Abstract

Speeding up query processing is a sensitive issue in the data warehouse. Using some mechanisms like summary tables and indexes can be a solution to this problem. However, though the performance when using summary tables for predefined queries is good but to save space and time during the query processing, indexing is a better solution without extra hardware. The challenge is to find a suitable index type that would enhance the query’s performance. Some relational database management systems are carried out by new indexing techniques, such as bitmap indexing, to speed up processing. Bitmap indexes have a particular structure for a quick data retrieval. This paper focuses on measuring the performance of Bitmap as index in data warehouse comparing it with the B-tree index using oracle environment which uses B-Tree as default indexing technique to avoid the problem of low cardinality column when an attribute has few values.
Bitmap Index as Effective Indexing for Low Cardinality Column in Data Warehouse

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Index Terms

Computer Science

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Data warehouse  Bitmap index  B-Tree index  indexing