

# IBM MQ: What's New and Roadmap

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# IBM MQ | Trusted by thousands of businesses globally



IBM MQ is **trusted** to connect applications reliably, **securely**, and dynamically, enabling you to build loosely coupled, **real-time** message and **event-driven** applications across hybrid and multi-cloud **at scale**, empowering teams to **innovate** and deliver outstanding customer experiences.

## 87%

of the top 100 in the 2024 Forbes Global 2000.

## 100%

of the top 10 Insurance companies in the 2024 Forbes Global 2000.

## 97%

of the top 100 banking companies in the 2024 Forbes Global 2000.

## 90%

of the top 10 automotive companies in the 2024 Forbes Global 2000.

IBM MQ has been recognised in the **Best IT Management Software** category in the annual [G2.com awards](#) for the second consecutive year - the **only** Messaging product to rank in the top 50 products.



★★★★★ Apr 22, 2024

"Best Messaging queue for Banking domains applications"

★★★★★ Apr 18, 2024

"Best Queue management tool in the market"

★★★★☆ Aug 03, 2023

"One of the most robust products at IBM"



**IBM MQ**   
Score 9.0 out of 10  
111 Reviews and Ratings

**Best message delivery platform.**

★★★★★ Score 9 out of 10

**IBM MQ - Highly Available MQ service**

Computer Software Company, 10,001+ employees  
★★★★★ Score 9 out of 10

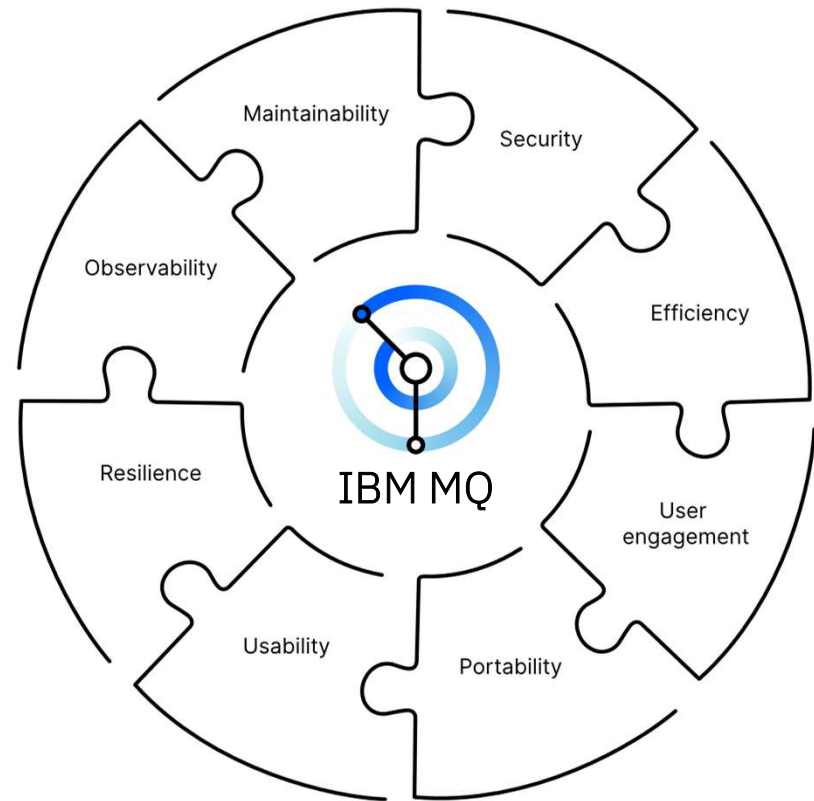
**MQ, proven quality.**

Transportation/Trucking/Railroad Company, 51-200 employees  
★★★★★ Score 10 out of 10

# Messaging product maturity

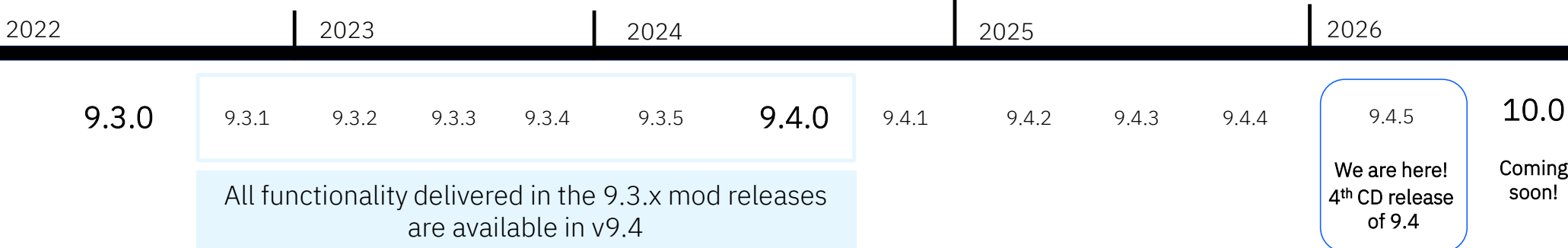
Core messaging features are fundamental but operational readiness requires other foundational qualities.

Platforms and practices relentlessly evolve, so longevity requires ongoing investment in all categories



# IBM MQ | Delivery cadence

**MQ 9.4.5**  
**Feb 2025**



### Long-Term Support (V.R.m.f)

Approximately every two years a new major Version/Release is released, which includes all new capabilities in a release with 5 years support.

Required by clients looking for fixed function.

### Continuous Delivery (v.r.M.f)

New mod versions of MQ are released approximately every four months, incrementally introducing new product capabilities. These are supported for at least 12 months.

Intended for clients that can continually integrate.

### Mix and Match

Both are available under the same license.

Both can interoperate, just like all versions of MQ.

<https://www.ibm.com/docs/en/announcements/mq-944-delivers-native-high-availability-cross-region-replication-linux-mq-as-service-reserved-instance-aws-technology-preview-mq-ai-agent>

# What's new in MQ 9.3 LTS

Simplified Linux install	Dspmqinst for IBM i	Stream MQ Appliance error logs	MQ Console application quick start	Key repository passwords	Idempotent MQSC DELETE commands	Hardware accelerated compression for AIX	Non-OS user authorisations	TLS 1.3 across all protocols	TLS 1.3 support for MQIPT
Encrypted MQTT channel passphrases	TLS-only communication switch	Streaming queues	Multiple queue manager certificates for MQIPT	TLS enabled .NET XA monitor	Cryptographic hardware support for client passwords	PKCS#12 key repository support	SNI hostname support for channel routing	Uniform Cluster support for request/reply flows	Transaction boundary aware Uniform Cluster
Uniform Cluster aware MDBs	IBM MQ scaler for KEDA	Apache Qpid JMS support over AMQP	Point-to-point support for AMQP	Java 17 support for applications	MQ Console remote queue manager support	Jakarta Messaging 3.0 support	64-bit RBA default for z/OS	MQ Appliance synchronous DR replication	Disk encryption for the MQ Appliance
OpenShift Operator managed rolling upgrade	OpenShift support for zLinux and Power	OpenShift Prometheus integration with ServiceMonitor	Helm chart sample for Kubernetes deployments	Client attached dead-letter handler	MQ Appliance failed resource action control	IBM MQ on Cloud LogDNA integration	Raft based Native HA for OpenShift	Transfer logging for Managed File Transfer	AT-TLS support for z/OS
Separate statistics and accounting intervals for z/OS	Browse support for AMQP applications	Start/stop of MFT resource monitors	Redistributable MFT Logger	MFT managed call control over REST	IBM MQ AsyncAPI binding	AsyncAPI code generator for IBM MQ JMS applications	Queue depth SMF data for z/OS	.NET 6 application support	Extended REST API message properties

[www.ibm.com/docs/en/ibm-mq/9.3?topic=930-whats-new-in-mq](https://www.ibm.com/docs/en/ibm-mq/9.3?topic=930-whats-new-in-mq)

