



IBM MQ Appliance M2001 is upgraded with new software and delivers enhanced features and functions for improved security, administration, and connectivity

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At a glance

IBM[®] MQ Appliance M2001 provides an optimized and enhanced version of IBM MQ that runs in a physical appliance. IBM MQ provides universal messaging to allow applications, systems, and services to connect and exchange information securely, reliably, rapidly, and simply. Offering IBM MQ capability in a hardware appliance delivers additional features and the benefits of a physical appliance.

New features and benefits in this latest update include:

- The latest MQ V9.0.1 software
- A REST API for monitoring, management, and configuration
- Enhanced management API with support for Simple Network Management Protocol (SNMP)
- Updated MQ Console for increased control
- Enhancements to security administration
- New Floating IP support for seamless, highly available application connectivity

The IBM MQ Appliance M2001 continues to be available as the M2001A and M2001B models that offer options for different volumes of workload.

Overview

The IBM MQ Appliance M2001 is a state-of-the-art physical appliance that comes with a pre-installed and optimized version of IBM MQ. It enables clients to rapidly deploy, configure, and manage MQ in their data centers, at remote locations, or with business partners and reduces some of the overhead that is required to support a high-performance, highly available, reliable, and secure enterprise messaging solution.

By providing seamless connectivity to other deployments of IBM MQ, users are assured that they can quickly and easily connect deployments on premise, in the cloud, or in hybrid deployments with simple, secure, rapid, and reliable messaging between applications, systems, and services.

In addition to providing all the benefits of the latest level of IBM MQ V9.0.1, the IBM MQ Appliance M2001 is delivered as a physical appliance and provides additional benefits, such as self-contained high availability that can be configured in seconds.

In the latest update to the IBM MQ Appliance, additional enhancements are delivered beyond the new IBM MQ V9.0.1 upgrade. These include:

- New Floating IP support to allow applications to seamlessly connect in high availability configurations
- A REST API for monitoring, management, and configuration
- New management API with support for SNMP
- Improved security granularity
- Support for authentication using an external user repository
- Simpler, more powerful administration of IBM MQ and the appliance

The move to IBM MQ V9.0.1 puts the IBM MQ Appliance M2001 on the Continuous Delivery release for IBM MQ updates. Clients, who do not require functional updates and simply want fixes, should remain on the IBM MQ V8 release, which will now only receive fixes.

Key prerequisites

IBM MQ Appliance M2001A or M2001B and a workstation with web browser access for using the IBM MQ Console.

Planned availability date

November 18, 2016

Description

Since its initial availability in March 2015, the IBM MQ Appliance has provided optimized versions of IBM MQ V8, with specific enhancements that take advantage of delivery and deployment in a physical appliance. There were multiple updates, delivered as firmware refreshes, which not only delivered fixes to IBM MQ functions and to the IBM MQ Appliance itself, but also included many functional enhancements.

Included in these improvements were enhancements to the high availability function, support for the IBM MQ Light API, and new disaster recovery options.

Availability of IBM MQ V9.0.1 for the IBM MQ Appliance

IBM MQ Appliance M2001, in addition to the previous IBM MQ Appliance M2000 model, now includes the latest IBM MQ V9.0.1 release of software. This is the first Continuous Delivery release shipment for IBM MQ. For details of Long Term Support Release and Continuous Delivery release, refer to Software Announcement [216-153](#), dated April 19, 2016.

Currently, clients who want a Long Term Support Release are advised to remain on the IBM MQ V8 code base for IBM MQ Appliance firmware. Clients will continue to receive fixes, but with no new functional enhancement to IBM MQ capabilities or to the IBM MQ Appliance features.

There are multiple new features available in IBM MQ V9, and the V9.0.1 update. A key feature that may be of specific interest to IBM MQ Appliance M2001 users is the new Confidentiality option for IBM MQ Advanced Message Security that can offer an order of magnitude performance improvement.

