IBM MQ V901
Continuous Delivery Release

IBM MQ

November 2016
Announce: 15th Nov
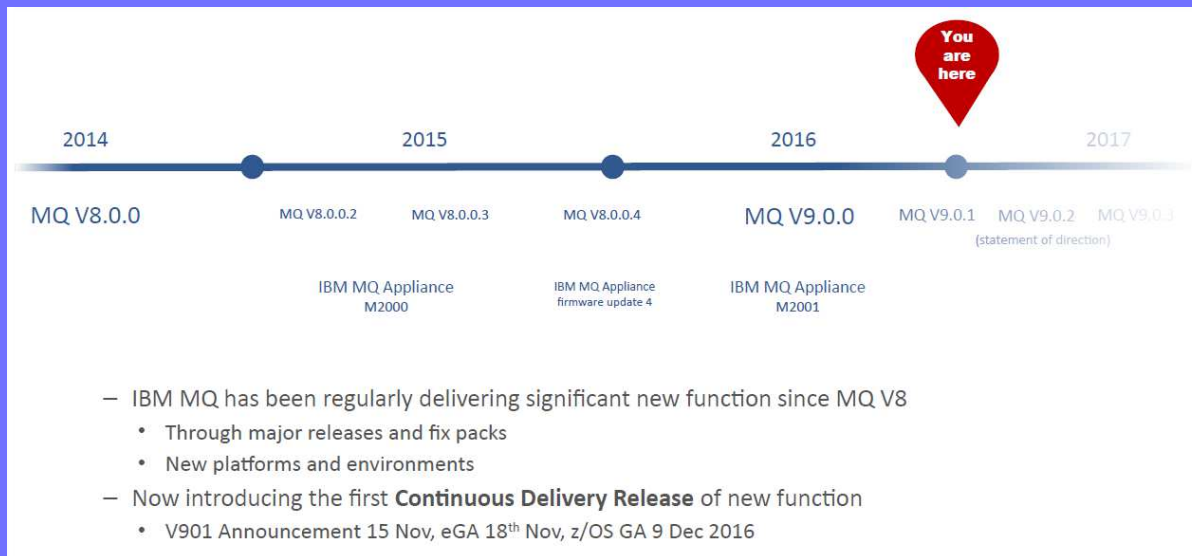## eGA: 18th Nov, zGA 9th Dec

Extrait du document IBM 2016MQV901Update

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Agenda

- IBM MQ Console
- Administrative REST API
- MFT Enhancements
- AMS Performance
- z/OS Connect Service Provider
- JMS for CICS Liberty

IBM MQ Deliveries

- IBM MQ has been regularly delivering significant new function since MQ V8
  - Through major releases and fix packs
  - New platforms and environments
- Now introducing the first **Continuous Delivery Release** of new function
  - V901 Announcement 15 Nov, eGA 18th Nov, z/OS GA 9 Dec 2016

IBM MQ Console

- New, optional, installable component
- Contains MQ Console, MQ Administrative REST API and their prereqs
  - WebSphere Liberty Profile

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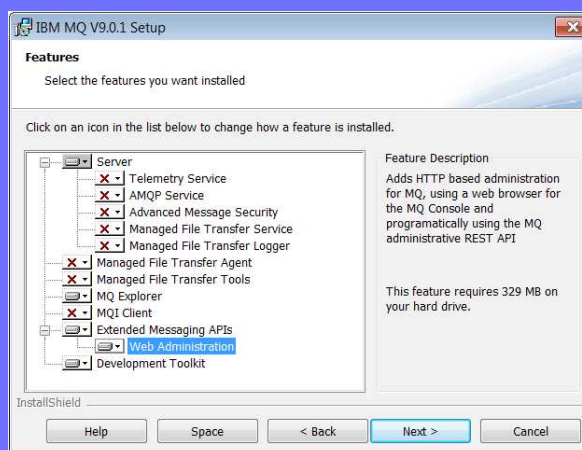
A picture tells a 1000 words
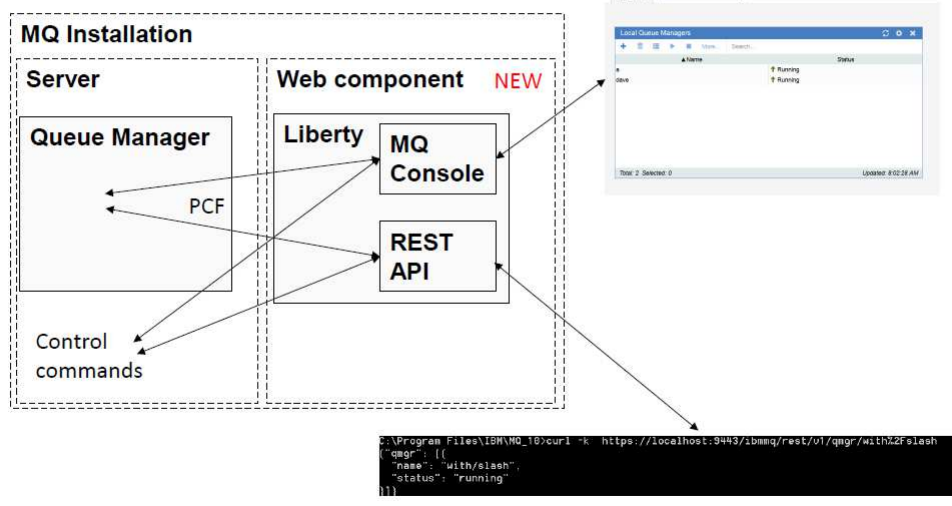
The mqweb server

