

WebSphere® software

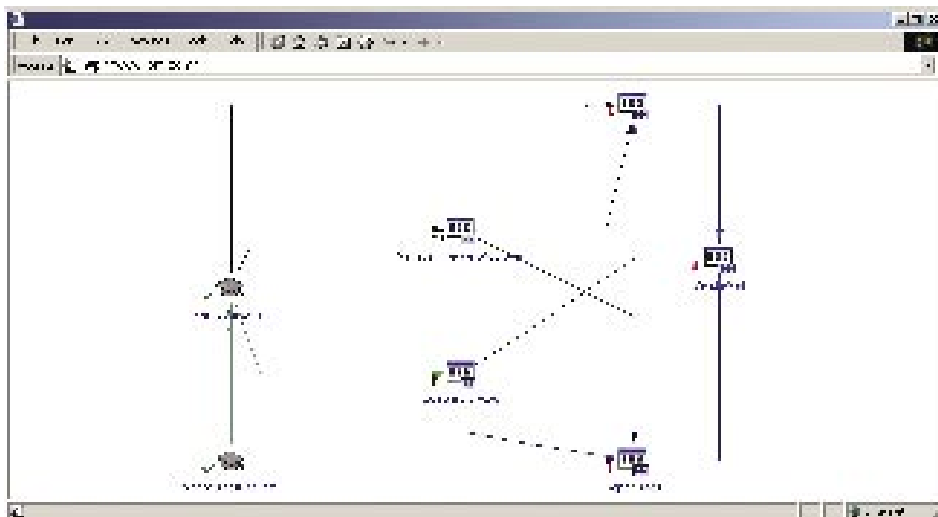
## IBM WebSphere MQ Workflow for Multiplatforms, Version 3.5

### Highlights

- **Helps integrate processes and applications with the people who perform your key business activities**
- **Delivers a framework for service-oriented program execution to simplify the reuse of task implementations**
- **Automates and tracks business processes in accordance with business design**
- **Provides full transactional integrity, performance and clustering**
- **Provides comprehensive support for Web server farms, portal servers and external directories**
- **Offers expanded workflow portal client functions**

To sustain a competitive edge, your business must be prepared to act—and react—intelligently and quickly to changing customer demands, marketplace trends and competitors' strategic moves. By aligning your business processes with your strategic objectives, you can improve business operations and deliver new services quickly as you integrate people, processes and applications throughout your enterprise.

IBM WebSphere® MQ Workflow for Multiplatforms, Version 3.5 can help your company become more agile and responsive by supporting business-process workflows as they interact with systems and people. So you can bring people and systems into a managed process-integration environment across your value chain to support enterprise application integration (EAI), business-to-business (B2B) and business-process management solutions. And leverage a highly scalable and reliable transactional environment as you optimize your existing IT and organizational infrastructures.



IBM WebSphere MQ Workflow automates long-running business processes that interact with applications and people

Deliver the benefits of e-business on demand™ using WebSphere MQ Workflow software to define and automate your business processes and extend them through the Web to customers, suppliers and trading partners. Accelerate your process flows. Cut costs. And reduce the risk of costly errors as you improve productivity of people throughout your extended enterprise.

### **Unite your resources to optimize business processes**

Typically, multiple applications, systems and people are involved in performing business processes. To optimize these processes, you must eliminate bottlenecks and effectively manage workflows, even when resources are limited. WebSphere MQ Workflow software helps you respond quickly to market changes and customer demands by providing a versatile business-process management solution that links all relevant resources to work together as one. So you can easily control, monitor and change your business processes as needed.

WebSphere MQ Workflow software can help speed and simplify management of your business processes because it's based on business-process logic, which is fully transparent in process models. So you can see, measure and change your business processes to keep them synchronized with your current business needs.

### **Implement process changes rapidly and smoothly**

WebSphere MQ Workflow software also uses service-oriented architectures (SOAs)—based on open, industry standards—to capture and document business-process information that can be automated and monitored while interacting with existing applications and people. In an SOA, you can manage your business processes and metrics separately from resources that provide individual process services.

