

IBM WebSphere Message Broker for z/OS V6.0 delivers an advanced ESB

Overview

WebSphere® Message Broker Version 6.0 delivers the solution for your current application integration and mediation needs. It can add advanced capabilities to your enterprise service bus (ESB) by extending the integration of your service-oriented architecture (SOA) to encompass your entire enterprise and beyond.

WebSphere Message Broker V6.0 adds real value to the reliable connections between applications and systems as provided by WebSphere MQ and other WebSphere products. It provides the key capabilities your business needs to transform your business data and route it between applications.

By removing the need for your business applications to include routing and transformation logic, you can ensure your applications stay focused and your business stays flexible.

WebSphere Message Broker can act as a message and protocol switch. This enables you to connect disparate applications and business data across multiple platforms and to provide transformation and intelligent routing capabilities for all your business information. It makes business data available exactly where you want it in the format you need it.

WebSphere Message Broker's robust design, scalable architecture, high performance, and ease of use deliver the capability to build your ESB to implement an enterprise-wide SOA in stages.

This flexible combination of capabilities provides your business with the tools to solve your integration requirements from any starting point: a simple two-application solution or a multi-application, multi-platform design. As your business expands and the integration challenges

multiply, WebSphere Message Broker can accommodate the changing needs of your business by:

- Growing your infrastructure without increasing the complexity
- Protecting your existing and ongoing investments in applications and data structures
- Seamlessly extending your enterprise service bus

WebSphere Message Broker is the cost-effective solution for your enterprise's extensive integration and mediation needs today and will protect your investment into the future

WebSphere Message Broker with Rules and Formatter Extension V6.0 offers the full level of function provided by WebSphere Message Broker with the addition of support for the Rules and Formatter capability from New Era of Networks.

WebSphere Event Broker V6.0 offers an easy way to distribute information based on the content of messages. Event Broker does this by providing publish and subscribe capabilities for clients who do not require the powerful and adaptable transformation capabilities provided by Message Broker.

All these products now contain a copy of WebSphere MQ Everyplace™, allowing you to link directly from WebSphere Message Broker or WebSphere Event Broker out to mobile platforms and devices.

Key prerequisites

Refer to the **Software requirements** and **Hardware requirements** sections.

At a glance

This new version continues to deliver significant new function that satisfies major customer requirements; and at the same time, improves migration, performance, and, ease of use. It offers:

- Flexible transformation
- Improved performance
- Simplified installation and migration
- Enhanced support for Web services
- An improved development toolkit
- · New ways of driving flows
- · Enhanced message parsing
- · Improved management
- Improved security
- Extended platform support

For ordering, contact:

Your IBM representative, an IBM Business Partner, or the Americas Call Centers at

800-IBM-CALL

Reference: LE001

Planned availability date

October 28, 2005

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Description

WebSphere Message Broker for z/OS® V6.0 delivers significant new function, while continuing to improve performance, ease of use, and flexibility for developers and administrators.

Flexible transformation

Transformations can be authored using tools that match both the user's skills and the data being transformed. The improved graphical mapping editor allows simple drag and drop transformations with minimal programming skills. Alternatively, developers who prefer to program can use $Java^{TM}$, ESQL, or XSLT as transformation languages.

Improved graphical mapping

The improved graphical mapping editor makes transforming both simple and complex messages as easy as dragging and dropping.

Maps can be developed iteratively either top-down (building the target format as part of map creation) or bottom-up (building the source as part of map creation) map development scenarios in addition to the existing support for meet-in-the-middle map development. Novice users are guided through mapping by "predictions" that generate an initial mapping using drag and drop techniques. New features include the ability to split source messages into a number of output messages, message header mapping, and easy mapping of repeating elements.

Routing and transformation rules in Java

A new Java compute node allows routing and transformation logic to be written in Java using existing programming skills. A standard J2SE 1.4.2 environment is provided in the broker runtime. Java transformations are developed with the standard eclipse JAVA editor with color highlighting and code assist. No ESQL skill or experience is required.

The Java jar files can be deployed to the broker runtime using the standard broker deployment facilities.

ESQL enhancements

ESQL has been extended to make transforming and routing messages using ESQL even easier. Improvements include:

- In-memory cache to avoid access to databases for read only routing or validation data
- Improved support for creating DATETIME variables
- Access to multiple databases from the same compute node
- Dynamic database schemas
- New user-defined properties that can pass parameters to ESQL to modify standard behavior
- Access to environment information such as flow name and broker name
- Improved support for result sets returned by database stored procedures
- Improved error recovery by the use of SQL handlers

Multiple out terminals to combine the function of compute and filter nodes

XSLT enhancements

Performance of XSLT transformations is improved by the support of compiled style sheets. The style sheets can also be deployed using the standard deployment facilities.

Improved performance and scalability

Performance of the broker runtime has been significantly improved by reducing the pathlength of the major broker functions.

The cost of parsing and streaming messages has been reduced. ESQL and publish/subscribe functions have been optimized.

The aggregation nodes are reimplemented to use queues to save state rather than a database to significantly improve throughput, particularly of non-persistent requests.

A new in-memory cache, mentioned above, allows more efficient flow to be developed. The Message Repository Manager (MRM) and XML parsers have reduced their storage requirements to allow larger messages to be dealt with.

The tools performance and scalability are improved. The tools take advantage of Eclipse 3.0 multi-threaded builders to quickly return control to the user. A performance analysis team optimized the complete tooling path, resulting in significant time savings for tools users.

Simplified installation and migration

Installation of the product has been simplified by reducing the prerequisite products required. The configuration manager no longer requires a database and other broker requirements have been reduced.

A default configuration wizard is provided to quickly build a full environment for development or other simple configurations on Windows $^{\text{\tiny TM}}$ and Linux $^{\text{\tiny TM}}$.

Migration from previous releases (branded WebSphere MQ Integrator® and WebSphere Business Integration Broker) is supported; utilities are provided to make version-to-version migration a simple operation.

Installation and configuration

Installation and configuration of the product on z/OS has been simplified.

Enhanced support for Web services

Web services support is extended by support for more standards such as SOAP 1.2 and HTTP 1.1 in addition to verification that Web services comply with the Web Services Interoperability (WS-I) Basic Profile.

Modelling and transformation of SOAP messages is simplified and the ability to import WSDL definitions is provided to allow the generated WSDL to be more easily used in client development tools.

The HTTP transport has been extended to provide HTTPS support.

205-208 -2-

Improved development toolkit

The development toolkit is based on the latest release of Rational® Application Developer and Eclipse. New XML editors are provided.

Visual debugging of flows, ESQL, Java, and graphical mappings are simplified by reducing Eclipse perspective switching.

New ways of driving flows

Message flows can now be driven by JMS transports in addition to WebSphere MQ. Supported JMS providers include the embedded JMS provider in WebSphere Application Server v6.0.

A new timer node allows message flows to be driven periodically rather than by an external event.

A new MQGET node allows messages to be retrieved in the middle of a flow in addition to the beginning and end of the flow. This new function allows groups of messages to be dealt with together or queues to be used to save temporary state information.

