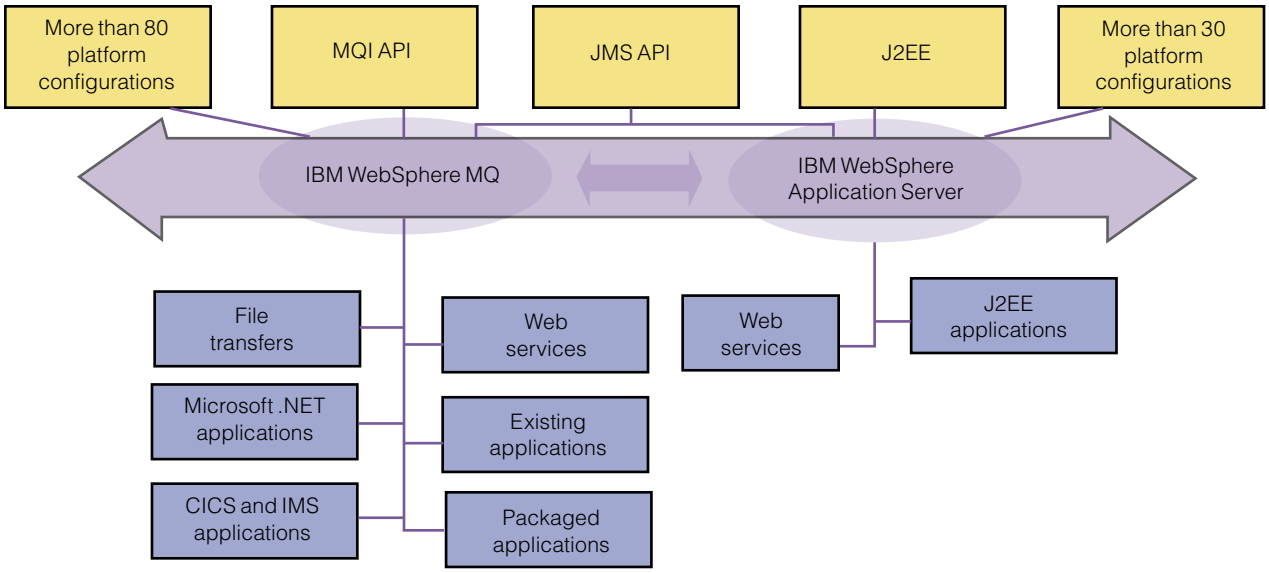
WebSphere software

# IBM WebSphere MQ, Version 6.0

## Highlights

- ***Connects applications across more than 80 supported platform configurations, with added support for the POWER platform for both Linux for iSeries and Linux for pSeries***
- ***Provides integrated support for Web services, enabling SOAP requests to flow over the reliable WebSphere MQ backbone, helping to connect J2EE, CICS and Microsoft .Net applications***
- ***Includes workload balancing and communication failover support***
- ***Interoperates seamlessly with the messaging resources of WebSphere Application Server, Version 6.0 to form the basis for your enterprise service bus***
- ***Delivers full support for the de facto standard MQI interface and the industry-standard JMS, Version 1.1 interface***
- ***Enables you to move your existing FTP infrastructure forward, helping to ensure reliable, highly secure file transfer over WebSphere MQ***
- ***Provides integrated support for simple configuration of messaging using publish-and-subscribe messaging distribution***
- ***Supports industry-standard SSL security and offers WebSphere MQ Extended Security Edition to support advanced security features***
- ***Includes the latest, enhanced Eclipse technology-based tooling, enabling you to remotely configure your WebSphere MQ network—including WebSphere MQ for z/OS, Version 6.0 deployments***




*WebSphere MQ, Version 6.0 integrates seamlessly with WebSphere Application Server to provide the foundation for your ESB.*

In today's fast-paced business environment, you need to invest your valuable skills in improving the responsiveness and flexibility of your business instead of wrestling with underlying network complexities. Maintaining homegrown approaches for connecting applications can divert your skills and time away from higher-level integration concerns. And external pressures from industry regulations and your supply chain to increase the trustworthiness of business financial reporting mean that the transparency and auditability of business transactions across your enterprise are more important than ever before.

IBM WebSphere® MQ, Version 6.0 software connects applications in a consistent, reliable and easy-to-manage way, providing a trustworthy foundation for cross-department, enterprise-wide integration. Renowned for its reliable once-and-once-only delivery of important messages and for its transactionality, WebSphere MQ handles the complexities of communication protocols and dynamically distributes messaging workload across available resources. It can transport all sorts of messages and data, including files, XML and binary data. And it can manage recovery after system problems and help to make your applications portable. Offloading these time-consuming tasks to WebSphere MQ frees you to apply your skills to higher-level integration challenges that bring benefits to your team and to the business.

**The foundation for an enterprise service bus**

In a service oriented architecture (SOA), an enterprise service bus (ESB) is the connectivity layer that connects and mediates information between service requesters and service providers. These service requesters and providers can include new Web services and existing investments, such as core applications, virtualized as Web services. Your organization needs to deploy its own unique ESB, reflecting how many of your applications conform to common standards and how many have not yet been made into services.

WebSphere MQ, Version 6.0 enables Simple Object Access Protocol (SOAP) interactions to flow over its messaging backbone between Web services requesters and providers. Web services-enabled existing and batch applications can also benefit from using WebSphere MQ in its asynchronous mode as a buffering mechanism to regulate the flow of requests made to these systems. WebSphere MQ provides an optimal transport to add reliability and traceability to your services connecting to the ESB to support your SOA.

With support for Web services now integrated into WebSphere MQ, Version 6.0; IBM WebSphere Application Server, Version 6.0; and IBM CICS® Transaction Server, Version 3.1, you can use Web services as a common approach to integrate investments on those platforms in a virtualized, service-oriented manner. This capability represents the next step in IBM enhancing its ability to enable you to deploy an end-to-end ESB that can integrate almost every component of your environment — and cost-effectively bring these investments into an SOA.

