IBM CICS Transaction Server for z/OS Value Unit Edition V5.1 offers a one-time-charge price metric for net new Java workloads

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At a glance

IBM® CICS® Transaction Server for z/OS® (CICS TS) Value Unit Edition (VUE) V5.1 offers a one-time-charge (OTC) price metric for eligible workloads that are deployed in qualified System z® New Application License Charge (zNALC) logical partitions (LPARs).

CICS TS VUE offers the following benefits for eligible workloads:

- An OTC licensing option for CICS TS V5.1, with subscription and support
- Deployment to zNALC LPARs, which delivers a reduced price for the z/OS operating system
- The ability for new CICS TS VUE V5 workloads to federate with existing CICS TS V3, CICS TS V4, and CICS TS V5 workloads
- A license that does not initiate any SVC period for any other monthly license charge (MLC) versions of CICS TS

For ordering, contact your IBM representative, an IBM Business Partner, or IBM Americas Call Centers at 800-IBM-CALL (Reference: LE001).

Overview

CICS TS for z/OS VUE V5.1 offers a one-time-charge (OTC) price metric for eligible workloads that are deployed in qualified System z New Application License Charge (zNALC) logical partitions (LPARs).

Eligible Workload is defined as net new Java™ workload that executes within the CICS TS VUE Java Virtual Machine (JVM) server environment, on condition that the workload is qualified and approved through the zNALC qualification process.

The OTC price metric provides an alternative pricing model for new CICS Java applications and new CICS Java-based, service enablement workloads.

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

CICS TS VUE V5.1 can connect to other supported versions of CICS TS for z/OS (whether in zNALC or non-zNALC environments) for the purpose of workload federation and systems management.

CICS TS VUE is a separately licensed program and does not initiate any Single Version Charging (SVC) period for monthly license charge (MLC) versions of CICS TS. This means that new CICS TS VUE applications can federate with existing CICS TS V3, CICS TS V4, and CICS TS V5 workloads, without mandating an upgrade of those systems.

Key prerequisites

The minimum required level of operating system for CICS TS VUE V5.1 is IBM z/OS V1.13 (5694-A01).

The minimum required level of Java is IBM 64-bit SDK for z/OS , Java Technology Edition, V7 SR1.

For information on IBM 64-bit SDK for z/OS , Java Technology Edition, V7, refer to Software Announcement 211-265, dated October 4, 2011.

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

Planned availability date

April 26, 2013

Description

CICS TS for z/OS VUE V5.1 delivers an OTC price metric for an offering based on CICS TS for z/OS V5.1, with terms that limit its use to support net new Java workloads on IBM System z servers that meet the zNALC qualification process.

zNALC is an MLC price metric available on IBM z/Architecture® 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 HCM and 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 207-006, dated January 9, 2007.

Both CICS TS V5.1 and CICS TS VUE V5.1 include an enterprise-class multithread, 64-bit, JVM server runtime environment for the deployment of Java workloads within CICS TS. A net new Java workload that executes within the CICS TS VUE JVM server, runtime environment is defined as an Eligible Workload, on condition that the Java workload is qualified and approved through the zNALC qualification process.

For more information on CICS TS V5.1, refer to Software Announcement 212-325, dated October 3, 2012.

CICS Java applications that run in CICS TS VUE can connect to Java or non-Java CICS applications that run other supported versions of CICS TS for z/OS in non-zNALC LPAR environments, for the purpose of workload federation and systems management. For example, a CICS Java application, that runs in a CICS TS VUE address space within a zNALC LPAR, can issue a Distributed Program Link (DPL) to another CICS application written in any language, that runs in a CICS TS address space on a non-zNALC LPAR.Customers can use CICSPlex® SM to manage workloads spanning CICS TS VUE and CICS TS. In a CICSplex that consists of CICS TS VUE V5.1 and CICS TS at an earlier release level, the CICSPlex SM maintenance point must be at the CICS TS VUE V5.1 level.

CICS TS VUE is a separately licensed program and does not initiate any SVC period for MLC versions of CICS TS. This means that new CICS TS VUE applications can federate with existing CICS TS V3, CICS TS V4, and CICS TS V5 workloads, without mandating an upgrade of those systems.

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

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.

Accessibility by people with disabilities

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

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

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.

