IBM Tivoli Security Management for z/OS V1.11 extends and simplifies compliance and audit management, administration, and monitoring of System z security

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**At a glance**

IBM® Tivoli® Security Management for z/OS® V1.11 capabilities:

- Facilitates compliance with security requirements and policies
- Leverages seamless integration with an enterprise-wide view of audit and compliance management efforts
- Monitors and audits incidents to help detect and prevent security exposures and to minimize risk
- Automates routine administrative tasks to help reduce costs and complexity, and to help improve productivity and efficiency
- Includes centralized server administration integrity, including virtual servers
- Proactively enforces policy compliance on RACF®, which can decrease RACF database pollution by helping to prevent noncompliant security commands
- Helps prevent privilege command abuse and errors by allowing selective distribution of RACF command access, verifying RACF security commands before processing, and retrieving security command information with audit trails

IBM Tivoli Security Management for z/OS V1.11 consists of a number of components. Refer to the Description section for a listing of these components.

**Overview**

IBM Tivoli Security Management for z/OS provides enterprise audit and compliance management reporting. It allows you to aggregate, analyze, and monitor for threats by auditing security changes that affect security information from z/OS, RACF, CICS®, and DB2®. As a result, you can capture comprehensive log data, interpret that data through sophisticated log analytics, and communicate results in an efficient, streamlined manner for timely follow-up investigation.

IBM Tivoli Security Management for z/OS V1.11 helps you administer your mainframe security while helping reduce administration time, effort, compliance overhead, and costs. It addresses the problem of obsolete authorizations with RACF database clean-up function and provides audit usage of resources while reporting on exceptions. It helps enforce policy compliance and provides automated access monitoring to help ensure an uncontaminated database.
What's new

• Format and analyze live Communication Server (TCP/IP) stack configuration information for auditing and alerting
• Monitor and audit configurations while also providing extended monitoring capabilities
• Support for new RACF and system management facility (SMF) fields for identity propagation
• Support Load Module Signature Verification requirements for Payment Card Industry Data Security Standard (PCI DSS)
• Report on additional z/OS UNIX® SMF events
• Integrate with CICS to deal with multiple events contained in a single CICS SMF 110 Record
• Report on IBM DFSMS™ Data Facility Storage Management Subsystem (DFSMS) Removable Media Manager (RMM) new dynamic variants
• Use MVS™ SMF format administrative commands to detect changes issued from OMEGAMON®
• Support Partitioned Data Set Extended (PDSE) member level auditing
• Audit on Internet Protocol Security (IPSEC) configuration information
• Can audit and report on security events via SMF records for IBM Tivoli Key Lifecycle Manager, IBM WebSphere® Application Server, and Object Access Method (OAM) by using SMF
• Able to deliver globalization enhancements for Double Byte Character Set (DBCS)

IBM Tivoli Security Management for z/OS V1.11 consists of a number of components. Refer to the Description section for details.

Key prerequisites

Refer to the Hardware requirements and Software requirements sections.

Planned availability date

April 23, 2010

Description

Every organization has a core set of mission-critical data that requires protection. Security lapses and failures are not simply disruptions, they can be catastrophic events with consequences felt across the enterprise. The inadvertent mistakes of privileged users alone can result in millions of dollars in damages through unintentional configuration errors and careless security commands. Malicious users with authorized access can cause even greater damage. As a result, security management faces a serious challenge to adequately protect a company’s sensitive data. Likewise, IT staff is challenged to provide detailed audit and controls documentation in the face of increasing demands on their time.

Automation and simplification of security and compliance processes can help you meet these challenges and establish effective, sustainable user administration and audit solutions. This includes security database cleanup, repeatable audit of configurations and settings, and active monitoring of changes and events. IBM Tivoli Security Management for z/OS V1.11 provides these solutions to help enhance the security of mainframe systems through automated audit and administration.

