



IBM Enterprise COBOL for z/OS , V4.2 delivers enhancements to XML parsing and offers usability improvements

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At a glance

New in Enterprise COBOL, V4.2

- XML document parsing with validation
- Performance improvements to parsing XML documents without validation
- Compiler message severity customization
- Compiler option BLOCK0 to exploit system-determined block size for QSAM files
- COBOL user-defined words can include the underscore (_) character
- Compiler listings display CICS® options in effect
- Java™ interoperability - support for Java 5 and Java 6

Overview

With IBM® Enterprise COBOL for z/OS®, V4, you get more than 40 years of IBM experience in application development to facilitate your new On Demand Business endeavors. Enterprise COBOL for z/OS helps you to integrate COBOL and Web-based business processes in Web services, XML, Java, and COBOL applications. This interoperability lets you capitalize on existing IT investment while smoothly incorporating new, Web-based applications as part of your organization's infrastructure.

Enterprise COBOL is a leading-edge IBM z/OS-based compiler that helps you create and maintain mission-critical, line-of-business COBOL applications, targeted to execute on your z/OS systems. It offers access to IBM DB2®, IBM CICS, and IBM IMS™ systems, as well as other data and transaction systems.

Key prerequisites

For details, refer to the [Software requirements](#) section.

Planned availability date

August 28, 2009

Description

Enterprise COBOL for z/OS, V4.2 delivers:

- Further enhancements to XML parsing using the z/OS XML System Services parser
 - Users can now parse XML documents with validation against an XML schema, using the VALIDATING phrase of the XML PARSE statement.
 - Performance is improved for nonvalidating parsing.
 - Character processing is enhanced for any XML document that contains a reference to a character that is not included in the single-byte EBCDIC code page of the document.
- A new facility that lets users customize message severity.

The new MSGEXIT suboption of the EXIT compiler option lets users specify a module that is called for each compiler diagnostic message and each FIPS (FLAGSTD) message. Using the MSGEXIT module, users can change the severity of messages, suppress messages, and convert FIPS messages into diagnostic messages.

- A new compiler option, BLOCK0, lets programs take advantage of system-determined block size for QSAM output files.

When a program is compiled using the BLOCK0 compiler option, an implicit BLOCK CONTAINS 0 clause is activated for all eligible QSAM files in the program, which can result in enhanced processing speed and minimized storage requirements for output files.

- COBOL user-defined words that can now include the underscore character (_).
User-defined words such as data names and program names can now include underscore characters. Underscores are also supported in the literal form of program names.

- Compiler listings display CICS options in effect.

When applications are compiled using the integrated CICS translator, compiler listings will show the CICS options that are in effect. This facility provides the same benefit to CICS users as was previously made available to DB2 users.

- Additional SDKs supported for Java interoperability.

Enterprise COBOL applications using object-oriented syntax for Java interoperability can now run with Java 5 or Java 6. Java SDK 1.4.2 continues to be supported.

Hardware and software support services

SmoothStart/installation services

IBM SmoothStart™ Services and Installation Services are not provided.

Availability of national languages

Description	Program Number	Availability Date	Language
IBM Enterprise COBOL for z/OS, V4.2	5655-S71	08/28/2009	Japanese

Program number

To order please specify:

Program Name	VRM	Program Number
IBM Enterprise COBOL for z/OS, V4	V4.2.0	5655-S71

Technical information

Specified operating environment

Hardware requirements

IBM Enterprise COBOL for z/OS, V4.2 will run on any z/Architecture® processor that includes the z/Architecture Extended-Translation Facility 2.

Software requirements

IBM Enterprise COBOL for z/OS, V4.2 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 *Licensed Program Specifications* and the preventive service planning (PSP) bucket.