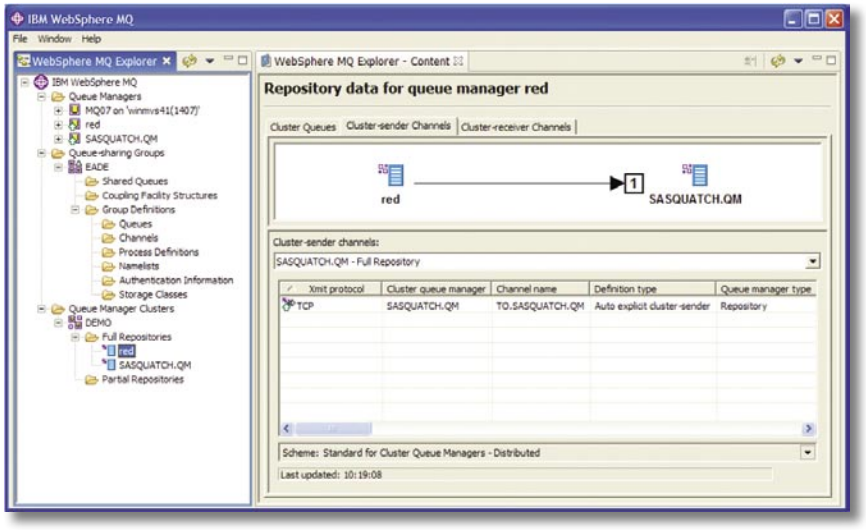
**Integrated tooling for your ESB**

WebSphere MQ, Version 6.0 introduces new, enhanced configuration tooling based on open-source, award-winning Eclipse Workbench technology. Improving on the tooling available in previous WebSphere MQ releases, the new WebSphere MQ explorer tool enables you to configure your WebSphere MQ network remotely from Microsoft® Windows® or Linux® for Intel® processor-based systems. For example, with the WebSphere MQ explorer, you can now configure WebSphere MQ for z/OS®, Version 6.0 running on IBM @server® zSeries® systems from your personal Linux notebook, without having to run a WebSphere MQ server locally. (IBM WebSphere MQ for z/OS, Version 5.3 or prior deployments cannot be configured with this tool.) You can also now configure WebSphere MQ resources across the network using intermediate queue managers. To prevent unauthorized changes, you can protect connections from the tool to your WebSphere MQ network with Secure Sockets Layer (SSL) technology.

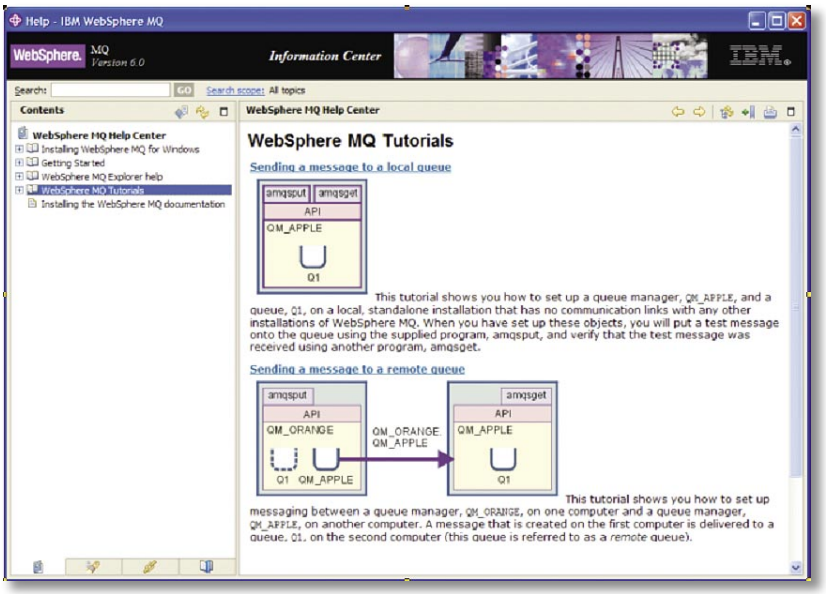
Although the new WebSphere MQ explorer tool retains much of the interface design for users familiar with the previous tool, it also provides more features to make it easier to manage WebSphere MQ networks. For example, you can filter your view of WebSphere MQ resources to show only those that match certain criteria, such as by queue depth or by how many applications are using a queue. You can tune the refresh rates of these filtered views to update them at a machine or queue-manager level.

You can also compare attributes: for example, to see whether two queues have the same characteristics.

The WebSphere MQ explorer tool is also extensible. Using the documented interfaces to WebSphere MQ objects and resources in the explorer tool, you can create your own extensions to the tool that are tightly integrated with the WebSphere MQ explorer console.




*From one Eclipse technology-based console, you can configure your WebSphere MQ network remotely.*




*The new WebSphere MQ Help Center guides you through the product features.*

**Consistent APIs help simplify integration**

WebSphere MQ provides a consistent application programming interface (API), called the Message Queue Interface (MQI), across all its supported platforms and programming environments to help make your programs portable. Along with providing this de facto standard interface, WebSphere MQ also fully implements the industry-standard Java™ interface — Java Message Service (JMS), Version 1.1 — including the publish-and-subscribe approach to directing flows of messages.

