IBM Tivoli System z OMEGAMON XE V4.2.0 extends the integration and management of OMEGAMON for more robust storage in CICS, IMS, and DB/2 environments

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Overview

The OMEGAMON® capabilities provide:

- Better integration for leveraging efficiency and cost savings
- Stronger historical information integration to help you analyze integrated workloads for CICS® and IMS[tm] environments
- Expansion of OMEGAMON's overall breadth and depth of monitoring and management abilities for greater visibility and control, and automation of your environment
- More actioning capabilities (Storage Toolkit) for the TEP user interface, helping to maximize efficiency and reduce effort
- Expanded information in both TEP and the 3270 user interfaces
- Continued day one currency to support technology adopters that are on the front end of the technology curve
- Continued integration in multiple areas that add capability to the overall IBM® Tivoli® Service Management Center for System z® (SMCz)
- Enterprise-wide end-to-end integration of performance and availability monitoring capability

Key prerequisites

Refer to the Hardware and software requirements section.

Planned availability date

- December 12, 2008

Description

IBM Tivoli OMEGAMON XE for Storage on z/OS®, V4.2

IBM Tivoli OMEGAMON XE for Storage on z/OS, V4.2 provides broad-based monitoring of the z/OS I/O subsystem performance and storage availability. The product aims to help customers manage the performance and availability of mainframe-attached storage, including DASD

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and tape devices, and the datasets that reside on them. It also features in-depth analysis of two important IBM storage software components: Data Facility Systems Managed Storage (DFSMS^{tm}), which manages the service levels and priorities of datasets based on user-created storage goals, and Data Facility System Managed Storage Hierarchical Storage Manager (DFSMShsm^{tm}).

Key enhancements:

- Currency of z/OS V10 operating system for new hardware
- Expanded online toolkit capability for DFSMShsm, DFSMSdss^{tm}, IDCAMS, and ICKDSF commands, providing greater breadth, depth, and flexibility in the storage administration function helping in the day-to-day activities
- Capability to generate JCL for batch jobs (any JCL) to greatly increase the flexibility from managing storage and the tools used
- New support for DFSMSrmm^{tm} tape systems for expanded off-line storage management capability
- Provides Dynamic Workspace Links (DWLs) to other IBM Tivoli Storage management tools for even greater integration to DFSMShsm management, catalog management, tape, allocation and space management, and data resiliency capabilities Tivoli tools

IBM Tivoli OMEGAMON DE on z/OS, V4.2

IBM Tivoli OMEGAMON DE on z/OS, V4.2 provides integration among multiple TEP-enabled products. This integration allows for enterprise-wide end-to-end performance and availability capability that leverages current TEP-enabled products to work together, providing a more efficient way of managing customer enterprise, which helps in lowering the total cost of doing business.

Key enhancement:

- Currency for new OMEGAMON V4.1.0 and V4.2.0 portfolio

IBM Tivoli OMEGAMON XE for CICS on z/OS, V4.1 - Interim Features (IFS)

IBM Tivoli OMEGAMON XE on CICs for z/OS, V4.1 facilitates proactive management of complex CICS systems to help achieve high performance and avoid costly downtime. With a flexible and easy-to-use browser interface, IBM Tivoli OMEGAMON XE for CICS on z/OS helps monitor and manage CICS transactions and resources to isolate and quickly detect situations and events in order to avoid or resolve problems as quickly as possible.

Key enhancements:

- Supports z/OS V10
- Can display summary application trace data in a new TEP report. From the existing task history view, users can select an individual transaction and view the application trace data if it has been collected. Using the new DWL 3270 feature, users can link from there to the 3270 application trace facility report for a more detailed view.
- Can leverage one minute history TEP capability to enable navigation in the Tivoli Data Warehouse and have an online Data Viewing (ONDV) drill-down capability for history details in context for problems
- Integrates OMEGAMON XE for CICS and IBM Tivoli Composite Application Manager for Transactions by allowing OMEGAMON XE for CICS to write CICS events to IBM Tivoli Composite Application Manager for Transactions
- XE zoom to 3270 OMEGAMON interface

Accessibility by people with disabilities

A U.S. 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

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 stipulate that the larger your required license capacity, the fewer Value Units per MSU you will need. Value Unit Exhibits are uniquely identified by a three-digit code and referred to using the nomenclature VUExxx, where xxx is the three-digit code.