# What's new in MQ 9.4 LTS

.NET 6 libraries	CAPEXPXY	RDQM on RHEL 9	MQIPT MQCSP password protection	64-bit Channel Initiator	SMF queue statistic enhancement	Streaming queues for shared queues	Console observability	Instana transaction tracing with CP4I in OCP	ANY* generic CipherSpecs for AMQP
Enhanced DISQMSTATUS	TLS 1.3 for managed .NET clients	MQ Console application view	Java modular application support	Simplified REST Messaging API security	Native HA entitlement with MQ Advanced	SMF116 STREAMEDN for streaming queues	Appliance DR between two HA pairs	Developer Essentials badge for AWS	Restricted MQ Operator permissions
MQ Console, object and application association linkage	AMQP performance enhancement	Remote REST messaging	JSON web tokens, initial support	Native HA auto recovery of damaged objects	Comprehensive per-queue SMF stats	Appliance CLI SSH certificate based authentication	Appliance disk space monitoring	Arm Developer container for MacOS	Configurable LogFilePages with MQ Operator
Smarter recovery log media image scheduling	MQ Console overview landing page	Tuning options for log I/O warnings	Supported Kafka Connectors with MQ Advanced	Enhanced Appliance SSH support for signatures	Smarter JMS Uniform Cluster auto balancing	Exactly-once Kafka Connectors	Simplified Java and JMS topologies for z/OS	Automated installs with Ansible Galaxy	Message property support for CSQ1LOGP
Stand-alone IBM MQ Web Server install	Open Telemetry tracing	Expanded JWT support for JMS applications	MQ Console application and network observability tabs	Updated compiler support for AIX C applications	Simpler zHyperWrite enablement on z/OS	Appliance secure backup and restore	AMQP samples	Developer tutorials for Uniform Clusters	MacOS client toolkit in Homebrew
JWKS for token authentication	Updated MFT ciphers	Persistent Volume flexibility (containers)	LZ4 compression	TLS certification bypass option	.NET 8 support	Better install process for Automation technologies	Non-production tags for IBMi	RedHat OCP odd version support	New 5+1+3 lifecycle

<https://community.ibm.com/community/user/integration/viewdocument/whats-new-in-the-latest-ibm-mq-v9>

# New since IBM MQ 9.4 LTS

[Announcement blog](#)

## 9.4.1 CD

## 9.4.2 CD

## 9.4.3 CD

## 9.4.4 CD

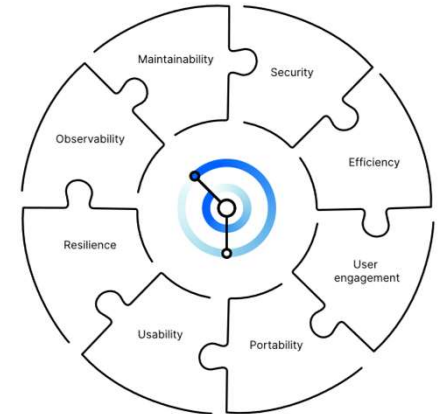
## 9.4.5 CD

dspmqcrt	HTTPS CCDT	Native HA CRR	Java support for FIPS 140-3	MFT support for OpenSSH format private keys	Extended Authority Events	Longer User IDs	Native HA CRR on Linux	RDQM HA and DR data encrypted in transit	MQ Operator for EKS	MQ Console 'Message Manager'
Improved AMQP/MQTT diagnostics	Advanced container image outside OpenShift	MQ Console: customizable columns	MQ Console: CF structure administration	MQ Console: SMDS administration	MQ Console: Queue manager status	JWT Support for JMS SE	MQ Console: improved efficiency with filters	IBM Java Semeru v21	.NET 10 support	z/OS Otel enhancements
License tagging for non-prod container workloads	IBM Aspera fasp.io gateway update	mqperfck	JWKS certificate validation / revocation enhancements	GB18030 conversion support	Longer CONNAMES on z/OS	Kafka Connect Framework	FIPS mode for AMS	Global Security Kit version 9 (GSKit)	Java 25 support	MFT Agent reliability enhancements when using OpenText SFTP
Updated Kafka connectors		Simpler AMQP/MQTT property configuration	JVM treated as a single application for uniform clusters	MQ Appliance: Support for external users	Container audit logs	Open Telemetry Tracing on z/OS and the MQ Appliance	Python MQ API	IBM MQ SaaS on AWS	RDQM heartbeat link encryption	PCF for programmatic access to error logs
		Kafka Connect XML converter	Updated Kafka connectors	MQ Appliance: Authenticate with UI/REST using certificate or OIDC			IBM MQ AI Agent (preview)		Enforced certificate checks using Extended Key Usage checks	IBM MQ AI Agent

# Functional Completeness

## core highlights

- Streaming queues
- Apache Kafka connectors
- Longer connection name in MQ for z/OS: increased from 48 to 264 characters



# Resilience

## highlights

- Native HA in OCP/Kubernetes
- Cross Region Replication (CRR) in OCP/Kubernetes
- Native HA and CRR on Linux (x86-64, IBM Z, POWER System)



# Security

## highlights

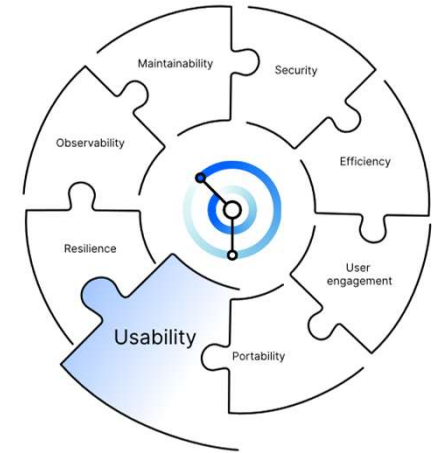
- Token-based authentication with JWT
- Initial support for 'long' user IDs
- TLS Certificate Management
- TLS Support for CCDT Retrieval
- Enhanced Security with Global Security Kit (GSKit) 9
- Positive authentication events - audit logs for both successful and unsuccessful events
- RDQM HA and DR data encrypted in transit
- FIPS mode configuration for AMS
- FIPS mode in MQ Explorer
- Server-side encryption support for AMS in containers
- OpenID Connect (OIDC) for the MQ Appliance, Multi-Factor Authentication support
- Customizable SSL socket factories for JWT/CCDT with MQ classes for JMS
  
- And many more...



# Usability

## highlights

- MQ Agents
- Python messaging API
- MQ Console: filters
- MQ Console: message manager
- MQ Console: better support for z/OS specific objects

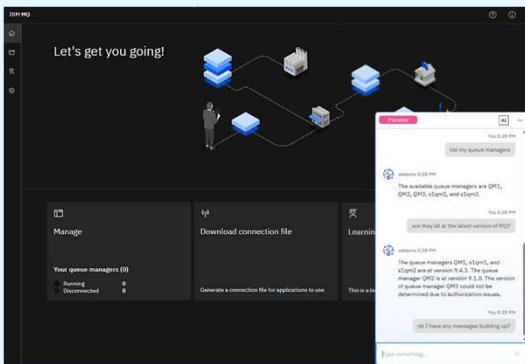


# IBM MQ Agents

IBM MQ Agents maximize MQ network uptime, improve administrator productivity and close the IT skills gap by applying AI to messaging networks

## Customer Outcomes:

- ✓ **30-50%** reduction in MTTR and L2 support escalations.
- ✓ **20-30%** reduction in day-to-day MQ administrative effort.
- ✓ Lower dependency on deep MQ expertise, reducing incident severity and duration.



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M32: AI in MQ, how we are using AI, what we have learned, and what comes next  
Thursday, 11:10-12:10

## What do the Agents do?

The MQ Agents provides users with a single entry-point to discover and analyze situations, and receive responses and suggestions in natural language

- From general MQ knowledge questions to aid understanding and learning MQ concepts, to more complex questions around specific issues in the network
- This enables users to focus on delivering business requirements while reducing risk of significant business impact or lengthy support engagement

## How are the Agents deployed and used?

MQ Agents work with all queue managers (MQ, MQ Advanced, Appliance, z/OS, and SaaS) in the customer's MQ network.

- There is no limit on the number of agents that can be deployed/connected
- Each deployed instance of the Agents is limited to administering 20 queue managers (based on typical scope of an individual admin user's responsibility for MQ and on meeting user expectation of performance)
- To use MQ Agents clients deploy a new MCP runtime which will automatically consume 4 VPC.
- Clients will be able to view their compute consumption vs. entitlement in the IBM license service

GA: 24 Mar 2026

The IBM MQ Agents help IT operations to answer one of the most important questions they face daily, in minutes rather than hours:

*“Why are my messages not flowing?”*

# Summary of MQ Agents Capabilities, Benefits and Outcomes

Agents	Purpose
Supervisor agent	Significantly <b>reduce</b> the multi-days with multiple teams' engagement for complex problems <b>to minutes</b> with <b>customer self-resolving the issue</b> conversationally via the Supervisor agent chat UI.
Application behavior agent	Within <b>minutes</b> of a problem being reported, an MQ operator can identify and respond with the <b>application root cause</b> , helping the application owners resolve their issue quickly
Channel health agent	<b>Without any deep background knowledge</b> , within <b>minutes</b> , an operator can identify the break in the MQ network. A clear reason is given, enabling the problem to be resolved quickly.
Dead letter queue analyzer agent	The operator will <b>immediately</b> understand which messages have been blocked and the reason for the blockage, <b>without even looking inside the DLQ or needing to decode the messages</b> .
Message build-up agent	Without needing to wait for an application ticket to be raised, you can <b>immediately identify potential problems</b> growing in the MQ environment.
MQ knowledge agent	Within the <b>same chat context</b> as the problem identification a user can ask background questions on how to resolve the issue, knowing that the answers given are <b>specific to their environment</b> .

