



IBM Tivoli OMEGAMON XE on z/VM and Linux V4.2.0 delivers information about the z/VM and Linux on System z operating systems

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At a glance

IBM® Tivoli® OMEGAMON® XE on z/VM® and Linux® V4.2.0 delivers comprehensive real-time and historical performance and availability management for the z/VM operating system and the Linux guest systems running under the control of z/VM.

This new release of OMEGAMON XE on z/VM and Linux provides the following new capabilities:

- Resource constraint analysis
- System health overview

Overview

IBM Tivoli OMEGAMON XE on z/VM and Linux delivers a wide range of information about your z/VM and Linux instances running as z/VM guests. The Linux workloads reveal how they are performing and affecting z/VM and each other.

IBM Tivoli OMEGAMON XE on z/VM and Linux allows you to compare Linux operations side by side with detailed performance metrics from other important systems. IBM Tivoli OMEGAMON XE on z/VM and Linux offers both active and passive monitoring of Linux guest systems. With Dynamic Workspace Linking, you can easily navigate between Tivoli Enterprise Portal workspaces.

You can view and monitor workloads for virtual machines, groups, response times and LPAR reporting and view reports on z/VM and Linux usage of resources such as CPU utilization, storage, mini-disks, and TCP/IP. High-level views help executives understand how systems performance influences business and the bottom line. With granular views, the product can help IT staff to more easily track complex problems that span multiple systems and platforms and share related information.

Key prerequisites

For details, refer to the [Hardware requirements](#) and [Software requirements](#) section.

Planned availability date

April 30, 2010

Description

IBM Tivoli OMEGAMON XE on z/VM and Linux provides comprehensive information about the z/VM operating system and the Linux operating system workloads, and both real and virtual resources. Information on Linux instances, running as z/VM guests and the Linux workload, are targeted so you can see how these instances and workloads of Linux are running and impacting z/VM. This offering has a prerequisite of z/VM V5.2, or later.

IBM Tivoli OMEGAMON XE on z/VM and Linux utilizes the data collection from Performance Toolkit (PTK) for VM. A prerequisite for the OMEGAMON XE on z/VM and Linux product, the PTK is rich in z/VM and Guest wide information, making it an ideal source for this z/VM and Guest data as reported in the OMEGAMON product. This is supplemented with the data collected from Linux on System z® to provide a complete view of the resources and workloads in both operating systems.

Functions included:

- Allows you to View workloads for virtual machines, response times, and LPAR reporting
- Reports on z/VM and Linux usage of resources include CPU utilization, storage, and TCP/IP
- Includes detailed reports of z/VM and the Linux instance workloads
- Delivers real-time and historical performance metrics
- Manages z/VM and its Linux instances for a single point of control
- Provides the ability to help identify, isolate, and correct problems between z/VM and Linux instances quickly
- Assists in optimizing the z/VM and Linux environments, as well as integrating this information with other IBM products that utilize the IBM Tivoli Monitoring products' Tivoli Enterprise Portal (TEP) feature for a total view of your environment
- Includes resource-constraint analysis displays
- Includes system health overview

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

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 (TEP) feature of the IBM Tivoli Monitoring product to provide the same graphical interface. This 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 can share data and linkages between products which can help improve 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.

Reference information

Software Announcement [AP06-0251](#), dated October 10, 2006, Family of Tivoli OMEGAMON System z products: Next evolution in IBM Tivoli OMEGAMON performance and availability solutions

Availability of national languages

IBM Tivoli OMEGAMON XE on z/VM and Linux is enabled for worldwide availability in the group 1 languages.

Program number

Program number	VRM	Program name
5698-A36	4.2.0	IBM Tivoli OMEGAMON XE on z/VM and Linux

Product identification number

IBM Tivoli OMEGAMON XE on z/VM and Linux V4.2.0

Program PID number	Subscription and Support PID number
5698-A36	5608-S73

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>

Publications

The following publications are available on the DVD and the Publications Center.

