details, and the channel stops. For auto-defined channels, the channel does not start.

System programmer response

Investigate why the user exit program set an invalid value. If necessary, alter the channel definitions so that the desired compression value is acceptable.

CSQX189E

csect-name Invalid data length *length* set by exit *exit-name*

Severity
8

Explanation

The user exit *exit-name* returned a data length value that was not greater than zero.

System action

Message CSQX190E is issued giving more details, and the channel stops. For auto-defined channels, the channel does not start.

System programmer response

Investigate why the user exit program set an invalid data length.

CSQX190E

csect-name Channel *channel-name* stopping because of error in exit *exit-name,* Id=*ExitId* reason=*ExitReason*

Severity
8

Explanation

The user exit *exit-name* invoked for channel *channel-name* returned invalid values, as reported in the preceding messages. *ExitId* shows the type of exit:

11
    MQXT_CHANNEL_SEC_EXIT, security exit

12
    MQXT_CHANNEL_MSG_EXIT, message exit

13
    MQXT_CHANNEL_SEND_EXIT, send exit

14
    MQXT_CHANNEL_RCV_EXIT, receive exit

15
    MQXT_CHANNEL_MSG_RETRY_EXIT, message retry exit

16
    MQXT_CHANNEL_AUTO_DEF_EXIT, auto-definition exit

and *ExitReason* shows the reason for invoking it:

11
    MQXR_INIT, initialization

12
    MQXR_TERM, termination

13
    MQXR_MSG, process a message

14
    MQXR_XMIT, process a transmission

15
    MQXR_SEC_MSG, security message received

16

MQXR_INIT_SEC, initiate security exchange

17

MQXR_RETRY, retry a message

18

MQXR_AUTO_CLUSSDR, auto-definition of cluster-sender channel

28

MQXR_AUTO_CLUSRCVR, auto-definition of cluster-receiver channel

System action

The channel stops. The associated transmission queue may be set to GET(DISABLED) and triggering turned off. For auto-defined channels, the channel does not start.

System programmer response

Investigate why the user exit program set invalid values.

CSQX191I

csect-name Channel *channel-name* beginning message reallocation

Severity
0

Explanation

The channel *channel-name* is entering message reallocation because it cannot currently deliver messages to the destination queue manager.

System action

Messages that are not bound to a particular queue manager will be workload balanced. This may take some time if there are a large number of messages assigned to this channel. Check how many using the **DISPLAY CHSTATUS(***channel-name***) XQMSGSA** command.

System programmer response

If reallocation is not desired, for example because the destination queue manager is now available, reallocation can be interrupted using **STOP CHANNEL MODE(FORCE)**.

CSQX192E

csect-name Channel *channel-name* unable to stop, message reallocation in progress

Severity
8

Explanation

A request to stop channel *channel-name* was made, but the channel cannot stop immediately because message reallocation is taking place.

System action

The channel continues to reallocate messages. This process can take some time to complete if there are a large number of messages assigned to the channel on its transmission queue. An increase in CPU utilization might be observed during this time. Upon completion of the reallocation process the channel ends.

System programmer response

The number of messages to be reallocated can be determined using the **DISPLAY CHSTATUS(***channel-name***) XQMSGSA** command.

Turn on the **MONCHL** attribute of the channel and check how many users are using the **DISPLAY CHSTATUS(***channel-name***) XQMSGSA** command. The value of **MONCHL** should be LOW,MEDIUM or HIGH. See MONCHL for further information.

If reallocation is not desired, for example because the destination queue manager is not available, reallocation can be interrupted using the **STOP CHANNEL MODE(FORCE)** command.

CSQX196E

csect-name Data length *data-length* set by exit *exit-name* is larger than agent buffer length *ab-length*

Severity
8

Explanation

The user exit *exit-name* returned data in the supplied agent buffer, but the length specified is greater than the length of the buffer.

System action

Message CSQX190E is issued giving more details, and the channel stops. For auto-defined channels, the channel does not start.

System programmer response

Investigate why the user exit program set an invalid data length.

CSQX197E

csect-name Data length *data-length* set by exit *exit-name* is larger than exit buffer length *eb-length*

Severity
8

Explanation

The user exit *exit-name* returned data in the supplied exit buffer, but the length specified is greater than the length of the buffer.

System action

Message CSQX190E is issued giving more details, and the channel stops. For auto-defined channels, the channel does not start.

System programmer response

Investigate why the user exit program set an invalid data length.

CSQX199E

csect-name Unrecognized message code *ccc*

Severity
8

Explanation

An unexpected error message code has been issued by the channel initiator.

System action

Processing continues.

System programmer response

Note the code *ccc* (which is shown in hexadecimal) and contact your IBM support center to report the problem.

CSQX201E

csect-name Unable to allocate conversation, channel *channel-name* connection *conn-id*
TRPTYPE=*trptype* RC=*return-code* (*return-text*) reason=*reason*

Severity
8

Explanation

An attempt to allocate a conversation on connection *conn-id* was not successful. The associated channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'. *trptype* shows the communications system used:

TCP
>   TCP/IP

LU62
>   APPC/MVS

The return code from it was: (in hexadecimal) *return-code*, (in text) *return-text*. For some errors, there may also be an associated reason code *reason* (in hexadecimal) giving more information.

System action

The channel is not started.

System programmer response

The error may be due to an incorrect entry in the channel definition or some problems in the APPC setup. Correct the error and try again

It could also be that the listening program at the remote end is not running. If so, perform the necessary operations to start the listener for *trptype*, and try again.

See "Communications protocol return codes" on page 1124 for information about the cause of the return code from the communications system. If using TCP/IP, see the *z/OS UNIX System Services Messages and Codes* manual for information about the reason code.

CSQX202E

csect-name Connection or remote listener unavailable, channel channel-name connection conn-id TRPTYPE=*trptype* RC=*return-code* (*return-text*) reason=*reason*

Severity
8

Explanation

An attempt to allocate a conversation was not successful because the connection *conn-id* was unavailable. The associated channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'. *trptype* shows the communications system used:

TCP
>   TCP/IP

LU62
>   APPC/MVS

The return code from it was: (in hexadecimal) *return-code*, (in text) *return-text*. For some errors, there might also be an associated reason code *reason* (in hexadecimal) giving more information.

System action

The attempt to start the channel is retried.

System programmer response

Try again later.

A likely cause is that the listener at the remote end was not running or has been started using the wrong port or LU name. If this is the case, perform the necessary operations to start the appropriate listener, and try again.

See "Communications protocol return codes" on page 1124 for information about the cause of the return code from the communications system.

If using TCP/IP, see the z/OS UNIX System Services Messages and Codes manual for information about the reason code.

If you receive reason code 468:

- You are not using the correct IP address.
- The listener for the port might not be active.
- A firewall does not allow the connection.

  When there are multiple links defined on a z/OS image, the image can have multiple host names depending on the link. You need to ensure that the correct host name is used as the sender end. Use the NETSTAT HOSTs command to display the host names on the image.

CSQX203E

csect-name Error in communications configuration, channel channel-name connection conn-id TRPTYPE=*trptype* RC=*return-code* (*return-text*) reason=*reason*

Severity
8

Explanation

An attempt to allocate a conversation on connection *conn-id* was not successful because of a communications configuration error. The associated channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'. *trptype* shows the communications system used:

TCP
TCP/IP

LU62
APPC/MVS

The return code from it was: (in hexadecimal) *return-code*, (in text) *return-text*. For some errors, there might also be an associated reason code *reason* (in hexadecimal) giving more information.

System action

The channel is not started.

System programmer response

See "Communications protocol return codes" on page 1124 for information about the cause of the return code from the communications system.

Probable causes are:

- If the communications protocol is TCP/IP:

  - The connection name specified is incorrect, or that it cannot be resolved to a network address, or the name may not be in the name server. Correct the error and try again.
  - If the return code is zero, there is a name server problem. The OMVS command OPING usually fails in the same way. Resolve this failure and restart the channel. Check the `/etc/resolv.conf` file and check that the correct name server address is specified in the NSINTERADDR statement.

- If the communications protocol is LU 6.2:

  - One of the transmission parameters (MODENAME or TPNAME or PARTNER_LU) in the side information is incorrect, or that there is no side information for the symbolic destination name specified as the connection name. Correct the error and try again.
  - An LU 6.2 session has not been established, perhaps because the LU has not been enabled. Issue the z/OS command VARY ACTIVE if this is the case.

See the *z/OS UNIX System Services Messages and Codes* manual for information about the reason code.

CSQX204E

csect-name Connection attempt rejected, channel channel-name connection conn-id TRPTYPE=*trptype* RC=*return-code* (*return-text*) reason=*reason*

Severity

8

Explanation

An attempt to connect on connection *conn-id* was rejected. The associated channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'. *trptype* shows the communications system used:

TCP

TCP/IP

LU62

APPC/MVS

The return code from it was: (in hexadecimal) *return-code*, (in text) *return-text*. For some errors, there might also be an associated reason code *reason* (in hexadecimal) giving more information.

System action

The channel is not started.

System programmer response

Check the appropriate listener has been started on the remote end.

See "Communications protocol return codes" on page 1124 for information about the cause of the return code from the communications system.

If the communications protocol is LU 6.2, it is possible that either the user ID or password supplied at the remote LU is incorrect. The remote host or LU may not be configured to allow connections from the local host or LU.

If the communications protocol is TCP/IP, it is possible that the remote host does not recognize the local host. See the *z/OS UNIX System Services Messages and Codes* manual for information about the reason code.

CSQX205E

csect-name Unable to resolve network address, channel channel-name connection conn-id TRPTYPE=TCP RC=*return-code* (*return-text*) reason=*reason*

Severity

8

Explanation

The supplied connection name *conn-id* could not be resolved into a TCP/IP network address. The associated channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'. *trptype* shows the communications system used:

TCP

TCP/IP

LU62

APPC/MVS

The return code from it was: (in hexadecimal) *return-code*, (in text) *return-text*. For some errors, there might also be an associated reason code *reason* (in hexadecimal) giving more information.

System action

The channel is not started.

System programmer response

Check the local TCP/IP configuration. Either the name server does not contain the host or LU name, or the name server was not available.

See "Communications protocol return codes" on page 1124 for information about the cause of the return code from TCP/IP. See the *z/OS UNIX System Services Messages and Codes* manual for information about the reason code.

CSQX206E

csect-name Error sending data, channel *channel-name* connection *conn-id* (queue manager *qmgr-name*) TRPTYPE=*trptype* RC=*return-code* (*return-text*) reason=*reason*

Severity
8

Explanation

An error occurred sending data to *conn-id*, which might be due to a communications failure. The associated channel is *channel-name* and the associated remote queue manager is *qmgr-name*; in some cases the names cannot be determined and so are shown as '????'. *trptype* shows the communications system used:

TCP
TCP/IP

LU62
APPC/MVS

The return code from it was: (in hexadecimal) *return-code*, (in text) *return-text*. For some errors, there might also be an associated reason code *reason* (in hexadecimal) giving more information.

System action

The channel is stopped. The associated transmission queue might be set to GET(DISABLED) and triggering turned off.

System programmer response

See "Communications protocol return codes" on page 1124 for information about the cause of the return code from the communications system. If using TCP/IP, see the *z/OS UNIX System Services Messages and Codes* manual for information about the reason code.

Note that the error might have occurred because the channel at the other end has stopped for some reason, for example an error in a receive user exit.

CSQX207E

csect-name Invalid data received, connection *conn-id* (queue manager *qmgr-name*) TRPTYPE=*trptype*

Severity
8

Explanation

Data received from connection *conn-id* was not in the required format. The associated remote queue manager is *qmgr-name*; in some cases its name cannot be determined and so is shown as '????'. The data that has been sent may come from something other than a queue manager or client. *trptype* shows the communications system used:

TCP
TCP/IP

LU62
APPC/MVS

System action

The data is ignored.

System programmer response

A likely cause is that an unknown host or LU is attempting to send data.

CSQX208E

> *csect-name* Error receiving data, channel *channel-name* connection *conn-id* (queue manager *qmgr-name*) TRPTYPE=*trptype* RC=*return-code* (*return-text*) reason=*reason*

Severity
> 8

Explanation

> An error occurred receiving data from connection *conn-id,* which may be due to a communications failure. The associated channel is *channel-name* and the associated remote queue manager is *qmgr-name*; in some cases the names cannot be determined and so are shown as '????'. *trptype* shows the communications system used:

> **TCP**
> > TCP/IP

> **LU62**
> > APPC/MVS

> The return code from it was: (in hexadecimal) *return-code*, (in text) *return-text*. For some errors, there might also be an associated reason code *reason* (in hexadecimal) giving more information.

System action

> The channel is stopped. The associated transmission queue may be set to GET(DISABLED) and triggering turned off.

System programmer response

> See"Communications protocol return codes" on page 1124 for information about the cause of the return code from the communications system. If using TCP/IP, see Return code 00000461 for more information about the reason code.

CSQX209E

> *csect-name* Connection unexpectedly terminated, channel *channel-name* connection *conn-id* (queue manager *qmgr-name*) TRPTYPE=*trptype* RC=*return-code* (*return-text*)

Severity
> 8

Explanation

> An error occurred receiving data from connection *conn-id*. The connection to the remote host or LU has unexpectedly terminated. The associated channel is *channel-name* and the associated remote queue manager is *qmgr-name*; in some cases the names cannot be determined and so are shown as '????'. *trptype* shows the communications system used:

> **TCP**
> > TCP/IP

> **LU62**
> > APPC/MVS

> However, this message can also occur in cases where there is no error; for example, if the TCP/IP command TELNET is issued that is directed at the port which the channel initiator is using.

> The return code from it was: (in hexadecimal) *return-code*, (in text) *return-text*. For some errors, there might also be an associated reason code *reason* (in hexadecimal) giving more information.

System action

> If a channel is involved, it is stopped. The associated transmission queue may be set to GET(DISABLED) and triggering turned off.

System programmer response

> Review the local and remote console logs for reports of network errors.

See "Communications protocol return codes" on page 1124 for information about the cause of the return code from the communications system. If using TCP/IP, see the *z/OS UNIX System Services Messages and Codes* manual for information about the reason code.

CSQX210E

csect-name Unable to complete bind, channel *channel-name* connection *conn-id* TRPTYPE=LU62 RC=*return-code* (*return-text*) reason=*reason*

Severity
8

Explanation

An incoming attach request arrived on connection *conn-id*, but the local host or LU was unable to complete the bind. The associated channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'.

The return code from APPC/MVS allocate services was: (in hexadecimal) *return-code*, (in text) *return-text*. For some errors, there might also be an associated reason code *reason* (in hexadecimal) giving more information.

System action

The channel is not started.

System programmer response

Check the APPC/MVS configuration.

See "APPC/MVS return codes" on page 1128 for the cause of the return code from APPC/MVS allocate services, and the *Writing Servers for APPC/MVS* manual for more information.

CSQX212E

csect-name Unable to allocate socket, channel *channel-name* TRPTYPE=TCP RC=*return-code* (*return-text*) reason=*reason*

Severity
8

Explanation

A TCP/IP socket could not be created, possibly because of a storage problem. The associated channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'.

The return code from TCP/IP was: (in hexadecimal) *return-code*, (in text) *return-text*. For some errors, there might also be an associated reason code *reason* (in hexadecimal) giving more information.

System action

The channel is not started.

System programmer response

See "Communications protocol return codes" on page 1124 for information about the cause of the return code from TCP/IP. See the *z/OS UNIX System Services Messages and Codes* manual for information about the reason code.

CSQX213E

csect-name Communications error, channel *channel-name* TRPTYPE=*trptype* function *func* RC=*return-code* (*return-text*) reason=*reason*

Severity
8

Explanation

An unexpected communications error occurred for a listener or a channel. If it was for a listener, the *csect-name* is CSQXCLMA, and the channel name is shown as '????'. If it was for a channel, the channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'.

trptype shows the communications system used:

TCP
    TCP/IP

LU62
    APPC/MVS

func is the name of the TCP/IP or APPC/MVS function that gave the error. In some cases the function name is not known and so is shown as '????'.

return-code is

- normally, the return code (in hexadecimal) from the communications system function
- for an LU 6.2 listener, it might be the reason code (in hexadecimal) from APPC/MVS allocate services
- if it is of the form 10009*nnn* or 20009*nnn*, it is a distributed queuing message code.

return-text is the text form of the return code.

For some errors, there might also be an associated reason code *reason* (in hexadecimal) giving more information.

An alternate version of this message exists as follows:

csect-name Communications error, function '*func*' RC=*return-code* reason=*reason*

For information about the *return-code* and *reason* from the PKCS #11 callable service, see the section on ICSF and TSS Return and Reason Codes in the *z/OS Cryptographic Services ICSF Application Programmer's Guide*

System action

If the error occurred for a channel, the channel is stopped. For a listener, the channel is not started or, in some cases, the listener terminates.

System programmer response

See "Communications protocol return codes" on page 1124 for information about the cause of the return code from the communications system.

A distributed queuing message code *nnn* is generally associated with message CSQX*nnn*E, which will normally be issued previously. See that message explanation for more information. Where no such message is described, see "Distributed queuing message codes" on page 1139 for the corresponding message number.

Check for error messages on the partner system that might indicate the cause of the problem.

One possible cause for this message appearing is connected with the use of the Integrated Cryptographic Service Facility (ICSF). See Using ICSF for more information.

CSQX215E

csect-name Communications network not available, TRPTYPE=*trptype*

Severity
8

Explanation

An attempt was made to use the communications system, but it has not been started or has stopped. *trptype* shows the communications system used:

TCP
    TCP/IP

LU62
APPC/MVS

System action

The channel or listener is not started.

System programmer response

Start the communications system, and try again.

CSQX218E

csect-name Listener not started - unable to bind, port *port* address *ip-address* TRPTYPE=TCP INDISP=*disposition* RC=*return-code*

Severity
8

Explanation

An attempt to bind the TCP/IP socket to the indicated listener port was not successful. *ip-address* is the IP address used, or '*' if the listener is using all IP addresses. The return code (in hexadecimal) from TCP/IP was *return-code*.

disposition shows which type of incoming requests the listener was handling:

QMGR
those directed to the target queue manager

GROUP
those directed to the queue-sharing group.

System action

The listener is not started.

System programmer response

The failure could be due to another program using the same port number.

See "Communications protocol return codes" on page 1124 for information about the return code from TCP/IP.

CSQX219E

csect-name Listener stopped - error creating new connection, TRPTYPE=TCP INDISP=*disposition*

Severity
8

Explanation

An attempt was made to create a new TCP/IP socket because an attach request was received, but an error occurred.

disposition shows which type of incoming requests the listener was handling:

QMGR
those directed to the target queue manager

GROUP
those directed to the queue-sharing group.

System action

The listener stops. The channel initiator will attempt to restart it, at the intervals specified by the LSTRTMR queue manager attribute.

System programmer response

The failure might be transitory, try again later. If the problem persists, it might be necessary to stop some other jobs that use TCP/IP, or to restart TCP/IP.

CSQX220E

csect-name Communications network not available, channel *channel-name* TRPTYPE=*trptype*

Severity
8

Explanation

An attempt was made to use the communications system by a channel or a listener, but it has not been started or has stopped. If it was for a channel, the channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'. If it was for a listener, the channel name is again shown as '????'. *trptype* shows the communications system used:

TCP
TCP/IP

LU62
APPC/MVS

System action

The channel or listener is not started.

System programmer response

Start the communications system, and try again.

CSQX228E

csect-name Listener unable to start channel, channel *channel-name* TRPTYPE=*trptype*
INDISP=*disposition* connection=*conn-id*

Severity
8

Explanation

An incoming attach request arrived from *conn-id*, but the listener for *trptype* could not start an instance of a channel to respond to it. The associated channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'.

disposition shows which type of incoming requests the listener was handling:

QMGR
those directed to the target queue manager

GROUP
those directed to the queue-sharing group.

However, this message can also occur in cases where there is no error; for example, if the TCP/IP command TELNET is issued that is directed at the port which the channel initiator is using.

System action

If a channel is involved, it is not started.

System programmer response

The failure could be because the channel initiator is currently too busy; try again when there are fewer channels running. If the problem persists, increase the number of dispatchers used by the channel initiator.

CSQX234I

csect-name Listener stopped, TRPTYPE=*trptype* INDISP=*disposition*

Severity
0

Explanation

The specified listener terminated. This could be for a number of reasons including, but not limited to, those in the following list:

- a STOP command was issued
- the listener was retrying
- an error occurred in the communications system

trptype is the transport type.

disposition shows which type of incoming requests the listener was handling:

QMGR
> those directed to the target queue manager

GROUP
> those directed to the queue-sharing group.

System action

Processing continues. If the listener was not deliberately stopped, the channel initiator will attempt to restart the listener, at the intervals specified by the LSTRTMR queue manager attribute.

System programmer response

If the listener was not deliberately stopped, look at any preceding messages relating to the channel initiator or to the TCP/IP, OMVS, or APPC address spaces to determine the cause.

CSQX235E

csect-name Invalid local address *local-addr*, channel *channel-name* TRPTYPE=*trptype* RC=*return-code* (*return-text*) reason=*reason*

Severity
8

Explanation

The supplied local address *local-addr* could not be resolved to a TCP/IP network address. The associated channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'. *trptype* shows the communications system used:

TCP
> TCP/IP

LU62
> APPC/MVS

The return code from it was: (in hexadecimal) *return-code*, (in text) *return-text*. For some errors, there might also be an associated reason code *reason* (in hexadecimal) giving more information.

System action

The channel is not started.

System programmer response

Check the local TCP/IP configuration. Either the name server does not contain the host name, or the name server was not available.

See "Communications protocol return codes" on page 1124 for information about the cause of the return code from TCP/IP.

CSQX239E

csect-name Unable to determine local host name, channel *channel-name* TRPTYPE=TCP RC=*return-code* (*return-text*) reason=*reason*

Severity
8

Explanation

An attempt was made to start a channel or listener using TCP/IP, but the TCP/IP gethostname call failed. If it was for a channel, the channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'. If it was for a listener, the channel name is again shown as '????'.

The return code from it was: (in hexadecimal) *return-code*, (in text) *return-text*. For some errors, there might also be an associated reason code *reason* (in hexadecimal) giving more information.

System action

The channel or listener is not started.

System programmer response

See "Communications protocol return codes" on page 1124 for information about the cause of the return code from TCP/IP.

CSQX250E

csect-name Listener ended abnormally, TRPTYPE=*trptype* INDISP=disposition, reason=*sssuuu-reason*

Severity
8

Explanation

The specified listener is ending abnormally because an error that cannot be corrected has occurred. *sss* is the system completion code, *uuu* is the user completion code, and *reason* is the associated reason code (all in hexadecimal).

disposition shows which type of incoming requests the listener was handling:

QMGR
those directed to the target queue manager

GROUP
those directed to the queue-sharing group.

System action

The listener ends abnormally, and a dump is normally issued. The channel initiator will attempt to restart the listener, at the intervals specified by the LSTRTMR queue manager attribute.

System programmer response

User completion codes are generally the result of errors detected by the Language Environment; see the *Language Environment for z/OS Debugging Guide and Runtime Messages* for information about these codes. Otherwise, contact your IBM support center.

CSQX251I

csect-name Listener started, TRPTYPE=*trptype* INDISP=*disposition*

Severity
0

Explanation

The specified listener started successfully. This may be as a result of a START LISTENER command, or because the listener restarted automatically following an error.

disposition shows which type of incoming requests the listener was handling:

QMGR
those directed to the target queue manager

GROUP
those directed to the queue-sharing group.

System action

Processing continues.

CSQX256E

csect-name Listener stopped - error selecting new connection, TRPTYPE=TCP INDISP=*disposition*

Severity
8

Explanation

An error occurred in the listener select processing. The listener was notified by TCP/IP, but no attach request was received.

disposition shows which type of incoming requests the listener was handling:

QMGR
those directed to the target queue manager

GROUP
those directed to the queue-sharing group.

System action

The listener stops. The channel initiator will attempt to restart it, at the intervals specified by the LSTRTMR queue manager attribute.

System programmer response

The failure might be transitory, try again later. If the problem persists, it might be necessary to stop some other jobs that use TCP/IP, or to restart TCP/IP.

CSQX257I

csect-name Listener unable to create new connection, TRPTYPE=TCP INDISP=*disposition*

Severity
4

Explanation

An attempt was made to create a new TCP/IP socket because an attach request was received, but an error occurred.

disposition shows which type of incoming requests the listener was handling:

QMGR
those directed to the target queue manager

GROUP
those directed to the queue-sharing group.

System action

The listener continues to run, but the connection is not created.

System programmer response

The failure might be transitory, try again later. If the problem persists, it might be necessary to stop some other jobs that use TCP/IP, or to restart TCP/IP.

CSQX258E

csect-name Listener stopped - error accepting new connection, TRPTYPE=TCP INDISP=*disposition*

Severity
8

Explanation

An error occurred in the listener accept processing. The listener was notified by TCP/IP, but no attach request was received.

disposition shows which type of incoming requests the listener was handling:

QMGR
> those directed to the target queue manager

GROUP
> those directed to the queue-sharing group.

System action

The listener stops. The channel initiator will attempt to restart it, at the intervals specified by the LSTRTMR queue manager attribute.

System programmer response

The failure might be transitory, try again later. If the problem persists, it might be necessary to stop some other jobs that use TCP/IP, or to restart TCP/IP.

CSQX259E

csect-name Connection timed out, channel *channel-name* connection *conn-id* (queue manager *qmgr-name*) TRPTYPE=*trptype*

Severity
> 8

Explanation

The connection *conn-id* timed out. The associated channel is *channel-name* and the associated remote queue manager is *qmgr-name*; in some cases the names cannot be determined and so are shown as '????'. *trptype* shows the communications system used:

TCP
> TCP/IP

LU62
> APPC/MVS

Probable causes are:

- A communications failure.
- For a message channel, if the Receive Timeout function is being used (as set by the RCVTIME, RCVTTYPE, and RCVTMIN queue manager attributes) and no response was received from the partner within this time.
- For an MQI channel, if the Client Idle function is being used (as set by the DISCINT server-connection channel attribute) and the client application did not issue an MQI call within this time.

System action

The channel stops.

System programmer response

For a message channel, check the remote end to see why the time out occurred. Note that, if retry values are set, the remote end will restart automatically. If necessary, set the receive wait time for the queue manager to be higher.

For an MQI channel, check that the client application behavior is correct. If so, set the disconnect interval for the channel to be higher.

CSQX261E

csect-name No suitable IP stack available, channel *channel-name*, connection *conn-id*

Severity
> 8

Explanation

An attempt to allocate a conversation on connection *conn-id* for channel *channel-name* using TCP/IP communications was not successful because the IP stack used did not support the IP address family required for the connection.

System action

The channel is not started.

System programmer response

If the channel's CONNAME attribute resolves to an IPv6 address, then ensure the stack being used by the combination of the TCPNAME queue manager attribute and the channel's LOCLADDR attribute supports IPv6. If the channel's CONNAME attribute resolves to an IPv4 address, then ensure the stack being used by the combination of the TCPNAME queue manager attribute and the channel's LOCLADDR attribute supports IPv4.

CSQX262E

csect-name Communications canceled, channel *channel-name* TRPTYPE=*trptype*

Severity
8

Explanation

An unexpected communications error occurred for a listener or a channel. This error occurs if the channel was stopped with mode FORCE and the communications session was canceled.

The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'. *trptype* shows the communications system used:

TCP
　　TCP/IP

LU62
　　APPC/MVS

System action

The channel is stopped.

System programmer response

Restart the channel if appropriate.

CSQX293I

csect-name Channel *channel-name* has initiated a switch of transmission queue from *old-xmitq* to *new-xmitq*

Severity
0

Explanation

A switch of transmission queue for the channel identified by *channel-name* is required due to a change to the default cluster transmission queue configuration of the queue manager, or to the cluster channel name attribute of a cluster transmission queue. This message is issued by the channel initiator when the process of switching the transmission queue from *old-xmitq* to *new-xmitq* is started.

System action

The queue manager is notified to start the switching process for the channel.

The channel continues to run after closing the old transmission queue and switching to use the new transmission queue instead.

System programmer response

None.

CSQX294E

csect-name Transmission queue status unavailable, channel *channel-name*

Severity

8

Explanation

The transmission queue for the cluster-sender channel identified by *channel-name* cannot be determined because when the queue manager started it was unable to load the persisted transmission queue state from the queue SYSTEM.CHANNEL.SYNCQ.

System action

The channel ends abnormally.

System programmer response

If the queue manager is unable to load the persisted transmission queue state during startup it issues message CSQM561E.

CSQX295E

csect-name Cluster transmission queue restricted, channel *channel-name,* transmission queue *xmitq-name*

Severity

8

Explanation

The cluster-sender channel identified by *channel-name* has been configured to use the transmission queue *xmitq-name,* however, the use of transmission queues other than SYSTEM.CLUSTER.TRANSMIT.QUEUE has subsequently been disabled by the queue manager mode of operation (OPMODE).

System action

The channel ends abnormally.

System programmer response

Ensure the queue manager mode of operation is correctly configured. If the configuration is correct, perform the following actions:

1. Change the default cluster transmission queue configuration of the queue manager so that all cluster-sender channels default to use the transmission queue SYSTEM.CLUSTER.TRANSMIT.QUEUE. You can do this by changing the value of the **DEFCLXQ** queue manager attribute to **SCTQ**.

2. Identify any manually defined transmission queues that have a non-blank cluster channel name attribute value by using the **DISPLAY QLOCAL(*) WHERE(CLCHNAME NE ' ')** command. Change the cluster channel name attribute value of these queues to blank.

3. Restart the channel.

CSQX296E

csect-name Password protection negotiation failed for channel *channel-name,* connection *conn-id*

Severity

8

Explanation

The channel *channel-name* could not be established because it failed to agree a password protection algorithm with the remote machine *conn-id*.

System action

The channel does not start.

System programmer response

Check whether password protection settings prevent interoperability with the remote machine.

Alternatively, consider using SSL or TLS to protect passwords instead. You must use a non-null CipherSpec to protect passwords.

CSQX403I

csect-name Auto-definition of channel *channel-name* suppressed by exit *exit-name*

Severity
0

Explanation

In response to a request to start a channel that was not defined, an attempt was made to define it automatically. The channel auto-definition exit *exit-name* prevented it being defined.

System action

The channel is not started.

CSQX404I

csect-name Phase one of REFRESH CLUSTER REPOS(YES) has completed, cluster *cluster-namen* objects changed

Severity
0

Explanation

Phase one of REFRESH CLUSTER has completed.

Applications attempting to access cluster resources may see failures to resolve cluster resources until phase two of REFRESH CLUSTER is complete.

Phase two is complete once all new information has been received from other members of the cluster.

Monitor your SYSTEM.CLUSTER.COMMAND.QUEUE to determine when it has reached a consistently empty state to indicate that the refresh process has completed.

System action

None.

CSQX405I

csect-name FORCEREMOVE QUEUES(YES) command processed, cluster *cluster-name* target *target*

Severity
0

Explanation

The repository manager successfully processed a RESET CLUSTER ACTION(FORCEREMOVE) command with the QUEUES(YES) option for the indicated cluster and target queue manager.

System action

None.

CSQX406E

csect-name REFRESH CLUSTER REPOS(YES) command failed, cluster *cluster-name - qmgr-name* is a full repository

Severity
8

Explanation

The repository manager could not process a REFRESH CLUSTER command with the REPOS(YES) option for the indicated cluster, because the local queue manager provides full repository management service for the cluster.

System action

The command is ignored.

System programmer response

Reissue the command with the correct values or on the correct queue manager. It might be necessary to change the queue manager so that it is not a full repository for the cluster.

CSQX407I

csect-name Cluster queue *q-name* definitions inconsistent

Severity
4

Explanation

The definition of a cluster queue has different values for the DEFPRTY, DEFPSIST, DEFPRESP, and DEFBIND attributes on the various queue managers in the cluster.

All definitions of the same cluster queue must be identical. Problems might arise if your applications rely on one of these attributes to determine messaging behavior. For example, if an application opens a cluster queue with the option MQOO_BIND_AS_Q_DEF, and the different instances of the queue have different DEFBIND values, the behavior of the message transfer depends on which instance of the queue happens to be selected when it is opened.

System action

None.

System programmer response

Alter the definitions of the queue on the various queue managers so that they have identical values for these attributes.

CSQX410I

csect-name Repository manager started

Severity
0

Explanation

The repository manager started successfully.

System action

None.

CSQX411I

csect-name Repository manager stopped

Severity
0

Explanation

The repository manager stopped. This may be for one of three reasons:

- The channel initiator is stopping.
- The channel initiator is starting and the queues used by the repository manager have not been defined because clustering is not required.

- An error has occurred.

System action

Processing continues, but clustering is not available.

System programmer response

If an error has occurred, investigate the problem reported in the preceding messages.

CSQX412E

csect-name Misdirected repository command, target *target-id* sender *sender-id*

Severity
8

Explanation

The repository manager received a command intended for some other queue manager, with an identifier that is *target-id*. The command was sent by the queue manager with identifier *sender-id*.

System action

The command is ignored, and the error is reported to the sender.

System programmer response

Check the channel and cluster definitions of the sending queue manager.

CSQX413E

csect-name Repository command format error, command code *command*

Severity
8

Explanation

An internal error has occurred.

System action

The command is ignored, and the error is reported to the sender; the repository manager continues processing. Information about the error is written to the data set identified by the CSQSNAP DD statement of the channel initiator started task JCL procedure, xxxxCHIN.

System programmer response

Collect the items listed in the Problem Determination section and contact your IBM support center.

CSQX415E

csect-name Repository command state error, command code *command* cluster object *object-name* sender *sender-id*

Severity
8

Explanation

An internal error has occurred.

System action

The command is ignored; the repository manager continues processing. Information about the error is written to the data set identified by the CSQSNAP DD statement of the channel initiator started task JCL procedure, xxxxCHIN.

System programmer response

Collect the items listed in the Problem Determination section and contact your IBM support center.

CSQX416E

csect-name Repository command processing error, RC=*return-code* command code *command* cluster object *object-name* sender *sender-id*

Severity

8

Explanation

An internal error has occurred.

System action

The command is ignored; the repository manager continues processing. Information about the error is written to the data set identified by the CSQSNAP DD statement of the channel initiator started task JCL procedure, xxxxCHIN.

System programmer response

Collect the items listed in the Problem Determination section and contact your IBM support center.

CSQX417I

csect-name Cluster-senders remain for removed queue manager *qmgr-name*

Severity

0

Explanation

The indicated queue manager has been deleted or forcibly removed from a cluster, but there are manually-defined cluster-sender channels that refer to it. This means that the repository manager will continue to send cluster information to the removed queue manager.

System programmer response

Delete the manually-defined cluster-sender channels that refer to *qmgr-name*.

CSQX418I

csect-name Only one repository for cluster *cluster-name*

Severity

0

Explanation

The repository manager has received information about a cluster for which it is the only full repository.

System action

None.

System programmer response

If you require a second full repository, alter the REPOS or REPOSNL attribute of the second queue manager that is to have a full repository for the cluster to specify the cluster name.

CSQX419I

csect-name No cluster-receivers for cluster *cluster-name*

Severity

0

Explanation

The repository manager has received information about a cluster for which no cluster-receiver channels are known.

System action

None.

System programmer response

Define cluster-receiver channels for the cluster on the local queue manager.

CSQX420I

csect-name No repositories for cluster *cluster-name*

Severity
0

Explanation

The repository manager has received information about a cluster for which no full repositories are known.

System action

None.

System programmer response

Define a cluster-sender channel for connecting to the queue manager that is the full repository for the cluster, or alter the REPOS or REPOSNL attribute of the queue manager that is to have a full repository for the cluster to specify the cluster name.

CSQX422E

csect-name Repository manager error, RC=*return-code*

Severity
8

Explanation

An internal error has occurred.

System action

The repository manager attempts to continue processing. Information about the error is written to the data set identified by the CSQSNAP DD statement of the channel initiator started task JCL procedure, xxxxCHIN.

System programmer response

Collect the items listed in the Problem Determination section and contact your IBM support center.

CSQX425E

csect-name Repository command merge error, command code *command* cluster object *object-name* sender *sender-id*

Severity
8

Explanation

An internal error has occurred.

System action

The command is ignored; the repository manager continues processing. Information about the error is written to the data set identified by the CSQSNAP DD statement of the channel initiator started task JCL procedure, xxxxCHIN.

System programmer response

Collect the items listed in the Problem Determination section and contact your IBM support center.

CSQX426E

csect-name Undeliverable repository command, channel *channel-name* target *target-id* command code *command*

Severity

8

Explanation

The repository manager tried to send a command to another queue manager using channel *channel-name*. The other queue manager, with identifier *target-id*, could not be found.

System action

The command is ignored.

System programmer response

Check the channel and cluster definitions of the sending and receiving queue managers.

CSQX427E

csect-name Cluster-sender not connected to repository, cluster *cluster-name* channel *channel-name* target *target-id*

Severity

8

Explanation

A cluster-sender channel must be connected to a queue manager that is a full repository for all the clusters for the channel, and the corresponding cluster-receiver channel must be in the same clusters. Channel *channel-name* in cluster *cluster-name* does not satisfy this. *target-id* is the identifier of the target queue manager for the channel.

System action

The command is ignored.

System programmer response

Check the definition of the channel on both queue managers to ensure that it is connected to a full repository for the clusters, and that it is in the same clusters on both queue managers.

CSQX428E

csect-name Unexpected publication of a cluster queue, cluster *cluster-name* cluster queue *q-name* sender *sender-id*

Severity

8

Explanation

The repository manager received a publication for cluster queue *q-name* from another queue manager, with an identifier *sender-id*, relating to cluster *cluster-name*. The local queue manager cannot accept the command because it is not a full repository for the cluster and thus it does not have an interest in the cluster queue.

This can also occur because a command destined for the local repository manager is delayed in the network and is out of date when it arrives, for example because a REFRESH CLUSTER command has been issued on the local repository manager and caused its view of the cluster to change.

System action

The command is ignored.

System programmer response

If the local partial repository queue manager is supposed to be a full repository for the cluster, use the ALTER QMGR command to specify a repository or repository namelist which contains the cluster. If the local queue manager is correctly a partial repository for the cluster, ensure that the remote queue manager does not have a manually defined cluster sender directed at the local partial repository.

If the message occurs because a command is out of date, the message can be ignored.

CSQX429E

csect-name Unexpected deletion of a cluster queue, cluster *cluster-name* cluster queue *q-name*

Severity
8

Explanation

The repository manager received a deletion for cluster queue *q-name* from another queue manager, with an identifier *sender-id*, relating to cluster *cluster-name*. The local queue manager cannot accept the command because it is not a full repository for the cluster and thus it does not have an interest in the cluster queue.

This can also occur because a command destined for the local repository manager is delayed in the network and is out of date when it arrives, for example because a REFRESH CLUSTER command has been issued on the local repository manager and caused its view of the cluster to change.

System action

The command is ignored.

System programmer response

If the local partial repository queue manager is supposed to be a full repository for the cluster, use the ALTER QMGR command to specify a repository or repository namelist which contains the cluster. If the local queue manager is correctly a partial repository for the cluster, ensure that the remote queue manager does not have a manually defined cluster sender directed at the local partial repository.

If the message occurs because a command is out of date, the message can be ignored.

CSQX430E

csect-name Unexpected queue manager repository command, cluster *cluster-name* channel *channel-name* sender *sender-id*

Severity
8

Explanation

The repository manager received a command from another queue manager, with an identifier that is *sender-id*, relating to cluster *cluster-name*. The local queue manager cannot accept the command because it is not a full repository for the cluster, it does not have an interest in the cluster channel, and it does not have any matching cluster-sender channels. The cluster-sender channel used by the other queue manager was *channel-name*.

This message might appear on a queue manager that has defined a cluster-sender channel to another queue manager that does not host a full repository, if the other queue manager is later modified to host a full repository.

System action

The command is ignored.

System programmer response

Check the definition of the channel on the sending queue manager to ensure that it is connected to a full repository for the cluster.

Ensure the CLUSTER and CLUSNL values are consistent, and that you have not specified a *cluster-name* when you meant a *cluster-namelist*.

CSQX431I

csect-name Repository unavailable, cluster *cluster-name* channel *channel-name* sender *sender-id*

Severity
0

Explanation

The repository manager received a command from another queue manager, with identifier *sender-id*, reporting that it is no longer a full repository for cluster *cluster-name*.

System action

The cluster-sender channel *channel-name* is changed so that it can no longer be used to access the other queue manager in relation to the cluster.

CSQX432I

csect-name Unexpected cluster query received, cluster *cluster-name* cluster object *object-name* sender *sender-id*

Severity
8

Explanation

The repository manager received a query for cluster object *object-name* from another queue manager, with an identifier *sender-id*, relating to cluster *cluster-name*. The local queue manager cannot accept the command because it is not a full repository for the cluster.

This can also occur because a command destined for the local repository manager is delayed in the network and is out of date when it arrives, for example because a REFRESH CLUSTER command has been issued on the local repository manager and caused its view of the cluster to change.

System action

The command is ignored.

System programmer response

If the local partial repository queue manager is supposed to be a full repository for the cluster, use the ALTER QMGR command to specify a repository or repository namelist which contains the cluster. If the local queue manager is correctly a partial repository for the cluster, ensure that the remote queue manager does not have a manually defined cluster sender directed at the local partial repository.

If the message occurs because a command is out of date, the message can be ignored.

CSQX433E

csect-name Cluster-receiver and cluster-sender differ, cluster *cluster-name* channel *channel-name* sender *sender-id*

Severity
8

Explanation

The repository manager received a command from another queue manager, with identifier *sender-id*. The cluster-sender channel *channel-name* on that queue manager is in cluster *cluster-name*, but the corresponding cluster-receiver channel on the local queue manager is not.

System action

The command is ignored.

System programmer response

Change the definition of the channel so that it is in the same clusters on both queue managers.

CSQX434E

csect-name Unrecognized message on *name*

Severity
8

Explanation

The channel initiator found a message on one of its queues that either had a format that could not be recognized or did not come from a queue manager or channel initiator.

System action

The message is put on the dead-letter queue.

System programmer response

Examine the message on the dead-letter queue to determine the originator of the message.

CSQX435E

csect-name Unable to put repository manager message, target *target-id* MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity
   4

Explanation

The repository manager tried to send a message to SYSTEM.CLUSTER.COMMAND.QUEUE on another queue manager with an identifier that is *target-id*, but the MQPUT call was unsuccessful.

System action

Processing continues, but repository information may be out of date.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

Check the channel and cluster definitions on the local and target queue managers, and ensure that the channels between them are running.

When the problem is corrected, the repository information will normally be updated automatically. The REFRESH CLUSTER command can be used to be sure that the repository information is up to date.

This error may occur if the REFRESH CLUSTER REPOS(YES) command is issued against a full repository, as the full repository will then be temporarily unable to fulfil requests from other repositories until it has rebuilt the cluster. If there is more than one full repository for the cluster, the problem will resolve itself. If there is only a single full repository for the cluster, the REFRESH CLUSTER command will need to be run against all the other queue managers in the cluster to make them contact the full repository again.

CSQX436E

csect-name Unable to put repository manager message, cluster *cluster-name* MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity
   4

Explanation

The repository manager tried to send a message to SYSTEM.CLUSTER.COMMAND.QUEUE on a queue manager that has the full repository for the specified cluster, but the MQPUT was unsuccessful.

System action

Processing continues, but repository information may be out of date.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

Check the channel and cluster definitions on the local and target queue managers, and ensure that the channels between them are running.

When the problem is corrected, the repository information will normally be updated automatically. The REFRESH CLUSTER command can be used to be sure that the repository information is up to date.

CSQX437E

csect-name Unable to commit repository changes

Severity
4

Explanation

The repository manager tried to commit some updates to the repository but was unsuccessful.

System action

Processing continues, but local repository information might be out of date.

System programmer response

If this occurs when the channel initiator is stopping, it can be ignored because the local repository information will normally be updated automatically when the channel initiator is restarted. If there is an isolated occurrence at other times, use the REFRESH CLUSTER command to bring the local repository information up to date.

If the problem persists, contact your IBM support center.

CSQX438E

csect-name Unable to reallocate messages, channel *channel-name* MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity
8

Explanation

The repository manager was unable to reallocate messages for the specified channel to another destination.

System action

The messages remain on the transmission queue.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

Use this information in conjunction with any preceding error messages to determine the cause of the problem. When the problem is corrected, restart the channel.

CSQX439E

csect-name Repository error for channel *channel-name*

Severity
8

Explanation

An internal error has occurred.

System action

The repository manager attempts to continue processing. Information about the error is written to the data set identified by the CSQSNAP DD statement of the channel initiator started task JCL procedure, xxxxCHIN.

System programmer response

Collect the items listed in the Problem Determination section and contact your IBM support center.

CSQX440E

csect-name FORCEREMOVE command failed, cluster *cluster-name* target *target* - repository is not on *qmgr-name*

Severity
8

Explanation

The repository manager could not process a RESET CLUSTER ACTION(FORCEREMOVE) command for the indicated cluster and target queue manager, because the local queue manager does not provide a full repository management service for the cluster.

System action

The command is ignored.

System programmer response

Reissue the command with the correct values or on the correct queue manager.

CSQX441I

csect-name FORCEREMOVE command processed, cluster *cluster-name* target *target*

Severity
0

Explanation

The repository manager successfully processed a RESET CLUSTER ACTION(FORCEREMOVE) command for the indicated cluster and target queue manager.

System action

None.

CSQX442I

csect-name Phase one of REFRESH CLUSTER has completed, cluster *cluster-namen* objects changed

Severity
0

Explanation

Phase one of REFRESH CLUSTER has completed.

Applications attempting to access cluster resources may see failures to resolve cluster resources until phase two of **REFRESH CLUSTER** is complete.

Phase two is complete once all new information has been received from other members of the cluster.

Monitor your SYSTEM.CLUSTER.COMMAND.QUEUE to determine when it has reached a consistently empty state to indicate that the refresh process has completed.

System action

None.

CSQX443I

csect-name SUSPEND QMGR command processed, cluster *cluster-namen* objects changed

Severity
0

Explanation

The repository manager successfully processed a SUSPEND QMGR command for the indicated cluster. (Where the command specified a namelist of clusters, the message is issued only for the first cluster in the namelist.)

System action

None.

CSQX444I

csect-name RESUME QMGR command processed, cluster *cluster-namen* objects changed

Severity
0

Explanation

The repository manager successfully processed a RESUME QMGR command for the indicated cluster. (Where the command specified a namelist of clusters, the message is issued only for the first cluster in the namelist.)

System action

None.

CSQX447E

csect-name Unable to backout repository changes

Severity
8

Explanation

Following an error, the repository manager tried to backout some updates to the local repository but was unsuccessful.

System action

The repository manager terminates.

System programmer response

If the repository manager subsequently restarts successfully, or if on restarting the channel initiator the repository manager subsequently starts successfully, this can be ignored.

If not, contact your IBM support center.

CSQX448E

csect-name Repository manager stopping because of errors. Restart in *n* seconds

Severity
8

Explanation

A severe error, as reported in the preceding messages, occurred during repository manager processing; the repository manager is unable to continue.

System action

The repository manager terminates. The channel initiator will try to restart it after the specified interval.

System programmer response

Correct the problem reported in the preceding messages.

CSQX449I

csect-name Repository manager restarted

Severity

0

Explanation

The repository manager restarted successfully following an error.

System action

None.

CSQX453E

csect-name FORCEREMOVE command failed, cluster *cluster-name* target *target* is not unique

Severity

8

Explanation

The repository manager could not process a RESET CLUSTER ACTION(FORCEREMOVE) command for the indicated cluster and target queue manager, because there is more than one queue manager with the specified name in the cluster.

System action

The command is ignored.

System programmer response

Reissue the command specifying the identifier (QMID) of the queue manager to be removed, rather than its name.

CSQX455E

csect-name FORCEREMOVE command failed, cluster *cluster-name* target *target* not found

Severity

8

Explanation

The repository manager could not process a RESET CLUSTER ACTION(FORCEREMOVE) command for the indicated cluster and target queue manager, because no information about that queue manager was found in the local repository.

System action

The command is ignored.

System programmer response

Reissue the command specifying the correct queue manager name or identifier.

CSQX456I

csect-name Full repository update not received, cluster *cluster-name* queue *q-name* (queue manager *qmgr-name*)

Severity

0

Explanation

The repository manager found a cluster queue that had been used sometime in the last 30 days, and for which updated information should have been received. However, no such information has been received. The queue is *q-name* in *cluster-name*, and its queue manager is *qmgr-name*.

If the queue manager is a partial repository for the queue, the updated information should have been sent from a full repository. If the queue manager is a full repository, the updated information should have been sent from the queue manager on which the queue is defined.

System action

The repository manager keeps information about this queue for a further 60 days from when the error first occurred. If information has not been sent to a full repository then this queue is not used to satisfy any new requests for cluster resources made to this full repository.

System programmer response

If the queue is still required, check that:

- The cluster channels to and from the queue manager that is the full repository for the cluster, and between there and the queue manager where the queue is located, are able to run.
- The repository managers on those queue managers have not ended abnormally.

CSQX457I

csect-name Repository available, cluster *cluster-name* channel *channel-name* sender *sender-id*

Severity
0

Explanation

The repository manager received a command from another queue manager, with identifier *sender-id*, reporting that it is once again a full repository for cluster *cluster-name*.

System action

The cluster-sender channel *channel-name* is changed so that it can be used to access the other queue manager in relation to the cluster.

CSQX458E
csect-name Unable to access repository cache exclusively, TCB= *tcb-name* has *num-registrations* outstanding registrations

Explanation

During an operation that requires exclusive access to the cache, another task was found to be registered. If the queue manager finds registrations still exist after waiting for the task to remove its registrations, the queue manager issues this message. The task preventing exclusive access to the repository cache has *num-registrations* outstanding registrations.

System action

Processing continues.

System programmer response

Determine if this task is still running or terminated. If the task is not running or if the problem persists collect the items listed in the Problem determination on z/OS section and contact your IBM support center.

CSQX459E
csect-name Cluster topic topic-name from qmgr-name rejected due to PSCLUS(DISABLED)

Explanation

Information regarding cluster topic topic-name has been sent to this queue manager over a channel from qmgr-name but the queue manager attribute PSCLUS has been set to DISABLED, indicating that Publish/Subscribe activity is not expected between queue managers in this cluster.

System action

The cluster topic definition is ignored and will not be visible from this queue manager.

System programmer response

If you wish to enable publish/subscribe clustering, alter the PSCLUS attribute on all queue managers in the cluster to ENABLED. You may also need to issue REFRESH CLUSTER and REFRESH QMGR commands as detailed in the documentation for the PSCLUS attribute. If you are not using publish/

subscribe clusters you should delete the clustered topic object, and ensure PSCLUS is DISABLED on all queue managers.

CSQX460E

csect-name Cluster cache is full

Severity
8

Explanation

No more space is available in the cluster cache area.

System action

The repository manager terminates. The channel initiator will try to restart it after the specified interval.

System programmer response

The problem may be temporary. If it persists, the queue manager must be restarted; this will cause more space to be allocated for the cluster cache area.

Consider changing the cluster cache type system parameter CLCACHE to dynamic, so that more space for the cache will be obtained automatically as required. (If you are using a cluster workload exit, ensure that it supports a dynamic cluster cache.) For information about the system parameters for the CSQ6SYSP macro, see Using CSQ6SYSP.

CSQX461I

csect-name Cluster cache entry corrected, cluster queue manager *clusqmgr-name* channel *channel-name* connection *conn-id*

Severity
4

Explanation

At channel initiator restart, the repository manager found a corrupted entry in the cluster cache. The entry has been corrected.

System action

Processing continues. The cluster channel to which the entry refers, *channel-name* using connection *conn-id*, will be available for use.

System programmer response

None. You can verify that the entry was successfully corrected by issuing the command DISPLAY CLUSQMGR(*clusqmgr-name*) on the queue manager where this message was issued.

CSQX462E

csect-name Cluster cache entry is unusable, cluster queue manager *clusqmgr-name* channel *channel-name* connection *conn-id*

Severity
8

Explanation

At channel initiator restart, the repository manager found a corrupted entry in the cluster cache which could not be corrected.

System action

The corrupted entry is ignored. The cluster channel to which it refers, *channel-name* using connection *conn-id*, will not be usable.

System programmer response

The corrupted entry must be corrected and reintroduced by issuing the command

```
ALTER CHANNEL(channel-name) CHLTYPE(CLUSRCVR)
```

on the cluster queue manager *clusqmgr-name*. You can verify that the entry was successfully reintroduced by issuing the command DISPLAY CLUSQMGR(*clusqmgr-name*) on the queue manager where this message was issued.

CSQX463E

csect-name Error accessing cluster cache entry

Severity
8

Explanation

There was an internal error when accessing a cluster cache entry.

System action

Information about the error is written to the data set identified by the CSQSNAP DD statement of the channel initiator started task JCL procedure, xxxxCHIN. The component where the error occurred (message channel agent, repository manager) usually terminates; in some cases, the end result will be that the channel initiator terminates.

System programmer response

Collect the items listed in the Problem Determination section and contact your IBM support center.

CSQX465I

csect-name New cluster topic definition inconsistent, topic *topic-name*, queue manager identifier *qmid*, attribute *attr*

Severity
4

Explanation

The definition of the cluster topic *topic-name*, defined on queue manager identifier *qmid* has different *attr* attribute values than one or more cluster topics that already exist in the cluster cache. The existing topic objects are reported by message CSQX466I.

All definitions of the same cluster topic should be identical; otherwise, problems may arise if your applications rely on one of these attributes to determine messaging behavior. For example, if an application opens a cluster topic and the different instances of the topic have different TOPICSTR values, the behavior of the message transfer depends on which instance of the topic happens to be selected when it is opened.

System action

None.

System programmer response

Alter the definitions of the topic on the various queue managers so that they have identical values for all attributes.

CSQX466I

csect-name Cluster topic definitions inconsistent, topic *topic-name*, queue manager identifier *qmid* attribute *attr*

Severity
4

Explanation

The definition of the cluster topic *topic-name*, defined on queue manager identifier *qmid* has different *attr* attribute value than a cluster topic being added to the cluster cache. The topic object being added is reported by message CSQX465I.

All definitions of the same cluster topic should be identical; otherwise, problems may arise if your applications rely on one of these attributes to determine messaging behavior. For example, if an application opens a cluster topic and the different instances of the topic have different TOPICSTR values, the behavior of the message transfer depends on which instance of the topic happens to be selected when it is opened.

System action

None.

System programmer response

Alter the definitions of the topic on the various queue managers so that they have identical values for all attributes.

CSQX467E

Repository error for topic *topic-name*, MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity
8

Explanation

The cluster repository was unable to insert or delete topic *topic-name* due to an unexpected error in the queue manager.

System action

The repository manager terminates. The channel initiator tries to restart the repository manager after an interval. See message CSQX448E for more information.

System programmer response

For more information about *mqcc* and *mqrc* completion codes (*mqrc-text* provides the MQRC in textual form), see API completion and reason codes.

Contact your IBM support center with the reason code provided for this failure.

CSQX468I

csect-name Queue manager *qmgr-uuid1* has replaced queue manager *qmgr-uuid2* in a cluster due to reuse of channel *channel-name*

Severity
0

Explanation

Queue manager *qmgr-uuid1* has joined a cluster using a cluster receiver channel with the same name as one that has already been defined by queue manager *qmgr-uuid2*. All cluster receiver channels used within a cluster must be uniquely named.

System action

Queue manager *qmgr-uuid1*uses channel *channel-name*. Queue manager *qmgr-uuid2* cannot successfully participate in the cluster while queue manager *qmgr-uuid1* is a member.

System programmer response

The use of a channel name currently associated with a different queue manager in the cluster can be intentional, for example it is possible the original queue manager has been deleted and recreated as a new queue manager. However, accidental duplication of a channel name across multiple queue

managers would also result in this behavior. If this action was not intended review the configuration of the queue managers.

CSQX469E

csect-name Update not received for CLUSRCVR channel *channel-name* hosted on queue manager *qmid* in cluster *cluster-name*, expected *n* days ago, *m* days remaining

Severity
8

Explanation

The repository manager detected that the CLUSRCVR channel has not been republished by its owning queue manager. This republish action should have happened automatically *n* days ago, or in the time between then and now.

System action

The repository manager will check for this condition approximately every hour, continuing for a period of approximately *m* days from now. If an update for the CLUSRCVR channel is received during this period, these messages will stop. If no update is received, these messages will continue to be written. However, after this period has elapsed, if no update has been received, the local queue manager will discard its knowledge of this channel, and these messages will stop. You should be aware that Partial Repository queue managers in this cluster will cease to be able to use the channel at about that time.

System programmer response

There are several possible responses:

1. If the channel had been removed intentionally, and is no longer required, you should consider removing it fully via the RESET CLUSTER command.

2. There is a long-running problem with the local queue manager's CLUSRCVR in cluster *cluster-name*. If this is true, then correct the problem urgently, to ensure that updates for the cluster are received.

3. There is a long-running problem on the remote queue manager's CLUSSDR in cluster *cluster-name*. If this is true, then correct the problem urgently, to ensure that updates for the cluster are sent.

4. Check that the repository manager on the remote queue manager has not ended abnormally.

5. The remote queue manager is out of step with this queue manager, potentially due to a restore of the queue manager from a backup. The remote queue manager must issue REFRESH CLUSTER to synchronize with other queue managers in the cluster.

If the above items have been checked, and this problem persists over several days, causing repeats of this error message in the local queue manager's error logs, contact your IBM support center.

CSQX470E

csect-name Channel *channel-name* has the wrong disposition *disposition*

Severity
8

Explanation

The action you requested cannot be performed on channel *channel-name* because it has the wrong disposition. For example, the action asked for a shared channel, but its disposition is private.

System action

The requested action is not performed.

System programmer response

Check whether the channel name is specified correctly. If it is, check that:

• The channel has been defined correctly

- The transmission queue name identifies the correct queue, and that queue has the required disposition.

The disposition of an instance of a channel is **not** related to that specified by QSGDISP in the channel definition:

- A sending channel is *shared* if its transmission queue is shared, and *private* if it is not.
- A receiving channel is *shared* if it was started in response to an inbound transmission directed to the queue-sharing group, and *private* if it was started in response to an inbound transmission directed to the queue manager.

CSQX471I

csect-name nn shared channels to restart, *nn* requests issued

Severity
0

Explanation

The channel initiator is shutting down; it owns some active shared sending channels, and they have not been requested to stop. Requests to restart these channels on another queue manager have been issued as shown.

System action

The channel initiator shutdown processing continues.

System programmer response

If the numbers in the message differ, the channel initiator was not able to issue restart requests for all the channels. In this case, use the DISPLAY CHSTATUS command to determine which channels are still owned by the queue manager for the channel initiator that is shutting down, and which therefore have not been restarted, and restart them manually as required.

CSQX475I

csect-name Channel *channel-name* adopted, connection *conn-id*

Severity
0

Explanation

Channel *channel-name*, which was orphaned because of a communications error, has been adopted by a new instance of the channel, from connection *conn-id*.

System action

Processing continues.

CSQX476E

csect-name Channel *channel-name* is active on *qmgr-name*, shared status entry found

Severity
8

Explanation

An operation was requested on a channel that is active. Because the channel is shared, it might be active on another queue manager. If the channel is a receiver, a previous instance of it might have been orphaned and therefore still be active.

System action

The request fails.

System programmer response

For operations other than starting the channel, either stop the channel manually, or wait for it to terminate, and try the operation again. It might be necessary to use MODE(FORCE) to stop the channel manually if the Adopt MCA function is not being used. Using the Adopt MCA function avoids the need for manual intervention to handle orphaned receiver channels.

If the channel is not running on the named queue manager, then there is an orphaned shared status entry, which mighty be because a loss of connectivity to Db2 occurred. If the problem persists, contact your IBM support center.

CSQX477E

csect-name Channel *channel-name* is active, transmission queue *queue-name* in use on *qmgr-name*

Severity
8

Explanation

An operation was requested on a channel that is active. The queue *queue-name* named as a transmission queue in the channel definition for *channel-name* is in use on another member of the queue sharing group, *qmgr-name*.

System action

The request fails.

System programmer response

Do the following, as appropriate:

- Check if the channel is already running
- Check if another channel is using the queue by using the DISPLAY QSTATUS command
- Ensure the queue name is specified correctly in the channel definition
- Alter the queue usage attribute of the queue to that of a transmission queue.

If the channel is already running, for operations other than starting the channel, either stop the channel manually, or wait for it to terminate, and retry the operation. It may be necessary to use MODE(FORCE) to stop the channel manually if the Adopt MCA function is not being used. Using the Adopt MCA function will avoid the need for manual intervention to handle orphaned receiver channels.

CSQX478E

csect-name Channel *channel-name* is active on *qmgr-name*, connection tag in use

Severity
8

Explanation

An operation was requested on a channel that is active. The connection tag used to serialize the channel within the queue-sharing group is currently in use. Because the channel is shared, it might be active on another queue manager. If the channel is a receiver, a previous instance of it might have been orphaned and therefore still be active.

In addition to the CSQX478E for a shared channel, another possible symptom is CSQX514E: *csect-name* Channel channel-name is active on qmgr-name. The new instance of the channel is starting with a different IP address from the running instance. If the sender's IP address changed or might translate into more than one address, set ADOPTCHK to QMNAME using the ALTER QMGR command. For example, /cpf ALTER QMGR ADOPTCHK(QMNAME) where "cpf" is the command prefix for the queue manager subsystem.

System action

The request fails.

System programmer response

For operations other than starting the channel, either stop the channel manually, or wait for it to terminate, and try the operation again. It might be necessary to use MODE(FORCE) to stop the channel manually if the Adopt MCA function is not being used. Using the Adopt MCA function avoids the need for manual intervention to handle orphaned receiver channels.

CSQX479E

csect-name Channel *channel-name* is active on *qmgr-name,* shared channel adoption failed

Severity
8

Explanation

An attempt was made to adopt channel *channel-name*, which was orphaned because of a communications error. It failed, either because the channel could not be stopped or because a response was not received from the queue manager *qmgr-name.*

System action

The request fails, and the orphaned channel might remain active.

System programmer response

Investigate any preceding error messages to discover why the adopt failed. Either stop the channel manually, or wait for it to terminate, and try the operation again. It might be necessary to use MODE(FORCE) to stop the channel manually.

CSQX482E

csect-name Shared channel function not available

Severity
8

Explanation

During the execution of a channel command, or during shared channel processing, an internal function required by the channel initiator was found to be unavailable.

System action

The channel command fails or the channel stops.

System programmer response

Check that the Db2 tables required by MQ are correctly defined, and restart the queue manager and Db2 if necessary. If these appear to be running correctly, display the information in the shared channel status (CSQ.ADMIN_B_SCST) and the shared synchronization key (CSQ.ADMIN_B_SSKT) Db2 tables, and contact your IBM support center for further assistance. For further information, and for details of a sample job (CSQ45STB) which shows the information in the Db2 tables, see Problem determination on z/OS .

CSQX483E

csect-name Db2 not available

Severity
8

Explanation

Because Db2 is not available, or is no longer available, the channel initiator cannot do processing for a shared channel.

System action

The channel command fails or the channel stops.

System programmer response

Use the preceding messages on the z/OS console to investigate why Db2 is not available, and restart it if necessary.

CSQX484E

csect-name Error accessing Db2

Severity
8

Explanation

Because there was an error in accessing Db2, the channel initiator cannot do processing for a shared channel.

System action

The channel command fails or the channel stops.

System programmer response

Resolve the error reported in the preceding messages.

CSQX485E

csect-name Shared channel status error

Severity
8

Explanation

During the execution of a channel command, or during shared channel processing, shared channel status or shared synchronization key information, held in Db2, was found to be corrupted.

System action

The channel command fails or the channel stops.

System programmer response

Check that the Db2 tables required by MQ are correctly defined, and restart Db2 if necessary. If Db2 appears to be running correctly, display the information in the shared channel status (CSQ.ADMIN_B_SCST) and the shared synchronization key (CSQ.ADMIN_B_SSKT) Db2 tables, and contact your IBM support center for further assistance. For further information, and for details of a sample job (CSQ45STB) which shows the information in the Db2 tables, see Problem determination on z/OS .

CSQX486E

csect-name Shared channel *channel-name* definitions inconsistent

Severity
8

Explanation

The definition of a shared channel has differing attribute values on the various queue managers in the queue-sharing group. For example, if the type of the channel differs start or stop requests cannot operate correctly.

System action

The request fails.

System programmer response

Change the definitions of the channel so that they are the same on all the queue managers. If the channel type needs changing, you must delete and then redefine the channel.

CSQX489E

csect-name Maximum instance limit *limit* exceeded, channel *channel-name* connection *conn-id*

Severity
8

Explanation

There are too many instances of the channel *channel-name* running to be able to start another. The maximum number allowed is *limit* and is specified in the MAXINST channel attribute.

System action

The channel does not start.

System programmer response

Wait for some of the operating channels to terminate before restarting the channel, or use the ALTER CHANNEL command to increase MAXINST.

CSQX490E

csect-name Maximum client instance limit *limit* exceeded, channel *channel-name* connection *conn-id*

Severity
8

Explanation

There are too many instances of the channel *channel-name* running from the connection *conn-id* to be able to start another. The maximum number allowed is *limit* and is specified in the MAXINSTC channel attribute.

System action

The channel does not start.

System programmer response

Wait for some of the operating channels to terminate before restarting the channel, or use the ALTER CHANNEL command to increase MAXINSTC.

CSQX496I

csect-name Channel *channel-name* stopping because of request by remote exit

Severity
0

Explanation

The channel is closing because the user channel exit at the remote end requested it.

System action

The channel stops. The associated transmission queue might be set to GET(DISABLED) and triggering turned off. For auto-defined channels, the channel does not start.

System programmer response

Note that this puts the channel into STOPPED state. A START CHANNEL command must be issued to restart it.

CSQX498E

csect-name Invalid MQCD field *field-name*, value=*nnn* (X*xxx*)

Severity
8

Explanation

The MQCD structure returned by the channel auto-definition exit had an invalid value in the indicated field. The value is shown in decimal (*nnn*) and hexadecimal (*xxx*).

System action

The channel is not defined.

System programmer response

Correct the channel auto-definition exit.

CSQX500I

csect-name Channel *channel-name* started connection *conn-id*

Severity
0

Explanation

The specified channel has been started.

If *channel-name* is an inbound channel (indicated by *csect-name* containing CSQXRESP) then it was started from connection *conn-id*. If *channel-name* is an outbound channel then *conn-id* will be omitted.

System action

Processing continues.

CSQX501I

csect-name Channel *channel-name* no longer active connection *conn-id*

Severity
0

Explanation

Channel *channel-name* terminated. It is now inactive if it terminated normally when the disconnect interval expired, or stopped if it terminated because of an error or a STOP CHANNEL command.

If *channel-name* was an inbound channel (indicated by *csect-name* containing CSQXRESP) then it was started from connection *conn-id*. If *channel-name* was an outbound channel then *conn-id* will be omitted.

System action

Processing continues.

System programmer response

If the channel is stopped, resolve any error, and issue a START CHANNEL command to restart the channel.

CSQX502E

csect-name Action not allowed for channel *chl-type*(*channel-name*)

Severity
8

Explanation

The action you requested cannot be performed on channel *channel-name*. Some actions are only valid for certain channel types. This channel is a *chl-type* channel type. For example, you can only ping a channel from the end sending the message.

System action

The requested action is not performed.

System programmer response

Check whether the channel name is specified correctly. If it is, check that:

- The channel has been defined correctly
- The connection name identifies the remote end correctly
- For a cluster-receiver channel, the connection name does not specify a generic address or a shared listener port (INDISP=GROUP).
- For TCP/IP connections, the port number specified by the local channel matches that used by the listener at the remote queue manager.

You can use the *csect-name* to determine the action that failed:

csect-name	action
CSQXPING	PING CHANNEL
CSQXRESE	RESET CHANNEL
CSQXRESO	RESOLVE CHANNEL
CSQXSTOP	STOP CHANNEL

Table 5.

CSQX503E

csect-name Negotiation failed, channel *channel-name* type=*last-segment-type* data=*xxx* connection *conn-id*

Severity
8

Explanation

Channel *channel-name* could not be established due to a negotiation failure between the local queue manager and the remote end using connection *conn-id*. The last control data received was of type *last-segment-type* and is accompanied by data indicating the error.

A value of FFFFFFFF (-1) indicates that no error data was sent by the remote end.

System action

The channel is not started.

System programmer response

Examine the console log for the remote end for messages explaining the cause of the negotiation failure.

CSQX504E

csect-name Local protocol error, channel *channel-name* type=*type* data=*xxx*

Severity
8

Explanation

During communications with the remote end, the local message channel agent for channel *channel-name* detected a protocol error.

type shows the type of error that occurred and the incorrect value is shown by *xxx*.

00000001
Missing channel. Define a remote channel. See message CSQX520E for more information.

00000002
Incorrect channel type. Check your definitions. See message CSQX547E for more information.

00000003

Queue manager unavailable. Check the queue manager. See message CSQX524E for more information.

00000004

Message sequence error. Investigate the problem and reset the channel. See message CSQX526E for more information.

00000005

Queue manager terminating. This message might be for information only. See message CSQX525E for more information.

00000006

Unable to store. This message might be for information only. See messages CSQX527E and CSQX544E for more information. Also, check the error log for the remote system. Messages might end up on the remote dead-letter queue.

00000007

User closed. This message might be for information only. See message CSQX528I for more information. The channel is stopping, either because of a STOP CHANNEL command, or the channel initiator is stopping.

00000008

Timeout expired. This message might be for information only. During an MQGET_WAIT the DISCINT times out, so the channel is closed.

00000009

Target queue unknown - contact your IBM support center.

0000000A

Incorrect segment type - contact your IBM support center.

0000000B

Incorrect segment length. Check the remote client. Either the client has sent a segment larger than the buffer it requested, or the requested buffer exceeds the combined payload and header limits.

0000000C

Data not valid - contact your IBM support center.

0000000D

Unexpected segment - contact your IBM support center.

0000000E

Unexpected ID - contact your IBM support center.

0000000F

Unexpected MSH - contact your IBM support center.

00000010

General protocol problem - contact your IBM support center.

00000011

Batch failure - contact your IBM support center.

00000012

Incorrect message length - contact your IBM support center.

00000013

Incorrect segment number - contact your IBM support center.

00000014

Security failure - contact your IBM support center.

00000015

Wrap value error. Use the command ALTER CHANNEL SEQWRAP to align the local or remote channel sequence wrap values. See message CSQX505E for more information.

00000016

Channel unavailable. Check if the remote channel is STOPPED, or otherwise unavailable. See message CSQX558E for more information.

00000017

Closed by exit - contact your IBM support center.

00000018

Cipher spec error. Confirm the SSLCIPH of the channel, and its compatibility if the remote side has been set to SSLFIPS(YES). See message CSQX635E for more information.

00000019

Peer name error. Confirm that SSLPEERNAME on this channel, matches the distinguished name in the certificate of the remote side. See message CSQX636E for more information.

0000001A

SSL/TLS client certificate error. Check the remote channel and see if a certificate has been supplied for SSL/TLS negotiation. See message CSQX637E for more information.

0000001B

RMT RSRCS in recovery. This message is for information only; the condition is transient.

0000001C

SSL/TLS refreshing. This message is for information only; the condition is transient.

0000001D

HOBJ not valid - contact your IBM support center.

0000001E

Conversion ID error - contact your IBM support center.

0000001F

Socket action type not valid - contact your IBM support center.

00000020

Standby queue manager not valid - contact your IBM support center.

00000021

Maximum transmission size not valid. Increase the remote RECEIVER attributes for transmission unit size.

00000022

FAP level not valid - contact your IBM support center.

00000023

Maximum permitted conversions exceeded. The SHARECNV limit has been exceeded. Investigate the remote client and increase the value of SHARECNV.

00000024

Password protection error - contact your IBM support center.

System action

The channel stops. The associated transmission queue might be set to GET(DISABLED) and triggering turned off.

System programmer response

Examine the console log to determine the cause of the failure. This might occur after the channel initiator or queue manager is stopped forcibly or ends abnormally. If it occurs in other cases, contact your IBM support center to report the problem.

CSQX505E

csect-name Sequence wrap values differ, channel *channel-name* local=*local-seqno* remote=*remote-seqno*

Severity
8

Explanation

The sequence number wrap value for channel *channel-name* is *local-seqno,* but the value specified at the remote end is *remote-seqno*. The two values must be the same before the channel can be started.

System action

The channel does not start.

System programmer response

Change either the local or remote channel definition so that the values specified for the message sequence number wrap value are the same.

CSQX506E

csect-name Message receipt confirmation not received for channel *channel-name*

Severity
8

Explanation

The remote end did not accept the last batch of messages.

System action

Channel *channel-name* stops. The associated transmission queue may be set to GET(DISABLED) and triggering turned off.

System programmer response

Determine why the remote end did not accept the last batch of messages. Resolve the problem and restart the channel.

CSQX507E

csect-name Channel *channel-name* is in-doubt, connection *conn-id* (queue manager *qmgr-name*)

Severity
8

Explanation

Channel *channel-name* is in-doubt with the remote end using connection *conn-id*. The associated remote queue manager is *qmgr-name*; in some cases its name cannot be determined and so is shown as '????'.

System action

The requested operation does not complete.

System programmer response

Examine the status of the channel, and either restart a channel to resolve the in-doubt state, or use the RESOLVE CHANNEL command to correct the problem manually.

CSQX511I

csect-name Channel *channel-name* started, connection *conn-id*

Severity
0

Explanation

The specified SVRCONN channel has been started from connection *conn-id*.

System action

Processing continues.

CSQX512I

csect-name Channel *channel-name* no longer active, connection *conn-id*

Severity

0

Explanation

SVRCONN Channel *channel-name* terminated. It is now inactive if it terminated normally when the disconnect interval expired, or stopped if it terminated because of an error or a STOP CHANNEL command.

The SVRCONN *channel-name* was started from connection *conn-id*.

System action

Processing continues.

System programmer response

If the SVRCONN channel is stopped, resolve any error, and issue a START CHANNEL command to restart the channel.

CSQX513E

csect-name Current channel limit exceeded channel *channel-name* connection *conn-id*

Severity

8

Explanation

There are too many channels current to be able to start another. The maximum number allowed is specified in the MAXCHL queue manager attribute. Current channels include stopped and retrying channels as well as active channels.

If *channel-name* was an inbound channel (indicated by *csect-name* containing CSQXRESP) then it was started from connection *conn-id*. If *channel-name* was an outbound channel then *conn-id* will be omitted.

System action

The channel does not start.

System programmer response

Wait for some of the operating channels to terminate before restarting the channel, or use the ALTER QMGR command to increase **MAXCHL**. A change that increases **MAXCHL** will not be effective until the channel initiator has been stopped and restarted. If many of the currently operating channels are server-connection channels, consider limiting the number of those using **MAXINST** or **MAXINSTC** attributes of a server-connection channel. See Server-connection channel limits for more details.

CSQX514E

csect-name Channel *channel-name* is active on *qmgr-name*

Severity

8

Explanation

An operation was requested on a channel that is active. If the channel is shared, it might be active on another queue manager. If the channel is a receiver, a previous instance of it might have been orphaned and therefore still be active.