Required licensed programs

- z/OS, Version 1 Release 9 (5694-A01) or later

z/OS Language Environment® provides the execution environment and library of COBOL runtime services required to compile and run COBOL applications using Enterprise COBOL. z/OS Language Environment, V1.9, V1.10, or V1.11, plus PTFs for APAR PK90754 are required.

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

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

XML parsing support requires z/OS XML System Services V1.9, V1.10, or V1.11, plus PTFs for APARs OA28253 and OA28398. When parsing with validation under CICS, the PTFs for APAR OA29675 are also required.

Optional licensed programs for z/OS

Support for applications using object-oriented COBOL syntax for Java interoperability requires one of the following:

- SDK for z/OS, Java Technology Edition, V6 (5655-R31) plus PTFs for APAR PK89762
- SDK for z/OS, Java 2 Technology Edition, V5 (5655-N98)
- SDK for z/OS, Java 2 Technology Edition, V1.4.2 (5655-I56)

Note: COBOL requires a 31-bit Java SDK. 64-bit Java technology is not currently supported.

Support for DB2 integrated coprocessor (SQL compiler option) requires one of the following:

- DB2 Universal Database™ for z/OS, V9 (5635-DB2)
- DB2 Universal Database for z/OS, V8 (5625-DB2)

Support for use of national decimal host variables in EXEC SQL statements requires DB2 V8 with PTFs for APAR PQ93857 or DB2 V9.

Support for use of alternate DDNAME for DBRMLIB requires DB2 V8 or DB2 V9 plus PTFs for DB2 APAR PK55937.

Support for the integrated CICS translator (CICS compiler option) requires one of the following:

- CICS Transaction Server (CICS TS) for z/OS, V4 (5655-S97)
- CICS TS for z/OS, V3 (5655-M15)

Including CICS options in effect as part of the COBOL listing requires CICS Transaction Server for z/OS, V4.1 (5655-S97) with PTFs for APAR PK89224, or CICS TS for z/OS, V3.2 (5655-M15) with PTFs for APAR PK91041.

For sorting and merging, the DFSORT™ element of z/OS (5694-A01) feature of z/OS or an equivalent product.

Programs with Report Writer statements require COBOL Report Writer, Release 4 (5798-DYR, 5798-DZX).

IBM Enterprise COBOL for z/OS, V4.2 runs with the currently supported releases of the following programs:

- CICS Transaction Server for z/OS, V4 (5655-S97)
- CICS Transaction Server for z/OS, V3 (5655-M15)
- DB2 Universal Database for z/OS, V9 (5635-DB2)
- DB2 Universal Database for z/OS, V8 (5625-DB2)
- IMS, V10 (5635-A01)
- IMS, V9 (5655-J38)
- IBM Application Performance Analyzer for z/OS, V9 (5697-P10)
- IBM Application Performance Analyzer for z/OS, V8 (5697-N63)
- IBM Application Performance Analyzer for z/OS, V7 (5697-N53)
- Debug Tool for z/OS, V9 (5655-U27)
- Debug Tool for z/OS, V8 (5655-S17)
- Debug Tool for z/OS, V7 (5655-R44)
- Debug Tool Utilities and Advanced Functions for z/OS, V8 (5655-S16)
- Debug Tool Utilities and Advanced Functions for z/OS, V7 (5655-R45)
- IBM Fault Analyzer for z/OS, V9 (5655-U28)

- IBM Fault Analyzer for z/OS, V8 (5655-S15)
- IBM Fault Analyzer for z/OS, V7 (5655-R46)
- IBM File Manager for z/OS, V9 (5655-U29)
- IBM File Manager for z/OS, V8 (5655-S14)
- IBM File Manager for z/OS, V7 (5655-R47)
- IBM Rational® Developer for System z®, V7 (5724-T07)
- COBOL Report Writer R4 (5798-DYR and 5798-DZX)
- High Level Assembler MVS™ & VM & VSE (5696-234)
- Enterprise PL/I for z/OS and OS/390®, V3 (5655-H31)
- VS FORTRAN, V2 (5668-806, 5688-087)
- For C/C++ with Enterprise COBOL -- You must use the XL C/C++ feature of z/OS (5694-A01).

