IBM MQ on Cloud service

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Agenda

• Introduction to the MQ Cloud service
• Mini demo
• New features
  • TLS
  • AMS
• New deployment options
Introducing the MQ Cloud service

Run IBM MQ in any location or cloud exactly as you need it

On-premise, software and the MQ Appliance

Run it yourself in any cloud, public or private

Let IBM host it for you with its new managed MQ service in IBM Cloud

IBM MQ

IBM Z
Linux
AIX
Windows
Solaris
HPE
IBMi
Appliance...

AWS
Azure
IBM Cloud
IBM Cloud Private
Private cloud

NEW
Introducing the MQ Cloud service

Provision queue managers directly into IBM Cloud

IBM owns the infrastructure and the responsibility to keep the systems running

The customer owns the application-level configuration and the monitoring

Hosted on IBM Cloud

Managed & operated by IBM

Queues, topics, channels, clustering, applications

MQ installation, basic configuration, security, maintenance

Hardware, virtualization, servers, network, storage
### Division of responsibility based on form factor

<table>
<thead>
<tr>
<th>On-premises software MQ</th>
<th>MQ in IBM Cloud Private</th>
<th>MQ Appliance</th>
<th>BYOL Cloud IaaS install</th>
<th>MQ on Cloud service</th>
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**Customer** | **IBM / Vendor**
Find IBM MQ in the “Integrate” section of the IBM Cloud catalog
Get started in minutes with the interactive guided tour
Quickly provision messaging capability in the Cloud

Free Trial so you can get started at no cost

Paid options in sizes to suit typical workloads
Up and running in minutes!

<table>
<thead>
<tr>
<th>Name</th>
<th>Display name</th>
<th>Version</th>
<th>Location</th>
<th>Status</th>
<th>Actions</th>
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<tbody>
<tr>
<td>QM1</td>
<td>My first queue manager</td>
<td>9.0.5 r1</td>
<td>IBM Cloud US South</td>
<td>Deploying</td>
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### Queue managers

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<td>Running</td>
<td>...</td>
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Up and running in minutes!
Integrated User and Application management, backed by IBM Cloud
Manage MQ using the integrated MQ Console in your browser

<table>
<thead>
<tr>
<th>Name</th>
<th>MQ username</th>
<th>Description</th>
<th>Actions</th>
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<tr>
<td>ibm demo app</td>
<td>ibmdemoapp</td>
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… or using familiar tools like MQ Explorer and runmqsc
Agenda

- Introduction to the MQ Cloud service
- Mini demo
- New features
  - TLS
  - AMS
- New deployment options
Configuring trust store TLS certificates

1. Import certificates

Simply import all files relating to the certificate: route, intermediary, etc. Accepted file types are X, Y and Z.

[ Browse files ]

[ Trusted ]

[ Import certificate ]
Configuring trust store TLS certificates

1. Import certificates

Simply import all files relating to the certificate; route, intermediary, etc. Accepted file types are X, Y and Z.

- Label:
  - App17
  - C34
  - C42
  - S65
  - S90
  - Zoning/App

- Trusted:
  - [ ]

- Browse files: 3 files attached

- Back
- Next
Configuring trust store TLS certificates
Configuring trust store TLS certificates
Configuring trust store TLS certificates

[Image of IBM Cloud interface showing configuration of trust store TLS certificates]

- **QM1** - Running
- **Details**
  - C34
- **Days to expiry**
  - C34: 27-Jun-18
- **Issued**
  - C34: 27-Jun-18
- **Fingerprint**
  - 00:1A:2A:4C
- **CN**
  - #.#.#.#.#.#.#.#.#.#.#.#.#.#.#.#.#.
- **Domain**
  - CN=RUB, O=IBM
- **Key Store**
  - Key Store options (C43, 565, 590, ZoningApp)
- **Trust Store**
  - Trust Store options (C34, 241, 321, 578, 899)
Configuring key store TLS certificates
Configuring key store TLS certificates
End-to-end message level security

- MQ Advanced Message Security (AMS) provides the capability to encrypt messages in transit and at rest between sender and receiver.

1. Automatically encrypted by the sending client so that it can only be decrypted by the intended recipient

2. Or encrypted by the queue manager on receipt, for cases where the application deployment cannot be updated

- Benefits
  - No application code changes required
  - Goes beyond TLS channel security, which only protects data in transit between processes
  - Message data can only be read by the intended receiving application code
    - Not on the queue by the system administrator
    - Not on the disk by your infrastructure or cloud provider
  - Proven, trusted approach to fulfilling compliance requirements such as GDPR, PCI, HIPAA etc
Configuring key store TLS certificates, incl AMS
Configuring key store TLS certificates, incl AMS
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IBM MQ

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MQ Technical Conference v2.0.1.8
Deploying a queue manager to AWS

MQ on Cloud – Queue managers can now be provisioned on infrastructure in IBM Cloud and AWS ensuring that MQ is where you need it most – close to your applications.
Managing a queue manager to AWS

All queue managers on IBM Cloud and AWS can be managed from one place in the MQ on Cloud service.
Using IBM MQ to reliably transfer data between different cloud providers
IBM MQ that you know and trust
… but in a managed Cloud service!

Try the service for free at:
console.bluemix.net/catalog/services/mq
Thank You - Questions?

Related sessions:

- Running MQ in the Cloud
  - Monday 1.00pm (Leopardwood)
  - Tuesday 8.30am (Leopardwood)

- Running MQ in Containers
  - Monday 3.45pm (Leopardwood)
  - Tuesday 1.00pm (Leopardwood)

- MQ Hybrid Cloud Architectures
  - Tuesday 9.45am (Sagewood)
  - Wednesday 9.45am (Sagewood)
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