IBM Tivoli System Automation Application Manager V3.1 enables high availability and disaster recovery for composite applications that span complex heterogeneous environments

At a glance

IBM Tivoli System Automation Application Manager V3.1 is designed for high availability and disaster recovery solutions, providing the ability to automate applications across multitiered, heterogeneous environments. New in Version 3.1 (compared to the predecessor product IBM Tivoli System Automation for Multiplatforms V2.3, end-to-end component):

- Packaging and pricing, where the Standard component provides the high availability capabilities and the separately orderable Geographically Dispersed Parallel Sysplex Distributed Cluster Management (GDPS DCM) platform support component extends this to a disaster recovery solution.
- Addition of disaster recovery capabilities in combination with GDPS. Shoulder tapping between System Automation Application Manager and GDPS allows GDPS to execute disaster recovery actions in a timely fashion.
- Integration with IBM Service Management and Tivoli Configuration and Change Management Database (CCMDB).
- Configuration GUI.

For ordering, contact:

Your IBM representative or the Americas Call Centers at 800-IBM-CALL Reference: YE001

Overview

IBM Tivoli® System Automation Application Manager V3.1 delivers the rich capabilities of the IBM Tivoli System Automation for Multiplatforms end-to-end component in a stand-alone product. The end-to-end automation capabilities can be deployed for existing clustering solutions such as HACMP™ or Microsoft® Cluster Server (MSCS).

IBM Tivoli System Automation Application Manager V3.1 offers unsurpassed capabilities designed to help meet high levels of availability for mission-critical composite business applications, reduce unplanned downtime, improve business flexibility, and meet strict service level guarantees across complex heterogeneous environments. With the integration of Geographically Dispersed Parallel Sysplex® Distributed Cluster Management (GDPS™ DCM), you also get disaster recovery capabilities.

IBM Tivoli System Automation Application Manager V3.1 includes four orderable components.

System Automation Application Manager Standard component

System Automation Application Manager Standard component enhancements include:
• Extended support for additional cluster technology platforms that includes Microsoft Windows® and Sun Solaris, bringing the overall end-to-end solution coverage to:
  – Veritas Cluster Server (VCS) (Solaris)
  – HACMP (AIX®)
  – MSCS (Windows)
  – System Automation for Multiplatforms (Linux™, AIX, Windows, and Sun Solaris)
  – System Automation for z/OS®
• Key IBM Service Management processes that are enabled to contain identified integration points to allow for the dynamic retrieval of resource information from System Automation Application Manager by means of a cross-product interface.
• System Automation Application Manager that defines a mapping of the end-to-end resources and end-to-end relationships that it knows and manages, and feeds them into the Tivoli Configuration and Change Management Database (CCMDB).
• Recovery time measurement and reporting.
• Configuration GUI for all supported platforms to graphically create and maintain end-to-end automation policies.
• Ability to be deployed on z/OS as the reliable platform of choice.
• Support for Windows and Linux for xSeries® running under VMware ESX.
• Support for AIX 6.1 and Windows Server 2008.

System Automation Application Manager Distributed Disaster Recovery (DDR) component
The optional DDR component extends the rich functionality of the standard SA AM version with disaster recovery capabilities by introducing the GDPS Distributed Cluster Manager (DCM). This allows System Automation Application Manager to detect critical application and resource outages — on open systems and z/OS — and notify GDPS. GDPS can take these notifications and use them as triggers for disaster recovery actions. In case of planned or unplanned disaster recovery actions, GDPS will notify System Automation Application Manager to take appropriate, coordinated actions on open systems and z/OS; for example, stop or restart the workload with a modified configuration on a backup site.

Key prerequisites
IBM Tivoli System Automation Application Manager V3.1 requires at least one of the following platforms:

• Linux on System z™, Linux on System p™, Linux on System i™, Linux on System x™, and BladeCenter®
• Linux on any 32-bit Intel®-based server or any 64-bit AMD-64 or AMD-64 EMT64T based server
• AIX 5.3 or AIX 6.1 on System p
• Windows Server 2003 or Windows Server 2008 on any 32-bit Intel-based server or any 64-bit AMD64 or EM64T based server
• z/OS V1.7
• Sun Solaris 10 on any SPARC server (for the VCS Solaris adapter only)

Planned availability dates
June 13, 2008: Electronic planned availability via Passport Advantage®
June 13, 2008: Media planned availability via Entitled Software
July 11, 2008: Media planned availability via Passport Advantage

Description
IBM Tivoli System Automation Application Manager V3.1 is a high availability and disaster recovery solution providing the unique ability to automate applications across multitiered, heterogeneous environments.