Subsequent acquisitions of Value Unit priced programs 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 Web site

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

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

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

Product positioning

The overriding value associated with this set of products is that they share a common goal (Performance and availability management) and were originally designed to achieve that goal by working together. For example, the OMEGAMON family of products rely on the Tivoli Enterprise Portal to provide the same graphical interface, which allows various end users from different domains (Storage, operating systems, and online subsystems, and so on) to utilize the same user interface and the same skill set to perform their function. In addition, the TEP provides Dynamic Workspace Linking (DWL) so that two or more products with TEP to share data and linkages between products which improves productivity and lowers costs. The OMEGAMON portfolio is key to the IBM Tivoli Service Management for System z initiative (SMCz), providing the operational management monitoring capabilities critical to managing your enterprise .

Product identification number

Program PID number	Subscription and Support PID number
5698-A37	5608-S77

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5698-B40                5608-S72
5698-A32                5608-S74
```

Program number

```
Program                 Program
number      VRM         name

5698-A37    4.2         IBM Tivoli OMEGAMON XE for Storage on z/OS
5698-B40    4.2         IBM Tivoli OMEGAMON DE on z/OS
5698-A32    4.1         IBM Tivoli OMEGAMON XE for CICS on z/OS (IFS)
```

Education support

Comprehensive education for IBM Tivoli products is offered through Worldwide Tivoli Education
Delivery Services. A wide range of training options are available, including classes led by
instructors, learning on demand, on-site training, and blended learning solutions.

For additional information, visit

http://www-306.ibm.com/software/tivoli/education/

Offering Information

Product information is available via the Offering Information Web site

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

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=208-374

Publications

The following publications can be ordered:

```
                                                        Publication
Document title                                          number

IBM Tivoli OMEGAMON XE and Tivoli Management Services on z/OS:  SC27-2303
 End-to-End Response Time Feature Reference
IBM Tivoli OMEGAMON XE and Tivoli Management Services on z/OS:  SC27-2304
 Reports for Tivoli Common Reporting
IBM Tivoli OMEGAMON XE Monitoring Agents on z/OS: Quick         GI11-8918
 Start Guide
IBM Tivoli OMEGAMON XE and Tivoli Management Services on z/OS:  SC23-9745
 Upgrade Guide
IBM Tivoli OMEGAMON XE and Tivoli Management Services on z/OS:  SC23-9734
 Planning and Configuration Guide

IBM Tivoli OMEGAMON XE for Storage on z/OS: Planning and        SC23-9702
 Configuration Guide
IBM Tivoli OMEGAMON XE for Storage on z/OS: User's Guide        SC23-9703
IBM Tivoli OMEGAMON XE for Storage on z/OS: Tuning Guide        SC23-9704
IBM Tivoli OMEGAMON XE for Storage on z/OS: Troubleshooting     GC23-9705
 Guide
Tivoli OMEGAMON XE for CICS on z/OS V4.1.0 User's Guide         SC23-9983
 Supplement

OMEGAVIEW and OMEGAVIEW II® for the Enterprise Release Notes    GI11-4085
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Configuring OMEGAVIEW® and OMEGAVIEW II for the Enterprise      SC32-9426
Using OMEGAVIEW and OMEGAVIEW II for the Enterprise             SC32-9427
Program Directory 5698-B40                                     GI11-8946
IBM Tivoli OMEGAMON XE for Storage on z/OS:                    SC23-9702
Planning and Configuration Guide

OMEGAMON II for SMS User's Guide                               GC32-9284
OMEGAMON II for SMS Administrator's Guide                      GC32-9281
OMEGAMON II for SMS Tuning Guide                               GC32-9283
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The IBM Publications Center

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

The Publications Center is a worldwide central repository for IBM product publications and marketing material with a catalog of 70,000 items. Extensive search facilities are provided. Payment options for orders are via credit card (in the U.S.) or customer number for 20 countries. A large number of publications are available online in various file formats, and they can all be downloaded by all countries, free of charge, where IBM does business.