## Outcome:

- **Enable less experienced engineers** to diagnose problems in an MQ system independently
- **Accelerate resolution** of problems by avoiding the need for ticket raising and disjointed analysis by SME's
- **Improve customer satisfaction** in MQ, removing negative associations with complexity and problems
- **Provide contextual information** for identified problems, accelerating user understanding, growing skills and aiding resolution

# Python messaging API

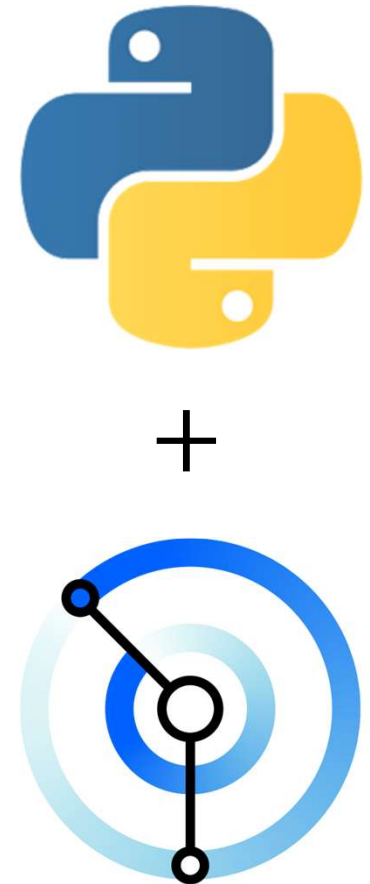
PyMQI has been the trusted way to connect MQ with Python for many years, but it is no longer active.

We are happy to announce a new open-source Python package for IBM MQ: `ibmmq`

This package has been substantially rewritten from its predecessor version (PyMQI), in an effort to modernise the implementation and make it more maintainable. Various obsolete features have been removed, while adding capabilities both from the latest levels of IBM MQ and to fill out missing options. There is a design document that gives rationales for many of the changes

## Outcomes

- A current Python interface aligned with recent MQ capabilities
- Modern, maintainable design with the latest MQ features (e.g. JWT)
- Simplified migration, cleaner APIs, better string/byte handling
- Open source, open to contributions from the community



# MQ Console filters and customizable columns

The screenshot shows the MQ Console interface. At the top left, there is a 'Queue depth normal' indicator with a green checkmark and the number '92'. Below it, it says '48 user-defined' and '44 system queues'. A table of queues is displayed with columns: 'Maximum depth', 'Current connections', 'Attached apps', 'Last put', and 'Last get'. A tooltip labeled 'Filter data' is positioned over the filter icon (a funnel) in the toolbar. A red arrow points from the left towards the filter icon. Another red arrow points from the filter icon down to the 'Last put' column header.

Maximum depth	Current connections	Attached apps	Last put	Last get
/999999999	Input 0, Output 0	-	-	-
/999999999	Input 0, Output 0	-	-	-

The 'Customize columns' dialog box is shown. It has a title 'Customize columns' and a subtitle 'Deselect columns to hide them. Drag rows to change column order. You can save your customization under a new name, or change the defaults.' The 'Name' field is set to 'Default order'. Below the name field is a search bar labeled 'Find column'. A 'Select all' button is present. The list of columns includes: Name (checked), Type (checked), Depth % (checked), Maximum depth (checked), Current connections (checked), Attached apps (checked), Last put (checked), Last get (checked), and QSG disposition (unchecked).

# MQ Console message manager

The screenshot displays the IBM MQ Console interface for managing messages in a local queue. The breadcrumb path is 'Manage / MQ21 / Queues / Local Queue: AQUEUE messages'. A summary bar indicates '35 messages (0%)' and a 'Maximum queue depth: 999999999'. A toolbar includes a 'Copy all messages' button, a search icon, a refresh icon, a delete icon, and a 'Create +' button. Below this is a table with columns for 'Timestamp', 'Application ID', 'User ID', and 'Application data'. The table contains 10 rows of messages, all with a timestamp of 'Feb 26, 2026 at 5:39:23 PM', 'Application ID' of 'jms.PutGetLoop', and 'User ID' of 'MATTHEWLEMIN'. The 'Application data' column shows a series of 'a' characters followed by a blue dot. A context menu is open over the second row, showing options: 'Copy message', 'Move message', and 'Delete message'. A red arrow points from the 'Copy all messages' button to the 'Copy message' option in the context menu. At the bottom, there is a pagination control showing 'Items per page: 10' and '1-10 of 35 items', along with a page indicator '1 of 4 pages'.

Timestamp ↓	Application ID	User ID	Application data
Feb 26, 2026 at 5:39:23 PM	jms.PutGetLoop	MATTHEWLEMIN	aaaaaaaaaaaaaaaaaaaaaaaaa... ●
Feb 26, 2026 at 5:39:23 PM	jms.PutGetLoop	MATTHEWLEMIN	aaaaaaaaaaaaaaaaaaaaaaaaa... ●
Feb 26, 2026 at 5:39:23 PM	jms.PutGetLoop	MATTHEWLEMIN	aaaaaaaaaaaaaaaaaaaaaaaaa... ●
Feb 26, 2026 at 5:39:23 PM	jms.PutGetLoop	MATTHEWLEMIN	aaaaaaaaaaaaaaaaaaaaaaaaa... ●
Feb 26, 2026 at 5:39:23 PM	jms.PutGetLoop	MATTHEWLEMIN	aaaaaaaaaaaaaaaaaaaaaaaaa... ●
Feb 26, 2026 at 5:39:23 PM	jms.PutGetLoop	MATTHEWLEMIN	aaaaaaaaaaaaaaaaaaaaaaaaa... ●
Feb 26, 2026 at 5:39:23 PM	jms.PutGetLoop	MATTHEWLEMIN	aaaaaaaaaaaaaaaaaaaaaaaaa... ●
Feb 26, 2026 at 5:39:23 PM	jms.PutGetLoop	MATTHEWLEMIN	aaaaaaaaaaaaaaaaaaaaaaaaa... ●
Feb 26, 2026 at 5:39:23 PM	jms.PutGetLoop	MATTHEWLEMIN	aaaaaaaaaaaaaaaaaaaaaaaaa... ●
Feb 26, 2026 at 5:39:23 PM	jms.PutGetLoop	MATTHEWLEMIN	aaaaaaaaaaaaaaaaaaaaaaaaa... ●

# MQ Console z/OS specific objects

The screenshot displays the IBM MQ Console z/OS interface for Queue manager: MQ21. The interface includes a navigation sidebar on the left, a top navigation bar with tabs for Overview, Queues, Events, Applications, and MQ network, and a main content area. A red arrow points to the 'Page set storage' metric in the top row of metrics.

**Queue manager: MQ21** [View configuration](#)

z/OS 9.4.5

Last Updated: a minute ago

**Buffer pool memory** 6% of 15.63 MB

**Page set storage** 6% of 75.90 MB

**Coupling facility storage** 3% of 69.00 MB

Active queues	Connected queue managers	Connected applications	Subscriptions
8	0	10	0
6 queues with messages 2 queues open for work	0 running channels 1 problem channel	0 running channels 10 MQ connections	

Deepest queues	Most recently used	Most recently connected	Oldest messages
<ul style="list-style-type: none"><li>AQUEUE 35 / 999999999</li><li>BIND 10 / 999999999</li><li>IMS.BRIDGE.REPLY 9 / 999999999</li><li>IMSJMPQ 9 / 999999999</li><li>INDEX.Q 2 / 999999999</li></ul>	<p>No connected queue managers</p> <p>After you connect queue managers, their connections will display here.</p>	<p>No connected user applications</p> <p>After you connect applications using a channel, their connections will display here.</p>	<ul style="list-style-type: none"><li>INDEX.Q 2 months ago</li><li>BIND 2 weeks ago</li><li>AQUEUE a week ago</li><li>OTELQ 6 days ago</li><li>IMSJMPQ 2 days ago</li></ul>

# MQ Console z/OS specific objects

Queue manager: MQ21

z/OS 9.4.5

Queue depth full: 0 (0 user-defined, 0 system queues)

Queue depth warning: 0 (0 user-defined, 0 system queues)

Queue depth normal: 92 (48 user-defined, 44 system queues)

Name	Type	Depth % ↓	Maximum depth	Current connections	Attached apps	Last put	Last get
AQUEUE	Local	0%	35/999999999	Input 0, Output 0	-	-	-
BIND	Local	0%	10/999999999	Input 0, Output 0	-	-	-
IMSJMPQ	Local	0%	9/999999999	Input 0, Output 0	-	-	-
INDEX.Q	Local	0%	2/999999999	Input 0, Output 0	-	-	-
OTELQ	Local	0%	2/999999999	Input 0, Output 0	-	-	-
mq21.DEAD.QUEUE	Local	0%	0/999999999	Input 0, Output 0	-	-	-
mq21.DEFXMIT.QUEUE	Local	0%	0/999999999	Input 0, Output 0	-	-	-
ANOTHER	Local	0%	0/999999999	Input 0, Output 0	-	-	-
AQ34	Local	0%	0/999999999	Input 0, Output 0	-	-	-
AQ35	Local	0%	0/999999999	Input 0, Output 0	-	-	-

Items per page: 10 | 1-10 of 55 items | 1 of 6 pages

# MQ Console z/OS specific objects

Manage / Queue manager: MQ21 [View configuration](#)

Overview **Queues** Events Applications MQ network z/OS 9.4.5

Queues Buffer pools are used to temporarily cache messages.

