IBM Enterprise COBOL Value Unit Edition for z/OS, V6.1 offers the flexibility to license the Enterprise COBOL for z/OS V6.1 compiler with a Value Unit price metric

At a glance

IBM® Enterprise COBOL Value Unit Edition, V6.1 delivers a compiler with a one-time charge price metric that is based on Value Units. The Value Unit price metric supports both full-capacity and sub-capacity environments.

Enterprise COBOL for z/OS® V6.1 exploits the capabilities of IBM z/Architecture® and continues to add new features and enhancements:

- The compiler internals are enhanced so that you can now compile your large programs.
- New and changed COBOL statements are included to provide you with added functions.
- New and changed compiler options are implemented to provide you with added flexibility.
- The ARCH compiler option allows you to exploit and tune your code to run on your choice of the z/Architecture levels of the z/OS platform.
- The OPTIMIZE compiler option allows you to select from multiple levels of increasing optimization for your code.
- Support for the latest middleware includes IBM CICS®, IBM DB2®, and IBM IMS™.

For ordering, contact your IBM representative. For more information, contact the Americas Call Centers at: 800-IBM-CALL (426-2255). Reference: LE001

Overview

Enterprise COBOL Value Unit Edition for z/OS, which is based on Enterprise COBOL for z/OS, V6.1, is a leading-edge, z/OS-based compiler that helps you create and maintain mission-critical, line-of-business COBOL applications to execute on your z/OS systems. Enterprise COBOL Value Unit Edition for z/OS gives you access to CICS, DB2, IMS, and other transactional and data systems.

Over the course of multiple releases, Enterprise COBOL Value Unit Edition for z/OS through Enterprise COBOL for z/OS, delivered new and enhanced functions. They provided the tools needed to modernize and maintain applications to meet your critical-business needs.
The following are some of the new and improved features delivered Version 6.1:

- Increased compiler capacity so that you can compile large programs
- New and changed COBOL statements for increased functionality
- New and changed COBOL options for increased flexibility
- Changed APIs in the Language Environment (LE) vendor interface
- Performance tuning for a number of COBOL statements

Enterprise COBOL Value Unit Edition for z/OS, V6.1 continues the IBM commitment to the COBOL programming language on the z/OS platform through investment in new compiler technology and the delivery of new features, many of them are requested by you. With Enterprise COBOL Value Unit Edition for z/OS, V6.1, you gain the benefit of new investment that is combined with more than 50 years of IBM experience in compiler development.

Key prerequisites

Enterprise COBOL Value Unit Edition for z/OS V6.1 requires z/OS V2.1 (5650-ZOS), or later.

For additional details, refer to the Software requirements section.

Planned availability date

March 18, 2016

Description

Enterprise COBOL Value Unit Edition, V6.1 contains the same functions as Enterprise COBOL for z/OS, V6.1. It delivers a compiler with a one-time charge metric that is based on Value Units. The Value Unit price metric supports both full-capacity and sub-capacity environments.

In Version 6.1, the internals of the COBOL compiler were enhanced to increase the compiler capacity. Now you can compile programs that are larger than what the previous compiler supported.

- New COBOL statements, such as ALLOCATE and FREE, allow you to obtain and release dynamic storage.
- The JSON GENERATE statement lets you convert data to JSON format.
- Changed COBOL statements, such as INITIALIZE, introduces new clauses from the 2002 and 2014 COBOL standards.

New and changed COBOL options are introduced for increased flexibility.

- The IGZXAPI Language Environment vendor interface is enhanced with a new function code 8 to request information about a COBOL program's WORKING-STORAGE section.
- The runtime behavior is changed so that WORKING-STORAGE is acquired from HEAP storage in all cases, so that there are no exceptions to when the STORAGE(xx) runtime option will affect WORKING-STORAGE.

Performance tuning done for Table SORT, INSPECT, UNSTRING, and SEARCH-ALL.