These new input and output methods are in addition to the WebSphere Message Broker File Extender, VSAM and CICS® nodes supported by WebSphere Business Integration Message Broker.

The new IBM Message Service Client for C/C++ will be supported to provide a JMS-like interface to broker client C/C++ applications.

Enhanced message parsing

The performance of parsing and streaming has been significantly improved to allow greater throughput, especially of large messages.

Pre-built message definitions are supplied for some common industry message formats such as SOAP envelope, SAP IDoc header, and MIME header.

A new WSDL importer is provided to simplify the calling of Web services from within flows.

A new MIME parser is provided to allow the parsing of SOAP with Attachment, RosettaNet, and TLOG messages.

Improved management

- Run-time versioning The enhanced versioning capabilities introduced to the development environment in the last release have been extended to the runtime environment. All resources deployed can be tagged to version, author, and other useful information in addition to the standard complied time and deployment time attributes. The new information is displayed in the administration interface making it easy to see which resources have been deployed to production systems.
- More automation New and extended command line utilities are provided to allow full automation of deployment of new resources to production environments.

A new systems management application interface is provided to allow the product to be fully managed by other products and utilities besides the administration interface.

Improved security

The HTTP transport has been extended to support HTTPS to allow added privacy and security. Communication between the toolkit and configuration manager has been extended to allow the use of SSL for added security.

Extended platform support

The Configuration Manager is supported on all the broker platforms including z/OS, UNIX®, Linux, and Microsoft™ Windows.

The development toolkit can be installed on Linux in addition to Windows.

Database support on Linux Intel $^{\text{TM}}$ is extended to include Oracle, in addition to DB2 Universal Database $^{\circledR}$.

Consulting and services

IBM Services has the breadth, depth, and reach to manage your services needs. You can leverage the deep technical skills of our WebSphere lab-based services and the business consulting, project management, and infrastructure expertise of our IBM Global Services team. Also, IBM Services extends our reach through IBM Business Partners to provide an unmatched portfolio of capabilities. Together, we provide the global reach, intellectual capital, industry insight, and technology leadership to support any critical business need.

For information on IBM Global Services, visit

http://www.ibm.com/services

To learn more about IBM Software Services, visit

http://www.ibm.com/developerworks/websphere/services/

To locate an IBM Business Partner, visit

http://www.ibm.com/software/solutions/isv

Section 508 of the U.S. Rehabilitation Act

Features of WebSphere Event Broker for z/OS V6.0, WebSphere Message Broker for z/OS V6.0, and WebSphere Message Broker with Rules and FormatterExtension for z/OS V6.0 that support use by people with disabilities include:

- The ability to use assistive technologies such as screen readers and screen magnifier software
- Facilities to customize display attributes such as color, contrast, and font size
- · Capability of operating using only the keyboard

The product documentation is provided in softcopy (PDF) format. It is also provided (in HTML format) as part of the WebSphere Event Broker for z/OS V6.0, WebSphere Message Broker for z/OS V6.0, and WebSphere Message Broker with Rules and FormatterExtension for z/OS V6.0 Information Center.

Value Unit-based pricing

Value Unit pricing for eligible IBM @server* zSeries® IPLA programs enables a lower cost of incremental growth and enterprise aggregation. Each zSeries IPLA product with Value Unit pricing has a single price per Value Unit and a conversion matrix, called Value Unit Exhibit, for converting from some designated measurement to Value

-3- 205-208

Units. Most commonly Millions of Service Units (MSUs) is the measurement designated by IBM to be converted to Value Units. Some other measurements are engines or messages. Since MSUs are the most common measurement, that measurement will be used for the remainder of this description.

Value Unit pricing offers price benefits for clients. For each zSeries IPLA program with Value Unit pricing, the quantity of that program needed to satisfy applicable IBM terms and conditions is referred to as the "required license capacity." Each of the various Value Unit Exhibits stipulate that the larger your required license capacity, the fewer Value Units per MSU you will need. Value Unit Exhibits are uniquely identified by a three digit code and referred to using the nomenclature VUExxx, where xxx is the three digit code.

Subsequent acquisitions of Value Unit priced programs offers additional price benefits for clients. The quantity of each zSeries IPLA program that you have acquired is referred to as "entitled license capacity." If you wish to grow your entitled license capacity for a zSeries IPLA program, the calculation to determine additional needed Value Units is based upon the number of Value Units already acquired.

For each zSeries IPLA program with Value Unit Pricing, you should:

- · Determine the required license capacity, in MSUs
- Aggregate the MSUs across the enterprise
- Convert the total MSUs to Value Units, using the applicable Value Unit Exhibit, and
- Multiply the price per Value Unit by the total number of Value Units to determine the total cost.

To simplify conversion from the designated measurement to Value Units or vice-versa, use the Value Unit Converter Tool. For additional information or to obtain a copy of the Value Unit Converter Tool, visit the Value Unit Converter Tool Web site

http://ibm.com/zseries/swprice/vuctool

Note that Value Units of a given product cannot be exchanged, interchanged, or aggregated with Value Units of another product.

To determine the required license capacity for the zSeries IPLA program you selected, refer to the **Terms and conditions** section.

IPLA and subscription and support considerations

IPLA licenses can be transferred from one machine to another within, but not limited to an enterprise. The client may aggregate the capacity for all the processors the product is operated on to achieve a more economic price. This will result in a single Proof of Entitlement (PoE). It is the client's responsibility to manage the distribution of Value Units within the limits of the entitlement of the product license.

Subscription and Support must cover the same capacity as the product license entitlement. Subscription and Support will be available in the country in which the agreement is made.

Product positioning

WebSphere provides several software products to meet your diverse integration needs as they span varying programming models, qualities of service, and multiple data types. Whether you are looking to exchange a limited amount of data or implement an enterprise-wide SOA, you can meet your current and future needs with WebSphere.

WebSphere Message Broker makes full use of the transport and connectivity options provided by WebSphere MQ and WebSphere Application Server, and provides additional routing and transformation capabilities to implement or extend an ESB.

- WebSphere Application Server is the leading J2EE application server and development environment, and includes a built-in JMS engine, for messaging between J2EE applications.
- WebSphere MQ, available on more than 80 platform configurations, provides the core of application integration connectivity, and integrates many differing platforms, systems, and applications. It provides heterogeneous messaging, extending your enterprise service bus with assured, reliable message delivery.
- WebSphere Message Broker with Rules and Formatter Extension offers the full level of function provided by IBM WebSphere Message Broker with additional support for the Rules and Formatter capability from New Era of Networks. This provides continuity for clients who require the use of IBM Rules and Formatter nodes.
- WebSphere Event Broker lets you rapidly build a flexible, extensible, and secure infrastructure that leverages applications and devices across heterogeneous platforms through distributing real-time information from disparate sources of information, and provides a powerful new means to unify organizations by extending WebSphere MQ messaging transport with other protocols, including those for enterprise, real-time, telemetry, mobile, and multicast endpoints.
- WebSphere MQ Extended Security Edition enhances WebSphere MQ with end-to-end, application-level data protection features. It enables enterprise-wide, remote management of security policies on your MQ network and can be deployed to existing production environments without changes to existing WebSphere MQ applications.
- WebSphere Partner Gateway provides an environment for the creation and management of supply chain partners being integrated to the business, as well as providing the support to send and receive multiple data types over multiple choices protocol and transport layers. Whether the client is driven to connect to just one or two key supply chain partners or whether they need to define a network of potentially thousands of partners, there are editions of this offering to meet their needs.