The Standard component provides everything needed to make complex applications highly available from one single point of control.

**End-to-end automation**

If you ever wanted to increase availability and automate and manage a multitier application like SAP, including the resources and applications it has relationships and dependencies with, such as NFS and DB2®, IBM Tivoli System Automation Application Manager is the answer. It provides an end-to-end automation manager, which uses adapters to automatically learn about applications and their status from the platform-specific clustering technology, and only the cross-platform resources, groups, and dependencies need to be defined. These platform-specific clustering technologies can be any combination of System Automation for Multiplatforms, other IBM clustering technologies such as HACMP and System Automation for z/OS, or even non-IBM clustering products such as Microsoft Cluster Server (MSCS) and Veritas Cluster Server (VCS) on Solaris.

The Application Manager can help users:

- Increase application availability by resolving cross-platform dependencies like recycling a Web application on Linux when DB2 for z/OS is down
- Move applications to another cluster or even platform

These functions are achieved through injecting persistent start or stop requests into the platform-specific, goal-driven automation, which allows continuing automation even when the Application Manager is not available.

**Continuous high availability for heterogeneous applications**

IBM Tivoli System Automation Application Manager initiates, executes, and coordinates the starting, stopping, restarting, and failing over of entire composite applications, while managing complex, cross-cluster resource dependencies. This helps improve IT operating efficiency and reduces manual labor by maximizing application availability across the enterprise and minimizing the skill level required by operators to manage across complex environments.

**Easy operations**

IBM Tivoli System Automation Application Manager V3.1 automatically manages complex application dependencies that span servers, clusters, and geographies, providing a holistic approach to high availability for complex applications. From a single point of control, you can monitor, manage, and initiate high availability operations end-to-end across the entire application topology. This simplifies operations by automating the labor-intensive effort to monitor and manage cross-cluster application dependencies.

**End-to-end operations**

IBM Tivoli System Automation Application Manager can help you drive high availability best practices and establish one operations and automation team responsible for z/OS, Linux, AIX, Windows, and Solaris applications, greatly simplifying problem determination and resolution. The Web-based single point of control across z/OS, Linux, AIX, Windows, and Solaris allows you to:

- Display aggregated and detailed status of application components
- Start or stop application components on all platforms, with a single action in the right order, without detailed knowledge of either the application or the platform it resides on

Linux, AIX, Windows, Solaris, and z/OS based applications, automated by the Tivoli System Automation family, can now be integrated into the end-to-end automation of IBM Tivoli System Automation Application Manager V3.1.

**Integration with Configuration and Change Management Database**

CCMDB is the common repository for configuration items (CIs) representing IT resources. It plays a central role in IT Infrastructure Library (ITIL) service management. CCMDB is the Tivoli product for change and configuration management. One way to fill the CCMDB with content is a discovery library adapter (DLA). A DLA discovers configuration data and lets the data store it in the CCMDB.

System Automation Application Manager defines a mapping of the end-to-end resources and end-to-end relationships that it knows and manages (by virtue of an end-to-end automation
policy) to CCMDB. This mapping is based on the resource view of the System Automation Application Manager. The resources and relationships provided by System Automation Application Manager in the CCMDB can then be exploited by other products.

Integration with IBM Service Management

ISM is the IBM Tivoli solution for ITIL-based service management. Any IBM service management process is enabled to contain identified integration points to allow for the dynamic retrieval of resource information from System Automation Application Manager by means of a cross-product interface (Web service). This Web service may be used by ISM process managers such as the Business Continuity Process Manager, or any other client (IBM internal or external).

Upon invocation, System Automation Application Manager Web services will retrieve the requested information (for example, the observed state of a resource) or invoke the requested operation (for example, an online request on a resource group) and return its results to the Web service client.

Configuration GUI

The automation policies for System Automation Application Manager are defined and then stored in the form of an XML document. The System Automation administrator currently has to use a favored XML editor to define or modify the automation policy. The related drawbacks are addressed by a user interface that can be used to graphically create and modify automation policies for System Automation Application Manager without the need to edit any XML document.

