Power Supply System Client Query Methods Based on Tree Structure Database

Full Text (PDF, 495KB)

Author: Jiangtao He, Zhiguo Lu, Ruidong Zhang, Qiujing Gong, Fei Long

Abstract: On the basis of employing the Microsoft Visual Studio 2010 and SQL Server 2008 and other softwares, this paper proposed the power supply system client query methods based on the tree structure database. Inputted the electrical diagram node information of distribution network in the TreeView tables of database by the database software, and then used the WPF programming and TreeView function module to display the function in tree structure. Meanwhile, we can also turn on the electrical diagram in WPF by programming the electrical diagram to realize the function of adding the annotation. When the power supply system fails, the personnel of the power network dispatching operational control click a branch can show the detailed information of breakdown maintenance personnel, and note maintenance personnel by short message. Thereby this method improves the work efficiency and achieves standardized management of the distribution network.

Keywords: Power System; Tree Structure; Database; TreeView; WPF

References:


Open BASE adopts the B+Tree index mechanism and realizes two types of index documents: a simple type and a structural type. However, because the query optimization module does not take query rewriting into account, the query optimization efficiency cannot be fully realized. The main objective of database system research is to hide the data structure details as much as possible. This objective allows database systems to be applied in various fields. The SDD-1 query strategy is based on the optimization process idea of a semijoin algorithm. The SDD-1 query strategy mainly adopts optional projection or semijoin methods to conduct data reduction operations based on the logical relationships of the query. Traditionally, database systems have been run on large servers capable of running several very large databases at once. However, there are distinct disadvantages inherent in the single-server model. For example, resources tied up in the large servers can’t be redistributed among the various databases and other services to ensure an optimal allocation of resources. Traditional large server systems, and because you can dynamically reallocate or provision resources based on actual needs, you’ll be using resources efficiently. Grid computing (also referred to as computing on demand and utility computing) is a new innovation invented solely by Oracle. The idea of grid computing has been around for a while, primarily in the academic world. Cost-Based Optimization. Query optimization is the overall process of choosing the most efficient means of executing a SQL statement. SQL is a nonprocedural language, so the optimizer is free to merge, reorganize, and process in any order. The cost of an index scan depends on the levels in the B-tree, the number of index leaf blocks to be scanned, and the number of rows to be fetched using the rowid in the index keys. The cost of fetching rows using rowids depends on the index clustering factor. The database chooses the method based on the number of rows to be distributed and the number of parallel server processes in the operation. For example, consider the following alternative cases: Many parallel server processes distribute few rows.