



### Highlights

- Offers a high performance, cost-effective alternative to legacy mainframe and Micro Focus COBOL on open systems
- Supports the ANSI-85 standard and legacy COBOL dialects
- Produces reliable and efficient object code that can be deployed on a range of platforms
- Complies with standard EXTFH and EXTSM interfaces
- Includes a powerful COBOL compiler, a streamlined runtime environment, a graphical, source-level debugger, and a 100% portable indexed file system
- Provides a flexible environment for integrating with external software such as UniKix Mainframe Rehosting software from Clarity, JEE Server Environments, and native libraries

## vCOBOL® Enterprise

### Powerful mainframe offloading and modernization platform

vCOBOL Enterprise provides a powerful environment to develop and deploy robust, business-critical COBOL applications across Linux®, UNIX® and Microsoft® Windows® systems. A cost-effective alternative to legacy mainframe and Micro Focus® COBOL dialects, vCOBOL is well-suited for mission-critical interactive and batch environments, as well as standalone COBOL application deployments.

#### Maximize the value of existing resources

vCOBOL technology from Veryant lowers total cost of ownership (TCO) without impacting existing development teams. Core components of vCOBOL Enterprise include a powerful COBOL compiler; a streamlined, portable run-time environment; a graphical, source-level debugger, and a range of data access and migration utilities to simplify transitions to the vCOBOL platform.

Supporting the ANSI-85 standard and legacy COBOL dialects, the vCOBOL® Compiler translates COBOL produces optimized, portable object code that can be deployed on a variety of platforms, including UNIX, Linux, Linux on IBM® System z®, and Microsoft Windows, to utilize the full performance of 32-bit or 64-bit deployments.

With vCOBOL, Veryant has shifted much of the ‘heavy lifting’ of operational analysis and execution instructions performed by alternative COBOL platforms during runtime, into the highly efficient vCOBOL Compiler. For example, by generating the logic for math operations inline during compilation, runtime processing requirements are minimized and only load and store of values to and from memory are required by runtime routines. This approach significantly improves critical runtime performance.

The vCOBOL® Runtime Environment also enhances performance by optimizing access to COBOL data types using native memory. With this innovative memory management technique, COBOL data types such as PIC S9(8) COMP are loaded in a single operation versus one byte at a time wherever possible. The vCOBOL Runtime Environment has been designed to minimize overhead and deliver enhanced performance in common enterprise scenarios such as with the use of POINTER data types and native memory operations, as well as inter-language calls such as C calling COBOL or COBOL calling C.

#### Debugging and diagnostics

A sophisticated, remote debugger is included with the vCOBOL Runtime Environment. From the vCOBOL® Debugger, developers leverage a graphical environment to perform source level debugging activities such as stepping through COBOL source code, setting breakpoints, and monitoring variables.

When regular debugging techniques are not able to address a production error or a problem cannot be easily reproduced, the Abend Diagnostic Snapshot (ADS) facility is available to report on the state of an application at the moment that an abnormal termination occurred. This report can be used to identify the root cause of an issue by providing all available information available at the point where the error occurred, including:

- Execution environment setting details such as the version of the vCOBOL Compiler, vCOBOL Runtime Framework, and loaded COBOL programs in use at the time of error.
- The name of the COBOL program, name of the paragraph, name of the COBOL source file and COBOL source line number of the code that was executing when the exception occurred.
- The COBOL call stack at the time the exception occurred, including the names of all COBOL programs in the stack and the names of the associated COBOL source files.
- A dump of COBOL working-storage memory, including each data-item name, length, value and hexadecimal byte dump of the data-item contents.

### Robust and comprehensive data access

The modular design of vCOBOL Enterprise supports a wide range of data access options.

vCOBOL supports all common COBOL file organizations and record types. This includes Indexed, Relative, Binary Sequential, and Line Sequential file organizations, with fixed and variable length records. In addition, vCOBOL software supports standard External File Handler (EXTFH) and External Sort Module (EXTSM) interfaces. vCOBOL has a built-in ESQL compiler that translates embedded SQL (EXEC SQL) statements to JDBC calls, and also supports Pro\*COBOL and DB2 Precompilers.

The vCOBOL platform includes Veryant™ JISAM, a 100% portable ISAM file system that enables fast and efficient access to data files. Several utilities are also available to streamline data administration tasks on the vCOBOL platform:

- The ISMIGRATE utility provides a one-step, graphical interface for moves between file systems and relational databases on the vCOBOL platform.

- The JUTIL utility is included with Veryant JISAM for basic file management. With JUTIL, developers can load and unload binary or line sequential files, compact files, check file consistency, and rebuild Veryant JISAM files.
- The Veryant™ Graphical Indexed File Editor (GIFE) provides a convenient GUI interface for developers to instantly read, modify, add, or delete individual indexed files records from outside of an application.

### The COBOL for business-critical operations

vCOBOL is a high-performance, cost-effective alternative to legacy COBOL platforms commonly found running business-critical transaction processing systems. Extensive COBOL dialect support makes it easy to migrate existing applications with little or no application code change. Valuable application code can be quickly replatformed to vCOBOL Enterprise and distributed on a wide range of cost-effective open systems.

vCOBOL software is tightly integrated with UniKix™ Mainframe Rehosting technology from Clerity, delivering a proven and scalable platform to rehost mission-critical online and batch mainframe assets to open systems while lowering annual operating costs up to 70%. Clerity's unique mainframe rehosting software leverages existing skill sets, application code, and administrative tools on open systems to benefit the bottom line and better prepare an enterprise to sustain competitive advantage in the future.

vCOBOL software's Java Invocation API also provides seamless integration between COBOL programs and Java Enterprise Edition (JEE) server environments. With vCOBOL technology, COBOL programs can be called directly from Java programs. vCOBOL's innovative framework enables programmers to natively call legacy COBOL programs from Java Servlets, Web Services, Enterprise JavaBeans, or any other Java program.

### Supported platforms

vCOBOL Enterprise is available on several platforms, including UNIX, Linux, Linux on IBM System z, and Microsoft Windows.

