IBM AIX Dynamic System Optimizer V1.1 helps to improve performance and reduce the complexity of operations

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At a glance

AIX® Dynamic System Optimizer is designed to improve performance and reduce the complexity of operations. It:

- Enables the AIX partition to dynamically set the optimum page size for the workload inside the partition
- Monitors the active workload in the partition and dynamically adjusts the settings to enable automatic performance tuning

Overview

The time required to obtain experience and expertise can be a great inhibitor to a quick return on investment. AIX Dynamic System Optimizer is a new AIX based software product designed to address these areas by combining IBM's own knowledge of performance tuning to provide clients a fast start with their new system.

AIX Dynamic System Optimizer enables two specific features. The first is automatic upgrade of a workload's System V Shared Memory regions to a large page size. This eliminates manual settings along with the need for monitoring and adjusting for changes in the workload. The software automatically adjusts over time and reduces the need for expertise and monitoring. The software is loaded by partition and is ideally suited for large database workloads.

The second feature leverages a memory prefetch option. While available today through command, this new feature again monitors the active workload in the partition and dynamically adjusts the settings to enable automatic performance tuning. This option also works well with large database workloads. Both represent a new paradigm of "set and forget" that makes the most of technology while providing relief to those who would otherwise labor to find the optimum values.

Key prerequisites

One of these operating systems:

- AIX 6 Technology Level 8 with Service Pack 1 (Express®, Standard, or Enterprise)
- AIX 7 Technology Level 2 with Service Pack 1 (Express, Standard, or Enterprise)
Planned availability date

November 9, 2012

Description

The goal for AIX Dynamic System Optimizer is to enable faster optimization of performance with less time and expertise. Taking the best of IBM's experience and know-how in performance tuning, this set of software routines analyzes workloads in run time and makes adjustments dynamically to help optimize the workload performance. All you have to do is turn it on.

Performance improvements may vary, depending on configuration and workload. Measurements should be taken before running in a production environment. Dynamic System Optimizer support is available for AIX 6.1 Technology Level 8 and AIX 7.1 Technology Level 2 on POWER7® systems. You will need to download the Service Pack 1, which will be available November 9, 2012, from Fix Central.

AIX Dynamic System Optimizer (5765-PWO) can be ordered as a stand-alone program or as part of the AIX Enterprise Edition 7.1 (5765-G99) and AIX Enterprise Edition 6.1 (5765-AEZ) bundled offering. Customers that currently are licensed for AIX Enterprise Edition 7.1 or AIX Enterprise Edition 6.1 and have a current valid SWMA license for those products are entitled to download AIX Dynamic System Optimizer from the Entitled Software Support site at


With this announcement and availability of AIX Dynamic System Optimizer, the AIX Enterprise Edition will now consist of:

- AIX Standard Edition
- WPAR Manager
- PowerSC Standard Edition
- SmartCloud Entry for POWER® bundle
- IBM® Tivoli® Monitoring
- AIX Dynamic System Optimizer

Accessibility by people with disabilities

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


Program number

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Product identification number

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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

IBM systems that run IBM POWER7 or POWER7+™ processors.

Software requirements

AIX Dynamic System Optimizer requires:

- AIX 6 Technology Level 8 with Service Pack 1 (Express, Standard, or Enterprise)
- AIX 7 Technology Level 2 with Service Pack 1 (Express, Standard, or Enterprise)

You will need to download the Service Pack 1, which will be available November 9, 2012, from Fix Central.
AIX Dynamic System Optimizer must be licensed for all active AIX cores on a Power Systems server. When additional cores are activated for AIX, you must purchase the same number of additional AIX Dynamic System Optimizer licenses.

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

The AIX Dynamic System Optimizer package 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

AIX Dynamic System Optimizer 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.

Charge metric

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Processor

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

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

5765-PWO  AIX Dynamic System Optimizer V1.1

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<td>Per processor - medium</td>
<td>U8EK1</td>
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<td>XIEBC1</td>
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<td>Per processor - large</td>
<td>U8EL1</td>
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<td>Upgrade small to large</td>
<td>XIECC1</td>
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<td>Upgrade medium to large</td>
<td>XIEDC1</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.

5660-PWO  Software Maintenance Registration 1 Year

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5661-PWO  Software Maintenance After License 1 Year

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5662-PWO  Software Maintenance Registration 3 Year

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5664-PWO  Software Maintenance After License 3 Year

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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-PWO) 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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**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) agreement 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 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 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 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.

**License Information form number**
LC23-5137 AIX Dynamic System Optimizer (5765-PWO)

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.

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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).

**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

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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.

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**Statement of good security practices**

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

Prices

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Announcement countries

All European, Middle Eastern and African countries.

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