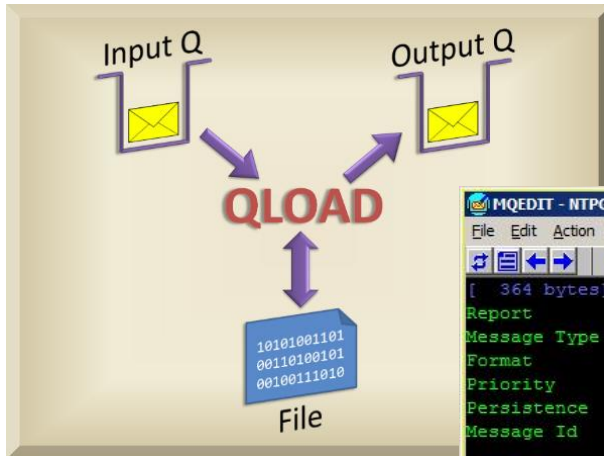
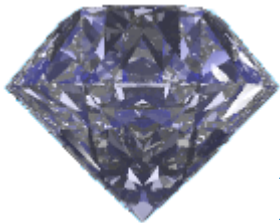


# Message Manipulation Tools

## QLOAD



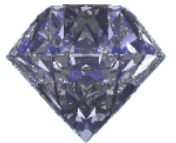
```
MQEDIT - NTPGC1/Q1
Last Refresh on Mon - 08 Aug 2016 (11:16:06)
File Edit Action View Windows
[ 364 bytes] Message Descriptor (MQMD)
Report :00000000
Message Type :8 (Datagram)
Format : 'MQHRF2 '
Priority :0 (Lowest)
Persistence :1 (Persistent)
Message Id :414D51204D5139303020202020202000ED165720510C04
           A M Q   M Q 9 0 0           Ý T W   Q ¨ ¯ ¯
ReplyToQ : '
ReplyToQMqr : 'MQ900
[ 2584 bytes] Message Bytes
52464820 02000000 7C000000 22020000 52030000 4D514144 4D494E20 00000000 B8040000 | RFH ....|...R...MQADMIN .....
54000000 3C6D7170 733E3C54 6F703E24 5359532F 4D512F49 4E464F2F 514D4752 2F4D5139 | T...<mqs><Top>$SYS/MQ/INFO/QMGR/MQ9
30302F41 63746976 69747954 72616365 2F417070 6C4E616D 652F616D 71737075 742E6578 | 00/ActivityTrace/AppName/amqsput.ex
653C2F54 6F703E3C 2F6D7170 733E2020 1A000000 24000000 03000000 D1000000 01000000 | e</Top></mqs> ...$.
01000000 00000000 00000000 17000000 04000000 44000000 DF070000 00000000 30000000 | .....D.....0...
4D513930 30202020 20202020 20202020 20202020 20202020 20202020 20202020 20202020 | MQ900
20202020 20202020 20202020 04000000 1C000000 770C0000 00000000 06000000 50414D4C | .....w.....PAML
41502E44 04000000 20000000 970A0000 00000000 0C000000 32303136 2D30342D 32310000 | AP.D....2016-04-21...
04000000 1C000000 980A0000 00000000 08000000 31313A34 383A3038 04000000 20000000 | .....11:48:08....
Offset:0x00000062
```



MQGem Software

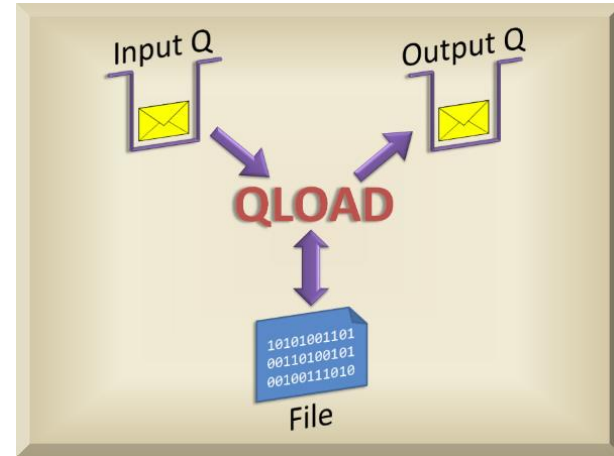
Paul Clarke  
[support@mqgem.com](mailto:support@mqgem.com)  
[www.mqgem.com](http://www.mqgem.com)

