Abstract

This paper works on a detailed and performative evaluation of a bit-level, adaptive, and asymmetric data compression scheme that is based on the adaptive character word length algorithm. It can be used with statistical compression techniques to increase efficiency. In this mathematical technique, the data word is converted into codewords (Binary form) then the binary coded file is compressed using 8 bits character word length. In this new Algorithm, an optimum character word length b is calculated where (b>8), so that a factor of (b/8) increases the compression ratio. To validate this algorithm, it is used as a complementary with Huffman code to compress a source text file with randomly distributed characters of different frequencies. This scheme is used to compress several text files into smaller bit-level files and can be used to achieve higher competitive skills more than state-of-art tools.

References
2. www.vectorsite.net/tdcmp1.html

Index Terms

Computer Science Circuits and Systems

Keywords

Data compression; Coding; Huffman coding; Binary codes.