IBM Virtualization Engine Enterprise Workload Manager for z/OS V1.1.0

Overview
IBM Virtualization Engine™ Enterprise Workload Manager for z/OS® V1.1.0 (EWLM for z/OS) is the first of the IBM Virtualization Engine systems services for the z/OS platform.

The Virtualization Engine can help your business improve the effectiveness of Information Technology (IT) as it enables individual distributed resources across the enterprise (select servers, storage, networking) to function cohesively as a single pool of resources or integrated entity. This can allow more efficient access and management of resources across an organization by effect and need, rather than by physical location.

Virtualization Engine Enterprise Workload Manager allows system administrators to define business-oriented performance objectives for workloads running across different platforms, and then view actual performance compared to those objectives. This initial release provides the capability for z/OS to be a managed server for monitoring z/OS applications within EWLM. The z/OS managed server can be added to an existing Virtualization Engine EWLM domain that has a Domain Manager running on AIX®, OS/400®, Linux™, or Windows™. For more information, visit the IBM @server® Information Center at http://publib.boulder.ibm.com/eserver/

The EWLM Domain Manager for z/OS is expected to be enabled in a future release of the Virtualization Engine, allowing customers to monitor and manage EWLM from their z/OS system.

Key prerequisites
- Hardware:
  - IBM @server® z990, or comparable server
  - IBM @server® z900, or comparable server
  - IBM @server® z890, or comparable server
  - IBM @server® z800, or comparable server
- Software:
  - IBM z/OS V1.6 (5694-A01) or z/OS.e V1.6 (5655-G52), or later

At a glance

IBM Virtualization Engine Enterprise Workload Manager for z/OS V1.1.0 allows system administrators to define business-oriented performance objectives for workloads across different platforms, and then view actual performance compared to those objectives. This initial release provides the capability for z/OS to be a managed server for monitoring z/OS applications within EWLM.

Planned availability date

December 17, 2004
IBM Virtualization Engine Enterprise Workload Manager for z/OS V1.1.0 is the first of the IBM Virtualization Engine systems services for the z/OS platform. Enterprise Workload Manager enables you to automatically monitor and manage multi-tiered, distributed, heterogeneous or homogeneous workloads across an IT infrastructure to better achieve defined business goals for end-user services. These capabilities allow you to identity work requests based on service class definitions, track performance of those requests across server and subsystem boundaries, and manage the underlying physical and network resources to set specified performance goals for each service class. By bringing this self-tuning technology to the set of servers, routers, and other devices enabled with Java virtual machine support, Enterprise Workload Manager can help enable greater levels of performance management across heterogeneous distributed systems.

In this first release, the Enterprise Workload Manager provides goal-based end-to-end performance monitoring of an application (or set of applications). A systems administrator will be able to monitor multiple servers, answering such questions as:

- How well is the work progressing?
- Are the business commitments for end-user service being met?
- If the performance goals are not being met, which components of which servers are causing the problem?
- Which type of user is being affected by the problem?

And performing such tasks as:

- Easily identifying where time is being spent in a distributed application that spans different operating systems, applications, networks, and routers.
- Specifying a performance goal that applies to each class of user of a distributed application.
- Identifying which servers are actively supporting a given application and which applications are running on a given server.

The Enterprise Workload Manager Domain Manager for z/OS is expected to be enabled in a future release of IBM Virtualization Engine Enterprise Workload Manager. The Domain Manager provides coordination and activation of policies across the EWLM Management Domain.

**Product positioning**

The long-standing z/OS Workload Manager (WLM) function allows z/OS to perform automatic sense and response management of multiple diverse zSeries workloads based on business policies and workload performance objectives. WLM’s scope extends from the network, with intelligent TCP/IP and SNA routing, within a single z/OS image, out to the disks where the data is stored. WLM also manages priorities across multiple systems in a Parallel Sysplex.