With Enterprise COBOL Value Unit Edition for z/OS, V6.1, you can harness the power of the latest advancement in z/Architecture. For more information on the functions
Accessibility by people with disabilities

A US Section 508 Voluntary Product Accessibility Template (VPAT) containing details on accessibility compliance can be found on the IBM Accessibility website.

Section 508 of the US Rehabilitation Act

Enterprise COBOL Value Unit Edition for z/OS, V6.1 is capable as of March 18, 2016, when used in accordance with associated IBM documentation, of satisfying the applicable requirements of Section 508 of the Rehabilitation Act, provided that any assistive technology used with the product properly interoperates with it. A US Section 508 Voluntary Product Accessibility Template (VPAT) can be found on the IBM Accessibility website.

Value Unit-based pricing

Value Unit pricing for eligible IBM z Systems™ IBM International Program License Agreement (IPLA) programs enables a lower cost of incremental growth and enterprise aggregation. Each z Systems™ 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 z Systems 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 z Systems IPLA program that you have acquired is referred to as entitled license capacity. If you wish to grow your entitled license capacity for a z Systems IPLA program, the calculation to determine additional needed Value Units is based upon the number of Value Units already acquired.

For each z Systems 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, go to the IBM System z™ Software Pricing website.

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 z Systems IPLA program you selected, refer to the Terms and conditions section.
Product positioning

Enterprise COBOL is a premier, enterprise-class COBOL compiler for the z/OS system. A proven and reliable program, it delivers innovation for modernizing business-critical applications, programming features to increase programmer productivity, and bolsters the overall benefits of transactional and data systems, such as CICS, IMS, and DB2.

New z Systems hardware brings increasing complexity. Enterprise COBOL for z/OS, V6.1 and Enterprise COBOL Value Unit Edition for z/OS, V6.1 deliver advanced compiler support to allow you to fully benefit from hardware advancements. With the introduction of the ARCH and OPTIMIZE compiler options, these Enterprise COBOL for z/OS compilers can now unleash the full power of IBM processors that are delivered in the various models of z Systems hardware. COBOL programmers no longer need a deep understanding of z/Architecture to exploit leading edge performance of new z Systems hardware. Developers only need to focus on the logic of the applications and let the compiler determine the best way to transform and optimize the code generation for the z Systems hardware on which the application will run.

With Enterprise COBOL for z/OS, V6.1 or Enterprise COBOL Value Unit Edition for z/OS, V6.1, you increase the return on your hardware and middleware investments. With the implementation of advanced code generation and optimization technology, Enterprise COBOL for z/OS establishes a foundation for delivery of additional optimization features and exploitation of future z/Architecture.

With its enhanced capabilities, simplified programming, and increased programmer productivity, you can continue to use Enterprise COBOL for z/OS to modernize existing business-critical applications. Modernization enables the reuse of your proven business logic. You can deliver new enhancements quicker, with less cost and lower risk. You can add modern GUIs to business-critical COBOL applications or extend them to work with web, cloud, or mobile infrastructures. Built on proven applications, there is no need for you to write from scratch.

With the investment in new compiler technology and the continued delivery of new features, many of them requested by clients, Enterprise COBOL for z/OS, V6.1 and Enterprise COBOL Value Unit Edition for z/OS, V6.1 continues the IBM commitment to COBOL on z/OS. You gain the benefit of new investment combined with more than 50 years of IBM experience in compiler development.

Program number

<table>
<thead>
<tr>
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<th>VRM</th>
<th>Program name</th>
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<td>V6.1</td>
<td>IBM Enterprise COBOL Value Unit Edition for z/OS, V6.1</td>
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<tr>
<td>5697-ECS</td>
<td>V1.1</td>
<td>IBM Enterprise COBOL Value Unit Edition for z/OS Subscription and Support</td>
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Product identification number

<table>
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<th>Subscription and Support PID number</th>
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</thead>
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<tr>
<td>5697-V61</td>
<td>5697-ECS</td>
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</table>

Offering Information

Product information is available on the IBM Offering Information website.