This Policy GUI provides the following features:

• Editing of System Automation Application Manager automation policies
• Integration into the Integrated Solutions Console (ISC) so that it can be used in conjunction with the existing operations
• Graphical display of policy elements such as grouping constructs and relationships
• Filtering capabilities
• Integration of policy checker to detect semantical errors early

System Automation Application Manager on z/OS

z/OS is the world-class operating system that runs on System z hardware. Many customers want to use z/OS as the platform of choice for a business continuity manager to manage the continuity of their business-critical applications. In business continuity, the service continuity process manager and operational management products, such as System Automation Application Manager and GDPS, play a central role. Therefore, System Automation Application Manager can be deployed on z/OS as the trusted point of control for disaster recovery.

The GDPS DCM feature extends the capabilities of the Standard component with disaster recovery capabilities

Disaster recovery solution with Geographically Dispersed Parallel Sysplex™ (GDPS)

GDPS is the world-class disaster recovery solution for z/OS. The platform coverage for GDPS has been extended and now includes GDPS and PPRC Multiplatform Resiliency for System z (xDR) to Linux for System z.

Business continuity integrates cluster high availability, provided by System Automation for Multiplatforms, and end-to-end high availability, provided by System Automation Application Manager, with disaster recovery capabilities. In order to achieve this, shoulder tapping between System Automation Application Manager and GDPS is key. System Automation Application Manager can detect critical application and resource outages on open systems and z/OS, and notify GDPS about them. GDPS can take these notifications and use them as triggers for disaster recovery actions. In case of planned disaster recovery actions, GDPS will notify System Automation Application Manager to take appropriate and coordinated actions on open systems and z/OS; for example, to stop the workload with a modified configuration on a backup site.

Recovery time measurement and reporting

A central issue in business continuity is the management of recovery times against a Recovery Time Objective (RTO). As the first step towards management of recovery times, it is important to measure them, aggregate them, and report them in an ascending hierarchy, beginning from the recovery time of a distributed cross-platform application. This information can then be used for optimizing the configuration to ensure a given RTO. Access to the measurement is possible via an open interface. All of this is provided by the new recovery time management capabilities.
Accessibility by people with disabilities

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


Section 508 of the U.S. Rehabilitation Act

IBM Tivoli System Automation Application Manager V3.1, is capable as of May 13, 2008, when used in accordance with IBM’s associated documentation, of satisfying the applicable requirements of Section 508 of the Rehabilitation Act, provided that any assistive technology used with the product properly interoperates with it. A U.S. Section 508 VPAT, containing details on the products accessibility compliance, can be requested at


Value Unit-based pricing for System z host products

Value Unit pricing for eligible 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 want 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

Product positioning — globalization

Translation support for IBM Tivoli System Automation Application Manager V3.1 will be provided for the same languages as by the predecessor product, IBM Tivoli System Automation for
Multiplatforms end-to-end component.

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 208-097


Trademarks

HACMP, GDPS, System p, System i, System z, System x, and Geographically Dispersed Parallel Sysplex are trademarks of International Business Machines Corporation in the United States or other countries or both.

Tivoli, Parallel Sysplex, AIX, z/OS, xSeries, BladeCenter, Passport Advantage, and DB2 are registered trademarks of International Business Machines Corporation in the United States or other countries or both.

Intel is a registered trademark of Intel Corporation.

Microsoft and Windows are registered trademarks of Microsoft Corporation.

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.

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


Offering Information

Product information is available via the Offering Information Web site

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

Publications

No physical publications are shipped with this program. Product documentation is included with the program software and may be printed by the customer or ordered through the IBM Publications Center. The following English softcopy publications are included on CD-ROM and are listed below with their form number:

- IBM Tivoli System Automation Application Manager Installation and Configuration Guide, SC33-8420
- IBM Tivoli System Automation Application Manager Reference, SC33-8421

In addition, all of these publications together with the IBM Tivoli System Automation Application Manager Release Notes® SC33-8422, can be found at
Technical information

Specified operating environment

Hardware requirements: IBM Tivoli System Automation Application Manager V3.1 (both components)

For Intel®-based servers:

- System x™
- BladeCenter®
- Any 32-bit Intel-based server
- Any 64-bit AMD64 or EM64T based server

For System i™, refer to

http://www-03.ibm.com/systems/i/hardware/

For System p™, refer to

For System z™ servers:

- Any System z or predecessor server supported by z/OS® V1.7, or later

For Sun Solaris servers:

- Any Sun Solaris SPARC server (only for the VCS Solaris adapter)

Software requirements: IBM Tivoli System Automation Application Manager V3.1 supports the following operating systems:

