IBM Tivoli Tape Optimizer on z/OS V1.2 delivers a tape copy and stacking solution for data residing on tape storage devices

Overview

IBM Tivoli® Tape Optimizer on z/OS V1.2 is a tape copy and stacking solution for data residing on tape storage devices that are managed by Data Facility Storage Management Subsystem removable media manager (DFSMSrmm). IBM Tivoli Tape Optimizer on z/OS V1.2 can copy tape volumes to other tapes or tape-compatible storage for the z/OS environment while:

- Renaming tape data sets
- Preserving DFSMSrmm tape library information
- Updating the system catalog for the copied tapes

You can copy a single tape or data set, or potentially your entire tape library. This capability helps make it easier to migrate large amounts of tape data to or from virtual tape servers (VTS) or high-density cartridge tapes.

You can use IBM Tivoli Tape Optimizer on z/OS V1.2 to:

- Load or unload data from virtual tape libraries
- Create tape copies of data for testing or off-site storage
- Move data off of old tapes that are starting to degrade
- Help optimize tape media and storage devices by stacking data

New in V1.2

- Can copy individual tape data sets by name, expiration date, catalog status, and many other filter criteria
- Has additional options for renaming tape data sets during copy operations

- Includes enhanced support for 3592 tape drives and high-capacity tape media
- Includes options that continue copy processing after certain types of failures or errors, such as tape I/O errors
- Supports relative generation data group (GDG) catalog entries to help identify generation data sets for a copy request
- Can edit some copy options for copy requests that have a status of pending restart
- Has usability improvements for expiration date processing of input tapes
- Includes enhanced copy processing of dump files that were created by the ADRDSSU utility, including the ability to create stacked tapes for these files based on byte-threshold levels and to copy files that were created when the ADRDSSU utility was run from within another program
- Helps prevent enqueued copy tasks when you run multiple, concurrent copy tasks for a copy request
- Delivers enhancements to help improve:
  - Include filter processing for multi-file and multi-volume tape chains
  - Maintenance of the product log and status files
  - Report processing and throughput
  - Reporting for stacked tapes

Key prerequisites

Refer to the Software requirements section.

At a glance

Intended benefits of IBM Tivoli Tape Optimizer on z/OS V1.2:

- Copies a multitude of tapes in a single copy job
- Delivers flexible filtering criteria to help identify precisely the input tapes or data sets to copy
- Provides multitasking capabilities by running up to ten subtasks concurrently for a single copy job
- Helps preserve tape library information that is associated with the selected DFSMSrmm control variables
- Updates the z/OS system catalog automatically
- Supports tape stacking to help maximize the utilization of tape media
- Renames tape data sets as they are copied to output tapes if users specify renaming criteria
- Supports almost all types of tapes and tape devices supported by IBM z/OS systems

Program Number

For details, refer to the Program number section in this announcement.

Planned availability date

October 13, 2006

This announcement is provided for your information only. For additional information, contact your IBM representative, call 800-IBM-4YOU, or visit the IBM home page at: http://www.ibm.com.
IBM Tivoli Tape Optimizer on z/OS V1.2 provides an Interactive System Productivity Facility (ISPF) interface from which you can define and submit tape copy jobs. You can create filters for specifying the exact tapes to be copied. You can also set many copy options, such as:

- Specifying the number of concurrent tasks to run for a copy job
- Specifying the number of days to retain input tapes
- Stacking tape volumes on the output tapes
- Renaming the tape data sets by adding a high-level qualifier
- Continuing copy processing after certain errors
- Calling the ADRDSSU utility to copy data sets that have a block size of zero
- Setting expiration dates for copied tapes based on various criteria

IBM Tivoli Tape Optimizer on z/OS V1.2 can generate the job control language (JCL) for the batch copy job and display it on screen for review. You can edit, submit, or delete a copy job from the product interface. The progress of a submitted copy job can be monitored by using the System Display and Search Facility (SDSF). After a copy job successfully completes, the copy log and summary copy statistics can be viewed from the product interface. IBM Tivoli Tape Optimizer on z/OS V1.2 automatically transfers the DFSMSrmm tape library information to the newly created tapes and updates the system catalog for the copied tape data sets.

