IBM WebSphere MQ for z/OS Value Unit Edition, V7.1 offers a one-time-charge price metric, which connects new workloads that run on qualified System z New Application License Charge logical partitions

Table of contents

1 Overview 6 Technical information
2 Key prerequisites 9 Ordering information
2 Planned availability date 12 Terms and conditions
2 Description 18 Prices
3 Product positioning 19 Announcement countries
5 Program number

At a glance

IBM® WebSphere® MQ for z/OS® (WebSphere MQ) Value Unit Edition (VUE) V7.1 offers a one-time-charge (OTC) price metric for new workloads that run on qualified System z® New Application License Charge (zNALC) logical partitions (LPARs). WebSphere MQ VUE offers the following benefits for eligible workloads:

- An OTC licensing option for WebSphere MQ V7.1, with subscription and support
- Deployment to zNALC LPARs, which delivers a reduced price for the z/OS operating system
- The ability for new WebSphere MQ VUE V7 workloads to federate with existing WebSphere MQ V7.0.1 and WebSphere MQ V7.1 workloads

Overview

WebSphere MQ for z/OS (WebSphere MQ) Value Unit Edition (VUE) V7.1 provides all the functions of WebSphere MQ for z/OS, V7.1, but is sold with a one-time-charge (OTC) price metric for support of eligible workloads that are deployed in qualified System z New Application License Charge (zNALC) logical partitions (LPARs).

The term, Eligible Workload, is defined as new workload which is qualified and approved through the zNALC qualification process and is then supported by the WebSphere MQ VUE server environment.

The OTC price metric provides an alternative pricing model for buying WebSphere MQ for z/OS to connect new workloads that are qualified to run on zNALC LPARs.

Support for the zNALC metric offers a reduced price for the z/OS operating system on logical partitions (LPARs) that run a qualified application.

WebSphere MQ VUE V7.1 can connect to other supported versions of WebSphere MQ for z/OS (whether in zNALC or non-zNALC environments) for the purpose of workload federation and systems management.

WebSphere MQ VUE V7.1 includes the code and entitlement to use WebSphere MQ Client Attachment Feature, by allowing connections to WebSphere MQ Clients, which run on other platforms.
Key prerequisites

The minimum required level of hardware is any IBM System z server that supports the minimum required level of operating system.

The minimum required level of operating system is IBM z/OS V1.11 (5694-A01).

The minimum required level of Java\textsuperscript{TM} 31-bit is IBM 31-bit SDK for z/OS Java 2 Technology Edition V5 (5655-N98).

The minimum required level of Java 64-bit is IBM 64-bit SDK for z/OS Java 2 Technology Edition, V5 (5655-N99).

For further details, refer to the Hardware requirements and Software requirements sections.

Planned availability date

November 22, 2013

Refer to the Availability of national languages section for national language availability.

Description

WebSphere MQ VUE V7.1 offers an OTC price metric for new workloads, which run on qualified zNALC LPARs.

zNALC is a monthly license charge (MLC) price metric available on IBM z/Architecture\textregistered servers that run on z/OS. It offers a reduced price for z/OS on LPARs where qualified applications are running. zNALC applies to the z/OS base feature and z/OS priced features, with the exception of IBM Hardware Configuration Manager (HCM) and IBM High Level Assembler (HLASM) Toolkit. zNALC is available for z/OS on LPARs running Qualified Applications, among other requirements. Customers can implement zNALC in either full-capacity or sub-capacity mode. For more information on zNALC, refer to Software Announcement ZA07-0102, dated January 9, 2007.

For more information on WebSphere MQ V7.1, refer to Software Announcement ZP11-0482, dated October 4, 2011.

For more information, refer to the Terms and conditions section.

Accessibility by people with disabilities

A US Section 508 Voluntary Product Accessibility Template (VPAT) containing details on accessibility compliance can be requested at


The following features support use by people with disabilities:

- Operation by keyboard alone
- Optional font enlargement and high-contrast display settings
- Suitability for use by people with hearing impairment
- Capability to use with screen readers and magnifiers for those with visual impairment
Softcopy documentation for the product is provided in PDF format. This documentation supports optional font enlargement and high-contrast display settings, and may be operated by the keyboard alone.

