MICRO FOCUS | VISUAL COBOL

VISUAL COBOL 2.2 WHAT'S NEW?

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 Eclipse and Visual Studio, with the flexibility of deployment across the widest range of enterprise platforms including .NET and the Java Virtual Machine. Visual COBOL is the most advanced COBOL toolset available for distributed application development.

The 2.2 release includes many enhancements based on actual customer requests, which are highlighted in this document. More details of the powerful features available can be found in the product specific data sheets.

PERFORMANCE

.NET and Java have become key deployment platforms across the enterprise with many business systems now exclusively .NET or Java based. Taking COBOL into these environments enables our customers to build .NET or Java systems faster, based on functionality within their existing COBOL systems.

This release includes many enhancements to increase runtime performance. While performance gains vary between applications, many common COBOL operations have seen significant boosts in performance. Examples include:

- CALL statements are 30% faster on average
- New code generator optimizations for large programs enable faster execution
- Packed decimal operations are 200-300% faster
- File and directory searches in .Net are up to 600% faster
- File handling operations are up to 15% faster.

COBOL JVM

Visual COBOL enables COBOL applications to be compiled to Java Byte Code and deployed directly within the Java Virtual Machine. Coupled with the power of Java Application Servers, COBOL applications can now provide backend functionality for web services and web applications.

Java Application Servers

Wider coverage of the industry's leading Java Application Server platforms, including IBM WebSphere, Oracle WebLogic, JBOSS and Tomcat.

Web Tools Platform

Visual COBOL now includes the Eclipse Web Tools Platform (WTP) as standard. The WTP extends Eclipse with tools for developing Web and Java EE applications. It includes graphical editors and wizards to assist in the creation, deployment and testing of web applications.

Web Services and JSP Tutorials

Tutorials and 'getting started' guides for deploying COBOL applications within a Java Application Server are included. The tutorials guide you through the whole process - from downloading, installation and configuration of the application server, through to creating a web service or JSP application and invoking a COBOL program for backend service functionality.

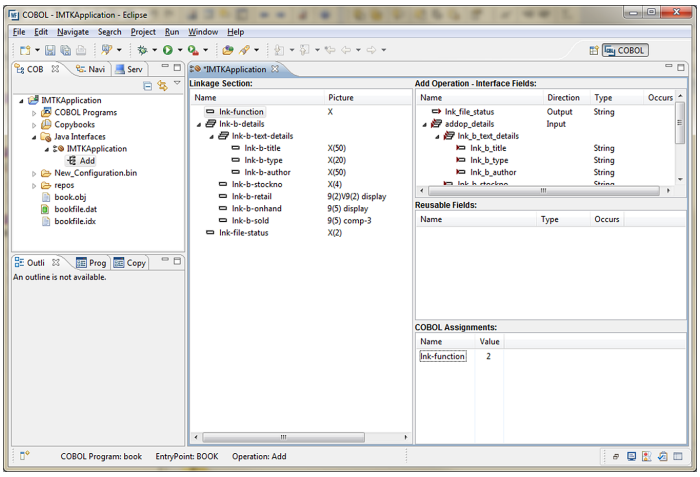
JDBC Connection Sharing

COBOL applications using embedded SQL can now access existing database connections to ensure efficient use of database resources and consistency of transaction operations.

ENTERPRISE SERVER

Enterprise Server is a scalable transaction processor for COBOL systems and is now available within Visual COBOL. It offers a high-performance platform for hosting COBOL systems that integrate with Java Application Servers, or for exposing COBOL systems as web services. A graphical editor, called the Interface Mapping Toolkit, enables COBOL developers to quickly create entry points into existing COBOL programs. These are then accessible to a wide range of other programming languages and third party toolsets.

Data Sheet



Creating a web service using the Interface Mapping Toolkit within Eclipse

ECLIPSE AND VISUAL STUDIO

Visual COBOL continues to set the benchmark for COBOL application development with many new features designed to increase efficiency of development teams and on-board new COBOL developers faster than ever. New features include:

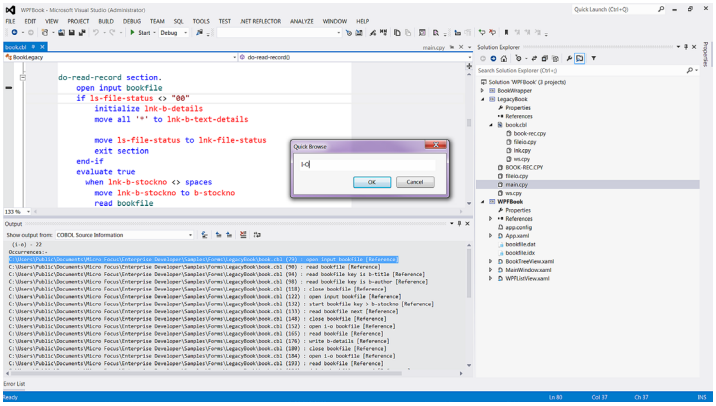
Smart editing – COBOL source code can be edited in a variety of styles including traditional fixed format and free format. The Visual COBOL editor in Eclipse and Visual Studio adjusts keyboard handling and preserves formatting, including comments based on the current source format

Copybook dependency view – a tool window shows copybooks used within a program, making it easy to find dependent source files. Developers can quickly identify which programs in the project share copybooks.

