

IBM Software Group

# Browsing Message Fields, Properties and Contents in WebSphere MQ V7

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WebSphere® Support Technical Exchange





# Agenda

- Basic tasks (both V6 and V7):
  - amqsput sample to put message
  - amqsbcg sample to browse messages
  - MQ Explorer
- Intermediate tasks (both V6 and V7):
  - Finding reason code from Dead Letter Queue
- Advanced tasks (only V7):
  - amqsbcg options to show message properties
- SupportPacs



#### Purpose

- To present the different mechanisms to browse messages in WebSphere MQ V7.
- How to view the message fields, message properties and the contents of the message, reason codes from dead letter queue.
  - Using sample executables and the MQ Explorer.
- First and Second parts of the presentation: the methods that work in both V6 and V7 will be shown.
  - These parts are targeted for beginners.
- Third part, showing only the methods that work with V7.
  - This part is targeted for intermediate users.



# Simple C-based samples - V6 and V7

- Let's start with simple samples
- Put: amqsput (bindings) amqsputc (client)
- Get: amqsget (bindings) amqsgetc (client)
  - Destructive read: the message is removed from the queue
- Browse: amqsbcg (bindings) amqsbcgc (client)
  - Non-destructive read: the message remains in the queue
- For simplicity, the "bindings" versions will be used in this presentation.



# C samples provided with MQ

- C source and executable files provided with MQ
- Linux®:
- Location of executable: /opt/mqm/samp/bin/amqsput
- Location of C source: /opt/mqm/samp/amqsput0.c
- Fileset: MQSeriesSamples-7.0.1-0
- Windows®:
- Executables:
- C:\Program Files\IBM\WebSphere MQ\tools\c\Samples\bin
- C source:
- C:\Program Files\IBM\WebSphere MQ\tools\c\Samples

# MQ Explorer V7 - 1

- MQ Explorer V7 is a GUI tool to interact with a queue manager and its objects.
- For our purposes: It allows to put a message into a queue, to read (get) the message and to browse it.
- Very useful with messages in the Dead Letter Queue:
  - It does the proper formatting of data and reason code.
- Provides remote access to Queue Managers in other hosts
   It knows how to interact with V6 queue managers

# MQ Explorer V7 - 2

- Available for Windows and Linux x86 (Intel®) 32-bit and 64-bit.
  - Server CD or Server download
- Standalone download as SupportPac MS0T:
- http://www-01.ibm.com/support/docview.wss?rs=171&uid=swg24021041 MS0T: WebSphere MQ Explorer
- Related WSTEs:
- http://www-01.ibm.com/support/docview.wss?uid=swg27014355
- WSTE: What is new in WebSphere MQ Explorer Version 7
- http://www-1.ibm.com/support/docview.wss?rs=171&uid=swg27008431
- WSTE: Remote administration of queue managers using MQ Explorer





## Excellent tutorials - Redbooks

- http://www.redbooks.ibm.com/abstracts/SG247128.html?Open
- WebSphere MQ V6 Fundamentals (SG24-7128)
  - Chapter 9. Hands-on introduction to messaging
  - 9.3.4 Display the attributes of the newly created queue
  - ▶ 9.3.6 Put test messages onto this queue
  - ▶ 9.3.7 Browse messages put to the queue
- http://www.redbooks.ibm.com/abstracts/SG247583.html?Open
   WebSphere MQ V7.0 Features and Enhancements (SG24-7583)



# Pre-requisite: Create a local queue

- Via runmqsc:
  - runmqsc QueueManagerName
    - DEFINE QLOCAL(Q1)
- Via MQ Explorer:
  - Left panel (navigator view) expand icon for QMgr
  - Select the Queues folder under QMgr
  - Right-click the Queues folder and select New -> Local Queue. The "Create a Local Queue" wizard opens.
  - Enter the name of the queue: Q1
  - Click Finish



## Put message into a queue - amqsput 1

- Execute the following command:
  - amqsput Q1 QMGR
- The following output is displayed, and the command waits for user input:
  - Sample AMQSPUT0 start
  - target queue is Q1
- Type a short message and press Enter.
- You can enter multiple messages, pressing Enter after each one.



