



# Quest® SQL Optimizer Suite

*for Sybase ASE*

## Simple Yet Powerful Tools for Maximizing Performance for Your Mission-Critical Applications

Developers are constantly challenged to optimize database performance—particularly when the database hosts mission-critical applications such as Sybase ASE (Adaptive Server Enterprise). To meet this objective, developers must write code and make application changes with accuracy and efficiency.

Quest® SQL Optimizer Suite for Sybase ASE maximizes database performance, giving developers the ability to quickly analyze and fix problems in code and SQL statements—before they roll into production.

Using this solution, developers can write queries, compare data and generate reports with ease, as well as quickly identify and optimize inefficient SQL in applications.

### Core Differentiator

- Identifies problematic SQL proactively from database objects (such as stored procedures) and source code files without the need to execute code
- Automatically analyzes, rewrites and optimizes problematic SQL statements
- Gives index recommendations and evaluates impact on other SQL statements
- Offers easy-to-use features for analyzing previously-executed and currently-running SQL statements
- Compares and analyzes SQL performance of database migrations, upgrades and configuration changes
- Integrates a tool that connects to multiple data sources, including Sybase ASE
- Allows users to write queries; execute commands; manage and compare data; browse and modify database objects; and generate reports

The screenshot displays the Quest SQL Optimizer for Sybase ASE interface. The main window is titled "Quest SQL Optimizer for Sybase" and contains a "SQL Optimizer" sub-window. The SQL Editor shows the following query:

```
SET PLAN OPTGOAL ALLROWS_MIX  
  
SELECT EMPLOYEE.EMP_ID,  
       EMPLOYEE.EMP_SALARY  
FROM EMPLOYEE EMPLOYEE,  
     EMPLOYEE EMPLOYEE1  
WHERE EMPLOYEE.EMP_SALARY >= 20000  
      AND EMPLOYEE.EMP_SALARY <= 50000  
      AND EMPLOYEE1.EMP_ID = COALESCE(EMPLOYEE.  
ORDER BY EMPLOYEE.EMP_ID,  
        EMPLOYEE.EMP_SALARY
```

The Plan view on the right shows the execution plan for the query, including a Sort operation (Step 6) and a MergeJoin operation (Step 5).

The Performance Comparison table at the bottom shows the results of the optimization process:

Cost Or...	Est. I/O	AP...	Elapsed Time (All Recor...	Times of Improvement...	CPU Time...	Actual I/O Cost...	Records Returned
SQL Editor	21612						
Original SQL	21612	Yes	00:00:00.090		00:00:00.100	1164	11364
AR1	23141		00:00:00.040	2.25	00:00:00.100	1164	11364
AR2	25428		00:00:00.080	1.13	00:00:00.100	23746	11364
AR3	25839		00:00:00.060	1.5	00:00:00.100	17590	11364
AR4	31083		00:00:00.060	1.5	00:00:00.100	1600	11364
AR5	32595		00:00:00.130		00:00:00.100	1600	11364
AR6	34763		00:00:00.240		00:00:00.300	63666	11364
AR7	35249		00:00:00.200		00:00:00.200	63666	11364
AR8	37822		00:00:00.260		00:00:00.200	63666	11364
AR9	37947		00:00:00.110		00:00:00.100	18026	11364

Quest SQL Optimizer for Sybase ASE offers quick and automatic analysis and optimization of problematic SQL statements.

## System Requirements

**Platform:** 1 GHZ minimum

**Memory:** 512 MB of RAM minimum, 1 GB recommended

**Hard Disk Space:**

280 MB of disk space

**Operating System:**

- Windows 2000
- Windows 2003
- Windows XP Professional (32-bit)

**Server**

- All operating systems supported by Sybase ASE.
- Quest SQL Optimizer for Sybase ASE supports Sybase ASE versions 11.9.2, 12.0.x, 12.5.x, 15.0 and 15.0.2. Toad for Data Analysts supports Sybase ASE versions 12.5.x and 15.0.2.

## Powerful Query Development and Data Management

Quest SQL Optimizer Suite for Sybase ASE provides direct access to data and an easy-to-use workflow, enabling users to create and execute queries and commands; view and understand data objects and relationships; make quick comparisons to ensure validity; and automate repetitive tasks.

### Proactive and Automated SQL Optimization

The solution eliminates the manual, time-intensive process that is typically needed to ensure SQL code is performing as fast as possible. It scans and analyzes SQL directly, using SQL statements, Transact-SQL code or other source code to identify potential issues. As a result, it is easy to automatically rewrite SQL, exploring every possible way to improve SQL performance. Another benefit is the ability to analyze new indexing scenarios.

### Prevention of Performance Problems

Quest SQL Optimizer Suite for Sybase ASE analyzes and compares SQL plan changes, including index creation, configuration changes, upgrades and migrations in different environments, to prevent performance degradation.

### About Quest Software, Inc.

Quest Software, Inc., a leading enterprise systems management vendor, delivers innovative products that help organizations get more performance and productivity from their applications, databases, Windows infrastructure and virtual environments. Quest also provides customers with client management through its ScriptLogic subsidiary and server virtualization management through its Vizioncore subsidiary. Through a deep expertise in IT operations and a continued focus on what works best, Quest helps more than 100,000 customers worldwide meet higher expectations for enterprise IT. Quest Software can be found in offices around the globe and at [www.quest.com](http://www.quest.com).



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