Technical information

Specified operating environment

Hardware and software requirements

IBM Tivoli OMEGAMON OM XE for Storage on z/OS:

z/OS V1.8, or later
DFSMS V1.8, or later

5694-A01 - z/OS V1.8, or later
5698-A79 ITM V6.2.1 as an installation prerequesite and for Dynamic Workspace Linking

IBM Tivoli OMEGAMON DE on z/OS:

z/OS, V1.8, V1.9, and V1.10

ISPF, V4.3, or later
TSO/E, V2.6, or later
For TSO user session, a minimum region size of 4,600K (recommended region size is 6,000K)
DFSMS, V1.4, or later
REXX^{tm}

IBM Tivoli OMEGAMON XE for CICS on z/OS

Mandatory requisites:

For 5694-A01: z/OS V1.4, or later

One of the following:

CICS TS V2.2, or later
CICS/TS V3.1, or later (PK20490 refers to null CorbaServer statistics) (PK27053 refers to an intermittent abend in the OMEGAMON service task.)
IBM Tivoli Monitoring V6.2.1 for Dynamic XE to OMEGAMON for CICS Classic linking.

Other supported subsystems:

DB2® V7.1, or later
IMS V8.1, or later
WebSphere® MQ for z/OS, V5.3.1, or later

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.

Planning information

Direct customer support

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

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

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

http://www.ibm.com/support

Packaging

IBM Tivoli OMEGAMON XE for Storage on z/OS is distributed with:

- International Program License Agreement (Z125-3301)
- License Information document (GC32-1964-01)
- Media

IBM Tivoli OMEGAMON DE on z/OS is distributed with:

- International Program License Agreement (Z125-3301)
- License Information document (GC32-9501-01)
- Media

IBM Tivoli OMEGAMON XE for CICs on z/OS is distributed with:

- International Program License Agreement (Z125-3301)
- License Information document (GC32-1960-01)
- Media

Security, auditability, and control

The IBM Tivoli OMEGAMON XE for z/OS products use the security and auditability features of the operating system software. 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-01.ibm.com/software/tivoli/services/consulting/index.html

Tivoli software products are priced using Tivoli's Enhanced Value-Based Pricing. The Enhanced Value-Based Pricing system is based upon the Tivoli Environment-Managed Licensing Model, which uses a managed-environment approach -- whereby price is determined by what is managed rather than the number and type of product components installed.

For example, all servers monitored with Tivoli's monitoring product (IBM Tivoli Monitoring) require entitlements sufficient for those servers. Other Tivoli products may manage clients, client devices, agents, network nodes, users, or other items, and are licensed and priced accordingly.

Unlike typical systems management licensing models that require entitlements of specific software components to specific systems, the IBM Tivoli Environment-Managed Licensing Model provides the customer flexibility to deploy its Tivoli software products within its environment in a manner that can address and respond to the customer's evolving architecture. That is, as the architecture of a customer's environment changes, the customer's implementation of Tivoli software can be altered, as needed, without affecting the customer's license requirements (as long as the customer does not exceed its entitlements to the software).

Under Enhanced Value-Based Pricing, licensing and pricing of server-oriented applications are determined based upon the server's use in the customer's environment. Typically, such applications are licensed and priced in a manner that corresponds to each installed and activated processor of the server managed by the Tivoli application to help correlate price to value while offering a simple solution.

For servers with physical or logical (sometimes called virtual) partitions, entitlements are required for all installed and activated processors on the server. For each Tivoli application managing a clustered environment, licensing is based on the cumulative number of installed and activated processors on each server in the cluster.

Enhanced Value-Based Pricing recognizes the convergence of RISC and UNIX®, and Microsoft® Windows® and Intel® technologies, in order to simplify your licensing requirements, and to provide a smoother, more scalable model. Pricing and licensing does not differentiate between non-System z server platforms or operating systems. For some products, this platform neutrality extends to System z and other host servers as well.

IBM Tivoli Enhanced Value-Based Pricing terminology definitions

Client device or client

A client device is a computing device that requests the execution of a set of commands, procedures, or applications from another computer system that is typically referred to as a server. Multiple client devices may share access to a common server. A client device generally has some processing capability or is programmable to allow a user to do work. Examples include, but are not limited to, notebook computers, desktop computers, desk-side computers, technical workstations, appliances, automated teller machines, point-of-sale terminals, tills and cash registers, and kiosks.

Engine

An engine is also referred to as a central processor (CP) or processor. Engines for traditional workloads are called General Purpose CPs. Engines for Linux® workloads are called Integrated Facility for Linux (IFL) engines or Linux-only engines. Engines for Coupling Facility workloads are called ICF engines.

