



# STATISTIQUES MQ

Support pac MH04 et ELK (étape1)

Guide MQ du 15/03/2016



**01.** **Spécifications**

**02.** **Support Pac MH04**

**03.** **ELK**

**04.** **Dashboard obtenu**

# 01. Expression du **besoin**

## Existant

- Vingtaine de scripts
- REXX, CMD et macros Excel
- Exécution fréquente et besoin d'un ordonnanceur

⇒ Difficultés :

- ❖ Maintenance des scripts, des fichiers de configuration (liste des files d'attentes), monitoring exécution
- ❖ Actions manuelles mise en forme Excel des rapports

## Besoin

- Donner de la visibilité sur l'utilisation des files d'attentes
- « Reporting » pour le suivi technique et le management
- Quick Win, investissement en temps minimum et rendement maximum



# 02. IBM SupportPac MH04 – MQ Queue Statistics Tools

```
xmqqstab -c MYCHANNEL -m MYQMGR01 -r -q QL* -x "MYSERVER(1414)" > stats_MYQMGR01_201603.txt
```

## Options:

```
-b chl-tbl-name  Use the named client channel table
-c chl-name      Channel name for client connection
-l              Use the MQCHLTAB/MQCHLLIB environment variables
-m qmgr-name     Name of the queue manager hosting the queue(s)
-n              Display only queues with non-zero queue depth
-q q-list        List of queues to display statistics for
-r              Display and reset dequeue and enqueue counts
-u ciph-suite    Cipher suite for SSL connection
-v              Use the MQSERVER environment variable
-x conn-name     Connection name as host(port) for client connection
```

q-list: list of queue names separated by space

Wildcards \* and ? may be used for queue names. \* replaces one or more characters, ? replaces a single character.

# 02. Support Pac MH04



➤ Export obtenu : tableau dans un fichier texte **stats\_MYQMGR01\_201603.txt**

Report for queue(s) : 'QL\*' on queue manager 'MYQMGR01'...

CQD	PQF	MxQD	OIC	OUC	MDC	MEC	UNC	LGETDATE	LGETTIME	LPUTDATE	LPUTTIME	QOM	G	P	Local Queue Name
0	0,00%	500	0	0	0	0	0								E E - QL.XXX998
0	0,00%	500	0	0	0	0	0								E E - QL.YYY999
0	0,00%	500	0	0	0	0	0								E E - QL.ZZZ998
0	0,00%	5000	0	0	0	0	0	2016-02-02	17.02.13	2016-02-02	17.02.10				E E - QL.AAA002
0	0,00%	5000	1	0	0	0	0	2016-01-27	15.22.01	2016-01-27	15.22.01				E E - QL.BBB003
1817	0,91%	200000	0	0	0	0	0	2016-01-20	17.08.13	2016-01-22	11.16.15	13d	E	E	E - QL.CCC020
23	0,02%	100000	0	0	0	0	0			2016-01-25	16.57.24	21d	E	E	E - QL.DDD999

## Statistics displayed

CQD	Current queue depth	LGETDATE	Last GET date
PQF	Percentage queue full	LGETTIME	Last GET time
MxQD	Maximum queue depth	LPUTDATE	Last PUT date
OIC	Open input count	LPUTTIME	Last PUT time
OUC	Open output count	QOM	Oldest message age
MDC	Message dequeue count	G	GET enabled/disabled
MEC	Message enqueue count	P	PUT enabled/disabled
UNC	Number of uncommitted changes		

➤ Interprétation des colonnes

➤ Règles de parsing sur les types de données, les colonnes vides

# 03. ELK : Combinaison de 3 produits



# 03. Configuration Logstash

## Output

### Input

```
input {
  file {
    type => "MQ_STATS"
    path => "/tmp/stats_MYQMGR01_201603.txt"
    start_position => beginning
    since_db_path => "/tmp/stats_MYQMGR01_201603.txt.since_db"
  }
}
```

```
output {
  stdout { codec => rubydebug }
  elasticsearch {
    cluster => "xxx"
    index => "xxx"
    protocol => "http"
    port => "1234"
    host => "xxx.xxx.xxx.xxx"
  }
}
```

