



IBM MQ

Quelques détails sur MQ 9.4.1 / 9.4.2

Une production : Demey Consulting

Ce document a été préparé à partir de différentes sources d'information publiquement disponibles.

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Contenu

- IBM MQ Performance Tool
- Display MQ Certificates
- MQ Console



IBM MQ Performance Tool (mqperfck)



mqperfck

- Nouveautés MQ 9.4.2
 - Backporté en 9.4.0.10
- Collecte d'information de performance pour un Queue Manager
 - A la demande
 - Linux / Unix / Windows / IBM i
 - Pas pour Appliance
 - Pour un sous-ensemble de files et de canaux
- Restitution sous forme de rapport HTML



Syntaxe

Usage: `mqperfck -h | -? | [-m QMgrName] [-q Queue] [-s ChannelName]
[-n Iterations] [-u User] [-d OutputDirectory] [-N]`

- h|-? Show this usage text and exit
- m Queue manager name
- q Name of queue(s) to analyze (repeat up to 10 times)
- s Name of sender channel(s) to analyze (repeat up to 10 times)
- n Number of sampling iterations to perform (defaults to 6)
- u User name for connection (the tool will prompt for password)
- d Name of directory where output will be written
- N Suppress translation of HTML report



Conditions

- Compte groupe **mqm** conseillé
 - Mais pas obligatoire
- L'attribut **MONCHL** des canaux interrogés ne doit pas être à « **OFF** »
 - Soit explicitement, soit via QMGR
- Exemple
 - ALTER CHL(**DC6Q2.DC6Q1**) CHLTYPE(SDR) MONCHL(**LOW**)
 - ALTER CHL(**DC6Q2.DC6Q1.Q**) CHLTYPE(SDR) MONCHL(**LOW**)



Données collectées (extrait)

- CPU
 - Serveur & QM
 - User & System
- Logs
 - Write latency
 - Write size
 - Slowest write since restart
- Files
 - Lock contention
 - Rollback
 - Nb & volume de messages persistants & NP
 - Average Q Time
 - Q depth
- API
 - MQGet
 - MQPut / MQPut1
 - MQOPen / MQClose
- Canaux
 - Network Time
 - Batch Size
 - Time on XMITQ
 - Messages on XMITQ
- Synthèse
 - MQPut / MQGet rate
 - MQPut / MQGet rollback rate
 - Msgid / Correlid perfs



Exemple de commande

- Répertoire pour les rapports :

```
mk dir /var/mqm/perfck
```

- Collecte pour le lien non TLS

```
mqperfck -m DC6Q2 -q PONG -s DC6Q2.DC6Q1 -n 4 -d /var/mqm/perfck
```

- Collecte pour le lien TLS - Quantum

```
mqperfck -m DC6Q2 -q PONG.Q -s DC6Q2.DC6Q1.Q -n 4 -d /var/mqm/perfck
```

MQ Performance Check for Queue Manager: DC6Q2

Host name: mqseries.ovh
CPU count: 1.00
MQ version: 9.4.2.0
Build level: p942-DC-USER-L250219.BETA
QMGr Command level: 942
Command args: mqperfck -m DC6Q2 -q PONG -s DC6Q2.DC6Q1 -n 4 -d /var/mqm/perfck
Start time: 2025-04-07 15:21:11.677 UTC (UTC +0)
Generated at: 2025-04-07 15:21:51.689 UTC (UTC +0)

☒ Show rows with all-zero values

CPU performance - platform wide

Statistic		Min value	Max value	Interval avg	Raw values
Interval length		10000000us	10000427us	10000151.75us	[10000179, 10000000, 10000000]
User CPU time percentage		15.73%	18.92%	16.90%	[15.73, 18.92, 16.56, 16.39]
System CPU time percentage		19.69%	22.78%	20.84%	[19.69, 22.78, 20.93, 19.97]
CPU load - one minute average		0.14	0.65	0.45	[0.14, 0.65, 0.55, 0.47]
CPU load - five minute average		0.03	0.14	0.11	[0.03, 0.14, 0.14, 0.13]
CPU load - fifteen minute average		0.01	0.04	0.03	[0.01, 0.04, 0.04, 0.04]
RAM free percentage		48.47%	48.56%	48.53%	[48.56, 48.47, 48.55, 48.56]
RAM total bytes		1771MB	1771MB	1771.00MB	[1771, 1771, 1771, 1771]

CPU performance - running queue manager

Statistic		Min value	Max value	Interval avg	Raw values
Interval length		10000000us	10000427us	10000151.75us	[10000179, 10000000, 10000000]
User CPU time - percentage estimate for queue manager		6.96%	10.15%	9.02%	[6.96, 10.15, 9.39, 9.59]
System CPU time - percentage estimate for queue manager		4.24%	9.03%	7.48%	[4.24, 9.03, 8.60, 8.04]
RAM total bytes - estimate for queue manager		132MB	132MB	132.00MB	[132, 132, 132, 132]

Disk usage - queue manager recovery log

Statistic		Min value	Max value	Interval avg	Raw values
Interval length		10000000us	10000427us	10000151.75us	[10000179, 10000000, 10000001]
Log - write latency		445us	474us	461.00us	[445, 454, 471, 474]
Log - write size		5635	5642	5636.75	[5642, 5635, 5635, 5635]
Log - logical bytes written		22076963	27071369	23625088.25	[22076963, 27071369, 23097425]
Log - physical bytes written		52580352	64217088	56159232.00	[52580352, 64217088, 54890496]
Log - slowest write since restart		33692us	33692us	33692.00us	[33692, 33692, 33692, 33692]
Log - timestamp of slowest write		2025-04-03 19:24:52.280 UTC (UTC +0)	2025-04-03 19:24:52.280 UTC (UTC +0)	n/a	[1743708292280329, 174370829]
Log - current primary space in use		29.19%	96.62%	64.53%	[89.23, 29.19, 43.08, 96.62]
Log - workload primary space utilization		50.02%	90.69%	72.04%	[83.52, 50.02, 63.92, 90.69]