In addition, product extensions provide additional supported function available as a download from the Internet. These product extensions are available from

http://www-306.ibm.com/software/integration/support/supportpacs/

The IBM market-leading application integration software including WebSphere MQ and WebSphere Message Broker helps companies:

205-208 -4-

- Quickly and economically address business integration issues
- Become more agile and take rapid advantage of new business opportunities
- Stay flexible
- · Maintain client orientation
- · Gain competitive position advantage

WebSphere Message Broker allows companies to maximize flexibility as an integrated, On Demand Business by:

- Leveraging existing resources much more widely than was part of their original design
- Improving speed of implementation of changes to applications to respond to new opportunities, ensuring that application design and changes are focused on business logic rather than infrastructure details
- Anticipating and rapidly implementing IT changes as their business changes

SOA and an ESB

In a SOA, a connectivity layer often referred to as an ESB optimizes information distribution between service requesters and service providers. Each enterprise can deploy its own unique ESB, reflecting how far it has advanced toward becoming an On Demand Business.

As key members of the WebSphere software portfolio, WebSphere MQ and WebSphere Message Broker enable you to begin deploying or widening the deployment of your ESB today.

Some businesses may find that simple messaging-based connectivity between well-matched applications provides the aspects of integration that they require to implement an effective enterprise service bus. Other businesses may find that to extend these capabilities into their wider deployed infrastructure, they realize value of other parts of the WebSphere software portfolio. As key members of the IBM WebSphere software portfolio, WebSphere MQ and WebSphere Message Broker enable you to begin deploying your ESB today.

These programs help maximize the value of your IT investment by broadening the range of environments this connectivity layer can reach, such as hardware and operating system platforms and non-standards-based programming models as well as J2EE and .NET.

The proven delivery mechanisms of WebSphere MQ and WebSphere Application Server can extend the standards-based enterprise service bus with reliable connectivity throughout the enterprise for connecting and integrating virtually any type of application or system. WebSphere Application Server messaging resources provide a best-of-breed Java Message Service (JMS) implementation for use with J2EE-hosted applications. WebSphere MQ seamlessly extends those messaging resources to non-J2EE environments to integrate virtually anything, across more than 80 platforms.

WebSphere Message Broker adds services such as content-based message routing and transformation, as well as support for a range of message distribution options and protocols to improve their flexibility and performance. These features allow WebSphere Message Broker to extend the standardized integration features of an enterprise service bus to encompass all business systems and applications, making full use of the IT assets of the business and even allowing better integration with

the applications and business processes of business partners.

WebSphere software provides integration capabilities that enable you to begin reaping the benefits of service-oriented architectures and to begin deploying end-to-end environments that provide the benefits of an enterprise service bus across all of a business infrastructure today.

IBM can help you grow project-by-project toward an On Demand Business. WebSphere MQ, WebSphere Application Server, and WebSphere Message Broker play a pivotal role in creating service-oriented architectures and will continue to do so as IBM delivers enhanced capabilities to accelerate the deployment of an integration infrastructure that spans the entire IT ecosystem.

Availability of national languages

The support information for national languages is to be sourced from the translation plan of record when the RFA is finalized. If anything changes or a target cannot be met before final RFA distribution, the RFA author is to communicate the updates to the geography representatives. If follow-up updates are required, they will be done by the geography representatives.

WebSphere Event Broker for z/OS V6.0, WebSphere Message Broker for z/OS V6.0, and WebSphere Message Broker with Rules and Formatter support three languages supplied with the Base Product.

Installation screens, GUI, and system messages displayed by the product have been translated into Japanese, Simplified Chinese, and English.

Business Partner information

If you are a Direct Reseller - System Reseller acquiring products from IBM, you may link directly to Business Partner information for this announcement. A PartnerWorld ID and password are required (use IBM ID).

BP Attachment for Announcement Letter 205-208

https://www.ibm.com/partnerworld/mem/sla.jsp?num=205-208

Trademarks

-5-

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Java is a trademark of Sun Microsystems, Inc.

UNIX is a registered trademark of the Open Company in the United States and other countries.

Linux is a trademark of Linus Torvalds in the United States, other countries or both

Other company, product, and service names may be trademarks or service marks of others.

205-208



IBM US Announcement Supplemental Information

September 6, 2005

Education support

Training is available for components of WebSphere® Message Broker and WebSphere Event Broker. This education is offered by IBM Learning Services, WebSphere Training and Technical Enablement, and Education Centers for IBM Software (ECIS). Information regarding worldwide availability of education offerings, including curriculum roadmaps, is available on the following Web sites

http://www.ibm.com/services/learning

http://www.ibm.com/developerworks/websphere/education/enablement

http://www.ibm.com/software/ecis

Offering Information

Product information is available via the Offering Information Web site

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

Publications

An Installation Guide is shipped with these programs.

The IBM Publications Center

http://www.ibm.com/shop/publications/order

The Publications Center is a worldwide central repository for IBM product publications and marketing material with a catalog of 70,000 items. Extensive search facilities are provided. Payment options for orders are via credit card (in the U.S.) or customer number for 50 countries. A large number of publications are available online in various file formats, and they can all be downloaded by all countries free of charge.

The IBM Publications Notification System (PNS) enables subscribers to set up profiles of interest by order number/product number. PNS subscribers automatically receive e-mail notifications of all new publications defined in their profiles. These may then be ordered/downloaded from the Publications Center

http://service5.boulder.ibm.com/pnsrege.nsf/ messages/welcome

The site is available in English and Canadian French.

All documentation for the WebSphere Message Brokers family of products is now part of the integrated help system. You can launch the help system from the Rational® Application Developer shipped with the program.

Some of the advantages over publications are:

- Improved search and navigation facilities
- Contextual help links from the workbench
- Links from the help to launch workbench Wizards
- Comprehensive linking between related information

Technical information

Hardware requirements: Any vendor hardware explicitly compatible and fully capable of running the specified operating system, the corresponding supporting software, and associated applications unmodified. Responsibility to provide statement of full compatibility between machines lies with the original equipment provider.

Server requirements:

Any server capable of running one of the listed z/OS_{\circledR} releases.

Software requirements

WebSphere Message Brokers Toolkit

The Message Brokers Toolkit graphical tooling is supported on the following environments:

Windows™

- Microsoft[™] Windows XP Professional (for development and test purposes)
- Microsoft Windows Server 2003 Standard Edition and Extended Edition

Linux™ x86

- Red Hat Enterprise Advanced Server V3.0 (plus Update 2)
- SUSE Linux Enterprise Server (SLES) 9

Requires: Mozilla Version 1.4.2, or later

Notes:

- The Toolkit requires any Intel[™] Pentium[™] III (or above) processor-based IBM PC or compatible, with 700+ MHz processor speed and a minimum of 512 MB of RAM.
- A minimum display resolution of 1024 x 768 is recommended.