Storage classes

Page sets

**Buffer pools**

Coupling facility structures

Shared message data sets

0

Buffer pools using synchronous writes

0

Buffer pools using asynchronous writes

4

Buffer pools normal

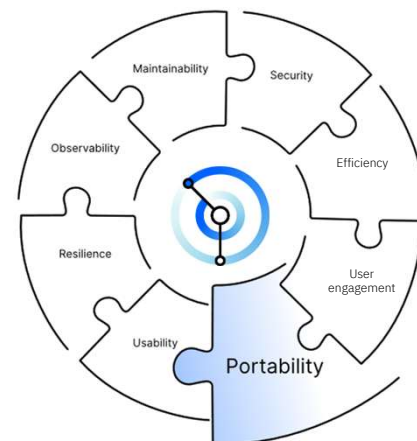
Buffer pool ↑	Usage	Location	Page class	Associated queues	Associated storage classes	Associated page set	
0	4% (36/1000)	Below the bar	4 KB	17	2	Multiple	
1	0% (1/1000)	Below the bar	4 KB	3	1	2	
2	1% (7/1000)	Below the bar	4 KB	8	3	3	
3	22% (216/1000)	Below the bar	4 KB	46	2	4	

Items per page: 10 1-4 of 4 items 1 of 1 pages

# Portability

## highlights

- MQ SaaS reserved instance on AWS
- Wider platform support for pre-built IBM MQ container images
- **AWS/Azure marketplace**
- Java 25 support for applications
- .NET 10 support
- MQ JMS client library enhancement - retrieval of tokens from an authentication service
- EKS Operator



# IBM MQ as a Service

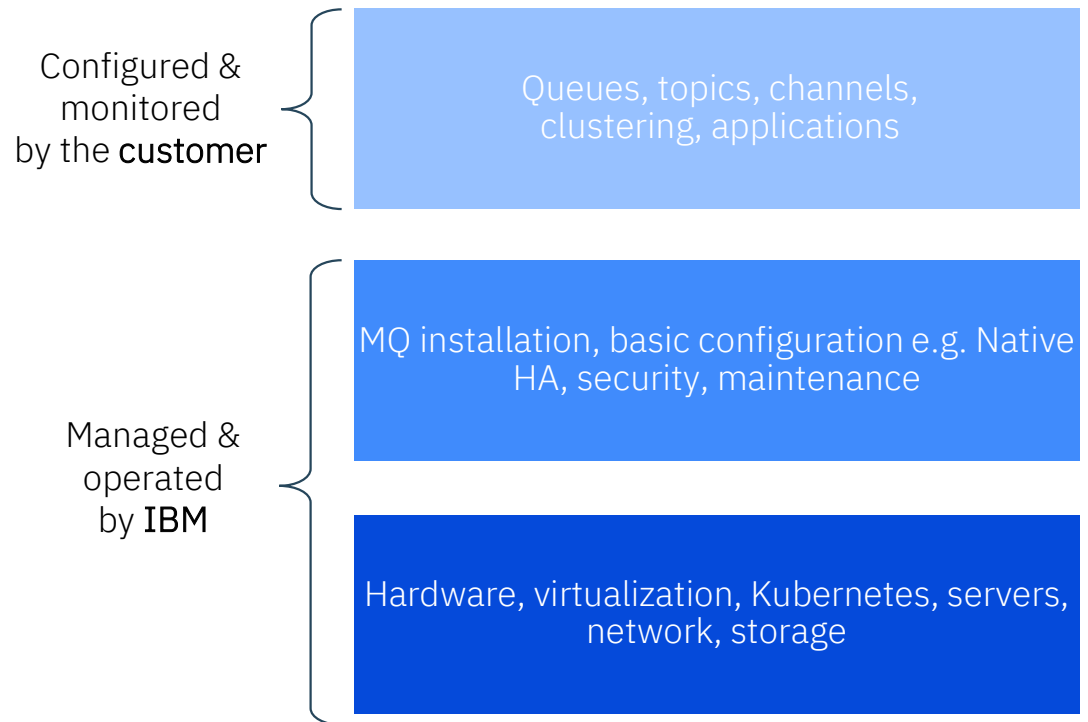
All the benefits of Cloud-native modernization managed by IBM

IBM maintains, monitors, upgrades, and patches your systems that run MQ so that you're always secure and can focus on your business applications

MQ SaaS is available as a multi-tenant service or as a single-tenant service on IBM Cloud or AWS



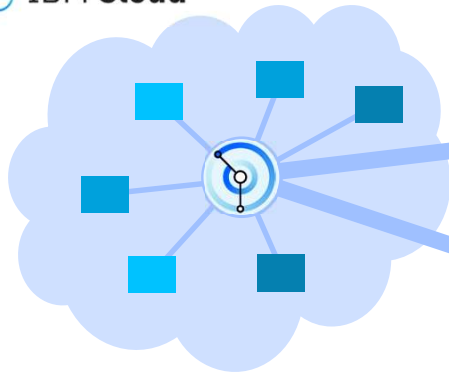
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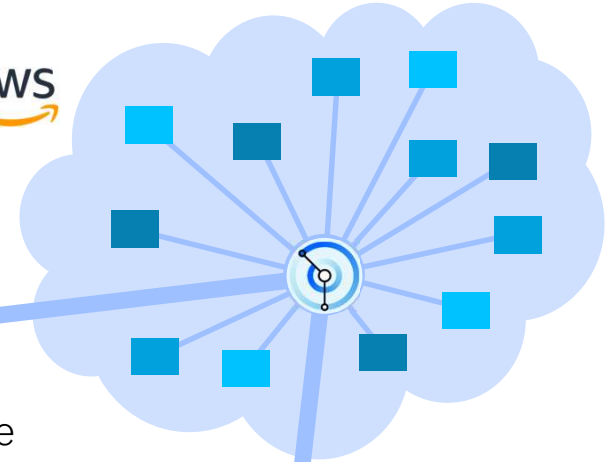


IBM MQ

*As new and existing applications shift to Cloud, use MQ SaaS to rapidly build a messaging network to span hybrid and multi-cloud*

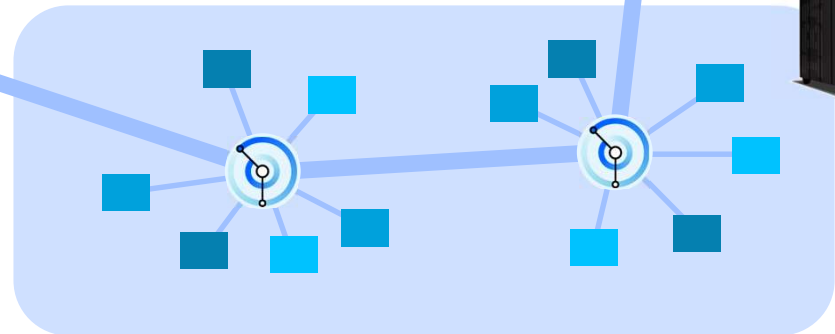


Provision new fully managed queue managers in minutes to respond more quickly to new and changing business requirements



Enjoy the benefits of Cloud native modernization with reduced operational overheads

Time consuming MQ upgrade projects become a thing of the past with MQ SaaS with automatic upgrades and security patching



# IBM MQ as a Service Reserved Instance on

Everything you love about MQ Advanced now AWS native fully **managed by IBM**

GA: 28<sup>th</sup> Nov 2025

## Reserved Instance



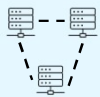
- **Run in a dedicated cluster** - reduces the chances of a security breach from shared infrastructure.
- **Increased performance** - critical workloads requiring high throughput are unaffected by other customer's workloads.

## Upgrades and Maintenance



- **Automated version upgrades and maintenance** - reduce operational overheads and downtime.
- **Maintain the highest levels of security** and always have access to the latest MQ features.

