MQGem Product Overview

MQSCX

QLOAD

MO71

MQEDIT

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MQGem Software

Agenda

- **MQSCX**
  - Feature Overview
  - New features
  - Demo

- **MO71**
  - Feature Overview
  - New features
  - Demo

- **QLOAD**
  - Features Overview

MQSCX (9.0.0)

MQGem Software

Overview

- ## Like RUNMQSC, but with so much more

  - Can be used interactively or in background

  - Fills many of the 'holes' in RUNMQSC

  - Runs as local or client bindings

  - More granular security

  - Less frustrating to use

  - More efficient and timely

  - Much Greater capabilities
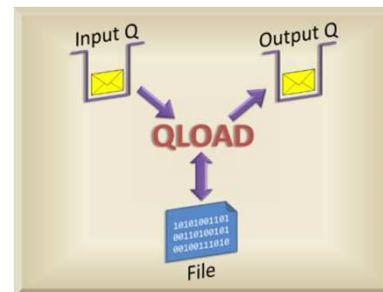
```
Command Prompt - mqscx  -m MYQM                                    _ □ ×
DEFXMITQ( )            DESCR( )              DISTL(YES)        <more>
INHIBTEV(DISABLED)     IPADDRV(IPV4)         LOCALEV(DISABLED)
LOGGEREV(DISABLED)     MARKINT(5000)         MAXHANDS(256)
MAXMSGL(4194304)       MAXPROPL(NOLIMIT)     MAXPRTY(9)
MAXUMSGS(10000)        MONACLS(QMGR)         MONCHL(OFF)
MONQ(OFF)              PARENT( )             PERFMEV(DISABLED)
PLATFORM(WINDOWSNT)    PSMODE(ENABLED)       PSCLUS(ENABLED)
PSNPMSG(DISCARD)       PSNPRES(NORMAL)       PSRTYCNT(5)
PSSYNCPT(IFPER)        QMID(MYQM_2013-05-26_11.34.34)
REMOTEEV(DISABLED)     REPOS( )              REPOSNL( )
ROUTEREC(MSG)          SCHINIT(QMGR)         SCMDSERV(QMGR)
SPLCAP(ENABLED)        SSLCRLNL( )           SSLCRYP( )
SSLEV(DISABLED)        SSLFIPS(NO)
SSLKEYR(C:\mqmdata\qmgrs\MYQM\ssl\key)       SSLRKEYC(0)
STATACLS(QMGR)         STATCHL(OFF)          STATINT(1800)
STATMQI(OFF)           STATQ(OFF)            STRSTPEV(ENABLED)
SUITEB(NONE)           SYNCPT                TREELIFE(1800)
TRIGINT(999999999)     VERSION(07050000)     XRCAP(YES)



MYQM>dis CHANNEL()
```

Command Retrieval

- What is more annoying than no command retrieval?
- MQSCX allows generic and targeted retrieval.
- Even across restarts

Command Auto-Completion

- Pressing 'Tab' will tab through available values
- Forwards and backwards supported
- Tab through commands, attributes or values
- Tab through like-named items

Object name completion

- Pressing 'Tab' will tab through available values

- Forwards and backwards supported

- Tab through like-named items

Multiple Wildcards

- Wildcards can be specified anywhere
  - Wildcards '*' and '?' supported

Extended WHERE clause

- Much more flexibility than standard WHERE
- Multiple expressions supported
- Greater list of operators
- Numeric expressions supported

Separator Lines

- Helps see the wood from the trees
- Can use significantly less screen real estate

Synonyms

- Saves laborious typing

- Reduces the chances of making mistakes

- Can go further even define a single keystroke as a command

Connecting and Disconnecting

- Allows connecting and disconnecting
  - All within same script
  - Connect as client or local bindings
  - Prompt changes depending on connected Queue Manager

FIND clause

- **Simpler way of just filtering by text**
  - Text matched against any of the response
  - Much easier to get right than WHERE clause

Filtering with =FIND Clause

Plus much more….

- Colour configuration

- Multiple commands on a single line

- Display totals

- Full prompt configuration

- Search through responses

- IMPORT other command files
  - Which can also IMPORT command files

- …….

CCDT Editing

- ## MQSCX can be run in 'CCDT' mode
  - CLNTCONN channels can be defined, changed, deleted
  - CCDT can be created of any MQ version
  - Two CCDT files can be merged (by channel name)

```
MQ Environment : 750GA - mqscx -n

CCDT commands directed to file 'C:\mqmdata\AMQCLCHL.TAB'
MQSCX Extended MQSC Program - Version 7.5.1
Licenced to Paul Clarke
Licence Location: Home
[11:00:19] dis chl(*) conname =where(not(channel == "SYS*"))
CHANNEL(FRED)       CHLTYPE(CLNTCONN)   CONNAME(localhost(1415))
CHANNEL(NTPGC1.SRU) CHLTYPE(CLNTCONN)   CONNAME(LOCALHOST)
CHANNEL(X)          CHLTYPE(CLNTCONN)   CONNAME(198.162.45.67)
Total display responses - Received:4 Matched:3
>
```