Queue: PONG

MQPUT and MQPUT1 (PONG)

Statistic		Min value	Max value	Interval avg	Raw values
Interval length		10002469us	10004605us	10003184.25us	[10002769, 10002894, 10004605]
lock contention		0.00%	0.01%	0.00%	[0.00, 0.01, 0.00, 0.00]
rolled back MQPUT count		0	0	0.00	[0, 0, 0, 0]
MQPUT1 persistent message count		0	0	0.00	[0, 0, 0, 0]
MQPUT persistent message count		4000	4852	4250.00	[4000, 4852, 4148, 4000]
MQPUT1 non-persistent message count		0	0	0.00	[0, 0, 0, 0]
MQPUT non-persistent message count		0	0	0.00	[0, 0, 0, 0]
queue avoided puts		0.00%	0.00%	0.00%	[0.00, 0.00, 0.00, 0.00]
persistent byte count		4096000	4968448	4352000.00	[4096000, 4968448, 4247552, 4096000]

Channel: DC6Q2.DC6Q1

Channel Status (DC6Q2.DC6Q1)

Statistic	Min value	Max value	Interval avg	Raw values
Interval length	9999748us	10002830us	10001032.50us	[9999748, 10000278, 10001274, 10002830]
Channel status (MQCHS_*)	3	3	n/a	[3, 3, 3, 3]
Channel start date	2025-04-07	2025-04-07	n/a	[2025-04-07, 2025-04-07, 2025-04-07, 2025-04-07]
Channel start time	15.21.13	15.21.13	n/a	[15.21.13, 15.21.13, 15.21.13, 15.21.13]
Network time Indicator	202us	535us	337.75us	[535, 355, 259, 202]
Batch size Indicator	1	1	1.00	[1, 1, 1, 1]
Time in user exits (ms/msg)	0	0	0.00	[0, 0, 0, 0]
Compression time (ms/msg)	0	0	0.00	[0, 0, 0, 0]
TLS key reset count	0	0	0.00	[0, 0, 0, 0]
Time on XMITQ	2438us	3883us	2912.25us	[3883, 2762, 2566, 2438]
Msgs on XMITQ	0	0	0.00	[0]
Buffers sent count	5568	6828	5964.00	[5568, 6828, 5834, 5626]
Bytes sent count	6044144	7330384	6423052.00	[6044144, 7330384, 6272152, 6045528]
Completed batches count	1568	1978	1714.00	[1568, 1978, 1684, 1626]
Messages sent count	4800	4850	4250.00	[4000, 4850, 4150, 4000]

Queue Analysis: PONG

Total elapsed time	40.01 seconds
Approx. MQPUT rate (successful calls only)	424.86 msgs/sec
Approx. MQGET rate (successful calls only)	n/a - no relevant calls recorded
Approx. MQGET-BROWSE rate (successful calls only)	n/a - no relevant calls recorded
MQGET % success	n/a - no relevant calls recorded
MQGET-BROWSE % success	n/a - no relevant calls recorded
Queue avoid %	0.00%
MQPUT % rolled back	0.00%
MQGET % rolled back	n/a - no relevant calls recorded
Ave Queue Depth	10713

Queue Analysis: DC6Q1

Total elapsed time	40.01 seconds
Approx. MQPUT rate (successful calls only)	424.87 msgs/sec
Approx. MQGET rate (successful calls only)	424.87 msgs/sec
Approx. MQGET-BROWSE rate (successful calls only)	n/a - no relevant calls recorded
MQGET % success	71.98%
MQGET-BROWSE % success	n/a - no relevant calls recorded
Queue avoid %	0.00%
MQPUT % rolled back	0.00%
MQGET % rolled back	0.00%
Ave Queue Depth	0
Ave Searches per Get	0.71979
Ave Msgs examined per Get	0.71979
Ave Correlld short hash mismatches per Get	n/a - no relevant calls recorded
Ave Correlld long hash mismatches per Get	n/a - no relevant calls recorded
Ave Msgld mismatches per Get	n/a - no relevant calls recorded
Ave Selector mismatches per Get	n/a - no relevant calls recorded
Ave Msg loads per Get	n/a - no relevant calls recorded

For more information see: <https://ibm.biz/mqperfck>



Résultats – No TLS

MQ Performance Check for Queue Manager: DC6Q2

Host name: mqseries.ovh
 CPU count: 1.00
 MQ version: 9.4.2.0
 Build level: p942-DC-USER-L250219.BETA
 QMgr Command level: 942
 Command args: mqperfck -m DC6Q2 -q PONG -s DC6Q2.DC6Q1 -n 4 -d /var/mqm/perfck
 Start time: 2025-04-07 15:21:11.677 UTC (UTC +0)
 Generated at: 2025-04-07 15:21:51.689 UTC (UTC +0)