Enterprise

An enterprise is a person or single entity and those subsidiaries with more than 50% ownership.

IBM Integrated Facility for Linux (IFL)

This optional facility enables additional processing capacity exclusively for Linux workload, with no effect on the model designation of a System z or OS/390® server. Consequently, executing

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Linux workload on the IBM IFL will not, in most cases, result in any increased IBM software charges for z/OS, OS/390, VM, VSE, or TPF operating systems and applications. There is, as indicated, a charge associated with the IFL, and there may also be a charge for applications which run on the IFL.

The IFL may be dedicated to a single Linux-mode logical partition or it may be shared by multiple Linux-mode logical partitions. Installations should note that the Linux workspace enabled by this facility will not support any of the traditional S/390® operating systems (OS/390, TPF, VSE, or VM). Only Linux applications or Linux operating in conjunction with the Virtual Image Facility, an environment that operates within a logical partition or in native S/390 mode and provides the capability to create multiple Linux images, are supported by IBM S/390 IFL.

Managed processor (charging under full capacity in the managed environment)

Managed processor charges are based on the active processors on the machines in the computing environment affiliated with the program rather than on the server where the program is run. The managed processors that require PoEs are defined in the License Information's program-unique terms.

Notes:

- IBM defines a physical processor in a computer as a functional unit that interprets and executes instructions. A physical processor consists of at least an instruction control unit and one or more arithmetic and logic units.
- Multicore technology allows two or more processors (commonly called cores) to be active on a single silicon chip. With multicore technology, IBM considers each core to be a physical processor. For example, in a dual-core chip, there are two physical processors residing on the single silicon chip.
- The program may not run on some or all of the processors for which PoEs are required by the program's valuation method.
- In the System z IFL environment, each IFL engine is considered a single physical processor.
- Threading, a technique which makes a single processor seem to perform as two or more, does not affect the count of physical processors.
- Where blade technology is employed, each blade is considered a separate server and charging is based upon the total number of processors on the blades with which the program is affiliated.
- Not all processors require the same number of Value Unit entitlements. To determine the number of Value Unit entitlements required, refer to the processor Value Unit conversion table on the Passport Advantage® Web site

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

Millions of Service Units (MSUs)

MSU is defined as millions of CPU service units per hour, which is the measure of capacity used to describe the computing power of the hardware processors on which S/390 or System z software runs. Processor MSU values are determined by the hardware vendor, IBM, or Software Compatible Vendors (SCVs).

For more detailed information about System z software pricing, visit

    http://www-1.ibm.com/servers/eserver/zseries/library/refguides/sw_ pricing.html

Network node or node

Network nodes include routers, switches, hubs, and bridges that contain a network management agent. A single network node may contain any number of interfaces or ports.

Port

A port is the physical connection between a device and the network.

Processor (per processor charging under full capacity)

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

Notes:

- IBM defines a physical processor in a computer as a functional unit that interprets and executes instructions. A physical processor consists of at least an instruction control unit and one or more arithmetic and logic units.
- Multicore technology allows two or more processors (commonly called cores) to be active on a single silicon chip. With multicore technology, IBM considers each core to be a physical processor. For example, in a dual-core chip, there are two physical processors residing on the single silicon chip.
- In the System z IFL environment, each IFL engine is considered a single physical processor.
- Threading, a technique that makes a single processor seem to perform as two or more, does not affect the count of physical processors.
- Where blade technology is employed, each blade is considered a separate server and charging is based upon the total number of processors on the blade on which the program is run.
- When a server is shipped with six processors, but two of them are inactive, four processors are active for the customer.
- Not all processors require the same number of Value Unit entitlements. To determine the number of Value Unit entitlements required, refer to the processor value unit conversion table on the Passport Advantage Web site

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

Resource Value Unit

Resource Value Unit is a pricing charge metric for program license entitlements that is based upon the quantity of a specific designated measurement used for a given program. Refer to the Value Units definition.

Server

A server is a computer system that executes requested procedures, commands, or applications to one or more user or client devices over a network. A PoE must be obtained for each server on which the program or a component of the program is run or for each server managed by the program. Where blade technology is employed, each blade is considered a separate server.

