Query Decomposition and Optimization in Multidatabase Systems

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Abstract

Multidatabase systems envelop the differences of multiple local database systems and provide a uniform accessing interface for global users. Global query, which is used to visit global schemata, should be transformed to local queries that can be accepted and executed by local database systems. In this paper, a way for establishing schema mapping is given and schema mapping tree is used to store and represent these mappings. An approach of global query decomposition based on schema mapping is given and a method of query optimization in allusion to global join is also presented.

Key words

Multidatabase systems, Global query decomposition, Query optimization, Schema mapping