

# Migration of MQMFT Configuration and Command QM

**Description:** MFT Configuration and log details of *agents* and *loggers* are maintained in the configuration Queue manager path. So while the migration of configuration QM from the existing one to the new one, these config and logs folders should be copied to the new Configuration QM path.

Detailed explanation of the same is as follows:

## Migration steps of MQMFT Configuration QMgr:

- *Stop all the Agents*

```
[root@localhost bin]# ./fteStopAgent AG_DR_121_01
5724-H72 Copyright IBM Corp. 2008, 2018.  ALL RIGHTS RESERVED
BFGPR0127W: No credentials file has been specified to connect to IBM MQ. Therefore, the assumption is that IBM MQ authentication has been disabled.
BFGCL0468I: Issuing stop request to agent 'AG_DR_121_01'. The command will wait for the agent to stop. The agent will stop only when all current transfers have completed.
BFGCL0553I: The agent has processed the stop request and will end when all current transfers have completed.
[root@localhost bin]# ./fteListAgents
5724-H72 Copyright IBM Corp. 2008, 2018.  ALL RIGHTS RESERVED
BFGPR0127W: No credentials file has been specified to connect to IBM MQ. Therefore, the assumption is that IBM MQ authentication has been disabled.

Command executed at 2019-02-28 07:46:26 EDT

Coordination queue manager time 2019-02-28 12:46:26 UTC

Agent Name:      Queue Manager Name:  Status:  Status Age:
AG_DR_121_01    DR12103                STOPPED  0:00:11
[root@localhost bin]#
```

- *Add proposed configuration Qmgr(DR12101) to the MFT QMGRs cluster (FTECLUSTER).*

```
display clusqmgr(DR12101) cluster(FTECLUSTER)
  4 : display clusqmgr(DR12101) cluster(FTECLUSTER)
AMQ8441I: Display Cluster Queue Manager details.
  CLUSQMGR(DR12101)                ALTDATE(2018-11-08)
  ALTTIME(10.10.30)                BATCHHB(0)
  BATCHINT(0)                      BATCHLIM(5000)
  BATCHSZ(50)                     CHANNEL(TO.DR12101)
  CLUSDATE(2018-11-08)            CLUSTER(FTECLUSTER)
  CLUSTIME(10.10.30)              CLWLPRTY(0)
  CLWLRANK(0)                     CLWLWGHT(50)
  COMPHDR(NONE)                   COMPMMSG(NONE)

display clusqmgr(DR12104)
  2 : display clusqmgr(DR12104)
AMQ8441I: Display Cluster Queue Manager details.
  CLUSQMGR(DR12104)                ALTDATE(2019-02-01)
  ALTTIME(10.39.56)                BATCHHB(0)
  BATCHINT(0)                      BATCHLIM(5000)
  BATCHSZ(50)                     CHANNEL(TO.DR12104)
  CLUSDATE(2019-02-01)            CLUSTER(FTECLUSTER)
  CLUSTIME(10.39.56)              CLWLPRTY(0)
  CLWLRANK(0)                     CLWLWGHT(50)
```

- *Change the configuration Queue manager to the proposed Qmgr by using the following command.*  
*./fteSetupCoordination -coordinationQMGr <ProposedConfigQM> -default -f.*

```
[root@localhost bin]# ./freSetupCoordination -coordinationQmgr DR12101 -default -f
5724-H72 Copyright IBM Corp. 2008, 2018. ALL RIGHTS RESERVED
BFGCM0242I: Direct the following MQSC definitions for your coordination queue manager 'DR12101' to an MQSC session if you have not already done so.

DEFINE TOPIC('SYSTEM.FTE') TOPICSTR('SYSTEM.FTE') REPLACE
ALTER TOPIC('SYSTEM.FTE') NMSGDLV(ALLAVAIL) PMSGDLV(ALLAVAIL)
DEFINE QLOCAL('SYSTEM.FTE') LIKE(SYSTEM.BROKER.DEFAULT.STREAM) REPLACE
ALTER QLOCAL('SYSTEM.FTE') DESCR('Stream for MQMFT Pub/Sub interface')
* Altering namelist: SYSTEM.QPUBSUB.QUEUE.NAMELIST
* Value prior to alteration:
DISPLAY NAMELIST(SYSTEM.QPUBSUB.QUEUE.NAMELIST)
ALTER NAMELIST(SYSTEM.QPUBSUB.QUEUE.NAMELIST) +
  NAMES(SYSTEM.BROKER.DEFAULT.STREAM+
    /SYSTEM.BROKER.ADMIN.STREAM,SYSTEM.FTE)
* Altering PSMODE. Value prior to alteration:
DISPLAY QMGR PSMODE
ALTER QMGR PSMODE(ENABLED)

BFGCM0243I: A file has been created that contains the MQSC definitions for your coordination queue manager. The file can be found here: '/var/mqm/mqft/config/DR12101/DR12101.mqsc'.
[root@localhost bin]#
```

