



VMS Software

VSI COBOL V3.4-3 for OpenVMS x86-64 Systems

Release Notes

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Operating System: VSI OpenVMS x86-64 Version 9.2-2 or higher

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1. VSI COBOL

1.1. Overview

VSI COBOL V3.4-3 for OpenVMS x86-64 systems provides a compiler which runs on the OpenVMS x86-64 version 9.2-2 or later.

VSI OpenVMS x86-64 V9.2-3 update 2 is strongly recommended as it contains RTL fixes, system condition handling fixes, and debugger improvements.

This chapter provides general information about the VSI COBOL product. The remaining chapters provide the following information:

- Highlights new and changed features in this version of VSI COBOL.
- Details some known problems and incomplete functionality in this version of the compiler.
- Lists the organization of the documentation set.

The image identification for the COBOL compiler is "COBOL V3.4-3".

The **COBOL/VERSION** string is:

VSI COBOL V3.4-3 (GEM 50nnn) on OpenVMS x86-64 Systems

1.2. Getting Help and Reporting Problems

Please report problems or offer feedback using the VSI Support Portal or VSI Official Forum.

2. New and Changed Features in Previous Releases

2.1. New and Changed Features

VSI COBOL V3.4-3 is the release of COBOL on OpenVMS x86-64. It is based on VSI COBOL on OpenVMS IA-64 for source compatibility. There may be platform-specific features from OpenVMS Alpha and OpenVMS IA-64 that may not be supported.

2.2. Known Issues

- Some of the run-time overflow checking, especially floating overflow, is still not working. We expect this to be fixed by a future release of OpenVMS.
- Debug support has been improved with this compiler and the debugger in OpenVMS V9.2-3 update 2 but there may still be some issues. We are working on these issues for a future release.
- The compiler now generates DWARF information for packed decimal variables, but the debugger support will be available in a release after V9.2-3. The example of current output for COBOL's PIC 99 with value 12.

```
DBG> show symbol/type VAR_DECIMAL
data TEST_DEBUG\TEST_DEBUG\VAR-DECIMAL
      atomic type, undefined type, size: 2 bytes
DBG>
DBG> examine VAR_DECIMAL
TEST_DEBUG\TEST_DEBUG\VAR-DECIMAL:      12849
DBG>
```

- The **/MACHINE_CODE** qualifier is ignored. Use the **ANALYZE/OBJECT/DISASSEMBLE** command to produce a list of the machine code instructions generated by the compiler.

2.3. Corrections Since Latest Release

- The debugger would stop on the wrong line for the "GO to reach start of program" when starting the debugger. This was caused by incorrect debug information from the compiler.
- [NS7964] A COBOL program would ACCVIO when using the USE AFTER STANDARD ERROR PROCEDURE clause. This bug requires both a compiler fix and an RTL file that is included in V9.2-3.
- [NS8056] Certain COBOL programs would ACCVIO due to stack memory leak.
- The compiler did not produce debug information for routines with multiple entry points.
- The compiler did not produce correct debug information for the size of decimal fields.
- The compiler did not produce correct checking code for invalid decimal values even when the **/CHECK=DECIMAL** DCL qualifier was used.

3. VSI COBOL Documentation and Online Information

The VSI COBOL documentation set can be found online at <https://docs.vmssoftware.com/>.

The online documentation has not been updated to include x86-64 support.