Abstract

Distribution design involves making decisions on the fragmentation and allocation of data across the sites of a computer network. Vertical splitting is the process of subdividing the attributes of a relation to generate fragments. In this paper, we propose an analysis for vertical splitting algorithm using prototype approach. This approach starts from the attribute affinity matrix and generates initial clusters based on the affinity values between attributes. Then, it uses the database according to optimal splitting solution to produce final groups that will represent the fragments. Then we analysed these fragments according to their contribution level. The result is generated that shows how to find optimal solutions.
An Analysis of Vertical Splitting Algorithm

- Karlapalem, K. , Li, 8. and Vieweg,, S. Method Induced Partitioning Schemes in Object Oriented Databases. In 16th international conference on Distributed Computing System, Hong Kong, 1996.
- Farhi Marir, Yahiya Najjar, Mahmoud Y. AlFaress, Hassan I. Abdalla, "An Enhanced Grouping Algorithm for Vertical Partitioning Problem in DDBs"
- Adrian Runceanu, Towards Vertical Fragmentation in Distributed Databases
- Mitchell, C. Components of a Distributed Database.

Index Terms

Computer Science

Algorithms

Keywords

BEA Distributed Database Vertical Fragmentation