



MQ for z/OS – Introduction to looking at the JES Logs

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Agenda

- What is a JES log and where can I find it?
- What parts of the logs are important to me as an administrator?
- The queue manager JES log
- The CHIN JES log
- MQ Messages

•

What is a JES log?

```
SDSF DA MQS2    MQS2    PAG 0 CPU 5          LINE 1-16 (68)
COMMAND INPUT ===>                                SCROLL ===> CSR
NP  JOBNAME StepName ProcStep JobID   Owner   C Pos DP Real Paging  SIO
   *MASTER*          STC07843 +MASTER+  NS  FF 2387  0.00  0.00
   PCAUTH  PCAUTH                    NS  FF 176   0.00  0.00
   RASP    RASP                      NS  FF 343   0.00  0.00
   TRACE   TRACE                    NS  FF 1162  0.00  0.00
   DUMPSRV DUMPSRV DUMPSRV           NS  FF 652   0.00  0.00
   XCFAS   XCFAS   IEFPROC           NS  FF 10T   0.00  1.85
   GRS     GRS                      NS  FF 13T   0.00  0.00
   SMSPDSE SMSPDSE                    NS  FF 3576  0.00  0.00
   SMSPDSE1 SMSPDSE1                  NS  FF 6351  0.00  0.00
   SMSVSAM SMSVSAM IEFPROC           NS  FF 13T   0.00  0.00
   CONSOLE CONSOLE                    NS  FF 3900  0.00  0.03
   WLM     WLM     IEFPROC           NS  FF 2012  0.00  0.00
   ANTMAIN ANTMAIN IEFPROC           NS  FF 2995  0.00  0.00
   ANTAS000 ANTAS000 IEFPROC         NS  FE 1593  0.00  0.00
   DEVMAN  DEVMAN  IEFPROC           NS  FF 554   0.00  0.00
   GTZ     GTZ     GTZ               NS  FE 314   0.00  0.00
```

- JES stands for Job Entry System
- A JES Log is the output for a job run (or running) on z/OS
- It contains status and resource use information about the job, and is a useful tool for problem determination

Where do I find the JES logs for MQ for z/OS?

- If the queue manager is running the jobs may be found using the SDSF (System Display and Search Facility) DA (Active Users) option or an equivalent on another vendor's tooling

```
Display Filter View Print Options Search Help
-----
SDSF MENU 3.1  MQPLEX1  MQS2                                LINE 1-19 (94)
COMMAND INPUT ==>                                SCROLL ==> CSR

NP  NAME      Description      Group   Status
DA  Active users      Jobs
I   Input queue      Jobs
O   Output queue      Output
H   Held output queue Output
ST  Status of jobs    Jobs
JG  Job groups        JES
SYM System symbols     System
LOG System log         Log
SR  System requests   Log
MAS Members in the MAS  JES
JC  Job classes       JES
SE  Scheduling environments WLM
RES WLM resources      WLM
ENC Enclaves           WLM
PS  Processes         OMVS
SYS System information  System

F1=HELP  F2=SPLIT  F3=END  F4=RETURN  F5=RFIND  F6=RCHANGE
F7=UP    F8=DOWN  F9=SWAP F10=LEFT  F11=RIGHT F12=RETRIEVE
*S1
```

Where do I find the JES logs for MQ for z/OS?

- MQ for z/OS runs as two jobs:
 - XXXXMSTR
 - XXXXCHIN
 - Where XXXX is the Queue Manager name
- For this presentation the queue manager name is ZQS2

<u>D</u> isplay <u>F</u> ilter <u>V</u> iew <u>P</u> rint <u>O</u> ptions <u>S</u> earch <u>H</u> elp												

SDSF	DA	MQS2	MQS2	PAG	0	CPU	5	LINE 1-2 (2)				
COMMAND INPUT ==>								SCROLL ==> CSR				
NP	JOBNAME	StepName	ProcStep	JobID	Owner		C	Pos	DP	Real	Paging	SIO
	ZQS2CHIN	ZQS2CHIN	PROCSTEP	STC08037	SYSPROG			IN	FE	7084	0.00	0.09
?	ZQS2MSTR	ZQS2MSTR	PROCSTEP	STC08036	SYSPROG			NS	FE	38T	0.00	0.00
_												

What parts of the JES log are important? ?

