

*Announce MQ version 9.0.5 CD*

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Guide MQ 27/03/2018

# IBM MQ version 9.0.5 CD

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## Rappels MQ 904

- MQ 9 CD disponible sur AIX à partir de MQ 904
- Nouvelle solution de HA : Replicated Data Queue Managers **HA**
- REST Messaging
- Blockchain Bridge
- Salesforce Bridge
- Améliorations REST Admin
- Gateway REST Admin
- Nouveautés errors logs
- Nouveautés recovery logs
- SAN support pour MQ Appliance
- Améliorations CHLAUTH/CONNAUTH

## Nouveautés MQ 905

- Replicated Data Queue Managers **DR** (MQ Advanced)
- MFT Rest APIs (MQ Advanced)
- Minor changes
- MQ on the Cloud

## Minor Changes

- Nouvel attribut QMGR : ADVCAP(ENABLED)
- Nouvel attribut pour désactiver TLS v1.0 sur un Queue Manager
  - Dans qm.ini
  - SSL:  
`AllowTLSV1=NO`
- BluemixRegistration stanza renamed to ReportingService stanza
  - Dans qm.ini
  - ReportingService:  
`APIKey = apikey Service`  
`URL = service_url`  
`Serviceproxy=optional_value_for_the_proxy_to_the_BlueMix_service`

