International J. of Engg. Research & Indu. Appls. (IJERIA).
ISSN 0974-1518, Vol.6, No. II (May 2013), pp 61-67

GET HIGH PERFORMANCE ANALYTICS DATABASE SYSTEM BY COMBINING MAIN MEMORY DATABASE & USING COLUMN BASED DATABASE TECHNOLOGIES

RAM BABU [a], NIRMAL LODHI [b], R.C. VERMA [c] AND RAJESH PANDEY [d]
[a] PHD Research Scholar –Bhagwant University, India.
[b] PHD Research Scholar –Bhagwant University, India.
[c] Asst. Professor IMT Faridabad, India.
[d] PHD Research Scholar –Bhagwant University, India.

Abstract

To get best performance for an analytic system or data warehouse systems, two technologies, column oriented database management systems and main memory database management system can be combined to get advantages of these two. Both technologies give best performance to its opponent database system, for example Main memory database management systems are faster as they reside in main memory as compared to disk resident database systems. This is because main memory is faster in comparison to hard drive/disk. The performance of main memory database systems is 15-20 % higher than that of disk resident database systems. Whereas column based database systems are faster than the row based database because in column based database systems, data is stored in columns and indexed as compared to row based database systems. Performance of column based database systems is 15-30% higher than that of row based database systems By combining these two technologies, we can achieve 30-50% higher performance for analytics systems they needs to be high performing in analysis and computation.

Keywords: Memory, Database, Main memory database, real time database, database management, , Hard Disk, storage memory and products, Columns, Column Based Database, advantages, Analytics, data Warehouse