WebSphere MQ Workflow gives you the flexibility to respond proactively to changes in your business environment by altering workflows to best suit the situation at hand. And it speeds and simplifies implementation of changes by allowing you to alter business rules rather than application code.

By supporting open, Internet standards—such as XML, Web services and Java™ 2 Platform, Enterprise Edition (J2EE)—WebSphere MQ Workflow software can ease integration projects throughout your enterprise. Optimized for parallel distributed processing, WebSphere MQ Workflow software helps you to fully leverage your existing resources and reuse existing business services more effectively. So you can reduce the time and expertise required for implementation and maintenance.

### **Understand the impact of changes before they're made**

Using the toolset that's part of the WebSphere Business Integration software portfolio, you can visualize the impact of business-process changes before they're implemented. For example, you can use IBM WebSphere Business Integration Modeler and IBM WebSphere Business Integration Monitor to capture measurements about resources such as process cost and cycle time. And you can run simulations to identify an alternative process that will fit best with your overall strategic goals. When you have identified the optimal process, you can deploy the process

to WebSphere MQ Workflow and continually monitor your key business-performance indicators. Business users can observe processes in real time through executive dashboards that enable business activity management. Then, they can stop, start and alter processes as needed to suit current business requirements.

### **Meet demand with market-leading business integration solutions**

Integration: the efficient, flexible combination of resources that enables you to optimize operations across and beyond the walls of your business. By tying together disparate resources, data, applications and processes, you can create a single, cooperative environment to unite your entire demand chain. And speed your return on investment (ROI) and time to value.

With WebSphere Business Integration solutions from IBM, you can connect:

- *People. By integrating business processes, your customers, employees, partners and suppliers can interact with your business more efficiently.*
- *Processes. By managing and coordinating your entire business horizontally, your IT infrastructure can keep pace with demand—and your business objectives.*
- *Information. By extending real-time access to distributed information, people and processes can take advantage of data and content resources from a variety of repositories.*

In your transformation to e-business on demand you'll need to increase efficiencies. Streamline processes. Leverage existing assets. And provide immediate, dynamic, personalized information that helps build long-term relationships. The WebSphere Business Integration software portfolio can help you deliver all this.

Built on open, industry standards like J2EE, XML and new Web services standards, WebSphere Business Integration software helps your business become more focused. Flexible. Resilient. And better able to respond to the opportunities—and disruptions—that can influence your future growth.

### **For more information**

To learn more about IBM WebSphere MQ Workflow for Multiplatforms, visit:

[ibm.com/software/integration/wmqwf](http://ibm.com/software/integration/wmqwf)

You can also contact your IBM sales representative, call IBM Worldwide Integration Sales at 1 888 685-0947, or send an e-mail to [bisales@us.ibm.com](mailto:bisales@us.ibm.com)

## IBM WebSphere MQ Workflow for Multiplatforms, Version 3.5 at a glance

### Product requirements

	Microsoft® Windows NT®, Windows® 2000 or Windows XP	IBM AIX® operating system	Sun Solaris operating environment on SPARC	HP-UX	IBM z/OS® and IBM OS/390® systems
<b>Tooling</b>					
Build time	X				
WebSphere Business Integration Modeler Workbench**	**				
<b>Servers</b>					
Run time	X	X	X	X	X
Administration utility	X	X	X	X	Console
<b>Application integration</b>					
Transactional XML message application programming interfaces (API)*	X	X	X	X	X
Workflow client API	X	X	X	X	X
IBM Lotus® Notes® API	X				
<b>User interaction</b>					
Web client	X	X	X	X	X
Portal client	X	X	X		X
Desktop client	X				
<b>BPM dashboards</b>					
WebSphere Business Integration Monitor**	**	**	**		**

### Web user access

A Web browser supporting HTML 4 with Cascading Style Sheets (CSS) is required, such as:

- Mozilla Navigator, Version 1.5 or Netscape, Version 1.7
- Microsoft Internet Explorer, Version 5.5 or Version 6.0

#### Notes:

- Servers and clients can be deployed on different platforms.
- Restricted-use licenses of IBM WebSphere MQ, Version 5.3.1 and IBM DB2® Universal Database™, Version 8.1, are included in WebSphere MQ Workflow.

