



# Quest® SQL Optimizer

## for Sybase

- Maximizes performance through SQL optimization, abstract plans and indexing
- Ensures successful adaptive server upgrades
- Prevents performance problems when applications are deployed into production
- Improves productivity of QA and production teams
- Assures performance throughout the application lifecycle

### Achieve Superior SQL Code Quality

Errors in SQL statements, indexes and database changes account for up to 90% of the performance issues in a Sybase environment. As a developer responsible for SQL performance, you face a tight deadline in writing hundreds of lines of source code every day. That leaves you little time to identify inefficient code and ensure high-performing SQL.

Quest® SQL Optimizer for Sybase maximizes your SQL code quality. It streamlines management and diagnostics of performance changes, giving you peace of mind that, changes affecting the database environment can occur quickly and without errors.

### Get the Best Possible Performance from Your Database

The screenshot displays the Quest SQL Optimizer for Sybase interface. The main window shows a SQL query in the editor and its execution plan. The query is:

```
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.EMP_ID, EMPLOYEE1.EMP_ID)
ORDER BY EMPLOYEE.EMP_ID,
         EMPLOYEE.EMP_SALARY
```

The execution plan shows a Sort operation (6) feeding into a MergeJoin operation (5), which in turn feeds into another Sort operation (3). The cost of the plan is 45,364.750000.

Below the query editor is a table comparing the performance of the original SQL statement with nine alternative plans (Alt1 through Alt9). The table columns are: Cost Or..., Est. I/O..., AP..., Elapsed Time (All Recor...), Times of Improvement..., CPU Time..., Actual I/O Cost..., and Records Returned.

Cost Or...	Est. I/O...	AP...	Elapsed Time (All Recor...)	Times of Improvement...	CPU Time...	Actual I/O Cost...	Records Returned
SQL Editor	21612		00:00:00.090				
Original SQL	21612	Yes	00:00:00.090		00:00:00.100	1164	11364
Alt1	23141		00:00:00.040	2.25	00:00:00.100	1164	11364
Alt2	25428		00:00:00.080	1.13	00:00:00.100	23746	11364
Alt3	25839		00:00:00.060	1.5	00:00:00.100	17590	11364
Alt4	31083		00:00:00.060	1.5	00:00:00.100	1600	11364
Alt5	32595		00:00:00.130		00:00:00.100	1600	11364
Alt6	34763		00:00:00.240		00:00:00.300	69666	11364
Alt7	35249		00:00:00.200		00:00:00.200	69666	11364
Alt8	37822		00:00:00.260		00:00:00.200	69666	11364
Alt9	37947		00:00:00.110		00:00:00.100	18026	11364

With Quest SQL Optimizer for Sybase, you can analyze and manage performance changes to diagnose, predict, and prevent issues. This allows you to efficiently run mission-critical business applications while maintaining the best possible performance.

## System Requirements:

### Hardware Requirements

- Platform: 233 MHZ minimum
- Memory: 512 MB of RAM minimum
- Disk Space: 67 MB

### Software Requirements

#### Operating System

- Windows 2000, XP Professional
- Window Server 2003, Windows Vista (32-bit)

#### Browser

- Microsoft Internet Explorer 6.0 or later

#### Database Client

- Quest SQL Optimizer will install a database client if one is not installed

#### Database Server

- Adaptive Server 11.0 and above is supported

## Capabilities:

### Performance Diagnosis

- Monitor Adaptive Server for performance issues
- Diagnose SQL-related performance bottlenecks with visual analysis of Adaptive Server's performance metrics
- Analyze application code and determine SQL most in need of tuning

### Performance Optimization

- Maximize performance through SQL optimization and indexing
- Optimize SQL without having to change source code

### Performance Management

- Evaluate how the creation of indexes affects database performance
- Analyze the effect on SQL performance when changing Adaptive Server configuration parameters
- Avoid performance degradation when deploying applications to production or upgrading Adaptive Server

The basic database administration capabilities provided within Quest SQL Optimizer for Sybase also provides detailed information on objects. They allow you to:

- Generate DDL scripts
- Browse databases objects
- Create and execute T-SQL scripts and commands

## 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. 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 provides customers with client management as well as server and desktop virtualization solutions through its subsidiaries, ScriptLogic, Vizioncore and Provision Networks. Quest Software can be found in offices around the globe and at [www.quest.com](http://www.quest.com).



Quest Software Incorporated. • To learn more about our solutions, contact your local sales representative or visit [www.quest.com](http://www.quest.com) • Headquarters: 5 Polaris Way, Aliso Viejo, CA 92656, USA  
© 2009 Quest Software Incorporated. ALL RIGHTS RESERVED. Quest Software and Quest SQL Optimizer for Sybase are trademarks and registered trademarks of Quest Software, Inc. in the U.S.A. and/or other countries. All other trademarks and registered trademarks are property of their respective owners.

DSD-QSLOptimizer4Sybase-US-20090309-CW