



# IBM Tivoli Advanced Reporting and Management for DFSMSHsm V2.4 delivers enhanced administration of the DFSMSHsm environment

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## At a glance

IBM® Tivoli® Advanced Reporting and Management for DFSMSHsm™ V2.4 helps users monitor and maintain a healthy, efficient DFSMSHsm environment by delivering:

- Daily reporting, filtering, masking, and analysis tools
- An interactive display with customizable reporting capabilities
- Real-time historical and trending data
- Capability to reorganize DFSMSHsm Control Data Sets (CDS) while started tasks are active
- Capability to rename, move, or enlarge DFSMSHsm CDSs without the need to schedule application downtime
- Reports that show the cost for a DFSMSHsm task to do successful and unsuccessful work

For ordering, contact Your IBM representative or an IBM Business Partner.  
For more information contact the Americas Call Centers at  
800-IBM-CALL (426-2255).

Reference: LE001

## Overview

With V2.4, IBM Tivoli Advanced Reporting for DFSMSHsm is renamed IBM Tivoli Advanced Reporting and Management for DFSMSHsm. IBM Tivoli Advanced Reporting and Management for DFSMSHsm V2.4 is a powerful tool that helps manage critical aspects of the Data Facility Storage Management Subsystem (DFSMS™) hierarchical storage manager (HSM) environment. It provides:

- An interactive display with customizable reporting capabilities
- Daily reporting, filtering, masking, and analysis to help manage the DFSMSHsm environment
- Real-time and historical trending data that can help optimize the DFSMSHsm environment
- Insight to help reduce the cost of operating the DFSMSHsm environment
- Capability for technical staff to:
  - See, know, and act upon situations in DFSMSHsm from within the product

- Build custom automation scripts

New in V2.4:

- Administration enhancements to provide the user with critical information about HSM activity and work from within the product. Examples are:
  - Capability to reorganize any or all DFSMShsm Control Data Sets (CDS) while the started tasks are active, which can help improve performance without disrupting operations.
  - Capability to rename, move, or enlarge any DFSMShsm CDSs without the need to schedule application downtime. This can be performed during a time when experienced technical staff is on site.
- Reports that show what it costs for a DFSMShsm task to do successful and unsuccessful work. These reports can help you tune your DFSMShsm environment to run at optimum performance without wasting valuable resources. The user can report on any HSM action by user ID, volume, dates, storage management subsystem (SMS), and so on. The user can better tune DFSMShsm resources, which can help reduce CPU cost.

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## Key prerequisites

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Refer to the [Technical information](#) section.

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## Planned availability date

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February 11, 2011

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## Description

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IBM Tivoli Advanced Reporting and Management for DFSMShsm V2.4 is part of IBM's System z® storage management offerings, a tightly integrated cluster of products that provide key capabilities to help manage key aspects of the System z storage environment. The IBM Tivoli storage management offerings for System z help storage administrators:

- Better manage the performance and availability of the storage environment
- Meet service-level agreements (SLAs) and internal and external regulatory requirements
- Reduce operational risks in the storage infrastructure by detecting potential problems before they can cause outages or data loss

The Tivoli storage management offerings for System z deliver a robust portfolio of software, enabling you to automate tasks such as storage administration, storage allocation, Integrated Catalog Facility (ICF) catalog management, IBM DFSMShsm, tape device sharing, tape data stacking, and even disaster recovery. In addition, these capabilities are accessible from a single, easy-to-use graphical user interface (GUI), utilizing the Tivoli Enterprise Portal (TEP).

Helping ensure the availability of the data sets that are managed by DFSMShsm requires daily analysis of its functions. To help maximize productivity, DFSMShsm administrators need pertinent information about DFSMShsm functions in a straightforward, interactive format. Tivoli Advanced Reporting and Management for DFSMShsm V2.4 is a powerful reporting tool that helps gather critical information from the DFSMShsm environment and creates an interactive display with customizable reporting capabilities, and provides at-a-glance graphical views of status through the TEP.

