

Data Sheet

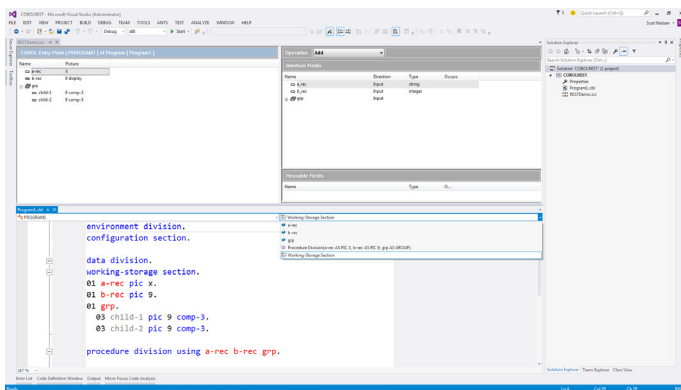
Visual COBOL is the industry leading solution for COBOL application development and deployment on Windows, Unix and Linux systems. It combines best in class development tooling within Microsoft Eclipse and Visual Studio, with the flexibility of deployment across the widest range of enterprise platforms including .NET and the Java Virtual Machine (JVM).

Visual COBOL is the most advanced COBOL toolset available for distributed application development. This release includes dozens of enhancements based on actual customer requests. This document highlights a few of those enhancements. More details of the powerful features available can be found in the product [data sheet](#).

HIGHLIGHTS OF THIS RELEASE

- Platform deployment coverage across the enterprise
- New development tools for the agile development team
- SOA support for RESTful Web Services and JSON
- Faster application performance

Fig 1. Creating a RESTful web service using the Micro Focus Interface Mapping Toolkit (IMTK)



ENTERPRISE-WIDE DEPLOYMENT

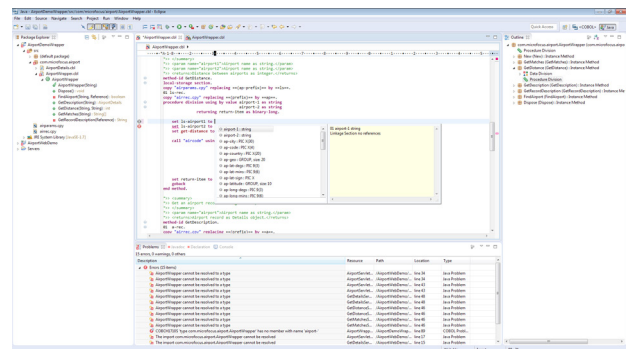
- **Latest platforms** - coverage for the latest releases of all supported platforms including Windows 10 and SUSE 12
- **Middleware** - support for Oracle Tuxedo and IBM TX Series middleware
- **RPM distributions** - products for Linux platforms are now available in RPM format providing a native packaging and installation experience
- **Linux** - COBOL deployment is now available across all major versions of supported Linux distributions
- **Deployment SDK** - A COBOL Server SDK is now provided to enable developers to create their own installation packages
- **PostgreSQL** - OpenESQL now provides compatibility for the PostgreSQL database
- **Oracle compatibility** - a new OpenESQL directive, SQL(PROCOB), emulates some Oracle Pro*COBOL behaviour when using ODBC, JDBC and ADO.NET access
- **Single deployment package** - a single COBOL Server product now supports all editions of Visual COBOL development products, simplifying application deployment.

VISUAL STUDIO AND ECLIPSE

COBOL development is now available in the latest releases of Visual Studio and Eclipse. Supported versions include:

- Visual Studio 2012/2013/2015
- Eclipse 4.2/4.3/4.4

Fig 2. COBOL development using Eclipse 4.4



VISUAL COBOL 2.3 WHAT'S NEW?