### Put message into a queue - amqsput 2

Leave a blank line, and press Enter to exit.

 Sample AMQSPUT0 start TEST MESSAGE 1<enter> TEST MESSAGE 2<enter>
 <enter>
 Sample AMQSPUT0 end

Limitation: message up to 65535 characters

 http://publib.boulder.ibm.com/infocenter/wmqv7/v7r0/index.jsp?topic=/ com.ibm.mq.csqzal.doc/fg17140\_.htm
 MQ V7 Information Center - The Put sample programs

#### Put message into a queue - Explorer 1

- Highlight the Queues folder under QMgr
- Right panel: Right-click the row in the table for Q1
  - Select "Put Test Message".
  - This opens the Put test message window.



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#### Put message into a queue - Explorer 2

Type a message into the Message data field.

Click "Put message".

The Message data field becomes blank.

You can enter multiple test messages, clicking Put message after each one.

	Put test message
	Put message to: Queue manager:
	QM_ANGELILLO
	Queue:
	Q1
-	Message data:
	TEST FROM MQ EXPLORER
	① The queue which will receive the test message is on this computer. The message will be put directly on the queue.



# How to find out if a Q has messages - 1

#### Using runmqsc:

- DISPLAY QL(Q1) CURDEPTH
- AMQ8409: Display Queue details.
- QUEUE(Q1)
   TYPE(QLOCAL)
- CURDEPTH(2)
- Windows: echo DISPLAY QL(Q1) CURDEPTH | runmqsc QMgr
- Unix®: echo "DISPLAY QL(Q1) CURDEPTH" | runmqsc QMgr
- http://www-01.ibm.com/support/docview.wss?uid=swg21395807
- How to obtain the value for an attribute from the output of runmqsc

#### IBM

# How to find out if a Q has messages - 2

- Using MQ Explorer
- Select Queue Q1 from the right panel.
- Scroll to the right until you see the column "Current queue depth"

Filter: Default for Queues									
🔥 Queue name	Queue type	Definition type	Open input count	Open output count	(Cur				
🔤 COLOR.BLUE	Local	Predefined	0	0	0				
	Local	Predefined	08	0	0				
🔟 Q.MUSR_MQADMIN	Local	Predefined	0	0	0				
🖻 Q.RIVERA	Local	Predefined	0	0	0				
<mark>@</mark> Q1	Local	Predefined	0	0	1				
<mark>l⇔l</mark> ∩2	Local	Predefined	n	n	n -				

# How to find out if a Q has messages - 2

- You may want to customize this view and move this column closer to the queue name, to show the number of messages without scrolling to the right.
- See: Slides 46-47: Customizing the order of the columns
- WSTE: What is new in WebSphere MQ Explorer Version 7
- http://www-01.ibm.com/support/docview.wss?uid=swg27014355





# Browsing messages – amqsbcg 1

- http://publib.boulder.ibm.com/infocenter/wmqv7/v7r0/index.jsp?topic=/ com.ibm.mq.csqzal.doc/fg17270\_.htm
- MQ V7 Information Center The Browser sample program
- Limitation: Prints the first 65535 characters of the message, and fails with the reason truncated msg if a longer message is read.

amqsbcg Q1 QM





# Browsing messages – amqsbcg 2 > TOP PORTION <<</p>

- AMQSBCG0 starts here
- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*
- MQOPEN 'Q1'
- MQGET of message number 1
- \*\*\*\*Message descriptor\*\*\*\*
- Strucld : 'MD ' Version : 2
- Report : 0 MsgType : 8
- Expiry : -1 Feedback : 0
- Encoding : 546 <u>CodedCharSetId : 437</u>
- Format : 'MQSTR '
- Priority : 0 Persistence : 0
- Msgld : X'414D5120514D5F414E47454C494C4C4F6A25774B20002502'
- BackoutCount: 0 → If greater than 1, it might be a "poison message"
- ReplyToQ
- ReplyToQMgr : 'QM\_ANGELILLO

.