New features and enhancements to the IBM MQ Appliance:

- New Floating IP support. A key feature of the IBM MQ Appliance is the self-contained High Availability (HA) support that enables a pair of IBM MQ Appliances

to be configured as a HA Group. This allows for the synchronous replication of messages between appliances and for the seamless automatic failover to take place as required. In order for the IBM MQ Client application to switch over to the IBM MQ Queue Manager on the second appliance, the client application needs to be configured with the separate IP addresses for both IBM MQ Appliances. When it detects no response from the primary IBM MQ Appliance, it looks for the next IP address on the list.

However, since not all IBM MQ Client Applications are configured with lists of IP addresses, some users may not be able to take advantage of connecting to the HA pair of IBM MQ Appliances.

In this update, the IBM MQ Appliances can be configured to make use of Floating IP, instead of fixed IP addresses. With this feature enabled, when there is a failure of a IBM MQ Appliance, the IBM MQ Queue Manager will start up on the second appliance of the HA pair to provide access to the replicated messages, it will also take over the IP address previously used by the Queue Manager on the primary appliance. This ensures that the IBM MQ Client application can seamlessly connect to the HA Queue Manager without requiring additional IP configuration.

- New and improved management features and interfaces. There have always been a number of different ways to configure, manage, monitor, and administer IBM MQ, which include IBM MQ Explorer, IBM MQ Script Commands (MQSC) and programmable command format (PCF) commands. The initial availability of the IBM MQ Appliance added the IBM MQ Console, which was originally only available with the IBM MQ Appliance. With IBM MQ V9.0.1, it is now available for MQ software deployments as well.

In this latest update to the IBM MQ Appliance M2001, there are further updates to administration and management.

- Enhancements to the IBM MQ Console that add more system control facilities:
 - Reboot the appliance.
 - Apply firmware updates.
 - Control the levels of debugging being used in the IBM MQ Appliance.

Previously these tasks would have required more explicit access to the IBM MQ administration functions, instead of quickly and simply accessing them through the IBM MQ Console.

- Addition of SNMP support. This monitoring standard can be used in external tools to interrogate the IBM MQ Appliance for status information or subscribe to notifications of system events. This makes production use simpler and more informed.
- A REST API is provided. In addition to allowing access to monitoring information, it provides powerful facilities to programmatically manage and configure many aspects of the system.
- The IBM MQ Appliance can now be configured to allow for the Queue Managers to automatically restart following appliance startup.
- New options are provided to allow Queue Managers that are defined on the appliance to be saved as a backup and then restored. In a business-critical environment, most companies need to be able to recover quickly from any eventuality. Even with the ability to configure IBM MQ Appliances for both HA with synchronous replication and for disaster recovery with asynchronous replication, some businesses might require the ability to have a backup of the configuration and definition of an IBM MQ Appliance. This can be restored onto the same appliance or a different appliance as required. This is now a simple and supported task in the IBM MQ Appliance.

Improvements and enhancements to security on the IBM MQ Appliance M2001

IBM MQ V8 introduced support for queue manager authentication and authorization policies to be stored in an LDAP repository instead of using locally defined users

and groups. Queue managers defined on the IBM MQ Appliance are able to exploit this capability, but in IBM MQ V8 locally defined users are required to administer the appliance. In this update, the UserIDs, which are used for IBM MQ Appliance administration, can now use LDAP for authentication. This enables the same user to use a common LDAP entry to manage multiple IBM MQ Appliances without the burden of multiple UserID definitions defined on multiple appliances.

In addition to this update, there are also further enhancements to provide finer grained and role-based security that allow for different levels of access and control for different users.

Accessibility by people with disabilities

A US Section 508 Voluntary Product Accessibility Template (VPAT) containing details on accessibility compliance can be found on the [IBM Accessibility](#) website.

Section 508 of the US Rehabilitation Act

IBM MQ Appliance M2001 is capable as of November 15, 2016, when used in accordance with associated IBM documentation, of satisfying the applicable requirements of Section 508 of the Rehabilitation Act, provided that any assistive technology used with the product properly interoperates with it. A US Section 508 Voluntary Product Accessibility Template (VPAT) can be found on the [IBM Accessibility](#) website.