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Bits</th>
<th>System x</th>
<th>System i</th>
<th>System p</th>
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<tr>
<td>Windows Server 2003 Enterprise Edition (1)</td>
<td>32</td>
<td>X</td>
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<tr>
<td>Windows Server 2008 Enterprise Edition (1)</td>
<td>32</td>
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</tbody>
</table>
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: For additional information, refer to the Usage restriction section of this announcement, or to the License Information document that is available on the IBM Software License Agreement Web site


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 System Automation Application Manager V3.1 is distributed with:

- International Program License Agreement (Z125-3301)
- License Information (electronic)
- CD-ROM media
- Publications (refer to the Publications section)

IBM Tivoli System Automation Application Manager V3.1 for z/OS is distributed with:

- International Program License Agreement (Z125-3301)
- License Information GI11-2704
- Program Directory GI11-2703
- 3480 Tape
- Publications (refer to the Publications section)

This program, when downloaded from a Web site, contains the applicable IBM license agreement, and License Information, if appropriate, and will be presented for acceptance at the time of installation of the program. For future reference, the license and License Information will be stored in a directory such as LICENSE.TXT.

Security, auditability, and control

IBM Tivoli System Automation Application Manager 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. 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.ibm.com/software/sw-services/

IBM Tivoli Enhanced Value-Based Pricing

IBM Tivoli software products are priced using IBM Tivoli's Enhanced Value-Based Pricing. The Enhanced Value-Based Pricing system is based upon the IBM 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 IBM 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 IBM 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 IBM 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 IBM 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 IBM 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 Integrated Coupling Facility (ICF) engines.

**Enterprise**

A person or single entity and the subsidiaries owned by more than 50% of 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 that 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 Integrated Facility for Linux.

Managed processor (charging under full capacity in the “Managed Environment”) 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 proofs of entitlement (POE) are defined in the License Information’s (LI) program-unique terms.

**Notes**

1. 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.

2. 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.

3. The program may not run on some or all of the processors for which PoEs are required by the program’s valuation method.
4. In the System z IFL environment, each IFL engine is considered a single physical processor.

5. Threading, a technique that makes a single processor seem to perform as two or more, does not affect the count of physical processors.

6. 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.

7. 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


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.

Partitions

A server's resources (CPU, memory, I/O, interconnects, and buses) may be divided according to the needs of the applications running on the server. This partitioning can be implemented with physical boundaries (physical partitions) or logical boundaries (logical partitions).

Physical partitions are defined by a collection of processors dedicated to a workload and can be used with systems that have either multiple cards or multiple frames, each of which can be configured independently. In this method, the partitions are divided along hardware boundaries and processors, and the I/O boards, memory, and interconnects are not shared.

Logical partitions are defined by software rather than hardware and allocate a pool of processing resources to a collection of workloads. These partitions, while separated by software boundaries, share hardware components and run in one or more physical partitions.

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

1. 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.

2. 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.

3. In the System z IFL environment, each IFL engine is considered a single physical processor.

4. Threading, a technique that makes a single processor seem to perform as two or more, does not affect the count of physical processors.

5. 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.
6. When a server is shipped with six processors but two of them are inactive, four processors are active for the customer.

7. 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

**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, synchronization of programs, data, or other resources (for example, active linking with another machine, program, database, or other resources, 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, 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


**Passport Advantage**

Through the Passport Advantage Agreement, you may receive discounted pricing based on their total volume of eligible products, across all IBM brands, acquired worldwide. The volume is measured by determining the total Passport Advantage points value of the applicable acquisitions. Passport Advantage points are only used for calculating the Entitled Passport Advantage discount.

To determine the required IBM Tivoli product configuration under Passport Advantage, the IBM Tivoli Enhanced Value-Based Pricing Model applies. The customer’s environment is evaluated on a per-product basis.

Use the following two-step process to determine the total Passport Advantage points value:

1. Analyze your environment to determine the number of charge units for a product. The quantity of each product's part numbers to be ordered is determined by that analysis.

2. Order the Passport Advantage part numbers. A Passport Advantage point value, which is the same worldwide for a specific part number regardless of where the order is placed, is assigned to each IBM Tivoli product part number. The Passport Advantage point value for the applicable part number, multiplied by the quantity for that part number, will determine the Passport Advantage points for that IBM Tivoli product part number. The sum of these Passport Advantage points determines the Passport Advantage point value of the applicable IBM Tivoli product authorizations, which then may be aggregated with the point value of other applicable Passport Advantage product acquisitions to determine the total Passport Advantage points value.

