



IBM Enterprise COBOL for z/OS V3.3 and Preview: Enhanced COBOL support for Enterprise Beans in IBM WebSphere Application Server for z/OS

Overview

Enterprise COBOL V3.3 enables developers to leverage more than 30 years' worth of applications in new endeavors. It delivers needed COBOL function to continue integration of COBOL and Web-oriented business processes.

New in V3.3

- Enhanced XML support
- Support for the new functions in IBM Debug Tool for z/OS® V4
- Support for DB2® V8

Preview: Enhanced COBOL support for Enterprise Beans in WebSphere® Application Server for z/OS

IBM announces the technical preview of enhanced run-time support and initial development tools in WebSphere Studio Enterprise Developer that will enable COBOL programs to be dynamically loaded into WebSphere Application Server for z/OS regions. They can be accessed from Enterprise Beans running in those regions.

Previews provide insight into IBM plans and releases. Availability prices, ordering information, and terms and conditions will be provided when the program is announced. IBM plans and intent are subject to change without notice.

Key prerequisites

One of the following:

- z/OS V1.1 (5694-A01), or later
- OS/390® V2.10 (5647-A01)

Depending on the function used, certain levels of other programs may be required. Refer to the **Software requirements** section for details.

Planned availability date

February 27, 2004

For ordering, contact:

Your IBM representative, an IBM Business
Partner, or the Americas Call Centers at

800-IBM-CALL

Reference: LE001

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Description

V3.3 compiler enhancements

XML processing enhancements: V3.3 builds on existing compiler XML capabilities to provide set-level operations between XML documents, represented as character strings, and COBOL elementary or group data items. The new XML GENERATE verb generates XML from a data item.

Support for DB2 for z/OS V8: V3.3 has been enhanced to take advantage of new SQL support that is planned to be available with DB2 for z/OS V8. Using the DB2 coprocessor support (SQL compiler option), you can now use new DB2 V8 SQL features such as multiple-row FETCH, multiple-row INSERT, and longer names for SQL identifiers, table names, and column names.

Support for debug tool: Enterprise COBOL is enhanced in V3.3 to support the new level of debug tool included in either the V3.3 Full Function offering or as the separate, new IBM Debug Tool for z/OS V4 product. Included is support for the following new debug tool features:

- Improved performance with COBOL debug side files — Performance is improved when using COBOL debug side files. Changes were made to only read the debug information from a COBOL debug side file for the programs that the user wants to debug.
- Enhanced debugging of programs using unicode support:
 - When national data is displayed using the Debug Tool LIST command or is part of a formatted dump, is automatically converted to EBCDIC representation using the code page specified in the CODEPAGE compiler option when the program was compiled. The output of a successful conversion may be a string containing mixed SBCS and DBCS characters, including SO and SI characters, depending on the code page used.
 - The Debug Tool MOVE command now supports assigning values to national data items. A national data item may also be moved to or from a group data item.
 - Debug Tool conditional commands such as IF and EVALUATE may specify national data as comparands.
- Support for object-oriented COBOL syntax — Programs containing object-oriented COBOL syntax can be debugged with Debug Tool.

Full Function vs Alternate Function offerings

The mainframe interactive debug tool is offered with the Enterprise COBOL compiler in the Full Function offering. This debug tool is a common facility that supports:

- Enterprise COBOL for z/OS
- Enterprise PL/I for z/OS
- COBOL for OS/390 & VM
- COBOL for MVS™ & VM
- VisualAge® PL/I for OS/390
- PL/I for MVS & VM
- z/OS C/C++ optional feature
- OS/390 C/C++ optional feature

Only one Full Function offering is required for debugging applications written using any of these programming products. An Alternate Function offering is available for customers who do wish to receive the Enterprise COBOL for z/OS compiler but not the debug tool.

Debug Tool for z/OS V4 is also offered as a separate product. For more information about the function offered in the debug tool, refer to Software Announcement 203-237, dated September 16, 2003.

Preview: Enhanced COBOL support for Enterprise Beans in WebSphere

This technical preview includes enhanced run-time support and initial development tools in WebSphere Studio Enterprise Developer that will enable COBOL programs to be dynamically loaded into WebSphere Application Server for z/OS regions. They can be accessed from Enterprise Beans running in those regions. The tools will generate a session Enterprise Beans “wrapper” that represents the procedural COBOL program in the WebSphere region, enabling the business logic in the COBOL program to be accessed in the same way as any other Enterprise Bean. Support will include management of an IBM DB2 connection, so that the COBOL program may access DB2 databases using EXEC SQL statements.

After January 27, 2004, visit

<http://www.ibm.com/software/awdtools/cobol/zos/>

- For detailed information about availability dates, terms and conditions, COBOL programming restrictions, and prerequisite software levels of WebSphere Studio Enterprise Developer, DB2, and WebSphere Application Server for z/OS
- To participate in the technical preview to gain early experience with this COBOL Enterprise Beans support

Hardware and software support services

SmoothStart™/installation services: SmoothStart and Installation Services are not provided.

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IBM US Announcement Supplemental Information

February 17, 2004

Technical information

Hardware requirements: Enterprise COBOL for z/OS® V3.3 will run on any hardware configuration supported by the licensed programs specified below.

Software requirements: Unless otherwise announced by IBM, Enterprise COBOL for z/OS V3 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 programs listed below that require program temporary fixes (PTFs), refer to the *Program Directory*, the *Customization Guide*, and the preventive support planning (PSP) bucket.