System action

The request fails.

System programmer response

For operations other than starting the channel, either stop the channel manually, or wait for it to terminate, and try the operation again. It might be necessary to use MODE(FORCE) to stop the channel manually if the Adopt MCA function is not being used. Using the Adopt MCA function avoids the need for manual intervention to handle orphaned receiver channels.

CSQX515I

csect-name Channel *channel-name* changed

Severity
0

Explanation

The channel for which information has been requested is a new instance of the channel. The previous channel instance has ended.

System action

The information shown is for the new channel instance.

CSQX516E

csect-name Error accessing synchronization data, RC=*return-code*

Severity
8

Explanation

There was an error when accessing the channel synchronization data.

If the return code is of the form 10009*nnn* or 20009*nnn*, it is a distributed queuing message code. This is generally associated with message CSQX*nnn*E, which will normally be issued previously.

Otherwise the most likely cause is a shortage of storage.

System action

The channel stops. The associated transmission queue may be set to GET(DISABLED) and triggering turned off.

In some cases, the channel initiator will stop as well.

System programmer response

If the return code is a distributed queuing message code, see the corresponding message explanation for more information. Where no such message is described, see "Distributed queuing message codes" on page 1139 for the corresponding message number.

Restart the channel or the channel initiator. If the problem persists, contact your IBM support center.

CSQX517E

csect-name Error in *q-name* - channel *channel-name* repeated

Severity
8

Explanation

There was more than one set of synchronization information in *q-name* for an instance of channel *channel-name*. This is probably because the channel is a receiver channel, and there are two sender channels with the same name on different queue managers within the same network address that have communicated with it.

System action

The first set of synchronization information for the channel instance is used, and any others are ignored. Errors may occur if the channel is used.

System programmer response

Avoid using the channel. Remove the extra sets of information from the channel synchronization queue, and rename channels so that they have unique names.

If this does not resolve the problem, contact your IBM support center.

CSQX519E

csect-name Channel *channel-name* not defined connection *remote-conn-id*

Severity
8

Explanation

The channel initiator could not find a definition of channel *channel-name*.

The associated remote connection name is *remote-conn-id*. If the request to use the channel is not from an inbound connection, or the remote connection name cannot be determined, *remote-conn-id* will be shown as '????'.

System action

The requested operation fails.

System programmer response

Ensure that the name is specified correctly and the channel definition is available.

The message can also be issued if an automatically defined cluster sender channel (CLUSSDRA) has been deleted as a result of issuing a REFRESH CLUSTER command and a putting application still has a queue object open which is using the channel.

CSQX520E

csect-name Remote channel *channel-name* not defined

Severity
8

Explanation

There is no definition of channel *channel-name* at the remote end.

System action

The channel does not start.

System programmer response

Add an appropriate channel definition at the remote end, and retry the operation.

CSQX523E

csect-name Remote protocol error, channel *channel-name* type=*type* data=*xxx*

Severity
8

Explanation

During communications with the remote end, the remote message channel agent for channel *channel-name* detected a protocol error. *type* shows the type of error that occurred:

0000000A
  Incorrect segment type
0000000B
  Incorrect length
0000000C
  Invalid data

0000000D
> Invalid segment

0000000E
> Invalid ID

0000000F
> Invalid MSH

00000010
> General error

00000011
> Batch failure

00000012
> Incorrect message length

00000013
> Incorrect segment number

The data associated with the error (for example, the incorrect value) is shown by *xxx*.

System action

The channel stops. The associated transmission queue might be set to GET(DISABLED) and triggering turned off.

System programmer response

Examine the console log for the remote end to determine the cause of the failure. This might occur after the channel initiator or queue manager is stopped forcibly or ends abnormally. If it occurs in other cases, contact your IBM support center.

CSQX524E

csect-name Remote queue manager unavailable for channel *channel-name*

Severity
8

Explanation

Channel *channel-name* cannot start because the remote queue manager is not currently available.

System action

The channel does not start

System programmer response

Either start the remote queue manager, or retry the operation later.

CSQX525E

csect-name Channel *channel-name* closing because remote queue manager *qmgr-name* is stopping

Severity
8

Explanation

Channel *channel-name* is closing because the remote queue manager *qmgr-name* is stopping. In some cases, the remote queue manager name cannot be determined and so is shown as '????'.

System action

The channel stops. The associated transmission queue might be set to GET(DISABLED) and triggering turned off.

System programmer response

Investigate why the remote queue manager is stopping, if it was not expected.

CSQX526E

csect-name Message sequence error for channel *channel-name*, sent=*msg-seqno* expected=*exp-seqno*

Severity
8

Explanation

The local queue manager does not agree with the remote end on the next message sequence number for channel *channel-name*. The message is normally issued at both the sending and receiving end: at the sending end, *msg-seqno* and *exp-seqno* are unpredictable; at the receiving end, a message had sequence number *msg-seqno* but sequence number *exp-seqno* was expected.

System action

The channel stops. The associated transmission queue might be set to GET(DISABLED) and triggering turned off.

System programmer response

Determine the cause of the inconsistency. It could be that the synchronization information has become damaged, or has been backed out to a previous version. If the problem cannot be resolved, the sequence number can be reset manually at the sending end of the channel using the RESET CHANNEL command. (For some queue managers, it might be necessary to issue the RESET CHANNEL command at the receiving end as well.)

CSQX527E

csect-name Unable to send message for channel *channel-name*

Severity
8

Explanation

The remote end cannot receive the message that is being sent for channel *channel-name*.

System action

The channel stops. The associated transmission queue may be set to GET(DISABLED) and triggering turned off.

System programmer response

Examine the console log for the remote end to determine why the message cannot be received, and then restart the channel.

CSQX528I

csect-name Channel *channel-name* stopping

Severity
0

Explanation

The channel is closing because a STOP CHANNEL command was issued, or because the channel initiator is stopping.

System action

The channel stops. The associated transmission queue may be set to GET(DISABLED) and triggering turned off.

System programmer response

Note that a STOP CHANNEL command puts the channel into STOPPED state. A START CHANNEL command must be issued to restart it.

CSQX531E

csect-name Transmission queue *q-name* for *channel-name* has wrong usage type

Severity

8

Explanation

Queue *q-name* is named as a transmission queue in the channel definition for *channel-name,* but it is not a transmission queue.

System action

The channel does not start.

System programmer response

Ensure the queue name is specified correctly in the channel definition. If it is, alter the queue usage attribute of the queue to that of a transmission queue.

CSQX533I

csect-name Channel *channel-name* is already in requested state

Severity

0

Explanation

A request to stop channel *channel-name* was made, but the channel was already in the specified state, or in the process of reaching that state.

System action

The request is ignored.

CSQX534E

csect-name Channel *channel-name* is stopped

Severity

4

Explanation

The operation requested cannot be performed because the channel is currently stopped.

System action

The request is ignored.

System programmer response

Issue a START CHANNEL command to restart the channel.

CSQX535E

csect-name Channel *channel-name* stopping because exit *exit-name* is not valid

Severity

8

Explanation

The user exit *exit-name* specified for channel *channel-name* is not valid.

System action

The channel stops. The associated transmission queue might be set to GET(DISABLED) and triggering turned off. For auto-defined channels, the channel does not start.

System programmer response

Ensure that the user exit name is specified correctly in the channel definition, and that the user exit program is correct and available. The channel initiator loads exits from the library data sets under the CSQXLIB DD statement of its started task JCL procedure xxxxCHIN.

CSQX536I

csect-name Channel *channel-name* stopping because of request by exit *exit-name*

Severity
0

Explanation

The channel is closing because the user channel exit *exit-name* requested it.

System action

The channel stops. The associated transmission queue may be set to GET(DISABLED) and triggering turned off. For auto-defined channels, the channel does not start.

System programmer response

Note that this puts the channel into STOPPED state. A START CHANNEL command must be issued to restart it.

CSQX539E

csect-name Channel *channel-name* for queue *q-name* is not available

Severity
8

Explanation

A trigger message was received to start a channel *channel-name* to process the transmission queue *q-name*. However, the channel initiator could not find a defined and available channel to start.

System action

The channel does not start.

System programmer response

Ensure that there is a channel defined to process the transmission queue, and that it is not stopped.

CSQX540E

csect-name Unable to commit batch, channel *channel-name* MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity
8

Explanation

An MQCMIT call for the queue associated with channel *channel-name* was unsuccessful.

System action

The channel stops. The associated transmission queue might be set to GET(DISABLED) and triggering turned off.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQX541E

csect-name Invalid CCSIDs for data conversion, *ccsid1* and *ccsid2*

Severity
8

Explanation

Either the local coded character set identifier (CCSID) or the target CCSID is not valid, or is not currently supported, or conversion between the two CCSIDs involved is not supported. (The name of the channel cannot be determined because the invalid CCSID prevents the necessary data conversion being done.)

System action

The channel stops. The associated transmission queue may be set to GET(DISABLED) and triggering turned off.

System programmer response

Ensure that the CCSIDs are valid and that conversion between them is supported. For information about the CCSIDs that are supported, see Codeset names and CCSIDs.

CSQX544E

csect-name Messages for channel *channel-name* sent to remote dead-letter queue

Severity
4

Explanation

During the processing of channel *channel-name*, one or more messages have been put the dead-letter queue at the remote queue manager.

System action

Processing continues.

System programmer response

Examine the contents of the dead-letter queue. Each message is contained in a structure that describes why the message was put to the queue, and to where it was originally addressed.

CSQX545I

csect-name Channel *channel-name* closing because disconnect interval expired

Severity
0

Explanation

The channel is closing because no messages arrived on the transmission queue within the disconnect interval.

System action

The channel ends normally.

CSQX547E

csect-name Remote channel *channel-name* has the wrong type

Severity
8

Explanation

The operation requested cannot be performed because channel *channel-name* on the remote end is not of a suitable type. For example, if the local channel is defined as a sender the remote queue manager must define its corresponding channel as either a receiver or requester.

System action

The requested operation is not performed.

System programmer response

Check that the channel name is specified correctly. If it is, check that:

- The channel definition on the remote end has an appropriate channel type
- The connection name of the local channel identifies the remote end correctly
- For a cluster-receiver channel, the connection name does not specify a generic address or a shared listener port (INDISP=GROUP).
- For TCP/IP connections, the port number specified by the local channel matches that used by the listener at the remote queue manager.

CSQX548E

csect-name Messages sent to local dead-letter queue, channel *channel-name* reason=*mqrc* (*mqrc-text*)

Severity
4

Explanation

During the processing of channel *channel-name*, one or more messages have been put the dead-letter queue at the local queue manager. *mqrc* shows why, and is one of the following:

- an MQRC_* reason code from an MQPUT or MQPUT1 call
- an MQFB_* feedback code.

System action

Processing continues.

System programmer response

Examine the contents of the dead-letter queue. Each message is contained in a structure that describes why the message was put to the queue, and to where it was originally addressed.

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

For information about MQFB_* feedback codes see the MQMD description in MQMD - Message descriptor.

CSQX549E

csect-name Queue *q-name* for channel *channel-name* is get-inhibited

Severity
8

Explanation

An MQGET failed because the transmission queue had been previously inhibited for gets.

System action

The channel stops. The associated transmission queue might have triggering turned off.

System programmer response

Change the definition of the transmission queue so that it is not inhibited for MQGET calls.

CSQX551E

csect-name Action not supported, channel *channel-name* connection *conn-id* (queue manager *qmgr-name*)

Severity
8

Explanation

The operation requested for channel *channel-name* is not supported by the remote end using the connection *conn-id*. The associated remote queue manager is *qmgr-name*; in some cases its name cannot be determined and so is shown as '????'.

System action

The channel stops. The associated transmission queue may be set to GET(DISABLED) and triggering turned off.

System programmer response

Check that the connection name parameter is specified correctly and that the levels of the queue managers in use are compatible.

CSQX552E

csect-name Security exit data for channel *channel-name* not received, connection *conn-id*

Severity
8

Explanation

The local security user channel exit for channel *channel-name* requested data from the remote security user channel exit, but no data was received. The remote connection was *conn-id*.

System action

The channel stops. The associated transmission queue may be set to GET(DISABLED) and triggering turned off.

System programmer response

Ensure that the security exit for the channel on the remote end has been defined correctly and is available. If it is, check that the exit program operates correctly.

CSQX558E

csect-name Remote channel *channel-name* not available

Severity
8

Explanation

The channel *channel-name* at the remote end is currently stopped or is otherwise unavailable. For example, there might be too many channels current to be able to start it.

System action

The channel does not start.

System programmer response

This might be a temporary situation, and the channel will try again. If not, check the status of the channel at the remote end. If it is stopped, issue a START CHANNEL command to restart it. If there are too many channels current, either wait for some of the operating channels to terminate, or stop some channels manually, before restarting the channel.

CSQX565E

csect-name No dead-letter queue for *qmgr-name*, channel *channel-name*

Severity
8

Explanation

A message could not be delivered normally and there is no dead-letter queue defined for queue manager *qmgr-name*.

You can get this message with a cluster sender channel during message reallocation. During reallocation, the message is got from the transmission queue and put back again. If the transmission queue is full, then the put fails and tries writing the message to the dead letter queue. If the dead letter queue does not exist, message CSQX565E is produced, and the reallocation changes are rolled back. Reallocation does not happen until the queue full problem is resolved.

System action

The channel stops, except in the case where nonpersistent messages are being sent and the NPMCLASS attribute of the channel is set to FAST, when processing continues. The associated transmission queue may be set to GET(DISABLED) and triggering turned off.

System programmer response

Correct the problem that prevented the message from being delivered normally, or define a dead-letter queue for the remote queue manager.

CSQX567E

csect-name Listener unable to register to APPC/MVS, TRPTYPE=LU62 INDISP=*disposition* RC=*return-code* reason=*reason*

Severity
8

Explanation

While starting, the specified LU 6.2 listener could not register as an APPC/MVS server. The return code from APPC/MVS allocate services was *return-code* and the associated reason code was *reason* (both in hexadecimal).

System action

The listener is not started.

System programmer response

See "Communications protocol return codes" on page 1124 for the cause of the return code from APPC/MVS allocate services, and the *Writing Servers for APPC/MVS* manual for more information. Check that the LUNAME queue manager attribute is the same as the PARTNER_LU value for the APPC/MVS symbolic destination used by the listener.

CSQX568E

csect-name Listener unable to unregister from APPC/MVS, TRPTYPE=LU62 INDISP=*disposition* RC=*return-code* reason=*reason*

Severity
8

Explanation

While stopping, the specified LU 6.2 listener could not unregister as an APPC/MVS server. The return code from APPC/MVS allocate services was *return-code* and the associated reason code was *reason* (bothin hexadecimal).

System action

The listener stops. It may not be possible to restart it.

System programmer response

See "Communications protocol return codes" on page 1124 for the cause of the return code from APPC/MVS allocate services and the *Writing Servers for APPC/MVS* manual for more information.

CSQX569E

csect-name Channel *channel-name* exceeded TCP/IP channel limit

Severity
 8

Explanation

 The number of current TCP/IP channels is the maximum allowed; another channel cannot be started. Current channels include stopped and retrying channels as well as active channels. The maximum allowed is specified in the TCPCHL queue manager attribute, but may be reduced if a dispatcher fails, or if TCP/IP resources are restricted (as reported by message CSQX118I).

System action

 The channel does not start.

System programmer response

 If the maximum allowed is zero, TCP/IP communications are not allowed, and no TCP/IP channels can be started. If the maximum allowed is non-zero, wait for some of the operating channels to terminate before restarting the channel, or use the ALTER QMGR command to increase TCPCHL.

CSQX570E

 csect-name Channel *channel-name* exceeded LU 6.2 channel limit

Severity
 8

Explanation

 The number of current LU 6.2 channels is the maximum allowed; another channel cannot be started. Current channels include stopped and retrying channels as well as active channels. The maximum allowed is specified in the LU62CHL queue manager attribute, but may be reduced if a dispatcher fails.

System action

 The channel does not start.

System programmer response

 If the maximum allowed is zero, LU 6.2 communications are not allowed, and no LU 6.2 channels can be started. If the maximum allowed is non-zero, wait for some of the operating channels to terminate before restarting the channel, or use the ALTER QMGR command to increase LU62CHL.

CSQX571E

 csect-name Error from PKCS #11 callable service '*func*', RC=*return-code*, reason=*reason*

Severity
 8

Explanation

 An attempt to use PKCS #11 callable service *func* failed.

System action

 The component where the error occurred (message channel agent, supervisor) will continue but the feature being used will be unavailable.

 If *func* is CSFPPRF (Pseudo-random function) the feature affected is password protection. If this feature is not being used then this error can be ignored. If this occurs at channel initiator startup, the password protection algorithm uses STCK instead.

System programmer response

 For information about the *return-code* and *reason* from the PKCS #11 callable service, see the section on ICSF and TSS Return and Reason Codes in the *z/OS Cryptographic Services ICSF Application Programmer's Guide*.

 For more information about Integrated Cryptographic Service Facility (ICSF), see Using ICSF.

CSQX572E

csect-name Channel *channel-name* stopping because message header is not valid

Severity
8

Explanation

During the processing of channel *channel-name,* a message was found that had an invalid header. The dead-letter queue was defined as a transmission queue, so a loop would have been created if the message had been put there.

System action

The channel stops. The associated transmission queue may be set to GET(DISABLED) and triggering turned off.

System programmer response

Correct the problem that caused the invalid message header.

CSQX573E

csect-name Channel *channel-name* exceeded active channel limit

Severity
8

Explanation

There are too many channels active (transmitting messages) to be able to start another. The maximum number allowed is specified in the ACTCHL queue manager attribute.

System action

The channel does not start.

System programmer response

Either wait for some of the operating channels to terminate, or stop some channels manually, before restarting the channel, or use the ALTER QMGR command to increase ACTCHL. A change that increases ACTCHL will not be effective until the channel inititator has been stopped and restarted.

CSQX574I

csect-name Channel *channel-name* can now start

Severity
0

Explanation

The specified channel was waiting to start, because there were too many channels active (transmitting messages) to be able to start another. One or more of the active channels has terminated, so this channel can now start.

Note: This message is not itself issued, although the corresponding event is generated.

CSQX575E

csect-name Negotiation failed for channel

Severity
8

Explanation

A channel between the local queue manager and the remote end could not be established due to a negotiation failure. The failure was such that the channel name could not be determined: for example, data conversion between the coded character set identifiers (CCSIDs) used by the local and remote ends might not have been possible.

System action

The channel is not started.

System programmer response

Examine the console log for the remote end for messages explaining the cause of the negotiation failure.

CSQX578E

csect-name Unable to save status for channel *channel-name*

Severity
8

Explanation

An internal error has occurred.

System action

The channel stops. The associated transmission queue may be set to GET(DISABLED) and triggering turned off.

Information about the error is written to the data set identified by the CSQSNAP DD statement of the channel initiator started task JCL procedure, xxxxCHIN.

System programmer response

Collect the items listed in the Problem Determination section and contact your IBM support center.

CSQX599E

csect-name Channel *channel-name* ended abnormally connection *conn-id*

Severity

8

Explanation

Channel *channel-name* ended abnormally because of a severe problem, as reported in the preceding messages.

If *channel-name* is an inbound channel (indicated by *csect-name* containing CSQXRESP) then it was started from connection *conn-id*. If *channel-name* is an outbound channel then *conn-id* will be omitted.

System action

The channel stops. The associated transmission queue might be set to GET(DISABLED) and triggering turned off.

System programmer response

Investigate the problem reported in the preceding messages. For more information see, Problem determination in DQM.

CSQX608E

csect-name Remote resources in recovery for channel *channel-name*

Severity
8

Explanation

Channel *channel-name* cannot start because resources at the remote queue manager are being recovered.

System action

The channel does not start.

System programmer response

Restart the channel at a later time. If the problem persists examine the console log for the remote end for messages explaining the cause of the problem. This includes an instance of CSQX609E with more details.

CSQX609E

csect-name Resources in recovery, channel *channel-name* MQCC=*mqcc* MQRC=*mqrc* (*mqrc-text*)

Severity
8

Explanation

The message channel agent for the channel could not connect to the queue manager because resources are being recovered.

System action

The channel does not start.

System programmer response

Refer to API completion and reason codes for information about *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form), which come from an MQCONNX request.

CSQX613I

csect-name Channel *channel-name* instance is already in requested state

Severity
0

Explanation

A request to stop a particular instance of channel *channel-name* was made (by specifying a connection name or a remote queue manager name), but the channel instance was already in the specified state, or in the process of reaching that state.

This error will also apply if an attempt is made to stop a SVRCONN channel using the QMNAME parameter. In this case do not use the QMNAME parameter. In order to stop a specific SVRCONN instance use the CONNAME parameter

System action

The request is ignored.

CSQX617I

csect-name SSL key repository refresh not processed, SSL communications unavailable

Severity
0

Explanation

The cached SSL key repository cannot be refreshed in response to a REFRESH SECURITY TYPE(SSL) command because SSL communications are currently unavailable.

System action

0

System programmer response

Investigate why SSL is not available and take action as appropriate. It may be necessary to restart the channel initiator to allow SSL to be used.

Note: Ensure that SSLTASKS is set to a nonzero value.

CSQX618I

csect-name SSL key repository refresh started

Severity
> 0

Explanation

> The cached SSL key repository is being refreshed in response to a REFRESH SECURITY TYPE(SSL) command.

System action

> Message CSQX619I will be issued when the refresh is complete.

CSQX619I

csect-name SSL key repository refresh processed

Severity
> 0

Explanation

> The refresh of the cached SSL key repository is complete.

System action

> Channels will be restarted as required.

> z/OS

CSQX620E

csect-name System SSL error, channel *channel-name* connection *conn-id* function '*func*' RC=*return-code*

Severity
> 8

Explanation

> An unexpected SSL communications error occurred for a channel. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'. The remote connection is *conn-id*. *func* is the name of the System SSL function that gave the error, and *return-code* is the return code (in decimal unless *func* is 'gsk_fips_state_set' in which case it is in hexadecimal).

System action

> The channel is stopped.

System programmer response

> See "Secure Sockets Layer (SSL) and Transport Layer Security (TLS) return codes for z/OS" on page 1135 for the cause of the return code from System SSL and refer to the SSL Function Return Codes in the *z/OS Cryptographic Services System SSL Programming* manual for more information.

> z/OS

CSQX625E

csect-name System SSL error, function '*func*' RC=*return-code*

Severity
> 8

Explanation

An unexpected SSL communications error occurred for an SSL server subtask. *func* is the name of the System SSL function that gave the error, and *return-code* is the return code (in decimal).

System action

The SSL server subtask terminates.

System programmer response

See "Secure Sockets Layer (SSL) and Transport Layer Security (TLS) return codes for z/OS" on page 1135 for the cause of the return code from System SSL and the *System Secure Sockets Layer Programming Guide and Reference* manual for more information.

CSQX629E

csect-name Channel *channel-name* requires ICSF for SSLCIPH(*ciph*)

Severity
8

Explanation

Channel *channel-name* is using a cipherspec *ciph* that requires Integrated Cryptographic Service Facility (ICSF) callable services, but ICSF is not available. Sometimes the channel name and cipherspec are unknown and so are shown as "????". If known, the cipherspec is shown in the message as a 4-character code.

Recognized values are shown in message CSQX631E.

The cipherspecs that use GCM or ephemeral elliptic curve algorithms require ICSF.

System action

The channel will not start.

System programmer response

Ensure ICSF is available, or change the cipherspec that the channel is using to one that does not require ICSF. If you are using ICSF and running the queue manager with SSLFIPS(YES), ensure that ICSF is configured to run in FIPS mode.

For more information, see System SSL RC 455.

CSQX630E

csect-name Channel *channel-name* requires SSL

Severity
8

Explanation

Channel *channel-name* cannot start because it requires SSL, but SSL communications are not currently available.

System action

The channel does not start.

System programmer response

If SSL is required, investigate why it is not available and take action as appropriate. One possible cause, is that there is no certificate available owned by the user who initiated the channel address space. If this is the case, you need to re-configure the user ID to have a certificate with the correct value, by issuing the command **RACDCERT ID(xxxx)**, where *xxxx* is the user ID.

Check that you have the SSL queue manager properties set, for example SSLTASKS must be greater than 0.

If SSL is not required, change the channel definition so that SSL is not used.

CSQX631E

csect-name Cipher specifications differ, channel *channel-name* local=*local-ciph* (*local-protocol*) remote=*remote-ciph* (*remote-protocol*) connection *conn-id*

Severity

8

Explanation

The SSL cipher specification value for channel *channel-name* is *local-ciph* using protocol *local-protocol,* but the value specified at the remote end (from connection *conn-id*) is *remote-ciph* using protocol *remote-protocol*. The cipher specification and protocol values must be the same before the channel can be started. The cipher specification values are shown in the message as four-character codes; common values are:

Table 6. Convert from four-character codes to CipherSpec names		
Four-character code	**Protocol**	**CipherSpec name**
0001	SSL 3.0	NULL_MD5
0002	SSL 3.0	NULL_SHA
0003	SSL 3.0	RC4_MD5_EXPORT
0004	SSL 3.0	RC4_MD5_US
0005	SSL 3.0	RC4_SHA_US
0006	SSL 3.0	RC2_MD5_EXPORT
0009	SSL 3.0	DES_SHA_EXPORT
0009	TLS 1.0	TLS_RSA_WITH_DES_CBC_SHA
000A	SSL 3.0	TRIPLE_DES_SHA_US
000A	TLS 1.0	TLS_RSA_WITH_3DES_EDE_CBC_SHA
002F	TLS 1.0	TLS_RSA_WITH_AES_128_CBC_SHA
0035	TLS 1.0	TLS_RSA_WITH_AES_256_CBC_SHA
003B	TLS 1.2	TLS_RSA_WITH_NULL_SHA256
003C	TLS 1.2	TLS_RSA_WITH_AES_128_CBC_SHA256
003D	TLS 1.2	TLS_RSA_WITH_AES_256_CBC_SHA256
C023	TLS 1.2	ECDHE_ECDSA_AES_128_CBC_SHA256
C024	TLS 1.2	ECDHE_ECDSA_AES_256_CBC_SHA384
C027	TLS 1.2	ECDHE_RSA_AES_128_CBC_SHA256
C028	TLS 1.2	ECDHE_RSA_AES_256_CBC_SHA384

System action

The channel does not start.

System programmer response

Change either the local or remote channel definition so that the values specified for the SSL cipher specification are the same.

CSQX632I

csect-name SSL certificate has no associated user ID, remote channel *channel-name,* connection *conn-id* - channel initiator user ID used

Severity

0

Explanation

The certificate sent from the remote end (from connection *conn-id*) during SSL handshaking was accepted, but no user ID could be found associated with it. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'.

Likely causes are that the certificate or a matching certificate name filter are not defined to the external security manager (ESM), or that the certificate contains fields that are not understood by the ESM.

System action

The user ID of the channel initiator address space is used as the channel user ID for the channel.

System programmer response

If you are using certificate name filtering, you can create a filter that matches this certificate. See Working with Certificate Name Filters (CNFs) for details on associating a user ID with a certificate.

If the security you want on your channel does not require the use of the SSL mapped certificate user ID, you can define the channel to use Put Authority (**PUTAUT**) with a value of **ONLYMCA** instead of **DEF**, or **ALTMCA** instead of **CTX** and this message is not issued as no security checking for the channel is using the SSL mapped certificate user ID that could not be found. See Receiving channels using TCP/IP for more details about which user IDs are used for security checking on a receiving channel using TCP/IP.

Alternatively, change the **SSLPEER** channel attribute or create a **CHLAUTH** record to prevent this certificate being accepted from the remote channel. See Channel authentication records for more details.

CSQX633E

csect-name SSL certificate for remote channel *channel-name* failed local check, connection *conn-id*

Severity

8

Explanation

The certificate sent from the remote end (from connection *conn-id*) during SSL handshaking could not be validated. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'.

System action

The channel will not start.

System programmer response

Ensure that the SSL certificate connected to the key repository at the remote end is valid, and that the signing certificate(s) have been connected to the key ring on the local queue manager so that the certificate sent can be authenticated.

For full details about SSL certificates and key repositories see Security.

This error might indicate that the remote end of the channel is configured to send the wrong certificate. Check the certificate label configuration at the remote end of the channel and ensure that the local key repository contains all of the necessary CA certificates.

For more information, refer to System SSL RC 8.

CSQX634E

csect-name SSL certificate failed remote check, channel *channel-name* connection *conn-id*

Severity

8

Explanation

The certificates sent to the remote end using the connection *conn-id* during SSL handshaking could not be validated. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'.

System action

The channel will not start.

System programmer response

Firstly, you need to check that the SSL certificate in the key ring at the local queue manager *qmgr-name* is valid, for example, in TRUST status and not expired.

Secondly, you also need to check that both the signing certificate (for example the certificate from the certificate authority) and the signed certificate have been connected to the key repository on the remote end, so that the certificate sent can be verified at the remote end.

The certificate used is either named on the channel in the CERTLABL attribute, or named on the queue manager in the CERTLABL attribute or CERTQSGL attribute (for a shared channel). If no certificate label is found in any of these attributes, then the certificate is named 'ibmWebSphereMQ*qsg-name*' (for a shared channel) or 'ibmWebSphereMQ*qmgr-name*', or a default certificate in the key ring is used.

For full details about SSL certificates and key repositories see Security.

For more information, refer to System SSL RC 414.

CSQX635E

csect-name Invalid cipher specification *ciph* for channel *channel-name*

Severity
8

Explanation

The SSL cipher specification value for channel *channel-name* is not valid. The value is shown in the message as a four-character code.

Recognized values are shown in message CSQX631E.

This error can occur if the remote end is configured to use SSLFIPS(YES). Check the errors at the remote end to determine if this is the case.

System action

The channel will not start.

System programmer response

Correct the SSL cipher specification for the channel. If the remote end is configured to only accept FIPS-certified cipher specifications, change the channel to use a FIPS-certified cipher spec. See Specifying CipherSpecs for details on which cipher specifications are FIPS-certified.

For more information, refer to System SSL RC 402, RC 412, and RC 422.

CSQX636E

csect-name Distinguished name does not match peer name, channel *channel-name* name='*dist-name*' connection *conn-id*

Severity
8

Explanation

The distinguished name, *dist-name,* specified in the SSL certificate at the remote end (from connection *conn-id*) does not match the SSL peer name for channel *channel-name*. The distinguished name at the remote end must match the peer name specified (which can be generic) before the

channel can be started. In some cases the channel name cannot be determined and so is shown as '????'.

System action

The channel will not start.

System programmer response

This error might indicate that the remote end of the channel is configured to send the wrong certificate. Check the certificate label configuration at the remote end of the channel and ensure that the local key repository contains all of the necessary CA certificates.

If you wish to allow this remote end to connect, change the SSL peer name specification for the channel so that it matches the distinguished name in the SSL certificate at the remote end, or obtain the correct certificate for the remote end, as appropriate.

If the SSL Peer name specification needs to match a number of different distinguished names for multiple different remote SSL certificates, consider using channel authentication records to define rules to allow or block specific SSL peer names instead of the SSL Peer name specification on the channel definition. See Channel authentication records for more details.

CSQX637E

csect-name No SSL certificate for remote channel *channel-name*, connection *conn-id*

Severity
8

Explanation

The remote channel (from connection *conn-id*) did not supply a certificate to use during SSL handshaking, but a certificate is required. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'.

System action

The channel will not start.

System programmer response

Ensure that the SSL certificate is connected to the key repository of the remote end; alternatively, if appropriate, change the local channel definition so that its **SSLCAUTH** attribute is set to **OPTIONAL**.

For full details about SSL certificates and key repositories see Security.

For more information, refer to System SSL RC 403.

CSQX638E

csect-name SSL communications error for channel *channel-name*, connection *conn-id*

Severity
8

Explanation

An unexpected SSL communications error occurred for a channel, as reported in the preceding messages. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'. The remote connection is *conn-id*.

System action

The channel will not start.

System programmer response

Investigate the problem reported in the preceding messages. Review the local and remote console logs for reports of network errors.

For more information, refer to System SSL RC 406.

CSQX639E

csect-name No cipher specification for remote channel *channel-name,* connection *conn-id*

Severity
8

Explanation

No SSL cipher specification was supplied by the remote channel *channel-name* (from connection *conn-id*), but one was required. In some cases the channel name cannot be determined and so is shown as '????'.

System action

The channel will not start.

System programmer response

Change the remote channel definition so that the value specified for the SSL cipher specification is the same as that of the local channel.

CSQX640E

csect-name Invalid peer name, channel *channel-name* attribute=*key-name*

Severity
8

Explanation

The SSL peer name for channel *channel-name* includes a distinguished name attribute key *key-name* which is invalid or unsupported. In some cases the channel name cannot be determined and so is shown as '????'.

System action

The channel will not start.

System programmer response

Correct the SSL peer name for the channel.

CSQX641E

csect-name Cipher specification error for remote channel *channel-name,* connection *conn-id*

Severity
8

Explanation

An error occurred with the SSL cipher specification for remote channel *channel-name* (from connection *conn-id*). In some cases the channel name cannot be determined and so is shown as '????'.

System action

The channel will not start.

System programmer response

Review the remote console log to determine the cipher specification error.

CSQX642E

csect-name No SSL certificate for channel *channel-name*

Severity
8

Explanation

The channel *channel-name* did not supply a certificate to use during SSL handshaking, but a certificate is required by the remote end. In some cases the channel name cannot be determined and so is shown as '????'.

System action

The channel does not start.

System programmer response

Ensure that the key ring of the local queue manager *qmgr-name* has an SSL certificate connected to it which is associated with the queue manager. If you have configured a certificate label, check that the certificate exists.

The certificate used is either named on the channel in the CERTLABL attribute, or named on the queue manager in the CERTLABL attribute or CERTQSGL attribute (for a shared channel). If no certificate label is found in any of these attributes, then the certificate is named 'ibmWebSphereMQ*qsg-name*' (for a shared channel) or 'ibmWebSphereMQ*qmgr-name*', or a default certificate in the key ring is used.

Alternatively, if appropriate, change the remote channel definition so that its SSLCAUTH attribute is set to OPTIONAL.

For full details about SSL certificates and key repositories, see Security.

CSQX643E

csect-name Peer name error for remote channel *channel-name,* connection *conn-id*

Severity
8

Explanation

An error occurred with the SSL peer name for remote channel *channel-name* (from connection *conn-id*). In some cases the channel name cannot be determined and so is shown as '????'.

System action

The channel will not start.

System programmer response

Review the remote console log to determine the peer name error.

CSQX644E

csect-name Unable to determine peer name for remote channel *channel-name*

Severity
4

Explanation

The peer name associated with the certificate sent from the remote end during SSL handshaking could not be determined. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'.

System action

If the local channel has a peer name specified it does not start.

System programmer response

Ensure that the SSL certificate in the key ring at the local queue manager *qmgr-name* is valid, and that the signing certificate has been connected to the key repository on the remote end so that the certificate sent can be authenticated.

The certificate used is either named on the channel in the CERTLABL attribute, or named on the queue manager in the CERTLABL attribute or CERTQSGL attribute (for a shared channel). If no certificate

label is found in any of these attributes, then the certificate is named 'ibmWebSphereMQ*qsg-name*' (for a shared channel) or 'ibmWebSphereMQ*qmgr-name*', or a default certificate in the key ring is used.

Check that the local and remote channel definitions are correct.

For full details about SSL certificates and key repositories, see Security.

CSQX645E

csect-name Certificate *cert-label* missing for channel *channel-name*

Severity
4

Explanation

An SSL/TLS certificate *cert-label*, or the default certificate cannot be found in the key ring or the certificate is not trusted. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'.

In some cases this message will appear multiple times, once for each affected channel.

System action

The channel does not start.

System programmer response

Ensure that the SSL/TLS certificate named *cert-label* is in the key ring and that it is valid, and that the queue manager is running with OPMODE(NEWFUNC,800).

Alternatively, change the certificate label configuration so that the channel uses a valid certificate.

The certificate used is either named on the channel in the CERTLABL attribute, or named on the queue manager in the CERTLABL attribute or CERTQSGL attribute (for a shared channel). If no certificate label is found in any of these attributes, then the certificate is named 'ibmWebSphereMQ*qsg-name*' (for a shared channel) or 'ibmWebSphereMQ*qmgr-name*', or a default certificate in the key ring is used.

To verify which key ring is in use, issue the following MQSC command:

```
DISPLAY QMGR SSLKEYR
```

To list the certificates that are present in the key ring in use, issue the following RACF command, or an equivalent command in your External Security Manager:

```
RACDCERT ID(chinit-user-id) LISTRING(key-ring-name)
```

For more information, refer to return codes 6 and 407 in SSL Function Return Codes.

CSQX646E

csect-name Error accessing LDAP server for channel *channel-name*

Severity
4

Explanation

While checking CRLs for a channel, an error occurred in setting up the LDAP environment or retrieving an LDAP directory entry. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'.

System action

The channel will not start.

System programmer response

Ensure that the LDAP server is specified and set up correctly, and is running.

For more information, refer to System SSL RC 11.

CSQX658E

csect-name SSL certificate has expired, channel *channel-name* connection *conn-id*

Severity
4

Explanation

The current time is either before the SSL certificate start time or or after the end time. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'. The connection is *conn-id*.

System action

The channel will not start.

System Programmer response

Obtain a new certificate if the certificate has expired, or wait until the certificate becomes valid if it is not valid yet.

For more information, refer to System SSL RC 401.

CSQX663E

csect-name SSL certificate signature is incorrect, channel *channel-name* connection *conn-id*

Severity
4

Explanation

In the SSL certificate sent from the remote end using the connection *conn-id*, the certificate signature is not correct. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'.

System action

The channel will not start.

System programmer response

Ensure that the SSL certificate connected to the key repository at the remote end is valid.

For more information, refer to System SSL RC 413.

CSQX665E

csect-name Channel *channel-name* stopping because remote SSL socket closed, connection *conn-id*

Severity
4

Explanation

The remote end of a channel using SSL communications (from connection *conn-id*) closed the socket or sent a close notification alert. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'.

System action

The channel stops.

System programmer response

Examine the console log for the remote end to determine the cause of the failure.

For more information, refer to System SSL RC 420.

CSQX666E

csect-name LDAP server unavailable for channel *channel-name*

Severity

4

Explanation

While checking CRLs for a channel, the required LDAP server was not available. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'.

System action

The channel does not start.

System programmer response

Ensure that the LDAP server is running.

For more information, refer to System SSL RC 427.

CSQX673E

csect-name Certificate label *cert-label* not used on channel *channel-name*, remote connection *conn-id*

Severity

8

Explanation

The SSL or TLS channel *channel-name* is configured to use certificate label *cert-label*. However, the remote peer did not send the necessary information to allow the local channel to use the correct certificate. The remote host is *conn-id*.

This error occurs when the local channel definition has a certificate label and the remote peer does not support selection of certificates.

System action

The channel will not start.

System programmer response

Ensure that the remote peer supports certificate label configuration. Refer to Digital certificate labels, understanding the requirements for details of certificate label requirements. Alternatively, alter the local channel definition so that it does not specify a certificate label.

CSQX674E

csect-name Channel *channel-name*specified a weak or broken SSL CipherSpec *sslciph*

Severity

8

Explanation

The channel is unable to start because it is configured to use a CipherSpec that is potentially insecure.

System action

The channel is prevented from starting.

System programmer response

Examine the CipherSpec specified in the SSLCIPH parameter and consider using a more secure CipherSpec.

If you want to re-enable the use of weak CipherSpecs, you can do so by adding a dummy Data Definition (DD) statement named CSQWEAK to the channel initiator JCL. For example:

```
//CSQWEAK DD DUMMY
```

If you want to re-enable the disabled SSLv3 support in IBM MQ, you can do so by adding a dummy Data Definition (DD) statement named CSQXSSL3 to the channel initiator JCL. For example:

```
//CSQXSSL3 DD DUMMY
```

You need to specify both of the preceding dummy DD statements, if you want to enable a weak SSLv3-based CipherSpec.

There are alternative mechanisms that can be used to forcibly re-enable weak CipherSpecs, and SSLv3 support,if the Data Definition change is unsuitable. Contact IBM Service for further information.

⚠️ **Attention:** Re-enabling CipherSpecs in this manner leaves systems exposed to possible security problems. You should use CipherSpecs that utilize only the TLS protocol, rather than SSLv3.

CSQX675E

csect-name Unable to complete SSL key repository refresh

Severity
4

Explanation

The refresh of the cached SSL key repository could not be completed because of errors.

System action

The refresh is incomplete.

System programmer response

Examine the console log for messages that might indicate why the refresh could not be started.

CSQX676E

csect-name SSL key repository refresh completed, but some channels not restarted

Severity
4

Explanation

The refresh of the cached SSL key repository has completed, so the latest values and certificates are in use for all SSL channels. However, not all the outbound SSL channels which were running when the refresh was initiated could be restarted after the refresh had completed.

System action

Processing continues.

System programmer response

Examine the console log for messages identifying the channels that did not restart.

CSQX677E

csect-name SSL key repository refresh terminated, waiting for channel *channel-name*

Severity
4

Explanation

The cached SSL key repository is being refreshed, which involves stopping all the channels that use SSL communications. One or more of the channels is taking too long to stop. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'.

System action

The refresh is terminated. Some channels using SSL will have been stopped.

System programmer response

Stop any SSL channels that have not already stopped and issue the REFRESH SECURITY TYPE(SSL) command again.

CSQX678E

csect-name Channel *channel-name* not started, refreshing SSL key repository

Severity
4

Explanation

A channel using SSL communications could not be started because the cached SSL key repository is currently being refreshed. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'.

System action

The channel does not start.

System programmer response

Wait until the refresh has completed and start the channel again.

CSQX679E

csect-name Channel *channel-name* not started, refreshing remote SSL key repository

Severity
4

Explanation

A channel using SSL communications could not be started because the cached SSL key repository is currently being refreshed at the remote end. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'.

System action

The channel does not start.

System programmer response

Wait until the refresh has completed and start the channel again.

CSQX683E

csect-name SSL key repository has no certificates

Severity
4

Explanation

The SSL key repository (that is, the key ring in the external security manager) does not contain any valid certificates.

System action

Channels using SSL communications will not start.

System programmer response

Add the user certificate and any necessary certificate authority (CA) certificates to the key repository. Ensure that existing certificates are valid, have not expired, and are marked as trusted.

For more information, refer to System SSL RC 7.

CSQX684E

csect-name SSL key repository has no CA certificates

Severity
    4

Explanation

The SSL key repository (that is, the key ring in the external security manager) does not contain any valid certificate authority (CA) certificates. A channel using SSL communications needs at least one CA or self-signed certificate to perform client authentication.

System action

Channels using SSL communications will not start.

System programmer response

Add the user certificate and any necessary certificate authority (CA) certificates to the key repository. Ensure that existing certificates are valid, have not expired, and are marked as trusted.

For more information, refer to System SSL RC 109.

CSQX685E

csect-name No self-signed certificate for channel *channel-name,* connection *conn-id*

Severity
    4

Explanation

A self-signed certificate cannot be validated as it is not in the SSL key repository. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'. The remote connection is *conn-id*.

System action

The channel is not started.

System programmer response

Add the self-signed certificate to the key repository.

Note: Changes to the key repository do not take effect immediately, see When changes to certificates or the key repository become effective on z/OS. If you have already added the self-signed certificate to the key repository, issue a REFRESH SECURITY TYPE(SSL) command or recycle the CHINIT address space.

For more information, refer to System SSL RC 417.

CSQX686E

csect-name SSL private key error for channel *channel-name*

Severity
    4

Explanation

The SSL certificate used has no associated private key, or the private key is not available because it key is stored in ICSF and ICSF services are not available. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'.

The certificate used is either named on the channel in the CERTLABL attribute, or named on the queue manager in the CERTLABL attribute or CERTQSGL attribute (for a shared channel). If no certificate label is found in any of these attributes, then the certificate is named 'ibmWebSphereMQ*qsg-name*' (for a shared channel) or 'ibmWebSphereMQ*qmgr-name*', or a default certificate in the key ring is used.

System action

The channel is not started.

System programmer response

Ensure that the private key associated with the SSL certificate used is available. Ensure that the ICSF started task is running if the private key is stored in ICSF.

For more information, refer to System SSL RC 428.

CSQX687E

csect-name SSL certificate revoked by CA for channel *channel-name*, connection *conn-id*

Severity
4

Explanation

The SSL certificate has been revoked by the certificate authority (CA). The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'. The remote connection is *conn-id*.

System action

The channel is not started.

System programmer response

Obtain a new certificate and add it to the key repository.

For more information, refer to System SSL RC 431.

CSQX688E

csect-name No SSL CA certificate for channel *channel-name*, connection *conn-id*

Severity
4

Explanation

The SSL key repository does not contain a certificate for the certificate authority (CA). The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'. The remote connection is *conn-id*.

System action

The channel is not started.

System programmer response

Obtain a certificate for the certificate authority (CA) and add it to the key repository.

For more information, refer to System SSL RC 435.

CSQX689E

csect-name CRL cannot be processed for channel *channel-name*, connection *conn-id*

Severity
4

Explanation

A Certificate Revocation List (CRL) is not valid and cannot be processed. The channel is *channel-name*; in some cases its name cannot be determined and so is shown as '????'. The remote connection is *conn-id*.

System action

The channel is not started.

System programmer response

Contact the certificate authority and obtain a replacement CRL.

For more information, refer to System SSL RC 436.

CSQX690I

csect-name Cipher specifications based on the SSLv3 protocol are disabled.

Severity
4

Explanation

Cipher specifications based on the SSLv3 protocol are not enabled, and channels configured to use those cipher specifications fail when started.

System action

Processing continues.

System programmer response

If you do not need to use cipher specifications based on the SSLv3 protocol, then no action is required.

If you want to re-enable the use of weak CipherSpecs, you can do so by adding a dummy Data Definition (DD) statement named CSQWEAK to the channel initiator JCL. For example:

```
//CSQWEAK DD DUMMY
```

If you want to re-enable the disabled SSLv3 support in IBM MQ, you can do so by adding a dummy Data Definition (DD) statement named CSQXSSL3 to the channel initiator JCL. For example:

```
//CSQXSSL3 DD DUMMY
```

You need to specify both of the preceding dummy DD statements, if you want to enable a weak SSLv3-based CipherSpec.

There are alternative mechanisms that can be used to forcibly re-enable weak CipherSpecs, and SSLv3 support,if the Data Definition change is unsuitable. Contact IBM Service for further information.

⚠️ **Attention:** Re-enabling CipherSpecs in this manner leaves systems exposed to possible security problems. You should use CipherSpecs that utilize only the TLS protocol, rather than SSLv3.

CSQX691I

csect-name Cipher specifications based on the SSLv3 protocol are enabled.

Severity
4

Explanation

Cipher specifications based on the SSLv3 protocol are enabled, and channels can be configured to use those cipher specifications.

System action

Processing continues.

System programmer response

If you need to use cipher specifications based on the SSLv3 protocol, then no action is required.

If you do not need to use cipher specifications based on the SSLv3 protocol, you should remove the override that enables the use of SSLv3.

See message CSQX690I for information on enabling SSLv3.

CSQX692I

csect-name Weak or broken SSL cipher specifications are disabled.

Severity
4

Explanation

Cipher specifications that are known to be weak or broken are not enabled, This includes all SSLv3-based cipher specifications. Channels configured to use those cipher specifications fail when started.

System action

Processing continues.

System programmer response

If you do not need to use broken or weak cipher specifications, no action is required.

If you want to re-enable the use of weak CipherSpecs, you can do so by adding a dummy Data Definition (DD) statement named CSQWEAK to the channel initiator JCL. For example:

```
//CSQWEAK DD DUMMY
```

If you want to re-enable the disabled SSLv3 support in IBM MQ, you can do so by adding a dummy Data Definition (DD) statement named CSQXSSL3 to the channel initiator JCL. For example:

```
//CSQXSSL3 DD DUMMY
```

You need to specify both of the preceding dummy DD statements, if you want to enable a weak SSLv3-based CipherSpec.

There are alternative mechanisms that can be used to forcibly re-enable weak CipherSpecs, and SSLv3 support,if the Data Definition change is unsuitable. Contact IBM Service for further information.

⚠️ **Attention:** Re-enabling CipherSpecs in this manner leaves systems exposed to possible security problems. You should use CipherSpecs that utilize only the TLS protocol, rather than SSLv3.

CSQX693I

csect-name Weak or broken SSL cipher specifications are enabled.

Severity
4

Explanation

Cipher specifications known to be weak or broken are enabled, and channels can be configured to use those cipher specifications.

System action

Processing continues.

System programmer response

If you need to use weak or broken cipher specifications, no action is required.

If you do not need to use weak or broken cipher specifications, you should remove the override that enables the use of weak or broken cipher specifications.

See message CSQX692I for information on enabling weak or broken cipher specifications.

CSQX694I

csect-name Cipher specifications based on the TLS v1.0 protocol are disabled.

Severity
4

Explanation

Cipher specifications based on the TLS v1.0 protocol are not enabled, and channels configured to use those cipher specifications fail when started.

System action

Processing continues.

System programmer response

If you do not need to use cipher specifications based on the TLS v1.0 protocol, then you can disable them by adding a dummy Data Definition (DD) statement named TLS10OFF to the channel initiator JCL. For example:

```
//TLS10OFF DD DUMMY
```

There are alternative mechanisms that can be used to forcibly disable cipher specifications based on the TLS v1.0 protocol, if the Data Definition change is unsuitable. Contact IBM Service for further information.

CSQX695I

csect-name Cipher specifications based on the TLS v1.0 protocol are enabled.

Severity
4

Explanation

Cipher specifications based on the TLS v1.0 protocol are enabled, and channels can be configured to use those cipher specifications.

System action

Processing continues.

System programmer response

If you need to use cipher specifications based on the TLS v1.0 protocol, then no action is required.

If you do not need to use cipher specifications based on the TLS v1.0 protocol, see message CSQX694I for information on how to disable TLS v1.0.

CSQX696I

csect-name Weak or broken SSL cipher specifications blocked by listener.

Severity
4

Explanation

Weak or broken SSL cipher specifications have been blocked by the listener. Consequentially you will not receive a successful SSL handshake with any cipher specifications marked as either weak or broken.

System action

Processing continues.

System programmer response

If you do not want to be able to negotiate with the listener using weak or broken cipher specifications then you can disable them by adding a dummy Data Definition (DD) statement named WCIPSOFF to the channel initiator JCL. For example:

```
//WCIPSOFF DD DUMMY
```

There are alternative mechanisms that can be used to achieve the same behavior if the Data Definition change is unsuitable. Contact IBM Service for further information.

CSQX697I

csect-name Listener will only negotiate System SSL default cipher specifications.

Severity
  4

Explanation

The listener will only negotiate with cipher specifications that are listed by default on the **System SSL** default cipher specification list.

System action

Processing continues.

System programmer response

If you only want to be able to negotiate with the listener using the cipher specifications listed on the **System SSL** default cipher specification list, then you can enable this behavior by adding a dummy Data Definition (DD) statement named **GSKDCIPS** to the channel initiator JCL. For example:

```
//GSKDCIPS DD DUMMY
```

There are alternative mechanisms that can be used to achieve the same behavior if the Data Definition change is unsuitable. Contact IBM Service for further information.

CSQX719E

csect-name Invalid cipher specification *ciph* for FIPS mode for channel *channel-name*

Severity
  8

Explanation

The SSL cipher specification value for channel *channel-name* is not FIPS-certified and the queue manager has been configured to run with **SSLFIPS(YES)**. The value is shown in the message as a four-character code.

Recognized values are shown in message CSQX631E.

In some cases, when the channel is responding to an inbound request, the cipher specification cannot be determined and so is shown as '????'.

System action

The channel will not start.

System programmer response

Correct the channel to use a FIPS-certified cipher specification, or if the queue manager should not be running in FIPS mode, alter the queue manager to use **SSLFIPS(NO)**. See Specifying CipherSpecs for details on which cipher specifications are FIPS-certified.

For more information, refer to System SSL RCs 402 and 412.

CSQX772E

csect-name mqapi-call failed, MQRC=*mqrc* (*mqrc-text*)

Severity
  8

Explanation

The indicated IBM MQ *mqapi-call* failed for the specified reason code *mqrc*, (*mqrc-text*).

System action

Typically the component in which the error occurs terminates. When the component is a message channel agent, the associated channel is stopped.

System programmer response

Refer to API completion and reason codes for information about *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQX774E

csect-name CHLAUTH cache load failed, all inbound channels blocked

Severity
8

Explanation

The CHLAUTH cache has failed to load. All inbound channels has been blocked from starting until the problem has been fixed. See previous message for the cause of the problem.

System action

All inbound channels are blocked from starting.

System programmer response

Look for the previous related message for the cause of the problem.

CSQX775I

csect-name Channel *channel-name* from *ipaddress* would have been blocked due to userid, Detail: *detail*

Severity
4

Explanation

The inbound channel *channel-name* would have been blocked from address *ipaddress* because the active values of the channel were mapped to a userid that should be blocked. Access is allowed as the channel authentication record is in warning mode.

The active values of the channel were *detail*.

System action

The channel is started.

System programmer response

Examine the channel authentication records to ensure that the correct settings have been configured. If the channel authentication record was not in warning mode the channel would be blocked. The ALTER QMGR **CHLAUTH** switch is used to control whether the channel authentication records are used. The DISPLAY CHLAUTH command can be used to query the channel authentication records.

CSQX776E

csect-name Channel *channel-name* from *ipaddress* has been blocked due to userid, Detail: *detail*

Severity
8

Explanation

The inbound channel *channel-name* was blocked from address *ipaddress* because the active values of the channel were mapped to a userid that should be blocked.

The active values of the channel were *detail*.

System action

The channel is not started.

System programmer response

Examine the channel authentication records to ensure that the correct settings have been configured. The ALTER QMGR **CHLAUTH** switch is used to control whether the channel authentication records are used. The DISPLAY CHLAUTH command can be used to query the channel authentication records.

CSQX777E

csect-name Channel *channel-name* from *ipaddress* has been blocked due to USERSRC(NOACCESS), Detail: *detail*

Severity
  8

Explanation

The inbound channel *channel-name* was blocked from address *ipaddress* because the active values of the channel matched a channel authentication record configured with USERSRC(NOACCESS).

The active values of the channel were *detail*.

System action

The channel is not started.

System programmer response

Examine the channel authentication records to ensure that the correct settings have been configured.

The ALTER QMGR **CHLAUTH** switch is used to control whether the channel authentication records are used. The DISPLAY CHLAUTH can be used to query the channel authentication records.

If no hostname is shown in the message next to the IP address, and CHLAUTH rules using hostnames are in place, ensure that your Domain Name Servers can correctly resolve the IP address to a hostname and that your queue manager is configured with REVDNS(ENABLED).

CSQX782E

csect-name Connection from address *ipaddress* has been blocked due to matching rule *ip-address-pattern*

Severity
  8

Explanation

The inbound connection from the address was blocked because it matches one of the blocked addresses, *ip-address-pattern*, in the channel authentication table.

System action

The channel is not started.

System programmer response

Examine the channel authentication records to ensure that the correct settings have been configured. The ALTER QMGR **CHLAUTH** switch is used to control whether the channel authentication records are used. The DISPLAY CHLAUTH can be used to query the channel authentication records.

CSQX785E

csect-name Channel *channel-name* is configured to not use the dead-letter queue

Severity
  8

Explanation

Channel *channel-name* failed to deliver a message to its destination. The report option MQRO_DISCARD_MSG was not specified for the message and the channel has been configured to not use the dead-letter queue through the attribute setting USEDLQ(NO).

System action

The channel either discards the message, or the channel ends, in accordance with the NPMSPEED attribute setting.

System programmer response

Investigate the cause of this error, then either correct the problem that prevented the channel delivering the message, or enable the channel to use the dead-letter queue.

CSQX786I

csect-name Connection from address *ipaddress* would have been blocked due to matching rule *ip-address-pattern*

Severity
4

Explanation

The inbound connection from the address *ipaddress* would have been blocked because it matches one of the blocked addresses, *ip-address-pattern*, in the channel authentication table. Access is allowed as the channel authentication table is in warning mode.

System action

The channel is started.

System programmer response

Examine the channel authentication records to ensure that the correct settings have been configured. If the channel authentication record was not in warning mode the channel would be blocked. The ALTER QMGR **CHLAUTH** switch is used to control whether the channel authentication records are used. The DISPLAY CHLAUTH command can be used to query the channel authentication records.

CSQX787I

csect-name Channel *channel-name* from *ipaddress* would have been blocked due to USERSRC(NOACCESS), Detail: *detail*

Severity
4

Explanation

The inbound channel *channel-name* would have been blocked from address *ipaddress* because the active values of the channel matched a channel authentication record configured with USERSRC(NOACCESS). It was not blocked due to the channel authentication record being in warning mode.

The active values of the channel were *detail*.

System action

The channel is started.

System programmer response

Examine the channel authentication records to ensure that the correct settings have been configured. If the channel authentication record was not in warning mode the channel would be blocked. The ALTER QMGR **CHLAUTH** switch is used to control whether the channel authentication records are used. The DISPLAY CHLAUTH command can be used to query the channel authentication records.

CSQX788I

csect-name DNS lookup for address *address* using function '*func*' took *n* seconds

Severity
4

Explanation

An attempt to resolve address *address* using the '*func*' function call took *n* seconds to complete. This might indicate a problem with the DNS configuration.

System action

Processing continues.

System programmer response

Ensure that the DNS is correctly configured on the local system.

If the address was an IP address then the slow operation was a reverse DNS lookup. Some DNS configurations are not capable of reverse DNS lookups and some IP addresses have no valid reverse DNS entries.

If the problem persists, consider disabling reverse DNS lookups until the issue with the DNS can be resolved.

CSQX790I

csect-name Connection authentication failed for user *user-id* due to CHLAUTH with CHCKCLNT(*chckclnt-value*), Detail: *detail*

Severity
4

Explanation

The user ID *user-id* and its password were checked because the inbound connection matched a channel authentication record with CHCKCLNT(*chckclnt-value*).

The active values of the channel were *detail*. The MATCH(RUNCHECK) mode of the DISPLAY CHLAUTH command can be used to identify the relevant CHLAUTH record.

This message accompanies a previous error to clarify the reason for the user ID and password check.

System action

The channel is not started.

System programmer response

Refer to the previous error for more information.

Ensure that a password is specified by the client application and that the password is correct for the User ID.

Alternatively, to avoid the authentication check you can amend the CHLAUTH record CHCKCLNT attribute. However, allowing unauthenticated remote access is not recommended.

CSQX791E

csect-name Client application *appl-name* from address *ip-address* did not supply a user ID and password, Detail: *detail*

Severity
8

Explanation

The client application *appl-name* running on host *ip-address* did not supply a user ID and password. The channel authentication (CHLAUTH) record for the connection requires a user ID and password, but none was supplied.

The active values of the channel were *detail*. The MATCH(RUNCHECK) mode of the DISPLAY CHLAUTH command can be used to identify the relevant CHLAUTH record.

System action

The channel is not started.

System programmer response

Ensure that the application provides a valid user ID and password, or change the queue manager connection authority (CONNAUTH) configuration to OPTIONAL to allow client applications to connect which have not supplied a user ID and password.

CSQX793E

csect-name The user ID and password for client application *appl-name* from address *ip-address* cannot be checked, Detail: *detail*

Severity
8

Explanation

The user ID and password for the client application *appl-name* running on host *ip-address* cannot be checked. The channel authentication (CHLAUTH) record for the connection requires an authentication check, but the queue manager is not configured to use connection authentication for clients.

The active values of the channel were *detail*. The MATCH(RUNCHECK) mode of the DISPLAY CHLAUTH command can be used to identify the relevant CHLAUTH record.

System action

The channel is not started.

System programmer response

Change the CHLAUTH configuration so that client authentication is not required, or alter the queue manager connection authority (CONNAUTH) configuration to enable client authentication checks.

CSQX830I

csect-name Channel initiator active

Severity
0

Explanation

This is issued in response to the DISPLAY CHINIT command if the channel initiator is active.

CSQX831I

csect-name nn adapter subtasks started, *nn* requested

Severity
0

Explanation

This is issued in response to the DISPLAY CHINIT command, and shows how many adapter subtasks are currently active, and how many were requested by the CHIADAPS queue manager attribute. If the numbers differ, some adapter subtasks have failed and not been restarted, which could reduce processing capacity.

CSQX832I

csect-name nn dispatchers started, *nn* requested

Severity
0

Explanation

This is issued in response to the DISPLAY CHINIT command, and shows how many dispatchers are currently active, and how many were requested by the CHIDISPS queue manager attribute. If the numbers differ, some dispatchers have failed and not been restarted. The number of current TCP/IP and LU 6.2 channels allowed will be reduced proportionately, and other processing capacity may be reduced.

CSQX833I

csect-name nn SSL server subtasks started, *nn* requested

Severity
> 0

Explanation

> This is issued in response to the <u>DISPLAY CHINIT</u> command, and shows how many SSL server subtasks are currently active, and how many were requested by the SSLTASKS queue manager attribute. If the numbers differ, some SSL server subtasks have failed and not been restarted, which could reduce processing capacity.

CSQX836I

csect-name nn Maximum channels - TCP/IP nn, LU 6.2 *nn*

Severity
> 0

Explanation

> This is issued in response to the <u>DISPLAY CHINIT</u> command. It shows the maximum numbers of each type of channel that are allowed.

CSQX840I

csect-name nn channels current, maximum *nn*

Severity
> 0

Explanation

> This is issued in response to the <u>DISPLAY CHINIT</u> command. It shows how many channels are current, and how many are allowed altogether, as requested by the MAXCHL queue manager attribute.

CSQX841I

csect-name nn channels active, maximum nn, including *nn* paused

Severity
> 0

Explanation

> This is issued in response to the <u>DISPLAY CHINIT</u> command. Of the channels that are current, it shows how many are active (transmitting messages), and how many are allowed altogether to be active, by the ACTCHL queue manager attribute. It also shows how many of the active channels are paused, waiting to retry putting a message.

CSQX842I

csect-name nn channels starting, *nn* stopped, *nn* retrying

Severity
> 0

Explanation

> This is issued in response to the <u>DISPLAY CHINIT</u> command. Of the channels that are current, it show how many are:

- waiting to become active, because the limit for active channels has been reached
- stopped, requiring manual intervention
- attempting to reconnect following a temporary error.

CSQX843I

csect-name TCP/IP listener INDISP=*disposition* retrying, for port *port* address *ip-address*

Severity
> 0

Explanation
> This is issued in response to the DISPLAY CHINIT command for each TCP/IP listener that is trying to restart after an error. The channel initiator will attempt to restart the listener, at the intervals specified by the LSTRTMR queue manager attribute.
>
> *port* and *ip-address* show the port and IP address combination on which it listens; if *ip-address* is '*', it listens on all available IP addresses. *disposition* shows which type of incoming requests the listener handles:
>
> **QMGR**
> > those directed to the target queue manager
>
> **GROUP**
> > those directed to the queue-sharing group.

CSQX844I

> *csect-name* LU 6.2 listener INDISP=*disposition* retrying, for LU name *name*

Severity
> 0

Explanation

> This is issued in response to the DISPLAY CHINIT command for each LU 6.2 listener that is trying to restart after an error. The channel initiator will attempt to restart the listener at the intervals specified by the LSTRTMR queue manager attribute.
>
> *disposition* shows which type of incoming requests the listener handles:
>
> **QMGR**
> > those directed to the target queue manager
>
> **GROUP**
> > those directed to the queue-sharing group.

CSQX845I

> *csect-name* TCP/IP system name is *name*

Severity
> 0

Explanation

> This is issued in response to the DISPLAY CHINIT command, and shows the TCP/IP system name that is being used, as specified in the TCPNAME queue manager attribute.

CSQX846I

> *csect-name* TCP/IP listener INDISP=*disposition* started, for port *port* address *ip-address*

Severity
> 0

Explanation

> This is issued in response to the DISPLAY CHINIT command for each TCP/IP listener that is active.
>
> *port* and *ip-address* show the port and IP address combination on which it listens; if *ip-address* is '*', it listens on all available IP addresses. *disposition* shows which type of incoming requests the listener handles:
>
> **QMGR**
> > those directed to the target queue manager
>
> **GROUP**
> > those directed to the queue-sharing group.

CSQX847I

csect-name LU 6.2 listener INDISP=*disposition* started, for LU name *name*

Severity
0

Explanation

This is issued in response to the <u>DISPLAY CHINIT</u> command for each LU 6.2 listener that is active.

disposition shows which type of incoming requests the listener handles:

QMGR
those directed to the target queue manager

GROUP
those directed to the queue-sharing group.

CSQX848I

csect-name TCP/IP listener INDISP=*disposition* not started

Severity
0

Explanation

This is issued in response to the <u>DISPLAY CHINIT</u> command for each TCP/IP listener that is not active.

disposition shows which type of incoming requests the listener handles:

QMGR
those directed to the target queue manager

GROUP
those directed to the queue-sharing group.

System programmer response

If the listener had been started, and was not deliberately stopped, this might be because there was an error in the communications system. The channel initiator will attempt to restart the listener, at the intervals specified by the LSTRTMR queue manager attribute.

CSQX849I

csect-name LU 6.2 listener INDISP=*disposition* not started

Severity
0

Explanation

This is issued in response to the <u>DISPLAY CHINIT</u> command for each LU 6.2 listener that is not active.

disposition shows which type of incoming requests the listener handles:

QMGR
those directed to the target queue manager

GROUP
those directed to the queue-sharing group.

System programmer response

If the listener had been started, and was not deliberately stopped, this might be because there was an error in the communications system. The channel initiator will attempt to restart the listener, at the intervals specified by the LSTRTMR queue manager attribute.

CSQX871I

csect-name Cluster maintenance has been running for *num-mins* minutes, phase *maintenance-phase* has so far processed *num-records* records

Severity

0

Explanation

A queue manager will periodically perform a maintenance cycle to refresh and remove state associated with the clusters it is a member of. This message gives an indication of the progress being made.

System action

For large clusters this maintenance process may take a significant period of time. In such situations this message will be periodically repeated until maintenance has completed, at which time message CSQX872I will be output.

CSQX872I

csect-name Cluster maintenance has completed after *num-mins* minutes, *num-records* records were processed

Severity

0

Explanation

A queue manager will periodically perform a maintenance cycle to refresh and remove state associated with the clusters it is a member of. This message follows one or more instances of message CSQX871I and indicates the cycle has completed.

System action

None

CSQX875I

csect-name REFRESH CLUSTER processing started for cluster cluster-name

Severity

0

Explanation

A REFRESH CLUSTER command has been issued on this queue manager.

In phase one this will discard all locally cached information for the cluster and request new information from other members of the cluster when necessary. Phase two processes the information received. For large cluster configurations this process can take a significant amount of time, especially on full repository queue managers. During this time applications attempting to access cluster resources may see failures to resolve cluster resources. In addition, cluster configuration changes made on this queue manager may not be processed until the refresh process has completed.

System action

Defer any cluster related work on this queue manager until both phases are complete.

Message CSQX442I or CSQX404I will be issued at the end of phase one.

Completion of phase two can be determined when the SYSTEM.CLUSTER.COMMAND.QUEUE has reached a consistently empty state.

CSQX876I

csect-name Cluster cache compression started

Severity

0

Explanation

Periodically cluster management will compress its local cache. Compression can take a significant period of time for certain operations, such as performing a CLUSTER REFRESH. During the compression task, cluster management commands will not be processed.

Once the compression task has completed message CSQX877I will be issued.

CSQX877I

csect-name Cluster cache compression completed

Severity

0

Explanation

The cluster cache compression activity, indicated by message CSQX876I, has now completed.

CSQX878I

csect-name Repository command error, command *command*, cluster object *object-name*, sender *sender-id*, reason *reason*

Severity

8

Explanation

An internal cluster repository command failed to complete successfully. Earlier messages in the log will contain details of the problem. Failure to successfully process a command can leave a cluster in an inconsistent state.

System action

Processing continues

System programmer response

If the problem cannot be resolved, collect the items listed in the Problem Determination section and contact your IBM® support center.

CSQX879E

csect-name Conflicting clustered topic *topic-name* from queue manager *qmgr-name*

Severity

8

Explanation

A conflict has been detected for clustered topic *topic-name*.

Two clustered topics conflict if any of the following conditions are true:

1. They have the same topic string but have a different topic name
2. They have the same topic string, or one is an ancestor of the other in the topic tree, and they have a different cluster name
3. They have the same topic string, or one is an ancestor of the other in the topic tree, and they have incompatible values for the cluster route attribute

System action

The CLSTATE attribute of the clustered topic identified by *topic-name* is set to INVALID and the topic is no longer used by the queue manager.

System programmer response

Review the clustered topics visible to the queue manager and correct any conflicts by modifying or deleting the definitions in error. After updating the topic definitions, ensure all clustered topics have a CLSTATE of ACTIVE on all queue managers in the same cluster.

Initialization procedure and general services messages (CSQY...)

CSQY000I

IBM WebSphere MQ for z/OS V*n*

Explanation

This message is issued when the queue manager starts, and shows the release level.

CSQY001I

QUEUE MANAGER STARTING, USING PARAMETER MODULE *parm-name*

Explanation

The START QMGR command is accepted. System parameter values will be taken from the module *parm-name*. This message is issued to the z/OS console at which the START command was issued. Message CSQY022I is sent when the queue manager startup process has completed.

System action

Queue manager startup processing begins.

CSQY002I

QUEUE MANAGER STOPPING

Explanation

The STOP QMGR command is accepted. Message CSQ9022I is issued when the queue manager shutdown process has completed. The message is issued either to the originator of the STOP QMGR command, or to the z/OS console from which the START QMGR command was received.

System action

Queue manager shutdown is initiated.

CSQY003I

QUEUE MANAGER IS ALREADY ACTIVE

Explanation

The START QMGR command has not been accepted, because the queue manager is active. Message CSQ9023E is issued after this message.

CSQY004I

QUEUE MANAGER IS ALREADY STOPPING

Explanation

The STOP QMGR command has not been accepted either because the queue manager shutdown is in progress for the specified option (QUIESCE or FORCE), or because the QUIESCE option was specified after a FORCE option had been accepted previously. Message CSQ9023E is issued after this message.

System action

Queue manager shutdown continues.

CSQY005E

QUEUE MANAGER STARTUP TERMINATED, INVALID START COMMAND

Explanation

The queue manager can be started only by a START QMGR command.

System action

Queue manager startup is terminated.

CSQY006E

csect-name INVALID AMODE OR RMODE ATTRIBUTE FOUND FOR LOAD MODULE *module-name*

Explanation

The queue manager initialization procedures found that a module had an invalid AMODE or RMODE attribute when it was loaded. *module-name* is the name of the load module with an invalid addressing or residency mode.

System action

Queue manager startup terminates abnormally.

System programmer response

Verify that all installation and maintenance activities against IBM MQ have been done correctly. If you are unable to correct the problem, contact your IBM support center.

CSQY007E
csect-name QUEUE MANAGER STARTUP TERMINATED, INVALID OPERATING SYSTEM LEVEL

Explanation

The queue manager initialization procedures found that the level of the operating system did not have the function required for correct queue manager operation.

System action

Queue manager startup terminates abnormally.

System programmer response

Verify that the prerequisite, or later, level of the operating system is installed. If you are unable to correct the problem, contact your IBM support center.

CSQY008I
QUEUE MANAGER SHUTDOWN REQUEST NOT ACCEPTED

Explanation

The STOP QMGR command has not been accepted because startup has not completed to the point where shutdown can occur. Message CSQ9023E is issued after this message.

System action

Queue manager startup continues, and the STOP QMGR command is ignored.

CSQY009I
verb-name pkw-name COMMAND ACCEPTED FROM USER(*userid*), STOP MODE(*mode*)

Explanation

This message is issued to record who issued the command to stop IBM MQ, and what type of stop it was. *verb-name* might include the command prefix (CPF). This depends on how the command was entered.

CSQY010E
csect-name LOAD MODULE *module-name* IS NOT AT THE CORRECT RELEASE LEVEL

Explanation

The named load module is not at the correct level for the version of the queue manager that was being used.

System action

If detected by the queue manager, startup terminates abnormally with reason code X'00E80161'. If detected by the channel initiator (*module-name* is CSQXJST), it does not start.

If detected by the AMS enablement module (DRQ0NABL), the queue manager only fails to start if SPLCAP=YES is specified in the system parameters. In this case message CSQY029E is issued.

System programmer response

Verify that the correct IBM MQ program libraries are being used (for the queue manager or channel initiator as appropriate) and that all installation and maintenance activities againstIBM MQ have been done correctly. If the early processing program is incorrect (*module-name* is CSQ3EPX), refresh it by issuing the REFRESH QMGR TYPE(EARLY) command.

If you are unable to correct the problem, contact your IBM support center.

CSQY011E
csect-name COMMAND PREFIX REGISTRATION FAILED. INVALID CHARACTER(S) IN CPF

Explanation

Command prefix registration failed because the command prefix (CPF) contains invalid characters.

System action

The queue manager does not start.

System programmer response

Reissue the z/OS command SETSSI ADD with the correct CPF parameter. Correct the CPF parameter in the record of SYS1.PARMLIB member IEFSSNxx. For information about the parameters, see Updating the subsystem name table.

CSQY012E
csect-name COMMAND PREFIX REGISTRATION FAILED. INVALID CHARACTER(S) IN QUEUE MANAGER NAME

Explanation

Command prefix registration failed because the queue manager name used as the owner of the command prefix (CPF) contains invalid characters.

System action

The queue manager does not start.

System programmer response

Reissue the z/OS command SETSSI ADD with the correct CPF parameter. Correct the CPF parameter in the record of SYS1.PARMLIB member IEFSSNxx. For information about the parameters, see Updating the subsystem name table.

CSQY013E
csect-name COMMAND PREFIX REGISTRATION FAILED. CPF ALREADY DEFINED

Explanation

Command prefix registration failed because the command prefix (CPF) was already defined to z/OS.

System action

The queue manager does not start.

System programmer response

Reissue the z/OS command SETSSI ADD with the correct CPF parameter. Correct the CPF parameter in the record of SYS1.PARMLIB member IEFSSNxx. For information about the parameters, see Updating the subsystem name table.

CSQY014E
csect-name COMMAND PREFIX REGISTRATION FAILED. CPF IS A SUBSET OF A CPF ALREADY DEFINED

Explanation

Command prefix registration failed because the command prefix (CPF) is a subset of a CPF already defined to z/OS.

System action

The queue manager does not start.

System programmer response

Reissue the z/OS command SETSSI ADD with the correct CPF parameter. Correct the CPF parameter in the record of SYS1.PARMLIB member IEFSSNxx. For information about the parameters, see Updating the subsystem name table.

CSQY015E
csect-name COMMAND PREFIX REGISTRATION FAILED. CPF IS A SUPERSET OF A CPF ALREADY DEFINED

Explanation

Command prefix registration failed because the command prefix (CPF) is a superset of a CPF already defined to z/OS.

System action

The queue manager does not start.

System programmer response

Reissue the z/OS command SETSSI ADD with the correct CPF parameter. Correct the CPF parameter in the record of SYS1.PARMLIB member IEFSSNxx. For information about the parameters, see Updating the subsystem name table.

CSQY016E
csect-name SYSTEM ERROR DURING COMMAND PREFIX REGISTRATION

Explanation

A z/OS error occurred during command prefix (CPF) registration.