# agaa amgabag 2

#### Browsing messages – amqsbcg 3

- >> BOTTOM PORTION <<
- \*\* Identity Context
- UserIdentifier : 'rivera
- AccountingToken :
- ApplIdentityData : '
- \*\* Origin Context
- PutApplType : '11'
- PutApplName : 'WebSphere MQ\bin\amqsput.exe'
- PutDate : '20100213' PutTime : '22314973'
- ApplOriginData : ' '
- MsgSeqNumber : '1'
- Offset : '0'
- MsgFlags : '0'
- OriginalLength : '-1'
- <u>\*\*\*\*\* Message</u> \*\*\*\*\* → This is the "contents" or "payload"
- length 13 bytes
- 00000000: 5445 5354 204D 4553 5341 4745 'TEST MESSAGE 1 '



# Browsing messages – Explorer 1

<b>0</b> Q1	2	1
📴 Q2	Compare with	1
回 QEVENT 员 QR	Status Delete	
	Watch Activity Trace Route Clear Messages Put Test Message	
	Browse Messages	
	Create JMS Oueue	

# Select the Queue, then right-click and select Browse Messages ...

🖾 M	essage	browser

eue Name:	Q1					
<ul> <li>Position</li> </ul>	Put date/time	User identifier	Put application name	Format	Data length	Message data
≷11	Feb 8, 2010 3:59:48 PM	rivera	iles\IBM\Java50\bin\iava.exe	MOSTR	339	JmsJndiProducer: \
22	Feb 14, 2010 8:13:08 AM	rivera	re MQ\java\jre\bin\javaw.exe	MQSTR	14	TEST MESSAGE 2

# Browsing messages – Explorer 2

General Report	General					
- Context - Identifiers	Position:	2				
- Segmentation Data	Message type:	Datagram				
	Priority:	0				
	Persistence:	Not persistent				
	Put date/time:	Feb 14, 2010 8:13:08 AM				
	Expiry:	Unlimited				
	Reply-to queue:					
	Reply-to queue manager:	QM_ANGELILLO				
	Backout count:	0				





# **Browsing messages – Explorer 3**

Nessage 2 - Proper	ties	
General Report	Data	
Identifiers	Data length:	14
Segmentation Data	Format:	MQSTR
	Coded character set ident	fier: 1208
	Encoding:	546
	Message data:	TEST MESSAGE 2
	Message data bytes:	00000 54 45 53 54 20 4D 45 535
		< <u>&gt;</u>





# **Explorer – Preferences - Messages**



V7: You can customize: how many messages to show in a queuehow many bytes of data to display

V6: you cannot customize these 2 properties.

type filter text	Messages					
<ul> <li>Ant</li> <li>⊕ General</li> <li>⊕ Help</li> <li>⊕ Install/Update</li> </ul>	Browsing limits Max messages browsed 500 Max data bytes displayed 1000					
<ul> <li>Java</li> <li>Plug-in Development</li> <li>Run/Debug</li> <li>Team</li> <li>WebSphere MQ Explorer         <ul> <li>Authorization Service</li> <li>Client Connections</li> <li>Colors</li> <li>Enable Plug-ins</li> <li>Events, Statistics and Activ</li> </ul> </li> </ul>	Message properties          Show message properties:         Image: Show message pro					



# JMS messages V6 V7 JmsProducer 1

- Using sample: JmsProducer.java
- Unix: /opt/mqm/samp/jms/samples
- Need to setup the MQ environment variables to run JMS (notice the dot, space, setjmsenv)
  - ▶ 32-bit: . setjmsenv
  - ▶ 64-bit: . setjmsenv64
- Windows:
- C:\Program Files\IBM\WebSphere MQ\tools\jms\samples
- Note: The installer sets the proper variables.