The zSeries Intelligent Resource Director (IRD) function extends z/OS WLM capabilities to automatically balance CPU and channel resources across LPARs on a zSeries server, based on business priority. These advanced workload-management technologies use business policies, priorities, and performance objectives to direct resources to key applications when needed.

Virtualization Engine EWLM extends the scope of workload management capabilities across platforms, to monitor applications and resources end-to-end. EWLM is planned to deliver workload monitoring capability to enable the shifting of network resources and workloads based on changing requirements. EWLM is a breakthrough technology that brings self-optimization, in the form of performance and response time management, to an entire Virtualization Engine-enabled IT environment. EWLM and z/OS WLM can run simultaneously; EWLM monitoring does not affect z/OS management and monitoring. A z/OS customer can continue z/OS management and use EWLM to see how the work relates to transactions that exist within a network of different platforms, such as AIX, OS/400, Linux, or Windows.

Industry-leading virtualization technologies for the zSeries family (such as PR/SM, IRD, LPAR, VMRM, HiperSockets, and z/OS WLM) are designed to provide state-of-the-art capabilities and world-class support for workloads running within the zSeries architecture environment. As business units of work traverse multiple operating environments, the Virtualization Engine systems services such as EWLM can let users create a “fabric” to monitor applications and resources across those heterogeneous computing environments. The zSeries platform’s inherent strengths, extending its leadership capabilities, will play a key role as a hub for managing cross-system resources. The ultimate goal of zSeries is to become the intelligent business policy director across the enterprise, enabling zSeries to dynamically manage workloads and workflows across the heterogeneous environment based on business policy and priority — not on technology policy.

**Reference information**

- Software Announcement 204-096, dated April 28, 2004 (Preview: IBM Virtualization Engine delivers on demand virtualization functions to multiple operating systems and platforms)
- Software Announcement 204-191, dated August 17, 2004 (IBM Virtualization Engine Suite for Servers V1.1 brings on demand services to multiple systems)
- Software Announcement 204-180, dated August 10, 2004 (IBM z/OS V1.6: Integrating new applications and Preview: z/OS V1.7)

**Business Partner information**

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

BP Attachment for Announcement Letter 204-305


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Java is a trademark of Sun Microsystems, Inc.

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

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

Product information is available via the Offering Information Web site

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

Publications

In addition to the product media, each order will include one copy of:

- Program Directory for CBPDO Installation and ServerPac Reference IBM Virtualization Engine™ Enterprise Workload Manager for z/OS® V1.1.0 (GI11-2850).
- IBM Virtualization Engine Enterprise Workload Manager for z/OS V1.1.0, License Information (GC53-1120). The license information is also available in softcopy form in members HVELICSE and HVEREADM of the SYS1.SAMPLIB dataset.

IBM Virtualization Engine product information is available from the Web in the IBM @server Information Center located at

http://publib.boulder.ibm.com/eserver/

When you access the IBM @server Information Center, select the IBM Virtualization Engine topic from the navigation hierarchy. At this location, you can find Virtualization Engine information that addresses planning, installation, configuration, and usage. This information is available in both HTML and PDF formats.

All information for EWLM for z/OS will be provided as part of the IBM @server Information Center, which is available on the Internet at


Technical information

Specified operating environment

Hardware requirements: IBM Virtualization Engine Enterprise Workload Manager for z/OS V1.1.0 runs on the following IBM servers, or equivalents:

- IBM @server® z900 or z990
- IBM @server® z800 or z890

Software requirements: IBM z/OS V1.6 (5694-A01) or z/OS.e V1.6 (5655-G52) or later is required.

