



IBM MQ V8.0 delivers improved scalability, enhanced security, and updates to standards and currency

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At a glance

IBM® MQ for Multiplatforms, V8.0 (MQ V8) offers a universal messaging solution. It delivers the messaging you need, where you need it, from enterprise messaging for secure core business applications to mobile messaging to extend your business to the Internet of things and mobile devices. With MQ V8, you have access to the key business data in files across your business, and simplified messaging access for your application developers.

The key features of IBM MQ V8 can be grouped mainly into themes of improved scalability, enhanced security, and updates to standards and currency.

Enhancements include:

- Verification of user ID and password, making use of either operating system definitions or a Lightweight Directory Access Protocol (LDAP) repository
- Use of Domain Name System (DNS) host names in Channel Authentication Records (CHLAUTH)
- Channel-level certificates, allowing multiple certificates to be used in a queue manager
- Routed publish-subscribe in clusters
- Enhanced status reporting for publish-subscribe
- Performance enhancements including queue manager scaling and multiplexed client performance
- Support for updated standards
- Support on all platforms for 64-bit queue managers
- Support for multiple transmission queues defined for use in a clustered queue manager on all platforms
- Availability on all platforms of both Advanced Message Security and Managed File Transfer

Overview

IBM MQ for Multiplatforms, V8.0 is a robust and secure messaging middleware offering, allowing applications, systems, services, and files to exchange data rapidly and reliably.

For more than 20 years IBM has led the market in messaging middleware, with more than 10,000 businesses across all geographies and industries able to rely on IBM MQ.

IBM MQ V8.0 builds on the functions and capabilities that were added in previous releases of IBM WebSphere® MQ, IBM WebSphere MQ Advanced, IBM WebSphere MQ Advanced Message Security, IBM WebSphere MQ Managed File Transfer, and IBM WebSphere MQ Telemetry.

Customers with an active license can obtain the new and enhanced functions offered in IBM MQ V8 by migrating directly to V8.0 from IBM WebSphere MQ V7.0.1, V7.1, or V7.5, where available, without migrating to an interim version or release.

The key features of IBM MQ V8 can be grouped mainly into themes of improved scalability, enhanced security, and updates to standards and currency.

These updates are in support of the key deliverables that comprise the IBM MQ V8.0 offering. Central in this offering is IBM MQ Advanced V8, which provides combined entitlement to all the core functions and capabilities delivered by the offering, without needing additional separate entitlements for each chargeable component. These separately chargeable components available in IBM MQ Advanced include:

- The IBM MQ product itself, which provides the enterprise messaging infrastructure
- IBM MQ Advanced Message Security, which provides policy-based end-to-end encryption of the message contents
- IBM MQ Telemetry, which provides lightweight, scalable connectivity to MQ Telemetry Transport (MQTT)-connected clients and devices
- WebSphere Managed File Transfer, which provides combined entitlement to IBM MQ Managed File Transfer Service, IBM Sterling Connect:Direct®, and IBM Sterling Control Center, as described in Software Announcement [ZP14-0048](#), dated March 11, 2014

Key prerequisites

For details, refer to the [Hardware requirements](#) and [Software requirements](#) sections.

Planned availability date

- May 23, 2014: Electronic software delivery
- June 13, 2014: Physical media

Description

IBM MQ V8 builds on the functions and capabilities that were added in previous releases of WebSphere MQ, WebSphere MQ Advanced, WebSphere MQ Advanced Message Security, WebSphere MQ Managed File Transfer, and WebSphere MQ Telemetry.

The key features of IBM MQ V8 can be grouped mainly into themes of improved scalability, enhanced security, and updates to standards and currency.

Enhanced security

IBM MQ V8 adds the ability to authenticate using an identity defined to the OS instance in which the MQ is running or to retrieve the identity from an external repository. This can be used in place of the existing MQ authentication mechanism. This new authentication feature will help reduce the administration of defining and removing users, especially across multiple systems.

An additional security enhancement in IBM MQ V8 allows CHLAUTH definitions to use DNS (domain) host names instead of being forced to use IP addresses. Use of IP addresses continues to be best practice but users now have the choice of either approach, which can simplify matters when machines move IP addresses. This enhancement will enable the removal of user exits where customers have used these to deliver this capability in the past.

Another security enhancement in IBM MQ V8 is to enable more flexible security configuration of a queue manager. A queue manager can now have multiple certificates, each signed by a different certificate authority. This will now enable a single queue manager to communicate with different partners, each of whom uses a different certificate authority, simply by controlling this through channel definitions.

Enhancements to scalability

IBM MQ V8 has made enhancements to how publish-subscribe can be deployed when using clustering. In this release it is now possible to assign roles to queue managers in a cluster. A subset of those queue managers in a cluster can be configured for more efficient routing of messages. This will assist in the propagation of publications which can then help publish-subscribe configurations scale more effectively.

Further enhancements in scalability in IBM MQ V8 include improved exploitation of the larger symmetric multiprocessing (SMP) machines now available, with increased performance available for real-world deployments rather than tuned for benchmarks.

Updates to standards and currency

With the availability of IBM MQ V8, all MQ queue manager platforms now support 64-bit server implementations, subject to appropriate hardware support and operating system support. In this release support has also been added for JMS 2.0, including new messaging features and API changes. This enables businesses to move up to this new level of JMS as required. There are also enhancements in .NET support, with the MQ .NET classes now supporting SSL without additional component installation required. Microsoft™ Windows™ native certificate stores are also supported with .NET applications. Additionally, the Windows Communication Foundation interface is extended to support non-SOAP, non-JMS messages. These changes all contribute to simplifying the use of IBM MQ in .NET configurations.

Integrated Advanced Message Security

IBM MQ Advanced Message Security has been available for a number of years, but with this release is now available for the first time on the IBM i platform. This therefore allows you to protect the security of your messages from application to application, without the need to change the application code itself, across the widest range of MQ platforms. As with recent releases on other platforms, this capability is integrated into the core IBM MQ V8 installation, making it simpler for users to see the function, and to have it installed should you wish to buy license entitlement to use it. License entitlement is included in IBM MQ Advanced.

Improved application isolation

A previous release of IBM MQ included improved ability to scale for differing workload environments by the ability to configure multiple transmission queues in an IBM MQ clustered environment. This enables applications with different workloads and performance requirements to operate at their own rate without impacting other applications. With IBM MQ V8, this feature is now available for the first time on the IBM i platform.

Increased functionality in IBM MQ Telemetry

IBM MQ Telemetry enables IBM MQ servers to connect to MQTT clients. Prior to IBM MQ V8, this was available in two different licenses: Standard or Advanced. With Standard licensing, MQ servers could connect to MQTT clients. With Advanced licensing, there was entitlement to deploy and connect to the MQ Telemetry Daemon for Devices, which allowed buffering for MQTT messages and acted as a client

concentrator. With IBM MQ V8 all of this function is now available with the regular IBM MQ Telemetry license, offering improved flexibility of deployment options at no additional license cost. IBM MQ Advanced still includes licensing for IBM MQ Telemetry deployment for all IBM MQ servers with any amount of IBM MQ Advanced licenses purchased.

Enhancements and changes in Managed File Transfer capabilities

IBM MQ has included Managed File Transfer capabilities for a number of years, allowing users to use the MQ environment to send and receive data in and out of files. This enabled file-to-file transfer, message-to-file transfer, and file-to-message transfer, with configuration and monitoring through MQ Explorer. As announced in Software Announcement [ZP14-0048](#), dated March 11, 2014, the Managed File Transfer capabilities provided with IBM MQ have been enhanced through the additional entitlement to IBM Sterling Connect:Direct for peer-to-peer file transfer, and entitlement to IBM Sterling Control Center which provides event-based monitoring and management for file transfers supporting both IBM MQ Managed File Transfer and IBM Sterling Connect:Direct. This increases the function and capabilities available to users of IBM MQ wanting to reliably and securely move files or file contents. As part of this update and enhancement to previous releases, the WebSphere MQ Managed File Transfer Agent, now available as part of the WebSphere Managed File Transfer Managed Endpoint entitlement, is licensed per Install instead of per Client Device.

Accessibility by people with disabilities

IBM MQ V8.0 is capable as of May 23, 2014, 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 U.S. Section 508 Voluntary Product Accessibility Template (VPAT) containing details on accessibility compliance can be requested at

http://www.ibm.com/able/product_accessibility/index.html

Product positioning

The IBM MQ family offers a universal messaging backbone for connectivity between all types of applications and systems, including SOA deployments. It connects new and existing applications, as well as web services, with reliable messaging. IBM MQ provides the reliable and secure messaging needed as a transport layer to underpin an enterprise service bus (ESB). It delivers guaranteed, reliable messaging - as well as other qualities of service - offering a choice in the class of delivery.