Control Language

- ## MQSC is a very static language

  - Very difficult to parse

  - No control constructs

  - Just a list of commands to execute

- ## MQSCX extends the language

  - Easy to process responses

  - Adds loops, if statements, list processing, goto

  - User variables

  - Functions

Control Language

- Extends MQSC uses enormously
  - Augment or modify command responses
  - Display consolidated result of multiple commands
  - Perform health checking
  - Perform monitoring
  - Write report file of Queue Manager status
  - Check objects against naming conventions
  - Bulk updates
    - For example, change all objects with a particular value

'Top' Script

```
* Get the local queues and their depth and store in array

* First delete any previous results
delvar(@val)

* Now, get a list of queues with messages
@i = 0;
foreach(DIS QL(*) CURDEPTH WHERE(CURDEPTH GT 0))
  @i = @i + 1
  @val[1,@i] = QUEUE
  @val[2,@i] = CURDEPTH
endfor

* Sort the array in descending order by second column
sortd(@val,2)

* Print out a screen full unless there are even less returned
if (_height)    @limit = _height-3; else @limit = 20; endif
if (@limit > @i) @limit = @i; endif

* Ok, print out the top few
@i = 0;
print :48:"Queue Name","Depth"
print :48:"==========","====="
while(@i < @limit)
  @i = @i + 1
  print :48:@val[1,@i],:5:@val[2,@i]
endwhile
```

ccdver function

```
* Determine the minimum and maximum version in a CCDT

func ccdtver()
if (_ccdtmode)
  @minVer = 999999999
  @maxVer = 0
  foreach (DISPLAY CHANNEL(*) VERSION)
    if (VERSION < @minVer)
      @minVer = VERSION
    endif
    if (VERSION > @maxVer)
      @maxVer = VERSION
    endif
  endfor
  if (_numEach)
    print "Channel version in",_ccdt
    print "Minimum:",@minVer,"Maximum:",@maxVer
  else
    print "No channels found in",_ccdt
  endif
else
  print "Run this script with MQSCX in CCDT mode"
endif
endfunc
```

'Conns' Function

```
func conns()
  =echo resp(no)
  if (_connqmgr = '')
    print 'Please connect to your queue manager before issuing "conns"'
    return
  endif

  DISPLAY QMSTATUS CONNS
  print 'Total connections:',CONNS
  @totalconns = CONNS
  DISPLAY CONN(*) WHERE(CHANNEL EQ ' ')
  @chlconns = @totalconns - _matches

  print '  Local      :',_matches
  @total = 0
  @svrcn = 0
  foreach(DISPLAY CHSTATUS(*) CURSHCNV CHLTYPE WHERE(STATUS EQ RUNNING))
    if (CHLTYPE = "SVRCONN")
      @svrcn = @svrcn + 1
      @total = @total + CURSHCNV
    endif
  endfor
  print '  QMgr Chls  :',@chlconns-@total
  print '  Client Chls:',@total
  print
  print 'Total Running Channel instances:',_matches
  print '  QMgr   Channels:',_matches - @svrcn
  print '  Client Channels:',@svrcn
endfunc
```

MO71 (9.0.1)

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MO71 Overview

- Windows GUI
  - Multiple window design
    - Show what you want, where ever you want it.
  - Single EXE install, small (~3MB) and fast

- Been around for almost 20 years
  - Used by hundreds of customers all over the world
  - Support any version up to MQ V9.0

- Very extensive list of features
  - Not just configuration
  - Monitoring and Administration

Filtering

- ## Very simple and yet very powerful filtering
  - Simple Boolean expression
  - Expression controls what and how fields are displayed

Filter Manager

- Allows a name to be assigned to each filter
  - Handy if it's complicated
  - Or just to save typing
  - Each filter given a name and invoked with $filtername
  - For example, **writedepth** below:

```
if (_first)
{
   @fd:= fopen("c:\\temp\\qs.csv","w");
}
fprintf(@fd,"%s,%s,%d\n",date$(_time),queue,curdepth);
if(_last)
{
   fclose(@fd);
}
1;
```

Multi-Queue Manager Dialogs

- ## Shows the results multiple Queue Managers
  - In the same dialog
  - Subject to the same filters
  - Uses less screen real-estate

