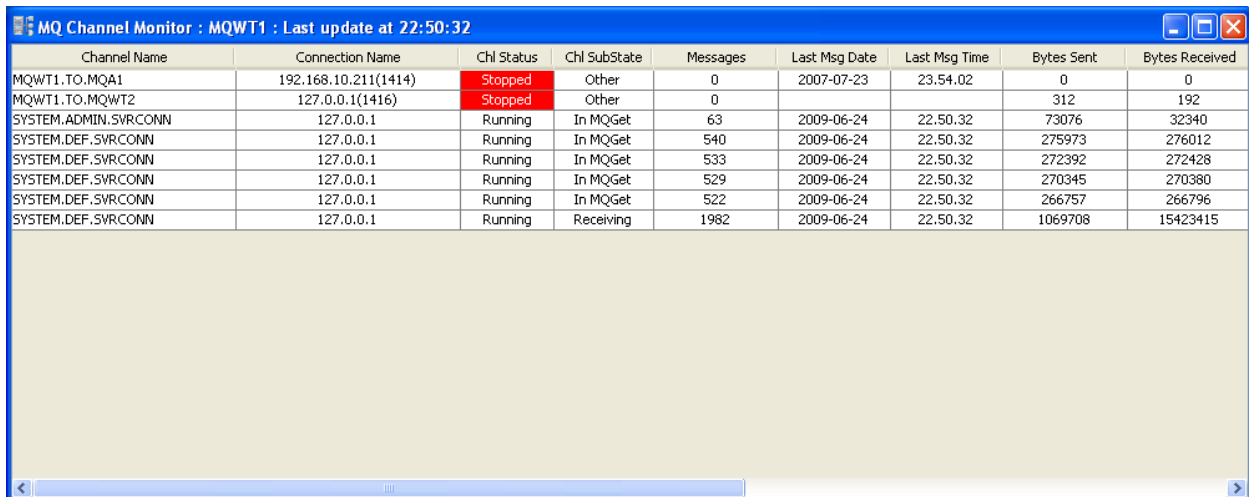


MQ Channel Monitor Installation and Operation Manual



MQ Channel Monitor : MQWT1 : Last update at 22:50:32

Channel Name	Connection Name	Chl Status	Chl SubState	Messages	Last Msg Date	Last Msg Time	Bytes Sent	Bytes Received
MQWT1.TO.MQA1	192.168.10.211(1414)	Stopped	Other	0	2007-07-23	23.54.02	0	0
MQWT1.TO.MQWT2	127.0.0.1(1416)	Stopped	Other	0			312	192
SYSTEM.ADMIN.SVRCONN	127.0.0.1	Running	In MQGet	63	2009-06-24	22.50.32	73076	32340
SYSTEM.DEF.SVRCONN	127.0.0.1	Running	In MQGet	540	2009-06-24	22.50.32	275973	276012
SYSTEM.DEF.SVRCONN	127.0.0.1	Running	In MQGet	533	2009-06-24	22.50.32	272392	272428
SYSTEM.DEF.SVRCONN	127.0.0.1	Running	In MQGet	529	2009-06-24	22.50.32	270345	270380
SYSTEM.DEF.SVRCONN	127.0.0.1	Running	In MQGet	522	2009-06-24	22.50.32	266757	266796
SYSTEM.DEF.SVRCONN	127.0.0.1	Running	Receiving	1982	2009-06-24	22.50.32	1069708	15423415



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1 Introduction

1.1 Overview

MQ Channel Monitor (MQCM) application is a software package that is designed to gather and to display the status of MQ channels of the queue manager. MQCM displays 16 columns of channel status information. The display is automatically refreshed every 60 seconds (default value). The user can alter this refresh rate. By default, all of the channels of the queue manager that currently have a status will be displayed. The user can define filters so that only particular channels will have their status displayed.

MQCM can connect to a queue manager in 3 possible ways:

- Locally in binding mode
- Remotely using a Client Channel Definition Table (CCDT)
- Remotely using a MQ XML file

MQCM supports both forms of MQ security:

- SSL for connecting to remote queue managers.
- 3rd party security exit for connecting to remote queue managers.

1.2 Executive Summary

The major features of MQCM are as follows:

- Provides a concise view of status of channels
- Automatically refreshes the display
- Supports user-defined filters to control which channels will have their status displayed
- Licensed under Apache License 2
- Free to use (support is extra)

1.3 Prerequisites

This section provides the minimum supported software levels.