<u>Display</u> <u>Filter</u> <u>View</u> <u>Print</u> <u>Options</u> <u>Search</u> <u>Help</u>									

SDSF JOB DATA SET DISPLAY - JOB ZQS2MSTR (STC08036) LINE 1-6 (6)									
COMMAND INPUT ==> SCROLL ==> CSR									
NP	DDNAME	StepName	ProcStep	DSID	Owner	C	Dest	Rec-Cnt	Page
s	JESMSGLG	JES2		2	SYSPROG	S		824	
-	JESJCL	JES2		3	SYSPROG	S		151	
	JESYSMSG	JES2		4	SYSPROG	S		2	
	CSQOUT1	ZQS2MSTR		101	SYSPROG	S		130	
	CSQOUT2	ZQS2MSTR		102	SYSPROG	S		9,178	
	CSQOUTT	ZQS2MSTR		103	SYSPROG	S		157	

- The JESMSGLOG holds:
 - Messages about the queue manager state and status
 - The parameters (ZPRM) at start-up and when changes are made
 - Often used for problem determination

Queue Manager Start-up

- The first useful bits of information include:
 - The queue manager start date and time
 - Queue manager version
 - The ERLY code version
 - The system parms from the ZPRM assembly and link

```
Display Filter View Print Options Search Help
-----
SDSF OUTPUT DISPLAY ZQS2MSTR STC08036 DSID      2 LINE 0      COLUMNS 02- 81
COMMAND INPUT ==>                                SCROLL ==> CSR
***** TOP OF DATA *****
                JES2 JOB LOG -- SYSTEM MQS2 -- NODE
17.42.31 STC08036 ---- MONDAY,    29 JAN 2024 ----
17.42.31 STC08036 IEF695I START ZQS2MSTR WITH JOBNAME ZQS2MSTR IS ASSIGNED TO U
17.42.31 STC08036 $HASP373 ZQS2MSTR STARTED
17.42.31 STC08036 CSQY000I ZQS2 IBM MQ for z/OS V9.3.3 CDR
17.42.31 STC08036 CSQY001I ZQS2 QUEUE MANAGER STARTING, USING PARAMETER MODULE
17.42.31 STC08036 CSQ3111I ZQS2 CSQYSCMD - EARLY PROCESSING PROGRAM IS V9.3.3 L
          966          010-000
17.42.31 STC08036 CSQY100I ZQS2 SYSTEM parameters ...
17.42.31 STC08036 CSQY101I ZQS2 LOGLOAD=5000000
17.42.31 STC08036 CSQY102I ZQS2 CMDUSER=CSQOPR, QMCCSID=0, ROUTCDE=( 1)
17.42.31 STC08036 CSQY103I ZQS2 SMFACCT=NO (00000000), SMFSTAT=NO (00000000),
          970          STATIME=30, ACCTIME=-1
17.42.31 STC08036 CSQY104I ZQS2 OTMAON= 971
          971          (, ,DFSYDRU0,2147483647,CSQ)
```

Queue Manager Start-up - Continued

- The queue sharing group information
- The log information

```
17.42.31 STC08036 CSQY105I ZQS2 TRACSTR=( 1), TRACTBL=99
17.42.31 STC08036 CSQY106I ZQS2 EXITTCB=8, EXITLIM=30, WLMTIME=30, WLMTIMU=MINS
17.42.31 STC08036 CSQY107I ZQS2 QSGDATA=(QSGA,DB3AG,D3AG,4,4)
17.42.31 STC08036 CSQY108I ZQS2 RESAUDIT=YES, QINDXBLD=WAIT, CLCACHE=STATIC
17.42.31 STC08036 CSQY131I ZQS2 EXCLMSG=()
17.42.31 STC08036 CSQY132I ZQS2 SPLCAP=NO, ACELIM=0
17.42.31 STC08036 CSQY110I ZQS2 LOG parameters ...
17.42.31 STC08036 CSQY111I ZQS2 INBUFF=60, OUTBUFF=4000, MAXRTU=2, MAXARCH=500
17.42.31 STC08036 CSQY112I ZQS2 TWOACTV=YES, TWOARCH=YES, TWOBSDS=YES
17.42.31 STC08036 CSQY113I ZQS2 OFFLOAD=YES, WRTHRS=20, DEALLCT=0, COMPLOG=NON
17.42.31 STC08036 CSQY114I ZQS2 MAXCNOFF=31, ZHYWRITE=NO
17.42.31 STC08036 CSQY120I ZQS2 ARCHIVE parameters ...
17.42.31 STC08036 CSQY121I ZQS2 UNIT=TAPE, UNIT2=, ALCUNIT=BLK, 984
984 PRIQTY=25715, SECQTY=540, BLKSIZE=24576
17.42.31 STC08036 CSQY122I ZQS2 ARCPFX1=CSQAR1, ARCPFX2=CSQAR2, TSTAMP=NO
17.42.31 STC08036 CSQY123I ZQS2 ARCRETN=9999, ARCWTOR=YES, ARCWRTC=( 1 ,3 ,4)
17.42.31 STC08036 CSQY124I ZQS2 CATALOG=NO, COMPACT=NO, PROTECT=NO, QUIESCE=5
```