Export Objects

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- ## All lists of MQ objects can be exported
  - To a file or the clipboard
  - In text, MQSC, CSV or XML formats
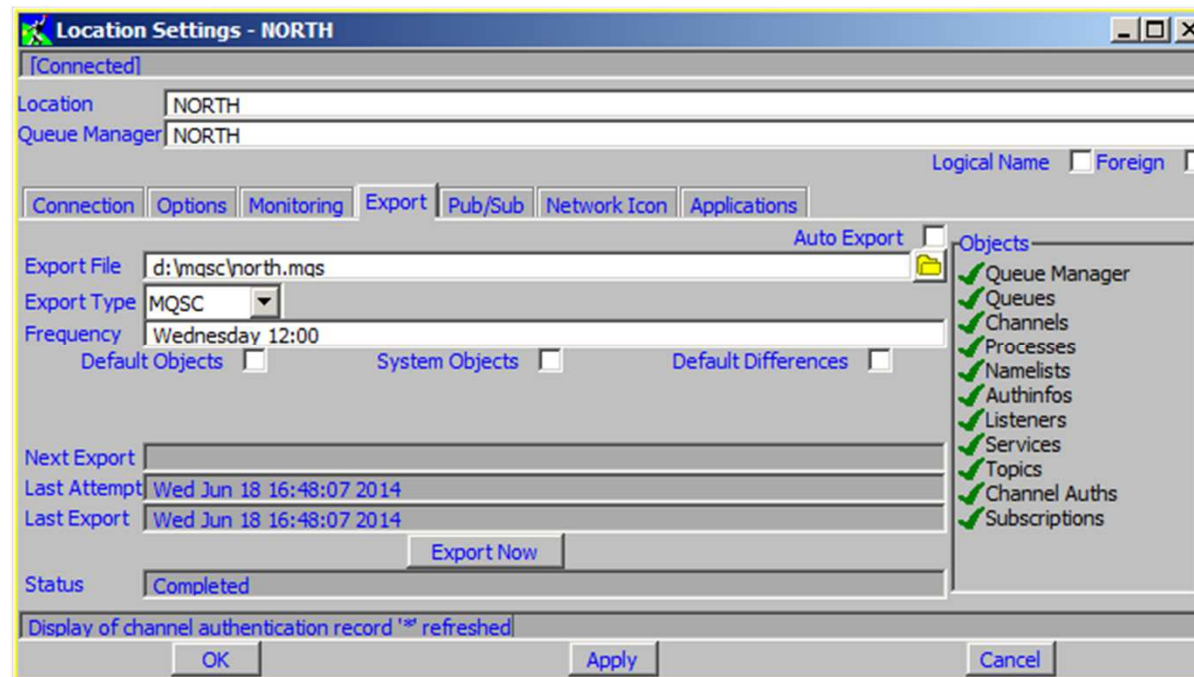 - Various options to control what gets exported
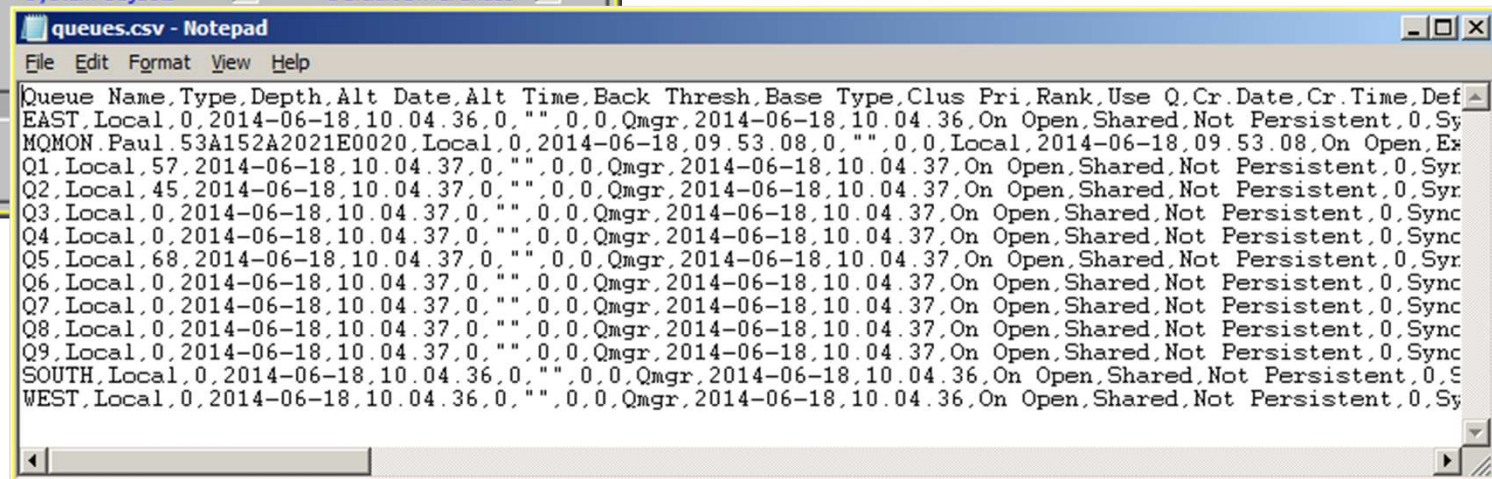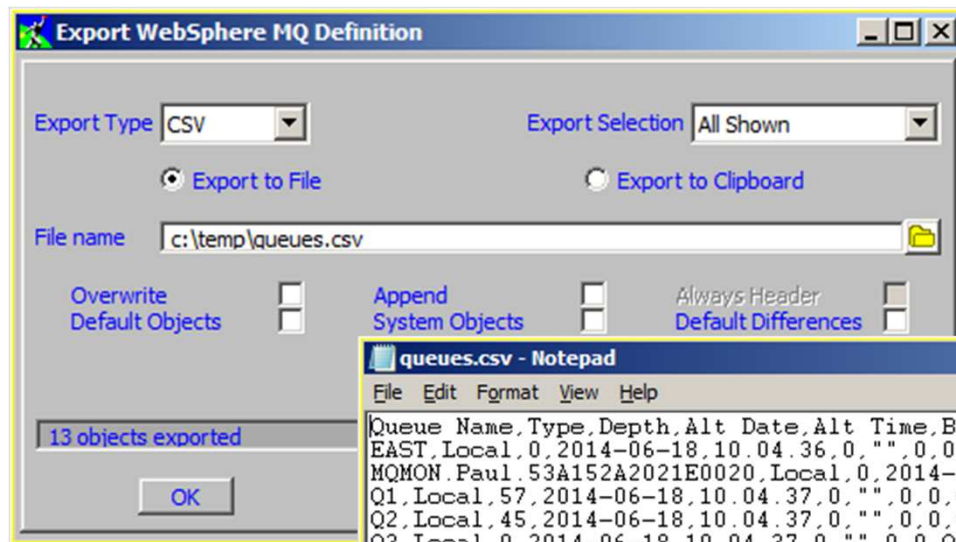
Exporting the whole Queue Manager