\*Application integration extends to:

- WebSphere MQ software and XML on more than 35 platforms
- IBM WebSphere Business Integration Message Broker and IBM WebSphere Business Integration Server
- IBM WebSphere Application Server
- Web services (support pack WA07)

\*\*Value-add products are available separately.

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## IBM WebSphere MQ Workflow for Multiplatforms, Version 3.5 at a glance (continued)

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### Operating environment: Build time (supports all run-time platforms)

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#### Hardware requirements

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##### System

- A personal computer with Intel® technology-based processor architecture such as an Intel Pentium® 300MHz processor or higher
  - Screen: resolution SVGA 800x600 (minimum), 256 colors (minimum)
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##### Storage requirements

- Main memory: 512MB
  - Hard disk: 1GB with DB2 Universal Database, 700MB with Microsoft Jet Engine
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#### Software requirements

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##### Operating systems

One of the following products:

- Microsoft Windows XP Professional Edition
  - Microsoft Windows 2000
  - Microsoft Windows 2003 Server
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##### Database

One of the following products:

- IBM DB2 Universal Database Enterprise Server Edition, Version 8.1 (included)
  - IBM DB2 Universal Database Enterprise Server Edition, Version 7.2 with Fix Pack 7 or later
  - Microsoft Jet Engine
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**Note:** Multiple build-time users can share the same build-time database using DB2 Universal Database in a client/server configuration.

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#### Operating environment: Run time

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The performance of IBM WebSphere MQ Workflow, Version 3.5 depends on:

- Usage characteristics of the process models and organization definitions
  - Average and maximum size of the work lists
  - Capacity and utilization of WebSphere MQ Workflow and database server machines
  - Speed and memory size of the server and client machines
  - Transmission speed and load on communication channels
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*To help ensure performance and safety, keep database and log files (table spaces) on separate disks when the servers are being set up.*

The demand for main memory and hard disk space is affected by:

- Number and size of process models and process instances residing in the run-time database
- Number of clients concurrently attached to the server

**Note:** Less memory may be sufficient for systems not used for production processes; for example, systems involved in development, testing or demonstrations. For test or demonstration purposes, an IBM ThinkPad® or other portable personal computer running Windows can be used to run all WebSphere MQ Workflow components on the same machine.

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*Hardware requirements are specified for a sample two-tier configuration where the database and the server reside on the same system.*

To increase the workload and the number of users and applications connected, use:

- Multiple queue managers and WebSphere MQ Workflow servers sharing the same database
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#### Program information

- Program number: 5697-FM3
  - Part number: 0790875
  - Available via CD-ROM
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## IBM WebSphere MQ Workflow for Multiplatforms, Version 3.5 at a glance (continued)

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### Operating environment: Run-time servers for Windows

#### Hardware requirements

##### *System (for a sample two-tier configuration)*

- A personal computer with Intel-based processor architecture, such as an Intel Pentium 500MHz, or higher

##### *Storage requirements*

- Main memory: 256MB
- Hard disk: 2GB

#### Software requirements

##### *Operating system*

One of the following products:

- Microsoft Windows XP Professional Edition
- Microsoft Windows 2000
- Microsoft Windows 2003 Server

##### *Database*

One of the following products:

- DB2 Universal Database for Windows, Version 8.1 with Fix Pack 3 (included)
- DB2 Universal Database for Windows, Version 7.2 with Fix Pack 7 or higher