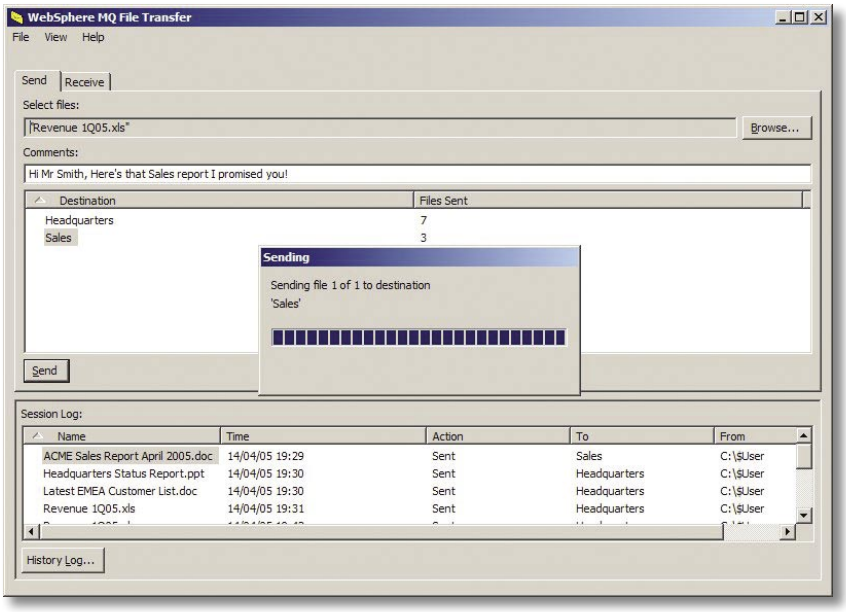
WebSphere Application Server also supports JMS. Although JMS doesn't provide a standard for interoperability between messaging implementations, the messaging resources of WebSphere Application Server and WebSphere MQ interoperate seamlessly. As a result, you can combine these products to form an ESB to integrate hosted Java 2 Platform, Enterprise Edition (J2EE) applications with the rest of the enterprise.

**Reliable, flexible file transfer**

In organizations of all sizes, the majority of valuable business information is still moved around the enterprise using mechanisms engineered in-house, File Transfer Protocol (FTP) technologies and costly, error-prone manual efforts. The limited reliability, security and auditability of these approaches, coupled with the high costs of maintenance, are a key driver for businesses to reassess these decisions. WebSphere MQ, Version 6.0 minimizes the time and skills that would be otherwise involved in transitioning to an automated, reliable approach to file movement across its proven transport.

Moving files over WebSphere MQ offers more than just reliability; it helps equip your ESB with file-handling capabilities, so that rather than just move files between machines, WebSphere MQ can distribute, mediate and process these files more flexibly to yield more business value. WebSphere MQ, Version 6.0 also provides logging capabilities that help you increase the auditability and transparency of your transfers.

WebSphere MQ, Version 6.0 introduces a file-transfer application for Windows and Linux on Intel that provides a simple graphical tool to move files across the WebSphere MQ network, an effective and simple first step toward managed, highly secure file transfer. This release also provides scripting commands for file transfer, enabling batch transfers to be scheduled automatically. Those familiar with FTP can quickly become productive using these new WebSphere MQ features without adding complexity to the overheads of enterprise FTP.




*The new file-transfer application offers a rapid start for those familiar with FTP to benefit from WebSphere MQ reliability, flexibility and traceability.*

**Enhanced manageability**

WebSphere MQ, Version 6.0 includes enhanced management capabilities, making it easier to determine and avoid problems, and to monitor your WebSphere MQ network, gather statistics and raise alerts. To make it easier to diagnose and avoid problems, WebSphere MQ, Version 6.0 provides new status information that shows whether messages are being processed or are delayed, and indicates what factors might be causing those delays.

Users of WebSphere MQ for z/OS are familiar with its System Management Facility (SMF). WebSphere MQ, Version 6.0 now provides SMF statistics gathering for distributed platforms, enabling better monitoring of application and queue-manager behavior. You can use this capability to monitor the required capacity of a system to better understand workloads. You can also more easily see important information returned from status commands because programmable command format (PCF) and MQ Script Commands (MQSC) now have a WHERE clause that filters queries. You can use this feature in commands that inquire about status, to see potential problems before they cause a significant outage.

To make it easier to monitor the WebSphere MQ network and change the way it is working, WebSphere MQ, Version 6.0 provides new commands such as `DISPLAY CONN`, to show which applications are connected to a queue manager and which queues they have opened, and `STOP CONN`, which forces a disconnection from a queue manager, allowing a WebSphere MQ administrator to disable a problem application. Also, WebSphere MQ can now track the route that a message is expected to take through its network. And new flags can request activity reports from queue managers processing a message (such as which channel, queue manager and transmission queue have been used).

WebSphere MQ, Version 6.0 increases the size of the active log to 128GB on UNIX® platforms and 64GB on Windows systems, generates event messages when log files are switched, and makes it easy to automate the copying and archiving of log files. You can also recover from system failures faster by replaying copied logs from queue managers without having to fully start them.

**Grows at your pace**

Whatever your starting point for integration, you can grow your ESB incrementally, according to your needs and at your own pace. You can add WebSphere MQ servers one at a time to create a unified messaging backbone, where messages can be passed directly between messaging servers and through servers. You can also combine WebSphere MQ servers, WebSphere Application Server deployments and WebSphere Message Broker software to deploy your ESB. This combined network of servers can then seamlessly exchange information across your enterprise, regardless of whether the original communication began as a JMS message from WebSphere Application Server or WebSphere MQ, a native MQI message from WebSphere MQ or even a file transfer. You can further enhance your WebSphere MQ deployment by downloading many official product extensions at no charge from **ibm.com**/software/integration/support/supportpacs/.

**Sophisticated security features to help protect your valuable IT assets**

WebSphere MQ provides a sophisticated, highly secure environment through 128-bit SSL technology, the Internet standard for secure communication. IBM WebSphere MQ Extended Security Edition further enhances WebSphere MQ with end-to-end, application-level data-protection features. It enables enterprise-wide, remote management of security polices on your WebSphere MQ network and can be deployed to existing production environments without changes or modifications to existing WebSphere MQ applications. WebSphere MQ Extended Security Edition is based on and integrates with IBM Tivoli® technology, enabling you to deploy WebSphere MQ Extended Security Edition as part of your enterprise-wide governance strategy.