The discounted pricing available through Passport Advantage is expressed in the form of Suggested Volume Prices (SVPs), which vary depending on the SVP level. Each SVP level is assigned a minimum total Passport Advantage point value, which must be achieved, in order to qualify for that SVP level.

Media packs and documentation packs do not carry Passport Advantage points and are not eligible for SVP discounting.

For additional information on Passport Advantage, visit

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

The following Passport Advantage part number categories may be orderable:

- License and Software Maintenance 12 Months: This is the product authorization with maintenance to the first anniversary date.
- Annual Software Maintenance Renewal: This is the maintenance renewal for one anniversary that applies when a customer renews their existing coverage period prior to the anniversary date at which it expires.
- Software Maintenance Reinstatement 12 months: This is for customers who have allowed their Software Maintenance to expire and later want to reinstate their Software Maintenance.
- Media packs: These are the physical media such as CD-ROMs that deliver the product’s code.
- Documentation packs: These contain printed documentation such as the User’s Guide and Release Notes.
- Custom Build Registration: This is used with products that have an IBM System z component. Ordering this part number results in a process to enable the customer to receive the System z code via the z/OS Customized Offerings packaging techniques; that is, ServerPac, SystemPac®, or the Custom Build Product Delivery Option (CBPDO).

**Pricing examples**

**IBM Tivoli System Automation Application Manager**

The following examples are provided to illustrate your licensing requirements.
References to processor-based licensing do not represent the actual number of entitlements required. Entitlement requirements are Value Unit based, with the exception of IBM Tivoli Storage Manager. Processors referenced in these examples represent the designated measurement on which the required number of Value Unit entitlements will be calculated. The number of Value Units required per processor will depend on the processor type. For more information, refer to the Value Unit definition in IBM Tivoli Enhanced Value-Based Pricing terminology definitions. To determine the number of Value Unit entitlements required per processor, refer to the processor Value Unit conversion table on the Passport Advantage Web site:

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

The customer's overall environment includes:

Distributed servers

- Twenty uniprocessors
- Sixty-five 2-way servers
- Twelve 4-way servers
- One 8-way server
- One 12-way server
- One 14-way server
- One 16-way Sun Ultra server with two 8-way physical partitions (only one of which is managed by IBM Tivoli applications)
- One 24-way server
- One z800 server with two IFLs running Linux (for example, Linux on System z)

System z servers

- One System z server with two CP engines, rated at 50 MSUs

In order to manage its applicable environment, the customer will require Value Unit entitlements associated with the following number of processors.

**IBM Tivoli System Automation Application Manager V3.1 and IBM Tivoli system automation application manager for distributed Disaster Recovery V3.1**

<table>
<thead>
<tr>
<th>Systems Managed</th>
<th>Quantity in Customer Environment</th>
<th>Processor to be Licensed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uniprocessor</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>2-way</td>
<td>65</td>
<td>130</td>
</tr>
<tr>
<td>4-way</td>
<td>12</td>
<td>48</td>
</tr>
<tr>
<td>8-way</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>12-way (2 logical partitions)</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>14-way</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>16-way (2 physical partitions one of which is managed by Tivoli applications)</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>24-way</td>
<td>1</td>
<td>24</td>
</tr>
<tr>
<td>z800 server with two IFLs</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Processors to be Licensed</strong></td>
<td></td>
<td><strong>266</strong></td>
</tr>
</tbody>
</table>

**IBM Tivoli System Automation Application Manager V3.1 z/OS adapter**

<table>
<thead>
<tr>
<th>Systems Managed</th>
<th>Quantity in Customer Environment</th>
<th>Processor to be Licensed</th>
</tr>
</thead>
<tbody>
<tr>
<td>System z server with 2 CP engines</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total processors to be licensed</strong></td>
<td></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

**IBM Tivoli System Automation Application Manager on z/OS V3.1**
IBM Tivoli System Automation Application Manager is an exception to the managed environment model. Licensing is based on the managing server. Because licensing is per Value Unit (calculated based on the number of MSUs), the customer must obtain the following entitlements (see VUE020):

<table>
<thead>
<tr>
<th>MSUs</th>
<th>Value Units/MSU</th>
<th>Value Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>3</td>
<td>1.00</td>
</tr>
<tr>
<td>Tier A</td>
<td>42</td>
<td>.15</td>
</tr>
<tr>
<td>Tier B</td>
<td>5</td>
<td>.08</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>

Value Units for non MSU-based S/390 processors:

<table>
<thead>
<tr>
<th>System</th>
<th>Value Units/System</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP3000 H30</td>
<td>3</td>
</tr>
<tr>
<td>MP3000 H50</td>
<td>4</td>
</tr>
<tr>
<td>MP3000 H70</td>
<td>6</td>
</tr>
<tr>
<td>ESL Models</td>
<td>1</td>
</tr>
</tbody>
</table>

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

Notes

- Tivoli NetView® for z/OS (a separate IBM MLC offering) is a prerequisite for SA/390.
- The distributed environment that is managed by IBM Tivoli System Automation Application Manager must be separately licensed — refer to IBM Tivoli System Automation Application Manager example above.
- Value Unit calculations are per system/sysplex, using the PSLC aggregation rules.