1.3.1 Java

MQ Channel Monitor requires Java SE 7 (or higher) or higher.

1.3.2 IBM MQ

MQ Channel Monitor requires IBM MQ v7.1 or higher.

1.3.2.1 Command Server

The queue manager's command server must be running; otherwise MQCM will not be able to obtain channel status information.

1.4 File Definitions

The file used in MQCM is defined as follows:

- *MQCM_MQ* XML file is the file that is defined by a *MQCM_MQ.dtd*. It contains the information to connect to a particular queue manager

2 Installing MQCM

This section describes how to install Capitalware's MQCM.

2.1 Windows Installation

To install MQ Channel Monitor on Windows, do the following instructions:

- Run the install program called: **mqcm-setup.exe**
- The installer follows the standard Windows install procedures and provides default values for the user.
- When the install program has completed execution, there will be a newly created folder under *Start -> All Programs* called *MQ Channel Monitor*.
- To run MQ Channel Monitor, select the MQ Channel Monitor icon from within the MQ Channel Monitor folder.

2.2 Unix and Linux Installation

To install MQ Channel Monitor on Unix or Linux, do the following:

1. ftp or copy the selected mqcm.tar.zip file to the target platform
2. Unzip the mqcm.tar.zip to an appropriate directory with the following command:

```
unzip mqcm.tar.zip
```

3. Change directory to *Capitalware/MQCM/*
4. Next, do the following command:

```
chmod +x *.sh
```

3 MQCM_MQ XML File

This section describes how to create an MQCM_MQ XML file for use by MQCM. The MQCM_MQ XML file contains the MQ configuration information for connecting to a remote queue manager as described below.

3.1 <MQCM_MQ> Root Element

<MQCM_MQ> is the root element for the MQCM_MQ XML file. The MQCM_MQ root element is comprised of 19 elements. According to the user's needs, one or more of the following 19 elements are selected:

- <MonitorChannelName> (optional) specifies the name of the channels to be monitored; default value is “*”
- <RefreshRate> (optional) specifies refresh interval; default value is 60 seconds
- <QMgrName> (optional) specifies the name of the queue manager
- <CCDTFile> (optional) specifies a CCDT file
- <Hostname> (optional) specifies the hostname
- <Port> (optional) specifies the port number
- <ChannelName> (optional) specifies the channel name
- <UserID> (optional) specifies the UserID
- <Password> (optional) specifies the Password for the UserID
- <SecurityExit> (optional) specifies the security exit name
- <SecurityExitPath> (optional) specifies the path to the security exit
- <CipherSuiteName> (optional) specifies the the CipherSuite name
- <DistinguishedName> (optional) specifies the Distinguished name
- <TrustedStore> (optional) specifies the Trusted Store
- <TrustedStorePasswd> (optional) specifies the Trusted Store password
- <KeyStore> (optional) specifies the Key Store
- <KeyStorePasswd> (optional) specifies the Key Store password
- <LDAPServer> (optional) specifies the LDAP server hostname or IP address
- <LDAPServerPort> (optional) specifies the LDAP server port number

3.2 Sample

To create an MQCM_MQ XML file, open a text editor and input one or more of the above elements as shown in below:

Note: The MQCM_MQ XML files must be stored in the <MQCM_Install_PATH>\mq\ directory. i.e. C:\Capitalware\MQCM\mq\