Queue Manager Start-up - Continued

- End of RBA Range
- Connection to DB2 Data Sharing member
- Backwards migration support
- Page set mapping to Buffer Pool
- Storage Use

```
Display Filter View Print Options Search Help
-----
SDSF OUTPUT DISPLAY ZQS2MSTR STC08036 DSID 2 LINE 54 COLUMNS 21- 100
COMMAND INPUT ==>
CSQJ099I ZQS2 LOG RECORDING TO COMMENCE WITH 998
STARTRBA=0000000000005A000
CSQJ034I ZQS2 CSQJW007 END OF LOG RBA RANGE IS FFFFFFFFFFFFFFFF
CSQW130I ZQS2 'GLOBAL' TRACE STARTED, ASSIGNED TRACE NUMBER 01
CSQ5001I ZQS2 CSQ5CONN Connected to DB2 D3A2
CSQY040I ZQS2 Backwards migration not supported
CSQP007I ZQS2 Page set 0 uses buffer pool 0
CSQP007I ZQS2 Page set 1 uses buffer pool 0
CSQP007I ZQS2 Page set 2 uses buffer pool 1
CSQP007I ZQS2 Page set 3 uses buffer pool 2
CSQP007I ZQS2 Page set 4 uses buffer pool 3
CSQY220I ZQS2 CSQCTL Queue manager storage usage: 008
local storage: used 33MB, free 1762MB; above bar: used 92MB, free 1GB
CSQR001I ZQS2 RESTART INITIATED
CSQR003I ZQS2 RESTART - PRIOR CHECKPOINT RBA=0000000000005850C
CSQR004I ZQS2 RESTART - UR COUNTS - 011
IN COMMIT=0, INDOUBT=0, INFLIGHT=0, IN BACKOUT=0
```

Other JES log Information

Connection and Recovery information for CF Structures

```
IXL014I IXLCONN REQUEST FOR STRUCTURE QSGATEST1 032
WAS SUCCESSFUL. JOBNAME: ZQS2MSTR ASID: 0040
CONNECTOR NAME: CSQEQSGAZQS202 CFNAME: CF01
CSQE141I ZQS2 CSQEENFR Stopped listening for ENF 35 033
events for structure TEST1
CSQE005I ZQS2 CSQECONN Structure TEST1 connected as 034
CSQEQSGAZQS202, version=DE928A95A9012381 00020001
CSQE007I ZQS2 CSQESTE EEPLDISCFAILCONNECTION event 035
received for structure TEST1 connection name CSQEQSGAZQS202
CSQE011I ZQS2 CSQESTE Recovery phase 1 started for 036
structure TEST1 connection name CSQEQSGAZQS202
CSQE013I ZQS2 CSQERWI1 Recovery phase 1 completed for 037
structure TEST1 connection name CSQEQSGAZQS202
CSQE012I ZQS2 CSQERWI2 Recovery phase 2 started for 038
structure TEST1 connection name CSQEQSGAZQS202
CSQE014I ZQS2 CSQERWI2 Recovery phase 2 completed for 039
structure TEST1 connection name CSQEQSGAZQS202
```

Other JES log Information

CSQJ322I ZQS2 DISPLAY SYSTEM report ... 097		
Parameter	Initial value	SET value

LOGLOAD	500000	
CMDUSER	CSQOPR	
QMCCSID	0	
ROUTCDE	1	
SMFACCT	NO	
SMFSTAT	NO	
STATIME	30	
ACCTIME	-1	
OTMACON		
GROUP		
MEMBER		
DRUEXIT	DFSYDRU0	
AGE	2147483647	
TPIPEPFX	CSQ	

System information display - Both for start-up and DISPLAY SYSTEM commands

Other JES log Information

CSQI010I ZQS2 Page set usage ... 105

Page set	Buffer pool	Total pages	Unused pages	Persistent data pages	NonPersist data pages	Expansion	Encr-
						count	ypt
0	0	1078	1045	33	0	USER	NO
1	0	1078	1061	17	0	USER	NO
2	1	1078	1074	4	0	USER	NO
3	2	1078	1075	0	3	USER	NO
4	3	1078	1075	3	0	USER	NO

End of page set report

CSQI065I ZQS2 Buffer pool attributes ... 106

Buffer pool	Available buffers	Stealable buffers	Stealable percentage	Page class	Location
0	50000	49998	99	4KB	BELOW
1	20000	19999	99	4KB	BELOW
2	50000	49999	99	4KB	BELOW
3	20000	19999	99	4KB	BELOW

End of buffer pool attributes

Page set and Buffer Pool usage, both at start up and when the DISPLAY USAGE command is used

Other JES log Information

- Error Messages!
- Bit more about these later
- Start Queue Manager completion message!

