

Materialized View Effect on Query Performance

Authors : Yusuf Ziya Ayık, Ferhat Kahveci

Abstract : Currently, database management systems have various tools such as backup and maintenance, and also provide statistical information such as resource usage and security. In terms of query performance, this paper covers query optimization, views, indexed tables, pre-computation materialized view, query performance analysis in which query plan alternatives can be created and the least costly one selected to optimize a query. Indexes and views can be created for related table columns. The literature review of this study showed that, in the course of time, despite the growing capabilities of the database management system, only database administrators are aware of the need for dealing with archival and transactional data types differently. These data may be constantly changing data used in everyday life, and also may be from the completed questionnaire whose data input was completed. For both types of data, the database uses its capabilities; but as shown in the findings section, instead of repeating similar heavy calculations which are carrying out same results with the same query over a survey results, using materialized view results can be in a more simple way. In this study, this performance difference was observed quantitatively considering the cost of the query.

Keywords : cost of query, database management systems, materialized view, query performance

Conference Title : ICCS 2017 : International Conference on Computer Science

Conference Location : Rome, Italy

Conference Dates : September 18-19, 2017