Example: To display all channels whose name begins with “ABC”, input the following:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE MQCM_MQ SYSTEM "MQCM_MQ.dtd">
<MQCM_MQ>
  <MonitorChannelName>ABC*</MonitorChannelName>
  <RefreshRate>60</RefreshRate>
  <QMgrName>MQWT1</QMgrName>
  <Hostname>10.10.10.10</Hostname>
  <ChannelName>SYSTEM.DEF.SVRCONN</ChannelName>
  <Port>1414</Port>
</MQCM_MQ>
```

Example: To display all channels whose name begins with “ABC” and “XYZ”, input the following:

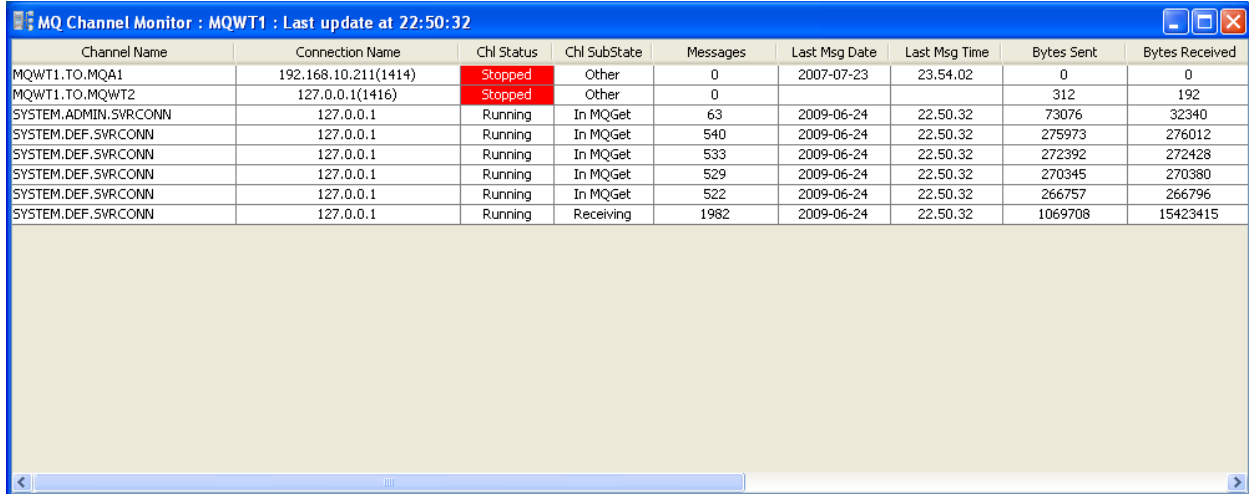
```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE MQCM_MQ SYSTEM "MQCM_MQ.dtd">
<MQCM_MQ>
  <MonitorChannelName>ABC*;XYZ*</MonitorChannelName>
  <RefreshRate>60</RefreshRate>
  <QMgrName>MQWT1</QMgrName>
  <Hostname>10.10.10.10</Hostname>
  <ChannelName>SYSTEM.DEF.SVRCONN</ChannelName>
  <Port>1414</Port>
</MQCM_MQ>
```

Example: To display all channels whose name begins with “ABC” and ends with “01”, input the following:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE MQCM_MQ SYSTEM "MQCM_MQ.dtd">
<MQCM_MQ>
  <MonitorChannelName>ABC*01</MonitorChannelName>
  <RefreshRate>60</RefreshRate>
  <QMgrName>MQWT1</QMgrName>
  <Hostname>10.10.10.10</Hostname>
  <ChannelName>SYSTEM.DEF.SVRCONN</ChannelName>
  <Port>1414</Port>
</MQCM_MQ>
```

4 Running MQCM

This section describes how to invoke MQCM. MQCM will display a window that shows the status of each channel. The display will be refreshed every 60 seconds unless the user specifies a different value for the RefreshRate XML tag.



MQ Channel Monitor : MQWT1 : Last update at 22:50:32

Channel Name	Connection Name	Chl Status	Chl SubState	Messages	Last Msg Date	Last Msg Time	Bytes Sent	Bytes Received
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SYSTEM.ADMIN.SVRCONN	127.0.0.1	Running	In MQGet	63	2009-06-24	22.50.32	73076	32340
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SYSTEM.DEF.SVRCONN	127.0.0.1	Running	In MQGet	533	2009-06-24	22.50.32	272392	272428
SYSTEM.DEF.SVRCONN	127.0.0.1	Running	In MQGet	529	2009-06-24	22.50.32	270345	270380
SYSTEM.DEF.SVRCONN	127.0.0.1	Running	In MQGet	522	2009-06-24	22.50.32	266757	266796
SYSTEM.DEF.SVRCONN	127.0.0.1	Running	Receiving	1982	2009-06-24	22.50.32	1069708	15423415

MQCM expects to be passed the name of an MQCM_MQ XML on start up. The default value is *mq.xml*. The user can create and name the MQCM_MQ XML files anything they want.

