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ECMA

Standardizing Information and Communication Systems

Adaptive Lossless Data Compression Algorithm

(ALDC)

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Brief History

In the past decades ECMA have published numerous ECMA Standards for magnetic tapes, magnetic tape cassettes and cartridges, as well as for optical disk cartridges. Those media developed recently have a very high physical recording density. In order to make optimal use of the resulting data capacity, lossless compression algorithms have been designed which allow a reduction of the number of bits required for the representation of user data.

These compression algorithms are registered by ECMA, the International Registration Authority established by ISO/IEC. The registration consists in allocating to each registered algorithm a numerical identifier which will be recorded on the medium and, thus, indicate which compression algorithm(s) has been used.

This ECMA Standard is the third ECMA Standard for compression algorithms. The two previous standards are:

ECMA-151 Data Compression for Information Interchange - Adaptive Coding with Embedded Dictionary - DCLZ Algorithm (June 1991)

ECMA-159 Data Compression for Information Interchange - Binary Arithmetic Coding Algorithm - (December 1991)

These ECMA Standards have been adopted under the fast-track procedure by ISO/IEC JTC 1 as International Standards 11558 and ISO/IEC 12042, respectively.

The present ECMA Standard has also been contributed to ISO/IEC for adoption under the fast-track procedure as an International Standard.

This ECMA Standard has been adopted by the ECMA General Assembly of June 1995.

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