System action

The queue manager does not start.

System programmer response

Check the z/OS console for other messages relating to the problem.

CSQY017E
csect-name INCORRECT STORAGE PROTECT KEY

Explanation

The queue manager initialization procedures found that the storage protect key was not 7. The most likely causes are that the program properties table (PPT) entry for CSQYASCP has not been specified correctly, or that the IBM MQ program libraries or other libraries in the IBM MQ STEPLIB are not APF authorized.

System action

Queue manager startup terminates abnormally with reason code X'00E80162'.

System programmer response

Check that all the libraries you include in the IBM MQ STEPLIB have been APF-authorized. Also, ensure that you use the actual library name and not the data set alias of the libraries in APF list.

For information about specifying the PPT entry for CSQYASCP and about APF authorization for the IBM MQ program libraries, see Updating the z/OS program properties table.

CSQY018E
csect-name INCORRECT APF AUTHORIZATION

Explanation

The queue manager initialization procedures found that they were not APF authorized. The most likely cause is that one or more of the data sets in the //STEPLIB concatenation is not APF authorized.

System action

Queue manager startup terminates abnormally with reason code X'00E80163'.

System programmer response

Check all the libraries that you include in the IBM MQ STEPLIB are APF-authorized. Also, check that you do not use a data set alias of the libraries in the APF list, use the actual library name instead.

For information about APF authorization for the IBM MQ program libraries, see APF authorize the IBM MQ load libraries.

CSQY019E
csect-name QUEUE MANAGER STARTUP TERMINATED, INVALID PARAMETER MODULE LEVEL, REBUILD *macro-name*

Explanation

The queue manager initialization procedures found that the level of the parameter module (named in the preceding CSQY001I message) is not at the correct level for this version of the queue manager.

System action

Queue manager startup terminates abnormally with reason code 00E80051.

System programmer response

Rebuild the parameter module ensuring that *macro-name* is recompiled with the same level of code that the queue manager is running with.

For more information about the macros used to build the parameter module see, Task 17: Tailor your system parameter module.

CSQY020E
csect-name CHANNEL INITIATOR STARTUP TERMINATED, INVALID START COMMAND

Explanation

The channel initiator can be started only by a **START CHINIT** command.

System action

Channel initiator startup is terminated.

System programmer response

Start the channel initiator using the **START CHINIT** command

CSQY021E
csect-name QUEUE MANAGER STARTUP TERMINATED, INSUFFICIENT MEMLIMIT

Explanation

The queue manager initialization procedures found that the configured MEMLIMIT is less than 512MB.

System action

Queue manager startup terminates abnormally.

CSQY022I
QUEUE MANAGER INITIALIZATION COMPLETE

Explanation

This message is issued when the initialization of the queue manager completes normally, and it is ready for use.

CSQY023A

SOME OBJECTS COULD NOT BE MIGRATED, MANUAL RESOLUTION REQUIRED. REPLY TO ACKNOWLEDGE AND CONTINUE STARTUP

Explanation

The queue manager has detected that it was previously running at an earlier version and forward migration has been performed. However, some objects could not be migrated because of locks held by in-doubt transactions. Message CSQI970E is also issued for each object that could not be migrated.

This message is not issued during subsequent restarts of the queue manager whilst it is running at the same version.

System action

Startup is suspended and the queue manager waits for the operator to reply with any single character.

System programmer response

Reply to acknowledge this message and allow queue manager startup to proceed.

Thereafter, additional action is required to complete forward migration of each identified object.

For more information see the description of message CSQI970E.

CSQY024I

IBM WebSphere MQ AMS for z/OS is not installed, but the system parameter SPLCAP is set to YES

Severity

8

Explanation

The system parameter SPLCAP is set to YES in the queue manager's ZPARM, however, IBM MQ Advanced Message Security has not been installed.

System action

Queue manager startup is terminated.

System programmer response

If IBM MQ Advanced Message Security is required, ensure it has been installed correctly and the queue manager's STEPLIB has been updated to include SDRQAUTH, otherwise update the queue manager's ZPARM to set the system parameter SPLCAP to NO.

CSQY025I

IBM WebSphere MQ AMS for z/OS is installed.

Severity

0

Explanation

This message indicates that IBM MQ Advanced Message Security is installed.

System action

Queue manager startup continues.

System programmer response

None.

CSQY026E

csect-name QUEUE MANAGER STARTUP TERMINATED, VUE IN NON-ZNALC LPAR

Explanation

An attempt was made to start a queue manager. The queue manager is configured to use 'IBM IBM MQ for z/OS Value Unit Edition', however, VUE is not running in a z/OS LPAR defined for IBM Z Systems New Application License Charges (zNALC).

System action

Queue manager startup terminates abnormally.

System programmer response

Verify the LPAR is correctly enabled for zNALC, or remove the SCUEAUTH library from the queue manager STEPLIB concatenation.

CSQY027I
csect-name AMS STARTING

Severity
0

Explanation

The Advanced Message Security (AMS) address space has been started because the system parameter SPLCAP is set to YES in the queue manager's ZPARM.

System action

Connections to the queue manager are permitted, but MQI calls that might require AMS function are suspended until AMS is available. Further messages are output when the AMS feature initializes.

CSQY028I
csect-name AMS HAS STARTED

Severity
0

Explanation

Advanced Message Security (AMS) initialization has completed successfully.

System action

Applications waiting for AMS function are resumed.

CSQY029E
csect-name QUEUE MANAGER STARTUP TERMINATED, AMS INITIALIZATION FAILED

Severity
12

Explanation

A severe error occurred during initialization of Advanced Message Security (AMS).

System action

The queue manager abnormally terminates with abend code 6C6 and reason 00F00003.

System programmer response

Investigate the problem reported by preceding messages in the job log for the AMS address space (xxxxAMSM). Resolve the problem, then restart the queue manager. If you are unable to resolve the error, contact your IBM support center.

CSQY030E
csect-name QUEUE MANAGER TERMINATING, AMS NOT AVAILABLE

Severity
12

Explanation

The Advanced Message Security (AMS) address space has ended abnormally due to an unrecoverable error.

System action

The queue manager abnormally terminates with abend code 6C6 and reason 00F00003.

System programmer response

Investigate the problem reported by preceding messages in the job log for the AMS address space (xxxxAMSM). Resolve the problem, then restart the queue manager. If you are unable to resolve the error, contact your IBM support center.

CSQY031I
csect-name QUEUE MANAGER WAITING FOR AMS INITIALIZATION

Severity
0

Explanation

The Advanced Message Security (AMS) address space has been started because the system parameter SPLCAP is set to YES in the queue manager's ZPARM. This message is periodically issued until AMS initialization completes.

System action

Processing continues. Connections to the queue manager are permitted, but MQI requests that might require AMS function are suspended until AMS is available.

System programmer response

Investigate the delay in initializing Advanced Message Security by reviewing the messages output in the job log for the AMS address space (xxxxAMSM).

CSQY032E
csect-name QUEUE MANAGER STARTUP TERMINATED, UNABLE TO START AMS

Severity
12

Explanation

The queue manager attempted to start the Advanced Message Security (AMS) address space because the system parameter SPLCAP is set to YES in the queue manager's ZPARM. The AMS address space (xxxxAMSM) failed to start, which might be because another job with the same name is active, or there is an error in the started task JCL.

System action

The queue manager abnormally terminates with abend code 6C6 and reason 00F00003.

System programmer response

Investigate why the AMS address space could not be started. Resolve the problem by terminating an existing address space if one is active, or correct the started task JCL if required, then restart the queue manager.

CSQY033A
csect-name QUEUE MANAGER NOT AVAILABLE, AMS INITIALIZATION ERROR

Severity
12

Explanation

A severe error occurred during initialization of Advanced Message Security (AMS).

System action

Queue manager startup is interrupted. The queue manager accepts commands, but MQI requests that might require AMS function fail with reason code 2063 (MQRC_SECURITY_ERROR).

System programmer response

Investigate the problem reported by preceding messages in the job log for the AMS address space (xxxxAMSM). Resolve the problem, then shutdown and restart the queue manager. If you are unable to resolve the error, contact your IBM support center.

CSQY034I

csect-name QUEUE MANAGER WAITING FOR AMS TO SHUTDOWN

Severity

0

Explanation

The queue manager is stopping and has requested the Advanced Message Security (AMS) address space (xxxxAMSM) ends. This message is periodically issued until AMS shutdown completes.

System action

The queue manager continues to wait for the AMS address space to end.

System programmer response

If this message is repeatedly issued examine the job log for the AMS address space to determine why it has not ended. If the problem cannot be resolved terminate the address space to allow queue manager shutdown to continue.

CSQY035I

csect-name AMS HAS SHUTDOWN

Severity

0

Explanation

The Advanced Message Security (AMS) address space (xxxxAMSM) has ended.

System action

Queue manager shutdown continues.

CSQY100I

csect-name SYSTEM parameters ...

Explanation

The queue manager is being started with the system parameter values shown in the following messages.

System action

Queue manager startup processing continues.

CSQY101I

CSQY102I, CSQY103I, CSQY104I, CSQY105I, CSQY106I, CSQY107I, CSQY108I, CSQY109I, CSQY130I: *csect-name* parms

Explanation

This series of messages shows the system parameter values that the queue manager is using. (Some values are followed by their internal hexadecimal representation in parentheses.) For information about the system parameters for the CSQ6SYSP macro, see Using CSQ6SYSP.

System action

Queue manager startup processing continues.

CSQY110I

csect-name LOG parameters ...

Explanation

The queue manager is being started with the log parameter values shown in the following messages.

System action

Queue manager startup processing continues.

CSQY111I

CSQY112I, CSQY113I: *csect-name* parms

Explanation

This series of messages shows the log parameter values that the queue manager is using. For information about the log parameters in the CSQ6LOGP macro, see Using CSQ6LOGP.

System action

Queue manager startup processing continues.

CSQY120I

csect-name ARCHIVE parameters ...

Explanation

The queue manager is being started with the archive parameter values shown in the following messages.

System action

Queue manager startup processing continues.

CSQY121I

CSQY122I, CSQY123I, CSQY124I: *csect-name* parms

Explanation

This series of messages shows the archive parameter values that the queue manager is using. For information about the archive parameters in the CSQ6ARVP macro, see Using CSQ6ARVP.

System action

Queue manager startup processing continues.

CSQY200E

csect-name ARM *request-type* for element *arm-element* type *arm-element-type* failed, rc=*rc* reason=*reason*

Explanation

An ARM request (IXCARM REQUEST=*request-type*) for the specified element failed. *rc* is the return code and *reason* is the reason code (both in hexadecimal) from the call.

System action

None.

System programmer response

See the *z/OS MVS Programming Sysplex Services Reference* manual for information about the Return and reason codes from the IXCARM call.

If you are unable to solve the problem, contact your IBM support center.

CSQY201I

csect-name ARM REGISTER for element *arm-element* type *arm-element-type* successful

Explanation

The specified element was successfully registered with ARM.

System action

None.

CSQY202E

csect-name ARM registration failed

Explanation

An attempt to register with ARM failed.

System action

Processing continues, but automatic restart is not available.

System programmer response

See the preceding CSQY200E message for more information about the failure.

CSQY203E
csect-name ARM *request-type* for element *arm-element* type *arm-element-type* timed out, rc=*rc* reason=*reason*

Explanation

An ARM request (IXCARM REQUEST=*request-type*) was issued but some predecessor element specified in the ARM policy did not issue an ARM READY request within its specified time interval.

System action

Processing continues.

System programmer response

None required. However, if your program cannot run without the predecessor element, some installation-defined action might be necessary.

CSQY204I
csect-name ARM DEREGISTER for element *arm-element* type *arm-element-type* successful

Explanation

The specified element was successfully deregistered from ARM.

System action

None.

CSQY205I
csect-name ARM element *arm-element* is not registered

Explanation

A STOP QMGR command requested ARM restart, but the queue manager was not registered for ARM.

System action

The queue manager stops normally, but will not be automatically restarted.

System programmer response

Restart the queue manager manually.

CSQY210E
csect-name call-name call for name name-token failed, rc=*rc*

Explanation

During processing for a group connect, a name token services call failed. *rc* is the return code (in hexadecimal) from the call.

System action

If the failure occurs in the batch adapter (*csect-name* CSQBCON or CSQBDSC), the application call will fail with a reason code of MQRC_UNEXPECTED_ERROR. Otherwise (*csect-name* CSQYGRA1), processing continues, but the group connect facility will not be available.

System programmer response

See the *MVS Authorized Assembler Services Reference* manual for information about the return codes from the name token services call. If you are unable to solve the problem, take a stand-alone system dump and contact your IBM support center.

CSQY211I
csect-name Unable to add entry to group connect name table (at *table-addr*)

Explanation

During initialization for the group connect facility, a new entry could not be added to the name table for this queue manager. The most likely cause is that there is already the maximum of 32 queue managers active in the group.

System action

Processing continues, but this queue manager will not be available for group connection.

System programmer response

Reduce the number of active queue managers and restart this queue manager. If this does not solve the problem, contact your IBM support center.

CSQY212E
csect-name Unable to find the group attach table

Explanation

During initialization for the group connect facility, the group attach table could not be found. The most likely causes are that an error occurred during subsystem initialization, or that the subsystem was not initialized with the latest version of the IBM MQ early code.

System action

Processing continues, but the group connect facility will not be available to CICS.

System programmer response

Ensure that the libraries with the latest version, release, or maintenance level of the IBM MQ early code are in the libraries used for the z/OS LPA, and refresh the early code for the queue manager using the IBM MQ command REFRESH QMGR TYPE(EARLY). See the Task 3: Update the z/OS link list and LPA.

CSQY220I
csect-name Queue manager storage usage : local storage : used *mm*MB, free *nn*MB : above bar : used *aabb*,free *cc*

Explanation

This message displays the amount of virtual storage currently used and available:

- in the extended private region (local storage).
- above the Bar (64 bit storage).

  The amount of storage used is displayed in the most appropriate unit (MB / GB) according to the number of bytes, and are approximations. If the amount of storage available exceeds 10 GB, '>10 GB' is displayed. In all other cases the amount of storage available is displayed in the most appropriate unit. For the amount of storage space available, the total is rounded down to a whole number in the appropriate unit (MB /GB). For example, if the value of 3 GB is displayed the amount of free storage is greater than or equal to 3 GB and less than 4 GB.

This message is logged at queue manager start and then either every hour if the usage does not change or when the memory usage changes (up or down) by more than 2%.

The message is also generated if the ALTER BUFFPOOL command makes a change to the value either for LOCATION, or BUFFERS.

System action

Processing continues. Any special actions taken by IBM MQ or that are required, are indicated by the CSQY221I and CSQY222E messages.

System programmer response

No action is required at this time. However, a frequent occurrence of this message might be an indication that the system is operating beyond the optimum region for the current configuration.

CSQY221I
csect-name Queue manager is short of local storage

Explanation

The queue manager is running short of virtual storage in the extended private region.

System action

Processing continues. Storage contraction processing is performed, which attempts to remove unused storage from internal subpools so that it can be reused in other subpools. This might be necessary after a temporary need for a large amount of storage; for example, an unusually large unit of work being performed.

System programmer response

If only a few of these messages are output then no action is required at this time. However, a frequent occurrence of this message may be an indication that the system is operating beyond the optimum region for the current configuration and should be investigated.

CSQY222E
csect-name Queue manager is critically short of local storage - take action

Explanation

The queue manager is running critically short of virtual storage in the extended private region. Action should be taken to relieve the situation, and to avoid the possible abnormal termination of the queue manager.

System action

Processing continues. Storage contraction processing has been performed, but the remaining unallocated virtual storage is less than a predetermined safe amount. If storage use continues to increase, the queue manager might terminate abnormally in an unpredictable way.

System programmer response

Virtual storage is over-allocated for the current configuration. The following actions can reduce the virtual storage requirement:

- For buffer pools that have the LOCATION parameter set to BELOW, you can reduce buffer pool sizes with the ALTER BUFFPOOL command. Buffer pool statistics can be used to determine buffer pools which are over-allocated.
- Reduce the number of concurrent connections to the queue manager. The DISPLAY CONN command can be used to determine connections which are consuming queue manager resources.

If the problem persists after taking actions described above, it might be an indication of an internal error where storage is not freed (a 'storage leak'). If you suspect this, then collect at least two system dumps of the queue manager, separated by an interval of time, and contact your IBM support center.

CSQY223I
csect-name Queue manager is no longer short of local storage

Explanation

The queue manager is no longer short of virtual storage in the extended private region.

System action

Processing continues. Storage contraction processing has been performed, and the remaining unallocated virtual storage is more than a predetermined safe amount.

CSQY224I
csect-name Queue manager is short of local storage above the bar

Explanation

The queue manager is running short of virtual storage above the bar.

System action

Processing continues. Storage contraction processing is performed, which attempts to remove unused storage from internal subpools so that it can be reused in other subpools. This might be necessary after a temporary need for lots of storage; for example, more than the usual number of messages held on an indexed queue, or an unusually large unit of work being performed.

CSQY225E
csect-name Queue manager is critically short of local storage above the bar - take action

Explanation

The queue manager is running critically short of virtual storage above the bar. Action should be taken to relieve the situation, and to avoid the possible abnormal termination of the queue manager.

System action

Processing continues. Storage contraction processing has been performed, but the remaining unallocated virtual storage is less than a predetermined safe amount. If storage use continues to increase, the queue manager might terminate abnormally in an unpredictable way.

CSQY226I
csect-name Queue manager is no longer short of local storage above the bar

Explanation

The queue manager is no longer short of virtual storage above the bar.

System action

Processing continues. Storage contraction processing has been performed, and the remaining unallocated virtual storage is more than a predetermined safe amount.

CSQY227E
csect-name Unable to allocate storage above the bar using IARV64, RC=rc, reason=reason

Explanation

A request by the queue manager to allocate storage above the bar failed. rc is the return code and reason is the reason code (both in hexadecimal) from the z/OS IARV64 service.

System action

The queue manager will attempt to recover from the error. If recovery is not possible an application or queue manager abend, for example 5C6-00A30042, 5C6-00A31000 or 5C6-00E20045, will occur.

CSQY228E
ACE pool cannot be extended, ACELIM reached

Explanation

The internal storage pool used to manage control blocks representing new connections to the queue manager has reached the limit defined by the ACELIM system parameter.

System action

Queue manager processing continues. New connection requests might have failed, message CSQ3202E or CSM078E give further information about the affected jobs.

System programmer response

Review the configured ACELIM value. It might be useful to use a STATISTICS CLASS(2) trace to establish the normal size of the ACE pool.

See Address space storage for more information.

CSQY270E

csect-name UNRECOGNIZED MESSAGE NUMBER *message-id*

Severity
8

Explanation

An unsuccessful attempt has been made to issue the message *message-id*. This message is issued only if the requested message could not be found in the IBM MQ message directory.

System action

Processing continues as though the requested message had been issued.

System programmer response

Use the message number (*message-id*) and look up the message in this product documentation. If you are using a language other than US English, ensure that you have installed the language feature correctly and that you have the appropriate load library data set concatenations in your job. Apart from that possibility, this might be an MQ system problem; see Troubleshooting and support.

Note: Messages are also used to provide text for constructing panels and reports. If such a message cannot be found, message CSQY270E will appear on the panel or report, generally in truncated form.

CSQY271I

MESSAGE GENERATOR INITIALIZATION PARAMETERS NOT FOUND. DEFAULTS ASSUMED

Severity
4

Explanation

The message generator was unable to access the routing code initialization parameter defined by the CSQ6SYSP macro. Default values defined by that macro are assumed.

System action

Queue manager initialization continues.

System programmer response

It might be necessary to change the CSQ6SYSP macro. For information about the system parameters for the CSQ6SYSP macro, see Using CSQ6SYSP.

CSQY290E

csect-name NO STORAGE AVAILABLE

Severity
4

Explanation

There was insufficient storage available for a system routine. *csect-name* shows the system routine function:

CSQAXDPS, CSQVXDPS
    User exits (other than channel)

CSQXARMY
    Channel initiator automatic restart

CSQXDCTS, CSQXTRPG
    Channel initiator trace

CSQXDMPS
    Channel initiator system dump

CSQXLDXS
    User channel exits

CSQ2GFRR, CSQ2MFRR
    IMS bridge system dump

System action

Processing continues, but the function provided by the system routine will be inhibited. For example, if the routine is CSQXLDXS, then user channel exits will not be available, and channels that use them will not start.

System programmer response

If the problem occurs in the queue manager, increase the size of the its address space, or reduce the number of queues, messages, and threads being used.

If the problem occurs in the channel initiator, increase the size of the its address space, or reduce the number of dispatchers, adapter subtasks, SSL server subtasks, and active channels being used.

CSQY291E

csect-name SDUMPX FAILED, RC=0000*ssrr*, *dump-identifier*

Severity
    4

Explanation

The system dump routine was unable to issue a dump; the dump identifier was as shown in the message. *rr* is the return code and *ss* is the reason code (both in hexadecimal) from the z/OS SDUMPX service.

Usually the return code is 08. The most common reason codes for return code 08 are:

02
    An SVC dump was suppressed because the capture phase of another SVC dump was in progress.

04
    An SVC dump was suppressed by a SLIP NODUMP command.

0B
    An SVC dump was suppressed by DAE.

System action

Processing continues.

System programmer response

Select the appropriate volume of the *z/OS MVS Authorized Assembler Services Reference* manual for information about the return code and reason code from the SDUMPX request.

For reason code 0B, that is, in the case of DAE suppression, see generating a suppressed dump.

To summarize, use IPCS option 3.5 , that is, `Utilities -> DAE` to set the T (TAKEDUMP) option for the dump symptom, or symptoms, you want to allow.

CSQY330I
Queue manager has restricted functionality

Explanation

The installation and customization options chosen for IBM MQ do not allow all functions to be used.

System action

Queue manager startup processing continues.

CSQY331E
parm value not allowed - restricted functionality

Explanation

The value specified for the *parm* system parameter is not allowed because the installation and customization options chosen for IBM MQ do not allow all functions to be used.

System action

The queue manager does not start.

CSQY332I
IMS Bridge not available - restricted functionality

Explanation

The IBM MQ-IMS bridge cannot operate because the installation and customization options chosen for IBM MQ do not allow all functions to be used.

System action

The MQ-IMS bridge does not start.

CSQY333E
Command not allowed - restricted functionality

Explanation

The command that was issued is not allowed because the installation and customization options chosen for IBM MQ do not allow all functions to be used.

`z/OS` For example, the queue manager might have been migrated from a previous version, and is currently operating with OPMODE=COMPAT. The function requested is not available in compatibility mode. See z/OS: OPMODE for more information.

System action

The command is ignored.

CSQY334E
csect-name keyword(*value*) not allowed - restricted functionality

Explanation

The value specified for the keyword is not allowed because the installation and customization options chosen for IBM MQ do not allow all functions to be used.

System action

The command is ignored.

System programmer response

Check for message CSQ5037I, resolve the problem, and restart this queue manager. To access IBM MQ V8.0 capabilities, ensure that you have OPMODE=(NEWFUNC,800) specified in the **CSQ6SYSP** macro.

CSQY335E
csect-name Channel *channel-name* unusable - restricted functionality

Explanation

The channel cannot be used because the installation and customization options chosen for IBM MQ do not allow all functions to be used.

System action

The requested operation fails.

CSQY336E
csect-name keyword not allowed - restricted functionality

Explanation

The keyword is not allowed because the installation and customization options chosen for IBM MQ do not allow all functions to be used.

z/OS For example, the queue manager might have been migrated from a previous version, and is currently operating with OPMODE=COMPAT. The function requested is not available in compatibility mode; see z/OS: OPMODE for further information.

System action

The command is ignored.

CSQY337E

csect-name keyword value length not allowed - restricted functionality

Explanation

The length of the value specified for the keyword is not allowed because the installation and customization options chosen for IBM MQ do not allow all functions to be used.

z/OS For example, the queue manager might have been migrated from a previous version, and is currently operating with OPMODE=COMPAT. The function requested is not available in compatibility mode; see z/OS: OPMODE for further information.

System action

The command is ignored.

CSQY340E

Queue manager has restricted functionality, but previously had full functionality. Unsupported objects will be deleted (losing messages), invalid attributes will be changed

Explanation

The installation and customization options chosen for IBM MQ do not allow all functions to be used. However, the queue manager has run previously without any functional restriction, and so might have objects and attribute settings that are not allowed with the restricted functionality.

In order to continue, these objects must be deleted (which might mean that messages are lost) and the attributes must be changed. The queue manager does this automatically.

System action

Message CSQY341D is issued and the operator's reply is awaited.

System programmer response

The operator has two options:

- Allow the queue manager to delete the objects and change the attributes, by replying 'Y'.
- Cancel the queue manager, by replying 'N'.

CSQY341D

Reply Y to continue or N to cancel

Explanation

The installation and customization options chosen for IBM MQ have changed, as indicated in the preceding CSQY340E message.

System action

The queue manager waits for the operator's reply

System programmer response

See message CSQY340E.

CSQY342I

Deleting objects and changing attributes - restricted functionality

Explanation

This message is sent if the operator answers 'Y' to message CSQY341D.

System action

The queue manager deletes the objects and changes the attributes that are not allowed with the restricted functionality.

CSQY343I

Queue manager terminating - restricted functionality not accepted

Explanation

This message is sent if the operator answers 'N' to message CSQY341D.

System action

The queue manager does not start.

Advanced Message Security (CSQ0...)

CSQ0101E

csect-name Internal message protection error, reason *reason*, diagnostics: *value1,value2*

Severity
8

Explanation

An internal error occurred during message protection processing.

System action

For a put operation, the message is rejected.

For a get operation, the message is moved to the error queue, **SYSTEM.PROTECTION.ERROR.QUEUE**.

System programmer response

You should check that the message has valid WebSphere MQ headers, if not, contact your IBM support center.

CSQ0105E

csect-name Internal error occurred, reason *reason*, diagnostics: *value*

Severity
8

Explanation

An internal error occurred during message protection processing.

System action

The message queue interface (MQI) call fails.

System programmer response

Contact your IBM support center.

CSQ0109E

csect-name SDUMP failed, return code *rc*, reason *reason*

Severity
8

Explanation

An attempt to issue an SDUMP during abend processing failed.

System action

SDUMP diagnostics are not generated.

System programmer response

Review the return code and reason in conjunction with SDUMP documentation to resolve the problem.

CSQ0110I

csect-name AMS abend *abend,* reason *reason*

Severity
8

Explanation

An abend has occurred during message protection processing of type *abend* for reason *reason*.

System action

The message queue interface (MQI) call fails and the WebSphere MQ subsystem might terminate.

System programmer response

Use the abend and reason code information to resolve the issue.

If the problem cannot be resolved contact your IBM support center.

CSQ0111I

csect-name Module offset *offset,* level *level*

Severity
0

Explanation

The *module* and *level* are reported for diagnostic purposes following an abend during message protection processing.

System action

Processing continues.

System programmer response

None.

CSQ0112I

csect-name PSW SDWAEC1, *SDWAEC1,* SDWAAEC1, *SDWAAEC1*

Severity
0

Explanation

Relevant Program Status Word (PSW) fields are reported following an abend during message protection processing.

System action

Processing continues.

System programmer response

None.

CSQ0113I

csect-name CAB *value1, value2, value3, value4*

Severity
0

Explanation

Relevant internal fields are reported following an abend during message protection processing.

System action

Processing continues.

System programmer response

None.

CSQ0114I

csect-name R0-R3 *gpr0, gpr1, gpr2, gpr3*

Severity

0

Explanation

General purpose registers 0 through 3 are reported following an abend during message protection processing.

System action

Processing continues.

System programmer response

None.

CSQ0115I

csect-name R4-R7 *gpr4, gpr5, gpr6, gpr7*

Severity

0

Explanation

General purpose registers 4 through 7 are reported following an abend during message protection processing.

System action

Processing continues.

System programmer response

None.

CSQ0116I

csect-name R8-R11 *gpr8, gpr9, gpr10, gpr11*

Severity

0

Explanation

General purpose registers 8 through 11 are reported following an abend during message protection processing.

System action

Processing continues.

System programmer response

None.

CSQ0117I

csect-name R12-R15 *gpr12, gpr13, gpr14, gpr15*

Severity

0

Explanation

General purpose registers 12 through 15 are reported following an abend during message protection processing.

System action

Processing continues.

System programmer response

None.

CSQ0118I

csect-name A0-A3 *ar0, ar1, ar2, ar3*

Severity

0

Explanation

Access registers 0 through 3 are reported following an abend during message protection processing.

System action

Processing continues.

System programmer response

None.

CSQ0119I

csect-name A4-A7 *ar4, ar5, ar6, ar7*

Severity

0

Explanation

Access registers 4 through 7 are reported following an abend during message protection processing.

System action

Processing continues.

System programmer response

None.

CSQ0120I

csect-name A8-A11 *ar8, ar9, ar10, ar11*

Severity

0

Explanation

Access registers 8 through 11 are reported following an abend during message protection processing.

System action

Processing continues.

System programmer response

None.

CSQ0121I

csect-name A12-A15 *ar12, ar13, ar14, ar15*

Severity

0

Explanation

Access registers 12 through 15 are reported following an abend during message protection processing.

System action

Processing continues.

System programmer response

None.

CSQ0137I

csect-name SDUMP not taken, suppressed by DAE

Severity

0

Explanation

An SDUMP was suppressed due to Dump Analysis and Elimination (DAE).

System action

Processing continues.

System programmer response

None.

CSQ0151E

csect-name Failed to allocate storage

Severity

8

Explanation

An attempt to allocate storage during message protection processing failed.

System action

The message queue interface (MQI) call fails.

System programmer response

Increase the amount of storage available.

CSQ0174E

csect-name Failed to load module *module*, return code *abncode*, reason *rsncode*

Severity

8

Explanation

An attempt to load a module into storage failed.

System action

The WebSphere MQ subsystem fails to start.

System programmer response

Use the abend and reason code in conjunction with documentation for the **LOAD** macro to resolve the problem.

CSQ0175E

csect-name Failed to delete module *module*, return code *rc*

Severity

8

Explanation

An attempt to delete a loaded module failed.

System action

The module remains loaded.

System programmer response

Use the return code in conjunction with documentation for the **DELETE** macro to resolve the problem.

CSQ0201E

csect-name Message table not available

Severity

8

Explanation

An attempt to load the message protection component message file failed.

System action

The WebSphere MQ subsystem fails to start.

System programmer response

Verify that the WebSphere MQ subsystem has been installed correctly. If the problem persists contact your IBM support center.

CSQ0204I

csect-name AMS is using *use-size* MB of local storage, *free-size* MB free

Severity

0

Explanation

The amount of storage currently used for message protection services is currently *use-size* MB, and a further *free-size* remains free.

System action

Processing continues.

System programmer response

None.

CSQ0209E

csect-name Message for *qname* sent to error queue, MQRC=*mqrc (mqrc-text)*

Severity

4

Explanation

During get processing a protected message on queue *qname* could not be processed for reason *mqrc*, and has been sent to the error queue, **SYSTEM.PROTECTION.ERROR.QUEUE** (*mqrc-text* provides the MQRC in textual form).

System action

The message is placed on the error queue and an error is returned to the requesting application.

System programmer response

Examine the message on the error queue and the reason code to determine why the message could not be processed.

You should check the sender and receiver policies. For example, when setting the policy:

- Specify the State or Province using ST=
- The following special characters need escape characters:

```
, (comma)
+ (plus)
" (double quote)
\ (backslash)
< (less than)
> (greater than)
; (semicolon)
```

- If the Distinguished Name contains embedded blanks, you should enclose the DN in double quotation marks.

CSQ0210E

csect-name Failed to redirect message to error queue, MQRC=*mqrc (mqrc-text)*

Severity
8

Explanation

An attempt during message protection processing to put a message to the error queue, **SYSTEM.PROTECTION.ERROR.QUEUE**, failed for reason *mqrc* (*mqrc-text* provides the MQRC in textual form).

System action

The get request fails and the message remains on the target queue.

System programmer response

Examine the message on the target queue and the reason code to determine why the message could not be processed or placed on the error queue.

CSQ0213E

csect-name Internal queue close failed MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Severity
8

Explanation

During open processing for a protected queue protection initialization failed and an attempt to internally close the queue failed.

System action

The open request fails.

System programmer response

Examine the completion and reason codes to determine the cause of the failure.

CSQ0214E

csect-name Message protection initialization failed, return code *rc*, reason *reason*

Severity
8

Explanation

During open processing for a protected queue protection initialization failed.

System action

The open request fails.

System programmer response

Examine the completion and reason codes to determine the cause of the failure. For more information, see Messages and codes in the *z/OS Cryptographic Services System SSL Programming* documentation.

CSQ0215E

csect-name Message protection failed, return code *rc*, reason *reason*

Severity
8

Explanation

An attempt to protect a message failed during put processing.

System action

The message is not put to the queue.

System programmer response

Examine the completion and reason codes to determine the cause of the failure. For more information, see Messages and codes in the *z/OS Cryptographic Services System SSL Programming* documentation.

CSQ0216E

csect-name Message unprotection failed, return code *rc*, reason *reason*

Severity
8

Explanation

An attempt to process a protected message during get processing failed.

System action

The message is moved to the error queue, **SYSTEM.PROTECTION.ERROR.QUEUE**, if possible.

System programmer response

Examine the completion and reason codes to determine the cause of the failure. For more information, see Messages and codes in the *z/OS Cryptographic Services System SSL Programming* documentation.

CSQ0217E

csect-name Failed to process object *'objname'*

Severity
8

Explanation

An attempt to initialize, protect, or process a protected message failed for the object named by *objname.*

System action

The open, get or put request fails.

System programmer response

Examine preceding or subsequent console messages for more information.

CSQ0218E

csect-name Privacy policy for *qname* invalid. No recipients

Severity
8

Explanation

During open or put1 processing, a privacy policy was stipulated for the object *qname*, but the policy failed to identify any recipients.

System action

The open or put1 request fails.

System programmer response

Modify or delete the protection policy for the object *qname*.

CSQ0219E

csect-name Message verification error for *qname*

Severity
8

Explanation

During put or get processing an attempt to process a message failed due to unexpected header values or offsets.

System action

The put or get operation fails.

For get processing the message is moved to the error queue, **SYSTEM.PROTECTION.ERROR.QUEUE**.

System programmer response

Examine the failing message to determine the cause of the problem.

CSQ0220E

csect-name Encryption strength not available

Severity
8

Explanation

During get processing a protected message did not specify an encryption strength.

System action

The get request fails and the message is moved to the error queue, **SYSTEM.PROTECTION.ERROR.QUEUE**.

System programmer response

Examine the message on the error queue to determine its origin and why it is not correctly protected.

CSQ0221E

csect-name Message encryption strength *encstr* not valid

Severity
8

Explanation

During get processing a protected message did not have a recognized encryption strength.

System action

The get request fails and the message is moved to the error queue, **SYSTEM.PROTECTION.ERROR.QUEUE**.

System programmer response

Examine the message on the error queue to determine its origin and why it does not have a valid encryption strength.

Some encryption algorithms are supported on some platforms, however, not on others.

CSQ0222E

csect-name Message encryption strength *encstr* inconsistent with policy

Severity
8

Explanation

During get processing a protected message did not use an encryption algorithm that matches the expected encryption strength.

System action

The get request fails and the message is moved to the error queue, **SYSTEM.PROTECTION.ERROR.QUEUE**.

System programmer response

Examine the message on the error queue to determine its origin and why the encryption algorithm does not match the expected encryption strength.

Some encryption algorithms are supported on some platforms, however, not on others.

CSQ0223E

csect-name Message size *m-size* inconsistent with header size *h-size* or original size *o-size*

Severity
8

Explanation

During get processing a protected message was found to have a header or overall message size that did not match the original unprotected message.

System action

The get request fails and the message is moved to the error queue, **SYSTEM.PROTECTION.ERROR.QUEUE**.

System programmer response

Examine the message on the error queue to determine why its lengths are inconsistent with the original unprotected message.

CSQ0224E

csect-name Message buffer length of *m-size* too small

Severity
8

Explanation

During get processing a protected message was of insufficient length to contain a standard protection header and could not be processed.

System action

The get request fails and the message is moved to the error queue,
SYSTEM.PROTECTION.ERROR.QUEUE.

System programmer response

Examine the message on the error queue to determine why it is of insufficient length.

CSQ0225E

csect-name Message header not acceptable, structure identifier is *'strucid'*

Severity
8

Explanation

During get processing a protected message did not have the expected protection header eye-catcher,
but instead had *strucid*.

System action

The get request fails and the message is moved to the error queue,
SYSTEM.PROTECTION.ERROR.QUEUE.

System programmer response

Examine the message on the error queue to determine why it has an invalid protection header.

CSQ0226E

csect-name Header version not supported

Severity
8

Explanation

During get processing a protected message did not have the expected protection header version.

System action

The get request fails and the message is moved to the error queue,
SYSTEM.PROTECTION.ERROR.QUEUE.

System programmer response

Examine the message on the error queue to determine why it has an invalid protection header.

CSQ0227E

csect-name Message signature algorithm *sig-alg* not valid

Severity
8

Explanation

During get processing a protected message did not have a recognized signature algorithm.

System action

The get request fails and the message is moved to the error queue,
SYSTEM.PROTECTION.ERROR.QUEUE.

System programmer response

Examine the message on the error queue to determine its origin and why it does not have a valid
signature algorithm. Some signature algorithms are supported on some platforms, however, not on
others.

CSQ0228E

csect-name Message signature algorithm *sig-alg* inconsistent with policy

Severity
8

Explanation

During get processing a protected message did not use a signature algorithm that matches the expected signature strength.

System action

The get request fails and the message is moved to the error queue,
SYSTEM.PROTECTION.ERROR.QUEUE.

System programmer response

Examine the message on the error queue to determine its origin and why the signature algorithm does not match the expected signature strength. Some signature algorithms are supported on some platforms, however, not on others.

CSQ0229E

csect-name Unable to verify sender distinguished name

Severity
8

Explanation

During get processing the distinguished name of the message sender was not present to be verified.

System action

The get request fails and the message is moved to the error queue,
SYSTEM.PROTECTION.ERROR.QUEUE.

System programmer response

Examine the message on the error queue to determine why it does not have a distinguished name for the sender of the message.

CSQ0230E

csect-name Structure identifier *strucid* invalid for format name *format*

Severity
8

Explanation

During message protection processing a message header did not have the expected value for the message format indicated.

System action

The MQI call fails. For a get request the message is moved to the error queue,
SYSTEM.PROTECTION.ERROR.QUEUE.

System programmer response

Examine the failing message formats and headers to determine the cause of the problem.

CSQ0231E

csect-name Unrecognized version *version* for structure *strucid*, format name *format*

Severity
8

Explanation

During message protection processing a message header version did not have the expected value for the message format and header indicated.

System action

The MQI call fails. For a get request the message is moved to the error queue, **SYSTEM.PROTECTION.ERROR.QUEUE**.

System programmer response

Examine the failing message formats and headers to determine the cause of the problem.

CSQ0232E

csect-name Buffer length insufficient for format name *format*

Severity
8

Explanation

During message protection processing a message length was insufficient to account for the length of a header indicated by the message format.

System action

The MQI call fails. For a get request the message is moved to the error queue, **SYSTEM.PROTECTION.ERROR.QUEUE**.

System programmer response

Examine the failing message formats and headers to determine the cause of the problem.

CSQ0233E

csect-name Message *msg-size* of size does not match original size of *orig-size*

Severity
8

Explanation

During get processing a protected message length does not resolve to the original length of the message before it was protected.

System action

The get request fails and the message is moved to the error queue, **SYSTEM.PROTECTION.ERROR.QUEUE**.

System programmer response

Examine the message on the error queue to determine why it has a different length than expected.

CSQ0240E

csect-name No storage for error queue processing for *qname*

Severity
8

Explanation

During get processing a message that failed protection processing could not be put to the error queue, **SYSTEM.PROTECTION.ERROR.QUEUE**, due to insufficient storage.

System action

The get request fails and the message remains on the queue *qname*.

System programmer response

Determine the cause of storage shortage and retry the get operation.

CSQ0400I

CSQ0UTIL IBM WebSphere MQ AMS for z/OS *vrm*

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility, CSQ0UTIL, is starting for utility version *v*, release *r*, and modlevel *m*.

System action

Processing continues.

System programmer response

None.

CSQ0401I

Queue Manager Protection Policy Utility

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility, CSQ0UTIL, has started.

System action

Processing continues.

System programmer response

None.

CSQ0402I

Command Name: *command*

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility is processing the policy command *command*.

System action

Processing continues.

System programmer response

None.

CSQ0403I

Arguments: args

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility is processing arguments *args* for the current policy command.

System action

Processing continues.

System programmer response

None.

CSQ0404E

Insufficient storage available to perform command

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility could not allocate storage to process the input command.

System action

The IBM WebSphere MQ Advanced Message Security policy utility terminates without executing the current input command.

System programmer response

Determine why there is insufficient storage for the policy utility then rerun the utility when the problem has been resolved.

CSQ0405E

An error occurred running command *cmd-number* on line *line number*

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility encountered an error during the processing of command *cmd-number* at line *line-number* of the input.

System action

The IBM WebSphere MQ Advanced Message Security policy utility processing fails for the command identified by *cmd-number* at line *line-number*.

System programmer response

Examine the failing command and related messages to determine the cause of the failure.

CSQ0406E

Invalid command found on line *line-number*. Valid commands are SETMQSPL and DSPMQSPL

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility did not recognize the input command at line *line-number* of the input.

System action

The IBM WebSphere MQ Advanced Message Security policy utility does not process the command at line *line-number*.

System programmer response

Change the input command to either **SETMQSPL** or **DSPMQSPL**.

CSQ0407E

Quoted string on line *line-number* does not have a terminating quote

Severity

8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility could not align matching quotes when processing the input command at line *line-number*.

System action

The IBM WebSphere MQ Advanced Message Security policy utility does not process the command at line *line-number*.

System programmer response

Change the command at line *line-number* to use consistent and matching quotes in the arguments.

CSQ0408I

cmd-count policy commands have been completed successfully

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility has successfully processed *cmd-count* commands.

System action

Processing continues.

System programmer response

None.

CSQ0409I

Reached end of input, *num-line* lines read

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility reached end of input after *num-line* lines.

System action

Processing continues.

System programmer response

None.

CSQ0410E

Error opening SYSIN data set

Severity

8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility could not open the standard input (SYSIN DD) to read input commands.

System action

No commands are processed.

System programmer response

Determine why the SYSIN DD is unavailable and resolve the problem, then rerun the policy utility.

CSQ0411E

Unexpected internal error

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility did not recognize the input command.

System action

The input command is not processed.

System programmer response

Examine the command input and verify that the input expresses a valid command with valid parameters.

CSQ0412I

Policy name: *policy-name*

Severity
0

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility is displaying information about the policy identified by *policy-name*.

System action

Processing continues.

System programmer response

None.

CSQ0413I

Encryption algorithm: *enc-alg*

Severity
0

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility is displaying the encryption algorithm *enc-alg* for a given policy.

System action

Processing continues.

System programmer response

None.

CSQ0414I

Recipient DNs: *recipient-dns*

Severity
0

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility is displaying the recipient distinguished names, *recipient-dns*, for a given policy.

System action

Processing continues.

System programmer response

None.

CSQ0415I

Signature algorithm: *sig-alg*

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility is displaying the signature algorithm, *sig-alg*, for a given policy.

System action

Processing continues.

System programmer response

None.

CSQ0416I

Signer DNs: *signer-dns*

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility is displaying the signer distinguished names, *signer-dns*, for a given policy.

System action

Processing continues.

System programmer response

None.

CSQ0417I

Quality of protection: *qop*

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility is displaying the quality of protection, *qop*, for a given policy.

System action

Processing continues.

System programmer response

None.

CSQ0418I

Toleration: *toleration-flag*

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility is displaying the toleration flag, *toleration-flag*, for a given policy.

System action

Processing continues.

System programmer response

None.

CSQ0447E

Failed to open EXPORT DD, exporting to STDOUT

Severity

8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility could not open the EXPORT DD to process a -export request.

System action

The policy export is sent to STDOUT.

System programmer response

Determine why the EXPORT DD is unavailable and resolve the problem, then rerun the policy utility.

CSQ0448E

Command failed

Severity

8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility failed to successfully process an input command.

System action

The current command is not processed and the IBM WebSphere MQ Advanced Message Security policy utility attempts to process the next input command, if any.

System programmer response

Determine the reason for the failing command by examining related messages, and correct the failing input command.

CSQ0449I

Command successful

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility successfully processed an input command.

System action

Processing continues.

System programmer response

None.

CSQ0450E

Syntax error. Usage: setmqspl -m (qm) -p (policy) -s (sigalg) -a (signer DN) -e (encalg) -r (receiver DN)

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility failed to interpret a command due to bad command syntax.

System action

The current command is not processed and the IBM WebSphere MQ Advanced Message Security policy utility attempts to process the next input command, if any.

System programmer response

Correct the syntax of the failing command then retry.

CSQ0451E

Invalid queue manager name: *qmgr-name*

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility encountered an invalid queue manager name value*, qmgr-name*, when processing an input command.

System action

The current command is not processed and the IBM WebSphere MQ Advanced Message Security policy utility attempts to process the next input command, if any.

System programmer response

Correct the queue manager name value in the input command then retry.

CSQ0452E

Invalid policy name: *policy-name*

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility encountered an invalid policy name when processing an input command.

System action

The current command is not processed and the IBM WebSphere MQ Advanced Message Security policy utility attempts to process the next input command, if any.

System programmer response

Correct the policy name value in the input command then retry.

CSQ0453E

Invalid encryption algorithm

Severity

8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility encountered an invalid encryption algorithm when processing an input command.

System action

The current command is not processed and the IBM WebSphere MQ Advanced Message Security policy utility attempts to process the next input command, if any.

System programmer response

Correct the encryption algorithm value in the input command then retry.

CSQ0454E

Invalid signature algorithm

Severity

8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility encountered an invalid signature algorithm when processing an input command.

System action

The current command is not processed and the IBM WebSphere MQ Advanced Message Security policy utility attempts to process the next input command, if any.

System programmer response

Correct the signature algorithm value in the input command and retry.

CSQ0455E

Encryption requires the use of a signature algorithm

Severity

8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility encountered an invalid command that identified an encryption algorithm, but did not also identify a valid signature algorithm.

System action

The current command is not processed and the IBM WebSphere MQ Advanced Message Security policy utility attempts to process the next input command, if any.

System programmer response

Provide both a valid encryption algorithm and a valid signature algorithm when defining privacy protection policies.

CSQ0456E

Encryption requires a receiver DN to be specified (-r)

Severity

8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility encountered an invalid command that identified an encryption algorithm, but did not also identify at least one recipient DN via the -r parameter.

System action

The current command is not processed and the IBM WebSphere MQ Advanced Message Security policy utility attempts to process the next input command, if any.

System programmer response

Provide both an encryption algorithm and at least one recipient DN when defining privacy protection policies.

CSQ0457E

Invalid receiver DN specified: *receiver-dn*

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility encountered an invalid receiver distinguished name, *receiver-dn*, when processing an input command.

System action

The current command is not processed and the IBM WebSphere MQ Advanced Message Security policy utility attempts to process the next input command, if any.

System programmer response

Correct the receiver distinguished name in the input command then retry.

CSQ0458E

Receiver DN is specified while no encryption is enabled

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility encountered an invalid command that identified at least one recipient DN, however, did not also identify an encryption algorithm when processing the -e parameter.

System action

The current command is not processed and the IBM WebSphere MQ Advanced Message Security policy utility attempts to process the next input command, if any.

System programmer response

Provide both an encryption algorithm and at least one recipient DN when defining privacy protection policies.

CSQ0459E

Invalid signer DN specified: *signer-dn*

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility encountered an invalid signer distinguished name, *signer-dn*, when processing an input command.

System action

The current command is not processed and the IBM WebSphere MQ Advanced Message Security policy utility attempts to process the next input command, if any.

System programmer response

Correct the signer distinguished name value in the input command then retry.

CSQ0460E

Signer DN is specified while no signing is enabled

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility encountered an invalid command that identified at least one signer DN using the -a parameter, however, did not also identify a signature algorithm using the -s parameter.

System action

The current command is not processed and the IBM WebSphere MQ Advanced Message Security policy utility attempts to process the next input command, if any.

System programmer response

Provide both an encryption algorithm and at least one recipient DN when defining privacy protection policies.

CSQ0461E

Queue **SYSTEM.PROTECTION.POLICY.QUEUE** unavailable, MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility could not open the policy queue, **SYSTEM.PROTECTION.POLICY.QUEUE**, due to an error identified by *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

System action

Processing ends.

System programmer response

Determine the reason the policy queue is unavailable using the *mqcc* and *mqrc*, then resolve the problem.

CSQ0462E

Failed to retrieve protection policy, MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility could not retrieve a policy from the policy queue, **SYSTEM.PROTECTION.POLICY.QUEUE**, due to an error identified by *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

System action

The current command is not processed and the IBM WebSphere MQ Advanced Message Security policy utility attempts to process the next input command, if any.

System programmer response

Determine the reason the policy could not be retrieved from the policy queue, then resolve the problem.

CSQ0463E

Policy update failed due to concurrent update, MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility detected that a policy was changed by another process when it was trying to update or create the same policy, due to an error identified by *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

System action

The current command is not processed and the IBM WebSphere MQ Advanced Message Security policy utility attempts to process the next input command, if any.

System programmer response

Verify the policy is correct, then update the policy again if necessary.

CSQ0464E

Policy definition not found, MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility could not find a policy on the policy queue, **SYSTEM.PROTECTION.POLICY.QUEUE**, when a policy was expected, due to an error identified by *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

System action

The current command is not processed and the IBM WebSphere MQ Advanced Message Security policy utility attempts to process the next input command, if any.

System programmer response

Determine the reason the policy could not be retrieved from the policy queue, then resolve the problem.

CSQ0465E

An unexpected error occurred, MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility encountered an unexpected MQI error when processing an input command, identified by *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

System action

The current command is not processed and the IBM WebSphere MQ Advanced Message Security policy utility attempts to process the next input command, if any.

System programmer response

Determine the reason the for the MQI error, then resolve the problem.

CSQ0466E

Invalid value specified for toleration flag, specify one of (0, 1)

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility encountered an invalid value for the toleration parameter.

System action

The current command is not processed and the IBM WebSphere MQ Advanced Message Security policy utility attempts to process the next input command, if any.

System programmer response

Use a value of 0 (false) or 1 (true) for the toleration parameter when creating or modifying a policy.

CSQ0467E

Failed to connect to the queue manager, MQCC=*mqcc* MQRC=*mqrc (mqrc-text)*

Severity
   8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility could not connect to the input queue manager to process further input commands, due to an error identified by *mqcc* and *mqrc* (*mqrc-text* provides the MQRC in textual form).

System action

Processing ends.

System programmer response

Determine the reason the queue manager is unavailable, then resolve the problem.

CSQ0468I

No policies found

Severity
   0

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility found no policies matching the specified parameters.

System action

Processing continues.

System programmer response

None.

CSQ0470E

Syntax error. Usage: dspmqspl -m (qm) -p (policy) -export

Severity
   8

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility failed to interpret a command due to incorrect syntax.

System action

The current command is not processed and the IBM WebSphere MQ Advanced Message Security policy utility attempts to process the next input command, if any.

Correct the syntax of the failing command then retry.

CSQ0499I

CSQ0UTIL Utility completed return code=*retcode*

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security policy utility, CSQ0UTIL, has completed with return code *retcode*.

System action

Processing continues.

System programmer response

If the utility did not complete successfully refer to other messages in the output to determine the cause of any errors.

CSQ0501I

csect-name SMF recording enabled for record type *record-type*

Severity

0

Explanation

IBM WebSphere MQ Advanced Message Security has enabled SMF record generation for record type *record-type*.

System action

Processing continues.

System programmer response

None.

CSQ0502I

csect-name SMF recording disabled

Severity

0

Explanation

IBM WebSphere MQ Advanced Message Security has disabled SMF record generation.

System action

Processing continues.

System programmer response

None.

CSQ0503I

csect-name SMF record write failed, return code *retcode*

Severity

8

Explanation

An attempt the generate an SMF audit record using SMFEWTM failed during message protection processing with return code *retcode*.

System action

The SMF record is not generated.

System programmer response

Examine the *retcode* and documentation for the SMFEWTM macro to determine the cause of the failure.

CSQ0600I

csect-name IBM WebSphere MQ AMS for z/OS, *version*, *service-level*

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security task is running at version *version* and service level *service-level*.

System action

Processing continues.

System programmer response

None.

CSQ0601I

csect-name Environment variable *varname* has an invalid value, using default *'value'*

Severity

8

Explanation

A IBM WebSphere MQ Advanced Message Security environment variable, *varname*, was set to an invalid value, resulting in the use of a default value, *value*, for the variable.

System action

Processing continues with the default value for the named environment variable.

System programmer response

Change the environment variable assignment to a valid value if the default is not acceptable.

CSQ0602I

csect-name AMS initialization complete

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security task initialization is complete.

System action

Processing continues.

System programmer response

None.

CSQ0603I

csect-name AMS shutdown requested

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security task has received a shutdown request.

System action

Processing continues.

System programmer response

None.

CSQ0604I

csect-name LOG option processed: *log-option*

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security task processed a LOG command for log option *log-option*.

System action

Processing continues with the new log option.

System programmer response

None.

CSQ0605E

csect-name Incorrect LOG option specified

Severity

8

Explanation

An attempt by the IBM WebSphere MQ Advanced Message Security task to process a LOG command failed due to an invalid log option.

System action

The LOG command does not take effect.

System programmer response

Correct the LOG option and retry the LOG command.

CSQ0606E

csect-name Unrecognized command: specify **DISPLAY**, **REFRESH**, **LOG**, **SMFTYPE**, **SMFAUDIT** or **STOP**

Severity

8

Explanation

An attempt by the IBM WebSphere MQ Advanced Message Security task to process a command failed because the command was not recognized.

System action

The command is not executed.

System programmer response

Select a valid command and retry.

Valid commands include **DISPLAY**, **REFRESH**, **LOG**, **SMFTYPE**, **SMFAUDIT** and **STOP**.

CSQ0607E

csect-name Insufficient storage available

Severity

8

Explanation

The IBM WebSphere MQ Advanced Message Security task failed to allocate storage.

System action

The function being performed by the IBM WebSphere MQ Advanced Message Security task fails.

System programmer response

Determine the reason there is insufficient storage and correct or increase, as appropriate.

CSQ0608E

csect-name Failed to load policy configuration, MQRC=*mqrc (mqrc-text)*

Severity

8

Explanation

The IBM WebSphere MQ Advanced Message Security task failed to load the policy configuration for reason *mqrc* (*mqrc-text* provides the MQRC in textual form).

System action

The IBM WebSphere MQ Advanced Message Security task cannot start.

System programmer response

Use the reason code, *mqrc,* to determine why the policy configuration could not be loaded from the policy queue, **SYSTEM.PROTECTION.POLICY.QUEUE**.

If the queue cannot start, you can define the queue in the CSQINP2 concatenation. Definitions are provided in SCSQPROC as CSQ4INSM.

CSQ0609I

csect-name WebSphere MQ AMS for z/OS starting, version *version*, level *service-level*

Severity

0

Explanation

IBM WebSphere MQ Advanced Message Security task has started for product version *version* and service level *service-level*.

System action

Processing continues.

System programmer response

None.

CSQ0610E

csect-name Failed to start policy subtask, error *errcode*, reason *reason*

Severity

8

Explanation

An attempt by the IBM WebSphere MQ Advanced Message Security task to start the policy configuration subtask failed with errno *errcode* and errno2 *reason*.

System action

The IBM WebSphere MQ Advanced Message Security task cannot start.

System programmer response

Use the error and reason codes to determine why the policy configuration subtask could not be started, then take corrective action.

CSQ0611E

csect-name Failed to make AMS address space non-swapable, error *errcode*

Severity
8

Explanation

An attempt by the IBM WebSphere MQ Advanced Message Security task to make itself non-swapable failed with error code *errcode*.

System action

The IBM WebSphere MQ Advanced Message Security task cannot start.

System programmer response

The error identified by *errcode* is likely to be the return code from the SYSEVENT macro. Use macro documentation to determine the cause of the SYSEVENT failure.

CSQ0612E

csect-name System function *'function'* failed

Severity
8

Explanation

An attempt by the IBM WebSphere MQ Advanced Message Security task to use a run-time call, *function*, failed.

System action

The IBM WebSphere MQ Advanced Message Security task cannot continue to process the service it was providing at the time of the failure.

System programmer response

This message is associated with other messages that are generated at the time of failure. Examine these messages for more information, including error codes that might identify the cause of the failure.

CSQ0613E

csect-name AMS initialization error *errno*, reason *errno2*

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security task failed to initialize due to a run-time call failure.

System action

The IBM WebSphere MQ Advanced Message Security task cannot start.

System programmer response

This message is associated with other messages that are generated at the time of failure. Examine these messages for more information, and use the error codes to determine the cause of the failure.

CSQ0614E

csect-name AMS termination error *errno,* reason *reason*

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security task failed during termination due to a run-time call failure.

System action

The IBM WebSphere MQ Advanced Message Security task termination continues.

System programmer response

This message is associated with other messages that are generated at the time of failure. Examine these messages for more information, and use the error codes to determine the cause of the failure.

CSQ0615E

csect-name AMS post/wait request failed, reason *reason*

Severity
8

Explanation

An attempt by the IBM WebSphere MQ Advanced Message Security task to issue a post or wait request failed for reason *reason*.

System action

The IBM WebSphere MQ Advanced Message Security task cannot continue to process the service it was providing at the time of the failure.

System programmer response

The error identified by *reason* is likely to be the return code from the POST or WAIT macro. Use macro documentation to determine the cause of the failure.

CSQ0616E

csect-name AMS runtime environment initialization failed

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security task failed to initialize.

System action

The IBM WebSphere MQ Advanced Message Security task cannot start.

System programmer response

Examine associated messages for more information about the failure, then take corrective action.

CSQ0617E

csect-name AMS already active

Severity
8

Explanation

An attempt to start the IBM WebSphere MQ Advanced Message Security task failed because it was already running.

System action

The IBM WebSphere MQ Advanced Message Security task cannot start while it is already running.

System programmer response

None.

CSQ0618E

csect-name AMS initialization failed, program not APF authorized

Severity
8

Explanation

An attempt to start the IBM WebSphere MQ Advanced Message Security task failed because the module, CSQ0DSRV, is not APF authorized.

System action

The IBM WebSphere MQ Advanced Message Security task cannot start.

System programmer response

Ensure that the AMS task module is APF authorized and retry.

CSQ0624E

csect-name SMF audit option invalid, defaulting to 'failure'

Severity
8

Explanation

An attempt to process the _AMS_SMF_AUDIT environment variable or an SMFAUDIT command failed because the variable or command value was not recognized.

System action

The variable assignment or command is ignored and the default value 'failure' is used.

System programmer response

Provide a valid variable or command value. Valid values include 'success', 'failure', and 'all'.

CSQ0625E

csect-name SMF record type invalid

Severity
8

Explanation

An attempt to process the _AMS_SMF_TYPE environment variable or an SMFTYPE command failed because the variable or command value was not valid.

System action

The variable assignment or command is ignored.

System programmer response

Provide a valid variable or command value. Valid values include numeric values between 0 and 255 inclusive. The SMFTYPE value represents the SMF record type for SMF record generation. A value of 0 means no SMF record generation is required. The recommended value is 180.

CSQ0626I

csect-name SMF audit type is *audit-type*

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security SMF audit type has been set to *audit-type*.

System action

The new SMF audit type takes effect immediately. If *audit-type* is 'failure', all failing puts/gets to a protected queue are audited. If *audit-type* is 'success', all successful puts/gets to a protected queue are audited. If *audit-type* is 'all', both successful and failing puts/gets to a protected queue are audited.

System programmer response

None.

CSQ0629E

csect-name Unable to create security environment for user *'userid'*, reason *errno*

Severity

8

Explanation

An attempt by the IBM WebSphere MQ Advanced Message Security task to create a thread-level security environment using **pthread_security_np()** for user *userid* failed for the reasons indicated by *errno* and *errno2*.

System action

The thread-level security environment is not created, and the AMS function being processed cannot be completed. The MQI call fails.

System programmer response

Examine the *errno* and *errno2* values in conjunction with **pthread_security_np()** documentation to determine the cause of the failure.

CSQ0630E

csect-name Unable to delete security environment, reason *errno*

Severity

8

Explanation

An attempt by the IBM WebSphere MQ Advanced Message Security task to delete a thread-level security environment using **pthread_security_np()** failed for the reason indicated by *errno*.

System action

The thread-level security environment is not deleted. AMS processing continues.

System programmer response

Examine the *errno* value in conjunction with **pthread_security_np()** documentation to determine the cause of the failure.

CSQ0631E

csect-name AMS not started, product is not enabled

Severity

8

Explanation

An attempt by the IBM WebSphere MQ Advanced Message Security task to register itself using macro IFAEDREG failed.

System action

The IBM WebSphere MQ Advanced Message Security task cannot start.

System programmer response

Verify that the PARMLIB IFAPRDxx member has been built with the provided AMS product information, then retry.

CSQ0632E

csect-name AMS deregistration failed, reason *reason*

Severity
8

Explanation

An attempt by the IBM WebSphere MQ Advanced Message Security task to deregister itself using macro IFAEDDRG failed.

System action

The IBM WebSphere MQ Advanced Message Security task cannot deregister. Processing continues.

System programmer response

Examine the reason returned by the IFAEDDRG macro in conjunction with macro documentation to determine the cause of the failure.

CSQ0633I

csect-name AMS environment variable values:

Severity
0

Explanation

The IBM WebSphere MQ Advanced Message Security task identifies its environment variables and their values immediately following this message.

System action

Processing continues.

System programmer response

None.

CSQ0634I

csect-namevariable=value

Severity
0

Explanation

During startup, the IBM WebSphere MQ Advanced Message Security task issues this message to report an environment variable *variable*, and its value *value*.

System action

Processing continues.

System programmer response

None.

CSQ0635I

csect-name POLICY refresh complete

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security task has refreshed its policy configuration in response to a **REFRESH** command.

System action

Processing continues.

System programmer response

None.

CSQ0636I

csect-name POLICY refresh failed

Severity

8

Explanation

An attempt by the IBM WebSphere MQ Advanced Message Security task to refresh its policy configuration failed.

System action

The policy configuration is not refreshed.

System programmer response

Examine the console for associated error messages to determine the cause of the failure.

CSQ0637I

csect-name KEYRING refresh complete

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security task has refreshed its keyring configuration in response to a **REFRESH** command.

System action

Processing continues.

System programmer response

None.

CSQ0638E

csect-name KEYRING refresh failed, return code *errno*

Severity

8

Explanation

An attempt by the IBM WebSphere MQ Advanced Message Security task to refresh its keyring configuration failed for the reason indicated by *errno*.

System action

The keyring configuration is not refreshed.

System programmer response

Examine the console for associated error message to determine the cause of the failure. Use the *errno*, which might represent a System SSL gsk_status to further diagnose the problem.

CSQ0639E

csect-name Incorrect **REFRESH** option, specify KEYRING, POLICY or ALL

Severity
8

Explanation

An attempt by the IBM WebSphere MQ Advanced Message Security task to process a **REFRESH** command failed because the refresh option was not recognized.

System action

The **REFRESH** command is not processed.

System programmer response

Ensure the **REFRESH** option is KEYRING, POLICY or ALL, depending on which option should be refreshed.

CSQ0640E

csect-name AMS not started correctly

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security task has started incorrectly.

System action

The IBM WebSphere MQ Advanced Message Security task fails to start.

System programmer response

The IBM WebSphere MQ Advanced Message Security task can only be started internally by WebSphere MQ.

CSQ0641I

csect-name **REFRESH** command completed successfully

Severity
0

Explanation

The IBM WebSphere MQ Advanced Message Security task has successfully processed a **REFRESH** command.

System action

Processing continues.

System programmer response

None.

CSQ0642I

*csect-name***REFRESH** command failed

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security task has failed to successfully process a **REFRESH** command.

System action

The requested **REFRESH** command is not processed.

System programmer response

Examine the console for associated error messages to determine the cause of the problem.

CSQ0648E

csect-name Failed to open AMS key ring, reason *gsk-status*

Severity
8

Explanation

An attempt by the IBM WebSphere MQ Advanced Message Security task to open its keyring failed for the reason indicated by *gsk-status*.

System action

The AMS keyring is not opened, and the AMS task cannot start.

System programmer response

Examine System SSL documentation related to the gsk_open_keyring() call in conjunction with the *gsk-status* code to determine the cause of the failure.

CSQ0649E

csect-name CRL initialization failed

Severity
8

Explanation

An attempt by the IBM WebSphere MQ Advanced Message Security task to connect to an LDAP server, based on configuration provided in the CRLFILE DD, failed.

System action

The IBM WebSphere MQ Advanced Message Security task cannot perform Certificate Revocation List (CRL) checking. The behavior of certificate validation is determined by the System SSL environment variable GSK_CRL_SECURITY_LEVEL. See System SSL documentation for more information.

System programmer response

Check the configuration provided via the CRLFILE DD in the AMS started task JCL and verify that the configuration details are correct.

CSQ0651E

csect-name Failed to open CRL LDAP, *ldap-name*

Severity
8

Explanation

An attempt by the IBM WebSphere MQ Advanced Message Security task to open an LDAP directory, *ldap-name*, failed.

System action

The IBM WebSphere MQ Advanced Message Security task cannot perform Certificate Revocation List (CRL) checking against the named LDAP directory. The behavior of certificate validation is determined

by the System SSL environment variable GSK_CRL_SECURITY_LEVEL. See System SSL documentation for more information.

System programmer response

Check the configuration provided in the CRLFILE DD in the AMS started task JCL and verify that the configuration details are correct. Verify that the failing directory is available.

CSQ0652I

csect-name CRL checking enabled

Severity
0

Explanation

The IBM WebSphere MQ Advanced Message Security task has successfully enabled Certificate Revocation List (CRL) checking.

System action

Processing continues.

System programmer response

None.

CSQ0653I

csect-name CRL checking disabled

Severity
0

Explanation

The IBM WebSphere MQ Advanced Message Security task has successfully disabled Certificate Revocation List (CRL) checking.

System action

Processing continues.

System programmer response

None.

CSQ0660E

csect-name Internal version mismatch

Severity
8

Explanation

The IBM WebSphere MQ Advanced Message Security task has received a request for data protection services with an unrecognized request version value.

System action

The data protection service cannot be provided.

System programmer response

This error implies that a task other than the IBM WebSphere MQ Advanced Message Security Interceptor is attempting to exploit AMS data protection services. AMS data protection services are only available by using the AMS Interceptor.

CSQ0699I

csect-name AMS shutdown complete

Severity

0

Explanation

The IBM WebSphere MQ Advanced Message Security task has shutdown.

System action

Processing continues.

System programmer response

None.

CSQ0996I

csect-name char-diag1, char-diag2, char-diag3, char-diag4, hex-diag1, hex-diag2

Severity

0

Explanation

This message is generated when AMS is running in DEBUG mode, as directed by IBM support center, and provides character and hexadecimal diagnostic values to aid in problem resolution.

System action

Processing continues.

System programmer response

None.

CSQ0997I

csect-name char-diag1, char-diag2, char-diag3, hex-diag1, hex-diag2, hex-diag3

Severity

0

Explanation

This message is generated when AMS is running in DEBUG mode, as directed by IBM support center, and provides character and hexadecimal diagnostic values to aid in problem resolution.

System action

Processing continues.

System programmer response

None.

CSQ0998I

csect-name char-diag1, char-diag2, hex-diag1, hex-diag2, hex-diag3, hex-diag4

Severity

0

Explanation

This message is generated when AMS is running in DEBUG mode, as directed by IBM support center, and provides character and hexadecimal diagnostic values to aid in problem resolution.

System action

Processing continues.

System programmer response

None.

CSQ0999I

csect-name char-diag1, hex-diag1, hex-diag2, hex-diag3, hex-diag4, hex-diag5

Severity
0

Explanation

This message is generated when AMS is running in DEBUG mode, as directed by IBM support center, and provides character and hexadecimal diagnostic values to aid in problem resolution.

System action

Processing continues.

System programmer response

None.

Service facilities messages (CSQ1...)

The value shown for severity in the service facility messages that follow is the value returned as the job-step condition code from the job-step during which the message is issued. If additional messages having higher severity values are issued during the same job-step, the higher value is reflected as the job-step condition code.

Log services return codes

The return codes set by log services are:

0
Successful completion

4
Exception condition (for example, end of file), not an error.

8
Unsuccessful completion due to parameter errors.

12
Unsuccessful completion. Error encountered during processing of a valid request.

CSQ1000I

csect-name IBM WebSphere MQ for z/OS V*n*

Severity
0

Explanation

This message is issued as the first part of the header to the report issued by the log print utility program.

CSQ1100I

csect-name LOG PRINT UTILITY - *date time*

Severity
0

Explanation

This message is issued as the second part of the header to the report issued by the log print utility program.

CSQ1101I

csect-name UTILITY PROCESSING COMPLETED, RETURN CODE=*rc*

Severity

0

Explanation

The log print utility completed with the return code *rc* indicated. 0 indicates successful completion.

CSQ1102I

SEARCH CRITERIA

Severity

0

Explanation

The search criteria specified for printing the log follow.

CSQ1105I

LOG PRINT UTILITY SUMMARY - *date time*

Severity

0

Explanation

This is issued as a header to the summary data set written by the log print utility.

CSQ1106I

END OF SUMMARY

Severity

0

Explanation

This marks the end of the summary data set written by the log print utility.

CSQ1110E

LIMIT OF 50 STATEMENTS EXCEEDED

Severity

8

Explanation

The limit of 50 input statements allowed by CSQ1LOGP has been exceeded.

System action

Processing is terminated.

System programmer response

Resubmit the job using no more than 50 statements.

CSQ1111E

LIMIT OF 80 TOKENS EXCEEDED

Severity

8

Explanation

The limit of 80 keywords and corresponding value specifications allowed by CSQ1LOGP has been exceeded. A keyword with its value is considered as two tokens.

System action

Processing is terminated.

System programmer response

Resubmit the job using no more than 80 tokens.

CSQ1112E

TOKEN *xxx*... EXCEEDS 48 CHARACTERS

Severity

8

Explanation

An input statement contains the character string beginning *xxx*. This string is not valid because it exceeds 48 characters in length.

System action

Processing is terminated.

System programmer response

Resubmit the job with a valid token.

CSQ1113E

INVALID SYNTAX FOR KEYWORD *kwd*

Severity

8

Explanation

An input statement contains the keyword *kwd*. The value specified for this keyword is not valid, because it is not of the form *kwd*(*value*).

System action

Processing is terminated.

System programmer response

Resubmit the job with the correct form of the keyword.

CSQ1127E

KEYWORD *kwd* UNKNOWN

Severity

8

Explanation

CSQ1LOGP does not recognize the keyword *kwd*.

System action

Processing is terminated.

System programmer response

Check to make sure all keywords are valid and resubmit the job.

CSQ1128E

END OF LOG RANGE SPECIFIED WITHOUT START

Severity

8

Explanation

You cannot specify the end of a search range (RBAEND or LRSNEND) without specifying a beginning of the search range (RBASTART or LRSNSTART).

System action

Processing is terminated.

System programmer response

Resubmit the job providing an RBASTART or LRSNSTART value to correspond to the RBAEND or LRSNEND value given to specify a valid search range.

CSQ1129E

LIMIT OF 10 *kwd* KEYWORDS EXCEEDED

Severity

8

Explanation

The *kwd* keyword appears too many times in the control statements. The limit is 10.

System action

Processing is terminated.

System programmer response

Resubmit the job providing no more than 10 of these keywords.

CSQ1130E

INVALID VALUE FOR KEYWORD *kwd* NUMBER *n*

Severity

8

Explanation

The value for the *n*th occurrence of keyword *kwd* is invalid because it has invalid characters, it is not one of a list of permitted values, or it is too long.

System action

Processing is terminated.

System programmer response

Resubmit the job providing a correct value specification.

CSQ1131E

INVALID VALUE FOR KEYWORD *kwd*

Severity

8

Explanation

The value for the keyword *kwd* is invalid because it has invalid characters, it is not one of a list of permitted values, or it is too long.

System action

Processing is terminated.

System programmer response

Resubmit the job providing a correct value specification.

CSQ1132E

NO VALUE FOR KEYWORD *kwd* NUMBER *n*

Severity

8

Explanation

The *n*th occurrence of keyword *kwd* is not followed by a value.

System action

Processing is terminated.

System programmer response

Resubmit the job providing a correct value specification.

CSQ1133E

NO VALUE FOR KEYWORD *kwd*

Severity
8

Explanation

The keyword *kwd* is not followed by a value.

System action

Processing is terminated.

System programmer response

Resubmit the job providing a correct value specification.

CSQ1134E

KEYWORD EXTRACT REQUIRES AT LEAST ONE OUTPUT DDNAME

Severity
4

Explanation

The keyword extract requires at least one output DDNAME for log records to be extracted.

System action

Processing continues, however, no log records are extracted .

System programmer response

Remove EXTRACT(YES), or alternatively add a DDNAME from the following list: **CSQBACK**, **CSQCMT**, **CSQBOTH**, **CSQINFLT**, **CSQOBJS**. Resubmit the job. For more information see, The log print utility (CSQ1LOGP).

CSQ1135E

KEYWORD *kwd* SPECIFIED MORE THAN ONCE

Severity
8

Explanation

The keyword *kwd* can only be specified once.

System action

Processing is terminated.

System programmer response

Resubmit the job providing only one of these keywords.

CSQ1137I

FIRST PAGE SET CONTROL RECORD AFTER RESTART = *r-rba*

Severity

0

Explanation

r-rba is the log RBA of a record that serves as an implicit indication that a restart occurred just prior to this point.

System action

Processing continues.

CSQ1138E

kwd1 AND *kwd2* CANNOT BOTH BE SPECIFIED

Explanation

kwd1 and *kwd2* cannot both appear in the control statements.

System action

Processing is terminated.

System programmer response

Correct the control statements and rerun the job.

CSQ1139E

SYSSUMRY DD STATEMENT MISSING

Severity

8

Explanation

You requested the SUMMARY option, but did not include the SYSSUMRY DD statement in your JCL.

System action

Processing terminates.

System programmer response

Resubmit the job with a SYSSUMRY DD statement included in the JCL.

CSQ1145E

CURRENT RESTART TIME STAMP OUT OF SEQUENCE - TIME=*date time* LOG RBA=*t-rba*

Severity

4

Explanation

This message indicates that the current log record has a time stamp that is less than the greatest time stamp processed so far. This might be a potential problem.

This message is followed by messages CSQ1147I and CSQ1148I which give the latest time stamp seen.

System action

Processing continues.

System programmer response

Examine the current log to determine whether multiple queue managers are writing to the same log. (Data might be being overwritten.) This might lead to data inconsistencies.

CSQ1146E

CURRENT END CHECKPOINT TIME STAMP OUT OF SEQUENCE - TIME=*date time* LOG RBA=*t-rba*

Severity

4

Explanation

This message indicates that the current log record has a time stamp that is less than the previous time stamp processed. This might be a potential problem.