### Filter (extract)

```
filter {
  if [type] == "MQ_STATS" {
    grok {
      match => ["message",
        "%{SPACE:ignore}%{NUMBER:CQD}%{SPACE:ignore}%{NOTSPACE:PQF}\\%%{SPACE:ignore}%{NUMBER:MxQD}%{SPACE:ignore}%{NUMBER:OIC}%{SPACE:ignore}%{NUMBER:OUC}%{SPACE:ignore}%{NUMBER:MDC}%{SPACE:ignore}%{NUMBER:MEC}%{SPACE:ignore}%{NUMBER:UNC}%{SPACE:ignore}%{NOTSPACE:QOM}}?%{NOTSPACE:G} %{NOTSPACE:P} \\- %{NOTSPACE:localQueueName}", "message",
        "%{SPACE:ignore}%{NUMBER:CQD}%{SPACE:ignore}%{NOTSPACE:PQF}\\%%{SPACE:ignore}%{NUMBER:MxQD}%{SPACE:ignore}%{NUMBER:OIC}%{SPACE:ignore}%{NUMBER:OUC}%{SPACE:ignore}%{NUMBER:MDC}%{SPACE:ignore}%{NUMBER:MEC}%{SPACE:ignore}%{NUMBER:UNC}%{SPACE:ignore}(%{YEAR}\\-%{MONTHNUM}\\-%{MONTHDAY} %{HOUR}\\,%{MINUTE}\\,%{SECOND}) (%{YEAR}\\-%{MONTHNUM}\\-%{MONTHDAY}"/>

```

# 04. Dashboard obtenu

The screenshot shows a Kibana dashboard interface. At the top, the title is 'Dashboard MQ'. Below the title, there are sections for 'QUERY' and 'FILTERING'. The 'FILTERING' section contains three filter rules:

- field must not be: field: tags, query: ("\_grokparsefailure")
- time must be: field: @timestamp, from: now-7d, to: now
- time must be: field: @timestamp, from: now-12h, to: now

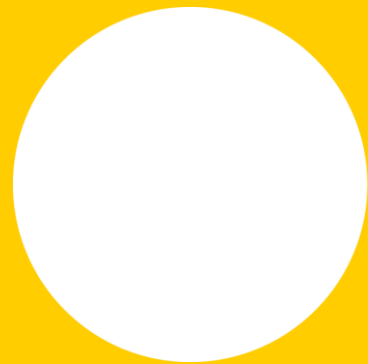
The main part of the dashboard is a 'DOCUMENTS' table. The table has 13 columns: CQD, POF, MxQD, OIC, OUC, MDC, MEC, UNC, lgeDateTime, lpsDateTime, QOM, G, P, and localQueueName. The table displays 24 rows of data. The first 23 rows have a 'CQD' value of 0, while the 24th row has a 'CQD' value of 1817. The 'localQueueName' column shows values like QLA, QLB, QLC, and QLF.

CQD	POF	MxQD	OIC	OUC	MDC	MEC	UNC	lgeDateTime	lpsDateTime	QOM	G	P	localQueueName
0	0,00	500	0	0	0	0	0				E	E	QLA
0	0,00	500	0	0	0	0	0				E	E	QLA
0	0,00	500	0	0	0	0	0				E	E	QLA
0	0,00	500	0	0	0	0	0				E	E	QLA
0	0,00	500	1	0	0	0	0	2016-02-04 10.24.09	2016-02-04 10.23.10		E	E	QLA
0	0,00	500	0	0	0	0	0				E	E	QLA
0	0,00	500	0	0	0	0	0				E	E	QLA
3	0,60	500	0	0	0	0	0		2016-01-20 10.02.15	21d	E	E	QLA
0	0,00	500	0	0	0	0	0				E	E	QLA
0	0,00	5000	0	0	0	0	0				E	E	QLB
0	0,00	100	1	0	0	0	0	2016-01-25 10.42.35	2016-01-25 10.42.34		E	E	QLB
0	0,00	5000	0	0	0	0	0				E	E	QLB
0	0,00	5000	0	0	0	0	0				E	E	QLC
0	0,00	5000	0	0	0	0	0				E	E	QLC
0	0,00	500	0	0	0	0	0				E	E	QLC
0	0,00	5000	0	0	0	0	0				E	E	QLC
11	0,22	5000	0	0	0	0	0		2016-01-14 14.04.16	21d	E	E	QLC
0	0,00	5000	0	0	0	0	0	2016-02-02 17.02.13	2016-02-02 17.02.10		E	E	QLB
0	0,00	5000	1	0	0	0	0	2016-01-27 15.22.01	2016-01-27 15.22.01		E	E	QLB
1817	0,91	200000	0	0	0	0	0	2016-01-20 17.08.13	2016-01-22 11.16.15	13d	E	E	QLB
23	0,02	100000	0	0	0	0	0		2016-01-25 16.57.24	21d	E	E	QLB
0	0,00	80	0	0	0	0	0				E	E	QLF



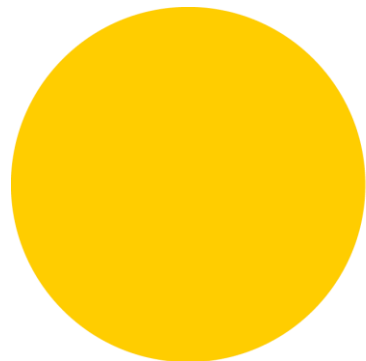
**Merci,  
des idées, suggestions,...?**





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