# Agenda



MQGem  
Software

- QLOAD
  - Features
  - Demo

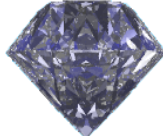


- MQEDIT
  - Features
  - Demo

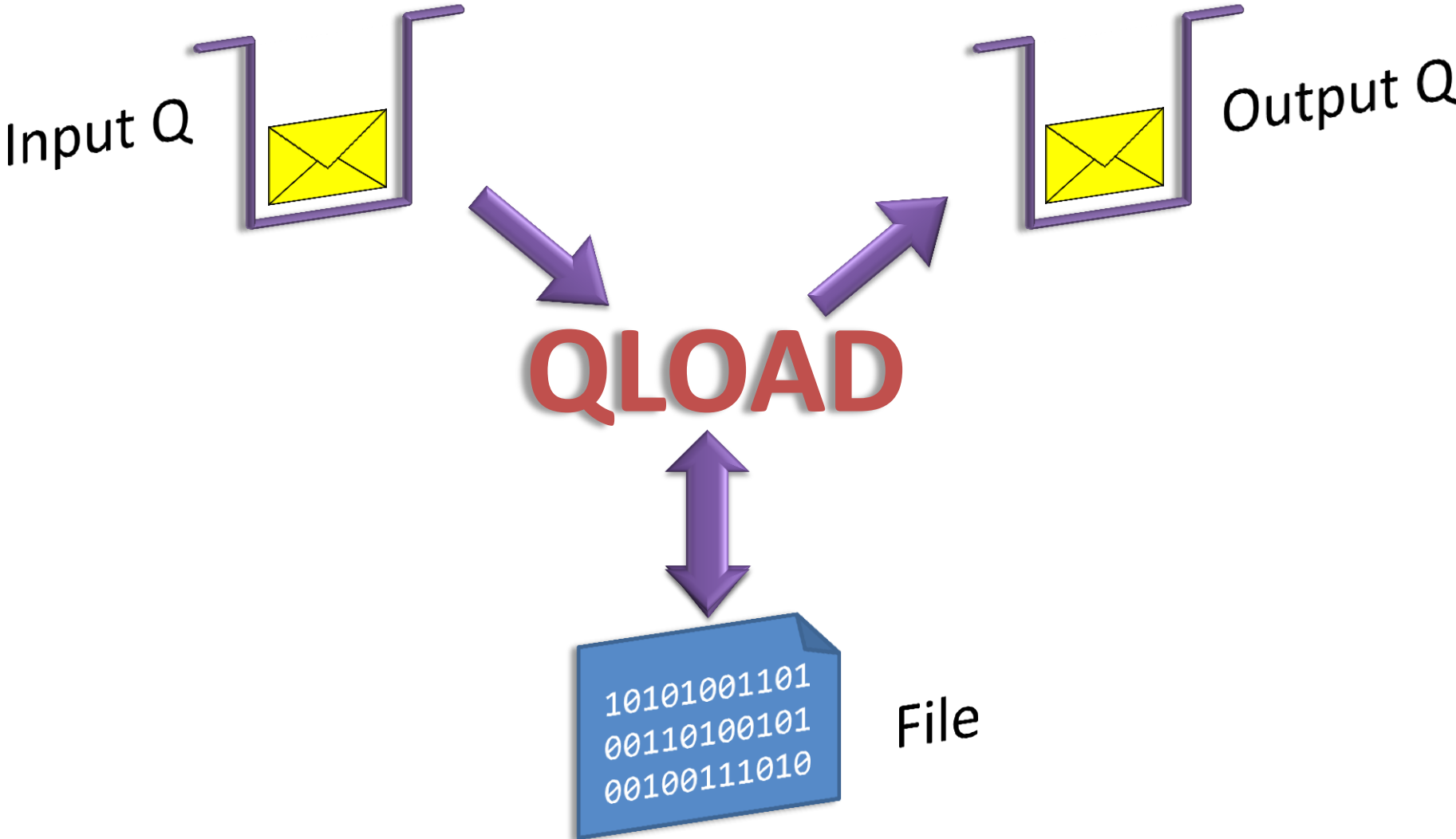
```
MQEDIT - NTPGCI/Q1
File Edit Action View Windows
[ 364 bytes] Message Descriptor (MQMD)
Report :00000000
Message Type :8 (Datagram)
Format : 'MQHRE2 '
Priority :0 (Lowest)
Persistence :1 (Persistent)
Message Id :414D51204D5139303020202020202020000ED165720510C04
ReplyToQ :
ReplyToQMgr : 'MQ900'
[ 2584 bytes] Message Bytes
52464820 02000000 7C000000 22020000 52030000 4D514144 4D494E20 00000000 B8040000 | RFH .....R...MQADMIN .....
54000000 3C6D7170 733E3C54 6F703E24 5359532F 4D512F49 4E464F2F 514D4752 2F4D5139 | T...<mcp><Top>$SYS/MQ/INFO/QMGR/MQ9
30302F41 63746976 69747954 72616365 2F417070 6C4E616D 652F616D 71737075 742E6578 | 00/ActivityTrace/AppName/mqspu.ex
653C2F54 6F703E3C 2F6D7170 733E2020 1A000000 24000000 03000000 D1000000 01000000 | e/<Top></mcp> .....$.
01000000 00000000 00000000 17000000 04000000 44000000 DF070000 00000000 30000000 | .....D.....0...
4D513930 30202020 20202020 20202020 20202020 20202020 20202020 20202020 20202020 | MQ900
20202020 20202020 20202020 04000000 1C000000 770C0000 00000000 06000000 50414D4C | .....W.....PAML
41502E44 04000000 20000000 970A0000 00000000 0C000000 32303136 2D30342D 32310000 | AP.D.....2016-04-21...
04000000 1C000000 980A0000 00000000 08000000 31313A34 383A3038 04000000 20000000 | .....11:48:08.....
Offset:0x00000062
```