CSQM056E ZQS2 CSQMIGQA MQOPEN failed for queue 118

SYSTEM.QSG.TRANSMIT.QUEUE, MQRC=2085 (MQRC_UNKNOWN_OBJECT_NAME)

CSQY022I ZQS2 QUEUE MANAGER INITIALIZATION COMPLETE

CSQ9022I ZQS2 CSQYASCP 'START QMGR' NORMAL COMPLETION

CSQY036I ZQS2 CSQYASCP QMGRPROD=, recording product 121
usage for MQM MVS/ESA product id 5655-MQ9

CSQ3018I ZQS2 CSQ3RRSR RRS synchronization complete

S ZQS2CHIN, JOBNAME=ZQS2CHIN

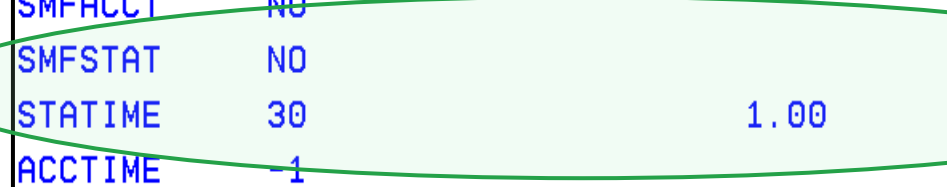
CSQM138I ZQS2 CSQMSCHI CHANNEL INITIATOR STARTING

CSQ9022I ZQS2 CSQXCRPS ' START CHINIT' NORMAL COMPLETION

Other JES log Information

- Changes to the queue manager start-up values
- After a SET command

```
CSQJ337I ZQS2 SYSTEM parameters set
CSQJ322I ZQS2 DISPLAY SYSTEM report ... 778
Parameter      Initial value      SET value
-----
LOGLOAD        500000
CMDUSER        CSQOPR
QMCCSID        0
ROUTCDE        1
SMFACCT        NO
SMFSTAT        NO
STATIME        30          1.00
ACCTIME        -1
```



Other JES log Information

- Traces – SMF Gathering Started

```
CSQW130I ZQS2 'S' TRACE STARTED, ASSIGNED TRACE NUMBER 02
CSQ9022I ZQS2 CSQWVC1 ' START TRACE' NORMAL COMPLETION
CSQW130I ZQS2 'A' TRACE STARTED, ASSIGNED TRACE NUMBER 03
CSQ9022I ZQS2 CSQWVC1 ' START TRACE' NORMAL COMPLETION
CSQW127I ZQS2 CURRENT TRACE ACTIVITY IS - 946
TNO TYPE CLASS DEST USERID RMID
01 GLOBAL 01 RES * *
02 STAT 01,02,03,04, SMF * *
02 05
03 ACCTG 03,04 SMF * *
00 CHINIT * RES * *
END OF TRACE REPORT
CSQ9022I ZQS2 CSQWVC1 ' DISPLAY TRACE' NORMAL COMPLETION
```

The Other Outputs - The JESJCL Output

```
Display Filter View Print Options Search Help
-----
SDSF JOB DATA SET DISPLAY - JOB ZQS2MSTR
COMMAND INPUT ==>
NP DDNAME StepName ProcStep DSID Own
5 JESMSG LG JES2 2 SY
JESJCL JES2 3 SY
JESYSMSG JES2 4 SY
CSQOUT1 ZQS2MSTR 101 SY
CSQOUT2 ZQS2MSTR 102 SY
CSQOUTT ZQS2MSTR 103 SY

4 XXPROCSTEP EXEC PGM=CSQYASCP,REGION=0M,MEMLIMIT=2G
XX*
XX*****
XX* STEPLIB *
XX* Libraries that are in the LPA or link list can be omitted. *
XX*****
5 XXSTEPLIB DD DSN=MQ933CD.SCSQANLE,DISP=SHR
6 XX DD DSN=ZQS1.USERAUTH,DISP=SHR
7 XX DD DSN=MQ933CD.SCSQAUTH,DISP=SHR
8 XX DD DSN=CEE.SCEERUN,DISP=SHR
9 XX DD DSN=DB2V13.SDSNLOAD,DISP=SHR
XX*
XX*****
XX* BOOTSTRAP DATA SETS *
XX* *
XX* This sample shows dual BSDS. To run with a single BSDS remove *
XX* the BSDS2 entry. *
```