IBM MQ supports industry-standard Java™ Message Service (JMS 2.0) messaging. It enables simple, RESTful access from Web 2.0 to core back-end applications. IBM MQ integrates virtually any commercial IT system with support for more than 80 platform configurations. It integrates Java Enterprise Edition (JEE) applications, .NET applications, CICS®, IMS™, DB2®, and packaged applications.

IBM MQ can help organizations get more from their IT investments by offering a reliable and flexible integration backbone for exchanging messages between applications and web services.

- IBM MQ, the core of application integration, delivers the reliable and proven messaging backbone for SOA connectivity, as the universal, multipurpose data transport. It connects many commercial IT systems, with support for more than 80 platform configurations. IBM MQ supports industry-standard JMS 2.0 messaging and offers a choice of APIs. IBM MQ interoperates with the JMS messaging services embedded in WebSphere Application Server, enabling JEE environments to bridge to other environments. IBM MQ is a flexible connectivity solution that can grow incrementally with changing business needs.

- IBM MQ for z/OS® exploits the capabilities of the IBM System z® platform to deliver a messaging powerhouse.
- WebSphere MQ for HP OpenVMS, WebSphere MQ for HP NonStop Server, and WebSphere MQ for z/VSE® all extend the reach of IBM MQ to these specific computing platforms.
- IBM MQ Advanced Message Security expands the industry-standard security supplied by IBM MQ with end-to-end data protection for applications. It enables enterprise-wide, remote management of security policies on an MQ network and can be deployed to existing production environments without changes to existing IBM MQ applications. This capability is integrated into IBM MQ V8 on all supported platforms but is separately licensed for definition and use of policies. Licensing is included in IBM MQ Advanced.
- WebSphere Managed File Transfer Service and WebSphere Managed File Transfer Endpoints leverage both existing messaging infrastructures to provide reliable, secure managed file transfer between systems without major recoding of applications that produce and consume files instead of messages, or use IBM Sterling Connect:Direct to move files between systems. This capability is further enhanced with IBM Sterling Control Center for event-based monitoring and management of file transfers. Licensing for WebSphere Managed File Transfer is subject to entitlement in addition to IBM MQ entitlement, but licensing for WebSphere Managed File Transfer Service is included in IBM MQ Advanced entitlement.
- IBM MQ Telemetry provides a lightweight client to run on physical devices such as sensors, or mobile devices such as mobile phones, extending the reach of the IBM MQ infrastructure. Connectivity to MQTT clients or the IBM MQ Telemetry Daemon for Devices is available subject to separate entitlement. Included with entitlement to IBM MQ Advanced is entitlement to deploy IBM MQ Telemetry on all MQ servers in the enterprise.
- WebSphere MQ Low Latency Messaging (on Linux™, Microsoft Windows, and Oracle Solaris platforms) extends the IBM MQ product family with low-latency, high-throughput delivery. It is optimized for the very high-volume, low-latency requirements typical of financial market firms and other industries where speed of data delivery is paramount. This is not provided with IBM MQ, but is available separately with separate entitlement. Messages can be exchanged both ways between IBM MQ and WebSphere MQ Low Latency Messaging.

IBM MQ delivers the messaging backbone that underpins and extends the IBM ESB portfolio. It supplies the transport layer that ESBs can build upon, augmenting the backbone with mediation, transformation, and routing services.

- IBM Integration Bus adds transformation, intelligent routing, and information flow modeling to the IBM MQ messaging backbone. This ESB distributes information and data generated by business events in real time to people, applications, and devices throughout the extended enterprise and beyond.

The IBM MQ family is complemented by skills, services, and offerings from more than 800 IBM Business Partners worldwide.

In addition, the IBM Tivoli® portfolio offers systems management for large-scale IBM MQ solutions. Tivoli OMEGAMON® XE for Messaging can help improve the availability and performance of IBM MQ solutions. It can identify common problems and automate corrective actions using predefined industry best-practice situations, while monitoring key IBM MQ metrics. It can also help improve management of service level agreements (SLAs) by monitoring availability and capacity using real-time and historical data analysis. Out-of-the box capabilities, such as auto-discovery and monitoring of complex IBM MQ environments, can improve IT staff productivity and reduce administration costs.

In addition, SupportPac product extensions offer additional function available as a download from the Internet. Visit

<http://www.ibm.com/webspheremq>

Statement of direction

IBM intends to deliver features into IBM MQ to allow applications that have been developed to the MQ Light API to be run on IBM MQ. This option might be considered when an application requires the qualities of service provided by an enterprise messaging platform. IBM intends to make this capability available in a future update to IBM MQ. MQ Light is currently in open alpha and consequently content, features, and name are subject to change.

IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal without notice at IBM's sole discretion. Information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision. The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. Information about potential future products may not be incorporated into any contract. The development, release, and timing of any future features or functionality described for our products remain at our sole discretion.

Reference information

For details about related products, refer to:

- IBM WebSphere MQ V8.0 for z/OS : Software Announcement [ZP14-0222](#), dated April 22, 2014
- WebSphere MQ for z/OS V8.0: Software Announcement [ZP14-0216](#), dated April 22, 2014
- IBM MQ V7.5 with Sterling Managed File Transfer: Software Announcement [ZP14-0048](#), dated March 11, 2014

Program number

Program number	VRM	Program name
5724-H72	8.0	IBM MQ for Multiplatforms

Offering Information

Product information is available via the Offering Information website

<http://www.ibm.com/common/ssi>

Also, visit the Passport Advantage® website

<http://www.ibm.com/software/passportadvantage>

Publications

A printed *Quick Start Guide* is shipped with the product.

IBM WebSphere MQ V8.0 documentation is published in IBM Knowledge Center, which can be viewed from a web browser with Internet access.

On June 13, 2014, the online version of the IBM WebSphere MQ V8.0 product documentation will be available at

Product documentation

IBM WebSphere MQ V8.0 product documentation is provided online, through IBM Knowledge Center.

Online information in IBM Knowledge Center: Online documentation for IBM WebSphere MQ V8.0 is now hosted in IBM Knowledge Center. IBM Knowledge Center provides information for over 2,500 IBM products. The information that was previously provided in product Information Centers is in IBM Knowledge Center. IBM Knowledge Center provides integrated tools for finding, filtering, customizing, saving, and sharing information.

Benefits include:

- **Consolidation:** IBM Knowledge Center is one place to go to find information about all IBM products.
- **Consistency:** There were differences in the presentation and function of Information Centers between products. IBM Knowledge Center provides the same set of functions for all product information.
- **Customization:** Customers can use IBM Knowledge Center filtering capabilities to select the information that is most relevant to them, and build that information into customized collections for viewing online or in PDF. IBM updates to the information are automatically reflected in such collections.

For more information about the features of IBM Knowledge Center, see the welcome page, at

<http://www.ibm.com/support/knowledgecenter/>

For the IBM WebSphere MQ V8.0 product documentation in IBM Knowledge Center, on June 13, 2014, visit

http://www.ibm.com/support/knowledgecenter/SSFKSJ_8.0.0/welcome/WelcomePagev8r0.html

Technical information

Specified operating environment

Hardware requirements

For IBM AIX® - 64-bit IBM System p® server

For HP-UX - Itanium™ systems only; HP-UX PA-RISC is not supported

For Linux

- Linux for System x® (32-bit): x86 compatible PC hardware, including x86-64 processors (1)
- Linux for System x (64-bit): AMD64, x86-64, and compatible processors
- Linux for System p : 64-bit System i® and System p IBM POWER® processor-based systems
- Linux for System z : IBM System z9®, System z10®, or eServer™ (or equivalent) 64-bit processor

For Oracle Solaris

- Oracle Solaris SPARC: 64-bit SPARC systems only
- Oracle Solaris x86-64: AMD64, EM64T, and compatible processors

For Windows - x86 (1) and x86-64 (also known as x64) technology-compatible PC hardware

(1) Only the C MQ Client is supported on 32-bit environments.