Planning information

SDK for z/OS, Java™ 2 Technology Edition V1.4 (5655-I56) is shipped with IBM Virtualization Engine Enterprise Workload Manager for z/OS V1.1.0 (Virtualization Engine EWLM). You do not need to order this IBM program product separately. If you order Virtualization Engine EWLM V1.1.0 (5655-M76) in a ServerPac, you cannot order any of the following products in the same ServerPac order:

- IBM Developer Kit for OS/390®, Java 2 Technology Edition (5655-D35)
- WebSphere® Application Server for z/OS V5.0 V5.1.0 (5655-I35)
- WebSphere Business Integration Server Foundation for z/OS V5.1.0 (5655-L85)

The above products can, however, be ordered separately in CBPDO. Additionally, WebSphere Application Server for z/OS V5.0 V5.1.0 (5655-I35) and WebSphere Business Integration Server Foundation for z/OS V5.1.0 (5655-L85) can also be ordered in ServerPac alone, with no additional software products.

Packaging: IBM Virtualization Engine Enterprise Workload Manager for z/OS V1.1.0 is distributed in one package that contains the following:

- Basic machine-readable material
- Program Directory
- Proof of Entitlement
- License Information
- IBM International Program License Agreement

The License Information is also available in softcopy form in members HVELICSE and HVEREADM of the SYS1.SAMPLIB dataset.

Security, auditability, and control

IBM Virtualization Engine Enterprise Workload Manager for z/OS V1.1.0 uses the security and auditability features of the host z/OS operating system. The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Ordering information

You must have one authorization for each activated general-purpose processor (CP) on each managed machine.

IBM Virtualization Engine Enterprise Workload Manager for z/OS V1.1.0 is a $0-priced product. It can be ordered today. New users should specify:

Type: 5655
Model: M76
For IBM Virtualization Engine Enterprise Workload Manager for z/OS V1.1.0 Subscription and Support, new users should specify:

Type: 5655  
Model: L84  

1 CPs execute the operating system and traditional zSeries application programs.

ServerPacs

Production of IBM Virtualization Engine Enterprise Workload Manager for z/OS V1.1.0 orders will begin on the planned general availability date, December 17, 2004. Shipment dates for orders will be based on order sequence, Customized Offering selected, production capability, and customer-requested arrival date. Due to the amount of customization of ServerPac orders, shipments will begin approximately two weeks after general availability. Due to the amount of additional customization of SystemPac orders, shipments will begin approximately four weeks after order and data input verification. For CBPDO orders, shipments will begin one week after general availability. In all cases, no delivery commitments are to be made to the customer until confirmed arrival dates are in ESW.

### 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](http://www14.software.ibm.com/webapp/ShopzSeries/ShopzSeries.jsp).

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.

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| **Program PID:** 5655-M76  |  |  |

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Customized offerings

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

Terms and conditions

**Licensing:** IBM International Program License Agreement. Proofs of Entitlement (PoE) are required for all authorized use.

These products are licensed under the IBM Program License Agreement (IPLA), the associated Agreement for Acquisition of Support, and the Addendum for Support Z125-6704 which provides for support with ongoing access to releases and versions of the program. These programs have an annual renewable charge for the enhanced support that includes telephone assistance (voice support for defects during normal business hours) as well as access to updates, releases, and versions of the program as long as support is in effect. S/390® and zSeries® IBM Operational Support Services — SoftwareXcel is an option for those customers who desire added services.

**Limited warranty:** Yes

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

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

**Money-back guarantee:** If for any reason you are dissatisfied with the program, return it within 30 days from the invoice date to the party (either IBM or its reseller) from whom you acquired it for a refund. This applies only to your first acquisition of the program.

**Copy and use on home/portable computer:** No

**Volume orders (IVO):** No

**Passport Advantage® applies:** No

**Software Maintenance applies:** No

**IBM Operational Support Services — SoftwareXcel:** Yes

**AIX®/UNIX® Upgrade Protection applies:** No

**Entitled Upgrade for current AIX/UNIX Upgrade Protection licensees:** No

**iSeries™ Software Subscription applies:** No

**Variable charges apply:** Yes

**Educational allowance available:** No

IBM Electronic Services

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

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

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

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

http://www.ibm.com/support/electronic
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Program PID: 5655-M76

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