Abstract

This paper proposes the cascading of two algorithms that combines the features of both PDLZW and Arithmetic coding and also compares this with deflate which is a cascading of LZ77 and Huffman Coding. In PDLZW algorithm, the dictionary is divided into several dictionaries based on the size of the words. With the hierarchical parallel dictionary set, the search time can be reduced significantly. All this dictionaries are operated independently with each other. The results generated by Arithmetic Coding are close to the optimal value (as predicted by entropy in information theory).

References


Index Terms

Computer Science  Algorithm

Keywords

Arithmetic Coding  huffman Coding  Lossless Data Compression  Lossy Data Compression
Parallel Dictionary Lzw (pdlzw)
Word-based Dynamic Lzw (wdlzw).