Software requirements

For complete details regarding the minimum software requirements to install and run IBM MQ for Multiplatforms V8.0, available on May 23, 2014, refer to

<http://www.ibm.com/support/docview.wss?uid=swg27006467>

Minimum software requirements:

For AIX :

- Operating system
 - AIX V7.1 TL2 POWER system
 - AIX V6.1 TL8 POWER system
- Application servers
 - All application servers that support the Java EE 7.0 specification
- LDAP servers
 - All LDAP servers that support the LDAP V2 or V3 specification
- Supported application servers for WebSphere MQ Managed File Transfer
 - WebSphere Application Server V8.5
 - WebSphere Application Server V8.0
 - WebSphere Application Server V7.0 fix pack 7.0.0.17 (2)
- Supported databases for WebSphere MQ Managed File Transfer
 - DB2 Enterprise Server Edition V10.5
 - DB2 Advanced Enterprise Server Edition V10.5
 - DB2 Enterprise Server Edition V10.1
 - DB2 Advanced Enterprise Server Edition V10.1
 - DB2 Enterprise Server Edition V9.7.0.6
 - DB2 Advanced Enterprise Server Edition V9.7.0.6
 - Oracle Database 12c Enterprise Edition Release 1
 - Oracle Database 11g Enterprise Edition Release 2
- Supported web browsers for WebSphere MQ Managed File Transfer web gateway administrative console and sample web application
 - Mozilla Firefox ESR24 or later
 - Internet Explorer 10 or later
- Prerequisites to run the WebSphere MQ Managed File Transfer protocol bridge agent - A standards-compliant FTP, FTPS, or SFTP server that uses a UNIX™ or Windows style file system format
- Prerequisites to run an IBM Sterling Connect:Direct node as a source or destination of a transfer through a WebSphere MQ Managed File Transfer Connect:Direct bridge agent
 - IBM Sterling Connect:Direct for Windows V4.5.01 server (Build 16 QC18989 or later)
 - IBM Sterling Connect:Direct for Windows V4.4.01 server (Build 11)
 - IBM Sterling Connect:Direct for UNIX V4.0.0.0 server (with 04 March 2011 maintenance or later)
 - IBM Sterling Connect:Direct for UNIX V3.8 server (with 04 March 2011 maintenance or later)

- IBM Sterling Connect:Direct for z/OS V5.0.00 server (with POST5000 APAR bucket)
- IBM Sterling Connect:Direct for z/OS V4.8 server (with maintenance PTF PUT4802 or later)
- IBM Sterling Connect:Direct for z/OS V4.7 server (with maintenance PTF PUT4702 or later)
- IBM Sterling Connect:Direct for z/OS V4.6 server (with maintenance PTF PUT4603 or later)

For details about supported platforms, refer to the IBM Sterling Connect:Direct website at

<http://www-01.ibm.com/software/commerce/managed-file-transfer/products/connect-direct/>

- Compiler
 - COBOL for AIX V3.1
 - COBOL for AIX V4.1
 - COBOL for AIX V4.1.1
 - Micro Focus Server Express® 5.1
 - XL C/C++ for AIX V10.1
 - XL C/C++ for AIX V11.1
 - XL C/C++ for AIX V12.1
 - XL C for AIX V10.1
 - XL C for AIX V11.1
 - XL C for AIX V12.1
- Java Technology
 - IBM Runtime Environment, Java Technology Edition V7

WebSphere MQ Advanced Message Security policies are supported for Java applications using bindings on any supported Java run time. Support for Java applications using client connections is limited to those running under a supported Java run time.

- Network communication
 - SNA: Communications Server for AIX V6.4
 - TCP/IP: IPv4 and IPv6 provided by the operating system
- Resource managers (when WebSphere MQ is the transaction manager)
 - DB2 Advanced Enterprise Server Edition V9.7.0.6
 - DB2 Enterprise Server Edition V9.7.0.6
 - DB2 Advanced Enterprise Server Edition V10.1
 - DB2 Enterprise Server Edition V10.1
 - DB2 Advanced Enterprise Server Edition V10.5
 - DB2 Enterprise Server Edition V10.5
 - IBM Informix® Server V11.70
 - IBM Informix Server V12.10
 - Oracle Database 11g Enterprise Edition Release 2
 - Oracle Database 12c Enterprise Edition Release 1
 - Sybase Adaptive Server Enterprise 15.0
 - Sybase Adaptive Server Enterprise 15.5
- Transaction manager
 - Oracle Tuxedo 11g R1
 - IBM TXSeries for Multiplatforms V7.1

- IBM TXSeries for Multiplatforms V8.1
- IBM WebSphere Application Server V7.0
- IBM WebSphere Application Server V8.0
- IBM WebSphere Application Server V8.5.5
- Virtualization
 - Live Application Mobility (LAM) for Workload Partition (WPAR)
 - WPAR: Product installed in Global AIX Instance, executed in System Workload Partition
 - WPAR: Product installed in System Workload Partition

(2) Latest application server version supported for the WebSphere Managed File Transfer Web Gateway component.

For HP: (3)

- Operating system - HP-UX 11i v3 (11.31)
- Application servers
 - All application servers that support the Java EE 7.0 specification LDAP servers
- LDAP servers
 - All LDAP servers that support the LDAP V2 or V3 specification
- Supported databases for WebSphere MQ Managed File Transfer
 - DB2 Enterprise Server Edition V10.5
 - DB2 Advanced Enterprise Server Edition V10.5
 - DB2 Enterprise Server Edition V10.1
 - DB2 Advanced Enterprise Server Edition V10.1
 - DB2 Enterprise Server Edition V9.7.0.6
 - DB2 Advanced Enterprise Server Edition V9.7.0.6
 - Oracle Database 12c Enterprise Edition Release 1
 - Oracle Database 11g Enterprise Edition Release 2
- Prerequisites to run the WebSphere MQ Managed File Transfer protocol bridge agent - A standards-compliant FTP, FTPS, or SFTP server that uses a UNIX or Windows style file system format
- Prerequisites to run an IBM Sterling Connect:Direct node as a source or destination of a transfer through a WebSphere MQ Managed File Transfer Connect:Direct bridge agent
- IBM Sterling Connect:Direct for Windows V4.5.01 server (Build 16 QC18989 or later)
- IBM Sterling Connect:Direct for Windows V4.4.01 server (Build 11)
- IBM Sterling Connect:Direct for UNIX V4.0.0.0 server (with 04 March 2011 maintenance or later)
- IBM Sterling Connect:Direct for UNIX V3.8 server (with 04 March 2011 maintenance or later)
- IBM Sterling Connect:Direct for z/OS V5.0.00 server (with POST5000 APAR bucket)
- IBM Sterling Connect:Direct for z/OS V4.8 server (with maintenance PTF PUT4802 or later)
- IBM Sterling Connect:Direct for z/OS V4.7 server (with maintenance PTF PUT4702 or later)
- IBM Sterling Connect:Direct for z/OS V4.6 server (with maintenance PTF PUT4603 or later)

For details about supported platforms, refer to the IBM Sterling Connect:Direct website at

- Compilers
 - HP aCC A.06.16 and future versions
 - Micro Focus Server Express 5.1
- Java Technology
 - HP Java SDK/JRE/JDK 7.0
 - IBM Runtime Environment, Java Technology Edition V7

WebSphere MQ Advanced Message Security policies are supported for Java applications using bindings on any supported Java run time. Support for Java applications using client connections is limited to those running under a supported Java run time.

- Network communication
 - HP SNAplus2 7.0
 - TCP/IP: IPv4 and IPv6 provided by the operating system
- Resource managers (when WebSphere MQ is the transaction manager)
 - DB2 Advanced Enterprise Server Edition V9.7.06
 - DB2 Enterprise Server Edition V9.7.0.6
 - DB2 Advanced Enterprise Server Edition V10.1
 - DB2 Enterprise Server Edition V10.1
 - DB2 Advanced Enterprise Server Edition V10.5
 - DB2 Enterprise Server Edition V10.5
 - IBM Informix Server V11.70
 - IBM Informix Server V12.10
 - Oracle Database 11g Enterprise Edition Release 2
 - Oracle Database 12c Enterprise Edition Release 1
 - Sybase Adaptive Server Enterprise 15.0
 - Sybase Adaptive Server Enterprise 15.5
- Transaction manager
 - Oracle Tuxedo 11g R1
 - IBM TXSeries for Multiplatforms V7.1
 - IBM TXSeries for Multiplatforms V8.1
 - IBM WebSphere Application Server V7.0
 - IBM WebSphere Application Server V8.0
 - IBM WebSphere Application Server V8.5.5

(3) WebSphere MQ Telemetry Server does not run on this platform.