Ordering information

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

Product group: IBM Tivoli On Demand
Product category: IBM Tivoli System Automation Application Manager

Product Identifier Description 5698-B07
IBM Tivoli System Automation Application Manager V3.1 (for z/OS)

Product Identifier Description 5698-R07
IBM Tivoli System Automation Application Manager S&S V1.1.0 (for z/OS operating system)

Product Identifier Description 5724-S92
IBM Tivoli System Automation Application Manager V3.1 (for non z/OS operating system)

Value Unit: A 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. Each program has a designated measurement. The most commonly used designated measurement is a processor core. However, for select programs, there are other designated measurements such as users or resources that may include servers, client devices, and messages. The number of Value Unit entitlements required for a program depends on how the program is deployed in your environment and must be obtained from a Value Unit table. You must obtain a PoE for the calculated number of Value Unit entitlements for your implementation. The Value Unit entitlements are specific to a program and may not be exchanged, interchanged, or aggregated with Value Unit entitlements of another program.
The programs in this announcement all have Value Unit-Based pricing.

<table>
<thead>
<tr>
<th>Program number</th>
<th>Program name</th>
</tr>
</thead>
<tbody>
<tr>
<td>5698-B07</td>
<td>IBM Tivoli System Automation Application Manager V3.1</td>
</tr>
<tr>
<td>5698-R07</td>
<td>IBM Tivoli System Automation Application Manager V3.1 S&amp;S</td>
</tr>
<tr>
<td>5724-S92</td>
<td>IBM Tivoli System Automation Application Manager V3.1</td>
</tr>
</tbody>
</table>

Value Unit Exhibit VUE020

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 VUE020

<table>
<thead>
<tr>
<th>Value Level</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Units/MSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Tier A</td>
<td>4</td>
<td>45</td>
<td>0.15</td>
</tr>
<tr>
<td>Tier B</td>
<td>46</td>
<td>175</td>
<td>0.08</td>
</tr>
<tr>
<td>Tier C</td>
<td>176</td>
<td>315</td>
<td>0.04</td>
</tr>
<tr>
<td>Tier D</td>
<td>316</td>
<td>+</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Value Units for mainframes without MSU ratings:

<table>
<thead>
<tr>
<th>HW</th>
<th>Units/machine</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP3000 H30</td>
<td>3</td>
</tr>
<tr>
<td>MP3000 H50</td>
<td>4</td>
</tr>
<tr>
<td>MP3000 H70</td>
<td>6</td>
</tr>
<tr>
<td>ESL Models</td>
<td>1</td>
</tr>
</tbody>
</table>

**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)

**Passport Advantage customer: Media pack entitlement details**

Customers with active maintenance or subscription for the products listed are entitled to receive the corresponding media pack.

**Entitled maintenance offerings**

<table>
<thead>
<tr>
<th>Sub ID Description</th>
<th>Chargeable Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CC004969 and CC005462</td>
</tr>
</tbody>
</table>
Media packs
description Part number
IBM Tivoli System Automation Application Manager BJ0LYML
V3.1.0 Medi a Pack

Entitled maintenance offerings
Sub ID description
Chargeable Component CC005463 Sub ID Number

Tiv SA AM Dist DR PVU TSAAMSB05
Tiv SA AM Dist DR Sys z PVU TSAAMSB06

Media packs
description Part number
IBM Tivoli System Automation Application Manager BJ0M9ML
Distributed Disaster Recovery V3.1.0

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.

New licensees
Orders for new licenses will be accepted now.

Shipment will begin on the planned availability date.

