Tosska SQL Tuning Expert Pro for Oracle® 3.1.0 - Release Notes

Release Notes

Sep 2019

About Tosska SQL Tuning Expert Pro for Oracle®

Tosska SQL Tuning Expert Pro (TSE Pro™) for Oracle® is an automatic SQL tuning product that uses AI technology to tune your SQL statements by applying Oracle Hints combinations and exploring indexes to improve your SQL statements' performance WITH or WITHOUT touching your source code. An intelligent cost-aware Indexes Advisor is also provided to recommend cost-effective indexes for a given SQL workload.

Trial Version limitations

1. The TSE Pro™ trial version provides 20 automatic SQL alternatives to solve most common SQL performance problems for free.
2. The TSE Pro™ trial version comes with 30 single SQL's index recommendations for free.
3. The TSE Pro™ trial version supports workload based indexes advice with at most 20 SQL statements in one captured SQL workload.

Supported Oracle® versions

Oracle® 11.2 or higher

Known Issues

1. Migration of SQL Patches or Plan Baselines from 12C to 11G is not allowed.

New Features

SQL Tuning Expert Pro for Oracle 3.1.0

SQL Tuning Expert Pro 3.1.0 is a minor release which includes following enhancements and resolved issues.

Recommend Indexes

Drop indexes created in test run process as early as possible to save space if those indexes are no longer needed in later test run stages.

Generate less index alternatives to speed up test run when indexing level is 1, 2 or 3.

Resolved Issues in 3.1.0

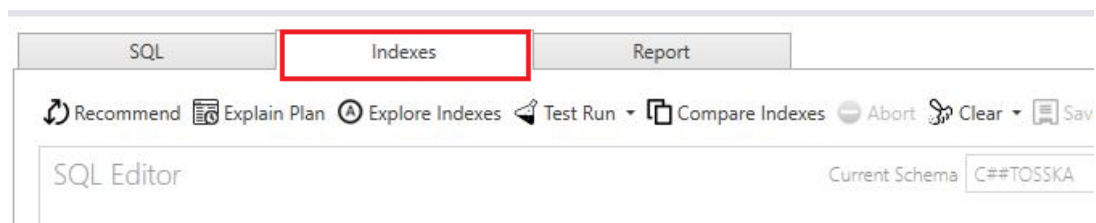| Feature	Resolved Issue	Issue ID
Tune SQL	The performance bar is not visible when the SQL performance improvement near 100%	TSEP-995
Tune SQL	Corrected an error if unselect all SQL alternatives when exploring SQL alternatives	TSEP-1054
Connection Manager	Corrected an error when launch application if TNS file with invalid entries.	TSEP-1048
Connection Manager	Corrected an error when launch application without TNS file.	TSEP-1059

SQL Tuning Expert Pro for Oracle 3.0.1

SQL Tuning Expert Pro 3.0.1 is a major release which includes new features, enhancements and fixes.
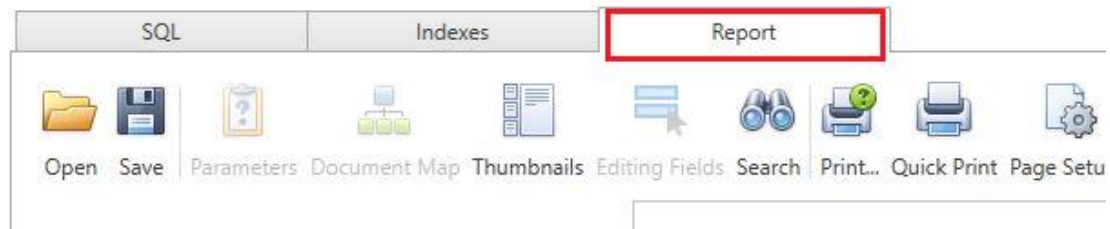
Tune SQL

- New recommend indexes for single SQL

New index recommendation function for single SQL statement empower by our unique AI engine. The feature can explore potential indexes to improve a given SQL to the uncompromising performance speed.

