

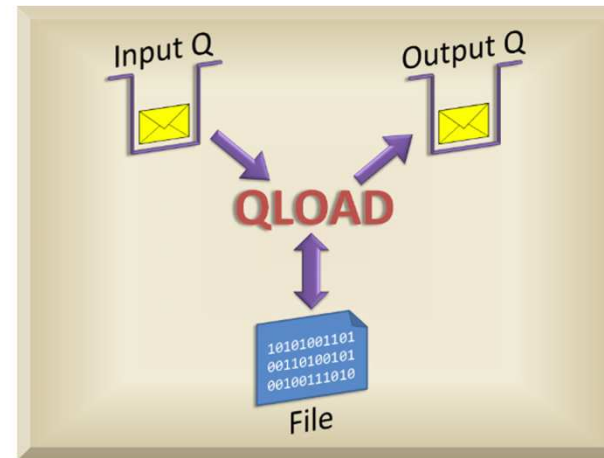
MQGem Product Overview

MQSCX

```

C:\> Command Prompt - mqscx -m MYQM
DEFXMITQ(<)          DESCR(<)          DISTL(YES)          <none>
INHIBTEU(DISABLED)  IPADDRU(IPU4)      LOCALEU(DISABLED)
LOGGEREU(DISABLED)  MARKINT(5000)      MAXHANDS(256)
MAXMSGL(4194304)    MAXPROPL(NOLIMIT) MAXPRTY(9)
MAXUMSCS(10000)     MONACLS(QMGR)      MONCHL(OFF)
MONQ(OFF)           PARENT(<)         PERFMU(DISABLED)
PLATFORM(WINDOWSNT) PSMODE(ENABLED)    PSCLUS(ENABLED)
PSNPMSC(DISCARD)    PSNPRES(NORMAL)   PSRTYCNT(5)
PSSYNCP(IFFPER)     QMID(MYQM_2013-05-26_11.34.34)
REMTTEU(DISABLED)  REPOS(<)          REPOSNL(<)
ROUTEREC(MSG)       SCHINIT(QMGR)     SCMDSERU(QMGR)
SPLCAP(ENABLED)     SSLCRNL(<)        SSLCRYP(<)
SLEU(DISABLED)      SSLFIPS(NO)       SSLKEYC(0)
SSLKEYR(C:\mqmdat\mqmgs\MYQM\sslkey)
STATACLS(QMGR)      STATCHL(OFF)      STATINT(1800)
STATMQI(OFF)        STATQ(OFF)        STRSTPEU(ENABLED)
SUITEB(NONE)        SYNCP             TREELIFE(1800)
TRIGINT(999999999) U
    
```

MO71



QLOAD

MQEDIT

NORTH/Queue List

Queue Name	Type	Depth	Alt Date	Alt Time	Back Thresh	Base Type	Clus Pri	Rank	Use Q	Cr. Date
MQMON.Paul.53A.152A2021E0020	Local	0	2014-06-18	09:53:08	0	0	0	0	Local	2014-
SYSTEM.ADMIN.ACCOUNTING.QUEUE	Local	0	2014-06-18	09:49:24	0	0	0	0	Qmgr	2014-
SYSTEM.ADMIN.ACTIVITY.QUEUE	Local	0	2014-06-18	09:49:24	0	0	0	0	Qmgr	2014-
SYSTEM.ADMIN.CHANNEL.EVENT	Local	0	2014-06-18	09:49:24	0	0	0	0	Qmgr	2014-
SYSTEM.ADMIN.COMMAND.EVENT	Local	0	2014-06-18	09:49:25	0	0	0	0	Qmgr	2014-
SYSTEM.ADMIN.COMMAND.QUEUE	Local	0	2014-06-18	09:49:24	0	0	0	0	Qmgr	2014-
SYSTEM.ADMIN.CONFIG.EVENT	Local	0	2014-06-18	09:49:25	0	0	0	0	Qmgr	2014-
SYSTEM.ADMIN.LOGGER.EVENT	Local	0	2014-06-18	09:49:24	0	0	0	0	Qmgr	2014-
SYSTEM.ADMIN.PERM.EVENT	Local	0	2014-06-18	09:49:24	0	0	0	0	Qmgr	2014-
SYSTEM.ADMIN.PUBSUB.EVENT	Local	0	2014-06-18	09:49:25	0	0	0	0	Qmgr	2014-
SYSTEM.ADMIN.QMGR.EVENT	Local	1	2014-06-18	09:49:24	0	0	0	0	Qmgr	2014-
SYSTEM.ADMIN.STATISTICS.QUEUE	Local	0	2014-06-18	09:49:24	0	0	0	0	Qmgr	2014-
SYSTEM.ADMIN.TRACE.ACTIVITY.QUEUE	Local	0	2014-06-18	09:49:25	0	0	0	0	Qmgr	2014-
SYSTEM.ADMIN.TRACE.ROUTE.QUEUE	Local	0	2014-06-18	09:49:24	0	0	0	0	Qmgr	2014-
SYSTEM.AUTH.DATA.QUEUE	Local	92	2014-06-18	09:49:24	0	0	0	0	Qmgr	2014-
SYSTEM.BROKER.ADMIN.STREAM	Local	0	2014-06-18	09:49:25	0	0	0	0	Qmgr	2014-
SYSTEM.BROKER.CONTROL.QUEUE	Local	0	2014-06-18	09:49:25	0	0	0	0	Qmgr	2014-
SYSTEM.BROKER.DEFAULT.STREAM	Local	0	2014-06-18	09:49:25	0	0	0	0	Qmgr	2014-
SYSTEM.BROKER.INTER.BROKER.COMMUNICATIONS	Local	0	2014-06-18	09:49:39	0	0	0	0	Qmgr	2014-
SYSTEM.CHANNEL.INITQ	Local	0	2014-06-18	09:49:39	0	0	0	0	Qmgr	2014-
SYSTEM.CHANNEL.SYNQ	Local	0	2014-06-18	09:49:24	0	0	0	0	Qmgr	2014-
SYSTEM.CHLAUTH.DATA.QUEUE	Local	3	2014-06-18	09:49:25	0	0	0	0	Qmgr	2014-

```

Windows
Message Descriptor (MQMD)
000000
(Datagram)
MHRF2 '
(Lowest)
(Persistent)
#D51204D5139303020202020202000ED165720510C04
MQ900
MQ900
Message Bytes
0 7C000000 22020000 52030000 4D514144 4D494E20 00000000 B8040000 | RFH .....MQADMIN .....
0 733E3C54 6F703E24 5359532F 4D512F49 4E464F2F 514D4752 2F4D5139 | T...<mqps><Top>$SYS/MQ/INFO/QMGR/MQ9
5 69747954 72616365 2F417070 6C4E616D 652F616D 71737075 742E6578 | 00/ActivityTrace/App1Name/@mqspu.ex
0 2FED7170 733E2020 1A000000 24000000 03000000 D1000000 01000000 | e</Top></mqps> .....$.
0 00000000 17000000 04000000 44000000 DF070000 00000000 30000000 | .....D.....0.....
20202020 20202020 20202020 20202020 20202020 20202020 20202020 | MQ900
20202020 20202020 20202020 04000000 1C000000 770C0000 00000000 | .....W.....PAML
#1502E44 04000000 20000000 870A0000 00000000 0C000000 32303136 2D30342D | AP.D....2016-04-21...
04000000 1C000000 980A0000 00000000 08000000 31313A34 383A3038 04000000 | .....11:48:08.....
    
```



MQGem Software

Paul Clarke
support@mqgem.com
www.mqgem.com

Agenda



MQGem
Software

- MQSCX

- Feature Overview
- New features
- Demo

```
Command Prompt - mqscx -m MYQM
DEFXMITQ< >          DESCR< >          DISTL<YES>          <none>
INHIBITEU<DISABLED> IPADDRU<IPU4>        LOCALEU<DISABLED>
LOGGEREU<DISABLED>  MARKINI<5000>         MAXHANDS<256>
MAXMSGL<4194304>   MAXPROPL<NOLIMIT>    MAXPRIY<9>
MAXUMSGS<10000>    MONACLS<QMGR>        MOMCHL<OFF>
MOMQ<OFF>           PAREN< >             PERFMU<DISABLED>
PLATFORM<WINDOWSNT> PSNDE<ENABLED>       PSCLUS<ENABLED>
PSNPMSC<DISCARD>   PSNPRES<NORMAL>      PSRTYCAT<5>
PSSYNCT<OFFER>     QMID<MYQM_2013-05-26_11_34_34>
REMOETEU<DISABLED> REPOS< >             REPOSML< >
ROUTEREC<MSG>      SCHINIT<QMGR>        SCMSERU<QMGR>
SPLCAP<ENABLED>    SSLCRLNL< >          SSLCRYP< >
SSLEU<DISABLED>    SSLFLPS<NO>          SSLRKEYC< >
SSLRKEYR<C:\mqdata\mqgms\MYQM\ssl\key> SSLRKEYV<0>
STATACLS<QMGR>    STATCHL<OFF>         STATINT<1800>
STATMQI<OFF>      STATQ<OFF>           STRSTPEU<ENABLED>
SUITEB<NONE>      SYNCP< >             TREELIFE<1800>
TRIGINT<999999999> UERSION<07050000>    XRCAP<YES>

MYQM>dis CHANNEL<>
```