IBM Tivoli Security Management for z/OS V1.11 consists of the following components:
• IBM Tivoli zSecure Admin
• IBM Tivoli zSecure Audit
• IBM Tivoli zSecure Command Verifier
• IBM Tivoli Security Information and Event Manager
• IBM Tivoli Compliance Insight Manager Enabler for z/OS components:
  – Tivoli Compliance Insight Manager Enabler for z/OS - RACF
  – Tivoli Compliance Insight Manager Enabler for z/OS - DB2
  – Tivoli Compliance Insight Manager Enabler for z/OS - CICS

IBM Tivoli Security Management for z/OS V1.11 provides security management and is tightly integrated with RACF, enabling compliance management, security administration, user management, and security monitoring on the mainframe.

Benefits:

• Supports compliance initiatives by:
  – Providing user management, access management, and operating system controls
  – Providing audit reporting
  – Helping reduced costs through repeatable and sustainable tasks
• Helps reduce costs by:
  – Simplifying administration and implement policies
  – Managing user access control and tracking activities efficiently
• Helps contain risk by:
  – Helping you address compliance requirements, reduce operational costs, enhance security posture, and develop operational efficiencies to help recession-proof your dynamic infrastructure
  – Reducing business risk -- changes to security are now auditable and more controllable
  – Providing a single point for defining and auditing user identities and their mainframe access -- auditors can clearly see information about the users, the access granted, and who accessed what data
• Enables the company by:
  – Helping provide comprehensive security policies with consistent enforcement.
  – Providing better insight into compliance issues and priorities.
  – Delivering automated compliance reporting and audit management.
  – Offering optional best practice or regulation specific reporting
  – Tracking in the RACF database any changes to the environment including security rules. Statistical analysis can then be performed to identify those changes, which assists you with identifying obsolete permits and profiles. This provides a repeatable, less manually intensive process, thereby, freeing up valuable administrative tasks and reducing the chance for human intervention and error. As compliance requirements become increasingly focused in this area, removing and showing proof of deleting obsolete authority is key to satisfying these requirements.
• Delivers mainframe security audit reporting and compliance analysis by:
  – Helping lower cost of event collection and analysis
  – Identifying security weaknesses to help minimize the risk of costly breaches
  – Leveraging tailored reporting to generate baseline verifications of security
  – Tracking and monitoring baseline and library changes
  – Helping mitigate RACF security risks
  – Detecting system changes to help minimize security risks
  – Gathering and analyzing critical information efficiently
- Providing customized reports to meet specific needs for repeatable and sustainable tasks
- Analyzing system management facility (SMF) log files to create a comprehensive audit trail
- Providing a threat knowledge base with parameters from your active configuration
- Providing a broad range of monitoring capabilities for configuration parameters

- Enhances security administration, user management, and compliance management for IBM RACF by:
  - Automating administrative tasks to increase efficiency and reduce errors
  - Reducing security administration complexity of tasks by providing simple, one-step actions that can be performed without extensive knowledge of RACF and only minimal training
  - Identifying obsolescence in the security database to enable cleanup that can reduce security risks, reduce administrative time and cost, and make it easier to demonstrate and report on compliance
  - Identifying potential access problems quickly to help minimize the risks of security breaches
  - Enabling administrators to focus on higher value tasks to help improve security infrastructure
  - Pinpointing potential conflicts in a multiple RACF database environment
  - Enabling you to test security configuration changes without affecting production
  - Storing non-RACF data to help reduce organizational costs

- Provides mainframe policy enforcement by:
  - Helping prevent errors and noncompliant security commands
  - Helping reduce the risk of security breaches and failed audits caused by internal errors
  - Proactively enforcing policy compliance on RACF
  - Conserving resources by helping eliminate RACF cleanup time and reducing audit concerns
  - Providing alerts when risky RACF security commands are executed to help reduce chances of outages

In summary, IBM Tivoli Security Management for z/OS V1.11 helps you address compliance requirements, reduce operational costs, enhance security posture, and develop operational efficiencies to recession-proof your dynamic infrastructure.

**Accessibility by people with disabilities**

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


**Value Unit-based pricing**

Value Unit pricing for eligible IBM 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 wish 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](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**

Your investment in RACF may be enhanced with the addition of IBM Tivoli Security Management for z/OS. This offering provides integrated security audit and compliance monitoring and administration for z/OS and RACF.