# JMS messages – JmsProducer 2

- C:\> java -Djava.library.path="C:\Program Files\IBM\We
- here MQ\Java\lib" -Dcom.ibm.msg.client.config.location="file:c:/var/mqm/myjms
- nfig" JmsProducer -m QM -d Q1

#### Sent message:

- JMSMessage class: jms\_text
- JMSType: null
- JMSDeliveryMode: 2
- JMSExpiration: 0
- JMSPriority:
- JMSMessageID: ID:414d5120514d5f414e47454c494c4c4fa962794b20009502
- JMSTimestamp: 1266249669343

4

- JMSCorrelationID: null
- JMSDestination: queue:///Q1
- JMSReplyTo: null
- JMSRedelivered: false
- JMSXAppID: WebSphere MQ Client for Java
- JMSXDeliveryCount: 0
- JMSXUserID: rivera
- JMS\_IBM\_PutApplType: 28
- JMS\_IBM\_PutDate: 20100215
- JMS\_IBM\_PutTime: 16010946
- JmsProducer: Your lucky number today is 234
- SUCCESS

## JMS messages - JmsBrowser

- C:\> java -Djava.library.path="C:\Program Files\IBM\WebSphere MQ\Java\lib" -Dcom.ibm.msg.client.config.location="file:c:/var/mqm/myjmsnfig" JmsBrowser -m QM -d Q1
- Browse starts Message 1:
- JMSMessage class: jms\_text
- JMSType: null
- JMSDeliveryMode: 2
- JMSExpiration: 0
- JMSPriority: 4
- JMSMessageID: ID:414d5120514d5f414e47454c494c4c4fa962794b20009502
- JMSTimestamp: 1266249669343
- JMSCorrelationID: null
- JMSDestination: queue:///Q1
- JMSReplyTo: null
- JMSRedelivered: false
- JMSXAppID: WebSphere MQ Client for Java
- JMSXDeliveryCount: 1
- JMSXUserID: rivera
- JMS\_IBM\_Character\_Set: UTF-8
- JMS\_IBM\_Encoding: 273
- JMS\_IBM\_Format: MQSTR
- JMS\_IBM\_MsgType: 8
- JMS\_IBM\_PutAppIType: 28
- JMS\_IBM\_PutDate: 20100215
- JMS\_IBM\_PutTime: 16010946
- JmsProducer: Your lucky number today is 234



### JMS messages - amqsbcg

- C:\>amqsbcg Q1 QM\_ANGELILLO
- Encoding : 273 CodedCharSetId : 1208
- Format : 'MQHRF2 '
- Priority : 4 Persistence : 1
- ... PutApplName : 'WebSphere MQ Client for Java'
- PutDate : '20100215' PutTime : '16010946'
- \*\*\*\* Message \*\*\*\*
- length 191 bytes

```
• 00000000: 5246 4820 0000 0002 0000 0094 0000 0111 'RFH .....ö....'
 00000010: 0000 04B8 4D51 5354 5220 2020 0000 0000 '....MQSTR
            0000 04B8 0000 0020 3C6D 6364 3E3C 4D73 '..... <mcd><mcd><Ms'
 0000020:
 00000030: 643E 6A6D 735F 7465 7874 3C2F 4D73 643E 'd>jms text</Msd>'
• 00000040: 3C2F 6D63 643E 2020 0000 0048 3C6A 6D73 '</mcd> ...H<jms'
• 00000050: 3E3C 4473 743E 7175 6575 653A 2F2F 2F51 '><Dst>queue:///0'
• 00000060: 313C 2F44 7374 3E3C 546D 733E 3132 3636 '1</Dst><Tms>1266'
00000070: 3234 3936 3639 3334 333C 2F54 6D73 3E3C '249669343</Tms><'</p>
• 0000080:
            446C 763E 323C 2F44 6C76 3E3C 2F6A 6D73 'Dlv>2</Dlv></jms'
• 00000090:
            3E20 2020 4A6D 7350 726F 6475 6365 723A '> JmsProducer:'
 000000A0:
            2059 6F75 7220 6C75 636B 7920 6E75 6D62 ' Your lucky numb'
• 00000B0:
            6572 2074 6F64 6179 2069 7320 3233 34
                                                 'er today is 234 '
```



## JMS messages – Explorer 1

#### Preferences

Decemende

type filter text	Messages	
<ul> <li>Ant</li> <li>General</li> <li>Help</li> <li>Install/Update</li> <li>Java</li> <li>Plug-in Development</li> <li>Run/Debug</li> <li>Team</li> <li>WebSphere MQ Explorer</li> <li>Authorization Service</li> <li>Client Connections</li> <li>Colors</li> <li>Enable Plug-ins</li> <li>Events, Statistics and Activ</li> </ul>	Browsing limits Max messages browsed Max data bytes displayed Message properties ✓ Show message propert ⓒ as Named Propertie ⓒ as an MQRFH2 stru ⓒ as an MQRFH2 stru	500 1000 ies: es ucture in message body
inessages		