For Linux :

- Operating system
 - Red Hat Enterprise Linux (RHEL) Server 6 Server Update 3 (x86-64, System p and System z) (4)
 - SUSE Linux Enterprise Server (SLES) 11 SP2 (x86-64, System p and System z) (4)
- Application servers
 - All application servers that support the Java EE 7.0 specification
- LDAP servers
 - All LDAP servers that support the LDAP V2 or V3 specification

- Supported application servers for WebSphere MQ Managed File Transfer
 - WebSphere Application Server V8.5
 - WebSphere Application Server V8.0
 - WebSphere Application Server V7.0 fix pack 7.0.0.17 (5)
- Supported databases for WebSphere MQ Managed File Transfer
 - DB2 Enterprise Server Edition V10.5
 - DB2 Advanced Enterprise Server Edition V10.5
 - DB2 Enterprise Server Edition V10.1
 - DB2 Advanced Enterprise Server Edition V10.1
 - DB2 Enterprise Server Edition V9.7.0.6
 - DB2 Advanced Enterprise Server Edition V9.7.0.6
 - Oracle Database 12c Enterprise Edition Release 1
 - Oracle Database 11g Enterprise Edition Release 2
- Supported web browsers for WebSphere MQ Managed File Transfer web gateway administrative console and sample web application
 - Mozilla Firefox ESR24 or later
 - Internet Explorer 10 or later
- Prerequisites to run the WebSphere MQ Managed File Transfer protocol bridge agent - A standards-compliant FTP, FTPS, or SFTP server that uses a UNIX or Windows style file system format
- Prerequisites to run an IBM Sterling Connect:Direct node as a source or destination of a transfer through a WebSphere MQ Managed File Transfer Connect:Direct bridge agent
 - IBM Sterling Connect:Direct for Windows V4.5.01 server (Build 16 QC18989 or later)
 - IBM Sterling Connect:Direct for Windows V4.4.01 server (Build 11)
 - IBM Sterling Connect:Direct for UNIX V4.0.0.0 server (with 04 March 2011 maintenance or later)
 - IBM Sterling Connect:Direct for UNIX V3.8 server (with 04 March 2011 maintenance or later)
 - IBM Sterling Connect:Direct for z/OS V5.0.00 server (with POST5000 APAR bucket)
 - IBM Sterling Connect:Direct for z/OS V4.8 server (with maintenance PTF PUT4802 or later)
 - IBM Sterling Connect:Direct for z/OS V4.7 server (with maintenance PTF PUT4702 or later)
 - IBM Sterling Connect:Direct for z/OS V4.6 server (with maintenance PTF PUT4603 or later)

For details about supported platforms, refer to the IBM Sterling Connect:Direct website at

<http://www-01.ibm.com/software/commerce/managed-file-transfer/products/connect-direct/>

- Compilers
 - GNU C Compiler (gcc) and g++ 4.3
 - GNU C Compiler (gcc) and g++ 4.4.4
 - Micro Focus Server Express 5.1
- Java Technology
 - IBM Runtime Environment, Java Technology Edition V7

WebSphere MQ Advanced Message Security policies are supported for Java applications using bindings on any supported Java run time. Support for Java

applications using client connections is limited to those running under a supported Java run time.

- Network communication
 - SNA: IBM Communications Server for Linux V6.4 (System p)
 - SNA: IBM Communications Server for Linux on System z V6.4 (System p)
 - TCP/IP: IPv4 and IPv6 provided by the operating system
 - SNA LU6.2 Services for Linux
- Resource managers (when WebSphere MQ is the transaction manager)
 - DB2 Advanced Enterprise Server Edition V9.7.06
 - DB2 Enterprise Server Edition V9.7.0.6
 - DB2 Advanced Enterprise Server Edition V10.1
 - DB2 Enterprise Server Edition V10.1
 - DB2 Advanced Enterprise Server Edition V10.5
 - DB2 Enterprise Server Edition V10.5
 - IBM Informix Server V11.70
 - IBM Informix Server V12.10
 - Oracle Database 11g Enterprise Edition Release 2
 - Oracle Database 12c Enterprise Edition Release 1
 - Sybase Adaptive Server Enterprise 15.0
 - Sybase Adaptive Server Enterprise 15.5
- Transaction manager
 - Oracle Tuxedo 11g R1
 - IBM TXSeries for Multiplatforms V7.1
 - IBM TXSeries for Multiplatforms V8.1
 - IBM WebSphere Application Server V7.0
 - IBM WebSphere Application Server V8.0
 - IBM WebSphere Application Server V8.5.5
- Virtualization
 - IBM PowerVM® Hypervisor (LPAR, DPAR, Micro-Partition) (Linux for System p)
 - IBM PR/SM™ any version (Linux for System z)
 - Red Hat KVM, as delivered with Red Hat Enterprise Linux (RHEL)
 - SUSE KVM, as delivered with SUSE Linux Enterprise Server (SLES)
 - VMware ESXi V5.0 and V5.1 (Linux on x86-32 and x86-64)

(4) The WebSphere MQ Telemetry Server component is only supported for the WebSphere Managed File Transfer Web Gateway component.

(5) Latest application server version supported for the WebSphere Managed File Transfer Web Gateway component.

For Oracle Solaris: (6)

- Operating system
 - Oracle Solaris 10 SPARC
 - Oracle Solaris 10 x86-64
 - Oracle Solaris 11 SPARC
 - Oracle Solaris 11 x86-64
- Application servers
 - All application servers that support the Java EE 7.0 specification

- LDAP servers
 - All LDAP servers that support the LDAP V2 or V3 specification
- Supported databases for WebSphere MQ Managed File Transfer
 - DB2 Enterprise Server Edition V10.5
 - DB2 Advanced Enterprise Server Edition V10.5
 - DB2 Enterprise Server Edition V10.1
 - DB2 Advanced Enterprise Server Edition V10.1
 - DB2 Enterprise Server Edition V9.7.0.6
 - DB2 Advanced Enterprise Server Edition V9.7.0.6
 - Oracle Database 12c Enterprise Edition Release 1
 - Oracle Database 11g Enterprise Edition Release 2
- Prerequisites to run the WebSphere MQ Managed File Transfer protocol bridge agent - A standards-compliant FTP, FTPS, or SFTP server that uses a UNIX or Windows style file system format
- Prerequisites to run an IBM Sterling Connect:Direct node as a source or destination of a transfer through a WebSphere MQ Managed File Transfer Connect:Direct bridge agent
 - IBM Sterling Connect:Direct for Windows V4.5.01 server (Build 16 QC18989 or later)
 - IBM Sterling Connect:Direct for Windows V4.4.01 server (Build 11)
 - IBM Sterling Connect:Direct for UNIX V4.0.0.0 server (with 04 March 2011 maintenance or later)
 - IBM Sterling Connect:Direct for UNIX V3.8 server (with 04 March 2011 maintenance or later)
 - IBM Sterling Connect:Direct for z/OS V5.0.00 server (with POST5000 APAR bucket)
 - IBM Sterling Connect:Direct for z/OS V4.8 server (with maintenance PTF PUT4802 or later)
 - IBM Sterling Connect:Direct for z/OS V4.7 server (with maintenance PTF PUT4702 or later)
 - IBM Sterling Connect:Direct for z/OS V4.6 server (with maintenance PTF PUT4603 or later)

For details about supported platforms, refer to the IBM Sterling Connect:Direct website at

<http://www-01.ibm.com/software/commerce/managed-file-transfer/products/connect-direct/>

- Compilers
 - Micro Focus Server Express 5.1
 - Oracle Solaris Studio 12.2
- Java Technology
 - IBM Runtime Environment, Java Technology Edition V7
 - Oracle Java SDK/JRE/JDK 7.0

WebSphere MQ advanced message security policies are supported for Java applications using bindings on any supported Java run time. Support for Java applications using client connections is limited to those running under a supported Java run time.

- Network communication
 - SNA: Data Connection SNAP-IX 7.0 (SPARC)
 - TCP/IP: IPv4 and IPv6 provided by the operating system
- Resource managers (when WebSphere MQ is the transaction manager)

- DB2 Advanced Enterprise Server Edition V9.7.06
- DB2 Enterprise Server Edition V9.7.0.6
- DB2 Advanced Enterprise Server Edition V10.1
- DB2 Enterprise Server Edition V10.1
- DB2 Advanced Enterprise Server Edition V10.5
- DB2 Enterprise Server Edition V10.5
- IBM Informix Server V11.70
- IBM Informix Server V12.10
- Oracle Database 11g Enterprise Edition Release 2
- Oracle Database 12c Enterprise Edition Release 1
- Sybase Adaptive Server Enterprise 15.0
- Sybase Adaptive Server Enterprise 15.5
- Transaction manager
 - Oracle Tuxedo 11g R1
 - IBM TXSeries for Multiplatforms V7.1
 - IBM TXSeries for Multiplatforms V8.1
 - IBM WebSphere Application Server V7.0
 - IBM WebSphere Application Server V8.0
 - IBM WebSphere Application Server V8.5.5

(6) WebSphere MQ Telemetry does not run on this platform.