New in V2.4:

### **Administration capabilities**

- Can reorganize CDSs while the DFSMSHsm started task is active
- Can move DFSMSHsm CDSs to a new volume without the need to either stop or bring the started task down
- Can rename or change the attributes of the DFSMSHsm CDSs without the need to bring the started task down

### **Tuning capabilities**

- Can report on what it costs for DFSMSHsm tasks to do successful and unsuccessful scheduled and requested work
- Can tune a DFSMSHsm environment to help reduce redundant or unneeded workload

In addition, Tivoli Advanced Reporting and Management for DFSMSHsm V2.4 delivers several new DFSMSHsm cost and tuning reports.

With V2.4, the following functions continue to be provided by Tivoli Advanced Reporting and Management for DFSMSHsm.

### **Reporting**

Tivoli Advanced Reporting and Management for DFSMSHsm V2.4 provides reporting on:

- DFSMSHsm automatic and on demand tasks
- Historical data within the CDS
- Real-time information from CDS and Log files, with user-controlled comparison and analysis periods
- Completion status of the DFSMSHsm automatic scheduled functions

### **Filtering and masking**

Tivoli Advanced Reporting and Management for DFSMSHsm V2.4 can be used to filter and mask data. It can:

- Filter and mask customized reports
- Filter specific data in the DFSMSHsm environment
- Mask data set names in filters using DFSMS automatic class selection
- Perform Automatic Class Selection (ACS) masking and wild card operations, such as LIKE and UNLIKE

### **Data display and analysis**

Tivoli Advanced Reporting and Management for DFSMSHsm V2.4 helps users analyze DFSMSHsm information so they can identify problem areas and assess the impact of potential changes. Tivoli Advanced Reporting and Management for DFSMSHsm V2.4:

- Helps validate ACS routine logic and manage class assignments
- Exports data and automatically creates charts and graphs to help with visual trending, space analysis, and resource utilization
- Helps users collect log x and log y data over multiple days for in-depth analysis and review of work performed

### **Error correction**

Tivoli Advanced Reporting and Management for DFSMSHsm V2.4 can issue DFSMSHsm, IDCAMS, and other commands to help correct error conditions in

the DFSMSHsm environment. Tivoli Advanced Reporting and Management for DFSMSHsm V2.4:

- Assists with issuing DFSMSHsm corrective commands toward one or all of the data elements matching specified criteria
- Provides the capability to perform "what-if" analysis before a change is made
- Can improve messages and user help to make it easier to interpret status and take appropriate corrective action

### **Integrates with the IBM Tivoli Monitoring infrastructure through the TEP**

Tivoli Advanced Reporting and Management for DFSMSHsm V2.4 integrates with the IBM Tivoli Monitoring V6.2 infrastructure components that enable it to supply TEP with key business performance metrics for enhanced visualization and correlation within new workspaces, as well as with other IBM Tivoli Monitoring V6.2 monitored systems. This integration delivers a single GUI through TEP, which is used by many IBM Tivoli monitoring and management products to help discover and investigate problems, and take immediate corrective actions.

If you have not separately purchased a license to IBM Tivoli Monitoring V6.2, you can obtain the TEP-based function by acquiring a no-charge, limited use license to IBM Tivoli Management Services on z/OS®, V6.2 (5698-A79). This limited use license is subject to usage restriction on use of the various IBM Tivoli Monitoring V6.2 components.

### **IBM Tivoli Service Management Center for System z (SMCz)**

SMCz is an IBM Service Management-based methodology and unified product suite designed to increase the availability of business-critical IT services as well as their stability. It focuses on helping users to more easily program, manage, and administer a mainframe, which is the most robust platform from which to run the business of the enterprise.