For data center auditors, security managers, system programmers, and IT managers who need to monitor mainframe events and incidents, help reduce security vulnerabilities, and help enforce security policy compliance and generate audit reports, Tivoli Security Management for z/OS offers a mainframe audit solution that provides analysis and reporting of mainframe events and automatic detection of exposures through extensive status auditing. Tivoli Security Management for z/OS provides a quick understanding of user activity through an easy-to-use security compliance dashboard that summarizes log files on one overview graphic. Through this dashboard, you can quickly gain an overview of your security compliance activities, and understand security events in comparison to regulatory and acceptable-use frameworks.

For RACF administrators and IT managers who need to simplify and automate routine administrative tasks and decentralize administration control, Tivoli Security Management for z/OS offers mainframe administration capabilities that enables efficient and effective RACF administration typically using less resources and providing richer functionality. It also helps address compliance initiatives. And by implementing a repeatable process for security management, Tivoli Security Management for z/OS can help reduce errors and improve the overall quality of services.

**Reference information**

Refer to:
• Software Announcement ZP09-0441, dated November 03, 2009, IBM Tivoli zSecure V1.11
• Software Announcement ZP10-0088, dated February 23, 2010, IBM Tivoli Security Information and Event Manager V2

Program number

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<thead>
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<th>Program number</th>
<th>VRM</th>
<th>Program name</th>
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<td>1.11.0</td>
<td>IBM Tivoli Security Management for z/OS</td>
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</tbody>
</table>

Product identification number

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<th>Subscription and Support PID number</th>
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</thead>
<tbody>
<tr>
<td>5698-B43</td>
<td>5698-R43</td>
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</tbody>
</table>

Offering Information

Product information is available via the Offering Information Web site

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

Publications

Unlicensed publications

Unlicensed publications are available on the Tivoli Security Management for z/OS documentation CD provided with the product.

Table 1 lists the unlicensed publications, which are available in English. Table 2 lists the unlicensed publications. Both licensed and unlicensed publications can be viewed and downloaded from the Tivoli zSecure Information Center Web site.

Tivoli zSecure Information Center Web site


Table 1: Tivoli Security Management for z/OS - English unlicensed publications

<table>
<thead>
<tr>
<th>Title</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Command Verifier User's Guide</td>
<td>SC23-6550-03</td>
</tr>
<tr>
<td>Admin and Audit for RACF Getting Started</td>
<td>GI11-8184-04</td>
</tr>
<tr>
<td>CARLa-Driven Components Installation and Deployment Guide</td>
<td>SC23-6556-03</td>
</tr>
</tbody>
</table>

Note: Refer to the CARLa-Driven Components Installation and Deployment Guide for the IBM Tivoli Compliance Insight Manager Enabler for z/OS components.

To obtain copies of licensed publications and the documentation CD, send an e-mail to tivzos@us.ibm.com. Include your IBM customer number, form number for each publication, and contact information.

Table 2: Tivoli Security Management for z/OS - English licensed publications

<table>
<thead>
<tr>
<th>Title</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM Tivoli zSecure Admin and Audit for RACF User Reference Manual</td>
<td>LC23-6592-01</td>
</tr>
<tr>
<td>IBM Tivoli Security Information and Event Manager</td>
<td></td>
</tr>
</tbody>
</table>
The following Tivoli Security Information and Event Manager V2.0 English and translated publications may be downloaded from the following Web site

http://publib.boulder.ibm.com/tividd/td/link/tdprodlist.html#S

- Quick Start Guide (GI11-8777-00)
- Installation Guide (GI11-8778-00)
- Event Source Guide (SC23-9687-00)
- Administrators Guide (SC23-9688-00)
- Users Guide (SC23-9689-00)
- Troubleshooting Guide (SC23-9690-00)
- User Reference Guide (SC23-9691-00)
- IBM Tivoli Basel II Management Module Installation Guide (GI11-8779-00)
- IBM Tivoli COBIT Management Module Installation Guide (GI11-8780-00)
- IBM Tivoli FISMA Management Module Installation Guide (GI11-9301-00)
- IBM Tivoli GLBA Management Module Installation Guide (GI11-9302-00)
- IBM Tivoli HIPAA Management Module Installation Guide (GI11-9303-00)
- IBM Tivoli ISO27001 Management Module Installation Guide (GI11-9304-00)
- IBM Tivoli NERC CIP Management Module Installation Guide (GI11-9306-00)
- IBM Tivoli PCI-DSS Management Module Installation Guide (GI11-9307-00)
- IBM Tivoli Sarbanes-Oxley Management Module Installation Guide (GI11-9308-00)

The IBM Publications Center

http://www.ibm.com/shop/publications/order

The Publications Center is a worldwide central repository for IBM product publications and marketing material with a catalog of 70,000 items. Extensive search facilities are provided. Payment options for orders are via credit card (in the U.S.) or customer number for 20 countries. A large number of publications are available online in various file formats, and they can all be downloaded by all countries, free of charge.