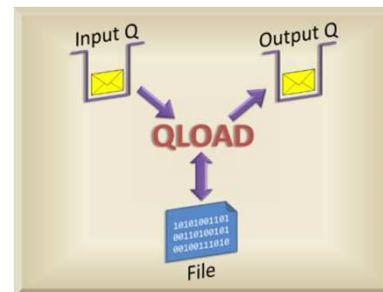
- MO71

- Feature Overview
- New features
- Demo

Queue Name /	Type	Depth	Alt Date	Alt Time	Back Thresh	Base Type	Clus Pri	Rank	Use Q	Cr Date
MQMORTN.Pair.SA130A2022E0020	Local	0	2014-06-18	09:53:08	0		0	0	Local	2014-
SYSTEM.ADMIN.ACCOUNTING.QUEUE	Local	0	2014-06-18	09:49:24	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.ACTIVITY.QUEUE	Local	0	2014-06-18	09:49:24	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.CHANNEL.EVENT	Local	0	2014-06-18	09:49:24	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.COMMAND.EVENT	Local	0	2014-06-18	09:49:25	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.COMMAND.QUEUE	Local	0	2014-06-18	09:49:24	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.CONFIG.EVENT	Local	0	2014-06-18	09:49:25	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.LOGGER.EVENT	Local	0	2014-06-18	09:49:24	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.PEPM.EVENT	Local	0	2014-06-18	09:49:24	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.PUBSUB.EVENT	Local	0	2014-06-18	09:49:25	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.QMGR.EVENT	Local	1	2014-06-18	09:49:24	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.STATISTICS.QUEUE	Local	0	2014-06-18	09:49:24	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.TRACE.ACTIVITY.QUEUE	Local	0	2014-06-18	09:49:25	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.TRACE.ROUTE.QUEUE	Local	0	2014-06-18	09:49:24	0		0	0	Qmgr	2014-
SYSTEM.AUTH.DATA.QUEUE	Local	92	2014-06-18	09:49:24	0		0	0	Qmgr	2014-
SYSTEM.BROKER.ADMIN.STREAM	Local	0	2014-06-18	09:49:25	0		0	0	Qmgr	2014-
SYSTEM.BROKER.CONTROL.QUEUE	Local	0	2014-06-18	09:49:25	0		0	0	Qmgr	2014-
SYSTEM.BROKER.DEFAULT.STREAM	Local	0	2014-06-18	09:49:25	0		0	0	Qmgr	2014-
SYSTEM.BROKER.INTER.BROKER.COMMUNICATIONS	Local	0	2014-06-18	09:49:39	0		0	0	Qmgr	2014-
SYSTEM.CHANNEL.INTQ	Local	0	2014-06-18	09:49:39	0		0	0	Qmgr	2014-
SYSTEM.CHANNEL.SYNCP	Local	0	2014-06-18	09:49:24	0		0	0	Qmgr	2014-
SYSTEM.HEALTH.DATA.QUEUE	Local	3	2014-06-18	09:49:25	0		0	0	Qmgr	2014-

- QLOAD

- Features Overview



MQSCX (9.0.0)

```
Command Prompt - mqscx -m MYQM
DEFXMITQ< >          DESCR< >          DISTL<YES>          <more>
INHIBTEU<DISABLED>  IPADDRU<IPV4>      LOCALEU<DISABLED>
LOGGEREU<DISABLED>  MARKINT<5000>      MAXHANDS<256>
MAXMSGGL<4194304>  MAXPROPL<NOLIMIT>  MAXPRTY<9>
MAXUMSGS<10000>    MONACLS<QMGR>      MONCHL<OFF>
MONQ<OFF>           PARENT< >          PERFMEU<DISABLED>
PLATFORM<WINDOWSNT> PSMODE<ENABLED>    PSCLUS<ENABLED>
PSNPMSG<DISCARD>   PSNPRES<NORMAL>   PSRTCNT<5>
PSSYNCP<IFPER>     QMID<MYQM_2013-05-26_11.34.34>
REMOTEEU<DISABLED> REPOS< >           REPOSNL< >
ROUTEREC<MSG>      SCHINIT<QMGR>     SCMDSERU<QMGR>
SPLCAP<ENABLED>    SSLCRLNL< >        SSLCRYP< >
SSLEU<DISABLED>    SSLFIPS<NO>        SSLRKEYC<0>
SSLKEYR<C:\mqmdata\qmgrs\MYQM\ssl\key>
STATACLS<QMGR>     STATCHL<OFF>       STATINT<1800>
STATMQI<OFF>       STATQ<OFF>         STRSTPEU<ENABLED>
SUITEB<NONE>       SYNCPT              TREELIFE<1800>
TRIGINT<999999999> VERSION<07050000>  XRCAP<YES>

MYQM>dis CHANNEL<>
```



MQGem Software

Overview



MQGem
Software

- 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>
INHIBTEU<DISABLED>  IPADDRU<IPU4>        LOCALEU<DISABLED>
LOGGEREU<DISABLED>  MARKINT<5000>        MAXHANDS<256>
MAXMSGSL<4194304>  MAXPROPL<NOLIMIT>   MAXPRTY<9>
MAXUMSGS<10000>    MONACLS<QMGR>       MONCHL<OFF>
MONQ<OFF>          PARENT< >           PERFMEU<DISABLED>
PLATFORM<WINDOWSNT> PSMODE<ENABLED>     PSCLUS<ENABLED>
PSNPMSG<DISCARD>   PSNPRES<NORMAL>    PSRTCNT<5>
PSSYNCPT<IFPER>    QMID<MYQM_2013-05-26_11.34.34>
REMOTEEU<DISABLED> REPOS< >            REPOSNL< >
ROUTEREC<MSG>      SCHINIT<QMGR>       SCMDSERU<QMGR>
SPLCAP<ENABLED>    SSLCRLNL< >         SSLCRYP< >
SSLEU<DISABLED>    SSLFIPS<NO>         SSLRKEYC<0>
SSLKEYR<C:\mqdata\mqgrs\MYQM\ssl\key> STATINT<1800>
STATACLS<QMGR>     STATCHL<OFF>        STRSTPEU<ENABLED>
STATMQI<OFF>       STATQ<OFF>          TREELIFE<1800>
SUITEB<NONE>       SYNCPT               XRCAP<YES>
TRIGINT<999999999> VERSION<07050000>

MYQM>dis CHANNEL<>
```

Command Retrieval



MQGem
Software

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

Command Retrieval

```
Command Prompt - mqscx -m MYQM
[13:38:59] DISPLAY QLOCAL<SYSTEM.ADMIN
QUEUE<SYSTEM.ADMIN.CHANNEL.EVENT>
QUEUE<SYSTEM.ADMIN.COMMAND.EVENT>
QUEUE<SYSTEM.ADMIN.COMMAND.QUEUE>
QUEUE<SYSTEM.ADMIN.CONFIG.EVENT>
[13:39:07] CLEAR QLOCAL<SYSTEM.A
AMQ8022: WebSphere MQ queue clear
[13:39:12] DEFINE QLOCAL<Q1>
AMQ8006: WebSphere MQ queue creat
MYQM>c l

Command Prompt - mqscx -m MYQM
[13:39:12] DISPLAY QLOCAL<SYSTEM.ADMIN.C*
SYSTEM.ADMIN.CHANNEL.EVENT> TYPE<QLOCAL>
SYSTEM.ADMIN.COMMAND.EVENT> TYPE<QLOCAL>
SYSTEM.ADMIN.COMMAND.QUEUE> TYPE<QLOCAL>
SYSTEM.ADMIN.CONFIG.EVENT> TYPE<QLOCAL>
[13:39:12] CLEAR QLOCAL<SYSTEM.ADMIN.CHANNEL.EVENT>
AMQ8022: webSphere MQ queue cleared.
[13:39:12] DEFINE QLOCAL<Q1>
AMQ8006: WebSphere MQ queue created.
MYQM>CLEAR QLOCAL<SYSTEM.ADMIN.CHANNEL.EVENT>
```

<http://www.mqgem.com>

Command Auto-Completion



MQGem
Software

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

Command Auto-Completion