Section 508 of the US Rehabilitation Act

CICS TS VUE V5.1 is capable, as of April 26, 2013, when used in accordance with associated IBM documentation, of satisfying the applicable requirements of Section 508 of the Rehabilitation Act, provided that any assistive technology used with the product properly interoperates with it.

Product positioning

CICS TS is designed to enable customers to create and maintain a competitive advantage by building custom, differentiated, mixed-language CICS applications. For customers, who have built a competitive advantage from their CICS applications, creating, and extending CICS applications is the fastest and most effective way to maintain and extend the leadership position they have earned.

Java has become a popular programming language and runtime environment for building new applications on all platforms, including System z . Over the last 15 years, Java has become a mature and established programming language for CICS applications. CICS TS now provides a first-class, 64-bit, Java 7, runtime environment, built on a fully multithreaded Java Virtual Machine (JVM server) infrastructure. This allows CICS to run more, and larger, Java applications in a single region, by delivering enterprise-class scalability for Java workloads.

Additionally, the CICS JVM server infrastructure fully supports the deployment of OSGi bundles, which are used to manage component lifecycles, dependencies, and configuration. This can significantly simplify both the system administration and portability of Java applications.

New in CICS TS V5.1 is a fast and lightweight production-ready Java web container that provides developers with the rich features of Java servlet and JavaServer Pages (JSP) specifications, combined with CICS qualities of service. Significant performance improvements can be delivered, when compared with network-connected web interfaces, by co-locating rich web interfaces with fast local access to your existing CICS applications and data.

This new Java web container is built on WebSphere® Application Server Liberty profile technology, which enhances compatibility and portability of web applications and tools in either environment. A wide range of Java development tools can be used to build these web applications. For example, WebSphere Application Server Developer Tools for Eclipse, and Rational® Developer for System z .

CICS Java capabilities are further enhanced with the announcement of two new Feature Packs, that provides Java-based Mobile and Modern Batch capabilities. This is in addition to the existing, Java-based Axis2 web services engine. These Java capabilities are available in both CICS TS V5.1 and CICS TS VUE V5.1.

CICS TS VUE V5.1 provides an alternative pricing model for new CICS Java applications and new CICS Java-based, service enablement workloads. For more information, contact your IBM representative.

Reference information

For information on CICS TS V5.1, refer to Software Announcement 212-325, dated
October 3, 2012.

Program number

```
Program         Program
number    VRM   name

5722-DFJ  5.1.0  CICS Transaction Server for z/OS Value Unit Edition V5.1
5722-DFK  1.1.0  CICS Transaction Server for z/OS Value Unit Edition S&S
```

Product identification number - PID number

```
                    Subscription and
Program PID number  Support PID number

5722-DFJ            5722-DFK
```

Offering Information

Product information is available via the Offering Information website

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

Information Center and publications

Information Center

The CICS TS V5.1 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 CICS TS VUE V5.1, 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 can be viewed on the web at

http://pic.dhe.ibm.com/infocenter/cicsts/v5r1/index.jsp

The CICS TS V5.1 Information Center can also be downloaded for free from the
IBM Publications Center and installed on a workstation or server. For a fee, the
Information Center can be ordered, effective May 24, 2013, on CD-ROM. Visit

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

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).

https://www.ibm.com/partnerworld/mem/sla.jsp?num=213-168

Technical information

Specified operating environment

Hardware requirements

Processor

CICS TS VUE V5.1 runs on any IBM System z machine that supports the required z/OS operating system.

Parallel Sysplex® support

A Parallel Sysplex environment is not required for CICS TS VUE V5.1 but can be exploited by each of the following data-sharing facilities supported by CICS , and by the usage of the MVS™ system logger's log stream merging facility:

- IMS™ databases
- DB2® databases
- VSAM data sets
- CICS temporary storage
- Coupling facility data tables
- Named counter server

System z cryptographic hardware

If the customer wants to exploit signature verification functions with WS-Security, then appropriate System z cryptographic hardware is required. For System z 800 and 900, this hardware is the Cryptographic Coprocessor Feature and the PCI Cryptographic Coprocessor. For System z 890, 990, z9® and z10™ , it is the CP Assist for Cryptographic Functions and the Crypto Express® 2 Coprocessor. For System z196 it is CP Assist for Cryptographic Functions and the Crypto Express 3 Coprocessor. For zEnterprise® EC12 it is the CP Assist for Cryptographic Functions and the Crypto Express4S.