Message Broker, User Name Server, and Configuration Manager

The following are minimum supported levels.

 z/OS V1.5 (5694-A01), with PTF for APAR OA11699, at RSU0507, or later (for the target system).

IBM SMP/E for z/OS V3.1, or later. (SMP/E PTF for APAR IR48947 is required for the driving system.)

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Both Recoverable Resource Services (RRS) and the Hierarchical File System (HFS) are used and the client will need to be familiar with the operation of both of these facilities.

- WebSphere MQ V5.3.1 for z/OS (5655-F10) (plus PTF for APAR PQ80677), including the FMID for MQ Java™ Classes.
- IBM DB2 Universal Database® V7.1 (5675-DB2®) at RSU0409 and PUT0402

or

DB2 Universal Database V8.1 (5675-DB2) plus PTF for APAR PQ84976

- XML Toolkit V1.8 for z/OS
- Java Runtime Environment (JRE) Version 1.4.2 (Fix Pack 2). Visit

http://www-1.ibm.com/servers/eserver/zseries/software/java/getsdk14.html

Note: Before installing any new products, ensure that you review their current Preventative Service Planning (PSP) information.

Options:

- WebSphere Information Integrator for Linux, UNIX®, and Windows V8.2
- WebSphere Information Integrator Classic Federation for z/OS V8.2, providing direct SQL connectivity with z/OS data sources: IMS™, VSAM, ISAM, sequential files, CA-IDMS, CA-Datacom, Software AG ADABAS, and DB2

Refer to the WebSphere Business Integration page for the latest information:

http://www.ibm.com/software/integration/wbimessagebroker/support

Planning information

WebSphere Message Brokers for z/OS

Use of components on separate machines

WebSphere Event Broker for z/OS V6.0, WebSphere Message Broker for z/OS V6.0, and WebSphere Message Broker with Rules and FormatterExtension for z/OS V6.0 consist of several components:

- Message broker
- Configuration manager
- User name server
- Database manager
- Rational Application Developer for Windows and Linux

Each component may be installed on only a single machine, at any one time, under the terms and conditions of the program license, except for the Rational Application Developer for Windows and Linux which may be installed on multiple machines provided they are all used in conjunction with the same message broker machine.

The Message Broker component determines how Value Unit requirements are calculated. Calculations must be made using the appropriate type of processor for the operating system in use.

Unit testing

The program license authorizes a single developer to install each component of the program on a single Microsoft Windows machine for purposes of "unit testing," which is limited to testing of code written or generated by such developer to confirm that such code functions as designed. Refer to the licence terms and conditions.

IBM Rules and Formatter extensions

The WebSphere Message Broker with Rules and FormatterExtension for z/OS V6.0 includes certain "Rules and Formatter" material supplied under license by Sybase, Inc. ("R+F Code").

The following applies in respect of the R+F Code: You may not assign or transfer any R+F Code to any other end user; Sybase, Inc. DISCLAIMS ALL WARRANTIES WITH RESPECT TO THE USE OF THE R+F CODE INCLUDED IN THE PROGRAM, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE; and the aggregate liability of Sybase, Inc. to you for all claims relating to the R+F Code shall not exceed the amount paid by you for the program.

Customer responsibilities: You must provide at least the minimum hardware and software environments in which the licensed programs operate.

Customers must identify the machine on which they will install WebSphere Event Broker for z/OS V6.0, WebSphere Message Broker for z/OS V6.0, or WebSphere Message Broker with Rules and FormatterExtension for z/OS V6.0. Then identify the MSU tier in which they fit and then calculate the number of Value Units for the required Use Authorization.

Before operating the system, the customer must confirm that they have sufficient Use Authorization to use the system.

The customer must purchase the appropriate number of Value Units before using the system.

Problem determination (PD) is a customer responsibility. PD is an assessment of whether a problem is caused by hardware or software. PD is complete only when the cause of the problem is identified. This assessment includes examination of available symptoms using the PD procedures documented in the product.

Problem source identification (PSI) is a customer responsibility. PSI begins when software is determined to be the source of the problem. PSI includes tracing the source of the program to a host system control program (SCP), an application program, or another source. Assisting the customer with PSI is an IBM service and support responsibility.

Direct customer support: Direct customer support is provided by IBM Operational Support Services — SoftwareXcel. This fee service enhances customers' productivity by providing voice and electronic access into the IBM support organization. IBM Operational Support Services — SoftwareXcel will help answer questions pertaining to usage and suspected software defects for eligible products.

Installation and technical support is provided by Global Services. For more information call 800-IBM-4YOU (426-4968).

For technical support or assistance, contact your IBM representative or visit

205-208 -2-

http://www.ibm.com/support

Packaging: The WebSphere Message Brokers for z/OS package consists of 3480 Tape Cartridges, Program Directories, CD-ROMs, licence information, memo to users, and PoE.

The WebSphere Event Broker for z/OS V6.0 program package contains:

- Installation tapes (3) for WebSphere Event Broker for z/OS V6.0
- Licence Information (GC34-6682)
- Program Directory (GI10-2594)
- Event Broker for Windows CD-ROM (LCD4-5321)
- DB2 V8.2 for WebSphere Broker Products (Windows) CD-ROM (LCD4-5322)
- WebSphere MQ for Windows V6.0 CD-ROM (LCD4-5323)
- Event Broker for Linux x86 CD-ROM (LCD4-5324)
- DB2 V8.2 for WebSphere Broker Products (Linux x86) CD-ROM (LCD4-5325)
- WebSphere MQ for Linux x86 V6.0 CD-ROM (LCD4-5326)
- WebSphere Event Broker Toolkit V6.0 (Windows) CD 1 (LCD4-7912)
- WebSphere Event Broker Toolkit V6.0 (Windows) CD 2 (LCD4-7913)
- WebSphere Event Broker Toolkit V6.0 (Windows) CD 3 (LCD4-7914)
- WebSphere Event Broker Toolkit V6.0 (Windows) CD 4 (LCD4-7915)
- WebSphere MQ for Linux x86 V6.0 CD-ROM (LCD4-5326)
- WebSphere Event Broker Toolkit V6.0 (Linux x86) CD 1 (LCD4-7916)
- WebSphere Event Broker Toolkit V6.0 (Linux x86) CD 2 (LCD4-7917)
- WebSphere Event Broker Toolkit V6.0 (Linux x86) CD 3 (LCD4-7918)
- WebSphere Event Broker Toolkit V6.0 (Linux x86) CD 4 (LCD4-7919)
- Rational Agent Controller V6.0.0.1 CD-ROM (LCD4-7920)
- WebSphere MQ Everyplace™ V2.0.2 CD-ROM (LCD4-7921)
- WebSphere MQ V6.0 Documentation (Linux x86) CD-ROM (SK3T-6970)
- WebSphere MQ V6.0 Documentation (Windows) CD-ROM (SK3T-6971)
- WebSphere Message Brokers V6.0 Documentation CD-ROM (LCD4-7922)
- Memo to Users (GI10-2597)
- Installation Guide (GC34-6622)
- IBM International Program License Agreement (Z125-3301)