```
Command Prompt - mqscx -m MYQM
DEFXMITQ< >          DESCR< >          DISTL<YES>          <more>
INHIBTEU<DISABLED>  IPADDRU<IPU4>      LOCALEU<DISABLED>
LOGGEREU<DISABLED>  MARKINT<5000>
MAXMSGSL<4194304>  MAXPROPL<NOLIMIT>
MAXUMSGS<10000>    MONACLS<QMGR>
MONQ<OFF>          PARENT< >
PLATFORM<WINDOWSNT> PSMODE<ENABLED>
PSNPMSG<DISCARD>   PSNPRES<NORMAL>
PSSYNCP<IFPER>     QMID<MYQM_2013-05-
REMOTEEU<DISABLED> REPOS< >
ROUTEREC<MSG>      SCHINIT< >
SPLCAP<ENABLED>    SSLCRLNL< >
SSLEU<DISABLED>    SSLFIPS< >
SSLKEYR<C:\mqmdat\qmgrs\MYQM\ssl\key> SSLRKEYC<0>
STATACLS<QMGR>    STATCHL<OFF>
STATMQI<OFF>      STATQ<OFF>
SUITEB<NONE>      SYNCPT
TRIGINT<999999999> UERSION<07050000>

MYQM>dis cha
MYQM>dis CHANNEL<>
```

<http://www.mqgem.com>

Object name completion



MQGem
Software

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

Object Name Auto-Completion

MYQM>DISPLAY QLOCAL(system.ad)

MYQM>DISPLAY QLOCAL<SYSTEM.ADMIN.ACCOUNTING.QUEUE>

<http://www.mqgem.com>

Multiple Wildcards



MQGem
Software

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

```
Command Prompt - mqscx -m MYQM
[22:06:25] DISPLAY QLOCAL<SYSTEM.ADMIN.*.EVENT>
QUEUE<SYSTEM.ADMIN.CHANNEL.EVENT> TYPE<QLOCAL>
QUEUE<SYSTEM.ADMIN.COMMAND.EVENT> TYPE<QLOCAL>
QUEUE<SYSTEM.ADMIN.CONFIG.EVENT> TYPE<QLOCAL>
QUEUE<SYSTEM.ADMIN.LOGGER.EVENT> TYPE<QLOCAL>
QUEUE<SYSTEM.ADMIN.PERFM.EVENT> TYPE<QLOCAL>
QUEUE<SYSTEM.ADMIN.PUBSUB.EVENT> TYPE<QLOCAL>
QUEUE<SYSTEM.ADMIN.QMGR.EVENT> TYPE<QLOCAL>
[22:06:31] DISPLAY QLOCAL<*.?????.*.EVENT>
QUEUE<SYSTEM.ADMIN.CHANNEL.EVENT> TYPE<QLOCAL>
QUEUE<SYSTEM.ADMIN.COMMAND.EVENT> TYPE<QLOCAL>
QUEUE<SYSTEM.ADMIN.CONFIG.EVENT> TYPE<QLOCAL>
QUEUE<SYSTEM.ADMIN.LOGGER.EVENT> TYPE<QLOCAL>
QUEUE<SYSTEM.ADMIN.PERFM.EVENT> TYPE<QLOCAL>
QUEUE<SYSTEM.ADMIN.PUBSUB.EVENT> TYPE<QLOCAL>
QUEUE<SYSTEM.ADMIN.QMGR.EVENT> TYPE<QLOCAL>
MYQM>
```



<http://www.mqgem.com>

Multiple Wildcards

Extended WHERE clause



MQGem
Software

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

```
Command Prompt - mqscx -m MYQM
[09:37:57] DIS QLOCAL(*) =WHERE<CURDEPTH > MAXDEPTH * 0.5>
QUEUE<Q.SMALL>      TYPE<QLOCAL>      CURDEPTH<51>
MAXDEPTH<100>
MYQM>
```



Separator Lines



MQGem
Software

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

```
Command Prompt - mqscx -m MYQM
[22:14:10] DISPLAY AUTHINFO(*) all
AUTHINFO(SYSTEM.DEFAULT.AUTHINFO.OCSP)  AUTHTYPE(OCSP)
OCSPURL( )          DESCR( )          ALTDATE(2013-05-26)
ALTTIME(11.34.39)
AUTHINFO(SYSTEM.DEFAULT.AUTHINFO.CRLLDAP)
AUTHTYPE(CRLLDAP)  CONNAME( )          LDAPUSER( )
LDAPPWD( )        DESCR( )          ALTDATE(2013-05-26)
ALTTIME(11.34.39)
MYQM>

-m MYQM
HINFO(*) all
T.AUTHINFO.OCSP)  AUTHTYPE(OCSP)
SCR( )          ALTDATE(2013-05-26)
T.AUTHINFO.CRLLDAP)
NNAME( )          LDAPUSER( )
SCR( )          ALTDATE(2013-05-26)

[22:13:32] DISPLAY AUTHINFO(*) all
AMQ8566: Display authentication inform
AUTHINFO(SYSTEM.DEFAULT.AUTHINFO.OCSP)  AUTHINFO(SYSTEM.DEFAULT.AUTHINFO.OCSP)  AUTHTYPE(OCSP)
OCSPURL( )          DESCR( )          ALTDATE(2013-05-26)
ALTTIME(11.34.39)
AMQ8566: Display authentication inform
AUTHINFO(SYSTEM.DEFAULT.AUTHINFO.CRLLDAP)  AUTHINFO(SYSTEM.DEFAULT.AUTHINFO.CRLLDAP)
AUTHTYPE(CRLLDAP)  CONNAME( )          LDAPUSER( )
LDAPPWD( )        DESCR( )          ALTDATE(2013-05-26)
ALTTIME(11.34.39)
MYQM>

[22:12:24] DISPLAY AUTHINFO(*) all
AUTHINFO(SYSTEM.DEFAULT.AUTHINFO.OCSP)  AUTHTYPE(OCSP)
OCSPURL( )          DESCR( )          ALTDATE(2013-05-26)
ALTTIME(11.34.39)
AUTHINFO(SYSTEM.DEFAULT.AUTHINFO.CRLLDAP)
AUTHTYPE(CRLLDAP)  CONNAME( )          LDAPUSER( )
LDAPPWD( )        DESCR( )          ALTDATE(2013-05-26)
ALTTIME(11.34.39)
MYQM>
```



Synonyms



MQGem
Software

- Saves laborious typing
- Reduces the chances of making mistakes
- Can go further even define a single keystroke as a command

```
Command Prompt - mqscx -m MYQM

[21:34:25] =syn(XMIT) cmd(DISPLAY QLOCAL(*) =WHERE(USAGE EQ XMITQ AND NOT (QUEUE LK 'SYSTEM.*')) CURDEPTH)

[21:34:28] DISPLAY QLOCAL(*) =WHERE(USAGE EQ XMITQ AND NOT (
QUEUE LK 'SYSTEM.*')) CURDEPTH
QUEUE(CSQ1)      TYPE(QLOCAL)      CURDEPTH(0)      USAGE(XMITQ)
QUEUE(QM1)       TYPE(QLOCAL)      CURDEPTH(0)      USAGE(XMITQ)
QUEUE(QM2)       TYPE(QLOCAL)      CURDEPTH(0)      USAGE(XMITQ)
QUEUE(QM3.AIX)  TYPE(QLOCAL)      CURDEPTH(0)      USAGE(XMITQ)

MYQM>XMIT
```



Connecting and Disconnecting



MQGem
Software

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

```
Command Prompt - mqscx -m MYQM
[07:30:52] =conn qm<MYQM>
Connected to 'MYQM'

[07:30:57] DEFINE QLOCAL<Q1>
AMQ8006: WebSphere MQ queue created.

[07:31:05] =conn qm<MYQM2>
Connected to 'MYQM2'

[07:31:12] DEFINE QLOCAL<Q1>
AMQ8006: WebSphere MQ queue created.