Publications

IBM United States Software Announcement 216-061
Hardcopy publications that are available with the program
The following are supplied automatically with the basic machine-readable material:
• License Information (provided on CD-ROM) (LC27-8710)
• Program Directory (GI13-4529)

Softcopy publications that are available from Information Centers
Links to PDF and xhtml version of the Enterprise COBOL for z/OS, V6.1 documentation (Equivalent to Enterprise COBOL Value Unit Edition for z/OS, V6.1) are available at the Information Center.

Hardcopy publications that are available from the Publication Center
The following publications can be ordered from the IBM Publications Center portal after planned availability. To order, use the Publications Center contact your IBM representative.

<table>
<thead>
<tr>
<th>Title</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licence Agreement / License Information</td>
<td>LC27-8710</td>
</tr>
<tr>
<td>Program Directory</td>
<td>GI13-4529</td>
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</tbody>
</table>

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. A large number of publications are available online in various file formats, and they can all be downloaded by all countries.

Services

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. 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, go to the IBM Software Services website.

Technical information

Specified operating environment

Hardware requirements
Enterprise COBOL Value Unit Edition for z/OS, V6.1 will run on the following IBM z Systems servers:
• z13™ or z13s
• zEnterprise® EC12 or zEnterprise BC12
• zEnterprise 196 or zEnterprise 114
• z10™ Enterprise Class or z10 Business Class
• z9® Enterprise Class or z9 Business Class

Software requirements
Enterprise COBOL Value Unit Edition for z/OS, V6.1 runs under the control of, or in conjunction with, the currently supported releases of the following programs and their subsequent releases or their equivalents. For more information on the following
programs listed that require program temporary fixes (PTFs), refer to the Program Directory and the preventive service planning (PSP) bucket.

z/OS V2.1 (5650-ZOS) is a required licensed program.

For installation on z/OS, z/OS SMP/E element is required.

For customization during or after installation, z/OS High Level Assembler is required.

Enterprise COBOL XML PARSE statements in programs that are compiled with the XMLPARSE(XMLSS) compiler option require z/OS XML System Services V2.1.

Optional licensed programs

Depending on the functions used, one or more of the following programs may be required:

- IBM CICS Transaction Server (CICS TS) for z/OS, V5 (5655-Y04)
- CICS Transaction Server for z/OS Value Unit Edition V5 (5722-DFJ)
- CICS Transaction Server for z/OS, V4 (5655-S97)
- DB2 11 for z/OS (5615-DB2)
- DB2 11 for z/OS Value Unit Edition (5697-P43)
- DB2 10 for z/OS (5605-DB2)
- DB2 10 for z/OS Value Unit Edition (5697-P31)
- IMS Database Value Unit Edition V12 (5655-DSQ)
- IMS Database Value Unit Edition V13 (5655-DSM)
- IMS V13 (5635-A04)
- IMS Transaction Manager Value Unit Edition V13 (5655-TM2)
- IMS V12 (5635-A03)
- IMS Transaction Manager Value Unit Edition V12 (5655-TM1)
- IBM DFSORT element of z/OS V2 (5650-ZOS)
- IBM High Level Assembler/MVS and VM and VSE (5696-234)
- IBM 31-bit SDK for z/OS, Java™ Technology Edition V8.0 (5655-DGG)
- IBM 31-bit SDK for z/OS, Java Technology Edition V7.0 (5655-W43)
- IBM 31-bit SDK for z/OS, Java Technology Edition V6.0 (5655-R31)
- z/OS V2.1 Client Web Enablement Toolkit (5650-ZOS - APAR Number OA46575)
- IBM Debug Tool for z/OS, V13.1 (5655-Q10)
- IBM Fault Analyzer for z/OS, V13.1 (5655-Q11)
- IBM File Manager for z/OS, V13.1 (5655-Q12)
- IBM Application Performance Analyzer for z/OS, V13.1 (5655-Q09)
- IBM Rational® Developer for z Systems, V9.5 (5724-T07)
- COBOL Report Writer Release 4 (5798-DYR, 5798-DZX)
- Enterprise COBOL for z/OS, V5 (5655-W32)
- Enterprise COBOL for z/OS, V4 (5655-S71)
- Enterprise PL/I for z/OS, V4 (5655-W67)
- Enterprise PL/I for z/OS, V3 (5655-H31)
- For XL C/C++ with Enterprise COBOL (You must use the XL C/C++ feature of z/OS V2.1 (5650-ZOS), or later.)
- IBM VS FORTRAN V2 (5668-806, 5688-087)