Among the many hard dollar business values it endeavors to bring to the user's enterprise, SMCz may:

- Help optimize productivity of IT personnel and increase end-user satisfaction
- Align IT operations and the business objectives from a service assurance perspective
- Align and support the IT Infrastructure Library® (ITIL®) processes within the enterprise

SMCz solutions help to:

- Provide the required visibility, control, and automation across the service, technical support, operations, security, and financial domains
  - Visibility: Users have a single, integrated view of critical applications on the mainframe, showing the linkages between IT assets and business applications.
  - Control: Users can customize views to support such functions as business services, services requests, finance, security, IT production, support, and operational control.
  - Automation: Based on needs, SMCz combines process automation software such as IBM Tivoli Change and Configuration Management Database, IBM Tivoli Application Dependency Discovery Manager, IBM Tivoli Business Service Manager, and IBM Tivoli Service Request Manager.
- Enable the transformation from a System z resource management focus to a centralized System z service management mode

One of the key components of SMCz is System z storage management software from IBM Tivoli. Because IBM Tivoli software provides a rich set of System z storage management offerings to help IT organizations address today's enterprise challenges, organizations can benefit from a comprehensive System z storage management solution that bridges silos of people, technology, processes, and information with increased IT operational efficiency and effectiveness.

In addition to traditional Interactive System Productivity Facility (ISPF), batch interfaces, or both, IBM Tivoli System z storage management offerings use TEP to provide simplified GUIs that help IT staff, who are new to the platform, learn and execute operational tasks. TEP integrates many IBM offerings, creating synergy across the solution. TEP interfaces aggregate and combine performance and availability operational data from many sources, helping to reduce the time and skills needed to diagnose problems and take corrective actions.

An organization may be able to leverage a new generation of workers as it grows and maintains System z skills. The System z storage solution helps manage disk and tape storage environments and hierarchical storage environments (including tapes) more efficiently and effectively.

Key functions:

- Helps prevent storage-related abends
- Helps monitor workload inputs and outputs
- Helps manage performance and availability of both online and offline storage subsystems
- Helps ensure the health and efficiency of the IBM DFSMSHsm environment
- Provides backup and recovery
- Checks health
- Helps maintain the critical Integrated Catalog Facility (ICF) catalogs and Virtual Storage Access Method (VSAM) files
- Shares tapes across sysplexes

The IBM System z storage management portfolio includes the following component products (refer to the website following the product name for product information).

- IBM Tivoli OMEGAMON® XE for Storage on z/OS  
<http://www.ibm.com/software/tivoli/products/omegamon-xe-storage/>
- Tivoli Advanced Reporting and Management for DFSMSHsm  
<http://www.ibm.com/software/tivoli/products/adv-reporting/>
- IBM Tivoli Advanced Audit for DFSMSHsm  
<http://www.ibm.com/systems/storage/software/toolkit/advaudit.html>
- IBM Tivoli Advanced Catalog Management for z/OS  
<http://www.ibm.com/systems/storage/software/toolkit/acm.html>
- IBM Tivoli Advanced Allocation Management  
<http://www.ibm.com/software/tivoli/products/allocation-optimizer-zos/>
- IBM Tivoli Tape Optimizer on z/OS  
<http://www-306.ibm.com/software/tivoli/products/tape-optimizer-zos/>
- IBM Tivoli Automated Tape Allocation Manager for z/OS  
<http://www-306.ibm.com/software/tivoli/products/automated-tape-alloc-mgr-zos/>
- IBM Tivoli Advanced Backup and Recovery for z/OS  
<http://www-306.ibm.com/software/tivoli/products/advanced-bkp-recovery-zos/index.html>

### Entitlement information

If you have the current offering listed in the table below, you are entitled to IBM Tivoli Advanced Reporting and Management for DFSMSHsm V2.4. You can move your Subscription and Support entitlements based on the current Subscription and Support pricing of the replacement offering. You must be current on Software Subscription and Support (also referred to as Software Maintenance) to be eligible for move of Subscription and Support entitlements. If you are not current on Software Subscription and Support, you will have to pay a get-current or Software Subscription and Support reinstatement fee.