**Value Unit-based pricing**

Value Unit pricing for eligible IBM System z IBM International Program License Agreement (IPLA) programs enables a lower cost of incremental growth and enterprise aggregation. Each System z 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 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 you. For each System z 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 stipulates 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 offer additional price benefits. The quantity of each System z IPLA program that you have acquired is referred to as **entitled license capacity**. If you wish to grow your entitled license capacity for a System z IPLA program, the calculation to determine additional needed Value Units is based upon the number of Value Units already acquired.

For each System z 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
- 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 website

http://ibm.com/systems/z/resources/swprice/zipla/vuc/

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 System z IPLA program you selected, refer to the **Terms and conditions** section.

**Product positioning**

The WebSphere MQ family offers the universal messaging backbone for connectivity across all environments, that include applications, services and service-oriented architecture (SOA) infrastructures. It connects new and existing applications, as well as web services, with reliable messaging and acts as a first step to SOA and event-driven architectures. It provides a transport layer to underpin an enterprise service bus (ESB). It delivers assured, reliable messaging, as well other qualities of service, while offering choice in the class of delivery.

WebSphere MQ VUE V7.1 provides exactly the same product and functions as WebSphere MQ for z/OS, V7.1, but priced and sold under an OTC pricing metric.
WebSphere MQ for z/OS supports the industry-standard, Java Message Service (JMS) messaging. It enables simple, RESTful access from Web 2.0 to core backend applications and integrates z/OS applications with virtually any other commercial IT system across more than 80 platform configurations. It also integrates Java Enterprise Edition (JEE) applications, .NET applications, CICS®, IMS™, DB2®, and packaged applications.

- WebSphere MQ for z/OS exploits the capabilities of the System z platform to deliver a messaging powerhouse.
- WebSphere MQ extends the reliable, proven messaging backbone to virtually any commercial IT system, that spans more than 80 platform configurations.
- WebSphere MQ for HP OpenVMS, WebSphere MQ for HP NonStop Server, and MQSeries® for z/VSE® all extend the reach of WebSphere MQ to these specific computing platforms.
- WebSphere MQ File Transfer Edition adds file-specific features to the proven WebSphere MQ transport. It delivers a managed file transfer solution that enables the movement of files between IT systems with reliability and without the need for programming.
- WebSphere MQ Advanced Message Security expands the security offered by WebSphere MQ for z/OS with end-to-end, data protection for customers' applications. It enables enterprise-wide, remote management of security polices on their WebSphere MQ network and can be deployed to existing production environments without changes to existing WebSphere MQ applications.
- WebSphere MQ Low Latency Messaging (on Linux™, Microsoft® Windows™, and Solaris platforms) extends the WebSphere MQ product family with low-latency, high-throughput delivery. It is optimized for the high-volume, low-latency requirements typical of financial markets firms and other industries where speed of data delivery is paramount.

In addition, the IBM Tivoli® portfolio offers systems management for large-scale WebSphere MQ solutions. Tivoli OMEGAMON® XE for Messaging can help improve the availability and performance of WebSphere MQ solutions. It can identify common problems and automate corrective actions using predefined industry best-practice situations, while monitoring key WebSphere MQ metrics.

Tivoli OMEGAMON XE for Messaging can help improve management of Service Level Agreements (SLAs) by monitoring availability and capacity using real-time and historical data analysis. Easy-to-install capabilities, such as auto-discovery and monitoring of complex WebSphere MQ environments, can improve IT staff productivity and reduce administration costs.

IBM Workload Deployer is a hardware appliance providing access to IBM middleware virtual images and patterns to easily, quickly and repeatedly create application environments that can be securely deployed and managed in a private cloud. As well as other IBM offerings, Workload Deployer supports deployment of WebSphere MQ Hypervisor.