For Windows :

- Operating system
 - Windows Server 2008 R2 SP1 Standard Edition, Datacenter Edition, Enterprise Edition (x86-64)
 - Windows Server 2012 Standard Edition, Datacenter Edition (x86-64)
 - Windows Server 2012 R2 Standard Edition, Datacenter Edition (x86-64)
 - Windows 7 SP1 Ultimate, Professional, Enterprise (x86-32 and x86-64)
 - Windows 8 Standard, Professional, Enterprise (x86-32 and x86-64)
 - Windows 8.1 Standard, Professional, Enterprise (x86-32 and x86-64)
- .NET (7)
 - Microsoft.NET Framework 3.5
 - Microsoft.NET Framework 4.0
- Application servers
 - All application servers that support the Java EE 7.0 specification
- LDAP servers
 - All LDAP servers that support the LDAP V2 or V3 specification
- Supported application servers for WebSphere MQ Managed File Transfer
 - WebSphere Application Server V8.5
 - WebSphere Application Server V8.0
 - WebSphere Application Server V7.0 fix pack 7.0.0.17 (8)
- Supported databases for WebSphere MQ Managed File Transfer
 - DB2 Enterprise Server Edition V10.5
 - DB2 Advanced Enterprise Server Edition V10.5
 - DB2 Enterprise Server Edition V10.1
 - DB2 Advanced Enterprise Server Edition V10.1

- DB2 Enterprise Server Edition V9.7.0.6
- DB2 Advanced Enterprise Server Edition V9.7.0.6
- Oracle Database 12c Enterprise Edition Release 1
- Oracle Database 11g Enterprise Edition Release 2
- Supported web browsers for WebSphere MQ Managed File Transfer web gateway administrative console and sample web application
 - Mozilla Firefox ESR24 or later
 - Internet Explorer 10 or later
- Prerequisites to run the WebSphere MQ Managed File Transfer protocol bridge agent - A standards-compliant FTP, FTPS, or SFTP server that uses a Windows style file system format
- Prerequisites to run an IBM Sterling Connect:Direct agent with WebSphere Managed File Transfer
 - Connect:Direct for Windows V4.5.01 (Build 16 QC18989 or later) server
 - Connect:Direct for Windows V4.4.01 (Build 11) server
- Prerequisites to run an IBM Sterling Connect:Direct node as a source or destination of a transfer through a WebSphere MQ Managed File Transfer Connect:Direct bridge agent
 - IBM Sterling Connect:Direct for Windows V4.5.01 server (Build 16 QC18989 or later)
 - IBM Sterling Connect:Direct for Windows V4.4.01 server (Build 11)
 - IBM Sterling Connect:Direct for Unix V4.0.0.0 server (with 04 March 2011 maintenance or later)
 - IBM Sterling Connect:Direct for Unix V3.8 server (with 04 March 2011 maintenance or later)
 - IBM Sterling Connect:Direct for z/OS V5.0.00 server (with POST5000 APAR bucket)
 - IBM Sterling Connect:Direct for z/OS V4.8 server (with maintenance PTF PUT4802 or later)
 - IBM Sterling Connect:Direct for z/OS V4.7 server (with maintenance PTF PUT4702 or later)
 - IBM Sterling Connect:Direct for z/OS V4.6 server (with maintenance PTF PUT4603 or later)

For details about supported platforms, refer to the IBM Sterling Connect:Direct website at

<http://www-01.ibm.com/software/commerce/managed-file-transfer/products/connect-direct/>

- Compilers
 - Micro Focus Server Express 5.1
 - Microsoft Visual Studio 2010
 - Microsoft Visual Studio 2012
- Java Technology
 - IBM Runtime Environment, Java Technology Edition V7

WebSphere MQ Advanced Message Security policies are supported for Java applications using bindings on any supported Java run time. Support for Java applications using client connections is limited to those running under a supported Java run time.

- Network communication
 - IBM Communications Server for Windows V6.4
 - Microsoft Host Integration Server 2010

- Personal Communications 6.0
- TCP/IP: IPv4 and IPv6 provided by the operating system
- NetBIOS: Provided with the operating system on Windows
- SPX: Sequence Package Exchange with operating system
- Resource managers (when WebSphere MQ is the transaction manager)
 - DB2 Advanced Enterprise Server Edition V9.7.06
 - DB2 Enterprise Server Edition V9.7.0.6
 - DB2 Advanced Enterprise Server Edition V10.1
 - DB2 Enterprise Server Edition V10.1
 - DB2 Advanced Enterprise Server Edition V10.5
 - DB2 Enterprise Server Edition V10.5
 - IBM Informix Server V11.70
 - IBM Informix Server V12.10
 - Oracle Database 11g Enterprise Edition Release 2
 - Oracle Database 12c Enterprise Edition Release 1
 - Sybase Adaptive Server Enterprise 15.0
 - Sybase Adaptive Server Enterprise 15.5
- Transaction manager
 - Oracle Tuxedo 11g R1
 - IBM TXSeries for Multiplatforms V7.1
 - IBM TXSeries for Multiplatforms V8.1
 - IBM WebSphere Application Server V7.0
 - IBM WebSphere Application Server V8.0
 - IBM WebSphere Application Server V8.5.5
- Virtualization
 - VMware ESXi V5.0 and V5.1

(7) Advanced Message Security is not fully supported in fully managed .NET applications.

(8) Latest application server version supported for the WebSphere Managed File Transfer Web Gateway component.

For IBM i: (9)

- Operating system
 - IBM i 7.1
- Application servers
 - All application servers that support the Java EE 7.0 specification
- LDAP servers
 - All LDAP servers that support the LDAP V2 or V3 specification
- Prerequisites to run the WebSphere MQ Managed File Transfer protocol bridge agent - A standards-compliant FTP server that uses a UNIX or Windows style file system format
- Compilers
 - Rational® development Studio for IBM i V7.1
- Java Technology
 - IBM Runtime Environment, Java Technology Edition V7 (32-bit & 64-bit)

WebSphere MQ Advanced Message Security policies are supported for Java applications using bindings on any supported Java run time. Support for Java applications using client connections is limited to those running under a supported Java run time.

- Network communication
 - TCP/IP: IPv4 and IPv6 provided by the operating system.
 - SNA LU6.2: Provided with the operating system
- Resource managers (when WebSphere MQ is the transaction manager)
 - DB2 for i V7.1
 - IBM i V7.1
- Transaction manager
 - IBM CICS Transaction Server for IBM i V7.1
 - Oracle Tuxedo 11g R1
 - IBM TXSeries for Multiplatforms V7.1
 - IBM TXSeries for Multiplatforms V8.1
 - IBM WebSphere Application Server V7.0
 - IBM WebSphere Application Server V8.0
 - IBM WebSphere Application Server V8.5.5
- Virtualization
 - IBM PowerVM Hypervisor (LPAR, DPAR, Micro-Partition) any supported version

(9) WebSphere MQ Telemetry does not run on this platform.

For the WebSphere MQ Telemetry operating environment:

WebSphere MQ Telemetry is a feature of the WebSphere MQ product. The Telemetry server runs only on a subset of the WebSphere MQ supported platforms.

For AIX :

Operating system

- AIX 6.1 TL8 POWER system
- AIX 7.1 TL2 POWER system

For Linux :

Operating system

- Red Hat Enterprise Linux (RHEL) Server 6 Server Update 3 x86-64 and System z
- SUSE Linux Enterprise Server (SLES) 11 SP2 x86-64 and System z

For Windows :

Operating system

- Windows Server 2008 R2 SP1 Standard Edition, Datacenter Edition, Enterprise Edition (x86-64)
- Windows Server 2012 Standard Edition, Datacenter Edition (x86-64)
- Windows Server 2012 R2 Standard Edition, Datacenter Edition (x86-64)
- Windows 7 SP1 Ultimate, Professional, Enterprise (x86-64)
- Windows 8 Standard, Professional, Enterprise (x86-64)
- Windows 8.1 Standard, Professional, Enterprise (x86-64)

The MQ Telemetry Daemon, C, and Java clients can be obtained from

<http://www.ibm.com/software/products/en/wmq-telemetry/>

For the most current and up to date software requirements for IBM MQ V8.0, available on the product availability date, visit

<http://www.ibm.com/support/docview.wss?uid=swg27006467>

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.

Compatibility

WebSphere MQ V8.0 queue managers and clients interoperate with queue managers and clients from current and previous levels of WebSphere MQ or MQSeries® products. The WebSphere MQ Explorer runs on the Linux on x86-64 and Windows platforms. The MQ Explorer supplied with WebSphere MQ V8.0 can be used on a client connection to connect to any supported level of WebSphere MQ on any platform. WebSphere MQ Managed File Transfer supports file transfer to and from server and client installations at any level of WebSphere MQ File Transfer Edition.