☒ Show rows with all-zero values

CPU performance - platform wide

First publication: 15:21:11.677 Last publication: 15:21:51.676

Statistic	Min value	Max value	Interval avg	Raw values
Interval length	10000000us	10000427us	10000151.75us	[10000179, 10000000, 10000001, 10000427]
User CPU time percentage	15.73%	18.92%	16.90%	[15.73, 18.92, 16.56, 16.39]
System CPU time percentage	19.69%	22.78%	20.84%	[19.69, 22.78, 20.93, 19.97]
CPU load - one minute average	0.14	0.65	0.45	[0.14, 0.65, 0.55, 0.47]
CPU load - five minute average	0.03	0.14	0.11	[0.03, 0.14, 0.14, 0.13]
CPU load - fifteen minute average	0.01	0.04	0.03	[0.01, 0.04, 0.04, 0.04]
RAM free percentage	48.47%	48.56%	48.53%	[48.56, 48.47, 48.55, 48.56]
RAM total bytes	1771MB	1771MB	1771.00MB	[1771, 1771, 1771, 1771]

CPU performance - running queue manager

First publication: 15:21:11.677 Last publication: 15:21:51.681

Statistic	Min value	Max value	Interval avg	Raw values
Interval length	10000000us	10000427us	10000151.75us	[10000179, 10000000, 10000001, 10000427]
User CPU time - percentage estimate for queue manager	6.96%	10.15%	9.02%	[6.96, 10.15, 9.39, 9.59]
System CPU time - percentage estimate for queue manager	4.24%	9.03%	7.48%	[4.24, 9.03, 8.60, 8.04]
RAM total bytes - estimate for queue manager	132MB	132MB	132.00MB	[132, 132, 132, 132]



Résultats – No TLS

Disk usage - queue manager recovery log				
First publication: 15:21:11.677 Last publication: 15:21:51.681				
Statistic	Min value	Max value	Interval avg	Raw values
Interval length	10000000us	10000427us	10000151.75us	[10000179, 10000000, 10000001, 10000427]
Log - write latency	445us	474us	461.00us	[445, 454, 471, 474]
Log - write size	5635	5642	5636.75	[5642, 5635, 5635, 5635]
Log - logical bytes written	22076963	27071369	23625088.25	[22076963, 27071369, 23097425, 22254596]
Log - physical bytes written	52580352	64217088	56159232.00	[52580352, 64217088, 54890496, 52948992]
Log - slowest write since restart	33692us	33692us	33692.00us	[33692, 33692, 33692, 33692]
Log - timestamp of slowest write	2025-04-03 19:24:52.280 UTC (UTC +0)	2025-04-03 19:24:52.280 UTC (UTC +0)	n/a	[1743708292280329, 1743708292280329, 1743708292280329, 1743708292280329]
Log - current primary space in use	29.19%	96.62%	64.53%	[89.23, 29.19, 43.08, 96.62]
Log - workload primary space utilization	50.02%	90.69%	72.04%	[83.52, 50.02, 63.92, 90.69]

Channel: DC6Q2.DC6Q1

Channel Status (DC6Q2.DC6Q1)				
First publication: 15:21:11.678 Last publication: 15:21:51.682				
Statistic	Min value	Max value	Interval avg	Raw values
Interval length	9999748us	10002830us	10001032.50us	[9999748, 10000278, 10001274, 10002830]
Channel status (MQCHS_*)	3	3	n/a	[3, 3, 3, 3]
Channel start date	2025-04-07	2025-04-07	n/a	[2025-04-07, 2025-04-07, 2025-04-07, 2025-04-07]
Channel start time	15.21.13	15.21.13	n/a	[15.21.13, 15.21.13, 15.21.13, 15.21.13]
Network time Indicator	202us	535us	337.75us	[535, 355, 259, 202]
Batch size Indicator	1	1	1.00	[1, 1, 1, 1]
Time in user exits (ms/msg)	0	0	0.00	[0, 0, 0, 0]
Compression time (ms/msg)	0	0	0.00	[0, 0, 0, 0]
TLS key reset count	0	0	0.00	[0, 0, 0, 0]
Time on XMITQ	2438us	3883us	2912.25us	[3883, 2762, 2566, 2438]
Msgs on XMITQ	0	0	0.00	[0]
Buffers sent count	5568	6828	5964.00	[5568, 6828, 5834, 5626]
Bytes sent count	6044144	7330384	6423052.00	[6044144, 7330384, 6272152, 6045528]
Completed batches count	1568	1978	1714.00	[1568, 1978, 1684, 1626]
Messages sent count	4000	4850	4250.00	[4000, 4850, 4150, 4000]



Résultats – TLS-Q

MQ Performance Check for Queue Manager: DC6Q2

Host name: mqseries.ovh
 CPU count: 1.00
 MQ version: 9.4.2.0
 Build level: p942-DC-USER-L250219.BETA
 QMgr Command level: 942
 Command args: mqperfck -m DC6Q2 -q PONG.Q -s DC6Q2.DC6Q1.Q -n 4 -d /var/mqm/perfck
 Start time: 2025-04-07 15:25:02.226 UTC (UTC +0)
 Generated at: 2025-04-07 15:25:42.239 UTC (UTC +0)

