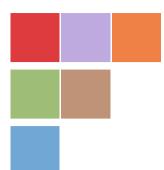


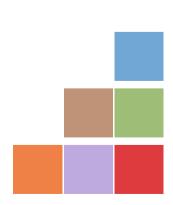
Version 3.10





# **COBOL-IT® Compiler Suite Enterprise Edition**

Quick Start Version 3.10







### Contents

| ACKNOWLEDGMENT  | 3 |
|---|---|
| COMPILER, RUNTIME, AND DEBUGGER TOPICS                          | 4 |
| Introduction  | 4 |
| COBOL-IT License terms  |   |
| Installing COBOL-IT   | 6 |
| Installing the binary distributions (Linux/Unix)                | 6 |
| Installing the binary distributions (Windows)<br>Citlicense.xml | 6 |
| Citlicense.xml  |   |
| Compile and run hello.cbl                                       | 7 |
| Copy files  | 7 |
| CALL'ed programs  | 7 |
| Data files  | 7 |
| Runtime error messages  | 7 |
| Using the COBOL-IT Debugger                                     |   |
| COBOL-IT E-Learning   | 8 |





# Acknowledgment

This documentation is derived from COBOL-IT Source code, parts of which are derived from OpenCOBOL.

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In 2008, COBOL-IT forked its own compiler branch, with the intention of developing a fully featured product and offering professional support to the COBOL user industry.

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# Compiler, Runtime, and Debugger Topics

## Introduction

This document describes how to install and how to use the COBOL-IT Compiler Suite.

This file contains part of the initial OpenCOBOL manual. Copyright (C) 2002-2007 Keisuke Nishida Copyright (C) 2007 Roger While Copyright (C) 2008-2018 COBOL-IT

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### **<u>COBOL-IT Compiler Suite</u>**

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The executable components in the COBOL-IT Compiler Suite, cobc and cobcrun are based on OpenCOBOL, originally developed by Keisuke Nishida and maintained since 2007 by Roger While.





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The executable component in the COBOL-IT runtime system, libcobit is based on the libcob library originally developed by Keisuke Nishida and maintained since 2007 by Roger While.

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## Installing COBOL-IT

The COBOL-IT compiler cobc requires that a "C" Compiler be installed on the host platform.

For a complete port list, including "C" Compilers that have been tested and are supported, see Port List with Supported "C" Compilers.

### Installing the binary distributions (Linux/Unix)

The COBOL-IT Linux/Unix 32-bit binary distributions are intended to be installed in **/opt/cobol-it.** The COBOL-IT Linux/Unix 64-bit binary distributions are intended to be installed in **/opt/cobol-it-64.** They are provided as **gzipped** tar files.

An example with a 32-bit Linux binary distribution:

As a root user, download the binaries that are compatible with your platform. From the folder in which the COBOL-IT binary is located:

Unzip/unpack the file:

```
# tar zxpf cobol-it-3.10.11-enterprise-32-i786-pc-linux-gnu.tar.gz
-C /opt/
```

This will unpack the distribution in /opt/cobol-it.

Copy the citlicense.xml to /opt/cobol-it.

Run the cobol-it-setup script\_to set all needed environment variables :

- \$ source /opt/cobol-it/bin/cobol-it-setup.sh or
- \$ . /opt/cobol-it/bin/cobol-it-setup.sh

### Installing the binary distributions (Windows)

Click on the Windows-Setup executable to launch the setup. The Windows setup requires that you indicate which version of Visual Studio you have installed on your machine. If COBOL-IT does not detect the "C" compiler selected during installation on your Windows machine, it will return an error message.

After the setup is complete you will have a Quick Launch Shortcut, which will cause the setenv\_cobolit.bat file to be executed when you open your command shell. Setenv\_cobolit.bat sets all the environment variables needed to begin using the COBOL-IT Compiler Suite.

#### Citlicense.xml

By default, the citlicense.xml should be located in the installation directory.

| Windows 32    | C:\COBOL\COBOL-IT   |
|---------------|---------------------|
| Windows 64    | C:\COBOL\COBOL-IT64 |
| UNIX/Linux 32 | /opt/cobol-it       |
| UNIX/Linux 64 | /opt/cobol-it-64    |





## Compile and run hello.cbl

COBOL-IT creates compiles to a shared object format by default. Compiler with cobc and run with cobcrun.

```
>cobc hello.cbl
>cobcrun hello
```

### **Copy files**

The COBOL-IT compiler can be directed to search for copy files in directories using the -I <dir> compiler flag. Default copy file extensions are .cpy, .cob, .cbl and [no extension]. If you have any other copy file extension, you should use the -ext [ extension ] compiler flag.

| -ext <extension></extension> | Add file extension to list of default extensions        |
|------------------------------|---|
| -I <directory></directory>   | Add <directory> to copy/include search path</directory> |

```
>cobc -I ./copy hello.cbl
```

#### CALL'ed programs

When you compile your source code, you probably will want to create the compiled objects in a separate directory, and run them from this separate directory. To create compiled objects in a separate directory, use the –o compiler flag.

>cobc -o ./object hello.cbl

To run shared objects from a separate directory, set the COB\_LIBRARY\_PATH environment variable. The COB\_LIBRARY\_PATH is the directory used by the runtime to locate share objects.

```
>export COB_LIBRARY_PATH=./object
```

#### **Data files**

Locate your data files using the COB\_FILE\_PATH runtime environment variable. The COB\_FILE\_PATH is the path to the data files used by the application.

>export COB\_FILE\_PATH=./data

#### Runtime error messages

Capture runtime error messages using the COB\_ERROR\_FILE runtime environment variable. The COB\_ERROR\_FILE is the file to which all runtime error messages are written that would otherwise be written to stderr.

>export COB\_ERROR\_FILE=coberr.txt

For details about all compiler flags and runtime environment variable, see the Compiler & Runtime Reference Manual.





## Using the COBOL-IT Debugger

The COBOL-IT Debugger (cobcdb) runs shared object files that have been created by the COBOL-IT Compiler (cobc) and that have been compiled with the –g compiler flag. Run the COBOL-IT debugger from the command line with the command >cobcdb [program-name]. For example:

C:\COBOL\CobolIT\samples>cobcdb hello

Step through the code with the "step" command. (cobcdb) Step

Terminate the debugging session with the "stop" command (cobcdb) Stop

For details about all of the COBOL-IT Debugger options and parameters, see the COBOL-IT Compiler and Runtime Reference Manual.

## **COBOL-IT E-Learning**

For more information, please visit <u>http://www.cobol-it.com/resources.html</u> for access to COBOL-IT's E-Learning modules. Please contact your sales representative at <u>sales@cobol-it.com</u> for information about how you can access the full set of COBOL-IT Documentation and Software.





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