Limitations

For additional information, refer to usage restrictions in the [Terms and conditions](#) section of this announcement, or to the license information document that is available on the IBM Software License Agreement website

<http://www.ibm.com/software/sla/sladb.nsf>

IBM Electronic Support

The IBM Support Portal is your gateway to technical support. This includes IBM Electronic Support tools and resources, for software and hardware, to help save time and simplify support. The Electronic Support tools can help you find answers to questions, download fixes, troubleshoot, automate data collection, submit and track problems through the Service Request online tool, and build skills. All these tools are made available through your IBM support agreement, at no additional charge. Read about the Electronic Support portfolio of tools

<http://ibm.com/electronicssupport>

Access the IBM Support Portal

<http://ibm.com/support>

Access the online Service Request tool

<http://ibm.com/support/servicerequest>

Planning information

Deprecated function in IBM WebSphere MQ V8.0:

- IBM does not expect that any additional enhancements will be applied to the IBM MQ Managed File Transfer Web Gateway function in IBM MQ and IBM MQ Managed File Transfer.
- IBM does not expect that any additional enhancements will be applied to the Service Definition Wizard in MQ Explorer.
- IBM does not expect that any additional enhancements will be applied to the WebSphere MQ Bridge for HTTP function. The WebSockets support provided by the IBM Messaging Client for JavaScript™ in the MA9B Mobile and Device Messaging Client Pack should be used as an alternative. This can be found at

https://www.ibm.com/developerworks/community/blogs/messaging/entry/mobile_and_device_messaging_client_pack10

- IBM does not expect that any additional enhancements will be applied to the MQ transport for SOAP .NET Framework 1 and 2 function. The WebSphere MQ custom channel for Microsoft Windows Communication Foundation (WCF) should be used as an alternative.
- IBM does not expect that any additional enhancements will be applied to the MQ transport for SOAP Java client and listener for Axis 1.4 using JAX-RPC function. The WebSphere MQ transport SOAP Java client for Axis 2 using JAX-WS should be used as an alternative

Packaging

IBM WebSphere MQ V8.0 is distributed via electronic download and a single physical media pack consisting of multiple DVDs and CD-ROMs. This program, when downloaded from a website, contains the applicable IBM license agreement and License Information, if appropriate, which will be presented for acceptance at the time of installation of the program. For future reference, the license and License Information will be stored in a directory such as LICENSE.TXT.

Security, auditability, and control

WebSphere MQ uses the security and auditability features of the host software.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Global Technology Services®

Contact your IBM representative for the list of selected services available in your country, either as standard or customized offerings, for the efficient installation, implementation, or integration of this product.

Ordering information

This product is available only via 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.

For more information about IBM Software Value Plus, visit

http://www.ibm.com/partnerworld/page/svp_authorized_portfolio

To locate IBM Business Partners for Software Value Plus in your geography for a specific Software Value Plus portfolio, visit

<http://www.ibm.com/partnerworld/wps/bplocator/>

Licensed function title	Product group	Product category
WebSphere MQ	IBM MQSeries	MQSeries

Program name	PID number	Charge unit description
IBM WebSphere MQ	5724-H72	Per PVU
IBM WebSphere MQ	5724-H72	Per Processor

		Value Unit (PVU) for Linux on System z
IBM WebSphere MQ	5724-H72	Processor-Day
IBM WebSphere MQ	5724-H72	Per Install
IBM WebSphere MQ	5724-H72	Client
IBM WebSphere MQ	5724-H72	Simultaneous Session

Product group: IBM MQSeries
Product Identifier Description (PID)
WebSphere MQ 5724-H72

Product category: MQ Series

For ordering information, consult your IBM representative or authorized IBM Business Partner, or visit

<http://www.ibm.com/software/support/pa.html>

Passport Advantage

Program name/Description	Part number
WebSphere MQ	
WebSphere MQ Per Processor Value Unit (PVU) Annual SW S&S Rnw1	E0256LL
WebSphere MQ Per Processor Value Unit (PVU) Lic + SW S&S 12 Mo	D55V1LL
WebSphere MQ Per Processor Value Unit (PVU) SW S&S Reinststate 12 Mo	D55V2LL
MQ Idle Standby PVU Lic+1yr Maint	D0GGQLL
MQ Idle Standby PVU S&S Renewal	E0ALULL
MQ Idle Standby PVU Reinststate 12 Mo	D0GGSLL
WebSphere MQ Advanced	
WebSphere MQ Advanced Per Processor Value Unit (PVU) License and SW S&S 12 Months	D14DJLL
WebSphere MQ Advanced Per Processor Value Unit (PVU) Annual SW S&S Renewal	E0JD0LL
WebSphere MQ Advanced Per Processor Value Unit (PVU) SW S&S Reinstatement 12 Months	D14DKLL
WebSphere MQ Advanced Idle Standby Per Processor Value Unit (PVU) License and SW S&S 12 Months	D14DSL
WebSphere MQ Advanced Idle Standby Per Processor Value Unit (PVU) Annual SW S&S Renewal	E0JD2LL
WebSphere MQ Advanced Idle Standby Per Processor Value Unit (PVU) SW S&S Reinstatement 12 Months	D14DTLL
WebSphere MQ Advanced for Developers Per Authorized User Single Install License and SW S&S 12 Months	D14EALL

WebSphere MQ Advanced for Developers Per Authorized User Single Install Annual SW S&S Renewal	E0JD7LL
WebSphere MQ Advanced for Developers Per Authorized User Single Install SW S&S Reinstatement 12 Months	D14EBLL
WebSphere MQ Telemetry	
WebSphere MQ Telemetry per Install Lic +SW S&S 12 mo	D0PJTL
WebSphere MQ Telemetry per Install Annual S&S Rnw1	E0DRHLL
WebSphere MQ Telemetry per Install SW S&S Reinstat 12mo	D0PJULL
WebSphere MQ Advanced Message Security Component	
WebSphere MQ Advanced Message Security Component PVU Lic + SW S&S 12 Mo	D0PLFLL
WebSphere MQ Advanced Message Security Component PVU Annual SW S&S Rnw1	E0DS8LL
WebSphere MQ Advanced Message Security Component PVU S&S Reinstat 12 Mo	D0PLGLL
WS MQ AMS Component Idle Standby per 10 PVUS Lic + SW S&S 12 Mo	D0PKZLL
WS MQ AMS Component Idle Standby per 10 PVUS Annual SW S&S Rnw1	E0DS0LL
WS MQ AMS Component Idle Standby per 10 PVUS S&S Reinstat 12 Mo	D0PL0LL
WS MQ AMS Component Idle Stby 10 PVUS Lin Sy zE BC Lic + SW S&S 12 Mo	D0PKWLL
WS MQ AMS Component Idle Stby 10 PVUS Lin Sy zE BC Annual SW S&S Rnw1	E0DRZLL
WS MQ AMS Component Idle Stby 10 PVUS Lin Sy zE BC S&S Reinstat 12 Mo	D0PKXLL
WebSphere MQ AMS Comp PVU Lin Sys z/zEnterprise BC Lic + SW S&S 12 Mo	D0PLCLL
WebSphere MQ AMS Comp PVU Lin Sys z/zEnterprise BC Annual SW S&S Rnw1	E0DS7LL
WebSphere MQ AMS Comp PVU Lin Sys z/zEnterprise BC S&S Reinstat 12 Mo	D0PLDLL
WebSphere Managed File Transfer Component	
WebSphere Managed File Transfer Service PVU Lic + SW S&S 12 Mo	D14CXLL
WebSphere Managed File Transfer Service PVU Annual SW S&S Rnw1	E0JCRL
WebSphere Managed File Transfer Service PVU S&S Reinstat 12 Mo	D14CYLL
WS Managed File Transfer Service Idle St 10 PVUS Lic + SW S&S 12 Mo	D14DDL
WS Managed File Transfer Service Idle St 10 PVUS Annual SW S&S Rnw1	E0JCXLL
WS Managed File Transfer Service Idle St 10 PVUS S&S Reinstat 12 Mo	D14DELL
WebSphere Managed File Transfer Agent Per Simultaneous Session License and SW S&S 12 Months	D14EGL
WebSphere Managed File Transfer Agent Per Simultaneous Session Annual SW S&S Renewal	E0JDALL

WebSphere Managed File Transfer Agent Per Simultaneous Session SW S&S Reinstatement 12 Months	D14EHLL
WebSphere Managed File Transfer Managed Endpoint Per Install License and SW S&S 12 Months	D14DFLL
WebSphere Managed File Transfer Managed Endpoint Per Install Annual SW S&S Renewal	E0JCYLL
WebSphere Managed File Transfer Managed Endpoint Per Install SW S&S Reinstatement 12 Months	D14DGLL

Passport Advantage trade-up

You must have previously acquired licenses for the following precursor products to be eligible to acquire equivalent licenses of the trade-up products.