Key features

- Supports most types of tape devices and tape media, including logical tape volumes in VTSs
- Provides an ISPF interface that can define and submit batch copy jobs
- Copies tape volumes or data sets, including generation data sets that are identified by relative GDGs
- Allows you to configure up to ten subtasks for a copy job to copy multiple tape chains simultaneously and help complete jobs faster
- Helps you define various types of tape-selection filters for specifying precisely the input tapes to copy

Flexible filtering criteria

The product interface provides many types of filters for specifying the exact input tapes to copy. Filters can be created to include tapes or to exclude tapes from copy jobs. Filtering criteria can include:

- Volume serial numbers (volsers)
- Data set names
- Tape creation program names
- Tape creation date, assigned date, and last reference date
- Tape expiration date
- Various other tape characteristics, such as whether the tapes:
  - Have temporary I/O errors
  - Have permanent I/O errors
  - Are pending scratch
  - Are copies that were previously created

By combining various types of filtering criteria, you can create complex filters. These filters can facilitate large migration projects (for example, migrating from cartridge tapes to a VTS) by helping to avoid unnecessary duplication.

Multitasking capability

You can run up to ten subtasks for a copy job in order to duplicate multiple tape chains simultaneously on different tape drives. Each subtask uses two tape drives, an input tape drive and an output tape drive. For example, if you run ten subtasks, you will need twenty tape drives.

This multitasking feature helps complete a copy job much faster. If necessary, you can tailor resource usage based on the resources that are available and on the workload to be maintained.

Helps preserve tape library information and updates the catalog

IBM Tivoli Tape Optimizer on z/OS V1.2 applies the DFSMSrmm tape library information for input tapes to output tapes based on the DFSMSrmm control variables that are known to the system. From the product interface, you can select or deselect the control variables that IBM Tivoli Tape Optimizer on z/OS V1.2 uses for copy jobs. For example, if you install system maintenance that adds control variables that are not supported on the system where you will run a copy job, you would deselect the unsupported variables so that IBM Tivoli Tape Optimizer
on z/OS V1.1 would not attempt to transfer the associated information and generate errors.

IBM Tivoli Tape Optimizer on z/OS V1.2 also can automatically update the z/OS system catalog to point to the new locations of copied data sets that were previously cataloged. If you do not want the catalog to be updated, you can select an option to prevent this updating from occurring.

**Supports tape stacking**

IBM Tivoli Tape Optimizer on z/OS V1.2 includes an option to stack tape volumes on output tapes to help maximize the utilization of tape media. By using tape stacking, you can reduce the number of tapes to store and maintain at your site and the associated personnel costs. Also, you can set tape utilization thresholds and a maximum file count to control when a new output tape is automatically loaded and tape stacking is enabled.

**Renames tape data sets**

Optionally, IBM Tivoli Tape Optimizer on z/OS V1.2 can rename tape data sets as they are copied to output tapes based on the renaming criteria that you provide. This allows you to perform a trial run of a copy job before actually running it. Summary copy statistics can be provided for each copy request and each copied tape volume. This renaming feature is useful if you are retaining the original tape data sets and want to differentiate them from the copies (for example, from backup copies).

**Helpful reports**

IBM Tivoli Tape Optimizer on z/OS V1.2 can generate summary reports that you can use to quickly help determine the outcome of a tape copy request. In addition, during a trial run of a copy request, IBM Tivoli Tape Optimizer on z/OS V1.2 can generate a detailed tape selection report that shows the tape and data sets to be copied. You can use this report to readjust your tape selection filters before submitting the final copy request for execution.