☒ Show rows with all-zero values

CPU performance - platform wide

First publication: 15:25:02.226 Last publication: 15:25:42.225

Statistic	Min value	Max value	Interval avg	Raw values
Interval length	10000000us	10000465us	10000128.50us	[10000465, 10000049, 10000000, 10000000]
User CPU time percentage	18.97%	21.88%	19.89%	[21.88, 19.27, 18.97, 19.43]
System CPU time percentage	19.02%	20.08%	19.64%	[19.77, 19.67, 20.08, 19.02]
CPU load - one minute average	0.25	0.66	0.38	[0.25, 0.29, 0.32, 0.66]
CPU load - five minute average	0.11	0.21	0.14	[0.11, 0.12, 0.13, 0.21]
CPU load - fifteen minute average	0.04	0.07	0.05	[0.04, 0.04, 0.05, 0.07]
RAM free percentage	48.34%	48.43%	48.38%	[48.35, 48.42, 48.34, 48.43]
RAM total bytes	1771MB	1771MB	1771.00MB	[1771, 1771, 1771, 1771]

CPU performance - running queue manager

First publication: 15:25:02.226 Last publication: 15:25:42.231

Statistic	Min value	Max value	Interval avg	Raw values
Interval length	10000000us	10000465us	10000128.50us	[10000465, 10000049, 10000000, 10000000]
User CPU time - percentage estimate for queue manager	6.25%	11.74%	9.59%	[6.25, 11.74, 10.70, 9.66]
System CPU time - percentage estimate for queue manager	3.97%	8.48%	7.07%	[3.97, 7.67, 8.48, 8.16]
RAM total bytes - estimate for queue manager	132MB	132MB	132.00MB	[132, 132, 132, 132]



Résultats – TLS-Q

Disk usage - queue manager recovery log				
Statistic	Min value	Max value	Interval avg	Raw values
Interval length	10000000us	10000427us	10000151.75us	[10000179, 10000000, 10000001, 10000427]
Log - write latency	445us	474us	461.00us	[445, 454, 471, 474]
Log - write size	5635	5642	5636.75	[5642, 5635, 5635, 5635]
Log - logical bytes written	22076963	27071369	23625088.25	[22076963, 27071369, 23097425, 22254596]
Log - physical bytes written	52580352	64217088	56159232.00	[52580352, 64217088, 54890496, 52948992]
Log - slowest write since restart	33692us	33692us	33692.00us	[33692, 33692, 33692, 33692]
Log - timestamp of slowest write	2025-04-03 19:24:52.280 UTC (UTC +0)	2025-04-03 19:24:52.280 UTC (UTC +0)	n/a	[1743708292280329, 1743708292280329, 1743708292280329, 1743708292280329]
Log - current primary space in use	29.19%	96.62%	64.53%	[89.23, 29.19, 43.08, 96.62]
Log - workload primary space utilization	50.02%	90.69%	72.04%	[83.52, 50.02, 63.92, 90.69]