MYQM2>
```



<http://www.mqgem.com>

Queue Manager Connection

FIND clause



MQGem
Software


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

```
Command Prompt - MQSCX - m MYQM

MQSCX Extended MQSC Program - Version 7.5.0
Licenced to Paul Clarke
Connected to 'MYQM'

[22:24:45] DISPLAY CHLAUTH(*) ALL =FIND(privileged)
CHLAUTH(*)          TYPE(BLOCKUSER)
DESCR(Default rule to disallow privileged users)
CUSTOM( )          USERLIST(*MQADMIN)  WARN(NO)
ALTDATE(2013-05-26) ALTTIME(11.34.40)

MYQM>
```



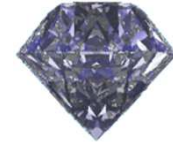
Somewhere
in the object it
says



<http://www.mqgem.com>

Filtering with =FIND Clause

Plus much more....



MQGem
Software

- 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



MQGem
Software

- 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)

```
C:\ 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



MQGem
Software

- 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



MQGem
Software

- 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



MQGem
Software

```
* 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



MQGem
Software

* 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



MQGem
Software

```
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)

NORTH/Queue List '*'

Last Refresh on Wed - 18 Jun 2014 (09:53:16)

Queue Name *

Queue Type *

Queue Name	Type	Depth	Alt Date	Alt Time	Back Thresh	Base Type	Clus Pri	Rank	Use Q	Cr.Date
MQMON.Paul.53A152A2021E0020	Local	0	2014-06-18	09.53.08	0		0	0	Local	2014-
SYSTEM.ADMIN.ACCOUNTING.QUEUE	Local	0	2014-06-18	09.49.24	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.ACTIVITY.QUEUE	Local	0	2014-06-18	09.49.24	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.CHANNEL.EVENT	Local	0	2014-06-18	09.49.24	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.COMMAND.EVENT	Local	0	2014-06-18	09.49.25	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.COMMAND.QUEUE	Local	0	2014-06-18	09.49.24	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.CONFIG.EVENT	Local	0	2014-06-18	09.49.25	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.LOGGER.EVENT	Local	0	2014-06-18	09.49.24	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.PERFM.EVENT	Local	0	2014-06-18	09.49.24	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.PUBSUB.EVENT	Local	0	2014-06-18	09.49.25	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.QMGR.EVENT	Local	1	2014-06-18	09.49.24	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.STATISTICS.QUEUE	Local	0	2014-06-18	09.49.24	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.TRACE.ACTIVITY.QUEUE	Local	0	2014-06-18	09.49.25	0		0	0	Qmgr	2014-
SYSTEM.ADMIN.TRACE.ROUTE.QUEUE	Local	0	2014-06-18	09.49.24	0		0	0	Qmgr	2014-
SYSTEM.AUTH.DATA.QUEUE	Local	92	2014-06-18	09.49.24	0		0	0	Qmgr	2014-
SYSTEM.BROKER.ADMIN.STREAM	Local	0	2014-06-18	09.49.25	0		0	0	Qmgr	2014-
SYSTEM.BROKER.CONTROL.QUEUE	Local	0	2014-06-18	09.49.25	0		0	0	Qmgr	2014-
SYSTEM.BROKER.DEFAULT.STREAM	Local	0	2014-06-18	09.49.25	0		0	0	Qmgr	2014-
SYSTEM.BROKER.INTER.BROKER.COMMUNICATIONS	Local	0	2014-06-18	09.49.39	0		0	0	Qmgr	2014-
SYSTEM.CHANNEL.INITQ	Local	0	2014-06-18	09.49.39	0		0	0	Qmgr	2014-
SYSTEM.CHANNEL.SYNCQ	Local	0	2014-06-18	09.49.24	0		0	0	Qmgr	2014-
SYSTEM.CHLAUTH.DATA.QUEUE	Local	3	2014-06-18	09.49.25	0		0	0	Qmgr	2014-

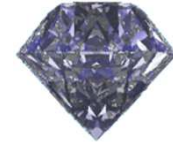
52 / 52

Refresh Usage... Browse... Cancel



MQGem Software

MO71 Overview



MQGem
Software

- **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



MQGem
Software

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

The screenshot shows the 'NORTH/Queue List' application window. The title bar indicates 'Last Refresh on Wed - 18 Jun 2014 (10:11:06)'. The window contains a search area with 'Queue Name' and 'Queue Type' fields. A filter expression is entered in the filter box: '* cur & bgcell(cur>20,red,cur)'. Below the filter is a table of queue information. The 'Depth' column is highlighted in red for the first four rows. The table has columns: Queue Name, Type, Depth, Alt Date, Alt Time, Back Thresh, Clus Pri, Rank, Use Q, Cr.Date, Cr.Time, Def Bind, Def Opt, and Def Pers.

Queue Name	Type	Depth	Alt Date	Alt Time	Back Thresh	Clus Pri	Rank	Use Q	Cr.Date	Cr.Time	Def Bind	Def Opt	Def Pers
SYSTEM.AUTH.DATA.QUEUE	Local	108	2014-06-18	09.49.24	0	0	0	Qmgr	2014-06-18	09.49.24	On Open	Shared	Not Persist
Q5	Local	68	2014-06-18	10.04.37	0	0	0	Qmgr	2014-06-18	10.04.37	On Open	Shared	Not Persist
Q1	Local	57	2014-06-18	10.04.37	0	0	0	Qmgr	2014-06-18	10.04.37	On Open	Shared	Not Persist
Q2	Local	45	2014-06-18	10.04.37	0	0	0	Qmgr	2014-06-18	10.04.37	On Open	Shared	Not Persist
SYSTEM.CHLAUTH.DATA.QUEUE	Local	3	2014-06-18	09.49.25	0	0	0	Qmgr	2014-06-18	09.49.25	On Open	Shared	Not Persist
SYSTEM.RETAINED.PUB.QUEUE	Local	2	2014-06-18	09.49.24	0	0	0	Qmgr	2014-06-18	09.49.24	On Open	Shared	Not Persist
SYSTEM.HIERARCHY.STATE	Local	2	2014-06-18	09.49.25	0	0	0	Qmgr	2014-06-18	09.49.25	On Open	Shared	Persistent
SYSTEM.DURABLE.SUBSCRIBER.QUEUE	Local	2	2014-06-18	09.49.24	0	0	0	Qmgr	2014-06-18	09.49.24	On Open	Shared	Not Persist
SYSTEM.CLUSTER.REPOSITORY.QUEUE	Local	2	2014-06-18	09.49.24	0	0	0	Qmgr	2014-06-18	09.49.24	On Open	Shared	Not Persist
SYSTEM.ADMIN.QMGR.EVENT	Local	1	2014-06-18	09.49.24	0	0	0	Qmgr	2014-06-18	09.49.24	On Open	Exclusive	Not Persist

At the bottom of the window, there are buttons for 'Refresh', 'Usage...', 'Browse...', and 'Cancel'. The status bar shows '10 / 64'.

Filter Manager



MQGem
Software

- 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



MQGem
Software

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

The screenshot shows a software window titled "NORTH[Multi QMgr]/Queue List 'Q1'". The window includes a toolbar with various icons and a status bar at the bottom with buttons for "Refresh All", "Usage...", "Browse...", and "Cancel". The main area displays a table of queue managers with the following data:

QMgr	Name	Type	Depth	Alt Date	Alt Time	Back Thresh	Clus Pri	Rank	Use Q	Cr.Date	Cr.Time	Def Bind
WEST	Q1	Local	0	2015-07-06	11.11.45	0	0	0	Qmgr	2015-07-06	11.11.45	On Open
SOUTH	Q1	Local	0	2015-07-06	11.11.44	0	0	0	Qmgr	2015-07-06	11.11.44	On Open
NORTH	Q1	Local	73	2015-07-06	11.11.44	0	0	0	Qmgr	2015-07-06	11.11.44	On Open
EAST	Q1	Local	0	2015-07-06	11.11.45	0	0	0	Qmgr	2015-07-06	11.11.45	On Open