The Subscription and Support entitlement move is for the same capacity as currently licensed when moving to the replacement offering. You are entitled to use the software on the same systems that you are currently managing.

For more information on move of Subscription and Support entitlements, contact your IBM representative.

Existing entitlement			Replacement entitlement		
License PID	S&S PID	Program description	License PID	S&S PID	Program description
5698-B14	5698-S98	IBM Tivoli Advanced Reporting for DFSMSHsm V2.3	5698-B14	5698-S98	IBM Tivoli Advanced Reporting and Management for DFSMSHsm V2.4

### **Accessibility by people with disabilities**

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

[http://www.ibm.com/able/product\\_accessibility/index.html](http://www.ibm.com/able/product_accessibility/index.html)

### **Value Unit-based pricing**

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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 website

<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.

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## Program number

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Program number	VRM	Program name
5698-B14	2.4	IBM Tivoli Advanced Reporting and Management for DFSMSHsm

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## Product identification number

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Program PID number	Subscription and Support PID number
5698-B14	5698-S98

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## Education support

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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

<http://www-306.ibm.com/software/tivoli/education/>

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## Offering Information

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Product information is available via the Offering Information website

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

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## Publications

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The following hardcopy publications are shipped with the basic machine-readable material.

Title	Order number
IBM Tivoli Advanced Reporting for DFSMSHsm: Program Directory	GI11-8942
IBM Tivoli Advanced Reporting for DFSMSHsm: Quick Start Memo	GI11-8943

The publications listed below can be downloaded from the following website after the planned availability date.

<http://www-306.ibm.com/software/tivoli/library/>

Title	Order number
IBM Tivoli Advanced Reporting for DFSMSHsm: User's Guide	SC27-2350

IBM Tivoli Advanced Reporting for DFSMSHsm: SC27-2351  
Monitoring Agent Planning and Configuration Guide  
IBM Tivoli Advanced Reporting for DFSMSHsm: SC27-2352  
Monitoring Agent User Guide

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, where IBM does business.

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## Technical information

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### **Specified operating environment**

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#### **Hardware requirements**

Any machine capable of running IBM z/OS V1.10, or later.

#### **Software requirements**

IBM z/OS V1.10, or later running DFSMSHsm.

To run the Tivoli Enterprise Monitoring Agent and its TEP interface, the following software is required:

- IBM Tivoli Monitoring Services on z/OS, V6.2.2 or Tivoli Monitoring V6.2.2
- One of the following operating systems for the TEP interface:
  - Microsoft® Windows®
  - Linux®
  - UNIX®

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**

Required access:

- At least one authorized program facility (APF) authorized load library.
- DFSMSHsm and security access is required to issue DFSMSHsm commands.
- Access to read the DFSMSHsm control data set is required.

### **Planning information**

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#### **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**

Tivoli Advanced Reporting and Management for DFSMSHsm V2.4 is distributed with:

- International Program License Agreement (Z125-3301)
- License Information document
- 3590 tape cartridge
- Publications (refer to the [Publications](#) section)

This program, when downloaded from a website, 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**

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Tivoli Advanced Reporting and Management for DFSMSHsm V2.4 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.

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## **Software Services**

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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/>

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## **Licensing metric definitions and pricing examples**

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### **Licensing metric definitions**

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#### **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, which require Proofs of Entitlement (PoEs), are defined in the License Information's 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® website:

<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, go to

<http://www-03.ibm.com/systems/z/resources/swprice/>

### **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

Value Unit is a unit of measure by which the program can be licensed. Value Unit Proofs of Entitlement are based on the number of units of users or a specific resource used or managed by the program. Licensee must obtain sufficient entitlements for the number of Value Units required for licensee's environment as specified in the table below. Value Unit entitlements are specific to program and may not be exchanged, interchanged, or aggregated with Value Unit entitlements of another program.