## High Availability



- **Data replication across 3 availability zones** - zero data loss in the event of a queue manager failure.
- **Rolling upgrades with only seconds of downtime** - ensure business continuity even during maintenance and upgrades.

## Datacenter Availability



- **Target availability in US East at GA**
- **Additional regions are targeted for 2026**
- **Queue manager co-location with applications** - reduce latency and maximize performance.

## Automation



- **Automate the deployment and configuration of queue managers** - scalable and repeatable, save on admin costs and reduce errors.
- Integrate deployment APIs as part of a deployment pipeline.

## AWS Marketplace



- **Fully native AWS service** – control plane and data plane are hosted in AWS
- Compatible with **existing AWS committed spend agreements (EDP)**
- Centralized AWS cost management

IBM MQ as a Service Reserved Instance is also available on  **IBM Cloud**

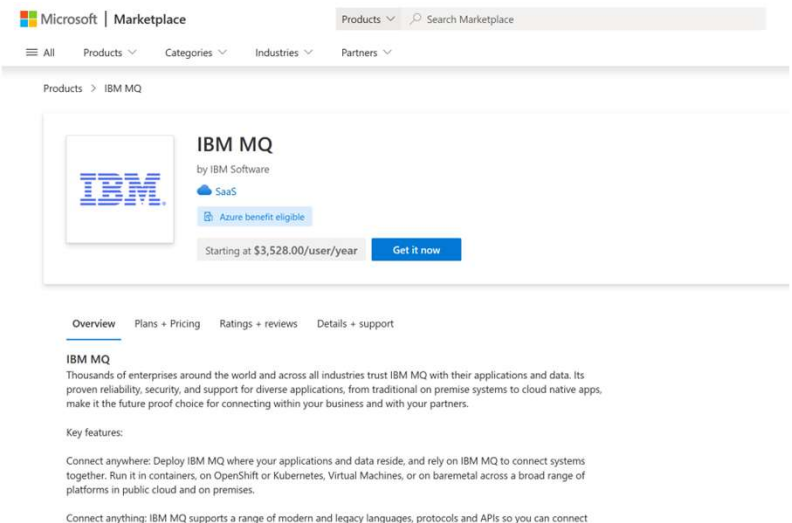
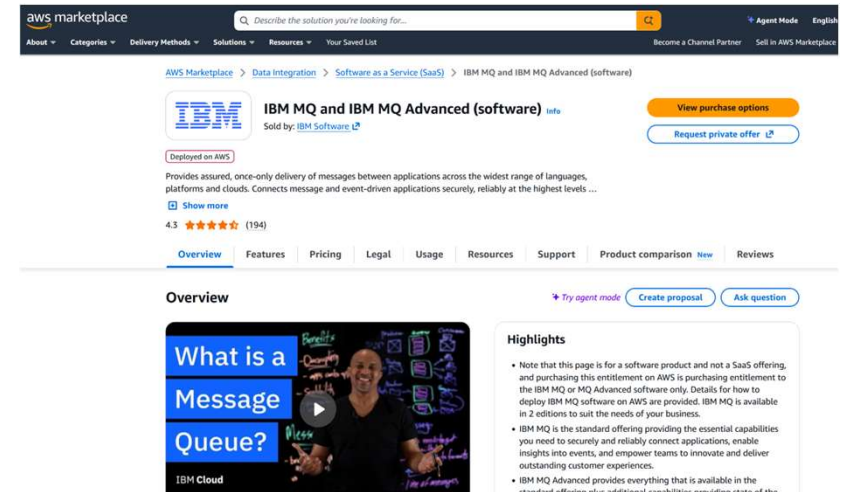
# AWS & Azure Marketplace

Do you intend to run MQ on AWS/Azure?  
Have you got AWS/Azure credits/spend?  
If yes, then IBM MQ has got the right option for you!

IBM MQ is available on both [AWS Marketplace](#) & [Azure Marketplace](#) as self-managed software.

You can use the AWS/Azure committed spend to purchase Subscription Licences via:

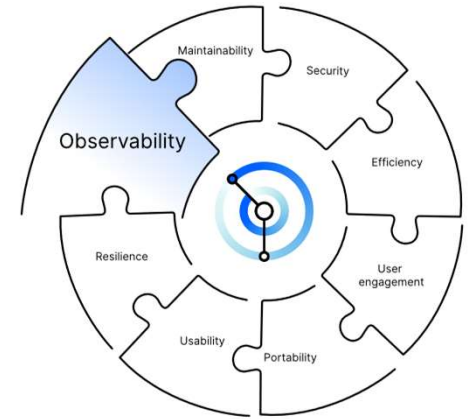
- Private Offer by [contacting us](#)
- Public Offer directly through both AWS & Azure marketplaces



# Observability

## highlights

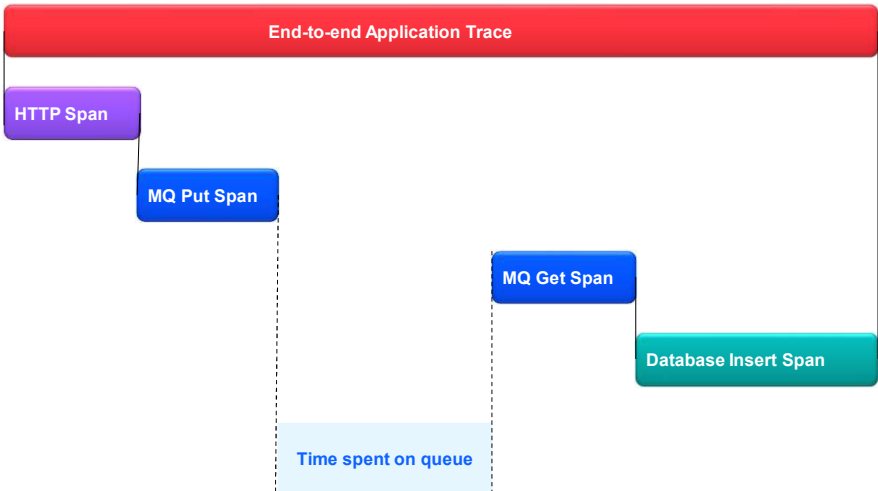
- OpenTelemetry tracing for distributed, z/OS and Appliance
- MQ Console – dashboards
- MQ Console – queue manager summary



# OpenTelemetry Trace

## What is OpenTelemetry ?

- An observability framework and toolkit designed to create and manage **trace**, metrics, and log data
- It is **vendor and tool agnostic** - it can be used with a broad variety of observability solutions:
  - Commercial offerings such as **IBM Instana**
  - Open-source tools like Jaeger and Prometheus



## Benefits to clients:



Diagnose problems across multiple systems fast, using data to pinpoint where issues are



Gain insights to optimise performance end-to-end, ultimately improving customer experience



Futureproof – open and likely to become a cross-industry de facto standard for observability

### What you need to know:

- Provided by supported exit from 9.3.5 on distributed
- Exit built into Appliance firmware from 9.4.3
- Fully built in trace support from 9.4.3 on z/OS, enhanced further in 9.4.5

And its not  
just trace...

## events/logs

New amqsevtg tool for collecting and sending performance and audit events to an OTel collector

<https://marketaylor.synology.me/?p=1689>

and

Samples for formatting JSON logs and forwarding to an OTel collector, no coding just configuration

## metrics

The open-source samples can now send IBM MQ metrics to an OTel collector

<https://github.com/ibm-messaging/mq-metric-samples>

# MQ Console Dashboards

The new overview tab of the queue manager page eliminates manual look-up so administrators can immediately understand the overall state of the queue manager and act on any emerging issues before they become problems

The screenshot shows the IBM MQ Console Dashboard for Queue Manager QM1. The dashboard includes several key sections:

- Overview Metrics:** CPU 0.00%, Memory, and Storage 23.8 GB.
- Active queues:** 5 active queues (4 queues with messages, 5 queues with no messages).
- Connected queue managers:** 3 connected queue managers (8 running channels, 0 problem channels).
- Connected applications:** 2 connected applications (2 running channels, 4 MQ connections).
- Messages in the last minute:** 874 messages (362.94 KB in, 311.41 KB out).
- Deepest queues:** A list of queues with their current and maximum message counts (e.g., 1234 / 6000 / 5000).
- Most recently used:** A list of recently used channels and their connection times.
- Most recently connected:** A list of recently connected applications and their connection times.
- Oldest messages:** A list of the oldest messages and their age (e.g., 9 months ago).