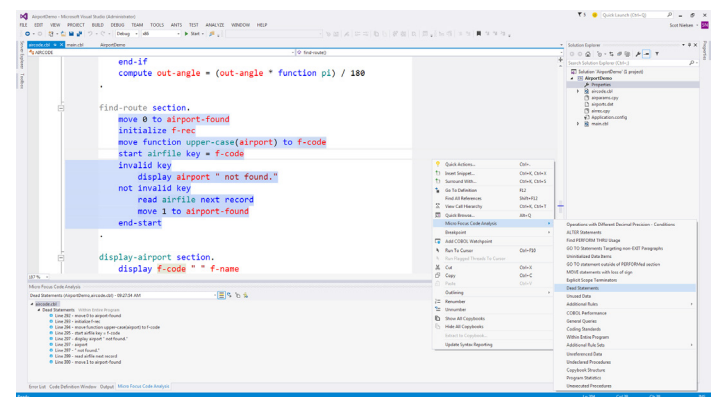
Data Sheet

New features for COBOL developers

- **Unit testing** - a COBOL unit testing framework for procedural COBOL applications is now available. The framework enables developers to create automated test cases to validate application behavior and provides output consumable by continuous integration systems for test reports
- **Code coverage and profiler** - support for Code Coverage (TESTCOVER) and Application Profiling (PROFILE) are now integrated into the Visual Studio and Eclipse IDEs
- **IDE assisted coding** - the COBOL editor auto-complete engine has been updated to provide comprehensive language support for procedural and OO COBOL applications within Eclipse and Visual Studio. Visual Studio 2015 IDE also provides new auto-correct and auto-implement features using the Visual Studio Light Bulb actions which replace the SmartTag feature
- **Faster compile times** - parallel build support is now enabled within the Visual Studio IDE reducing compilation time for multi-project solutions. Incremental build is now supported for JVM COBOL projects, significantly improving the time taken to build COBOL JVM applications
- **Easier Pro*COBOL configuration** – enhanced support for configuring Oracle Pro*COBOL applications is now available within the project properties
- **Remote Development** - remote Eclipse projects can now be accessed using the SOCKS5 internet protocol. This feature enables Eclipse network traffic to be routed through the SSH port, removing the need to open other network ports
- **Code reminders** - TODO and FIXME source code comments now appear in Eclipse and Visual Studio task lists
- **Enhanced pre-processor support** - pre-processors can now be configured from within the project properties

- **ADO.NET** - a new wizard is available for configuring ADO.NET connections
- **Single file editing** - Eclipse and Visual Studio now support editing and debugging of individual COBOL source code without needing to create an associated COBOL project
- **Code analysis tools** – new tools for locating points of interest within the application code can be invoked via context menu or automatically at the end of a build. Out-of-the-box queries support dead code analysis and identification of inefficient coding constructs.

Fig 3. Rules-based analysis available within Visual Studio and Eclipse can be used to identify dead code and adherence to coding standards



COBOL DATA TOOLS

A new version of the data file tools are available for early adopters. These tools feature improved performance and support for multi-platforms.

RESTFUL AND JSON WEB SERVICES

An updated version of the Interface Mapping Toolkit (IMTK) now supports creation of RESTful Web Services. New REST Web Services can be designed and deployed using JSON for data interchange.

Data Sheet

FASTER APPLICATION PERFORMANCE

New optimizations have been made to the COBOL runtime system and compiler technology to improve overall application performance. In comparison to Net Express and Server Express products, customer benchmarks reveal an increase of between 5-12% across all platforms. Use-case specific, internal benchmarks show performance improvements by up to 30% on Windows 64-bit and up to 40% on HP-UX platforms.

COBOL FOR THE NEXT GENERATION

Developers who wish to learn COBOL can make use of Visual COBOL Personal Edition, available free for non-commercial use.

See www.microfocus.com/visualcobolpe for more information.

The Micro Focus Academic Program is open to academic institutions teaching the COBOL language. This program offers free tooling and training materials to qualified academic partners.

For more information visit www.microfocus.com/academic.

PRODUCTS

Application development

- Visual COBOL for Visual Studio
- Visual COBOL for Eclipse
- Visual COBOL Development Hub

Integrated development environments

- Visual Studio 2012, 2013, 2015
- Eclipse 4.2, 4.3, 4.4

Application deployment

- COBOL Server

SUPPORTED PLATFORMS

Microsoft Windows

- Windows - 7, 8, 8.1, 10
- Windows Server -2003, 2008 R2, 2012 R2
- Microsoft Azure 2.6 SDK

IBM AIX

- 6.1, 7.1

HP-UX

- 11i v3 (11.31) on Itanium

Solaris

- 10, 11 SPARC
- 11 Intel

SUSE

- 11, 12 on Intel and System z

Red Hat

- 6, 7 on Intel and System z

Oracle Linux

- 6, 7 on Intel
- Red Hat Compatible Kernel
- Oracle Unbreakable Kernel

Java

- 1.6, 1.7, 1.8

Java Application Servers

- Tomcat 7
- JBOSS 6.1
- Oracle WebLogic 12.1
- IBM WebSphere 8.5

.NET

- All supported frameworks versions

Data Sheet

Relational Databases

- Oracle 11g R1-R2, 12c
- Microsoft SQL Server 2008 R2, 2012, 2014
- IBM DB2 9.5, 9.7, 10.1,10.5
- Postgres 9.4

Middleware

- Oracle Tuxedo and Tuxedo ART 12.1.3c
- IBM TXSeries for Multiplatforms 8.2

For additional information please visit: www.microfocus.com

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