Enterprise COBOL Value Unit Edition for z/OS, V6.1 in this announcement is supported for use only with the announced and currently supported levels of IBM software listed above. Enterprise COBOL for z/OS, V6.1 should continue to work with certain earlier, unsupported IBM software products.
IBM will undertake to fix problems found by using Enterprise COBOL Value Unit Edition for z/OS, V6.1 in this announcement with the above mentioned earlier, unsupported product levels. IBM must be able to reproduce the problem using a supported level of the same product. If the problem can be reproduced and fixed, the fix will be developed and tested using supported levels of IBM software. If a fix is made available, it is likely to work on the unsupported product level; however, IBM cannot guarantee that the fix will work with the unsupported product.

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.

**Companion products**

None

**Compatibility**

Enterprise COBOL Value Unit Edition for z/OS, V6.1 provides a high level of source compatibility, object compatibility, and runtime compatibility with earlier versions of IBM COBOL.

The Enterprise COBOL Value Unit Edition, V6.1 source is compatible with earlier versions of IBM COBOL, in that the compiler will compile correct COBOL source programs that were developed using Enterprise COBOL V5, Enterprise COBOL V4 or earlier, with the exception of obsolete functions that are removed and the addition of new reserved words. The removed functions include obsolete COBOL language syntax and obsolete compiler options. Complete details on removed obsolete functions are documented in the *Enterprise COBOL for z/OS Version 6.1 Migration Guide*. IBM does not expect that many applications will be affected by the removed functions, which in practice are no longer heavily used. To assist in migration, a new compiler option FLAGMIG is added to Enterprise COBOL V4.2 through the service stream. This option provides warning diagnostics to flag use of obsolete syntax and options in existing COBOL programs.

Enterprise COBOL Value Unit Edition, V6.1 is compatible with earlier versions of IBM COBOL, in that applications can be constructed by using a mixture of object modules compiled with Version 6.1 and those compiled with earlier versions. Both static calls (calls within a link-edited module) and dynamic calls (calls between programs link-edited as separate modules) can be used. The following are exceptions:

- Interoperation with object modules that were compiled with OS/VS COBOL (5740-CB1) is no longer supported.
- Interoperation with object modules that were compiled with VS COBOL II (5688-958) is limited to programs compiled with the RES compiler option. Interoperation with VS COBOL II programs compiled with the NORES option is no longer supported.

The run time of Enterprise COBOL Value Unit Edition, V6.1 is compatible with earlier versions of IBM COBOL. This means that COBOL programs using valid data will continue to produce the same runtime results after being recompiled with Enterprise COBOL Value Unit Edition for z/OS, V6.1. A small number of exception cases are documented in the *Enterprise COBOL for z/OS Version 6.1 Migration Guide*.