Katakana terminal devices

CICS TS VUE has to issue certain messages in mixed-case, and is therefore not supported with displays or terminal emulators that are restricted to the non-extended, single-byte character set (SBCS) Katakana part of code page 930.

Software requirements

Operating environment

IBM z/OS V1.13 or later is required. CICS TS VUE V5.1 will not initialize in an environment with a lower level of operating system installed.

Java Runtime Environment

The IBM 64-bit SDK for z/OS , Java Technology Edition V7 SR1, or later, is required if using Java application programs, the CICS Web Services Assistant, or the CICS XML Assistant. The IBM SDK for z/OS is available, without charge, on tape or by download. Visit

http://ibm.com/systems/z/os/zos/tools/java/

CICS Explorer® V5.1

Details of the system requirements for both the CICS Explorer and CICS Explorer SDK are available at

http://www.ibm.com/software/htp/cics/explorer/requirements/

System z tools (including CICS tools)

For information on these tools, refer to the **Associated IBM software products** section.

For additional information on software requirements, refer to the *CICS TS VUE V5.1 Program Directory* (GI13-3313).

For details of other IBM products that support CICS TS VUE V5.1, visit

http://www.ibm.com/support/docview.wss?uid=swg27035673

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.

Information center publications

Details are provided in the Information Center and publications section.

Application programming summary

This section lists Java releases and compilers that are in service on z/OS . All Java compilers listed in this topic can use the integrated CICS translator.

```
Java

Product name                                              PID         Runtime

IBM SDK for z/OS,  Java Technology Ed., V5                5655-N98    (1)
IBM 31-bit SDK for z/OS, Java Technology Edition, V6      5655-R31    (1)
IBM 64-bit SDK for z/OS, Java Technology Edition, V6      5655-R32    (1)
IBM 64-bit SDK for z/OS, Java Technology Edition, V6.0.1  5655-R32    (1)
IBM 64-bit SDK for z/OS, Java Technology Edition, V7      5655-W44    Supported
```

(1) These Java releases cannot be used with CICS TS VUE V5.1. Java application bytecode created using these releases should run on the supported SDK product, provided the application does not use deprecated APIs and is not affected by any incompatibilities introduced with Java version changes.

Performance considerations

Performance information is available in the *Performance Guide* (SC34-2864), from general availability. In addition, a performance report is available on request from your IBM representative.

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

http://ibm.com/support

Access the online Service Request tool

http://ibm.com/support/servicerequest

Planning information

Packaging

Elements included in CICS TS VUE V5.1

- The base CICS element of CICS TS VUE V5.1 is CICS V6.8.
- The CICSPlex SM element is CICSPlex SM V5.1.

Physical delivery

The following hardcopy documents and CD-ROM are shipped, together with the basic machine-readable material for the product:

- License Information CD-ROM (GC34-2928)
- Memo to Licensees (GI13-3311)
- Information Center Flyer (GI13-3312)
- CICS Technical Services Flyer (GI13-3303)

Certain other items, such as specification sheets of related IBM products, might be included.

Electronic and physical delivery

To download a CICS Information Center, visit the IBM Publications Center. Search for the form number, then select **download.** Visit

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

If preferred, a CD-ROM of the required Information Center can be ordered (for a fee), from May 24, 2013.

- CICS TS V5.1 Information Center for AIX® (SK4T-2692)
- CICS TS V5.1 Information Center for Linux™ Intel™ (SK4T-2693)
- CICS TS V5.1 Information Center for Microsoft™ Windows™ (SK4T-2694)
- CICS TS V5.1 Information Center for z/OS (SK4T-2695)

Customers can also download and use, free-of-charge, CICS Explorer V5.1 with CICS TS VUE V5.1. Further information about CICS Explorer and how to download it can be found at

http://www.ibm.com/cics/explorer/

For details of compatibility of CICS tools plug-ins for CICS Explorer , visit

http://www.ibm.com/support/docview.wss?uid=swg21577571

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

For information on security, refer to the *CICS Transaction Server for z/OS , V5.1, RACF® Security Guide,* (SC34-2866).