The WebSphere Message Broker for z/OS V6.0 program package contains:

- Installation tapes (3) for WebSphere Event Broker for z/OS V6.0
- Installation tape (1) for WebSphere Message Broker for z/OS V6.0
- Licence Information (GC34-6683)
- Program Directory (GI10-2595)
- Message Broker for Windows CD-ROM (LCD4-5327)
- DB2 V8.2 for WebSphere Broker Products (Windows) CD-ROM (LCD4-5322)
- WebSphere MQ for Windows V6.0 CD-ROM (LCD4-5323)
- Message Broker for Linux x86 CD-ROM (LCD4-5330)
- DB2 V8.2 for WebSphere Broker Products (Linux x86) CD-ROM (LCD4-5325)
- WebSphere MQ for Linux x86 V6.0 CD-ROM (LCD4-5326)
- WebSphere Message Broker Toolkit V6.0 (Windows) CD 1 (LCD4-7900)
- WebSphere Message Broker Toolkit V6.0 (Windows) CD 2 (LCD4-7901)
- WebSphere Message Broker Toolkit V6.0 (Windows) CD 3 (LCD4-7902)
- WebSphere Message Broker Toolkit V6.0 (Windows) CD 4 (LCD4-7903)
- WebSphere MQ for Linux x86 V6.0 CD-ROM (LCD4-5326)
- WebSphere Message Broker Toolkit V6.0 (Linux x86) CD 1 (LCD4-7908)
- WebSphere Message Broker Toolkit V6.0 (Linux x86) CD 2 (LCD4-7909)
- WebSphere Message Broker Toolkit V6.0 (Linux x86) CD 3 (LCD4-7910)
- WebSphere Message Broker Toolkit V6.0 (Linux x86) CD 4 (LCD4-7911)
- Rational Agent Controller V6.0.0.1 CD-ROM (LCD4-7920)
- WebSphere MQ Everyplace V2.0.2 CD-ROM (LCD4-7921)
- WebSphere MQ V6.0 Documentation (Linux x86) CD-ROM (SK3T-6970)
- WebSphere MQ V6.0 Documentation (Windows) CD-ROM (SK3T-6971)
- WebSphere Message Brokers V6.0 Documentation CD-ROM (LCD4-7922)
- Memo to Users (GI10-2597)
- Installation Guide (GC34-6621)
- IBM International Program License Agreement (Z125-3301)

The WebSphere Message Broker with Rules and FormatterExtension for z/OS V6.0 program package contains:

-3- 205-208

- Installation tapes (3) for WebSphere Event Broker for z/OS V6.0
- Installation tape (1) for WebSphere Message Broker for z/OS V6.0
- Installation tapes (2) for WebSphere Message Broker with Rules and Formatter Extension for z/OS V6.0
- Licence Information (GC34-6684)
- Program Directory (GI10-2596)
- Rules & Formatter Runtime Extension (Windows) (LCD4-7904)
- Rules & Formatter Extension (Linux x86) (LCD4-7905)
- Rules & Formatter Design-Time Extension (Windows) (LCD4-7906)
- Rules & Formatter Design-Time Extension (Linux x86) (LCD4-7907)
- Message Broker for Windows CD-ROM (LCD4-5327)
- DB2 V8.2 for WebSphere Broker Products (Windows) CD-ROM (LCD4-5322)
- WebSphere MQ for Windows V6.0 CD-ROM (LCD4-5323)
- Message Broker for Linux x86 CD-ROM (LCD4-5330)
- DB2 V8.2 for WebSphere Broker Products (Linux x86) CD-ROM (LCD4-5325)
- WebSphere MQ for Linux x86 V6.0 CD-ROM (LCD4-5326)
- WebSphere Message Broker Toolkit V6.0 (Windows) CD 1 (LCD4-7900)
- WebSphere Message Broker Toolkit V6.0 (Windows) CD 2 (LCD4-7901)
- WebSphere Message Broker Toolkit V6.0 (Windows) CD 3 (LCD4-7902)
- WebSphere Message Broker Toolkit V6.0 (Windows) CD 4 (LCD4-7903)
- WebSphere MQ for Linux x86 V6.0 CD-ROM (LCD4-5326)
- WebSphere Message Broker Toolkit V6.0 (Linux x86) CD 1 (LCD4-7908)
- WebSphere Message Broker Toolkit V6.0 (Linux x86) CD 2 (LCD4-7909)
- WebSphere Message Broker Toolkit V6.0 (Linux x86) CD 3 (LCD4-7910)
- WebSphere Message Broker Toolkit V6.0 (Linux x86) CD 4 (LCD4-7911)
- Rational Agent Controller V6.0.0.1 CD-ROM (LCD4-7920)
- WebSphere MQ Everyplace V2.0.2 CD-ROM (LCD4-7921)
- WebSphere MQ V6.0 Documentation (Linux x86) CD-ROM (SK3T-6970)
- WebSphere MQ V6.0 Documentation (Windows) CD-ROM (SK3T-6971)
- WebSphere Message Brokers V6.0 Documentation CD-ROM (LCD4-7922)
- Memo to Users (GI10-2597)
- Installation Guide (GC34-6621)

- IBM International Program License Agreement (Z125-3301)
- PoE

License restrictions

Copies of WebSphere Message Broker for Multiplatforms and DB2 are provided to allow you to deploy the Rational Application Developer for Windows and Linux. Refer to Terms and Conditions within the package. This program when downloaded from a Web site, contains the applicable IBM license agreement, and License Information (LI), if appropriate, and will be presented for acceptance at the time of installation of the program. The license and LI will be stored in a directory such as LICENSE.TXT for future reference.

Security, auditability, and control

WebSphere Event Broker for z/OS V6.0, WebSphere Message Broker for z/OS V6.0, and WebSphere Message Broker with Rules and FormatterExtension for z/OS V6.0 use the security and auditability features of the workstation or server operating system.

In addition, WebSphere MQ implements a level of security including access control of queues and authorization between message queue managers.

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

Ordering information

Charge metric

Program name	Part number or PID number	Charge metric
WebSphere Event Broker for z/OS V6.0	5655-M75	Value Unit
WebSphere Message Broker for z/OS V6.0	5655-M74	Value Unit
WebSphere Message Broker with Rules and Formatter Extension for z/OS V6.0	5697-J09	Value Unit

The charge units used for WebSphere Event Broker for z/OS V6.0, WebSphere Message Broker for z/OS V6.0, and WebSphere Message Broker with Rules and FormatterExtension for z/OS V6.0 are based on Value Units, depending on the MSU level of the server on which the Message Broker is installed. MSU tiers are applied and the cumulative Value Unit/MSU rate determines the charge.

For information on value units, refer to the **Ordering information** section.

205-208 -4-

Value unit transferability

Value Units purchased as a result of this announcement are intended to be used on z/OS only. Processor Licence Units (PLUs) purchased to use WebSphere Message Brokers on other platforms can be transferred for use on z/OS but only with reference to the IBM Special Bid pricer for approval.

Processor

In Full Capacity charging, PoEs must be acquired for all activated "processors" (available for use) that are on the server where the program or a component of the program is run.