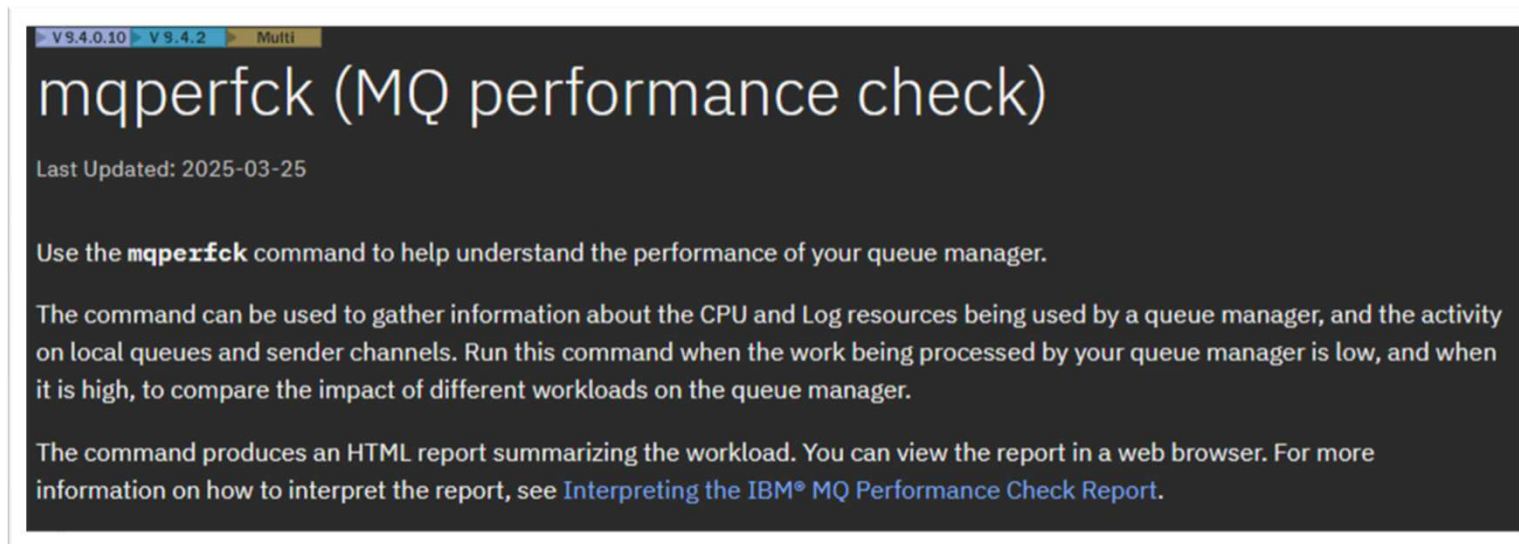
Channel: DC6Q2.DC6Q1

Channel Status (DC6Q2.DC6Q1)				
Statistic	Min value	Max value	Interval avg	Raw values
Interval length	9999748us	10002830us	10001032.50us	[9999748, 10000278, 10001274, 10002830]
Channel status (MQCHS_*)	3	3	n/a	[3, 3, 3, 3]
Channel start date	2025-04-07	2025-04-07	n/a	[2025-04-07, 2025-04-07, 2025-04-07, 2025-04-07]
Channel start time	15.21.13	15.21.13	n/a	[15.21.13, 15.21.13, 15.21.13, 15.21.13]
Network time Indicator	202us	535us	337.75us	[535, 355, 259, 202]
Batch size Indicator	1	1	1.00	[1, 1, 1, 1]
Time in user exits (ms/msg)	0	0	0.00	[0, 0, 0, 0]
Compression time (ms/msg)	0	0	0.00	[0, 0, 0, 0]
TLS key reset count	0	0	0.00	[0, 0, 0, 0]
Time on XMITQ	2438us	3883us	2912.25us	[3883, 2762, 2566, 2438]
Msgs on XMITQ	0	0	0.00	[0]
Buffers sent count	5568	6828	5964.00	[5568, 6828, 5834, 5626]
Bytes sent count	6044144	7330384	6423052.00	[6044144, 7330384, 6272152, 6045528]
Completed batches count	1568	1978	1714.00	[1568, 1978, 1684, 1626]
Messages sent count	4000	4850	4250.00	[4000, 4850, 4150, 4000]



Documentation

KC : <https://www.ibm.com/docs/en/ibm-mq/9.4.0?topic=reference-mqperfck-mq-performance-check>





Documentation

- Interpretation guide : <https://ibm.biz/mqperfck>

Interpreting the IBM MQ Performance Check Report

IBM MQ 9.4.2 and MQ 9.4.0.10 include a new command-line tool named `mqperfck`, which gives you insight into the workload being processed by a queue manager. `mqperfck` produces an HTML report that shows statistics on the throughput and performance of the queue manager's transaction log, queues and channels.

The `mqperfck` tool is primarily intended to provide a snapshot of IBM MQ behaviour over a short period of time, rather than as a continuous monitoring solution.

For longer term monitoring of IBM MQ see the [Monitoring and Performance topics](#) in IBM Documentation, and <https://github.com/ibm-messaging/mq-metric-samples>

Use `mqperfck` to take a snapshot of IBM MQ queues and channels when the system is performing well, and another if the system is not performing as you expect. Compare the two reports to gain insight into differences in the way the workload is being handled.



Documentation

- Introduction to the IBM MQ Performance Tool

<https://community.ibm.com/community/user/blogs/mark-phillips/2025/02/25/introduction-to-the-ibm-mq-performance-tool>



By **MARK PHILLIPS** posted Thu February 27, 2025 05:47 PM

IBM MQ Performance Check Tool:
mqperfck





Display MQ Certificates (dspmqcert)



dspmqcert

- Affichage des informations du certificat d'un Queue Manager
 - Démarré ou non
- Disponible depuis 9.4.1
- Affiche :
 - Les caractéristiques du certificat
 - La période de validité
 - Le nombre de jours avant (ou après !) l'expiration



Syntaxe

`dspmqcert -h`

Usage: `dspmqcert [-h] [-o <output>] [-d <days>] [-m <pattern>] [-e] [-f <path>]`

Options:

- h this help
- o output: <json|csv|text> default text
- d days: print certs due to expire within these days
- m pattern: match queue manager names, ie. QM1, ERR*, default *
- a include CA intermediate certificates
- e exit error (127) if -d specified and there are certs expiring
- f path: location of INI file mapping QM names and keystore location



Exemple

```
dspmqcrt
```

Queue Manager Name: DC103

Label: DC103

Type: End entity

Version: 3

Serial: 23

Subject: CN=DC103,OU=Tests 2024,O=Demey Consulting,L=Paris,C=FR

Issuer: CN=CA_OFDC_2021_A,EMAIL=pki_of21@demey-consulting.fr,OU=Infra,O=PKI OF DC,L=Paris,C=FR

Keystore Path: D:\MQ_data\qmgrs\DC103\ssl\key.kdb

Key Size: 2048

Not Before: 2023-12-30 18:59:09

Not After: 2025-02-14 18:59:09

Expiry Days: -39 → donc le certificat de DC103 est expiré depuis 39 jours

Variante :

```
dspmqcrt -m DC103
```



Variante « -a »

```
dspmqcrt -m DC103 -a
```

Queue Manager Name: DC103

Label: Racine_DC_2021
Type: Root CA
Version: 3
Serial: 008b87dc81e480ab92
Subject: CN=CA_OFDC_2021_A,EMAIL=pki_of21@demey-consulting.fr,OU=Infra,O=PKI OF DC,L=Paris,C=FR
Issuer: CN=CA_OFDC_2021_A,EMAIL=pki_of21@demey-consulting.fr,OU=Infra,O=PKI OF DC,L=Paris,C=FR
Keystore Path: D:\MQ_data\qmgrs\DC103\ssl\key.kdb
Key Size: 2048
Not Before: 2020-11-14 22:40:01
Not After: 2030-11-12 22:40:01
Expiry Days: 2058

Label: DC103
Type: End entity
Version: 3
Serial: 23
Subject: CN=DC103,OU=Tests 2024,O=Demey Consulting,L=Paris,C=FR
Issuer: CN=CA_OFDC_2021_A,EMAIL=pki_of21@demey-consulting.fr,OU=Infra,O=PKI OF DC,L=Paris,C=FR
Keystore Path: D:\MQ_data\qmgrs\DC103\ssl\key.kdb
Key Size: 2048
Not Before: 2023-12-30 18:59:09
Not After: 2025-02-14 18:59:09
Expiry Days: -39