Advanced COBOL searches – COBOL Source Information enables developers to quickly find items of interest such as fields, paragraphs and COBOL verbs.

Faster project loads and builds –Visual Studio and Eclipse integration is optimized to provide better support for larger code bases. Projects load faster, background parsing and developer tools are more responsive, and improved project dependency analysis means only out-of-date source files are recompiled.

Filter views – organize source files and copybooks into separate virtual folders. Create customizable filters to organize source files based on file extensions.



COBOL Source Information output from Visual Studio showing all instances of file IO usage within a program

'Expanded source' preview – enables a developer to see the entire program including all dependent copy files within a single editor view. Source files and copybooks can be edited inline and show the effect of copy replacing.

Error markers – enable rapid identification of errors. Icons highlight source files within the Visual Studio Solution Explorer and Eclipse Package Explorer, so problems can be seen at-a-glance.

Multi-output .NET projects – COBOL projects targeting .NET can generate multiple executables per project, enabling large codebases to be easily moved into .NET.

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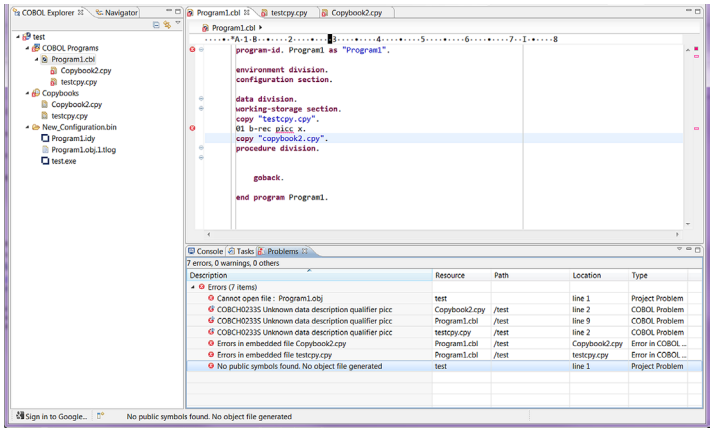


Eclipse enhanced error markers and copybook dependency view

Quickfix hints - missing copybooks are fixed quickly within Eclipse using an automatic quick fix tool.

Copybook projects – Eclipse supports copybook projects enabling copybooks to be easily shared and accessed across multiple projects within the workspace without the need to setup external folders.

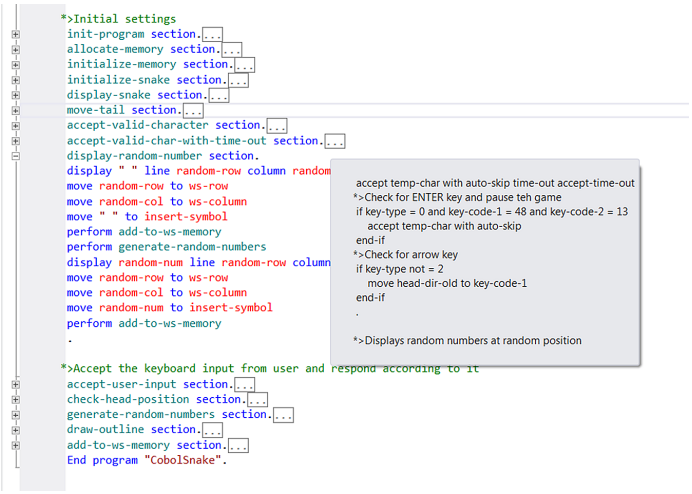
OpenESQL assistant – available within Eclipse and Visual Studio. Fast generation and testing of COBOL snippets that connect to and query relational databases.

Azure support – now included as standard, it enables .NET COBOL applications to be deployed into the Microsoft Azure Cloud.

Eclipse 3.8 – Visual COBOL is accompanied by the latest Eclipse release from the 3.x Eclipse project.

RESTful web services – Visual Studio users have access to a new project template for creating RESTful web services using ASP.NET. Use RESTful web services to access COBOL programs on the backend.

Visual Studio outlining on paragraphs and sections – gain extra screen estate by hiding sections of code.



Collapsible regions in Visual Studio

Visual Studio watch window – supports mixed hex/text data formats. View the same field in hex/text without switching between modes.