In addition, SupportPac product extensions offer additional function available as a download. Visit http://www.ibm.com/webspheremq

A messaging backbone based on WebSphere MQ can help organizations:

- Quickly and economically connect IT systems.
- Improve the reliability and accuracy of business data being exchanged.
- Become more agile so that IT can be flexible enough to meet changing business demands.
- Stay flexible so that IT and organizational changes can be absorbed.
- Be better prepared for regulatory compliance and industry initiatives.
- Make the most of Web 2.0 and web services, while connecting these with the core back-end system messaging.
Universal messaging backbone

In an SOA, an ESB delivers an integration layer that mediates, transforms, and enriches data as it transports between service components. The transport layer that underpins an ESB layer is a messaging backbone that enables it to move data between those service assets. As a key member of the WebSphere software portfolio, WebSphere MQ delivers a universal messaging backbone that can help you take the first step to SOA.

WebSphere MQ for z/OS enables SOAP interactions to flow over its messaging backbone between web service requesters and providers. Legacy and batch applications that are web services-enabled can also benefit from using WebSphere MQ for z/OS in its asynchronous mode as a buffering mechanism to regulate the flow of requests made to these systems.

WebSphere MQ for z/OS is the ideal transport for adding reliability and traceability to service interactions, delivering a scalable, reliable, resilient backbone that enables a business-critical SOA.

Reference information

For information on WebSphere MQ V7.1, refer to Software Announcement ZP11-0482, dated October 4, 2011.

Availability of national languages

<table>
<thead>
<tr>
<th>Description</th>
<th>Availability date</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>WebSphere MQ VUE V7.1</td>
<td>November 22, 2013</td>
<td>Multilingual</td>
</tr>
</tbody>
</table>

Program number

<table>
<thead>
<tr>
<th>Program number</th>
<th>VRM</th>
<th>Program name</th>
</tr>
</thead>
<tbody>
<tr>
<td>5655-VUE</td>
<td>7.1.0</td>
<td>WebSphere MQ for z/OS Value Unit Edition</td>
</tr>
<tr>
<td>5655-VSS</td>
<td>1.1.0</td>
<td>WebSphere MQ for z/OS Value Unit Edition S&amp;S</td>
</tr>
</tbody>
</table>

Product identification number

<table>
<thead>
<tr>
<th>Program PID number</th>
<th>Subscription and Support PID number</th>
</tr>
</thead>
<tbody>
<tr>
<td>5655-VUE</td>
<td>5655-VSS</td>
</tr>
</tbody>
</table>

Offering Information

Product information is available via the Offering Information website

http://www.ibm.com/common/ssi
**Information Center and publications**

**Information Center**

The WebSphere MQ V7.1 Information Center consists of an IBM User Interface Help System that is built on Eclipse and the content as a set of document plug-ins.

For WebSphere MQ VUE V7.1, the Information Center is updated to use content types to structure how the information is displayed. The Information Center content types are generally task-oriented, for example, upgrading, configuring, and installing. Other content types include reference, overview, and scenario or tutorial-based information. This structure means that there is no duplication in the navigation. This prepares the way for exploiting more advanced searching and filtering mechanisms in the future. The Information Center is available online at [http://pic.dhe.ibm.com/infocenter/wmqv7/v7r1/index.jsp](http://pic.dhe.ibm.com/infocenter/wmqv7/v7r1/index.jsp)

The WebSphere MQ V7.1 Information Center can also be downloaded for free from the IBM Publications Center and installed on a workstation or server.

**Technical information**

**Specified operating environment**

**Hardware requirements**

**Processor**

WebSphere MQ for z/OS, V7.1 runs on any IBM System z server that supports z/OS V1.11 with enough storage to meet the combined requirements of the programming prerequisites, WebSphere MQ for z/OS, the access methods, and the application programs.