Program number

| Program number | VRM | Program name |
|-------------------------|---------------------------|---|
| 5725-Z09 | 9.0.1 | IBM MQ Appliance M2001 |
| Description | Machine type-model | Passport Advantage^(R) part number |
| IBM MQ Appliance M2001A | 8436-55X | D1MH3LL |
| IBM MQ Appliance M2001B | 8436-55X | D1MH9LL |

Publications

The following publications are shipped with the appliance:

- IBM MQ Appliance M2001 Quick Start Guide
- IBM MQ Appliance M2001 User Install Guide

IBM MQ Appliance M2001 online product documentation is available in [IBM Knowledge Center](#).

Services

Software Services

IBM Software Services has the breadth, depth, and reach to manage your services needs. You can leverage the deep technical skills of our lab-based, software services team and the business consulting, project management, and infrastructure expertise of our IBM Global Services team. Together, we provide the global reach, intellectual capital, industry insight, and technology leadership to support a wide range of critical business needs.

To learn more about IBM Software Services, contact your Lab Services Sales or Delivery Leader.

Technical information

Specified operating environment

Hardware requirements

Hardware: Workstation with Internet access to use browser-based user interface

Software: One of the following to use browser-based user interface:

- Microsoft™ Internet Explorer 11, or later
- Mozilla Firefox ESR 45, or later
- Google Chrome 51, or later

IBM MQ Appliance M2001 specifications

Dimensions

Size: All models

- Height: 88.9 mm (3.5 in)
- Depth: 438 mm (17.25 in)
- Width: 584 mm (23 in)

Maximum weight

| Model | Machine weight | Shipping weight |
|-------|------------------|-----------------|
| M2001 | 21 kg (46.2 lbs) | 39 kg (86 lbs) |

Electrical and power requirements

The following data represents the maximum label rated power requirements. When planning the electrical system, it is important to use maximum values to account for internal or environmental conditions that result in power consumption increasing beyond typical values.

Maximum system power

IBM MQ Appliance contains redundant power supplies. Each power supply is 720 watts. The following supply voltages are available:

- 100 to 127 (nominal) V ac; 50 Hz or 60 Hz; 10.0 A
- 200 to 240 (nominal) V ac; 50 Hz or 60 Hz; 5.0 A

Power consumption

- Idle 214 watts (730 BTUs/hr)
- Maximum 462 watts (1575 BTUs/hr)

Note: All weights and measurements are approximate.

Standards compliance

The IBM MQ Appliance M2001 supports or complies with the following standards:

- Multiprocessor Specification (MPS) 1.4
- Hardware-enabled to meet the International Organization for Standardization (ISO) 9241, Part 3

Equipment approvals and safety

- FCC - Verified to comply with Part 15 of the FCC Rules, Class A
- Canada ICES-003, issue 5, Class A
- UL/IEC 60950-1
- CSA C22.2 No. 60950-1
- Argentina S-Mark

Software requirements

Not applicable.

The program's specifications and specified operating environment information may be found in documentation accompanying the program, if available, such as a readme file, or other information published by IBM, such as an announcement letter. Documentation and other program content may be supplied only in the English language.

Companion products

Operating environment

Power on

- ASHRAE Class A2.
 - 10° to 35° C (50° to 95° F) at 0 to 914 m (0 to 3,000 ft)
 - 10° to 32° C (50° to 90° F) at 914 m to 2133 m (3000 to 7000 ft)
- Relative humidity: 8% to 80% (noncondensing)

Allowable operating classification: ASHRAE Class A2

| Temperature | Altitude |
|----------------------------------|--|
| 10° C to 35° C (50° F - 95° F) | 0 to 914.4 m (0 to 3000 ft) |
| 10° C to 32° C (50° F - 89.6° F) | 914.4 m to 2133.6 m (3000 ft to 7000 ft) |

Maximum altitude: 2133.6 m (7000 ft.)

Relative humidity: 8% - 85%

Power off

Shipping temperature: -40° C to 60° C (-40° F - 140° F)

Limitations

Contact your local representative for a copy of the IBM official published specifications for IBM MQ Appliance M2001 hardware.

