



# Toska SQL Tuning Expert for Oracle® 4.6.0 - Release Notes

Aug 2022

## About Toska SQL Tuning Expert for Oracle®

Toska SQL Tuning Expert (TSE™) for Oracle® is a tool to tune your SQL automatically.

## Supported Oracle® versions

Oracle® 11.2 or higher

## SQL Tuning Expert for Oracle 4.6.0

SQL Tuning Expert 4.6.0 is a minor release that includes enhancements and fixes.

### Tune SQL

Improved the ability to rewrite SQL.

### Resolved Issues in 4.6.0

Feature	Resolved Issue	Issue ID
SQL Tuning	Fixed a row count mismatch error when tuning SQL with specific SQL syntax	TSE -260
SQL Tuning	Fixed an error "Value can not be null, parameter name: source" when tuning SQL	TSE-1513

## SQL Tuning Expert for Oracle 4.5.1

SQL Tuning Expert 4.5.1 is a hotfix release that includes bug fixes.

### Resolved Issues in 4.5.1

Feature	Resolved Issue	Issue ID
SQL Tuning	Fixed an error when tuning SQL on database 12.1.0.1.	TSE -1514



SQL Tuning	Fixed an issue when checking if the user has ALTER SYSTEM privilege.	TSE -1516
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## SQL Tuning Expert for Oracle 4.5.0

SQL Tuning Expert 4.5.0 is a minor release that includes enhancements and fixes.

### Additional database supported

Support Oracle standard edition database.

### Connection

Support connecting to the database through a proxy user.

### Tune SQL

Improved the performance to load the saved SQL session.

Redesign of Test Run Options window to simplify the setting of tuning criteria and optimization goals.



## Test Run All Options

Tuning Goals    Filtering Method & Test Run Order

Use default or user-defined setting [Modify](#)  
*All SQL alternatives will be executed once.*

Improve my SQL for slow first-time execution without data cache, although it is fast on the second execution

It is a long run time SQL and I am looking for a SQL with a run time within 30 Minutes

Improve my short run time SQL to run even faster since the SQL is executed thousands of times in a minute

What improvement you are looking for:

I want to tune my SQL for better elapsed time

I want to tune my SQL for better response time since It is a SQL for online query

I want to tune my SQL to use less CPU time since my system is CPU bound

I want to tune my SQL to use less IO time since my system is IO bound

I want to tune my SQL to use less Logical Reads

Executing Method :

Select a method to measure the performance of your SQL statements.

Static

Dynamic

*Benchmarking SQL alternatives may affect other SQL statements that executing in the same database. It is recommended to execute this function in development environment or non-peak hours in production database.*

OK    Cancel

## Recommend Indexes

Improved the ability to recommend indexes for SQL with a specific syntax.

## Resolved Issues in 4.5.0

Feature	Resolved Issue	Issue ID
SQL Tuning	Fixed an error when tuning SQL with a system view.	TSE -1186
SQL Tuning	Fixed an issue that some columns might be invisible in the tree plan.	TSE -1111



## SQL Tuning Expert for Oracle 4.4.0

SQL Tuning Expert 4.4.0 is a minor release that includes enhancements and fixes.

### Tune SQL

Show scrollbar in SQL Tuning summary.

### Resolved Issues in 4.4.0

Feature	Resolved Issue	Issue ID
SQL Tuning	Fixed an error when tuning SQL with a synonym for view.	TSE-1310
SQL Tuning	Fixed an issue that the query plan is empty in Compare SQL window.	TSE-1327

## SQL Tuning Expert for Oracle 4.3.0

SQL Tuning Expert 4.3.0 is a minor release that includes enhancements and fixes.

### Common

Improved the UI response performance.

### Connection Manager

Improved the speed to login database and check privileges.

### Recommend Indexes

Recommend indexes for SQL with READ ONLY view.



## Resolved Issues in 4.3.0

Feature	Resolved Issue	Issue ID
SQL Tuning	Fixed an issue that the data buffer is cleared during the Test Run when the "Flush data buffer before executing every SQL alternative" option is selected but the "Run all SQL once" is not selected.	TSE-1368
SQL Tuning	Fixed a rewrite mistake for the specific syntax of SQL	TSE-1382
SQL Tuning	Fixed issue that SQL text is wrapped in SQL Editor	TSE-1397
SQL Tuning	Fixed an error when test run, tune SQL with bind variables in a CASE expression.	TSE-1424
Common	Fixed an error when remote from Windows PC	TSE-1383

## SQL Tuning Expert for Oracle 4.2.0

SQL Tuning Expert 4.2.0 is a minor release that includes enhancements and fixes.

### Common

Provide an option to specify decimal places to display for Seconds in a time value.

### Connection Manager

Improved Connection Manager to show TNS names in file tnsnames.ora with an incorrect format.

### Tune SQL

Improved the SQL rewrite ability.