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

Software Services

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

To learn more about IBM Software Services or to contact a Software Services sales specialist, visit

http://www.ibm.com/software/sw-services/

Ordering information

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

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

Charge metric

```
Program name            PID number  Charge metric

CICS TS VUE V5.1        5722-DFJ    Value Unit
```

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

```
Program
number     Program name      Value Unit exhibit

5722-DFJ   CICS TS VUE V5.1  VUE007
```

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

	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

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

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

Basic license

On/Off CoD

CICS TS VUE V5.1 is eligible for On/Off CoD with a temporary use charge calculated based on MSUs per-day usage.

Program name CICS TS VUE V5.1
Program PID 5722-DFJ

Entitlement identifier	Description	License option/Pricing metric
S01770R	CICS TS VUE V5.1	Basic OTC, Per MSU-day TUC

Program name: CICS TS VUE V5.1
Program PID: 5722-DFJ

Entitlement identifier	Description	License option/Pricing metric
S01770R	CICS TS VUE V5.1	Basic OTC, per Value Unit

Orderable supply ID	Language	Distribution medium
S01770P	Multilingual	3590 Tape

```
Subscription and Support PID: 5722-DFK

Entitlement
identifier    Description       License option/Pricing metric

S01770Z       CICS TS VUE V5.1  Basic ASC, per Value Unit SW S&S
                                No charge, decline SW S&S
                                Per MSU SW S&S registration

Orderable
supply ID     Language          Distribution medium

S01770X       Multilingual      Hardcopy pub
```

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 and ServerPac. These customized offerings are offered for Internet delivery in countries where ShopzSeries 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 the month following their availability in CBPDO. z/OS can be ordered via CBPDO and ServerPac 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 CFSW will determine the eligibility based on product requisite checking. For more details on the Product ServerPac, visit the Help section on the Shopz website at

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

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.

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-JRON-94AFMJ

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

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

Limited warranty applies

Yes

Limited warranty

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 CICS TS Value Unit Edition

Definitions

The term "Program" is IBM CICS Transaction Server for z/OS Value Unit Edition, including the original and all whole or partial copies: 1) machine-readable instructions and data, 2) components, files, and modules, 3) audio-visual content (such as images, text, recordings, or pictures), and 4) related licensed materials (such as keys and documentation).

The term "Licensee" is someone to whom a license is granted. Licensee has the license to use IBM CICS Transaction Server for z/OS Value Unit Edition.

The term " CICS TS for z/OS " is IBM CICS Transaction Server for z/OS , licensed under the IBM Customer Agreement (or equivalent agreement between Licensee and IBM). 'CICS TS for z/OS' is a separately available program from IBM and is not to be confused with the Program.

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

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

The term "Qualified Application" is defined in the Attachment for zNALC License Charges on IBM System z (IBM Form Z125-7454).

The term "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 Z125-7454.

A) Eligible Workload

Licensee is authorized to use the Program to run 'Eligible Workload' in one or more Logical Partitions (each, an LPAR) in a validly licensed zNALC environment. However, neither (i) existing workload that is transferred or migrated to the zNALC LPAR from z/OS elsewhere in the same enterprise; nor (ii) existing workload already deployed in a zNALC LPAR within the same enterprise qualifies as 'Eligible Workload'.

B) Java workload

A Java workload executing within the Program's JVMSERVER runtime environment will be considered to be a 'Qualified Application', on condition that the Java workload has been qualified and approved through the zNALC qualification process as eligible to run in a zNALC LPAR.

C) Non-Java workload

Licensee may create and use non-Java User Replaceable Modules (URMs), Global User Exits (GLUEs), and Task Related User Exits (TRUEs) deployed outside of the Program's JVMSERVER runtime environment (including non-Java applications used solely to administer those URMs, GLUEs and TRUEs), on condition that Licensee's authorization is limited to installation and use solely in support of 'Eligible Workload'.

D) CICS systems management

Licensee may connect the Program to other supported versions of 'CICS TS for z/OS' (whether in zNALC or non-zNALC environments) for the purpose of workload federation and systems management.

E) Calculation of Value Unit entitlements

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

(E.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 'CICS VUE environment', and the combined peak MSUs for all instances of any supported versions of 'CICS TS for z/OS' in the 'CICS VUE environment'.

(E.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 'CICS TS for z/OS' in the 'CICS VUE environment'.

