Using Snowflake Schema and Bitmap Index for Big Data Warehouse Volume

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

Volume 180
Number 8

Year of Publication: 2017

Authors:
Mohammed Benjelloun, Mohamed El Merouani, El Amin A. Abdelouarit

10.5120/ijca2017916049

Abstract

Designing a data warehouse is the most important action done by the designer; it is a risk study of its performance as per its criticality while going to production.

It is known that hardware has developed in term of memory volume and speed, storage… but to minimize the execution time and the storage space still being the main objective for data warehousing specialists.

This paper shows the advantage of using bitmap index and partitioned fact tables in big data warehouses volumes based on a snowflake schema based on compression.

References

1. E. Abdelouarit, M. El Merouani, A. Medouiri, The bitmap index advantages on the data
warehouses American Academic & Scholarly Research Journal Vol. 6, No. 4, July 2014

Index Terms

Computer Science Databases

Keywords

Data Warehouse, DBMS, Indexes, Business Intelligence