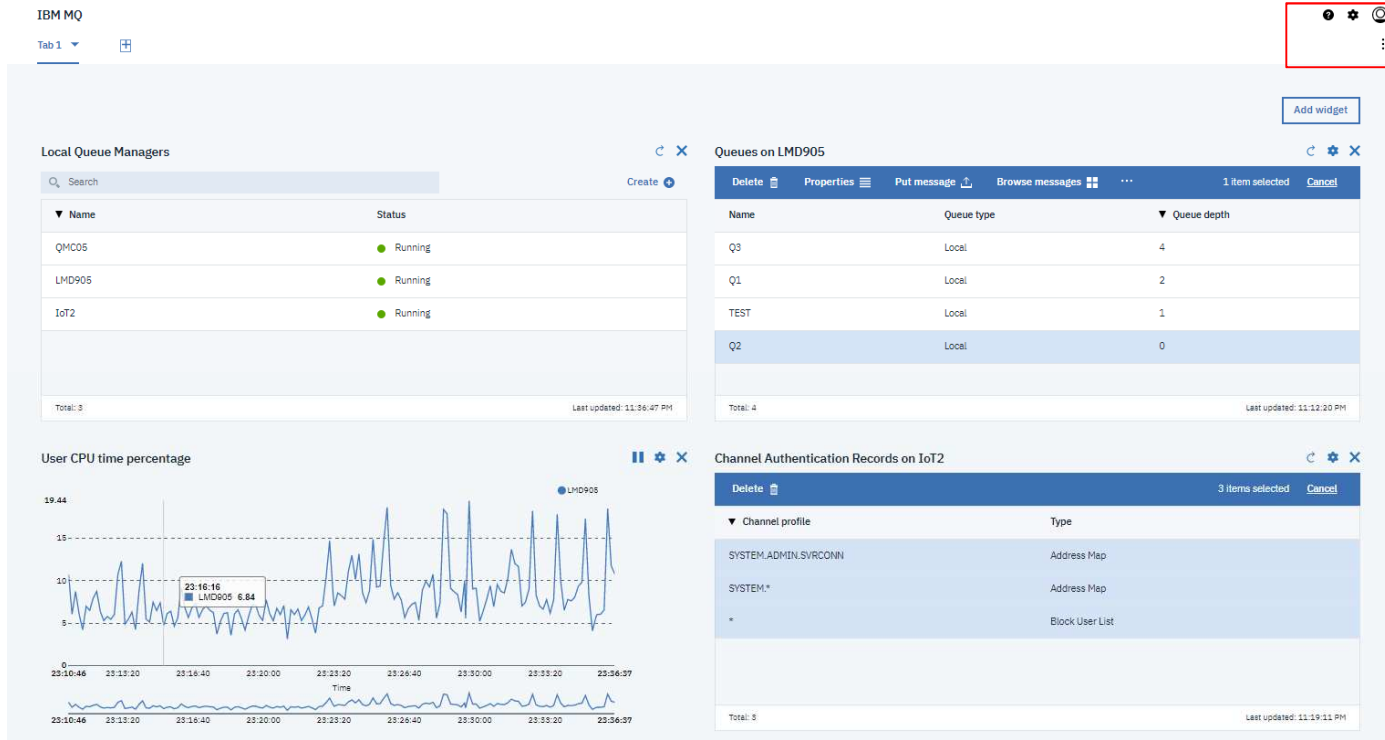
## Minor Changes

- Implicit syncpoint :
  - Enables persistent messages put outside of syncpoint to perform better when multiple applications are using the same queue.
  - To optimize performance, the default setting is to implicitly put all persistent messages in syncpoint, if two or more applications have a queue open.
- MQ can query LDAP by using short names for group members.
- Listener AMQP activé par défaut

## Changements REST API

- Simplification de la protection Cross-Site Request Forgery (CSRF)
  - Suppression du csrfToken
  - Dans le header http, le `ibm-mq-rest-csrf-token` peut être vide
- Article developerWorks de Matt Leming :  
<https://developer.ibm.com/messaging/2018/03/20/changes-csrf-protection-mq-rest-api-9-0-5/>

# MQ Console



The screenshot displays the IBM MQ Console interface with several panels:

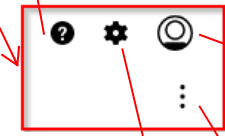
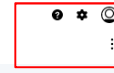
- Local Queue Managers:** A table listing queue managers and their status.
 

Name	Status
QMCO5	Running
LMD905	Running
IoT2	Running
- Queues on LMD905:** A table listing queues and their depth.
 

Name	Queue type	Queue depth
Q3	Local	4
Q1	Local	2
TEST	Local	1
Q2	Local	0
- User CPU time percentage:** A line graph showing CPU usage over time for LMD905. A data point is highlighted at 23:16:16 with a value of 6.84.
- Channel Authentication Records on IoT2:** A table listing channel profiles and their types.
 

Channel profile	Type
SYSTEM.ADMIN.SVRCONN	Address Map
SYSTEM.*	Address Map
*	Block User List

IBM Knowledge Center



About  
Logout

Import dashboard  
Export dashboard  
Reset dashboard

Settings

- Auto-refresh the queue manager list: **i**
  - Enable  Disable
- Messaging trace: **i**
  - Enable  Disable
- Browser trace: **i**
  - Enable  Disable

## Améliorations Appliance

- The floating IP option of the MQ Appliance high availability feature is improved by the ability to make use of aggregated IP interfaces, not tying this important feature to an individual physical network port. This update could improve reliability by removing a potential single point of failure.



## Changes AMS Z

- IBM MQ Advanced for z/OS Value Unit Edition
  - AMS : policy disponible au MQOPEN
    - Amélioration de perf pour AMS et non-AMS
  - Les clients JMS et Java d'un QM VUE peuvent utiliser AMS

## MFT REST APIs

- En plus des données disponibles via “SYSTEM.FTE/Agents/#”
- Deux nouveaux rôles :
  - MFTWebAdmin
  - MFTWebAdminRO
- Objets administrables en version 905 :
  - Agents status
  - Transfers status
- URL : [http\[s\]://hostname:port/ibmmq/rest/v1/admin/mft/](http[s]://hostname:port/ibmmq/rest/v1/admin/mft/)

## IBM MQ 9.0.5 for development

- MQ 905 Advance Dev est téléchargeable en :  
<https://developer.ibm.com/messaging/mq-downloads/>
- Pour
  - Windows
  - Linux x86-64
  - Ubuntu



