Monitoring Business Transactions for a Real-time Data Warehouses

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Abstract

Real-time business intelligence (RTPI) is an approach to data analytics that enables business users to get up-to-the-minute data by directly accessing operational systems or feeding business transactions into a real-time data warehouse and business intelligence (BI) system. Business Intelligence (BI) technology has helped many organizations to make better and faster decisions and improve its performance. RTBI allows organizations to evaluate business processes and take strategic action on the current overall business environment. The ability to manage and effectively present the volume of data tracked in today’s business is the cornerstone of data warehousing, but when a business users require up-to-date or real-time data for the purpose of analysis, which presuppose the building of a real-time data warehouse (RTDW). In this paper we propose a real-time framework to support this up-to-date process. Our framework is based on reading transaction log file of external data sources to determine that data changed using changed data capture, then load this data to data warehouse. This framework minimizes impact to the source system and the target data warehouse system.
References


Index Terms

Computer Science

Information Sciences

Keywords

Change Data Capture (CDC), Extract, Transform and Load (ETL), Replicate, Extract, Transform and Load (RETL), Real-Time Data Warehouse (RTDW)