Abstract

Data warehouse is a repository of large amount of data collected from multiple heterogeneous and distributed data sources. Data warehouse stores lots of data in the form of views, referred as materialized views which provide a base for decision support or OLAP queries. Materialized views store the result of queries which improves the query performance. One of the most important aspect in data warehousing is the selection of materialized views which minimizes the query response time and maintenance cost, given a limited storage space. In this paper, analysis of various approaches of view selection in data warehousing environment is done that have been proposed in the recent past and also provided a comprehensive study of these approaches based on various parameters such as issues addressed, query language supported, comparison to benchmark etc.
Assortment of Materialized View: A Comparative Survey in Data Warehouse Environment

- S. Agrawal, S. Chaudhari and V. Narasayya, ”Automated selection of materialized views and indexes for SQL databases”, Proceedings of 26th International Conference on Very Large Databases, Cairo, Egypt, 2000.
- Qingzhou Zhang, Xia Sun, Ziqiang Wang, ”An Efficient MA-Based Materialized Views Selection Algorithm”, 2009 Iita International Conference On Control, Automation And Systems Engineering
- Zhou Lijuan, Ge Xuebin and Wang Linhuang, Shi Qian, ”Efficient Materialized
- Alika and Anjana Gosain, "A Comparative Study of Materialised View Selection in Data Warehouse Environment", 5th International Conference on Computational Intelligence and Communication Networks (CICN), 2013.
- P. P. Karde and V. M. Thakare, "Materialized View Selection Approach Using Tree Based Methodology", International Journal of Engineering Science and Technology,

Index Terms

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