**Works with almost all tapes and tape devices**

IBM Tivoli Tape Optimizer on z/OS V1.2 supports almost all types of tapes and tape devices. It can copy:

- Single or multivolume tapes
- Tapes that have standard labels
- Unlabeled tapes
- Tapes that contain either cataloged or uncataloged data sets
- High-capacity 3592 tape drives and enterprise recording format tape media

**Product identification number — PID number**

<table>
<thead>
<tr>
<th>Program number</th>
<th>Subscription and support PID number</th>
</tr>
</thead>
<tbody>
<tr>
<td>5698-A73</td>
<td>5698-S84</td>
</tr>
</tbody>
</table>

### Plant of control and manufacture

**Plant of Control:** SDF  
**Plant of Manufacture:** SDF

**Language support:**

IBM Tivoli Tape Optimizer on z/OS V1.2 is available in English and can be supported in a Japanese double byte character set (DBCS) system.

**Trademarks**

DFSMSrmm is a trademark of International Business Machines Corporation in the United States or other countries or both.  
z/OS and Tivoli are registered trademarks of International Business Machines Corporation in the United States or other countries or both.  
Other company, product, and service names may be trademarks or service marks of others.
Education support

Comprehensive education for IBM Tivoli® products is offered through Worldwide Tivoli Education Delivery Services. A wide range of training options are available, including classes led by instructors, learning on demand, on-site training, and blended learning solutions.

For additional information, visit Web site


Offering Information

Product information is available via the Offering Information Web site

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

Publications

The following hardcopy publication is shipped with the basic machine-readable material.

<table>
<thead>
<tr>
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<th>Form number</th>
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<tr>
<td>IBM Tivoli Tape Optimizer on z/OS(R) V1.2 Program Directory</td>
<td>G111-4074</td>
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The publication listed below can be downloaded from the following Web site after the planned availability date.


<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>IBM Tivoli Tape Optimizer on z/OS V1.2 User’s Guide</td>
<td>SC18-9569</td>
</tr>
</tbody>
</table>

Technical information

Specified operating environment

Hardware requirements: IBM Tivoli Tape Optimizer on z/OS V1.2 will run on any hardware capable of running z/OS.

Software requirements

IBM Tivoli Tape Optimizer on z/OS V1.2 supports the following:

- z/OS V1.4, or later (5694-A01) with DFSMSrmm™
- Any supported version of Time Sharing Option/Extensions (TSO/E)
- Any supported version of ISPF

Planning information

Packaging

IBM Tivoli Tape Optimizer on z/OS V1.2 is distributed with:

- International Program License Agreement (Z125-3301)
- License Information document (GC32-9413)
- 3480 tape cartridge
- Publications (refer to the Publications section)

Security, auditability, and control

IBM Tivoli Tape Optimizer on z/OS V1.2 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.

IBM Tivoli Enhanced Value-Based Pricing

IBM Tivoli software products are priced using IBM Tivoli’s Enhanced Value-Based Pricing. The Enhanced Value-Based Pricing system is based upon the IBM Tivoli Environment-Managed Licensing Model, which uses a managed-environment approach — whereby price is determined by what is managed rather than the number and type of product components installed.

For example, all servers monitored with IBM Tivoli’s monitoring product (IBM Tivoli Monitoring) require entitlements sufficient for those servers. Other IBM Tivoli products may manage clients, client devices, agents, network nodes, users, or other items, and are licensed and priced accordingly.

Unlike typical systems management licensing models that require entitlements of specific software components to specific systems, the IBM Tivoli Environment-Managed
Licensing Model provides the customer flexibility to deploy its IBM Tivoli software products within its environment in a manner that can address and respond to the customer’s evolving architecture. That is, as the architecture of a customer’s environment changes, the customer’s implementation of IBM Tivoli software can be altered, as needed, without affecting the customer’s license requirements (as long as the customer does not exceed its entitlements to the software).

Under Enhanced Value-Based Pricing, licensing and pricing of server-oriented applications are determined based upon the server’s use in the customer’s environment. Typically, such applications are licensed and priced in a manner that corresponds to each installed and activated processor of the server managed by the IBM Tivoli application to help correlate price to value while offering a simple solution.