Planning information

Customer setup

IBM MQ Appliance M2001 is designed for customer setup and installation. Customer setup instructions are shipped with the product.

Power supply requirements

IBM MQ Appliance M2001 has two 720-watts redundant power supplies.

Packaging

The shipping package contains:

- IBM MQ Appliance M2001
- IBM MQ Appliance M2001 power cord

- IBM MQ M2001 Resource CD
- IBM MQ M2001 Quick Start Guide
- IBM MQ M2001 Installation users Guide
- Two 1 GB cables: 10 meters each (197 in)
- One 10 GB Ethernet cable: 5 meters (394 in)

The shipping package has the following dimensions:

- Length: 66 cm (26 in)
- Width: 91 cm (35.0 in)
- Height: 41 cm (16.1)

The shipping package weighs 39 kg. (86 lbs)

Ordering information

This product is only available through Passport Advantage. It is not available as shrinkwrap.

These products may only be sold directly by IBM or by authorized IBM Business Partners for Software Value Plus.

More information can be found on the [IBM Software Value Plus](#) website.

To locate IBM Business Partners for Software Value Plus in your geography for a specific Software Value Plus portfolio, go to the [Find a Business Partner](#) page.

Product group: WebSphere^(R)

Product: IBM MQ Appliance M2001 (5725-Z09)

Product category: Appliance

Passport Advantage

| Program name/Description | Part number |
|--|-------------|
| IBM MQ Appliance M2001A | |
| IBM MQ Appliance M2001A Install Appliance Subscription and Support 12 Months | D1MH3LL |
| IBM MQ Appliance M2001A Install Annual Appliance Maintenance + Subscription and Support Renewal | E0MKILL |
| IBM MQ Appliance M2001A Install Appliance Maintenance + Subscription and Support Reinstatement 12 Months | D1MH4LL |
| IBM MQ Appliance M2001A Install Initial Appliance Business Critical Service Upgrade 12 Months | D1MH7LL |
| IBM MQ Appliance M2001A Install Subsequent Appliance Business Critical Service Upgrade 12 Months | E0MKKLL |
| IBM MQ Appliance M2001B | |
| IBM MQ Appliance M2001B Install Appliance + Subscription and Support 12 Months | D1MH9LL |
| IBM MQ Appliance M2001B Install Annual Appliance Maintenance + Subscription and Support Renewal | E0MKMLL |
| IBM MQ Appliance M2001B Install Appliance Maintenance + Subscription and Support Reinstatement 12 Months | D1MHALL |

| Program name/Description | Part number |
|--|--------------------|
| IBM MQ Appliance M2001B Install Initial Appliance Business Critical Service Upgrade 12 Months | D1MHDLL |
| IBM MQ Appliance M2001B Install Subsequent Appliance Business Critical Service Upgrade 12 Months | E0MKPLL |
| IBM MQ Appliance M2001B Additional Capacity Install License + SW Subscription & Support 12 Months | D1MHFLL |
| IBM MQ Appliance M2001B Additional Capacity Install Annual SW Subscription & Support Renewal 12 Months | E0MKRLL |
| IBM MQ Appliance M2001B Additional Capacity Install SW Subscription & Support Reinstatement 12 Months | D1MHGLL |

Business Critical Service Upgrade

Business Critical Service Upgrade is available in the United States and Puerto Rico.

Hard Drive Retention Service Upgrade

| Program name/Description | Part number |
|---|--------------------|
| IBM MQ Appliance M2001A Install Initial Appliance Business Critical Service Upgrade 12 Months | D1MH8LL |
| IBM MQ Appliance M2001A Install Subsequent Appliance Hard Drive Retention Service Upgrade 12 Months | E0MKLLL |
| IBM MQ Appliance M2001B Install Initial Appliance Hard Drive Retention Service Upgrade 12 Months | D1MHELL |
| IBM MQ Appliance M2001B Install Subsequent Appliance Hard Drive Retention Service Upgrade 12 Months | E0MKQLL |

Hard Drive Retention Service Upgrade is available in the US and Puerto Rico.

