Tosska SQL Tuning Expert for MySQL
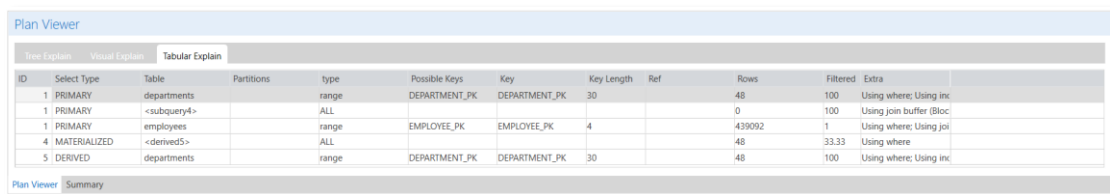
It is not just another SQL tuning tool

There are not many SQL tuning tools for MySQL database, but most of them are focused on plan visualization or query plan analysis, it is not helpful if you don't have in-depth SQL tuning knowledge and are not willing to spend extra effort to tune a SQL apart from their daily duties. If you are eager for getting one-button-solution tool that can tune a SQL statement automatically without the need of your intervention. Tosska SQL Tuning Expert for MySQL may be your only choice.

Expensive SQL tuning effort by human expert

It may be up to days or weeks for a DBA or experienced SQL developer to tune a problematic SQL statement. SQL tuning is a very skillful job that not many developers are able to carry out in an enterprise. Should such expensive and valuable time be saved and used for other even more productive tasks inside a company?
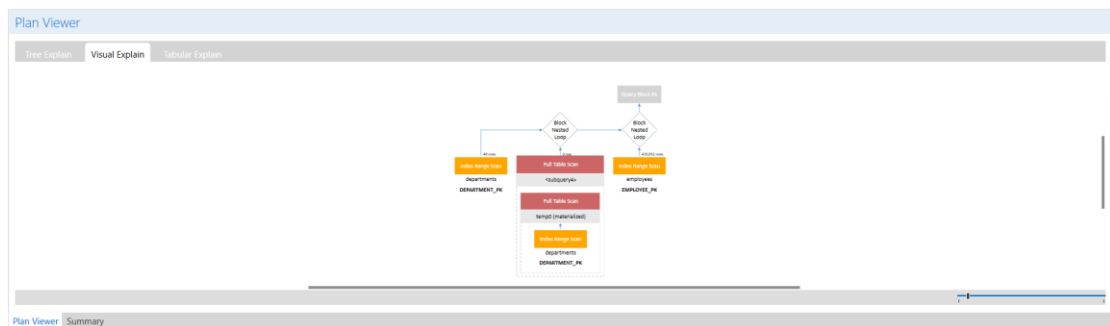
Tosska proprietary Tree Plan format for your easy understanding

Traditional MySQL tabular explain plan and visual explain plan are the standard tools for developer to understand how MySQL SQL optimizer is processing the input SQL statement, while the tabular explain plan is leaking of hierarchical operation steps, visual explain plan is too focused on hierarchical structure without enough information is displaying on screen. There is another fatal problem that a complex visual explain plan is normally too big to fit in a window, it is very difficult to the user apprehend the overall structure of the query plan without scrolling around the window.

Traditional Tabular Plan

Visual Plan

Tosska proprietary tree plan has a market leading explain plan function for MySQL, it not only has rich statistics information like what is provided by Tubular Explain from MySQL, but it also has a heirachical structure like what is displaying in visual plan. The beauty is that all such informmation can be displayed in a small window for easy reading.

Tosska Tree Plan

What is machine tuning for SQL statements?

Tosska SQL Tuning Expert is a SQL tuning tool that optimizes your SQL statements without the need of user's involvement. The product will give you the ultimate SQL performance solution by just point and click. What you have to do is to input your problematic SQL statement into the product and press a button. You don't have to do analysis, guessing or manual testing during the entire SQL tuning process. The improved SQL statement will be benchmarked with your original SQL statement side by side without suspicion.

The machine tuning for SQL statements is a proprietary technology invented by Tosska to mimic a human expert SQL tuning process, in which the engine tries every possible effective MySQL Hints combinations for a SQL statement to improve the execution speed within the given quota. As the permutation of MySQL Hints combinations to a SQL statement is so huge, it is impossible for a human expert to accomplish it for complex SQL statements. Furthermore, there is also no way for a DBA or developer to guarantee that the best solution is found after a lot of trials and errors.

Best solution without trial and error

With Tosska SQL Tuning Expert for MySQL, you no longer need to rewrite or try every possible hints combination manually to the SQL statement to explore potential better performance execution plans, since all those hard tasks are released by the embedded AI engine. Our intelligent engine will help you to find every possible Hints combination to improve your SQL speed without the need of your intervention. You just sit back, relax, and wait for the best SQL alternative to come up on your screen.

Provide even better than a human expert's solution

Tuning SQL is a time consuming job that requires in-depth knowledge on SQL tuning skill and most SQL developers are not trained to accomplish this job apart from their daily development tasks. Furthermore, there is no way for a DBA to explore all alternative execution plans within a short time. The following screenshot shows that Tosska SQL Tuning Expert can explore thousands of SQL alternatives in just a few minutes that may require a human expert months' effort to do.

After benchmarking partial or all SQL alternative execution plans, the best SQL alternative will be displayed with Original SQL statement side by side on the screen. The process is fully automatic without the need of user's involvement and the result is the best out of thousands of potential execution plans that MySQL can generate for this SQL statement. This exhaustive search and test process is impossible to be accomplished by a human expert.

Uncompromised SQL tuning solution within manageable time

It is known that the longer you spend on the SQL tuning process, the more chance you may get a better SQL alternative. It is also true in Tosska SQL Tuning Expert that the user can adjust the Intelligent Level to control the time to spend on a specific SQL statement according to the complexity of your SQL statement. For complex SQL statements with huge potential execution plans, user can allocate more resources and time to explore the ultimate performance solution for the SQL.

The predefined intelligent level is 5 sets of "Maximum number of SQL to investigate" setting to control the size of search space. The larger the search space, the more chance the engine can find a better SQL solution for a problematic SQL statement.

User defined "Maximum number of SQL to investigate" option is also available for experienced users to tackle complicated SQL performance problems with manual specification of hints and maximum number of SQL to investigate during the tuning process.