



VMS Software

VSI COBOL V3.3-0002 for OpenVMS x86-64

Release Notes

Publication Date: November 2024

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

VSI COBOL V3.3-0002 for OpenVMS x86-64 Release Notes



Copyright © 2024 VMS Software, Inc. (VSI), Boston, Massachusetts, USA

Legal Notice

Confidential computer software. Valid license from VSI required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

The information contained herein is subject to change without notice. The only warranties for VSI products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. VSI shall not be liable for technical or editorial errors or omissions contained herein.

All other trademarks and registered trademarks mentioned in this document are the property of their respective holders.

1. Release Notes

1.1. Overview

VSI COBOL V3.3-0002 for OpenVMS x86-64 Systems provides a compiler which runs on the OpenVMS x86-64 version 9.2-2 or higher.

VMS922X_UPDATE-V0200 is strongly recommended as it contains RTL fixes and system condition handling fixes.

This section provides general information about the VSI COBOL product. The remaining sections 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 V3.3-0002

The COBOL/VERSION string is:

VSI COBOL V3.3-0002 (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 V3.3-0002 is the release of COBOL for VSI OpenVMS x86-64. It is based on VSI COBOL for OpenVMS IA-64 for source compatibility, but certain features specific to OpenVMS Alpha and OpenVMS IA-64 may not be supported in this version.

2.2. Known Issues

- Some of the run-time overflow checking, especially floating overflow, is still not fully supported. This may be fixed in a future release of VSI OpenVMS x86-64.
- Debug support is not fully implemented and the compiler may generate an assertion when using `/DEBUG` or the debugger may report errors about undefined types. These issues will be fixed in a future release of the compiler.
- The compiler now generates DWARF information for packed decimal variables, but the full debugger support will be implemented in the future. The example of current output for COBOL's PIC 99 with value 12 is printed below:

```
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 machine code instructions generated by the compiler.

2.3. Corrections Since The Last Release

- The compilation time for sources with large data chunks has been significantly reduced.
- The compiler now generates debug information for packed decimal variables. The debugger support will be available in the future.

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.