**Technical information**

**Specified operating environment**

**Hardware requirements**

Refer to the Reference information section for announcements that contain details about hardware requirements for each component in IBM Tivoli Security Management for z/OS, as hardware requirements may vary among the individual components.

**Software requirements**

Refer to the Reference information section for announcements that contain details about software requirements for each component in IBM Tivoli Security Management for z/OS, as software requirements may vary among the individual components.

The program's specifications and specified operating environment information may be found in documentation accompanying the program, if available, such as a README file, or other information published by IBM, such as an announcement letter. Documentation and other program content may be supplied only in the English language.

**Planning information**
Packaging
IBM Tivoli Security Management for z/OS V1.11 is distributed with:

- International Program License Agreement (Z125-3301)
- License Information document
- Tape and DVDs
- Publications (refer to the Publications section)

Security, auditability, and control
IBM Tivoli Security Management for z/OS 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.

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.

Pricing terminology and definitions

Millions of Service Units (MSU) per hour
An MSU is defined as millions of Central Processing Unit (CPU) service units per hour; the measure of capacity used to describe the computing power of the hardware processors on which S/390® or System z software runs. Processor MSU values are determined by the hardware vendor, IBM, or Software Compatible Vendors (SCVs).

Standby or backup systems
For programs running or resident on backup machines, IBM defines three types of situations: cold, warm and hot. In cold and warm situations, a separate entitlement for the copy on the backup machine is normally not required and typically no additional charge applies. In a hot backup situation, the customer needs to acquire other license or entitlements sufficient for that server. All programs running in backup mode must be solely under the customer's control, even if running at another enterprise's location.

As a practice, the following are definitions and allowable actions concerning the copy of the program used for backup purposes.

Cold: A copy of the program may reside, for backup purposes, on a machine as long as the program is not started. There is no additional charge for this copy.

Warm: A copy of the program may reside for backup purposes on a machine and is started, but is idling, and is not doing any work of any kind. There is no additional charge for this copy.

Hot: A copy of the program may reside for backup purposes on a machine, is started, and is doing work. The customer must acquire a license or entitlements for this copy and there will generally be an additional charge.

Doing work includes, for example, production, development, program maintenance, and testing. It also could include other activities such as mirroring of transactions, updating of files, synchronization of programs, data or other resources (for example, active linking with another machine, program, database or other resource, and so on), or any activity or configurations that would allow an active hot switch or other synchronized switch over between programs, databases, or other resources to occur.
In the case of a program or system configuration that is designed to support a high availability environment by using various techniques (for example, duplexing, mirroring of files, or transactions, maintaining a heartbeat, active linking with another machine, program, database, or other resource), the program is considered to be doing work in the hot situation and a license or entitlement must be purchased.

**Value Unit (VU)**

The VU is a unit of measure by which the program can be licensed. A single price per VU is established for the program, and Proofs of Entitlement (PoE) for VUs are based on a designated measurement category (for example, MSUs capacity of a machine, engines, and messages) specified by IBM for the program which is used to calculate the required VUs based on a conversion matrix or Value Unit Exhibit (VUE). The VUE that applies to this program is VUE020 which can be found at


Value Units for this program may not be exchanged, interchanged, or aggregated with Value Units for any other program.

**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


**Program pricing**

Value Unit pricing is based upon MSUs for IBM Tivoli Security Management for z/OS.

