DATA SHEET

ESQL-COBOL (BS2000/OSD)
Version 3.0
COBOL DB Interface for SESAM

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Pages   2

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 openUTM and TIAM.

Functional Description

SQL2008 standard

SESAM/SQL-Server is based closely on the standard ISO/IEC 9075:2008. 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 standard.
- 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 an 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 DETAILS

ESQL-COBOL V3.0

Technical requirements
Hardware
BS2000/OSD Business Server

Software
BS2000/OSD-BC V6.0 or higher or
OSD/XC V2.0 or higher
SESAM/SQL-Server V5.0 or higher,
COBOL2000 V1.4 or higher, CRTE V2.6 or higher, SORT
optional: SESAM/SQL-LINK V5.0 or higher

Installation
By the user according to the release notice

Documentation
ESQL-COBOL for SESAM/SQL-Server

Training
See course offer at:
http://ts.fujitsu.com/training

Conditions
This software product can be purchased by the customer against a single payment or leased in accordance with the conditions for the use of software products.

Ordering and delivery
This software product may be obtained from your local Fujitsu Technology Solutions GmbH regional office.

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