IBM HourGlass V7.1 delivers enhancements to IBM CICS, IBM IMS, and IBM DB2 application time request capabilities

At a glance

IBM® HourGlass V7.1 benefits include:

- Ability to handle SVC 11 system time requests, PC Time system service, and MVS™ STCKSYNC system service time requests on z/OS®.
- Simulation of past, present, or future dates and times without changing application code or computing environments.
- Option to set the HourGlass date-time for a CICS® region using a CICS batch process.
- Ability to maintain each user's view of the system date without affecting other users. This allows more testing to be performed in a compressed time frame.
- Ability to handle IMS™ time settings from an IMS application.

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

IBM HourGlass V7.1 provides support for time simulation in the z/OS environment. With HourGlass, you can simulate any date and time that can be represented by the underlying computer hardware - past, present, or future - without changing application code or requiring a separate computing environment.

HourGlass enables testing at the end-of-period, a week, month, quarter, or year processing, or simply testing across midnight or any other critical time period. A simple, on-line ISPF interface allows you to specify testing on individual development jobs or to create a "wildcard" testing scenario across groups of programs.

HourGlass allows you to temporarily alter the system date or time for one or more z/OS application programs using supported date and time calls, to any date and time value supported by the MVS, 64-bit time-of-day clock.

Important features in HourGlass V7.1

- Ability to set the HourGlass date-time for a CICS region using the HourGlass CICS Batch Time Management process.
- Validation of user date/time specifications that are input via JCL.
- New and improved messages generated by HourGlass enhancing usability and control.
- Ability to dynamically refresh the HourGlass active control element set to reflect the current state of the control elements maintained in the HourGlass Repository.
- Administer job schedule control elements using the HourGlass Control Centre or batch program. Updates are coordinated in order to maintain data integrity.
- Ability to create and maintain IMS time settings from an IMS application using the HourGlass Control Centre for IMS.
- Support for job schedule control elements with DB2® time requests.
- Support for CICS Transaction Server V5.1 is included in this release.

### Key prerequisites

- Currently supported versions of z/OS
- Currently supported versions of CICS, DB2, IMS, and IBM Language Environment®

For details, refer to the Technical information section.

### Planned availability date

December 6, 2013

### Description

HourGlass V7.1 is a z/OS clock simulator application for altering the date and time returned to a z/OS application when a time request is made. HourGlass enables automation of the date and time testing process to help companies deliver reliable applications without requiring changes to application code, re-IPLing the CPU or LPAR, or making runtime JCL changes. HourGlass features and flexibility help enable easy, accurate, and comprehensive application testing.

The testing of time-sensitive applications with HourGlass, which allows you to set as many altered date and time values as needed, helps reduce costs and disruptions from multiple re-IPLs. Altered values affect only the applications you specify. HourGlass intercepts all system time-of-day requests that internally issue an SVC 11 or requests to the PC Time system service and handles time requests originating from the MVS STCKSYNC system service, which is important for sysplex-wide applications impacted by time and date. You can alter the date-time by specifying patterns or specific applications, transactions, users, and address space names.

The HourGlass Repository provides the capability to save and manage HourGlass date and time settings in a permanent storage facility. Date and time settings are preserved across executions of the product. You can manage the contents of the repository with the HourGlass Control Centre.

### Accessibility by people with disabilities

A US 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 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.

**Reference information**

For information on IBM Data Set Commander for z/OS, V8.1, refer to Software Announcement [A13-0868](#), dated October 1, 2013.

For information on IBM Problem Determination Tools V13.0, refer to Software Announcement [A13-0736](#), dated October 1, 2013.

**Program number**

<table>
<thead>
<tr>
<th>Program number</th>
<th>Program name</th>
<th>VRM</th>
</tr>
</thead>
<tbody>
<tr>
<td>5655-U59</td>
<td>IBM HourGlass</td>
<td>V7.1</td>
</tr>
</tbody>
</table>

**Product identification number - PID number**

<table>
<thead>
<tr>
<th>Program PID number</th>
<th>Subscription and Support PID number</th>
</tr>
</thead>
<tbody>
<tr>
<td>5655-U59</td>
<td>5697-P30</td>
</tr>
</tbody>
</table>
Offering Information

Product information is available via the Offering Information website

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

Publications

The following HourGlass V7.1 publications are shipped with the product.