Planning information

Packaging

The IBM Enterprise COBOL for z/OS, V4.2 package includes:

- Basic machine-readable material on the customer-selected distribution medium
- Program Directory (GI11-7870)
- Licensed Program Specifications (GI11-7871)
- Licensed Program Specifications - Japanese (GC27-1411)

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 IBM Enterprise COBOL for z/OS V4.1 must order this release via MES.

New licensees

Orders for new licenses can be placed now.

Registered customers can access IBMLink™ for ordering information and charges.

Shipment will not occur before the availability date.

Unless a later date is specified, orders entered before the planned availability date will be assigned a schedule date of one week following availability.

- Orders entered after the planned availability date will be assigned a schedule date for the week following order entry.
- New users of IBM Enterprise COBOL for z/OS, V4.2 should specify Type: 5655 Model: S71.

Note: Ordering codes and pricing information remain unchanged from the prior release. For ordering and pricing information previously announced for IBM Enterprise COBOL for z/OS, V4, refer to Software Announcement [AP07-0339](#), dated December 11, 2007.

A Program Directory (GI11-7870) and *Licensed Program Specifications* (GI11-7871) are supplied automatically with the basic machine-readable material. No other hardcopy publications are shipped with the product.

The following optional publications will be available after product availability:

- Customization Guide (SC23-8526)
- Language Reference (SC23-8528)
- Compiler and Runtime Migration Guide (GC23-8527)
- Programming Guide (SC23-8529)

Displayable Softcopy Publications

All IBM Enterprise COBOL V4 publications are available in displayable softcopy format (BookManager®, PDF) on the IBM COBOL Web site:

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

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

Product deliverables are shipped only via Customized Offerings (for example, CBPDO, ServerPac, and SystemPac®).

CBPDO and ServerPac are offered for Internet delivery, where ShopzSeries product ordering is available. Internet delivery of ServerPac may help improve automation and software delivery time. For more details on Internet delivery, refer to the ShopzSeries help information at

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

Media type for this software product is chosen during the customized offerings ordering process. Based on your customer environment, it is recommended that the highest possible density tape media is selected. Currently offered media types are:

- CBPDOs - 3480, 3480 Compressed, 3490E, 3590, and 3592*
- ServerPacs - 3480, 3480 Compressed, 3490E, 3590, and 3592*
- SystemPacs - 3480, 3480 Compressed, 3490E, 3590, and 3592*

*3592 is highest density media. Selecting 3592 will ship the fewest number of media.

Once a product becomes generally available, it will be included in the next ServerPac and SystemPac monthly update.

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 three weeks after inclusion in ServerPac.
- SystemPac shipments will begin four weeks after inclusion in SystemPac due to additional customization, and data input verification.

Terms and conditions

The terms for IBM Enterprise COBOL V4, as previously announced in Software Announcement [AP07-0339](#), dated December 11, 2007, licensed under the IBM Customer Agreement (ALP/IAP Software - Japan) are unaffected by this announcement.

IBM Operational Support Services - SupportLine

Yes

Prices

For all local charges, contact your IBM representative.

AP distribution

Country/Region	Announced
AP IOT	
ASEAN*	Yes
India/South Asia**	Yes
Australia	Yes
People's Republic of China	Yes
Hong Kong S.A.R of the PRC	Yes
Macao S.A.R of the PRC	Yes
Taiwan	Yes
Korea	Yes
New Zealand	Yes
Japan IOT	
Japan	Yes

* Brunei Darussalam, Indonesia, Cambodia, Lao People's Democratic Republic, Malaysia, Philippines, Singapore, Thailand, and Vietnam

**Bangladesh, Bhutan, India, Sri Lanka, Maldives, Nepal, and Afghanistan

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