Where a server is physically partitioned, this approach is modified. This partitioning technique is the approach used with systems that have either multiple cards or multiple frames, each of which can be configured independently. For servers capable of physical partitioning (for example, IBM System p™ Scalable POWERparallel Systems® servers, Sun Ultra servers, and HP Superdome servers), an entitlement is required for each processor in the physical partition being managed by the Tivoli application. For example, assume that a server has 24 processors installed in aggregate. If this server is not partitioned, entitlements are required for all 24 processors. If, however, it is physically partitioned into three partitions each containing eight processors, and IBM Tivoli products were managing only one of the three partitions, then entitlements would be required for the eight processors on the physical partition managed by the IBM Tivoli application.

For servers with virtual or logical partitions, entitlements are required for all installed and activated processors on the server. For each IBM Tivoli application managing a clustered environment, licensing is based on the cumulative number of installed and activated processors on each server in the cluster. Where the cluster includes physically partitioned servers, the considerations described above concerning physically partitioned servers apply as well.

Enhanced Value-Based Pricing recognizes the convergence of RISC/UNIX® and Microsoft® Windows™/Intel® technologies, in order to simplify the customers licensing requirements, and to provide a smoother, more scalable model. Pricing and licensing does not differentiate between non-System z™ server platforms or operating systems. For some products, this platform neutrality extends to System z and other host servers as well.

**IBM Tivoli Enhanced Value-Based Pricing terminology definitions**

**IBM Integrated Facility for Linux™ (IFL)**

This optional facility enables additional processing capacity exclusively for Linux workload, with no effect on the model designation of a System z or OS/390® server. Consequently, executing Linux workload on the IFL will not, in most cases, result in any increased IBM software charges for z/OS, OS/390, VM, VSE, or TPF operating systems/applications. There is, as indicated, a charge associated with the IFL, and there may also be a charge for applications that run on the IFL.

The IFL may be dedicated to a single Linux-mode logical partition or it may be shared by multiple Linux-mode logical partitions. Installations should note that the Linux workspace enabled by this facility will not support any of the S/390 traditional operating systems (OS/390, TPF, VSE, or VM). Only Linux applications or Linux operating in conjunction with the Virtual Image Facility™, an environment that operates within a logical partition or in native S/390® mode and provides the capability to create multiple Linux images, are supported by the IFL.

**Millions of Service Units (MSU)**

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).


**Partitions**

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

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

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

**Processor (per processor charging under full capacity)**

In full capacity charging, Proof of Entitlements (PoEs) must be acquired for all activated processors (available for use) that are on the server where the program or a component of the program is run.

**Notes:**

1. IBM defines a physical processor in a computer as a functional unit that interprets and executes instructions. A physical processor consists of at least an instruction control unit and one or more arithmetic and logic units.

2. Multicore technology allows two or more processors (commonly called cores) to be active on a single silicon chip. With multicore technology, IBM considers each core to be a physical processor. For example, in a dual-core chip, there are two physical processors residing on the single silicon chip.

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

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

5. Where blade technology is employed, each blade is considered a separate server and charging is based upon the total number of processors on the blade on which the program is run.
6. When a server is shipped with six processors, but two of them are inactive, four processors are active for the customer.

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 PoEs are defined in the Prices section of the announcement or 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 for the program’s valuation method.

4. In the IBM 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.

Server

A server is a computer system that executes requested procedures, commands, or applications to one or more users and/or client devices over a network. A PoE must be obtained for each server on which the program, or a component of the program, is run or for each server managed by the program. Where blade technology is employed, each blade is considered a separate server.

Standby or backup systems

For programs running or resident on backup machines, IBM defines three types of situations: cold, warm, and hot. In the 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 another 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, and so on), the program is considered to be doing work in the hot situation and a license or entitlement must be purchased.

Value Units

A Value Unit is a pricing charge metric for program license entitlements that is based upon the quantity of a specific designated measurement used for a given program. Each program has a designated measurement. The most commonly used designated measurements are processor cores and MSUs. However, for select programs, there are other designated measurements such as users, client devices, and messages. The number of Value Unit entitlements required for your specific implementation of the given program must be obtained from a conversion table associated with the program. You must obtain a PoE for the appropriate number of Value Unit entitlements for your implementation. The Value Unit entitlements of a given program cannot be exchanged, interchanged, or aggregated with Value Unit entitlements of another program.

