Double Partitioning with global and local Indexing: Effect on Data Warehouse Performance

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 180
Number 44

Year of Publication: 2018

Authors:
Mohamed El Emine Abdel Wedoud, Mohamed Larbi Benmaati, Emany Sidi

10.5120/ijca2018917148

Abstract

The design of data warehouses is the most important step in their life cycle and is due to its permanent impact on its condition and operation.

Strategic decision-making in a timely manner is an objective and a need for decision makers, especially in a production environment with a high frequency of updating.

Designers of data warehouses always try to minimize the execution time of the analysis requests and optimize the performance of the warehouse in order to present the reports in the best time and condition.

This article shows that during the design phase a double vertical and horizontal partitioning of the fact table and dimension tables with global and local indexing can optimize the logical and physical performance of the data warehouse.
References


Index Terms

Computer Science Information Sciences

Keywords

Data Warehouse, optimization, BI, Indexes, performance