IBM PowerVP Standard Edition delivers performance intelligence for Power Systems virtualized with PowerVM

Overview

IBM® PowerVP (virtualization performance) for Power Systems™ offers performance insight into which virtual workloads are using specific physical resources on a Power® server. This solution helps reduce time and complexity to pinpoint performance bottlenecks and enables a simple, color-coded dashboard to display the performance health of the system. It can help simplify management, reduce the cost of resolving performance issues, and give you a quick view of the performance health of your server.

PowerVP is tightly integrated with the PowerVM® hypervisor and collects performance data directly from PowerVM, which offers the most accurate performance information about virtual machines running on Power Systems. This performance information is displayed on a real-time, continuous GUI and is also available historically for review.

Key prerequisites

Any IBM system that includes an IBM POWER7® or POWER7+™ processor

Planned availability date

November 29, 2013

Description

PowerVP includes the following features:

- Real-time, continuous graphical monitor that delivers an easy-to-read display showing the overall performance health of the Power server.
- Customizable performance thresholds that enables you to customize the display to match your monitoring requirements.
- DVR-like replay that enables you to go back in time and replay performance data sequences to pinpoint performance bottlenecks.
- System-level performance views that show all VMs and how they are using real system resources.
- Virtual Machine drill-down, which gives you further performance details for each VM, displaying critical detail information on various resources like CPU, memory, and disk activity
- Support for all VM types including AIX®, IBM i, and Linux™
- Background data collection, which enables detailed performance data to be collected when the GUI is not active.

PowerVP is a new product that is currently being offered in a single standard edition. This edition is sold as a stand-alone offering for PowerVM Standard Edition clients and is included within PowerVM Enterprise Edition.

**Accessibility by people with disabilities**

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


**Reference information**

Refer to Hardware Announcement ZP13-0518, dated October 7, 2013

Refer to Hardware Announcement ZP13-0522, dated October 7, 2013

**Program number**

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**Product identification number**

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**Additional information**

**Reliability, availability, and serviceability (RAS)**

The reliability of the IBM Power Systems starts with components, devices, and subsystems that are designed to be fault-tolerant. IBM Power Systems uses lower voltage technology in the processor SCMs that improves reliability stacked latches to reduce soft error (SER) susceptibility. During the design and development process, subsystems go through rigorous verification and integration testing processes. During system manufacturing, systems go through a thorough testing process to help ensure high product quality levels.
The processor and memory subsystem contains a number of features designed to avoid or correct environmentally induced, single-bit, intermittent failures as well as handle solid faults in components, including selective redundancy to tolerate certain faults without requiring an outage or parts replacement.

**Offering Information**

Product information is available via the Offering Information website

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

**Publications**

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 US) or customer number for 50 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.

**Technical information**

**Specified operating environment**

**Hardware requirements**

Any IBM system that includes an IBM POWER7 or POWER7+ processor running V7.7 firmware level, or later.

This functionality requires firmware level 7.8, which will only enable the DPO functionality over the previously available firmware level 7.3 for these two specific machine model types.

For details of supported machine model types by firmware and function, visit


**Software requirements**

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.

**Limitations**

Requires IBM POWER7 or POWER7+ processor running V7.7 Firmware level or higher

**IBM Electronic Support**

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

Read about the Electronic Support portfolio of tools: http://ibm.com/electronicsupport
Access the IBM Support Portal: http://ibm.com/support
Access the online Service Request tool: http://ibm.com/support/servicerequest

Planning information

Packaging
The PowerVP Standard Edition contains DVDs that include product installation documentation and files.

Your Proof of Entitlement (PoE) for this program is a copy of a paid sales receipt, purchase order, invoice, or other sales record from IBM or its authorized reseller from whom you acquired the program, provided that it states the license charge unit (the characteristics of intended use of the program, number of processors, number of users) and quantity acquired.

Information about how you may obtain program services will be provided by the party (either IBM or its authorized reseller) from whom you acquired the program.

Security, auditability, and control

PowerVP Standard V1.1 uses the security and auditability features of the host hardware or software. The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Global Technology Services®

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

Ordering information

Consult your IBM representative.