IBM Tivoli Security Management for z/OS is z/OS-based, which means that in a full capacity environment this will be the full capacity number of MSUs of each machine where IBM Tivoli Security Management for z/OS is running. In sub-capacity pricing, because licensee's required license capacity is equal to z/OS MSUs, IBM will determine licensee's required license capacity for IBM Tivoli Security Management for z/OS by reviewing the billable z/OS MSUs shown on the Sub-Capacity Reports for the machines where IBM Tivoli Security Management for z/OS executes. Under these terms, the System z IPLA required license capacity is reevaluated based upon the monthly Sub-Capacity Reports.

In a Sysplex environment, the product must be licensed for the machine where IBM Tivoli Security Management for z/OS code is running on. If the IBM Tivoli Security Management for z/OS product is running on more than one machine, then it must be licensed for each of those machines.

Translation from MSUs to Value Units employs VUE020.

<table>
<thead>
<tr>
<th>MSUs</th>
<th>Value Units/MSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>For 1-3 MSUs</td>
<td>1. Value Unit per MSU is required.</td>
</tr>
<tr>
<td>For 4-45 MSUs</td>
<td>.15 Value Units per MSU is required.</td>
</tr>
<tr>
<td>For 46-175 MSUs</td>
<td>.08 Value Units per MSU is required.</td>
</tr>
<tr>
<td>For 176-315 MSUs</td>
<td>.04 Value Units per MSU is required.</td>
</tr>
<tr>
<td>For 316+ MSUS</td>
<td>.03 Value Units per MSU is required.</td>
</tr>
</tbody>
</table>

**System z software pricing examples**

**IBM Tivoli Security Management for z/OS V1.11 pricing explanation**

IBM Tivoli Security Management for z/OS V1.11 uses System z IPLA licensing, which means you have a one-time charge (OTC) and an (optional) annual maintenance charge, called Subscription and Support (S&S). The following descriptions are used
for System z IPLA licensing of IBM Tivoli Security Management for z/OS V1.11 program.

For customers with full capacity terms, "z/OS-based" means that the required license capacity of the program equals the MSU-rated capacity of the machines where the program is running. For customers with sub-capacity terms, "z/OS-based" means that the required license capacity of the program equals the license capacity of z/OS (and z/OS.e) on the machines where the program is running.

For customers with full capacity terms, "execution-based" means that the required license capacity of the program equals the MSU-rated capacity of the machines where the program is running. For customers with sub-capacity terms, "execution-based" means that the required license capacity of the program equals the capacity of the LPARs where the program is running.

The pricing metric for IPLA software on the mainframe is the Value Unit. Value Unit pricing is based upon MSUs for Tivoli Security Management for z/OS V1.11.

IBM Tivoli Security Management for z/OS is z/OS-based, which means that in a full capacity environment this will be the full capacity number of MSUs of each machine where Tivoli Security Manage for z/OS is running. In sub-capacity pricing, because your required license capacity is equal to z/OS MSUs, IBM will determine your required license capacity for IBM Tivoli Security Management for z/OS by reviewing the billable z/OS MSUs shown on the Sub-Capacity Reports for the machines where IBM Tivoli Security Management for z/OS executes. Under these terms, the System IPLA required license capacity is reevaluated based upon the monthly Sub-Capacity Reports.

In a Sysplex environment, the product must be licensed for the machine IBM Tivoli Security Management for z/OS V1.11 code is running on. If IBM Tivoli Security Management for z/OS V1.11 product is running on more than one machine then it must be licensed for each of those machines.

Pricing examples

The following pricing example should be used to determine required license entitlements.

If the customer has installed 1,000 MSUs, the applicable number of Value Units will be:

<table>
<thead>
<tr>
<th>Level</th>
<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>
<td>3.00</td>
</tr>
<tr>
<td>Tier A</td>
<td>42</td>
<td>0.15</td>
<td>6.30</td>
</tr>
<tr>
<td>Tier B</td>
<td>130</td>
<td>0.08</td>
<td>10.40</td>
</tr>
<tr>
<td>Tier C</td>
<td>140</td>
<td>0.04</td>
<td>5.60</td>
</tr>
<tr>
<td>Tier D</td>
<td>685</td>
<td>0.03</td>
<td>20.55</td>
</tr>
<tr>
<td>Total</td>
<td>1,000</td>
<td></td>
<td>45.85</td>
</tr>
</tbody>
</table>

When calculating the total number of Value Units, the sum is rounded up to the next integer. In this example, the customer will need to license 46 Value Units.