Title	Order number
IBM Tivoli OMEGAMON XE on z/VM and Linux Quick Start Guide	GI11-9441
IBM Tivoli OMEGAMON XE on z/VM and Linux User's Guide	SC27-2836
IBM Tivoli OMEGAMON XE on z/VM and Linux Planning and Configuration Guide	SC27-2837
IBM Tivoli OMEGAMON XE on z/VM and Linux Troubleshooting Guide	GC27-2838

The translated publications will be available for download after May 31, 2010.

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 requirements

The architectural hardware pre-requisites of the z/VM operating system are inherited:

- Processors - z/VM V5.4 supports:
 - System z10 Enterprise Class(z10 EC)
 - System z9® Enterprise Class(z9™ EC)
 - System z9 Business Class(z9 BC)
 - zSeries® 990 (z990)
 - zSeries 890 (z890)
 - zSeries 900 (z900)
 - zSeries 800 (z800)
- Must be running in LPAR mode
- Memory - Between 20 MB and 25 MB RAM at a minimum
- Disk space - 175 MB for the OMEGAMON XE on z/VM and Linux monitoring agent

Software requirements

z/VM V5.4 and V6.1, with the corresponding release of z/VM Performance Toolkit

For the z&L agent, a minimum of one instance of Linux to support the agent:

- RHEL V4.5, and 5, and
- SLES 9, 10, and 11 (Agent or End-point)

IBM Tivoli Monitoring V6.2.1 IF4 base or later, accessible via network connection.

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

Packaging

IBM Tivoli OMEGAMON XE on z/VM and Linux V4.2 is distributed with:

- International Program License Agreement (Z125-3301)
- License Information document (GC32-1979-04)
- DVDs
- Publications (refer to the [Publications](#) section)

Security, auditability, and control

IBM Tivoli OMEGAMON XE on z/VM and Linux uses 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.

Enhanced Value-based pricing terminology definitions

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.

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 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.

Millions of service units (MSUS)

Millions of Service Units (MSU) is defined as millions of CPU service units per hour; 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-03.ibm.com/systems/z/resources/swprice/>

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, 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.

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, inter- changed, 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.

Pricing examples

z/VM software pricing example (engine-based)

The pricing example below should be used to determine required license entitlements for IBM Tivoli OMEGAMON for z/VM and Linux.

In the example below, the customer is managing 30 z/VM engines. Engine-based Value Units for a specified number of engines are determined by the:

Value Unit Exhibit VUE021

Level	Engine		Value Units per Engine
	Min	Max	
Base	1	3	10
Tier A	4	6	9
Tier B	7	9	8
Tier C	10	12	7
Tier D	13	16	6
Tier E	17	20	5
Tier F	21	25	4
Tier G	26+		3

Value Unit calculation

Level	Engines	Value units per Engines	Value Units
Base	3	10	30
Tier A	3	8	27
Tier B	3	8	24
Tier C	3	7	21
Tier D	3	6	24
Tier E	4	5	20
Tier F	5	4	20
Tier G	5	3	15
Total	30		181

The customer needs to license 181 Value Units in this example.

Ordering information

Sub-capacity for selected middleware products

The program in this announcement has Value Unit-based pricing.

Program number	Program name	Value Unit exhibit
5698-A36	IBM Tivoli OMEGAMON XE on z/VM and Linux	VUE021

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 VUE021

Engine-based Value Units for a specified number of engines are determined by the following table:

Level	Engines minimum	Engines maximum	Value Units per engine
Base	1	3	10
Tier A	4	6	9
Tier B	7	9	8
Tier C	10	12	7
Tier D	13	16	6
Tier E	17	20	5
Tier F	21	25	4
Tier G	26	+	3

Current licensees

Current licensees, with support in effect, will receive instructions on how to order this update.

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 Processor day usage.