- If there are Program Components included in the offering whose function is not to be included in the charge metric, these must be listed in the Program-unique Terms of the License Information.
- IBM defines a physical processor in a computer as a functional unit that interprets and executes instructions. A physical processor consists of at least an instruction control unit and one or more arithmetic and logic units.
- Multi-core technology allows two or more processors (commonly called "cores") to be active on a single silicon chip. Unless otherwise announced, with multi-core technology, IBM considers each "core" to be a physical processor. For example, in a dual-core chip, there are two physical processors residing on the single silicon chip.
- In the zSeries' Integrated Facility for Linux (IFL) environment, each IFL engine is considered a single "physical processor."
- Threading, a technique which makes a single processor seem to perform as two or more, does NOT affect the count of physical processors.
- Where "blade" technology is employed, each "blade" is considered a separate server and charging is based upon the total number of processors on the blade on which the program is run.

Sub-capacity processor

The required authorized use level for eligible programs is based upon the highest utilization of the partition(s) where the program or a component of the program, executes. Customer agrees to periodically report program use to IBM using an IBM license management tool.

- The number of authorizations you must acquire is the smaller value of either of the following methods:
 - The total number of activated (available for use) processors in the machine, or
 - The sum of (i) and (ii) as follows (any remaining fraction of a processor must be rounded up to a full processor in the final aggregation)
 - (i) When the program is run in partitions with dedicated processors, the sum of the Processing Units of those partitions, and
 - (ii) When the program is run in partitions that are members of a Shared Processing Pool, the smaller of:
 - -- The number of processors assigned to the pool, or
 - The sum of the Virtual Processors of each Uncapped Partition plus the Processing Units in each Capped Partition running a Program.
 - -- z/VM® Guest Charging

- The total number of activated (available for use) processors in the machine, or
- The sum of (i) and (ii) as follows (any remaining fraction of a processor must be rounded up to a full processor in the final aggregation)
- (i) When the program is run in VM Guests with dedicated processors, the sum of the Integrated Facility for Linux (IFL) engines of those VM Guests, and
- (ii) When the program is run in VM Guests that are members of a Shared Processing Pool (z/VM), the smaller of:
- -- The number of processors assigned to the z/VM pool, or
- -- The sum of the IFL engines in each z/VM pool running a program.

The programs in this announcement all have Value Unit-based pricing.

Program number	Program name	Value unit Exhibit
5655-M75	WebSphere Event Broker for z/OS V6.0	VUE007
5655-M74	WebSphere Message Broker for z/OS V6.0	VUE007
5697–J09	WebSphere Message Broker with Rules and Formatter Extension for z/OS V6.0	VUE007

For each zSeries IPLA program with Value Unit pricing, the quantity of that program needed to satisfy applicable IBM terms and conditions is referred to as the "required license capacity." Your required license capacity is based upon the following factors:

- The zSeries IPLA program you select
- The applicable Value Unit Exhibit
- The applicable Terms
- Whether your current mainframes are full-capacity or sub-capacity

Value Unit exhibit VUE007

	MSUs minimum	MSUs maximum	Value Units/MSU
Base	1	3	1
Tier A	4	45	0.45
Tier B	46	175	0.36
Tier C	176	315	0.27
Tier D	316	+	0.2

Value Units for mainframes without MSU ratings:

Hardware	Value Units/machine
MP3000 H30	6
MP3000 H50	8
MP3000 H70	12
ESL Models	2

-5-

205-208

Ordering example: The total number of Value Units is calculated according to the following example.

If your required license capacity is 1500 MSUs for your selected zSeries IPLA product, the applicable Value Units would be:

Translation from MSUs to Value Units

	MSUs	*	Value Units/MSU	= V	alue Units
Base Tier A Tier B Tier C Tier D	3 42 130 140 1,185	* * * *	1.00 .45 .36 .27 .20	= = = =	3.00 18.90 46.80 37.80 237.00
Total	1,500				343.50

When calculating the total number of Value Units, the sum is to be rounded up to the next integer.

Ordering z/OS through the Internet

ShopzSeries provides an easy way to plan and order your z/OS ServerPac or CBPDO. It will analyze your current installation, determine the correct product migration, and present your new configuration based on z/OS. Additional products can also be added to your order (including determination of whether all product requisites are satisfied). ShopzSeries is available in the U.S. and several countries in Europe. In countries where ShopzSeries is not available yet, contact your IBM representative (or IBM Business Partner) to handle your order via the traditional IBM ordering process. For more details and availability, visit the ShopzSeries Web site at

http://www14.software.ibm.com/webapp/ ShopzSeries/ShopzSeries.jsp

Basic license

On/Off Capacity on Demand

WebSphere Event Broker for z/OS V6.0, WebSphere Message Broker for z/OS V6.0, and WebSphere Message Broker with Rules and Formatter are eligible for On/Off Capacity on Demand (On/Off CoD) with a Temporary Use Charge (TUC) calculated based on MSUs-per day usage.

WebSphere Event Broker for z/OS V6.0

Program PID: 5655-M75

Entitlement Identifier	Description	License Option / Pricing Metric
S011ZV7	WebSphere Event Broker for z/OS V6.0	Basic OTC, Per MSU-day TUC

WebSphere Message Broker for z/OS V6.0

Program PID: 5655-M74

Entitlement Identifier	Description	License Option / Pricing Metric		
S011ZV2	WebSphere Message Broker for z/OS V6.0	Basic OTC, Per MSU-day TUC		

WebSphere Message Broker with Rules and Formatter Extension for z/OS V6.0

Program PID: 5697-J09

Entitlement Identifier	Description	License Option / Pricing Metric
S011L10	WebSphere Message Broker with Rules and Formatter Extension for z/OS V6.0	Basic OTC, Per MSU-day TUC

Translation from MSUs to Value Units

	MSUs	Value Units/MSU
Base	1–3	1
Tier A	4–45	0.45
Tier B	46–175	0.36
Tier C	176–315	0.27
Tier D	316+	0.2

To order, specify the program product number and the appropriate license or charge option. Also, specify the desired distribution medium. To suppress shipment of media, select the license-only option in CFSW.