Basic license

Ordering information for Passport Advantage
Passport Advantage allows you to have a common anniversary date for Software Maintenance renewals, which can simplify management and budgeting for eligible new versions and releases (and related technical support) for your covered products. The anniversary date, established at the start of your Passport Advantage Agreement, will remain unchanged while your Passport Advantage Agreement remains in effect. New software purchases will initially include 12 full months of Software Maintenance. Software Maintenance in the second year (the first year of renewal) can be prorated to be coterminous with your common anniversary date. Thereafter, all Software Maintenance will renew at the common anniversary date for 12 full months of maintenance.

Refer to the IBM International Passport Advantage Agreement and to the IBM Software Support Handbook for specific terms relating to, and a more complete description of, technical support provided through Software Maintenance.

The quantity to be specified for the Passport Advantage part numbers in the following table is per required number of Value Units. To order for Passport Advantage, specify the desired part number and quantity.

Entitlement Identifier for TSAAMSB01
Description Part number
Tivoli Sys Automation App Processor Value Unit LIC SW S&S 12 MD D03K3LL
Tivoli Sys Automation App Processor Value Unit ANNUAL SW S&S RNWL E04JWLL
Tivoli Sys Automation App Processor Value Unit SW S&S REI NSTATE 12 MD D03K4LL
IBM Tivoli System Application Mgr Proc Day OOCoD Temp Use Chrg D03TRLL

Entitlement Identifier for TSAAMSB02
Part number description Part number
IBM United States Announcement 208-097 IBM is a registered trademark of International Business Machines Corporation 17
Tivoli Sys Autom App Sys Z Processor Value Unit D03K5LL

Tivoli Sys Autom App Sys Z Processor Value Unit E04JXLL

Tivoli Sys Autom App Sys Z Processor Value Unit D03K6LL

Entitlement Identifier for TSAAM5B03
Part number description Part number
Tivoli Sys Autom App Mgr for zOS Adp Proc Val Unit LIC+SW S&S 12 MO D03KFLL
Tivoli Sys Autom App Mgr for zOS Adp Proc Val Unit ANNUAL SW S&S RNWL E04JZLL
Tivoli Sys Autom App Mgr for zOS Adp Proc Val Unit SW S&S REINSTATE 12 MO D03KGLL

Entitlement Identifier for TSAAM5B04
Part number description Part number
Tiv Sys Autom App Mgr for zOS Adp SysZ PVU LIC+SW S&S 12 MO D03KDLL
Tiv Sys Autom App Mgr for zOS Adp SysZ PVU ANNUAL SW S&S RNWL E04JYLL
Tiv Sys Autom App Mgr for zOS Adp SysZ PVU SW S&S REINSTATE 12 MO D03KELL

Entitlement Identifier for TSAAM5B05
Part number description Part number
Tiv Sys Autom App Mgr for DDR Proc Value Unit LIC+SW S&S 12 MO D03PSLL
Tiv Sys Autom App Mgr for DDR Proc Value Unit ANNUAL SW S&S RNWL E04M4LL
Tiv Sys Autom App Mgr for DDR Proc Value Unit SW S&S REINSTATE 12 MO D03PTLL
IBM Tivoli System Application Mgr for DDR Proc Day OCCoD Temp Use Chrg D03TKLL

Entitlement Identifier for TSAAM5B06
Part number description Part number
Tiv Sys Autom App Mgr for DDR Sys Z PVU LIC+SW S&S 12 MO D03PQLL
Tiv Sys Autom App Mgr for DDR Sys Z PVU ANNUAL SW S&S RNWL E04M7LL
Tiv Sys Autom App Mgr for DDR Sys Z PVU SW S&S REINSTATE 12 MO D03PRLL

To order a media pack for Passport Advantage, specify the part number in the desired quantity from the following table:

<table>
<thead>
<tr>
<th>Description</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM Tivoli System Automation Application Manager V3.1.0 Media Pack</td>
<td>B0LYML</td>
</tr>
<tr>
<td>IBM Tivoli Sys Automation App Mgr for Distributed Disaster Recovery V3.1.0 Media Pack</td>
<td>B0M9ML</td>
</tr>
</tbody>
</table>

IBM Tivoli System Automation Application Manager V3.1 is also available, via Web download, from Passport Advantage.
Ordering information for 5698-B07 MSU-based System z offerings:

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 System Automation Application Manager for z/OS V3.1
Program PID: 5698-B07

<table>
<thead>
<tr>
<th>Entitlement Identifier</th>
<th>Description</th>
<th>License option/ Pricing metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>S014ZS9</td>
<td>Sys. Automation Appl. Mgr</td>
<td>Basic OTC, per Value Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Basic OTC, per MSU-day TUC</td>
</tr>
</tbody>
</table>

Orderable supply ID Language Distribution medium
S014ZVH English 3480 Tape

Subscription and Support PID: 5698-R07

<table>
<thead>
<tr>
<th>Entitlement Identifier</th>
<th>Description</th>
<th>License option/ Pricing metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>S014ZS8</td>
<td>Sys. Automation Appl. Mgr S&amp;S SW S&amp;S</td>
<td>Basic ASC, per Value Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No charge, decline SW S&amp;S</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Per MSU SW S&amp;S, registration</td>
</tr>
</tbody>
</table>

Orderable supply ID Language Distribution medium
S014ZVK 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.

