**FACT SHEET | APPLICATION SERVICES** 

# Migrate Your COBOL Applications to a Cost-Effective, High-Performance Platform

NTT DATA Enterprise COBOL

#### Benefits:

- Offers a cost-effective alternative to legacy mainframe and Micro Focus COBOL
- Supports 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 external file handler (EXTFH) and external sort module (EXTSM) interfaces
- Includes a powerful COBOL compiler, a streamlined runtime environment, a source-level debugger and a portable indexed file system
- Provides a flexible environment for integrating with external software

## Modernize legacy systems with high-performance COBOL solutions

Maintaining your legacy mainframe or Micro Focus COBOL systems can be costly in today's constantly evolving digital realm. To stay competitive, you need to migrate to a cost-effective platform. NTT DATA Enterprise COBOL provides a powerful environment for you to develop and deploy robust, business-critical COBOL applications on scalable, open systems. It is well suited to handle your mission-critical online and batch environments, as well as stand-alone application deployments.

#### Maximize the value of your existing resources

With NTT DATA COBOL, you can lower your total cost of ownership without impacting your existing development teams. Core components of the platform include:

- A powerful COBOL compiler
- A streamlined, portable runtime environment
- Flexible IDE for Visual Studio and an Eclipse-based workbench
- Graphical and command-line source-level debuggers
- A range of data access capabilities to simplify transitions to NTT DATA COBOL

Supporting the ANSI-85 standard and legacy COBOL dialects, the NTT DATA COBOL compiler produces optimized, portable object code that you can deploy on a variety of Linux®, UNIX® and Microsoft Windows® platforms to take full advantage of 32-bit or 64-bit deployments.

The NTT DATA COBOL compiler handles the majority of operational analysis and execution instructions performed by alternative platforms during runtime. This approach can significantly improve critical runtime performance.

## NTT DATA Enterprise COBOL

The NTT DATA COBOL runtime environment can also enhance performance by optimizing access to COBOL data types using native memory. With this memory management technique, COBOL data is loaded in a single operation when possible, as opposed to one byte at a time. The NTT DATA COBOL runtime environment has been designed to minimize overhead and deliver improved performance in common enterprise scenarios, as well as interlanguage calls such as Java or C calling COBOL or COBOL calling Java or C.

## Debugging and diagnostics

The NTT DATA COBOL runtime environment includes sophisticated, remote debugging capabilities. You can choose to use a command-line debugger, a graphical stand-alone debugger, or the debugging capabilities found in the Visual Studio IDE or Eclipse Workbench to perform source-level debugging activities.

When regular debugging techniques are not able to address a production error or a problem cannot be easily reproduced, the exception dump report feature is available to help you report on the state of an application at the moment of the error. This report can be used to identify the root cause of an issue by providing all pertinent information, including:

- Execution environment details, such as the date and time when the exception occurred, the runtime framework version and loaded programs in use
- The names of the COBOL program, paragraph and source file, as well as the 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 programs in the stack and the names of the associated 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 NTT DATA COBOL supports a wide range of data access options.

NTT DATA COBOL 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. NTT DATA COBOL also supports EXTFH interfaces (to access virtual storage access method files and generation data groups) and EXTSM interfaces (to access external sort packages like Syncsort® DMExpress®). NTT DATA COBOL also has a built-in ESQL compiler that translates EXEC SQL statements to JDBC calls, and also supports Pro\*COBOL®, IBM® DB2® and other precompilers.

NTT DATA COBOL also includes JISAM, a portable indexed sequential access method file system that enables fast access to data files.

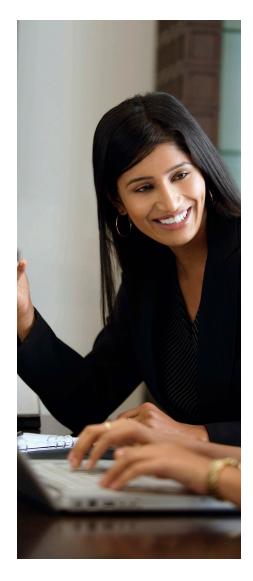
# COBOL for business-critical operations

NTT DATA COBOL provides an alternative to legacy COBOL platforms commonly found running business-critical transaction processing systems. Extensive COBOL dialect support makes it easy for you to migrate existing applications with little to no application code change. Valuable application code can be quickly re-platformed and distributed on a wide range of open systems.

Via integration with NTT DATA COBOL offers an established, scalable platform to re-host your mission-critical online and batch mainframe assets to open systems. Our mainframe re-hosting software uses

existing skill sets, application code and administrative tools on open systems to help improve your bottom line and prepare your enterprise for the future.

NTT DATA COBOL's Java Invocation API and Java-to-COBOL and COBOL-to-Java CALL interfaces provide seamless integration between COBOL programs and Java Enterprise Edition server environments. With NTT DATA COBOL's innovative framework, you can natively call legacy COBOL programs from Java servlets, web services, Enterprise JavaBeans or any other Java program.



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