### Developer Tools

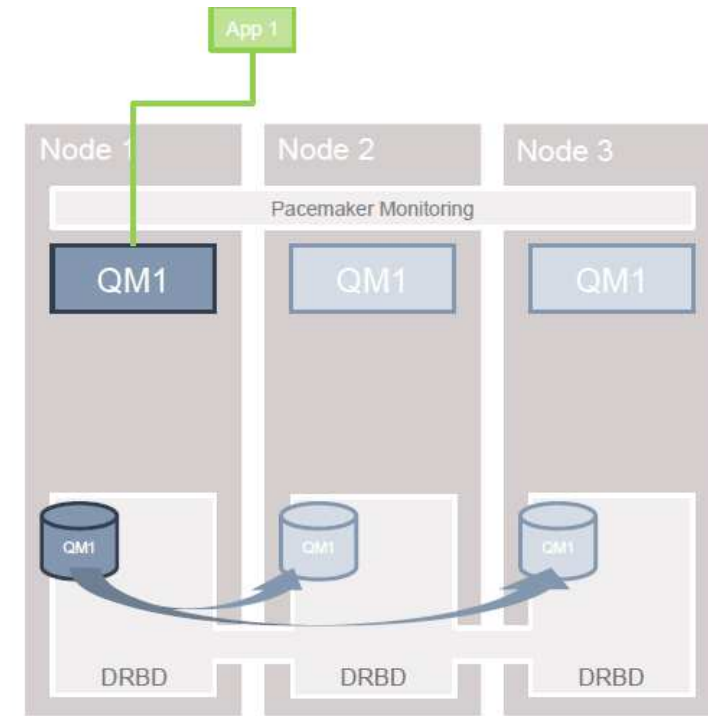
No cost non-production use downloads

#### MQ Advanced for Developers

- v9 Long Term Release- [Windows/ Linux](#)
- v9.0.5 – [Windows/Linux/ Ubuntu](#)

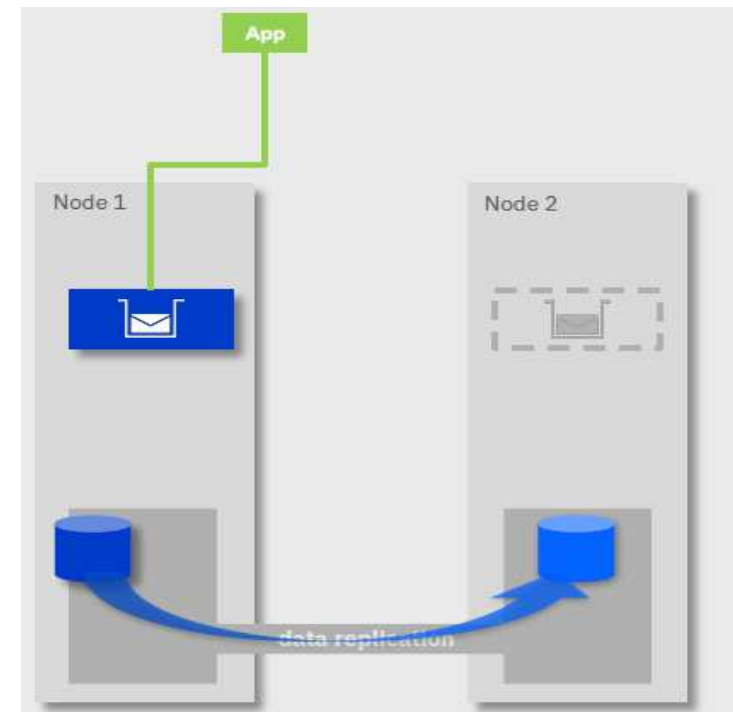
## V 904 : Replicated Data Queue Managers HA

- Linux RHEL V7.3 x86-64 en MQ 904 Advanced
- Stockage dans DRBD, gestion par Pacemaker
- Configuré par MQ
- Réplication synchrone des données
- 3 nodes nécessaires pour le quorum
- Bascule actif / passif automatique
- IP flottante pour chaque QM