Precursor product	Trade-up product	Trade-up part number
WebS MQ AMS PVU	WebSphere MQ AMS Component PVU Trdup Lic + SW S&S 12 Mo	D0PLHLL
WebS MQ AMS Idle Stby 10 PVUs	WebSphere MQ AMS Component Idle Stby 10 PVUs Trdup Lic + SW S&S 12 Mo	D0PL1LL
WebS MQ AMS Idle Stby 10 PVUs Sys zEN BC	WebS MQ AMS Comp IS 10 PVUs SzE Bc Trdup Lic + SW S&S 12 Mo	D0PKYLL
WebS MQ AMS PVU Sys zEN BC	WebS MQ AMS Comp PVU Sys zEN Bc Trdup Lic + SW S&S 12 Mo	D0PLELL
WebSphere MQ PVU License + SW S&S 12 Months	WebSphere MQ Advanced Processor Value Unit	D14DLLL
Sterling Connect Direct PVU License + SW S&S 12 Months	WebSphere MQ Advanced PVU Processor Value Unit	D14DMLL
WebSphere MQ for zEnterprise® BladeCenter® Ext and Linux on System z PVU License + SW S&S 12 Months	WebSphere MQ Advanced for zEnterprise BladeCenter Extension and Linux on System z Processor Value Unit	D14DQLL
Sterling Connect Direct for zEnterprise BladeCenter Ext and Linux on System z PVU License + SW S&S 12 Months	WebSphere MQ Advanced for zEnterprise BladeCenter Extension and Linux on System z Processor Value Unit	D14DRLL
WebSphere MQ Idle Standby for zEnterprise BladeCenter Ext and Linux on System z PVU License + SW S&S 12 Months	WebSphere MQ Advanced Idle Standby for zEnterprise BladeCenter Extension and Linux on System z Processor Value Unit	D14DXLL

WebSphere MQ Idle Standby PVU License + SW S&S 12 Months	WebSphere MQ Advanced Idle Standby Processor Value Unit	D14DULL
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Consult your IBM representative if you have any questions.

Passport Advantage customer: Media pack entitlement details

Customers with active maintenance or subscription for the product listed are entitled to receive the corresponding media pack.

WebSphere MQ for Multiplatforms

Entitled maintenance offerings description	Media packs description	Part number
WebSphere MQ Processor Value Unit	WebSphere MQ v8.0 for Multiplatforms Multilingual Media Pack	BA17VML
WebSphere MQ Linux zSeries Processor Value Unit	WebSphere MQ v8.0 for Multiplatforms Multilingual Media Pack	BA17VML

Cross-platform product for use on System z Integrated Facility for Linux (IFL) engines

Order the part numbers that follow when the product is intended to run on the Linux operating system on System z IFL engines. If the product is not intended to run on the Linux operating system on System z IFL engines, order from the other set of part numbers in this announcement. This set of part numbers provides the identical supply and authorization as the other set in this announcement.

Program name/Description	Part number
WebSphere MQ	
WebSphere MQ Per Proc VU for Lin Sys z Annual SW S&S Rnw1	E0257LL
WebSphere MQ Per Proc VU for Lin Sys z Lic + SW S&S 12 Mo	D55V4LL
WebSphere MQ Per Proc VU for Lin Sys z SW S&S Reinstate 12 Mo	D55V5LL
MQ Idle Standby Linux on System z PVU Lic+1yr Maint	D0GGNLL
MQ Idle Standby Linux on System z PVU S&S Renewal	E0ALTL
MQ Idle Standby Linux on System z PVU Reinstate 12 Mo	D0GGPLL
WebSphere Managed File Transfer	
WebSphere Managed File Transfer Service for zEnterprise BladeCenter Extension and Linux on System z Per Processor Value Unit (PVU) Linux on System z License and SW S&S 12 Months	D14CZLL
WebSphere Managed File Transfer Service for zEnterprise BladeCenter Extension and Linux on System z Per Processor Value Unit (PVU) Linux on System z Annual SW S&S Renewal	E0JCSLL
WebSphere Managed File Transfer Service for zEnterprise BladeCenter Extension and Linux on System z Per Processor Value Unit (PVU)	

Linux on System z SW S&S Reinstatement 12 Months	D14D0LL
WebSphere Managed File Transfer Service Idle Standby for zEnterprise BladeCenter Extension and Linux on System z Per 10 Processor Value Units (PVUs)	
Linux on System z License and SW S&S 12 Months	D14DBLL
WebSphere Managed File Transfer Service Idle Standby for zEnterprise BladeCenter Extension and Linux on System z Per 10 Processor Value Units (PVUs)	
Linux on System z Annual SW S&S Renewal	E0JCWLL
WebSphere Managed File Transfer Service Idle Standby for zEnterprise BladeCenter Extension and Linux on System z Per 10 Processor Value Units (PVUs)	
Linux on System z SW S&S Reinstatement 12 Months	D14DCLL
WebSphere Managed File Transfer Managed Endpoint for zEnterprise BladeCenter Extension and Linux on System z Per Install	
Linux on System z License and SW S&S 12 Months	D14DHLL
WebSphere Managed File Transfer Managed Endpoint for zEnterprise BladeCenter Extension and Linux on System z Per Install	
Linux on System z Annual SW S&S Renewal	E0JCZLL
WebSphere Managed File Transfer Managed Endpoint for zEnterprise BladeCenter Extension and Linux on System z Per Install	
Linux on System z SW S&S Reinstatement 12 Months	D14DILL
WebSphere MQ Advanced for zEnterprise BladeCenter Extension and Linux on System z Per Processor Value Unit (PVU)	
Linux on System z License and SW S&S 12 Months	D14DNLL
WebSphere MQ Advanced for zEnterprise BladeCenter Extension and Linux on System z Per Processor Value Unit (PVU)	
Linux on System z Annual SW S&S Renewal	E0JD1LL
WebSphere MQ Advanced for zEnterprise BladeCenter Extension and Linux on System z Per Processor Value Unit (PVU)	
Linux on System z SW S&S Reinstatement 12 Months	D14DPLL
WebSphere MQ Advanced Idle Standby for zEnterprise BladeCenter Extension and Linux on System z Per Processor Value Unit (PVU)	
Linux on System z License and SW S&S 12 Months	D14DVLL
WebSphere MQ Advanced Idle Standby for zEnterprise BladeCenter Extension and Linux on System z Per Processor Value Unit (PVU)	
Linux on System z Annual SW S&S Renewal	E0JD3LL
WebSphere MQ Advanced Idle Standby for zEnterprise BladeCenter Extension and Linux on System z Per Processor Value Unit (PVU)	
Linux on System z SW S&S Reinstatement 12 Months	D14DWLL
WebSphere MQ Advanced for Developers for zEnterprise BladeCenter Extension and Linux on System z Per Authorized User Single Install	
Linux on System z License and SW S&S 12 Months	D14E8LL
WebSphere MQ Advanced for Developers for zEnterprise BladeCenter Extension and Linux on System z Per Authorized User Single Install	
Linux on System z Annual SW S&S Renewal	E0JD6LL
WebSphere MQ Advanced for Developers for zEnterprise BladeCenter Extension and Linux on System z	

Per Authorized User Single Install Linux on System z SW S&S Reinstatement 12 Months	D14E9LL
WebSphere Managed File Transfer Agent for zEnterprise BladeCenter Extension and Linux on System z Per Simultaneous Session Linux on System z License and SW S&S 12 Months	D14EILL
WebSphere Managed File Transfer Agent for zEnterprise BladeCenter Extension and Linux on System z Per Simultaneous Session Linux on System z Annual SW S&S Renewal	E0JDBLL
WebSphere Managed File Transfer Agent for zEnterprise BladeCenter Extension and Linux on System z Per Simultaneous Session Linux on System z SW S&S Reinstatement 12 Months	D14EJLL

On/Off Capacity on Demand (CoD)

Part number	Description
ASQ24LL	WebSphere MQ Processor-Day(s) Per Use-Day 00CoD

Charge metric

Program name	Part number or PID number	Charge metric
WebSphere MQ	5724-H72	per Processor Value Unit
WebSphere MQ	5724-H72	Per Processor Value Unit PVU for Linux on Sys z
WebSphere MQ	5724-H72	Processor-Day
WebSphere MQ	5724-H72	Per Install
WebSphere MQ	5724-H72	Client

Install

Install is a unit of measure by which the program can be licensed. An install is an installed copy of the program on a physical or virtual disk made available to be executed on a computer. Licensee must obtain an entitlement for each install of the program.

Processor Value Unit (PVU)

PVU is a unit of measure by which the program can be licensed. The number of PVU entitlements required is based on the processor technology (defined within the PVU table by processor value, brand, type, and model number at the website below) and the number of processors made available to the program. IBM continues to define a processor, for the purpose of PVU-based licensing, to be each processor core on a chip. A dual-core processor chip, for example, has two processor cores. The PVU table can be found at

http://www.ibm.com/software/lotus/passportadvantage/pvu_licensing_for_customers.html

Licensee can deploy the program using either full capacity licensing or virtualization capacity (sub-capacity) licensing according to the Passport Advantage Sub-Capacity Licensing Terms (refer to the web page below). If using full capacity licensing, licensee must obtain PVU entitlements sufficient to cover all activated processor

cores* in the physical hardware environment made available to or managed by the program, except for those servers from which the program has been permanently removed. If using virtualization capacity licensing, licensee must obtain entitlements sufficient to cover all activated processor cores made available to or managed by the program, as defined according to the Virtualization Capacity License Counting Rules at

http://www.ibm.com/software/lotus/passportadvantage/Counting_Software_licenses_using_sp_eific_virtualization_technologies.html

* An activated processor core is a processor core that is available for use in a physical or virtual server, regardless of whether the capacity of the processor core can be or is limited through virtualization technologies, operating system commands, BIOS settings, or similar restrictions.