<table>
<thead>
<tr>
<th>Title</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Directory</td>
<td>GI13-2928</td>
</tr>
<tr>
<td>IPLA License Information</td>
<td>GI13-2929</td>
</tr>
</tbody>
</table>

The IBM Publications Centre

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

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

The publication *IBM HourGlass Usage and Installation Guide* (GC27-4557) is on-line and available from the Publications Centre.

Technical information

Specified operating environment

**Hardware requirements**

Any system capable of running z/OS V1.12, or later

**Software requirements**

- z/OS V1.12, or later
- CICS TS V3.1, or later
- DB2 V9, or later
- IMS V11, or later
- IBM Language Environment V1.12, or later

For the current list of supported versions, refer to the HourGlass maintenance page


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

HourGlass V7.1 is available only in US English.

Planning information

Packaging

HourGlass V7.1 is distributed with:

- 3590 tape cartridge
- Program Directory (GI13-2928)
- IPLA License Information (GI13-2929)

Software Services

IBM Software Services has the breadth, depth, and reach to manage your services needs. You can leverage the deep technical skills of our lab-based, software services team and the business consulting, project management, and infrastructure expertise of our IBM Global Services team. Also, we extend our IBM Software Services reach through IBM Business Partners to provide an extensive portfolio of capabilities. Together, we provide the global reach, intellectual capital, industry insight, and technology leadership to support a wide range of critical business needs.

To learn more about IBM Software Services or to contact a Software Services sales specialist, visit

http://www.ibm.com/software/sw-services/

Ordering information

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 US 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


Charge metric

<table>
<thead>
<tr>
<th>Program name</th>
<th>PID number</th>
<th>Charge metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM HourGlass V7.1</td>
<td>5655-U59</td>
<td>Value Unit (VUE007)</td>
</tr>
</tbody>
</table>

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>
</tr>
</thead>
<tbody>
<tr>
<td>5655-U59</td>
<td>IBM HourGlass V7.1</td>
<td>VUE007</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 VUE007

<table>
<thead>
<tr>
<th>MSUs minimum</th>
<th>MSUs maximum</th>
<th>Value Units/MSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Tier A</td>
<td>4</td>
<td>45</td>
</tr>
<tr>
<td>Tier B</td>
<td>46</td>
<td>175</td>
</tr>
<tr>
<td>Tier C</td>
<td>176</td>
<td>315</td>
</tr>
<tr>
<td>Tier D</td>
<td>316</td>
<td>+</td>
</tr>
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</table>

Value Units for mainframes without MSU ratings:

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Value Units/machine</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>

## Ordering example

The total number of Value Units is calculated according to the following example.

If your required license capacity is 1,500 MSUs for your selected System z IPLA product, the applicable Value Units would be:

Translation from MSUs to Value Units

<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>
</tbody>
</table>

Total 1,500 343.50

When calculating the total number of Value Units, the sum is to be rounded up to the next integer.

Example: In the above ordering example, for the product running on a machine with 1,500 MSUs requiring 344 Value Units, order feature number G4FG, quantity 94, and feature number G4FH, quantity 1.

## Basic license

### On/Off CoD

HourGlass V7.1 is eligible for On/Off CoD with a temporary use charge calculated based on MSUs per-day usage.

Program name IBM HourGlass V7.1
Program PID 5655-U59

Entitlement identifier Description License option/Pricing metric
S017C27 IBM HourGlass V7.1 Basic OTC, Per MSU-day TUC

Translation from MSUs to Value Units

<table>
<thead>
<tr>
<th>MSUs</th>
<th>Value Units/MSU</th>
</tr>
</thead>
</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 HourGlass V7.1
Program PID: 5655-U59

<table>
<thead>
<tr>
<th>Entitlement identifier</th>
<th>Description</th>
<th>License option/Pricing metric</th>
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</thead>
<tbody>
<tr>
<td>S017C27</td>
<td>HourGlass V7.1</td>
<td>Basic OTC, per Value Unit</td>
</tr>
</tbody>
</table>

Orderable supply ID Language Distribution medium
S017C26 English 3590 Tape cartridge

Subscription and Support PID: 5697-P30

<table>
<thead>
<tr>
<th>Entitlement identifier</th>
<th>Description</th>
<th>License option/Pricing metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>S01535N</td>
<td>IBM HourGlass Subscription &amp; Support</td>
<td>Basic ASC, per Value Unit SW S&amp;S No charge, decline SW S&amp;S</td>
</tr>
</tbody>
</table>

Orderable supply ID Language Distribution medium
S01535J English Hardcopy publication

Subscription and Support

To receive voice technical support via telephone and future releases and versions at no additional charge, Subscription and Support must be ordered. The capacity of Subscription and Support (Value Units) must be the same as the capacity ordered for the product licenses.

