Abstract

Online Transaction Processing (OLTP) systems have been using the traditional relational Database management system for many years. Online Analytical Processing (OLAP) system for analytical reporting is optimized to aggregate many records which involve more read operations. Hence to enhance the performance in OLAP systems various modeling options like star schema, extended star schema was implemented. But with the latest innovations in hardware technologies like availability of multi core dual processors, availability of 64 bit processors, decreasing cost of main memory and software technology innovations like In-Memory computing, Columnar storage and other with various other new features now there is less concern towards the performance degradation and performance optimization in a data warehouse system. If there is an option to use same database for the OLTP and OLAP systems then the business intelligence system can get the real time data for the analytical query reporting. This document presents the overview of the next generation data warehouse architecture which shares the database along with OLTP and discuss how it is going to use the in memory capability to apply real time analytics.
Next Generation Data Warehouse Design with OLTP and OLAP Systems Sharing same Database

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Index Terms

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