

STANDARD

15200

First edition
1996-12-01

**Information technology — Adaptive
Lossless Data Compression algorithm
(ALDC)**

*Technologies de l'information — Algorithme de compression de données
d'adaptation sans pertes (ALDC)*



Reference number
ISO/IEC 15200:1996(E)

This is a preview of "ISO/IEC 15200:1996". Click [here](#) to purchase the full version from the ANSI store.

Contents

Foreword	iii
Introduction	iv
1 Scope	1
2 Conformance	1
3 Normative Reference	1
4 Definitions	1
4.1 Compressed Data Stream	1
4.2 Copy Pointer	1
4.3 Current Address	1
4.4 Data Byte.	1
4.5 Displacement Field.	1
4.6 End Marker	1
4.7 History Buffer.	1
4.8 Literal.	1
4.9 Matching String	1
4.10 Match Count	1
4.11 Match Count Field.	1
4.12 Pad Bits	1
5 Conventions and Notations	1
5.1 Representation of numbers	1
5.2 Names	2
6 ALDC compression algorithm	2
6.1 Encoding description for a 512-byte History Buffer	2
6.2 Description of the Compressed Data Stream	3
Annexes	
A - ALDC encoding format	5
B - ALDC Overview	7
C - ALDC Encoding Flow Chart	8
D - Bibliography	12

© ISO/IEC 1996

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

ISO/IEC Copyright Office • Case postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

This is a preview of "ISO/IEC 15200:1996". [Click here to purchase the full version from the ANSI store.](#)

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75% of the national bodies casting a vote.

International Standard ISO/IEC DIS 15200 was prepared by ECMA (as ECMA-222) and was adopted, under a special "fast-track procedure", by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

Annexes A to D are for information only.

This is a preview of "ISO/IEC 15200:1996". Click [here](#) to purchase the full version from the ANSI store.

Introduction

In the past decades ISO/IEC have published numerous International 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 International Standard is the third one for lossless compression algorithms. The two previous International Standards are:

- | | |
|--------------------|---|
| ISO/IEC 11558:1992 | <i>Information technology - Data compression for information interchange - Adaptive coding with embedded dictionary - DCLZ algorithm.</i> |
| ISO/IEC 12042:1993 | <i>Information technology - Data compression for information interchange - Binary arithmetic coding algorithm.</i> |