- ## Will save all the object definitions
  - Can be scheduled to run at any frequency
  - Again you can choose what gets exported
    - Such as default objects, system objects.

Comparing Definitions

- Compare definitions on any two Queue Managers
  - Shows which objects are different
  - Shows which attributes are different
- Allows object definitions to be synchronised

API Exerciser

- ## Allows you to try out most of the MQI

  - Try out MQI combinations

  - See the effect or generate error conditions

  - Supports multiple local or client connections

  - Shows the whole of the MQI structures

Browser Access

- ## View your MQ status from anywhere
  - – Read-only
 - – Fully configurable

Event Monitoring

- Will 'listen' on any event queue for given event
  - Can filter by any event field

- Choice of event actions
  - Log to console
  - Log to a file
  - Send to another queue
  - Issue a command
    - Can be used to send email or pager etc

Graphing

- Monitor virtual any numeric value

  - Set frequency, graph type etc

  - Graph multiple objects and object types

  - Export data-points to CSV
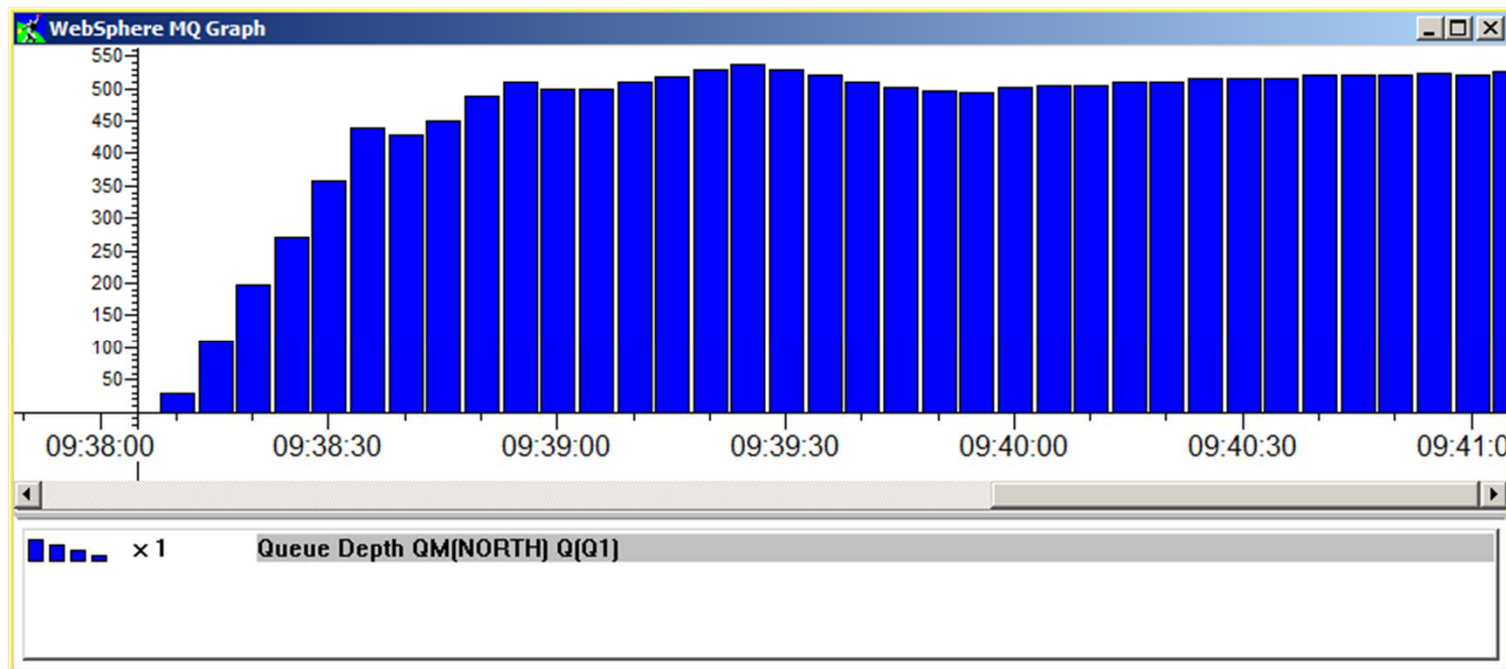
Predefined Dialogs