**Note:** IBM RACF for z/OS (a separate IBM MLC offering) is a prerequisite for IBM Tivoli Security Management for z/OS V1.11. For more information on RACF, refer to

http://www.ibm.com/racf

Transaction 1

Enterprise ABC initially wants to work with the following system configuration:

On one System z server with 1,000 MSUs, they want to run IBM Tivoli Security Management for z/OS V1.11.
<table>
<thead>
<tr>
<th>Level</th>
<th>MSUs</th>
<th>Units/MSU</th>
<th>Value Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
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<tr>
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<td>6.30</td>
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<tr>
<td>Tier B</td>
<td>130</td>
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</tr>
<tr>
<td>Tier C</td>
<td>140</td>
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</tr>
<tr>
<td>Tier D</td>
<td>685</td>
<td>0.03</td>
<td>20.55</td>
</tr>
<tr>
<td>Total</td>
<td>1,000</td>
<td></td>
<td>45.85</td>
</tr>
</tbody>
</table>

Value units rounded up 46.00

When calculating the total number of Value Units, the sum is rounded up to the next integer. The customer must purchase 46 Value Units for IBM Tivoli Security Management for z/OS V1.11.

**Transaction 2**

After the initial purchase, enterprise ABC wants to run Tivoli Security Management for z/OS V1.11 on a second System z server with 500 MSUs for a total of 1,500 MSUs in their environment. The machines must be coupled together in a qualifying parallel Sysplex environment.

<table>
<thead>
<tr>
<th>Level</th>
<th>MSUs</th>
<th>Units/MSU</th>
<th>Value Units</th>
</tr>
</thead>
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<tr>
<td>Base</td>
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<td>1.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Tier A</td>
<td>42</td>
<td>0.15</td>
<td>6.30</td>
</tr>
<tr>
<td>Tier B</td>
<td>130</td>
<td>0.08</td>
<td>10.40</td>
</tr>
<tr>
<td>Tier C</td>
<td>140</td>
<td>0.04</td>
<td>5.60</td>
</tr>
<tr>
<td>Tier D</td>
<td>1,185</td>
<td>0.03</td>
<td>35.55</td>
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<tr>
<td>Total</td>
<td>1,500</td>
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<td>60.85</td>
</tr>
</tbody>
</table>

Less Value Units from Transaction 1 (46.00)

Additional Value Units required 14.85

Total Value Units 15.00 rounded up

The customer must purchase an additional 15 Value Units for the second System z server.

**Ordering information**

Consult your IBM representative.

The programs in this announcement all have Value Unit-Based pricing.

<table>
<thead>
<tr>
<th>Program number</th>
<th>Program name</th>
<th>Value Unit exhibit</th>
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</thead>
<tbody>
<tr>
<td>5698-B43</td>
<td>IBM Tivoli Security Management for z/OS V1.11</td>
<td>VUE020</td>
</tr>
</tbody>
</table>

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

Value Units for mainframes without MSU ratings:

<table>
<thead>
<tr>
<th>HW</th>
<th>Value 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


**Basic license**

**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.

**Current licensees**

Current licensees of IBM Tivoli Security Management for z/OS V1.11 must place a new order for the desired distribution medium.

**New licensees**

Orders for new licenses will be accepted now.

Shipment will begin on the planned availability date.

**Basic license**

The following table shows the conversion from MSUs to Value Units.

<table>
<thead>
<tr>
<th>VUE020</th>
<th>MSUs</th>
<th>Value Units/MSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>1-3</td>
<td>1.00</td>
</tr>
<tr>
<td>Tier A</td>
<td>4-45</td>
<td>0.15</td>
</tr>
<tr>
<td>Tier B</td>
<td>46-175</td>
<td>0.08</td>
</tr>
<tr>
<td>Tier C</td>
<td>176-315</td>
<td>0.04</td>
</tr>
<tr>
<td>Tier D</td>
<td>316+</td>
<td>0.03</td>
</tr>
</tbody>
</table>

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.