The Other Outputs - JESYSMSG

Display Filter View Print Options Search Help									

SDSF JOB DATA SET DISPLAY - JOB ZQS2MSTR (STC08036) LINE 1-6 (6)									
COMMAND INPUT ==> SCROLL ==> CSR									
NP	DDNAME	StepName	ProcStep	DSID	Own	STMT NO.	MESSAGE		
S	JESMSGLG	JES2		2	SYS	2	IEFC001I PROCEDURE ZQS2MSTR WAS EXPANDED USING SYSTEM LIBRARY SYS1.PRO		
-	JESJCL	JES2		3	SYS	IEF695I	START ZQS2MSTR WITH JOBNAME ZQS2MSTR IS ASSIGNED TO USER SYSPROG , GROUP		
→	JESYSMSG	JES2		4	SYS	IEFA111I	ZQS2MSTR IS USING THE FOLLOWING JOB RELATED SETTINGS:		
	CSQOUT1	ZQS2MSTR		101	SYS	IEF236I	ALLOC. FOR ZQS2MSTR ZQS2MSTR		
	CSQOUT2	ZQS2MSTR		102	SYS	IGD103I	SMS ALLOCATED TO DDNAME STEPLIB		
	CSQOUTT	ZQS2MSTR		103	SYS	IGD103I	SMS ALLOCATED TO DDNAME		
						IGD103I	SMS ALLOCATED TO DDNAME		
						IEF237I	A073 ALLOCATED TO		
						IGD103I	SMS ALLOCATED TO DDNAME		
						IGD103I	SMS ALLOCATED TO DDNAME BSDS1		
						IGD103I	SMS ALLOCATED TO DDNAME BSDS2		
						IGD103I	SMS ALLOCATED TO DDNAME CSQINP1		
						IGD103I	SMS ALLOCATED TO DDNAME CSQINP2		

The CSQOUTs – CSQOUT1

```
DEFINE BUFFPOOL( 0 ) BUFFERS( 50000 ) LOCATION( BELOW ) +  
    PAGECLAS( 4KB ) NOREPLACE  
CSQ9022I ZQS2 CSQPDBUF ' DEFINE BUFFPOOL' NORMAL COMPLETION  
    DEFINE BUFFPOOL( 1 ) BUFFERS( 20000 ) LOCATION( BELOW ) +  
    PAGECLAS( 4KB ) NOREPLACE  
CSQ9022I ZQS2 CSQPDBUF ' DEFINE BUFFPOOL' NORMAL COMPLETION  
    DEFINE BUFFPOOL( 2 ) BUFFERS( 50000 ) LOCATION( BELOW ) +  
    PAGECLAS( 4KB ) NOREPLACE  
CSQ9022I ZQS2 CSQPDBUF ' DEFINE BUFFPOOL' NORMAL COMPLETION  
    DEFINE BUFFPOOL( 3 ) BUFFERS( 20000 ) LOCATION( BELOW ) +  
    PAGECLAS( 4KB ) NOREPLACE  
CSQ9022I ZQS2 CSQPDBUF ' DEFINE BUFFPOOL' NORMAL COMPLETION
```

```
DEFINE PSID( 00 ) BUFFPOOL( 0 ) EXPAND ( USER )  
CSQ9022I ZQS2 CSQPDPSI ' DEFINE PSID' NORMAL COMPLETION  
    DEFINE PSID( 01 ) BUFFPOOL( 0 ) EXPAND ( USER )  
CSQ9022I ZQS2 CSQPDPSI ' DEFINE PSID' NORMAL COMPLETION  
    DEFINE PSID( 02 ) BUFFPOOL( 1 ) EXPAND ( USER )  
CSQ9022I ZQS2 CSQPDPSI ' DEFINE PSID' NORMAL COMPLETION  
    DEFINE PSID( 03 ) BUFFPOOL( 2 ) EXPAND ( USER )  
CSQ9022I ZQS2 CSQPDPSI ' DEFINE PSID' NORMAL COMPLETION  
    DEFINE PSID( 04 ) BUFFPOOL( 3 ) EXPAND ( USER )  
CSQ9022I ZQS2 CSQPDPSI ' DEFINE PSID' NORMAL COMPLETION
```

CSQOUT1 is the output from buffer pool and page set definitions

These are defined before the queue manager is fully started

The CSQOUTs – The others

CSQOUT2 is the output from most MQ object definitions – storage classes, queues, channels, etc.