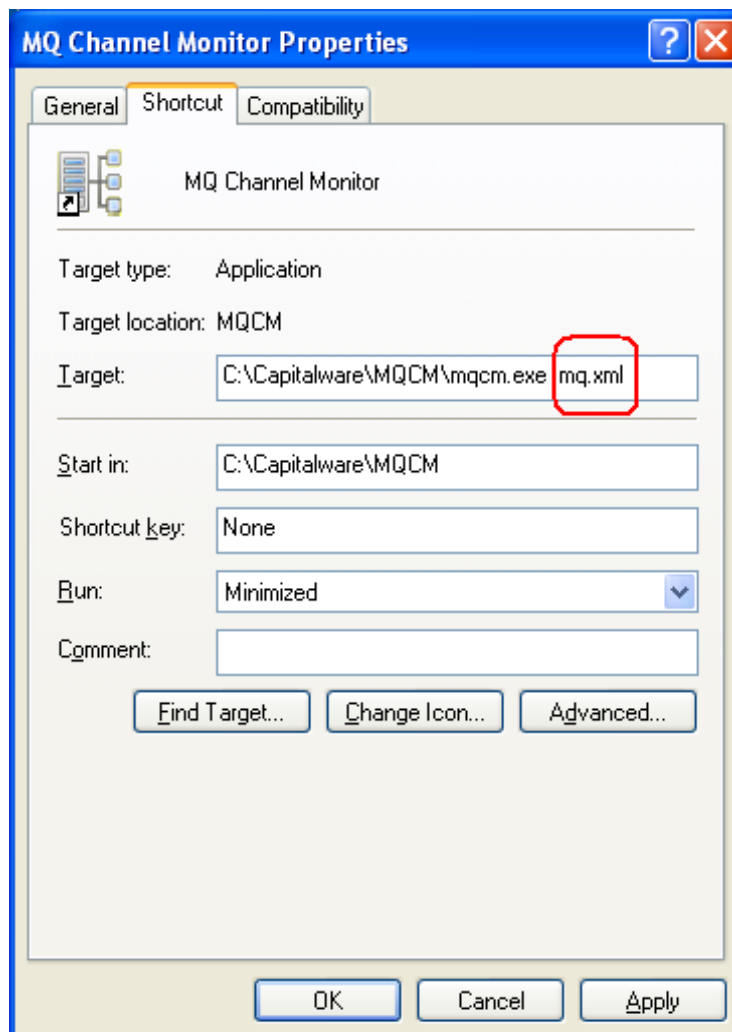
4.1 Examples

4.1.1 Windows

To run MQ Channel Monitor on Windows, select **Start -> All Programs -> MQ Channel Monitor -> MQ Channel Monitor**

4.1.1.1 GUI

To specify a different MQCM_MQ XML file, right click on the MQCM icon and select **Properties**. In the **Target** field, replace mq.xml file name with the new name. Click **Apply** and then **OK** to save the information.



4.1.1.2 Command Prompt

To run MQCM from a Windows Command Prompt, do the following commands:

```
cd \Capitalware\MQCM
mqcm.exe mq.xml
```

4.1.2 Unix and Linux

To run MQCM on Unix or Linux, do the following commands:

```
cd Capitalware/MQCM  
./MQCM.sh mq.xml
```

5 Appendix A – MQ Channel Monitor Upgrade Procedures

To upgrade an existing installation of MQ Channel Monitor, do the following below:

5.1 For Windows Upgrade

- Stop all instances of Watch and Receive
- Backup all MQCM data files in the MQCM install directory
- Un-install MQ Channel Monitor
- Run the MQ Channel Monitor installer: mqcm-setup.exe
- Restore the MQCM data files if necessary

5.2 For Unix and Linux Upgrade

- Stop all instances of Watch and Receive
- Backup all MQCM data files in the MQCM install directory
- Delete the MQCM install directory
- Unzip mqcm.tar.zip archive
- Restore the MQCM data files if necessary

6 Appendix B – Support

The support for MQ Channel Monitor can be found at the following location (requires a support contract):

Online Help Desk Ticketing System at
www.capitalware.com/phpst/

By email at:
support@capitalware.com

By regular mail at:

Capitalware Inc.
Attn: MQ Channel Monitor Support
Unit 11, 1673 Richmond Street, PMB524
London, Ontario N6G2N3
Canada

7 Appendix C – Summary of Changes

- MQ Channel Monitor v1.2.0
 - Added code so that the MQ DTD will be embedded in the MQCM.jar file.
 - Updated code to support the latest release of IBM MQ.
 - Updated code to support Java i18n – I included 55 language property files.
 - Fixed CCDTFile tag not being read/loaded.

- MQ Channel Monitor v1.1.0
 - Added code to check if the queue manager's command server is running.

- MQ Channel Monitor v1.0.0
 - Initial release.

8 Appendix D – License Agreement

Apache License
Version 2.0, January 2004
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