

ESQL-COBOL (BS2000/OSD) Version 3.0

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COBOL Database Interface for SESAM/SQL-Server

For COBOL applications in the BS2000/OSD operating system, ESQL-COBOL (BS2000/OSD) implements the "embedded SQL" application program interface to the SESAM/SQL-Server database system. This means that SQL functions can be called from COBOL programs under UTM and TIAM.

Functional Description

SQL2003 standard

SESAM/SQL-Server is based closely on the standard ISO/IEC 9075:2003. High portability of SQL applications is achieved as a result. The SQL interface also contains extremely powerful features such as multiple columns. The SQL commands can be linked "statically" in a program or can be compiled at program runtime (dynamic SQL).

With ESQL-COBOL the full SQL functionality of SESAM/SQL-Server can be used:

- Data definition (CREATE TABLE, ALTER TABLE etc.)
- Data checking (GRANT, REVOKE)
- Data manipulation (SELECT, INSERT, UPDATE, DELETE etc.)
- Utility functions (LOAD, UNLOAD, COPY, RECOVER etc.)

Programming support for the developer

ESQL-COBOL (BS2000/OSD) provides developers with effective support:

- Option enables different language scopes to be selected, e.g. full scope or ISO/IEC 9075: 2003.
- Syntax and semantic checks on the SQL statements with or without links to the database reduce development time.
- Precompilation runs with links to the database can be speeded up by running in linked-in mode with the aid of the SESAM/SQL-LINK add-on product.

Additional technical information

The SQL statements of an ESQL-COBOL program are embedded in the COBOL code and are replaced by the ESQL-COBOL (BS2000/OSD) precompiler with COBOL-CALLs. The output of the precompiler is a normal COBOL source which is compiled with the COBOL compiler. In addition, the precompiler extracts the SQL statements and transforms them into a SQL object module. The compiled COBOL program is linked with the SQL object module and a DBMS runtime module to form an executable program.

Enhancements ESQL-COBOL V3.0 compared to V2.0

- Support of the new COBOL2000 data type National
This allows ESQL-COBOL programs to use Unicode data in the database and in the COBOL application as well.
- Numeric data
Numeric data may have a length up to 31 digits in the picture mask.
- Additional COBOL language features
More COBOL language features are allowed within the SQL text.
- Support of the COBOL2000 Free reference format (with ESQL-COBOL V3.0B)
This allows line lengths up to 248 characters.

Technical Data	
Technical Requirements Hardware	BS2000/OSD Business Server S Series / Business Server SX Series Memory requirements: For detailed information, see the Release Notice
Technical Requirements Software	BS2000/OSD-BC V6.0B or OSD/XC V2.0 or higher, with the appropriate versions of SORT and TIAM, SESAM/SQL-Server V5.0 or higher, COBOL2000 V1.4 or higher, CRTE V2.6 or higher. Optional: SESAM/SQL-LINK V5.0 or higher.
Installation	By the user according to the Release Notice
Documentation	The documentation is available online, see http://manuals.fujitsu-siemens.com , or in printed form which must be paid and ordered separately at http://fsc-manualshop.com/ . <ul style="list-style-type: none"> ■ ESQ-LOBOL for SESAM/SQL-Server ■ SESAM/SQL-Server Core Manual ■ SESAM/SQL-Server SQL Language Reference Manual Part 1 SQL Statements ■ SESAM/SQL-Server SQL Language Reference Manual Part 2 Utilities
User Requirements	A basic knowledge of BS2000/OSD, COBOL, SESAM/SQL-Server and SQL.
Training	See course offer at: http://www.fujitsu-siemens.com/training
Conditions	This software product is supplied to the customer against a single payment / payment by installments subject to our conditions for the use of software products.
Warranty	Class: A Delivery format: Machine language