Variante « -o »

```
dspmqcrt -m DC103 -o json
```

```
{"DC103": [{"label": "DC101", "type": "End entity", "version": 3, "serial":  
"28", "subjectDn": "CN=DC101,OU=Tests 2024,O=Demey  
Consulting,L=Paris,C=FR", "issuerDn":  
"CN=CA_OFDC_2021_A,EMAIL=pki_of21@demey-consulting.fr,OU=Infra,O=PKI  
OF DC,L=Paris,C=FR", "keystorePath":  
« D:\MQ_data\qmgrs\DC103\ssl\key.kdb", "keySize": 2048, "notBefore": "2023-  
12-30 18:59:09", "notAfter": "2025-02-14 18:59:09", "daysExpiry": -39}]}
```



Variante « - o »

```
dspmqcrt -m DC103 -o csv
```

qm,label,type,version,serial,subjectDn,issuerDn,keystorePath,keySize,notBefore,
notAfter,daysExpiry

```
"DC103","DC103","End entity",3,28,"CN=DC101,OU=Tests 2024,O=Demey  
Consulting,L=Paris,C=FR","CN=CA_OFDC_2021_A,EMAIL=pki_of21@demey-  
consulting.fr,OU=Infra,O=PKI OF  
DC,L=Paris,C=FR","J:\MQ_data\qmgrs\DC103\ssl\key.kdb","2048","2023-12-30  
18:59:09","2025-02-14 18:59:09",-39
```

	A	B	C	D	E	F	G	H	
1	qm	label	type	version	serial	subjectDn	issuerDn	keystorePath	ke
2	DC103	DC103	End entity	3	28	CN=DC101,OU=Tests 2024,O=Dem	CN=CA_OFDC_2021_A,EMAIL=pki_of	D:\MQ_data\qmgrs\DC103\ssl\key.kdb	2



Mais ...

dspmqr

QMNAME(DC101)	STATUS(En cours de fonctionnement)
QMNAME(DC102)	STATUS(En cours de fonctionnement)
QMNAME(DC103)	STATUS(En cours de fonctionnement)
QMNAME(SSL01)	STATUS(Arrêt normal.)
QMNAME(SSL02)	STATUS(Arrêt normal.)
QMNAME(TEST12)	STATUS(Arrêt immédiat.)
QMNAME(DC110)	STATUS(Arrêt normal.)

dspmqr cert

- Parcourt la liste des QM, et liste le contenu du magasin correspondant
- S'il est présent dans le chemin par défaut
- Si il est de type cms
- S'il se nomme key.kdb

Sinon, il faut passer des paramètres



Variable d'environnement

`KBPASS_<nom_QM>=<mot_de_passe_du_mag>`

Si :

- le magasin est de type pkcs12
- il est présent dans le chemin par défaut
- il se nomme key.p12

Exemple

`KBPASS_QM1=passw0rd`

`dspmqcert -m QM1`

....

...



Fichier de configuration ini

- Contient
 - le chemin du magasin
 - le nom du magasin
 - Le mot de passe du magasin si pkcs12

- Exemple :

```
DC101:  
  path=H:\DemeyConsulting\mags\mag2503_DC101.p12  
  passwd=mqseries  
  
DC102:  
  path=H:\DemeyConsulting\mags\mag2503_DC102.p12  
  passwd=mqseries
```



Fichier de configuration ini

dspmqcert -f H:\DemeyConsulting\dspmqcert\dspmqcert.ini

Queue Manager Name: DC101

Label: DC101

Type: End entity

Version: 3

Serial: 2f

Subject: CN=DC101,OU=TP MQ 2024,O=Demey Consulting,L=Paris,C=FR

Issuer: CN=CA_OFDC_2021_A,EMAIL=pki_of21@demey-consulting.fr,OU=Infra,O=PKI OF DC,L=Paris,C=FR

Keystore Path: H:\DemeyConsulting\mags\mag2503_DC101.p12

Key Size: 2048

Not Before: 2024-10-01 17:58:05

Not After: 2025-11-17 16:58:05

Expiry Days: 223

Queue Manager Name: DC102

Label: DC102

Type: End entity

Version: 3

Serial: 30

....

Queue Manager Name: DC103

Label: DC103

Type: End entity

Version: 3

Serial: 28

...



Fichier de configuration ini

Chiffrement automatique des mots de passe après utilisation

Contenu du fichier après dspmqcert :

DC101:

`path=H:\DemeyConsulting\mags\mag2503_DC101.p12`

`passwd=<QM>!2!Rx43qzTsNQACnULgexMyVEJPcU7Dvt2HeA0i0tHZdVo=!eBNivEgz83YWWTURapMwhA==`

DC102:

`path=H:\DemeyConsulting\mags\mag2503_DC102.p12`

`passwd=<QM>!2!P8z1J7VWAg0qKA+yMPoNxMGRJF7YJ/j8LkzmcYzPnyY=!akDkEj48n6HF3ufSYOFYPQ==`

DC103:

`path=D:\MQ_data\gmgrs\DC103\ssl\key.kdb`

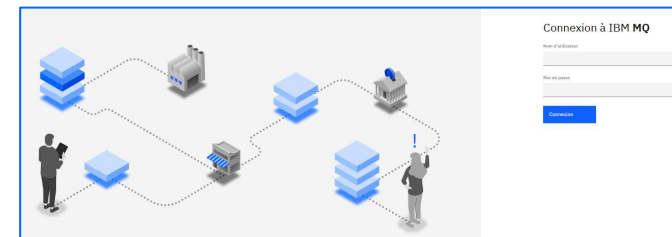


MQ Console



MQ Console

- Outil GUI d'administration MQ
 - Client léger
 - Serveur mqweb
- Initialement :
 - Visualisation du ou des QM locaux rattachés à la même installation
 - Fonctions limitées, mais amélioration continue
- Récemment :
 - Nombreuses améliorations
 - Support des QM distants
 - mqweb serveur standalone (Linux)
- MQ Version 9.4.2
 - Queue Manager Dashboard
 - Personnalisation des colonnes



Rappel : MQ Explorer est « stabilisé » → maintenu mais plus de nouvelles fonctions



IBM MQ

C'est parti...