- Create the folder named “agents” in the new configuration QM path (/var/mqm/mqft/config/DR12101).

```
[root@localhost DR12101]# ls -ltr
total 12
-rw-rw-r--. 1 root mqm 55 Nov 8 11:42 command.properties
drwxr-sr-x. 3 root mqm 25 Feb 27 07:46 agents
-rw-rw-r--. 1 root mqm 57 Feb 27 07:50 coordination.properties
-rw-rw-r--. 1 root mqm 607 Feb 27 07:50 DR12101.mqsc
```

- Copy all the config folders present under the agents directory of old Configuration QM to the new Configuration QM path along with the sub-folders and files. (/var/mqm/mqft/config/DR12101/agents).

```
[root@localhost DR12101]# cd /var/mqm/mqft/config/DR12101/agents/
[root@localhost agents]# ls -ltr
total 4
drwxr-sr-x. 3 root mqm 4096 Feb 27 07:48 AG_DR_121_01
[root@localhost agents]# cd AG_DR_121_01/
[root@localhost AG_DR_121_01]# ls -ltr
total 20
-rw-r--r--. 1 root mqm 133 Feb 27 07:48 agent.properties
-rw-r--r--. 1 root mqm 1017 Feb 27 07:48 AG_DR_121_01_delete.mqsc
-rw-r--r--. 1 root mqm 2638 Feb 27 07:48 AG_DR_121_01_create.mqsc
-rw-r--r--. 1 root mqm 6547 Feb 27 07:48 UserSandboxes.xml
drwxr-sr-x. 2 root mqm 6 Feb 27 07:48 exits
[root@localhost AG_DR_121_01]#
```

- Copy all the logs folders present in the agents directory of old Configuration QM to the new Configuration QM path along with the sub-folders and files. (/var/mqm/mqft/logs/DR12101/agents/AG\_DR\_121\_01/logs).

```
[root@localhost AG_DR_121_01]# cd /var/mqm/mqft/logs/DR12101/agents/logs
-bash: cd: /var/mqm/mqft/logs/DR12101/agents/logs: No such file or directory
[root@localhost AG_DR_121_01]# cd /var/mqm/mqft/logs/DR12101/agents/
[root@localhost agents]# ls -ltr
total 0
drwxrwsrwx. 3 root mqm 85 Feb 28 08:11 AG_DR_121_01
[root@localhost agents]# cd AG_DR_121_01/
[root@localhost AG_DR_121_01]# ls -ltr
total 12
-rw-rw-rw-. 1 root mqm 5 Feb 28 08:11 mqmftpc.pid
-rw-rw-r--. 1 root mqm 0 Feb 28 08:11 agent.lck
-rw-rw-r--. 1 root mqm 5 Feb 28 08:11 agent.pid
-rw-rw-rw-. 1 root mqm 0 Feb 28 08:11 mqmftpc.lck
drwxrwsrwx. 3 root mqm 4096 Feb 28 08:11 logs
```

- Start all the agents in pairs and check whether the agents are started properly. Also check if the corresponding monitors and scheduled transfers are started.

```
[root@localhost bin]# ./fteStartAgent AG_DR_121_01
5724-H72 Copyright IBM Corp. 2008, 2018. ALL RIGHTS RESERVED
BFGCL0030I: The request to start agent 'AG_DR_121_01' on this machine has been submitted.
BFGCL0031I: Agent log files located at: /var/mqm/mqft/logs/DR12101/agents/AG_DR_121_01/logs

[root@localhost bin]# ./fteListMonitors -v
5724-H72 Copyright IBM Corp. 2008, 2018. ALL RIGHTS RESERVED
BFGPR0127W: No credentials file has been specified to connect to IBM MQ. Therefore, the assumption is that IBM MQ authentication has been disabled.
Monitor Information:
  Name:          DR_121_0001
  Agent:         AG_DR_121_01
  Status:        Started
  Resource Type: Directory
  Resource:      /mnt/MFTDR/EMEA/DR0001/src_eai_in
  Poll interval: 1 minutes
  Batch size:    1
  Condition:     Match
  Pattern:       *.ready (wildcard)
[root@localhost bin]#

[root@localhost bin]# ./fteListAgents
5724-H72 Copyright IBM Corp. 2008, 2018. ALL RIGHTS RESERVED
BFGPR0127W: No credentials file has been specified to connect to IBM MQ. Therefore, the assumption is that IBM MQ authentication has been disabled.

Command executed at 2019-02-28 08:42:45 EDT

Coordination queue manager time 2019-02-28 13:42:45 UTC

Agent Name:      Queue Manager Name:  Status:      Status Age:
AG_DR_121_01    DR12103          READY        0:01:27
```

*After this step all the MFT monitors and scheduled transfers should be up and running.*

### Migration steps of MQMFT Command QMgr:

- *Change the command queue manager using the following command.*  
`./fteSetupCommands -connectionQMgr <proposedNewCommandQMgr> -f.`

```
[root@localhost bin]# ./fteSetupCommands -connectionQMgr DR12102 -f
5724-H72 Copyright IBM Corp. 2008, 2018. ALL RIGHTS RESERVED
BFGCL0245I: The file '/var/mqm/mqft/config/DR12101/command.properties' has been created successfully.
[root@localhost bin]# cat /var/mqm/mqft/config/DR12101/command.properties
#
#Thu Feb 28 10:04:55 EST 2019
connectionQMgr=DR12102
[root@localhost bin]#
```