### Your key to integrating critical business applications and processes

WebSphere MQ forms the key integration layer of the IBM WebSphere software platform, helping you reach your On Demand Business goals. Together with IBM WebSphere Enterprise Service Bus and IBM WebSphere Message Broker, WebSphere MQ provides an ideal basis for deploying your ESB. To learn more about how an ESB can help you integrate the diverse elements of your IT environment, visit **ibm.com**/software/integration/esb.

### For more information

To learn more about how IBM WebSphere MQ, Version 6.0 can help you integrate your investments and reach your business and IT goals, contact your IBM representative or IBM Business Partner, or visit:

**ibm.com**/software/integration/wmq

### IBM WebSphere MQ, Version 6.0 at a glance

*WebSphere MQ, Version 6.0 runs on more than 80 platform configurations supported by IBM and IBM Business Partners. The following index can help you find the system requirements relevant to your business needs.*



***Note:*** *Each WebSphere MQ, Version 6.0 product maintains compatibility with the corresponding previous releases.*

#### Hardware requirements

*Any hardware that is explicitly compatible and fully capable of running the specified operating system, all the corresponding supporting software shown below and any associated applications unmodified. Responsibility to provide a statement of full compatibility between machines lies with the original equipment provider (if not IBM).*

- IBM AIX: 64-bit IBM @server pSeries® systems only
- HP-UX: 64-bit systems only
- HP-UX Itanium: HP-UX Itanium systems
- IBM OS/400® and IBM i5/OS™: IBM @server iSeries™ systems
- Linux x86 platform: 32-bit Intel PC hardware
- Linux x86-64 platform: AMD64, EM64T and compatible processors
- Linux for iSeries and pSeries: 64-bit iSeries and pSeries IBM POWER™ processor-based systems only
- Linux for zSeries platform: IBM S/390® or zSeries (or equivalent) processor
- Linux on zSeries s390x platform: zSeries (or equivalent 64-bit processor)
- Sun Solaris operating environment: 64-bit Sun SPARC systems only
- Sun Solaris x86-64 platform: AMD64, EM64T and compatible processors
- Windows x86 technology-compatible PC hardware

## IBM WebSphere MQ, Version 6.0 at a glance (continued)

### Software requirements

***Operating environment: AIX***

*Operating system (one of the following)*

- AIX, Version 5.2 with Maintenance Level 3
- AIX, Version 5.3

*Java and JMS client (one of the following)*

- 32 bit
  - IBM 32-bit Software Developer Kit (SDK) for AIX, Java 2 Technology Edition, Version 1.4.2 (IBM AIX Developer Kit, Java 2 Technology Edition, Version 1.4.2, 32-bit required for SSL support using Java because it provides the necessary IBM Java Secure Socket Extension [JSSE] class files)
  - IBM AIX Developer Kit, Java 2 Technology Edition, Version 1.3.1, 32-bit version for POWER. (If AIX Developer Kit, Java 2 Technology Edition, Version 1.3.1, 32-bit and JSSE class files can be obtained as included within an alternate IBM product; this is also a suitable environment under which SSL support using Java can be run, except for certificate checking against Certificate Revocation Lists [CRLs], which requires full Java Development Kit [JDK] implementation at Version 1.4.)
- 64 bit
  - IBM 64-bit SDK for AIX Java 2 Technology Edition, Version 1.4.2 (supplied with WebSphere MQ)
  - AIX Developer Kit, Java 2 Technology Edition, Version 1.4.2, 64-bit
  - AIX Developer Kit, Java 2 Technology Edition, Version 1.3.1, 64-bit version for POWER

*Note: Only IBM DB2® and Oracle are supported for Java Database Connectivity (JDBC) and Extended Architecture (XA) usage.*

*Database (one of the following)*

- IBM DB2® Universal Database™, Version 8.2
- IBM Informix® Dynamic Server, Version 9.40 with Client SDK, Version 2.90
- Oracle 9i, Release 2 with Patch Set 4 (Version 9.2.0.5) or Oracle 10g
- Sybase Adaptive Server Enterprise (ASE), Version 12.5.3 with Electronic Software Distribution (ESD), Version 1 or Sybase SDK, Version 12.5.1 with ESD, Version 7

*Compiler (one of the following)*

- IBM C for AIX, Version 5.0, Version 6.0 or Version 7.0
- IBM COBOL Set for AIX, Version 1.1 (32-bit applications only)
- IBM VisualAge® C++ Professional for AIX, Version 5.0, Version 6.0 or Version 7.0
- Micro Focus Server Express, Version 4.0 (COBOL)

*Connectivity (one of the following)*

- IBM Communications Server for AIX, Version 6.1 (Systems Network Architecture [SNA])
- TCP/IP (provided by the operating system)

*Transaction manager (one of the following)*

- IBM TXSeries®, Version 5.1
- IBM WebSphere Application Server, Version 5.1 or IBM WebSphere Application Server, Version 6.0.1
- BEA Tuxedo, Version 8.1
- BEA WebLogic Server, Version 8.1

*SOAP support (one of the following)*

- SDK for AIX, Java 2 Technology Edition, Version 1.4.2 (supplied with WebSphere MQ)
- Apache Axis, Version 1.1 (supplied with WebSphere MQ)

## IBM WebSphere MQ, Version 6.0 at a glance (continued)

### Software requirements

***Operating environment: HP-UX PA-RISC***

*Operating system (one of the following)*

- HP-UX 11i, Version 1 (B.11.11) (with December 2003 QPK)
- HP-UX 11.23 (PA-RISC systems)

*Java and JMS client (one of the following)*

- HP-UX SDK for the Java platform and JDK, Version 1.4.2 (32 and 64 bit) (HP-UX SDK for Java 2 Platform, Version 1.4.2 required for SSL support using Java because it provides the necessary JSSE class files)
- HP SDK for J2SE HP-UX 11i platform, adapted by IBM for IBM software, Version 1.4.2 (32 bit only, supplied with WebSphere MQ)
- HP-UX SDK for Java 2 Platform, Version 1.3.1

