

THE ENTERPRISE. UNWIRED.

SQL EXPERT OPTION FOR SYBASE® ADAPTIVE SERVER® ENTERPRISE

The SQL Expert Option for Sybase Adaptive Server Enterprise (ASE) is the complete SQL performance tuning and optimization solution that detects and rewrites problematic SQL. With its built-in feedback searching engine, the SQL Expert Option reduces the effort required to optimize problematic SQL and makes even the most junior SQL programmer an expert. Developers use the SQL Expert Option to optimize SQL during application development. DBAs also use it to eliminate problematic SQL before users experience application performance problems in production systems.

SQL AND APPLICATION PERFORMANCE

SQL statements are responsible for sixty to ninety percent of database application performance problems. There are many semantically equivalent ways to write any given SQL query. The challenge is finding the SQL statement that produces optimum performance. Even with experienced SQL programmers, up to thirty percent or more of complex SQL statements can be rewritten to perform better. SQL is complex and may require hours to tune for performance—until now...

EASILY IDENTIFY SQL PROBLEMS BEFORE THEY OCCUR

The SQL Expert Option scans through database objects and application programs without the need to execute the programs. This dramatically reduces the time required to identify the SQL statements that are causing poor performance.

AUTOMATICALLY FINDS EQUIVALENT SQL STATEMENTS

The SQL Expert's unique feedback searching algorithms take the guesswork out of optimizing problematic SQL statements. Once you have located a SQL statement that requires tuning, SQL Expert's Syntactical SQL Optimizer rewrites the statement for you. It finds those SQL statements that are semantically equivalent to your original SQL statement and then narrows the selection of alternative SQL statements to the ones with unique query plans.

The SQL Expert's feedback searching algorithms offer the greatest opportunity to find SQL statements that will most improve performance. This powerful approach enables Sybase SQL Expert to do in moments that which would normally take hours.



MINIMUM SYSTEM REQUIREMENTS

- Windows® 95, 98, 2000, NT 4.0, XP
- 486DX or above
- 64 MB Ram
- 50 MB hard disk space
- CD-ROM Drive
- PC Client or CT-Lib Open Client Release 11 or higher
- Sybase ASE 11.5 or higher

OPTIMIZE SQL IN THIRD-PARTY APPLICATIONS

Sybase SQL Expert Option fully supports Sybase ASE's Abstract Plan (AP) feature. The AP feature of ASE can make each of the query plans generated by the optimizer fully available via 'capture'. Once captured they can be stored, associated to their originating query and reused. Thus, bypassing ASE's optimizer in part or in full. APs make it possible to tune SQL in third-party applications without changing source code.

SAVE TIME AND EFFORT WITH AUTOMATED TEST-RUNS

Sybase SQL Expert automates the time-intensive task of testing SQL statements. It enables you to test run the SQL statement for each alternate query-plan, individually or in a batch run. It then reports the response time for processing the first record and the elapsed time for processing all records. This process enables you to choose the best SQL statement for your application.

Sybase SQL Expert saves even more time by allowing you to set termination criteria that will automatically cancel test runs on any statement that is running longer than the current best.

IMPROVE SQL SKILLS WITH "IN-PROCESS TRAINING"

In-Process Training teaches developers and DBAs how to write the highest performing SQL possible. The SQL Expert's SQL Comparer does this by showing comparisons between source and alternative SQL statements. More in-depth knowledge about the query-plan is gained from the SQL Expert's comprehensive context-sensitive help system.

SYBASE SQL EXPERT FEATURES THESE MODULES

Syntactical SQL Optimizer

- Automates the tuning of SQL statements.
- Rewrites SQL statements for optimum performance using proprietary AI-based Feedback Searching algorithms.
- Finds every possible alternative query plan for all semantically equivalent SQL statements.
- Benchmarks the original and alternative SQL to locate the most efficient statement for a database and application.

- Provides In-Process Training by comparing the source SQL statement and alternative statements to help develop SQL coding skills.
- Expedites the process of learning Abstract Plan language.
- Integrates ASE's Abstract Plans for source-less SQL optimization making it possible to optimize performance of third-party packaged applications.
- Supports temp table SQL optimization.

SQL Scanner

- Extracts embedded SQL statements from database objects, text and binary files, abstract plan groups, and application source codes.
- Identifies the SQL statements that need to be optimized without physical execution of applications or manual intervention.
- Displays the query plan and classifies every SQL statement according to suspected levels of performance problems.

Abstract Plan Manager

- Simplifies the procedures of Abstract Plan maintenance.
- Using a graphical interface, maintains Abstract Plans in your database. SQL Monitor
- Monitors SQL statements through the Sybase Monitor Server.
- Enables users to capture dynamic SQL statements that are generated by application programs.
- Captures SQL statements that can be analyzed with the SQL Scanner to identify performance inefficiencies.

SQL Worksheet

Enables users to:

- Write and execute Transact-SQL commands.
- Create and edit database objects.

SQL Formatter

- Formats SQL statements with indenting which enables easier reading and maintenance.
- Checks syntax to validate SQL statements.

Database Explorer

- Provides detailed information about database objects including columns, indexes, keys, statistics, DDL and procedure text

Code Finder

- Locates database objects and files that contain specific text.

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