**Software requirements**

**Operating environment**

The following products or equivalents at the specified minimum levels:

- Operating system:
  - z/OS V1.11
- For C/C++ applications, XL C/C++ feature of z/OS, V1.11
- For PL/I applications, Enterprise PL/I for z/OS, V3.7
- For COBOL applications, Enterprise COBOL for z/OS, V3.4
- For Java applications using the WebSphere MQ classes for Java or JMS 31-bit:
  - IBM Java SDK 6.0
  - IBM Java SDK 5.0
- Transaction managers
  - IBM CICS Transaction Server for z/OS (CICS TS)
  - CICS TS V3
  - CICS TS V4
  - CICS TS V5
- Databases
  - IMS V11
  - IMS V10
  - DB2 9 for z/OS, V9.1
- DB2 10 for z/OS, V10.1

- Application servers
  - WebSphere Application Server for z/OS, V8.0
  - WebSphere Application Server for z/OS, V7.0
  - WebSphere Application Server for z/OS, V6.1

- Supported application servers for the WebSphere MQ Bridge for HTTP
  - WebSphere Application Server for z/OS, V8.0
  - WebSphere Application Server for z/OS, V7.0

- Virtualization - IBM PR/SM™

- Connectivity
  - TCP/IP: z/OS TCP/IP or any TCP product that supports the z/OS Unix Sockets API
  - VTAM®: Included with z/OS(1)

- Other platform specifics

- For shared queues

- Coupling Facility (CF) Level 9

- DB2 9 for z/OS, V9.1

- Resource Recovery Services (RRS) activated

- For Secure Sockets Layer (SSL):
  - z/OS Cryptographic Services Security Level 3 (FMID JCPT381)

(1) Only TCP/IP is supported with the JMS Client and the WebSphere MQ Java Classes.

WebSphere MQ Telemetry server does not run on this platform.

The Program Directory (GI13-3327-00) shipped with the product contains the latest level of information, includes APAR or PTF levels of supported products.

For information on software requirements, visit


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

WebSphere MQ for z/OS V7.1 is upwardly compatible with programs written for MQSeries for MVS/ESA V1.2; MQSeries for OS/390® V2.1; MQSeries for OS/390 V5.2; WebSphere MQ for z/OS V5.3.1; WebSphere MQ for z/OS V6.0; WebSphere MQ for z/OS V7.0; and WebSphere MQ for z/OS V7.0.1. Regression testing is performed to ensure compatibility.

**WebSphere MQ platforms**

WebSphere MQ supports more than 80 IBM and non-IBM platform configurations. Some platforms do not support all of the functions available in this product.

**National language versions testing**

Testing of the national language versions is complete.
**Performance considerations**

A performance report for WebSphere MQ for z/OS, V7.1 is available in SupportPac MP1H. Visit


**IBM Electronic Support**

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

Read about the Electronic Support portfolio of tools:

http://ibm.com/electronicsupport

Access the IBM Support Portal, at

http://ibm.com/support

Access the online Service Request tool, at

http://ibm.com/support/servicerequest

**Planning information**

**Packaging**

Elements included in WebSphere MQ VUE V7.1

- The base is WebSphere MQ V710.

**Physical delivery**

The License Information CD-ROM (GC34-2967) is shipped with the product, together with the basic machine-readable material.

This program, when downloaded from a website, contains the applicable IBM license agreement and License Information, if appropriate, and will be presented for acceptance at the time of installation of the program. For future reference, the license and License Information will be stored in a directory such as LICENSE.TXT.

**Security, auditability, and control**

Information on security and setup is available in the WebSphere MQ for z/OS V7.1 Information Center. Visit


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

**Global Technology Services®**

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

Consult your IBM representative.

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 US 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 website at


Charge metric

<table>
<thead>
<tr>
<th>Program name</th>
<th>PID number</th>
<th>Charge metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>WebSphere MQ VUE V7.1</td>
<td>5655-VUE</td>
<td>Value Unit</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Program number</th>
<th>Program name</th>
<th>Value Unit exhibit</th>
</tr>
</thead>
<tbody>
<tr>
<td>5655-VUE</td>
<td>WebSphere MQ VUE V7.1</td>
<td>VUE007</td>
</tr>
</tbody>
</table>

For each System z 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 System z 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**

<table>
<thead>
<tr>
<th></th>
<th>MSUs minimum</th>
<th>MSUs maximum</th>
<th>Value Units/MSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Tier A</td>
<td>4</td>
<td>45</td>
<td>0.45</td>
</tr>
<tr>
<td>Tier B</td>
<td>46</td>
<td>175</td>
<td>0.36</td>
</tr>
<tr>
<td>Tier C</td>
<td>176</td>
<td>315</td>
<td>0.27</td>
</tr>
<tr>
<td>Tier D</td>
<td>316</td>
<td>+</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Value Units for mainframes without MSU ratings:

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Value Units/machine</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP3000 H30</td>
<td>6</td>
</tr>
<tr>
<td>MP3000 H50</td>
<td>8</td>
</tr>
<tr>
<td>MP3000 H70</td>
<td>12</td>
</tr>
<tr>
<td>ESL models</td>
<td>2</td>
</tr>
</tbody>
</table>
Ordering example

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

If your required license capacity is 1,500 MSUs for your selected System z IPLA product, the applicable Value Units would be:

Translation from MSUs to Value Units

<table>
<thead>
<tr>
<th>MSUs</th>
<th>Value Units/MSU</th>
<th>Value Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>3 * 1.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Tier A</td>
<td>42 * .45</td>
<td>18.90</td>
</tr>
<tr>
<td>Tier B</td>
<td>130 * .36</td>
<td>46.80</td>
</tr>
<tr>
<td>Tier C</td>
<td>140 * .27</td>
<td>37.80</td>
</tr>
<tr>
<td>Tier D</td>
<td>1,185 * .20</td>
<td>237.00</td>
</tr>
<tr>
<td>Total</td>
<td>1,500</td>
<td>343.50</td>
</tr>
</tbody>
</table>

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

Basic license

On/Off CoD

WebSphere MQ VUE V7.1 is eligible for On/Off CoD with a temporary use charge calculated based on MSUs per-day usage.

Program name WebSphere MQ VUE V7.1
Program PID: 5655-VUE

Entitlement identifier Description License option/Pricing metric
S017Ck7 WebSphere MQ VUE V7.1 Basic OTC, Per MSU-day TUC

Program name: WebSphere MQ VUE V7.1
Program PID: 5655-VUE

Entitlement identifier Description License option/Pricing metric
S017Ck7 WebSphere MQ VUE V7.1 Basic OTC, per Value Unit

Orderable supply ID Language Distribution medium
S017CwX Multilingual 3590 Tape

Subscription and Support PID: 5655-VSS

Entitlement identifier Description License option/Pricing metric
S017CkB WebSphere MQ VUE S&S Basic MSC, per Value Unit SW S&S
No charge, decline SW S&S
Per MSU SW S&S registration

Orderable supply ID Language Distribution medium
S017Cz1 Multilingual Hardcopy publication
Subscription and Support

To receive voice technical support via telephone 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 Software Maintenance. This offering:

- Includes and extends the support services provided in the base support to include technical support via telephone.
- Entitles you to future releases and versions, at no additional charge. Note that you are not entitled to new products.

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

The combined effect of the IPLA license and the Agreement for Acquisition of Software Maintenance gives you rights and support services comparable to those under the traditional ICA S/390® and System z license or its equivalent. To ensure that you continue to enjoy the level of support you are used to in the ICA business model, you must order both the license for the program and the support for the selected programs at the same Value Unit quantities.

Customized Offerings

Product deliverables are shipped only via CBPDO, ServerPac, SystemPac, FunctionPac, and ProductPac®.

All of these customized offerings are offered for Internet delivery in countries where Shopz product ordering is available. Internet delivery reduces software delivery time and allows you to install software without the need to handle tapes. For more details on Internet delivery, refer to the Shopz help information at

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

You choose the delivery method when you order the software. IBM recommends Internet delivery. In addition to Internet and DVD, the supported tape delivery options include:

- 3590
- 3592

Most products can be ordered in ServerPac, SystemPac, FunctionPac, and ProductPac the month following their availability in CBPDO. z/OS can be ordered via CBPDO, ServerPac, and SystemPac at general availability. Many products will also be orderable in a Product ServerPac without also having to order the z/OS operating system or subsystem. Shopz and CFS W will determine the eligibility based on product requisite checking. For more details on the Product ServerPac, visit the Help section on the Shopz web site at


Production of software product orders will begin on the planned general availability date.

