Visual COBOL

Visual COBOL® is a suite of software products designed to meet the needs of IT organizations with existing application investments written in the COBOL language.

**Product Highlights**

Advanced COBOL application development tools available within Visual Studio and Eclipse provide developers with a modern development experience, consistent with that of Java and C# developers, facilitating fast, agile development and easy onboarding for new staff.

Patented compiler technology offers flexible deployment options across native platforms including Windows, UNIX and Linux systems as well as managed code environments such as .NET and the Java Virtual Machine (JVM). Existing COBOL applications seamlessly integrate with C# or Java systems enabling faster development and service delivery.

**Business Benefit**

Visual COBOL provides IT organizations with the ability to create new customer value from existing application investments. By re-using core application logic, Visual COBOL removes the risk associated with re-write or replacement strategies which expose the business to uncertain cost and extended delivery time frames.

With Visual COBOL, organizations can quickly and safely respond to new business requirements with predictable and highly cost-effective results.

**Feature Overview**

- High-performance and optimized COBOL runtime environment
- Highly compatible upgrade path for existing Micro Focus® Net Express and Server Express users
- Application development within Visual Studio or Eclipse
- Application development and deployment across Windows, UNIX and Linux platforms
- Extensive 3rd party support including application servers, databases and middleware components
- Direct generation to Java bytecode and Microsoft Intermediate Language (MSIL) for deployment to the Java Virtual Machine (JVM) or .NET platforms
- A modern COBOL language syntax supporting new language constructs for object-oriented development and traditional procedural styles
- A toolkit for web services and API development using SOA, REST and JSON technologies based on existing COBOL applications.
- Advanced diagnostics tools including patented reversible debugging aids for RHEL Intel systems

**Detailed Feature Overview**

**Patented Compiler Technology**

The Visual COBOL compiler includes patented technology that offers unique and highly versatile options for COBOL application development. COBOL programs can be compiled to a variety of executable formats including:

- **Intermediate code (.int)** a Micro Focus platform portable executable format
- **Generated code (.gnt)** a Micro Focus executable format optimized for the target platform
- **Shared Object (.so)** native shared object executable format for UNIX/Linux platforms
- **Windows Executable (.exe/dll)** native Windows executable formats
- **Java bytecode (.class)** COBOL compiled to Java bytecode and executable with the JVM
- **.NET Assembly (.exe/dll)** COBOL compiled to MSIL and executable within the Microsoft Common Language Runtime (CLR).

The Visual COBOL compiler offers support for a wide variety of modern and older COBOL dialect variants and includes ANSI and ISO standards, Enterprise COBOL and many others.
High-Performance COBOL Runtime Environment

Micro Focus COBOL Server provides a high-performance, platform-portable runtime environment for the execution of COBOL applications.

Consistent application behavior is provided across supported platforms and through use of a portable API layer, enabling developers to follow a write-once, deploy-anywhere approach.

Cross-Platform Deployment

The Micro Focus COBOL compiler and COBOL runtime system provides ubiquitous platform coverage enabling COBOL applications to be deployed across a range of distributed systems, ensuring compatibility and consistent behavior across different platforms. Standard library routines callable from COBOL applications enable application developers scope to write-once, deploy-anywhere yet still access operating system level functionality.

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

ISVs can target multiple platforms with the same COBOL codebase, increasing market coverage and reducing application testing overheads. Application owners can swiftly change operating platforms to take advantage of commodity hardware and more agile, flexible deployment options.

The latest release of Visual COBOL includes support for the Docker container platform, further increasing flexibility for application development and deployment. New product packaging options enable Docker deployment to both Windows Server and Linux platforms.

System Requirements

<table>
<thead>
<tr>
<th>Products</th>
<th>Solaris</th>
<th>.NET</th>
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<tbody>
<tr>
<td>Application development</td>
<td>• 11 SPARC</td>
<td>• All framework versions supported</td>
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<tr>
<td></td>
<td>• 11 Intel</td>
<td></td>
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<tr>
<td>Integrated development environments</td>
<td>• 12 SP4 64-bit only on Intel, IBM Power and z Systems</td>
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<td>• SUSE 15</td>
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<tr>
<td>Application deployment</td>
<td>• 6, 7 on Intel, IBM Power and z Systems</td>
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<td></td>
<td>• Oracle Linux</td>
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<tr>
<td>Platforms</td>
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<tr>
<td>Microsoft Windows</td>
<td>• 6, 7 on Intel</td>
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<td></td>
<td>• Red Hat Compatible Kernel</td>
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<td></td>
<td>• Oracle Unbreakable Kernel</td>
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<td>IBM AIX</td>
<td>• 6, 7 on Intel</td>
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<td>• Red Hat</td>
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<td>HP-UX</td>
<td>• 6, 7 on Intel</td>
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<td></td>
<td>• Oracle Java 8</td>
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<td>• Adopt Open JDK 8</td>
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<td>Java</td>
<td>• Oracle Java 8, 11</td>
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<td>• Adopt Open JDK 8</td>
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<tr>
<td>Java Application Servers</td>
<td>• Tomcat 9</td>
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<td></td>
<td>• JBOSS EAP 7.1</td>
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<tr>
<td></td>
<td>• Oracle WebLogic 12c</td>
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<td>• IBM WebSphere 9.0</td>
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Relational Databases

- Oracle 12.2c
- IBM DB2 10.5, 11.1
- Postgres 10.5
- MySQL 8.0

Middleware

- Oracle Tuxedo and Tuxedo ART 12.1.3c
- IBM TXSeries for Multiplatforms 9.1

Docker

Community and Enterprise Editions:

- Windows Server 2016  
  - CE 17.09.0-ce-win33
  - EE 17.06.2-ee-6
- RedHat  
  - CE 1.12.6
- SUSE  
  - CE 17.04.0-ce