Basic machine-readable material:
The distribution media features in the following table apply to program number 5698-B07 and Software Maintenance program number 5698-R07. To order, select the distribution medium feature for the desired program number.

<table>
<thead>
<tr>
<th>Language</th>
<th>Product Number</th>
<th>Feature number</th>
<th>Distribution medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>5698-B07</td>
<td>5802</td>
<td>3480 Tape</td>
</tr>
<tr>
<td>English</td>
<td>5698-R07</td>
<td>6197</td>
<td>Hardcopy Pub</td>
</tr>
</tbody>
</table>

Customized Offerings for z/OS host products

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

1 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 (IPLA), IBM International Passport Advantage Agreement, and the IBM Agreement for Acquisition of Software Maintenance.

**Terms and conditions for distributed products**

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

**Licensing:** IPLA including the LI document and PoE govern your use of the program. PoEs are required for all authorized use. Part number products only, offered outside of Passport Advantage, where applicable, are license only and do not include Software Maintenance.

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

**Agreement for Acquisition of Software Maintenance:**

The following agreement applies for maintenance and does not require customer signatures:

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

This program is licensed under the IPLA, and the associated Agreement for Acquisition of Software Maintenance, which provides for support with ongoing access to releases and versions of the program. IBM includes one year of Software Maintenance with the initial license acquisition of each program acquired. The initial period of Software Maintenance can be extended by the purchase of a renewal option, if available. 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.

**LI form number:** L-NSTL-79BP7T

The program's License Information document will be available for review on the IBM Software
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. 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. Consult the IBM Software Support Handbook for further information at


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 five years from the general availability date, as long as your 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 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 the IBM International Passport Advantage offering, this term applies only to your first acquisition of the program, and 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: Yes, and through the Passport Advantage Web site at

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

Usage restriction: Yes

Usage is limited to the quantity of Value Units licensed.

For additional information, refer to the License Information document that is available on the IBM Software License Agreement Web site


Software Maintenance applies: Yes

Software Maintenance is included with licenses purchased through Passport Advantage and Passport Advantage Express. Product upgrades and Technical Support are provided by the Software Maintenance offering as described in the Agreements. Product upgrades provide the latest versions and releases to entitled software, and Technical Support provides voice and
IBM includes one year of Software Maintenance with each program license acquired. The initial period of Software Maintenance can be extended by the purchase of a renewal option that is available.

While your 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 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, 7 days a week. For additional details, consult your IBM Software Support Handbook at

http://www14.software.ibm.com/web
app/set2/sas/f/handbook/home.html

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 the applicable agreements.

For additional information about the International Passport Advantage Agreement and the IBM International Passport Advantage Express Agreement, visit the Passport Advantage Web site at

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

System i Software Maintenance applies: No

Variable charges apply: No

Educational allowance available: Not applicable

Terms and conditions for host products

Licensing: IPLA including the LI document and 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 maintenance and does not require customer signatures:

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

This program is licensed under the IPLA, and the associated Agreement for Acquisition of Software Maintenance, which provides 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.

S/390 and System z IBM Operational Support Services — SoftwareXcel is an option for those customers who want added services.

LI form number:
L-NSTL-79BP7T

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


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. 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. Consult the IBM
Software Support Handbook for further information at

http://www14.software.ibm.com/web
app/set2/sas/f/handbook/home.html

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

**Program support:** Support for a program product will be available for a minimum of five years
from the planned availability date with a fee-based option to extend support for up to three
additional years. 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 obtained 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 OOCd) 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

**Usage restriction:** Yes

Usage is limited to the quantity of Value Units licensed.

For additional information, refer to the License Information document that is available on the IBM
Software License Agreement Web site


**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 newly announced 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, 15% education allowance applies to qualified education
institute customers.

**Sub-capacity terms and conditions for System z host products**

**On/Off CoD for z/OS host products**
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.

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Subscription and Support PID: 5698-R07

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