### Pricing example

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The following pricing example applies to Tivoli Advanced Reporting and Management for DFSMSHsm V2.4.

System z server = one 1,500 MSU System z server

The product in this example employs Value Unit slope VUE007 (VUE = Value Unit Exhibit). The scales below are used to calculate the equivalent number of Value Units for a specified number of MSUs.

In the example below, if the customer has installed 1,500 MSUs, the applicable number of Value Units is:

MSUs		Value Units/MSU	Value Units
Base	3	1.00	3.00
Tier A	42	.45	18.90
Tier B	130	.36	46.80
Tier C	140	.27	37.80
Tier D	1,185	.20	237.00
Total	1,500		343.50

When calculating the total number of Value Units, the sum is rounded up to the next integer. In this example, the customer needs to license 344 Value Units.

Value Units for non MSU-based System z processors:

System	Value Units/System
MP3000 H30	6
MP3000 H50	8
MP3000 H70	12
ESL models	2

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

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## Ordering information

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The program in this announcement has Value Unit-Based pricing.

Program number	Program name	Value Unit exhibit
5698-B14	IBM Tivoli Advanced Reporting and Management for DFSMSHsm V2.4	VUE007

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 VUE007

	MSUS minimum	MSUS maximum	Value Units/MSU
Base	1	3	1
Tier A	4	45	0.45
Tier B	46	175	0.36
Tier C	176	315	0.27
Tier D	316	+	0.2

Value Units for mainframes without MSU ratings:

Hardware      Value Units/machine

MP3000 H30	6
MP3000 H50	8
MP3000 H70	12
ESL models	2

### 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 website at

<http://www14.software.ibm.com/webapp/ShopzSeries/ShopzSeries.jsp>

### Current licensees

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Current licensees, with support in effect, will receive instructions on how to order this update.

### New licensees

Orders for new licenses will be accepted now.

Shipment will begin on the planned availability date.

### Basic license

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### Ordering information for 5698-xxx MSU-based System z offerings:

Translation from MSUs to value units

	MSUs	Value Units/MSU
Base	1-3	1.00
Tier A	4-45	.45
Tier B	46-175	.36
Tier C	176-315	.27
Tier D	316+	.20

When running on the z/OS platform, IBM Tivoli Management Services on z/OS, V6.2.2, or later may be a corequisite to IBM Tivoli Advanced Reporting and Management for DFSMSshm V2.4 if you want to use the Tivoli Enterprise Monitoring

Agent (TEMA) for IBM Tivoli Advanced Reporting and Management for DFSMSHsm V2.4 and do not already have IBM Tivoli Monitoring V6.2.2, or later in your enterprise. To obtain a limited use, no charge license for IBM Tivoli Management Services on z/OS, V6.2.2, you must place a separate order for program number 5698-A79 and agree to the terms of the IBM license for that program.

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 Advanced Reporting and Management for  
DFSMSHsm V2.4  
Program PID: 5698-B14

Entitlement identifier	Description	License option/ Pricing metric
S014J5K	IBM Tivoli Advanced Reporting and Management for DFSMSHsm	Basic OTC, per Value Unit Basic OTC, per MSU-day TUC
Orderable supply ID	Language	Distribution medium
S014J66	English	3590 tape cartridge

Subscription and Support PID: 5698-S98

Entitlement identifier	Description	License option/ Pricing metric
S013W98	IBM Tivoli Advanced Reporting and Management for DFSMSHsm S&S	Basic ASC, per Value Unit SW S&S No charge, decline SW S&S Per MSU SW S&S registration
Orderable supply ID	Language	Distribution medium
S013W99	English	Hardcopy publication

### 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 the product, via a separately purchased offering, under the terms of the IBM International Agreement for Acquisition of Software 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 you to future releases and versions, at no additional charge. Note that you are not entitled to new products.

When Subscription and Support is ordered, the charges will automatically renew annually unless cancelled by you.