Standby or backup systems

For programs running or resident on backup machines, IBM defines three types of situations: cold, warm, and hot. In cold and warm situations, a separate entitlement for the copy on the backup machine is normally not required and typically no additional charge applies. In a hot backup situation, the customer needs to acquire other license or entitlements sufficient for that server. All programs running in backup mode must be solely under the customer's control, even if running at another enterprise's location.

As a practice, the following are definitions and allowable actions concerning the copy of the program used for backup purposes.

Cold: A copy of the program may reside, for backup purposes, on a machine as long as the program is not started. There is no additional charge for this copy.

Warm: A copy of the program may reside for backup purposes on a machine and is started, but is idling, and is not doing any work of any kind. There is no additional charge for this copy.

Hot: A copy of the program may reside for backup purposes on a machine, is started, and is doing work. The customer must acquire a license or entitlements for this copy and there will generally be an additional charge.

Doing work includes, for example, production, development, program maintenance, and testing. It also could include other activities such as mirroring of transactions, updating of files,

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synchronization of programs, data or other resources (for example, active linking with another machine, program, database or other resource, and so on), or any activity or configurations that would allow an active hot switch or other synchronized switch over between programs, databases, or other resources to occur.

In the case of a program or system configuration that is designed to support a high availability environment by using various techniques (for example, duplexing, mirroring of files, or transactions, maintaining a heartbeat, active linking with another machine, program, database, or other resource), the program is considered to be doing work in the hot situation and a license or entitlement must be purchased.

Terabyte (T/TB)

1 TB of managed storage = 2 to the power of 40 bytes = 1,099,511,627,776 bytes, trillion bytes.

Tivoli Management Points

A Tivoli Management Point is a metric used to compute license quantities and is program specific.

Value Units

A Value Unit is a pricing charge metric for program license entitlements, which is based upon the quantity of a specific designated measurement used for a given program. Each program has a designated measurement. The most commonly used designated measurements are processor cores and MSUs. However, for select programs, there are other designated measurements such as servers, users, client devices, and messages. The number of Value Unit entitlements required for your specific implementation of the given program must be obtained from a conversion table associated with the program. You must obtain a PoE for the appropriate number of Value Unit entitlements for your implementation. The Value Unit entitlements of a given program cannot be exchanged, interchanged, or aggregated with Value Unit entitlements of another program. Whenever the designated measurement is a processor core, not all processors require the same number of Value Unit entitlements. To determine the number of Value Unit entitlements required, refer to the processor value unit conversion table on the Passport Advantage Web site

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

Product and licensing Web Sites

A complete list of IBM Tivoli products is available at

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

IBM Tivoli product licensing documents are available at

http://www.ibm.com/software/tivoli/products/licensing.html

Pricing examples

System z Server:

One 1,500 MSU System z server

All products in this example employ Value Unit slope VUE007 (VUE = Value Unit Exhibit). If the customer has installed 1,500 MSUs, the applicable number of Value Units will be:

```
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 rounded up to the next integer. So the customer will need to license 344 Value Units in this example.

Value Units for non-MSU-based S/390 processor cores:

```
System          Value Units / System

MP3000 H30          6
MP3000 H50          8
MP3000 H70         12
ESL Models          2
```

Value Units for IBM 9672 processor cores are based upon the full capacity of these systems. This is applicable to all System z systems measured on MSU capacity. Information on MSU capacities can be found in the IBM System/370^{tm}, System/390® and System z Machine Exhibit, Z125-3901.

Ordering information

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

```
Program
number   Program name                                   Value Unit exhibit

5698-A37  IBM Tivoli OMEGAMON XE for Storage on z/OS        VUE007
5698-B40  IBM Tivoli OMEGAMON DE on z/OS                    VUE007
5698-A32  IBM Tivoli OMEGAMON XE for CICS on z/OS           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
```

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```
Total    1,500                 343.50
```

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

Ordering z/OS through the Internet

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

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

Single version charging

To elect single version charging, you must notify and identify to IBM the prior program and replacement program, and the machine the programs are operating on.

Current licensees

New licensees

Orders for new licenses will be accepted now.

Shipment will begin on the planned availability date.