##### *External Lightweight Directory Access Protocol (LDAP), Version 3 directory server (optional)*

- IBM Directory Server, Version 5.1 or equivalent

##### *Communication*

- IBM WebSphere MQ for Windows, Version 5.3.1 with CSD04 (included)

##### *Client APIs*

- Microsoft Visual Studio .Net, Version 7.0 (C/C++ APIs)
- IBM Lotus Notes API release 4.5
- IBM Java Development Kit (JDK), Version 1.3.1 or Version 1.4.1
- Sun JDK, Version 1.3.1 or higher

##### *Web client and Java applications*

One of the following products:

- WebSphere Application Server, Version 4.0.1 and higher
- WebSphere Application Server, Version 5.0 and higher
- WebSphere Application Server, Version 5.1
- IBM WebSphere Portal server, Version 4.1,2, IBM WebSphere Portal server, Version 4.2 or IBM WebSphere Portal server, Version 5.0

#### Web user access requirements

- A Web browser supporting HTML 4 with Cascading Style Sheets (CSS), such as Netscape Navigator, Version 4.7 or later, or Microsoft Internet Explorer, Version 5.5 or Version 5.6
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## IBM WebSphere MQ Workflow for Multiplatforms, Version 3.5 at a glance (continued)

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### Operating environment: Desktop client for Windows

#### Hardware requirements

##### System

- A personal computer with Intel technology-based processor architecture

##### Storage requirements

- 64MB of memory recommended

#### Software requirements

##### Operating system

One of the following products:

- Microsoft Windows XP Professional Edition
- Microsoft Windows 2000
- Microsoft Windows NT Workstation, Version 4.0

##### Communication

- IBM WebSphere MQ for Windows, Version 5.3 client with CSD04 (included)

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### Operating environment: Run-time servers for AIX operating environment

#### Hardware requirements

##### System

One of the following systems (for a sample two-tier configuration):

- An IBM @server<sup>®</sup> pSeries<sup>®</sup> uniprocessor, symmetric multiprocessing (SMP) or SP machine
- A system for AIX 5L with PowerProcessor Chip (PPC) (support in 32-bit mode only)

##### Storage requirements

- Main memory: 512MB
- Hard disk: 2GB

**Note:** A dedicated graphical display screen is not necessary because the system console is sufficient.

#### Software requirements

##### Operating system

One of the following products:

- AIX 5L, Version 5.1 (with fix level ML02; for PPC)
- AIX 5L, Version 5.2

In a high-availability environment, IBM High-Availability Cluster Multiprocessing (IBM HACMP™) (IBM Support Pac™ WC61 refreshed to upgrade HACMP support)

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## **IBM WebSphere MQ Workflow for Multiplatforms, Version 3.5 at a glance (continued)**

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### **Operating environment: Run-time servers for AIX operating systems**

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#### **Software requirements**

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##### *Database*

One of the following products:

- IBM DB2 Universal Database for AIX, Version 8.1 with Fix Pack 3 (included with MQ Workflow)
  - IBM DB2 Universal Database for AIX, Version 7.2 with Fix Pack 7 or higher
  - Oracle, Version 8.1.7.3
  - Oracle 9i, Version 9.2
- 

##### *External LDAP, Version 3 directory servers (optional)*

- IBM Directory Server, Version 5.1 or equivalent
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##### *Communication*

- IBM WebSphere MQ for AIX, Version 5.3.1 with CSD04 (included with MQ Workflow)
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##### *Client APIs*

- IBM C for AIX®, Version 6.0
  - IBM VisualAge C++ Professional for AIX, Version 6.0
  - IBM JDK, Version 1.3.1 or Version 1.4.1
  - Sun JDK, Version 1.3.1 or 1.4.1
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##### *Web client and Java applications*

One of the following products:

- WebSphere Application Server, Version 4.0.1 and higher
  - WebSphere Application Server, Version 5.0 and higher
  - WebSphere Application Server, Version 5.1
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##### *Portal server*

- WebSphere Portal server, Version 4.1.2, WebSphere Portal server, Version 4.2 or WebSphere Portal server, Version 5.0
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#### **Web user access requirements**