**Note:** *Only DB2 and Oracle are supported for JDBC and XA usage.*

*Database (one of the following)*

- DB2 Universal Database, Version 8.2
- Informix Dynamic Server, Version 9.40 with Client SDK, Version 2.90
- Oracle 9i, Release 2 with Patch Set 4 (Version 9.2.0.5) or Oracle 10g
- Sybase ASE, Version 12.5.3 with ESD, Version 1 or Sybase SDK, Version 12.5.1 with ESD, Version 7

*Compiler (one of the following)*

- HP C/ANSI Developer Bundle for HP-UX 11.0 and 11i, Version 1
- HP aC++, Version A.03.52 for HP-UX 11.0 (available as patch PHSS_29483) and HP-UX 11i, Version 1
- Micro Focus Server Express, Version 4.0 (COBOL)

*Connectivity (one of the following)*

- HP SNAplus2, Version 6 (SNA)
- TCP/IP (provided by the operating system); IP, Version 6 feature support available with HP Transport Optional Upgrade Release (TOUR)

*Transaction manager (one of the following)*

- IBM TXSeries, Version 5.1
- WebSphere Application Server, Version 5.1 or WebSphere Application Server, Version 6.0.1
- BEA Tuxedo, Version 8.1
- BEA WebLogic Server, Version 8.1

*SOAP support (one of the following)*

- HP SDK for J2SE HP-UX 11i platform, adapted by IBM for IBM software, Version 1.4.2 (32 bit only, supplied with WebSphere MQ)
- Apache Axis, Version 1.1 (supplied with WebSphere MQ)

## IBM WebSphere MQ, Version 6.0 at a glance (continued)

### Software requirements

***Operating environment: HP-UX Itanium***

*Operating system*

- HP-UX 11i, Version 2 (11.23) for the Itanium processor family (IPF)

*Java and JMS client (one of the following)*

- 32 bit
  - HP-UX IPF SDK for the Java 2 platform (HP-UX IPF SDK for Java 2 Platform, Version 1.4.2 required for SSL support using Java because it provides the necessary JSSE class files)
  - HP SDK for J2SE HP-UX 11i platform, adapted by IBM for IBM software, Version 1.4.2 (32-bit Itanium, supplied with WebSphere MQ)
- 64 bit
  - HP-UX IPF SDK for the Java 2 platform (HP-UX IPF SDK for Java 2 Platform, Version 1.4.2 required for SSL support using Java because it provides the necessary JSSE class files)
  - HP SDK for J2SE HP-UX 11i platform, adapted by IBM for IBM software, Version 1.4.2 (64-bit Itanium, supplied with WebSphere MQ)

**Note:** *Only DB2 and Oracle are supported for JDBC and XA usage.*

*Database (one of the following)*

- DB2 Universal Database, Version 8.2
- Informix Dynamic Server, Version 9.40 with Client SDK, Version 2.90
- Informix Dynamic Server, Version 10 with Client SDK, Version 2.90
- Oracle 9i, Release 2 with Patch Set 4 (Version 9.2.0.5) or Oracle 10g
- Sybase ASE, Version 12.5.3 with ESD, Version 1 or Sybase SDK, Version 12.5.1 with ESD, Version 7

*Compiler (one of the following)*

- HP C/ANSI Developer Bundle, Version 6.02
- HP aC++, Version 6.02
- Micro Focus Server Express, Version 4.0 (COBOL)

*Connectivity (one of the following)*

- HP SNAplus2, Version 6 (SNA)
- TCP/IP (provided by the operating system); IP, Version 6 feature support available with HP Transport Optional Upgrade Release (TOUR)

*Transaction manager (one of the following)*

- WebSphere Application Server, Version 6.0.2 with WebSphere MQ, Version 6.0 Fix Pack (FP) 1
- BEA Tuxedo, Version 9

*SOAP support (one of the following)*

- HP SDK for J2SE HP-UX 11i platform, adapted by IBM for IBM software, Version 1.4.2 (32-bit only, supplied with WebSphere MQ)
- Apache Axis, Version 1.1 (supplied with WebSphere MQ)

## IBM WebSphere MQ, Version 6.0 at a glance (continued)

### Software requirements

***Operating environment: iSeries servers***

*Operating system (one of the following)*

- OS/400, Version 5.2 with program temporary fix (PTF) C3077520 or later, and Java Group PTF SF99169
- i5/OS, Version 5.3

*Java and JMS client*

- IBM AS/400® Developer Kit for Java (provided by the operating system) option 6 with JDK, Version 1.4.

**Notes:**

1. On OS/400, Version 5.2.0, it is necessary to upgrade the installed JDK, Version 1.4.1 to Version 1.4.2 by applying the Java Group PTF SF99169. AS/400 Developer Kit for Java with JDK 1.4.2 is required for SSL support using Java because it provides the necessary JSSE class files.
2. If the AS/400 Developer Kit for Java with JDK, Version 1.3.1 and JSSE class files can be obtained as included within an alternate IBM product, this is also a suitable environment under which SSL support using Java can be run, except for certificate checking against CRLs, which requires full JDK implementation at Version 1.4.