- The MQ Console and REST API are applications that run in a
- WebSphere Liberty Profile (WLP) server called mqweb
  - WLP is provided as part of MQ install
  - mqweb server definition provided out of the box when installing the webcomponent
- Out of the box:
  - MQ Console is enabled
  - REST API is disabled
  - HTTPS only, on localhost only
  - Locked down, users need to be defined in order to login

Configuring mqweb server

- Currently done by editing xml (standard WLP approach)
  - File called mqwebuser.xml provided in MQ data directory
  - This is the only part of the WLP configuration that we support customers editing :

```xml
<!--
    Sample mqwebuser.xml file, included by server.xml, to contain user
    configuration for the mqweb server.
-->

<server>
    <featureManager>
        <feature>appSecurity-2.0</feature>
    </featureManager>
    <basicRegistry id="basic" realm="defaultRealm">
<!--
    Default configuration allows no user access, refer to the IBM Knowledge Center
    section on "IBM MQ Console and REST API security" for details of how
    to configure security.
-->
    </basicRegistry>
</server>
```

Configuring mqweb server

- Before use need to allow users to log in
  - Select user registry: basic, LDAP, SAF
    - Samples of first two provided
  - Define users and groups
  - Assign to roles
    - MQWebAdmin - runs as member of mqm group: read/write access
    - MQWebAdminRO - runs as member of mqm group: read-only access
    - MQWebUser – access allowed as per OAM/RACF
- Usually also need to consider
  - TLS configuration
    - Self signed certificates automatically defined
  - HTTPS port
    - Defaults to 9443
- Hostname
  - Defaults to local host only

Managing mqweb server - distributed

- Three new control commands
  - All build on WLP server command
- strmqweb

```
C:\Program Files\IBM\MQ_10\bin>strmqweb
Starting server mqweb.
Server mqweb started.
```

- endmqweb

```
C:\Program Files\IBM\MQ_10\bin>endmqweb.bat
Stopping server mqweb.
Server mqweb stopped.
```

- dspmqweb

```
C:\Program Files\IBM\MQ_10\bin>dspmqweb.bat
Server mqweb is running.
URLs:
    https://localhost:9443/ibmmq/console/
    https://localhost:9443/ibmmq/rest/v1/
```

MQ Console

- Browser based interface for administering and managing MQ
  - No client side install needed
- Common capability across Appliance and software MQ
  - Re-engineered on AngularJS so different browser code than on 8.0.0.* Appliance
  - Functional parity with MQ Console in 8.0.0.* Appliance
- Some capabilities currently restricted on z/OS
  - Can't create/delete/start/stop queue managers etc
- All capabilities restricted to queue managers associated with a specific 9.0.1 CD installation
  - On z/OS all queue managers at 9.0.1 CD level

