Abstract

Semantic query optimization uses semantic knowledge in databases to rewrite queries and logic programs for the purpose of more efficient query evaluation. There has been a large body of work in the area of semantic query optimization. But, unfortunately, till now no commercial application of semantic query optimization techniques has received wide attention. In this paper, we address this problem by developing a unified framework (Application Programming Interface) called SQOPI that could be used by any application developer to semantically optimize queries executed against relational database regardless of DBMS type used. Our results show that SQOPI improves both time and I/O efficiency.

References

- M. Hammer and S. B. Zdonik, "Knowledge-based query processing," in Proceedings of the sixth international conference on Very Large Data Bases-Volume 6, 1980,
SQOPI: Semantic Query Optimization Framework

pp. 137-147.

Index Terms

Computer Science  Query Processing

Keywords

Semantic Query Optimization  Query Rewrite.