Required licensed programs

- One of the following:
 - z/OS V1.1 (5694-A01), or later
 - OS/390® V2.10 (5647-A01)

Optional licensed programs

- CICS® Transaction Server for OS/390 V1 (5655-147)
- CICS Transaction Server for z/OS V2 (5697-E93)
CICS Transaction Server V2 is required to use the Integrated CICS Translator support.
- COBOL Report Writer R4 (5798-DYR, 5798-DZX)
required for programs with Report Writer statements
- DB2® UDB for OS/390 V6 (5645-DB2)
DB2 UDB V7 or V8 is required for DB2 coprocessor support.
- DB2 UDB for z/OS and OS/390 V7 (5675-DB2)
- DB2 UDB for z/OS V8 (5625-DB2)
- Debug Tool for z/OS and OS/390 V3.1 (5655-H32)
- Debug Tool Utilities and Advanced Functions for z/OS and OS/390 V3.1 (5655-J18)
- Debug Tool for z/OS V4.1 (5655-L24)
- Debug Tool Utilities and Advanced Functions for z/OS V4.1 (5655-L23)
- DFSORT™ element of z/OS (5694-A01) or OS/390 (5647-A01)
- High Level Assembler/MVS™ and VM and VSE (5696-234)
- IMS™ V7 (5655-B01)
- IMS V8 (5655-C56)

- OS PL/I V2.3 (5668-909, 5668-910, 5668-911)
- PL/I for MVS & VM V1.1 (5688-235)
- Enterprise PL/I for z/OS and OS/390 V3 (5655-H31)
- VS FORTRAN V2 (5668-806, 5688-087)

Compatibility: The following summarizes the compatibility characteristics of Enterprise COBOL for z/OS V3. Full details will be provided in the *Migration Guide* and the *Licensed Programming Specifications*.

Enterprise COBOL for z/OS V3 provides source code and object code compatibility with its predecessor product, COBOL for OS/390 and VM V2, with the following exceptions:

- The CMPR2 compiler option has been removed. Source programs still using VS COBOL II R1 or R2 level syntax must be migrated to conform to ANS/ISO COBOL 85 standard rules before they can be compiled with IBM Enterprise COBOL V3.
- SOM®-based object-oriented (OO) COBOL applications are no longer supported. Object-oriented COBOL syntax is “retargeted” for Java™-based OO programming. Further, the primary purpose of the object-oriented syntax is not stand-alone OO COBOL programming. The syntax is intended to facilitate interoperation of COBOL and Java.
- Support for the VM/CMS environment is not provided in this product.
- New reserved words are defined.
- In addition to CMPR2, the ANALYZE, FLAGMIG, IDLGEN, and TYPECHK compiler options are removed.
- The pseudo-assembly listing produced by the LIST compiler option is slightly changed, which may impact development tools that process the listing. IBM recommends that such tools use the ADATA compiler option to obtain desired information about the compilation, rather than the listing.
- The defaults for compiler options DBCS, FLAG, RENT and XREF have been changed from NODBCS to DBCS, FLAG(I) TO FLAG(I,I), NORENT to RENT and NOXREF to XREF(FULL).

Planning information

Packaging: The Enterprise COBOL for z/OS V3 package includes:

- Basic machine-readable material on the customer-selected distribution medium
- Program Directory (GI10-8423)
- Licensed Program Specifications (GC27-1411)

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>.

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.

Ordering information

Current licensees

Current licensees of Enterprise COBOL for z/OS and OS/390 V3.2 will be sent a program reorder form that can be returned directly to IBM Software Delivery and Fulfillment (SDF).

Reorder forms are scheduled to be mailed by two weeks after planned availability. Reorder forms returned to SDF will be processed within 10 workdays of receipt. When V3.3 is available, V3.2 will no longer be available.

New licensees

- Orders for new licenses can be placed now.
- Customers whose orders ship before the planned availability will receive Enterprise COBOL for z/OS and OS/390 V3.2.
- Customers whose orders ship after the planned availability date will receive Enterprise COBOL for z/OS V3.3.
- New users of Enterprise COBOL for z/OS V3 should specify Type: 5655 Model: G53

For ordering information on Enterprise COBOL for z/OS and OS/390 V3, refer to Software Announcement 201-343, dated November 27, 2001.

Unlicensed documentation: A *Program Directory* (GI10-8423) and *Licensed Program Specifications* (GC27-1411) is supplied automatically with the basic machine-readable material. No other hardcopy publications are shipped with the product.

Displayable softcopy publications: All IBM Enterprise COBOL for z/OS V3 publications are available free of charge in displayable softcopy format (BookManager® and PDF) from the IBM COBOL Web site

<http://www.ibm.com/software/awdtools/cobol/zos/>

Subsequent updates (technical newsletters or revisions between releases) to the publications shipped with the product will be distributed to the user of record for as long as a license for this software remains in effect. A separate publication order or subscription is not needed.

Customized offerings

Most product media is shipped only via customized offerings (that is, 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

The terms for Enterprise COBOL for z/OS and OS/390 V3 as previously announced in Software Announcement 201-343, dated November 27, 2001, licensed under the IBM Customer Agreement are unaffected by this announcement.

IBM Operational Support Services — Support Line: Yes

Prices

The pricing for Enterprise COBOL for z/OS and OS/390 V3 as previously announced in Software Announcement 201-343, dated November 27, 2001, is unaffected by this announcement.

Entry support license one-time charge: A one-time charge authorizes use only on IBM Entry End User/390 Machines.

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Note: Shipments will begin after the planned availability date.

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