MQ Console - log in & add widgets
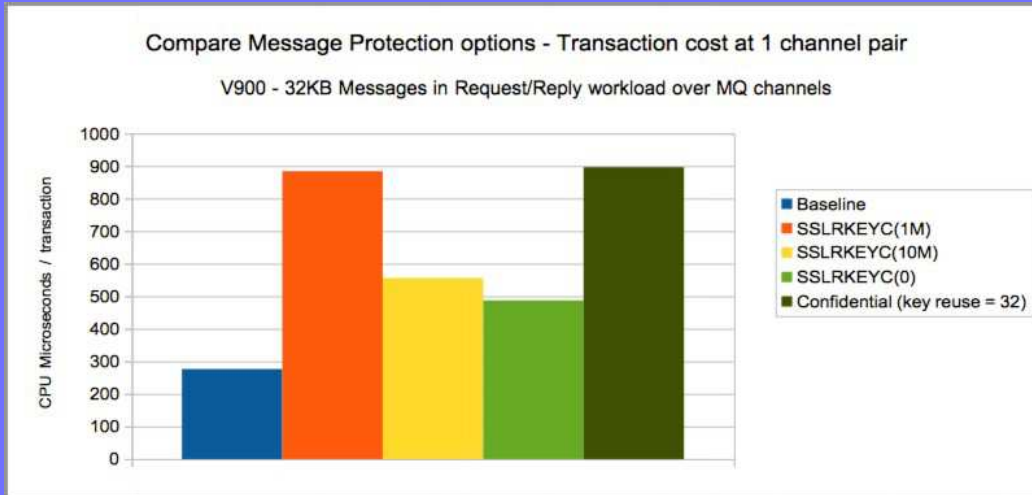

MQ Console - manage

MFT Enhancements

- IBM MQ Managed File Transfer Agent redistributable package
- File Transfer Recovery Timeout

IBM MQ Advanced Message Security – Key points

- Provides additional security to that provided by base MQ
- End-to-end security, message level protection
  - A security policy defines what protection should be applied to messages
  - AMS intercepts messages at "endpoints" and applies the policy
- Asymmetric cryptography used to protect each message
  - Integrity policies prove message origin, content not changed, digitally signed
  - Privacy policies as per integrity plus each message encrypted with unique key
  - Confidentiality policy : encryption, but no signing

Compare Message Protection options - Transaction cost at 1 channel pair

V900 - 32KB Messages in Request/Reply workload over MQ channels

- Baseline
- SSLRKEYC(1M)
- SSLRKEYC(10M)
- SSLRKEYC(0)
- Confidential (key reuse = 32)

Comparing SSL with AMS Confidential V9.0.1

Compare Message Protection options - Transaction cost at 1 channel pair

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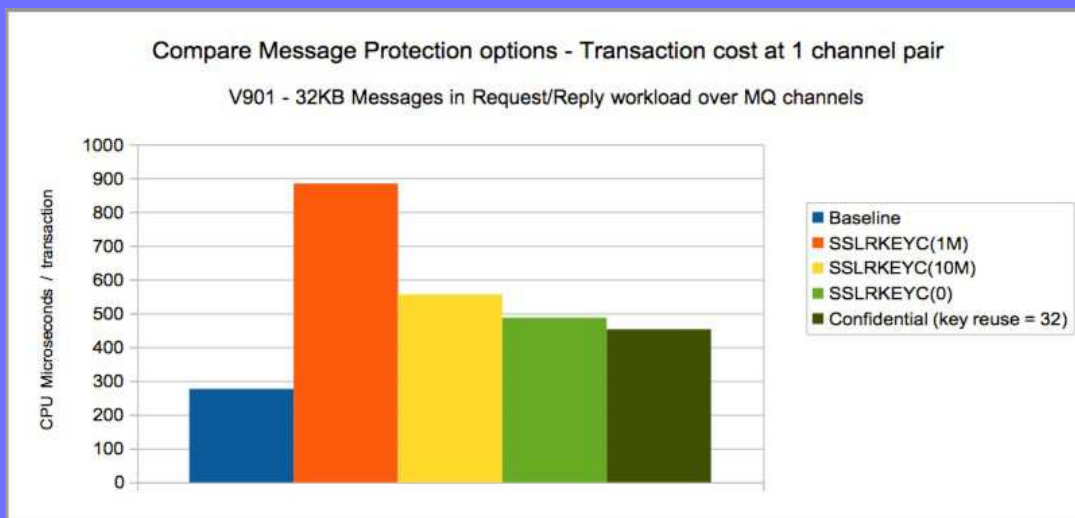
MQdev Blog
https://www.ibm.com/developerworks/community/blogs/messaging

- BIteSize Blogging: MQ 9.0.1 - Administrative REST API
- IBM MQ Console on z/OS
- Bitesize Blogging: MQ 9.0.1 - IBM MQ Console Authentication
- IBM MQ for z/OS: V9.0.1 performance improvements for AMS
- IBM MQ Managed File Transfer Agent Re-distributable package
- Connection Authentication & Channel Authentication Record interactions
- What's new for the IBM MQ Console in 9.0.1

Présentation MQ 9.0.1 CD

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