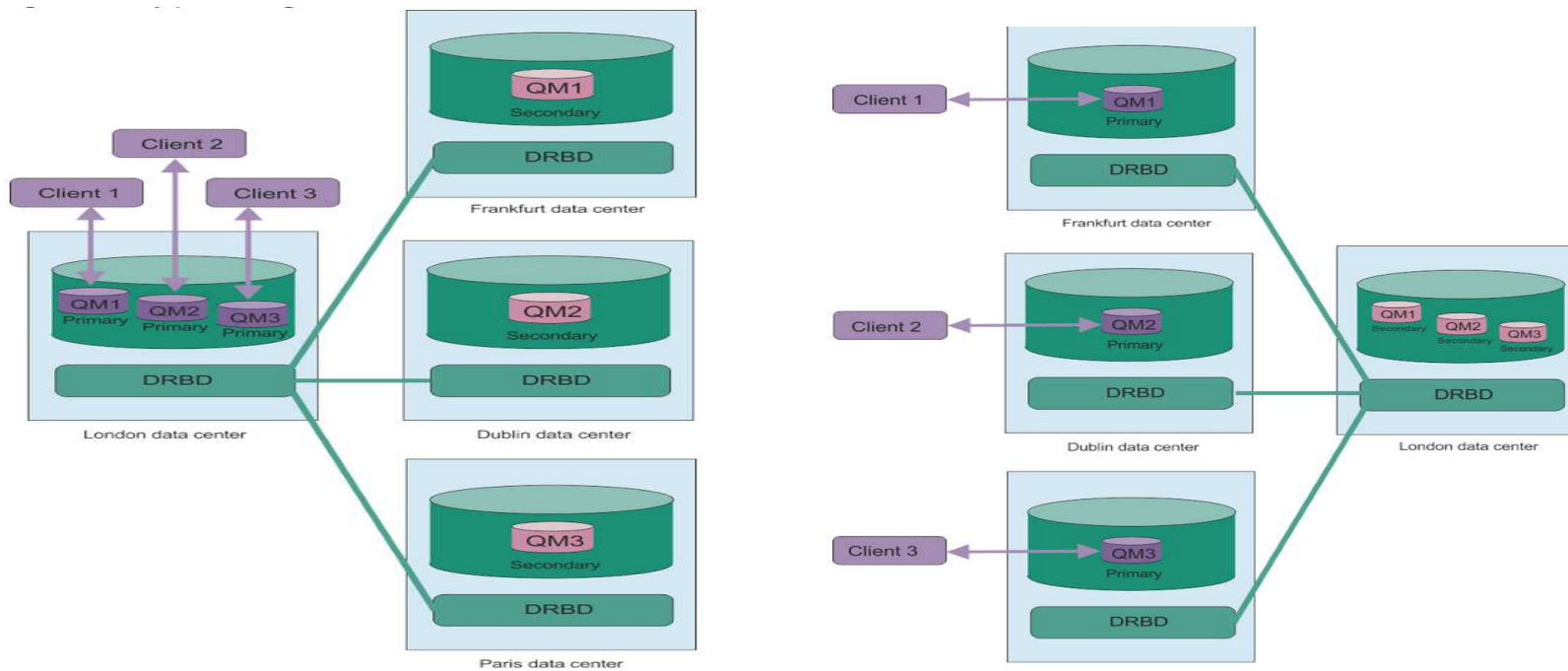


## V 905 : Replicated Data Queue Managers DR

- Linux RHEL V7.3 x86-64 en MQ 905 Advanced
- Même principe que RDQM HA mais bascule manuelle -> Disaster Recovery
- Stockage dans DRDB, gestion par Pacemaker
- Configuré par MQ
- Réplication synchrone ou asynchrone des données
- 2 nodes uniquement
- Utilisation du CONNAME multiple par les partenaires