Callouts provide additional context for these metrics:

- CPU, Memory, Storage:** See if the Queue Manager is under pressure (CPU, Memory, Storage). These will map to different metrics on each form factor.
- Connected applications, channel instances and MQ connections:** See the number of connected applications, channel instances and MQ connections.
- Messages in the last minute:** Gain confidence that everything is fine, by seeing the number of messages passing through the Queue Manager.
- Active queues:** If the queue manager is part of a "MQ Network", show the connected Queue Managers.
- Deepest queues:** See if any queues are becoming full – and need action.
- Most recently used / Most recently connected:** See activity within the MQ Network from this Queue Managers view point.

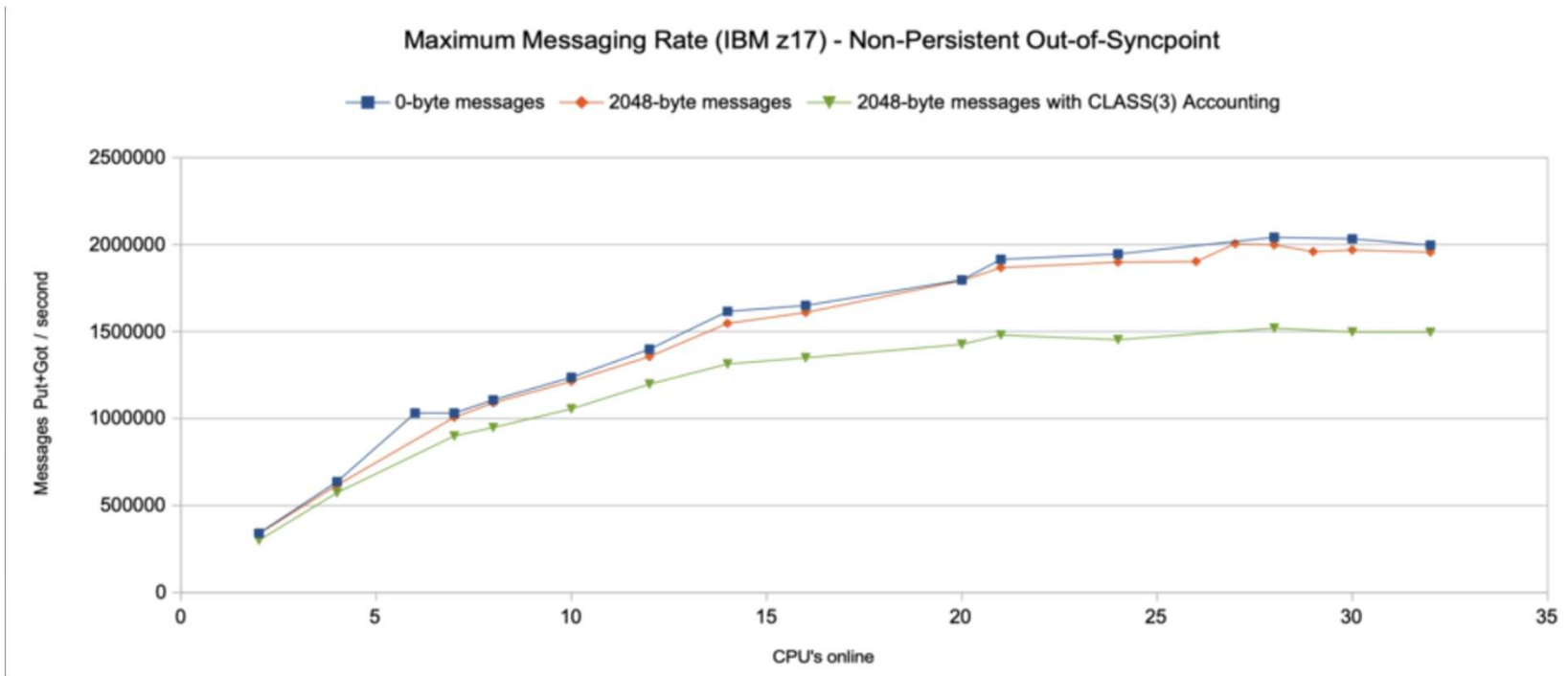
# Efficiency

## highlights

- MQ on z17 can move over 2 million messages per second
- Simpler DR for shared queues in MQ for z/OS
- Optimised air-gap installation of MQ Operator / queue manager – significant package size reduction



# z17 performance uplift



Z16 peaked @ 1.35 million

# Simpler DR for shared queues on z/OS

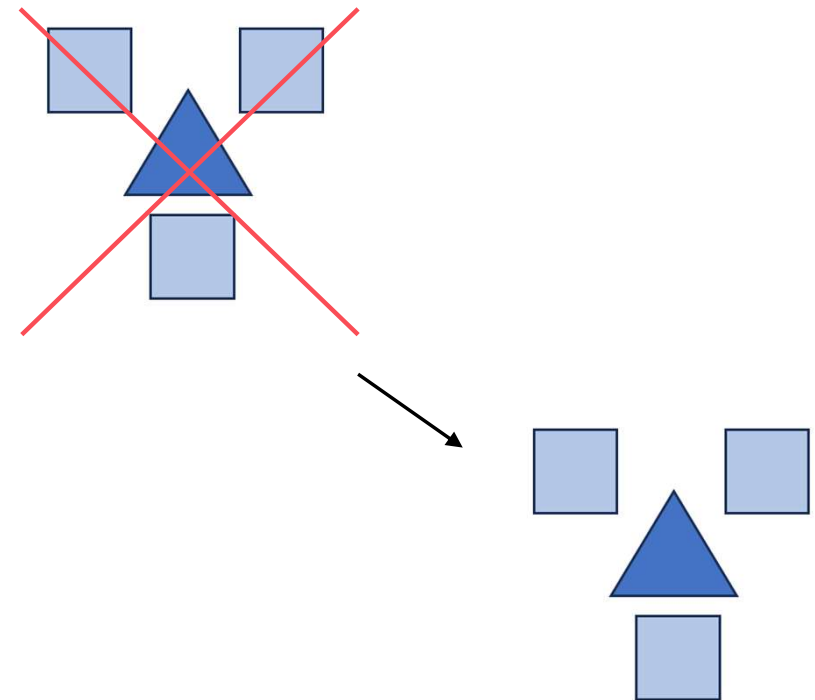
In disaster recovery scenarios a queue sharing group can be recovered at an alternative site using mirrored disk data

Requires a set of actions to be performed to ensure CF definitions are set up, structures cleared, etc

One of those steps which regularly caused challenges for customers was running CSQ5PQSG to recreate the XCF group used by the QSG

With 9.4.3, the first queue manager in the group will recreate the XCF group for all queue managers, during startup

PH64232 enables this at 9.2.0, 9.3.0 and 9.4.0

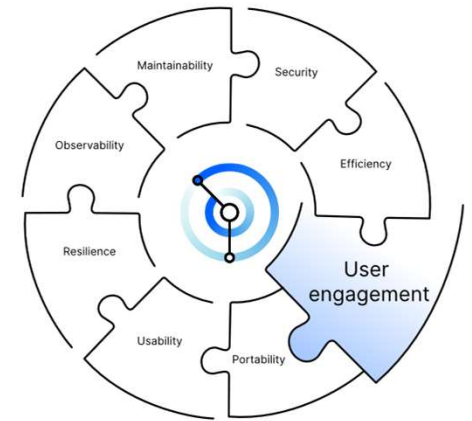


<https://ibmdocs-test.dcs.ibm.com/docs/en/ibm-mq/9.4.x?topic=mq-alternative-site-recovery-zos>

# User Engagement

## highlights

- New IBM MQ Administrator certification for v9.4, available October 2025
- Direct engagement



# Direct Engagement

Community forum

<http://ibm.biz/mq-community>

Aha ideas

<https://ibm.biz/mqideas>

IBM MQ v.Next Early Program

Email us at: [MQ.Early.Program@uk.ibm.com](mailto:MQ.Early.Program@uk.ibm.com)

# The IBM MQ AI Agent

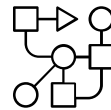


## What's the problem?



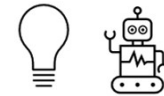
Important to get a quick response to this question. **Delays can frustrate end users and impact the business.**

Ticket driven analysis can take hours or maybe even days to identify a root cause.



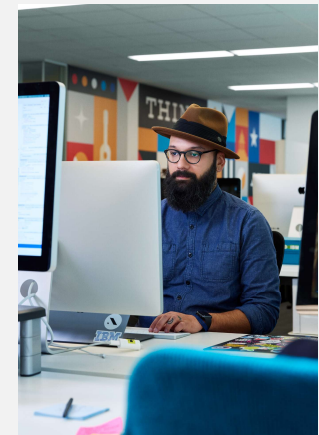
Often messaging application **developers and SREs don't have the deep skills and expertise to debug their deployment environments.**

This can lead to hand-offs between individuals and teams to advance the analysis



Proposed solution guides the diagnosis with **root cause analysis in seconds/minutes, without the need for deep MQ knowledge,** speeding up time to resolution and reducing impact.

