

AN ENCODING SCHEME BASED ON FRACTIONAL NUMBERS FOR QUERYING AND UPDATING XML DATA

TECHNOLOGY DESCRIPTION

This technology is a system to effectively manage and exchange data using XML platform.

TECHNOLOGY FEATURES

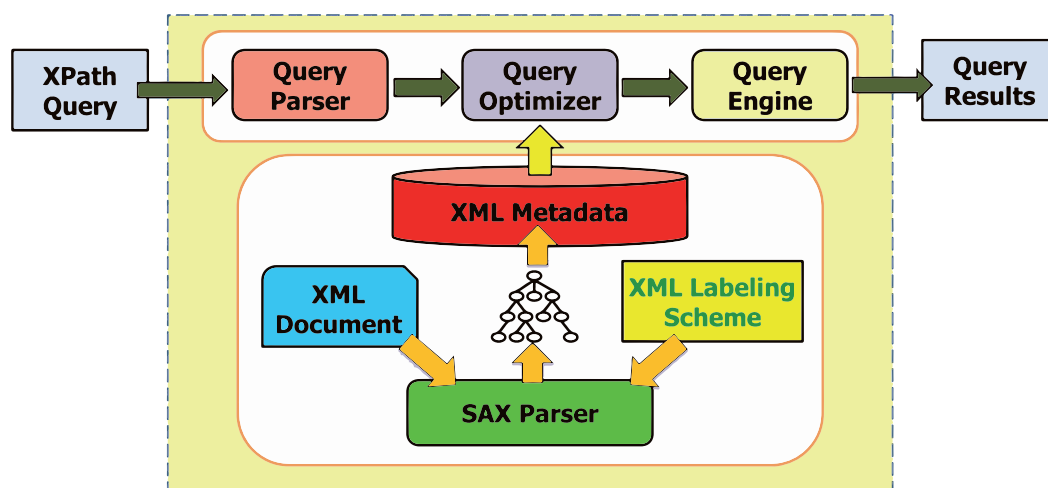
This technology is used for XML data update and query, without interrupting the performance of the system. It can be embedded into existing XML query processors of commercial database management system, such as Oracle, DB2 and SQL Server. It enables the labelling of XML models to ensure that the structural relationships between XML nodes can be efficiently computed. The system can be easily maintained with minimum supervision.

ADVANTAGES

- Save storage space for storing labels
- Reduce XML query processing time
- Reduce total XML update time

INDUSTRY OVERVIEW

Prospects: Data management system market, the existing users of XML query processor



Globally, the database management systems market grew significantly by the year 2011. The five leading commercial relational database vendors by revenue were Oracle (USD11,787 millions), IBM (USD4,870 millions), Microsoft (USD4,099 millions), SAP including Sybase (USD1,101 millions) and Teradata (USD882 millions). In terms of market share, Oracle dominated 48.8% of the market in 2011, increased by 48.2% from 2010. The market share for IBM (DB2 database) and Microsoft (SQL Server) databases were 20.2% and 17%, respectively. The database management system software market is expected to have strong

growth as its adoption is driven by big data and digitalization initiatives. Over the period of 2012-2016, the analysts forecast the Global Relational Database Management System (RDBMS) market to grow at a CAGR of 10.06%.

Prof. Dr. Hamidah Ibrahim
Faculty of Computer Science and Information Technology
hamidah@fsktm.upm.edu.my