

Enterprise PL/I for z/OS



Licensed Program Specifications

Version 5 Release 2

Enterprise PL/I for z/OS



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Version 5 Release 2

First Edition (September 2017)

This edition applies to Version 5 Release 2 of IBM Enterprise PL/I for z/OS (program number 5655-PL5) and to all subsequent releases and modifications until otherwise indicated in new editions. Make sure that you are using the correct edition for the level of the product.

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Enterprise PL/I for z/OS, Version 5 Release 2 — Program Number 5655-PL5

IBM® Enterprise PL/I is a leading-edge, z/OS-based compiler that helps you create and maintain mission-critical, line-of-business PL/I applications to execute on your z/OS® operating systems. The applications that are created by using Enterprise PL/I can interoperate with IBM CICS®, IBM DB2®, IBM IMS™, and other transactional and data systems.

This compiler can help facilitate your new, on-demand business endeavors by helping to integrate PL/I and web-based business processes in web services, XML, Java™, and PL/I applications. This compiler's interoperability helps you capitalize on your existing IT investments while more smoothly incorporating new, web-based applications as part of your organization's infrastructure.

Enterprise PL/I for z/OS, V5.2 reinforces the continuing IBM commitment to the PL/I programming language on the z/OS platform and the continued delivery of new features.

With Enterprise PL/I for z/OS, V5.2, you can take advantage of more than 50 years of IBM experience in PL/I compiler development.

Highlights

Enterprise PL/I for z/OS V5.2 offers:

- Exploitation of the new IBM z14™ hardware
- Several performance enhancements, particularly to SELECT and INLIST
- More messages to help improve code quality
- Compilation of programs with SQL statements under z/OS UNIX System Services
- Over five additional client-requested enhancements that include:
 - Microseconds for improved accuracy in REPATTERN
 - Improved diagnosis of missing returns from functions
 - Support for inlining of nested functions
 - Message to explain when a function is not inlined
 - Flagging of incorrect PLIXOPT declares

Specified operating environment for Enterprise PL/I

This section lists the hardware and software requirements for IBM Enterprise PL/I for z/OS, V5.2.

Hardware requirements

The Enterprise PL/I for z/OS V5.2 compiler runs on the following (and later) IBM Z® servers:

- z14™
- z13
- z13s™

- zEnterprise® EC12 (zEC12)
- zEnterprise BC12 (zBC12)
- zEnterprise 196 (z196)
- zEnterprise 114 (z114)

The Enterprise PL/I for z/OS V5.2 compiler generates code that runs on the following (and later) IBM Z® servers:

- z14
- z13
- z13s
- zEnterprise EC12 (zEC12)
- zEnterprise BC12 (zBC12)
- zEnterprise 196 (z196)
- zEnterprise 114 (z114)

Software requirements

Enterprise PL/I for z/OS V5.2 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 about programs listed in the following section that require program temporary fixes (PTFs), see the *Program Directory* and the preventive service planning (PSP) bucket.

Required licensed programs

- z/OS, Version 2.1 (5650-ZOS), or later

Optional licensed programs

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

- IBM CICS Transaction Server for z/OS, Version 5 (5655-Y04)
- IBM CICS Transaction Server for z/OS, Version 4 (5655-S97)
- IBM CICS Transaction Server for z/OS Value Unit Edition, Version 5 (5722-DFJ)
- Enterprise COBOL for z/OS Version 6 (5655-EC6)
- Enterprise COBOL for z/OS Version 5 (5655-W32)
- Enterprise COBOL for z/OS Version 4 (5655-S71)
- Enterprise PL/I for z/OS, Version 5 (5655-PL5)
- Enterprise PL/I for z/OS, Version 4 (5655-W67)
- IBM DB2 11 for z/OS (5615-DB2)
- IBM DB2 10 for z/OS (5605-DB2)
- IBM DB2 11 for z/OS Value Unit Edition (5697-P43)
- IBM DB2 10 for z/OS Value Unit Edition (5697-P31)
- IBM Debug for z Systems, V14.1 (5655-Q50)
- IBM Debug for z Systems, V14.0 (5655-Q50)
- IBM Debug Tool for z/OS, Version 13.1 (5655-Q10)
- IBM DFSORT element of z/OS (5650-ZOS)
- IBM z/OS High Level Assembler/MVS and VM and VSE (5696-234)
- Fault Analyzer for z/OS, Version 14.1 (5655-Q41)
- Fault Analyzer for z/OS, Version 13.1 (5655-Q11)
- IBM File Manager for z/OS, Version 14.1 (5655-Q42)