Charge metric

| Program name | Part number or PID number | Charge metric |
|------------------------|----------------------------------|----------------------|
| IBM MQ Appliance M2001 | 5725-Z09 | Appliance install |

Appliance Install

Appliance Install is a unit of measure by which the program can be licensed. An Appliance Install is an installed copy of the program that is included on a single unit of supporting hardware. Licensee must obtain an entitlement for each Appliance Install of the program.

Terms and conditions

The information provided in this announcement letter is for reference and convenience purposes only. The terms and conditions that govern any transaction with IBM are contained in the applicable contract documents such as the IBM International Program License Agreement, IBM International Passport Advantage Agreement, and the IBM Agreement for Acquisition of Software Maintenance.

This product is only available through Passport Advantage.

Licensing

IBM International Program License Agreement including the License Information document and Proof of Entitlement (PoE) govern your use of the program. PoEs are required for all authorized use. Part number products only, offered outside of Passport Advantage, where applicable, are license only and do not include Software Maintenance.

Agreement for Acquisition of Software Maintenance

These programs are licensed under the IBM Program License Agreement (IPLA) and the associated Agreement for Acquisition of Software Maintenance, which provide for support with ongoing access to releases and versions of the program. IBM includes one year of Software Subscription and Support (also referred to as Software Maintenance) with the initial license acquisition of each program acquired. The initial period of Software Subscription and Support (also referred to as Software Maintenance) can be extended by the purchase of a renewal option, if available. These programs have a one-time license charge for use of the program and an annual renewable charge for the enhanced support that includes telephone assistance (voice support for defects during normal business hours), as well as access to updates, releases, and versions of the program as long as support is in effect.

IBM MQ Appliance M2001

This product is only available through Passport Advantage.

Clients may elect to purchase optional support services including Appliance Business Critical Support and Hard Drive Retention.

- Appliance Business Critical Support. Whereas standard support includes assistance with appliance hardware issues during normal business hours, Business Critical Support provides 24x7 onsite service with a response objective of four hours from the time a hardware issue is identified
- Hard Drive Retention. Appliance hardware support requires all replaced parts be returned to IBM. The Hard Drive Retention option allows you to keep hard drives that have been replaced by IBM Hardware Support.

Consult the [IBM Appliance Support Handbook](#) for further details on Appliance Warranty Service Upgrade options.

IBM MQ Appliance M2001 firmware support

IBM MQ Appliance M2001 includes system firmware to support operation of the appliance. The system firmware follows the IBM version, release, maintenance, fix pack number (V.R.M.F) maintenance delivery terminology. New function, security updates, and maintenance will be made available through firmware releases. Additional maintenance through iFixes will be made available, as necessary, on the most recent firmware level release.

Refer to the [IBM Software Support Lifecycle Policy](#) for complete details.

License Information number

L-APIG-ABNEJP

See the [License Information documents](#) page on the IBM Software License Agreement website for more information.

Limited warranty applies

Yes

Limited warranty

IBM warrants that when the program is used in the specified operating environment, it will conform to its specifications. The warranty applies only to the unmodified portion of the program. IBM does not warrant uninterrupted or error-free operation of the program or that IBM will correct all program defects. You are responsible for the results obtained from the use of the program.

IBM provides you with access to IBM databases containing information on known program defects, defect corrections, restrictions, and bypasses at no additional charge. For further information, see the [IBM Software Support Handbook](#).

IBM will maintain this information for at least one year after the original licensee acquires the program (warranty period).

Program technical support

Continuous Delivery Support Model

The programs in this announcement use the Continuous Delivery (CD) support model for the delivery of new function and enhancements that will be available through incremental updates.

For additional information on the Continuous Delivery Lifecycle Policy, see the [IBM Software Support Lifecycle Policy](#) website.

As previously announced in Software Announcement [216-153](#), dated April 19, 2016, the IBM MQ Appliance V9.0.1 firmware follows the Continuous Delivery release support lifecycle. The IBM MQ Appliance V8 firmware remains on the enhanced support lifecycle and provides predictable support through iFixes and fixpacks for a minimum period of five years from the general availability date. A minimum, three-year extension of support is available for an additional fee.