Notes:

- Some programs may require licenses for the program **and** what is being managed. In that case, the following applies. In addition to the entitlements required for the program directly, licensee must obtain PVU entitlements for this program sufficient to cover the processor cores managed by the program.
- Some programs may be licensed on a managed basis only. In that case, the following applies. Instead of the entitlements required for the program directly, licensee must obtain PVU entitlements for this program sufficient to cover the processor cores managed by the program.
- A few programs on an exception basis may be licensed on a referenced basis. In that case, the following applies. Rather than obtaining entitlements for the activated processor cores available to the program, licensee must obtain PVU entitlements for this program sufficient to cover the environment made available to the referenced program as if the program itself were executing everywhere the referenced program was executing, independent of the basis on which the referenced program is licensed.

Processor Value Unit (PVU) sub-capacity licensing

This software product is eligible for sub-capacity licensing. Customers must accept the terms of the IBM International Passport Advantage Agreement Attachment for Sub-Capacity Licensing Terms (Attachment), and must obtain PVU Proofs of Entitlement (PoEs) for the maximum processor core capacity available to an eligible sub-capacity product when deployed in an eligible virtualization environment. This is also referred to as sub-capacity or virtualization capacity licensing.

Customers must use the IBM License Metric Tool unless they meet the exceptions described in the Attachment.

For information regarding PVU sub-capacity licensing, including terms and IBM License Metric Tool ordering information, visit

<http://www.ibm.com/software/lotus/passportadvantage/subcaplicensing.html>

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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 IBM Agreement for Acquisition of Software Maintenance.

This product is available only via 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

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License Information number

License information form number: L-APIG-9FZFC3

- IBM WebSphere MQ V8.0
- IBM WebSphere MQ Telemetry Client V8.0
- IBM WebSphere MQ Advanced Message Security Component V8.0
- IBM WebSphere MQ Idle Standby V8.0
- IBM WebSphere MQ Advanced Message Security Component Idle Standby V8.0

License information form number: L-APIG-9FZFDP

- IBM WebSphere MQ Advanced V8.0
- IBM WebSphere MQ Advanced Idle Standby V8.0
- IBM WebSphere MQ Advanced for Developers V8.0

License information form number: L-APIG-9FZFET

- IBM WebSphere Managed File Transfer Service V8.0
- IBM WebSphere Managed File Transfer Service Idle Standby V8.0
- IBM WebSphere Managed File Transfer Managed Endpoint V8.0

License information form number: L-APIG-9FZFFQ

- IBM WebSphere Managed File Transfer Managed Endpoint Sessions V8.0

The program's License Information will be available for review on the IBM Software License Agreement website

<http://www.ibm.com/software/sla/sladb.nsf>

Limited warranty applies

Yes

Limited warranty

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

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Technical support of a program product version or release will be available for a minimum of five years from the general availability date, as long as your Software Subscription and Support (also referred to as Software Maintenance) is in effect. This technical support allows you to obtain assistance (via telephone or

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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, and through the Passport Advantage website at

<http://www.ibm.com/software/passportadvantage>

Usage restriction

Yes. Any Program Unique Terms that apply to the Program and its components and that are in addition to, or may modify, the terms of the IBM International Program License Agreement are included in the License Information document for this product.

For additional information, refer to the License Information document that is available on the IBM Software License Agreement website

<http://www.ibm.com/software/sla/sladb.nsf>

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.

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System i Software Maintenance applies

No

Variable charges apply

No

Educational allowance available

Education allowance does not apply.

Education software allowance does not apply.

Special education prices are available for qualified customers through Passport Advantage.

Sub-capacity pricing terms and conditions

To be eligible for sub-capacity pricing, the machine on which the eligible products are installed and running must be eligible for sub-capacity pricing terms and conditions. Software pricing, at less than full machine capacity for eligible products, apply when running:

- AIX 5L™ V5.1, or later, on an IBM System p 690 or equivalent partition-capable operating system and machine
- OS/400® V5R1, or later, running on an IBM System i
- Linux running in an LPAR under AIX 5L V5.1, under OS/400 V5R1, or in a partition on an equivalent partition-capable operating system and server

Sub-capacity pricing for eligible products is based on the current program pricing methodology, but the number of processors will be determined based on the sum of processors for all partitions where the program is defined (used). To obtain pricing at less than full machine capacity for eligible products, you are required to:

- Install and use, when available, IBM's license use management program, which installs with eligible IBM programs.
- Install available updates to the operating system and eligible products such that license use can be accurately managed.
- Determine if the use of sub-capacity pricing terms results in a reduced requirement for entitlements; you can reallocate the entitlement difference by distributing entitlements across a larger or different set of systems, or reserve them for future growth. There will be no refunds for these freed up entitlements. Subscription, Software Maintenance and support volumes, and entitlements for existing contracts will continue at the same levels as the acquired licenses.

On/Off Capacity on Demand (CoD)

To be eligible for On/Off CoD pricing, you must be enabled for temporary capacity on the corresponding hardware, and the required contract, Amendment for iSeries® and pSeries Temporary Capacity On Demand - Software (Z125-6907), must be signed prior to use.

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 comprehensive security approach, which will necessarily involve additional operational procedures, and may require other systems, products, or services to be most effective. IBM does not warrant that systems and products are immune from the malicious or illegal conduct of any party.

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Electronic Service Agent™ and the IBM Electronic Support web portal are dedicated to providing fast, exceptional support to IBM Systems customers. The IBM Electronic Service Agent tool is a no-additional-charge tool that proactively monitors and reports hardware events, such as system errors, performance issues, and inventory. The Electronic Service Agent tool can help you stay focused on your company's strategic business initiatives, save time, and spend less effort managing day-to-day IT maintenance issues. Servers enabled with this tool can be monitored remotely around the clock by IBM Support, all at no additional cost to you.

Now integrated into the base operating system of AIX V5.3, AIX V6.1, and AIX V7.1, Electronic Service Agent is designed to automatically and electronically report system failures and utilization issues to IBM, which can result in faster problem resolution and increased availability. System configuration and inventory information collected by the Electronic Service Agent tool also can be viewed on the secure Electronic Support web portal, and used to improve problem determination and resolution by you and the IBM support team. To access the tool main menu, simply type `smitty esa_main`, and select Configure Electronic Service Agent. In addition, ESA now includes a powerful web user interface, giving the administrator easy access to status, tool settings, problem information, and filters. For more information and documentation on how to configure and use Electronic Service Agent, refer to

<http://www.ibm.com/support/electronic>

The IBM Electronic Support portal is a single Internet entry point that replaces the multiple entry points traditionally used to access IBM Internet services and support. This portal enables you to gain easier access to IBM resources for assistance in resolving technical problems. The My Systems and Premium Search functions make it even easier for Electronic Service Agent tool-enabled customers to track system inventory and find pertinent fixes.

Benefits

Increased uptime: The Electronic Service Agent tool is designed to enhance the Warranty or Maintenance Agreement by providing faster hardware error reporting and uploading system information to IBM Support. This can translate to less wasted time monitoring the symptoms, diagnosing the error, and manually calling IBM

Support to open a problem record. Its 24x7 monitoring and reporting mean no more dependence on human intervention or off-hours customer personnel when errors are encountered in the middle of the night.

Security: The Electronic Service Agent tool is designed to be secure in monitoring, reporting, and storing the data at IBM. The Electronic Service Agent tool securely transmits via either the Internet (HTTPS or VPN) or modem, and can be configured to communicate securely through gateways to provide you a single point of exit from your site. Communication is one way. Activating Electronic Service Agent does not enable IBM to call into your system. System inventory information is stored in a secure database, which is protected behind IBM firewalls. It is viewable only by you and IBM. Your business applications or business data is never transmitted to IBM.

More accurate reporting: Because system information and error logs are automatically uploaded to the IBM Support center in conjunction with the service request, you are not required to find and send system information, decreasing the risk of misreported or misdiagnosed errors. Once inside IBM, problem error data is run through a data knowledge management system and knowledge articles are appended to the problem record.

Customized support: Using the IBM ID entered during activation, you can view system and support information in the My Systems and Premium Search sections of the Electronic Support website at

<http://www.ibm.com/support/electronic>

My Systems provides valuable reports of installed hardware and software using information collected from the systems by Electronic Service Agent. Reports are available for any system associated with your IBM ID. Premium Search combines the function of search and the value of Electronic Service Agent information, providing advanced search of the technical support knowledgebase. Using Premium Search and the Electronic Service Agent information that has been collected from your system, you are able to see search results that apply specifically to your systems.

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