WebSphere Event Broker for z/OS

Program PID: 5655-M75

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Entitlement Identifier	Description		License Option / Pricing Metric
S011ZV7	WebSphere Event Broker for z/OS V6.0		Basic OTC, Value Units
Orderable Supply	y ID:	Language	Distribution Medium
S011ZV1		U.S. English	3480 Tape Cartridge

Subscription and Support PID 5655-K58

Entitlement Identifier	Description		License Option / Pricing Metric
S01085K	WebSphere Event Broker for z/OS V6.0 S&S		Basic ALC, Value Units SW S&S Decline SW S&S (no charge)
Orderable Suppl	y ID:	Language	Distribution Medium
S01085T		U.S. English	Hardcopy Pub

WebSphere Message Broker for z/OS

Program PID: 5655-M74

Fntitlement

Identifier	Descri	ption	Pricing Metric
S011ZV2	WebSphere Message Broker for z/OS V6.0		Basic OTC, Value Units
Orderable Suppl	y ID:	Language	Distribution Medium
S011ZTZ		U.S. English	3480 Tape Cartridge

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205-208 -6-

Subscription and Support PID 5655-I59

Fnt.it.lement license Option / Pricing Metric Identifier Description

S00WWTM WebSphere Message Broker for z/OS V6.0

Basic ALC, Value Units SW S&S Decline SW S&S (no charge)

Orderable Supply ID: Language Distribution Medium

SOOWWSV U.S. English Hardcopy Pub

WebSphere Message Broker with Rules and Formatter Extension for z/OS

Program PID: 5697-J09

Entitlement License Option / Identifier Description Pricing Metric

S011L10 WebSphere Message Basic OTC, Value Units

Broker with Rules and Formatter extension for z/OS

V6.0

Orderable Supply ID: Distribution Medium Language S011L11 U.S. English 3480 Tape Cartridge

Subscription and Support PID 5655-G98

Entitlement License Option / Identifier Pricing Metric Description

S00W3N7 WebSphere Message Basic ALC, Value Units SW S&S Decline SW S&S Broker with Rules and Formatter extension for (no charge) z/0S V6.0

Orderable Supply ID: Distribution Medium Language

S00VWWB U.S. English Hardcopy Pub

Subscription and Support: To receive voice technical support via telephone during normal business hours and future releases and versions at no additional charge, Subscription and Support must be ordered. The capacity of Subscription and Support (Value Units) must be the same as the capacity ordered for the product licenses.

To order, specify the Subscription and Support program number (PID) referenced above and the appropriate license or charge option.

IBM is also providing Subscription and Support for these products via a separately purchased offering under the terms of the IBM International Agreement for Acquisition of Support (IAAS). This offering:

- Includes and extends the support services provided in the base support to include technical support via telephone during normal business hours.
- · Entitles customers to future releases and versions at no additional charge. Note that the customer is not entitled to new products.

When Subscription and Support is ordered, the charges will renew automatically annually unless cancelled by the customer.

Single version charging: Not applicable

Specify feature code 3410. Billing for the media is generated under the SPO. To prevent additional billing expenses, place only one SPO order per machine.

Select one of the following (5692-A5L) features for the licensed program hardcopy entitled publications.

Include feature number 9001 for asset registration to be shipped on a given date.

Under SPO 5692-A5L, feature number 3470 can be used to suppress hardcopy documentation. To order entitled hardcopy documentation only, order feature number 3430.

Customized Offerings

Product media is shipped only via Customized Offerings (for example. CBPDO. ServerPac. SystemPac®). Non-customized items (CDs, diskettes, source media, media kits) will continue to be shipped via the stand-alone product.

Terms and conditions

Licensing: IBM International Program License Agreement (IPLA). PoE are required for all authorized use.

These products are licensed under the IPLA, and the associated Agreement for Acquisition of Support, and the Addendum for Support Z125-6011 which provides for support with ongoing access to releases and versions of the program. These programs have a one-time license charge for use of the program and an annual renewable charge for the enhanced support that includes telephone assistance (voice support for defects during normal business hours) as well as access to updates, releases, and versions of the program as long as support is in effect. S/390® and zSeries IBM Operational Support Services — SoftwareXcel is an option for those customers who need added services.

Limited warranty applies: Yes

Warranty: This program has warranty for a minimum of one year from acquisition from IBM or authorized IBM The warranty provided to the Business Partner. customer, for at least one year from acquisition, is access to databases (read Web sites) for program information and FAQs, including any known fixes to defects, which the customer can download or obtain otherwise and install at leisure.

Program support: Enhanced Support, called Subscription and Support, includes telephone assistance (voice support for defects during normal business hours) as well as access to updates, releases, and versions of the program as long as support is in effect. The customer will be notified of discontinuance of support with 12 months' notice.

If for any reason you are Money-back guarantee: dissatisfied with the Program and you are the original licensee, return it within 30 days from the invoice date, to the party (either IBM or its reseller) from whom you acquired it, for a refund. For clarification, note that 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 the customer.

Copy and use on home/portable computer: No

Volume orders (IVO): No

Passport Advantage® applies: No

-7-205-208 Usage restriction: Yes

Use of components on separate machines: WebSphere Event Broker for z/OS V6.0, WebSphere Message Broker for z/OS V6.0, and WebSphere Message Broker with Rules and FormatterExtension for z/OS V6.0 consist of several components:

- Message broker
- Configuration manager
- User Name Server
- Database manager
- Rational Application Developer with plug-ins

Each component may be installed on only a single machine, at any one time, except for the Rational Application Developer for Linux and Windows which may be installed on multiple machines provided they are all used in conjunction with the same message broker machine.

Unit testing

The program license authorizes a single developer to install each component of the program on a single Microsoft Windows machine for purposes of "unit testing," which is limited to testing of code written or generated by such developer to confirm that such code functions as designed. Each license does not authorize the following purposes:

- Testing applications on servers separate from the developer's machine
- Exchanging messages with any production application or system
- Simulating production workloads
- Testing scalability of any code, application or system.

Software Maintenance applies: No

For operating system software, the revised IBM Operational Support Services —SoftwareXcel offering will provide support for those operating systems and associated products that are not available with the newly announced Software Maintenance offering. This will ensure total support coverage for your enterprise needs, including IBM and selected non-IBM products. For complete lists of products supported under both the current and revised SoftwareXcel offering, visit

http://www.ibm.com/services/sl/products

For additional information on the revised IBM Operational Support Services, refer to Services Announcement 601-023, dated July 10, 2001.

IBM Operational Support Services — SoftwareXcel: Yes

iSeries™ Software Maintenance applies: No

Variable charges apply: No

Educational allowance available: Yes, 15% education allowance applies to qualified education institution customers.

Sub-capacity terms and conditions

For each zSeries IPLA program with Value Unit pricing, the quantity of that program needed to satisfy applicable IBM terms and conditions is referred to as the "required license capacity." Your required license capacity is based upon the following factors:

- The zSeries IPLA program you select
- The applicable Value Unit Exhibit

- The applicable Terms
- Whether your current mainframes are full-capacity or sub-capacity

For more information on the Value Unit Exhibit for the zSeries IPLA program you selected, refer to the **Ordering information** section.

Program Number	Program Name	Terms	Parent(s), if Applicable
5655-M75	WebSphere Event Broker for z/OS	z/OS-based	n/a
5655-M74	WebSphere Message Broker for z/OS	z/OS-based	n/a
5697 – J09	WebSphere Message Broker with Rules and Formatter extension for z/OS	z/OS-based	n/a

Full-Capacity Mainframes: In cases where full-capacity is applicable, the following terms apply:

Execution-based, z/OS-based, Full-Machine-based: The required capacity of a zSeries IPLA program with these terms equals the MSU rated capacity of the machine(s) where the zSeries IPLA program executes.

For more information on mainframe MSU rated capacities, refer to "The System/370™, System/390®, and zSeries Machine Exhibit (Z125-3901)" or visit the "Mainframes" section of the zSeries Exhibits Web site

http://ibm.com/zseries/library/swpriceinfo/

Reference-based: The required license capacity of a zSeries IPLA program with these terms equals the license capacity of the applicable monthly license charge (MLC) program. This MLC program is called the "parent" program.