*Why are my messages not flowing?*





# Current agent capabilities



## Investigate

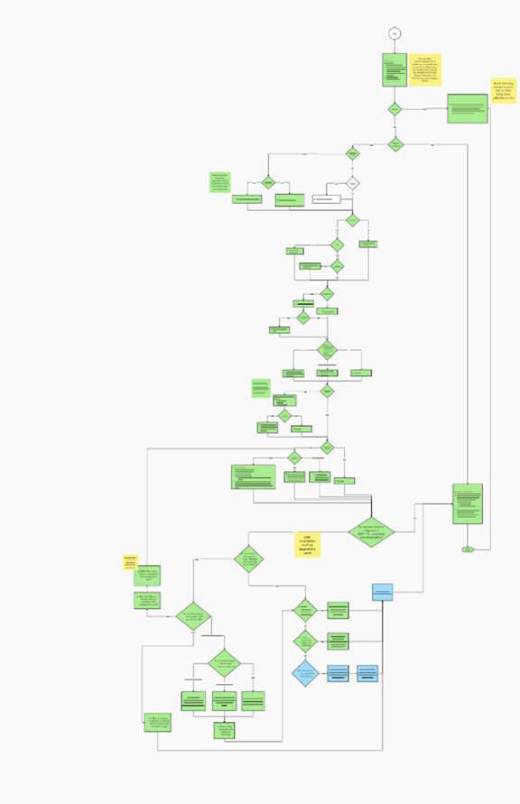
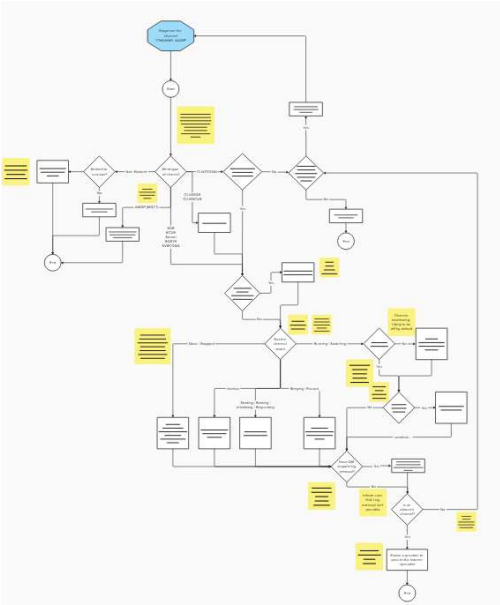
SME-designed diagnostic skills guide LLM reasoning to give generative conclusions and recommendations from real-time status

*Have I got any messages building up on QueueManager?*

*Are all my channels healthy?*

*How do I fix QUEUE.1?*

*Why isn't THAT.CHANNEL running?*





# Current agent capabilities



## Investigate

SME-designed [diagnostic skills](#) guide LLM reasoning to give [generative conclusions and recommendations](#) from real-time status

*Have I got any messages building up on QueueManager?*

*Are all my channels healthy?*

*How do I fix QUEUE.1?*

*Why isn't THAT.CHANNEL running?*



## Teach

LLM-optimized [knowledge collections](#) curated and indexed to provide detailed and accurate responses with [cited sources](#) for further reading

*What does the MONQ setting do?*

*How do I start THAT.CHANNEL?*

*Write a channel authentication [security] rule that maps "user1" to "user2"*



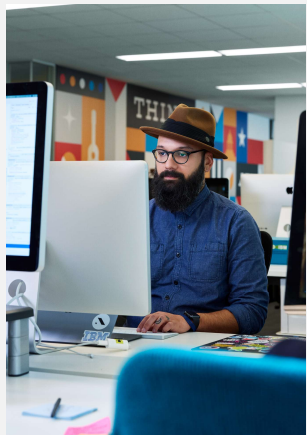
## Show

Dig deep into current object status and configuration with [natural language queries](#) and [optimized filtering](#)

*List my queues*

*Show me all the channels that begin with "A"*

*What platform and version is QueueManager?*





# Current agent capabilities



## Investigate

SME-designed **diagnostic skills** guide LLM reasoning to give **generative conclusions and recommendations** from real-time status



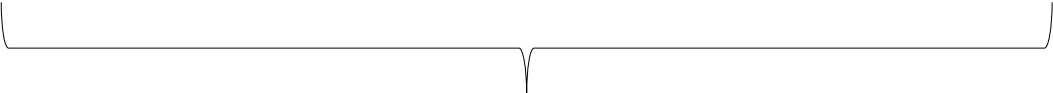
## Teach

LLM-optimized **knowledge collections** curated and indexed to provide detailed and accurate responses with **cited sources** for further reading

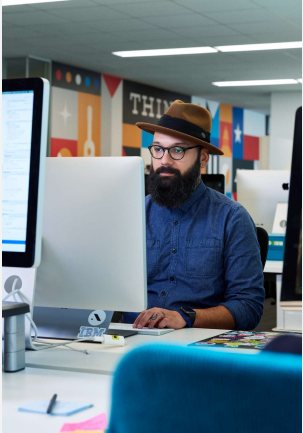


## Show

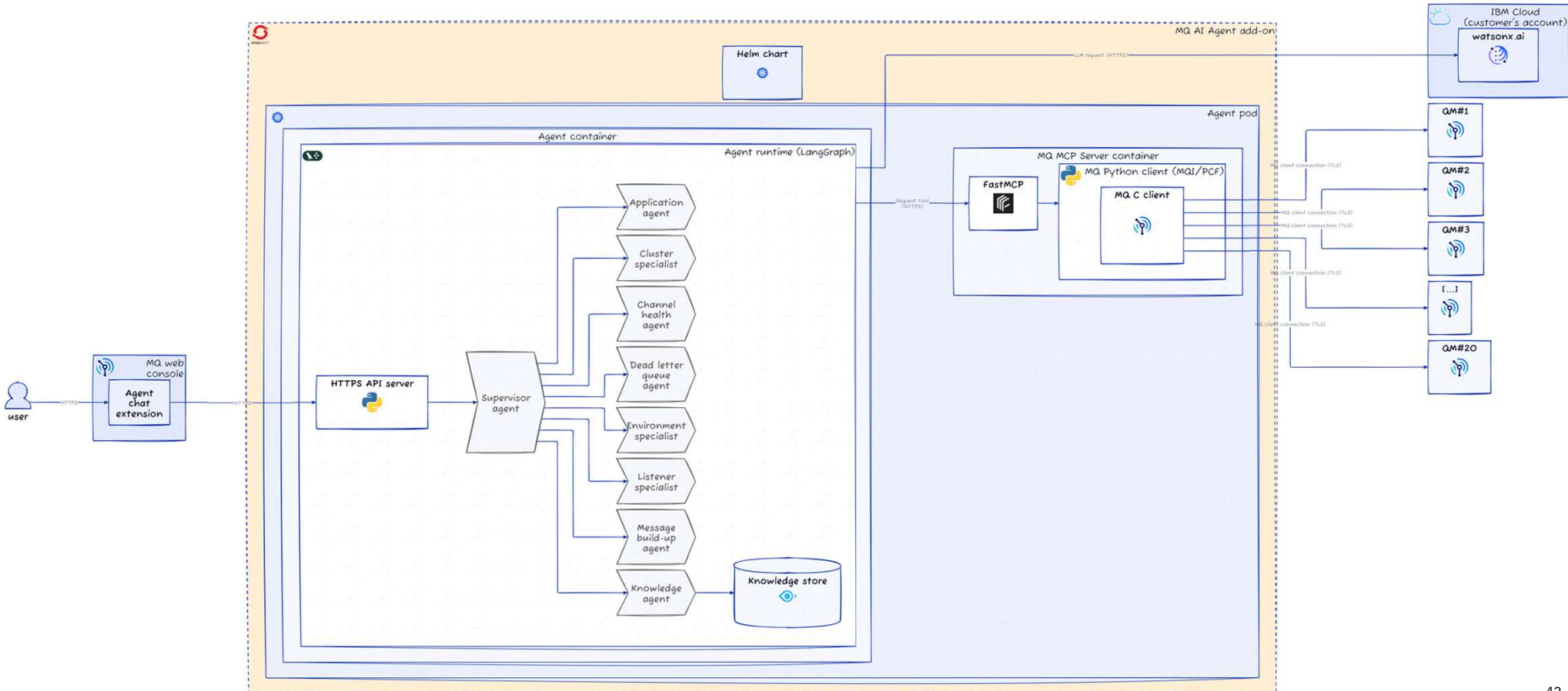
Dig deep into current object status and configuration with **natural language queries** and **optimized filtering**