*Database*

- DB2 Universal Database provided by the level of operating system

*Compiler (one of the following)*

- IBM Integrated Language Environment® C for iSeries
- IBM Integrated Language Environment C++ for iSeries
- IBM Integrated Language Environment COBOL for iSeries
- IBM Integrated Language Environment RPG for iSeries

*Note: Integrated Language Environment facilities are provided as part of IBM WebSphere Development Studio for iSeries.*

*Connectivity (one of the following)*

- OS/400 SNA (provided by the operating system)
- TCP/IP (provided by the operating system); IP, Version 6 feature support also provided

*Transaction manager (one of the following)*

- IBM CICS/400®
- WebSphere Application Server, Version 5.1 or WebSphere Application Server, Version 6.0.1

## IBM WebSphere MQ, Version 6.0 at a glance (continued)

### Software requirements

***Operating environment: Linux x86 platform***

*Operating system (one of the following)*

- Red Hat Enterprise Linux (RHEL), Version 3.0 with Update 2
- SUSE LINUX Enterprise Server (SLES), Version 8 with Service Pack (SP) 3 or SLES, Version 9

*Java and JMS client (one of the following)*

- IBM 32-bit SDK for Linux on Intel, Java 2 Technology Edition, Version 1.4.2 (supplied with WebSphere MQ) (This is required for SSL support using Java because it provides the necessary JSSE class files.)
- Java 2 Platform, Standard Edition (J2SE), Version 1.4.2 from Sun Microsystems, Inc.
- IBM Developer Kit for Linux, Version 1.3.1 (If the IBM Developer Kit for Linux, Java 2 Technology Edition, Version 1.3.1, 32-bit version and JSSE class files can be obtained as included within an alternate IBM product, this is also a suitable environment under which SSL support using Java can be run, except for certificate checking against CRLs, which requires full JDK implementation at Version 1.4.)

*Database (one of the following)*

- DB2 Universal Database, Version 8.2
- Informix Dynamic Server, Version 9.40 with Client SDK, Version 2.90
- Oracle 9i, Release 2 with Patch Set 4 (Version 9.2.0.5) or Oracle 10g
- Sybase ASE, Version 12.5.1

*Compiler (one of the following)*

- GNU C Compiler (gcc) and g++, Version 2.9.5
- GNU C Compiler (gcc) and g++, Version 3.2
- GNU C Compiler (gcc) and g++, Version 3.3
- GNU C Compiler (gcc) and g++, Version 3.4
- Micro Focus Server Express, Version 4.0 (COBOL)

*Connectivity (one of the following)*

- IBM Communications Server for Linux, Version 6.2 (SNA)
- TCP/IP (provided by the operating system)

*Transaction manager (one of the following)*

- WebSphere Application Server, Version 5.1 (for SLES, Version 8) or WebSphere Application Server, Version 6.0.1
- BEA Tuxedo, Version 8.1
- BEA WebLogic Server, Version 8.1

*SOAP support (one of the following)*

- IBM 32-bit SDK for Linux on Intel, Java 2 Technology Edition, Version 1.4.2 (supplied with WebSphere MQ)
- Apache Axis, Version 1.1 (supplied with WebSphere MQ)

## IBM WebSphere MQ, Version 6.0 at a glance (continued)

### Software requirements

***Operating environment: Linux x86-64***

*Operating system (one of the following)*

- RHEL, Version 4.0
- SLES, Version 9

*Java and JMS client (one of the following)*

- 32 bit: IBM 32-bit SDK for Linux on Intel architecture, Java 2 Technology Edition, Version 1.4.2 (supplied with WebSphere MQ)
- 64 bit: IBM SDK for Linux on AMD64/EM64T architecture, Java 2 Technology Edition, Version 1.4.2 (supplied with WebSphere MQ)

***Note**: JDBC and XA usage is not supported on this platform.*

*Database (one of the following)*

- DB2 Universal Database, Version 8.2
- Informix Dynamic Server, Version 9.40 with Client SDK, Version 2.90
- Informix Dynamic Server, Version 10 with Client SDK, Version 2.90
- Oracle 9i, Release 2 with Patch Set 4 (Version 9.2.0.5) or Oracle 10g

*Compiler (one of the following)*

- GNU C Compiler (gcc) and g++, Version 3.3
- GNU C Compiler (gcc) and g++, Version 3.4
- Micro Focus Server Express, Version 4.0 (COBOL)

*Connectivity*

- TCP/IP (provided by the operating system)

*Transaction manager (one of the following)*

- WebSphere Application Server, Version 6.0.2 with WebSphere MQ, Version 6.0 with FP1
- BEA Tuxedo, Version 8.1
- BEA WebLogic Server, Version 8.1 with SP4 (RHEL, Version 4.0 only)

*SOAP support (one of the following)*

- IBM SDK for Linux on AMD64/EM64T architecture, Java 2 Technology Edition, Version 1.4.2 (supplied with WebSphere MQ)
- Apache Axis, Version 1.1 (supplied with WebSphere MQ)

## IBM WebSphere MQ, Version 6.0 at a glance (continued)

**Software requirements**

***Operating environment: Linux for POWER***

*Operating system (one of the following)*

- RHEL, Version 3.0 with Update 2
- SLES, Version 9

*Java and JMS client (one of the following)*

- IBM 32-bit SDK for Linux for iSeries and pSeries, Java 2 Technology Edition, Version 1.4.2 (supported on pSeries only, supplied with WebSphere MQ)
- IBM 64-bit SDK for Linux for iSeries and pSeries, Java 2 Technology Edition, Version 1.4.2 (supported on pSeries only, supplied with WebSphere MQ)

*Database*

- DB2 Universal Database, Version 8.2

*Compiler (one of the following)*

- GNU C Compiler (gcc) and g++, Version 3.2
- GNU C Compiler (gcc) and g++, Version 3.3
- GNU C Compiler (gcc) and g++, Version 3.4
- Micro Focus Server Express, Version 4.0 (COBOL)

*Connectivity*

- TCP/IP (provided by the operating system)

*Transaction manager (one of the following)*

- WebSphere Application Server, Version 6.0.1
- BEA WebLogic Server, Version 8.1 (for RHEL, Version 3.0)

*SOAP support (one of the following)*

- IBM 32-bit SDK for Linux for iSeries and pSeries, Java 2 Technology Edition, Version 1.4.2 (supported on pSeries only, supplied with WebSphere MQ)
- IBM 64-bit SDK for Linux for iSeries and pSeries, Java 2 Technology Edition, Version 1.4.2 (supported on pSeries only, supplied with WebSphere MQ)
- Apache Axis, Version 1.1 (supplied with WebSphere MQ)