These are brought in during the second stage of queue manager start-up

CSQOUTT is the output from pub/sub related definitions

These definitions are brought into the queue manager in the third state of the start-up

Channel Initiator JES logs

The CHIN JES Log

- The JESMSGLOG holds:
 - Messages about the CHIN state and status
 - The attributes the CHIN started with and changes
 - Often used for problem determination

```
SDSF JOB DATA SET DISPLAY - JOB ZQS2CHIN (STC08037)    LINE 1-4 (4)
COMMAND INPUT ==>                                     SCROLL ==> CSR
NP   DDNAME      StepName ProcStep DSID Owner      C Dest      Rec-Cnt Page
    JESMSGLOG JES2          2 SYSPROG S           47,783
    JESJCL    JES2          3 SYSPROG S           134
    JESYSMSG  JES2          4 SYSPROG S          47,875
    CSQOUTX   ZQS2CHIN      102 SYSPROG S           110
```

The CHIN JES Log

```
JES2 JOB LOG -- SYSTEM MQS2 -- NODE

17.43.52 STC08037 ---- MONDAY,    29 JAN 2024 ----
17.43.52 STC08037 IEF695I START ZQS2CHIN WITH JOBNAME ZQS2CHIN IS ASSIGNED TO U
17.43.52 STC08037 $HASP373 ZQS2CHIN STARTED
17.43.52 STC08037 CSQX000I ZQS2 CSQXJST IBM MQ for z/OS V9.3.3
17.43.52 STC08037 CSQX001I ZQS2 CSQXJST Channel initiator starting
17.43.52 STC08037 CSQX030I ZQS2 CSQXJST 'GLOBAL' trace started, assigned trace
17.43.52 STC08037 +CSQX002I ZQS2 CSQXGIP Queue-sharing group is QSGA
17.43.52 STC08037 +CSQX070I ZQS2 CSQXGIP CHINIT parameters ...
17.43.52 STC08037 +CSQX071I ZQS2 CSQXGIP CHIADAPS=8, CHIDISPS=5, LSTRTMR=60
17.43.52 STC08037 +CSQX072I ZQS2 CSQXGIP MAXCHL=200, ACTCHL=200
17.43.52 STC08037 +CSQX073I ZQS2 CSQXGIP CHLEV=DISABLED, SSLEV=DISABLED
17.43.52 STC08037 +CSQX074I ZQS2 CSQXGIP MONCHL=OFF, MONACLS=QMGR
17.43.52 STC08037 +CSQX075I ZQS2 CSQXGIP ADOPTMCA=ALL, ADOPTCHK=ALL
17.43.52 STC08037 +CSQX076I ZQS2 CSQXGIP STATCHL=OFF, STATACLS=QMGR
```

- Like the MSTR address space, the CHIN starts off with some of the same information
 - Date and time of startup
 - MQ Version
 - QSG Information
 - Attributes of the CHIN