**Planning information**

**Packaging**

Packaging Information

The Enterprise COBOL Value Unit Edition for z/OS, V6.1 (5697-V61) package includes:
- Basic machine-readable material on the customer-selected distribution medium
- Enterprise COBOL Value Unit Edition for z/OS Program Directory (G113-4529)
- License Document CD containing agreements and license information (LC27-8710)

**Security, auditability, and control**

The announced program uses the security and auditability features of the host 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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### Ordering information

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>5697-V61</td>
<td>IBM Enterprise COBOL Value Unit Edition for z/OS, V6.1</td>
<td>VUE007</td>
</tr>
<tr>
<td>5697-ECS</td>
<td>IBM Enterprise COBOL Value Unit Edition for z/OS Subscription and Support</td>
<td>VUE007</td>
</tr>
</tbody>
</table>

For each z Systems 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 z Systems 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></th>
<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>
<td>1</td>
</tr>
<tr>
<td>Tier A</td>
<td>4</td>
<td>45</td>
<td>0.45</td>
</tr>
<tr>
<td>Tier B</td>
<td>46</td>
<td>175</td>
<td>0.36</td>
</tr>
<tr>
<td>Tier C</td>
<td>176</td>
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<tr>
<td>Tier D</td>
<td>316</td>
<td>+</td>
<td>0.20</td>
</tr>
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</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 z Systems IPLA product, the applicable Value Units would be:

<table>
<thead>
<tr>
<th>Tier</th>
<th>MSUs</th>
<th>Multiplied by Value Units per MSU</th>
<th>Equal Value Units</th>
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</thead>
<tbody>
<tr>
<td>Base</td>
<td>3</td>
<td>1.00</td>
<td>3.00</td>
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<tr>
<td>Tier A</td>
<td>42</td>
<td>.45</td>
<td>18.90</td>
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<tr>
<td>Tier B</td>
<td>130</td>
<td>.36</td>
<td>46.80</td>
</tr>
<tr>
<td>Tier C</td>
<td>140</td>
<td>.27</td>
<td>37.80</td>
</tr>
<tr>
<td>Tier D</td>
<td>1,185</td>
<td>.20</td>
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</tr>
<tr>
<td>Total</td>
<td>1,500</td>
<td></td>
<td>343.50</td>
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</tbody>
</table>
When calculating the total number of Value Units, the sum is to be rounded up to the next integer.

**Ordering z/OS through the Internet**

Shopz 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). For more details and availability, go to the Shopz website.

**Charge metric**

<table>
<thead>
<tr>
<th>Program name</th>
<th>Part number or PID number</th>
<th>Charge metric</th>
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</thead>
<tbody>
<tr>
<td>IBM Enterprise COBOL Value Unit Edition for z/OS, V6.1</td>
<td>5697-V61</td>
<td>Value Units</td>
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<tr>
<td>IBM Enterprise COBOL Value Unit Edition for z/OS Subscription and Support</td>
<td>5697-ECS</td>
<td>Value Units</td>
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</table>

For more information on the value unit charge metric see the description in the section regarding 'Value Unit-based pricing'.

**Basic license**

**On/Off CoD**

Enterprise COBOL Value Unit Edition for z/OS, V6.1 is eligible for On/Off CoD with a temporary use charge calculated based on MSUs per-day usage.

**Program name IBM Enterprise COBOL Value Unit Edition for z/OS, V6.1**

**Program PID 5697-V61**

<table>
<thead>
<tr>
<th>Entitlement identifier</th>
<th>Description</th>
<th>License option/Pricing metric</th>
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<tbody>
<tr>
<td>S017Z7K</td>
<td>IBM Enterprise COBOL Value Unit Edition for z/OS, V6.1</td>
<td>Basic OTC, Per MSU-day TUC</td>
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**Translation from MSUs to Value Units**

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<tbody>
<tr>
<td>Base</td>
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<tr>
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<td>46-175</td>
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<td>Tier C</td>
<td>176-315</td>
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<tr>
<td>Tier D</td>
<td>316+</td>
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</tbody>
</table>

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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 Enterprise COBOL Value Unit Edition for z/OS, V6.1**

**Program PID: 5697-V61**

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<td>S017Z7H</td>
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<td>3590 Tape</td>
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<td>S017Z7J</td>
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Subscription and Support PID: 5697-ECS

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Migration Information

Migration under single version charging (SVC) terms from Enterprise COBOL for z/OS, V5 (5655-W32) or a previous version (with a monthly license charge price metric) to the Enterprise COBOL Value Unit Edition for z/OS, V6 (5697-V61) (with the Value Unit price metric) is supported.