**Ordering information for Value Unit pricing**

Program name: IBM Tivoli Security Management for z/OS V1.11
Program PID: 5698-B43

<table>
<thead>
<tr>
<th>Entitlement identifier</th>
<th>Description</th>
<th>License option/ Pricing metric</th>
</tr>
</thead>
</table>

IBM Europe, Middle East, and Africa
Software Announcement ZP10-0132
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. 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.

Delivery services - Custom QuickShip Program

This product is eligible for the IBM Custom QuickShip Program.

Custom QuickShip combines flexible configurations with fast delivery. Customers and Business Partners are able to create product configuration of their choice by using a combination or standalone selection of hardware, software, and a menu of additional features, including the option for software preload. The inclusion of feature number 1748 will ensure Custom QuickShip delivery of the complete product configuration or standalone order.

The committed response time under Custom QuickShip is six business days from order acceptance by IBM to customer delivery.

Customized Offerings

Product deliverables are shipped only via Customized Offerings (for example, CBPDO, ServerPac, 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
Media type for this software product is chosen during the Customized Offerings ordering process. Based on your customer environment, it is recommended that the highest possible density tape media is selected. Currently offered media types are:

- CBPDOs - 3480, 3480 Compressed, 3490E, 3590, 3592*
- ServerPacs - 3480, 3480 Compressed, 3490E, 3590, 3592*
- SystemPacs - 3480, 3480 Compressed, 3490E, 3590, 3592*

*3592 is highest density media. Selecting 3592 will ship the fewest number of media.

Once a product becomes generally available, it will be included in the next ServerPac and SystemPac monthly update.

Production of software product orders will begin on the planned general availability date.

- CBPDO shipments will begin one week after general availability.
- ServerPac shipments will begin 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, 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 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 Software Subscription and Support (Software Maintenance) and does not require customer signatures:

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

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. 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.

IBM System z Operational Support Services - SoftwareXcel is an option if you desire added services.

**License Information form number**

License Information form number: L-JSCK-82HRACY

The program’s License Information will be available for review on the IBM Software License Agreement Web site
Limited warranty applies  
Yes

Money-back guarantee  
If for any reason you are dissatisfied with the program and you are the original licensee, you may obtain a refund of the amount you paid for it, if within 30 days of your invoice date you return the program and its PoE to the party from whom you obtained it. If you downloaded the program, you may contact the party from whom you acquired it for instructions on how to obtain the refund.

For clarification, note that for programs acquired under any of IBM's On/Off Capacity on Demand (On/Off CoD) software offerings, this term does not apply since these offerings apply to programs already acquired and in use by you.

Authorization for use on home/portable computer  
You may not copy and use this program on another computer without paying additional license fees.

Other terms

Volume orders (IVO)  
No

IBM International Passport Advantage Agreement  
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 Subscription and Support (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 Software Subscription and Support (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

System i Software Maintenance applies  
No

Variable charges apply  
No

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.

**Sub-capacity terms and conditions**

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

For more information on the Value Unit Exhibit for the System z IPLA program you selected, refer to the **Ordering information** section.

<table>
<thead>
<tr>
<th>Program number</th>
<th>Program name</th>
<th>Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>5698-B43</td>
<td>IBM Tivoli Security Management for z/OS</td>
<td>z/OS-based</td>
</tr>
</tbody>
</table>

**Full-capacity mainframes**

In cases where full capacity is applicable, the following terms apply.

Execution based, z/OS based, full machine based: The required capacity of a System z IPLA program with these terms equals the MSU-rated capacity of the machines where the System z IPLA program executes.

For more information on mainframe MSU-rated capacities, visit


Reference based: The required license capacity of a System z IPLA program with these terms equals the license capacity of the applicable monthly license charge (MLC) program. This MLC program is called the parent program.
**Sub-capacity mainframes**

In cases where sub-capacity is applicable, the following terms apply.

Execution based: The required capacity of a System z IPLA sub-capacity program with these terms equals the capacity of the LPARs where the System z IPLA program executes.

z/OS based: The required license capacity of a System z IPLA program with these terms equals the license capacity of z/OS on the machines where the System z IPLA program executes.

Reference based: The required license capacity of a System z IPLA program with these terms equals the license capacity of the applicable monthly license charge (MLC) program. This MLC program is called the parent program.