Basic license

```
     Translation from MSUs to Value Units

              MSUs      Value Units/MSU
     Base      1-3          1.00
     Tier A    4-45          .45
     Tier B   46-175         .36
     Tier C  176-315         .27
     Tier D   316+           .20
```

On/Off Capacity on Demand for the z/OS host product

The products in this announcement are eligible for On/Off Capacity on Demand (On/Off CoD) with a Temporary Use Charge calculated based on MSUs-per day usage.

```
Product name                                      PID

IBM Tivoli OMEGAMON XE for Storage on z/OS, V4.2    5698-A37
IBM Tivoli OMEGAMON DE on z/OS, V4.2                5698-B40
IBM Tivoli OMEGAMON XE for CICS on z/OS V4.1        5698-A32
```

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

```
Program name: IBM Tivoli OMEGAMON XE for Storage on z/OS, V4.2
Program PID: 5698-A37

Entitlement                          License option/
identifier    Description            Pricing metric

S012S9M      Tivoli OMEGAMON XE for   Basic OTC, per Value Unit
             Storage on z/OS          Basic OTC, per MSU-day TUC


Program name: IBM Tivoli OMEGAMON DE on z/OS, V4.2
Program PID: 5698-B40

Entitlement                          License option/
identifier    Description            Pricing metric
```

```
S015DLH       Tivoli OMEGAMON DE on z/OS      Basic OTC, per Value Unit
                                              Basic OTC, per MSU-day TUC


      Program name: IBM Tivoli OMEGAMON XE for CICS on z/OS, V4.1
      Program PID: 5698-A32

      Entitlement                           License option/
      identifier   Description              Pricing metric

      S012LK1      Tivoli OMEGAMON XE for    Basic OTC, per Value Unit
                   CICS on z/OS             Basic OTC, per MSU-day TUC

      Orderable
      supply ID  Description              Language       Distribution medium

      S012S9N    Tivoli OMEGAMON XE for    English       3480 tape cartridge
                  Storage on z/OS

      S015DLK    Tivoli OMEGAMON DE on     English       3480 tape cartridge
                  z/OS

      S012LK2    Tivoli OMEGAMON XE for    English       3480 tape cartridge
                  CICS

      Subscription and Support PID: 5608-S77

      Entitlement                           License option/
      identifier   Description              Pricing metric

      S011KW6      Tivoli OMEGAMON XE for   Basic ASC, per Value Unit SW S&S
                   Storage on z/OS S&S      No charge, decline SW S&S
                                            Per MSU SW S&S registration


      Subscription and Support PID: 5608-S72

      Entitlement                           License option/
      identifier   Description              Pricing metric

      S011KWT      Tivoli OMEGAMON DE on    Basic ASC, per Value Unit SW S&S
                   z/OS S&S                 No charge, decline SW S&S
                                            Per MSU SW S&S registration


      Subscription and Support PID: 5608-S74

      Entitlement                           License option/
      identifier   Description              Pricing metric

      S011KWH      Tivoli OMEGAMON XE for   Basic ASC, per Value Unit SW S&S
                   CICS on z/OS S&S         No charge, decline SW S&S
                                            Per MSU SW S&S registration
      Orderable
      supply ID  Description              Language       Distribution medium

      S011KW7    Tivoli OMEGAMON XE for    English       Hardcopy pub
                  Storage on z/OS

      S011KWV    Tivoli OMEGAMON DE        English       Hardcopy pub
                  on z/OS

      S011KWJ    Tivoli OMEGAMON for CICS  English       Hardcopy pub
                  on z/OS
```

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Subscription and Support

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

To order, specify the Subscription and Support program product number and the appropriate license or charge option.

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

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

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

Basic machine-readable material

The distribution media features in the following table apply to program numbers 5698-A37, 5698-B40, and 5698-A32.

Customization option for z/OS:

Select the following feature number to customize your order if running on the z/OS platform. This feature can be specified on the initial or MES orders.

```
Feature number          Description

3450                    Satellite Electronic Delivery
```

Customized Offerings

Product deliverables are shipped only via Customized Offerings (for example, CBPDO, ServerPac, SystemPac®).