Product and licensing Web Sites

A complete list of IBM Tivoli products is available at Web site

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

IBM Tivoli product licensing documents are available at Web site


Pricing example

IBM Tivoli Tape Optimizer on z/OS V1.2

The product is licensed in VUE007.

The scales below are used to calculate the equivalent number of Value Units for a specified number of MSUs.
In the example below, the customer is managing 1,500 MSUs:

<table>
<thead>
<tr>
<th>MSUs</th>
<th>Value Units/MSU</th>
<th>Value Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>3</td>
<td>1.00</td>
</tr>
<tr>
<td>Tier A</td>
<td>42</td>
<td>.45</td>
</tr>
<tr>
<td>Tier B</td>
<td>130</td>
<td>.36</td>
</tr>
<tr>
<td>Tier C</td>
<td>140</td>
<td>.27</td>
</tr>
<tr>
<td>Tier D</td>
<td>1,185</td>
<td>.20</td>
</tr>
<tr>
<td>Total</td>
<td>1,500</td>
<td>343.50</td>
</tr>
</tbody>
</table>

When calculating the total number of Value Units, the sum is rounded up to the next integer. So the customer will need to license 344 Value Units in this example.

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

| System | Value Units/
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MP3000 H30</td>
<td>6</td>
</tr>
<tr>
<td>MP3000 H50</td>
<td>8</td>
</tr>
<tr>
<td>MP3000 H70</td>
<td>12</td>
</tr>
<tr>
<td>ESL Models</td>
<td>2</td>
</tr>
</tbody>
</table>

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/370â€”System/390â€”and zSeries Machine Exhibit", Z125-3901.

Ordering information

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

<table>
<thead>
<tr>
<th>Program number</th>
<th>Program Name</th>
<th>VUE exhibit</th>
</tr>
</thead>
<tbody>
<tr>
<td>5698-A73</td>
<td>IBM Tivoli Tape Optimizer on z/OS V1.2</td>
<td>VUE007</td>
</tr>
</tbody>
</table>

For each System z IBM Program License Agreement (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

Value Unit exhibit VUE007

| MSUs | Value Units/
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>minimum</td>
<td>maximum</td>
</tr>
<tr>
<td>Base</td>
<td>1</td>
</tr>
<tr>
<td>Tier A</td>
<td>4</td>
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<tr>
<td>Tier B</td>
<td>46</td>
</tr>
<tr>
<td>Tier C</td>
<td>176</td>
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<tr>
<td>Tier D</td>
<td>316</td>
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</tbody>
</table>

Value Units for mainframes without MSU ratings:

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Value Units/</th>
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<tbody>
<tr>
<td>MP3000 H30</td>
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<td>MP3000 H50</td>
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<tr>
<td>MP3000 H70</td>
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<td>ESL Models</td>
<td>2</td>
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</tbody>
</table>

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

Ordering information for 5698-xxx MSU-based z/OS offering

Translation from MSUs to Value Units

<p>| Value Units/ |</p>
<table>
<thead>
<tr>
<th>MSUs</th>
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<tbody>
<tr>
<td>Base</td>
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<td>Tier A</td>
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<tr>
<td>Tier B</td>
</tr>
<tr>
<td>Tier C</td>
</tr>
<tr>
<td>Tier D</td>
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</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.

Program name: IBM Tivoli Tape Optimizer on z/OS
Program PID: 5698-A73

Option description

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<th>Feature number</th>
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<tr>
<td>1 Value Unit</td>
<td>4305</td>
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Distribution

<table>
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Subscription and Support PID: 5698-S84

Support for program name

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<th>F/S</th>
<th>F/S</th>
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<tbody>
<tr>
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<td>4290</td>
<td>4292</td>
<td>4295</td>
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Support annual charge feature number

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<tr>
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<tr>
<td>1 Value Unit</td>
<td>4291</td>
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Support no-charge feature number

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<td>250 Value Units</td>
<td>4296</td>
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Support registration feature number

<table>
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<td>IBM Tivoli Tape Optimizer on z/OS</td>
<td>6332</td>
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Subscription and Support annual decline registration for charge