- Q&A

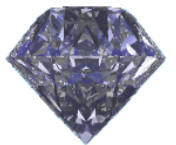
# Message Directions



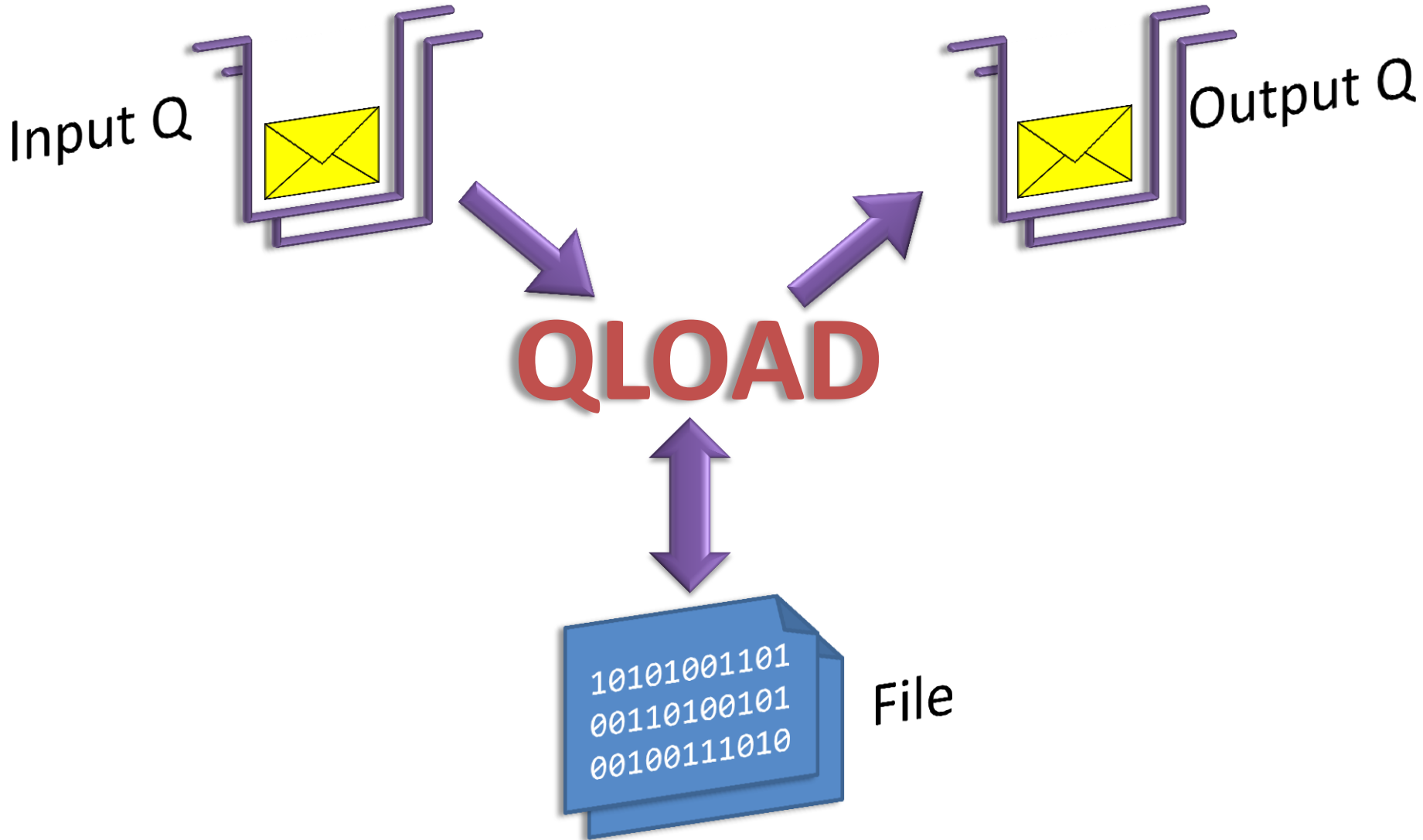
MQGem  
Software



# Multiple inputs/outputs

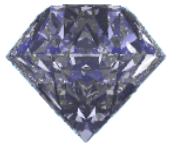


MQGem  
Software



# Many features....

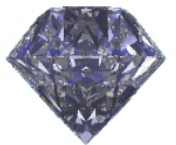
---



MQGem  
Software

- Started life as SupportPac MO03
  - was incorporated into the product as DMPMQMSG
  - greatly extended since then
- Copy or Move messages between Queue Managers
- Select by:
  - Priority, Age, Size, SQL92, Text string, Message Range, Target of DLQ or XmitQ, Message Id etc
- Strip headers, such as MQXQH and MQDLH
- Choose maximum output file based on:
  - Size, Number of Messages or Age

# Require Rate Processing



MQGem  
Software