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- ## Allow you to pre-set dialog…
  - Content
  - Even Multi-Queue Manager supported via qm() filter fn.
  - Filtering
  - Position and Size
  - Refresh rate

- ## Groups supported
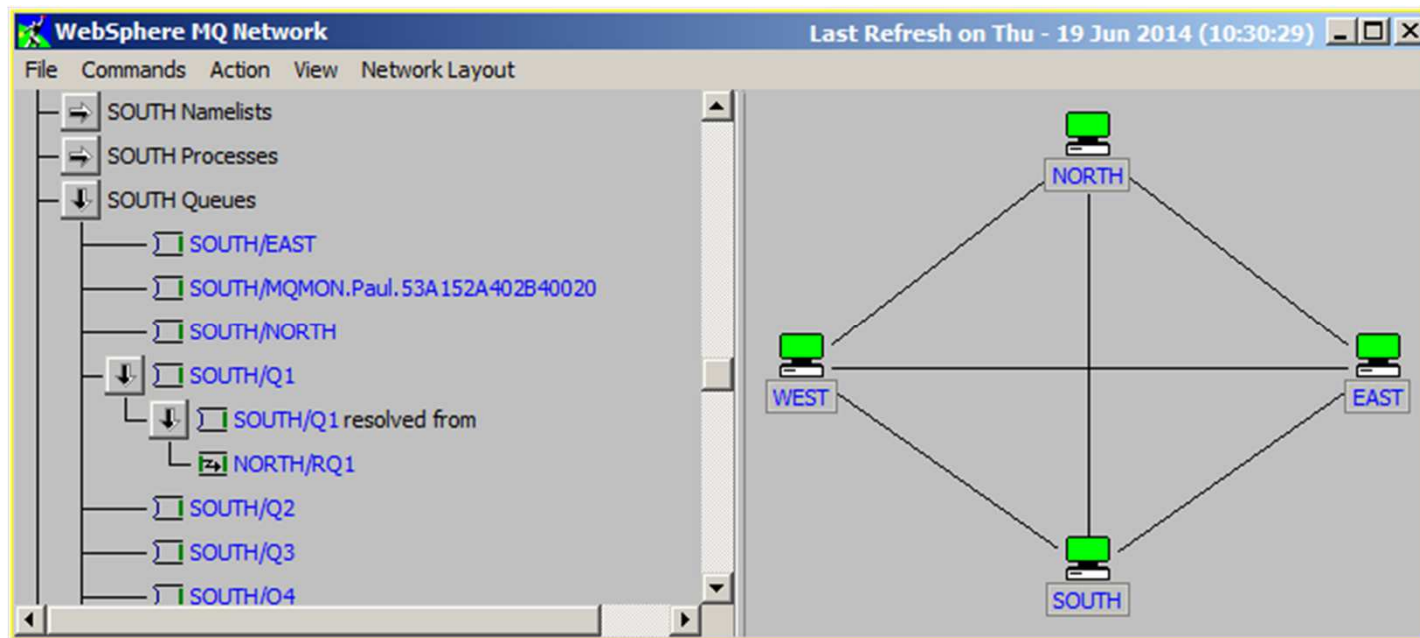 - Any number of dialogs can be started with single click

Network Display

- ## Diagrammatic view of your network
  - Position Queue Managers with your own picture

- ## Verify view
  - Shows object resolution both to and from
  - Shows any health-check problems

Application List

- ## List of applications
  - Generate dynamically from monitoring
  - Show status, inactive, running or error
  - Shows history of objects opened by the application
    - Including last used times