#### Show message properties: (\*) as Named Properties

# Message 1 - Properties

- Report - Context

Data

Identifiers

Segmentation Named Properties

#### Named Properties

Name	Value
JMSDeliveryMode	2
JMSDestination	queue:///Q1
JMSTimestamp	1266249669343
mcd.Msd	jms_text

# JMS messages – Explorer 2

Preferences						
type filter text	Messages					
<ul> <li>Ant</li> <li>General</li> <li>Help</li> <li>Install/Update</li> <li>Java</li> <li>Plug-in Development</li> <li>Run/Debug</li> <li>Team</li> <li>WebSphere MQ Explorer         <ul> <li>Authorization Service</li> <li>Client Connections</li> <li>Colors</li> <li>Enable Plug-ins</li> <li>Events, Statistics and Activ</li> <li>Messages</li> </ul> </li> </ul>	Browsing limits Max messages browsed Max data bytes displayed Message properties Show message properties as Named Properties as an MQRFH2 stru	500 1000 es: ss icture in message body icture in f Message General Report	Show message properties: (*) as an MQRFH2 structure in message body			
		Context Identifier Segment MORFH2 Data	's ation Properties	Show details Name ims Dlv Dst Tms mcd Msd	Value 2 queue:///Q1 1266249669343 jms_text	



### Dead Letter Queue V6 V7 – amqsbcg 1

- When messages are placed onto the Dead Letter Queue (such as SYSTEM.DEAD.LETTER.QUEUE), a special header is attached to the message giving information on why the message has been put onto the queue (reason code).
- You can use the sample amqsbcg to find out the reason code:
- amqsbcg SYSTEM.DEAD.LETTER.QUEUE QMgrName



In the message header, notice: Format : 'MQDEAD '

- Strucld : 'MD ' Version : 2
- Report : 0 MsgType : 8
- Expiry : -1 Feedback : 0
- Encoding : 273 CodedCharSetId : 819
- Format : 'MQDEAD '
- Priority : 0 Persistence : 0
- Msgld : X'414D5120415744545732303220202094517845201F4483'





In the message data, see the first line in the output.It has an eye catcher: DLH

* * * *	Message	e	* * * *						
length	n <b>-</b> 697	bytes							
0000000	00: <b>44</b>	4C 482	0 0000	0001	<u>0000 07F3</u>	4157	442E	' <u>DLH</u>	 AWD. '
					*******			***	

- Notice the value for the 9-13 bytes (5th and 6th pairs from the left).
  - In this case it is hexadecimal 0000 007F3 or 000007F3



#### For Unix (except for Linux on x86 – Intel):

- You can use the "mqrc" command to find out the meaning of 000007F3
- You have to compose the code to be as follows, in hexadecimal:
- \$ mqrc 0x000007f3
- 2035 0x000007f3 MQRC\_NOT\_AUTHORIZED



- Keep in mind that the following shortcuts will NOT work with mqrc:
- \$ mqrc x'7F3'
- No matching return codes
- \$ mqrc x7F3
- No matching return codes
- \$ mqrc x07F3
- No matching return codes



#### For Windows and Linux for Intel:

- You need to take into account the swapping of the bytes.
- The following is obtained from a DLQ in Windows.
- 00000000: 444C 4820 0100 0000 2508 0000 5133 2020 'DLH ....&...Q3 byte2 byte1
- You cannot use 0x25080000 because it is not a valid reason code:
- C:\> mqrc 0x25080000
  - No matching return codes



In Intel, you need to swap the bytes and reverse the order:

- 2508 0000 => 00 00 08 25
- ++---++
- ++ ---- ++
- ++ ---- ++
  ++
  ++ ----- ++
- Thus, the reason code is:0x00000825
- C:\> mqrc 0x00000825
   2085 0x0000825 MQRC\_UNKNOWN\_OBJECT\_NAME