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<th>Feature number</th>
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Subscription and Support for program feature

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Support annual decline registration for program feature

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To suppress shipment of media, select the license-only option in CFSW.
For China only

Program name: IBM Tivoli Tape Optimizer on z/OS
Subscription and Support PID: 5698-S84

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<td>for OTCchg</td>
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Support for program name

IBM Tivoli Tape Optimizer on z/OS
1 Value Unit 4312
250 Value Units 4313

For Japan only

Program name: IBM Tivoli Tape Optimizer on z/OS
Program PID: 5698-A73

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Subscription and Support PID: 5698-S84

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Ordering information for On/Off Capacity on Demand (On/Off CoD)

IBM Tivoli Tape Optimizer on z/OS is eligible for On/Off CoD with a Temporary Use Charge calculated based on MSUs-per-day usage.

Program name: IBM Tivoli Tape Optimizer on z/OS
Program PID: 5698-A73

One-time charge

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For Japan only

Program name: IBM Tivoli Tape Optimizer on z/OS
Program PID: 5698-A73

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<td>Basic OTC, Per MSU-day TUC</td>
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Subscription and Support

To receive voice technical support via telephone during normal business hours and future releases and versions at no additional charge, Subscription and Support must be ordered. 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 Agreement for Acquisition of Software Maintenance (IAASM). This offering:

- Includes and extends the support services provided in the base support to include technical support via telephone during normal business hours.
- Entitles customers to future releases and versions at no additional charge. Note that the customer is not entitled to new products.

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

Customized Offerings

Product media is shipped only via Customized Offerings (for example, CBPDO, ServerPac, SystemPac®). Non-customized items (CDs, diskettes, source media, media kits) will continue to be shipped via the stand-alone product.

Terms and conditions

Licensing: IBM International Program License Agreement and License Information document. PoEs are required for all authorized use.

This program is licensed under the IPLA and the associated Agreement for IAASM, which provides for support with ongoing access to releases and versions of the program. This program has a one-time license charge for use of the program and an annual renewable charge for the enhanced support that includes telephone assistance (voice support for defects during normal business hours) as well as access to updates, releases, and versions of the program as long as support is in effect.

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

Limited warranty applies: Yes

Warranty: This program includes a warranty for one year from acquisition from IBM or an authorized IBM Business Partner. For one year from acquisition of the program, this warranty provides the customer with access to databases containing program information and FAQs, including any known fixes to defects, which the customer can download or otherwise obtain and install.

Program support: Enhanced support, called Subscription and Support, 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. The customer...
will be notified of discontinuance of support with 12 months’ notice.

**Money-back guarantee:** If for any reason you are dissatisfied with the program and you are the original licensee, return it within 30 days from the invoice date, to the party (either IBM or its reseller) from whom you acquired it, for a refund. For clarification, note that for programs acquired under any of IBM’s On/Off CoD software offerings, this term does not apply since these offerings apply to programs already acquired and in use by the customer.

**Copy and use on home/portable computer:** No

**Volume orders (IVO):** No

**Passport Advantage®** applies: No

**Usage restriction:** Yes. Usage is limited to the quantity of Value Units licensed.

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


**Software Maintenance applies:** No

For operating system software, the revised IBM Operational Support Services — SoftwareXcel offering will provide support for those operating systems and associated products that are not available with the newly announced Software Maintenance offering.

This will ensure total support coverage for your enterprise needs, including IBM and selected non-IBM products. For complete lists of products supported under both the current and revised SoftwareXcel offering, visit

http://www.ibm.com/services/si/products

For additional information on the revised IBM Operational Support Services, refer to Services Announcement AA01-3066, dated July 10, 2001.

**System i Software Maintenance applies:** No

**Variable charges apply:** No

**Educational allowance available:** 15%, to qualified educational institution customers.

**On/Off CoD**

To be eligible for On/Off CoD pricing, customers must be enabled for temporary capacity on the corresponding hardware, and the required contract — Z125-6611, Attachment for Customer Initiated Upgrade and IBM eServer On/Off Capacity on Demand — Software — must be signed prior to use.

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**Prices**

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