- CBPDO shipments will begin one week after general availability.
- ServerPac shipments will begin two weeks after general availability.
• SystemPac, FunctionPac and ProductPac shipments will begin four weeks after general availability due to additional customization, and data input verification.

Terms and conditions

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

Licensing

IBM International Program License Agreement including the License Information document and Proof of Entitlement (PoE) govern your use of the program. PoEs are required for all authorized use.

Agreement for Acquisition of Software Maintenance

The IBM Agreement for Acquisition of Software Maintenance (Z125-6011) applies for Software Subscription and Support (Software Maintenance) and does not require customer signatures.

These programs are licensed under the IBM Program License Agreement (IPLA) and the associated Agreement for Acquisition of Software Maintenance, which provide for support with ongoing access to releases and versions of the program. These programs have a one-time license charge for use of the program and an annual renewable charge for the enhanced support that includes telephone assistance (voice support for defects during normal business hours), as well as access to updates, releases, and versions of the program as long as support is in effect.

IBM System z Operational Support Services - SoftwareXcel is an option if you desire added services.

License Information form number

L-APIG-9ALD9Q

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


Limited warranty applies

Yes

Limited warranty

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

IBM provides you with access to IBM databases containing information on known program defects, defect corrections, restrictions, and bypasses at no additional charge. For further information, consult the IBM Software Support Handbook found at

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

IBM will maintain this information for at least one year after the original licensee acquires the program (warranty period).
**Program support**
Enhanced support, called Subscription and Support, includes telephone assistance, as well as access to updates, releases, and versions of the program as long as support is in effect. You will be notified of discontinuance of support with 12 months' notice.

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

For clarification, note that for programs acquired under any of IBM's On/Off Capacity on Demand (On/Off CoD) software offerings, this term does not apply since these offerings apply to programs already acquired and in use by you.

**Other terms**

**Program-unique terms for WebSphere MQ VUE V7.1**

**Definitions**

"WebSphere MQ for z/OS" is the IBM program WebSphere MQ for z/OS, licensed under the IBM Customer Agreement (or equivalent agreement between Licensee and IBM). "WebSphere MQ for z/OS" is a separately available program from IBM and is not to be confused with the Program.

"WebSphere MQ VUE environment" is either (i) a single machine; or (ii) a group of machines making up a 'Qualified Sysplex' where the Program is running.

"Eligible Workload" is that which has been approved by IBM as supporting a 'Qualified Application'.

"Qualified Application" is defined in the 'IBM Customer Agreement Attachment for zNALC License Charges on IBM System z'.

"Qualified Sysplex" is a Parallel Sysplex® in which IBM z/OS is eligible for aggregated zNALC charges, as described in the 'Charges' section of IBM Form 'IBM Customer Agreement Attachment for zNALC License Charges on IBM System z'.

**A) Eligible Workload**
Licensee is authorized to deploy and use the Program to support 'Eligible Workload' in one or more Logical Partitions (each, an LPAR) in a validly licensed zNALC environment.

However, an existing validly licensed zNALC environment already running "WebSphere MQ for z/OS" does not qualify as 'Eligible Workload'.

**B) Calculation of Value Unit Entitlements**

Where the Program is deployed for use in a "WebSphere MQ VUE environment", then the Value Unit entitlements for the Program in that "WebSphere MQ VUE environment" will be determined by the following steps:

1. Perform a calculation of the number of Value Units for the Program which equates to the total sum of the Service Units in Millions (MSUs) for any copies of the Program in the "WebSphere MQ VUE environment", and the combined peak MSUs for all instances of any supported versions of "WebSphere MQ for z/OS" outside the "WebSphere MQ VUE environment".
2. Perform a calculation of the number of Value Units for the Program which equates to the combined peak MSUs for all instances of any supported versions of "WebSphere MQ for z/OS" outside the "WebSphere MQ VUE environment".

3. The total number of required Value Unit entitlements for the Program in that "WebSphere MQ VUE environment" is the Value Units value calculated in step (1) minus the Value Units value calculated in step (2).

