Abstract

Column oriented database have continued to grow over the past few decades. C-Store, Vertica Monet DB and Lucid DB are popular open source column oriented database. Column-store in a nutshell, store each attribute values belonging to same column contiguously. Since column data is uniform type therefore, there are some opportunities for storage size optimization in Column-store, many renowned compression schemes such as RLE & LZW that make use of similarity of adjacent data to compress. Good Compression can also be achieved using bitmap index by order of magnitude through the sorting. The Run Length Encoding works best for the columns of ordered data, or data with few distinct values. This ensures long runs of identical values which RLE compresses quite well. In this paper we have put an effort to build a simulation of Column-Store and applied the best bitmap compression technique RLE which further improves the retrieval time.
Fast Retrieval with Column Store using RLE Compression Algorithm

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Index Terms

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