- SQL Tuning Solution Report

A SQL tuning report will be generated after the SQL tuning and Indexes tuning processes are completed, users can use it to compare the performance gains between SQL tuning and indexes tuning.
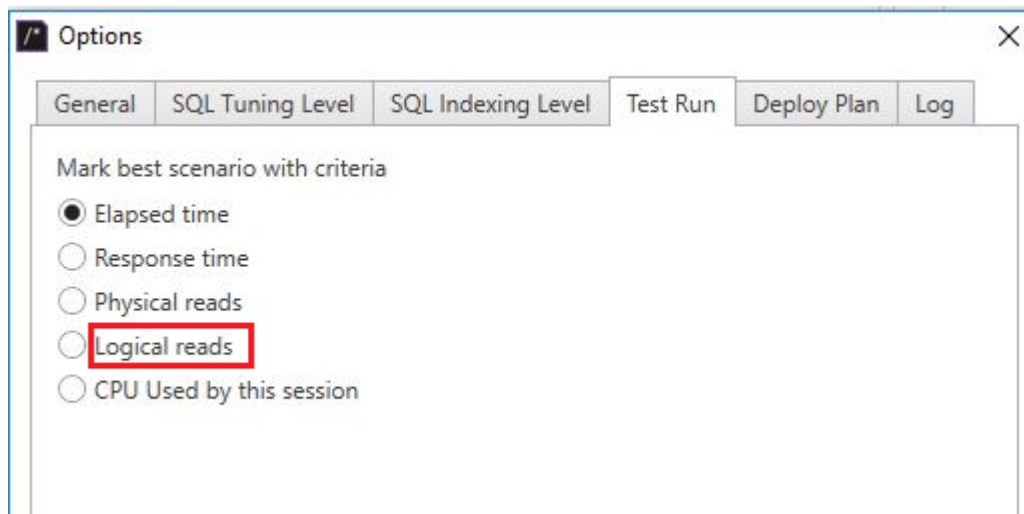

- Test Run

  A new option to flush data buffer before each execution of SQL alternative when **"Run all SQL once"** is selected. It is useful to benchmark those SQL that are not executed frequently.
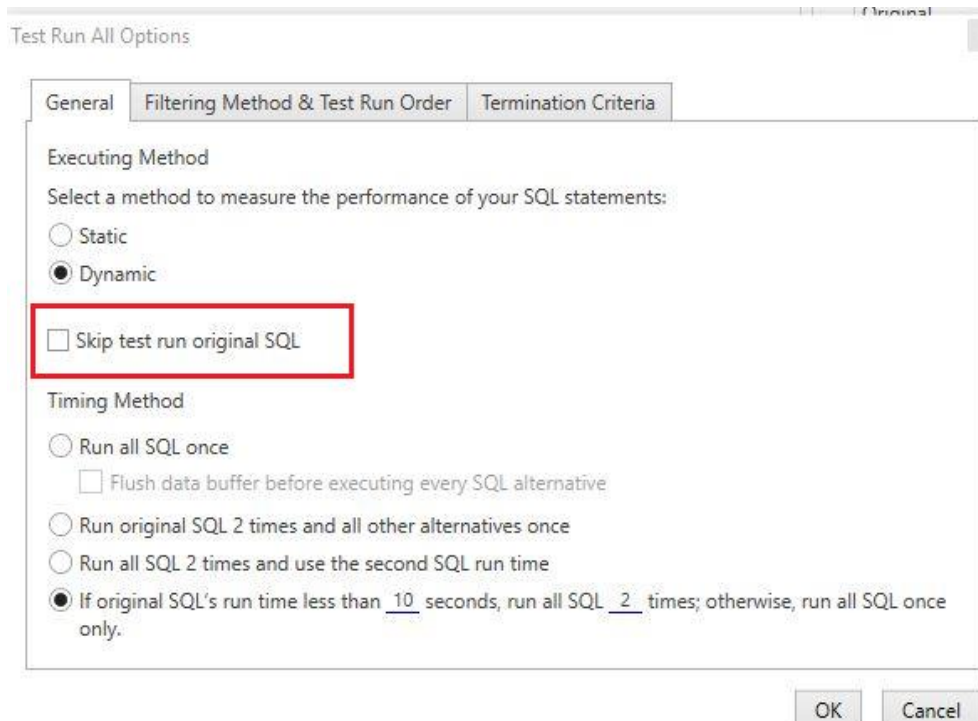
New option in "Mark best scenario with criteria" – "Logical Reads".

New option "Skip test run original SQL". This option is useful to save your test run time when you already know your original SQL's elapsed time is long; you can use it to skip the test running of original SQL.

Tune Top SQL

Show SQL alternative improvement and Index improvement in graphical style.