Gestion

Vos gestionnaires de files d'attente (3)

En cours de fonctionnement 3

Arrêté 0

Déconnecté 0

Création d'un gestionnaire de files d'attente

Les gestionnaires de files d'attente sont des moteurs MQ qui hébergent vos ressources de messagerie, telles que des files d'attente et des rubriques.

Gestion

Gestionnaires de files d'attente

Gestionnaires de files d'attente éloignées

Gestionnaires de files d'attente locaux

3 gestionnaires de files d'attente chargé(s) sur 3

Ici, vous pouvez afficher et gérer tous les gestionnaires de files d'attente colocalisés avec cette instance de la console MQ.

Créer

Nom unique ↑	Statut	
DC601	En cours de fonctionnement	⋮
DC6Q1	En cours de fonctionnement	⋮
DC6Q2	En cours de fonctionnement	⋮

Éléments par page : 10

1 à 3 éléments sur 3

1 sur 1 pages

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French MQ User Group - Avril 2025

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Gestion / **Gestionnaire de files d'attente : DC6Q1** [Afficher la configuration](#)

Présentation Files d'attente Événements Applications **Réseau MQ** Unix 9.4.2.0

Dernière mise à jour : il y a quelques secondes

Présentation
Gestionnaires de files d'attente connectés
Canaux de gestionnaire de file d'attente
Instances de canal de gestionnaire de files d'attente

Running queue manager channel instances
4
4 canaux définis par l'utilisateur
0 instances de canal arrêtées