This message is followed by messages CSQ1147I and CSQ1148I which give the latest time stamp seen.

System action

Processing continues.

System programmer response

Examine the current log to determine whether multiple queue managers are writing to the same log. (Data might be being overwritten.) This might lead to data inconsistencies.

CSQ1147I

LATEST TIME STAMP SEEN SO FAR - TIME=*date time* LOG RBA=*t-rba*

Severity

4

Explanation

This message follows message CSQ1145I or CSQ1146I and gives the latest time stamp seen.

CSQ1148I

MULTIPLE QUEUE MANAGERS MAY BE WRITING TO THE SAME LOG

Severity

4

Explanation

This message follows message CSQ1145I or CSQ1146I to indicate a possible cause of the time stamp problem.

CSQ1150I

SUMMARY OF COMPLETED EVENTS

Severity

0

Explanation

This message heads the summary of completed units of recovery (URs) and checkpoints.

System action

Processing continues.

CSQ1151I

UR CONNID=*cc* THREAD-XREF=*bb* USERID=*aa* TIME=*date time* START=*s-rba* END=*e-rba* DISP=*xx* INFO=*ii*

Severity

0

Explanation

This message describes a unit of recovery that terminated.

cc
    Connection id (for example, BATCH)

bb
    Thread cross-reference id (for example, JOB xxx)

aa
    User id executing the UR

date time
    Starting time of the UR

s-rba
    Log RBA of the first log record associated with the UR (that is, the URID)

e-rba
    Log RBA of the last log record associated with the UR If the UR is not complete, *e-rba* is shown as '***'

xx
    Disposition of the UR, values include:

- INFLIGHT
- IN BACKOUT
- IN COMMIT
- INDOUBT
- COMMITTED
- BACKED OUT

ii
    Status of the data, one of the following:

- COMPLETE, indicating that all page sets modified by this UR have been identified
- PARTIAL, indicating that the list of page sets modified by this UR is incomplete (this is shown if all records associated with a UR are not available, and no checkpoint is found prior to the UR's completion)

If the UR identifying information is not available, it will be shown as '***'.

System action

Processing continues.

CSQ1153I

CHECKPOINT START=*s-rba* END=*e-rba* TIME=*date time*

Severity
    0

Explanation

This message describes a complete checkpoint on the log starting at RBA *s-rba* and ending at RBA *e-rba*. If the information is available, CSQ1LOGP also returns the date and time that the checkpoint was completed.

When this message follows message CSQ1157I, it identifies the checkpoint that would be used at restart. If no checkpoint is available, message CSQ1158I is printed instead.

System action

Processing continues.

CSQ1154I

RESTART AT r-*rba* TIME=*date time*

Severity
    0

Explanation

A normal restart occurred at log RBA *r-rba*. CSQ1LOGP also returns the date and time of that restart.

System action

Processing continues.

CSQ1155I

CONDITIONAL RESTART AT *r-rba* TIME=*date time*

Severity
0

Explanation

A conditional restart occurred at log RBA *r-rba*. CSQ1LOGP also returns the date and time of that restart.

System action

Processing continues.

CSQ1156I

ALL URS COMPLETE

Severity
0

Explanation

There are no URs outstanding for restart.

System action

Processing continues.

CSQ1157I

RESTART SUMMARY

Severity
0

Explanation

This message heads the summary of the description of work to be performed at restart. Restart information that follows is based on the scope of the log scanned. If you suspect an error in MQ, see Problem determination on z/OS for information about identifying and reporting the problem.

System action

Processing continues.

CSQ1158I

NO CHECKPOINT AVAILABLE - RESTART SUMMARY INCOMPLETE

Severity
0

Explanation

No checkpoint is available within the scope of the log scanned. The information following this message includes:

- URs that have not completed
- Page sets modified by these URs
- Page sets with writes pending

The information cannot be considered complete.

System action

Processing continues.

CSQ1161E

INVALID URE FOUND AT *x-rba*

Severity
4

Explanation

While processing the SUMMARY option, an invalid URE checkpoint record was encountered in the log.

System action

Processing continues.

System programmer response

If the checkpoint record identified in the message is used to restart the queue manager, the restart will be unsuccessful because it will not be able to process the unit of recovery presented by the invalid URE.

Look for other messages that indicate the cause of the problem. If you are unable to resolve the problem, contact your IBM support center.

CSQ1162E

INVALID RURE FOUND AT *x-rba*

Severity
4

Explanation

While processing the SUMMARY option, an invalid RURE checkpoint record was encountered in the log.

System action

Processing continues.

System programmer response

If the checkpoint record identified in the message is used to restart the queue manager, the restart will be unsuccessful because it will not be able to process the unit of recovery presented by the invalid RURE.

Look for other messages that indicate the cause of the problem. If you are unable to resolve the problem, contact your IBM support center.

CSQ1163E

NO CHECKPOINT AVAILABLE DUE TO LOG ERROR - RESTART SUMMARY INCOMPLETE

Severity
4

Explanation

A log error was encountered. CSQ1LOGP marked any checkpoints encountered before the log error as invalid. There were no complete checkpoints following the log error in the specified log range. The information following this message includes:

- URs that have not completed
- Page set modified by these URs
- Page sets with writes pending

This information cannot be considered complete.

System action

Processing continues.

CSQ1165E

UR REQUIRES LOG WHICH IS IN ERROR

Severity

0

Explanation

While processing a UR, information was required from the log, but the log was in error, as indicated by previous messages.

System action

Processing continues.

CSQ1166I

INFORMATION INCOMPLETE FOR UR - LOG TRUNCATED AT *xx*

Severity

0

Explanation

Complete information for the UR is not available within the scope of the log scanned.

System action

Processing continues.

CSQ1209E

END OF LOG RANGE IS LESS THAN START

Severity

8

Explanation

The end log range value (specified by RBAEND or LRSNEND) is less than or equal to the start range value (specified by RBASTART or LRSNSTART).

System action

Processing is terminated.

System programmer response

Resubmit the job providing an RBASTART or LRSNSTART value and a corresponding RBAEND or LRSNEND value to specify a valid search range.

CSQ1210E

LOG READ ERROR RETCODE=*rc* REASON CODE=*reason*

Severity

8

Explanation

An error was detected while attempting to read the log.

System action

Processing is terminated.

CSQ1211E

BAD LOG RBA RETURNED

Severity

8

Explanation

One of the three problems listed in this topic exists:

- The recovery log data set is damaged
- You identified a data set that is not a recovery log data set
- There is a problem with the log print utility

System action

Processing terminates, and a dump is produced.

System programmer response

A common error is to specify the first data set on an archive tape (the Bxxxxxxx data set) as a log data set; it is actually a bootstrap data set (BSDS).

Determine if the problem is your error by dumping the data set and determining if it is a log data set.

CSQ1212I

FIRST LOG RBA ENCOUNTERED = *s-rba*

Severity

0

Explanation

This identifies the RBA of the first log record read.

System action

Processing continues.

CSQ1213I

LAST LOG RBA ENCOUNTERED = *e-rba*

Severity

0

Explanation

This identifies the RBA of the last log record read.

System action

Processing continues.

CSQ1214I

nn LOG RECORDS READ

Severity

0

Explanation

This identifies the number (in decimal) of logical log records read during CSQ1LOGP processing.

System action

Processing continues.

CSQ1215I

NO LOG RECORDS READ

Severity

0

Explanation

CSQ1LOGP read no log records.

Possible explanations are:

- An error has prevented CSQ1LOGP from continuing, therefore no log records have yet been processed (if this is so, an error message should precede this message)
- You specified the active log data sets or archive log data sets out of RBA sequence
- You specified an RBASTART or LRSNSTART value that is greater than any RBA or LRSN in the active and archive data sets available
- You specified a log range using LRSNs, but the queue manager is not in a queue-sharing group.

System action

Processing continues.

CSQ1216E

LOG READ ERROR, RETCODE=*rc*, REASON CODE=*reason*, RBA=*x-rba*

Severity
4

Explanation

An error was encountered while attempting to read the log, indicating that either the log has an error in one of the control intervals (CI), or a data set containing the requested RBA cannot be located. The RBA specification in the message indicates where the error was detected and gives the requested RBA. It will point to:

- The start of the CI if there is a problem with the log control interval definition (LCID), or with any of the general control information within a CI
- The log record in the CI if there is a problem with a log record header (LRH)

If this is the first log record read during this execution of the Log Extractor, and if there is a problem with the LCID, the RBA specification will be all zeros.

Before returning any records, the utility checks the control information (LCID) at the end of a CI, and analyzes the LRH to ensure that all records are properly chained together within the CI. If an error is detected while performing this process, CSQ1LOGP will issue this message, before dumping the entire CI. It will not format individual records within the CI, but will, if possible, continue processing by reading the next CI.

System action

Processing continues.

CSQ1217E

RBA RANGE WARNING, RETCODE=*rc*, REASON CODE=*reason*, PRIOR RBA=*p-rba*, CURRENT RBA=*c-rba*

Severity
4

Explanation

A gap in the log RBA range has been encountered. PRIOR RBA *p-rba* indicates the last good log RBA prior to the gap. CURRENT RBA *c-rba* indicates the log record following the gap, and will be formatted following this message.

System action

Processing continues.

CSQ1218I

nn LOG ERROR MESSAGES

Severity

  0

Explanation

CSQ1LOGP distinguishes three classes of errors:

- Code problems existing in the MQ or system code used for CSQ1LOGP. In such cases, abnormal termination with a user completion code of U0153 occurs.
- Incorrect invocation of CSQ1LOGP caused, perhaps, by your having used an incorrect keyword or missed a DD statement. Under these circumstances, CSQ1LOGP issues appropriate error messages, and the program is terminated.
- An error in a particular log CI under the scrutiny of CSQ1LOGP. Such scrutiny is performed before any of the records within the CI are processed. This is an indication of logical damage, and error messages are issued by the utility. The CI or log record in error is printed, and CSQ1LOGP continues to the next CI or log record.

  The count *nn* provided summarizes the number (in decimal) of errors CSQ1LOGP detected while accessing the log.

System action

Processing continues.

CSQ1219I

LOG RECORDS CONTAIN *n* BYTE RBA - QSG(*in-qsg*)

Severity

  0

Explanation

This message is issued by CSQ1LOGP to indicate the format of the log records being processed, and whether the queue manager was a member of a queue-sharing group (QSG). The message is issued before any log records are printed, and whenever the format of the log records change.

The value of *n* identifies the log RBA format of the log records being processed, and can be either 6 or 8.

The value of *in-qsg* identifies whether the log records were written by a queue manager that was a member of a QSG, and can be one of the following values:

YES

  The log records were written by a queue manager that was a member of a QSG

NO

  The log records were written by a queue manager that was not a member of a QSG

System action

Processing continues

CSQ1220E

ARCHIVE LOG TRUNCATED AT *xxxx* - INVALID LOG RECORDS READ

Severity

  4

Explanation

At a restart of the queue manager, an archive log was truncated. This archive log data set could not be physically altered to reflect this truncation, and invalid log records therefore still exist. CSQ1LOGP has already reported this information in the summary report, and cannot retract it. Nor can it disregard the invalid log information already read in order adequately to summarize what has occurred. Therefore, all information up to this point in the log will be summarized, and a new summary report initiated. Consequently, the same UR might be reported twice with different dispositions and different page sets modified.

System action

Processing continues.

System programmer response

To avoid this condition, use the BSDS DD statement instead of the ARCHIVE DD statement.

CSQ1221E

VSAM ERROR, RETCODE=*rc*, REASON CODE=*reason*,VSAM RETURN CODE=*aaaa*, ERROR CODE=*bbbb*

Severity
8

Explanation

A VSAM error was encountered while attempting to read the log.

System action

Processing continues.

CSQ1222E

LOG ALLOCATION ERROR, RETCODE=*rc*, REASON CODE=*reason*, DYNALLOC INFO CODE=*aaaa*,
ERROR CODE=*bbbb*

Severity
8

Explanation

An error occurred while dynamically allocating a log data set.

System action

Processing terminates.

CSQ1223E

JFCB READ ERROR, RETCODE=rc, REASON CODE=*reason*, RDJFCB RETURN CODE=*aaaa*

Severity
8

Explanation

An error occurred while trying to read the job file control block.

System action

Processing continues.

CSQ1224I

INFORMATION INCOMPLETE FOR LOG RECORD, CURRENT RBA=*c-rba*, CURRENT URID=*c-urid*

Severity
0

Explanation

Incomplete information for the log record was found within the scope of the logs scanned. An end
of log condition was encountered before all segments of a spanned record could be found. CURRENT
RBA *c-rba* indicates the log RBA of the record in question. CURRENT URID *c-urid* indicates the UR
to which the spanned log record is related. If there is no URID associated with the log record (for
instance, a checkpoint record), then this will show zeros.

System action

Processing continues.

System programmer response

If complete information for the identified log record is required, extend the RBA range to be processed until the required log data is available.

CSQ1271I

START OF LOG RANGE SET TO LRSN=*s-lrsn*

Severity

0

Explanation

The LRSN value you specified for the start of the log range is less than the lowest possible LRSN value, which is *s-lrsn*.

System action

Processing continues, using an LRSNSTART value of *s-lrsn*.

CSQ1272I

FIRST LOG LRSN ENCOUNTERED = *s-lrsn*

Severity

0

Explanation

This identifies the LRSN of the first log record read.

System action

Processing continues.

CSQ1273I

LAST LOG LRSN ENCOUNTERED = *e-lrsn*

Severity

0

Explanation

This identifies the LRSN of the last log record read.

System action

Processing continues.

CSQ1275I

LRSN RANGE CAN BE USED ONLY WITH A QUEUE-SHARING GROUP

Severity

0

Explanation

You specified a log range using LRSNs, but CSQ1LOGP read no log records. This could be because the queue manager is not in a queue-sharing group, in which case you cannot use LRSN specifications.

System action

Processing continues.

System programmer response

If the queue manager is not in a queue-sharing group, rerun the job using RBA specifications for the log range.

CSQ1276E

LOG READ ERROR, RETCODE=*rc*, REASON CODE=*reason*, LRSN=*x-lrsn*

Severity
4

Explanation

An error was encountered while attempting to read the log, indicating that either the log has an error in one of the control intervals (CI), or a data set containing the requested LRSN cannot be located. The LRSN specification in the message indicates where the error was detected and gives the requested LRSN. It will point to:

- The start of the CI if there is a problem with the log control interval definition (LCID), or with any of the general control information within a CI
- The log record in the CI if there is a problem with a log record header (LRH)

If this is the first log record read during this execution of the Log Extractor, and if there is a problem with the LCID, the LRSN specification will be all zeros.

Before returning any records, the utility checks the control information (LCID) at the end of a CI, and analyzes the LRH to ensure that all records are properly chained together within the CI. If an error is detected while performing this process, CSQ1LOGP will issue this message, before dumping the entire CI. It will not format individual records within the CI, but will, if possible, continue processing by reading the next CI.

System action

Processing continues.

CSQ1277E

LRSN RANGE WARNING, RETCODE=*rc*, REASON CODE=*reason*, PRIOR LRSN=p-lrsn, CURRENT LRSN=*c-lrsn*

Severity
4

Explanation

A gap in the log LRSN range has been encountered. The PRIOR LRSN specification indicates the last good log LRSN prior to the gap. The CURRENT LRSN specification indicates the log record following the gap, and will be formatted following this message.

System action

Processing continues.

IBM MQ-IMS bridge Messages (CSQ2...)

CSQ2001I
csect-name OTMA REJECTED MESSAGE - APPLICATION ERROR, SENSE CODE=*code*, XCFGNAME=*gname* XCFMNAME=*mname* TPIPE=*tpipename*

Explanation

Because of an application error, the MQ-IMS bridge received a negative acknowledgment (NAK) from OTMA when sending a message. The information provided in the message is:

gname
The XCF group to which the partner belongs.

mname
The member name of the partner.

tpipename
The name of the Tpipe used by the partner.

code
The IMS sense code returned by the partner (the first four characters are the sense code).

System action

The message is put to the dead-letter queue, and processing continues.

System programmer response

For information about the sense code from IMS, see the *IMS/ESA Communications and Connections Guide* Version 10, document number SC18-9703, program number 5635-A01.

CSQ2002E
csect-name OTMA CLIENT BID REJECTED, XCFGNAME=*gname* XCFMNAME=*mname*, SENSE CODE=*code*

Explanation

An OTMA client bid command from the MQ-IMS bridge was rejected. *code* is the associated IMS sense code. *gname* and *mname* identify the partner IMS system to which the command was directed.

System action

No connection is made to the IMS system. Connections to other OTMA partners are unaffected.

System programmer response

For information about IMS-OTMA sense codes, see the IMS Messages and Codes.

CSQ2003E
csect-name OTMA REJECTED MESSAGE - SYSTEM ERROR, SENSE CODE=*code*, XCFGNAME=*gname* XCFMNAME=*mname* TPIPE=*tpipename*

Explanation

Because of a system-related error, the MQ-IMS bridge received a negative acknowledgment (NAK) from OTMA when sending a message. The information provided in the message is:

gname
    The XCF group to which the partner belongs.

mname
    The member name of the partner.

tpipename
    The name of the Tpipe used by the partner.

code
    The IMS sense code returned by the partner (the first four characters are the sense code).

System action

If the problem was caused by an environmental error, the IMS bridge returns the message to the queue. Depending on the error described by the sense code, the message send is retried or the queue is closed.

If a severe error occurred, the message is returned to the queue, and the IMS bridge ends abnormally with completion code X'5C6' and reason code X'00F20059'.

System programmer response

For information about IMS-OTMA sense codes, see the IMS Messages and Codes.

CSQ2004E
csect-name ERROR USING QUEUE *q-name*, MQRC=*mqrc (mqrc-text)*

Explanation

The IBM MQ-IMS bridge was unable to open, close, get from, put to, or inquire about a queue.

If *csect-name* is CSQ2QCP0, the problem was with the message queue associated with IMS or the reply-to queue. If *csect-name* is CSQ2QCP1, the problem was with the reply-to queue. If *csect-name* is CSQ2PUTD, the problem was with the dead-letter queue.

If CSQ2PUTD fails to put a message in the dead-letter queue for some reason, the process which gets messages from the IMS bridge queue ends, and is only restarted by disabling and re-enabling the IMS Bridge queue, or by restarting the queue-manager.

If the reason code received is 2042, it is because the IBM MQ-IMS bridge requires exclusive input access (MQOO_INPUT_EXCLUSIVE) to the bridge queue if it is defined with QSGDISP(QMGR), or if it is defined with QSGDISP(SHARED) together with the NOSHARE option.

System action

If the problem was caused by an environmental error, processing continues.

If a severe error occurred, the IMS bridge ends abnormally with completion code X'5C6' and a reason code which shows the particular error.

System programmer response

Refer to API completion and reason codes for information about *mqrc* (*mqrc-text* provides the MQRC in textual form).

If *csect-name* is CSQ2PUTD, disable and re-enable the IMS bridge queue, and if that does not work, restart the queue-manager.

CSQ2005I
csect-name ERROR PROCESSING MESSAGE, FEEDBACK=*code*, XCFGNAME=*gname* XCFMNAME=*mname* TPIPE=*tpipename*

Explanation

The MQ-IMS bridge encountered an error while processing a message. *code* is the associated feedback code that will be set in the message descriptor. The information provided in the message is:

gname
    The XCF group to which the partner belongs.

mname
    The member name of the partner.

tpipename
    The name of the Tpipe used by the partner.

code
    The IMS sense code returned by the partner.

If there is a loop of CSQ2005I messages causing FEEDBACK=292, see if there is a:

- Looping application that is putting badly-formed messages.
- Queue, for example the dead letter queue (DEADQ), that is not intended to be read by the IMS Bridge, but is using a STGCLASS with non-blank XCFGNAME and XCFMNAME parameters.

System action

The message is not processed.

System programmer response

code is one of the following:

291 (MQFB_DATA_LENGTH_ZERO)
    A segment length field was zero in the application data of the message.

292 (MQFB_DATA_LENGTH_NEGATIVE)
    A segment length field was negative in the application data of the message.

293 (MQFB_DATA_LENGTH_TOO_BIG)
    A segment length field was too big in the application data of the message.

294 (MQFB_BUFFER_OVERFLOW)
    The value of one of the length fields would overflow the MQ message buffer.

295 (MQFB_LENGTH_OFF_BY_ONE)
The length field was one byte too short.

296 (MQFB_IIH_ERROR)
The MQMD specified MQFMT_IMS, but the message does not begin with a valid MQIIH structure.

298 (MQFB_NOT_AUTHORIZED_FOR_IMS)
The user ID specified in the MQMD was denied access.

3xx
IMS sense code xx (where xx is the decimal representation of the IMS sense code). For information about IMS-OTMA sense codes, see the IMS Messages and Codes.

CSQ2006I
csect-name DEAD-LETTER QUEUE UNAVAILABLE, MQRC=*mqrc (mqrc-text)*

Explanation

The MQ-IMS bridge was unable to put a message to the dead-letter queue.

System action

If the message was being sent to IMS, it will be retained on the local IMS queue, and the queue will be disabled. If the message was coming from IMS, a NAK will be sent to IMS so that IMS will retain it and stop sending messages on the Tpipe.

System programmer response

If *mqrc* is 0, there is no dead-letter queue defined; you are strongly recommended not to use the MQ-IMS bridge unless you have a dead-letter queue defined. Otherwise, there is a problem obtaining the name of the queue from the queue manager; refer to API completion and reason codes for information about *mqrc* (*mqrc-text* provides the MQRC in textual form).

CSQ2009I
csect-name PREREQUISITE PRODUCTS FOR IMS BRIDGE NOT AVAILABLE

Explanation

The MQ-IMS bridge cannot operate because:

- The version of z/OS being used is not correct
- The version of IMS being used is not correct
- OTMA support has not been enabled on IMS.
- An incorrect version of the system parameter module (CSQZPARM) is being used.

System action

The MQ-IMS bridge does not start.

System programmer response

Refer to the Planning on z/OS for information about what product levels are required.

If required, recompile CSQZPARM with the correct libraries.

CSQ2010I
csect-name CONNECTED TO PARTNER, XCFGNAME=*gname* XCFMNAME=*mname*

Explanation

The MQ-IMS bridge successfully established a connection to the partner IMS system identified by *gname* and *mname*.

System action

Processing continues; messages can be sent to the partner.

CSQ2011I
csect-name DISCONNECTED FROM PARTNER, XCFGNAME=*gname* XCFMNAME=*mname*

Explanation

The partner IMS system identified by *gname* and *mname* is no longer available, and the connection from the MQ-IMS bridge has ended.

System action

Processing continues; messages can no longer be sent to the partner.

CSQ2012I
csect-name NO UTOKEN SECURITY REQUESTED FOR IMS SIGNON, XCFGNAME=*gname* XCFMNAME=*mname*

Explanation

The MQ-IMS bridge signed-on to the partner IMS system identified by *gname* and *mname*. No UTOKEN security was requested for this session.

System action

Processing continues.

CSQ2013E
csect-name NOT AUTHORIZED FOR IMS SIGNON, XCFGNAME=*gname* XCFMNAME=*mname*

Explanation

The MQ-IMS bridge tried to sign on to the partner IMS system identified by *gname* and *mname*. However, the queue manager not authorized to establish a connection to this IMS system.

System action

No connection is made to the IMS system. Connections to other OTMA partners are unaffected.

CSQ2015I
csect-name IMS BRIDGE ALREADY SUSPENDED, XCFGNAME=*gname* XCFMNAME=*mname*

Explanation

A SUSPEND QMGR FACILITY(IMSBRIDGE) command was issued, but the MQ-IMS bridge to the partner IMS system identified by *gname* and *mname* is already suspended.

System action

None.

CSQ2016I
csect-name IMS BRIDGE NOT SUSPENDED, XCFGNAME=*gname* XCFMNAME=*mname*

Explanation

A RESUME QMGR FACILITY(IMSBRIDGE) command was issued, but the MQ-IMS bridge to the partner IMS system identified by *gname* and *mname* is not suspended.

System action

None.

CSQ2020E
csect-name RESYNCHRONIZATION ERROR

Explanation

A resynchronization error has occurred. The information provided by this message is:

```
  IN TPIPE tpipename  FOR QUEUE q-name,  BY PARTNER, XCFGNAME=gname XCFMNAME=mname,
 QMGR SEND=sendseq PARTNER RECEIVE=otmarecvseq,QMGR RECEIVE=recvseq
 PARTNER SEND=otmasendseq,  INDOUBT UNIT OF RECOVERY urid
```

where:

tpipename
The name of the Tpipe which cannot be resynchronized

q-name
The name of the queue for this Tpipe

gname
The name of the XCF group to which the Tpipe belongs

mname
The name of the XCF member to which the Tpipe belongs

sendseq
The recoverable sequence number of the message last sent by MQ to the partner, in hexadecimal

otmasendseq
The recoverable sequence number of the message last sent by the partner to MQ, in hexadecimal

recvseq
The recoverable sequence number of the message last received by MQ from the partner, in hexadecimal

otmarecvseq
The recoverable sequence number of the message last received by the partner from MQ, in hexadecimal

urid
The identifier of an in-doubt unit of recovery; a value of 0 means that there is no in-doubt unit of recovery.

System action

No messages are sent on the Tpipe.

System programmer response

Use the RESET TPIPE command to reset recoverable sequence numbers, to restart the Tpipe, and, if required, to resolve the unit of recovery.

CSQ2023E
csect-name PARTNER, XCFGNAME=*gname* XCFMNAME=*mname,* CANNOT RESYNCHRONIZE, SENSE CODE=*code*

Explanation

MQ was unable to resynchronize with the partner. The information provided in the message is:

gname
The name of the XCF group to which the partner belongs.

mname
The member name of the partner who cannot resynchronize.

code
The IMS sense code returned by the partner (the first four characters are the sense code).

System action

The connection to OTMA is stopped

System programmer response

For information about IMS-OTMA sense codes, see the IMS Messages and Codes. Resolve the problem and restart the OTMA connection.

CSQ2024E
csect-name TPIPE *tpipename* IS UNKNOWN TO PARTNER, XCFGNAME=*gname* XCFMNAME=*mname*

Explanation

The Tpipe name was unknown to the partner. The information provided in the message is:

tpipename
> The name of the Tpipe which the partner no longer recognizes.

gname
> The XCF group to which the partner belongs.

mname
> The member name of the partner who is resynchronizing

System action

The associated unit of recovery is backed out and processing continues.

System programmer response

If the partner IMS system has been cold started then this message can be considered normal. If the IMS system has not been cold started consider this message as an alert and investigate the partner IMS system.

CSQ2025E
csect-name PARTNER, XCFGNAME=*gname* XCFMNAME=*mname*, CANNOT RESYNCHRONIZE TPIPE *tpipename*, SENSE CODE=*code*

Explanation

The partner was unable to resynchronize the Tpipe. The information provided in the message is:

gname
> The XCF group to which the partner belongs.

mname
> The member name of the partner who is resynchronizing.

tpipename
> The name of the Tpipe which the partner cannot resynchronize.

code
> The IMS sense code returned by the partner.

System action

The Tpipe is stopped.

System programmer response

See the *IMS V10 Communications and Connections* InfoCenter for information about the sense code from IMS. Resolve the problem and restart or reset the Tpipe.

CSQ2026I
csect-name PARTNER, XCFGNAME=*gname* XCFMNAME=*mname*, HAS COLD-STARTED TPIPE *tpipename*

Explanation

The partner has cold started a Tpipe. The information provided in the message is:

gname
> The XCF group of which the partner is a member.

mname
> The member name of the partner who is resynchronizing.

tpipename
> The name of the Tpipe which the partner has cold started.

System action

All recoverable sequence numbers are reset to 1, and processing continues.

System programmer response

None.

CSQ2027I
csect-name TPIPE *tpipename* FOR PARTNER, XCFGNAME=*gname* XCFMNAME=*mname*, DOES NOT HAVE AN INDOUBT UNIT OF RECOVERY

Explanation

MQ expected a Tpipe to have an in-doubt unit of recovery. The information provided by the message is:

tpipename
The name of the Tpipe for which there should be a unit of recovery still in doubt

gname
The XCF group to which the partner belongs.

mname
The member name of the partner for the Tpipe.

System action

Processing continues.

System programmer response

Collect the following items, and contact your IBM support center.

- Console log
- MQ job log
- IMS job log

CSQ2028I
csect-name QUEUE MANAGER IS NOT CONNECTED TO PARTNER, XCFGNAME=*gname* XCFMNAME=*mname*

Explanation

MQ is not connected to the partner. The information provided in the message is:

gname
The group name of the partner.

mname
The member name of the partner.

System action

The command is rejected.

System programmer response

Resubmit the command using the correct XCF group name when MQ is connected to the partner.

CSQ2029I
csect-name TPIPE *tpipename* NOT FOUND FOR PARTNER, XCFGNAME=*gname* XCFMNAME=*mname*

Explanation

The Tpipe could not be found. The information provided in this message is:

tpipename
The name of the Tpipe which could not be found.

gname
The XCF group of which the partner is a member.

mname
The member name of the partner for the Tpipe.

System action

The command is rejected.

System programmer response

Resubmit the RESET TPIPE command with the correct Tpipe name.

CSQ2030I

csect-name TPIPE *tpipename* IS STILL OPEN FOR PARTNER, XCFGNAME=*gname* XCFMNAME=*mname*

Explanation

The Tpipe is still open. The information provided by this message is:

tpipename
The name of the Tpipe which is still open.

gname
The XCF group name.

mname
The member name of the partner for the Tpipe.

System action

The command is rejected.

System programmer response

The most likely cause of this message is that the RESET TPIPE command was issued with an incorrect Tpipe name or that the command was issued on the wrong queue manager in a queue-sharing group. Resubmit the RESET TPIPE command with the correct Tpipe name.

CSQ2031I

csect-name TPIPE *tpipename* FOR PARTNER, XCFGNAME=*gname* XCFMNAME=*mname*, ACTION REQUIRED FOR INDOUBT UNIT OF RECOVERY

Explanation

A Tpipe has an in-doubt unit of recovery, but no recovery action was specified. The information provided by the message is:

tpipename
The name of the Tpipe which has a unit of recovery still in doubt

gname
The XCF group to which the partner belongs.

mname
The member name of the partner for the Tpipe.

System action

Processing continues.

System programmer response

Resubmit the RESET TPIPE command specifying an action (COMMIT or BACKOUT) for the in-doubt unit of recovery.

CSQ2040I

csect-name OTMA MESSAGE FLOOD STATUS=WARNING FOR PARTNER, XCFGNAME=*gname* XCFMNAME=*mname*

Severity
4

Explanation

This message is issued by the WebSphere MQ-IMS bridge in response to a notification from the partner IMS system, identified by *gname* and *mname*, that an OTMA message flood warning condition exists.

This message indicates that the IMS partner is currently unable to process the volume of transaction requests being sent to it via the WebSphere MQ-IMS bridge.

System action

Processing continues but the WebSphere MQ-IMS bridge will slow down the rate at which transaction requests are sent to allow the partner IMS system to process the accumulated backlog.

System programmer response

Review the status of the partner IMS system to determine if any action is required. You can use the **/DISPLAY OTMA** and **/DISPLAY TMEMBER** commands to do this.

Perform a check on the partner IMS system to determine if the message DFS1988W has been issued, identifying the severity of the warning condition.

CSQ2041I

csect-name OTMA MESSAGE FLOOD STATUS=FLOODED FOR PARTNER, XCFGNAME=*gname* XCFMNAME=*mname*

Severity
8

Explanation

This message is issued by the WebSphere MQ-IMS bridge in response to a notification from the partner IMS system, identified by *gname* and *mname*, that an OTMA message flood condition exists.

This indicates that the IMS partner is currently unable to process the volume of transaction requests being sent to it via the WebSphere MQ-IMS bridge. No further requests can be sent until the flood condition in IMS has been relieved.

System action

All TPIPEs to the identified partner IMS system are suspended until a notification is received from IMS indicating that the flood condition has been relieved.

Messages can still be put to any WebSphere MQ-IMS bridge queue with a storage class specifying the identified IMS partner but will remain there until the TPIPES can be resumed.

WebSphere MQ-IMS bridge queues for other IMS partners are unaffected.

System programmer response

Review the status of the partner IMS system and determine what action is required to relieve the IMS flood condition. You can use the **/DISPLAY OTMA** and **/DISPLAY TMEMBER** commands to do this.

Perform a check on the partner IMS system to determine if the message DFS1989E has been issued, identifying the flood condition.

CSQ2042I

csect-name OTMA MESSAGE FLOOD RELIEVED FOR PARTNER, XCFGNAME=*gname* XCFMNAME=*mname*

Severity
0

Explanation

This message is issued by the WebSphere MQ-IMS bridge in response to a notification from the partner IMS system, identified by *gname* and *mname*, that an OTMA message flood, or flood warning, condition no longer exists.

System action

If this message follows CSQ2041I, all TPIPEs to the identified partner IMS system that were suspended in response to the flood condition are resumed. The WebSphere MQ-IMS bridge will

gradually increase the rate at which transaction requests are sent until the maximum rate is achieved, or a subsequent flood condition is reported by the partner IMS system.

System programmer response

None required.

Subsystem support messages (CSQ3...)

CSQ3001E
csect-name - ABNORMAL DISCONNECT FROM SUBSYSTEM INTERFACE

Explanation

An online routine was still supporting SSI calls (IEFSSREQ) even though the queue manager had nearly completed termination or was no longer executing. This occurs with *csect-name* CSQ3RS00 or CSQ3RS0X when the queue manager address space has reached end-of-memory and neither normal termination nor online error recovery routines have successfully completed termination of the queue manager. This occurs with *csect-name* CSQ3SSTM when this condition is discovered during online termination.

System action

The connection is terminated. All IEFSSREQ requests are handled by the IBM MQ early processing program until the queue manager is restarted. An SVC dump is requested.

CSQ3002I
INDOUBT RECOVERY BY *connection-name* STILL IN PROGRESS

Explanation

There might be IBM MQ units of recovery (URs), related to an identified subsystem (*connection-name*), still in doubt after restart synchronization has taken place. (Indoubt URs are those for which commit has been voted by IBM MQ but which have not yet been acknowledged by *connection-name*.)

This message might appear if the *connection-name* subsystem has begun to do new work before having resolved all in-doubt URs. The *connection-name* subsystem is still in the process of resolving the in-doubt URs.

System action

Resources held (locked) by these in-doubt URs are unavailable to any other work units until their status is resolved.

System programmer response

The system programmer or system administrator must determine the correct recovery action to resolve the in-doubt situations. This involves either ensure-commit or backout decisions for all in-doubt URs.

The DISPLAY THREAD command should be used to see the URs still in doubt. It will normally show that all in-doubt URs have now been resolved. If not, the RESOLVE INDOUBT command should be used to resolve the in-doubt URs and to release the resources they hold.

CSQ3004E
SSI DESCRIPTOR GET FAILURE, RC=*rc* REASON=*reason*

Explanation

An internal error has occurred during initialization or termination.

System action

The queue manager terminates.

System programmer response

Ensure that all maintenance has been applied to the IBM MQ program libraries, and then restart the queue manager.

CSQ3006E
'*rmid*' SSI FUNCTION WAS ALREADY ACTIVE WHEN ACTIVATE WAS ATTEMPTED

Explanation

An initialization sequence error has occurred.

System action

The queue manager terminates.

System programmer response

Ensure that all maintenance has been applied to the IBM MQ program libraries, and then restart the queue manager.

CSQ3007E
'*rmid*' SSI FUNCTION WAS ALREADY INACTIVE WHEN DEACTIVATE WAS ATTEMPTED

Explanation

A termination sequence error has occurred.

System action

Termination continues.

System programmer response

Ensure that all maintenance has been applied to the IBM MQ program libraries.

CSQ3008E
csect-name - ABNORMAL DISCONNECT FOR PROGRAM REQUEST HANDLER(S)

Explanation

One or more resource managers are still supporting application program calls through their program request handler, even though the queue manager had almost completed termination, or was no longer executing. This occurs when the queue manager address space has gone to end of memory and neither normal termination nor online error recovery routines have successfully completed termination.

System action

The connection is terminated. All application program support requests are rejected with an indication that the queue manager is not active. An SVC dump is requested.

System programmer response

If the problem persists, collect the following items, and contact your IBM support center:

- System dump
- Printout of SYS1.LOGREC

CSQ3009E
error-info

Explanation

An internal error has occurred in RRS exit processing. The message contains error information that will be needed to resolve the problem.

System action

Processing continues, but RRS coordination is no longer available to the queue manager. It will probably be necessary to restart the queue manager or RRS.

CSQ3011I
csect-name Coordinator RRS is cold-starting and has lost its log. In-doubt IBM MQ threads need manual resolution

Explanation

IBM MQ has participant responsibility for in-doubt threads. RRS, the commit coordinator, has informed the queue manager that it lost all knowledge of IBM MQ in-doubt threads. The in-doubt threads at this queue manager must be manually resolved with the RESOLVE INDOUBT command.

System action

Processing continues.

System programmer response

A list of in-doubt threads where RRS is the coordinator can be displayed using the DISPLAY THREAD command for in-doubt type threads by specifying RRSBATCH as the connection name.

The decision to commit or back out the logical unit of work should be coordinated with any other participant RRS Recoverable Resource Managers. The existence of other participants might not be easy to determine. The information might be available in the RRS recovery log even though information has been lost.

At this queue manager, all in-doubt threads coordinated by RRS must be resolved with the RESOLVE INDOUBT command. Locked data remains unavailable until resolution. Threads that were already resolved with this command are discarded. Threads not yet resolved are discarded after resolution with the command.

The commit or back out decision provided using the RESOLVE INDOUBT command for a logical unit of work is propagated to all downstream participants, if any.

CSQ3013I
csect-name Queue manager was restarted on the wrong system so cannot connect to RRS. There are unresolved URs where IBM MQ is a participant

Explanation

The queue manager has one or more in-doubt threads and is unable to connect to RRS to resolve these in-doubt units of recovery (URs).

System action

Processing continues.

CSQ3014I
csect-name In-doubt RRS URID=rrs-*urid* is unknown to IBM MQ. URID recorded for IBM MQ by RRS=mq-*urid*

Explanation

The queue manager is restarting with RRS where IBM MQ is a participant and RRS is the coordinator. RRS has a unit of recovery (UR) that the queue manager should be a participant in, but it has no knowledge of the RRS unit of recovery, with an ID of *rrs-urid*. RRS has recorded the IBM MQ URID as *mq-urid*.

System action

Restart with RRS continues.

System programmer response

This message might indicate a problem in IBM MQ or RRS, or it might be produced because of one of the following prior actions:

- A conditional restart was performed that resulted in the loss of part or all of the IBM MQ log. This conditional restart might have happened at any time in the past.
- The RESOLVE INDOUBT command was used to resolve the IBM MQ UR with ID *mq-urid*.

If one of these occurred, the message can be ignored. If neither occurred, there might be a problem in IBM MQ or RRS.

If the *mq-urid* appears to be a valid log RBA, use the log print utility (CSQ1LOGP) with the SUMMARY option and URID options using the *mq-urid* value. If this finds the UR, the disposition will indicate whether it was committed or backed out. If possible, use the RRS ISPF interface to commit or back out the RRS URID so that they match.

If you suspect an error in IBM MQ, collect the items listed in the Problem Determination section and contact your IBM support center.

CSQ3016I
csect-name RRS has lost data from its log

Explanation

The queue manager is restarting with RRS and RRS has lost some portion of its log.

System action

Restart with RRS continues.

System programmer response

IBM MQ might not be able to resolve in-doubt units of recovery successfully with RRS because of the loss of RRS log data.

CSQ3017I
csect-name RRS function *call-name* failed, RC=*rc*

Explanation

During queue manager restart, the RRS function specified by *call-name* issued a return code *rc* indicating a failure.

System action

Processing continues, but RRS functions will not be available. For example, connections using the RRS adapter will not be allowed, and queue-sharing group facilities will not work.

System programmer response

Investigate the RRS return code from the function specified and resolve the problem. Then restart the queue manager.

CSQ3018I
csect-name RRS function synchronization complete

Explanation

The queue manager has completed synchronization processing with RRS, and RRS functions are available.

System action

None.

System programmer response

None.

CSQ3100I
csect-name - SUBSYSTEM *ssnm* READY FOR START COMMAND

Explanation

The queue manager has terminated, and can be restarted when required.

CSQ3101E
csect-name - INVALID EARLY PROCESSING PARAMETER

Explanation

The z/OS command SETSSI ADD or the subsystem definition record in the IEFSSNxx member of SYS1.PARMLIB for the IBM MQ subsystem specified the early processing initialization parameter incorrectly. The name must be CSQ3EPX.

The failing subsystem name is provided in message IEF759I, which follows this message.

System action

The IBM MQ subsystem with the indicated name is not available.

System programmer response

Correct the parameter fields in the record of SYS1.PARMLIB member IEFSSNxx. For information about the parameters, see Update SYS1.PARMLIB members.

CSQ3102E
csect-name - INVALID COMMAND PREFIX

Explanation

The z/OS command SETSSI ADD or the subsystem definition record in the IEFSSNxx member of SYS1.PARMLIB for the IBM MQ subsystem specified the command prefix initialization parameter incorrectly.

The failing subsystem name is provided in message IEF759I, which follows this message.

System action

The IBM MQ subsystem with the indicated name is not available.

System programmer response

Correct the parameter fields in the record of SYS1.PARMLIB member IEFSSNxx. For information about the parameters, see Update SYS1.PARMLIB members.

CSQ3104I
csect-name - TERMINATION COMPLETE

Explanation

The queue manager has terminated. The actual z/OS termination of the queue manager address spaces might have completed earlier. This message is presented for every termination, normal or abnormal.

CSQ3105E
csect-name - UNABLE TO LOAD EARLY PROCESSING PROGRAM 'CSQ3EPX'. *ssnm* IS NOT AVAILABLE

Explanation

Subsystem initialization or early processing refreshing for the IBM MQ subsystem failed because the initialization program (CSQ3INI) could not locate the early processing program (CSQ3EPX).

For subsystem initialization, the program must be either in the linkpack area (LPA) or in a library which is in the link list. For early processing refreshing, the program must be in the LPA.

System action

Subsystem initialization or early processing refreshing ends abnormally. IBM MQ subsystem *ssnm* is not available.

CSQ3106E
csect-name - QUEUE MANAGER STOPPED. COMMAND NOT PROCESSED - *command-text*

Explanation

A command was received which cannot be processed due to one of the following:

- The queue manager has not been started (this could be because the START QMGR command was not entered correctly)

- The command was queued for processing while the queue manager was starting, but startup terminated with an error
- The queue manager terminated before the command could be processed

System action

The command is not processed.

CSQ3107E
csect-name - COMMAND REJECTED. REQUESTER NOT AUTHORIZED

Explanation

A command was received from a console that does not have the correct authority.

System action

The command is not processed. This message is sent to the console that entered the command.

System programmer response

Verify that this console should be used for entering IBM MQ commands. If so, authorize it for IBM MQ commands by using z/OS services.

Note: If IBM MQ security is not activated, this check is still performed. This authorization is the z/OS console authority, and is not related to the external security manager. The user ID that entered the IBM MQ command must have OPERPARM AUTH with SYS, ALL, or MASTER console authority.

CSQ3108E
csect-name - COMMAND REJECTED. COMMAND FACILITY PATH UNAVAILABLE

Explanation

A command was received, but the path from z/OS consoles to the IBM MQ command processor is unavailable. It might still be possible to enter commands in other ways. You can also receive this message if the early code for the queue manager was being refreshed when the command was issued.

System action

The command is not processed. This message is delivered to the console that entered the command.

System programmer response

The console command facility is available again the next time the queue manager is started.

If the command was rejected because the early code for the queue manager was being refreshed when you issued it, wait until message CSQ3110I is issued to indicate that the early code has successfully refreshed before you issue the command again.

CSQ3109E
csect-name - UNABLE TO OBTAIN SUBSYSTEM AFFINITY TABLE INDEX FOR SUBSYSTEM *ssnm*. IEFSSREQ RC=*nn*

Explanation

IBM MQ was unable to obtain a subsystem affinity table index for the named subsystem. z/OS did not recognize the named subsystem name as a known subsystem. If this message is issued, a serious error has occurred in z/OS or IBM MQ.

In the message, *nn* is the return code from the IEFSSREQ z/OS service. *ssnm* is the name of the IBM MQ subsystem undergoing IPL-time initialization.

System action

IBM MQ ends abnormally with completion code X'5C6' and reason code X'00F30104'. The IBM MQ subsystem with the indicated name is not available for this IPL of z/OS.

System programmer response

Try to perform an IPL of the z/OS system. If the problem persists, see Problem determination on z/OS for information about identifying and reporting the problem.

CSQ3110I
  csect-name - SUBSYSTEM *ssnm* INITIALIZATION COMPLETE

Explanation

  Either:

  - IBM MQ subsystem initialization is complete, following z/OS IPL processing or the z/OS command SETSSI ADD.
  - The IBM MQ early processing program has been successfully refreshed, following a REFRESH QMGR TYPE(EARLY) command.

CSQ3111I
  csect-name - EARLY PROCESSING PROGRAM IS V*n* LEVEL *l*

Explanation

  This message shows the level of the early processing program that is being used.

  The level is of the form *nnn-mmm* and indicates the capability of the early code.

  nnn is incremented for each new release of the product and *mmm* can be incremented from time to time when PTFs add maintenance to the early code.

  The early code level used must have a capability level corresponding with the highest release of the product you intend to run on an LPAR. You can use the *nnn* value to confirm the level installed.

  Corresponding values of *nnn* are:

  - **005**: IBM WebSphere MQ for z/OS Version 7.0.1
  - **006**: IBM WebSphere MQ for z/OS Version 7.1
  - **007**: IBM MQ for z/OS Version 8.0

CSQ3112E
  csect-name - INVALID CPF SCOPE

Explanation

  The z/OS command SETSSI ADD or the subsystem definition record in the IEFSSNxx member of SYS1.PARMLIB for the IBM MQ subsystem specified the CPF scope initialization parameter incorrectly.

  The failing subsystem name is provided in message IEF759I, which follows this message.

System action

  The IBM MQ subsystem with the indicated name is not available.

System programmer response

  Correct the parameter fields in the record of SYS1.PARMLIB member IEFSSNxx. For information about the parameters, see Update SYS1.PARMLIB members.

CSQ3113E
  csect-name - COMMAND PREFIX REGISTRATION FAILED. INVALID CHARACTER(S) IN CPF

Explanation

  Command prefix registration failed because the command prefix (CPF) contains invalid characters.

System action

  The IBM MQ subsystem with the indicated name is not available.

System programmer response

  Correct the CPF parameter in the record of SYS1.PARMLIB member IEFSSNxx. For information about the parameters, see Update SYS1.PARMLIB members.

CSQ3114E

csect-name - COMMAND PREFIX REGISTRATION FAILED. INVALID CHARACTER(S) IN SUBSYSTEM NAME

Explanation

Command prefix registration failed because the subsystem name used as the owner of the command prefix (CPF) contains invalid characters.

System action

The IBM MQ subsystem with the indicated name is not available.

System programmer response

Correct the CPF parameter in the record of SYS1.PARMLIB member IEFSSNxx. For information about the parameters, see Update SYS1.PARMLIB members.

CSQ3115E

csect-name - COMMAND PREFIX REGISTRATION FAILED. CPF ALREADY DEFINED

Explanation

Command prefix registration failed because the command prefix (CPF) was already defined to z/OS.

System action

The IBM MQ subsystem with the indicated name is not available.

System programmer response

Correct the CPF parameter in the record of SYS1.PARMLIB member IEFSSNxx. For information about the parameters, see Update SYS1.PARMLIB members.

CSQ3116E

csect-name - COMMAND PREFIX REGISTRATION FAILED. CPF IS A SUBSET OF A CPF ALREADY DEFINED

Explanation

Command prefix registration failed because the command prefix (CPF) is a subset of a CPF already defined to z/OS.

System action

The IBM MQ subsystem with the indicated name is not available.

System programmer response

Correct the CPF parameter in the record of SYS1.PARMLIB member IEFSSNxx. For information about the parameters, see Update SYS1.PARMLIB members.

CSQ3117E

csect-name - COMMAND PREFIX REGISTRATION FAILED. CPF IS A SUPERSET OF A CPF ALREADY DEFINED

Explanation

Command prefix registration failed because the command prefix (CPF) is a superset of a CPF already defined to z/OS.

System action

The IBM MQ subsystem with the indicated name is not available.

System programmer response

Correct the CPF parameter in the record of SYS1.PARMLIB member IEFSSNxx. For information about the parameters, see Update SYS1.PARMLIB members.

CSQ3118E

csect-name - SYSTEM ERROR DURING COMMAND PREFIX REGISTRATION

Explanation

A z/OS error occurred during command prefix (CPF) registration.

System action

The MQ subsystem with the indicated name is not available.

System programmer response

Check the z/OS console for other messages relating to the problem.

CSQ3119E
csect-name call-name call for group attach table failed, rc=*rc*

Explanation

During initialization for the group connect facility, a name token services call failed. *rc* is the return code (in hexadecimal) from the call.

System action

Processing continues, but the group connect facility will not be available to CICS.

System programmer response

See the *MVS Authorized Assembler Services Reference* manual for information about the return codes from the name token services call. If you are unable to solve the problem, take a stand-alone system dump and contact your IBM support center.

CSQ3120E
csect-name - IXCQUERY ERROR FOR XCF GROUP *group-name* APPLID= *applid*, RC= *rc* REASON= *reason*

Explanation

A CICS region with APPLID *applid* attempted to connect to a queue-sharing group. During processing of the request an IXCQUERY call failed with return code *rc* and reason code *reason*.

The XCF group for which the IXCQUERY request was performed is identified by *group-name*.

System action

The request by CICS to connect to the queue-sharing group fails with the reason code MQRC_UNEXPECTED_ERROR.

System programmer response

See the *z/OS MVS Sysplex Services Reference* manual for an explanation of the IXCQUERY return and reason codes. If you are unable to solve the problem, contact your IBM support center.

CSQ3201E
ABNORMAL EOT IN PROGRESS FOR USER=*user* CONNECTION-ID=*conn-id* THREAD-XREF=*thread-xref* JOBNAME=*jobname* ASID=*asid* TCB=*tcb*

Explanation

Abnormal termination processing has been started for the agent with the values for the USER, CONNECTION-ID, THREAD-XREF, JOBNAME, ASID and TCB shown. These values are the last known set of identifiers for the terminating agent.

The abnormal termination might be the result of an error in the allied agent's address space or the result of the z/OS command CANCEL issued by the operator.

The value for the USER, the THREAD-XREF or both might be blank. The values for the USER, CONNECTION-ID, THREAD-XREF, JOBNAME and ASID are the last values established to IBM MQ for this connection and might represent the current activity of the agent. The TCB value is the address of the TCB that is terminating. Previous IBM MQ work by this agent might have completed successfully.

This message, CSQ3201E, is written to the z/OS console after the agent has been removed from the service task work queue at the time that termination processing begins.

System action

The agent was previously queued to a service task for termination processing. This message indicates that the agent has been taken from the queue for processing. Any uncommitted changes will be backed out.

System programmer response

See the Problem Determination section of this message. The z/OS commands CANCEL and FORCE will have no effect. Do not cancel IBM MQ. If an extensive backout is in progress, the subsequent queue manager restart might take a very long time due to additional log activity.

CSQ3202E
CONNECTION FOR *jobname* FAILED, INSUFFICIENT ECSA STORAGE TO CREATE ACE

Explanation

jobname attempted to connect to IBM MQ using the MQCONN, or MQCONNX, API call.

There was insufficient common storage available to build the control blocks to represent the connection and to the connection attempt failed.

There might be a system wide ECSA shortage, or the storage available for creating new queue manager connections might be limited by the ACELIM system parameter.

This message can be seen for batch applications, including RRS applications; for example, Db2 stored procedures and WebSphere Application Server.

System action

The MQCONN or MQCONNX API call, used by *jobname* returns MQCC_FAILED, together with reason code MQRC_Q_MGR_NOT_AVAILABLE 2059

Queue manager processing continues.

CSQ3580E
CONNECTION FOR '*ssi-call*' GAVE RC=*rc*, REASON=*reason*

Explanation

A nonzero return code has been returned to CSQ3AMI2 from the connect to subsystem interface (SSI) call. The variables in the message indicate which SSI call is involved and the actual return and reason codes associated with it.

System action

The current task is ended abnormally with a system completion code of X'5C6' and a reason code of X'00F30580'. The queue manager terminates.

System programmer response

Restart the queue manager. Note the values contained in the message, and contact your IBM support center.

Db2 manager messages (CSQ5...)

CSQ5001I
csect-name Connected to Db2 *db2-name*

Explanation

The queue manager has successfully established a connection to the named Db2 subsystem.

System action

Processing continues.

System programmer response

None.

CSQ5002E
csect-name Connection to Db2 using *connect-name* failed, RC=*return-code* reason=*reason*

Explanation

The queue manager's attempt to establish a connection to the named Db2 subsystem failed.

System action

Queue manager startup is terminated.

System programmer response

This is normally an authorization error.

Consult the *Db2 for z/OS Messages and Codes* manual for an explanation of the codes and attempt to resolve the problem.

CSQ5003A
csect-name Connection to Db2 using *connect-name* pending, no active Db2

Explanation

The queue manager is waiting for an eligible Db2 subsystem to become active so that a connection can be established. Alternatively, RRS is inactive or was started after the Db2 subsystems.

System action

The queue manager waits for an eligible Db2 subsystem to become active.

System programmer response

Check whether the Db2 subsystem(s) are active. If not then start them. If they are active, ensure RRS is active and check that it was started prior to the Db2 subsystems.

CSQ5004E
csect-name Db2 table entry for queue manager in queue-sharing group *qsg-name* is missing or incorrect

Explanation

During startup the queue manager was unable to find its entry in the Db2 administration tables, or the entry was incorrect.

System action

The queue manager terminates with completion code X'6C6' and reason code X'00F50013'.

System programmer response

Check that a queue manager record exists in the Db2 tables for the Db2 data-sharing group specified. Check the QSGDATA system parameter specifies the correct Db2 data-sharing group. If so, check that a queue manager entry exists in the CSQ.ADMIN_B_QMGR table.

If you are migrating from a previous release of IBM MQ, check also that you have updated the Db2 tables to the format for the current release. For information about migration and compatibility between releases, see Migrating.

CSQ5005E
csect-name Queue manager release level is incompatible with queue-sharing group

Explanation

The release level of the queue manager that is being started is incompatible with that of other members of the queue-sharing group.

System action

The queue manager terminates with completion code X'6C6' and reason code X'00F50029'.

System programmer response

Verify that the correct load libraries are being used and that the queue-sharing group information in the system parameters has been specified correctly. Also use the queue-sharing group utility (CSQ5PQSG) to verify that the queue manager has been defined correctly in the Db2 administration tables, using the MIGRATE QSG option. Ensure that you use the same version of IBM MQ for the utility, as was used for running the queue manager.

For information about migration and compatibility between releases, see Migrating queue sharing groups.

If the MIGRATE QSG results show queue managers that no longer exist, but are still in the Db2 tables, use the REMOVE QMGR option or, if necessary, the FORCE QMGR option.

CSQ5006E
csect-name Data-sharing groups differ

Explanation

A mismatch has been detected between the Db2 data-sharing group specified on the QSGDATA system parameter and the queue manager entry in the CSQ.ADMIN_B_QMGR table.

System action

The queue manager terminates with completion code X'6C6' and reason code X'00F50006'.

System programmer response

The queue-sharing group name specified on the QSGDATA system parameter must match that in which the queue manager is defined in the Db2 CSQ.ADMIN_B_QMGR table.

CSQ5007E
csect-name RRSAF function *function* failed for plan *plan-name*, RC=*return-code* reason=*reason* syncpoint code=*sync-code*

Explanation

A non-zero or unexpected return code was returned from an RRSAF request. The Db2 plan involved was *plan-name*.

System action

If the error occurs during queue manager startup or reconnect processing, the queue manager terminates with completion code X'6C6' and reason code X'00F50016'. Otherwise, an error message is issued and processing continues.

System programmer response

Determine the cause of the error using the RRS return and reason code from the message.

Consult the *Db2 for z/OS Messages and Codes* manual for an explanation of the codes and attempt to resolve the problem.

CSQ5008E
csect-name Db2 *db2-name* is not a member of data-sharing group *dsg-name*

Explanation

The Db2 subsystem to which the queue manager has connected is not a member of the Db2 data-sharing group specified on the QSGDATA system parameter.

System action

The queue manager terminates with completion code X'6C6' and reason code X'00F50007'.

System programmer response

Ensure that the Db2 subsystem to which the queue manager has connected is a member of the data-sharing group specified on the QSGDATA system parameter.

Issue the Db2 command DIS GROUP to the Db2 subsystem and check the data-sharing group name matches the data-sharing group name on the QSGDATA system parameter.

CSQ5009E
csect-name SQL error for table *table-name*, code=*SQL-code* state=*SQL-state*, data=*d1 d2 d3 d4 d5*

Explanation

A non-zero or unexpected SQL return code was returned from a Db2 SQL request.

System action

The requested operation fails. Processing continues, but the failed request may result in further errors occurring. In some circumstances, the queue manager terminates with completion code X'6C6' and reason code X'00F50014'.

System programmer response

Determine the reason for the SQL error and correct the problem.

Consult the *Db2 for z/OS Messages and Codes* manual to determine the reason for the SQL error.

CSQ5010E
csect-name XCF IXCQUERY member error, RC=*return-code* reason=*reason*

Explanation

The queue manager received an unexpected return code from an IXCQUERY request.

System action

The queue manager terminates with completion code X'6C6' and reason code X'00F50017'.

System programmer response

Determine the reason for the unexpected error and correct the problem.

Consult the *z/OS MVS Programming: Sysplex Services Reference* manual for an explanation of the return and reason code from the IXCQUERY request.

This message may occur if one or more of the queue managers in a Queue Sharing Group (QSG) do not have a member entry in the XCF group for the QSG.

Enter the following z/OS command substituting the QSG name for xxxx:

```
D XCF,GRP,CSQGxxxx,ALL
```

This will list the members of the XCF group. If any queue managers are defined as a member of the QSG, but do not have an entry in the XCF Group, use the ADD QMGR command of the CSQ5PQSG utility to restore the XCF group entry for that queue manager. The utility should be run for each queue manager which does not have an entry in the XCF group.

CSQ5011E
csect-name XCF IXCJOIN group error, RC=*return-code* reason=*reason*

Explanation

The queue manager received an unexpected return code from an IXCJOIN request.

System action

The queue manager terminates with completion code X'6C6' and reason code X'00F50019'.

System programmer response

Determine the reason for the unexpected error and correct the problem.

Consult the *z/OS MVS Programming: Sysplex Services Reference* manual for an explanation of the return and reason code from the IXCJOIN request.

CSQ5012E

csect-name XCF IXCQUIES group error, RC=*return-code* reason=*reason*

Explanation

The queue manager received an unexpected return code from an IXCQUIES request.

System action

The queue manager terminates with completion code X'6C6' and reason code X'00F50021'.

System programmer response

Determine the reason for the unexpected error and correct the problem.

Consult the *z/OS MVS Programming: Sysplex Services Reference* manual for an explanation of the return and reason code from the IXCQUIES request.

CSQ5013E

csect-name XCF IXCSETUS error, RC=*return-code* reason=*reason*

Explanation

The queue manager received an unexpected return code from an IXCSETUS request.

System action

The queue manager terminates with completion code X'6C6' and reason code X'00F50018'.

System programmer response

Determine the reason for the unexpected error and correct the problem.

Consult the *z/OS MVS Programming: Sysplex Services Reference* manual for an explanation of the return and reason code from the IXCSETUS request.

CSQ5014I

csect-name Connection to *db2-name* lost, Db2 terminated abnormally

Explanation

The queue manager received an abnormal termination notification from the Db2 subsystem to which it is connected.

System action

The queue manager will clean up its connection to the Db2 subsystem and attempt to reconnect. If a Db2 group attach name was specified on the QSGDATA system parameter a connection to a different Db2 may occur.

System programmer response

Determine the reason for the Db2 abnormal termination. Correct the problem and attempt to restart the Db2 subsystem.

CSQ5015I

csect-name Connection to *db2-name* lost, Db2 shut down forcibly

Explanation

The queue manager received a STOP FORCE termination notification from the Db2 subsystem to which it is connected.

System action

The queue manager will clean up its connection to the Db2 subsystem and attempt to reconnect. If a Db2 group attach name was specified on the QSGDATA system parameter a connection to a different Db2 may occur.

System programmer response

Determine the reason for the Db2 forcible stop. Restart the Db2 subsystem.

CSQ5016I

csect-name Connection to *db2-name* quiescing, Db2 terminating

Explanation

The queue manager received a STOP QUIESCE termination notification from the Db2 subsystem to which it is connected.

System action

The queue manager will quiesce all Db2 server tasks and disconnect from the Db2 subsystem so that it can shut down. It will then attempt to reconnect. If a Db2 group attach name was specified on the QSGDATA system parameter a connection to a different Db2 may occur.

System programmer response

Restart the Db2 subsystem so that shared queue operations can resume.

CSQ5019I

csect-name Disconnected from Db2 *db2-name*

Explanation

The queue manager has successfully disconnected from the Db2 subsystem.

System action

If the disconnect is due to a Db2 STOP MODE(QUIESCE) the queue manager will attempt to reconnect to the Db2 subsystem.

System programmer response

None.

CSQ5020E

csect-name SQL error, table *table-name* not defined in Db2

Explanation

The queue manager attempted to access one of its Db2 tables. Db2 has returned an SQL code indicating the table does not exist.

System action

The request fails and processing continues.

System programmer response

Check that all MQ tasks to set up the Db2 environment completed successfully and that the correct Db2 data-sharing group name was specified on the QSGDATA system parameter.

CSQ5021E

csect-name SQL error, table *table-name* index not built in Db2

Explanation

The queue manager has attempted to access one of its Db2 tables. Db2 has returned an SQL code indicating that the index for the specified table has not been built.

System action

The request fails and processing continues.

System programmer response

Check that all MQ tasks to set up the Db2 environment completed successfully and that the correct Db2 data-sharing group name was specified on the QSGDATA system parameter.

CSQ5022I

csect-name Pending connection to Db2 using *connect-name* ended, queue manager terminating

Explanation

The outstanding connection pending request to Db2 has been terminated due to a STOP QMGR request.

System action

The pending connect to Db2 is canceled and queue manager termination continues.

System programmer response

None.

CSQ5023E
csect-name SQL error, failed to access table *table-name*

Explanation

An attempt by the queue manager to access one of its tables was returned an SQL code indicating that access to the named resource failed.

System action

The request fails and processing continues.

System programmer response

This message will be followed by message CSQ5009E which contains full details of the information returned from Db2 which should be used in conjunction with messages on the Db2 log to diagnose the problem.

The most likely cause of this problem is contention for a Db2 resource, especially on a heavily-used system. If so, the problem is temporary; retry the action that gave the error.

If not, and the problem persists, determine from the message and the Db2 log the resource concerned and perform the recovery actions necessary to unlock the resource. Such a problem could be caused by a Db2 failure while updating one of the Db2 tables, which will be indicated in the Db2 log.

CSQ5024E
csect-name Unable to update queue manager status, RC=*return-code*

Explanation

During startup and shutdown processing the queue manager attempts to update its status in the CSQ.ADMIN_B_QMGR table. This attempt failed.

System action

None. Startup/shutdown processing continues.

System programmer response

None.

CSQ5025E
csect-name SQL error, function *function* code=*SQL-code*

Explanation

A call to the SQL function specified by *function* returned a non-zero code specified by *SQL-code*.

System action

Processing continues.

System programmer response

Note the values contained in the message, and contact your IBM support center. Consult the *Db2 for z/OS Messages and Codes* manual for more information about the error code.

CSQ5026E
csect-name Unable to access Db2, RRS is not available

Explanation

The queue manager tried to access Db2, but RRS is not available.

System action

If this occurs during queue manager initialization, the queue manager waits for RRS to become available.

If this occurs at other times, the queue manager terminates its connection to Db2, and then tries to reconnect. Some queue-sharing group functions will not be available until RRS is restarted and the connection to Db2 is reestablished.

System programmer response

Start (or restart) RRS.

CSQ5027E
csect-name SQL error for table *table-name*, deadlock or timeout occurred (code=*SQL-code*)

Explanation

An SQL call returned a non-zero code indicating that a deadlock or timeout condition occurred.

System action

The request fails and processing continues.

System programmer response

Retry the command or application involved. If the problem persists, contact your IBM support center. Consult the *Db2 for z/OS Messages and Codes* manual for more information about the error code.

CSQ5028E
csect-name Unable to access Db2, RRS connection limit exceeded

Explanation

The queue manager tried to access Db2, but RRS has reached the limit of allowed concurrent connections (IDENTIFYs).

System action

If this message occurs during queue manager initialization, the queue manager waits for an RRS connection to become available.

If this message occurs at other times, the queue manager terminates its connection to Db2, and then tries to reconnect. Some queue-sharing group functions are not available until RRS is restarted and the connection to Db2 is reestablished.

System programmer response

Adjust the RRS connection limit if required, then start (or restart) RRS.

Ensure that the Db2 system parameter controlling the maximum number of concurrent users and connections is correct. The Db2 parameter is Max Batch connect (CTHREAD) on the thread management panel DSNTIPE.

See the *Db2 for z/OS* documentation for an explanation of this Db2 parameter to resolve the problem.

CSQ5029E
csect-name Operation on Db2 table *table-name* failed

Explanation

An operation requested for the named Db2 table failed. For example, the table might be full, or there might be insufficient storage available to perform the request.

This is most likely to occur when writing data to one of the tables that IBM MQ uses to store large shared messages.

System action

Message CSQ5009E is issued giving details of the associated SQL error codes. The requested operation fails and processing continues. The message or other data is not written to the table.

System programmer response

Investigate the cause of the problem as indicated by the SQL codes in message CSQ5009E.

If the table is one of the tables used for storing large shared messages, and the problem is due to insufficient storage, try the operation again later, as the condition might be temporary. If the problem is because the table is full, remove some of the messages; for example, start an application that retrieves and processes the messages. Use the MQ DISPLAY GROUP command to check if there are any obsolete messages in the table space, and delete them. If necessary, increase the size of the table.

CSQ5032I
csect-name Connection to Db2 *db2-name* in data-sharing group *dsg-name* is suspended

Explanation

This is issued in response to a SUSPEND QMGR FACILITY(Db2) command if it completed successfully.

System action

All Db2 activity is suspended for the queue manager named, and the connection to Db2 is broken.

System programmer response

Use the RESUME QMGR FACILITY(Db2) command when ready to resume Db2 activity.

CSQ5033I
csect-name Connection to Db2 *db2-name* in data-sharing group *dsg-name* is resumed

Explanation

The RESUME QMGR FACILITY(Db2) command completed successfully, reestablishing the connection to Db2.

System action

Db2 activity is resumed for the queue manager named.

CSQ5034I
csect-name Suspend or resume Db2 request pending

Explanation

A SUSPEND or RESUME QMGR FACILITY(Db2) command was issued, but such a request is already pending.

System action

None.

System programmer response

Wait until the pending request completes, then reissue the command if necessary.

CSQ5035I
csect-name Connection to Db2 *db2-name* in data-sharing group *dsg-name* already suspended

Explanation

A SUSPEND QMGR FACILITY(Db2) command was issued, but the connection to the named Db2 subsystem is already suspended.

System action

None.

CSQ5036I
csect-name Connection to Db2 *db2-name* in data-sharing group *dsg-name* not suspended

Explanation

A RESUME QMGR FACILITY(Db2) command was issued, but the connection to the named Db2 subsystem is not suspended.

System action

None.

CSQ5037I

csect-name New function not available, incompatible queue managers in the queue-sharing group

Explanation

An attempt was made to start the queue manager in new function mode, but some queue managers in the queue-sharing group are either not at a version that is sufficient to coexist with the new functions provided in this level of code, have not been started in new function mode, or do not have compatible QSGDATA parameters.

System action

Processing continues, but certain functions will be unavailable.

System programmer response

Ensure that all of the queue managers in the queue-sharing group have been started in new function mode at the appropriate version, then restart the queue manager. See z/OS: OPMODE for more information on running in new function mode

CSQ5038I

csect-name Service task service-task has been unresponsive since hh.mm.ss.nnnnnn. Check for problems with Db2

Explanation

The queue manager has detected a service task *service-task* that is taking too long to process a request that started at hh.mm.ss.nnnnnn.

System action

Processing continues, but certain functions might be unavailable.

System programmer response

Investigate if there are any problems with Db2 or RRS that prevent them responding to IBM MQ requests. For example, the Db2 CTHREAD limit has been exceeded, or Db2 is running slowly because it is short of resources like CPU, I/O capacity, or storage; or Db2 is waiting for log space.

CSQ5039I

`csect-name` SQL error information

Explanation

An SQL error has occurred. Additional diagnostic information direct from Db2 follows.

System action

See the preceding Db2 manager error message.

System programmer response

Determine the reason for the SQL error and correct the problem.

CSQ5100I

DISPLAY GROUP report ...

Explanation

This message is the initial response to the DISPLAY GROUP command. It is followed by message CSQ5102I which is a formatted report of the queue managers in the group.

System action

Processing continues normally.

CSQ5102I
Queue managers in group *group-name*

Explanation

This message is part of the responses to the DISPLAY GROUP command. It provides information about each queue manager in the group, as follows:

```
  Name Num Prefix  Status    Ver Db2    Connection  name num cpf     qmgr-stat vrm db2-id
conn-stat :  End of queue managers report
```

where:

name
The name of the queue manager.

num
The internally generated number of the queue manager in the group.

cpf
The command prefix of the queue manager.

qmgr-stat
The current status of the queue manager:

ACTIVE
The queue manager is running.

INACTIVE
The queue manager is not running, having terminated normally.

FAILED
The queue manager is not running, having terminated abnormally.

CREATED
The queue manager has been defined to the group, but has not yet been started.

UNKNOWN
The status cannot be determined.

vrm
The function level of the queue manager. The value is a 3-digit number, where:

v
is the version number

r
is the release number

m
is the modification number.

db2-id
The name of the Db2 subsystem or group attachment to which the queue manager connects.

conn-stat
The current status of the connection to Db2:

ACTIVE
The queue manager is running and connected to Db2.

PENDING
The queue manager is running but not connected because Db2 has terminated normally.

FAILED
The queue manager is running but not connected because Db2 has terminated abnormally.

INACTIVE

The queue manager is not running and not connected to Db2.

UNKNOWN

The status cannot be determined.

Exceptionally, the last line might be either:

```
Report terminated, too many lines
```

if the report was generated in response to a command from a z/OS console and more than 253 response lines were generated. Only 253 response lines are returned.

```
Report terminated
```

if there was an error in obtaining the information. The error is described in the following messages.

System action

Processing continues normally.

CSQ5103I

Obsolete messages in Db2 for group *group-name*

Explanation

Messages are normally deleted automatically from Db2, but in exceptional circumstances obsolete messages can remain. This identifies such messages, as follows:

```
LEID msg-id :  End of messages report
```

where:

msg-id

is the identifier of the message.

Exceptionally, the last line might be either:

```
Report terminated, too many lines
```

if the report was generated in response to a command from a z/OS console and more than 253 response lines were generated. Only 253 response lines are returned.

```
Report terminated
```

if there was an error in obtaining the information.

System action

Processing continues normally.

System programmer response

Delete the obsolete messages from Db2. For example, use SPUFI to issue the SQL command

```
  DELETE FROM CSQ.ADMIN_B_MESSAGES     WHERE QSGNAME = 'group-name' AND     LEID = 'msg-
id';
```

CSQ5113I

Queue manager is not in a queue-sharing group

Severity

0

Explanation

A command that requires a queue-sharing group was entered, but the queue manager is not in a group.

System action

The command is not actioned.

CSQ5116E

call-name call failed, rc=*rc* reason=*reason*

Severity
8

Explanation

During processing for a DISPLAY GROUP command, a coupling facility services call used to get information failed. *rc* is the return code and *reason* is the reason code (both in hexadecimal) from the call.

System action

Processing is terminated. A following message is issued to identify which type of information was being obtained.

System programmer response

See the *z/OS MVS Programming Sysplex Services Reference.* manual for information about the return and reason codes from the call.

CSQ5117E

Information not available for group *group-name* - reason

Severity
8

Explanation

During processing for a DISPLAY GROUP command, information could not be obtained for the group, for the *reason* indicated:

ERROR
A coupling facility services call failed, as indicated in the preceding CSQ5116E message.

CHANGED
The group size has changed.

System action

Processing is terminated.

System programmer response

Resolve the problem accordingly.

Generalized command preprocessor messages (CSQ9...)

CSQ9000E
'*keyword*' appears more than once

Explanation

The named keyword appears more than once in the command. This message will be issued for each occurrence of the keyword after the first.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command correctly. See Building command scripts for information about the rules for building commands.

CSQ9001E
'*keyword*' is invalid

Explanation

The named keyword is unknown or undefined. It might be misspelled, or it might not be applicable to the command being processed.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command correctly. See MQSC commands for information about the command.

CSQ9002E
Unbalanced parentheses following '*keyword*'

Explanation

An invalid combination of parentheses has been found following the keyword *keyword*. A closing parenthesis must follow an opening parenthesis before any other opening parenthesis occurs.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command correctly. See Building command scripts for information about the rules for building commands.

CSQ9003E
'*keyword*' parameter contains unbalanced apostrophes

Explanation

An odd number of apostrophes is present in a parameter value of keyword *keyword*. If the parameter is a quoted string, it must have one apostrophe at each end of the string. If an apostrophe is to appear within the string, two adjacent apostrophes must be entered. If the parameter is a hexadecimal value, it must be entered as X'hex-characters'.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command correctly. See Building command scripts for information about the rules for building commands.

CSQ9004E
'*keyword*' parameter specifies range (:) incorrectly

Explanation

A parameter of keyword *keyword* specifies a range of values incorrectly. The character used to denote a range is a colon (:); the format is *lower-limit*:*upper-limit*.

System action

Processing for the command is terminated.

System programmer response

See MQSC commands to verify that the command you are using allows a range for the given keyword. Correct the error, and reissue the command.

CSQ9005E
'*keyword*' parameter does not satisfy generic rules

Explanation

For the keyword *keyword*, parameter values can be generic, but the value specified does not conform to the rules for a generic value. The value does not conform to these rules due to one of the following reasons:

- The value contains an asterisk (*) which is not the last character.
- The value contains a question mark (?) or colon (:).
- The keyword is WHERE and the value is a single asterisk.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, correct the keyword parameter, and reenter the command. See MQSC commands for a description of the keyword and how to enter the command.

CSQ9006E
'*keyword*' parameter uses asterisk (*) incorrectly

Explanation

For the keyword *keyword*, an asterisk (*) was used in a parameter value. Either:

- The asterisk was not the last or only character in the value. Incorrect examples are NAME(BL*CK) and NAME(*LUE); a correct specification is NAME(BL*) or NAME(*).
- There is a list of parameter values, for example DETAIL(1,*).

System action

Processing for the command is terminated.

System programmer response

See MQSC commands to verify that the command you are using allows specification of '*' for the given keyword. Correct the error, and reissue the command.