## IBM WebSphere MQ, Version 6.0 at a glance (continued)

**Software requirements (continued)**

***Operating environment: Linux for zSeries***

*Operating system (one of the following)*

- RHEL, Version 3.0 with Update 2
- SLES, Version 8 with SP3 and SLES, Version 9

*Java and JMS client*

- SDK Java 2 Technology Edition for Linux for zSeries, Version 1.4.2 (supplied with WebSphere MQ)

*Database (one of the following)*

- DB2 Universal Database, Version 8.2
- Informix Dynamic Server, Version 9.40 with Client SDK, Version 2.90

*Compiler (one of the following)*

- GNU C Compiler (gcc) and g++, Version 2.9.5
- GNU C Compiler (gcc) and g++, Version 3.2
- GNU C Compiler (gcc) and g++, Version 3.3
- GNU C Compiler (gcc) and g++, Version 3.4
- Micro Focus Server Express, Version 4.0 (COBOL)

*Connectivity (one of the following*

- IBM Communications Server for Linux for zSeries, Version 6.2 (SNA)
- TCP/IP (provided by the operating system)

*Transaction manager (one of the following)*

- WebSphere Application Server, Version 5.1 (for SLES, Version 8 only) or WebSphere Application Server, Version 6.0.1
- BEA Tuxedo, Version 8.1 (for SLES, Version 8 only)

*SOAP support (one of the following)*

- IBM SDK Java 2 Technology Edition for Linux for zSeries, Version 1.4.2 (supplied with WebSphere MQ)
- Apache Axis, Version 1.1 (supplied with WebSphere MQ)

**IBM WebSphere MQ, Version 6.0 at a glance (continued)**

**Software requirements (continued)** *SOAP support (one of the following)*

***Operating environment: Linux on zSeries s390x***

*Operating system (one of the following)*

- RHEL, Version 4.0
- SLES, Version 9

*Java and JMS client (one of the following)*

- 31 bit: IBM 31-bit SDK for Linux on zSeries, Java 2 Technology Edition, Version 1.4.2 (supplied with WebSphere MQ)
- 64 bit: IBM 64-bit SDK for Linux on zSeries, Java 2 Technology Edition, Version 1.4.2 (supplied with WebSphere MQ)

*Note: JDBC and XA usage is not supported on this platform.*

*Database (one of the following)*

- DB2 Universal Database, Version 8.2
- Informix Dynamic Server, Version 9.40 with Client SDK, Version 2.90
- Informix Dynamic Server, Version 10 with Client SDK, Version 2.90

*Compiler (one of the following)*

- GNU C Compiler (gcc) and g++, Version 3.3
- GNU C Compiler (gcc) and g++, Version 3.4
- Micro Focus Server Express, Version 4.0 (COBOL)

*Connectivity*

- TCP/IP (provided by the operating system)

*Transaction manager (one of the following)*

- WebSphere Application Server, Version 6.0.2 (31 bit only) with WebSphere MQ, Version 6.0 FP1
- BEA Tuxedo, Version 8.1

- IBM 64 bit SDK for Linux on zSeries, Java 2 Technology Edition, Version 1.4.2 (supplied with WebSphere MQ)
- Apache Axis, Version 1.1 (supplied with WebSphere MQ)

## IBM WebSphere MQ, Version 6.0 at a glance (continued)

### Software requirements

***Operating environment: Sun Solaris SPARC platform***

*Operating system*

- Sun Solaris operating environment, Version 8 or Version 9 (with SunSolve-recommended Patch Cluster level)

*Java and JMS client (one of the following)*

- 32 bit
  - IBM 32-bit SDK for Solaris, Java 2 Technology Edition, Version 1.4.2 (supplied with WebSphere MQ)
  - Sun Solaris Java SDK, Version 1.4. with JDK, Version 1.4.2 (For SSL support using Java, Sun Java 2 SDK Standard Edition, Version 1.4.2 is required because it provides the necessary JSSE class files.)
  - Sun Solaris Java 2 Standard Edition, for the Sun Solaris operating environment, SDK, Version 1.3.1. (If the Sun Java 2 SDK, Standard Edition, Version 1.3.1 and JSSE class files can be obtained, this is also a suitable environment under which SSL support using Java can be run, except for certificate checking against CRLs, which requires full JDK implementation at Version 1.4.)
- 64 bit
  - Sun Java 2 SDK, Standard Edition, Version 1.4.2

***Note:*** *Only DB2 and Oracle are supported for JDBC and XA usage.*

*Database (one of the following)*

- DB2 Universal Database, Version 8.2
- Informix Dynamic Server, Version 9.40 with Client SDK, Version 2.90
- Oracle 9i, Release 2 with Patch Set 4 (Version 9.2.0.5) or Oracle 10g
- Sybase ASE, Version 12.5.3 with ESD, Version 1 or Sybase SDK, Version 12.5.1 with ESD, Version 7

*Compiler (one of the following)*

- Sun ONE Studio, Version 8 Compiler Collection (C and C++)
- Sun Studio, Version 9 (C and C++)
- Micro Focus Server Express, Version 4.0 (COBOL)

*Connectivity (one of the following)*

- SNAP-IX, Version 7.0 or Alebra Brixton PU2.1 SNA Server, Release 4.1.3 (SNA)
- TCP/IP (provided by the operating system)

*Transaction manager (one of the following)*

- IBM TXSeries, Version 5.1
- WebSphere Application Server, Version 5.1 or WebSphere Application Server, Version 6.0.1
- BEA Tuxedo, Version 8.1
- BEA WebLogic Server, Version 8.1

*SOAP support (one of the following)*

- IBM 32-bit SDK for Solaris, Java 2 Technology Edition, Version 1.4.2
- Apache Axis, Version 1.1 (supplied with WebSphere MQ)