#### **Dead Letter Queue – Explorer**

- It is far easier to find out the reason code by browsing a message from the DLQ via MQ Explorer.
- It handles the swapping of bytes according to platform.
- You can do reverse lookup via mqrc:
  - \$ mqrc MQRC\_UNKNOWN\_OBJECT\_NAME

2085	0x0000825
------	-----------

🖣 Message 1 - Proper	ties	
General Report	Dead-letter header	
- Context Identifiers	Reason:	MQRC_UNKNOWN_OBJECT_NAME
Dead-letter header	Destination queue:	Q3
Data	Destination queue manager:	QM_ANGELILLO
	Original encoding:	546

# Message Properties in V7 - 1

- http://www-01.ibm.com/support/docview.wss?rs=171&uid=swg27017014
- MQ V7: How to view the message properties and, or RFH2 header from a message
- This document shows the different output that can be obtained with the different choices from the Explorer and the sample amqsbcg to display:
  - the RFH2 header for JMS messages
  - message properties created by non-JMS applications.



# Message Properties in V7 - 2

Samples to create messages with properties

JMS: See the JMS sample:

- Sample: SampleJMSMsgProperty.java
- Which is provided with techdoc:

http://www.ibm.com/support/docview.wss?rs=171&uid=swg27016581 Using an MDB with JMS message selectors with WebSphere MQ V7 and WebSphere Application Server V7

C-code: See the C sample in the MQ directory tree: Unix: /opt/mqm/samp/bin/amqsstm

# Message Properties in V7 – Explorer

- As Named
- Properties

General Report Genterat	Named Properties	
Context Identifiers	Name	Value
Segmentation	JMSDeliveryMode	2
Named Properties	JMSDestination	queue:///Q1
Data	1MSTimestamp	1254749100921
	C color	red
	mcd.Msd	jms_text

#### As an MQRFH2 structure in message body

General Report	MQRFH2 Propertie	S	
Context Identifiers Segmentation	Show details		
MOREH2 Properties	Name	Value	
Data	🦊 🖃 jms		
	Div	2	
	Dst	queue:///Q1	
	Tms	1254749100921	
	🖃 mcd		
	Msd	jms_text	
	🖃 usr		
	Color	red	

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### amqsbcg – message properties V7

- With amqsbcg, there are 6 different ways to display the message properties.
- The amqsbcg command needs to be invoked with an option (a single digit) as the last input parameter, to indicate the desired way to display the message properties:
- PROPS\_AS\_Q\_DEF:
- PROPS\_IN\_MSG\_HANDLE:
- PROPS\_NONE:
- PROPS\_IN\_MQRFH2:
- PROPS\_COMPATIBILITY:
- PROPS\_LAST:

- amqsbcg Q1 QM 0
- amqsbcg Q1 QM 1
- amqsbcg Q1 QM 2
- amqsbcg Q1 QM 3
- amqsbcg Q1 QM 4
- amqsbcg Q1 QM 5



# PROPS\_IN\_MSG\_HANDLE (1)

- The main differences are:
  - a) In the output: Format : 'MQSTR '
  - b) There is an explicit section with the message properties.c) The section for the message data does not show the
  - message properties.
- OriginalLength : '-1'
- \*\*\*\*Message properties\*\*\*\*
- color : 'red'
- \*\*\*\* Message \*\*\*\*
- Iength 72 bytes
- 00000000: 5246 4820 0200

# PROPS\_NONE (2)

- The main differences are:
  - a) In the output: Format : 'MQSTR '

b) The section for the message data does not show the message properties.

- OriginalLength : '-1'
   \*\*\*\* Message \*\*\*\*
- 00000000: 5246 4820 0200

# PROPS\_IN\_MQRFH2 (3)

#### • The main differences are:

a) In the output: Format : 'MQHRF2 'b) The section for the message data shows the RFH2 header

* * * *	Mess	sage	7	* * * *						
lengtl	h - '	72 byt	ces							
000000	00:	5246	4820	0200	0000	4800	0000	2202	0000	'RFHH'
000000	10:	B501	0000	4D51	5354	5220	2020	0000	0000	'MQSTR'
0000002	20:	B804	0000	2000	0000	3C75	7372	3E3C	636F	' <usr>&lt;<u><co< u="">'</co<></u></usr>
000000	30:	6C6F	723E	7265	643C	2F63	6F6C	6F72	3E3C	' <u>lor&gt;red</u> <'
0000004	40:	2F75	7372	3E20	2020					'/usr>





- IH03: WebSphere Message Broker V7 Message display, test & performance utilities (RFHutil)
- http://www-1.ibm.com/support/docview.wss?rs=171&uid=swg24000637
- It contains a GUI utility for Windows and several line commands for different platforms.
- With the GUI you can browse messages and view the different components such as the message descriptor, the payload (contents/data), the JMS header, etc.