CSQ9007E
Either '*keyword1*' or '*keyword2*' must be specified

Explanation

The command requires that either keyword *keyword1* or keyword *keyword2* is specified, but neither keyword was entered on the command. One of the two keywords must be present in order for the command to be processed.

System action

Processing for the command is terminated.

System programmer response

Reissue the command and include whichever keyword is appropriate. See MQSC reference for descriptions of the two keywords, and for information about the rules for building commands.

CSQ9008E
'*keyword*' may not be negated

Explanation

The negation characters (NO) appear in front of the keyword *keyword*, but negating this keyword is not allowed.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command correctly. See Building command scripts for further information about this command.

CSQ9009E
'*keyword*' not specified

Explanation

The keyword *keyword* must be present, but it was not entered. This keyword must be present in order for the command to process properly.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command including the specified keyword. See MQSC commands for further information about this command.

CSQ9010E
Required parameter for '*keyword*' not specified

Explanation

For the keyword *keyword*, either:

- One or more parameters must be specified, but no parameter was entered.
- A fixed number of parameters must be specified, but fewer parameters were entered.

For example, the keyword USERDATA must have a parameter that is a character string. Entering USERDATA() is meaningless; you must either enter a string (for example, USERDATA(MY_DATA)), or if you want to remove this attribute, you must enter USERDATA(' ').

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, supply appropriate parameters for the specified keyword, and reissue the command. See MQSC commands for further information about this command.

CSQ9011E
Parameter(s) not allowed for '*keyword*'

Explanation

No parameters can be specified for the keyword *keyword*. This message is issued for each invalid parameter, so it can be issued more than once for a command.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, correct the error, and reissue the command. See Building command scripts for details on how to enter the command.

CSQ9012E
'*keyword*' parameter is not hexadecimal

Explanation

Parameter values for the keyword *keyword* must be hexadecimal values. Hexadecimal characters are the numeric digits 0 through 9 and the letters A through F, in either uppercase or lowercase. The value can optionally be specified using the hexadecimal string notation X'hex characters'; for example, *keyword*(123ABC) and *keyword*(X'123ABC') are synonymous.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command, ensuring that the parameters for the named keyword are hexadecimal values.

CSQ9013E
'*keyword*' parameter '*parameter-value*' length is more than *nn*

Explanation

The parameter value *parameter-value* for keyword *keyword* exceeds the limit of *nn* characters in length.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry. See MQSC commands for a list of acceptable parameters. Correct the error, and reissue the command.

CSQ9014E
More than *nn* parameter(s) for '*keyword*'

Explanation

Too many parameters have been specified for the keyword *keyword*. At most *nn* parameters can be specified. In addition to entering too many parameters, this could also be caused by a missing closing parenthesis that has not yet been detected.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command, using no more than the specified limit of parameters for the given keyword. See MQSC reference for further details, and for information about the rules for building commands.

If this error occurs while you are using connection names with the CSQUTIL program you must enclose certain variables within single quotation marks. See CSQUTIL for more information.

CSQ9015E
Parameter '*parameter-value*' is unacceptable for '*keyword*'

Explanation

The parameter value *parameter-value* is not an acceptable value for keyword *keyword*. Either:

- The keyword parameter can be one of a set of character values, but the value specified is not one of them.
- The keyword parameter can be a bounded numeric value, but the value specified is outside the bounds.

- The keyword parameter can be either numeric or one of a set of character values, but the value specified is neither numeric nor one of the set.
- The keyword is WHERE and the first parameter (the filter keyword) is not one of the acceptable keywords for the command.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command correctly. See MQSC reference for a list of acceptable values, and for information about the rules for building commands.

CSQ9016E
'*cmd*' command request not authorized

Explanation

The command requires a level of authorization that you do not have, either for the command itself, or for the resource that it is operating on.

System action

The command is not executed. Processing is terminated.

System programmer response

Contact the system programmer responsible for system security, and request that this person grant you authorization to use the command. Otherwise, you must have someone who is authorized issue the command for you.

CSQ9017E
Failure while processing '*cmd*' command

Explanation

The command preprocessor ended abnormally while processing the command shown in the message. The error is recorded in SYS1.LOGREC, and an SVC dump is requested. The command might have partially completed. Look at any previous response messages to determine what has been done.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command. If it fails again, collect the items listed in the Problem Determination section, and contact your IBM support center.

CSQ9018E
csect-name Insufficient storage to process '*cmd*' command

Explanation

The command preprocessor was unable to obtain sufficient storage to complete processing of any response messages generated by the command.

System action

Processing for the command is terminated abnormally.

System programmer response

If the problem persists, you might need to increase the region size used by your queue manager or channel initiator, or you might need to reduce the number of jobs running in your system.

CSQ9019E
'*cmd*' command is invalid

Explanation

The command, which starts with *cmd,* is invalid. This could be because:

- the command verb is unknown
- no keywords were specified, or none were specified that are valid as a secondary keyword for the command
- there is syntax error at the start of the command

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command correctly. See <u>MQSC reference</u> for the correct command format, and for information about the rules for building commands.

CSQ9020E
'*keyword1*' and '*keyword2*' cannot both be specified

Explanation

The command does not allow keyword *keyword1* and keyword *keyword2* to be specified together.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command, omitting the inappropriate keyword. See <u>MQSC reference</u> for descriptions of the two keywords and how to enter the command.

CSQ9022I
csect-name '*cmd*' NORMAL COMPLETION

Explanation

All synchronous processing for the command completed successfully. Any tasks executing asynchronously on behalf of the command might still be executing when this message is displayed.

System action

Synchronous processing for the command is complete.

CSQ9023E
csect-name '*cmd*' ABNORMAL COMPLETION

Explanation

The command has not completed successfully. The command has issued one or more error messages prior to this message.

System action

Processing for the command has ended.

System programmer response

Follow the instructions for the other messages associated with the error.

CSQ9025E
'*parameter-value*' is unacceptable with 'WHERE' parameter '*filter-keyword*'

Explanation

The parameter values for the WHERE keyword are incompatible. The WHERE keyword must have three parameters, *filter-keyword*, *operator*, and *filter-value*. The error is one of the following:

- The operator parameter is not appropriate for the type of parameter values that the filter keyword requires. For example, the filter keyword requires one of a set of parameter values, but the operator is not EQ or NE.
- The filter value parameter exceeds the length limit for parameter values of the filter keyword.
- The filter value parameter is not a value that is valid as a value of the filter keyword. For example:
  - The filter keyword requires a numeric parameter value but the filter value parameter is not numeric.
  - The filter keyword requires one of a set of parameter values but the filter value parameter is not one of them.
  - The filter keyword requires a bounded numeric parameter value but the filter value parameter is outside the bounds.
  - The filter keyword requires an object or system name, but the filter value parameter does not consist only of characters that are valid for such a name.

Depending on the error, *parameter-value* may be the operator parameter or the filter value parameter.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command correctly. See MQSC reference for information about the parameters for the WHERE keyword.

CSQ9026E
'*keyword*' parameter does not satisfy name rules

Explanation

Parameter values for the keyword *keyword* are names, and therefore must consist only of characters that are valid for the particular type of name, object name or system name. The valid object name characters are uppercase A-Z, lowercase a-z, numerics 0-9, period (.), forward slash (/), underscore (_), and percent sign (%). The valid system name characters are uppercase A-Z, and numerics 0-9; the first character must not be numeric.

This message is issued if the name specified contains invalid characters, or if the name is all blank in cases where an all-blank name is not allowed.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command ensuring that the parameters for the named keyword are of the required type. See MQSC reference for a description of the keyword and how to enter the command.

CSQ9028E
'*keyword*' parameter is not numeric

Explanation

Parameter values for the keyword *keyword* must consist of numeric values only.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command ensuring that the parameters for the named keyword are of the required type. See MQSC reference for a description of the keyword and how to enter the command.

CSQ9029E
csect-name Failure while processing a command

Explanation

An error occurred while processing a command. The command might or might not have been executed. The error has been recorded in the system error log (the SYS1.LOGREC data set), and an SVC dump was attempted.

You can get this message if you have insufficient ECSA.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command. If you cannot resolve the problem, collect the items listed in the Problem Determination section, and contact your IBM support center.

CSQ9030E
'*keyword*' parameter may not be generic

Explanation

The parameter for the keyword *keyword* specifies a generic value using an asterisk (for example, ABC*), but a generic value is not allowed for that keyword.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, correct the keyword parameter, and reenter the command. See MQSC reference for a description of the keyword and how to enter the command.

CSQ9031E
Syntax error following '*keyword*'

Explanation

The text that follows the named keyword contains invalid syntax. This is typically caused by specifying an incorrect sequence of special characters, such as equals (=), comma (,), colon (:), or parentheses.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, examining the text following the named keyword. Ensure that you have followed the rules for command entry, and reenter the command. See Building command scripts for information about the rules for building commands.

CSQ9032E
Requested function is not available

Explanation

An attempt was made to invoke a command processor that was not loaded.

System action

The requested function is not performed.

System programmer response

Verify the command entry, to determine which command caused the error.

CSQ9033E

Command exceeds allowable length

Severity
8

Explanation

The command is so large that its internal form has exceeded the maximum length allowed. The size of the internal form of the command is affected by both the length, and the complexity of the command. (For example, an attempt has been made to use the operations and control panels to create a namelist containing too many names.)

This message could also be caused by commands entered through one of the following:

- the initialization input data sets
- the COMMAND function of the utility program CSQUTIL
- a user-written program that puts commands onto the system-command input queue, SYSTEM.COMMAND.INPUT

System action

Processing of the command is terminated.

System programmer response

If you are using the operations and control panels to define a namelist, use the edit facility to reduce the number of names in the list. If you are entering a command from elsewhere, determine which command caused the error, and verify the syntax of that command from MQSC commands. Correct the command.

CSQ9034E

Command cannot be issued using command server

Severity
8

Explanation

An attempt was made to issue a command using the command server. The command cannot be issued in that way.

The command server is used by commands entered through one of the following:

- the COMMAND function of CSQUTIL
- the CSQINPX initialization input data set of the channel initiator
- a user-written program that puts commands onto the system-command input queue, SYSTEM.COMMAND.INPUT

System action

The command is ignored.

CSQ9035E

csect-name Required keyword not specified

Severity
8

Explanation

The command requires one of a set of alternative keywords to be specified, but none was.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command correctly. See MQSC reference for the proper format of the command, and for information about the rules for building commands.

CSQ9036E

Command with '*keyword*(*parameter-value*)' not allowed when queue manager is active

Severity
8

Explanation

The command has the specified parameter value for keyword *keyword*. The command with this keyword and value can be issued only when the queue manager is not active.

System action

The command is ignored.

System programmer response

See MQSC commands for information about how to use the command.

CSQ9037E

Command must be issued from *ddname*

Severity
8

Explanation

An attempt was made to issue a command from the specified initialization input data set. The command cannot be issued from that data set.

System action

The command is ignored.

System programmer response

See MQSC commands for information about how to use the command.

CSQ9038E

Command must be issued from console

Severity
8

Explanation

An attempt was made to issue a command from other than the z/OS console or its equivalent. The command can only be issued in that way.

System action

The command is ignored.

System programmer response

Issue the command from the z/OS console; it cannot be issued from elsewhere.

If you issued the **DEFINE PSID** command from the console, you must include the additional DSN parameter for the command to complete successfully.

See MQSC commands for information about how to use the command.

CSQ9039E

Command cannot be issued from console

Severity
8

Explanation

An attempt was made to issue a command from the z/OS console or its equivalent. The command cannot be issued in that way.

System action

The command is ignored.

System programmer response

See MQSC commands for information about how to use the command.

CSQ9040E

Command cannot be issued from *ddname*

Severity

8

Explanation

An attempt was made to issue a command from the specified initialization input data set. The command cannot be issued from that data set.

System action

The command is ignored.

System programmer response

See MQSC commands for information about how to use the command.

CSQ9041E

Command not allowed during restart

Severity

8

Explanation

An attempt was made to issue a command before restart had completed, but the command cannot be issued at that time. This could be because the command was in the CSQINP1 initialization input data set.

System action

The command is ignored.

System programmer response

If the command was in the CSQINP1 initialization input data set, delete it.

CSQ9042E

Command with '*keyword*()' cannot be issued from *ddname*

Severity

8

Explanation

The command was issued with the specified keyword from an initialization input data set. The command with this keyword cannot be issued from that data set.

System action

The command is ignored.

System programmer response

See MQSC commands for information about how to use the command.

CSQ9045E

'*keyword*' has parameter(s) and is a 'WHERE' parameter

Explanation

The command specifies the WHERE keyword with a filter keyword parameter *keyword*. That keyword is also specified explicitly with with parameters, which is not allowed.

System action

Processing for the command is terminated.

System programmer response

Verify the command entry, and reissue the command correctly. See MQSC reference for information about the parameters for the WHERE keyword.

IBM MQ for z/OS codes

Each component of IBM MQ for z/OS can issue codes and each component uses a unique two character hexadecimal identifier for its messages. Use this topic to identify and interpret the codes for IBM MQ for z/OS components.

The following code types are described:

Connection manager codes (X'94')

If a connection manager reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- A description of the actions that led to the error or, if applicable, either a listing of the application program or the input string to a utility program that was being run at the time of the error.
- The console output for the period leading up to the error.
- The queue manager job log.
- The system dump resulting from the error.
- If you are using CICS, the CICS transaction dump output.
- Appropriate WebSphere MQ, z/OS, Db2, CICS, and IMS service levels.
- If you are using the WebSphere MQ Operations and Control panels, the ISPF panel name.

00940001

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6', and the queue manager terminates.

System programmer response

Collect the items listed in "Diagnostics" on page 935 and contact your IBM support center.

Restart your queue manager.

00940003

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 935 and contact your IBM support center.

00940004

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 935 and contact your IBM support center.

00940007

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 935 and contact your IBM support center.

00940008

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6', and the queue manager terminates.

System programmer response

Collect the items listed in "Diagnostics" on page 935 and contact your IBM support center.

Restart your queue manager.

00940028

A requested diagnostic trap has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

This should only occur if the IBM support center have requested that a dump be captured to aid in problem diagnosis

Collect the items listed in "Diagnostics" on page 935 and contact your IBM support center.

0094002B

An internal error has occurred during ALESERV processing.

System action

The current execution unit terminates with completion code X'5C6'. The failing return code from ALESERV will be in register 2 of the dump.

System programmer response

Collect the items listed in "Diagnostics" on page 935 and contact your IBM support center.

Restart the queue manager.

Topic Manager codes ('X'A3')

If a topic manager reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- A description of the actions that led to the error or, if applicable, either a listing of the application program or the input string to a utility program that was being run at the time of the error.
- The console output for the period leading up to the error.
- The queue manager job log.
- The system dump resulting from the error.
- If you are using CICS, the CICS transaction dump output.
- Appropriate WebSphere MQ, z/OS, Db2, CICS, and IMS service levels.
- If you are using the WebSphere MQ Operations and Control panels, the ISPF panel name.

00A30001, 00A30002,00A30052, 00A30053, 00A30054, 00A30061, 00A30062, 00A30064, 00A30065, 00A30066, 00A31000

An internal error has occurred while processing a command.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 937 and contact your IBM support center.

00A30042

An internal error has occurred while processing a command.

If this error occurs in conjunction with a CSQY227E message then the problem is a lack of 64 bit storage.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 937 and contact your IBM support center.

You should consider raising the value of the MEMLIMIT parameter. For more information, see Address space storage.

00A30072, 00A30073, 00A30074, 00A30075, 00A30076, 00A30077

An internal error occurred during commit processing.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 937 and contact your IBM support center.

Batch adapter codes (X'C2')

00C20001

The CSQBSRV program has detected a request for a nonexistent function. CSQBSRV is invoked from batch and RRS-batch applications via a stub such as CSQBSTUB, CSQBRRSI, or CSQBRSTB.

System action

The application program ends abnormally, but MQ continues processing.

System programmer response

The most likely cause of this problem is incompatible versions of CSQBSRV and the stub. If this is not the cause of the problem, obtain the diagnostic items listed in this topic, and contact your IBM support center.

- Application program listing
- Queue manager job log
- PSW and registers at point of failure

00C20009

The task which started an asynchronous MQ thread (for asynchronous message consumption or asynchronous event listening) has ended before the asynchronous thread which it started had ended. This abend is raised on the asynchronous MQ thread, because processing cannot continue after the resources allocated by the original thread have been released.

System action

The application program ends abnormally, but MQ continues processing.

System programmer response

Ensure that an MQDISC is called for all connections which are used to start asynchronous threads before termination of the task which created the connection.

00C2000A, 00C2000B, 00C2000C, 00C2000D, 00C2000E, 00C2000F

An internal error has occurred while processing an MQCRTMH call.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Obtain the diagnostic items listed in this topic, and contact your IBM support center.

- An application program listing.
- The queue manager job log.
- The PSW and registers at point of failure.

Coupling Facility codes (X'C5')

If a coupling facility reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center. Restart the queue manager if necessary.

Diagnostics

- A description of the actions that led to the error or, if applicable, either a listing of the application program or the input string to a utility program that was being run at the time of the error.
- The console output for the period leading up to the error.
- The queue manager job log.
- The system dump resulting from the error.
- If you are using CICS, the CICS transaction dump output.
- Appropriate WebSphere MQ, z/OS, Db2, CICS, and IMS service levels.
- If you are using the WebSphere MQ Operations and Control panels, the ISPF panel name.
- A dump of the coupling facility structure.

00C50006

A backup or recovery of a CF structure failed because the queue manager is not connected to a Db2 subsystem.

System action

CF structure backup or recovery processing is terminated.

System programmer response

Configure the Db2 subsystem so that the queue manager can connect to it.

00C50012

CF structure processing failed, because the CF structure became full during the action.

System action

CF structure processing is terminated.

System programmer response

Increase the size of the CF structure.

00C50014

An unexpected reason code was returned by the Db2 subsystem that the queue manager is connected to.

System action

The current operation is terminated.

System programmer response

Investigate the cause of the error, as reported in the preceding messages.

00C50050

The CF structure is being recovered and cannot be used until the recovery is complete.

System action

Processing of the command is terminated.

System programmer response

Wait for the recovery of the structure to complete, then reissue the command. Use the DISPLAY CFSTATUS command to view the status of the CF structures.

00C50064

A backup or recovery of a CF structure failed either because the installation and customization options chosen for WebSphere MQ do not allow the queue manager to use structures at the required level, or because the level of the structure is not supported by the current command level.

For example, the queue manager may have been migrated from a previous version and currently operating with OPMODE=COMPAT, and CF structures at the level of the structure being processed are not available in compatibility mode.

See z/OS: OPMODE for further information.

System action

CF structure backup or recovery processing is terminated.

00C5004F

This reason code is issued in message CSQM090E when a command has failed. It indicates that a request has been issued for a CF structure, but the request cannot be performed, as explained in the accompanying more specific message.

Severity

4

System action

The command is ignored.

System programmer response

Refer to the description of the accompanying message.

00C5005B

CF structure recovery failed because an error occurred when reading the BSDS of another queue manager in the queue-sharing group.

System action

CF structure recovery processing is terminated.

System programmer response

Check the log for recovery log manager messages that indicate the reason for the error.

00C50D00

A backup of a CF structure failed because a required SMDS data set is not available.

System action

CF structure backup processing is terminated.

System programmer response

Ensure that all SMDS data sets used for the CF structure are available, then reissue the backup command. A **RECOVER CFSTRUCT** command can be used to restore these data sets if this is required.

00C51001, 00C51004, 00C51005, 00C51006, 00C5100A, 00C51019, 00C5101A, 00C5101B, 00C5101C, 00C5001D

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C51021, 00C51022, 00C51023, 00C51024, 00C50025, 00C51026, 00C51027, 00C51028, 00C51029, 00C5002A, 00C5102B, 00C5102C, 00C5102D, 00C5102E, 00C5002F

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C5102F

The queue manager failed to connect to the administration structure.

System action

The current execution unit terminates with completion code X'5C6', and the queue manager attempts to connect to the administration structure if it becomes available again. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Investigate the configuration for the administration structure. This abend code might be seen if the queue manager is running on an LPAR with no connectivity to the administration structure, or if the administration structure has been encrypted, but the LPAR does not have access to a cryptographic coprocessor.

00C50030, 00C51031, 00C51032, 00C51033, 00C51034, 00C50035, 00C51036, 00C51037, 00C51038, 00C51039, 00C5003A, 00C5103A, 00C5103B, 00C5103C, 00C5103D, 00C5103E, 00C5003F

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C50040, 00C51041, 00C51042, 00C51043, 00C51044, 00C50045, 00C51046, 00C51047

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager may terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C51051, 00C51052, 00C51053, 00C51054, 00C50055, 00C51056

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager may terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C51090, 00C51092, 00C51093

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C51094, 00C51095, 00C51096, 00C51097

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

00C510A1, 00C510A2, 00C510A3, 00C510A4, 00C500A5, 00C510A6, 00C510A7, 00C510A8, 00C510A9, 00C500AA

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C510AB

The CF structure has failed or connection to it has been lost.

System action

This might be issued in response to a command, in which case processing of the command is terminated. Otherwise, the current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Restart the queue manager if necessary. Recover the structure; if the error occurred in response to a command, reissue it.

00C510AC, 00C510AD

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C51100, 00C51101, 00C51102, 00C51103, 00C51104, 00C51105, 00C51106, 00C51107, 00C51108, 00C51109, 00C5110A, 00C5110B, 00C5110C, 00C5110D, 00C5110E, 00C5110F

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager may terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C51110, 00C51111, 00C51112, 00C51113, 00C51114, 00C51115, 00C51116, 00C51117, 00C51118, 00C51119, 00C5111A, 00C5111B, 00C5111C, 00C5111D, 00C5111E, 00C5111F

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C51120, 00C51121, 00C51122, 00C51123, 00C51124, 00C51125, 00C51126, 00C51127, 00C51128, 00C51129, 00C5112A, 00C5112B, 00C5112C, 00C5112D, 00C5112E, 00C5112F

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C51130, 00C51131, 00C51132, 00C51133, 00C51134, 00C51135, 00C51136, 00C51137, 00C51138, 00C51139, 00C5113A, 00C5113B, 00C5113C, 00C5113D, 00C5113E, 00C5113F

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager may terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C51140, 00C51141, 00C51142, 00C51143, 00C51144, 00C51145, 00C51146, 00C51147, 00C51148, 00C51149, 00C5114A, 00C5114B, 00C5114C, 00C5114D, 00C5114E, 00C5114F

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager may terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C51150, 00C51151, 00C51152, 00C51153, 00C51154, 00C51155, 00C51156, 00C51157, 00C51158, 00C51159, 00C5115A, 00C5115B, 00C5115C, 00C5115D, 00C5115E, 00C5115F

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C51160, 00C51161, 00C51162, 00C51163, 00C51164, 00C51165, 00C51166, 00C51167, 00C51168, 00C51169, 00C5116A, 00C5116B, 00C5116C, 00C5116D, 00C5116E, 00C5116F

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C51170, 00C51171, 00C51172, 00C51174, 00C51175, 00C51176, 00C51177, 00C51178, 00C51179, 00C5117A, 00C5117B, 00C5117C, 00C5117D, 00C5117E, 00C5117F

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C51173

An internal error has occurred.

System action

The internal task performing recovery of a CFSTRUCT terminates with completion code x'5C6'.

System programmer response

This error is often, but not exclusively, associated with space issues in the coupling facility.

Ensure that sufficient space is available in the cfstructure.

A common source of error is that the INITSIZE and SIZE values do not match in the CFRM policy. During normal use, the structure has expanded through AUTOALTER processing and the structure backup being restored reflects this size.

However, a new structure has been allocated with the INITSIZE attribute that is too small.

If storage issues are not indicated, then collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

00C51180, 00C51181, 00C51182, 00C51184, 00C51185, 00C51186, 00C51187, 00C51188, 00C51189, 00C5118A, 00C5118B, 00C5118C, 00C5118D, 00C5118E, 00C5118F

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager may terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C51183

An internal error has occurred.

System action

The internal task performing recovery of a CFSTRUCT terminates with completion code x'5C6'.

System programmer response

This error is often, but not exclusively, associated with space issues in the coupling facility.

Ensure that sufficient space is available in the cfstructure.

A common source of error is that the INITSIZE and SIZE values do not match in the CFRM policy. During normal use, the structure has expanded through AUTOALTER processing and the structure backup being restored reflects this size.

However, a new structure has been allocated with the INITSIZE attribute that is too small.

If storage issues are not indicated, then collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

00C51190, 00C51191, 00C51192, 00C51193, 00C51194, 00C51195, 00C51196, 00C51197, 00C51198, 00C51199, 00C5119A, 00C5119B, 00C5119C, 00C5119D, 00C5119E, 00C5119F

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager may terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C511A0, 00C511A1, 00C511A2, 00C511A3, 00C511A4, 00C511A5, 00C511A6, 00C511A7, 00C511A8, 00C511A9, 00C511AA, 00C511AB, 00C511AC, 00C511AD, 00C511AE, 00C511AF

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager may terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C511B0, 00C511B1, 00C511B2, 00C511B3, 00C511B4, 00C511B5, 00C511B6, 00C511B7, 00C511B8, 00C511B9, 00C511BA, 00C511BB, 00C511BC, 00C511BD, 00C511BE, 00C511BF

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager may terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C511C0, 00C511C1, 00C511C2, 00C511C3, 00C511C4, 00C511C5, 00C511C6, 00C511C7, 00C511C8, 00C511C9, 00C511CA, 00C511CB, 00C511CC, 00C511CD, 00C511CE, 00C511CF

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager may terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C511D0, 00C511D1, 00C511D2, 00C511D3, 00C511D4, 00C511D5, 00C511D6, 00C511D7, 00C511D8, 00C511D9, 00C511DA, 00C511DB, 00C511DC, 00C511DD, 00C511DE, 00C511DF

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C511E0, 00C511E1, 00C511E2, 00C511E3, 00C511E4, 00C511E5, 00C511E6, 00C511E7, 00C511E8, 00C511E9, 00C511EA, 00C511EB, 00C511EC, 00C511ED, 00C511EE, 00C511EF

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C511F0, 00C511F1, 00C511F2, 00C511F3, 00C511F4, 00C511F5, 00C511F6, 00C511F7, 00C511F8, 00C511F9, 00C511FA, 00C511FB, 00C511FC, 00C511FD, 00C511FE, 00C511FF

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 938 and contact your IBM support center.

Restart the queue manager if necessary.

00C53000

The queue manager cannot use the administration structure because its size is less than the minimum that MQ requires.

System action

The queue manager terminates with completion code X'6C6'.

System programmer response

Increase the size of the admininstration structure. See message CSQE022E for more information.

00C53001

The queue manager has detected a mismatch between the queue-sharing group creation timestamp in the Db2 tables and the creation timestamp associated with the structure name in message CSQE029E.

System action

The queue manager terminates, a record is written to SYS1.LOGREC and a dump is taken.

System programmer response

Verify the queue manager, queue-sharing group and data-sharing group configuration and determine whether a queue manager has configured to connect to a different Db2 data-sharing group.

If the queue manager and queue-sharing group configuration is correct then the structure should be deallocated. Having verified that there are only failed-persistent connections remaining to the structure, deallocate it with the z/OS command

```
SETXCF FORCE,STRUCTURE,STRNAME=ext-struc-name
```

(In this command, *ext-struc-name* is formed by prefixing the MQ structure name from message CSQE029E with the queue-sharing group name.)

00C53002

The queue manager cannot use the administration structure because the administration structure is full and remains full despite repeated attempts to wait for space to become available.

System action

The queue manager terminates with completion code X'5C6'.

System programmer response

Increase the size of the administration structure. See message CSQE038E for more information.

Message generator codes (X'C6')

00C60001

MQ received return code X'20' when issuing a WTO request to display a console message. This means that there are no message buffers for either Multiple Console Support (MCS) or JES3, or there is a JES3 WTO staging area excess. The WTO request is terminated. The current console message and all subsequent informational console messages are ignored until the problem is corrected.

System action

A record is written to SYS1.LOGREC. A retry is requested and execution continues. MQ resumes issuing console messages when the condition is corrected.

00C60004

The queue manager was unable to load the message table (CSQFMTAB).

System action

The queue manager terminates.

System programmer response

Ensure that the message table is in the required library (SCSQANLx, where x is your national language letter), that it is referenced correctly, and that all the libraries in the concatenation are APF authorized. Restart the queue manager.

00C60005

An internal error has occurred.

System action

The queue manager is terminated, and a dump is produced.

System programmer response

Restart the queue manager.

Collect the following diagnostic items and contact your IBM support center:

- Queue manager job log
- System dump resulting from the error

00C60006

The MQ utility program was unable to load its message table (CSQFSTAB).

System action

The utility program ends abnormally.

System programmer response

Check the console for messages indicating why CSQFSTAB was not loaded. Ensure that the message table is in the required library (SCSQANLx, where x is your national language letter), and that it is referenced correctly, and resubmit the job.

The utility program attempts to load this module from the library data sets under the STEPLIB DD statement of the utility address space.

00C60007

The MQ CICS adapter was unable to load its message table (CSQFCTAB).

System action

The MQ CICS adapter server task terminates.

System programmer response

Check the console for messages indicating why CSQFCTAB was not loaded. Ensure that the message table is in the required library (SCSQANLx or SCSQSNLx, where x is your national language letter), and that it is referenced correctly.

CSQCSERV attempts to load this module from the library data sets under the STEPLIB DD statement of the CICS address space.

00C60008

The MQ utility program was unable to load its message table (CSQFLTAB).

System action

The utility program ends abnormally.

System programmer response

Check the console for messages indicating why CSQFLTAB was not loaded. Ensure that the message table is in the required library (SCSQANLx, where x is your national language letter), and that it is referenced correctly, and resubmit the job.

The utility program attempts to load this module from the library data sets under the STEPLIB DD statement of the utility address space.

00C6000A

The MQ early processing program was unable to load its message table (CSQ3ECMX).

System action

The queue manager terminates.

System programmer response

Ensure that the message table in the required library (SCSQSNLx, where x is your national language letter), and that it is referenced correctly, and perform an IPL of your z/OS system or use the z/OS command SETSSI ADD to restart the queue manager.

00C6000B

The distributed queuing component was unable to load its message table (CSQFXTAB).

System action

The channel initiator ends.

System programmer response

Check the console for messages indicating why CSQFXTAB was not loaded. Ensure that the message table is in the required library (SCSQANLx, where x is your national language letter), that it is referenced correctly, and that all the libraries in the concatenation are APF authorized. Restart the channel initiator.

00C6000C

The IMS trigger monitor was unable to load its message table (CSQFSTAB).

System action

The trigger monitor ends.

System programmer response

Check the console for messages indicating why CSQFSTAB was not loaded. Ensure that the message table is in the required library (SCSQANLx, where x is your national language letter), and that it is referenced correctly, and restart the trigger monitor.

00C600F0

The Advanced Message Security component was unable to load its message table (CSQF0TAB).

System action

The Advanced Message Security component fails to start during queue manager startup.

System programmer response

Check the console for messages indicating why CSQF0TAB was not loaded. Ensure that the message table is in the required library (SCSQANLx, where x is your national language letter), that it is referenced correctly, and that all the libraries in the concatenation are APF authorized. Restart the queue manager.

Functional recovery manager codes (X'C7')

00C70010

 While trying to recover from an error, an internal consistency check indicated a storage overlay, or an internal error.

System action

 Control is percolated to the z/OS recovery termination manager, and a dump is requested.

System programmer response

 Retain the dump, and contact your IBM support center for assistance.

 Restart the queue manager if necessary.

00C70020

 A critical procedure recovery routine has ended abnormally, causing a secondary abnormal end.

System action

 Control is percolated to the z/OS recovery termination manager, and in some cases the queue manager terminates abnormally. A dump is produced for both the primary and secondary errors.

System programmer response

 Retain both dumps, and contact your IBM support center for assistance.

 Restart the queue manager if necessary.

00C70030

 A request to z/OS to establish an ESTAE produced a non-zero return code.

System action

 A dump is requested.

System programmer response

 The return code from z/OS is captured in register 14. See the *MVS Assembler Services Reference* manual for an explanation of the return code.

00C70040

 This abnormal end reason code was caused by an internal MQ error.

System action

 Control is percolated to the z/OS recovery termination manager, and a dump is requested.

System programmer response

 Retain the dump, and contact your IBM support center for assistance.

 Restart the queue manager if necessary.

Security manager codes (X'C8')

If a security manager reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- A description of the actions that led to the error or, if applicable, either a listing of the application program or the input string to a utility program that was being run at the time of the error.
- The console output for the period leading up to the error.
- The queue manager job log.

- The system dump resulting from the error.
- If you are using CICS, the CICS transaction dump output.
- Appropriate WebSphere MQ, z/OS, Db2, CICS, and IMS service levels.
- If you are using the WebSphere MQ Operations and Control panels, the ISPF panel name.
- The security command issued before the error.

00C80001

An attempt to obtain storage for the security manager was unsuccessful.

Note: This could indicate a system-wide storage problem.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the return code from the storage failure.

System programmer response

Check that you are running with the recommended region size, and if not, reset your system and restart the queue manager. If this is not the cause of the problem, use these items to diagnose the cause of the problem:

- Queue manager job log
- Information about any other storage-related problems
- System dump resulting from the error

00C80002

An attempt to obtain storage for the security manager was unsuccessful.

Note: This error code could indicate a system-wide storage problem.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the return code from the storage failure.

System programmer response

Check that you are running with the suggested region size, and if not, reset your system and restart the queue manager. If this is not the cause of the problem, use these items to diagnose the cause of the problem:

- Queue manager job log
- Information about any other storage-related problems
- System dump resulting from the error

00C80003

An attempt to obtain a storage subpool for the security manager was unsuccessful.

Note: This error code could indicate a system-wide storage problem.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the return code from the storage failure.

System programmer response

Check that you are running with an appropriate region size, and if not, reset your system and restart the queue manager. If the region size is not the cause of the problem, use these items to diagnose the cause of the problem:

- Queue manager job log
- Information about any other storage-related problems

- System dump resulting from the error

00C80004

An internal error has occurred.

System action

The queue manager is terminated, and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

Restart the queue manager.

00C8000A

A severe error has occurred during a SAF RACROUTE REQUEST=STAT call to the external security manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. Check your security configuration (for example, that the required classes are installed and active). If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C8000B

A severe error has occurred during a SAF RACROUTE REQUEST=EXTRACT call to the external security manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the entity being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. For information about setting MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C8000C

A severe error has occurred during a SAF RACROUTE REQUEST=LIST (create) call to the external security manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class, and register 3 the address of the entity, being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C8000D

An unexpected return code has been received from one of the following SAF calls to the external security manager (ESM) during security switch processing at queue manager initialization time:

- RACROUTE REQUEST=EXTRACT

- RACROUTE REQUEST=LIST
- RACROUTE REQUEST=STAT

System action

Message CSQH004I is produced containing the return codes from SAF and the ESM. The queue manager is terminated, and a dump is produced. Register 2 contains the address of the return codes.

System programmer response

See your ESM documentation for information about the return codes that appear in message CSQH004I (in the job log) or the dump. For information about setting WebSphere MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C8000E

An unexpected setting for the subsystem security switch was encountered.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the control block containing the switch setting.

System programmer response

Collect the items listed in "Diagnostics" on page 950, together with a note of what you expected the switch to be set to, and whether you had defined a profile for it or not, and contact your IBM support center.

00C8000F

An internal error has occurred.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class involved at the time of the error.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

Restart the queue manager.

00C80010

An attempt to obtain storage for the security manager was unsuccessful.

Note: This error code could indicate a system-wide storage problem.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced. Register 2 contains the return code from the storage failure.

System programmer response

Check that you are running with the suggested region size, and if not, reset your system and restart the queue manager. If this is not the cause of the problem, use the items listed in "Diagnostics" on page 950, together with information about any other storage-related problems, to diagnose the cause of the problem. If you are unable to resolve the problem, contact your IBM support center.

00C80011

An attempt to obtain a storage subpool for the security manager was unsuccessful.

Note: This error code could indicate a system-wide storage problem.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced. Register 2 contains the return code from the storage failure.

System programmer response

Check that you are running with the suggested region size, and if not, reset your system and restart the queue manager. If this is not the cause of the problem, use the items listed in "Diagnostics" on page 950, together with information about any other storage-related problems, to diagnose the cause of the problem. If you are unable to resolve the problem, contact your IBM support center.

00C80012

An attempt to obtain storage for the security manager was unsuccessful.

Note: This error code could indicate a system-wide storage problem.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced. Register 2 contains the return code from the storage failure.

System programmer response

Check that you are running with the suggested region size, and if not, reset your system and restart the queue manager. If this is not the cause of the problem, use the items listed in "Diagnostics" on page 950, together with information about any other storage-related problems, to diagnose the cause of the problem. If you are unable to resolve the problem, contact your IBM support center.

00C80013

An internal error has occurred while processing a security request.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80020

An attempt to obtain storage for the security manager was unsuccessful.

Note: This error code could indicate a system-wide storage problem.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced. Register 2 contains the return code from the storage failure.

System programmer response

Check that you are running with the suggested region size, and if not, reset your system and restart the queue manager. If this is not the cause of the problem, use the items listed in "Diagnostics" on page 950, together with information about any other storage-related problems, to diagnose the cause of the problem. If you are unable to resolve the problem, contact your IBM support center.

00C80024

An internal error has occurred while processing a command.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80025

An internal error has occurred while processing a command.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80026

An internal error has occurred while processing a command.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80027

An unrecognized keyword was encountered whilst processing a REFRESH SECURITY command.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced. Register 2 contains the address of the keyword causing the problem.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80028

An attempt to obtain a storage subpool for the security manager was unsuccessful. This might have occurred during the processing of an ALTER SECURITY command, a REFRESH SECURITY command, or during the automatic security timeout processing.

Note: This could indicate a system-wide storage problem.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced. Register 2 contains the return code from the storage failure.

System programmer response

Use the items listed in "Diagnostics" on page 950, together with information about any other storage-related problems, to diagnose the cause of the problem. If you are unable to resolve the problem, contact your IBM support center.

00C80029

A severe error has occurred during a SAF RACROUTE REQUEST=STAT call to the external security manager (ESM) during security switch processing for a REFRESH SECURITY command.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced. Register 2 contains the address of the class being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. Check your security configuration (for example, that the required classes are installed and active). If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80031

A severe error has occurred during a SAF RACROUTE REQUEST=LIST (create) call to the external security manager (ESM) during the processing for a REFRESH SECURITY command.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced. Register 2 contains the address of the class, and register 3 the address of the entity, being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. Check your security configuration (for example, that the required classes are installed and active). If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80032

An unexpected return code has been received from one of the following SAF calls to the external security manager (ESM) during the processing of a REFRESH SECURITY command:

- RACROUTE REQUEST=LIST (create)
- RACROUTE REQUEST=LIST (delete)
- RACROUTE REQUEST=STAT

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced. Register 2 contains the address of the return codes from SAF, and the ESM.

Note: If the error occurred on a STAT call, the error is preceded by a CSQH004I message containing the return codes from SAF, and the ESM.

System programmer response

See your ESM documentation for information about the return codes from SAF and the ESM. For information about setting MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80033

An unexpected setting for the subsystem security switch was encountered during the processing of a REFRESH SECURITY command.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 950, together with a note of what you expected the switch to be set to, and whether you had defined a profile for it or not, and contact your IBM support center.

00C80034

An internal error has occurred.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced. Register 2 contains the address of the class invoked at the time of the check.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80035

A severe error has occurred during a SAF RACROUTE REQUEST=STAT call to the external security manager (ESM) during security switch processing for a REFRESH SECURITY command.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced. Register 2 contains the address of the class being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. Check your security configuration (for example, that the required classes are installed and active). If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80036

A severe error has occurred during a SAF RACROUTE REQUEST=EXTRACT call to the external security manager (ESM) during security switch processing for a REFRESH SECURITY command.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced. Register 2 contains the address of the entity being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. For information about setting MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80037

A severe error has occurred during a SAF RACROUTE REQUEST=LIST (create) call to the external security manager (ESM) during the processing for a REFRESH SECURITY command.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced. Register 2 contains the address of the class, and register 3 the address of the entity, being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80038

An unexpected return code has been received from one of the following SAF calls to the external security manager (ESM) during the processing of a REFRESH SECURITY command.

- RACROUTE REQUEST=LIST (create)
- RACROUTE REQUEST=LIST (delete)
- RACROUTE REQUEST=EXTRACT
- RACROUTE REQUEST=STAT

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced. Register 2 contains the address of the return codes from SAF, and the ESM.

Note: If the error occurred on a STAT call, the error is preceded by a CSQH004I message containing the return codes from SAF, and the ESM.

System programmer response

See your ESM documentation for information about the return codes from SAF and the ESM. For information about setting MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80039

An attempt to obtain a storage subpool for a security manager user entry block was unsuccessful. This could have occurred during either security timeout processing, or REFRESH SECURITY command processing.

Note: This could indicate a system-wide storage problem.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced. Register 2 contains the return code from the storage failure.

System programmer response

Use the items listed in "Diagnostics" on page 950, together with information about any other storage-related problems, to diagnose the cause of the problem. If you are unable to resolve the problem, contact your IBM support center.

00C80040

A severe error has occurred during security timeout processing. An unexpected return code has been received from the MQ timer component.

Note: This could indicate a system-wide problem with the timer component, or the system timer.

System action

Messages CSQH009I and CSQH010I are issued. The current execution unit terminates with a completion code of X'5C6', and a dump is produced. Register 2 contains the return code from the timer component that caused the problem.

System programmer response

Use the items listed in "Diagnostics" on page 950, together with information about any other timer-related problems, to diagnose the cause of the problem. If you are unable to resolve the problem, contact your IBM support center.

00C80041

A severe error has occurred during security timeout processing for an ALTER SECURITY command. An unexpected return code has been received from the MQ timer component.

Note: This could indicate a system-wide problem with the timer component, or the system timer.

System action

Message CSQH010I is issued. The current execution unit terminates with a completion code of X'5C6' and a dump is produced. Register 2 contains the return code from the timer component that caused the problem.

System programmer response

Use the items listed in "Diagnostics" on page 950, together with information about any other timer-related problems, to diagnose the cause of the problem. If you are unable to resolve the problem, contact your IBM support center.

00C80042

A severe error has occurred during security initialization when trying to start the security timer. An unexpected return code has been received from the MQ timer component.

Note: This could indicate a system-wide problem with the timer component, or the system timer.

System action

Message CSQH010I is issued. The queue manager terminates and a dump is produced. Register 2 contains the return code from the timer component that caused the problem.

System programmer response

Use the items listed in "Diagnostics" on page 950, together with information about any other timer-related problems, to diagnose the cause of the problem. If you are unable to resolve the problem, contact your IBM support center.

00C80043

A severe error has occurred whilst processing a DISPLAY SECURITY command. A parameter has been entered on the SECURITY keyword, but this is invalid.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80044

A severe error has occurred whilst processing an ALTER SECURITY command. A parameter has been entered on the SECURITY keyword, but this is invalid.

System action

The current execution unit terminates with a completion code of X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80045

A severe error has occurred because the last security refresh did not complete successfully.

System action

The current execution unit terminates with error reason code X'5C6', and a dump is produced.

System programmer response

If you are able to fix the cause of the problem, you must refresh the security again before you can continue. If you are unable to solve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80046

An attempt to obtain a storage subpool for the security manager Utoken blocks was unsuccessful.

This indicates that there could be a wider ranging problem relating to storage availability.

System action

The queue manager is terminated and a dump is produced.

System programmer response

Use the items listed in "Diagnostics" on page 950, together with information about any other storage-related problems, to diagnose the cause of the problem.

00C80047

An attempt to obtain a storage block for a security manager Utoken block was unsuccessful.

This indicates that there could be a wider ranging problem relating to storage availability.

System action

The current execution unit terminates with X'5C6' and a dump is produced.

System programmer response

Use the items listed in "Diagnostics" on page 950, together with information about any other storage-related problems, to diagnose the cause of the problem. Contact your IBM support center if you need help.

00C80050

A severe error has occurred during a SAF RACROUTE REQUEST=STAT call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. Check your security configuration (for example, that the required classes are installed and active). If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80051

A severe error has occurred during a SAF RACROUTE REQUEST=EXTRACT call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the entity being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. For information about setting MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80052

A severe error has occurred during a SAF RACROUTE REQUEST=LIST (create) call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class, and register 3 the address of the entity, being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80053

An unexpected return code has been received from one of the following SAF calls to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

- RACROUTE REQUEST=EXTRACT
- RACROUTE REQUEST=LIST
- RACROUTE REQUEST=STAT

System action

Message CSQH004I is produced containing the return codes from SAF and the ESM. The queue manager is terminated, and a dump is produced. Register 2 contains the address of the return codes.

System programmer response

See your ESM documentation for information about the return codes that appear in message CSQH004I (in the job log) or the dump. For information about setting MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80054

An unexpected setting for the subsystem security switch was encountered.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the control block containing the switch setting.

System programmer response

Collect the items listed in "Diagnostics" on page 950, together with a note of what you expected the switch to be set to, and whether you had defined a profile for it or not, and contact your IBM support center.

Restart the queue manager.

00C80055

An internal loop count was exceeded during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class being checked at the time of the error.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

Restart the queue manager.

00C80060

A severe error has occurred during a SAF RACROUTE REQUEST=STAT call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. Check your security configuration (for example, that the required classes are installed and active). If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80061

A severe error has occurred during a SAF RACROUTE REQUEST=EXTRACT call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the entity being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. For information about setting MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80062

A severe error has occurred during a SAF RACROUTE REQUEST=LIST (create) call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class, and register 3 the address of the entity, being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80063

An unexpected return code has been received from one of the following SAF calls to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

- RACROUTE REQUEST=EXTRACT
- RACROUTE REQUEST=LIST
- RACROUTE REQUEST=STAT

System action

Message CSQH004I is produced containing the return codes from SAF and the ESM. The queue manager is terminated, and a dump is produced. Register 2 contains the address of the return codes.

System programmer response

See your ESM documentation for information about the return codes that appear in message CSQH004I (in the job log) or the dump. For information about setting MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80064

An unexpected setting for the subsystem security switch was encountered.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the control block containing the switch setting.

System programmer response

Collect the items listed in "Diagnostics" on page 950, together with a note of what you expected the switch to be set to, and whether you had defined a profile for it or not, and contact your IBM support center.

Restart the queue manager.

00C80065

An internal loop count was exceeded during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class being checked at the time of the error.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

Restart the queue manager.

00C80070

A severe error has occurred during a SAF RACROUTE REQUEST=STAT call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. Check your security configuration (for example, that the required classes are installed and active). If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80071

A severe error has occurred during a SAF RACROUTE REQUEST=EXTRACT call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the entity being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. For information about setting MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80072

A severe error has occurred during a SAF RACROUTE REQUEST=LIST (create) call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class, and register 3 the address of the entity, being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80073

An unexpected return code has been received from one of the following SAF calls to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

- RACROUTE REQUEST=EXTRACT
- RACROUTE REQUEST=LIST
- RACROUTE REQUEST=STAT

System action

Message CSQH004I is produced containing the return codes from SAF and the ESM. The queue manager is terminated, and a dump is produced. Register 2 contains the address of the return codes.

System programmer response

See your ESM documentation for information about the return codes that appear in message CSQH004I (in the job log) or the dump. For information about setting MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80074

An unexpected setting for the subsystem security switch was encountered.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the control block containing the switch setting.

System programmer response

Collect the items listed in "Diagnostics" on page 950, together with a note of what you expected the switch to be set to, and whether you had defined a profile for it or not, and contact your IBM support center.

00C80075

An internal loop count was exceeded during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class being checked at the time of the error.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

Restart the queue manager.

00C80080

A severe error has occurred during a SAF RACROUTE REQUEST=STAT call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. Check your security configuration (for example, that the required classes are installed and active). If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80081

A severe error has occurred during a SAF RACROUTE REQUEST=EXTRACT call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the entity being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. For information about setting MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80082

A severe error has occurred during a SAF RACROUTE REQUEST=LIST (create) call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class, and register 3 the address of the entity, being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80083

An unexpected return code has been received from one of the following SAF calls to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

- RACROUTE REQUEST=EXTRACT
- RACROUTE REQUEST=LIST
- RACROUTE REQUEST=STAT

System action

Message CSQH004I is produced containing the return codes from SAF and the ESM. The queue manager is terminated, and a dump is produced. Register 2 contains the address of the return codes.

System programmer response

See your ESM documentation for information about the return codes that appear in message CSQH004I (in the job log) or the dump. For information about setting MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80084

An unexpected setting for the subsystem security switch was encountered.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the control block containing the switch setting.

System programmer response

Collect the items listed in "Diagnostics" on page 950, together with a note of what you expected the switch to be set to, and whether you had defined a profile for it or not, and contact your IBM support center.

00C80090

A severe error has occurred during a SAF RACROUTE REQUEST=STAT call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. Check your security configuration (for example, that the required classes are installed and active). If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80091

A severe error has occurred during a SAF RACROUTE REQUEST=EXTRACT call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the entity being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. For information about setting MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80092

A severe error has occurred during a SAF RACROUTE REQUEST=LIST (create) call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class, and register 3 the address of the entity, being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80093

An unexpected return code has been received from one of the following SAF calls to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

- RACROUTE REQUEST=EXTRACT
- RACROUTE REQUEST=LIST
- RACROUTE REQUEST=STAT

System action

Message CSQH004I is produced containing the return codes from SAF and the ESM. The queue manager is terminated, and a dump is produced. Register 2 contains the address of the return codes.

System programmer response

See your ESM documentation for information about the return codes that appear in message CSQH004I (in the job log) or the dump. For information about setting MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80094

An unexpected setting for the subsystem security switch was encountered.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the control block containing the switch setting.

System programmer response

Collect the items listed in "Diagnostics" on page 950, together with a note of what you expected the switch to be set to, and whether you had defined a profile for it or not, and contact your IBM support center.

Restart the queue manager.

00C80095

An internal loop count was exceeded during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class being checked at the time of the error.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

Restart the queue manager.

00C80100

A severe error has occurred during a SAF RACROUTE REQUEST=STAT call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. Check your security configuration (for example, that the required classes are installed and active). If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80101

A severe error has occurred during a SAF RACROUTE REQUEST=EXTRACT call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the entity being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. For information about setting MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80102

A severe error has occurred during a SAF RACROUTE REQUEST=LIST (create) call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class, and register 3 the address of the entity, being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80103

An unexpected return code has been received from one of the following SAF calls to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

- RACROUTE REQUEST=EXTRACT

- RACROUTE REQUEST=LIST
- RACROUTE REQUEST=STAT

System action

Message CSQH004I is produced containing the return codes from SAF and the ESM. The queue manager is terminated, and a dump is produced. Register 2 contains the address of the return codes.

System programmer response

See your ESM documentation for information about the return codes that appear in message CSQH004I (in the job log) or the dump. For information about setting MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80104

An unexpected setting for the subsystem security switch was encountered.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the control block containing the switch setting.

System programmer response

Collect the items listed in "Diagnostics" on page 950, together with a note of what you expected the switch to be set to, and whether you had defined a profile for it or not, and contact your IBM support center.

Restart the queue manager.

00C80105

An internal loop count was exceeded during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class being checked at the time of the error.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

Restart the queue manager.

00C80200

A severe error has occurred during a SAF RACROUTE REQUEST=STAT call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. Check your security configuration (for example, that the required classes are installed and active). If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80201

A severe error has occurred during a SAF RACROUTE REQUEST=EXTRACT call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the entity being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. For information about setting MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80202

A severe error has occurred during a SAF RACROUTE REQUEST=LIST (create) call to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class, and register 3 the address of the entity, being checked at the time of the error.

System programmer response

See your ESM documentation for information about any return codes that appear in the job log. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80203

An unexpected return code has been received from one of the following SAF calls to the External Security Manager (ESM) during security switch processing at queue manager initialization time.

- RACROUTE REQUEST=EXTRACT
- RACROUTE REQUEST=LIST
- RACROUTE REQUEST=STAT

System action

Message CSQH004I is produced containing the return codes from SAF and the ESM. The queue manager is terminated, and a dump is produced. Register 2 contains the address of the return codes.

System programmer response

See your ESM documentation for information about the return codes that appear in message CSQH004I (in the job log) or the dump. For information about setting MQ security switches, see Switch profiles. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

00C80204

An unexpected setting for the subsystem security switch was encountered.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the control block containing the switch setting.

System programmer response

Collect the items listed in "Diagnostics" on page 950, together with a note of what you expected the switch to be set to, and whether you had defined a profile for it or not, and contact your IBM support center.

Restart the queue manager.

00C80205

An internal loop count was exceeded during security switch processing at queue manager initialization time.

System action

The queue manager is terminated, and a dump is produced. Register 2 contains the address of the class being checked at the time of the error.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

Restart the queue manager.

00C80206

An unexpected setting for the request type was encountered on an authentication request.

System action

The current execution unit terminates with a completion code of X'5C6' and a dump is produced. Register 2 contains the request type in error.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

Restart the queue manager.

00C80207

An unexpected setting for the request type was encountered on an authentication request.

System action

The queue manager terminates and a dump is produced. Register 2 contains the request type in error.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

Restart the queue manager.

00C81000

A severe error has occurred while processing a REFRESH SECURITY command.

System action

The current execution unit terminates with error reason code X'5C6', and a dump is produced. Register 2 contains the address of the control block involved in the error.

System programmer response

Collect the items listed in "Diagnostics" on page 950 and contact your IBM support center.

Data manager codes (X'C9')

If a data manager reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- A description of the actions that led to the error or, if applicable, either a listing of the application program or the input string to a utility program that was being run at the time of the error.
- The console output for the period leading up to the error.
- The queue manager job log.
- The system dump resulting from the error.
- If you are using CICS, the CICS transaction dump output.
- Appropriate WebSphere MQ, z/OS, Db2, CICS, and IMS service levels.
- If you are using the WebSphere MQ Operations and Control panels, the ISPF panel name.

00C90100

The object MQ was trying to create was too large to be stored.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90200

A page set page retrieved was not valid.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90201

A page set page retrieved was not valid. The page was not a header page.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90202

A page set page retrieved was not valid. The page was not a data page.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90300

MQ was unable to start a unit of recovery for this execution unit.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90301

An internal logging error has occurred for the current execution unit.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90400

The data manager has detected in invalid log record.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90401

The data manager has detected an invalid log record subtype.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90500

The data manager was asked to make a change to some data in a page, but the change would have extended beyond the specific data item.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90600

The data manager was unable to locate a specific logical record within a data page. The record was required for an update, or to insert a new record immediately after.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90700

The data manager was unable to locate its *resource access list entry* (RALE).

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90800

The data manager was requested to put a message on a queue, but told to give the message an invalid priority.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90900

The data manager was asked to retrieve a logical record from a page, but on retrieving it discovered that the record is invalid.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90A00

The data manager was asked to carry out a value logging operation with an invalid length field.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90B00

The space reclamation routines have been asked to deallocate a page that is not in a state to be deallocated.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90C00

An object type description passed to the data manager is not valid.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90D00

A page set that was originally page set n is being presented as being a different page set, probably because the started task JCL procedure for the queue manager has been changed. Register 0 contains the identifier of the page set in error, and register 2 contains the identifier it was previously associated with.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Check the started task JCL procedure for the queue manager, and undo any changes to the CSQPnnnn DD statements that specify the page sets. Restart the queue manager. If the problem persists, or no changes have been made to these statements, collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90D01

Your data set is not recognized as an MQ page set. This may be for one of the following reasons.

- The data set has not been formatted
- You are attempting to start the queue manager with an older version of MQ and the backward migration PTF for that release is not installed

- You are attempting to start the queue manager with an older version of MQ, but the queue manager had been running with OPMODE=NEWFUNC at the higher release, and fallback to an earlier release is not possible

Register 0 contains the identifier of the page set in error.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Investigate the reason code and take one of the following actions:

- format the page set
- install appropriate backward migration PTFs
- start the queue manager with the correct level of code

00C90D02

This reason code is caused by one of the following:

- An attempt to use a page set that is a valid MQ page set, but does not belong to this queue manager
- An attempt to change the subsystem name

Neither of these actions is allowed.

Register 0 contains the identifier of the page set in error.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

If you were attempting to use a page set from another queue manager, correct the error. Do not attempt to change the name of your queue manager.

00C90D03

An internal error has occurred during processing of an MQGET call with the Mark Skip Backout option.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90D04

During restart, the queue manager detected that a page set has been truncated. This is probably because the data set allocated during restoration of a backup was smaller than required to hold the backed up data, and so the data has been truncated. It might also occur if page set 0 is larger than the maximum supported page set size.

System action

The identifier of the page set in error is put in register 0. Restart is terminated.

System programmer response

Reallocate the data set correctly, restore the backed up data if necessary, and restart the queue manager.

00C90E00

The data manager was passed an invalid parameter describing the location of a logical record within a data page and page set.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C90F00

The data manager was requested to update a logical record within a page, but the record had been deleted previously.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C91000

The data manager was asked to retrieve a message from an object that was not a local queue.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C91094, 00C91095, 00C91096, 00C91097

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C91101

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C91102

MQ received a return code indicating an error from the RRS ATRSROI service.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

The return code from ATRSROI is in register 3. See the *MVS Programming: Resource Recovery* manual for information about the return code.

00C91104

The data manager was requested to carry out a browse message operation, but the required lock was not held.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C91200

The internal data manager locate-object routine could not find the object it was seeking during UNDO processing.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C91300

During queue manager startup, an attempt was made to recover an object, the length of which exceeds a single data page. However, one of the intermediate data pages was not available, and MQ was unable to recover the object.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C91400

The data manager was unable to access the header page (page 0) of one of the page sets.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced. The number of the page set with a header page that was unreadable is held in register 2.

System programmer response

1. Check for a preceding IEC161I, CSQP060E, or CSQP011E message relating to page set mentioned in register 2.
2. Check the following:
   - For the page set mentioned in register 2, is the appropriate CSQPnnnn DD statement present in the started task JCL procedure for the queue manager, xxxxMSTR?
   - Does this DD statement reference a genuine data set? DD DUMMY statements are not allowed for page sets.
   - Is DEFINE PSID(nn) present in the CSQINP1 initialization input data set?
3. If you are still unable to resolve the problem, collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C91500

During queue manager startup, the data manager was following a chain of objects on disk, and requested the next data page in the chain from the buffer manager. However, the buffer manager could not supply this page.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C91600

During restart, the data manager rebuilds its in-storage structures from page set data. On rebuilding an object, data manager discovered that the object already exists.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C91700, 00C91800

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C91900

During restart, data manager has detected an error in the rebuild of its in-storage object structures.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C91B01

During restart, the data manager found a queue with messages that are apparently located in a newly added page set. This is probably because the queue manager was run with a page set offline, and a new page set was formatted to replace the original one. This will lead to data loss.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C91C00

A delete purge request has been issued but the object type is not a local queue.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C91D00

A lock request has failed during an attempt to lock all pages associated with a long catalog object, or a long message.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C91E00

During a request issued by CSQIPUT5 or CSQIPUT6, an attempt to obtain a page level lock was unsuccessful.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C91F00

During a request issued by CSQIPUT5 or CSQIPUT6, an attempt to obtain a record level lock was unsuccessful.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C92000

An attempt to obtain a page level lock on the owner page relating to an object or message was unsuccessful.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C92100

An attempt to obtain a page level lock while trying to insert data was unsuccessful.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C92200

An attempt to obtain a record level lock while trying to insert data was unsuccessful.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C92300

An attempt to obtain a record level lock while trying to amend data was unsuccessful.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C92400

An attempt to get a lock on object type concatenated with object name within CSQIMGE1 was unsuccessful.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C92500, 00C92600, 00C92700, 00C92800, 00C92900, 00C92A00, 00C92B00, 00C92C00, 00C92D00, 00C92E00, 00C92F00, 00C93000

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C93100

A keyed read queue has encountered an error. A problem has occurred in the hash-table structure for the queue.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C93200, 00C93300

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C93500

MQ was extending a page set at startup, based on log records from earlier dynamic page set extend operations. (MQ does this so that any media recovery operation will have the required number of pages available in the page set.)

The page set could not be extended to the required RBA value.

The contents of the relevant registers are as follows:

R0
The number of the page set that could no longer be extended

R2
The logged page number that MQ was trying to extend to

R3
The high page number at restart. This is the base from which MQ was extending.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Create a larger page set, using multiple disk volumes if required, with a larger secondary extent value. The high page number of the page set should at least match that shown in register 2 in the dump.

00C93700

A queue contains messages, but the storage class named in the queue definition does not exist. This is an error.

This reason code is issued on queue manager restart if it is *not* the first time the queue manager has been started after migration to a new version.

Register 2 contains the first 4 characters of the storage class name, and register 3 contains characters 5 through 8.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the dump and a listing of your page set 0 and contact your IBM support center.

00C93800

A queue contains messages, which are on a page set other than that defined by the storage class named by the queue.

This reason code is issued on queue manager restart if it is *not* the first time the queue manager has been started after migration to a new version. It is preceded by one or more instances of message CSQI028E.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the dump and a listing of your page set 0 and contact your IBM support center.

00C93900

During MQPUT processing, MQ was unable to acquire a lock on the storage class of the queue.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C93A00

During MQGET processing, MQ was unable to acquire a lock on the queue it was processing.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C93B00

During MQPUT processing, MQ was unable to acquire a lock on the queue it was processing.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C93C00

During MQGET processing, MQ was unable to retrieve a message page from a queue it was processing.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C93D00, 00C93E00, 00C93F00, 00C94000, 00C94100

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C94200

MQ received a return code indicating an error from the RRS ATREINT service. This can occur if RRS is stopped when running an MQ application linked with an RRS stub.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

The return code from ATREINT is in register 3. See the *MVS Programming: Resource Recovery* manual for information about the return code.

00C94300

MQ received a return code indicating an error from the RRS ATRSIT service.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

The return code from ATRSIT is in register 3. See the *MVS Programming: Resource Recovery* manual for information about the return code.

00C94400

MQ received a return code indicating an error from the RRS ATRSPID service.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

The return code from ATRSPID is in register 3. See the *MVS Programming: Resource Recovery* manual for information about the return code.

00C94500, 00C94501, 00C94502

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C94503

A page set that has been the subject of the RESETPAGE function had not previously been through a clean shutdown of the queue manager. Using this page set for subsequent MQ processing would lead to data integrity problems.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Check the page sets that are defined to the queue manager. One or more of the page sets has been the subject of a RESETPAGE operation. Do not run the RESETPAGE operation against page sets that are either of the following:

- Fuzzy page set backups
- From a queue manager that has terminated abnormally

If you are unable to solve the problem, collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C94505

An internal error has occurred.

An attempt to restart with a log from another queue manager was detected. The queue-sharing group name recorded in the log during checkpoint does not match the name of the queue-sharing group in the queue manager using that log. If the correct log is being used, you can perform the change only after a clean shutdown of the queue manager, that is, after a quiesce.

Message CSQI060E is issued before this error occurs.

System action

Restart is terminated abnormally with completion code X'5C6' and a dump is produced.

System programmer response

Restart the queue manager using the correct logs and BSDS, or change the QSGDATA system parameter. Note that you cannot change the name of the queue-sharing group that a queue manager uses unless it has been shut down normally.

The following registers in the dump contain helpful values:

- R0 = the queue-sharing group name recorded in the log
- R2 = the queue-sharing group name in the running queue manager

00C94506

An internal error has occurred.

An attempt to restart with a log from another queue manager was detected. The shared queue manager identifier recorded in the log during checkpoint does not match the shared queue manager identifier in the queue manager using that log. If the correct log is being used, the entry in the Db2 CSQ.ADMIN_B_QMGR table for this queue manager has been corrupted.

Message CSQI061E is issued before this error occurs.

System action

Restart is terminated abnormally with completion code X'5C6' and a dump is produced.

System programmer response

Restart the queue manager using the correct logs and BSDS. If the correct logs are being used, correct the entry for the queue manager in the Db2 CSQ.ADMIN_B_QMGR table. If you cannot resolve the problem, contact your IBM support center for assistance.

The following registers in the dump contain helpful values:

- R0 = the queue manager identifier recorded in the log
- R2 = the queue manager identifier in the running queue manager

00C94507

An internal error has occurred during processing of Mark Skip Backout.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C94510

A request was made to a coupling facility resource manager service within MQ. The coupling facility resource manager service returned an unexpected return code.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C94511

An attempt to obtain storage for the data manager's use was unsuccessful. This indicates there could be a wider-ranging problem relating to storage availability.

System action

The queue manager is terminated and a dump is produced.

System programmer response

Check that you are running with the recommended region size, and if not, reset your system and restart the queue manager. If this is not the cause, use these items to diagnose the cause of the problem:

- Queue manager job log
- Information about any other storage-related problems
- System dump resulting from the error

00C94512

A request was made to a Db2 resource manager service within MQ. The Db2 resource manager service returned an unexpected return code.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C94513

A request was made to a coupling facility resource manager service within MQ. The coupling facility resource manager service returned an unexpected return code.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C9451A

A request was made to a Db2 resource manager service within MQ during restart. The Db2 resource manager service returned an unexpected return code related to a locked table condition.

System action

The queue manager terminates with completion code X'5C6', and a dump is produced.

System programmer response

Restart the queue manager. If you started several queue managers at the same time, try restarting them one at a time to alleviate this condition.

If the problem persists, collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

00C9FEEE

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 970 and contact your IBM support center.

Recovery log manager codes (X'D1')

If a recovery log manager reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- The console output for the period leading up to the error.
- The system dump resulting from the error.
- If you are using CICS, the CICS transaction dump output.
- Appropriate IBM MQ, z/OS, Db2, CICS, and IMS service levels.
- A printout of SYS1.LOGREC, if the reason code is issued by an active queue manager.
- If the reason code is issued by an active queue manager, a CSQ1LOGP detail report containing the log records associated with the problem.
- Contents of the BSDS. Obtain a listing by running the Print Log Map utility (CSQJU004).
- The recovery log manager standard diagnostic information, which is provided in the SYS1.LOGREC variable recording area (VRA) of the system diagnostic work area (SDWA) for many of the reason codes:

  MODID
  Name of the module issuing the error.

  LEVEL
  Change level.

  COMPONENT
  Subcomponent identifier of the recovery log manager.

  REGISTERS
  General purpose registers (GPRs) 0-15 at time of the abend.

00D10010

The end log range value specified on an invocation of the log print utility (CSQ1LOGP) is less than or equal to the start range value.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Correct the log range input control parameters specified in the invocation of the log print utility.

For more information about log services, refer to CSQ1LOGP.

00D10011

An invocation of the log print utility (CSQ1LOGP) was unable to obtain the storage required to perform the request.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

It is probable that the REGION parameter on the EXEC statement of the job control language (JCL) for this invocation is too small. Increase the REGION size, and resubmit the log print request.

For more information about log services, refer to Address space storage.

00D10012

An invocation of the log print utility (CSQ1LOGP) was unsuccessful because the job control language (JCL) for this invocation did not specify either the use of the bootstrap data set (BSDS) or, in the absence of the BSDS, the active or archive log data sets.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Correct the JCL and resubmit the log print request.

For more information about BSDS, refer to Managing the BSDS.

00D10013

An invocation of the log print utility (CSQ1LOGP) resulted in a VSAM error while attempting to open the bootstrap data set (BSDS).

This reason code, and the VSAM return code are issued with message CSQ1221E.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Refer to the *DFSMS/MVS Macro Instructions for Data Sets* to determine the meaning of the VSAM OPEN error. Take appropriate action, and resubmit the log print request.

00D10014

The job control language (JCL) for an invocation of the log print utility (CSQ1LOGP) specified the use of the bootstrap data set (BSDS), but the utility control statements did not specify values for RBASTART and RBAEND.

The RBASTART and RBAEND values must be specified when using the BSDS, although they are not required when using the active or archive logs.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Either:

- Continue to use the BSDS, but change the utility control statements to specify values for RBASTART and RBAEND
- Change the JCL to use the active and archive data sets instead

For more information, refer to CSQ1LOGP.

00D10015

An invocation of the log print utility (CSQ1LOGP) was unsuccessful because the record format of the bootstrap data set is incompatible with this release of the log print services.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Ensure that the correct release of the log print services are used with the appropriate BSDS record format.

For more information, refer to CSQ1LOGP.

00D10019

An invocation of the log print utility (CSQ1LOGP) resulted in a VSAM error while attempting to open the bootstrap data set (BSDS). The error was determined to be one which could be corrected by use of a VSAM access method services (AMS) VERIFY call, but the VERIFY call was also unsuccessful.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Collect the following items, and contact your IBM support center:

- A copy of the user's job control language (JCL) that was used to invoke the log print utility (CSQ1LOGP)
- The log data sets that the user was attempting to print

00D10020

The log print utility (CSQ1LOGP) issued this message because the end of data has been reached (that is, the end of the log, or the end of the user-specified data sets, or the user-specified RBAEND value has been reached).

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

This is not an error. This reason code denotes a normal end of data condition. No action is necessary.

For more information, refer to CSQ1LOGP.

00D10021

An invocation of the log print utility (CSQ1LOGP) encountered a gap in the log RBA range when switching log data sets. This indicates that log records might be missing.

Normally, a continuous set of log records is supplied as input by the ACTIVE and ARCHIVE DDnames (or the BSDS DDname if you are using the bootstrap data set (BSDS) to access the log data sets) in the

job control language (JCL) used to invoke the utility. If a log data set was removed from the JCL, this condition will arise.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

If the log data set was not removed intentionally, check the JCL to ensure that the log data sets are specified in ascending RBA value order. If you are using the BSDS to access the log data sets, use the print log map utility (CSQJU004) to examine the RBA ranges as recorded in the BSDS, and note any RBA gaps that might have resulted from the deletion of an active or archive log data set.

If it appears that a log error might have occurred, see Active log problems for information about dealing with problems on the log.

00D10022

An invocation of the log print utility (CSQ1LOGP) encountered a gap in the log RBA range when switching log data sets. This indicates that log records might be missing. The log RBA of the next record following the gap is greater than the RBAEND value specified in the utility control statements.

Normally, a continuous set of log records is supplied as input by the ACTIVE and ARCHIVE DDnames (or the BSDS DDname if using the bootstrap data set (BSDS) to access the log data sets) in the job control language (JCL) used to invoke the utility. If a log data set was removed from the JCL, this condition will arise.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Check the JCL and the RBAEND value specified in the utility control statements.

If a log data set was not removed intentionally, check that the log data sets are specified in ascending RBA value order. If using the BSDS to access log data sets, use the print log map utility (CSQJU004) to examine the RBA ranges as recorded in the BSDS, and note any RBA gaps that might have resulted from the deletion of an active or archive log data set.

If it appears that a log error might have occurred, see Active log problems for information about dealing with problems on the log.

00D10024

An invocation of the log print utility (CSQ1LOGP) encountered a log RBA sequence error. The RBA of the previous log record is greater than the RBA of the current log record.

Normally, a continuous set of log records is supplied as input by the ACTIVE and ARCHIVE DDnames (or the BSDS DDname if using the bootstrap data set (BSDS) to access the log data sets) in the job control language (JCL) used to invoke the utility. If a log data set appears out of sequence, this condition will arise.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Check the JCL to ensure that the log data sets are specified in ascending RBA value order. If using the BSDS to access the log data sets, use the print log map utility (CSQJU004) to examine the RBA ranges associated with each archive and active log data set. If both archive and active log data sets are used, the first archive log data set must contain the lowest log RBA value. If necessary, adjust the concatenation of the archive and active log data sets in the JCL to ensure that log records are read in ascending RBA sequence, and resubmit the log print request.

If it appears that a log error might have occurred, see Active log problems for information about dealing with problems on the log.

00D10025

An invocation of the log print utility (CSQ1LOGP) resulted in a VSAM GET error while attempting to read the active log data set.

This reason code, and the VSAM return and reason codes are issued in message CSQ1221E.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Refer to the *DFSMS/MVS Macro Instructions for Data Sets* to determine the meaning of the VSAM GET error and the RPL error code. Take appropriate action to correct the error, and resubmit the log print request.

00D10026

An invocation of the log print utility (CSQ1LOGP) was unsuccessful because an RBA value within the range specified by RBASTART and RBAEND could not be located on a log data set.

This reason code, and the RBA value that could not be located are issued with message CSQ1216E

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Check the utility control statements to ensure that the RBASTART and RBAEND values have not exceeded the lower or upper bounds of the RBAs available on all the active or archive log data sets defined by DDnames in the JCL.

If you are using the BSDS to access the log data sets, use the print log map utility (CSQJU004) to examine the RBA ranges associated with each archive and active log data set.

Correct the JCL and utility control statements as necessary, and resubmit the log print request.

For more information, refer to CSQ1LOGP.

00D10027

An invocation of the log print utility (CSQ1LOGP) resulted in a VSAM GET error while attempting to read the bootstrap data set (BSDS).

This reason code, and the VSAM return and reason codes, are issued with message CSQ1221E.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Refer to the *DFSMS/MVS Macro Instructions for Data Sets* manual to determine the meaning of the VSAM GET error and the RPL error code. Take appropriate action to correct the error and resubmit the log print request.

00D1002A

An invocation of the log print utility (CSQ1LOGP) was unsuccessful because an RBA value has been requested in an active log data set that has previously not been opened. A VSAM OPEN error occurred while attempting to open the active log data set.

This reason code, and the VSAM return and reason codes, are issued in message CSQ1221E.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Refer to the *DFSMS/MVS Macro Instructions for Data Sets* manual to determine the meaning of the VSAM OPEN error and the ACB error code. Take appropriate action to correct the error, and resubmit the log print request.

00D1002B

An invocation of the log print utility (CSQ1LOGP) was unsuccessful because an RBA value has been requested in an active log data set that has previously not been opened. A VSAM OPEN error occurred while attempting to open the active log data set. The VSAM OPEN error was determined to be one that could be corrected, however, a system error occurred while executing a z/OS TESTCB macro to determine whether the active log data set in question was a VSAM ESDS (entry-sequenced data set) or a VSAM LDS (linear data set).

This reason code, and the VSAM return and reason codes are issued in message CSQ1221E.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Refer to the *DFSMS/MVS Macro Instructions for Data Sets* manual to determine the meaning of the VSAM OPEN error and the ACB error code. Take appropriate action to correct the error, and resubmit the log print request.

If the problem persists, collect the following items, and contact your IBM support center:

- A copy of the job control language (JCL) used to invoke the log print utility (CSQ1LOGP)
- The log data sets that the user was attempting to print

00D1002C

An invocation of the log print utility (CSQ1LOGP) was unsuccessful because an RBA value has been requested in a active log data set that has previously not been opened. A VSAM OPEN error occurred while attempting to open the active log data set. The VSAM OPEN error was determined to be one which could be corrected by use of a VSAM access method services (AMS) VERIFY call, but the VERIFY call was unsuccessful.

This reason code, and the VSAM return and reason codes are issued with message CSQ1221E.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Refer to the *DFSMS/MVS Macro Instructions for Data Sets* manual to determine the meaning of the VSAM OPEN error and the ACB error code. Take appropriate action to correct the error, and resubmit the log print request.

00D1002D

An invocation of the log print utility (CSQ1LOGP) was unsuccessful because an RBA value has been requested in an active log data set that has previously not been opened. A VSAM OPEN error occurred while attempting to open the active log data set. The VSAM OPEN error was corrected by use of a VSAM access method services (AMS) VERIFY call, but a subsequent attempt to reposition the VSAM pointer back to the beginning of the active log data set (using the VSAM AMS POINT call) was unsuccessful.