CBPDO and ServerPac are offered for Internet delivery, where ShopzSeries product ordering is available. Internet delivery of ServerPac may help improve automation and software delivery time. For more details on Internet delivery, refer to the ShopzSeries help information at

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

Media type for this software product is chosen during the Customized Offerings ordering process. Based on your customer environment, it is recommended that the highest possible density tape media is selected. Currently offered media types are:

- CBPDOs - 3480, 3480 Compressed, 3490E, 3590, 3592*
- ServerPacs - 3480, 3480 Compressed, 3490E, 3590, 3592*
- SystemPacs - 3480, 3480 Compressed, 3490E, 3590, 3592*

*3592 is highest density media. Selecting 3592 will ship the fewest number of media.

Once a product becomes generally available, it will be included in the next ServerPac and SystemPac monthly update.

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 inclusion in ServerPac.

- SystemPac shipments will begin four weeks after inclusion in SystemPac due to additional customization, and data input verification.

Terms and conditions

The information provided in this announcement letter 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 following agreement applies for Software Subscription and Support (Software Maintenance) and does not require customer signatures:

- IBM Agreement for Acquisition of Software Maintenance (Z125-6011)

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 numbers

```
5698-A37 - GC32-1964-01
5698-A32 - GC32-1960-01
5698-B40 - GC32-9501-01
```

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

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.

Authorization for use on home/portable computer

You may not copy and use this program on another computer without paying additional license fees.

Volume orders (IVO)

No

Passport Advantage applies

No

Software Subscription and Support (Software Maintenance) applies

No. For operating system software, the revised IBM Operational Support Services - SoftwareXcel offering will provide support for those operating systems and associated products that are not available with the 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

System i Software Maintenance applies

No

Variable charges apply

No

Educational allowance available

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

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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.

```
Program
number    Program name                              Terms

5698-A37  IBM Tivoli OMEGAMON XE for Storage on z/OS    z/OS-based
5698-B40  IBM Tivoli OMEGAMON DE on z/OS                z/OS-based
5698-A32  IBM Tivoli OMEGAMON XE for CICS on z/OS       Reference-based
```

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://www-1.ibm.com/servers/eserver/zseries/library/swpriceinfo/

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 (and z/OS.e) 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 Web site*

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

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

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:

- That meets the criteria defined in Hardware Announcement 198-001, dated January 13, 1998
- 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 (or z/OS.e) operating systems
- Any licenses for the OS/390 operating system must be discontinued
- All instances of the z/OS operating (or z/OS.e) systems must be running in z/Architecture® (64-bit) mode

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

   http://ibm.com/zseries/swprice

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

- The complete terms and conditions of sub-capacity WLC are defined in the IBM Customer Agreement - Attachment for 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 eServer^{tm} 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 eServer zSeries® 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.

On/Off 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 Customer Initiated Upgrade and IBM eServer On/Off Capacity on Demand - Software (Z125-6611) must be signed prior to use.

IBM Electronic Services

IBM has transformed its delivery of hardware and software support services to help you achieve higher system availability. Electronic Services is a Web-enabled solution that offers an exclusive, no-additional-charge enhancement to the service and support available for IBM servers. These services are designed to provide the opportunity for greater system availability with faster

problem resolution and preemptive monitoring. Electronic Services comprises two separate, but complementary, elements: Electronic Services news page and Electronic Services Agent.

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

The Electronic Service Agent^{tm} is no-additional-charge software that resides on your server. It monitors events and transmits system inventory information to IBM on a periodic, client-defined timetable. The Electronic Service Agent automatically reports hardware problems to IBM. Early knowledge about potential problems enables IBM to deliver proactive service that may result in higher system availability and performance. In addition, information collected through the Service Agent is made available to IBM service support representatives when they help answer your questions or diagnose problems. Installation and use of IBM Electronic Service Agent for problem reporting enables IBM to provide better support and service for your IBM server.

To learn how Electronic Services can work for you, visit

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

Prices

Information on charges is available at

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In the Electronic tools category, select the option for Purchase/upgrade tools.

Business Partner information:

If you are an IBM Business Partner -- Distributor for Workstation Software acquiring products from IBM, you may link to Passport Advantage Online for resellers where you can obtain Business Partner pricing information. An IBM ID and password are required.

https://www.ibm.com/software/howtobuy/passportadvantage/paoreseller

Order now

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

Identify your local IBM representative or IBM Business Partner, call 800-IBM-4YOU (426-4968).

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The Americas Call Centers, our national direct marketing organization, can add your name to the mailing list for catalogs of IBM products.

Note: Shipments will begin after the planned availability date.

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