#### Technical support:

Category 2 Provided in good faith and AS-IS



<u>File E</u> dit	<u>S</u> earch	<u>R</u> ead <u>W</u> rite <u>Vie</u> r	ı <u>I</u> ds <u>M</u> Q <u>H</u> elp							
Main	Data	MQMD PS	Usr Prop RFH	PubSub	pscr	jms	usr	other	CICS	1
Qu Qi Qi Qi	ueue Manag M_ANGELI ueue Name 1	ger Name (to conne ILLO	st to)			•	Queu Loca	le Type Q	ueue depth 2 Move Q	
Re	emote Quec	le Manager Name (i	emote queues only)			_	Sa	veQ	Pur <u>ge</u> Q	
Se	elector						Loc	ad Q	<u>D</u> isplay Q	]



Pos	Length	Format	GS	User Id	Put Date/Time	Application	Tj	
1 2	191 29	MQHRF2 MQSTR		rivera rivera	2010/02/15 16:01:09.46 2010/02/15 20:16:12.84	WebSphere MQ Client for Java re MQ\java\jre\bin\javaw.exe	8	
								Read
								Browse
							r	Start Bro



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When browsing, you can click on the different tabs to look at a particular section of a message (data) and the meta-data for the message (MQMD – message descriptor, PS – Pub/Sub, etc.)

🏧 Q1										
<u>Eile E</u> di	t <u>S</u> earch <u>R</u> ead <u>W</u> rite <u>V</u> iev	v <u>I</u> ds <u>M</u> Q <u>H</u> elp								
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# SupportPac MA96 Message Browser 1

- MA96: WebSphere MQ Message Browser
- http://www-01.ibm.com/support/docview.wss?uid=swg24021783
- Message descriptor (MQMD) is shown in parsed format. Each data in MQMD is shown with semantic descriptions in addition to actual value.
- Message content is shown in graphic hexadecimal representation and also in character representation.
- In addition, extended formatting function is provided for MQADMIN, MQDEAD, MQEVENT, MQHDIST, MQHEPCF, MQHMDE, MQHREF, MQHRF, MQHRF2, MQPCF, MQTRIG and MQXMIT format.
- Technical support: Category 2 Provided in good faith and AS-IS

# SupportPac MA96 Message Browser 2

ueue manager       QM_ANGELILLO       V       Iocal grig/s         (Select or direct key in)       Extract application queue names       Channel name         (Select or direct key in)       Extract application queue names       Port number         (Select or direct key in)       Extract application queue names       Port number         Output control       MQ attributes       Message selection         Output file / Terminal       Output       File separation         Output       File       Terminal (-t)       One file         Output directory (-dd)       Iocal grig/s       C         Output directory (-dd)       Select       C         Output content       XML line length (-x)       100       No formatted content (-nc)         Max length shown (d)       C       Intel select       Intel select	- C
Jeue       Q1       Host name / IP address         (Select or direct key in)       Extract application queue names         Extract system queue names       Port number         Output control       MQ attributes         MQ attributes       Message selection         Output file / Terminal       Image: Delete messages after browsing (-delete)         Output file / Terminal       Image: Delete messages after browsing (-delete)         Output file / Terminal       Image: Delete messages after browsing (-delete)         Output file / Terminal       Image: Delete messages after browsing (-delete)         Output file / Terminal       Image: Delete messages after browsing (-delete)         Output file / Terminal       Image: Delete messages after browsing (-delete)         Output file name (-o)       Image: Delete old output files (-f)         Output directory (-dd)       Image: Delete old output files (-f)         Output directory (-dd)       Image: Delete old output file (-f)         Multime length (-x)       Image: Delete old output (-f)         Multime length (-x)	
Using the struct system queue names       Host name / IP address         (Select or direct key in)       Extract application queue names         Extract system queue names       Port number         Output control       MQ attributes         MQ attributes       Message selection         Output file / Terminal       Output         Output file / Terminal       One file         Output file name (-o)       Image: Content         Name only       Fullpath         Output directory (-dd)       Image: Content         XML line length (-x)       100         Max length (-x)       100         Max length (-x)       00         Max length (-x)       00	-
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Show MQMD attribute list (-list)	
Column definition file (-col)	
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And a