This reason code and the VSAM return and reason codes are issued with message CSQ1221E.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Refer to the *DFSMS/MVS Macro Instructions for Data Sets* manual to determine the meaning of the VSAM OPEN error and the ACB error code. Take the appropriate action to correct the error, and resubmit the print log request.

00D10030

An invocation of the log print utility resulted in an internal error.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Collect the following items, and contact your IBM support center:

- A copy of the job control language (JCL) used to invoke the log print utility
- The log data sets that the user was attempting to print

00D10031

An invocation of the log print utility (CSQ1LOGP) was unsuccessful because an RBA value has been requested in a log data set that has previously not been opened. The job control language (JCL) has specified that the bootstrap data set (BSDS) be used as the guide to determine which data sets are required. An attempt to allocate the appropriate data set dynamically (using z/OS SVC 99) was unsuccessful.

This reason code, and the dynamic allocation information and error codes (S99INFO and S99ERROR) are issued with message CSQ1222E.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Refer to the *MVS Authorized Assembler Services Guide* manual to determine the meaning of the SVC 99 information and error codes. Take the appropriate action to correct the error, and resubmit the log print request.

00D10040

An invocation of the log print utility (CSQ1LOGP) was unsuccessful because an RBA value has been requested in an archive log data set (on tape) that has previously not been opened. An attempt was made to open the second file on the archive log tape (the first file normally contains the bootstrap data set) but this was unsuccessful because the archive log data set was not the second file on the archive log tape. The read job file control block (RDJFCB) macro was then invoked to attempt to change the data set sequence number from the default value of 2 to a value of 1, before attempting to open the second file again, but the macro invocation resulted in an error.

This reason code, and the RDJFCB return code are issued in message CSQ1223E.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Refer to the *MVS/ESA DFP System Programming Reference* manual to determine the meaning of the RDJFCB error code. Take the appropriate action to correct the error, and resubmit the log print request.

00D10044

An invocation of the log print utility (CSQ1LOGP) was unsuccessful because an RBA value has been requested in an archive log data set that has previously not been opened. An attempt to open the archive log data set resulted in a QSAM (queued sequential access method) error.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Check the console for messages indicating the cause of the QSAM error. Take the appropriate action to correct the error, and resubmit the log print request.

00D10048

An invocation of the log print utility (CSQ1LOGP) was unsuccessful because a QSAM (queued sequential access method) GET error occurred while reading an archive log data set.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Check the console for messages indicating the cause of the QSAM error. Take the appropriate action to correct the error, and resubmit the log print request.

00D10050

An invocation of the log print utility (CSQ1LOGP) was unsuccessful because the bootstrap data set (BSDS) was erroneously specified as one of the archive data sets in the job control language (JCL).

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set.

System programmer response

Examine the JCL, and remove the occurrence of the BSDS data set as one of the concatenated ARCHIVE data sets. Resubmit the log print request.

For more information, refer to Archive log problems.

00D10061

An invocation of the log print utility (CSQ1LOGP) succeeded, but an unexpected physical record length was encountered for the log record control interval (CI) for an active or archive log data set.

The data on the log data set might have been corrupted after it was written by IBM MQ. The data in the log data set might still be usable, but with caution.

The length of a log CI in an active log data set is expected to be 4096 bytes. The length of a log CI in an archive log data set is expected to be 4089 bytes.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set. The log print request has completed. This reason code is issued as a warning.

System programmer response

Ensure that the ACTIVE and ARCHIVE DDnames in the job control language (JCL) refer to active and archive logs correctly.

If the problem persists, collect the following items, and contact your IBM support center:

- A copy of the job control language (JCL) used to invoke the log print utility (CSQ1LOGP)
- The log data set that the user was trying to print

00D10062

An invocation of the log print utility (CSQ1LOGP) succeeded, but the first log record segment could not be found for a middle spanned log record segment.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set. The log print request has completed. This reason code is issued as a warning.

System programmer response

Several possibilities exist for the cause of this condition:

- The recovery log manager component of IBM MQ did not originally construct the log record header (LRH) properly
- The LRH for the log record segment was damaged after it was written by IBM MQ
- The application program continued to process after being informed about a gap in the log RBA values (reason code X'00D10021')

Determine if the LRH of the log record segment is truly in error by looking at the record segments directly preceding and after the record segment in question.

Take the appropriate action to correct the error, and resubmit the log print request. If the problem persists, collect the following items, and contact your IBM support center:

- A copy of the job control language (JCL) used to invoke the lop print utility (CSQ1LOGP)
- The log data set that the user was attempting to print

00D10063

An invocation of the log print utility (CSQ1LOGP) succeeded, but the first log record segment could not be found for a last spanned log record segment.

System action

No error is issued by log services, and no information is written to SYS1.LOGREC data set. The log print request has completed. This reason code is issued as a warning.

System programmer response

Several possibilities exist for the cause of this condition:

- The recovery log manager component of IBM MQ did not originally construct the log record header (LRH) properly
- The LRH for the log record segment was damaged after it was written by IBM MQ
- The application program continued to process after being informed about a gap in the log RBA values (reason code X'00D10021')

Determine if the LRH of the log record segment is truly in error by looking at the record segments directly before and after the record segment in question.

Take the appropriate action to correct the error, and resubmit the log print request. If the problem persists, collect the following items, and contact your IBM support center:

- A copy of the job control language (JCL) used to invoke the lop print utility (CSQ1LOGP)
- The log data set that the user was attempting to print

00D10114

IBM MQ failed to read or write member information in the queue sharing group table, CSQ.ADMIN_B_QSG.

System action

Queue manager initialization terminates.

System programmer response

Investigate Db2 SQL errors reported in the queue manager job log immediately preceding this error, to determine the cause. It is most likely due to incorrect table setup, plans not bound or insufficient authority to execute Db2 plans.

00D10120

The BSDS version is not allowed by the installation and customization options chosen for IBM MQ. For example, the queue manager might have been migrated from a previous version, and is currently operating with OPMODE=COMPAT.

System action

Queue manager startup terminates.

System programmer response

Either enable the required functions using OPMODE, or if this is the first attempt to start the queue manager with a BSDS that has been converted to a new version, restore the BSDS to the original version.

00D10121

The BSDS is not valid. A non-valid BSDS is the result of a failure during a previous attempt to run the BSDS conversion utility.

System action

Queue manager startup terminates.

System programmer response

The procedure for running the BSDS conversion utility involves renaming the original BSDS. Restore the BSDS to the original pre-conversion copy by renaming the data sets, then try the conversion again.

When the conversion is successful, try the program that issued the error message again.

00D10122

The BSDS version is not supported by this release of IBM MQ.

System action

Queue manager startup, or the process that was accessing the BSDS, terminates.

System programmer response
Start the queue manager at a version of IBM MQ that supports the BSDS version.

You can determine the version of a BSDS by running the print log map utility (CSQJU004)

00D10250

An unrecoverable error occurred while updating either the BSDS or the z/OS catalog to reflect changes in active log data sets.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The queue manager then terminates abnormally.

System programmer response

Obtain the SYS1.LOGREC and SVC dump. Correct the error, and restart the queue manager.

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem. In addition, see the description of reason code X'00D10252' for details of the information recorded in the variable recording area (VRA) of the system diagnostic work area (SDWA).

Examine the console log for a CSQJxxxx message preceding this error to determine whether the error was a BSDS error or a z/OS catalog update error. If you cannot resolve the problem, contact your support center.

00D10251

An unrecoverable error occurred in the log buffer writer.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The queue manager then terminates abnormally.

System programmer response

Obtain the SYS1.LOGREC and the SVC dump. This error is usually caused by a previous error that was recorded on SYS1.LOGREC and produced an SVC dump. The SYS1.LOGREC entries and SVC dump should be examined to determine the primary error that occurred.

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem. In addition, see the description of reason code X'00D10252' for details of the information recorded in the variable recording area (VRA) of the system diagnostic work area (SDWA).

If you cannot resolve the problem, contact your support center.

00D10252

This reason code is used to define the format of the information recorded in the variable recording area (VRA) of the system diagnostic work area (SDWA).

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump.

System programmer response

Obtain the SYS1.LOGREC and SVC dump.

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem. In addition, the following information is contained in the VRA of the SDWA:

- Reason code X'00D10252' stored with VRA key 6.
- The log buffer writer recovery tracking area is stored with VRA key 10.

00D10253

An application program check occurred in an MVCP instruction that attempted to move a parameter list or other data from the caller's address space to the queue manager address space.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump.

System programmer response

Obtain the SYS1.LOGREC and SVC dump. You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem.

Examine the area from which data was to be moved. It might be in the wrong key, or the address might be the cause of the problem. The incorrect instruction has a DA opcode and indicates the registers showing address and length to be moved.

00D10254

An application program check occurred in an MVCS instruction that attempted to move data from the queue manager address space to the caller's address space.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump.

System programmer response

Obtain the SYS1.LOGREC and SVC dump. You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem.

Examine the area to which data was to be moved. It might be in the wrong key, or the address might be the cause of the problem. The incorrect instruction has a DB opcode and indicates the registers showing address and length to be moved.

00D10257

The log RBA has reached or exceeded the value FFF800000000 (if 6-byte log RBAs are in use) or FFFFFFC000000000 (if 8-byte log RBAs are in use). The queue manager is terminated because the log RBA range has reached a CRITICAL level where the available range is too small for the queue manager to continue.

System action

The queue manager terminates with reason code 00D10257.

System programmer response

You need to reset the logs before the queue manager can be restarted. If you do not perform this action, the queue manager will abend once again after the next log data set switch.

For information on how to reset the logs using the CSQUTIL utility program, see RESETPAGE.

If your queue manager is using 6-byte log RBAs, consider converting the queue manager to use 8-byte log RBAs. See Planning to increase the maximum addressable log range for further information.

00D10261

While scanning the records and record segments in a log control interval (CI), it was discovered that the forward record chain was broken. This condition is the result of an incorrect record length in the log record header of some record in the log CI.

System action

This reason code can be issued by an active queue manager as the log buffers are scanned before they are written to the active log, or by the IBM MQ log services GET processor as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active queue manager, a diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by CSQJOFF1, the archiving of the active log data set is terminated and the faulty active log data set is marked 'stopped'
- If the error was detected by CSQJR005, message CSQJ012E is issued and the calling agent is terminated
- If the error was detected by CSQJW009, message CSQJ012E is issued and the queue manager is terminated
- If the error was detected by CSQJW107, the queue manager is terminated

If this reason code is issued as the result of IBM MQ log services GET processing, no error is issued and no information is written to the SYS1.LOGREC data set.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem. If you are unable to solve the problem, contact your IBM support center.

00D10262

While scanning a log control interval (CI), the offset to the last record or record segment in the CI was found to be incorrect.

System action

This reason code can be issued by an active queue manager as the log buffers are scanned before they are written to the active log, or by the IBM MQ log services GET processor as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active queue manager, a diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by CSQJOFF1, the archiving of the active log data set is terminated and the faulty active log data set is marked 'stopped'

- If the error was detected by CSQJR005, message CSQJ012E is issued and the calling agent is terminated
- If the error was detected by CSQJW009, message CSQJ012E is issued and the queue manager is terminated
- If the error was detected by CSQJW107, the queue manager is terminated

If this reason code is issued as the result of IBM MQ log services GET processing, no error is issued, and no information is written to the SYS1.LOGREC data set.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem. If you are unable to solve the problem, contact your IBM support center.

00D10263

While scanning a log control interval (CI), the VSAM RDF/CIDF control information was found to be incorrect.

System action

This reason code can be issued by an active queue manager as the log buffers are scanned before they are written to the active log, or by the IBM MQ log services GET processor as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active queue manager, a diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by CSQJOFF1, the archiving of the active log data set is terminated and the faulty active log data set is marked 'stopped'
- If the error was detected by CSQJR005, message CSQJ012E is issued and the calling agent is terminated
- If the error was detected by CSQJW009, message CSQJ012E is issued and the queue manager is terminated
- If the error was detected by CSQJW107, the queue manager is terminated

If this reason code is issued as the result of IBM MQ log services GET processing, no error is issued, and no information is written to the SYS1.LOGREC data set.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem. If you are unable to solve the problem, contact your IBM support center.

00D10264

While scanning a log control interval (CI), the beginning log RBA of the CI was not the expected RBA.

System action

This reason code can be issued by an active queue manager as the log buffers are scanned before they are written to the active log, or by the IBM MQ log services GET processor as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active queue manager, a diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by CSQJOFF1, the archiving of the active log data set is terminated and the faulty active log data set is marked 'stopped'
- If the error was detected by CSQJR005, message CSQJ012E is issued and the calling agent is terminated
- If the error was detected by CSQJW009, message CSQJ012E is issued and the queue manager is terminated
- If the error was detected by CSQJW107, the queue manager is terminated

If this reason code is issued as the result of IBM MQ log services GET processing, no error is issued, and no information is written to the SYS1.LOGREC data set.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem. If you are unable to solve the problem, contact your IBM support center.

00D10265

While scanning the records and record segments in a log control interval (CI), it was discovered that the backward record chain was broken. This condition is the result of an incorrect record length in the log record header of some record in the log CI.

System action

This reason code can be issued by an active queue manager as the log buffers are scanned before they are written to the active log, or by the IBM MQ log services GET processor as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active queue manager, a diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by CSQJOFF1, the archiving of the active log data set is terminated
- If the error was detected by CSQJR005, message CSQJ012E is issued and the calling agent is terminated
- If the error was detected by CSQJW009, message CSQJ012E is issued and the queue manager is terminated
- If the error was detected by CSQJW107, the queue manager is terminated

If this reason code is issued as the result of IBM MQ log services GET processing, no error is issued, and no information is written to SYS1.LOGREC data set.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem. If you are unable to solve the problem, contact your IBM support center.

00D10266

While scanning a log control interval (CI), a unit of recovery ID or LINK RBA in some record was found to be inconsistent with the beginning log RBA of the CI.

System action

This reason code can be issued by an active queue manager as the log buffers are scanned before they are written to the active log, or by the IBM MQ log services GET processor as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active queue manager, a diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by CSQJOFF1, the archiving of the active log data set is terminated and the faulty active log data set is marked 'stopped'
- If the error was detected by CSQJR005, message CSQJ012E is issued and the calling agent is terminated
- If the error was detected by CSQJW009, message CSQJ012E is issued and the queue manager is terminated
- If the error was detected by CSQJW107, the queue manager is terminated

If this reason code is issued as the result of IBM MQ log services GET processing, no error is issued, and no information is written to SYS1.LOGREC data set.

System programmer response

You might find the items listed in useful in resolving the problem. If you are unable to solve the problem, contact your IBM support center.

00D10267

While scanning a log control interval (CI), a middle or last spanned record segment was not the first segment contained in the log CI.

System action

This reason code can be issued by an active queue manager because the log buffers are scanned before they are written to the active log, or by the IBM MQ log services GET processor because a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active queue manager, a diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by CSQJOFF1, the archiving of the active log data set is terminated and the faulty active log data set is marked 'stopped'
- If the error was detected by CSQJR005, message CSQJ012E is issued and the calling agent is terminated
- If the error was detected by CSQJW009, message CSQJ012E is issued and the queue manager is terminated
- If the error was detected by CSQJW107, the queue manager is terminated

If this reason code is issued as the result of IBM MQ log services GET processing, no error is issued, and no information is written to the SYS1.LOGREC data set.

System programmer response

You might find the items listed in useful in resolving the problem. If you are unable to solve the problem, contact your IBM support center.

00D10268

While scanning a log control interval (CI), a first or middle spanned record segment was not the last segment contained in the log CI.

System action

This reason code can be issued by an active queue manager as the log buffers are scanned before they are written to the active log, or by the IBM MQ log services GET processor as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active queue manager, then a diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by CSQJOFF1, the archiving of the active log data set is terminated and the faulty active log data set is marked 'stopped'
- If the error was detected by CSQJR005, message CSQJ012E is issued and the calling agent is terminated
- If the error was detected by CSQJW009, message CSQJ012E is issued and the queue manager is terminated
- If the error was detected by CSQJW107, the queue manager is terminated

If this reason code is issued as the result of IBM MQ log services GET processing, no error is issued, and no information is written to the SYS1.LOGREC data set.

System programmer response

You might find the items listed in useful in resolving the problem. If you are unable to solve the problem, contact your IBM support center.

00D10269

An unrecoverable error was found in one of the buffers, while moving the current log buffer to the static write buffer in preparation for the physical write to the active log.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The queue manager then terminates.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem. If you are unable to solve the problem, contact your IBM support center.

00D10270

A LOG WRITE request completed unsuccessfully because the length of the log record header was not as expected. This is an internal error.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem.

Examine the SYS1.LOGREC, console log, and SVC dump for information about prior errors during LOG WRITE processing.

If you are unable to solve the problem, contact your IBM support center.

00D10327

A LOG READ completed unsuccessfully because of an invalid log LOGRBA. A log read, MODE(DIRECT) with a requested RBA does not match the start of a log record.

System action

An SVC dump is requested and the execution unit ends abnormally. If the log read error occurs during queue manager startup then the queue manager ends abnormally.

System programmer response

Log read with MODE(DIRECT) is most commonly used in the queue manager for verifying that the start RBA of a unit of work can be found on the log, before a sequential (maybe backward) read of the log data to recover locks on an in-doubt unit of work, or to back out a unit of work. It indicates that the queue manager is being started with incomplete log data available.

If you suspect an error in IBM MQ, collect the following data and contact IBM support:

- The BSDS
- All active and archive logs
- The SVC dump created by this error

00D1032A

An unsuccessful completion of a LOG READ has occurred. BSDS does not map the specified RBA into a log data set. Either the BSDS is in error, or the log data set has been deleted.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem.

00D1032B

Completion of a LOG READ was unsuccessful, because an error occurred while attempting to allocate a log data set.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem.

Examine LOGREC and SVC dump information. Also, examine any prior messages with a CSQJ prefix from recovery log manager allocation processing.

00D1032C

A LOG READ completed unsuccessfully, because an error occurred while opening or closing a log data set.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem.

Examine LOGREC and SVC dump information. Also, examine prior messages from recovery log manager open/close processing. These messages have a prefix of CSQJ.

00D1032E

A LOG READ completed unsuccessfully due to an internal error.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem. Examine the SYS1.LOGREC and SVC dump information.

00D10340

An unsuccessful completion of a LOG READ has occurred. This reflects an internal recovery log manager (RLM) logic error.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem.

Examine the SYS1.LOGREC, console log and SVC dump for information about prior errors during LOG READ processing.

If you cannot solve the problem, contact your IBM support center.

00D10341

A LOG READ completed unsuccessfully because an error was detected during a Forward READ of the log record. This is an internal error.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem.

Examine the SYS1.LOGREC, console log and SVC dump for information about prior errors during LOG READ processing.

If you cannot solve the problem, contact your IBM support center.

00D10342

A LOG READ completed unsuccessfully because an error was detected during a backward READ of a log record. This is an internal error.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem.

Examine the SYS1.LOGREC, console log and SVC dump for information about prior errors during LOG READ processing.

If you cannot solve the problem, contact your IBM support center.

00D10343

A LOG READ completed unsuccessfully because an error was detected during a READ of a log record due to an invalid CI offset. This is an internal error.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem.

Examine the SYS1.LOGREC, console log and SVC dump for information about prior errors during LOG READ processing.

If you cannot solve the problem, contact your IBM support center.

00D10345

A LOG READ completed unsuccessfully because an error was received from a CATALOG LOCATE request for an archive log data set. The requested archive log data set might have been uncataloged or deleted.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem. Examine the SYS1.LOGREC and SVC dump.

00D10348

The maximum retry count was exceeded while attempting to read a log RBA.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

Check the console log for related errors. This problem might occur if the user has specified an archive or active log data set to the BSDS with an incorrect RBA range.

If you cannot solve the problem, contact your IBM support center.

00D10354

A LOG READ request completed successfully but the length of the log record header was not as expected. This is an internal error.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem.

Examine the SYS1.LOGREC, console log, and SVC dump for information about prior errors during LOG READ processing.

If you are unable to solve the problem, contact your IBM support center.

00D10406

The bootstrap data set access service received a request with an invalid function code.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem. If you cannot solve the problem, contact your IBM support center.

00D10410

An unsuccessful completion of a READ BSDS RECORD has occurred. An error has been returned from VSAM.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

Check the console log for return codes from VSAM.

If you are unable to resolve the problem, note these values, collect the items listed in "Diagnostics" on page 984, and contact your IBM support center.

00D10411

An unsuccessful completion of a WRITE UPDATE BSDS RECORD has occurred. An error has been returned from VSAM.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

Check the console log for return codes from VSAM.

If you are unable to resolve the problem, note these values, collect the items listed in "Diagnostics" on page 984, and contact your IBM support center.

00D10412

An unsuccessful completion of a WRITE INSERT BSDS RECORD has occurred. An error has been returned from VSAM.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

Check the console log for return codes from VSAM.

If you are unable to resolve the problem, note these values, collect the items listed in "Diagnostics" on page 984, and contact your IBM support center.

00D10413

An unsuccessful completion of a DELETE BSDS RECORD has occurred. An error has been returned from VSAM.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

Check the console log for return codes from VSAM.

If you are unable to resolve the problem, note these values, collect the items listed in "Diagnostics" on page 984, and contact your IBM support center.

00D10419

An error was returned from the z/OS GETDSAB service.

System action

The current utility terminates abnormally.

System programmer response

Contact your IBM support center.

00D1041A

An error was returned from the z/OS SWAREQ service.

System action

The current utility terminates abnormally.

System programmer response

Contact your IBM support center.

00D1041B

The Db2 subsystem that a utility has connected to does not meet the minimum system requirements for this version of IBM MQ for z/OS.

System action

The current utility terminates abnormally.

System programmer response

Ensure that the Db2 data-sharing group name, and subsystem ID provided in the parameters to the utility are correct, and that the Db2 subsystem meets the system requirements for this version of IBM MQ for z/OS.

See IBM MQ prerequisites for a link to the IBM MQ for z/OS requirements web page.

00D10700

An error completion code was returned by SETLOCK OBTAIN.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem. In the dump, register 0 contains the return code from SETLOCK OBTAIN.

00D10701

An error completion code was returned by SETLOCK RELEASE.

System action

An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response

You might find the items listed in "Diagnostics" on page 984 useful in resolving the problem. In the dump, register 0 contains the return code from SETLOCK RELEASE.

Lock manager codes (X'D3')

If a lock manager reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- A description of the actions that led to the error or, if applicable, either a listing of the application program or the input string to a utility program that was being run at the time of the error.
- The console output for the period leading up to the error.
- The queue manager job log.
- The system dump resulting from the error.
- If you are using CICS, the CICS transaction dump output.
- Appropriate WebSphere MQ, z/OS, Db2, CICS, and IMS service levels.

00D301F1

An attempt to obtain storage was unsuccessful. This is probably because there is insufficient storage in your region.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Check that you are running in a region that is large enough. If not, reset your system and restart the queue manager. If this is not the cause of the problem, collect the items listed in "Diagnostics" on page 1004 and contact your IBM support center.

00D301F2

An attempt to obtain storage was unsuccessful. This is probably because there is insufficient storage in your region.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Check that you are running in a region that is large enough. If not, reset your system and restart the queue manager. If this is not the cause of the problem, collect the items listed in "Diagnostics" on page 1004 and contact your IBM support center.

00D301F3

An attempt to obtain storage was unsuccessful. This is probably because there is insufficient storage in your region.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Check that you are running in a region that is large enough. If not, reset your system and restart the queue manager. If this is not the cause of the problem, collect the items listed in "Diagnostics" on page 1004 and contact your IBM support center.

00D301F4

An attempt to obtain storage was unsuccessful. This is probably because there is insufficient storage in your region.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Check that you are running in a region that is large enough. If not, reset your system and restart the queue manager. If this is not the cause of the problem, collect the items listed in "Diagnostics" on page 1004 and contact your IBM support center.

00D301F5

An attempt to obtain storage was unsuccessful. This is probably because there is insufficient storage in your region.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Check that you are running in a region that is large enough. If not, reset your system and restart the queue manager. If this is not the cause of the problem, collect the items listed in "Diagnostics" on page 1004 and contact your IBM support center.

00D302F1, 00D302F2, 00D302F3, 00D302F4, 00D302F5, 00D303F1, 00D303F2, 00D303F3, 00D304F1, 00D305F1, 00D306F1

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1004 and contact your IBM support center.

00D31094, 00D31095, 00D31096, 00D31097

> An internal error has occurred.

System action

> The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

> Collect the items listed in "Diagnostics" on page 1004 and contact your IBM support center.

Message manager codes (X'D4')

If a message manager reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- A description of the actions that led to the error or, if applicable, either a listing of the application program or the input string to a utility program that was being run at the time of the error.
- The console output for the period leading up to the error.
- The queue manager job log.
- The system dump resulting from the error.
- If you are using CICS, the CICS transaction dump output.
- Appropriate IBM MQ, z/OS, Db2, CICS, and IMS service levels.
- If you are using the IBM MQ Operations and Control panels, the ISPF panel name.

00D40001, 00D40002

> An internal error has occurred while processing a command.

System action

> The current execution unit terminates with completion code X'5C6'.

System programmer response

> Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40003, 00D40004, 00D40007

> An internal error has occurred while processing a DEFINE or ALTER command for a queue.

System action

> The current execution unit terminates with completion code X'5C6'.

System programmer response

> Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40008

> An internal error has occurred while processing a DEFINE or ALTER command for a process.

System action

> The current execution unit terminates with completion code X'5C6'.

System programmer response

> Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40009

> An internal error has occurred while processing a DEFINE or ALTER command for a queue.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D4000A, 00D4000B, 00D4000C

An internal error has occurred while processing a command.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D4000D

An internal error has occurred while attempting to establish a processing environment for the command processors.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D4000E, 00D4000F

An internal error has occurred while attempting to establish a processing environment.

System action

The current execution unit terminates with completion code X'5C6'

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40010

An internal error has occurred while processing a command.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40011, 00D40012, 00D40013, 00D40014

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40015

An attempt to write a trigger message to the initiation queue or the dead-letter queue was unsuccessful because of an internal error (for example, a storage overwrite).

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40016, 00D40017, 00D40018, 00D4001A, 00D4001B, 00D4001C, 00D4001D, 00D4001E, 00D4001F

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40020, 00D40021, 00D40022, 00D40023, 00D40024, 00D40025

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40026

An internal error has occurred while processing a DEFINE CHANNEL or ALTER command for a channel.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40027, 00D40028, 00D40029, 00D4002A, 00D4002B, 00D4002C

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D4002D

An attempt to write a message to a queue was unsuccessful because of an internal error (for example, a storage overwrite).

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D4002E

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D4002F

An internal error has occurred while processing a channel command.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40030

The report option requested in a message was not recognized.

System action

The current execution unit terminates with completion code X'5C6'. A dump is produced.

System programmer response

Correct the value of the report option field (the value specified is given in register 2).

00D40031, 00D40032

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40033

An internal error has occurred while processing a STGCLASS command.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40034, 00D40035, 00D40036, 00D40037, 00D40038, 00D40039

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D4003B

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006. Also collect details of the queue-sharing group (QSG) and of the queue managers active, as well as the queue managers defined to the QSG at the time of the error. This information can be obtained by entering the following z/OS commands:

```
D XCF,GRP
```

to display a list of all QSGs in the coupling facility.

```
D XCF,GRP,qsg-name,ALL
```

to display status about the queue managers defined to QSG qsg-name. Contact your IBM support center.

00D4003C, 00D4003D

An internal error has occurred while processing a DEFINE CFSTRUCT or ALTER CFSTRUCT or DELETE CFSTRUCT command.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D4003E

An internal error has occurred while processing an AUTHINFO command.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D4003F

An internal error has occurred while processing a DEFINE MAXSMSGS or ALTER QMGR command.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40040

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40042

An internal processing error has occurred. The repository cannot locate an object that it has been asked to release.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40043, 00D40044, 00D40045, 00D40046, 00D40047, 00D40048

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40049

An internal processing error has occurred while attempting to create the queue manager object during end restart processing.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40050

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. The IGQ agent then attempts to recover.

System programmer response

If the IGQ agent fails to recover properly, an attempt could be made to disable the SYSTEM.QSG.TRANSMIT.QUEUE to force the IGQ agent to enter retry, or if this fails, the IGQ agent task can be restarted by issuing an ALTER QMGR IGQ(ENABLED) command or by restarting the queue manager.

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40051, 00D40052

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40053

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 together with a dump of the coupling facility list structure that the shared queue is defined to use, and contact your IBM support center.

00D40054

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006. Also collect details of the queue-sharing group (QSG) and of the queue managers active, as well as the queue managers defined to the QSG at the time of the error. This information can be obtained by entering the following z/OS commands:

```
D XCF,GRP
```

to display a list of all QSGs in the coupling facility.

```
D XCF,GRP,qsg-name,ALL
```

to display status about the queue managers defined to QSG qsg-name. Contact your IBM support center.

00D40055, 00D40056

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40060

While performing Shared Channel Recovery Processing, Db2 was found to be inactive.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Check why Db2 related tasks are unavailable.

The recovery process is terminated; some channels might have been recovered, while others have not. Any channels that were not recovered will be recovered when the recovery process next runs; alternatively, they can be restarted manually. For more information about recovery and restart mechanisms used by IBM MQ, see Recovery and restart.

00D40062, 00D40064, 00D40065, 00D40066

An internal error has occurred during shared channel recovery.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

The recovery process is terminated; some channels may have been recovered, while others have not. Any channels that were not recovered will be recovered when the recovery process next runs; alternatively, they can be restarted manually. For more information about recovery and restart mechanisms used by IBM MQ, see Recovery and restart.

00D40067

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40068

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'. In some cases, the queue manager might terminate with completion code X'6C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

Restart the queue manager if necessary.

00D40069

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006. Also collect details of the queue-sharing group (QSG) and of the queue managers active, as well as the queue managers defined to the QSG at the time of the error. This information can be obtained by entering the following z/OS commands:

```
 D XCF,GRP
```

to display a list of all QSGs in the coupling facility.

```
 D XCF,GRP,qsg-name,ALL
```

to display status about the queue managers defined to QSG qsg-name. Contact your IBM support center.

00D40070

An internal error has occurred involving the cluster cache.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and the channel initiator job log, and contact your IBM support center.

00D40071, 00D40072, 00D40073, 00D40074, 00D40075, 00D40076, 00D40077, 00D40078, 00D40079, 00D4007A, 00D4007B, 00D4007C, 00D4007D, 00D4007E, 00D4007F

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

Restart the queue manager if necessary.

00D40080

An internal error has occurred invloving the cluster cache.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and the channel initiator job log, and contact your IBM support center.

00D40081

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

Restart the queue manager if necessary.

00D40082

An internal error has occurred invloving the cluster cache.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and the channel initiator job log, and contact your IBM support center.

00D40083

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

Restart the queue manager if necessary.

00D40084

An internal error has occurred when opening a managed destination queue.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

Restart the queue manager if necessary.

00D40085

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

Restart the queue manager if necessary.

00D40086, 00D40087

An internal error has occurred while processing a DEFINE or ALTER command for a subscription.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D40091

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

Restart the queue manager if necessary.

00D4009C

An internal error has occurred while processing an **ALTER SMDS** or **RESET SMDS** command.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D4009D

An internal error has occurred while processing a **START SMDSCONN** or **STOP SMDSCONN** command.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D400B1

While putting a message, an error was detected in the chaining of message headers.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Check the chaining fields (**CodedCharSetId**, **Encoding**, and **Format**) in the MQMD and headers for the problem message to determine which values are invalid or inconsistent.

At each point in the header chain, the field values must correctly describe the data in the next header:

- The **Format** field identifies the correct format of the next header

- The **CodedCharSetId** field identifies the character set of text fields in the next header
- The **Encoding** field identifies the numeric encoding of numeric fields in the next header

00D401F1

Whilst processing a get message request, the specified search type (message identifier or correll identifier) was found to be in error. This indicates a data corruption error.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

00D44001

This reason code is issued in message CSQM090E when a command has failed. This code indicates that an object of the specified name exists, but is of a different subtype; it might not necessarily have the same disposition in the queue-sharing group. This can only occur with subtypes of queues or channels. Message CSQM099I is also issued, indicating the object in error.

Severity

8

System action

The command is ignored.

System programmer response

Reissue the command, ensuring that all object subtypes are correct.

00D44002

This reason code is issued in message CSQM090E when a command has failed. This code indicates that the object specified on the request could not be located. Message CSQM094I or message CSQM125I is also issued, indicating the object in error.

It is also issued in message CSQM086E, indicating that the queue manager object could not be located.

Severity

8

System action

For CSQM090E, the command is ignored. For CSQM086E, the queue manager fails to restart.

System programmer response

If you are using a queue-sharing group, check that Db2 is available and not suspended. Define the object in question. For the queue manager, reissue the START QMGR command to restart the queue manager.

Note: An object of the same name and type, but of a different disposition, might already exist. If you are dealing with a queue or channel object, an object of the same name, but of a different subtype, might already exist.

00D44003

This reason code is issued in message CSQM090E when a command has failed. This code indicates that the object specified on the request already exists. This will only arise when trying to define a new object. Message CSQM095I is also issued.

Severity

8

System action

The command is ignored.

System programmer response

Use the object in question.

00D44004

This reason code is issued in message CSQM090E when a command has failed. This code indicates that one or more of the keywords on the command failed the parameter validation rules that apply to them. One or more other more specific messages are also issued, indicating the reason for the validation failure.

Severity

8

System action

The command is ignored.

System programmer response

Refer to the more specific associated message to determine what the error is.

00D44005

This reason code is issued in message CSQM090E when a command has failed. This code indicates that one of the following situations has occurred:

- The object specified on the request is currently open. This typically happens when an object is in use through the API or a trigger message is being written to it, but it could also arise because the object specified is in the process of being deleted. For a local queue, it can occur because there are messages currently on the queue. Message CSQM101I or CSQM115I is also issued.

- A request has been issued for a local queue, but this queue has incomplete units of recovery outstanding for it. Message CSQM110I is also issued.

- An alter, delete, or define request was made against a storage class that is in use (that is, there is a queue defined as using the storage class, and there are messages currently on the queue. Message CSQM101I is also issued.

- An ALTER CFSTRUCT command was issued and an associated shared queue has messages or uncommitted message activity.

Severity

8

System action

The command is ignored.

System programmer response

Refer to the description of message CSQM101I, CSQM110I, or CSQM115I as appropriate.

00D44006

This reason code is issued in message CSQM090E when a command has failed. This code indicates that a request has been issued to delete a local queue. The PURGE option has not been specified, but there are messages on the queue. Message CSQM103I is also issued.

Severity

8

System action

The command is ignored.

System programmer response

If the local queue must be deleted, even though there are messages on it, reissue the command with the PURGE option.

00D44007

This reason code is issued in message CSQM090E when a command has failed. This code indicates that a request has been issued for a local queue that is dynamic, but this queue has been flagged for deletion. Message CSQM104I is also issued.

Severity

8

System action

The command is ignored.

System programmer response

None, the local queue will be deleted as soon as possible.

00D44008

This reason code is issued in message CSQM090E when a command has failed. This code indicates that the object specified on the request needs updating because the IBM MQ version has changed, but that this cannot be done because the object is currently open. Message CSQM101I is also issued.

Severity

8

System action

The command is ignored.

System programmer response

Wait until the object is closed and reissue the command.

00D44009

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM112E or message CSQM117E indicating the object in error. It is also issued in message CSQM086E during queue manager restart.

This code indicates that a request has been issued for an object, but the object information could not be accessed because of an error on page set zero.

Severity

8

System action

The command is ignored or the queue manager fails to restart.

System programmer response

Check for error messages on the console log that might relate to the problem. Verify that page set zero is set up correctly; refer to Managing page sets for information about this.

00D4400A

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM113E indicating the object in error. It is also issued in message CSQM086E during queue manager restart. This code indicates that a request has been issued for an object, but page set zero is full.

Severity

8

System action

The command is ignored or the queue manager fails to restart.

System programmer response

Increase the size of page set zero. Refer to Managing page sets for information about how to do this.

00D4400B

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM114E. This code indicates that a request has been issued for a local queue, but no more local queues could be defined. There is an implementation limit of 524 287 for the total number of local queues that can exist. For shared queues, there is a limit of 512 queues in a single coupling facility structure, and 512 structures altogether.

For the indexes used by shared queues (OBJ_QUEUE_IX1 and OBJ_QUEUE_IX2), 48 KB of space allocation is sufficient for 512 queues.

Severity

4

System action

The command is ignored.

System programmer response

Delete any existing queues that are no longer required.

00D4400C

This reason code is issued in message CSQM090E when a command has failed. It indicates that the command is not allowed for a particular subtype of an object, as shown in the accompanying more specific message.

Severity

4

System action

The command is ignored.

System programmer response

Reissue the command with the object name specified correctly.

00D4400D

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM127I. This code indicates that a request was issued specifying a namelist as a list of cluster names, but there are no names in the namelist.

Severity

8

System action

The command is ignored.

System programmer response

Specify a namelist that is not empty.

00D4400E

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM112E or message CSQM117E indicating the object in error. It is also issued in message CSQM086E during queue manager restart. This code indicates that a request has been issued for an object, but that a page set that it requires is not defined.

Severity

8

System action

The command is ignored or the queue manaager fails to restart.

System programmer response

Ensure that the necessary page set is defined in the initialization input data set CSQINP1, and has a DD statement in the queue manager started task JCL procedure. Restart the queue manager.

00D4400F

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM112E or message CSQM117E indicating the object in error. It is also issued in message CSQM086E during queue manager restart. This code indicates that a request has been issued for an object, but that a page set that it requires is not open.

Severity

8

System action

The command is ignored or the queue manager fails to restart.

System programmer response

Ensure that the necessary page set is defined in the initialization input data set CSQINP1, and has a DD statement in the queue manager started task JCL procedure. Restart the queue manager.

00D44010

This reason code is issued in message CSQM090E when a command has failed. This code indicates that a request was issued to change the default transmission queue for the queue manager, but the queue is already in use.

Severity

8

System action

The command is ignored.

System programmer response

Wait until the queue is no longer in use, or choose another queue.

00D44011

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM128E. This code indicates that a request was issued that required a message to be sent to a command queue, but the message could not be put.

Severity

8

System action

The command is ignored.

System programmer response

Resolve the problem with the command queue.

00D44013

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM160I indicating the object in error.

Severity

8

System action

The command is ignored.

System programmer response

See message CSQM160I for more information.

00D44014

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM161I.

Severity

8

System action

The command is ignored.

System programmer response

See message CSQM161I for more information.

00D44015

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM164I indicating the object in error.

Severity

8

System action

The command is ignored.

System programmer response

See message CSQM164I for more information.

00D44016

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM163I indicating the object in error.

Severity

8

System action

The command stops processing.

System programmer response

See message CSQM163I for more information.

00D44017

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM112E or message CSQM117E indicating the object in error. It is also issued in message CSQM086E during queue manager restart.

This code indicates that a request has been issued for an object, but the object information could not be accessed because coupling facility structure has failed.

Severity

8

System action

The command is ignored or the queue manager fails to restart.

System programmer response

Check for error messages on the console log that might relate to the problem. Use the RECOVER CFSTRUCT command to recover the coupling facility structure.

00D44018

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM112E or message CSQM117E indicating the object in error. It is also issued in message CSQM086E during queue manager restart.

This code indicates that a request has been issued for an object, but the object information could not be accessed because there is an error or inconsistency in the coupling facility information.

Severity

8

System action

The command is ignored or the queue manager fails to restart.

System programmer response

Check for error messages on the console log that might relate to the problem. Check that Db2 is available and not suspended. If the problem persists, it may be necessary to restart the queue manager.

00D44019

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM112E or message CSQM117E indicating the object in error. It is also issued in message CSQM086E during queue manager restart.

This code indicates that a request has been issued for an object, but the object information could not be accessed because Db2 is not available or is suspended.

Severity

8

System action

The command is ignored or the queue manager fails to restart.

System programmer response

Check for error messages on the console log that might relate to the problem. Check that Db2 is available and not suspended.

00D44023

This reason code is issued in message CSQM090E and is accompanied by message CSQM117E when a command cannot be executed because a CF structure is not available.

System action

The command is ignored.

System programmer response

See reason code MQRC_CF_STRUC_IN_USE (2346, X'092A') for more information.

00D4001B

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM182E.

Severity

8

System action

The command is ignored.

System programmer response

See message CSQM182E for more information.

00D4001C

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM183E.

Severity

8

System action

The command is ignored.

System programmer response

See message CSQM183E for more information.

00D4001D

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM185E.

Severity

8

System action

The command is ignored.

System programmer response

See message CSQM185E for more information.

00D4001E

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM186E.

Severity

8

System action

The command is ignored.

System programmer response

See message CSQM186E for more information.

00D4401F

This reason code is issued in message CSQM090E when a command has failed, and is accompanied by message CSQM190E.

Severity

8

System action

The command is ignored.

System programmer response

See message CSQM190E for more information.

00D44020

This reason code is issued in message CSQM090E when a PUBSUB command cannot be executed because PUBSUB is disabled.

System action

The command is ignored.

System programmer response

See message CSQM292I for more information.

00D4F001

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1006 and contact your IBM support center.

Command server codes (X'D5')

If a command server reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- A description of the actions that led to the error or, if applicable, either a listing of the application program or the input string to a utility program that was being run at the time of the error.
- The console output for the period leading up to the error.
- The queue manager job log.
- The system dump resulting from the error.
- Appropriate WebSphere MQ, z/OS, Db2, CICS, and IMS service levels.
- Any trace information collected.
- If message CSQN104I or CSQN202I was issued was issued, return and reason codes from the message.

00D50101

During initialization, the command server was unable to obtain storage. This is probably because there is insufficient storage in your region.

System action

Message CSQN104I is sent to the console containing this reason code and the return code from the internal storage macro. None of the commands in the initialization data set currently being processed are performed. Queue manager startup continues.

Note: If there is a storage problem, startup might not be successful.

System programmer response

Check that you are running in a region that is large enough, and if not, reset your system and restart the queue manager. If this is not the cause of the problem, collect the following items and contact your IBM support center:

- Return and reason codes from CSQN104I message
- Trace of startup (if available)

00D50102

The command preprocessor ended abnormally while processing a command in the initialization input data set.

System action

Message CSQ9029E is produced, followed by message CSQN103I with this code as the return code, and a reason code of -1 indicating that the command was not processed, and a dump is produced. The next command is processed.

System programmer response

Look in the output data set to determine the command in error. Check that the command is correctly formed, that it applies to a valid object.

If the command is correct, collect the items listed in "Diagnostics" on page 1024 and contact your IBM support center.

00D50103

During initialization, an internal error occurred.

System action

Message CSQN104I is sent to the z/OS console, indicating the return and reason codes from the internal macro. The command server stops, without processing any commands.

System programmer response

Review the job log for messages about other errors that might be related. If you are unable to solve the problem, collect the items listed in "Diagnostics" on page 1024, and contact your IBM support center.

00D50104

An internal error occurred during initialization.

System action

Message CSQN104I is sent to the z/OS console, indicating the return and reason codes from the internal macro. The command server stops, without processing any commands.

System programmer response

Stop and restart the queue manager.

Collect the items listed in "Diagnostics" on page 1024 and contact your IBM support center.

00D50105

An internal error has occurred.

System action

The command server terminates, and a dump is produced.

System programmer response

Stop and restart the queue manager.

Collect the items listed in "Diagnostics" on page 1024 and contact your IBM support center.

00D50201

The command server was unable to obtain storage while starting. This return code typically occurs because there is insufficient storage in your region.

System action

Message CSQN202I is sent to the z/OS console, indicating the return code from the internal storage macro. The command server stops, without processing any commands.

System programmer response

Check that you are running in a region that is large enough, and if not, reset your system and restart the queue manager. If this is not the cause of the problem, collect the items listed in "Diagnostics" on page 1024 and contact your IBM support center.

00D50202

An internal error has occurred.

System action

Message CSQN202I is sent to the z/OS console, indicating the return code from the internal macro. The command server stops, without processing any commands.

System programmer response

Review the job log for messages about other errors that might be related. If you are unable to solve the problem, collect the items listed in "Diagnostics" on page 1024 and contact your IBM support center.

00D50203

An internal error has occurred.

System action

Message CSQN202I is sent to the z/OS console, indicating the return code from the internal macro. The command server stops, without processing any commands.

System programmer response

Issue the START CMDSERV command to restart the command server.

Collect the items listed in "Diagnostics" on page 1024 and contact your IBM support center.

00D50208

The command server was unable to obtain storage during startup.

System action

Message CSQN202I is sent to the z/OS console, indicating the return code from the internal macro. The command server stops, without processing any commands.

System programmer response

Check that you are running in a region that is large enough, and if not, reset your system and restart the queue manager. If this is not the cause of the problem, collect the items listed in "Diagnostics" on page 1024 and contact your IBM support center.

00D50209

The command preprocessor ended abnormally while processing a command from the command server.

System action

Message CSQN205I is put onto the reply-to queue with COUNT=1, RETURN=00D50209, and REASON=-1 indicating that the command has not been processed. The command server processes the next command.

System programmer response

Check that the command is correctly formed, that it applies to a valid object.

If the command is correct, collect the items listed in "Diagnostics" on page 1024 and contact your IBM support center.

00D5020C

> While waiting for a command, the command server did not recognize the reason for the end of the wait. This is because it was not one of the following:
>
> - The arrival of a message
> - The STOP CMDSERV command

System action

> Messages CSQN203I and CSQN206I are sent to the console, containing the return and reason codes from the request function, and the ECB list.
>
> The command server is terminated and a dump is produced.

System programmer response

> Issue the START CMDSERV command to restart the command server.
>
> Collect the items listed in "Diagnostics" on page 1024 and contact your IBM support center.

00D5020E

> The command processor attempted to get a command from the system-command-input queue, but the attempt was unsuccessful because of an internal error.

System action

> The command server continues processing. Message CSQN203I is written to the console containing the return and reason codes from the API call.

System programmer response

> Collect the items listed in "Diagnostics" on page 1024 and contact your IBM support center.

00D5020F

> The command processor got a command from the system-command-input queue, but was unable to process it because the message was not of type MQMT_REQUEST.

System action

> The command processor processes the next command message.

00D50210

> The command processor got a command from the system-command-input queue, but was unable to process it because the command message was of length zero.

System action

> The command processor processes the next command message.

00D50211

> The command processor got a command from the system-command-input queue, but was unable to process it because the command message consisted of blank characters only.

System action

> The command processor processes the next command message.

00D50212

> The command processor got a command from the system-command-input queue, but was unable to process it because the command message was greater than 32 762 characters long.

System action

> The command processor processes the next command message.

00D54000

An internal error has occurred.

System action

The command server is terminated and a dump is produced.

System programmer response

Issue the START CMDSERV command to restart the command server.

Collect the items listed in "Diagnostics" on page 1024 and contact your IBM support center.

00D54nnn

The command processor got a command from the system-command-input queue, but was unable to process it because the command message indicated that data conversion was required and an error occurred during conversion. *nnn* is the reason code (in hexadecimal) returned by the MQGET call.

System action

The command processor processes the next command message.

System programmer response

Refer to API completion and reason codes for information about the reason code *nnn*.

Buffer manager codes (X'D7')

If a buffer manager reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- A description of the actions that led to the error or, if applicable, either a listing of the application program or the input string to a utility program that was being run at the time of the error.
- The console output for the period leading up to the error.
- The queue manager job log.
- The WebSphere MQ active log data set.
- The system dump resulting from the error.
- If you are using CICS, the CICS transaction dump output.
- Appropriate WebSphere MQ, z/OS, Db2, CICS, and IMS service levels.

00D70101

An attempt to obtain storage for a buffer manager control block (the PANC) was unsuccessful. This is probably because there is insufficient storage in your region.

System action

The queue manager is terminated, an entry is written to SYS1.LOGREC, and a dump is produced. Registers 2 and 0 contain the return and reason codes from the STORAGE or GETMAIN request.

System programmer response

Check that you are running in a region that is large enough, and if not, reset your system and restart the queue manager. If this does not resolve the problem, note the register values, and contact your IBM support center.

00D70102

The name of the queue manager being restarted does not match the name recorded in a prior checkpoint log record.

System action

The queue manager is terminated, an entry is written to SYS1.LOGREC, and a dump is produced. This is preceded by message CSQP006I. Register 0 contains the name found in the log record. Register 2 contains the name of the queue manager being restarted.

System programmer response

Change the started task JCL procedure xxxxMSTR for the queue manager to name the appropriate bootstrap and log data sets.

The print log utility, CSQ1LOGP, can be used to view checkpoint records. You might also find the MQ active log data set useful for problem determination.

00D70103

An attempt to obtain storage for a buffer manager control block (a PSET) was unsuccessful.

System action

The queue manager is terminated, an entry is written to SYS1.LOGREC, and a dump is produced. Registers 2 and 0 contain the return and reason codes from the STORAGE or GETMAIN request.

System programmer response

Restart the queue manager.

Note the register values, and contact your IBM support center.

00D70104

An attempt to obtain storage for a buffer manager control block (a BHDR) was unsuccessful.

System action

The queue manager is terminated, an entry is written to SYS1.LOGREC, and a dump is produced. Registers 2 and 0 contain the return and reason codes from the STORAGE or GETMAIN request.

System programmer response

Restart the queue manager.

Note the register values, and contact your IBM support center.

00D70105

An internal error has occurred during dynamic page set expansion.

System action

The current page set extend task is terminated, an entry is written to SYS1.LOGREC, and a dump is produced. No further attempt will be made to expand the page set until the queue manager is restarted. Subsequent dynamic page set extend requests for other page sets are processed.

System programmer response

Collect the items listed in "Diagnostics" on page 1028 and contact your IBM support center.

00D70106

An internal error has occurred.

System action

An entry is written to SYS1.LOGREC, and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 1028 and contact your IBM support center.

00D70108

An attempt to obtain storage for the buffer pool was unsuccessful.

System action

The queue manager is terminated, an entry is written to SYS1.LOGREC, and a dump is produced. Register 2 contains the return code from the STORAGE, GETMAIN or IARV64 GETSTOR request. Register 3 contains the buffer pool number.

System programmer response

Provide sufficient storage for the number of buffers specified in the DEFINE BUFFPOOL command.

If the buffer pool is backed by page fixed storage, that is it has a PAGECLAS of FIXED4KB, check that there is enough real storage available on the system. For more information, see Address space storage.

If it is not possible to rectify the problem:

- Alter the definition of the buffer pool in the CSQINP1 data set, to include the REPLACE attribute, and specify a smaller number of buffers, or
- Change the PAGECLAS attribute to 4KB.

00D7010A

An internal storage error has occurred.

System action

The queue manager is terminated, an entry is written to SYS1.LOGREC, and a dump is produced. Registers 2 and 3 contain the return and reason codes from the IARV64 GETSTOR request. Register 4 contains the buffer pool number.

System programmer response

Increase the value of the MEMLIMIT parameter.

00D70112

A critical process could not be started during queue manager initialization. This could be because there is insufficient storage in your region.

System action

The queue manager is terminated, an entry is written to SYS1.LOGREC, and a dump is produced. Register 0 contains the reason code for the error.

System programmer response

Check that you are running in a region that is large enough. If not, reset your system and restart the queue manager. If this does not resolve the problem, note the completion code and the reason code and contact your IBM support center.

00D70113

A critical process could not be started during queue manager initialization. This could be because there is insufficient storage in your region.

System action

The queue manager is terminated, an entry is written to SYS1.LOGREC, and a dump is produced. Register 0 contains the reason code for the error.

System programmer response

Check that you are running in a region that is large enough. If not, reset your system and restart the queue manager. If this does not resolve the problem, note the completion code and the reason code and contact your IBM support center.

00D70114

An internal cross-component consistency check failed.

System action

The request is terminated, an entry is written to SYS1.LOGREC, and a dump is produced. Register 0 contains the value in error.

System programmer response

Note the completion code and the reason code, collect the MQ active log data set, and contact your IBM support center.

00D70116

An I/O error has occurred.

System action

An entry is written to SYS1.LOGREC, and a dump is produced. Register 0 contains the Media Manager reason code from an MMCALL call. In some circumstances, the queue manager will terminate. (This depends on the nature of the error, and the page set on which the error occurred.)

System programmer response

Restart the queue manager if necessary.

See the *MVS/DFP Diagnosis Reference* manual for information about return codes from the Media Manager. If you do not have access to the required manual, contact your IBM support center, quoting the Media Manager reason code.

You might also find the MQ active log data set useful for problem determination.

00D70118

A page was about to be written to a page set, but was found to have improper format. The executing thread is terminated. (If this is the deferred write processor, the queue manager is terminated)

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Restart the queue manager. If the problem persists collect the items listed in "Diagnostics" on page 1028 and contact your IBM support center.

00D70120

No buffers are available to steal. An executing thread needed a buffer in a buffer pool to bring a page in from the page set. The buffer pool is overcommitted, and despite attempts to make more buffers available, including writing pages to the page set, no buffers could be released.

System action

The current execution unit terminates with completion code X'5C6'. The API request is terminated with reason code MQRC_UNEXPECTED_ERROR, with the aim of reducing demand for the buffer pool.

System programmer response

Determine the problem buffer pool from preceding CSQP019I and CSQP020E messages. Review the size of the buffer pool with the DISPLAY USAGE command. Consider increasing the size of the buffer pool using the ALTER BUFFPOOL command.

00D70122

An unrecoverable error has occurred during check point.

System action

The queue manager is terminated, an entry is written to SYS1.LOGREC, and a dump is produced. Register 0 contains the reason code for the error.

System programmer response

Restart the queue manager.

Note the completion code and the reason code, collect the MQ active log data set, and contact your IBM support center.

00D70133

An internal consistency check failed.

System action

The request is terminated, an entry is written to SYS1.LOGREC, and a dump is produced.

System programmer response

Note the completion code and the reason code, collect the MQ active log data set, and contact your IBM support center.

00D70136

A critical process could not be started during queue manager initialization. This could be because there is insufficient storage in your region.

System action

The queue manager is terminated, an entry is written to SYS1.LOGREC, and a dump is produced. Register 0 contains the reason code for the error.

System programmer response

Check that you are running in a region that is large enough. If not, reset your system and restart the queue manager. If this does not resolve the problem, note the completion code and the reason code and contact your IBM support center.

00D70137

A critical process could not be started during queue manager initialization. This could be because there is insufficient storage in your region.

System action

The queue manager is terminated, an entry is written to SYS1.LOGREC, and a dump is produced. Register 0 contains the reason code for the error.

System programmer response

Check that you are running in a region that is large enough. If not, reset your system and restart the queue manager. If this does not resolve the problem, note the completion code and the reason code and contact your IBM support center.

00D70139

An attempt to allocate 64 bit storage for internal use failed.

System action

The queue manager is terminated.

System programmer response

Raise the value of the MEMLIMIT parameter. For more information, see Address space storage.

00D7013A

An attempt to allocate storage for internal use failed. Register 2 contains the return code from the STORAGE request.

System action

The queue manager is terminated.

System programmer response

Provide sufficient storage. For more information, see Address space storage.

00D7013B

An internal consistency check failed.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect buffer manager problem determination information, and contact your IBM support center.

Recovery manager codes (X'D9')

If a recovery manager reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- A description of the actions that led to the error or, if applicable, either a listing of the application program or the input string to a utility program that was being run at the time of the error.
- The console output for the period leading up to the error.
- The queue manager job log.
- The system dump resulting from the error.
- A printout of SYS1.LOGREC.
- If you are using CICS, the CICS transaction dump output.
- Appropriate IBM MQ, z/OS, Db2, CICS, and IMS service levels.

00D90000

A recovery manager module received control from its FRR for retry and found an invalid retry point identifier. The name of the module in which the error occurred appears in the SYS1.LOGREC entry showing this reason code in register 15.

System action

Standard diagnostic information is provided. The error is recorded in SYS1.LOGREC, an SVC dump is scheduled, and queue manager termination is requested. The termination reason code reflects the function for which retry was unsuccessfully attempted.

System programmer response

This is a secondary error. Obtain a copy of SYS1.LOGREC and the SVC dump for this error and for the original problem that resulted in the retry attempt. Examine the SYS1.LOGREC information and the dumps from both the original and the secondary error to determine if the recovery parameter area was damaged or if retry incorrectly restored registers for the mainline module.

Restart the queue manager.

00D90002

The recovery manager startup notification routine received an error return code from the recovery log manager when attempting to read a recovery manager status table (RMST) record from the bootstrap data set (BSDS) in one of the following cases:

- When reading the record containing the RMST header. The first copy was successfully read, but the second copy could not be found.
- When reading records containing the RMST entries. A *no record found* condition was encountered before all entries were read.
- When reading either a header record or an entry record. The record exceeded its expected length.

This is an IBM MQ error.

System action

The recovery manager has no functional recovery routine (FRR) in place when this error occurs. It relies on its invoker, the facility startup function, to perform SYS1.LOGREC recording and to request a dump. The queue manager terminates with a X'00E80100' reason code.

System programmer response

The queue manager determined that the BSDS that it was reading has been corrupted. If you are running in a dual BSDS environment, determine which BSDS is corrupt, and follow the procedures described in Recovering the BSDS to recover it from the valid BSDS.

Similarly, if you are running in a single BSDS environment, refer to Recovering the BSDS, which describes the procedures needed to recover your BSDS from an archived BSDS.

00D92001

The checkpoint/restart serial controller FRR invoked queue manager termination, because an unrecoverable error was detected while processing a request.

This is a queue manager termination reason code.

System action

Queue manager termination is initiated. Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the associated error.

System programmer response

Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error, and follow the instructions associated with it.

Restart the queue manager.

00D92003

The restart request servicer FRR invoked queue manager termination, because an unrecoverable error was detected while processing a restart request.

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Obtain a copy of SYS1.LOGREC and the SVC dump for the original error and follow the instructions associated with it.

Restart the queue manager.

00D92004

The shutdown checkpoint controller FRR invoked queue manager termination, because an unrecoverable error was detected while processing a shutdown checkpoint request.

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Obtain a copy of SYS1.LOGREC and the SVC dump for the original error and follow the instructions associated with it.

Restart the queue manager.

00D92011

An internal error has occurred.

System action

The checkpoint process will end abnormally to prevent a damaged URE from being written out to the log, and the queue manager will be terminated. This is to prevent the loss or incorrect processing of an IBM MQ unit of recovery (UR). Restart will use the previous checkpoint and apply all the IBM MQ log records up to the point of the problem. Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1033 and contact your IBM support center.

00D92012

An internal error has occurred.

System action

The checkpoint process will end abnormally to prevent a damaged RURE from being written out to the log, and the queue manager will be terminated. This is to prevent the loss or incorrect processing of an IBM MQ unit of recovery. Restart will use the previous checkpoint and apply all the IBM MQ log records up to the point of the problem. Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1033 and contact your IBM support center.

00D92021

An internal error has occurred.

System action

The restart processing ends abnormally, which terminates the queue manager. This is to prevent the loss or incorrect processing of a IBM MQ unit of recovery.

System programmer response

Do not attempt to restart the queue manager until the error is resolved.

The log has become corrupted. If you are running with dual logging, try to start the queue manager from the undamaged log.

If you are unable to do achieve this, use the following procedure (you will lose all updates since your last back up):

1. Restore your page sets from the last set of full backups. The queue manager must have been shut down cleanly before taking the backup copies of the page sets.

2. Clear the logs by following the procedure detailed in Resetting the queue manager's log.

See CSQUTIL utility for information about restarting the queue manager from one log when using dual logging, and using the CSQUTIL utility. If you are unable to resolve the problem, contact your IBM support center.

00D92022

An internal error has occurred.

System action

The restart processing ends abnormally, which terminates the queue manager. This is to prevent the loss or incorrect processing of a IBM MQ unit of recovery.

System programmer response

Do not attempt to restart the queue manager until the error is resolved.

The log has become corrupted. If you are running with dual logging, try to start the queue manager from the undamaged log.

If you are unable to do achieve this, use the following procedure (you will lose all updates since your last back up):

1. Restore your page sets from the last set of full backups. The queue manager must have been shut down cleanly before taking the backup copies of the page sets.
2. Clear the logs by following the procedure detailed in Resetting the queue manager's log.

See CSQUTIL utility for information about restarting the queue manager from one log when using dual logging, and using the CSQUTIL utility. If you are unable to resolve the problem, contact your IBM support center.

00D92023

During queue manager restart in 6 byte log RBA mode, a log record has been encountered that is written with an 8 byte log RBA.

System action

The restart processing ends abnormally, which terminates the queue manager. This is to prevent the loss, or incorrect processing, of a IBM MQ unit of recovery.

System programmer response

Do not attempt to restart the queue manager until the error is resolved.

The queue manager might have been started with an incorrect log or BSDS. Ensure that the queue manager is started with the correct log and BSDS data sets. If this was not the cause of the problem, the log or BSDS has become corrupted.

To recover from a corrupted log or BSDS, if you are running with dual logging or dual BSDS, try to start the queue manager from the undamaged log.

If you are unable to do achieve this, use the following procedure. Note, that by carrying out this procedure, you will lose all updates since your last back up:

1. Restore your page sets from the last set of full backups. The queue manager must have been shut down cleanly before taking the backup copies of the page sets.
2. Clear the logs by following the procedure detailed in Resetting the queue manager's log.

If necessary, when clearing the logs ensure that you convert the BSDS to the previous version, using the BSDS conversion utility CSQJUCNV.

See CSQUTIL utility for information about using the CSQUTIL utility. If you are unable to resolve the problem, contact your IBM support center.

00D93001

The commit/backout FRR invoked queue manager termination, because an unrecoverable error was detected during 'must-complete' processing for phase 2 of a commit-UR request.

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Obtain a copy of SYS1.LOGREC and the SVC dump for the original error and follow the instructions associated with it.

Restart the queue manager.

00D93011

A subcomponent of IBM MQ invoked commit when the agent state was invalid for commit-UR invocation. Commit-UR was requested for an agent that was modifying data. Either commit-UR or backout-UR was already in process, or the recovery structure (URE) was damaged.

System action

Abnormal termination of the agent results, including backing out (backout-UR) of its activity to the previous point of consistency. This releases all locks held by the agent for its resources.

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled. Additional information, identified in the SDWA variable recording area (VRA) by reason code X'00D9CCCC', is added to the VRA.

If the agent was in a 'must-complete' state (in-commit or in-backout), the queue manager is also terminated with reason code X'00D93001'. When the queue manager is next restarted, recoverable activity for this agent (such as an ensure-backout or ensure-commit UR) is handled to complete the commit or backout process.

System programmer response

This is an IBM MQ error. Examine the SYS1.LOGREC data and the dump to establish whether either commit-UR was invoked incorrectly or the control structure that reflects the state was damaged.

00D93012

A subcomponent of IBM MQ invoked commit when the agent state was invalid for commit-UR invocation. Commit-UR was invoked for an agent that was only retrieving data. Either commit-UR or backout-UR was already in process, or the ACE progress state field was damaged.

System action

Abnormal termination of the agent results, including backing out (backout-UR) of its activity to the previous point of consistency. This releases all locks held by the agent for its resources.

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled. Additional information, identified in the SDWA variable recording area (VRA) by reason code X'00D9CCCC', is added to the SDWA VRA.

System programmer response

This is an IBM MQ error. Examine the SYS1.LOGREC data and the dump to establish whether either commit-UR was invoked incorrectly or the control structure was damaged.

00D93100

This reason code indicates that an IBM MQ allied agent does not need to participate in the Phase-2 (Continue Commit) call, because all required work has been accomplished during the Phase-1 (Prepare) call.

This reason code is generated by the recovery manager when it is determined that an IBM MQ allied agent has not updated any IBM MQ resource since its last commit processing occurred.

System action

The 'yes' vote is registered with the commit coordinator.

System programmer response

None should be required because this is not an error reason code. This reason code is used for communication between components of IBM MQ.

00D94001

The commit/backout FRR invoked queue manager termination, because an unrecoverable error was detected during 'must-complete' processing for a backout-UR request.

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Obtain a copy of SYS1.LOGREC and the SVC dump for the original error and follow the instructions associated with it.

Restart the queue manager.

00D94011

A subcomponent of IBM MQ invoked backout at a point when the agent state is invalid for invoking the function that backs out units of recovery. Either backout-UR or commit-UR phase-2 was already in process, or the agent structure was damaged.

System action

Abnormal termination of the agent results and, because the agent is in a 'must-complete' state, the queue manager is terminated with reason code X'00D94001'. When the queue manager is restarted, recoverable activity for this agent is handled to complete the commit or backout process.

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled. Additional information, identified in the SDWA variable recording area (VRA) by reason code X'00D9AAAA', is added to the SDWA VRA.

System programmer response

This is an IBM MQ error. Examine the SYS1.LOGREC data and the dump to establish whether commit-UR was invoked incorrectly or the control structure was damaged.

00D94012

During backout, the end of the log was read before all the expected log ranges had been processed. The error is accompanied by an abnormal termination with reason code X'00D94001'.

This could be because the queue manager has been started with a system parameter load module that specifies OFFLOAD=NO rather than OFFLOAD=YES.

System action

The agent is abnormally terminated with completion code X'5C6'. Because the agent is in a must-complete state, the queue manager is terminated with reason code X'00D94001' and message CSQV086E.

Standard diagnostic information is recorded in SYS1.LOGREC. and an SVC dump is requested.

System programmer response

Run the print log map utility to print the content of both BSDSs. Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. At the time of the error, registers 3 and 4 contain the 8-byte relative byte address (RBA) of the beginning of this unit of recovery. IBM MQ must read the log back to this point to complete the backout of this unit of recovery.

To restart the queue manager, you must add the missing archive log data sets back to the BSDS with the change log inventory utility, and increase the MAXARCH parameter in the CSQ6LOGP macro (the system parameter module log initialization macro) to complete the backout.

If the missing archive log is not available, or if archiving was not active, the queue manager cannot be restarted unless the log data sets and page sets are all reinitialized or restored from backup copies. Data will be lost as a result of this recovery action.

00D95001

The recovery manager's common FRR invoked queue manager termination, because an unrecoverable error was detected during checkpoint processing.

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Obtain a copy of SYS1.LOGREC and the SVC dump for the original error and follow the instructions associated with it.

Restart the queue manager.

00D95011

The recovery manager checkpoint FRR invoked queue manager termination, because an unrecoverable error was detected while performing its checkpoint functions.

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error and follow the instructions associated with it.

Restart the queue manager.

00D96001

The recovery manager's restart FRR invoked queue manager termination, because an unrecoverable error was detected during the restart processor processing.

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error and follow the instructions associated with it.

Restart the queue manager.

00D96011

The restart participation FRR invoked queue manager termination, because an unrecoverable error was detected while processing log records during restart.

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error and follow the instructions associated with it.

Restart the queue manager when the problem has been corrected.

00D96021

The queue manager was terminated during restart because an error occurred while attempting to read the log forward MODE(DIRECT). It is accompanied by a recovery log manager error X'5C6' with a reason code describing the specific error.

Each time a portion of the log is skipped, a 'read direct' is used to validate the beginning RBA of the portion that is read.

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Run the print log map utility to print the contents of both BSDSs. Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. Follow instructions for the accompanying recovery log manager error. If possible, remove the cause of original error and restart the queue manager. If you cannot correct the error, contact your IBM support center.

00D96022

The restart FRR invoked abnormal termination, because, while reading the log forward during restart, the end-of-log was read before all recovery log scopes had been processed. It is followed by an abnormal termination with the same reason code (X'00D96022').

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the error before queue manager termination is initiated.

System programmer response

Run the print log map utility to print the contents of both BSDSs. Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. At the time of the error, registers 2 and 3 (as shown in the dump or in SYS1.LOGREC) contain the relative byte address (RBA) of the last log record that was read before end-of-log was encountered. Follow instructions for the accompanying recovery log manager error. If you cannot correct the error, contact your IBM support center.

00D96031

The restart FRR invoked queue manager termination, because an error occurred while attempting to read the log backward MODE(DIRECT). It is accompanied by a recovery log manager error X'5C6' with a reason code describing the specific error.

Each time a portion of the log is skipped, a 'read direct' is used to validate the beginning RBA of the portion that is read.

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Run the print log map utility to print the contents of both BSDSs. Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. Follow instructions for the accompanying recovery log manager error. See the accompanying error reason code.

Restart the queue manager.

00D96032

During restart, the end of the log was read before all the expected log ranges had been processed. The error is accompanied by an abnormal termination with the same reason code (X'00D96032').

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC. An SVC dump is requested. The queue manager is terminated with message CSQV086E.

System programmer response

Run the print log map utility to print the contents of both BSDSs. See Finding out what the BSDS contains for more information.

Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. At the time of the error, registers 2 and 3 contain the relative byte address (RBA) of the last log record that was read before end-of-log was encountered. Determine where the log went.

00D97001

The agent concerned was canceled while waiting for the RECOVER-UR service to complete.

System action

The RECOVER-UR function is completed. Abnormal termination of the requesting agent occurs. Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested.

The condition that caused cancellation of the agent was installation initiated (for example, a *forced* termination of the queue manager).

00D97011

The queue manager was terminated during RECOVER-UR because an unrecoverable error was detected during RECOVER-UR (CSQRRUPR) recovery processing.

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested. queue manager terminates with message CSQV086E and return code X'00D97011'.

System programmer response

Determine the original error. If the error is log-related, see Active log problems before restarting the queue manager.

00D97012

The RECOVER-UR request servicer FRR invoked queue manager termination, because an unrecoverable error was detected while attempting to recover a unit of recovery.

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error and follow the instructions associated with it.

Restart the queue manager.

00D97021

The RECOVER-UR FRR invoked queue manager termination, because an error occurred while attempting to read the log MODE(DIRECT) during forward processing. It is accompanied by a recovery log manager error X'5C6' with a reason code describing the specific error.

Each time a portion of the log is skipped, a 'read direct' is used to validate the beginning RBA of the portion that is read.

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Run the print log map utility to print the contents of both BSDSs. Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. Follow instructions for the accompanying recovery log manager error. See the accompanying error reason code.

Restart the queue manager.

00D97022

The RECOVER-UR invoked abnormal termination because end-of-log was reached before all ranges had been processed for forward recovery. This error is accompanied by an abnormal termination with the same reason code (X'00D97022').

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Run the print log map utility to print the contents of both BSDSs. Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. At the time of the error, registers 2 and 3 contain the relative byte address (RBA) of the last log record that was read before end-of-log was encountered. Follow instructions for the accompanying recovery log manager error.

Restart the queue manager.

00D97031

The RECOVER-UR FRR invoked queue manager termination, because an error occurred during an attempt to read the log MODE(DIRECT) while reading the log backward. It is accompanied by a recovery log manager error X'5C6' with a reason code describing the specific error.

Each time a portion of the log is skipped, a 'read direct' is used to validate the begin-scope RBA of the portion that is read.

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Run the print log map utility to print the contents of both BSDSs. Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. See the accompanying error reason code. Follow instructions for the accompanying recovery log manager error.

Restart the queue manager.

00D97032

The RECOVER-UR invoked abnormal termination because end-of-log was reached before all ranges had been processed for backward recovery. This error is accompanied by an abnormal termination with the same reason code (X'00D97032').

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Run the print log map utility to print the contents of both BSDSs. Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. At the time of the error, registers 2 and 3 contain the relative byte address (RBA) of the last log record that was read before end-of-log was encountered. Follow instructions for the accompanying recovery log manager error.

Restart the queue manager.

00D98001

The recovery manager's common FRR invoked queue manager termination, because an unrecoverable error was detected during indoubt-UR processing.

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error and follow the instructions associated with it.

Restart the queue manager.

00D98011

The FRR for the resolved-indoubt-UR request servicer invoked queue manager termination, because an unrecoverable error was detected processing a request.

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. See the accompanying error reason code.

Restart the queue manager.

00D98021

The resolved indoubt FRR invoked queue manager termination because of an error while attempting to read the log MODE(DIRECT) during forward recovery. It is accompanied by a recovery log manager error X'5C6' with a reason code describing the specific error.

Each time a portion of the log is skipped, a 'read direct' is used to validate the beginning RBA of the portion that is read.

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Run the print log map utility to print the contents of both BSDSs. Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. See the accompanying error reason code. Follow instructions for the accompanying recovery log manager error.

Restart the queue manager.

00D98022

Resolved indoubt invoked abnormal termination when end-of-log was reached before all ranges had been processed for forward recovery. This error is accompanied by abnormal termination with the same reason code (X'00D98022').

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Run the print log map utility to print the contents of both BSDSs. Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. At the time of the error, registers 2 and 3 contain the relative byte address (RBA) of the last log record that was read before end-of-log was encountered. Follow instructions for the accompanying recovery log manager error.

Restart the queue manager.

00D98031

The resolved indoubt FRR invoked queue manager termination, because an error occurred during an attempt to read the log MODE(DIRECT) while reading the log backward. It is accompanied by a recovery log manager error X'5C6' with a reason code describing the specific error.

Each time a portion of the log is skipped, a 'read direct' is used to validate the begin-scope RBA of the portion that is read.

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Run the print log map utility to print the contents of both BSDSs. Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. See the accompanying error reason code. Follow instructions for the accompanying recovery log manager error.

Restart the queue manager.

00D98032

The resolved indoubt FRR invoked abnormal termination when end-of-log was reached before all ranges had been processed for backward recovery. This error is accompanied by abnormal termination with the same reason code (X'00D98032').

This is a queue manager termination reason code.

System action

Standard diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before queue manager termination is initiated.

System programmer response

Run the print log map utility to print the contents of both BSDSs. Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. At the time of the error, registers 2 and 3 contain the relative byte address (RBA) of the last log record that was read before end-of-log was encountered. Follow instructions for the accompanying recovery log manager error.

Restart the queue manager.

00D99001

The checkpoint RBA in the conditional restart control record, which is deduced from the end RBA or LRSN value that was specified, is not available. This is probably because the log data sets available for use at restart do not include that end RBA or LRSN.

System action

The queue manager terminates.

System programmer response

See message CSQR015E.

00D99104

Queue manager restart detected that backward migration of messages was required. For backward migration to be possible, there must be no uncommitted units of recovery present at the end of restart. During restart, however, a decision was made not to force commit a detected indoubt unit of work. The decision is based on the response to message CSQR021D, or by the presence of a service parm which prevents the CSQR021D WTOR from being issued.

System action

Queue manager restart is terminated.

System programmer response

Either restart the queue manager with a higher level of code so that backward migration is not required, or, allow indoubt units of work to be force committed during restart.

00D9AAAA

This reason code identifies additional data stored in the system diagnostic work area (SDWA) variable recording area (VRA) following an error during backout-UR.

System action

Data is stored in the field indicated by VRA key 38 following the EBCDIC string 'RMC-COMMIT/ BACKOUT'. This information is useful for IBM service personnel.

System programmer response

Quote this code, and the contents of the VRA field indicated by key 38 when contacting your IBM support center.

00D9BBBB

This reason code identifies additional data stored in the system diagnostic work area (SDWA) variable recording area (VRA) following an error during begin-UR.

System action

Data is stored in the field indicated by VRA key 38. This information is useful for IBM service personnel.

System programmer response

Quote this code, and the contents of the VRA field indicated by key 38 when contacting your IBM support center.