# V 905 : Replicated Data Queue Managers DR



## Replicated Data Queue Managers DR : Installation

- Créer un volume group : drbdadm
- Installer le package MQSeriesRDQM-9.0.5-0.x86\_64.rpm situé dans MQServer/Advanced/RDQM
  - Script installRDQMsupport fourni
- Ouvrir les ports du firewall
  - `../samp/rdqm/firewalld/configure.sh`
- SELinux : semanage permissive
- Résoudre les dépendances

```
Error: Package: pacemaker-cli-1.1.15.linbit-2.0+20160622+e174ec8.e17.x86_64 (/pacemaker-cli-1.1.15.linbit-2.0+20160622+e174ec8.e17.x86_64)
  Requires: libnetsnmpagent.so.31() (64bit)
Error: Package: cluster-glue-1.0.12.linbit-2.0+20160321+103524e205ae.e17.x86_64 (/cluster-glue-1.0.12.linbit-2.0+20160321+103524e205ae.e17.x86_64)
  Requires: libOpenIPMIposix.so.0() (64bit)
Error: Package: pacemaker-1.1.15.linbit-2.0+20160622+e174ec8.e17.x86_64 (/pacemaker-1.1.15.linbit-2.0+20160622+e174ec8.e17.x86_64)
  Requires: libltdl.so.7() (64bit)
Error: Package: pacemaker-cli-1.1.15.linbit-2.0+20160622+e174ec8.e17.x86_64 (/pacemaker-cli-1.1.15.linbit-2.0+20160622+e174ec8.e17.x86_64)
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  Requires: perl-TimeDate
Error: Package: cluster-glue-1.0.12.linbit-2.0+20160321+103524e205ae.e17.x86_64 (/cluster-glue-1.0.12.linbit-2.0+20160321+103524e205ae.e17.x86_64)
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  Requires: libOpenIPMIutils.so.0() (64bit)
Error: Package: cluster-glue-1.0.12.linbit-2.0+20160321+103524e205ae.e17.x86_64 (/cluster-glue-1.0.12.linbit-2.0+20160321+103524e205ae.e17.x86_64)
  Requires: libnetsnmp.so.31() (64bit)
Error: Package: pacemaker-cluster-libs-1.1.15.linbit-2.0+20160622+e174ec8.e17.x86_64 (/pacemaker-cluster-libs-1.1.15.linbit-2.0+20160622+e174ec8.e17.x86_64)
  Requires: libltdl.so.7() (64bit)
Error: Package: pacemaker-cli-1.1.15.linbit-2.0+20160622+e174ec8.e17.x86_64 (/pacemaker-cli-1.1.15.linbit-2.0+20160622+e174ec8.e17.x86_64)
  Requires: libnetsnmp.so.31() (64bit)
Error: Package: heartbeat-libs-3.0.6.linbit-2.0+20160321+ac3d99da832d.e17.x86_64 (/heartbeat-libs-3.0.6.linbit-2.0+20160321+ac3d99da832d.e17.x86_64)
  Requires: libltdl.so.7() (64bit)
Error: Package: cluster-glue-libs-1.0.12.linbit-2.0+20160321+103524e205ae.e17.x86_64 (/cluster-glue-libs-1.0.12.linbit-2.0+20160321+103524e205ae.e17.x86_64)
  Requires: libltdl.so.7() (64bit)
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  Requires: libltdl.so.7() (64bit)
Error: Package: resource-agents-3.9.7.linbit-1.0+20160606+902bd05.e17.x86_64 (/resource-agents-3.9.7.linbit-1.0+20160606+902bd05.e17.x86_64)
  Requires: psmisc
Error: Package: crmsh-2.2.1.linbit-1.0+20160504+097bb0d.e17.x86_64 (/crmsh-2.2.1.linbit-1.0+20160504+097bb0d.e17.x86_64)
  Requires: PyYAML
Error: Package: cluster-glue-1.0.12.linbit-2.0+20160321+103524e205ae.e17.x86_64 (/cluster-glue-1.0.12.linbit-2.0+20160321+103524e205ae.e17.x86_64)
  Requires: libopenhpi.so.3() (64bit)
Error: Package: heartbeat-3.0.6.linbit-2.0+20160321+ac3d99da832d.e17.x86_64 (/heartbeat-3.0.6.linbit-2.0+20160321+ac3d99da832d.e17.x86_64)
  Requires: libltdl.so.7() (64bit)
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```



## Replicated Data Queue Managers DR : Configuration

- Node local :

```
crtmqm -rr p -rt a -rl DRLocalIP -ri DRRecoveryIP -rn  
DRRecoveryName -rp DRPort QMgrName
```

- Node Recovery

```
crtmqm -rr s -rt a -rl DRLocalIP -ri DRRecoveryIP -rn  
DRRecoveryName -rp DRPort QMgrName
```

## Replicated Data Queue Managers DR : Utilisation

- strmqm : démarrage QM
- rdqmstatus : status RDQM
- rdqmdr -m QM -s | p : bascule primaire / secondaire
  
- Easy Disaster Recovery with IBM MQ Advanced 9.0.5  
– MARK CAMPBELL, IBM

<https://developer.ibm.com/messaging/2018/03/23/easy-disaster-recovery-ibm-mq-advanced-9-0-5/>