Full machine based: The required license capacity of a System z IPLA program with full machine based terms equals the MSU-rated capacity of the machines where the System z IPLA program executes.

For more information on mainframe MSU-rated capacities, refer to *The IBM System z Machines Exhibit, Z125-3901*, or visit the Mainframes section of the System z Exhibits Web site

http://ibm.com/zseries/library/swpriceinfo/

For more information on sub-capacity System z IPLA terms and conditions, refer to Software Announcement ZA04-0227, dated August 10, 2004.

For additional information for products with reference-based terms, System z IPLA sub-capacity programs with reference-based terms adds value to the parent program across the environment, regardless of where in the environment the System z IPLA program executes.

An environment is defined as either a single or stand-alone machine or a qualified Parallel Sysplex®. You may have one or more different environments across the enterprise. To determine the required license capacity for each System z IPLA program with referenced-based terms, each environment should be assessed separately.

When a System z IPLA sub-capacity program with reference-based terms is used in a qualified Parallel Sysplex environment, the required license capacity of the System z IPLA program must equal with the license capacity of the parent program across the Parallel Sysplex. Qualified Parallel Sysplex refers to one:

- That meets the criteria defined in Hardware Announcement ZA98-0120, dated January 13, 1998
- Where MLC pricing is aggregated across the sysplex

**Sub-capacity eligibility**

To be eligible for sub-capacity charging on select System z IPLA programs, you must first implement and comply with all terms of either sub-capacity Workload License Charges (WLC) or sub-capacity Entry Workload License Charges (EWLC). To implement sub-capacity WLC or EWLC, a machine must be System z (or equivalent). On that machine:

- All instances of the OS/390® operating system must be migrated to the z/OS operating systems
- Any licenses for the OS/390 operating system must be discontinued
- All instances of the z/OS operating systems must be running in z/Architecture® (64-bit) mode

For that machine, you must create and submit a Sub-Capacity Report to IBM each month. Sub-Capacity Reports must be generated using the Sub-Capacity Reporting
IBM is a registered trademark of International Business Machines Corporation

You must comply with all of the terms of the WLC or EWLC offering, whichever is applicable:

- The complete terms and conditions of sub-capacity WLC are defined in the IBM Customer Agreement - Attachment for System z Workload License Charges (Z125-6516).
- The complete terms and conditions for sub-capacity EWLC are defined in the IBM Customer Agreement - Attachment for IBM System z 890 and 800 License Charges (Z125-6587).

Additionally, you must sign and comply with the terms and conditions specified in the amendment to the IPLA contract - Amendment for IBM System z9® and System z Programs Sub-Capacity Pricing (Z125-6929). Once the amendment is signed, the terms in the amendment replace any and all previous System z IPLA sub-capacity terms and conditions.

IBM Getting Started Sub-capacity Pricing for z/OS IPLA Software applies.

**Sub-capacity utilization determination**

Sub-capacity utilization is determined based on the utilization of an eligible operating system and machine (for example, z/OS running in z/Architecture (64 bit) mode on a System z ((or equivalent) server) server).

**On/Off Capacity on Demand (CoD)**

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.

**IBM Electronic Services**

IBM has transformed its delivery of hardware and software support services to help you achieve higher system availability. Electronic Services is a Web-enabled solution that offers an exclusive, no-additional-charge enhancement to the service and support available for IBM servers. These services are designed to provide the opportunity for greater system availability with faster problem resolution and preemptive monitoring. Electronic Services comprises two separate, but complementary, elements: Electronic Services news page and Electronic Services Agent.

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

The Electronic Service Agent™ is no-additional-charge software that resides on your server. It monitors events and transmits system inventory information to IBM on a periodic, client-defined timetable. The Electronic Service Agent automatically reports hardware problems to IBM. Early knowledge about potential problems enables IBM to deliver proactive service that may result in higher system availability and performance. In addition, information collected through the Service Agent is made available to IBM service support representatives when they help answer your questions or diagnose problems. Installation and use of IBM Electronic Service Agent for problem reporting enables IBM to provide better support and service for your IBM server.
To learn how Electronic Services can work for you, visit

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

**Prices**

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**Announcement countries**

All European, Middle Eastern, and African countries except Iran, Sudan, and Syria.

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