# SupportPacs MO03 Queue Load

- http://www-01.ibm.com/support/docview.wss? rs=171&uid=swg24009368
- MO03: WebSphere MQ Queue Load / Unload Utility
- It allows the user to copy or move the contents of a queue, its messages, to a file.
- This file can be saved away as required and used at some later point to reload the messages back onto the queue.
- This file has a specific format understood by the utility, but is humanreadable, so that it can be updated in an editor before being reloaded.
- **Technical support:** Category 2 Provided in good faith and AS-IS



# SupportPacs MA17 Msg Handler z/OS

- http://www-01.ibm.com/support/docview.wss? rs=171&uid=swg24000071
- MA17: WebSphere MQ for z/OS Message Handler Sample
- It provides C and COBOL sample code for a message handling application for WebSphere MQ for MVS/ESA.
- The program will allow users to view, forward and delete messages.
- **Technical support:** Category 2 Provided in good faith and AS-IS

# References (1)

- http://publib.boulder.ibm.com/infocenter/wmqv7/v7r0/index.jsp
- WebSphere MQ V7 Information Center:
- http://www-1.ibm.com/support/docview.wss?uid=swg27012921
- WSTE: What is new in WebSphere MQ Version
- http://www-01.ibm.com/support/docview.wss?uid=swg27014355
- WSTE: What is new in WebSphere MQ Explorer V7
- http://www-1.ibm.com/support/docview.wss?rs=171&uid=swg27008431
- WSTE: Remote administration of queue managers using WebSphere MQ Explorer

# References (2)

- http://www.redbooks.ibm.com/abstracts/SG247128.html?Open
- Redbook: WebSphere MQ V6 Fundamentals (SG24-7128)
- http://www.redbooks.ibm.com/abstracts/SG247583.html?Open
- Redbook: WebSphere MQ V7.0 Features and Enhancements (SG24-7583)
- http://www-01.ibm.com/support/docview.wss?uid=swg21395807
- How to obtain the value for an attribute from the output of runmqsc
- http://www-01.ibm.com/support/docview.wss?rs=171&uid=swg27017014
- MQ V7: How to view the message properties and, or RFH2 header from a message



# References (3)

- http://www.ibm.com/support/docview.wss?rs=171&uid=swg27016581
- Using an MDB with JMS message selectors with WebSphere MQ V7 and WebSphere Application Server V7
- http://www-01.ibm.com/support/docview.wss?rs=171&uid=swg24021041
- MS0T: WebSphere MQ Explorer
- http://www-1.ibm.com/support/docview.wss?rs=171&uid=swg24000637
- IH03: WebSphere Message Broker V7 Message display, test & performance utilities (RFHutil)
- http://www-01.ibm.com/support/docview.wss?uid=swg24021783
- MA96: WebSphere MQ Message Browser
- http://www-01.ibm.com/support/docview.wss?rs=171&uid=swg24000071
- MA17: WebSphere MQ for z/OS Message Handler Sample
- http://www-01.ibm.com/support/docview.wss?rs=171&uid=swg24009368
- MO03: WebSphere MQ Queue Load / Unload Utility

#### Additional WebSphere Product Resources

- Discover the latest trends in WebSphere Technology and implementation, participate in technically-focused briefings, webcasts and podcasts at: http://www.ibm.com/developerworks/websphere/community/
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- View a webcast replay with step-by-step instructions for using the Service Request (SR) tool for submitting problems electronically: http://www.ibm.com/software/websphere/support/d2w.html
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## **Questions and Answers**