Application View

- ## Shows status of applications in a diagram
  - Choose what applications to show…and where
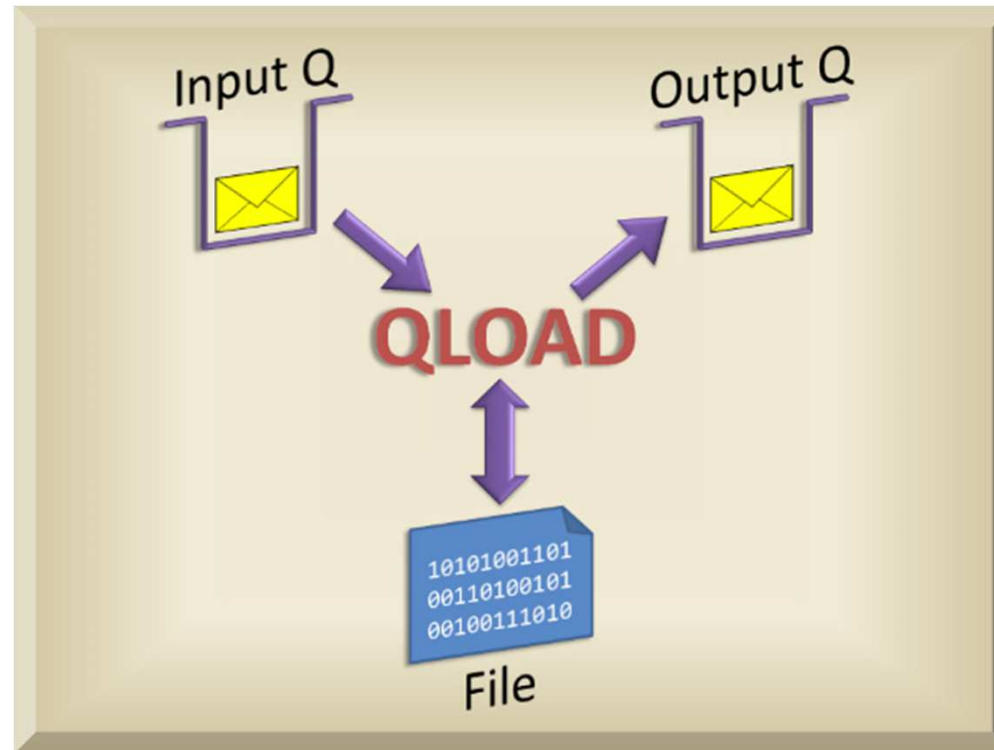 - Whether application is active and/or has queue open
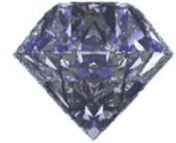 - User picture can be assigned to an application