Product Name	PID
IBM Tivoli OMEGAMON XE on z/VM and Linux V4.2.0	5698-A36

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 on z/VM and Linux V4.2.0
Program PID: 5698-A36

Entitlement identifier	Description	License option/Pricing metric	
S012L23	Tivoli OMEGAMON XE on z/VM and Linux	Basic OTC, per Value Unit Basic OTC, per Processor-day TUC	

Orderable supply ID	Description	Language	Distribution medium
S012L24	Tivoli OMEGAMON XE on z/VM and Linux	English	3480 tape cartridge

Subscription and Support PID: 5608-S73

Entitlement identifier	Description	License option/Pricing metric	
S011KW3	Tivoli OMEGAMON XE on z/VM and Linux S&S	Basic ASC, per Value Unit SW S&S No charge, decline SW S&S No charge, SW S&S registration	

Orderable supply ID	Language	Distribution medium	
S011KW4	English	Hardcopy Pub	

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.

Customized Offerings

Product deliverables are shipped only via Customized Offerings (for example, CBPDO, ServerPac, and 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 three 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.

This product is only available via Passport Advantage. It is not available as shrinkwrap.

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.

This software license includes Software Subscription and Support (also referred to as Software Maintenance).

Agreement for Acquisition of Software Maintenance

The IBM Agreement for Acquisition of Software Maintenance (Z125-6011) agreement applies for subscription and support (also referred to as Software Maintenance) and does not require customer signatures.

This program is 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. This program has 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

GC32-1979-04

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 technical support

Technical support of a program product will be available for a minimum of three years from the general availability date, as long as your Software Subscription and Support (also referred to as Software Maintenance) is in effect. This technical support allows you to obtain assistance (via telephone or electronic means) from IBM for product-specific, task-oriented questions regarding the installation and operation of the program product. Software Subscription and Support (Software Maintenance) also provides you with access to updates, releases, and versions of the program. You will be notified, via announcement letter, of discontinuance of support with 12 months' notice. If you require additional technical support from IBM, including an extension of support beyond the discontinuance date, contact your IBM representative or IBM Business Partner. This extension may be available for a fee.

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

Yes. All distributed software licenses include Software Subscription and Support (also referred to as Software Maintenance) for a period of 12 months from the date of acquisition, providing a streamlined way to acquire IBM software and assure technical support coverage for all licenses. Extending coverage for a total of three years from date of acquisition may be elected.

While your Software Subscription and Support (Software Maintenance) is in effect, IBM provides you assistance for your routine, short duration installation and usage (how-to) questions, and code-related questions. IBM provides assistance via telephone and, if available, electronic access, only to your information systems (IS) technical support personnel during the normal business hours (published prime shift hours) of your IBM support center. (This assistance is not available to your end users.) IBM provides Severity 1 assistance 24 hours a day, every day of the year. For additional details, consult your IBM Software Support Handbook at

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

Software Subscription and Support (Software Maintenance) does not include assistance for the design and development of applications, your use of programs in other than their specified operating environment, or failures caused by products for which IBM is not responsible under this agreement.

For more information about the Passport Advantage Agreement, visit the Passport Advantage Web site at

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

System i Software Maintenance applies

Yes

Variable charges apply

No

Educational allowance available

15% to qualified educational institution customers.

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™ 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

Contact your local IBM representative for the applicable charges.

AP distribution

Country/Region	Announced
AP IOT	
ASEAN*	Yes
India/South Asia**	Yes
Australia	Yes
People's Republic of China	Yes
Hong Kong S.A.R of the PRC	Yes
Macao S.A.R of the PRC	Yes
Taiwan	Yes
Korea	Yes
New Zealand	Yes
Japan IOT	
Japan	Yes

* Brunei Darussalam, Indonesia, Cambodia, Lao People's Democratic Republic, Malaysia, Philippines, Singapore, Thailand, and Vietnam

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