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- A Web browser supporting HTML 4 with CSS, such as Netscape Navigator, Version 4.7 or higher, or Microsoft Internet Explorer, Version 5.5 or 5.6
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## IBM WebSphere MQ Workflow for Multiplatforms, Version 3.5 at a glance (continued)

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### Operating environment: Run-time servers for HP-UX

#### Hardware requirements

##### *System (for a sample two-tier configuration)*

- An HP 9000 workstation with PA-Risc (32-bit mode only)

##### *Storage requirements*

- Main memory: 1GB
- Hard disk: 2GB

**Note:** A dedicated graphical display screen is not necessary because the system console is sufficient.

#### Software requirements

##### *Operating system*

One of the following products:

- HP-UX, Version 11.0
- HP-UX, Version 11i

##### *Database*

One of the following products:

- IBM DB2 Universal Database, Version 8.1 for HP-UX (included)
- DB2 Universal Database, Version 7.2 for HP-UX with Fix Pack 7 (included)
- Oracle, Version 8.1.7.1 or Oracle 9i, Version 9.2.0

##### *External LDAP, Version 3 directory servers (optional)*

- IBM Directory Server, Version 5.1 or equivalent

##### *Communication*

- IBM WebSphere MQ for HP-UX, Version 5.3.1 with CSD04 (included)

##### *Client APIs*

- HP ANSI C++ Compiler for HP-UX, Version 03.33
- IBM JDK, Version 1.3.1 or Version 1.4.1

##### *Web client and Java applications*

- WebSphere Application Server, Version 4.0, WebSphere Application Server, Version 5.0 or WebSphere Application Server, Version 5.0

#### Web user access requirements

- A Web browser supporting HTML 4 with CSS, such as Netscape Navigator, Version 4.7 or higher, or Microsoft Internet Explorer, Version 5.5 or 5.6
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## IBM WebSphere MQ Workflow for Multiplatforms, Version 3.5 at a glance (continued)

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### Operating environment: Run-time servers for Sun Solaris operating environment

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#### Hardware requirements

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*System (for a sample two-tier configuration)*

- A Sun workstation with SPARC processor architecture
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*Storage requirements*

- Main memory: 1GB
- Hard disk: 2GB

**Note:** A dedicated graphical display is not necessary because the system console is sufficient.

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#### Software requirements

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*Operating system*

One of the following products:

- Sun Solaris, Version 8 (WebSphere MQ Workflow runs in 32-bit mode)
  - Sun Solaris, Version 9 (WebSphere MQ Workflow runs in 32-bit mode)
- 

*Database*

One of the following products:

- DB2 Universal Database for Sun Solaris, Version 8.1 (included)
  - DB2 Universal Database for Sun Solaris, Version 7.2 with Fix Pack 7 or higher
  - Oracle, Version 8.1.7.1
  - Oracle 9i, Version 9.2
- 

*External LDAP, Version 3 directory servers (optional)*

- IBM Directory Server, Version 5.1 or equivalent
- 

*Communication*

- IBM WebSphere MQ for Sun Solaris, Version 5.3.1 with CSD04 (included)
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*Client APIs*

- Sun Workshop Compiler Professional C++/SPARC, Version 6.2
  - Sun JDK, Version 1.3.1, 1.4.1 or 1.4.2
- 

*Web client and Java applications*

One of the following products:

- WebSphere Application Server, Version 4.0.1 or higher
  - WebSphere Application Server, Version 5.0 or higher
  - WebSphere Application Server, Version 5.1
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*Portal server*

- WebSphere Portal server, Version 4.1.2, WebSphere Portal server, Version 4.2 or WebSphere Portal server, Version 5.0
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#### Web user access requirements

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- A Web browser supporting HTML 4 with CSS, such as Netscape Navigator, Version 4.7 or higher, or Microsoft Internet Explorer, Version 5.5 or 5.6
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