Copy/Move messages between queues at a specific rate

```
qload -i SOURCEQ -o TARGETQ -R1000
```

Copy messages for specific time

```
qload -i SOURCEQ -o TARGETQ -R1000:300
```

Copy messages as fast as you can go

```
qload -i SOURCEQ -o TARGETQ -R*:*
```

# Generic Unload/Load



Unload all queues to a set of files

```
qload -m QM1 -i * -f *
```

Unload just some of the queues to a set of files

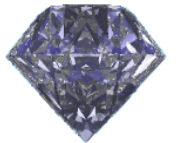
```
qload -m QM1 -i APP1.* -f *
```

Reload all queue unload files to the appropriate queue

```
qload -m QM1 -o * -f *
```

# QLOAD Summary

---



MQGem  
Software

- Lots of new features since M003 and DMPMQMSG
- Regularly enhanced because of customer requests
  - now at version 9.0.2

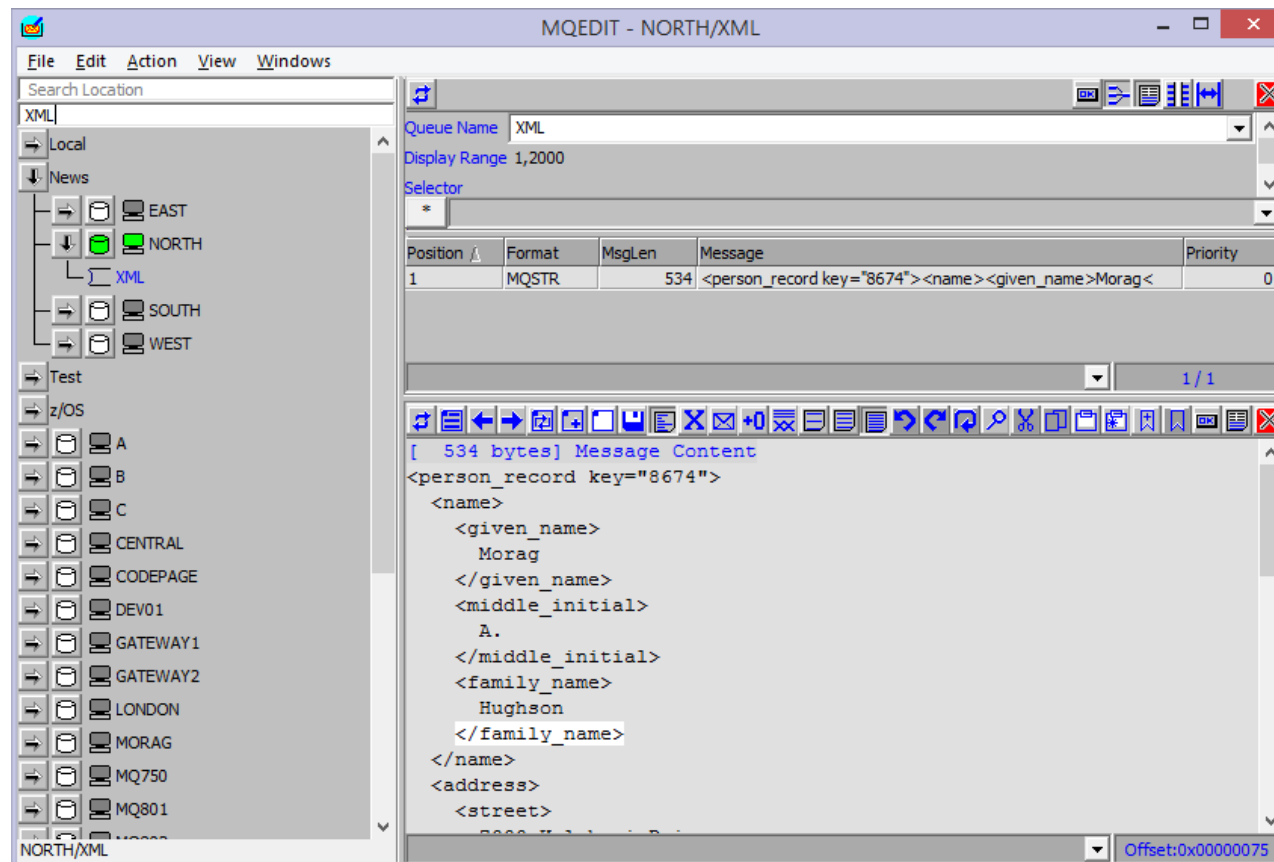
Any Questions ?