In the calculation to determine required Value Unit entitlements for the Program, no MSUs associated with any unsupported instances of "WebSphere MQ for z/OS" shall be included with the MSUs for the Program.

Example:

Simply by way of example (hypothetically for the purpose of illustration only), assuming that the MSUs for the existing version(s) of "WebSphere MQ for z/OS" which would be included in the calculations = 100, and the MSUs for the Program itself = 30 (where the calculated Value Units for the copies of the Program based on Program MSUs alone would = 16):

a) Assume that the calculated Value Units for the combined MSUs of "WebSphere MQ for z/OS" and the Program (i.e. 100 + 30 = 130 MSUs) would = 53 (Step 1 above)

b) Assume that the calculated Value Units for the applicable "WebSphere MQ for z/OS" (100 MSUs) would = 42 (Step 2 above)

c) Then the number of Value Unit entitlements required for the Program would be the difference between the Value Units in a and b = 11 (i.e., 53 - 42 = 11).

Volume orders (IVO)

No

Passport Advantage applies

No

Software Subscription and Support 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 Software Subscription and Support (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 offering, visit

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

Other support

SoftwareXcel

System i® Software Maintenance applies

No

Variable charges apply

No
**Educational allowance available**

Yes. When ordering through the program number process, a 15% education allowance applies to qualified education institution customers.

Education Software Allowance Program applies when ordering through the program number process.

**ESAP available**

Yes, to qualified customers.

**Sub-capacity terms and conditions**

For each System z 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 System z 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 System z IPLA program you selected, refer to the Ordering information section.

**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 System z IPLA program with these terms equals the MSU-rated capacity of the machines where the System z IPLA program executes.

For more information on mainframe MSU-rated capacities, visit [http://ibm.com/systems/z/resources/swprice/](http://ibm.com/systems/z/resources/swprice/)

Reference-based: The required license capacity of a System z 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 System z IPLA sub-capacity program with these terms equals the capacity of the LPARs where the System z IPLA program executes.

z/OS-based: The required license capacity of a System z IPLA program with these terms equals the license capacity of z/OS on the machines where the System z IPLA program executes.

Reference-based: The required license capacity of a System z 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 System z IPLA program with full machine based terms equals the MSU-rated capacity of the machines where the System z IPLA program executes.
For more information on mainframe MSU-rated capacities, refer to *The IBM System z Machines Exhibit* (Z125-3901), or visit the Mainframes section of the System z Exhibits website.

http://ibm.com/systems/z/resources/swprice/

For additional information for products with reference-based terms, System z IPLA sub-capacity programs with reference-based terms adds value to the parent program across the environment, regardless of where in the environment the System z IPLA program executes.

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

When a System z IPLA sub-capacity program with reference-based terms is used in a qualified Parallel Sysplex environment, the required license capacity of the System z IPLA program must equal with the license capacity of the parent program across the Parallel Sysplex. Qualified Parallel Sysplex refers to one where MLC pricing is aggregated across the sysplex.

**Sub-capacity eligibility**

To be eligible for sub-capacity charging on select System z 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 System z (or equivalent).

On that machine:

- All instances of the OS/390 operating system must be migrated to the z/OS operating systems.
- Any licenses for the OS/390 operating system must be discontinued.
- All instances of the z/OS operating 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 System z Software Pricing website

http://ibm.com/systems/z/resources/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 System z Workload License Charges (Z125-6516).
- The complete terms and conditions for sub-capacity EWLC are defined in the IBM Customer Agreement - Attachment for IBM System z 890 and 800 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 IBM System z9® and System z Programs Sub-Capacity Pricing* (Z125-6929). Once the amendment is signed, the terms in the amendment replace any and all previous System z IPLA sub-capacity terms and conditions.

IBM Getting Started Sub-capacity Pricing for z/OS IPLA Software applies.
On/Off Capacity on Demand (CoD)

To be eligible for On/Off CoD pricing, you must be enabled for temporary capacity on the corresponding hardware, and the required contract, Attachment for IBM System z On/Off Capacity on Demand (Z125-7883) must be signed prior to use.