SVC is only supported for migration of all of your workloads and entitlements from the prior version compiler (with the monthly license charge unit) to the new version of the compiler (with the Value Unit charge unit).

SVC is not supported for partial migration of your workloads. SVC is not supported for migration from Enterprise COBOL for z/OS, V6 (5655-EC6). Customers who currently license Enterprise COBOL for z/OS, V6 (5655-EC6) should consider submitting a license termination notification for that version to their IBM z Systems software marketing representative.

At the end of the SVC waiver period, the customer can elect to either retain the prior COBOL version and Monthly License Charges will resume or to submit a license termination notification to their IBM z Systems software marketing representative.

If the customer is using multiple versions of the compiler and is not engaged in migrating applications to the newer version, they should contact their IBM representative for applicability.

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 z Systems 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.**

**Single version charging**

To elect single version charging, you must notify and identify to IBM the prior program and replacement program, and the machine the programs are operating on.

**Customized Offerings**

Product deliverables are shipped only through CBPDO and ServerPac. These customized offerings are offered for Internet delivery in countries where Shopz 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, go to the Help section on the Shopz website.

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 through 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, go to the Help section on the Shopz website.

For additional information about the Product ServerPac option, refer to Software Announcement 212-272, dated July 31, 2012.

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.

This software license includes Software Subscription and Support (also referred to as Software Maintenance).

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

**License Information number**

L-JYIP-A6KNTA

See the License Information documents page on the IBM Software License Agreement website for more information.

A License Document CD-ROM (LDCD) is shipped with the program media. The LDCD identifier is LC27-8710.

**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, see the IBM Software Support Handbook.

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

Usage restriction

Yes

See the License Information documents page on the IBM Software License Agreement website for more information.

Software Subscription and Support applies

Yes. During the S&S period, for the unmodified portion of a program, and to the extent problems can be recreated in the specified operating environment, IBM will provide the following:

- Defect correction information, a restriction, or a bypass.
- Program updates: Periodic releases of collections of code corrections, fixes, functional enhancements and new versions and releases to the program and documentation.
- Technical assistance: A reasonable amount of remote assistance by telephone or electronically to address suspected program defects. Technical assistance is available from the IBM support center in the organization’s geography.

Additional details regarding Technical Assistance, that includes IBM contact information, are provided in the IBM Software Support Handbook.

S&S does not include assistance for:

- The design and development of applications
- Organization’s use of program in other than their specified operating environment, or
- Failures caused by products for which IBM is not responsible under the IBM Agreement for Acquisition of Software Maintenance.

S&S is provided only if the program is within its support timeframe as specified in the Software Support Lifecycle policy for the program.

Yes. All distributed software licenses include Software Subscription and Support (also referred to as Software Maintenance) for a period of 12 months from the date of acquisition, providing a streamlined way to acquire IBM software and assure technical support coverage for all licenses. Extending coverage for a total of three years from date of acquisition may be elected.

While your Software Subscription and Support is in effect, IBM provides you assistance for your routine, short duration installation and usage (how-to) questions, and code-related questions. IBM provides assistance by telephone and, if available, electronic access, only to your information systems (IS) technical support personnel during the normal business hours (published prime shift hours) of your IBM support center. (This assistance is not available to your end users.) IBM provides Severity 1 assistance 24 hours a day, every day of the year. For additional details, go to the IBM Support Handbooks page.

Software Subscription and Support does not include assistance for the design and development of applications, your use of programs in other than their specified operating environment, or failures caused by products for which IBM is not responsible under this agreement.
For more information about the Passport Advantage® Agreement, go to the Passport Advantage and Passport Advantage Express® website.