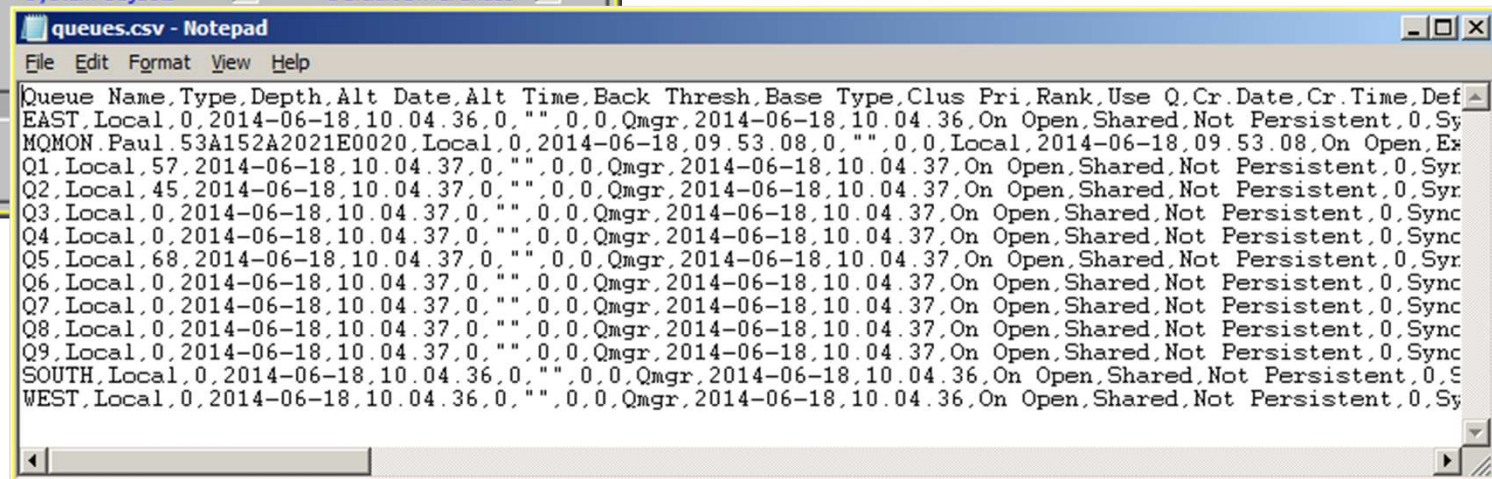
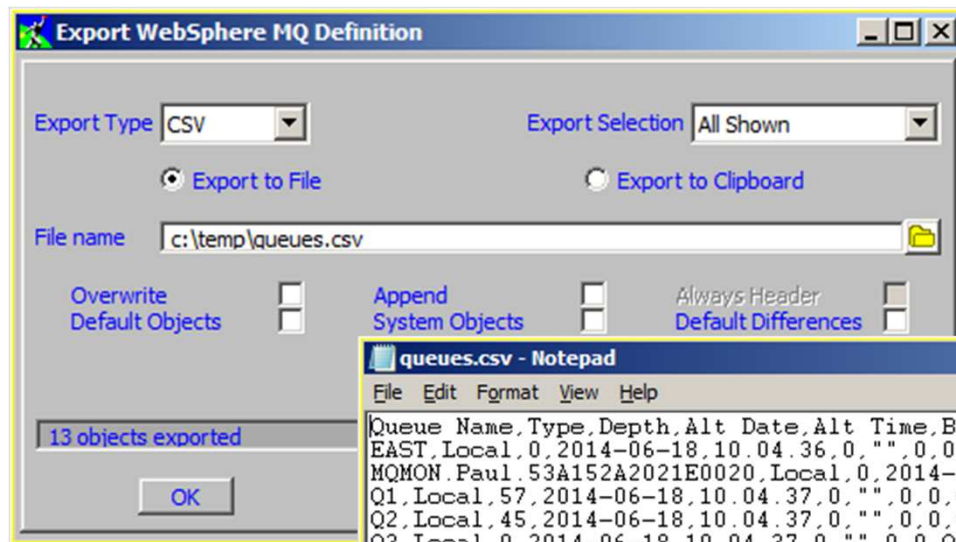
The window also features a left sidebar with checkboxes for "EAST", "NORTH", "SOUTH", and "WEST", and a top section for "Queue Name" (set to "Q1") and "Queue Type".

Export Objects



MQGem
Software

- 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

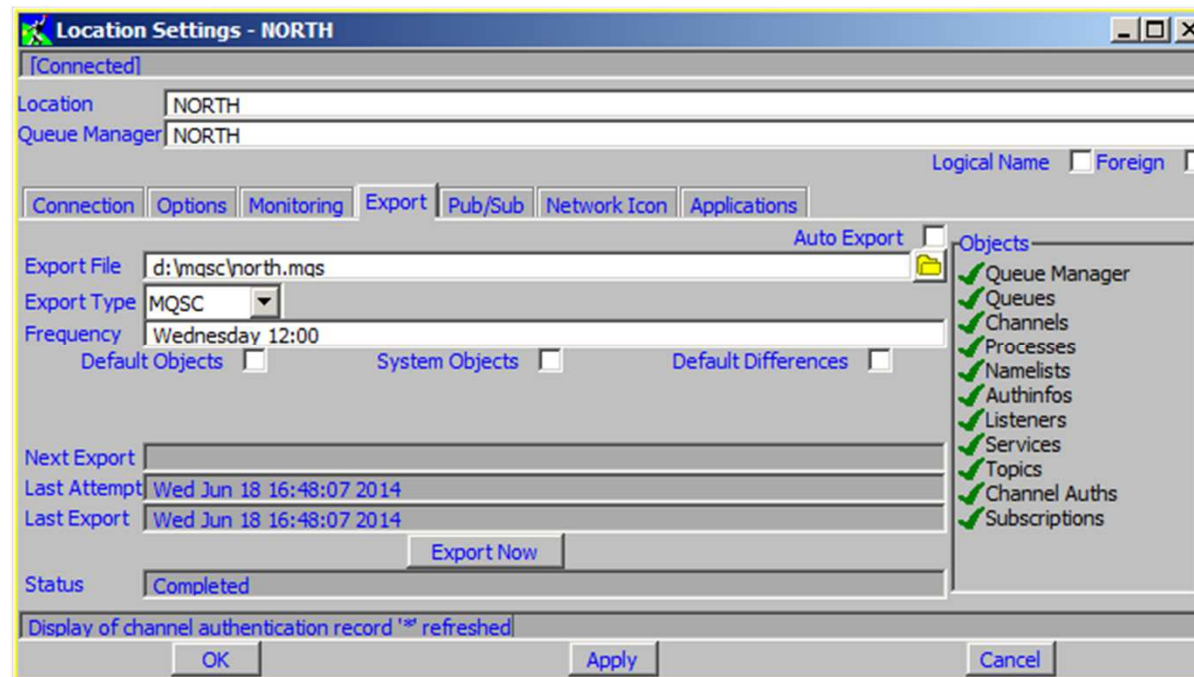


Exporting the whole Queue Manager



MQGem
Software

- 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



MQGem
Software

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

NORTH-SOUTH/Compare Queue List 'Q*'

Queue Manager Name A NORTH
Queue Manager Name B SOUTH
Queue Name Q*
Queue Type *

Queue Name	Max Q Depth	Max Msg Length	Queue Name	Max Q Depth	Max Msg Length
Q1	5,000	4,194,304	Q1	5,000	4,194,304
Q2	5,000	4,194,304	Q2	5,000	4,194,304
■ Q3	6,000	4,194,304	Q3	5,000	4,194,304
Q4	5,000	4,194,304	Q4	5,000	4,194,304
◀ Q5	5,000	4,194,304	Q5		
Q6	5,000	4,194,304	Q6	5,000	4,194,304
▶ Q7			Q7	5,000	4,194,304
■ Q8	5,000	100,000	Q8	5,000	4,194,304
Q9	5,000	4,194,304	Q9	5,000	4,194,304

8 / 8 8 / 8

Refresh Refresh A Refresh B Synchronise... Cancel

API Exerciser



MQGem
Software

- 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

The screenshot shows the 'WebSphere MQ API Exerciser' window. It has a menu bar with 'New Instance...' and a toolbar with buttons for MQCONN, MQDISC, MQOPEN, MQCLOSE, MQCB, MQPUT, MQPUT1, and MQSUB. Below the toolbar are tabs for 'Parameters', 'MQMD', 'MQPMO', and 'Buffer'. The 'Parameters' tab is active, showing various fields for configuring an MQPUT request:

- Message Type: MQMT_DATAGRAM (dropdown menu)
- Feedback or reason code: MQFB_NONE (dropdown menu)
- Encoding: 546 (text input)
- Format name: MQFMT_NONE (dropdown menu)
- Message Priority: -1 (text input)
- Message Persistence: MQPER_PERSISTENCE_AS_Q_DEF (dropdown menu)
- Message Identifier: 414D51204E54504743312020202020203A00A0532000F902 (text input)
- Correlation Identifier: 00 (text input)
- Backout counter: 0 (text input)
- Reply Queue: (empty dropdown menu)
- Reply Queue Manager: (empty dropdown menu)

Below the parameters are 'Output Fields':

- Completion Code: 0 (text input)
- Reason Code: (0) OK. (text input)

At the bottom of the window, there is an 'Issue MQPUT' button and an 'Advanced Mode' checkbox which is currently unchecked.