00D9CCCC

This reason code identifies additional data stored in the system diagnostic work area (SDWA) variable recording area (VRA) following an error during commit-UR.

System action

Data is stored in the field indicated by VRA key 38 following the EBCDIC string 'RMC-COMMIT/ABORT'. This information is useful for IBM service personnel.

System programmer response

Quote this code, and the contents of the VRA field indicated by key 38 when contacting your IBM support center.

00D9EEEE

This reason code identifies additional data stored in the system diagnostic work area (SDWA) variable recording area (VRA) following an error during end-UR.

System action

Data is stored in the field indicated by VRA key 38. This information is useful for IBM service personnel.

System programmer response

Quote this code, and the contents of the VRA field indicated by key 38 when contacting your IBM support center.

Storage manager codes (X'E2')

If a storage manager reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- A description of the actions that led to the error or, if applicable, either a listing of the application program or the input string to a utility program that was being run at the time of the error.
- The console output for the period leading up to the error.
- The queue manager job log.
- The system dump resulting from the error.
- A printout of SYS1.LOGREC.
- If you are using CICS, the CICS transaction dump output.
- Appropriate WebSphere MQ, z/OS, Db2, CICS, and IMS service levels.

00E20001, 00E20002

An internal error has occurred.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Collect the items listed in <u>"Diagnostics" on page 1046</u> and contact your IBM support center.

00E20003

A request for storage indicated that sufficient storage in the private area was not available.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Increase region size.

If you are unable to solve the problem by increasing the region size, collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E20004

A request for storage indicated that sufficient storage was not availab le because of pool size limits.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Increase pool sizes.

If you are unable to solve the problem by increasing the pool sizes, collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E20005, 00E20006, 00E20007, 00E20008, 00E20009

An internal error has occurred.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E2000A

A request to get storage was unsuccessful.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Increase the region size.

If increasing the region size does not help you solve the problem, collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E2000B

A request to get storage was unsuccessful.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Increase region size.

If increasing the region size does not help you solve the problem, collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E2000C

A request for storage indicated that sufficient storage was not available because of pool size limits.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Increase pool sizes.

If increasing the pool size does not help you solve the problem, collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E2000D, 00E2000E

An internal error has occurred.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

The most likely cause of the problem is a storage overlay or an invalid storage request from a queue manager component. A product other than MQ could cause the storage overlay problem.

Collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E2000F, 00E20010, 00E20011, 00E20012

An internal error has occurred.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E20013

A request to get storage was unsuccessful.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Increase region size.

If increasing the region size does not help you to solve the problem, collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E20014

An internal error has occurred.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E20015

A request for storage indicated that 8K bytes of private area storage in subpool 229 was not available.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

There is probably a shortage of private area storage in the address space in which the problem occurred. Increase maximum private storage.

If increasing the maximum private storage does not solve the problem, collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E20016

A request for storage indicated that sufficient storage in subpool 229 was not available.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Increase region size.

If increasing the region size does not help you resolve the problem, collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E20017, 00E20018, 00E20019

An internal error has occurred.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E2001A

An error has occurred with the z/OS ESTAE.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested. Register 15 contains the return code from the z/OS ESTAE.

System programmer response

Collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E2001B

The 'setlock obtain' function issued a nonzero return code.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E2001D, 00E2001E

An internal error has occurred.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E2001F

There was insufficient storage in the common service area (CSA) to satisfy a request for storage.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Run the monitoring tools available at your installation to review your CSA usage.

Increase the CSA size.

If increasing the CSA size does not solve the problem, collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E20020

There was insufficient storage in the private area to satisfy a request for storage.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Increase region size.

If increasing the region size does not solve the problem, collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E20021

There was insufficient storage in the common service area (CSA) to satisfy a request for storage.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Run the monitoring tools available at your installation to review your CSA usage.

Increase the CSA size.

If increasing the size of the CSA does not solve the problem, collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E20022

There was insufficient storage in the common service area (CSA) to satisfy a request for storage.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Run the monitoring tools available at your installation to review your CSA usage.

Increase the CSA size.

If increasing the size of the CSA does not solve the problem, collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E20023

There was insufficient storage in the private area was to satisfy a request for storage.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Increase region size.

If increasing the region size does not solve the problem, collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E20024

There was insufficient storage in the common service area (CSA) to satisfy a request for storage.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Run the monitoring tools available at your installation to review your CSA usage.

Increase the CSA size.

If increasing the CSA size does not solve the problem, collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E20025

There was insufficient storage in the common service area (CSA) to satisfy a request for storage.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Run the monitoring tools available at your installation to review your CSA usage.

Increase the CSA size.

If increasing the CSA size does not solve the problem, collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E20026

A request for storage indicated that 4K bytes of private area storage in subpool 229 was not available.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

There is probably a shortage of private area storage in the address space in which the problem occurred. Increase region size.

If increasing the region size does not solve the problem, collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E20027, 00E20028, 00E20029, 00E2002A

An internal error has occurred.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E2002B

This reason code code is used to force percolation when an error is encountered while in storage manager code and the storage manager has been called recursively.

System programmer response

Refer to the originating error code.

00E20042, 00E20043, 00E20044, 00E20045

An internal error has occurred.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E20046

There was insufficient storage in a 64-bit storage pool to satisfy a request.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Increase the MEMLIM for the queue manager and restart it. If the problem persists collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

00E20047

An internal error has occurred.

System action

The invoker is abnormally terminated. Diagnostic information is recorded in SYS1.LOGREC, and a dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1046 and contact your IBM support center.

Timer services codes (X'E3')

00E30001

An internal error has occurred.

System programmer response

Collect the system dump, any trace information gathered and the related SYS1.LOGREC entries, and contact your IBM support center.

00E30002

This reason code was issued because an attempt to call the z/OS macro STIMERM was unsuccessful. The return code from STIMERM is in register 9.

System programmer response

Analyze the system dump, correct the problem from the information contained in the dump, and restart the queue manager.

For information about the STIMERM macro, see the *MVS Programming: Assembler Services Reference* manual.

Agent services codes (X'E5')

If an agent services reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- A description of the actions that led to the error or, if applicable, either a listing of the application program or the input string to a utility program that was being run at the time of the error.
- The console output for the period leading up to the error.
- The queue manager job log.
- The system dump resulting from the error.
- A printout of SYS1.LOGREC.
- If you are using CICS, the CICS transaction dump output.
- Appropriate WebSphere MQ, z/OS, Db2, CICS, and IMS service levels.

00E50001, 00E50002

An internal error has occurred.

System action

The requesting execution unit is ended abnormally.

System programmer response

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50004, 00E50005, 00E50006, 00E50007, 00E50008, 00E50009, 00E50012

An internal error has occurred.

System action

The requesting execution unit is ended abnormally. A record is written to SYS1.LOGREC and an SVC dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50013

An MQ execution unit has been ended abnormally.

System action

The agent CANCEL processing continues.

System programmer response

This reason code might be issued as a result of any abnormal termination of a connected task, or a STOP QMGR MODE(FORCE) command. No further action is required in such cases.

If the error results in the termination of the queue manager, and you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50014

An internal error has occurred.

System action

An entry is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50015

An internal error has occurred.

System action

The operation is retried once. If this is not successful, the queue manager is terminated with reason code X'00E50054'.

A SYS1.LOGREC entry and an SVC dump are taken.

System programmer response

Restart the queue manager if necessary.

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50029

The agent services function which establishes the MQ tasking structure ends abnormally with this reason code following the detection of a load module which was loaded without the 31-bit addressing capability. This is preceded by message CSQV029E.

System action

Queue manager start-up is terminated.

System programmer response

See message CSQV029E.

00E50030, 00E50031, 00E50032, 00E50035, 00E50036

An internal error has occurred.

System action

The requesting execution unit is ended abnormally. The error is recorded on SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50040

Queue manager termination was invoked following an unrecoverable error while processing a terminate allied agent request at the *thread*, or *identify* level.

System action

The queue manager is terminated.

System programmer response

Restart the queue manager.

Scan the system log and the contents of SYS1.LOGREC for MQ errors occurring immediately before the system termination message CSQV086E. Follow the problem determination procedures for the

specific errors. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50041

Queue manager termination was invoked following an unrecoverable error while processing a terminate agent request.

System action

The queue manager is terminated.

System programmer response

Restart the queue manager.

Scan the system log and the contents of SYS1.LOGREC for MQ errors occurring immediately before the system termination message CSQV086E. Follow the problem determination procedures for the specific errors. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50042, 00E50044

An internal error has occurred.

System action

The current execution unit is ended abnormally. A record is written to SYS1.LOGREC and an SVC dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50045

Queue manager termination was invoked following an unrecoverable error while processing a create allied agent service request at the *thread*, or *identify* level.

System action

The queue manager is terminated.

System programmer response

Restart the queue manager.

Scan the system log and the contents of SYS1.LOGREC for MQ errors occurring immediately before the termination message CSQV086E. Follow the problem determination procedures for the specific errors. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50046

Queue manager termination was invoked following an unrecoverable error while processing a create agent structure request.

System action

The queue manager is terminated.

System programmer response

Restart the queue manager.

Scan the system log and the contents of SYS1.LOGREC for MQ errors occurring immediately before the termination message CSQV086E. Follow the problem determination procedures for the specific errors. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50047

An internal error has occurred.

System action

The queue manager is terminated.

System programmer response

Restart the queue manager.

Scan the system log and the contents of SYS1.LOGREC for MQ errors occurring immediately before the termination message CSQV086E. Follow the problem determination procedures for the specific errors. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50050

An internal error has occurred.

System action

The requesting execution unit is ended abnormally.

An X'00E50054' recovery reason code is placed in the SDWACOMU field of the SDWA, indicating that synchronization services was responsible for queue manager termination.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50051

An internal error has occurred.

System action

The queue manager is ended abnormally with a X'5C6' completion code and this reason code.

An X'00E50054' recovery reason code is placed in the SDWACOMU field of the SDWA indicating that synchronization services was responsible for queue manager termination.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50052

The z/OS cross-memory lock (CML) could not be released.

System action

The queue manager is ended abnormally with a X'5C6' completion code and this reason code.

An X'00E50054' recovery reason code is placed in the SDWACOMU field of the SDWA indicating that synchronization services was responsible for queue manager termination.

A record is written to SYS1.LOGREC and an SVC dump is produced.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50054

The queue manager is ended abnormally by the synchronization services recovery routine when an unrecoverable error is encountered during recovery processing for the SUSPEND, CANCEL, RESUME, or SRB REDISPATCH functions. This is a queue manager termination reason code.

One of the following conditions was encountered during recovery processing for the requested function:

- Unable to complete resume processing for an SRB mode execution unit that was suspended at time of error
- Errors were encountered during primary recovery processing causing entry to the secondary recovery routine
- Recovery initiated retry to mainline suspend/resume code caused retry recursion entry into the functional recovery routine
- Unable to obtain or release the cross-memory lock (CML) of the queue manager address space either during mainline processing or during functional recovery processing (for example, reason code X'00E50052')

System action

The queue manager is terminated. This reason code is associated with a X'6C6' completion code indicating that synchronization services was responsible for termination.

System programmer response

Restart the queue manager.

Scan the system log and the contents of SYS1.LOGREC for MQ errors occurring immediately before the system termination message CSQV086E. Follow the problem determination procedures for the specific errors. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50055

The synchronization services functional recovery routine was unable to successfully complete resume processing for a suspended TCB mode execution unit. The resume processing was requested by the CANCEL or RESUME functions.

System action

Because the suspended TCB mode execution unit must not be permitted to remain in a suspended state, the recovery routine invokes the z/OS CALLRTM (TYPE=ABTERM) service to end the execution unit abnormally with a X'6C6' completion code. Depending upon which execution unit was terminated, the queue manager might be ended abnormally.

System programmer response

Restart the queue manager if necessary.

Scan the system log and the contents of SYS1.LOGREC for MQ errors occurring immediately before the end of the execution unit. Follow the problem determination procedures for the specific errors. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50059

An internal error has occurred.

System action

If the module detecting the error is CSQVSDC0, it will be retried once. If validation is unsuccessful, the queue manager is terminated abnormally with a X'00E50054' reason code.

A SYS1.LOGREC entry and an SVC dump are requested.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50062

An internal error has occurred.

System action

The allied task is ended abnormally.

System programmer response

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50063

An internal error has occurred.

System action

The task is ended abnormally.

System programmer response

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50065

An internal error has occurred.

System action

The execution unit is ended abnormally.

System programmer response

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50069

This reason code is issued during recovery processing for the suspend function when executing in SRB mode under the recovery routine established by the z/OS SRBSTAT(SAVE) service. Because the recovery routine established by this service is the only routine in the FRR stack at the time of error, normal RTM percolation to the invoking resource manager recovery routine is not possible.

After recovery processing for the initial error has successfully completed, the RTM environment is exited through retry to a routine that restores the original FRR stack. This routine terminates abnormally with completion code X'5C6' and this reason code. This causes entry into the original recovery routine established during suspend initialization.

System action

After this is intercepted by the original suspend recovery routine, a SYS1.LOGREC entry and SVC dump are requested to document the original error. The original recovery reason code is placed in the SDWACOMU field of the SDWA indicating the actions performed during recovery processing of the initial error. Control is then returned to the invoking resource manager's recovery routine through RTM percolation.

System programmer response

Because this is used only to permit the transfer of the initial recovery reason code to the invoking resource manager's recovery routine, no further recovery actions are required for this reason code. Diagnostic information for the initial error encountered can be obtained through the SYS1.LOGREC and SVC dump materials provided.

00E50070

To enable an internal task to terminate itself, the task has ended abnormally. This is not necessarily an error.

System action

The task is ended abnormally.

If the service task is ended abnormally with a completion code of X'6C6', no SVC dump is taken.

System programmer response

The error should be ignored if it happens in isolation, however, if it occurs in conjunction with other problems, these problems should be resolved.

If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50071

An internal error has occurred.

System action

The internal task is ended abnormally.

System programmer response

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50072

An internal error has occurred.

System action

The queue manager is ended abnormally.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50073

An internal error has occurred.

System action

The current execution unit is ended abnormally. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50074

This reason code is issued in response to a nonzero return code from ATTACH during an attempt to create an internal task.

System action

The ATTACH is retried. A record is written to SYS1.LOGREC, and an SVC dump is requested. If a problem occurs again, the queue manager is terminated.

System programmer response

Restart the queue manager if necessary.

Register 2, in the SDWA, contains the return code from the ATTACH request. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50075, 00E50076, 00E50077, 00E50078

An internal error has occurred.

System action

The requesting execution unit is terminated. The queue manager might also be terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager if necessary.

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50079

An internal error has occurred. This can occur if the allied address space is undergoing termination.

System action

The requesting execution unit is ended abnormally. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50080, 00E50081

An internal error has occurred.

System action

An SVC dump is requested specifying a completion code of X'5C6' and this reason code. No record is written to SYS1.LOGREC. Execution continues.

System programmer response

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50094, 00E50095, 00E50096, 00E50097, 00E50100

An internal error has occurred.

System action

The requesting recovery routine is ended abnormally. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50101

MQ was unable to establish an ESTAE.

System action

The error is passed on to a subsystem support subcomponent (SSS) ESTAE. Probably, the queue manager is ended abnormally. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

The inability to establish an ESTAE is normally due to insufficient free space in the local system queue area (LSQA) for an ESTAE control block (SCB). If necessary, increase the size of the queue manager address space.

Restart the queue manager.

Review the associated SVC dump for usage and free areas in the LSQA subpools belonging to the system services address space. If you are unable to solve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50102

An unrecoverable error occurred while canceling all active agents during processing of the STOP QMGR MODE(FORCE) command. This is a queue manager termination reason code.

System action

The queue manager is ended abnormally. A record is written to SYS1.LOGREC.

System programmer response

Restart the queue manager.

You might find the items listed in "Diagnostics" on page 1053 useful in resolving the problem. Review the SYS1.LOGREC entries for errors immediately preceding queue manager termination.

00E50500

A z/OS LOCAL or CML lock could not be obtained during queue manager abnormal termination processing.

System action

The execution unit is ended abnormally. The error is recorded on SYS1.LOGREC, and abnormal queue manager termination is completed under a different execution unit if possible.

System programmer response

Restart the queue manager if necessary.

You might find the items listed in "Diagnostics" on page 1053 useful in resolving the problem.

00E50501

A z/OS LOCAL or CML lock could not be released during queue manager abnormal termination processing.

System action

The execution unit is ended abnormally. The error is recorded on SYS1.LOGREC. Queue manager termination is completed under a different execution unit if possible.

System programmer response

Restart the queue manager.

You might find the items listed in "Diagnostics" on page 1053 useful in resolving the problem.

00E50502

A z/OS LOCAL lock could not be obtained during queue manager abnormal termination processing.

System action

The execution unit is ended abnormally. The error is recorded on SYS1.LOGREC, and abnormal queue manager termination is completed under a different execution unit if possible.

System programmer response

Restart the queue manager.

You might find the items listed in "Diagnostics" on page 1053 useful in resolving the problem.

00E50503

A z/OS LOCAL lock could not be released during queue manager abnormal termination processing.

System action

The execution unit is ended abnormally. The error is recorded on SYS1.LOGREC, and abnormal queue manager termination is completed under a different execution unit if possible.

System programmer response

Restart the queue manager.

You might find the items listed in "Diagnostics" on page 1053 useful in resolving the problem.

00E50504

This reason code is used to define the format of the information recorded in the SDWA variable recording area (VRA) by the queue manager termination processor. The code identifies additional information provided in the VRA for errors encountered in module CSQVATRM.

System action

Recording of the error encountered during queue manager termination continues.

System programmer response

None.

00E50505

This reason code is used to define the format of the information recorded in the SDWA variable recording area (VRA). The code identifies additional information provided in the VRA for errors encountered in module CSQVATR4.

System action

Recording of the error encountered during queue manager termination continues.

System programmer response

None.

00E50701

A problem occurred during Commit Phase-1. This is used to effect backout, deallocation, and end-UR processing.

System action

The queue manager is ended abnormally. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50702

An error occurred while processing in SRB mode which could not be recovered.

SRB mode processing is often used internally by the queue manager to ensure data integrity and consistency of internal state. Where recovery is not possible, the queue manager is terminated with this reason code.

Most occurrences are due to internal errors which should be reported to IBM service for further investigation.

The error is also known to occur where log data sets have been reformatted, without reformatting the pagesets (so they still contain active data). This situation can be resolved by user action.

System action

The queue manager is ended abnormally with this reason code. An SVC dump of the original error was requested by the recovery routine for CSQVEUS2 and a record written to SYS1.LOGREC.

System programmer response

Restart the queue manager.

Scan the SYS1.LOGREC entries looking for one or more MQ errors immediately prior to the queue manager termination. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50703

This queue manager termination reason code is used following an error while attempting to resume a suspended execution unit. The successful completion of resume processing was 'indoubt'.

System action

The queue manager is ended abnormally. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

You might find the items listed in "Diagnostics" on page 1053 useful in resolving the problem.

00E50704

An internal error has occurred.

System action

The queue manager is terminated with this reason code. Additionally, if no SDWA was provided to the recovery routine, a dump is requested.

System programmer response

Restart the queue manager.

Scan the SYS1.LOGREC entries looking for one or more MQ errors immediately prior to the queue manager termination. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50705

An internal error has occurred.

System action

The queue manager is ended abnormally.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50706

An internal error has occurred.

System action

The queue manager is terminated with this reason code. Additionally, if no SDWA was provided to the recovery routine, a dump is requested. A record is written to SYS1.LOGREC.

System programmer response

Restart the queue manager.

Scan the SYS1.LOGREC entries looking for one or more MQ errors immediately prior to the queue manager termination. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50707

An ESTAE could not be established.

System action

The queue manager is ended abnormally. A record is written to SYS1.LOGREC.

System programmer response

Review the usage and the free areas in the LSQA subpool of the queue manager address space. If necessary, increase the private area size of the address space.

Restart the queue manager.

If queue manager termination was requested by module CSQVRCT, a standard SVC dump was requested. If insufficient private storage is the cause of the problem, other MQ resource managers might have ended abnormally.

If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50708

An error occurred while connecting an allied agent to the queue manager address space. The connection must complete so that the allied agent can be terminated.

System action

The queue manager is terminated with this reason code. An SVC dump of the original error was requested and a record entered into SYS1.LOGREC.

System programmer response

Restart the queue manager.

Scan the SYS1.LOGREC entries looking for one or more MQ errors immediately prior to the queue manager termination.

00E50709

An internal error has occurred.

System action

The queue manager is ended abnormally.

System programmer response

Restart the queue manager.

Scan the SYS1.LOGREC entries for one or more MQ errors occurring immediately prior to the queue manager termination. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50710

An internal error has occurred.

System action

The queue manager is terminated with this reason code. An SVC dump of the original error was requested and a record entered into SYS1.LOGREC.

System programmer response

Restart the queue manager.

Scan the SYS1.LOGREC entries looking for one or more MQ errors immediately prior to the queue manager termination. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50711

An internal error has occurred.

System action

The queue manager is terminated with this reason code. An SVC dump of the original error was requested and a record entered into SYS1.LOGREC.

System programmer response

Restart the queue manager.

Scan the SYS1.LOGREC entries looking for one or more MQ errors immediately prior to the queue manager termination. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50712

An error occurred in a latch manager function attempting to terminate the holder of an MQ latch. The holder's task has been set nondispatchable by z/OS and a CALLRTM to terminate this task was unsuccessful.

System action

The queue manager is terminated with this reason code. An SVC dump of the error is requested and a record entered into SYS1.LOGREC. Register 3 at time of error contains the latch-holder's TCB address in the home address space and register 4 contains the return code from CALLRTM.

System programmer response

Restart the queue manager.

You might find the items listed in "Diagnostics" on page 1053 useful in resolving the problem. Scan the SYS1.LOGREC entries for one or more MQ errors immediately prior to the queue manager termination.

00E50713

An internal error has occurred.

System action

The queue manager is ended abnormally. An SVC dump is requested by the queue manager termination processor and a record is written to SYS1.LOGREC.

System programmer response

Restart the queue manager.

Scan the SYS1.LOGREC entries for one or more MQ errors occurring immediately prior to the queue manager termination. It might be necessary to analyze the SVC dump requested. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50715

Queue manager termination was requested following an unrecoverable error in an SRB mode execution unit.

System action

The SRB-related task was ended abnormally as a result of SRB to TCB percolation. The queue manager is ended abnormally.

System programmer response

Restart the queue manager.

You might find the items listed in "Diagnostics" on page 1053 useful in resolving the problem. Scan the SYS1.LOGREC entries for one or more MQ errors occurring immediately prior to the queue manager termination.

00E50717

An internal error has occurred.

System action

The queue manager is ended abnormally.

System programmer response

Restart the queue manager.

Scan the SYS1.LOGREC entries for one or more MQ errors occurring immediately prior to the queue manager termination. If an error preceded the queue manager termination request, diagnostic information can be obtained through SYS1.LOGREC and SVC dump materials. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50719

An internal error has occurred.

System action

The queue manager is ended abnormally.

System programmer response

Restart the queue manager.

Scan the SYS1.LOGREC entries for one or more MQ errors occurring immediately prior to the queue manager termination. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1053 and contact your IBM support center.

00E50725

Queue manager termination was requested because of an unrecovered error in a scheduled SRB-mode execution unit.

System action

The SRB-related task was ended abnormally, due to SRB to TCB percolation. The queue manager is ended abnormally.

System programmer response

Restart the queue manager.

You might find the items listed in "Diagnostics" on page 1053 useful in resolving the problem. Scan the SYS1.LOGREC entries for one or more MQ errors occurring immediately prior to the queue manager termination. If necessary, analyze the SVC dump requested by queue manager termination.

00E50727

A secondary error occurred during agent services functional recovery processing. This is a queue manager termination reason code.

System action

The queue manager is ended abnormally.

System programmer response

Restart the queue manager.

You might find the items listed in "Diagnostics" on page 1053 useful in resolving the problem. Scan the SYS1.LOGREC entries for one or more MQ errors occurring immediately prior to the queue manager termination.

Instrumentation facilities codes (X'E6')

If an instrumentation facilities reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- The console output for the period leading up to the error.
- The system dump resulting from the error.
- A printout of SYS1.LOGREC.
- Appropriate WebSphere MQ, z/OS, Db2, CICS, and IMS service levels.

00E60008

> An internal error has occurred.

System action

> The function being traced is ended abnormally. The queue manager remains operational.

System programmer response

> Collect the items listed in "Diagnostics" on page 1067 and contact your IBM support center.

00E60017

> This code is an internal code used by the dump formatter.

System action

> The request is ended abnormally.

System programmer response

> Collect the items listed in "Diagnostics" on page 1067 and contact your IBM support center.

00E60085, 00E60086, 00E60087, 00E60088, 00E60089

> An internal error has occurred.

System action

> The request is end abnormally.

System programmer response

> Collect the items listed in "Diagnostics" on page 1067 and contact your IBM support center.

00E60100 through 00E60199

> The reason codes X'00E60100' through X'00E60199' are used by the instrumentation facility component (IFC) when a trace event occurs for which IBM service personnel have requested a dump using the IFC selective dump service aid.

System action

> The agent might be retried or terminated, depending upon the serviceability dump request.

System programmer response

> The reason code is issued on the occurrence of a specified trace event. An SVC dump is taken to the SYS1.DUMPxx data set. Problem determination methods depend on the condition that IBM service personnel are attempting to trap.

00E60701

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1067 and contact your IBM support center.

00E60702, 00E60703

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1067 and contact your IBM support center.

Distributed queuing codes (X'E7')

If a distributed queuing reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- A description of the actions that led to the error or, if applicable, either a listing of the application program or the input string to a utility program that was being run at the time of the error.
- The channel definitions being used
- If the error affected a message channel agent, a listing of any user channel exit programs used by the message channel agent.
- The console output for the period leading up to the error.
- The queue manager job log.
- The channel initiator job log.
- The system dump resulting from the error.
- Appropriate WebSphere MQ, z/OS, Db2, CICS, and IMS service levels.

00E70001

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E70002

No adapter subtasks are active. They have failed many times and so have not been restarted.

System action

The channel initiator terminates.

System programmer response

Investigate the adapter subtask failure problems, as reported in the messages associated with each failure.

00E70003

No dispatchers are active. Either all the dispatchers failed to start, or all the dispatchers have failed many times and so have not been restarted.

System action

The channel initiator terminates.

System programmer response

Investigate the dispatcher failure problems, as reported in the messages associated with each failure.

00E70004

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E70007

An attempt by an adapter subtask to obtain some storage failed.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Increase the size of the channel initiator address space, or reduce the number of dispatchers, adapter subtasks, SSL server subtasks, and active channels being used.

00E70008, 00E70009, 00E7000A

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E70011

The channel initiator was unable to load the module CSQXBENT.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Check the console for messages indicating why CSQXBENT was not loaded. Ensure that the module is in the required library, and that it is referenced correctly.

The channel initiator attempts to load this module from the library data sets under the STEPLIB DD statement of its started task JCL procedure xxxxCHIN.

00E70013

Some adapter subtasks were requested, but none could be attached.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Investigate the adapter subtask attach problems, as reported in the messages associated with each failure. If you cannot resolve the problems, collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E70015

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E7001D

During startup, the channel initiator was unable obtain some storage below 16M.

System action

The channel initiator ends.

System programmer response

Investigate the cause of the problem.

00E7001E, 00E7001F

An internal error has occurred.

System action

The channel initiator terminates with completion code X'5C6'.

System programmer response

Restart the channel initiator.

Collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E70020

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Check the console for preceding error messages. If the problem cannot be resolved, collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E70021, 00E70022, 00E70023, 00E70024, 00E70025

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E70031

An internal error has occurred. A lock is currently held by a task that has terminated.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Determine why the terminated task did not free the lock. This might be due to a previous error. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E70032

An internal error has occurred. An attempt to update information held in the coupling facility failed.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1068, together with details of the queue-sharing group and of the queue managers active, as well as the queue managers defined to the queue-sharing group at the time. This information can be obtained by entering the following z/OS commands:

```
 D XCF,GRP
```

to display a list of all queue-sharing groups in the coupling facility

```
 D XCF,GRP,qsg-name,ALL
```

to display status about the queue managers defined to the queue-sharing group.

Contact your IBM support center.

00E70033

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E70052

No SSL server subtasks are active. They have failed many times and so have not been restarted.

System action

The channel initiator terminates.

System programmer response

Investigate the SSL server subtask failure problems, as reported in the messages associated with each failure.

00E70053

Some SSL server subtasks were requested, but none could be attached.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Investigate the SSL server subtask attach problems, as reported in the messages associated with each failure. If you cannot resolve the problems, collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E7010C

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E7010E

The dispatcher detected an inconsistency in the linkage stack.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

The most likely cause is incorrect use of the linkage stack by a user exit; exits must issue any MQ API calls and return to the caller at the same linkage stack level as they were entered. If exits are not being used, or if they do not use the linkage stack, collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E7010F, 00E7014A

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E7014C

An internal error has occurred. This can be caused by the channel initiator failing to stop when running against a previous instance of the queue manager and attempting to connect to a later instance of the queue manager.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1068, terminate then restart the channel initiator and contact your IBM support center.

00E7014D

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E7014F

An internal error has occurred. This is normally as a result of some previous error.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Check the console for preceding error messages reporting a previous error, and take the appropriate action for resolving that error. If there is no previous error, collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E7015A, 00E70214, 00E70216, 00E70226, 00E70231, 00E70232, 00E70233, 00E70501, 00E70522, 00E70543, 00E70546, 00E70553

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E70054, 00E70055, 00E70056

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E70057, 00E70058

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

00E70708

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1068 and contact your IBM support center.

Initialization procedure and general services codes (X'E8')

If an initialization procedure reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- The console output for the period leading up to the error.
- The queue manager job log.
- The system dump resulting from the error.
- A printout of SYS1.LOGREC.
- The system parameter load module.
- The initialization procedure.
- The started task JCL procedure for this queue manager.

- Appropriate WebSphere MQ, z/OS, Db2, CICS, and IMS service levels.

00E80001

An internal error has occurred.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E80002

The queue manager address space was not started correctly or an error occurred during z/OS IEFSSREQ processing.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested. Register 9 contains the address of an 8-byte field that contains the following diagnostic information:

- Bytes 1 through 4 - subsystem name
- Bytes 5 through 8 - contents of register 15 that contains the return code set by the z/OS IEFSSREQ macro

System programmer response

You might find the items listed in "Diagnostics" on page 1073 useful in resolving the problem.

00E80003, 00E80004, 00E80005, 00E80006

An internal error has occurred.

System action

A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E8000E

An ESTAE could not be established for the queue manager address space control task.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested. Register 9 contains the address of a 4-byte field that contains the ESTAE macro return code.

System programmer response

Restart the queue manager.

You might find the items listed in "Diagnostics" on page 1073 useful in resolving the problem.

00E8000F

Invalid startup parameters were specified. This was probably caused by an attempt to start the queue manager by som means other than a START QMGR command.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E80011

The address space could not be made non-swappable.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

You might find the items listed in "Diagnostics" on page 1073 useful in resolving the problem.

00E80012

An internal error has occurred.

System programmer response

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E80013, 00E8001F, 00E8002F

An internal error has occurred.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E80031

An unsupported input parameter was detected for allied address space initialization.

System action

The caller's task is ended abnormally. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E80032

An unsupported input parameter was detected for allied address space termination.

System action

The caller's task is ended abnormally. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E80033

This reason code accompanies a X'6C6' completion code. This module detected that the queue manager was terminating.

System action

The caller's task is ended abnormally with code X'6C6'. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

You might find the items listed in "Diagnostics" on page 1073 useful in resolving the problem.

00E8003C

An internal error has occurred.

System action

The caller's task is ended abnormally. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E8003D

An internal error has occurred.

System action

Abnormal termination of the queue manager is initiated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E8003E

An ESTAE could not be established in an address space about to be initialized as an MQ allied address space.

System action

The caller's task is ended abnormally. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E8003F

An internal error has occurred.

System action

The caller's task is ended abnormally. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E80041

An internal error has occurred.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E80042, 00E8004F

An internal error has occurred.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E80051

An error was detected in the command that was used to start the queue manager.

System action

The queue manager is terminated.

System programmer response

Reenter the command if it was entered incorrectly.

If you are unable to resolve the problem, contact your IBM support center.

00E80052, 00E80053, 00E80054, 00E80055

An internal error has occurred.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E80057

An error occurred while trying to start a queue manager address space. One possible cause of this problem is an error in the started task JCL procedure for the queue manager.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

You might find the items listed in "Diagnostics" on page 1073 useful in resolving the problem.

00E80058

An error occurred during command prefix registration.

System action

The queue manager ends abnormally.

System programmer response

See the accompanying CSQYxxx messages for information about the cause of the problem.

Restart the queue manager after correcting the problem.

00E8005F, 00E80061, 00E8006F, 00E8007F

An internal error has occurred.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E80081

An invalid load module was detected.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested. Register 9 contains the address of an 8-byte field that contains the name of the module in error.

System programmer response

Check that the installation process was successful.

Restart the queue manager after resolving the problem.

If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E80084

A resource manager provided notification of an error during queue manager startup notification processing.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested. Register 9 contains the address of a 4-byte field that contains the RMID of the resource manager that requested queue manager termination.

System programmer response

Look for error messages indicating the cause of the problem.

Restart the queue manager after resolving the problem.

If you are unable to solve the problem, collect the items listed in "Diagnostics" on page 1073, together with the contents of the BSDS and a GTF trace, and contact your IBM support center.

00E8008F, 00E80091, 00E8009F, 00E800AF, 00E800B1

An internal error has occurred.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E800B2

The queue manager initialization procedure found that the version of ZPARM loaded was compiled for a higher release of IBM WebSphere MQ, and specifies NEWFUNC.

System action

Startup is terminated.

System programmer response

Check whether the correct ZPARM has been loaded at initialization.

The existence of this version of ZPARM implies that the queue manager has been running at a higher release of the product.

Check to see if the queue manager has been started on a higher release of the product. If this is the case, you have inadvertently started IBM WebSphere MQ with the wrong version of the product libraries.

It might still be possible to rebuild ZPARM using the macros from SCSQMACS for the current release of the product.

Note, however, that a queue manager that has been operating with OPMODE(NEWFUNC,nnn) at a higher release of the product cannot be subsequently started at a lower release of the product.

00E800CE

An ESTAE could not be established.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested. Register 9 contains the address of a 4-byte field that contains the ESTAE macro return code.

System programmer response

Restart the queue manager.

You might find the items listed in "Diagnostics" on page 1073 useful in resolving the problem.

00E800D1

An internal error has occurred.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E800D2

An error was encountered while attempting to obtain the z/OS LOCAL lock.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

You might find the items listed in "Diagnostics" on page 1073 useful in resolving the problem.

00E800D3

An error was encountered while attempting to release the z/OS LOCAL lock.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

You might find the items listed in "Diagnostics" on page 1073 useful in resolving the problem.

00E800DF

An internal error has occurred.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E80100

The queue manager was ended abnormally because the queue manager address space control task ESTAE was entered. This reason code is issued for all completion codes, except for the X'5C6' completion code.

The queue manager is unable to determine the cause of the error.

System action

Termination of the queue manager is initiated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager after resolving the problem.

The subcomponent that caused the error is unknown. This reason code might be returned if the queue manager is unable to find the system parameter load module you specified on the START QMGR command (the default name is CSQZPARM). Check that the module you specified is available.

This reason code is also issued if the queue manager is canceled by the z/OS command CANCEL. If this is the case, determine why the queue manager was canceled.

You might find the items listed in "Diagnostics" on page 1073, together with the contents of the BSDS and a GTF trace, useful in resolving the problem.

00E8011D

An internal error has occurred.

System action

Termination of queue manager is initiated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E8011E

The allied address space task primary ESTAE detected that the secondary ESTAE could not be established.

System action

Abnormal termination of allied address space is continued. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

You might find the items listed in "Diagnostics" on page 1073 useful in resolving the problem.

00E8011F

The allied address space task primary ESTAE was entered without a subsystem diagnostic work area (SDWA) provided by z/OS RTM.

System action

Abnormal termination of the allied address space is continued. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

You might find the items listed in "Diagnostics" on page 1073 useful in resolving the problem.

00E8012D

An internal error has occurred.

System action

Abnormal termination of queue manager is initiated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E8012F

The allied address space task secondary ESTAE was entered without a subsystem diagnostic work area (SDWA) provided by z/OS.

System action

Continue with the abnormal termination of the allied address space. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

You might find the items listed in "Diagnostics" on page 1073 useful in resolving the problem.

00E80130

The FRR that protects the START QMGR/STOP QMGR command processor function was entered while a valid STOP QMGR command was being processed.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

You might find the items listed in "Diagnostics" on page 1073 useful in resolving the problem.

00E80140

An internal error has occurred.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E80150, 00E80151

An invalid module was detected.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested. Register 9 contains the address of a 12-byte field that contains the following diagnostic information:

- Bytes 1 through 8 contain the name of the load module that contains the initialization entry point list with the invalid entry

System programmer response

Restart the queue manager after resolving the problem.

Check that the installation process was successful. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E8015F

An internal error has occurred.

System action

The queue manager is terminated. A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

00E80160

The queue manager initialization procedures found that a load module had an invalid AMODE or RMODE attribute.

System action

Queue manager startup is terminated.

System programmer response

See message CSQY006E.

00E80161

The queue manager initialization procedures found that a load module was not at the correct level for the version of the queue manager that was being started.

System action

Queue manager startup is terminated.

System programmer response

See message CSQY010E.

00E80162

> The queue manager initialization procedures found that the storage protect key was not 7. The most likely cause is that the program properties table (PPT) entry for CSQYASCP has not been specified correctly.

System action

> Queue manager startup is terminated.

System programmer response

> Restart the queue manager after resolving the problem.

> For information about specifying the PPT entry for CSQYASCP, see Update the z/OS program properties table.

00E80163

> The queue manager initialization procedures found that they were not APF authorized. The most likely cause is that one or more of the datasets in the //STEPLIB concanentation is not APF authorized.

System action

> Queue manager startup is terminated.

System programmer response

> Restart the queue manager after resolving the problem.

> For information about APF authorization for the MQ load libraries, see APF authorize the WebSphere MQ load libraries

00E80170

> An internal error has occurred.

System action

> The request is ignored.

System programmer response

> Collect the items listed in "Diagnostics" on page 1073 and contact your IBM support center.

System parameter manager codes (X'E9')

If a system parameter manager reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- The console output for the period leading up to the error.
- The queue manager job log.
- The system dump resulting from the error.
- A printout of SYS1.LOGREC.
- The system parameter load module.
- The initialization procedure.
- The started task JCL procedure for this queue manager.
- Appropriate WebSphere MQ, z/OS, Db2, CICS, and IMS service levels.

00E90101

> An error has occurred while trying to open MQ resources. The most likely cause is that a customized system parameter load module specified on the START QMGR command is not available.

System action

A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Check that the system parameter load module you specified on the START QMGR command (the default name is CSQZPARM) is available for use. If it is, collect the items listed in "Diagnostics" on page 1083 and contact your IBM support center.

00E90201

An internal error has occurred while attempting to open MQ resources.

System action

A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1083 and contact your IBM support center.

00E90202

An error has occurred while attempting to open MQ resources. The most likely cause is that a customized system parameter load module specified on the START QMGR command (the default name is CSQZPARM) has been built incorrectly.

System action

A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Check that the system parameter load module that you specified is available, and that it was linked correctly. See CSQ4ZPRM for sample link-edit JCL. and for information about the system parameter modules, see Tailor your system parameter module.

Restart the queue manager. If the problem persists, collect the items listed in "Diagnostics" on page 1083 and contact your IBM support center.

00E90203

An internal error has occurred while attempting to verify descriptor control information in MQ resources.

System action

A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1083 and contact your IBM support center.

00E90301

An internal error has occurred while attempting to close MQ resources.

System action

A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response

Collect the items listed in "Diagnostics" on page 1083 and contact your IBM support center.

Service facilities codes (X'F1')

00F10001, 00F10002, 00F10003, 00F10004, 00F10005, 00F10006, 00F10007, 00F10008, 00F10009, 00F10010, 00F10011, 00F10012, 00F10013, 00F10014, 00F10015, 00F10016, 00F10017, 00F10018

An internal error has been detected in the CSQ1LOGP log print utility.

System action

A dump is requested. The utility ends abnormally with completion code X'5C6'.

System programmer response

Collect the following diagnostic items and contact your IBM support center:

- Utility report output
- System dump resulting from the error, if any
- The WebSphere MQ, z/OS, Db2, CICS, and IMS service levels

00F10100

An internal error has been detected in the CSQ1LOGP log print utility.

System action

A dump is requested. The utility ends abnormally with completion code X'5C6'.

System programmer response

Resubmit the job.

Contact your IBM support center if the problem persists.

00F10101

The stand-alone log read function returned an invalid RBA. See the explanation for message CSQ1211E.

System action

A dump is requested. The utility ends abnormally with completion code X'5C6'.

System programmer response

If you determine that the data set is a log data set and that it is not damaged, contact your IBM support center.

WebSphere MQ-IMS bridge codes (X'F2')

If a WebSphere MQ-IMS bridge reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- A description of the actions that led to the error or, if applicable, either a listing of the application program or the input string to a utility program that was being run at the time of the error.
- The console output for the period leading up to the error.
- The queue manager job log.
- The IMS job logs.
- The system dump resulting from the error.
- Appropriate WebSphere MQ, z/OS, Db2, CICS, and IMS service levels.

00F20001, 00F20002, 00F20003, 00F20004, 00F20005, 00F20006, 00F20007, 00F20008, 00F20009, 00F2000A, 00F2000B, 00F2000C, 00F2000D, 00F2000E, 00F2000F, 00F20010, 00F20011

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 1085 and contact your IBM support center.

00F20012

The MQ-IMS bridge received a bad return code from IXCQUERY macro.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Registers 3 and 4 contain the return and reason codes from XCF. Refer to the *MVS Programming: Sysplex Services Reference* for information about these codes.

00F20013

The MQ-IMS bridge received a bad return from IXCJOIN macro.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Registers 3 and 4 contain the return and reason codes from XCF. Refer to the *MVS Programming: Sysplex Services Reference* for information about these codes.

00F20014

The MQ-IMS bridge received a bad return from IXCCREAT macro.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Registers 3 and 4 contain the return and reason codes from XCF. Refer to the *MVS Programming: Sysplex Services Reference* for information about these codes.

Use the IMS DIS OTMA command to see if the OTMACON member name is already in use. This can be caused by specifying the IMS system instead of the queue manager name in the OTMACON member name.

00F20015, 00F20016

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 1085 and contact your IBM support center.

00F20017

The MQ-IMS bridge received a bad return from IXCLEAVE macro.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Registers 3 and 4 contain the return and reason codes from XCF. Refer to the *MVS Programming: Sysplex Services Reference* for information about these codes.

00F20018

The MQ-IMS bridge received a bad return from IXCDELET macro.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Registers 3 and 4 contain the return and reason codes from XCF. Refer to the *MVS Programming: Sysplex Services Reference* for information about these codes. Contact your IBM support center to report the problem.

00F20019, 00F2001A, 00F2001B, 00F2001C, 00F2001D, 00F2001E, 00F2001F, 00F20020, 00F20021, 00F20022

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 1085 and contact your IBM support center.

00F20023

The MQ-IMS bridge received a bad return code from IXCMSGO.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Registers 2 and 3 contain the return and reason codes from XCF. Refer to the *MVS Programming: Sysplex Services Reference* for information about these codes.

00F20024, 00F20026, 00F20027, 00F20029, 00F2002A, 00F2002B

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 1085 and contact your IBM support center.

00F2002C

The MQ-IMS bridge received a bad return code from IXCMSGO.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Registers 2 and 3 contain the return and reason codes from XCF. Refer to the *MVS Programming: Sysplex Services Reference* for information about these codes.

00F2002D, 00F2002E

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 1085 and contact your IBM support center.

00F20030

The MQ-IMS bridge received a bad return code from IXCMSGO.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Registers 2 and 3 contain the return and reason codes from XCF. Refer to the *MVS Programming: Sysplex Services Reference* for information about these codes.

00F20031

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 1085 and contact your IBM support center.

00F20032

The MQ-IMS bridge received a bad return code from IXCMSGO.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Registers 2 and 3 contain the return and reason codes from XCF. Refer to the *MVS Programming: Sysplex Services Reference* for information about these codes.

00F20035, 00F20036, 00F20037, 00F20038, 00F20039, 00F2003A, 00F2003B, 00F2003D, 00F2003E, 00F2003F, 00F20040

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 1085 and contact your IBM support center.

00F20041

The MQ-IMS bridge received an MQOPEN error.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Contact your IBM support center to report the problem.

00F20042

The MQ-IMS bridge received an MQCLOSE error.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Contact your IBM support center to report the problem.

00F20043

The MQ-IMS bridge received an MQGET error.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Contact your IBM support center to report the problem.

00F20044

The MQ-IMS bridge received an MQPUT error.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Contact your IBM support center to report the problem.

00F20045

The MQ-IMS bridge received an MQOPEN error.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Contact your IBM support center to report the problem.

00F20046

The MQ-IMS bridge received an MQCLOSE error.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Contact your IBM support center to report the problem.

00F20047

The MQ-IMS bridge received an MQGET error.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Contact your IBM support center to report the problem.

00F20048

The MQ-IMS bridge received an MQPUT error.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Contact your IBM support center to report the problem.

00F20049

The MQ-IMS bridge received an MQPUT1 error.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Contact your IBM support center to report the problem.

00F2004A, 00F2004B, 00F2004C, 00F2004D, 00F2004E, 00F2004F, 00F20050, 00F20051, 00F20052, 00F20053, 00F20054, 00F20055, 00F20056, 00F20057

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Collect the items listed in "Diagnostics" on page 1085 and contact your IBM support center.

00F20058

The MQ-IMS bridge received an MQPUT1 error.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Contact your IBM support center to report the problem.

00F20059

The MQ-IMS bridge received a severe sense code in an IMS negative response.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

The IMS sense code is given in message CSQ2003I.

00F20069

The MQ-IMS bridge received an error when trying to resolve an in-doubt unit of recovery.

System action

The current execution unit terminates with completion code X'5C6', and a dump is produced.

System programmer response

Contact your IBM support center to report the problem.

Subsystem support codes (X'F3')

Many of the following reason codes are returned in register 15 at the time of an abnormal termination with completion code X'0Cx', and not as the reason code for a completion code of X'5C6'. This is indicated in the descriptions that follow.

If a subsystem support reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- A description of the actions that led to the error or, if applicable, either a listing of the application program or the input string to a utility program that was being run at the time of the error.
- The console output for the period leading up to the error.
- The queue manager job log.
- The system dump resulting from the error.
- A printout of SYS1.LOGREC.
- Appropriate WebSphere MQ, z/OS, Db2, CICS, and IMS service levels.

00F30003, 00F30004, 00F30005

An internal error has occurred.

System action

The request is not processed. A dump is taken, and an entry is written in SYS1.LOGREC.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30006

An internal error has occurred.

System action

The request is not processed.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30007, 00F30008

An internal error has occurred.

System action

The request is not processed. A dump is taken, and an entry is written in SYS1.LOGREC.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30014

An internal error has occurred.

System action

The requester's task is ended abnormally with completion code X'5C6'. A dump is taken, and an entry is written in SYS1.LOGREC.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30027, 00F30030 ,00F30032, 00F30033, 00F30038

An internal error has occurred.

System action

The request is not processed. A dump is taken, and an entry is written in SYS1.LOGREC.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30042

An internal error has occurred.

System action

A dump is taken, and an entry is written in SYS1.LOGREC.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30048

An internal error has occurred.

System action

The request is not processed. A dump is taken, and an entry is written in SYS1.LOGREC.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30052

The recovery coordinator for the caller has already terminated, so the connection from the caller to MQ has been terminated.

System action

The request is not processed. The connection from the caller to MQ is terminated.

The caller might reconnect to MQ when the recovery coordinator has been restarted.

System programmer response

Identify and restart the recovery coordinator.

This abnormal termination is most commonly associated with a termination of RRS. There might be additional CSQ3009E messages on the console log associated with the termination of RRS.

00F30053

An internal error has occurred.

System action

The request is not processed. A dump is taken, and an entry is written in SYS1.LOGREC.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30067

An internal error has occurred.

System action

The connection request is not processed. A dump is taken, and an entry is written in SYS1.LOGREC.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30070

Functional recovery for the connection processing could not be established. The executing module could not establish its ESTAE. This can occur if the current address space has insufficient storage. This might lead to an abnormal termination of the queue manager.

System action

The connection request is not processed. The caller is ended abnormally with completion code X'5C6' and this reason code.

System programmer response

Restart the queue manager if necessary. A dump should be taken for problem analysis.

Examine the usage and free areas in the LSQA portion of the current address space private area. If necessary, have the size of the private areas expanded.

The caller should produce a SYS1.LOGREC entry and an SVC dump, so that you can examine the LSQA area. You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30071

An internal error has occurred.

System action

The connection request is not processed. A dump is taken, and an entry is written in SYS1.LOGREC.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30075

An internal error has occurred.

System action

A dump is taken, and an entry is written in SYS1.LOGREC.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30078

An internal error has occurred.

System action

The request is not processed. A dump is taken, and an entry is written in SYS1.LOGREC.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30080

An internal error has occurred.

System action

The application program is ended abnormally with completion code X'5C6' and this reason code. A dump is taken, and an entry is written in SYS1.LOGREC.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30091

The application program issued an RRSAF IDENTIFY function request, but RRS is not available.

System action

The IDENTIFY request is not processed.

00F30093

The application program issued an RRSAF TERMINATE THREAD or TERMINATE IDENTIFY function request, but the application has issued an MQ API request since the last invocation of SRRCMIT or SRRBACK and therefore is not at a point of consistency.

System action

The function request is not processed.

00F30095

An internal error was detected in either MQ or RRS.

System action

The application is ended abnormally. The error is recorded in the SYS1.LOGREC data set and an SVC dump is requested.

This error might, in many cases, eventually cause the queue manager to terminate abnormally.

System programmer response

This is probably either an error in MQ or in RRS.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30096

An internal error was detected in either MQ or RRS Context Services.

System action

The application is ended abnormally. The error is recorded in the SYS1.LOGREC data set and an SVC dump is requested.

This error might, in many cases, eventually cause the queue manager to terminate abnormally.

System programmer response

This is probably either an error in MQ or in RRS.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30101

The parameter contained in the IEFSSNxx member used to initialize MQ (and other subsystems) is in error. See message CSQ3101E for details.

System action

See message CSQ3101E.

System programmer response

See message CSQ3101E.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30102

The parameter contained in the IEFSSNxx member used to initialize MQ (and other subsystems) is in error. The MQ command prefix (CPF) must not be blank. For details, see message CSQ3102E.

System action

See message CSQ3102E.

System programmer response

See message CSQ3102E.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30103

The parameter contained in the IEFSSNxx member used to initialize MQ (and other subsystems) is in error or the named module is not resident in a library available during IPL. See message CSQ3103E for details.

System action

See message CSQ3103E.

System programmer response

See message CSQ3103E.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30104

Module CSQ3UR00 was unable to obtain the affinity table index for the named subsystem. z/OS did not recognize the named subsystem. See message CSQ3109E for details.

System action

See message CSQ3109E.

System programmer response

See message CSQ3109E.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30105

Module CSQ3UR00 was unable to load Early module CSQ3EPX. Either there was an I/O error, or the named module is not resident in a library available during IPL. See message CSQ3105E for details.

System action

See message CSQ3105E.

System programmer response

See message CSQ3105E.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30106

The parameter contained in the IEFSSNxx member used to initialize MQ (and other subsystems) is in error. The scope of the MQ command prefix (CPF) is not valid. For details, see message CSQ3112E.

System action

See message CSQ3112E.

System programmer response

See message CSQ3112E.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30107

An error occurred during command prefix registration.

System action

The MQ subsystem ends abnormally.

System programmer response

See the accompanying CSQ3xxx messages for information about the cause of the problem.

00F30210, 00F30211, 00F30212, 00F30213, 00F30214

An internal error has occurred.

System action

The caller is ended abnormally. An SVC dump and associated SYS1.LOGREC entries are produced.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30216

An attempt to create a queue manager address space failed. This is probably because the user who issued the START QMGR command has insufficient authority.

System action

The current START command processing is terminated. An SVC dump and associated SYS1.LOGREC entries are produced.

System programmer response

Check the authority of users and consoles to issue commands. Retry the command.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30217

The console ID for the z/OS console that entered the current command is not found in the z/OS unit control module (UCM) structure. An internal z/OS command might have been incorrectly issued by an application program that provided invalid input parameters.

System action

The caller is ended abnormally.

System programmer response

Retry the START QMGR command. If the command was unsuccessful, collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30218

An internal error has occurred.

System action

The current task is ended abnormally. The calling task might have requested an SVC dump or created associated SYS1.LOGREC entries.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30219

An internal error has occurred.

System action

The calling task is ended abnormally. The calling task might have requested an SVC dump or created associated SYS1.LOGREC entries.

System programmer response

Cancel the queue manager. End-of-task processing might still work, and it does a more complete clean-up than end-of-memory processing does. If this does not work, issue the z/OS command FORCE for the queue manager. If the problem is still unresolved, it might be necessary to perform an IPL of your z/OS system.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F3021A

An internal error has occurred.

System action

The calling task is ended abnormally. An SVC dump and associated SYS1.LOGREC entries are produced.

System programmer response

Stop the queue manager and reissue the START QMGR command.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F3021C

An ESTAE could not be established. This can occur if the z/OS system address space that is broadcasting the command has insufficient storage.

System action

The caller is ended abnormally (without a dump). The current START command processing is terminated.

System programmer response

Retry the command. If the error persists, it might be necessary to perform an IPL of your z/OS system.

Examine the LOGREC entries, and the console log for indications of a z/OS error, and try increasing the storage.

If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F3021D

An ESTAE could not be established during either the initialization or termination of the queue manager.

This can occur during initialization if the z/OS system address space that is broadcasting the first command (assumed to be the START command) has insufficient storage.

This can occur during termination if the current address space (usually the queue manager, or in the case of EOM broadcast, a z/OS system address space) has insufficient storage.

System action

The caller is ended abnormally without taking a system dump. The initialization stops, but termination proceeds.

System programmer response

Retry the command after the queue manager has terminated. If the problem persists, it might be necessary to perform an IPL of your z/OS system.

Examine the LOGREC entries, and the console log for indications of a z/OS error, and try increasing the storage.

If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F3021E

An ESTAE could not be established while in the process of routing control to the actual ESTAE routine. The caller (RTM) is ended abnormally. This causes the original error to percolate to a higher-level recovery routine and causes this reason code to be shown in an RTM recovery environment.

This can occur if the current address space (usually an allied address space) has insufficient storage.

System action

The caller is ended abnormally and a dump is produced.

System programmer response

Examine the usage and free areas in the LSQA portion of the current address space private area. If necessary, have the size of the private area expanded.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F3021F, 00F30220

An internal error has occurred.

System action

The caller is not ended abnormally. A dump is taken, and an entry is written in SYS1.LOGREC.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30230

An internal error has occurred.

System action

The connection between the allied address space and the queue manager terminated. A dump is taken, and an entry is written in SYS1.LOGREC.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30310

An internal error has occurred.

System action

The invoker is ended abnormally. A dump is taken, and an entry is written in SYS1.LOGREC.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30311

An ESTAE could not be established during the processing of a resolve-indoubt request. This can occur if the current address space has insufficient storage. This will probably cause an abnormal termination of the queue manager.

System action

The caller is ended abnormally.

System programmer response

Restart the queue manager if necessary.

Examine the usage and free areas in the local system queue area (LSQA) portion of the current address space private area. If necessary, have the size of the private area expanded.

The caller should produce a SYS1.LOGREC entry and an SVC dump, so that you can examine the LSQA area.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30312

An ESTAE could not be established during the processing of a resolve-indoubt-UR request. This can occur if the current address space has insufficient storage.

System action

The caller is ended abnormally.

System programmer response

Examine the usage and free areas in the local system queue area (LSQA) portion of the current address space private area. If necessary, have the size of the private area expanded.

The caller should produce a SYS1.LOGREC entry and an SVC dump.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30313

A control block could not be allocated. This could occur when the storage pool has no more free space available.

System action

The request is not processed. The application program is ended abnormally with completion code X'5C6' and this reason code.

System programmer response

A dump should be taken for problem analysis.

Check that you are running with the recommended region size, and if not, reset your system and retry. If you are unable to resolve the problem, collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30400, 00F30401, 00F30402

An internal error has occurred.

System action

The program which made the request might produce diagnostics to report the error.

System programmer response

Collect the diagnostics produced by the application program reporting the error, if any, and contact your IBM support center.

00F30406

The queue manager has gone to EOM (end-of-memory). This is probably because the z/OS command FORCE has been issued.

System action

The queue manager is terminated, and a dump is taken.

System programmer response

The queue manager can be restarted after termination completes.

Determine why the z/OS command FORCE was issued.

00F30409, 00F3040A

An internal error has occurred.

System action

The queue manager is terminated with an SVC dump.

System programmer response

The queue manager can be started again after it terminates.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F3040B

See message CSQ3001E.

System action

See message CSQ3001E.

System programmer response

See message CSQ3001E.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F3040C, 00F3040D

An internal error has occurred.

System action

The queue manager is terminated with an SVC dump.

System programmer response

The queue manager can be started again after it terminates.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F3040E

An internal error has occurred.

System action

The queue manager is terminated.

System programmer response

The queue manager should be restarted.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F3040F, 00F30410

An internal error has occurred.

System action

The queue manager is terminated.

System programmer response

The queue manager can be started again after it terminates.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30411, 00F30412, 00F30413

An internal error has occurred.

System action

The queue manager is terminated.

System programmer response

The queue manager can be started again after it terminates.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30414

An internal error has occurred.

System action

The queue manager is terminated.

System programmer response

The queue manager can be started again after it terminates. If the problem persists, request a stand-alone dump, and perform an IPL of your z/OS system.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30415

An ESTAE could not be established during the processing of an EOM SSI broadcast. This is probably a z/OS problem, because these modules are executing in the z/OS master scheduler address space.

System action

The queue manager is terminated.

System programmer response

The queue manager can be started again after it terminates. If the problem persists, it might be necessary to perform an IPL of your z/OS system.

This can occur if the z/OS master scheduler address space has insufficient free storage. If such is the case, MQ is unable to write a SYS1.LOGREC record or request a dump. The z/OS master scheduler should have produced these diagnostic aids. Examine the dump to determine whether the problem is in z/OS or MQ. Other unrelated errors in the z/OS Master Scheduler address space would indicate a z/OS problem.

If the problem appears to be an MQ problem, collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30416

An ESTAE could not be established during the processing of an EOM for an allied address space.

System action

The queue manager is terminated.

System programmer response

The queue manager can be started again after it terminates. If the problem persists, it might be necessary to perform an IPL of your z/OS system.

This can occur if the z/OS master scheduler address space has insufficient free storage. If such is the case, MQ is unable to write a SYS1.LOGREC record or request a dump. The z/OS master scheduler should have produced these diagnostic aids. Examine the dump to determine whether the problem is in z/OS or MQ. Other unrelated errors in the z/OS Master Scheduler address space would indicate a z/OS problem.

If the problem appears to be an MQ problem, collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30417, 00F30418

An internal error has occurred.

System action

The queue manager is terminated.

System programmer response

The queue manager can be started again after it terminates.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30419

An internal error has occurred.

System action

The queue manager is terminated with an SVC dump.

System programmer response

The queue manager can be started again after it terminates.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F3041A

An ESTAE could not be established by the deferred end-of-task (EOT) processor. This error could occur only during queue manager startup. Probably, an ESTAE could not be established because of a shortage of LSQA space.

System action

The queue manager is terminated.

System programmer response

Restart the queue manager.

If the problem persists, increase the size of the queue manager address space private area.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F3041B, 00F30420

An internal error has occurred.

System action

The queue manager is terminated. A SYS1.LOGREC entry and associated SVC dump were requested.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30429

An internal error has occurred.

System action

The queue manager is terminated with an SVC dump.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30450

An ESTAE could not be established during the processing of an identify SSI call. This can occur if the current address space has insufficient storage.

System action

The allied address space is ended abnormally (without a dump). A dump should be produced by the allied task.

System programmer response

The user can retry the identify request. If a dump is available, review the storage manager's control blocks to determine if all of the private area has been allocated. If necessary, increase the private area size of the allied address space.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30451

An ESTAE could not be established during the processing of an identify SSI call. This can occur if the current address space has insufficient storage.

System action

The allied task is ended abnormally (without a dump). A dump should be produced by the allied task.

System programmer response

The user can retry the identify request. If a dump is available, review the storage manager's control blocks to determine if all of the private area has been allocated. If necessary, increase the private area size of the allied address space.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30452

An ESTAE could not be established during the processing of an identify SSI call. This can occur if the current address space has insufficient storage.

System action

The allied task is ended abnormally (without a dump). A dump should be produced by the allied task.

System programmer response

The user can retry the identify request. If a dump is available, review the storage manager's control blocks to determine if all of the private area has been allocated. If necessary, increase the private area size of the allied address space.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30453

ESTAEs could not be established during the processing of a n SSI call other than FEOT, EOM, HELP, COMMAND, and IDENTIFY. This can occur if the current address space has insufficient storage.

System action

The allied task is ended abnormally (without a dump). A dump should be produced by the allied task.

System programmer response

The user can retry the request. If a dump is available, review the storage manager's control blocks to determine if all of the private area has been allocated. If necessary, increase the private area size of the allied address space.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30454

An internal error has occurred.

System action

The allied task is ended abnormally.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30455

An ESTAE could not be established during the processing of an identify termination request. This can occur if the current address space has insufficient storage.

System action

The allied task is ended abnormally (without a dump). A dump should be produced by the allied task.

System programmer response

The user can retry the request. If a dump is available, review the storage manager's control blocks to determine if all of the private area has been allocated. If necessary, increase the private area size of the allied address space.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30456

An internal error has occurred.

System action

The calling task is ended abnormally.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30457

An internal error has occurred.

System action

The caller is ended abnormally. The error might, in many cases, eventually terminate the queue manager.

System programmer response

Restart the queue manager if necessary.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30459

An internal error has occurred.

System action

The queue manager is terminated with a reason code of X'00F30420'.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30461

The queue manager was unable to successfully restart with RRS because of an internal error in either MQ or RRS.

System action

The queue manager is not connected to RRS and all services dependent on that connection are unavailable. This means that applications might not connect to the queue manager using RRSAF and that WLM-established address spaces might not be used for MQ stored procedures until the queue manager successfully restarts with RRS.

System programmer response

Stop and then start RRS. Stop and then start the queue manager. If the problem persists, perform an RRS cold start.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30501, 00F30502

An internal error has occurred.

System action

The requester is ended abnormally, and the request is not processed.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30503

CSQ6SYSP is missing from the system parameter load module.

System action

Queue manager start-up is terminated.

System programmer response

Re-create your system parameter load module (if a customized version is being used) and restart the queue manager. For information about the system parameter modules, see Tailor your system parameter module.

00F30573, 00F30574

An internal error has occurred.

System action

The requester is ended abnormally, and the request is not processed. A dump is taken, and an entry is written in SYS1.LOGREC.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30580

An internal error has occurred.

System action

The requester is ended abnormally.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30581

An internal error has occurred.

System action

The queue manager ends abnormally. The startup/shutdown ESTAE creates a SYS1.LOGREC entry and takes an SVC dump.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30597, 00F30598

An internal error has occurred.

System action

The allied task is ended abnormally, and the request is not processed.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30599

An internal error has occurred.

System action

The connection name associated with the error is probably unable to continue communication with MQ until the queue manager is terminated and restarted.

System programmer response

If necessary, stop and restart the queue manager.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30601

Asynchronous events occurred which caused the premature termination of the thread. The thread could not be recovered.

There might be other errors or messages concerning this allied user indicating what the asynchronous events were.

System action

The allied user is ended abnormally with completion code X'5C6' and this reason code.

System programmer response

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30610

An ESTAE could not be established during the processing of an 'end stop-work force' notification. This can occur if there is insufficient storage. This might lead to abnormal termination of the queue manager.

System action

The caller is ended abnormally. An SVC dump and related SYS1.LOGREC entry are requested.

System programmer response

If necessary, restart the queue manager.

If necessary, increase the private area size of the address space.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30801

An internal error has occurred.

System action

The queue manager is terminated. An SVC dump is requested.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30802

An internal error has occurred.

System action

The task is not ended abnormally.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30803

An ESTAE could not be established during the processing of an application program support call. This can occur if the current address space has insufficient storage.

System action

The allied task is ended abnormally. The allied task might have requested an SVC dump.

System programmer response

The user can retry the request. If necessary, increase the private area size of the application address space.

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30805

An internal error has occurred.

System action

The request might have been processed or rejected.

System programmer response

Collect the items listed in "Diagnostics" on page 1091 and contact your IBM support center.

00F30901

MQ has lost its cross-memory authority to an allied address space because the ally has released its authorization index.

System action

The allied address space is terminated.

System programmer response

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30902

MQ has detected a recursive error condition while processing End-of-Task for a task in an allied address space.

System action

The allied address space is terminated.

System programmer response

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30903

An error has occurred while processing End-of-Task for the queue manager address space.

System action

The address space is forced to 'end-of-memory' with this reason code.

System programmer response

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

00F30904

End-of-Task occurred for the queue manager address space, and MQ could not establish an ESTAE to protect its processing. Insufficient storage might be the reason the ESTAE could not be established.

System action

The address space is forced to 'end-of-memory' with this reason code.

System programmer response

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

Attempt to determine if one or more MQ address spaces is storage-constrained. Examination of the console output for the time period preceding this condition might reveal other messages or indications that the terminating address space was storage-constrained.

00F30905

End-of-Task occurred for the job step task in an allied address space. MQ would normally attempt to terminate the address space's connection to the queue manager but was unable to protect its processing by establishing an ESTAE. Insufficient storage might be the reason the ESTAE could not be established.

System action

The address space is forced to 'end-of-memory' with this reason code.

System programmer response

You might find the items listed in "Diagnostics" on page 1091 useful in resolving the problem.

Attempt to determine if one or more allied address spaces is storage-constrained. Examination of the console output for the time period preceding this condition might reveal other messages or indications that the terminating allied address space was storage-constrained.

00F33100

The MQ thread is read-only.

System action

A prepare issued by the application program was processed through Phase-1. MQ discovered there were no resources modified and no need for COMMIT or BACKOUT to be subsequently issued.

System programmer response

This might create a path length saving by not issuing the subsequent commit or backout which normally follows prepare. No further action is required to complete the unit of recovery; the unit of recovery is complete.

Db2 manager codes (X'F5')

If a Db2 manager reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- A description of the actions that led to the error or, if applicable, either a listing of the application program or the input string to a utility program that was being run at the time of the error.
- The console output for the period leading up to the error.
- The queue manager job log.
- The system dump resulting from the error.
- A printout of SYS1.LOGREC.
- Appropriate WebSphere MQ, z/OS, Db2, CICS, and IMS service levels.

00F50000

An internal error has occurred.

System action

The queue manager terminates, a record is written to SYS1.LOGREC and a dump is taken.

System programmer response

Ensure that the QSGDATA system parameter is specified correctly and restart the queue manager.

If the problem persists, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50001

An internal error has occurred.

System action

The queue manager terminates, a record is written to SYS1.LOGREC and a dump is taken.

System programmer response

Restart the queue manager.

If the problem persists, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50002

An internal error has occurred.

System action

The task ends abnormally. Queue manager processing continues but the queue manager might not terminate normally and might not register Db2 termination.

System programmer response

Refer to *Db2 for z/OS Messages and Codes* for information about the completion and reason code in the accompanying message and collect the diagnostic data requested in the manual. In addition, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50003

An internal error has occurred.

System action

The task ends abnormally. Queue manager processing continues.

System programmer response

Collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50004

An internal error has occurred.

System action

The queue manager terminates, a record is written to SYS1.LOGREC and a dump is taken.

System programmer response

Ensure that the following modules are available through the linklist or the steplib concatenation: DSNRLI, DSNHLIR, DSNWLIR, ATRCMIT and ATRBACK. Restart the queue manager.

If the problem persists, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50006

An internal error has occurred.

System action

The queue manager terminates, a record is written to SYS1.LOGREC and a dump is taken.

System programmer response

All queue managers that are members of the same queue-sharing group must connect to the same Db2 data-sharing group. Check that all queue managers in the queue-sharing group have the same Db2 data-sharing group specified in the QSGDATA system parameter. Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50007

An internal error has occurred.

System action

The queue manager terminates, a record is written to SYS1.LOGREC and a dump is taken.

System programmer response

Ensure that the Db2 subsystem(s) specified on the QSGDATA system parameter are members of the Db2 data-sharing group that is also specified on the QSGDATA system parameter. Restart the queue manager.

If the problem persists, refer to *Db2 for z/OS Messages and Codes* for information about the completion and reason code in the accompanying message and collect the diagnostic data requested in the manual. In addition, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50008

An internal error has occurred.

System action

The task ends abnormally and processing continues.

System programmer response

Collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50009

An internal error has occurred.

System action

The queue manager terminates, a record is written to SYS1.LOGREC and a dump is taken.

System programmer response

Restart the queue manager.

Refer to *Db2 for z/OS Messages and Codes* for information about the completion and reason code in the accompanying message and collect the diagnostic data requested in the manual. In addition, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50010

An internal error has occurred.

System action

The queue manager terminates, a record is written to SYS1.LOGREC and a dump is taken.

System programmer response

Restart the queue manager.

See z/OS MVS Programming: Sysplex Services Reference for an explanation of the error and the diagnostic information, if any, that you must collect. In addition, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50013

No queue manager entry was found in the CSQ.ADMIN_B_QMGR table for this combination of queue manager and queue-sharing group, or the entry was incorrect.

System action

The queue manager terminates, a record is written to SYS1.LOGREC and a dump is taken.

System programmer response

Check the CSQ.ADMIN_B_QMGR table in the Db2 data-sharing group and ensure that an entry has been defined for the queue manager and it relates to the correct queue-sharing group.

If you are migrating from a previous release of MQ, check also that you have updated the Db2 tables to the format for the current release. See Migrating, for information about migration and compatibility between releases.

Restart the queue manager. If the problem persists, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50014

An internal error has occurred.

System action

The queue manager terminates, a record is written to SYS1.LOGREC and a dump is taken.

System programmer response

Check that the Db2 related installation and customization tasks have all completed successfully. Restart the queue manager.

If the problem persists, refer to *Db2 for z/OS Messages and Codes* for information about the completion and reason code in the accompanying message and collect the diagnostic data requested in the manual. In addition, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50015

An internal error has occurred.

System action

The queue manager terminates, a record is written to SYS1.LOGREC and a dump is taken.

System programmer response

Restart the queue manager.

If the problem persists, refer to *Db2 for z/OS Messages and Codes* for information about the completion and reason code in the accompanying message and collect the diagnostic data requested in the manual. In addition, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50016

An internal error has occurred.

System action

The queue manager terminates, a record is written to SYS1.LOGREC and a dump is taken.

System programmer response

Restart the queue manager.

If the problem persists, refer to *Db2 for z/OS Messages and Codes* for information about the completion and reason code in the accompanying message and collect the diagnostic data requested in the manual. In addition, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50017

An internal error has occurred.

System action

The queue manager terminates, a record is written to SYS1.LOGREC and a dump is taken.

System programmer response

See z/OS MVS Programming: Sysplex Services Reference for information about the completion and reason code in the accompanying message.

Restart the queue manager. If the problem persists, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

This error may occur if one or more of the queue managers in a Queue Sharing Group (QSG) do not have a member entry in the XCF group for the QSG.

Enter the following z/OS command substituting the QSG name for xxxx:

```
D XCF,GRP,CSQGxxxx,ALL
```

This will list the members of the XCF group. If any queue managers are defined as a member of the QSG, but do not have an entry in the XCF Group, use the ADD QMGR command of the CSQ5PQSG utility to restore the XCF group entry for that queue manager. The utility should be run for each queue manager which does not have an entry in the XCF group.

00F50018

An internal error has occurred.

System action

The queue manager terminates, a record is written to SYS1.LOGREC and a dump is taken.

System programmer response

See z/OS MVS Programming: Sysplex Services Reference for information about the completion and reason code in the accompanying message.

Restart the queue manager. If the problem persists, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50019

An internal error has occurred.

System action

The queue manager terminates, a record is written to SYS1.LOGREC and a dump is taken.

System programmer response

See z/OS MVS Programming: Sysplex Services Reference for information about the completion and reason code in the accompanying message.

Restart the queue manager. If the problem persists, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F5001C

CSQ5_DB2_UNAVAILABLE

System action

The queue manager terminates, a record is written to SYS1.LOGREC and a dump is taken.

System programmer response

See z/OS MVS Programming: Sysplex Services Reference for information about the completion and reason code in the accompanying message.

Restart the queue manager. If the problem persists, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50021

An internal error has occurred.

System action

The queue manager terminates, a record is written to SYS1.LOGREC and a dump is taken.

System programmer response

See z/OS MVS Programming: Sysplex Services Reference for information about the completion and reason code in the accompanying message.

Restart the queue manager. If the problem persists, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50024

An internal error has occurred.

System action

The task ends abnormally and a dump is taken.

System programmer response

If the problem persists, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50025

An internal error has occurred.

System action

The task ends abnormally and a dump is taken.

System programmer response

Collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50026

An internal error has occurred.

System action

The task ends abnormally and a dump is taken.

System programmer response

Collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50027

An internal error has occurred.

System action

The task ends abnormally and a dump is taken.

System programmer response

Collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F50028

An internal error has occurred.

System action

The task ends abnormally and a dump is taken.

System programmer response

This might be a temporary condition if Db2 or RRS has failed. If the problem persists, collect the items listed in "Diagnostics" on page 1108, together with output from Db2 command DISPLAY THREAD(*), and contact your IBM support center.

00F50029

The queue manager has detected a mismatch between its supported versions of MQ and those of other members of the queue-sharing group.

System action

The queue manager terminates, a record is written to SYS1.LOGREC and a dump is taken.

System programmer response

Verify the started task JCL procedure for the queue manager (xxxxMSTR) is executing the correct version of MQ. Restart the queue manager. If the correct version is being executed, collect the items listed in "Diagnostics" on page 1108, together with a printout of the CSQ.ADMIN_B_QMGR table from the Db2 data-sharing group to which the queue manager connected, and contact your IBM support center.

00F50901

An internal error has occurred.

System action

The job ends abnormally with a X'5C6' completion code and a dump is taken.

System programmer response

Collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F51030

An internal error has occurred.

System action

The task ends abnormally and a dump is taken.

System programmer response

Restart RRS if it has terminated. If RRS has not terminated, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

00F51031

An internal error has occurred on a Db2 connection thread.

System action

The task ends abnormally and a new task is created. A dump is taken if there is an 'in-flight' Db2 request.

System programmer response

None. A new Db2 server task is automatically re-created to replace the task that was terminated. If the problem persists, collect the items listed in "Diagnostics" on page 1108 and contact your IBM support center.

Generalized command preprocessor codes (X'F9')

If a command preprocessor reason code occurs that is not listed here, an internal error has occurred. Collect the following diagnostic items and contact your IBM support center.