Statement of good security practices

IT system security involves protecting systems and information through prevention, detection, and response to improper access from within and outside your enterprise. Improper access can result in information being altered, destroyed, or misappropriated or can result in misuse of your systems to attack others. Without a comprehensive approach to security, no IT system or product should be considered completely secure and no single product or security measure can be completely effective in preventing improper access. IBM systems and products are designed to be part of a comprehensive security approach, which will necessarily involve additional operational procedures, and may require other systems, products, or services to be most effective. IBM does not warrant that systems and products are immune from the malicious or illegal conduct of any party.

IBM Electronic Services

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

Now integrated into the base operating system of AIX® 5.3, AIX 6.1, and AIX 7.1, Electronic Service Agent is designed to automatically and electronically report system failures and utilization issues to IBM, which can result in faster problem resolution and increased availability. System configuration and inventory information collected by the Electronic Service Agent tool also can be viewed on the secure Electronic Support web portal, and used to improve problem determination and resolution by you and the IBM support team. To access the tool main menu, simply type "smitty esa_main", and select "Configure Electronic Service Agent." In addition, ESA now includes a powerful Web user interface, giving the administrator easy access to status, tool settings, problem information, and filters. For more information and documentation on how to configure and use Electronic Service Agent, refer to http://www.ibm.com/support/electronic

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

Benefits

Increased uptime: The Electronic Service Agent tool is designed to enhance the Warranty or Maintenance Agreement by providing faster hardware error reporting and uploading system information to IBM Support. This can translate to less wasted time monitoring the "symptoms," diagnosing the error, and manually calling IBM Support to open a problem record. Its 24 x 7 monitoring and reporting mean no
more dependence on human intervention or off-hours customer personnel when errors are encountered in the middle of the night.

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

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

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

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

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

For more information on how to utilize the power of IBM Electronic Services, contact your IBM Systems Services Representative, or visit

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

---

**Prices**

For all local charges, contact your IBM representative.

**IBM Global Financing**

IBM Global Financing offers competitive financing to credit-qualified customers to assist them in acquiring IT solutions. Offerings include financing for IT acquisition, including hardware, software, and services, from both IBM and other manufacturers or vendors. Offerings (for all customer segments: small, medium, and large enterprise), rates, terms, and availability can vary by country. Contact your local IBM Global Financing organization or visit

http://www.ibm.com/financing

IBM Global Financing offerings are provided through IBM Credit LLC in the United States, and other IBM subsidiaries and divisions worldwide to qualified commercial and government customers. Rates are based on a customer’s credit rating, financing terms, offering type, equipment type, and options, and may vary by country. Other restrictions may apply. Rates and offerings are subject to change, extension, or withdrawal without notice.

Financing from IBM Global Financing helps you preserve cash and credit lines, enables more technology acquisition within current budget limits, permits
accelerated implementation of economically attractive new technologies, offers payment and term flexibility, and can help match project costs to projected benefits. Financing is available worldwide for credit-qualified customers.

For more financing information, visit

http://www.ibm.com/financing

**Announcement countries**

All European, Middle Eastern, and African countries, except Iran, Syria, and Sudan.

**Trademarks**

IMS, PR/SM and Electronic Service Agent are trademarks of IBM Corporation in the United States, other countries, or both.

IBM, WebSphere, z/OS, System z, z/Architecture, CICS, DB2, MQSeries, z/VSE, Tivoli, OMEGAMON, VTAM, OS/390, Global Technology Services, S/390, ProductPac, Passport Advantage, Parallel Sysplex, System i, System z9 and AIX are registered trademarks of IBM Corporation in the United States, other countries, or both.

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

Microsoft and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.

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

**Terms of use**

IBM products and services which are announced and available in your country can be ordered under the applicable standard agreements, terms, conditions, and prices in effect at the time. IBM reserves the right to modify or withdraw this announcement at any time without notice. This announcement is provided for your information only. Reference to other products in this announcement does not necessarily imply those products are announced, or intend to be announced, in your country. Additional terms of use are located at:


For the most current information regarding IBM products, consult your IBM representative or reseller, or visit the IBM worldwide contacts page

http://www.ibm.com/planetwide/