Browser Access



MQGem
Software

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

The screenshot shows a web browser window titled "MO71 MQ Administration" with the address bar at "localhost:8080/mq/admin". The main content area displays "Queue Managers" on the left and a "Queue List" for the "NORTH" location on the right. The queue list table includes columns for Queue Name, Queue Type, Queue Depth, Alteration Date, Alteration Time, and Backout Threshold. The table lists various queues such as AA, CQ1, CQ2, CQ3, MQMON, Q.ABC, Q1, Q2, Q3, Q4, QAA, and RQ1.

Queue Name	Queue Type	Queue Depth	Alteration Date	Alteration Time	Backout Threshold
AA	Local	0	2015-11-30	17.50.31	0
CQ1	Cluster		2015-07-06	11.11.44	
CQ1	Local	0	2015-07-06	11.11.44	0
CQ2	Cluster		2015-07-06	11.11.44	
CQ2	Local	0	2015-07-06	11.11.44	0
CQ3	Cluster		2015-07-06	11.11.44	
CQ3	Local	0	2015-07-06	11.11.44	0
MQMON.Paul.57D637E002250020	Local	0	2016-09-12	17.08.01	0
Q.ABC	Local	0	2015-11-24	20.49.52	0
Q1	Local	73	2015-07-06	11.11.44	0
Q2	Local	0	2015-12-10	11.52.25	0
Q3	Local	0	2015-07-06	11.11.44	0
Q4	Local	0	2015-07-06	11.11.44	0
QAA	Local	0	2015-11-30	17.49.57	0
RQ1	Remote		2015-12-02	09.44.21	

Web Access to IBM MQ QMgrs provided by MO71. For more information about MO71 please visit [MQGem's WebSite](#).

Event Monitoring



MQGem
Software

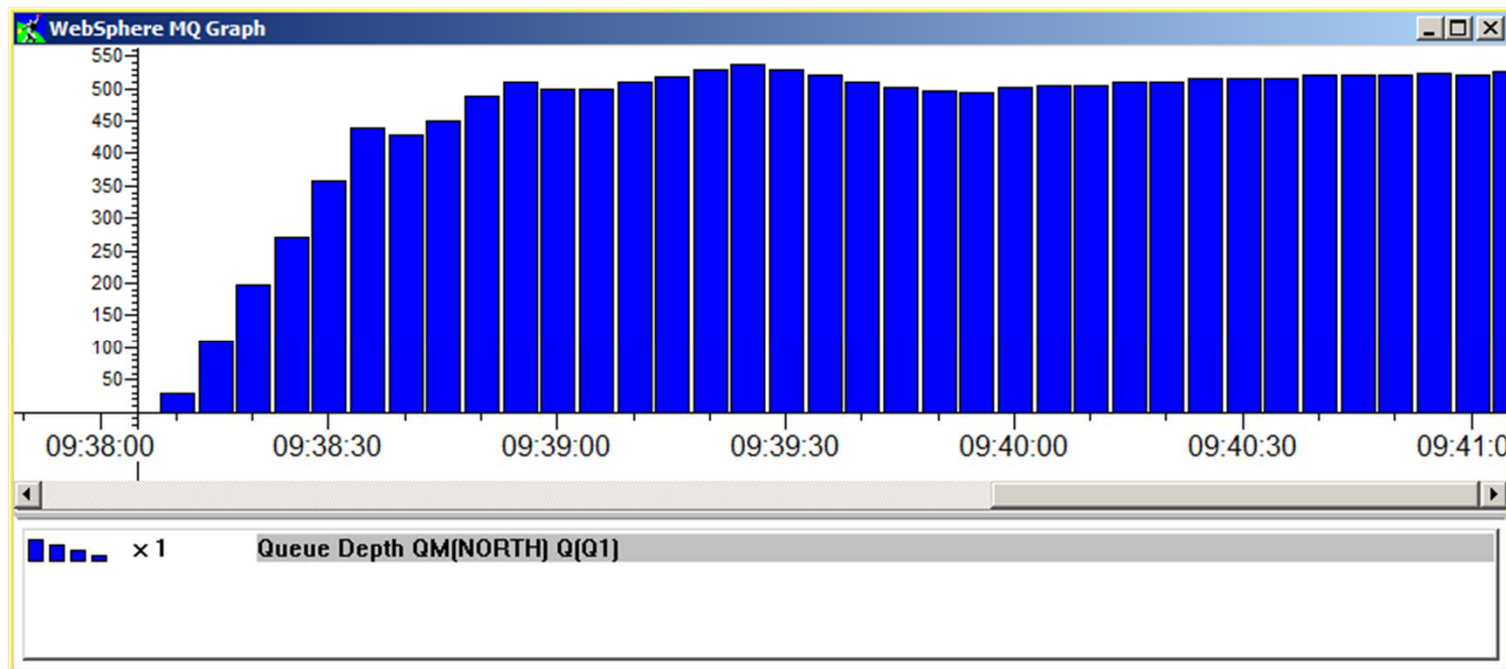
- Will 'listen' on any event queue for given event
 - Can filter by any event field
- Choice of event actions
 - Log to console
 - Log to a file
 - Send to another queue
 - Issue a command
 - Can be used to send email or pager etc

Graphing



MQGem
Software

- Monitor virtual any numeric value
 - Set frequency, graph type etc
 - Graph multiple objects and object types
 - Export data-points to CSV



Predefined Dialogs



MQGem
Software

- 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

NORTH/Queue List *
Last Refresh on Thu - 19 Jun 2014 (10:06:34)

Queue Name *

Queue Type Local

Usage=xmitq

Queue Name	Queue Type	Queue Depth
EAST	Local	0
SOUTH	Local	0
SYSTEM.CLUSTER.TRANSMIT.QUEUE	Local	0
WEST	Local	0

4 / 54

SOUTH/Queue List *
Last Refresh on Thu - 19 Jun 2014 (10:06:34)

Queue Name *

Queue Type Local

Usage=xmitq

Queue Name	Queue Type	Queue Depth
EAST	Local	0
NORTH	Local	0
SYSTEM.CLUSTER.TRANSMIT.QUEUE	Local	0
WEST	Local	0

4 / 54

EAST/Queue List *
Last Refresh on Thu - 19 Jun 2014 (10:06:34)

Queue Name *

Queue Type Local

Usage=xmitq

Queue Name	Queue Type	Queue Depth
NORTH	Local	0
SOUTH	Local	0
SYSTEM.CLUSTER.TRANSMIT.QUEUE	Local	0
WEST	Local	0