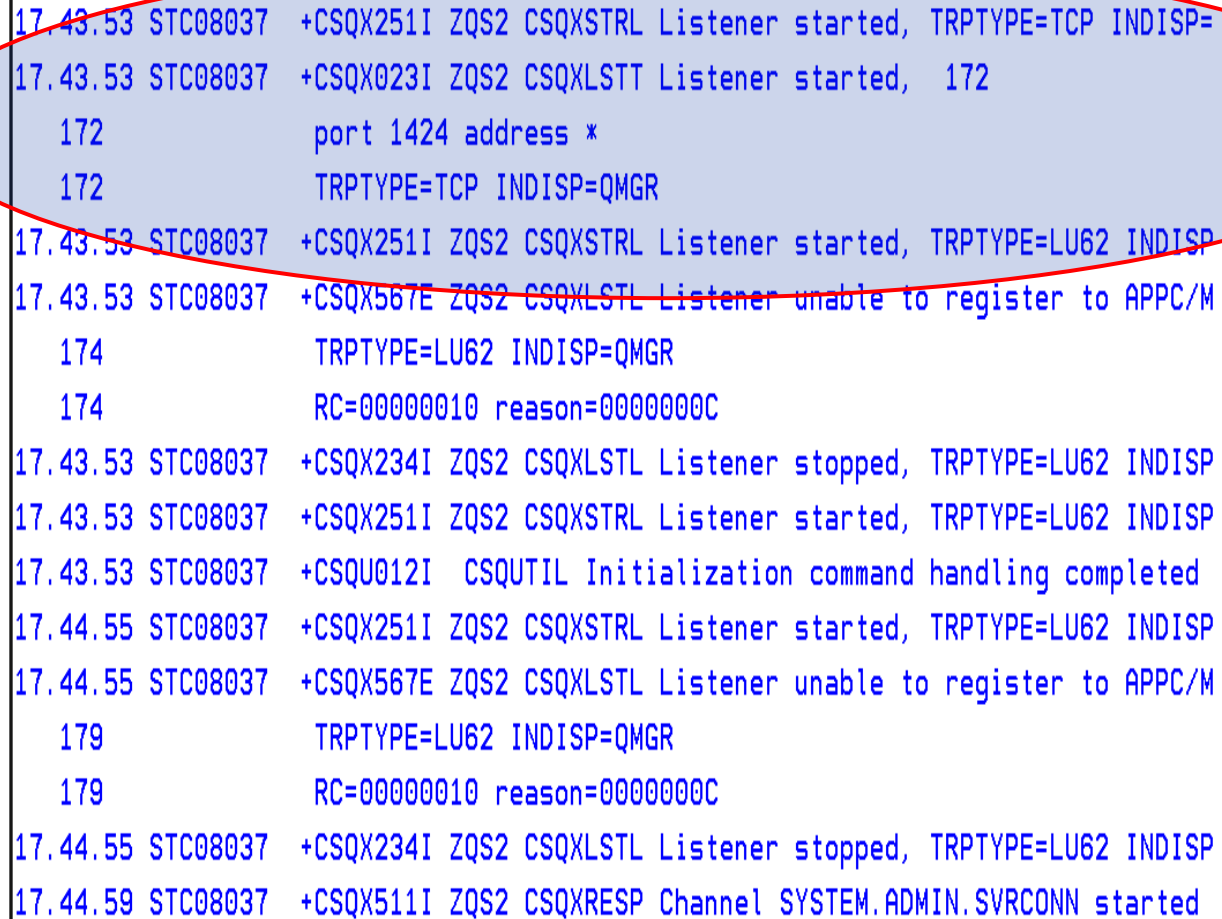
The CHIN JES Log

```
JES2 JOB LOG -- SYSTEM MQS2 -- NODE

17.43.52 STC08037 ---- MONDAY,    29 JAN 2024 ----
17.43.52 STC08037 IEF695I START ZQS2CHIN WITH JOBNAME ZQS2CHIN IS ASSIGNED TO U
17.43.52 STC08037 $HASP373 ZQS2CHIN STARTED
17.43.52 STC08037 CSQX000I ZQS2 CSQXJST IBM MQ for z/OS V9.3.3
17.43.52 STC08037 CSQX001I ZQS2 CSQXJST Channel initiator starting
17.43.52 STC08037 CSQX030I ZQS2 CSQXJST 'GLOBAL' trace started, assigned trace
17.43.52 STC08037 +CSQX002I ZQS2 CSQXGIP Queue-sharing group is QSGA
17.43.52 STC08037 +CSQX070I ZQS2 CSQXGIP CHINIT parameters ...
17.43.52 STC08037 +CSQX071I ZQS2 CSQXGIP CHIADAPS=8, CHIDISPS=5, LSTRTMR=60
17.43.52 STC08037 +CSQX072I ZQS2 CSQXGIP MAXCHL=200, ACTCHL=200
17.43.52 STC08037 +CSQX073I ZQS2 CSQXGIP CHLEV=DISABLED, SSLEV=DISABLED
17.43.52 STC08037 +CSQX074I ZQS2 CSQXGIP MONCHL=OFF, MONACLS=QMGR
17.43.52 STC08037 +CSQX075I ZQS2 CSQXGIP ADOPTMCA=ALL, ADOPTCHK=ALL
17.43.52 STC08037 +CSQX076I ZQS2 CSQXGIP STATCHL=OFF, STATACLS=QMGR
```

- Like the MSTR address space, the CHIN starts off with some of the same information
 - Date and time of startup
 - MQ Version
 - QSG Information
 - Attributes of the CHIN