COBOL LANGUAGE

Micro Focus is committed to evolving the COBOL language to ensure it remains the best option for business applications. In this release new COBOL syntax for managed code includes:

- Optional parameters
- Named parameters
- Event attach/detach
- Delegate combining

The Visual COBOL Samples Browser provides examples of how to use these new capabilities.

Data Sheet

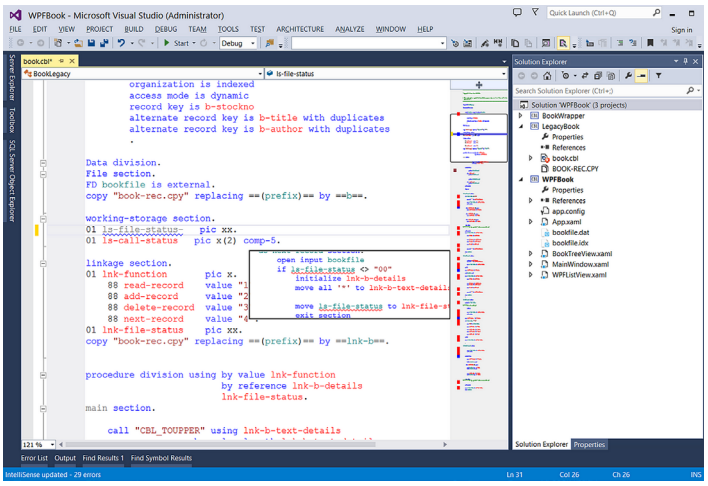
ACUCOBOL-GT® AND RM/COBOL COMPATIBILITY

Modernization add-on for ACUCOBOL-GT extend® and RM/COBOL customers. This toolset assists in the conversion of code to Micro Focus dialect and supports ACUCOBOL-GT® to .NET WPF and character screen support.

Micro Focus provides an Early Adopter Program (EAP) for customers wishing to upgrade to Visual COBOL. To determine your upgrade path and find out more about the program, please contact your Micro Focus account manager.

VISUAL STUDIO 2013 - DEVELOPER PREVIEW

With integration already in Visual Studio 2010 and 2012, Micro Focus now offers initial support for COBOL development within Visual Studio 2013, Microsoft's flagship development platform. For a closer look, start your trial here www.microfocus.com/vs2013



Visual Studio 2013 Preview – showing enhanced scrollbar and preview window

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PLATFORM SUPPORT

COBOL application portability across the enterprise is paramount in the long term success of our customers' applications. Micro Focus executes thousands of test cases across all supported operating system and processor combinations, including 32 and 64-bit, .NET and JVM, ensuring COBOL applications run reliably, no matter where the application is deployed.

SUPPORTED OPERATING SYSTEMS

If your operating system is not listed, please discuss this with your account manager. We may still have coverage for your environment.

Windows on Intel x86/x64

- Windows Vista
- Windows XP
- Windows 7
- Windows 8
- Windows Server 2003
- Windows Server 2008
- Windows Server 2012

AIX

6.1 / 7.1

Linux on Intel x86/x64

SUSE 11 SP 2, SP3

Red Hat 5.9, 6.4

Oracle Linux 6.4

z/Linux on 390

SUSE 11 SP 2, SP3

Red Hat 6.4

Solaris

Solaris 10, 11.1 on SPARC

Solaris 11.1 on Intel

HPUX

HPUX 11i v3 (11.31) on Itanium

SUPPORTED APPLICATION SERVERS FOR COBOL JVM

Micro Focus has tested COBOL JVM deployment against these known configurations:

Tomcat 7.0.39	JRE 1.6.027	
JBoss 6.1	JRE 1.6.027	
Oracle WebLogic 12.1.1	JRE 1.6.027	IBM JRE 1.6.1 SR10 FP1
IBM WebSphere 8.5	JRE 1.6.027	IBM JRE 1.6.1 SR10 FP1

SUPPORTED APPLICATION SERVERS FOR ENTERPRISE SERVER

Micro Focus has tested J2EE deployment with Enterprise Server against these configurations:

WebSphere 8.0, 8.5

Oracle WebLogic Server 10.3.5, 12.1.1

JBoss Application Server 5.1, 6.1

SUPPORTED DATABASES

Micro Focus supports ODBC, JDBC and ADO.NET database access using OpenESQL. Supported database configurations include:

- Microsoft SQL Server 2008 R2, 2012
- IBM DB2 9.5, 9.7, 10.1
- Oracle 11g R1, 11g R2

For More Information

Interested in finding out more details or upgrading to Visual COBOL? Ask us about our free Value Profile Day service.

Alternatively, you can email the team at visualcobol@microfocus.com.

For additional information please visit: www.microfocus.com