# MQEDIT main screen



- Queue Manager List
  - Queues listed under each queue manager
- Message List
- Message edit pane



The screenshot displays the MQEDIT main screen with the following components:

- Queue Manager List (Left Pane):** A tree view showing the hierarchy of queue managers. Under 'Local', there are 'News' and 'Test'. Under 'News', there are 'EAST', 'NORTH', 'SOUTH', and 'WEST'. Under 'Test', there are 'A', 'B', 'C', 'CENTRAL', 'CODEPAGE', 'DEV01', 'GATEWAY1', 'GATEWAY2', 'LONDON', 'MORAG', 'MQ750', and 'MQ801'. The 'NORTH' queue manager is selected, and its 'XML' queue is highlighted.
- Message List (Right Pane):** A table showing the message details for the selected queue. The table has columns for Position, Format, MsgLen, Message, and Priority. The first row shows Position 1, Format MQSTR, MsgLen 534, and Priority 0.
- Message Content (Bottom Pane):** The message content is displayed in XML format: 

```
[ 534 bytes] Message Content
<person_record key="8674">
  <name>
    <given_name>
      Morag
    </given_name>
    <middle_initial>
      A.
    </middle_initial>
    <family_name>
      Hughson
    </family_name>
  </name>
  <address>
    <street>
```

# Features: 'live parsing'



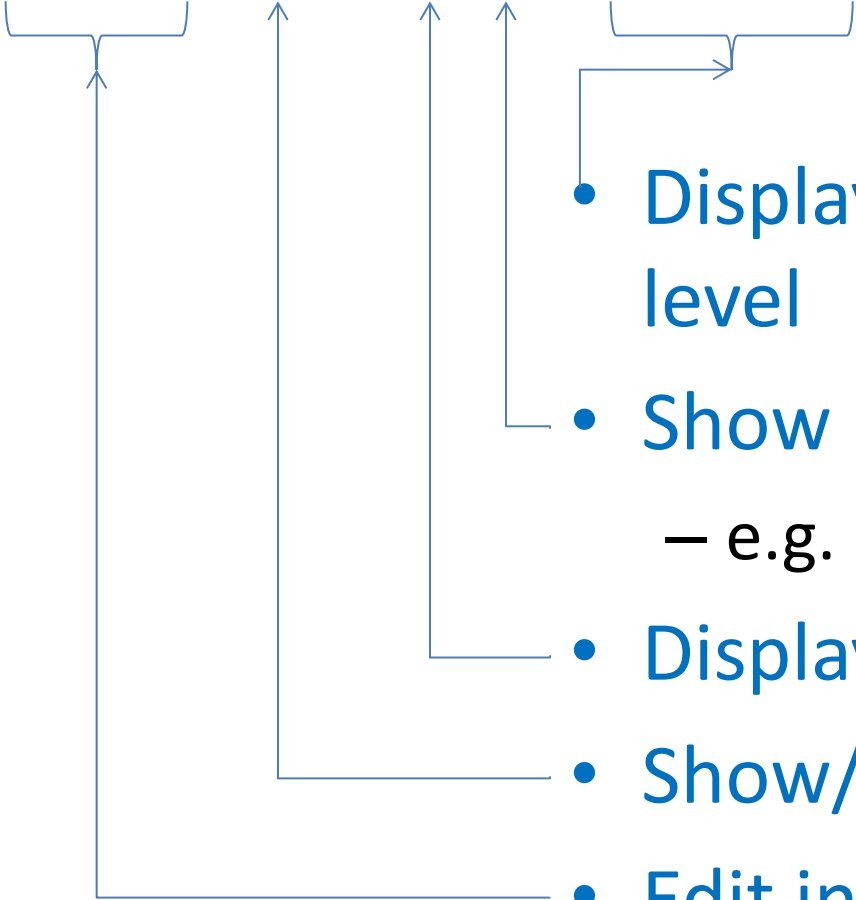
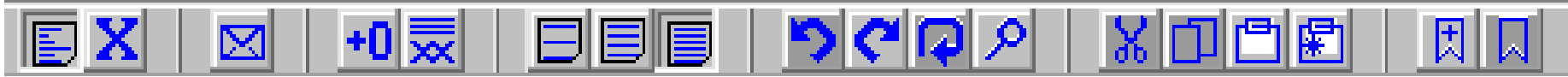
- Message is formatted 'as you type'
  - Instant feedback on data errors