The CHIN JES Log



```
17.43.53 STC08037 +CSQX251I ZQS2 CSQXSTRL Listener started, TRPTYPE=TCP INDISP=
17.43.53 STC08037 +CSQX023I ZQS2 CSQXLSTT Listener started, 172
172 port 1424 address *
172 TRPTYPE=TCP INDISP=QMGR
17.43.53 STC08037 +CSQX251I ZQS2 CSQXSTRL Listener started, TRPTYPE=LU62 INDISP
17.43.53 STC08037 +CSQX567E ZQS2 CSQXLSTL Listener unable to register to APPC/M
174 TRPTYPE=LU62 INDISP=QMGR
174 RC=00000010 reason=0000000C
17.43.53 STC08037 +CSQX234I ZQS2 CSQXLSTL Listener stopped, TRPTYPE=LU62 INDISP
17.43.53 STC08037 +CSQX251I ZQS2 CSQXSTRL Listener started, TRPTYPE=LU62 INDISP
17.43.53 STC08037 +CSQU012I CSQUTIL Initialization command handling completed
17.44.55 STC08037 +CSQX251I ZQS2 CSQXSTRL Listener started, TRPTYPE=LU62 INDISP
17.44.55 STC08037 +CSQX567E ZQS2 CSQXLSTL Listener unable to register to APPC/M
179 TRPTYPE=LU62 INDISP=QMGR
179 RC=00000010 reason=0000000C
17.44.55 STC08037 +CSQX234I ZQS2 CSQXLSTL Listener stopped, TRPTYPE=LU62 INDISP
17.44.59 STC08037 +CSQX511I ZQS2 CSQXRESP Channel SYSTEM.ADMIN.SVRCONN started
```

- The listeners, the receivers for messages, are started and their port affiliation shown
- And then there are the messages

The CHIN JES Log

- The changed Storage use message



```
18.44.39 STC08037 +CSQX004I ZQS2 CSQXSPRM Channel initiator storage usage: loca
379                used 24MB, free 1757MB: above bar: used 187MB, free 1GB
```

MQ Messages

MQ for z/OS – Messages

MQ Messages:

- Always start with **CSQ**
- Final letter is message type code:
 - A – Immediate Action Needed
 - D – Immediate Decision Needed
 - E – Eventual Action Needed
 - I – Informational Message

MQ for z/OS – Messages

MQ Messages:

- Fourth character indicates the where the message comes from
- See <https://www.ibm.com/docs/en/ibm-mq/9.3?topic=codes-messages-mq-zos> for a list

MQ for z/OS – Messages

Other Info

```
CSQP017I ZQS2 CSQPEXTD EXPANSION STARTED FOR PAGE SET 4
CSQP013I ZQS2 CSQPEXTD NEW EXTENT CREATED FOR PAGE SET 521
4. NEW EXTENT WILL NOW BE FORMATTED
CSQI031I ZQS2 CSQIFRMT THE NEW EXTENT OF PAGE SET 4 522
HAS FORMATTED SUCCESSFULLY
CSQP017I ZQS2 CSQPEXTD EXPANSION STARTED FOR PAGE SET 4
CSQP013I ZQS2 CSQPEXTD NEW EXTENT CREATED FOR PAGE SET 524
4. NEW EXTENT WILL NOW BE FORMATTED
CSQI031I ZQS2 CSQIFRMT THE NEW EXTENT OF PAGE SET 4 525
HAS FORMATTED SUCCESSFULLY
```

The ‘action’ code may be misleading - While technically and informational message, in a production queue manager page set expansion can be very disruptive. This is one I would set an alert for.

MQ Messages - continued

Each MQ component or 'manager' can issues messages, some may be critical to operations in your environment, some you may never see.

Each new release of MQ introduces new messages, it may change the meanings of older message, and it can remove others. See the MQ Migration information for changes.

- **Message manager messages (CSQM...)**
- **Command server messages (CSQN...)**
- **Operations and control messages (CSQO...)**
- **Buffer manager messages (CSQP...)**
- **IMS adapter messages (CSQQ...)**
- **Recovery manager messages (CSQR...)**
- **Topic manager messages (CSQT...)**
- **Utilities messages (CSQU...)**
- **Agent services messages (CSQV...)**
- **Instrumentation facilities messages (CSQW...)**
- **Distributed queuing messages (CSQX...)**
- **Initialization procedure and general services messages (CSQY...)**
- **Advanced Message Security (CSQ0...)**
- **Service facilities messages (CSQ1...)**

Resources:

<https://www.ibm.com/docs/en/ibm-mq/9.3?topic=codes-messages-mq-zos>

<https://www.ibm.com/docs/en/ibm-mq/9.3?topic=zos-distributed-queuing-messages-cs qx>

<https://www.ibm.com/docs/en/ibm-mq/9.3?topic=initiator-suppress-information-messages>

<https://www.ibm.com/docs/en/ibm-mq/9.3?topic=support-using-error-logs>