IBM MQ V9.0.1 is not a Long term Support Release.

This technical support allows you to obtain assistance (by telephone or electronic means) from IBM for product-specific, task-oriented questions regarding the installation and operation of the program product. Software Subscription and Support (Software Maintenance) also provides you with access to updates (modifications or fixes), releases, and versions of the program. You will be notified, through an announcement letter, of discontinuance of support with 12 months' notice. If you require additional technical support from IBM, including an extension of support beyond the discontinuance date, contact your IBM representative. This extension may be available for a fee.

Money-back guarantee

If for any reason you are dissatisfied with the program and you are the original licensee, you may obtain a refund of the amount you paid for it, if within 30 days of your invoice date you return the program and its PoE to the party from whom you obtained it. If you downloaded the program, you may contact the party from whom you acquired it for instructions on how to obtain the refund.

For clarification, note that (1) for programs acquired under the IBM International Passport Advantage offering, this term applies only to your first acquisition of the program and (2) for programs acquired under any of IBM's On/Off Capacity on Demand (On/Off CoD) software offerings, this term does not apply since these offerings apply to programs already acquired and in use by you.

Volume orders (IVO)

No

Passport Advantage applies

Yes, information is available on the [Passport Advantage and Passport Advantage Express^{\(R\)}](#) website.

Usage restriction

Yes

IBM has the sole right to replace the software components within the IBM MQ Appliance M2001 with alternative software components during the support term of IBM MQ Appliance M2001.

Adding, removing, or replacing hardware components of IBM MQ Appliance M2001 must be performed by IBM unless a component is designated as customer replaceable.

Software Subscription and Support applies

Yes. Software Subscription and Support, also referred to as Software Maintenance, is included with licenses purchased through Passport Advantage and Passport Advantage Express. Product upgrades and Technical Support are provided by the Software Subscription and Support offering as described in the Agreements. Product upgrades provide the latest versions and releases to entitled software, and Technical Support provides voice and electronic access to IBM support organizations, worldwide.

IBM includes one year of Software Subscription and Support with each program license acquired. The initial period of Software Subscription and Support can be extended by the purchase of a renewal option, if available.

While your Software Subscription and Support is in effect, IBM provides you assistance for your routine, short duration installation and usage (how-to) questions, and code-related questions. IBM provides assistance by telephone and, if available, electronic access, only to your information systems (IS) technical support personnel during the normal business hours (published prime shift hours) of your IBM support center. (This assistance is not available to your users.) IBM provides Severity 1 assistance 24 hours a day, 7 days a week. For additional details, see the [IBM Software Support Handbook](#). Software Subscription and Support does not include assistance for the design and development of applications, your use of programs in other than their specified operating environment, or failures caused by products for which IBM is not responsible under the applicable agreements.

Unless specified otherwise in a written agreement with you, IBM does not provide support for third party products that were not provided by IBM. Ensure that when contacting IBM for covered support, you follow problem determination and other instructions that IBM provides, including in the [IBM Software Support Handbook](#).

For additional information about the International Passport Advantage Agreement and the IBM International Passport Advantage Express Agreement, go to the [Passport Advantage and Passport Advantage Express](#) website.

IBM Operational Support Services - SoftwareXcel

No

System i Software Maintenance applies

No

Variable charges apply

No

Educational allowance available

Not applicable.

Statement of good security practices

IT system security involves protecting systems and information through prevention, detection, and response to improper access from within and outside your enterprise. Improper access can result in information being altered, destroyed, or misappropriated or can result in misuse of your systems to attack others. Without a comprehensive approach to security, no IT system or product should be considered completely secure and no single product or security measure can be completely effective in preventing improper access. IBM systems and products are designed to be part of a lawful, comprehensive security approach, which will necessarily involve additional operational procedures, and may require other systems, products, or services to be most effective.

Important: IBM does not warrant that any systems, products, or services are immune from, or will make your enterprise immune from, the malicious or illegal conduct of any party.

Prices

The prices are unchanged by this announcement.

IBM Global Financing

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