- IBM File Manager for z/OS, Version 13.1 (5655-Q12)
- IBM Application Performance Analyzer for z/OS, Version 14.1 (5655-Q49)
- IBM Application Performance Analyzer for z/OS, Version 14.0 (5655-Q49)
- IBM Application Performance Analyzer for z/OS, Version 13.1 (5655-Q09)
- IBM IMS Version 14 (5635-A05)
- IBM IMS Version 13 (5635-A04)
- IBM IMS Transaction Manager Value Unit Edition Version 14 (5655-TM3)
- IBM IMS Transaction Manager Value Unit Edition Version 13 (5655-TM2)
- IBM IMS Transaction Manager Value Unit Edition Version 12 (5655-TM1)
- IBM IMS Database Value Unit Edition Version 14 (5655-DSE)
- IBM IMS Database Value Unit Edition Version 13 (5655-DSM)
- IBM Developer for z Systems, Version 14 (5724-T07)
- IBM Rational® Developer for System z®, Version 9 (5724-T07)
- IBM Rational Developer for System z, Version 8.5 (5724-T07)
- IBM VS FORTRAN, Version 2 (5668-806, 5688-087)
- IBM Application Delivery Foundation for z Systems, Version 3.1 (5565-AC6)
- IBM Application Delivery Foundation for z Systems, Version 3.0 (5565-AC6)
- IBM Application Delivery Foundation for z Systems, Version 1.2 (5697-CDT)
- For XL C/C++ with Enterprise PL/I, you must use the XL C/C++ feature of z/OS, Version 2 Release 1 (5650-ZOS), or later.

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.

Licensed program materials availability

Restricted materials: No. This licensed program is available without source licensed program materials. It is available in object code only.

Supplemental terms

Designated Machine Identification

Designated Machine Identification Required: Yes.

Testing period

- Basic License: Not applicable.
- DSLO License: Not applicable.

Installation or location license

Not applicable. A separate license is required for each machine on which the licensed program will be used.

Use-based charges/usage restriction

Not applicable.

Usage restriction

Not applicable.

Type/duration of program services

- Central Service.
- Until discontinued by IBM with a minimum of six months' written notice.

Authorization for copy and use on home/portable computer

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This document is a W3C Recommendation. This fifth edition is not a new version of XML. As a convenience to readers, it incorporates the changes dictated by the accumulated errata (available at <http://www.w3.org/XML/xml-v10-4e-errata>) to the Fourth Edition of XML 1.0, dated 16 August 2006. In particular, erratum [E09] relaxes the restrictions on element and attribute names, thereby providing in XML 1.0 the major end user benefit currently achievable only by using XML 1.1. As a consequence, many possible documents which were not well-formed according to previous editions of this specification are now well-formed, and previously invalid documents using the newly-allowed name characters in, for example, ID attributes, are now valid.

This edition supersedes the previous W3C Recommendation of 16 August 2006.

Please report errors in this document to the public xml-editor@w3.org mail list; public archives are available. For the convenience of readers, an XHTML version with color-coded revision indicators is also provided; this version highlights each change due to an erratum published in the errata list for the previous edition, together with a link to the particular erratum in that list. Most of the errata in the list provide a rationale for the change. The errata list for this fifth edition is available at <http://www.w3.org/XML/xml-v10-5e-errata>.

An implementation report is available at <http://www.w3.org/XML/2008/01/xml10-5e-implementation.html>. A Test Suite is maintained to help assessing conformance to this specification.

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