

# Quest SQL Optimizer for SAP ASE 3.9.1

## Release Notes

Tuesday, August 13, 2019

## Welcome to Quest SQL Optimizer for SAP ASE

SQL Optimizer contains the following features:

- Identifies problematic SQL statements in database applications
- Diagnoses SQL related performance bottlenecks with visual analysis of Adaptive Server's performance metrics
- Generates SQL alternatives to automatically locate the most-efficient SQL statement
- Proposes new index candidates for a SQL statement and identifies performance effects of adding new indexes to the database
- Analyzes the effect on performance when changing Adaptive Server configuration parameters
- Preempts performance degradation before deploying applications to production or when upgrading Adaptive Server
- Identifies unused indexes in the database to free up space and decrease maintenance
- Integrates DDL generation for multiple SQL statements and an interface that allows the creation of scripts and execution of commands

## New in This Release

Quest SQL Optimizer for SAP® ASE 3.9.1 is a patch release containing bug fixes and enhancements.

# Resolved Issues and Enhancements

The following is a list of issues addressed and enhancements implemented in this release.

Resolved Issue	Defect ID
Fixed: SQL Optimizer generates some alternatives which are not semantically equivalent with original SQL script.	SOFS-283

# Known Issues

Feature	Known Issue	Defect ID																										
General	<p>SQL Optimizer cannot terminate a database connection or an operation when the Adaptive Server transaction log is full. Thus, if the transaction log becomes full while you are using SQL Optimizer, the program may hang. This only happens if the Adaptive Server 'abort tran log full' option is set ON.</p> <p><b>Workaround:</b> Dump the transaction log. <b>DUMP TRANSACTION database_name WITH TRUNCATE_ONLY</b></p> <p>Or, you may set the Adaptive Server 'abort tran on log full' option to OFF. You must evaluate whether this is an appropriate setting for your database environment.</p>																											
	The "WITH INTO_OPTION" syntax in the INTO clause of a SELECT statement is not supported.	ST45442																										
	<p>The information for some data types does not display when records are retrieved from the database. This occurs on the Data tab of the Database Explorer module, the Run Results window in the SQL Optimizer module, and on the Result panel of the SQL Worksheet module. The following table lists the data type's that do not display.</p> <table border="1"> <thead> <tr> <th>Datatype</th> <th>Results in Database Explorer (Data tab)</th> </tr> </thead> <tbody> <tr> <td>binary</td> <td>"Bytes" displays in the column.</td> </tr> <tr> <td>varbinary</td> <td>"Bytes" displays in the column.</td> </tr> <tr> <td>money</td> <td>Truncated to two decimals.</td> </tr> <tr> <td>smallmoney</td> <td>Truncated to two decimals.</td> </tr> <tr> <td>text</td> <td>"Memo" displays in the column.</td> </tr> <tr> <td>unitext</td> <td>"Blob" displays in the column.</td> </tr> <tr> <td>image</td> <td>"Blob" displays in the column.</td> </tr> <tr> <td>timestamp</td> <td>"Bytes" displays in the column.</td> </tr> <tr> <td>bigint</td> <td>When the integer is very large, it is converted to a float datatype.</td> </tr> <tr> <td>ubigint</td> <td>When the integer is very large, it is converted to a float datatype.</td> </tr> <tr> <td>unichar</td> <td>Displays this error message; no data displays for the table: Failed to retrieve data. ... Field 'columnname' is an unsupported type.</td> </tr> <tr> <td>univarchar</td> <td>Displays this error message; no data displays for the table: Failed to retrieve data. ... Field 'columnname' is an unsupported type.</td> </tr> </tbody> </table>	Datatype	Results in Database Explorer (Data tab)	binary	"Bytes" displays in the column.	varbinary	"Bytes" displays in the column.	money	Truncated to two decimals.	smallmoney	Truncated to two decimals.	text	"Memo" displays in the column.	unitext	"Blob" displays in the column.	image	"Blob" displays in the column.	timestamp	"Bytes" displays in the column.	bigint	When the integer is very large, it is converted to a float datatype.	ubigint	When the integer is very large, it is converted to a float datatype.	unichar	Displays this error message; no data displays for the table: Failed to retrieve data. ... Field 'columnname' is an unsupported type.	univarchar	Displays this error message; no data displays for the table: Failed to retrieve data. ... Field 'columnname' is an unsupported type.	ST46470
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Feature	Known Issue	Defect ID
Installation	<p>If you did not uninstall the previous version of SQL Optimizer before you installed the current version, the following message displays when you launch the program:</p> <p>"The feature that you are trying to use is on a network resource that is unavailable."</p> <p>Click <b>OK</b> to try again, or enter an alternative path to a folder containing the installation package 'QuestSQLOptimizer_Sybase_version.msi' in the box below."</p> <p><b>Workaround:</b></p> <p>You must uninstall the previous version of SQL Optimizer, and then install the current version again.</p>	ST72116
SQL Collector for Monitor Server	<p>Quest SQL Optimizer for SAP ASE may hang if you do not have the Monitor Server connection information correctly entered. Check the Help file for detailed information for setting up the Monitor Server connection.</p>	
Run Result Time	<p>When you have a SQL statement with parameters, the time from the Run Result function may not correspond with the actual run time for SQL in your application due to the substitution of actual values for the parameters by the Run Result function.</p>	
Preferences	<p>The Preference settings from versions of SQL Tuning prior to version 3.0 will not be transferred to the Preference settings for the current version. You must customize all the option settings once again.</p>	
Analyzer modules	<p>In the Analyzer modules, if you rapidly click several times on the child node of an Analyzer you may receive an Access Violation error message or an "Error loading SQL. File may be lost or corrupted." error message.</p>	ST46539
XML Plan	<p>Structure and details of the XML plan vary according to which version of ASE to which you are connected.</p>	
Database Explorer	<p>Database Explorer displays the following error message if the connection to the Adaptive Server is lost, and repeated attempts are made to reconnect to the database:</p> <p>Failed to connect to database. Fatal error: in TISybDatabase.Logon</p> <p><b>Workaround:</b></p> <p>There is no workaround for this issue. SQL Optimizer must be restarted.</p>	
SQL Optimizer	<p>After you have executed the SQL alternatives in the Batch Run or individually, the "mismatch with original SQL error" message may display in the Remarks column in the Run Time pane in the SQL Optimizer window. This message indicates that the alternative is not retrieving the same result set as the original SQL.</p> <p>This message should indicate that the alternative is not "semantically equivalent" and therefore is not a correct SQL</p>	

