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# Considerations for running COBOL programs under Language Environment for z/VM<sup>®</sup>, Version 4 Release 4

This document describes relaxed, new, and existing restrictions for running COBOL programs on Language Environment as shipped with z/VM Version 4 Release 4. A description of a new run-time message that is included in Language Environment for z/VM Version 4 Release 4 is also provided.

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## Supported COBOL compilers

You can run COBOL programs that have been compiled with the following COBOL compilers, subject to the restrictions that are identified in the sections below:

- OS/VS COBOL, 2.4
- VS COBOL II, Release 3
- VS COBOL II, Release 4
- COBOL/370, Version 1 Release 1
- COBOL for MVS & VM, Version 1 Release 2
- COBOL for OS/390<sup>®</sup> & VM, Version 2 Release 1
- COBOL for OS/390 & VM, Version 2 Release 2

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## Relaxed restrictions

The following previous restrictions are now supported for COBOL programs running under CMS:

- You can debug COBOL programs that have been compiled with the TEST(SEPARATE) compiler option when you use Debug Tool, Version 3 Release 1, or later.
- Programs that have been compiled with the PGMNAME(LONGUPPER) or PGMNAME(LONGMIXED) compiler options can be processed by the CMS BIND command. Programs that have been compiled with these options do not require processing by the Language Environment prelinker.

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## New restrictions

The following new restrictions apply when you run COBOL programs under CMS:

- You cannot modify the COBPACKS that are provided with Language Environment for z/VM, Version 4 Release 4.
- COBOL programs that have been compiled with Enterprise COBOL for z/OS<sup>™</sup> and OS/390, Version 3 Release 1, or later are not supported.

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## Existing restrictions

The following existing restrictions apply when you run COBOL programs under CMS:

- If DFSORT<sup>™</sup>/CMS, Version 2 Release 1, or later or an equivalent is installed SORT and MERGE verbs are supported on XA or ESA mode machines.
- The RERUN phrase is tolerated, but no checkpoints are taken because CMS has no checkpoint or restart feature.

- When you use the CMS LKED command or the GENMOD command with the NOMAP and RLDSAVE options to generate independent load modules for each program in the object deck, CMS supports the following code:
  - CANCEL, dynamic CALL *literal*, and CALL *identifier* targeting a subprogram that has been compiled into the same object program as the calling program by using the batch compile facility
  - Dynamic CALL *identifier* and static CALL *literal* to the same subprogram
- You cannot run COBOL programs in the VM/ESA™ OpenEdition environment.
- You cannot use files that are defined as ORGANIZATION LINE SEQUENTIAL.
- You cannot allocate files dynamically by using environment variables.

CMS does not support the following COBOL code:

- User label-handling functions
 

The user label-handling format of the USE statement and the *data-name* option of the LABEL RECORDS clause are not valid. The LABEL declaritive of the USE statement is never invoked for label processing.
- IGZBRDGE macro for call conversions
- Object-oriented COBOL language extensions (references to objects, methods, or classes, for example)
- Programs that have been compiled with the DLL, EXPORTALL or ARITH(EXTEND) compiler option

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## New run-time message

The following message has been added:

**IGZ0189S** Program *program-name* cannot be run in this operating system environment.

**Explanation:** The program contains features that are not supported in this operating system environment. For example, when running on CMS, the following features are not supported:

- programs compiled with the DLL compiler option
- programs compiled with the ARITH(EXTEND) compiler option
- programs compiled with Enterprise COBOL for z/OS and OS/390 V3R1 and later

**Programmer response:** Modify the program to use supported features for the environment or run the program in the appropriate environment.

**System action:** The application was terminated.

**Symbolic feedback code:** IGZ05T

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