Connected queue managers
1
0 gestionnaires de files d'attente de cluster

Cluster membership
0

Failing queue manager channels
No failing queue manager channels

Longest message delays
No channels with long message delays

Unattended transmission queues
No unattended transmission queues

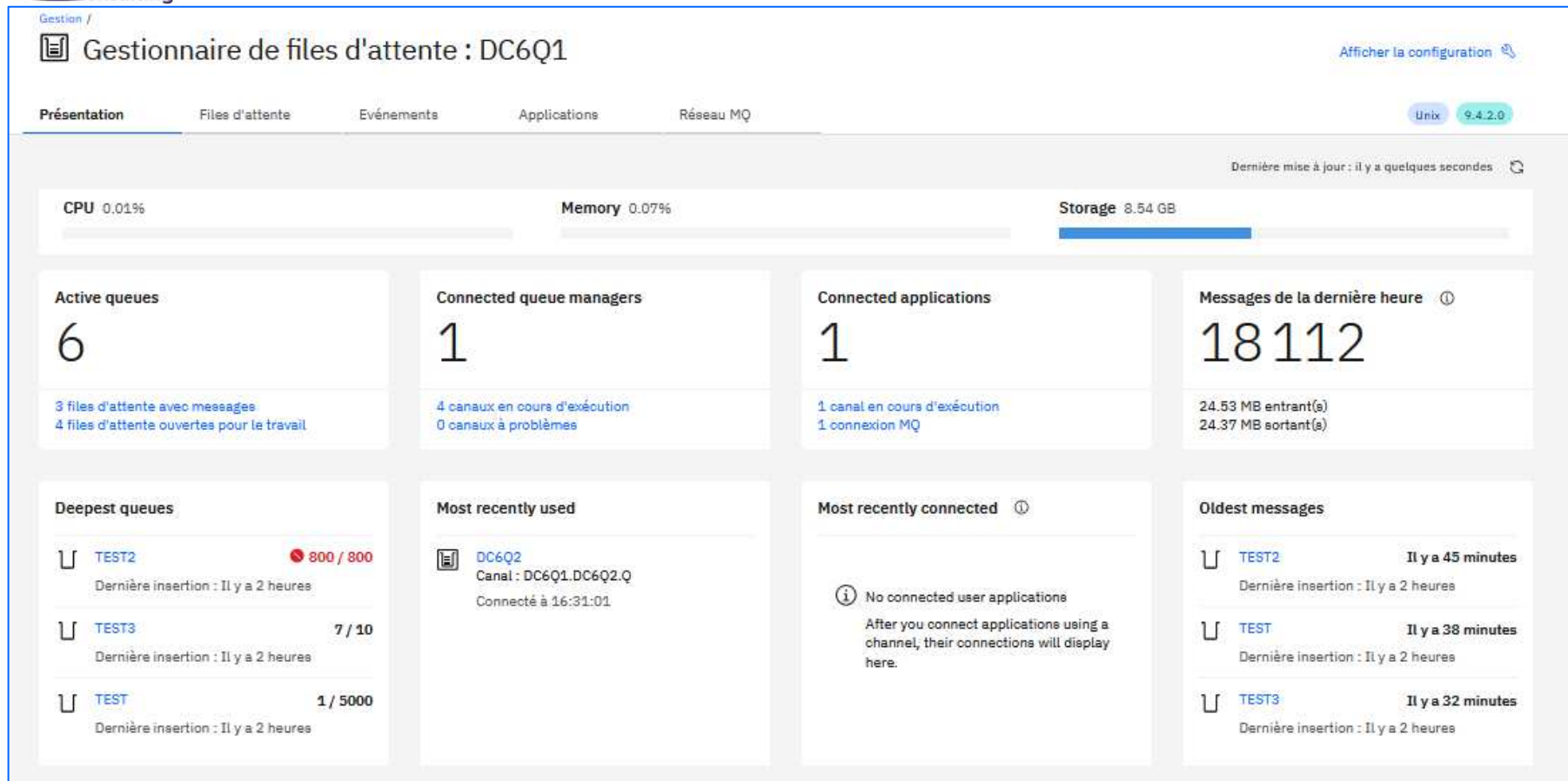
Remote connection versions

Version	Queue managers
9.4.2.0	1

Queue manager channel security

Protocol	Channels
1.3	1

Listeners
2
1 de programmes d'écoute en cours d'exécution





Gestion /

Gestionnaire de files d'attente : DC6Q1

Afficher la configuration

Présentation **Files d'attente** Événements Applications Réseau MQ

Unix 9.4.2.0

1

Longueur de file d'attente - saturée

1 défini par l'utilisateur
0 files d'attente système

1

Longueur de file d'attente - avertissement

1 défini par l'utilisateur
0 files d'attente système

58

Longueur de file d'attente - normale

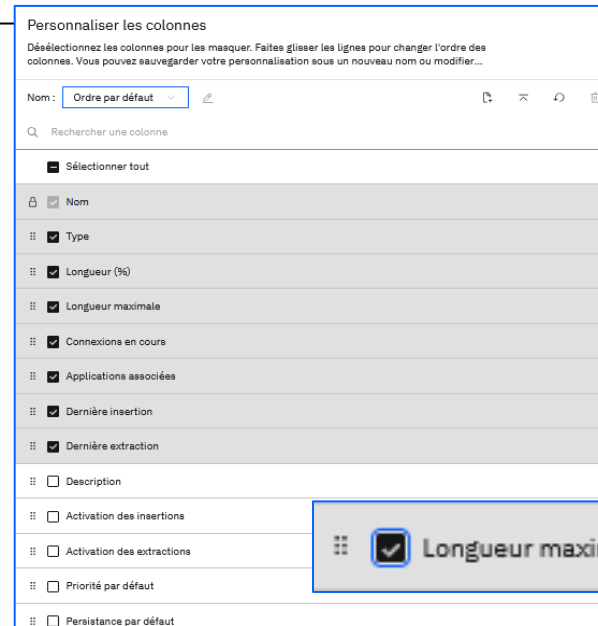
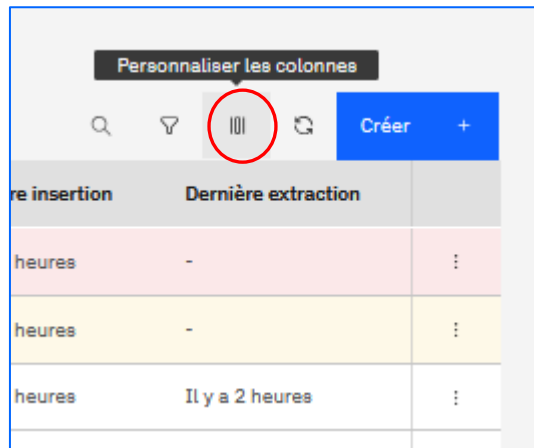
7 défini par l'utilisateur
51 files d'attente système

Rechercher des files d'attente

Nom	Type	Longueur (%) ↓	Longueur maximale	Connexions en cours	Applications associées	Dernière insertion	Dernière extraction
TEST2	Locale	100% ●	800/800	Entrée 0, sortie 0	-	Il y a 2 heures	-
TEST3	Locale	70% ▲	7/10	Entrée 0, sortie 1	amqspu	Il y a 2 heures	-
TEST	Locale	0%	1/5000	Entrée 0, sortie 0	-	Il y a 2 heures	Il y a 2 heures

Eléments par page : 10 1 à 3 éléments sur 3

1 sur 1 pages



Nom	Type	Longueur (%)	Longueur maximale	Connexions en cours	Applications associées	Dernière insertion	Dernière extraction	Longueur maximale des messages	
TEST2	Locale	100%	800/800	Entrée 0, sortie 0	-	Il y a 3 heures	-	4194304	:
TEST3	Locale	70%	7/10	Entrée 0, sortie 1	amqsput	Il y a 3 heures	-	4194304	:
TEST	Locale	0%	1/5000	Entrée 0, sortie 0	-	Il y a 3 heures	Il y a 3 heures	4194304	:



Sondage

- Qu'utilisez-vous pour administrer votre réseau de QM ?
 - runmqsc
 - WRKMQM
 - MQ Explorer
 - MQ Console
 - Outils commerciaux ou OSS



Merci de votre attention



La formation avec Demey Consulting



- Un organisme de formation déclaré et Datadocké"
- Un catalogue de modules sur WebSphere Application Server et IBM MQ
- Plus de 50 modules MQ disponibles (1500 slides)
- Des supports de cours totalement francisés et au dernier niveau technique (MQ version 9.4.2)
- Des travaux pratiques sur Windows, Linux et IBM i avec les corrigés
- Des filières prédéfinies de 2 à 5 jours, ou à la carte.

<https://demey-consulting.fr/formationMQ>