## IBM WebSphere MQ, Version 6.0 at a glance (continued)

### Software requirements

***Operating environment: Sun Solaris x86-64***

*Operating system*

- Sun Solaris operating environment, Version 10 (with SunSolve-recommended Patch Cluster level)

*Java and JMS client (one of the following)*

- 32 bit
  - Sun Java 2 Platform Standard Edition, Version 1.4.2
  - Sun Java 2 Platform Standard Edition, Version 5.0
  - IBM 32-bit SDK for Solaris, Java 2 Technology Edition, Version 1.4.2 (supplied with WebSphere MQ)
- 64 bit
  - Sun Java 2 Platform Standard Edition, Version 5.0

*Note: JDBC and XA usage is not supported on this platform.*

*Database*

- Oracle 10g

*Compiler (one of the following)*

- Sun ONE Studio 10 Enterprise Edition for Solaris (C and C++)
- Micro Focus Server Express, Version 4.0 (COBOL)

*Connectivity*

- TCP/IP (provided by the operating system)

*SOAP support (one of the following)*

- IBM 32-bit SDK for Solaris, Java 2 Technology Edition, Version 1.4.2
- Apache Axis, Version 1.1 (supplied with WebSphere MQ)

## IBM WebSphere MQ, Version 6.0 at a glance (continued)

### Software requirements

***Operating environment: Windows***

*Operating system (one of the following)*

- Windows 2000 Professional, Server or Advanced Server with SP4, 32 bit only
- Windows XP Professional
- Windows Server 2003 (Standard Edition or Enterprise Edition)

*Java and JMS client (one of the following)*

- IBM Developer Kit for Windows, Java 2 Technology Edition, Version 1.4.2. (IBM 32-bit SDK for Windows, Java 2 Technology Edition, Version 1.4.2 is supplied with the WebSphere MQ product and is required for SSL support using Java because it provides the necessary JSSE class files.)
- J2SE, Version 1.4.2 from Sun Microsystems, Inc.
- IBM Developer Kit for Windows, Java Technology Edition, Version 1.3.1 (If the IBM 32-bit SDK for Windows, Java 2 Technology Edition, Version 1.3.1 and JSSE class files can be obtained as included within an alternate IBM product, this is a suitable environment under which SSL support using Java can be run, except for certificate checking against CRLs, which requires full JDK implementation at Version 1.4.2).

*Note: Only DB2 and Oracle are supported for JDBC and XA usage.*

- DB2 Universal Database, Version 8.2
- Informix Dynamic Server, Version 9.40 with Client SDK, Version 2.90
- Oracle 9i, Release 2 with Patch Set 4 (Version 9.2.0.5) or Oracle 10g
- Sybase ASE, Version 12.5.1

*Compiler (one of the following)*

- Microsoft Visual C++ .NET 2003
- Microsoft Visual C# .NET 2003
- Microsoft Visual Basic, Version 6
- Microsoft Visual Basic .NET 2003
- IBM VisualAge COBOL Enterprise, Version 3.0.1
- Micro Focus Net Express, Version 4.0 (COBOL)

*Connectivity (one of the following)*

- IBM Communications Server for Windows, Version 6.1.2
- IBM Personal Communications, Version 5.7 (part of IBM Host Access Client Package [HACP], Version 4.0)
- Microsoft Host Integration Server 2004
- Microsoft Host Integration Server 2000
- Attachmate myEXTRA! Presentation Services, Version 7.11
- Attachmate EXTRA! Enterprise 2000
- Attachmate myEXTRA! Presentation Services, Version 7.11
- Attachmate EXTRA! Enterprise 2000
- Attachmate EXTRA! Personal Client, Version 6.7
- TCP/IP (provided by the operating system; IP, Version 6 feature provided on Windows XP with SP1 or later and Windows Server 2003)
- NetBIOS (provided by the operating system)
- Sequenced Package Exchange (SPX) (provided by the operating system)

## IBM WebSphere MQ, Version 6.0 at a glance (continued)

### Software requirements

***Operating environment: Windows (continued)***

*Transaction manager (one of the following)*

- TXSeries, Version 5.1
- WebSphere Application Server, Version 5.1 (for Windows 2000 Server, Windows 2000 Advanced Server and Windows 2003 Standard Edition and Enterprise Edition)
- WebSphere Application Server, Version 6.0.1
- BEA WebLogic Server, Version 8.1
- BEA Tuxedo, Version 8.1 (Windows 2000 Advanced Server and Windows Server 2003 Enterprise Edition)
- MTS/COM (at the same level as the operating system)

*SOAP support (one of the following)*

- Microsoft Internet Information Services (for running .NET services) on Windows 2000
- Microsoft .NET Framework, Version 1.1 or later (redistributable)
- Microsoft .NET Framework SDK, Version 1.1 or Microsoft Visual Studio .NET 2003 (for deploying Microsoft .NET services)
- IBM Developer Kit for Windows, Java 2 Technology Edition, Version 1.4.2 (supplied with WebSphere MQ)
- Apache Axis, Version 1.1 (supplied with WebSphere MQ)

### Compatibility

- WebSphere MQ, Version 6.0 interoperates with queue managers from any previous level of WebSphere MQ or IBM MQSeries® products.
- IBM WebSphere MQ Explorer now runs on the Linux x86 platform (along with the Windows platform). You can use WebSphere MQ Explorer on a client connection from an earlier supported level of WebSphere MQ or MQSeries on a different platform (for example, WebSphere MQ, Version 5.3 on AIX or MQSeries, Version 5.1 on Solaris, Intel Platform Edition).

### Limitations

For 64-bit queue-manager platforms, WebSphere MQ, Version 6.0 does not support 32-bit instances of DB2. If you use 32-bit instances of DB2, you must migrate them to 64-bit instances, as detailed in the DB2 documentation.

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