The screenshot shows the MQEDIT - NORTH/XML application window. The menu bar includes File, Edit, Action, View, and Windows. The toolbar contains various icons for file operations and editing. The main text area displays XML content for a person record with key "8674". The XML is partially formed, and several errors are highlighted in red:

```
[ 533 bytes] Message Content
<person_record key="8674">
  <name>
    <given_name>
      Morag
    </given_name>
    <middle_initial>
      A.
    </middle_initial>
    <family_name>
      Hughson
    </family_nam>
    ** XML Badly formed ** Expected end tag </family name>
  </name><address><street>7000 Kalahari Drive</street><city>Sandusky</city><state>Ohio</state><
  zip_code>44870</zip_code></address><phone type="toll-free">877-525-2427</phone><phone type="l
  ocal">419-433-7200</phone><web type="email">morag@mqgem.com</web><web type="email">morag.hugh
  son@freemail.com</web><web type="homepage">http://www.mqgem.com</web><web type="twitter">@Mor
  agHughson</web></person_record>
  ** XML Badly formed ** Expected end tag </name>
  ** XML Badly formed ** Expected end tag </person record>
```

The status bar at the bottom right shows "Offset:0x0000004E".

# Features: multiple display formats

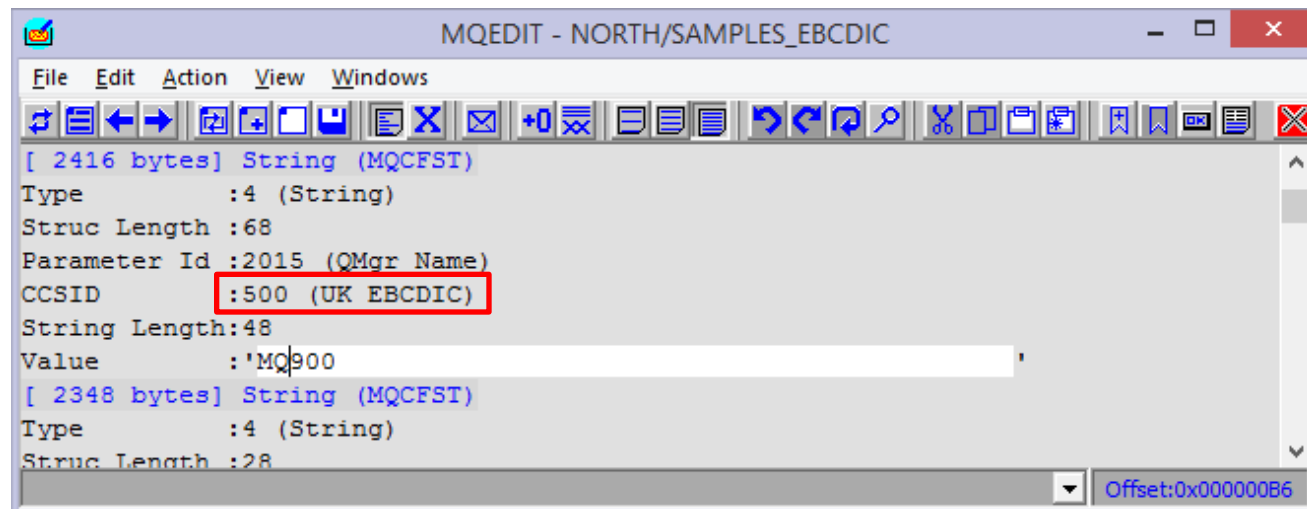


- Display high/medium/low detail level
- Show hex as characters
  - e.g. MessageId/CorrelationId
- Display message offsets
- Show/Hide MQMD
- Edit in formatted mode or hex mode