## Resolved Issues in 4.2.0



Feature	Resolved Issue	Issue ID
SQL Tuning	Fixed an error when Tune SQL with view	TSE-573
SQL Tuning	Fixed a rewrite mistake for the specific syntax of SQL	TSE-1350
SQL Tuning	Fixed an error for SQL with USING join condition	TSE-1356
SQL Tuning	Fixed an issue that SQL syntax is not supported when Windows default language is not English.	TSE-1362

## SQL Tuning Expert for Oracle 4.1.0

SQL Tuning Expert 4.1.0 is a minor release that includes enhancements and fixes.

### Connection Manager

Improved Connection Manager to support TNS files with ifile definition inside.

### Tune SQL

Improved the SQL rewrite ability.

### Resolved Issues in 4.1.0

Feature	Resolved Issue	Issue ID
Connection Manager	Fixed an issue when connecting to 11G if FIPS is turned on	TSE-568
Connection Manager	Corrected the grid position in the "New or Select Connection" window when no connection was created.	TSE-1324
SQL Tuning	Fixed an error when Tune SQL with trim function	TSE-569
SQL Tuning	Fixed a rewrite mistake for the specific syntax of SQL with a subquery	TSE-1335



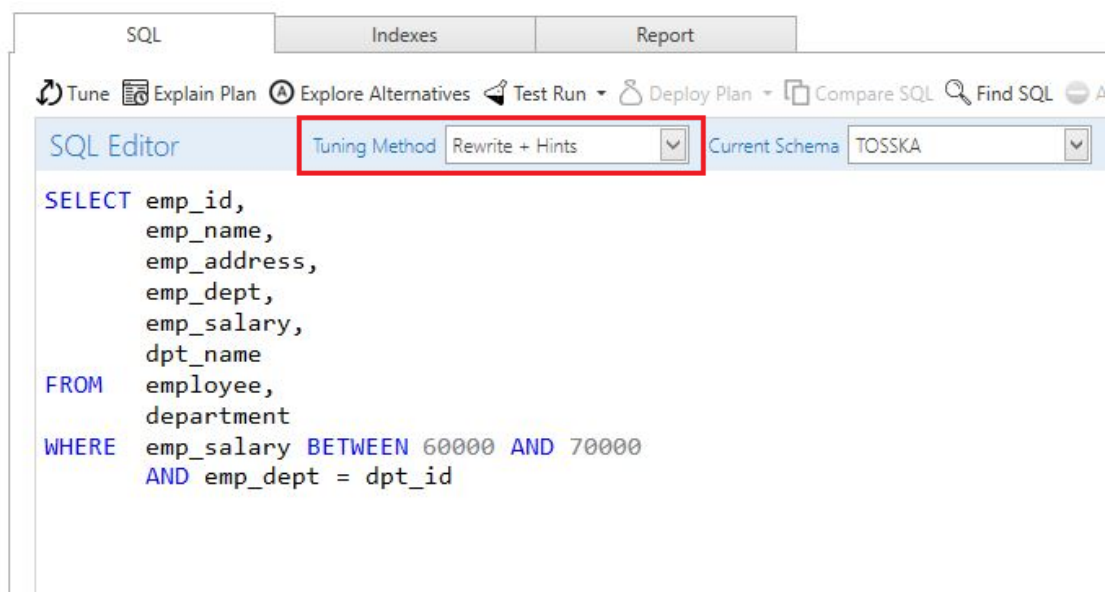
## SQL Tuning Expert for Oracle 4.0.0

SQL Tuning Expert 4.0.0 is a major release that includes new features, enhancements, and bug fixes.

### Tune SQL / Tune Top SQL

- Rewrite SQL

A new powerful A.I. SQL Rewrite Engine to help users to rewrite their problematic SQL statements to potential better semantical equivalent SQL alternatives. Users can select the “Rewrite + Hints”, “Rewrite Only” or “Hints Only” method in the “Tuning Method” dropdown menu to tell our A.I. Rewrite Engine which tuning method will be used to tune a given SQL.



- Recommend Indexes for single SQL  
Speed up test run index sets
- Plan and Summary have separate docking panels. You can drag and drop to reorganize your layout.



## Common

Support more SQL syntax.

Updated default UI layout.

Change Tree Plan to columns layout with access predicates and filter predicates added.

Show scrollbar if there are too many saved SQL tuning sessions that are not fit in a window.

## Resolved Issues in 4.0.0

Feature	Resolved Issue	Issue ID
Tune SQL	Fixed issue that DB time statistics is always 0 after test running of SQL alternatives	TSE-1221
Tune SQL	Fixed an error when tune or test run update SQL statement if update table is a subquery	TSE-1220





Tune SQL	Fixed an error when explain, tune or test run SQL with semicolon again after inputting return and new line at the end of a SQL.	TSE-1222
Tune SQL	Fixed an error when Explore Indexes if SQL contains functions with DB link.	TSE-1180