### Customized Offerings

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Product deliverables are shipped only via CBPDO, ServerPac, SystemPac®.

CBPDO and ServerPac are offered for Internet delivery in countries where ShopzSeries product ordering is available. Internet delivery reduces software

delivery time and allows you to install software without the need to handle tapes. For more details on Internet delivery, refer to the ShopzSeries help information at

<http://www.software.ibm.com/ShopzSeries>

You choose the delivery method when you order the software. IBM recommends Internet delivery. In addition to Internet and DVD, the supported tape delivery options for CBPDO, ServerPac, and SystemPac, include:

- 3590
- 3592

Most products can be ordered in ServerPac and SystemPac the month following their availability on CBPDO. z/OS can be ordered via all three offerings at general availability. 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 general availability
- SystemPac shipments will begin four weeks after general availability due to additional customization, and data input verification.

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## **Terms and conditions**

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The information provided in this announcement letter is for reference and convenience purposes only. The terms and conditions that govern any transaction with IBM are contained in the applicable contract documents such as the IBM International Program License Agreement, IBM International Passport Advantage Agreement, and the IBM Agreement for Acquisition of Software Maintenance.

### ***Licensing***

IBM International Program License Agreement including the License Information document and Proof of Entitlement (PoE) govern your use of the program. PoEs are required for all authorized use.

### ***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)

This program is 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. 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.

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

### ***License Information form number***

GI11-8944. The program's License Information will be available for review on the IBM Software License Agreement website

<http://www.ibm.com/software/sla/sladb.nsf>

### ***Limited warranty applies***

Yes

### ***Limited warranty***

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

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

<http://www.ibm.com/support/handbook>

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

### ***Program support***

Support for the program product will be available for a minimum of three years from the general availability date, as long as your Software Subscription and Support (also referred to as Software Maintenance) is in effect. 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. 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 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.

### ***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 website

<http://www.ibm.com/software/sla/sladb.nsf>

**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>

**IBM Operational Support Services - SoftwareXcel**

Yes

**System i Software Maintenance applies**

No

**Variable charges apply**

No

**Educational allowance available**

Yes. A 15% education allowance applies to qualified education institution customers.

**Sub-capacity terms and conditions**

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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.

Program number	Program name	Terms
5698-B14	IBM Tivoli Advanced Reporting and Management for DFSMSHsm	z/OS-based

**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

<http://www-1.ibm.com/servers/eserver/zseries/library/swpriceinfo/>

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 website

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

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:

- 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 Tool (SCRT). For additional information or to obtain a copy of SCRT, visit the System z Software Pricing website

<http://ibm.com/zseries/swprice>

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.

### **Sub-capacity utilization determination**

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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).

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

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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 IBM System z On/Off Capacity on Demand (Z125-7883) must be signed prior to use.

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## **IBM Electronic Services**

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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>

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## **Prices**

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Information on charges is available at website

<http://www.ibm.com/support>

In the Electronic tools category, select the option for Purchase/upgrade tools.

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## Order now

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To order, contact your local IBM representative or your IBM Business Partner.

To identify your local IBM Business Partner or IBM representative, call 800-IBM-4YOU (426-4968). For more information, contact the Americas Call Centers.

Phone: 800-IBM-CALL (426-2255)  
Fax: 800-2IBM-FAX (242-6329)  
For IBM representative: [callserv@ca.ibm.com](mailto:callserv@ca.ibm.com)  
For IBM Business Partner: [pwswna@us.ibm.com](mailto:pwswna@us.ibm.com)

Mail: IBM Teleweb Customer Support  
ibm.com® Sales Execution Center, Americas North  
3500 Steeles Ave. East, Tower 3/4  
Markham, Ontario  
Canada L3R 2Z1

Reference: LE001

The Americas Call Centers, our national direct marketing organization, can add your name to the mailing list for catalogs of IBM products.

**Note:** Shipments will begin after the planned availability date.

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