# Features: Edit in native format



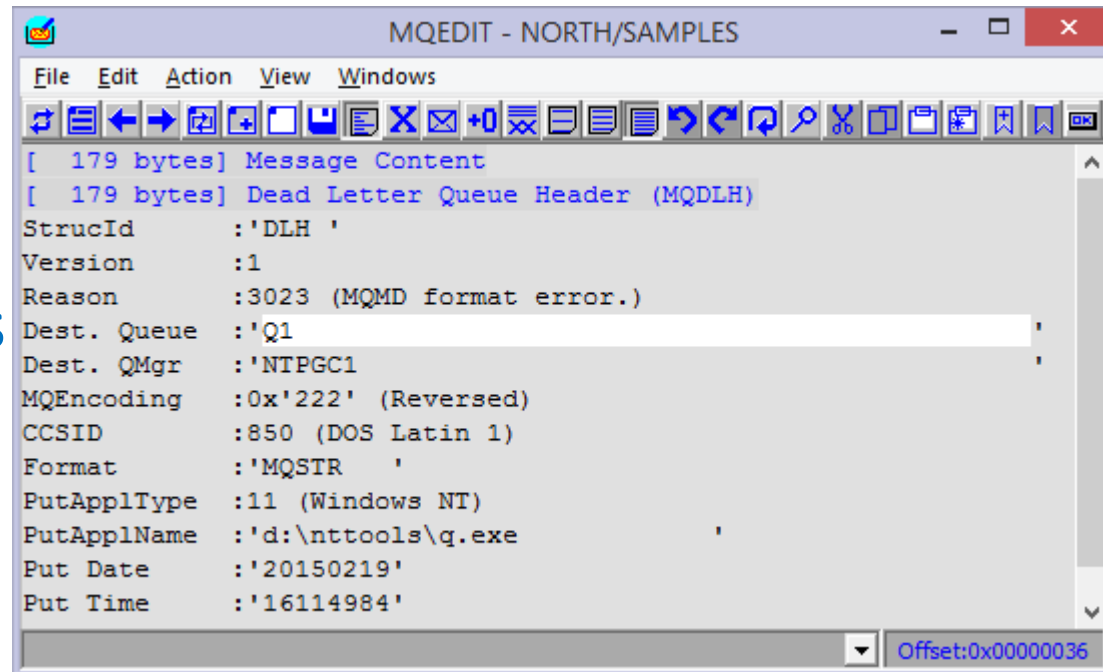
- No need to convert to local codepage/encoding
  - Edit EBCDIC messages directly
  - Edit big endian integers directly
- No risk of data loss/corruption
- Make minimum changes to the message
  - Just change the bytes you need



# Features: Editing of structured messages



- MQEDIT understands the structure of
  - PCF Command Messages
  - Events messages
  - Transmission Queue Headers
  - Dead Letter Queue Headers
  - ... and others
- ...making editing or adding sub-structures easy