Orders may be placed beginning with configurator availability. For new orders, select from the following table:

5765-SLE IBM PowerVP Standard Edition V1.1

<table>
<thead>
<tr>
<th>Description</th>
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<tr>
<td>Per processor - small with 1 yr SWMA</td>
<td>U8FWC1</td>
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<tr>
<td>Per processor - medium with 1 yr SWMA</td>
<td>U8FXC1</td>
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<tr>
<td>Upgrade small to medium</td>
<td>XIJ8C1</td>
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<td>Per processor - large with 1 yr SWMA</td>
<td>U8FYC1</td>
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<td>Upgrade medium to large</td>
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Software Maintenance

This software license offers Software Maintenance, previously referred to as Software Subscription and Technical Support.

Extending coverage for a total of three years from the date of acquisition may be elected. Order the program number, feature number, and quantity to extend coverage for your software licenses. If maintenance has expired, specify the after license feature number.

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<td>Per processor core on small renewal 1yr</td>
<td>U0WFC3</td>
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System Program Order (SPO): An order for SPO 5692-A6P is mandatory for shipments of program distribution. The individual licensed program orders are for registration and billing purposes only. No shipment occurs under these orders.

Machine-readable materials are only available on DVD. To receive shipment of machine-readable materials the order needs to include SPO 5692-A6P.
The individual licensed program order (for example, 5765-SLE) must still be ordered but will be for registration and billing purposes only and will not result in shipment of materials.

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**Basic machine-readable material**

Select one of the following priced feature numbers for media type under 5692-A6P. Media process charge feature 1101 is for Electronic Software Delivery.

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**Charge metric**

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<td>per processor core small, medium, and large</td>
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</table>

**Processor core (or processor)**

Processor Core (or Processor) is a unit of measure by which the program can be licensed. Processor Core (or Processor) is a functional unit within a computing device that interprets and executes instructions. A processor core consists of at least an instruction control unit and one or more arithmetic or logic unit. With multicore technology, each core is considered a Processor Core. Entitlements must be acquired for all activated Processor Cores available for use on the server.

In addition to the entitlements required for the program directly, licensee must obtain entitlements for this program sufficient to cover the processor cores managed by program.

A Proof of Entitlement (PoE) must be acquired for all activated processor cores available for use on the server. Authorization for the IBM PowerVP Standard Edition program is based on the total number of activated processors on the machines running the program and the activated processors on the machines being managed by the program.

**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.

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) applies for Subscription and Support (also referred to as Software Maintenance) and does not require customer signatures.

These programs are licensed under the IBM Program License Agreement (IPLA) and the associated Agreement for Acquisition of Software Maintenance, which provide for support with ongoing access to releases and versions of the program. IBM includes one year of Software Subscription and Support (also referred to as Software Maintenance) with the initial license acquisition of each program acquired. The initial period of Software Subscription and Support (also referred to as Software Maintenance) can be extended by the purchase of a renewal option, if available. These programs have a one-time license charge for use of the program and an annual renewal 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.

**License Information form number**

LC23-5148 IBM PowerVP Standard Edition (5765-SLE)

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


**Limited warranty applies**

Yes

**Limited warranty**

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

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


IBM will maintain this information for at least one year after the original licensee acquires the program (warranty period).
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.

Volume orders (IVO)
Yes. Contact your IBM representative.

Passport Advantage applies
No

Software Subscription and Support 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 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 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.

System i® Software Maintenance applies
No

Variable charges apply
Yes

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

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

Yes, to qualified customers.

Statement of good security practices

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

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

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

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

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

Benefits

**Increased uptime:** The Electronic Service Agent tool is designed to enhance the Warranty or Maintenance Agreement by providing faster hardware error reporting and uploading system information to IBM Support. This can translate to less wasted time monitoring the "symptoms," diagnosing the error, and manually calling IBM Support to open a problem record. Its 24 x 7 monitoring and reporting mean no more dependence on human intervention or off-hours customer personnel when errors are encountered in the middle of the night.
Security: The Electronic Service Agent tool is designed to be secure in monitoring, reporting, and storing the data at IBM. The Electronic Service Agent tool securely transmits either via the Internet (HTTPS or VPN) or modem, and can be configured to communicate securely through gateways to provide customers a single point of exit from their site. Communication is one way. Activating Electronic Service Agent does not enable IBM to call into a customer’s system. System inventory information is stored in a secure database, which is protected behind IBM firewalls. It is viewable only by the customer and IBM. The customer’s business applications or business data is never transmitted to IBM.

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

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

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

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

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

Prices

For all local charges, contact your IBM representative.

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Announcement countries

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