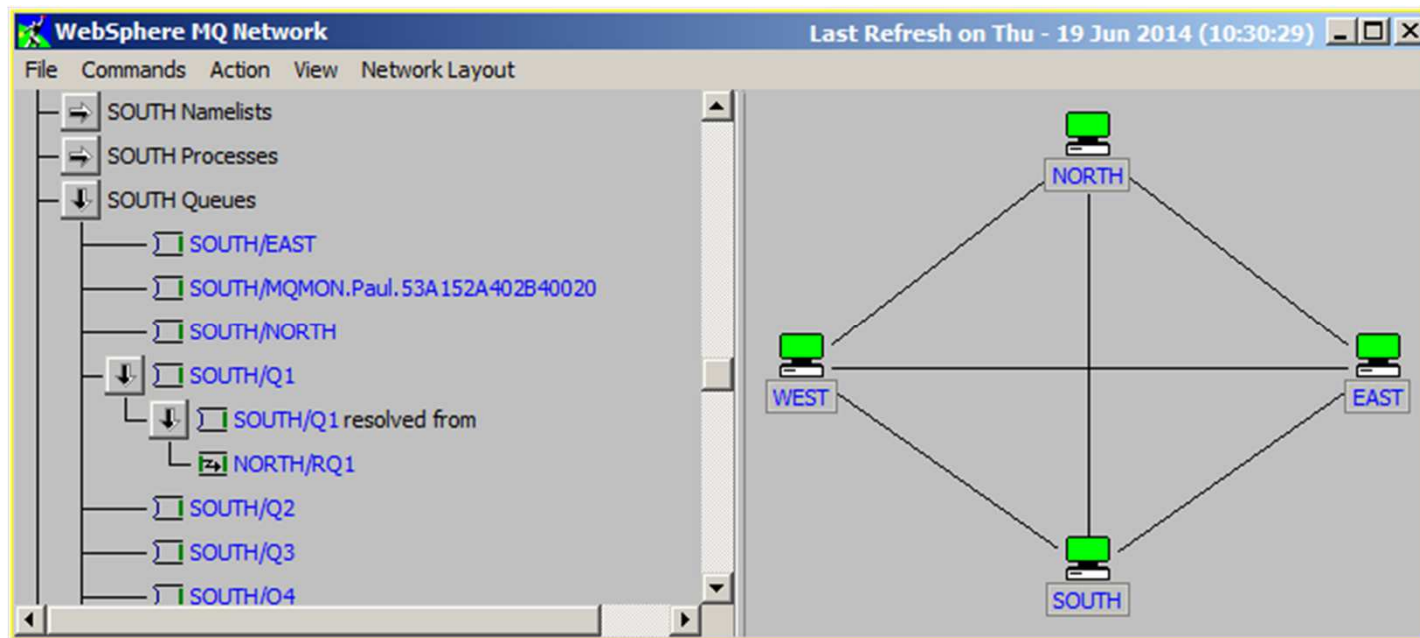
4 / 55

Network Display



MQGem
Software

- 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



MQGem
Software

- 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

The screenshot shows a window titled "NORTH/Application List" with a refresh button and a timestamp "Last Refresh on Thu - 19 Jun 2014 (16:08:56)". Below the title bar are search filters for Application, Description, Nidname, Group, and Type. The main area contains a table with the following data:

Name	Type	Application Type	Connections
WebSphere MQ Distributed Pub/Sub Publish Task	Application	System	0
WebSphere MQ Distributed Pub/Sub Fan Out Task	Application	System	0
WebSphere MQ Distributed Pub/Sub Controller	Application	System	0
WebSphere MQ Distributed Pub/Sub Command Task	Application	System	0
WebSphere MQ Deferred Message Processor	Application	System	0
WebSphere MQ Command Server	Application	System	0
WebSphere MQ Cluster Repository	Application	System	0
WebSphere MQ Channel Initiator	Application	Chinit	0
MQSCX	Application	User	0
MO71	Application	User	0
d:\nttools\q.exe	Application	User	0

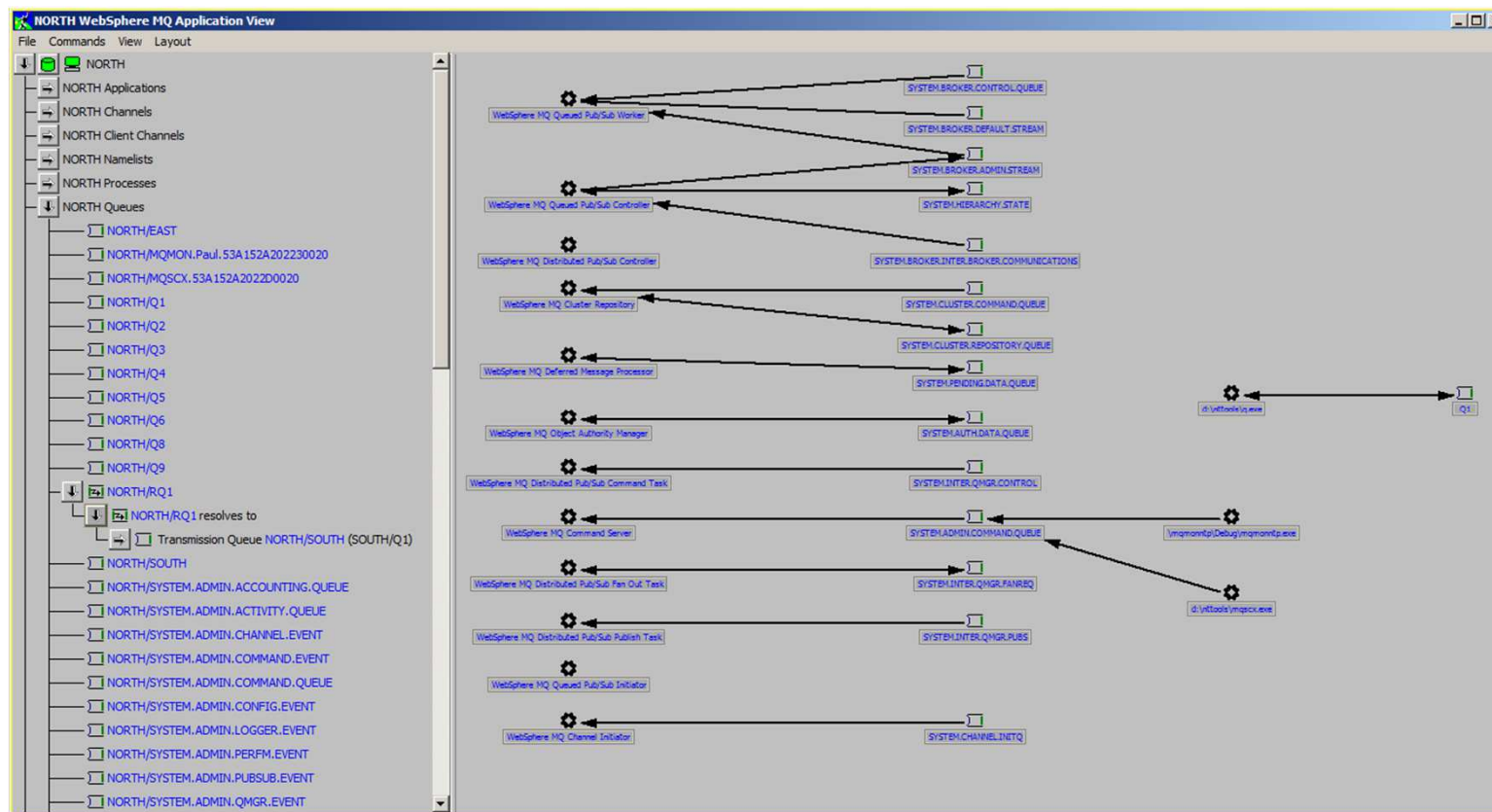
At the bottom of the window, there are buttons for "Refresh", "Connections...", and "Cancel", along with a page indicator "15 / 15".

Application View

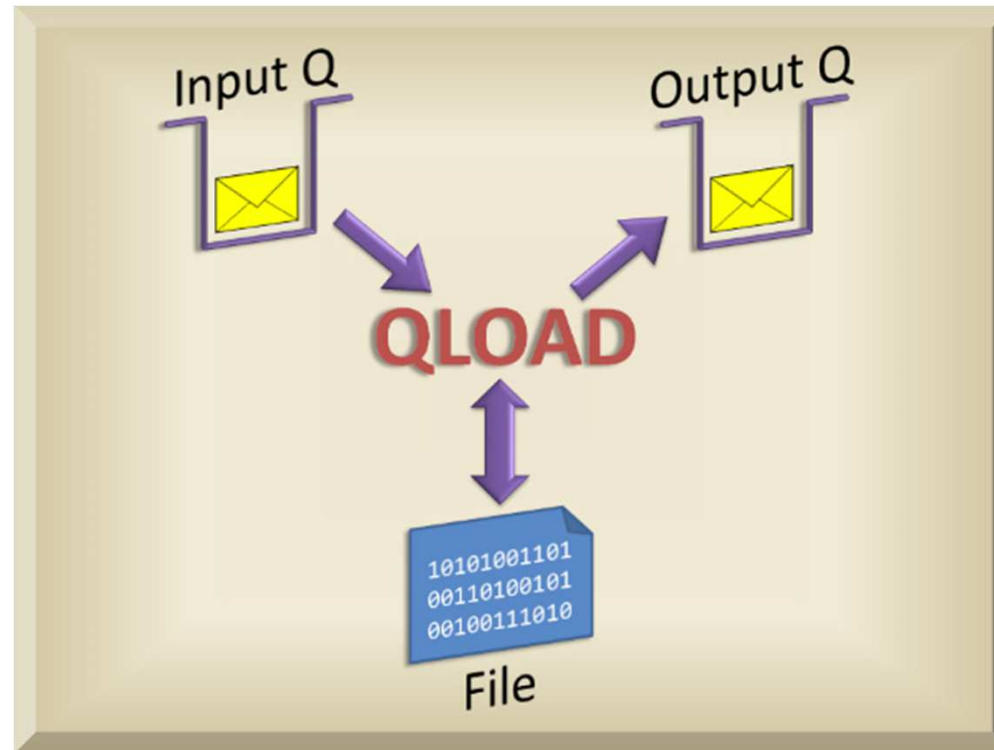


MQGem
Software

- 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

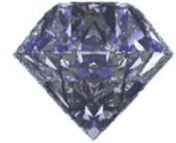


QLOAD(9.0.0)