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

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

Example : For the purposes of illustration only, in the following calculations assume that the existing version of CICS TS for z/OS is currently licensed for 100 MSUs. Then assume that the requirement is to incrementally add 30 MSUs of net new CICS Java workload running under CICS TS VUE. To calculate this license requirement:

(Ex.1) Assume that the calculated Value Units for the combined MSUs of CICS TS for z/OS and CICS TS VUE (that is, 100 + 30 = 130 MSUs) = 53 VUs, from step (E.1) above.

(Ex.2) Assume that the calculated Value Units for the applicable CICS TS for z/OS (that is, 100 MSUs) = 42 VUs, from step (E.2) above.

(Ex.3) Therefore, the number of Value Unit entitlements required for CICS TS VUE is the difference between the Value Units from step (Ex.1) and step (Ex.2) (that is, 53 - 42) = 11 VUs.

For reference, under VUE007:

30 MSUs alone would require 16 VUs

100 MSUs alone would require 42 VUs

130 MSUs combined would require 53 VUs

Therefore, in this example, using the calculation above allows a purchase of only 11 VUs instead of 16 VUs for CICS TS VUE.

F) Copies of the Program

In support of Licensee's authorized use of the Program, Licensee may deploy copies of the Program: (i) in any zNALC LPAR in which the 'Eligible Workload' is deployed for use; or; (ii) within a 'Qualified Sysplex' in any zNALC LPAR in which the Eligible Workload is deployed for use. To deploy a copy of the Program in any other zNALC environment, Licensee must acquire another license to the Program with its own separate entitlement.

G) Charges

Charges for the Program are based on Value Unit entitlements.

If Licensee's required license capacity for the Program exceeds Licensee's entitled license capacity for the Program, then Licensee must acquire additional license capacity (in Value Units) to meet the license requirement.

If Licensee's required Subscription and Support entitlements for the Program exceeds Licensee's existing Subscription and Support entitlements for the Program, then Licensee must acquire additional Subscription and Support entitlements to meet the Subscription and Support requirement.

The following examples are actions which could result in a change in capacity or Subscription and Support requirements: moving 'Eligible Workload' to another machine, into a 'Qualified Sysplex', or out of a 'Qualified Sysplex'; an increase in the z/OS defined capacity; changes to the operating environment and its configuration within the Licensee's enterprise. Other actions may also result in a change.

H) Execution-based and Referenced-based terms

For the purposes of sub-capacity pricing, the Program is a System z IPLA program with Execution-based terms.

The Program will be treated as a 'Parent Program' for the purposes of calculating charges for System z IPLA programs with Referenced-based terms, just as if the Program were a monthly license charge 'CICS TS for z/OS' program. Additional charges for Licensee's acquired IBM programs with Referenced-based terms may apply, similar to when adding MSU capacity to other 'CICS TS for z/OS' 'Parent Programs'. Furthermore, if Licensee is running both zNALC LPAR(s) and non-zNALC LPAR(s) in the same machine, then the MSUs applicable to 'CICS TS for z/OS' instances for the purposes of establishing charges for Reference-based System z IPLA programs will be the lesser of (i) the sum of the 'CICS TS for z/OS' instances and the Program MSUs; or (ii) the peak z/OS MSUs; as indicated on the Licensee's Sub-Capacity Reporting Tool (SCRT) report.

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

IBM Operational Support Services - SoftwareXcel

Yes

Other support

SoftwareXcel

System i® Software Maintenance applies

No

Variable charges apply

No

Educational allowance available

Yes. A 15% education allowance applies to qualified education institution 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/

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 monthly license charge (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: Since 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 at

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

My Systems provides valuable reports of installed hardware and software using information collected from the systems by Electronic Service Agent . Reports are available for any system associated with 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 additional information and current prices, contact your local IBM representative.

Information on charges is available at

http://www.ibm.com/support

Choose the option entitled Purchase/upgrade tools.

```
Program name: CICS TS VUE V5.1
Program PID: 5722-DFJ

Entitlement
identifier    Description                  License option/Pricing metric

S01770R       CICS TS VUE V5.1             Basic OTC, per Value Unit
                                           Basic OTC, per MSU-day TUC


Subscription and Support PID: 5722-DFK

S01770Z       CICS TS VUE V5.1             Basic ASC, per Value Unit SW S&S
                                           No charge, decline SW S&S
                                           Per MSU SW S&S registration
```

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