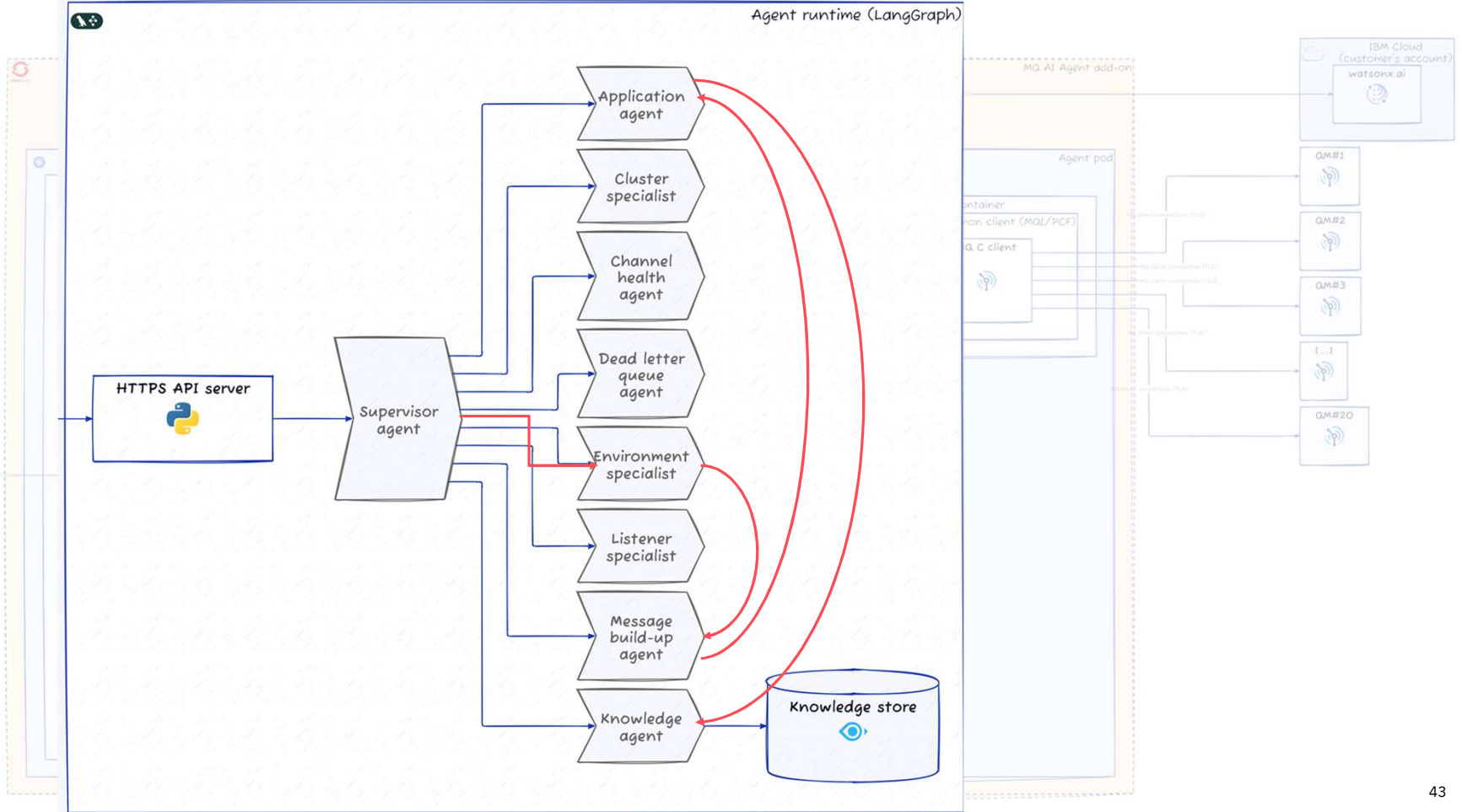
← Self-sufficiency



# The IBM MQ AI Agents - Design

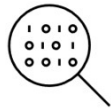


# The IBM MQ AI Agents - Design



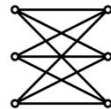


# A whole new way of testing: Evals



Code-based evaluation

- Pattern matching
- Static keyword analysis



Model-based evaluation

- LLM-as-a-judge



Human-based evaluation

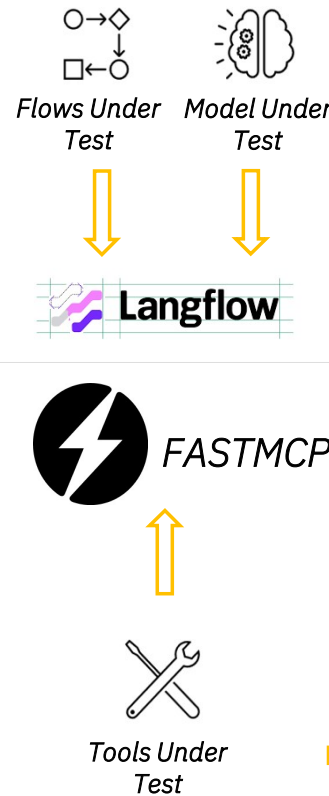
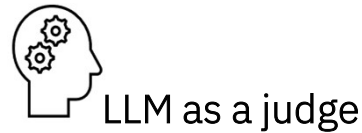
- Developers aren't the best testers...



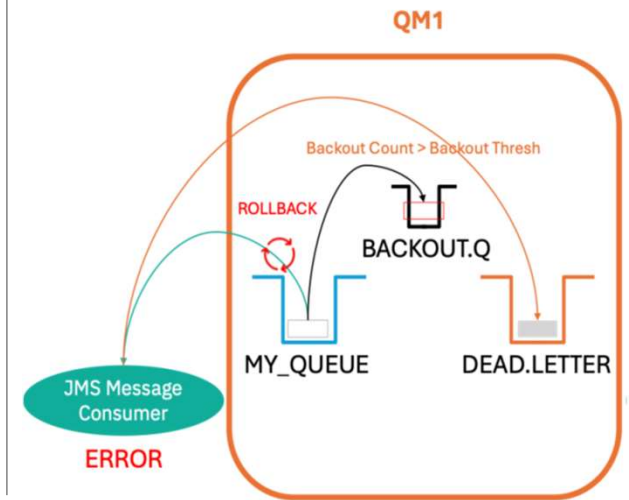
# Code and model-based evals

## e2e-eval

```
{Test metadata}
expectedResponses {"Q1 and Q2
are not the queues you are
looking for... MQGET DISABLED"}
Keywords = {"Q1", "Q2", "not the
queues", "MQGET", "DISABLED"}
{Test metadata}
```



System Under Test  
(MQ | ACE | CP4I |...)



➔ MCPInspector  FASTMCP

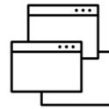


# Human evals



Groups of colleagues with very limited hands-on experience with MQ were given a set of scenarios to complete using the MQ agents:

- Filling queue scenarios
- Application-reported message disruption



The same scenarios were run with a control group, who only had access to regular admin tools, the product documentation, and a search engine.

The control test had an on-call SME, whose rates started from \$1/minute <sup>[1]</sup>

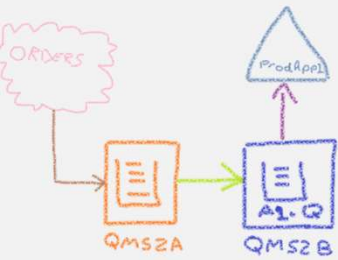


The groups given access to the agents completed the scenarios in 30-45 minutes.

*They were delighted with this outcome, despite their less-than-helpful facilitator...*

Without the agent, the control group was 33-48% slower on the same scenarios.

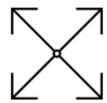
*And racked-up a \$68 bill for SME time*



[1] SME pricing based on Middleware Administrator average salary data from Glassdoor and Indeed. Prices were increased to \$1.50 during one "out of hours" scenario.



# IBM MQ Agents: Possible future enhancements under consideration



Expand the deployment options for the agents

- Additional LLM runtimes
- Additional container orchestration environments



Composability

- Agent-to-agent communications such as A2A
- Exposing MQ capabilities as MCP tools



Continue to build agent's product skill set

- Let us know which tasks you'd want your "coworker" to handle!

Please note: IBM's statements regarding its plans, directions and intent are subject to change or withdrawal without notice at IBM's sole discretion.

# IBM MQ v10.0 – Key Announcement

A major evolution of enterprise messaging

- Step-change platform for hybrid cloud, event-driven and cloud-native architectures
- Maintains core value: reliable, guaranteed message delivery

4 Strategic Pillars:

- Resiliency: Native HA + cross-region replication for zero downtime
- Security: Post-quantum cryptography & modern authentication
- AI-driven Ops: Observability + AI-assisted troubleshooting
- Connectivity: Kafka integration & Kubernetes-native deployments

Business Value:

- Always-on systems, reduced risk, easier modernization

GA: June 2026