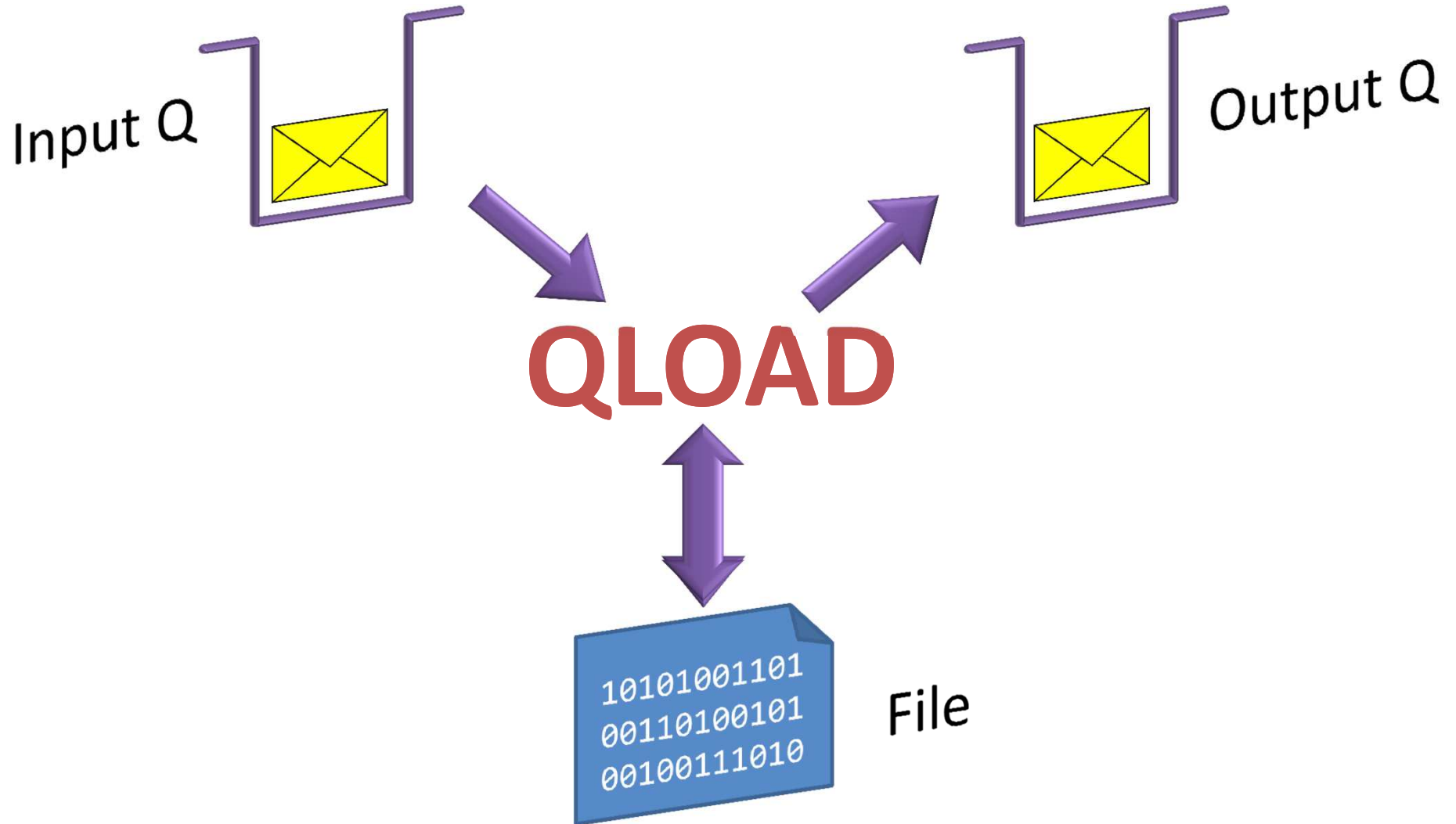


MQGem Software

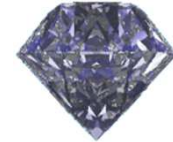
Message directions



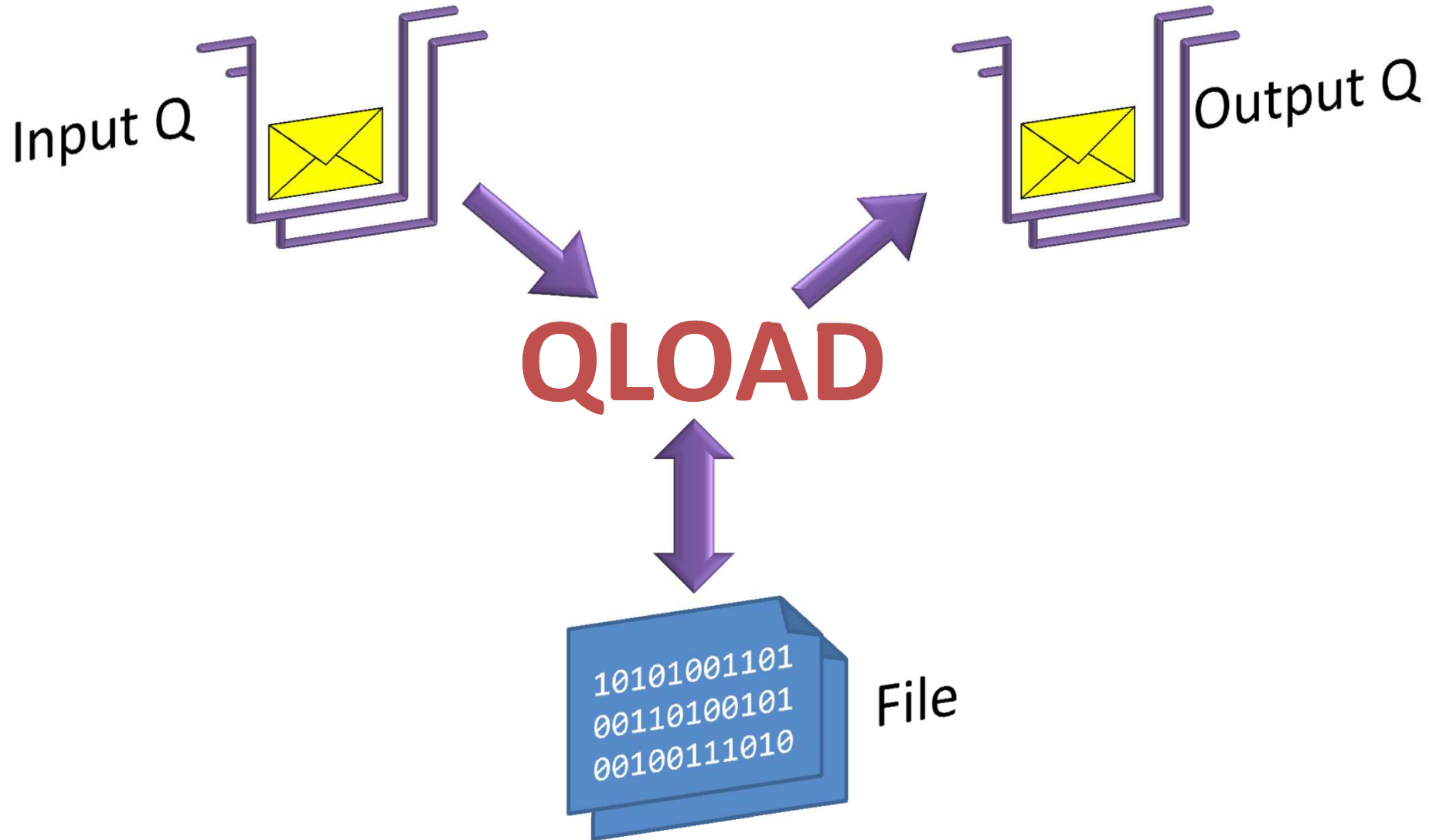
MQGem
Software



Multiple inputs/outputs



MQGem
Software



Many features....



MQGem
Software

- 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?



MQGem Software

Paul Clarke
support@mqgem.com
www.mqgem.com