**IBM Operational Support Services - SoftwareXcel**

No

**System i Software Maintenance applies**

No

**Variable charges apply**

No

**Educational allowance available**

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

**Products eligible for single version charging**

<table>
<thead>
<tr>
<th>Replaced program</th>
<th>Program name</th>
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</tr>
</thead>
<tbody>
<tr>
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<td>OS/VS COBOL</td>
<td>5697-V61</td>
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<td>5734-CB2</td>
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<td>5697-V61</td>
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<td>VS COBOL II</td>
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<td>5648-A25</td>
<td>IBM COBOL for OS/390® &amp; VM V2</td>
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### Replaced program

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<td>5655-S71</td>
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<td>IBM Enterprise COBOL VUE for z/OS V5</td>
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</table>

### Sub-capacity terms and conditions

For each z Systems 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 z Systems 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 z Systems IPLA program you selected, refer to the Ordering information section.

<table>
<thead>
<tr>
<th>Program number</th>
<th>Program name</th>
<th>Terms</th>
<th>Parent, if applicable</th>
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<tbody>
<tr>
<td>5697-V61</td>
<td>Enterprise COBOL Value Unit Edition for z/OS, V6</td>
<td>Execution-based</td>
<td></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 z Systems IPLA program with these terms equals the MSU-rated capacity of the machines where the z Systems IPLA program executes.

For more information on mainframe MSU-rated capacities, go to the IBM System z Software Contracts website.

Reference-based: The required license capacity of a z Systems 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 z Systems IPLA sub-capacity program with these terms equals the capacity of the LPARs where the z Systems IPLA program executes.
z/OS based: The required license capacity of a z Systems IPLA program with these terms equals the license capacity of z/OS on the machines where the z Systems IPLA program executes.

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

For more information on mainframe MSU-rated capacities, refer to The IBM z Systems Machines Exhibit, (Z125-3901), or visit the Mainframes section of the z Systems Exhibits website.

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

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

When a z Systems IPLA sub-capacity program with reference-based terms is used in a qualified Parallel Sysplex environment, the required license capacity of the z Systems 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 z Systems 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 z Systems (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, go to the IBM System z Software Pricing website.

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 z Systems Workload License Charges (Z125-6516).
- The complete terms and conditions for sub-capacity EWLC are defined in the IBM Customer Agreement - Attachment for EWLC, TWLC, zELC, and z/OS.e 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 Amendment for IBM z Systems Programs Sub-Capacity Pricing (Z125-6929). Once the amendment is
signed, the terms in the amendment replace any and all previous z Systems IPLA sub-capacity terms and conditions.

**Sub-capacity terms and conditions**

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

**Sub-capacity utilization determination**

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

**On/Off 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 z Systems 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 lawful, comprehensive security approach, which will necessarily involve additional operational procedures, and may require other systems, products, or services to be most effective.

**Important:** IBM does not warrant that any systems, products, or services are immune from, or will make your enterprise immune from, the malicious or illegal conduct of any party.

**Prices**

Information on charges is available on the IBM Support Portal website.

**Pricing for 5697-V61 MSU-based z Systems offerings**

**Program name:** IBM Enterprise COBOL Value Unit Edition for z/OS, V6.1

**Program PID:** 5697-V61

<table>
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<th>Entitlement identifier</th>
<th>Description</th>
<th>License option/Pricing metric</th>
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<tbody>
<tr>
<td>S017Z7K</td>
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<td>Basic OTC, per Value Unit</td>
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<td>S017Z7K</td>
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<td>Basic OTC, per MSU-day TUC</td>
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**Subscription and Support PID:** 5697-ECS

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<td>Basic ASC, per Value Unit SW S&amp;S</td>
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<td>S017V84</td>
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<td>No charge, decline SW S&amp;S</td>
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<td>IBM Enterprise COBOL Value Unit Edition for z/OS S&amp;S</td>
<td>Per MSU SW S&amp;S registration</td>
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</table>

**Order now**

To order, contact the Americas Call Centers or your local IBM representative. To identify your local 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

**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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