

## DATA SHEET

# ACUSQL®

### Business Challenge

Embedded SQL. It's ingrained in your COBOL programs. It's what binds your legacy applications to your relational data. It gives your users precise access to the information they need to do their jobs. AcuSQL is an embedded SQL precompiler designed for businesses like yours. It scans your COBOL source file for SQL statements and translates them into COBOL CALL statements that the ACUCOBOL-GT® compiler can process. At runtime, a powerful SQL runtime library provides seamless access to your data. What could be better for business?

### Product Overview

AcuSQL is a simple, cost-effective solution for those who use embedded SQL statements in their COBOL programs to access SQL-conversant data sources. AcuSQL is a Structured Query Language (SQL) precompiler that supports the inclusion of embedded SQL (ESQL) statements in ACUCOBOL-GT program source code. The AcuSQL precompiler, in combination with an AcuSQL runtime library, allows your ESQL COBOL programs to access in ISO/ANSI SQL92-compliant data sources such as MySQL®, Microsoft® SQL Server and IBM DB2®. AcuSQL supports both static and dynamic SQL so you can control the queries sent to the database as much as required.

### Key Benefits

- Leverage the power and flexibility of SQL from COBOL
- Simplify the COBOL code needed to perform data operations
- Execute complex data operations that utilize the capabilities of the database engine
- Write applications tailored to a wide variety of individual databases
- Develop and deploy on Windows®, UNIX® and/or Linux® (choice of server is database-dependent)

### Detailed Feature Overview

AcuSQL is a simple, cost-effective solution for IT organizations which want to use embedded SQL statements in their COBOL programs to access SQL-conversant data sources.

### ACCESS TO MULTIPLE DATABASES

AcuSQL gives your end users access to ISO/ANSI SQL92-conversant data sources. It is certified by Micro Focus to work with Microsoft SQL Server, IBM DB2 and MySQL (a leading, open source database).

### FLEXIBILITY IN SOURCE FILE FORMAT

The precompiler can read and parse source code files in two common formats: Terminal and ANSI. You can also pre-compile "mixed-mode" files that contain both terminal and ANSI source formats. This flexibility enables you to use existing files regardless of format. AcuSQL even processes ESQL statements within COPY files.

### PRECISION AND PERFORMANCE

AcuSQL allows you to specify the exact SQL commands to use when accessing your data. This results in tighter control over the volume and nature of data being retrieved. As a result, your queries are processed faster and more efficiently than by alternate methods.

### EASE OF USE

When you use the ACUCOBOL-GT compiler to drive the precompiler, everything is automatic. The compiler starts compiling the file and it parses anything it finds between an "EXEC SQL" and "END-EXEC" statement to AcuSQL. Successful compilation results in an object file that is ready for immediate execution by the runtime. There is no link step so you have improved productivity and a shorter development cycle.

### STORED PROCEDURES

Using Microsoft SQL Server, you can create a set of stored procedures for accessing database tables - procedures for inserting, deleting, reading, and updating records as well as starting a file. AcuSQL checks for stored procedures whenever it opens a database file, decreasing processing time and reducing network traffic. Enjoy more uniformity and easier maintenance as single procedures are accessed by multiple applications.

### INTEGRATION WITH ACUBENCH®

The AcuSQL precompiler and its options are tightly integrated into the AcuBench development environment, providing a seamless, single-step compilation of both SQL and COBOL into one executable object. You can easily include your source files with ESQL in an

AcuBench project and pre-compile them as part of a standard build function. You can easily edit files containing ESQL in the Code Editor and debug them with the runtime debugger.

## TRANSACTION PROCESSING SUPPORT

AcuSQL supports syntax for beginning, committing and rolling back embedded transactions. This lets you take advantage of the benefits of a transaction management system when the need arises.

## DATABASE SYNTAX CHECKING

AcuSQL performs syntax checking of embedded SQL statements. You select the level of syntax checking desired, relaxed or strict, at the program, or command level. There is an option to pass SQL statements directly to the database engine for validation.

## Other Key Features

- > **Conforms to the ISO/ANSI SQL-92 standard:** Most SQL verbs are supported, including but not limited to: CONNECT, DISCONNECT, SELECT, FETCH, INSERT, DELETE and UPDATE. This enables you to access databases that conform to the same standard.
- > **Transparent data interface:** For superior performance, AcuSQL employs an ODBC interface to all of the databases that it supports. All data access is transparent to the end user. AcuSQL also offers a highly customized runtime library for use with Microsoft SQL Server.
- > **File tracing:** The ACUCOBOL-GT runtime file-trace option generates useful information about file I/O activity. Useful when you are attempting to locate file I/O related problems. File tracing

simplifies troubleshooting.

## Product Specifications and System Requirements

**COBOL applications can be run on any of the following hosts:**

- > UNIX, Linux, Windows® XP, Windows Vista, Windows Server 2008, Windows Server™ 2003, or Windows 2000.

**Data sources can be hosted on one (or more) of the following environments:**

- > UNIX, Linux, Windows XP, Windows Vista, Windows Server 2008, Windows Server 2003, or Windows 2000, OS390® (DB2 only).

**For additional information please visit: [www.microfocus.com](http://www.microfocus.com)**

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