To order, specify the Subscription and Support program number (PID) referenced above 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 Software Maintenance. This offering:

- Includes and extends the support services provided in the base support to include technical support via telephone.
- 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.

The combined effect of the IPLA license and the Agreement for Acquisition of Software Maintenance gives you rights and support services comparable to those under the traditional ICA S/390® and System z license or its equivalent. To ensure that you continue to enjoy the level of support you are used to in the ICA business model, you must order both the license for the program and the support for the selected programs at the same Value Unit quantities.
**Customized Offerings**

Product deliverables are shipped only via CBPDO and ServerPac. These customized offerings 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 Shopz 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 include:

- 3590
- 3592

Most products can be ordered in ServerPac the month following their availability in CBPDO. z/OS can be ordered via CBPDO and , ServerPac. at general availability. Many products will also be orderable in a Product ServerPac without also having to order the z/OS operating system or subsystem.

Shopz and CFSW will determine the eligibility based on product requisite checking. For more details on the Product ServerPac, visit the Help section on the Shopz website at


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.

**Terms and conditions**

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

**Licensing**

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

**Agreement for Acquisition of Software Maintenance**

The IBM Agreement for Acquisition of Software Maintenance (Z125-6011) applies for Software Subscription and Support (Software Maintenance) and does not require customer signatures.

These programs are licensed under the IBM Program License Agreement (IPLA) and the associated Agreement for Acquisition of Software Maintenance, which provide for 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.
**License Information form number**
License information form number L-MEMS-9AMRGJ

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


**Limited warranty applies**
Yes

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

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


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

**Program support**
Enhanced support, called Subscription and Support, includes telephone assistance, as well as access to updates, releases, and versions of the program as long as support is in effect. You will be notified of discontinuance of support with 12 months' notice.

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

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

**Volume orders (IVO)**
No

**Passport Advantage applies**
No

**Software Subscription and Support applies**
No. For operating system software, the revised IBM Operational Support Services - SupportLine 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 - SupportLine**

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.

**Academic use allowance:** Yes

**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>5655-U59</td>
<td>IBM HourGlass</td>
<td>Execution-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 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

Sub-capacity utilization is determined based on the product's own execution as reported to IBM in accordance with the requirements for reporting sub-capacity utilization for products.

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

### Statement of good security practices

IT system security involves protecting systems and information through prevention, detection, and response to improper access from within and outside your enterprise. Improper access can result in information being altered destroyed or misappropriated or can result in misuse of your systems to attack others. Without a comprehensive approach to security, no IT system or product should be considered completely secure and no single product or security measure can be completely effective in preventing improper access. IBM systems and products are designed to be part of a comprehensive security approach, which will necessarily involve additional operational procedures, and may require other systems, products, or services to be most effective. IBM does not warrant that systems and products are immune from the malicious or illegal conduct of any party.
Prices

Prices are subject to change without notice.

GST, QST, and sales taxes, where applicable, are extra.

For additional information and current prices, contact your local IBM representative.

Program name: IBM HourGlass V7.1
Program PID: 5655-U59

<table>
<thead>
<tr>
<th>Entitlement identifier</th>
<th>Description</th>
<th>License option/Pricing metric</th>
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<tbody>
<tr>
<td>S017C27</td>
<td>IBM HourGlass V7.1</td>
<td>Basic OTC, per Value Unit</td>
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<tr>
<td></td>
<td></td>
<td>Basic OTC, per MSU-day TUC</td>
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Subscription and Support PID: 5697-P30

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<tr>
<td>S01535N</td>
<td>IBM HourGlass</td>
<td>Basic ASC, per Value Unit SW S&amp;S</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No charge, decline SW S&amp;S</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Per MSU SW S&amp;S registration</td>
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</tbody>
</table>

Passport Advantage

For Passport Advantage information and charges, contact your IBM representative or authorized IBM Business Partner for Software Value Plus. Additional information is also available at

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

IBM Global Financing

IBM Global Financing offers competitive financing to credit-qualified customers to assist them in acquiring IT solutions. Offerings include financing for IT acquisition, including hardware, software, and services, from both IBM and other manufacturers or vendors. Offerings (for all customer segments: small, medium, and large enterprise), rates, terms, and availability can vary by country. Contact your local IBM Global Financing organization or visit

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Corrections

(Corrected on October 3, 2013)
The At a glance and Description sections are revised.