Feature	Known Issue	Defect ID
	<p>transformation for the original SQL statement.</p> <p>However, in closely looking at the SQL alternatives that sometimes produce this message, it can be seen that the SQL alternatives are semantically equivalent to the original SQL statement and should be retrieving the same result.</p> <p>There are two issues that cause this error. The first is caused by an issue in ASE 15.x when the forces (see the Optimization Preferences) are applied to some of the SQL alternatives and the result is that no records are retrieved from the database.</p> <p>The second is caused by a similar issue in ASE 15.x when the COALESCE function is added to some of the SQL alternatives and the result is that no records are retrieved from the database.</p> <p><b>Workaround:</b></p> <p>You should disregard these alternatives.</p>	
<p>National Language Support</p> <p><b>Note:</b> These problems only arise if you type characters in the national language. If you are using the national Windows environment and type English text, these problems do not arise.</p>	<p>The message "Failed to retrieve the query plan ..." is displayed when you 1) select "dump abstract plan" on the Optimization   Abstract Plan page of the preferences, 2) connect to a French language database, and 3) optimize a SQL statement that contains any of the French language characters that are not a part of the English language character set.</p>	ST46552
	<p>An "Invalid value for field column_name" error occurs when you have your Windows environment set to French and you execute a SELECT SQL statement that selects the data from a column that stores monetary values.</p>	ST46555
	<p>When the table name, column name, or other database object contains any of the French language characters that are not a part of the English language character set, the table, column, or database object is displayed in the SQL statement as "garbage" characters in the SQL Text pane.</p>	ST46485

# System Requirements

Before installing Quest SQL Optimizer for SAP ASE, ensure your system meets the following minimum hardware and software requirements:

<b>Platform</b>	1 GHz recommended minimum
<b>Memory</b>	1 GB of RAM recommended minimum
<b>Hard Disk Space</b>	100 MB hard disk space
<b>Operating System</b>	Microsoft Windows Server 2008 R2 Microsoft Windows 7 (32-bit and 64-bit) Microsoft Windows Server 2012 Microsoft Windows Server 2012 R2 Microsoft Windows 8 (32-bit and 64-bit) Microsoft Windows 8.1 (32-bit and 64-bit) Microsoft Windows 10 (32-bit and 64-bit) Microsoft Windows Server 2016
<b>Additional Software</b>	Adobe Acrobat Reader 7.0 or later (for viewing the Installation Guide) Microsoft Internet Explorer 6.0 or later
<b>Database Server</b>	SAP ASE 15.5, 15.7, 16

## Global Operations

This section contains information about installing and operating this product in non-English configurations, such as those needed by customers outside of North America. This section does not replace the materials about supported platforms and configurations found elsewhere in the product documentation.

This release supports any single-byte or multi-byte character set. In this release, all product components should be configured to use the same or compatible character encodings and should be installed to use the same locale and regional options. This release is targeted to support operations in the following regions: North America, Western Europe and Latin America.

## Getting Started

## Contents of the Release Package

The Quest SQL Optimizer for SAP ASE release package contains the following products:

1. Quest SQL Optimizer for SAP ASE 3.9.1
2. Product Documentation, including:
  - Installation Guide
  - Online Help

# Installation Instructions

Refer to Quest SQL Optimizer for SAP ASE Installation Guide for installation instructions.

## Product Licensing

### To register the trial or production version

1. Install and launch Quest SQL Optimizer for SAP ASE
2. Enter your License Key and Site Message to register your trial or commercial license

# About Us

## We are more than just a name

We are on a quest to make your information technology work harder for you. That is why we build community-driven software solutions that help you spend less time on IT administration and more time on business innovation. We help you modernize your data center, get you to the cloud quicker and provide the expertise, security and accessibility you need to grow your data-driven business. Combined with Quest's invitation to the global community to be a part of its innovation, and our firm commitment to ensuring customer satisfaction, we continue to deliver solutions that have a real impact on our customers today and leave a legacy we are proud of. We are challenging the status quo by transforming into a new software company. And as your partner, we work tirelessly to make sure your information technology is designed for you and by you. This is our mission, and we are in this together. Welcome to a new Quest. You are invited to Join the Innovation.

## Our brand, our vision. Together.

Our logo reflects our story: innovation, community and support. An important part of this story begins with the letter Q. It is a perfect circle, representing our commitment to technological precision and strength. The space in the Q itself symbolizes our need to add the missing piece — you — to the community, to the new Quest.

## Technical Support Resources

For sales or other inquiries, visit <https://www.quest.com/company/contact-us.aspx>.

Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at <https://support.quest.com>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product



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### Legend

-  **WARNING:** A WARNING icon indicates a potential for property damage, personal injury, or death.
-  **CAUTION:** A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.
-  **IMPORTANT, NOTE, TIP, MOBILE, or VIDEO:** An information icon indicates supporting information.

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