Diagnostics

- A description of the actions that led to the error or, if applicable, either a listing of the application program or the input string to a utility program that was being run at the time of the error.
- The console output for the period leading up to the error.
- The queue manager job log.
- The system dump resulting from the error.
- Appropriate WebSphere MQ, z/OS, Db2, CICS, and IMS service levels.
- If you are using the WebSphere MQ Operations and Control panels, the ISPF panel name.
- The command issued before the error occurred.

00F90000

An internal error has occurred.

System action

Command execution was ended abnormally. If the command was properly entered, it might have been partially or completely executed.

System programmer response

Collect the items listed in "Diagnostics" on page 1115 and contact your IBM support center.

It might be necessary to restart the CICS or IMS adapter.

00F90001

An internal error has occurred.

System action

Command execution was ended abnormally. If the command was properly entered, it might have been partially or completely executed.

System programmer response

Collect the items listed in "Diagnostics" on page 1115 and contact your IBM support center.

It might be necessary to restart the CICS or IMS adapter.

00F90002

The routines of the multiple console support (MCS) service of z/OS. were unable to initialize. This condition might indicate an error in the address space.

System action

Initialization is stopped, causing the queue manager to terminate.

System programmer response

Collect the items listed in "Diagnostics" on page 1115 and contact your IBM support center.

Restart the queue manager.

00F90003

The routines of the multiple console support (MCS) service of z/OS were unable to initialize.

System action

If the error was issued by module CSQ9SCNM, queue manager initialization is stopped, causing the queue manager to terminate. If the error was issued by module CSQ9SCN6, the command from the associated console is executed, and should proceed normally.

System programmer response

Collect the items listed in "Diagnostics" on page 1115 and contact your IBM support center.

00F90004

The routines of the multiple console support (MCS) service of z/OS detected a logic error.

System action

The command was not executed.

System programmer response

Collect the items listed in "Diagnostics" on page 1115 and contact your IBM support center.

00F90005

A routine of the multiple console support (MCS) service of z/OS was not able to create an ESTAE recovery environment. This condition is detected when the ESTAE service of z/OS returns a nonzero return code. The command from the associated z/OS console is not executed. See the *MVS Programming: Assembler Services Reference* manual for an explanation of ESTAE return codes.

System action

Command processing is terminated.

System programmer response

Collect the items listed in "Diagnostics" on page 1115 and contact your IBM support center.

00F90006

An internal error has occurred.

System action

Agent allocation is terminated.

System programmer response

Collect the items listed in "Diagnostics" on page 1115 and contact your IBM support center.

00F90007

An internal error has occurred.

System action

The statistical update is not completed. The statistics block address is cleared from the CGDA to prevent future problems. No further command statistical counts are maintained. Processing for the command is retried and should complete normally.

System programmer response

Collect the items listed in "Diagnostics" on page 1115 and contact your IBM support center.

00F90008

An internal error has occurred.

System action

The function is ended abnormally.

System programmer response

Collect the items listed in "Diagnostics" on page 1115 and contact your IBM support center.

00F90009

This reason code is used to document that module CSQ9SCN9 has added information to the SDWA variable recording area (VRA) following the data provided by the CSQWRCRD service. If CSQ9SCN9 records an error in SYS1.LOGREC and the reason code in the VRA is not of the form X'00F9xxxx', the reason code is changed to X'00F90009'. This is done so that anyone examining a SYS1.LOGREC entry can determine, from the reason code, what additional data has been placed in the VRA. The reason code is the first data item in the VRA, as mapped by macro IHAVRA.

System programmer response

Collect the items listed in "Diagnostics" on page 1115 and contact your IBM support center.

00F9000A

An internal error has occurred.

System action

Command execution was ended abnormally. The command was not executed.

System programmer response

Collect the items listed in "Diagnostics" on page 1115 and contact your IBM support center.

00F9000B

An internal error occurred while attempting to obtain CSA storage. The storage request could not be satisfied, either because no CSA storage was available or because an unreasonably large amount of storage was requested. The amount of storage requested is determined by the length of the command being parsed. Normally, it is several hundred bytes.

System action

Command execution is ended abnormally.

System programmer response

It might be necessary to restart the CICS or IMS adapter, or the queue manager.

If the problem persists, collect the items listed in "Diagnostics" on page 1115 and contact your IBM support center.

00F9000C

An internal error has occurred.

The command processor invoked attempted to return a message formatted for inclusion in a z/OS multiple line WTO (write to operator).

System action

Command execution is ended abnormally.

System programmer response

The command in error is identified by message CSQ9017E. It might be necessary to restart the CICS or IMS adapter, or the queue manager.

Collect the items listed in "Diagnostics" on page 1115 and contact your IBM support center.

00F9000D

An internal error has occurred.

System action

The queue manager start-up is terminated.

System programmer response

Restart the queue manager.

Collect the items listed in "Diagnostics" on page 1115 and contact your IBM support center.

00F9000E

An internal error has occurred.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Collect the items listed in "Diagnostics" on page 1115 and contact your IBM support center.

00F9000F

MQ was unable to locate the default userid to be used on a command check. This indicates that CSQ6SYSP is not in the system parameter load module.

System action

The current execution unit terminates with completion code X'5C6'.

System programmer response

Ensure that CSQ6SYSP is in the system parameter load module. Restart the queue manager if necessary.

00F90010

An internal error has occurred while processing a command.

System action

Command execution was ended abnormally. The command was not executed.

System programmer response

Collect the items listed in "Diagnostics" on page 1115 and contact your IBM support center.

IBM MQ CICS adapter abend codes

See the Transaction abend codes section of the CICS documentation for further information.

QAPI

Unrecognizable API call. All supported API calls are documented in the Function calls.

System action

The task is ended abnormally.

QCAL

The WebSphere MQ CICS adapter has been invoked by CICS for an unknown reason.

System action

The invoking task is ended abnormally.

System programmer response

Contact your IBM support center.

QCMG

This abend code is issued because the WebSphere MQ CICS adapter error handler is unable to load the message text module CSQFCTAB or CSQCMTXT. This module must be defined as a program entry in CICS, and exists in the WebSphere MQ library under the DFHRPL DD statement in the CICS JCL.

System action

The task invoking the message handler is ended abnormally.

System programmer response

Check that the installation process was followed correctly.

QDCL

An attempt to EXEC CICS LOAD the data conversion service modules was unsuccessful.

System action

The task is ended abnormally.

QGAL

CSQCCON had enabled CSQCTRUE with a global area smaller than that needed by CSQCTRUE. This could be due to a mismatch of version level between CSQCCON and CSQCTRUE.

System action

The task is ended abnormally.

QNST

A task has issued an API call that requires task switching, but there are no server subtasks available. This is because the subtasks have not yet started, or were not started successfully. (Message CSQC472I is issued for each subtask started; there should be eight of these.)

System action

The task is ended abnormally.

This abend can also cause CICS to stop. This happens if either:

- In-doubt units of work are being resolved at connect time. The connection process requires a server subtask to execute the resolutions, so if there are no subtasks available, the process stops with this reason code. This abend during the resynchronization process causes CICS to stop.
- The abend occurs in a program list table (PLT) program.

System programmer response

Investigate why your system is running so slowly that the subtasks have not yet started.

QTAL

CSQCCON had enabled CSQCTRUE with a task area smaller than that needed by CSQCTRUE. This could be due to a mismatch of version level between CSQCCON and CSQCTRUE.

System action

The task is ended abnormally.

IBM MQ CICS bridge abend codes

See the Transaction abend codes section of the CICS documentation for further information.

CKB0

This abend code is issued because the WebSphere MQ CICS adapter error handler is unable to load the message text module CSQFCTAB or CSQCMTXT. This module must be defined as a program entry in CICS, and exists in the WebSphere MQ library under the DFHRPL DD statement in the CICS JCL.

System action

The task invoking the message handler is ended abnormally.

System programmer response

Check that the installation process was followed correctly.

CKB1

An internal logic error has been detected in the CICS bridge monitor.

System action

Message CSQC750E is written to the CICS CSMT transient data queue and the CICS bridge monitor task is ended abnormally.

CKB2

The CICS bridge monitor has terminated with CICS bridge tasks still active.

System action

Message CSQC744E is written to the CICS CSMT transient data queue and the CICS bridge monitor task is ended abnormally.

CKB3

The CICS DPL bridge program has detected an error in a request message for this unit of work.

System action

All request messages for this unit of work are copied to the dead-letter queue with an MQFB_CICS_* reason code. Corresponding error messages are written to the CICS CSMT transient data queue. An MQCRC_BRIDGE_ERROR reply is sent to the reply-to queue if requested. The CICS bridge task is ended abnormally.

CKB4

The CICS bridge monitor or DPL bridge program received an abend due to an unexpected return code from an EXEC CICS API call.

System action

Message CSQC704E is written to the CICS CSMT transient data queue and the CICS bridge monitor or DPL bridge program is abnormally terminated.

CKB5

The CICS bridge monitor or DPL bridge program received an abend due to an unexpected return code from an MQ API call.

System action

Message CSQC710E is written to the CICS CSMT transient data queue and the CICS bridge monitor or DPL bridge program is abnormally terminated.

CKB6

The CICS bridge message handling program is unable to proceed because its COMMAREA is too small.

System action

The CICS bridge monitor is abnormally terminated.

CKB7

The CICS DPL bridge program received an abend before processing any messages for the unit of work.

System action

All request messages for this unit of work are left on the CICS bridge queue to be handled by the CICS bridge monitor.

CKB8

The CICS DPL bridge program received an abend during error processing.

System action

An unexpected error occurred during CICS DPL bridge error processing.

MBRA

The type of EXEC CICS RECEIVE request does not match the next BRMQ vector.

System action

The transaction is abnormally terminated.

MBRB

The size of the EXEC CICS SEND MAP request is too large for the output buffer (the maximum size is 20 KB).

System action

The transaction is abnormally terminated.

MBRC

An error occurred issuing an EXEC CICS SYNCPOINT request.

System action

The transaction is abnormally terminated.

MBRD

An error occurred issuing an EXEC CICS SYNCPOINT ROLLBACK request.

System action

The transaction is abnormally terminated.

MBRE, MBRF, MBRG

The CICS bridge exit received an unexpected return code from an MQ API call.

System action

The transaction is abnormally terminated. The request messages are moved to the dead-letter queue.

MBRH

MQCIH field *ConversationalTask* was set to MQCCT_NO, but the task was conversational.

System action

The transaction is abnormally terminated.

MBRI

The size of the request message is too large for the input buffer (the maximum size is 20 KB).

System action

The transaction is abnormally terminated. The request messages are moved to the dead-letter queue.

MBRJ

The contents of the MQCIH or BRMQ vectors are incorrect.

System action

The transaction is abnormally terminated.

MBRK

The start data received by the CICS bridge exit is incorrect.

System action

The transaction is abnormally terminated.

MBRM

The CICS bridge exit received invalid calling parameters from CICS.

System action

The transaction is abnormally terminated. The request messages are moved to the dead-letter queue.

MBRN

The request message was truncated.

System action

The transaction is abnormally terminated.

MBRO, MBRP

The contents of the MQCIH or BRMQ vectors are incorrect.

System action

The transaction is abnormally terminated.

MBRQ

A requested map did not have an associated ADSD.

System action

The transaction is abnormally terminated.

MBRS

The CICS bridge exit received an unexpected return code from an MQ API call to open a queue.

System action

The transaction is abnormally terminated. All request messages for this unit of work are left on the CICS bridge queue to be handled by the CICS bridge monitor.

MBR1, MBR2, MBR3, MBR6

The CICS bridge exit received invalid calling parameters from CICS.

System action

The transaction is abnormally terminated. The request messages are moved to the dead-letter queue.

MBR7

The size of the EXEC CICS TC output request is too large for the output buffer (the maximum size is 20 KB).

System action

The transaction is abnormally terminated.

MBR8

The mapset name in the next BRMQ vector does not match the CICS request.

System action

The transaction is abnormally terminated.

MBR9

The map name in the next BRMQ vector does not match the CICS request.

System action

The transaction is abnormally terminated.

MQB1

The CICS bridge exit received an unexpected return code from an MQ API call when processing a backout request.

System action

The transaction is abnormally terminated. The request messages are moved to the dead-letter queue.

MQB2

The CICS bridge exit received an unexpected return code from an MQ API call when processing a commit request.

System action

The data is not committed. The transaction is abnormally terminated. The request messages are moved to the dead-letter queue.

MQB4

The CICS bridge exit was unable to reread messages from the bridge request queue during backout processing.

System action

The request messages are left on the CICS bridge queue with MQMD.BackoutCount set to 1.

IBM MQ component identifiers

IBM MQ for z/OS has a component-based architecture and each component uses a unique identifier code. These identifier codes are displayed in some of the informational messages.

Table 7. Component identifiers used in IBM MQ messages and codes		
Component	**ID**	**Hex ID**
Batch adapter	B	X'C2'
CICS adapter	C	X'C3'
Coupling Facility manager	E	X'C5'
Message generator	F	X'C6'
Functional recovery manager	G	X'C7'
Security manager	H	X'C8'
Data manager	I	X'C9'
Recovery log manager	J	X'D1'
Lock manager	L	X'D3'
Connection manager	m	X'94'
Message manager	M	X'D4'
Command server	N	X'D5'
Operations and control	O	X'D6'
Buffer manager	P	X'D7'
IMS adapter	Q	X'D8'
Recovery manager	R	X'D9'
Storage manager	S	X'E2'
Timer services	T	X'E3'
Utilities	U	X'E4'
Agent services	V	X'E5'

Table 7. Component identifiers used in IBM MQ messages and codes (continued)

Component	ID	Hex ID
Instrumentation facilities	W	X'E6'
Distributed queuing	X	X'E7'
Initialization procedures and general services	Y	X'E8'
System parameter manager	Z	X'E9'
Advanced message security	0 (zero)	X'F0'
Service facilities	1	X'F1'
IBM MQ - IMS bridge	2	X'F2'
Subsystem support	3	X'F3'
Db2 manager	5	X'F5'
Generalized command processor	9	X'F9'

Communications protocol return codes

The communication protocols used by IBM MQ for z/OS can issue their own return codes. Use these tables to identify the return codes used by each protocol.

The tables in this topic show the common return codes from TCP/IP and APPC/MVS returned in messages from the distributed queuing component:

- "TCP/IP UNIX System Services Sockets return codes" on page 1124
- APPC/MVS return codes

If the return code is not listed, or if you want more information, see to the documentation mentioned in each table.

If the return code you received is X'7D0' or more, it is one of the MQRC_* return codes issued by IBM MQ. These codes are listed in API completion and reason codes.

TCP/IP UNIX System Services Sockets return codes

See the *TCP/IP UNIX System Services Messages and Codes* manual for more information and for further return codes.

Table 8. UNIX System Services sockets return codes

Return code (Hexadecimal)	Explanation
0001	Error in the domain
0002	Result is too large
006F	Permission is denied
0070	The resource is temporarily unavailable
0071	The file descriptor is incorrect
0072	The resource is busy
0073	No child process exists
0074	A resource deadlock is avoided
0075	The file exists

Return code (Hexadecimal)	Explanation
0076	The address is incorrect
0077	The file is too large
0078	A function call is interrupted
0079	The parameter is incorrect
007A	An I/O error occurred
007B	The file specified is a directory
007C	Too many files are open for this process
007D	Too many links occurred
007E	The file name is too long
007F	Too many files are open in the system
0080	No such device exists
0081	No such file, directory, or IPC member exists
0082	The exec call contained a format error (DFSMS error)
0083	No locks are available
0084	Not enough space is available
0085	No space is left on the device, or no space is available to create the IPC member ID
0086	The function is not implemented
0087	Not a directory
0088	The directory is not empty
0089	The I/O control operator is inappropriate
008A	No such device or address exists
008B	The operation is not permitted
008C	The pipe is broken
008D	The specified file system is read only
008E	The seek is incorrect
008F	No such process or thread exists
0090	A link to a file on another file system was attempted
0091	The parameter list is too long, or the message to receive was too large for the buffer
0092	A loop is encountered in symbolic links
0093	The byte sequence is incorrect
0095	A value is too large to be stored in the data type
0096	OpenMVS kernel is not active

Table 8. UNIX System Services sockets return codes (continued)

Return code (Hexadecimal)	Explanation
0097	Dynamic allocation error
0098	Catalog Volume Access Facility error
0099	Catalog obtain error
009C	Process Initialization error
009D	An MVS environmental or internal error has occurred
009E	Bad parameters were passed to the service
009F	HFS encountered a permanent file error
00A2	HFS encountered a system error
00A3	SAF/RACF extract error
00A4	SAF/RACF error
00A7	Access to the OpenMVS version of the C RTL is denied
00A8	The password for the specified resource has expired
00A9	The new password specified is not valid
00AA	A WLM service ended in error
03EA	Socket number assigned by client interface code (for socket() and accept()) is out of range
03EB	Socket number assigned by client interface code is already in use
03ED	Offload box error
03EE	Offload box restarted
03EF	Offload box down
03F0	Already a conflicting call outstanding on socket
03F1	Request canceled using SOCKcallCANCEL request
03F3	SetIbmOpt specified a name of a PFS that either was not configured or was not a Sockets PFS
044C	Block device required
044D	Text file busy
044E	The descriptor is marked nonblocking, and the requested function cannot complete immediately
044F	Operation now in progress
0450	Operation already in progress
0451	Socket operation on a non-socket
0452	Destination address required
0453	The message is too large to be sent in a single transmission, as required
0454	The socket type is incorrect
0455	Protocol or socket option unavailable

Table 8. UNIX System Services sockets return codes (continued)

Table 8. UNIX System Services sockets return codes (continued)	
Return code (Hexadecimal)	**Explanation**
0456	Protocol not supported
0457	Socket type not supported
0458	The referenced socket is not a type that supports the requested function
0459	Protocol family not supported
045A	The address family is not supported
045B	The address is already in use
045C	Cannot assign requested address
045D	Network is down
045E	Network is unreachable
045F	Network dropped connection on reset
0460	Software caused connection abort
0461	Connection reset by peer
0462	Insufficient buffer space available
0463	The socket is already connected
0464	The socket is not connected
0465	Cannot send after socket shutdown
0466	Too many references: Cannot splice
0467	Connection timed out
0468	The attempt to connect was rejected
0469	Host is down
046A	No route to host
046B	Too many processes
046C	Too many users
046D	Disk quota exceeded
046E	Stale NFS file handle
046F	Too many levels of remote in path
0470	Device is not a stream
0471	Timer expired
0472	Out of streams resources
0473	No message of the required type
0474	Trying to read unreadable message
0475	Identifier removed
0476	Machine is not on the network
0477	Object is remote

Return code (Hexadecimal)	Explanation
0478	The link has been severed
0479	Advertise error
047A	srmount error
047B	Communication error on send
047C	Protocol error
047D	Protocol error
047E	Cross mount point
047F	Remote address change
0480	The asynchronous I/O request has been canceled
0481	Socket send/receive gotten out of order
0482	Unattached streams error
0483	Streams push object error
0484	Streams closed error
0485	Streams link error
0486	Tcp error
Other	See the *OS/390 UNIX System Services Messages and Codes* manual

Table 8. UNIX System Services sockets return codes (continued)

APPC/MVS return codes

The tables in this section document the following return codes:

- APPC return codes
- APPC allocate services return codes
- APPC reason codes

See the *Writing Transaction Programs for APPC/MVS* and *Writing Servers for APPC/MVS* documentation for more information.

APPC return codes

This table documents the return codes that can be returned from APPC/MVS in messages from the distributed queuing component if you are using APPC/MVS as your communications protocol. These return codes can be returned to the local program in response to a call.

Table 9. APPC return codes and their meanings

Return code (Hexadecimal)	Explanation
00	The call issued by the local program ran successfully. If the call specified a Notify_type of ECB, the call processing is performed asynchronously, and the ECB is posted when the processing is complete.
01	The caller specified an allocate_type that was other than *immediate*. Either APPC/MVS can not establish a session with the partner LU, or VTAM can not establish the conversation. In this case (when allocate_type is *immediate*), APPC/MVS converts this return code to "unsuccessful".

Table 9. APPC return codes and their meanings (continued)	
Return code (Hexadecimal)	**Explanation**
02	The conversation cannot be allocated on a session because of a condition that might be temporary. The program can try again the allocation request. The system returns this code when the allocate_type specified on a CMALLOC verb is other then *immediate*.
03	The partner LU rejected the allocation request because the local program issued an Allocate call with the Conversation_type parameter set to either Basic_conversation or Mapped_conversation, and the partner program does not support the mapped or basic conversation protocol boundary. This return code is returned on a call made after the Allocate.
05	The partner LU rejected an ATBALLC or ATBALC2 (allocate) request because the partner program has one or more initialization parameter (PIP) variables defined. APPC/MVS does not support these parameters. This return code is returned on a call made after the Allocate. It is not returned for allocate requests made using CPI Communications.
06	The partner LU rejected the allocation request because the access security information is not valid. This return code is returned on a call subsequent to the Allocate.
08	The partner LU rejected the allocation request because the local program specified a synchronization level (with the Sync_level parameter) that the partner program does not support. This return code is returned on a call subsequent to the Allocate.
09	The partner LU rejected the allocation request because the local program specified a partner program that the partner LU does not recognize. This return code is returned on a call subsequent to the Allocate.
0A	The partner LU rejected the allocation request because the local program specified a partner program that the partner LU recognizes but cannot start. The condition is not temporary, and the program should not try again the allocation request. This return code is returned on a call subsequent to the Allocate.
0B	The partner LU rejected the allocation request because the local program specified a partner program that the partner LU recognizes but currently cannot start. The condition might be temporary, and the program can try again the allocation request. This return code is returned on a call subsequent to the Allocate.
11	The partner program issued a Deallocate call with a Deallocate_type of Deallocate_abend, or the partner LU has done so because of a partner program abnormal ending condition. If the partner program was in receive state when the call was issued, information sent by the local program and not yet received by the partner program is purged. This return code is reported to the local program on a call the program issues in Send or Receive state.
12	The partner program issued a Deallocate call on a basic or mapped conversation with a Deallocate_type of Deallocate_sync_level or Deallocate_flush. This return code is reported to the local program on a call the program issues in Receive state.

Return code (Hexadecimal)	Explanation
	Table 9. APPC return codes and their meanings (continued)
13	The local program issued a call specifying an argument that was not valid. Specific reasons for the return code apply to the following callable services: **ATBALC2 or ATBALLC (LU 6.2 Allocate)** • The TP name was not 1 - 64 characters long • Either the SYMDEST name or the TP name length were not specified • SNASVCMG is specified as mode name • X'06' is used as the first character of a TP name • An SNA service TP name is used with a mapped conversation verb • The partner LU name was not valid • The mode name was not valid • The local LU name specified is either undefined or not permitted **CMALLC (CPI-C Allocate)** • SNASVCMG is specified as mode name • X'06'is used as the first character of a TP name • An SNA service TP name is used with a mapped conversation verb • The mode name was not valid
14	A product-specific error has been detected. The system writes symptom records that describe the error to SYS1.LOGREC.
15	Indicates one of the following: • The partner program made a Send_error call on a mapped conversation and the conversation for the partner program was in Send state. No truncation occurs at the mapped conversation protocol boundary. This return code is reported to the local program on a Receive call before receiving any data records or after receiving one or more data records. • The partner program made a Send_error call specifying the Type parameter with a value of PROG, the conversation for the partner program was in Send state, and the call did not truncate a logical record. No truncation occurs at the basic conversation protocol boundary when a program performs a Send_error before sending any logical records, or after sending a complete logical record. This return code is reported to the local program on a Receive call before receiving any logical records or after receiving one or more complete logical records.
16	The partner program made a Send_error call on a mapped conversation, or made a Send_error call on a basic conversation specifying the Type parameter with a value of PROG, and the conversation for the partner program was in Receive or Confirm state. The call might have caused information to be purged. Purging occurs when a program issued Send_error in receive state before receiving all the information sent by its partner program. No purging occurs when a program issues the call in Confirm state or in Receive state after receiving all the information sent by its partner program. The return code is normally reported to the local program on a call it issues before sending any information, depending on the call and when it is made.

Table 9. APPC return codes and their meanings (continued)	
Return code (Hexadecimal)	**Explanation**
17	The partner program made a Send_error call specifying the Type parameter with a value of PROG, the conversation for the partner program was in Send state, and the call truncated a logical record. Truncation occurs at the basic conversation protocol boundary when a program begins sending a logical record and then makes a Send_error call before sending the complete logical record. This return code is reported to the local program on a Receive call it issues after receiving the truncated logical record.
18	The local program issued a call in which a programming error has been found in one or more parameters. Specific reasons for the return code apply to the following callable services: **ATBALC2 or ATBALLC (LU 6.2 Allocate)** • An unauthorized caller passed a nonzero TP_ID • For Sec_pgm-type security, both the user ID and password were not specified • For Sec_Pgm-type security, a user ID was specified with a blank password, or a password was specified with a blank user ID • The SYMDEST name was not found in the side information • The specified TP_ID is not associated with the address space • An unauthorized caller specified a Notify_Type of ECB **ATBCFM (LU 6.2 Allocate)** • An unauthorized caller specified a Notify_type of ECB • The Sync_Level field for the conversation was equal to sync_level_none **ATBDEAL (LU 6.2 Allocate)** • A Deallocate_type of deallocate_confirm was specified, and the Sync_Level field for the conversation was equal to sync_level_none **ATBPTR (LU 6.2 Prepare to Receive)** • A Prepare_To_Receive_Type of Prep_to_receive_sync_level was specified, and the Sync_Level field for the conversation was equal to sync_level_none **ATBSEND (LU 6.2 Send)** • The value in the 2 byte LL field was not valid • A Send_Type of Send_and_Confirm was specified, and the Sync_Level field for the conversation was equal to sync_level_none **CMINIT (CPI-C Initialize Conversation)** The SYMDEST name was not found in the side information

Return code (Hexadecimal)	Explanation
	Table 9. APPC return codes and their meanings (continued)
Return code (Hexadecimal)	**Explanation**
19	The local program issued a call in a state that was not valid for that call. The program should not examine any other returned variables associated with the call as nothing is placed in the variables. The state of the conversation remains unchanged.
	If the error occurs in one of the following callable services, the conversation was in send state and the program started, but the program did not finish sending a logical record:
	• ATBCFM (LU 6.2 Allocate)
	• ATBDEAL (LU 6.2 Allocate)
	• ATBPTR (LU 6.2 Allocate)
	• ATBRCVW and ATBRCVI (LU 6.2 Receive and Wait and Receive Immediate)
	• ATBSEND (LU 6.2 Send)
1A	A failure occurred that caused the conversation to be prematurely terminated. The condition is not temporary, and the program should not try the transaction again until the condition is corrected.
1B	A failure occurred that caused the conversation to be prematurely terminated. The condition might be temporary, and the program can try the transaction again.
1C	The call issued by the local program did not run successfully. This return code is returned on the unsuccessful call.
	If this code is returned by the ATBRCVI (LU 6.2 Receive_Immediate) callable service, there is no data to be returned.
1E	The partner program issued a Deallocate call with a Deallocate_type of Deallocate_abend_SVC. If the partner program was in Receive state when the call was issued, information sent by the local program and not yet received by the partner program is purged. This return code is reported to the local program on a call the program issues in Send or Receive state.
1F	The partner program issued a Deallocate call with a Deallocate_type of Deallocate_abend_timer. If the partner program was in Receive state when the call was issued, information sent by the local program and not yet received by the partner program is purged. This return code is reported to the local program on a call the program issues in Send or Receive state.
20	The partner program issued a Send_error call specifying a Type parameter of SVC, the conversation for the partner program was in Send state, and the call did not truncate a logical record. This return code is returned on a Receive call. It is not returned for Send_error requests using CPI Communications.

Return code (Hexadecimal)	Explanation
21	The partner program issued a Send_error call specifying a Type parameter of SVC, the conversation for the partner program was in Receive, Confirm, or Sync_Point state, and the call might have caused information to be purged. This return code is normally returned to the local program on a call that the local program issues after sending some information to the partner program. However the return code can be returned on a call that the local program issues before sending any information, depending on when the call is issued. This code is not returned for Send_error requests using CPI Communications.
22	The partner program issued a Send_error call specifying a Type parameter of SVC, the conversation for the partner program was in Send state, and the call truncated a logical record. Truncation occurs when a program begins sending a logical record and then issues Send_error before sending the complete record. This return code is returned to the local program on a Receive call that the local program issues after receiving the truncated logical record. The code is not returned for Send_error requests using CPI Communications.
40	APPC/MVS is not currently active. Call the service again after APPC is available.
Other	See the *Writing Transaction Programs for APPC/MVS* and *Writing Servers for APPC/MVS* manuals.

Table 9. APPC return codes and their meanings (continued)

APPC allocate services return codes

This table documents the return codes that can be returned from APPC/MVS allocate queue services in messages from the distributed queuing component if you are using APPC/MVS as your communications protocol.

Table 10. APPC allocate services return codes and their meanings

Return code (Hex)	Explanation
0	The service completed as requested.
4	The service completed, but possibly not as expected. See the reason code parameter for a description of the warning condition.
8	A user-supplied parameter was found to be in error. For example, a parameter contains characters not in the required character set. See the reason code parameter to determine which parameter is in error.
10	The service was unsuccessful. The cause is most likely a parameter error other than a syntax error, or an environmental error. For example, a syntactically valid LU name was specified, but the LU is not defined to APPC/MVS. An example of an environmental error is that the caller called the service while holding locks. See the reason code parameter for the specific cause of the error, and to determine whether the error can be corrected and the service issued again.

Table 10. APPC allocate services return codes and their meanings (continued)	
Return code (Hex)	Explanation
20	APPC/MVS service failure. Record the return and reason code, and give them to your system programmer, who should contact the appropriate IBM support personnel.
40	APPC/MVS is not currently active. Call the service again after APPC is available.
Other	See the *Writing Transaction Programs for APPC/MVS* and *Writing Servers for APPC/MVS* manuals.

APPC reason codes

This table documents the reason codes that can be returned from APPC/MVS allocate queue services in messages from the distributed queuing component if you are using APPC/MVS as your communications protocol.

Note: Some of the APPC return codes are not accompanied by a reason code; in these cases, the value in the reason code field can be ignored. See the documentation shown in "APPC/MVS return codes" on page 1128 for more information.

Table 11. APPC reason codes and their meanings	
Return code (Hex)	Explanation
1	The address space issued a Register_For_Allocates call that duplicated a previous Register_For_Allocate call (that is, the values specified for TP name, local LU name, partner LU name, user ID, and profile all matched those specified on a previous call to the Register_For_Allocates service).
2	A TP name is required, but none was specified.
3	The specified TP name contains characters that are not valid
4	The specified TP name length is outside the allowable range.
5	A local LU name is required, but none was specified.
7	An asynchronous call failed because a specified parameter was found to be inaccessible.
8	The caller held one or more locks when calling the service.
0A	A transaction scheduler called the Register_For_Allocate service, which is not allowed
0B	The specified symbolic destination name can not be found in the side information data set.
0C	The specified local LU is undefined.
0D	The specified local LU is not receiving inbound allocate requests.
0E	The Register_For_Allocate service was called, but the caller is not authorized to serve the specified TP name on the specified local LU.
0F	The specified local LU is inaccessible to the caller.
10	The service failed because of an APPC failure.
11	The specified allocate queue token does not represent an allocate queue for which this address space is registered.
12	The specified notify type is not valid.

Return code (Hex)	Explanation
13	The specified timeout value is not valid.
14	The request was canceled while in progress. This might have been caused by a call to the Unregister_For_Allocates service, or the termination of the caller's address space.
15	A Receive_Allocate call completed, but no allocate request was available to be received.
1A	The specified event notification type is not valid.
1B	The specified event code is not supported or is not valid for this service.
1C	The netid retrieved from the side information data set does not match the local netid.
1D	The specified event code qualifier is not valid or supported.
1E	The Get_Event call completed, but no event element was available to be received.
1F	The call to the Get_Event service was interrupted because all event notification requests were canceled for this address space.
20	The call to the Get_Event service was rejected because a previous Get_Event call is currently outstanding.
21	The Get_Event call was rejected because no event notification is in effect for this address space.
22	The specified allocate queue keep time is outside the allowable range.
24	A call to the Unregister_For_Allocates service specified "unregister all" (that is, the allocate_queue_token was set to binary zeros), but this address space is not registered for any allocate queues.
25	The specified event get type is not valid.
26	The specified receive allocate type is not valid.
27	APPC/MVS cannot determine if the specified netid is valid.
29	The service failed because the supplied buffer was not large enough to contain the requested information.
Other	See the *Writing Transaction Programs for APPC/MVS* and *Writing Servers for APPC/MVS* manuals.

Table 11. APPC reason codes and their meanings (continued)

z/OS Secure Sockets Layer (SSL) and Transport Layer Security (TLS) return codes for z/OS

IBM MQ for z/OS can use Secure Sockets Layer (SSL) with the various communication protocols. Use this topic to identify the error codes that can be returned by SSL.

Table 12 on page 1136 in this appendix documents the return codes, in decimal form, from the Secure Sockets Layer (SSL) that can be returned in messages from the distributed queuing component.

Table 13 on page 1138 in this appendix documents the return codes, in hexadecimal form, from the Secure Sockets Layer (SSL) function 'gsk_fips_state_set' that can be returned in messages from the distributed queuing component.

If the return code is not listed, or if you want more information, see SSL Function Return Codes in *z/OS Cryptographic Services System SSL Programming*.

Table 12. SSL return codes	
Return code (decimal)	**Explanation**
1	Handle is not valid.
3	An internal error has occurred.
4	Insufficient storage is available
5	Handle is in the incorrect state.
6	Key label is not found.
7	No certificates available.
8	Certificate validation error.
9	Cryptographic processing error.
10	ASN processing error.
11	LDAP processing error.
12	An unexpected error has occurred.
102	Error detected while reading key database or SAF key ring.
103	Incorrect key database record format.
106	Incorrect key database password.
109	No certificate authority certificates.
201	No key database password supplied.
202	Error detected while opening the key database.
203	Unable to generate temporary key pair
204	Key database password is expired.
302	Connection is active.
401	Certificate is expired or is not valid yet.
402	No SSL cipher specifications.
403	No certificate received from partner.
405	Certificate format is not supported.
406	Error while reading or writing data.
407	Key label does not exist.
408	Key database password is not correct.
410	SSL message format is incorrect.
411	Message authentication code is incorrect.
412	SSL protocol or certificate type is not supported.
413	Certificate signature is incorrect.
414	Certificate is not valid.

Table 12. SSL return codes (continued)	
Return code (decimal)	**Explanation**
415	SSL protocol violation.
416	Permission denied.
417	Self-signed certificate cannot be validated.
420	Socket closed by remote partner.
421	SSL V2 cipher is not valid.
422	SSL V3 cipher is not valid.
427	LDAP is not available.
428	Key entry does not contain a private key.
429	SSL V2 header is not valid.
431	Certificate is revoked.
432	Session renegotiation is not allowed.
433	Key exceeds allowable export size.
434	Certificate key is not compatible with cipher suite.
435	certificate authority is unknown.
436	Certificate revocation list cannot be found.
437	Connection closed.
438	Internal error reported by remote partner.
439	Unknown alert received from remote partner.
440	Incorrect key usage.
442	Multiple certificates exist for label.
443	Multiple keys are marked as the default.
444	Error encountered generaring random bytes.
445	Key database is not a FIPS mode database.
446	TLS extension mismatch has been encountered.
447	Required TLS extension has been rejected.
448	Requested server name is not recognized.
449	Unsupported fragment length was received.
450	TLS extension length field is not valid.
451	Elliptic Curve is not supported.
452	EC Parameters not supplied.
453	Signature not supplied.
454	Elliptic Curve parameters are not valid.
455	ICSF services are not available.
456	ICSF callable services returned a error.

Table 12. SSL return codes (continued)	
Return code (decimal)	**Explanation**
457	ICSF PKCS#11 not operating in FIPS mode.
458	The SSL V3 expanded cipher is not valid.
459	Elliptic Curve is not supported in FIPS mode.
460	Required TLS Renegotiation Indication not received.
461	EC domain parameter format is not supported.
462	Elliptic Curve point format is not supported.
463	Cryptographic hardware does not support service or algorithmn.
464	Elliptic curve list is not valid.
466	Signature algorithm pairs list is not valid.
467	Signature algorithm not in signature algorithm pairs list.
468	Certificate key algorithm not in signature algorithm pairs list.
501	Buffer size is not valid.
502	Socket request would block.
503	Socket read request would block.
504	Socket write request would block.
505	Record overflow.
601	Protocol is not SSL V3, TLS V1.0, TLS V1.1, or TLS V1.2.
602	Function identifier is not valid.
603	Specified function enumeration is not valid.
604	Send sequence number is near maxumum value.
701	Attribute identifier is not valid.
702	Attribute length is not valid.
703	Enumeration is not valid.
704	Session identifier cache callback is not valid.
705	Numeric value is not valid.
706	Attribute parameter is not valid.
707	TLS extension type is not valid.
708	Supplied TLS extension data is not valid.

Table 13. SSL return codes from 'gsk_fips_state_set'	
Return code (hexadecimal)	**Explanation**
03353050	The enumeration value is not valid or it cannot be set due to the current state.

Table 13. SSL return codes from 'gsk_fips_state_set' (continued)	
Return code (hexadecimal)	**Explanation**
0335306B	The System SSL FIPS mode state cannot be changed to FIPS mode because it is currently not in FIPS mode.
0335306C	The request to execute in FIPS mode failed because the Cryptographic Services Security Level 3 FMID is not installed so that the required System SSL DLLs could not be loaded.
03353067	The power on known answer tests failed. FIPS mode cannot be set.

Distributed queuing message codes

Distributed queuing is one of the components of IBM MQ for z/OS. Use this topic to interpret the message codes issued by the distributed queuing component.

Distributed queuing message codes are in the form *s* 0009 *nnn* (in hexadecimal). The error they identify is described in detail by error message CSQX *nnn*, although there are some exceptions. The following table shows the full correspondence. Distributed queuing message codes are used in some error messages, and in the event data for the MQRC_CHANNEL_STOPPED event. The event data also contains message inserts. The meanings of the inserts depend on the message code, and are shown in the following table, in the form in which they are given in the message explanation. Where no meaning is shown, the insert is not relevant to the message code, and the value set in the event message is unpredictable.

Note: *trptype* can be shown in various forms:

Message insert
    Event data

TCP
    TCP/IP

LU62
    LU 6.2, APPC, CPI-C

Message code (*nnn*)	Message number	Integer insert 1	Integer insert 2	Character insert 1	Character insert 2	Character insert 3
001	CSQX501I			channel-name		
181	CSQX181E	response		exit-name		
182	CSQX182E	response		exit-name		
184	CSQX184E	address		exit-name		
189	CSQX189E	length		exit-name		
196	CSQX196E	data-length	agent-buffer length	exit-name		
197	CSQX197E	data-length	exit-buffer length	exit-name		
201	CSQX201E	return-code		conn-id	trptype	
202	CSQX202E	return-code		conn-id	trptype	
203	CSQX203E	return-code		conn-id	trptype	
204	CSQX204E	return-code		conn-id	trptype	
205	CSQX205E	return-code		conn-id	trptype	

Message code (*nnn*)	Message number	Integer insert 1	Integer insert 2	Character insert 1	Character insert 2	Character insert 3
206	CSQX206E	return-code		conn-id	trptype	
207	CSQX207E			conn-id	trptype	
208	CSQX208E	return-code		conn-id	trptype	
209	CSQX209E			conn-id	trptype	
211	CSQX027E					
212	CSQX212E	return-code				
213	CSQX213E	return-code			trptype	
237	CSQX203E	return-code	reason	conn-id	trptype	
238	CSQX213E	return-code	reason		trptype	
403	CSQX403I			channel-name	exit-name	
496	CSQX496I			channel-name		
498	CSQX498E	fieldvalue		channel-name		
506	CSQX506E			channel-name		
510	CSQX037E	mqrc			name	
511	CSQX038E	mqrc			name	
514	CSQX514E			channel-name		
519	CSQX519E			channel-name		
520	CSQX520E			channel-name		
525	CSQX525E			channel-name		
526	CSQX526E	msg-seqno	exp-seqno	channel-name		
527	CSQX527E			channel-name		
528	CSQX528I			channel-name		
533	CSQX533I			channel-name		
534	CSQX534E			channel-name		
536	CSQX536I			channel-name	exit-name	
540	CSQX540E	mqrc		commit identifier which includes channel-name		
542	the queue manager is stopping (no corresponding error message)					

Message code (*nnn*)	Message number	Integer insert 1	Integer insert 2	Character insert 1	Character insert 2	Character insert 3
544	see integer insert 1	1 - see message CSQX548E 2 - see message CSQX544E		channel-name		
545	CSQX545I			channel-name		
546	code 00E70546					
558	CSQX558E			channel-name		
565	CSQX565E			channel-name	qmgr-name	
569	CSQX569E			channel-name		
570	CSQX570E			channel-name		
572	CSQX572E			channel-name		
573	CSQX573E			channel-name		
574	CSQX574I			channel-name		
575	CSQX575E					
613	CSQX613E			channel-name		
620	CSQX620E	return-code		SSL-function		
631	CSQX631E			channel-name	local cipher spec	remote cipher spec
633	CSQX633E			channel-name		
634	CSQX634E			channel-name		
635	CSQX635E			channel-name		cipher spec
636	CSQX636E			channel-name	dist-name	
637	CSQX637E			channel-name		
638	CSQX638E			channel-name		
639	CSQX639E			channel-name		
640	CSQX640E			channel-name		key-name
641	CSQX641E			channel-name		
642	CSQX642E			channel-name		
643	CSQX643E			channel-name		
644	CSQX644E			channel-name		
999	CSQX599E			channel-name		

Queued Publish/Subscribe message codes

Queued Publish/Subscribe is a component of IBM MQ for z/OS. Use this topic to interpret the message codes issued by the queued Publish/Subscribe component.

Queued publish/subscribe message codes are in the form 5 *nnn* (in hexadecimal), and the error they identify is described in detail by error message CSQT *nnn*, although there are some exceptions. The following table shows the full correspondence. Queued publish/subscribe message codes are used in some error messages.

Message Code (*nnn*)	Message Number	Description
800	No equivalent message	Unexpected error
87F	CSQX036E	Failed

Messages from other products

Software products on the z/OS platform issue messages and each product uses a unique identifier. Use this topic to identify the different z/OS products using the unique identifier.

The following table shows the message prefixes for other products that you might receive while using IBM MQ for z/OS.

Table 14. Message prefixes		
Prefix	**Component**	**Procedure**
AMQ	IBM MQ (not z/OS)	Consult Reason codes
ATB	APPC	Consult *MVS System Messages*
ATR	Resource recovery services	Consult *MVS System Messages*
CBC	C/C++	Consult *C/MVS User's Guide*
CEE	Language Environment	Consult *Language Environment for z/OS Debugging Guide and Runtime Messages*
CSQ	IBM MQ for z/OS	Consult this documentation
CSV	Contents supervision	Consult *MVS System Messages*
DFH	CICS	Consult *CICS Messages and Codes*
DFS	IMS	Consult *IMS Messages and Codes*
DSN	Db2	Consult *Db2 Messages and Codes*
EDC	Language Environment	Consult *Language Environment for z/OS Debugging Guide and Runtime Messages*
EZA, EZB, EZY	TCP/IP	Consult *TCP/IP for MVS Messages and Codes*
IBM	Language Environment	Consult *Language Environment for z/OS Debugging Guide and Runtime Messages*
ICH	RACF	Consult *RACF Messages and Codes*
IDC	Access method services	Consult *MVS System Messages*
IEA	z/OS system services	Consult *MVS System Messages*
IEC	Data management services	Consult *MVS System Messages*
IEE,IEF	z/OS system services	Consult *MVS System Messages*
IKJ	TSO	Consult *MVS System Messages*

Table 14. Message prefixes (continued)		
Prefix	**Component**	**Procedure**
IST	VTAM	Consult *VTAM Messages and Codes*
IWM	z/OS workload management services	Consult *MVS System Messages*
IXC	Cross-system coupling facility (XCF)	Consult *MVS System Messages*
IXL	Cross-system extended services (XES)	Consult *MVS System Messages*

See the Message directory for a full list of the z/OS message code prefixes.

MQJMS Messages

List of messages with message numbers beginning with MQJMS.

Table 15. MQJMS Messages.

List of message numbers, constants and explanatory text for messages beginning with MQJMS.

Message identifier	**Message constant**	**Description**
MQJMS0000	MQJMS_EXCEPTION_ILLEGAL_STATE	Method ''{0}'' has been invoked at an illegal or inappropriate time or if the provider is not in an appropriate state for the requested operation.
MQJMS0002	MQJMS_EXCEPTION_INVALID_CLIENTID	IBM MQ classes for JMS attempted to set invalid connection's client id.
MQJMS0003	MQJMS_EXCEPTION_INVALID_DESTINATION	Destination not understood or no longer valid.
MQJMS0004	MQJMS_EXCEPTION_INVALID_SELECTOR	IBM MQ classes for JMS has given JMS Provider a message selector with invalid syntax.
MQJMS0005	MQJMS_EXCEPTION_MESSAGE_EOF	Unexpected end of stream has been reached when a StreamMessage or BytesMessage is being read.
MQJMS0006	MQJMS_EXCEPTION_MESSAGE_FORMAT	IBM MQ classes for JMS attempts to use a data type not supported by a message or attempts to read data in the wrong type.
MQJMS0007	MQJMS_EXCEPTION_MESSAGE_NOT_READABLE	IBM MQ classes for JMS attempts to read a write-only message.
MQJMS0008	MQJMS_EXCEPTION_MESSAGE_NOT_WRITABLE	IBM MQ classes for JMS attempts to write a read-only message.
MQJMS0009	MQJMS_EXCEPTION_RESOURCE_ALLOCATION	IBM MQ classes for JMS is unable to allocate the resources required for a method.

Table 15. MQJMS Messages.

List of message numbers, constants and explanatory text for messages beginning with MQJMS.

(continued)

Message identifier	Message constant	Description
MQJMS0010	MQJMS_EXCEPTION_TRANSACTION_IN_PROGRESS	Operation invalid because a transaction is in progress.
MQJMS0011	MQJMS_EXCEPTION_TRANSACTION_ROLLED_BACK	Call to Session.commit resulted in a rollback of the current transaction.
MQJMS1000	MQJMS_EXCEPTION_MSG_CREATE_ERROR	Failed to create JMS message.
MQJMS1001	MQJMS_EXCEPTION_UNKNOWN_ACK_MODE	Unknown acknowledge mode ''{0}''.
MQJMS1004	MQJMS_EXCEPTION_CONNECTION_CLOSED	Connection closed.
MQJMS1005	MQJMS_EXCEPTION_BAD_STATE_TRANSITION	Unhandled state transition from ''{0}'' to ''{1}''.
MQJMS1006	MQJMS_EXCEPTION_BAD_VALUE	invalid value for ''{0}'': ''{1}''.
MQJMS1007	MQJMS_E_BAD_EXIT_CLASS	failed to create instance of exit class ''{0}''.
MQJMS1008	MQJMS_E_UNKNOWN_TRANSPORT	unknown value of transportType: ''{0}''.
MQJMS1009	MQJMS_E_NO_STR_CONSTRUCTOR	no constructor with string argument.
MQJMS1010	MQJMS_E_NOT_IMPLEMENTED	not implemented.
MQJMS1011	MQJMS_E_SECURITY_CREDS_INVALID	security credentials cannot be specified when using MQ bindings.
MQJMS1012	MQJMS_E_NO_MSG_LISTENER	no message listener.
MQJMS1013	MQJMS_E_SESSION_ASYNC	operation invalid whilst session is using asynchronous delivery.
MQJMS1014	MQJMS_E_IDENT_PRO_INVALID_OP	operation invalid for identified producer.
MQJMS1015	MQJMS_E_UNKNOWN_TARGET_CLIENT	unknown value of target client: ''{0}''.
MQJMS1016	MQJMS_E_INTERNAL_ERROR	an internal error has occurred. Please contact your system administrator. Detail: ''{0}''.

Table 15. MQJMS Messages.

List of message numbers, constants and explanatory text for messages beginning with MQJMS.

(continued)

Message identifier	Message constant	Description
MQJMS1017	MQJMS_E_NON_LOCAL_RXQ	non-local MQ queue not valid for receiving or browsing.
MQJMS1018	MQJMS_E_NULL_CONNECTION	no valid connection available.
MQJMS1019	MQJMS_E_SESSION_NOT_TRANSACTED	invalid operation for non-transacted session.
MQJMS1020	MQJMS_E_SESSION_IS_TRANSACTED	invalid operation for transacted session.
MQJMS1021	MQJMS_E_RECOVER_BO_FAILED	recover failed: unacknowledged messages might not get redelivered.
MQJMS1022	MQJMS_E_REDIRECT_FAILED	failed to redirect message.
MQJMS1023	MQJMS_E_ROLLBACK_FAILED	rollback failed.
MQJMS1024	MQJMS_E_SESSION_CLOSED	session closed.
MQJMS1025	MQJMS_E_BROWSE_MSG_FAILED	failed to browse message.
MQJMS1026	MQJMS_E_EXCP_LSTNR_FAILED	ExceptionListener threw exception: ''{0}''.
MQJMS1027	MQJMS_E_BAD_DEST_STR	failed to reconstitute destination from ''{0}''.
MQJMS1028	MQJMS_EXCEPTION_NULL_ELEMENT_NAME	element name is null.
MQJMS1029	MQJMS_EXCEPTION_NULL_PROPERTY_NAME	property name is null.
MQJMS1030	MQJMS_EXCEPTION_BUFFER_TOO_SMALL	buffer supplied by application is too small.
MQJMS1031	MQJMS_EXCEPTION_UNEXPECTED_ERROR	an internal error has occurred. Please contact your system administrator.
MQJMS1032	MQJMS_E_CLOSE_FAILED	close() failed because of ''{0}''.
MQJMS1033	MQJMS_E_START_FAILED	start() failed because of ''{0}''.
MQJMS1034	MQJMS_E_MSG_LSTNR_FAILED	MessageListener threw: ''{0}''.

Table 15. MQJMS Messages.

List of message numbers, constants and explanatory text for messages beginning with MQJMS.

(continued)

Message identifier	Message constant	Description
MQJMS1042	MQJMS_E_DELIVERY_MODE_INVALID	invalid Delivery Mode.
MQJMS1044	MQJMS_E_INVALID_HEX_STRING	String is not a valid hexadecimal number - ''{0}''.
MQJMS1045	MQJMS_E_S390_DOUBLE_TOO_BIG	Number outside of range for double precision S/390 Float ''{0}''.
MQJMS1046	MQJMS_E_BAD_CCSID	The character set ''{0}'' is not supported.
MQJMS1047	MQJMS_E_INVALID_MAP_MESSAGE	The map message has an incorrect format.
MQJMS1048	MQJMS_E_INVALID_STREAM_MESSAGE	The stream message has an incorrect format.
MQJMS1049	MQJMS_E_BYTE_TO_STRING	The IBM MQ classes for JMS attempted to convert a byte array to a String.
MQJMS1050	MQJMS_E_BAD_RFH2	The MQRFH2 header has an incorrect format.
MQJMS1051	MQJMS_MSG_CLASS	JMS Message class.
MQJMS1052	MQJMS_E_BAD_MSG_CLASS	Unrecognizable JMS Message class.
MQJMS1053	MQJMS_E_INVALID_SURROGATE	Invalid UTF-16 surrogate detected ''{0}''.
MQJMS1054	MQJMS_E_INVALID_ESCAPE	Invalid XML escape sequence detected ''{0}''.
MQJMS1055	MQJMS_E_BAD_TYPE	The property or element in the message has incompatible datatype ''{0}''.
MQJMS1056	MQJMS_E_UNSUPPORTED_TYPE	Unsupported property or element datatype ''{0}''.
MQJMS1057	MQJMS_E_NO_SESSION	Message has no session associated with it.
MQJMS1058	MQJMS_E_BAD_PROPERTY_NAME	Invalid message property name: ''{0}''.
MQJMS1059	MQJMS_E_NO_UTF8	Fatal error - UTF8 not supported.
MQJMS1060	MQJMS_E_SERIALISE_FAILED	Unable to serialize object.

Message identifier	Message constant	Description
MQJMS1061	MQJMS_E_DESERIALISE_FAILED	Unable to deserialize object.
MQJMS1062	MQJMS_EXCEPTION_HAPPENED	Exception occurred reading message body: ''{0}''.
MQJMS1063	MQJMS_CHARS_OMITTED	Another ''{0}'' character(s) omitted.
MQJMS1064	MQJMS_ENCODINGS	Integer encoding: ''{0}''=Floating point encoding ''{1}''.
MQJMS1065	MQJMS_E_COULD_NOT_WRITE	Exception occurred writing message body.
MQJMS1066	MQJMS_E_BAD_ELEMENT_NAME	Invalid message element name: ''{0}''.
MQJMS1067	MQJMS_E_BAD_TIMEOUT	timeout invalid for MQ.
MQJMS1068	MQJMS_E_NO_XARESOURCE	failed to obtain XAResource.
MQJMS1069	MQJMS_E_NOT_ALLOWED_WITH_XA	Not allowed with XASession.
MQJMS1072	MQJMS_E_QMGR_NAME_INQUIRE_FAILED	Could not inquire upon Queue Manager name.
MQJMS1073	MQJMS_E_QUEUE_NOT_LOCAL_OR_ALIAS	Specified MQ Queue is neither a QLOCAL nor a QALIAS.
MQJMS1074	MQJMS_E_NULL_MESSAGE	Unable to process null message.
MQJMS1075	MQJMS_E_DLH_WRITE_FAILED	Error writing dead letter header.
MQJMS1076	MQJMS_E_DLH_READ_FAILED	Error reading dead letter header.
MQJMS1077	MQJMS_E_CONN_DEST_MISMATCH	Connection/destination mismatch.
MQJMS1078	MQJMS_E_INVALID_SESSION	Invalid Session object.
MQJMS1079	MQJMS_E_DLQ_FAILED	Unable to write message to dead letter queue.
MQJMS1080	MQJMS_E_NO_BORQ	No Backout-Requeue queue defined.

Table 15. MQJMS Messages.

List of message numbers, constants and explanatory text for messages beginning with MQJMS.

(continued)

Message identifier	Message constant	Description
Table 15. MQJMS Messages.		
List of message numbers, constants and explanatory text for messages beginning with MQJMS.		
(continued)		
Message identifier	**Message constant**	**Description**
MQJMS1081	`MQJMS_E_REQUEUE_FAILED`	Message requeue failed.
MQJMS1082	`MQJMS_E_DISCARD_FAILED`	Failure while discarding message.
MQJMS1085	`MQJMS_E_RFH_WRITE_FAILED`	Error writing RFH.
MQJMS1086	`MQJMS_E_RFH_READ_FAILED`	Error reading RFH.
MQJMS1087	`MQJMS_E_RFH_CONTENTS_ERROR`	Unrecognizable or invalid RFH content.
MQJMS1088	`MQJMS_E_CC_MIXED_DOMAIN`	Mixed-domain consumers acting on the same input is forbidden.
MQJMS1089	`MQJMS_E_READING_MSG`	Exception occurred reading message body: ''{0}''.
MQJMS1091	`MQJMS_E_UNIDENT_PRO_INVALID_OP`	operation invalid for unidentified producer.
MQJMS1093	`MQJMS_E_NULL_PARAMETER`	A null parameter was passed to the constructor: ''{0}''.
MQJMS1094	`MQJMS_E_INVALID_QUANTITY_HINT`	Invalid quantityHint.
MQJMS1096	`MQJMS_E_INVALID_MESSAGE_REFERENCE`	Invalid MessageReference.
MQJMS1098	`MQJMS_E_INVALID_MSG_REF_VERSION`	Invalid MessageReference version.
MQJMS1099	`MQJMS_E_INVALID_THREAD_VERSION`	Invalid MQQueueAgentThread version.
MQJMS1102	`MQJMS_E_MULTICAST_NOT_AVAILABLE`	Multicast connection cannot be established.
MQJMS1103	`MQJMS_E_MULTICAST_LOST_MESSAGES`	Lost ''{0}'' messages in reliable multicast mode.
MQJMS1104	`MQJMS_E_MULTICAST_HEARTBEAT_TIMEOUT`	Multicast connection disconnected due to timeout.
MQJMS1105	`MQJMS_E_MULTICAST_PORT_INVALID`	Cannot connect with a specific local port for disthub multicast.

Table 15. MQJMS Messages.

List of message numbers, constants and explanatory text for messages beginning with MQJMS.

(continued)

Message identifier	Message constant	Description
MQJMS1106	MQJMS_DIR_PGM_LIB_NOT_FOUND	Unable to load the native library required for PGM/IP.
MQJMS1110	MQJMS_E_11_NOTSUPPORTED	JMS1.1 Operation not supported by this type.
MQJMS1111	MQJMS_E_11_SERVICES_NOT_SETUP	JMS1.1 The required Queues/Publish Subscribe services are not set up.
MQJMS1112	MQJMS_E_11_INVALID_DOMAIN_SPECIFIC	JMS1.1 Invalid operation for domain specific object.
MQJMS1113	MQJMS_E_11_INVALID_CROSS_DOMAIN	JMS1.1 Invalid operation for cross domain object.
MQJMS2000	MQJMS_EXCEPTION_MQ_Q_CLOSE_FAILED	failed to close MQ queue.
MQJMS2001	MQJMS_EXCEPTION_MQ_NULL_Q	MQ Queue reference is null.
MQJMS2002	MQJMS_EXCEPTION_GET_MSG_FAILED	failed to get message from MQ queue.
MQJMS2003	MQJMS_EXCEPTION_QMDISC_FAILED	failed to disconnect queue manager.
MQJMS2004	MQJMS_EXCEPTION_MQ_NULL_QMGR	MQQueueManager reference is null.
MQJMS2005	MQJMS_EXCEPTION_QMGR_FAILED	failed to create MQQueueManager for ''{0}''.
MQJMS2006	MQJMS_EXCEPTION_SOME_PROBLEM	MQ problem: ''{0}''.
MQJMS2007	MQJMS_EXCEPTION_PUT_MSG_FAILED	failed to send message to MQ queue.
MQJMS2008	MQJMS_EXCEPTION_MQ_Q_OPEN_FAILED	failed to open MQ queue ''{0}''.
MQJMS2009	MQJMS_EXCEPTION_MQ_QM_COMMIT_FAILED	MQQueueManager.commit() failed.
MQJMS2010	MQJMS_EXCEPTION_MQ_UNKNOWN_DEFTYPE	unknown value for MQ queue definitionType: ''{0}''.
MQJMS2011	MQJMS_EXCEPTION_MQ_Q_INQUIRE_FAILED	failed to inquire MQ queue depth.
MQJMS2012	MQJMS_EXCEPTION_XACLOSE_FAILED	XACLOSE failed.

Table 15. MQJMS Messages.

List of message numbers, constants and explanatory text for messages beginning with MQJMS.

(continued)

Message identifier	Message constant	Description
MQJMS2 013	MQJMS_EXCEPTION_AUTHENTICATION_FAILE D	invalid security authentication supplied for MQQueueManager.
MQJMS2 014	MQJMS_EXCEPTION_XACLIENT_FAILED	Queue manager rejected XA client connection.
MQJMS3 000	MQJMS_E_TMPQ_FAILED	failed to create a temporary queue from ''{0}''.
MQJMS3 001	MQJMS_E_TMPQ_CLOSED	temporary queue already closed or deleted.
MQJMS3 002	MQJMS_E_TMPQ_INUSE	temporary queue in use.
MQJMS3 003	MQJMS_E_TMPQ_DEL_STATIC	cannot delete a static queue.
MQJMS3 004	MQJMS_E_TMPQ_DEL_FAILED	failed to delete temporary queue.
MQJMS3 005	MQJMS_PS_GENERAL_ERROR	Publish/Subscribe failed due to ''{0}''.
MQJMS3 006	MQJMS_PS_TOPIC_NULL	Topic reference is null.
MQJMS3 008	MQJMS_PS_COMMAND_MSG_BUILD	Failed to build command ''{0}''.
MQJMS3 009	MQJMS_PS_COMMAND_MSG_FAILED	Failed to publish command to MQ queue.
MQJMS3 010	MQJMS_PS_PUBLISH_MSG_BUILD	Failed to build publish message.
MQJMS3 011	MQJMS_PS_PUBLISH_MSG_FAILED	Failed to publish message to MQ queue.
MQJMS3 013	MQJMS_PS_STORE_ADMIN_ENTRY	Failed to store admin entry.
MQJMS3 014	MQJMS_PS_SUB_Q_OPEN_FAILED	Failed to open subscriber queue ''{0}''.
MQJMS3 017	MQJMS_PS_SUB_Q_DELETE_FAILED	Failed to delete subscriber queue ''{0}''.
MQJMS3 018	MQJMS_PS_UNKNOWN_DS	Unknown durable subscription ''{0}''.
MQJMS3 019	MQJMS_E_TMPT_DELETED	TemporaryTopic already deleted.

Message identifier	Message constant	Description
	Table 15. MQJMS Messages.	
	List of message numbers, constants and explanatory text for messages beginning with MQJMS.	
	(continued)	
MQJMS3020	MQJMS_E_TMPT_OUTOFSCOPE	TemporaryTopic out of scope.
MQJMS3021	MQJMS_PS_INVALID_SUBQ_PREFIX	Invalid subscriber queue prefix: ''{0}''.
MQJMS3022	MQJMS_PS_SUBQ_REQUEUE	Durable re-subscribe must use same subscriber queue; specified:''{0}'' original:''{1}''.
MQJMS3023	MQJMS_PS_SUB_ACTIVE	Subscription has an active TopicSubscriber.
MQJMS3024	MQJMS_PS_NULL_CLIENTID	Illegal use of uninitialized client ID.
MQJMS3025	MQJMS_E_TMPT_IN_USE	TemporaryTopic in use.
MQJMS3026	MQJMS_ERR_QSENDER_CLOSED	QueueSender is closed.
MQJMS3028	MQJMS_PUBLISHER_CLOSED	TopicPublisher is closed.
MQJMS3031	MQJMS_CLIENTID_FIXED	Can't set clientID after connection has been used.
MQJMS3032	MQJMS_CLIENTID_NO_RESET	Resetting the clientID is not allowed.
MQJMS3033	MQJMS_QRECEIVER_CLOSED	QueueReceiver is closed.
MQJMS3034	MQJMS_SUBSCRIBER_CLOSED	TopicSubscriber is closed.
MQJMS3037	MQJMS_MESSAGEPRODUCER_CLOSED	Message Producer is closed.
MQJMS3038	MQJMS_MESSAGECONSUMER_CLOSED	Message Consumer is closed.
MQJMS3039	MQJMS_PS_NULL_NAME	Illegal use of null name.
MQJMS3040	MQJMS_E_BROKER_MESSAGE_CONTENT	Invalid broker control message content: ''{0}''.
MQJMS3041	MQJMS_E_ALREADY_SET	Field ''{0}'' already set.
MQJMS3042	MQJMS_E_UNREC_BROKER_MESSAGE	Unrecognizable message from Pub/Sub Broker.

Message identifier	Message constant	Description
	Table 15. MQJMS Messages.	
	List of message numbers, constants and explanatory text for messages beginning with MQJMS.	
	(continued)	
MQJMS3043	MQJMS_E_CLEANUP_REP_BAD_LEVEL	Invalid Level for repeating Cleanup.
MQJMS3044	MQJMS_E_CLEANUP_NONE_REQUESTED	Cleanup level of NONE requested.
MQJMS3045	MQJMS_E_CLEANUP_Q_OPEN_1	Failed to open ''{0}'': maybe a FORCE or NONDUR level cleanup is running?
MQJMS3046	MQJMS_E_CLEANUP_Q_OPEN_2	Failed to open ''{0}'': maybe another JMS application is using Pub/Sub with this queue manager?
MQJMS3047	MQJMS_PS_SUBSTORE_NOT_SUPPORTED	Subscription Store type not supported by queue manager.
MQJMS3048	MQJMS_PS_INCORRECT_SUBSTORE	Incorrect Subscription Store type.
MQJMS3049	MQJMS_PS_WRONG_SUBSCRIPTION_TYPE	MQJMS_Messages.MQJMS_PS_ WRONG_SUBSCRIPTION_TYPE = Incorrect Subscription type for this Subscription Store.
MQJMS3050	MQJMS_PS_SUBSCRIPTION_IN_USE	Subscription is already in use and cannot be updated.
MQJMS3051	MQJMS_PS_INVALID_SUB_NAME	Invalid Subscription name.
MQJMS4124	MQJMS_ADMIN_PROPVAL_NULL	Property value for ''{0}'' is null.
MQJMS4125	MQJMS_ADMIN_INV_PROP	Invalid property for a ''{0}'': ''{1}''.
MQJMS4131	MQJMS_ADMIN_OBJTYPE_MISMATCH	Expected and actual object types do not match.
MQJMS5053	MQJMS_UTIL_PS_NO_BROKER	*** No broker response. Please ensure that the broker is running. If you are using the IBM MQ broker check that your brokerVersion is set to V1 ***
MQJMS5087	MQJMS_UTIL_PS_INTERNALQ	Unexpected error ''{1}'' accessing internal queue ''{0}''.
MQJMS6040	MQJMS_DIR_IMB_BADSOCKNAME	Invalid socket family name: ''{0}''.

Message identifier	Message constant	Description
		Table 15. MQJMS Messages. List of message numbers, constants and explanatory text for messages beginning with MQJMS. *(continued)*
MQJMS6041	MQJMS_DIR_IMB_NOCLASS	An exception occurred while attempting to load socket factory class ''{0}'', exception: <''{1}''>.
MQJMS6056	MQJMS_DIR_MIN_NOMORE	Cannot change parameter ''{0}'' since no more BaseConfig parameter changes are allowed.
MQJMS6057	MQJMS_DIR_MIN_BADSET	Cannot set parameter ''{0}'' to value ''{1}''.
MQJMS6058	MQJMS_DIR_MIN_BADGET	error occurred while getting BaseConfig parameter ''{0}''.
MQJMS6059	MQJMS_DIR_MIN_SECLDERR	An exception occurred while loading the minimal client security implementation.
MQJMS6060	MQJMS_DIR_MIN_UNXEXC	An unexpected exception in minimal client, ''{0}''.
MQJMS6061	MQJMS_DIR_MIN_BADTOP	A specified topic was malformed, ''{0}''.
MQJMS6062	MQJMS_DIR_MIN_EOF	EOF was encountered while receiving data in the minimal client.
MQJMS6063	MQJMS_DIR_MIN_BRKERR	The broker indicated an error on the minimal client connection.
MQJMS6064	MQJMS_DIR_MIN_BADMSG	Connector.send was called with an illegal message value.
MQJMS6065	MQJMS_DIR_MIN_BADFIELD	An illegal value was encountered for a field, ''{0}''.
MQJMS6066	MQJMS_DIR_MIN_INTERR	An unexpected internal error occurred in the minimal client.
MQJMS6067	MQJMS_DIR_MIN_NOTBYTES	A bytes message operation was requested on something that is not a bytes message.
MQJMS6068	MQJMS_DIR_MIN_NOTTEXT	A text message operation was requested on something that is not a text message.
MQJMS6069	MQJMS_DIR_MIN_NOTSTREAM	A stream message operation was requested on something that is not a stream message.
MQJMS6070	MQJMS_DIR_MIN_NOTMAP	A map message operation was requested on something that is not a map message.

Message identifier	Message constant	Description
Table 15. MQJMS Messages.		
List of message numbers, constants and explanatory text for messages beginning with MQJMS.		
(continued)		
Message identifier	**Message constant**	**Description**
MQJMS6071	MQJMS_DIR_MIN_BADBRKMSG	The broker sent an invalid message during authentication.
MQJMS6072	MQJMS_DIR_MIN_UNVPRO	The broker requested an unavailable protocol during authentication.
MQJMS6073	MQJMS_DIR_MIN_AUTHREJ	Minimal client connection rejected because of authentication failure.
MQJMS6074	MQJMS_DIR_MIN_NOQOP	No QOP available in the minimal client.
MQJMS6079	MQJMS_DIR_JMS_NOTHDPOOL	An exception occurred while attempting to load thread pooling support, ''{0}''.
MQJMS6081	MQJMS_DIR_JMS_FMTINT	An attempt was made to read from a Stream message before a previous read has completed.
MQJMS6083	MQJMS_DIR_JMS_THDEXC	An exception occurred while initializing a thread pool instance, ''{0}''.
MQJMS6085	MQJMS_DIR_JMS_NEXCLIS	No ExceptionListener has been set.
MQJMS6088	MQJMS_DIR_JMS_KILLMON	The client-side connection monitor is terminating.
MQJMS6090	MQJMS_DIR_JMS_LSTACT	Attempted to synchronously receive on a MessageConsumer for which a listener is active.
MQJMS6091	MQJMS_DIR_JMS_TCSTSTP	An IOException occurred when starting or stopping delivery on the connection, ''{0}''.
MQJMS6093	MQJMS_DIR_JMS_RUNKEXC	An exception occurred during synchronous receive, ''{0}''.
MQJMS6096	MQJMS_DIR_JMS_INVPRI	A JMSPriority level of ''{0}'' is outside the range specified in JMS.
MQJMS6097	MQJMS_DIR_JMS_BADID	The specified JMSMessageID, ''{0}'', is invalid.
MQJMS6105	MQJMS_DIR_JMS_NOMORE	No more client parameter changes allowed.
MQJMS6106	MQJMS_DIR_JMS_BADNUM	An exception occurred when initializing parameter ''{0}'', exception ''{1}''.

Message identifier	Message constant	Description
	Table 15. MQJMS Messages. List of message numbers, constants and explanatory text for messages beginning with MQJMS. *(continued)*	
MQJMS6115	MQJMS_DIR_JMS_TCFLERR	An exception occurred while creating the TopicConnection, ''{0}''.
MQJMS6116	MQJMS_DIR_JMS_CLOSED	This operation is not permitted on an entity that is closed.
MQJMS6117	MQJMS_DIR_JMS_BDTOPIMPL	The ''{0}'' implementation of Topic is not supported.
MQJMS6118	MQJMS_DIR_JMS_PBNOWLD	Topic ''{0}'' contains a wildcard which is invalid for publishing.
MQJMS6119	MQJMS_DIR_JMS_PBIOERR	An IOException occurred while publishing, ''{0}''.
MQJMS6120	MQJMS_DIR_JMS_TMPVIO	Attempted to use a temporary topic not created on the current connection.
MQJMS6121	MQJMS_DIR_JMS_TSIOERR	An IOException occurred while subscribing, ''{0}''.
MQJMS6232	MQJMS_DIR_JMS_TSBADMTC	While creating a TopicSubscriber, attempting to add the subscription to the matching engine resulted in the following exception: ''{0}''.
MQJMS6233	MQJMS_DIR_MTCH_UNKEXC	An unexpected exception was caught in the matching engine: ''{0}''.
MQJMS6234	MQJMS_DIR_MTCH_NULRM	An attempt was made to remove an object with topic ''{0}'' from an empty matching engine: ''{1}''.
MQJMS6235	MQJMS_DIR_MTCH_NULCH	An attempt was made to remove an object with topic ''{0}'' from the matching engine, but it did not have a cache entry: ''{1}''.
MQJMS6236	MQJMS_DIR_MTCH_BDTYP	An unknown check type of class ''{0}'' was encountered in a type-specific matcher.
MQJMS6237	MQJMS_DIR_MTCH_UNKNM	An attempt was made to access an unknown field named ''{0}''.
MQJMS6238	MQJMS_DIR_MTCH_BDMSG	In attempting to access a field of a message=the following exception occurred: ''{0}''.
MQJMS6239	MQJMS_DIR_MTCH_ECPREP	An EvalCache get or put operation occurred when the cache was not loaded.

Table 15. MQJMS Messages.

List of message numbers, constants and explanatory text for messages beginning with MQJMS.

(continued)

Message identifier	Message constant	Description
MQJMS6240	MQJMS_DIR_MTCH_ECNMIN	An EvalCache get or put operation specified an invalid id.
MQJMS6241	MQJMS_DIR_MTCH_TOMNY	Too many content attributes were specified.
MQJMS6242	MQJMS_DIR_MTCH_DUPDET	A duplicate MatchTarget was detected in MatchSpace.
MQJMS6243	MQJMS_DIR_MTCH_NOTPK	An attempt was made to remove MatchTarget ''{0}'' from MatchSpace, but it has no key (topic).
MQJMS6244	MQJMS_DIR_MTCH_NOSUB	The MatchTarget ''{1}'' with key (topic) ''{0}'' could not be removed from MatchSpace because it could not be found.
MQJMS6245	MQJMS_DIR_MTCH_NLTOP	An attempt was made to add a MatchTarget to MatchSpace without a key (topic).
MQJMS6246	MQJMS_DIR_MTCH_BDWLD	An incorrect use of a the topic wildcard character ''{0}'' was detected.
MQJMS6247	MQJMS_DIR_MTCH_BDSEP	The topic segment separator ''{0}'' appears in an incorrect position.
MQJMS6248	MQJMS_DIR_MTCH_CNTLD	An error occurred while trying to load or invoke the subscription selector parser.
MQJMS6249	MQJMS_DIR_MTCH_PSTPER	The following exception occurred while parsing a subscription selector: ''{0}''.
MQJMS6250	MQJMS_DIR_MTCH_BDESC	The escape character was used to terminate the following pattern: ''{0}''.
MQJMS6251	MQJMS_DIR_MTCH_BDESCL	The escape character ''{0}'' passed to the pattern tool is longer than one character.
MQJMS6252	MQJMS_DIR_MTCH_UNXTYP	A message field was expected to contain a value of type ''{0}'' but contained one of type ''{1}''.
MQJMS6228	MQJMS_DIR_MIN_AUTHEXC	Minimal client authentication failed because exception ''{0}''.
MQJMS6229	MQJMS_DIR_MIN_QOPDIS	QOP required but disabled for this minimal client.
MQJMS6312	MQJMS_DIR_MIN_NOSUB	Non-authorized subscription to topic ''{0}''.

Message identifier	Message constant	Description
Table 15. MQJMS Messages. List of message numbers, constants and explanatory text for messages beginning with MQJMS. *(continued)*		
MQJMS6 311	MQJMS_DIR_MIN_NOXASUP	Transport type 'DIRECT' within a transaction is not supported.
MQJMS6 350	MQJMS_DIR_MIN_NOTOBJECT	An object message operation was requested on something that is not an object message.
MQJMS6 351	MQJMS_DIR_MIN_TSBADSYN	An exception occurred when creating subscription to <''{0}''''{1}''>, ''{2}''.
MQJMS6 401	MQJMS_DIR_MIN_PER_NOT_SUPPORTED	Persistent messages not supported for transport type 'DIRECT'.
MQJMS6 402	MQJMS_DIR_MIN_TTL_NOT_SUPPORTED	Time to Live > 0 not supported for transport type 'DIRECT'.
MQJMS6 403	MQJMS_DIR_MIN_EXP_NOT_SUPPORTED	Topic Expiry > 0 not supported for transport type 'DIRECT'.
MQJMS6 404	MQJMS_DIR_MIN_ACK_NOT_SUPPORTED	Client Acknowledge not supported for transport type 'DIRECT'.

Related information

WMQ JMS Exception Messages

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