# XML Editing assistance



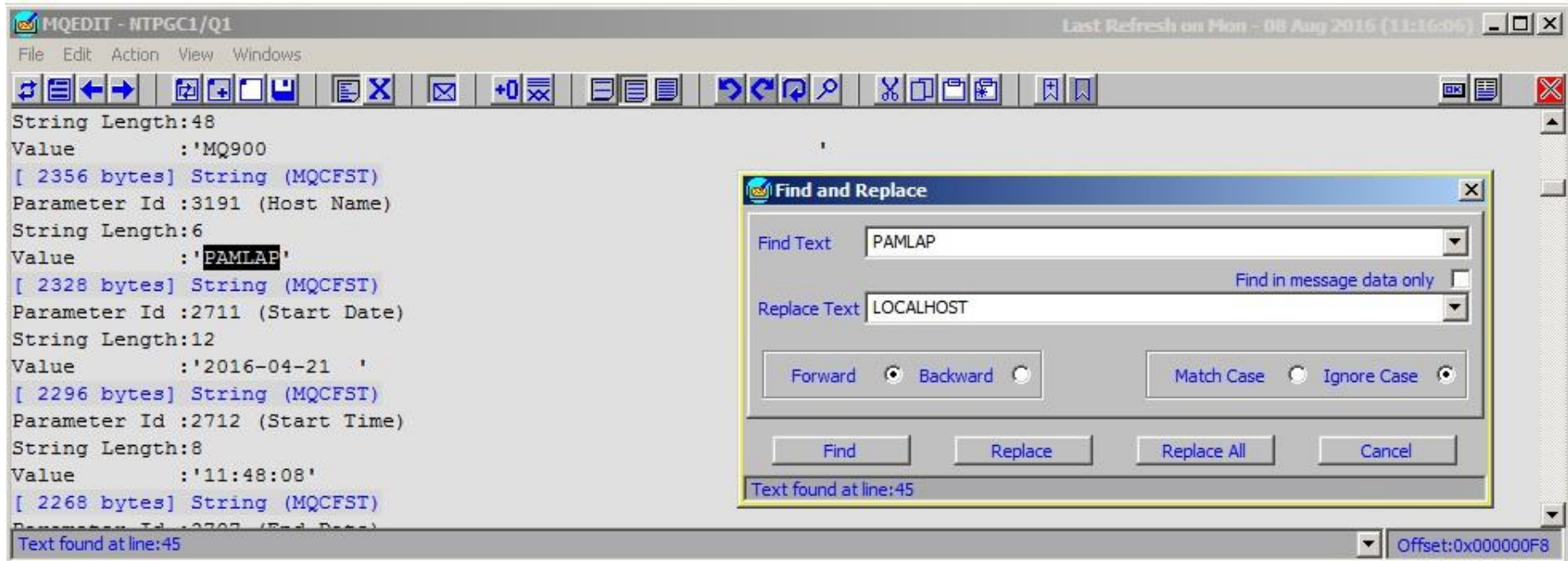
- Editing XML messages assistance includes
  - Goto partner tag
  - Selection of tag section
  - Simple add and removal of tags
  - Comment/Uncomment XML section
  - Automatic modification of partner tags

```
MQEDIT - NORTH/XML
File Edit Action View Windows
[ 560 bytes] Message Content
<person_record key="8674">
  <name>
    <given_name>
      Morag
    </given_name>
    <middle_initial>
      A.
    </middle_initial>
    <family_name>
      Hughson
    </family_name>
  </name>
  <!-- Temporary address -->
  <address>
    <street>
      7000 Kalahari Drive
    </street>
    <city>
      Sandusky
    </city>
    <state>
      Ohio
    </state>
    <zip_code>
      44870
    </zip_code>
  </address>
  <phone type="toll-free">
    877-525-2427
  </phone>
</person_record>
```

# Features: Find and Replace



- Search for strings
- Replace just one or all instances of a string
- Replacement is done intelligently
  - Lengths remain correct in structured messages



# Features: Operations



- Browse
- Edit
- Delete
- Copy & Move
  - Drag & Drop even across QMgrs!

Pos	Format	MsgLen	Message
8	MQXMIT	3,600	XMIT: NTPGC2/SYSTEM.CLUSTER.COMMAI
9	MQXMIT	1,336	XMIT: NTPGC2/Q1
10	MQXMIT	434	XMIT: NTPGC2/Q5
11	MQEVENT	104	QMgr Event - Reason(QMgr active) QMgr I
12	MQEVENT	1,948	Config Event - Reason(Config Change obje
13	MQDEAD	180	DLQ: Reason(Transmission Q Message Err
14	MQDEAD	183	DLQ: Reason(Unknown object name)
15	MQDEAD	179	DLQ: Reason(MQMD format error)
16	MOSTR	26	Test message from 'NTPGC1'



# Conclusion

---



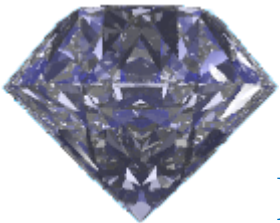
- Makes editing messages on MQ a breeze
- Large range of features
  - Live Parsing
  - Edit unconverted message
    - ASCII or EBCDIC, Big or Little Endian
  - Maintains structure integrity – for example PCF messages
  - Full Undo/Redo
  - Find Edit and Replace
  - User Message Formats
  - Formatters for XML, MQ Formats, JSON, FIX, Edifact, CSV, OFS
- Free trial licence available on request
  - Give it a try and let us know what you think

# Thank-you

---

## Any Questions ?

If you would like try either (or both) product(s) yourself then please just send an email to [support@mqgem.com](mailto:support@mqgem.com) and a free, no-obligation one-month licence will be sent to you for your evaluation.



MQGem Software

[www.mqgem.com](http://www.mqgem.com)  
[support@mqgem.com](mailto:support@mqgem.com)