Sub-Capacity Mainframes: In cases where sub-capacity is applicable, the following terms apply:

Execution-based: The required capacity of a zSeries IPLA sub-capacity program with these terms equals the capacity of the LPAR(s) where the zSeries IPLA program executes.

z/OS-based: The required license capacity of a zSeries IPLA program with these terms equals the license capacity of z/OS (and z/OS.e) on the machine(s) where the zSeries IPLA program executes.

Reference-based: The required license capacity of a zSeries IPLA program with these terms equals the license capacity of the applicable MLC program. This MLC program is called the "parent" program.

Full machine-based: The required license capacity of a zSeries IPLA program with full machine-based terms equals the MSU rated capacity of the machine(s) where the zSeries IPLA program executes.

For more information on mainframe MSU rated capacities, refer to *The System/370, System/390, and zSeries Machine Exhibit (Z125-3901)* or visit the *Mainframes* section of the zSeries Exhibits Web site

http://ibm.com/zseries/library/swpriceinfo/

For more information on sub-capacity zSeries IPLA terms and conditions, refer to Software Announcement 204-184, dated August 10, 2004

Additional information for products with reference-based terms

205-208 -8-

zSeries IPLA sub-capacity programs with reference-based terms adds value to the parent program across the environment, regardless of where in environment the zSeries IPLA program executes.

An environment is defined as either a single/stand-alone machine or a qualified Parallel Sysplex®. Customers may have one or more different environments across their enterprise. To determine the required license capacity for each zSeries IPLA program with referenced-based terms, each environment should be assessed separately.

When a zSeries IPLA sub-capacity program with reference-based terms is used in a qualified Parallel Sysplex environment the required license capacity of the zSeries IPLA program must equal with the license capacity of the parent program across the Parallel Sysplex. Qualified Parallel Sysplex refers to one:

- 1. That meets the criteria defined in Hardware Announcement 198-001, dated January 13, 1998
- 2. Where MLC pricing is aggregated across the Sysplex

Sub-Capacity Eligibility: To be eligible for sub-capacity charging on select zSeries IPLA programs, you must first implement and comply with all terms of either sub-capacity Workload License Charges (WLC) or sub-capacity Entry Workload License Charges (EWLC). To implement sub-capacity WLC or EWLC, a machine must be zSeries (or equivalent). On that machine:

- All instances of the OS/390® operating system must be migrated to the z/OS (or z/OS.e) operating systems
- Any licenses for the OS/390 operating system must be discontinued
- All instances of the z/OS operating (or z/OS.e) systems must be running in z/Architecture™ (64-bit) mode

For that machine, you must create and submit a Sub-Capacity Report to IBM each month. Sub-Capacity Reports must be generated using the Sub-Capacity Reporting Tool (SCRT). For additional information or to obtain a copy of SCRT, visit the zSeries Software Pricing Web site

http://ibm.com/zseries/swprice

You must comply with all of the terms of the WLC or EWLC offering, whichever is applicable:

- The complete terms and conditions of sub-capacity WLC are defined in the IBM Customer Agreement — Attachment for zSeries Workload License Charges (Z125-6516).
- The complete terms and conditions for sub-capacity EWLC are defined in the IBM Customer Agreement — Attachment for z800 and z890 Software License Charges (Z125-6587).

Additionally, you must sign and comply with the terms and conditions specified in the amendment to the IPLA contract — "Amendment for zSeries Platform Programs Sub-Capacity Pricing (Z125-6929)." Once the amendment is signed, the terms in the amendment replace any and all previous zSeries IPLA sub-capacity terms and conditions.

Sub-capacity utilization determination

Sub-capacity utilization is determined based on the utilization of an eligible operating system and machine (for example, z/OS running in z/Architecture (64-bit) mode on a zSeries (or equivalent) server).

Sub-capacity utilization is determined based on the utilization of a sub-capacity eligible reference product and machine.

On/Off Capacity on Demand

To be eligible for On/Off Capacity on Demand pricing, customers must be enabled for temporary capacity on the corresponding hardware, and the required contract — Z125-6611, Attachment for Customer Initiated Upgrade and IBM eServer On/Off Capacity on Demand — Software — must be signed prior to use.

IBM Electronic Services

IBM Global Services has transformed its delivery of hardware and software support services to put you on the road to higher systems availability. IBM Electronic Services is a Web-enabled solution that provides you with an exclusive, no-additional-charge enhancement to the service and support on the IBM eServer. You should benefit from greater system availability due to faster problem resolution and preemptive monitoring. IBM Electronic Services is comprised of two separate, but complementary, elements: IBM Electronic Services news page and IBM Electronic Service AgentTM.

IBM Electronic Services news page provides you with a single Internet entry point that replaces the multiple entry points traditionally used by customers to access IBM Internet services and support. The news page enables you to gain easier access to IBM resources for assistance in resolving technical problems.

The IBM Electronic Service Agent no-additional-charge software that resides on your IBM eServer system. It is designed to proactively monitor events and transmit system inventory information to IBM on a periodic, customer-defined timetable. Electronic Service Agent tracks system inventory, hardware error logs, and performance information. If the server is under a current IBM maintenance service agreement or within the IBM warranty period, the Service Agent automatically reports hardware problems to IBM. Early knowledge about potential problems enables IBM to provide proactive service that maintains higher system availability and performance. In addition, information collected through the Service Agent will be made available to IBM service support representatives when they are helping answer your questions or diagnosing problems.

To learn how IBM Electronic Services can work for you, visit

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

Prices

Information on charges is available at

http://www.ibm.com/support

Choose the option entitled Purchase/upgrade tools.

WebSphere Event Broker for z/OS V6.0

Program PID: 5655-M75

Entitlement
Identifier
Description
License Option/
Pricing Metric

S011ZV7
WebSphere Event
Basic OTC, Value Units

Broker for z/OS V6.0

-9- 205-208

Subscription and Support PID 5655-K58

Entitlement License Option/ Identifier Description Pricing Metric

S01085K WebSphere Event Basic ALC, Value

Broker for z/OS V6.0 Units SW S&S

WebSphere Message Broker for z/OS V6.0

Program PID: 5655-M74

Entitlement License Option/ Identifier Description Pricing Metric

S011ZV2 WebSphere Message Basic OTC, Value Units

Broker for z/OS V6.0

Subscription and Support PID 5655-I59

Entitlement License Option/ Identifier Description Pricing Metric

SOOWWTM WebSphere Message Basic ALC, Value Broker for z/OS Units SW S&S

V6.0

WebSphere Message Broker with Rules and Formatter Extension for z/OS V6.0

Program PID 5697-J09

Entitlement License Option/ Identifier Description Pricing Metric

S011L10 WebSphere Message Basic OTC, Value Units

Broker with Rules and Formatter Extension for z/OS

V6.0

Subscription and Support PID 5655-G98

Entitlement License Option/ Identifier Description Pricing Metric

SOOW3N7 WebSphere Message Basic ALC, Value Units SW S&S

and Formatter
Extension for z/OS

V6.0

Order now

To order, contact the Americas Call Centers, your local IBM representative, or your IBM Business Partner.

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