Advise Indexes
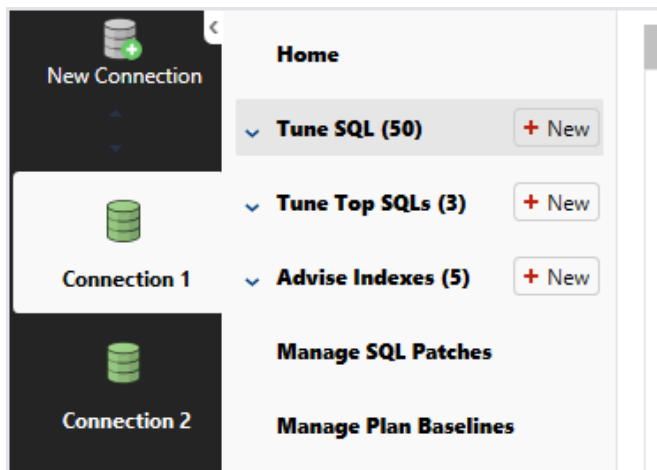
Supports function-based index.

Provides popup window to export all SQL List to Excel file in Index Advice report

Reduces disk space to save an Advise Indexes Session

User Interface

New layout of home page for users' easy access of major functions in the product.

New navigation panel.

General

A new session will be created automatically for Tune SQL, Tune Top SQL and Advise Indexes if there are old sessions.

Resolved Issues in 3.0.1

Feature	Resolved Issue	Issue ID
Tune SQL	Fixed an exception when tuning a SQL	TSEP-1003
Tune Top SQL	Fixed the issue that duplicated plans are shown in plan panel in Tune Top SQL	TSEP-918
Tune SQL & Tune Top SQL	Fixed the issue that the default data type for bind variable is not correct for some SQL.	TSEP-726
Advise Indexes	Fixed a bug that Advise Indexes is not stopped immediately when stop conditions are satisfied.	TSEP-729
Advise Indexes	Fixed an exception when compare plans in Advice Indexes Report	TSEP-733
Advise Indexes	Fixed an issue that error "Failed to explain plan" occurred when initialize specified SQL in Advise Indexes	TSEP-894
General	Fixed an exception when launch application	TSEP-874
Connection Manager	List the TNS names in connection manager with instant Oracle client	TSEP-821
Connection Manager	Show message when connect a database which is not supported	TSEP-855

SQL Tuning Expert Pro for Oracle 2.0.8

SQL Tuning Expert Pro 2.0.8 is a major release which includes following new features, enhancements and resolved issues.

Tune SQL

Improve problem-solving ability with more Hints supported

Tune Top SQL

A new module Tune Top SQL is provided to extract resource expensive SQLs from SGA or AWR for SQL tuning.

Advise Indexes

Display more SQL statistics in Extract SQL window.

New Compare Plan window for Advice Report.

More information is provided if explain plan failed or it has no index privilege on specific tables during advise indexes process.

Common

Export execution plan to PDF or image;

Print execution plan.

UI Languages Supported: English, Chinese (simplified)

Resolved Issues in 2.0.8

Feature	Resolved Issue	Issue ID
Common	SQL Text wrongly warped in SQL Editor	TSEP-580
Tune SQL	Improved progress bar style during test run	TSEP-336

SQL Tuning Expert Pro for Oracle 1.2.0

SQL Tuning Expert Pro 1.2.0 is a minor release which includes following enhancements and resolved issues.

Common

No create table privilege is needed when Tune SQL or Advise Indexes.

Advise Indexes

Display more SQL statistics in Extract SQL window.

New Compare Plan window for Advice Report.

Resolved Issues in 1.2.0

Feature	Resolved Issue	Issue ID
Tune SQL	Corrected an error when attempting to Tune or test run SQL.	TSEP-440

SQL Tuning Expert Pro for Oracle 1.1.0

SQL Tuning Expert Pro 1.1.0 is a major release which includes following new features.

Tune SQL

It is a very powerful tool to tune your SQL statements in a fully automatic manner without the need of user's expertise involvement. Our AI engine will try most effective hints combinations to your SQL statement to explore potential better execution plans of your SQL statements. You can select the best performance SQL alternative for your application after benchmarking of all or selected scenarios generated by the engine. It is also a powerful SQL tuning tool to tune your SQL statements without touching your source code by applying SQL Patches/Plan Baselines to production database anytime and anywhere.

Manage SQL Baselines

You can manage one or multiple deployed SQL Plan Baselines. You can use this function to enable, disable, drop or migrate selected SQL Plan Baselines.

Manage SQL Patches

You can manage one or multiple deployed SQL Patches. You can use this function to enable, disable, drop or migrate selected SQL Patches.

Advise Indexes

It is an Intelligent and cost-aware Indexes Advisor for a given SQL workload captured from AWR or SGA. The Advise Indexes is able to find the best recommendation of indexes within a certain quota or time. The recommended indexes will have the best impact to the given SQL workload.