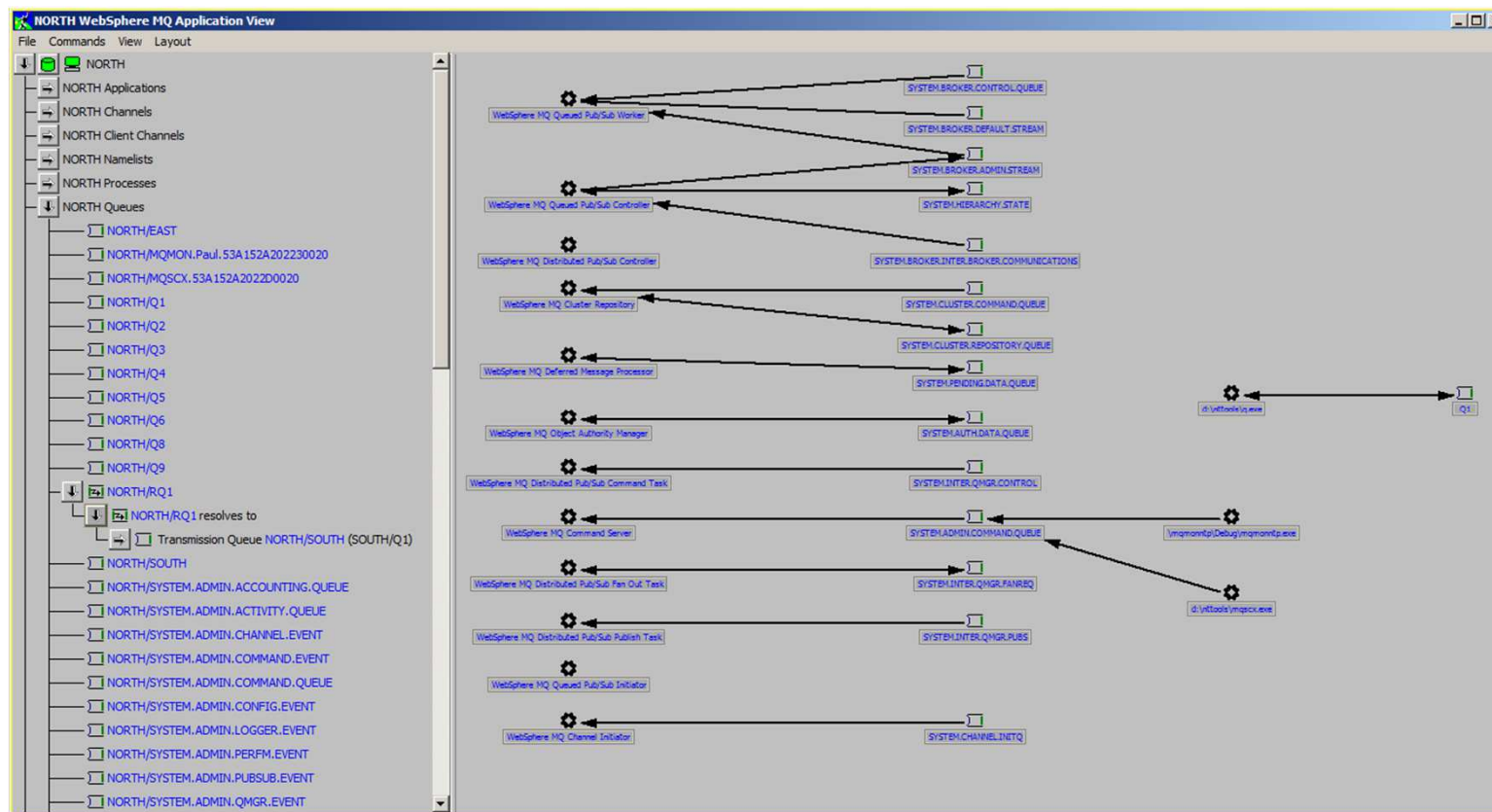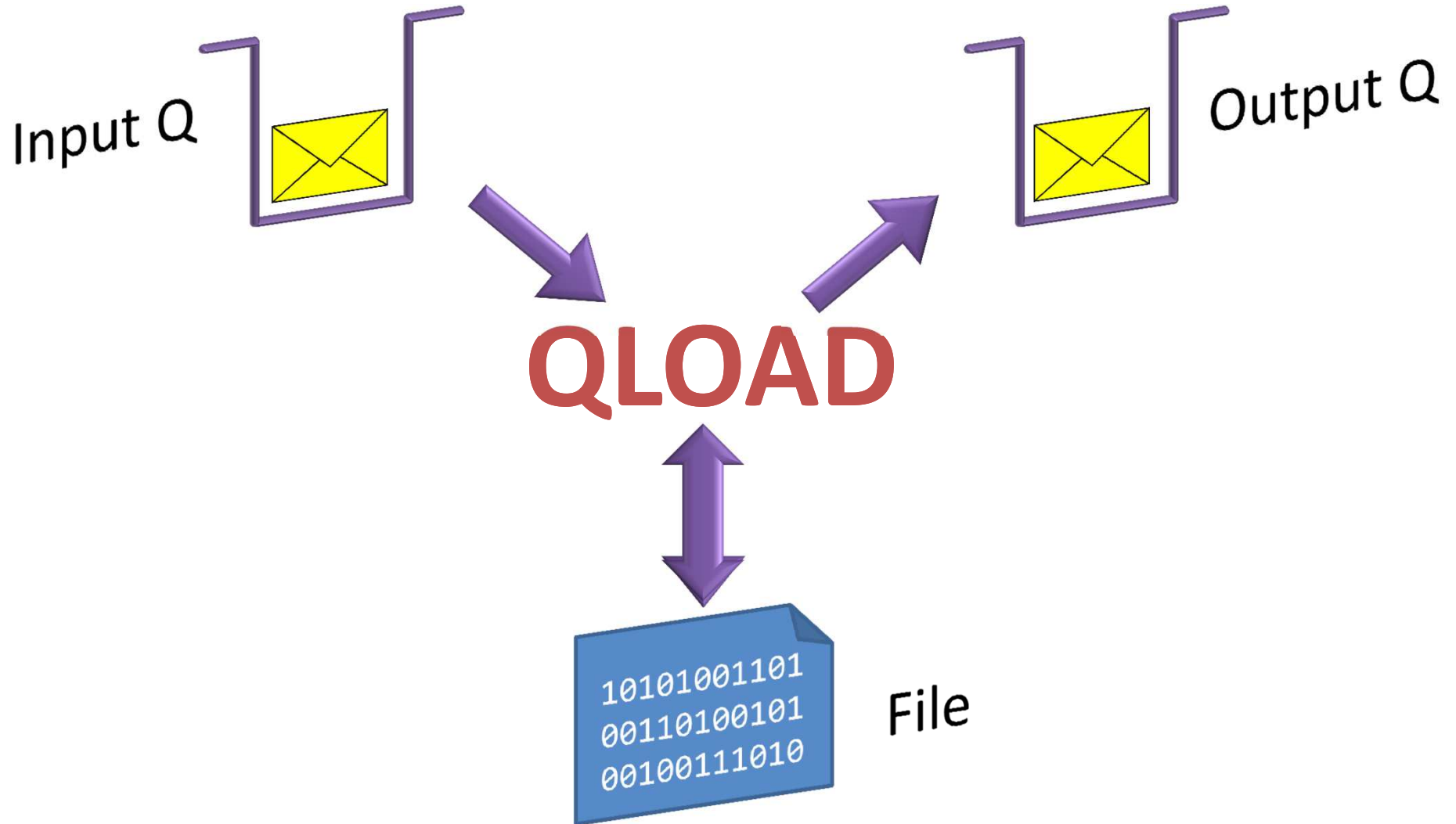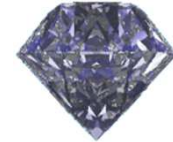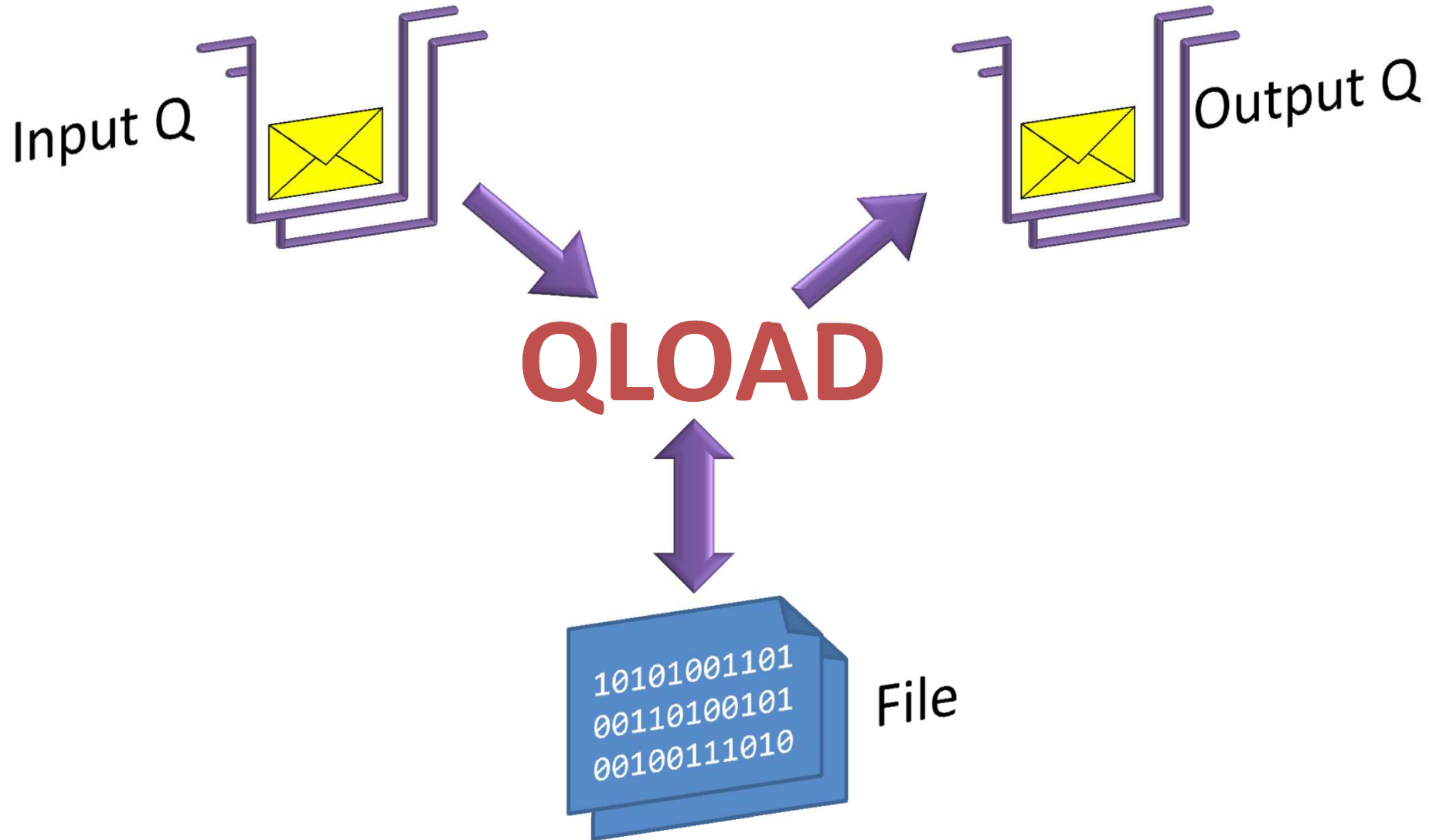
QLOAD(9.0.0)

MQGem Software

Message directions

Multiple inputs/outputs

Many features….

- Copy or Move messages between Queue Managers

- Select by:
  - Priority, Age, Size, SQL92, Test string, Message Range

- Strip headers, such as MQXQH and MQDLH

- Choose maximum output file based on:
  - Size, Number of Messages or Age

- Convert Messages

Thank-you

Any questions?

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