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COMPUTER GRAPHICS—METAFILE FOR THE STORAGE AND TRANSFER OF PICTURE DESCRIPTION INFORMATION

Part 4—CLEAR TEXT ENCODING

(ISO Title: Information processing systems—Computer graphics—Metafile for the storage and transfer of picture description information—Part 4: Clear text encoding)

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Australian Association of Permanent Building Societies
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Australian Bureau of Statistics
Australian Computer Equipment Manufacturers Association
Australian Computing Services Association
Australian Computer Users Association
Australian Information Industry Association
Canberra College of Advanced Education
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Life Insurance Federation of Australia
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Telecom Australia
University of Technology, Sydney

AUSTRALIAN STANDARD

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PREFACE

This Standard was prepared by the Association's Committee on Information Processing Systems in response to rapid developments and growth of interest in computer related graphics. It is identical with, and has been reproduced from, International Standard ISO 8632—1987; drawn up by ISO TC 97, Information Processing Systems.

The computer graphics metafile provides a file format suitable for the storage and retrieval of picture information. The file format consists of a set of elements that can be used to describe pictures in a way that is compatible between systems of different architectures and devices of different capabilities and design.

For the purpose of this Australian Standard, the text of the ISO Standard should be modified as follows:

Reference to International Standards		*Relevant Australian Standard*	
ISO		AS	
646	Information processing—ISO 7-bit coded character set for information interchange	1776	Information processing—7-bit coded character set for information interchange
2022	Information processing—ISO 7-bit and 8-bit coded character sets—Code extension techniques	1953	Information processing—ISO 7-bit and 8-bit coded character sets—Code extension techniques

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Computer graphics—Metafile for the storage and transfer of picture description information Part 4—Clear text encoding

0 Introduction

0.1 Purpose of the clear text encoding

The Clear Text Encoding of the Computer Graphics Metafile (CGM) provides a representation of the Metafile syntax that is easy to type, edit and read. It allows a metafile to be edited with any standard text editor, using the internal character code of the host computer system.

0.2 Primary objectives

a. HUMAN EDITABLE: The Clear Text Encoding should be able to be hand edited or, if desired, hand constructed.

b. HUMAN-FRIENDLY: The Clear Text Encoding should be easy and natural for people to read and edit. Although what is easiest and most natural is a subjective judgment that varies among users, contributing factors such as ease of recognition, ease of remembering, avoidance of ambiguity, and prevention of mistyping have all been considered.

c. MACHINE-READABLE: The Clear Text Encoding should be able to be parsed by software.

d. Suitable for USE IN A WIDE VARIETY OF EDITORS: The Clear Text Encoding should not have any features that make it difficult to edit in normal text editors.

e. Facilitate INTERCHANGE BETWEEN DIVERSE SYSTEMS: The Clear Text Encoding should be encoded in such a way as to maximize the set of systems which can utilize it. No assumptions should be made as to word size or arithmetic modes used to interpret the metafile.

f. Use STANDARDIZED ABBREVIATIONS as much as possible. Where language encoding of other graphics standards have established standard abbreviations, or where common practice in the data processing and graphics industries has established well known abbreviations, these abbreviations are used. In accordance with the principle of "least astonishment", this approach should minimize the time needed to learn to use this encoding.

0.3 Secondary objectives

Because other CGM encodings are targeted toward CPU efficiency (CGM Binary Encoding) and information density (CGM Character Encoding), these objectives are considered of secondary importance for the CGM Clear Text Encoding.

0.4 Relationship to other International Standards

The set of characters required to implement the Clear Text Encoding is a subset of those included in national versions of ISO 646. Any character set that can be mapped to and from that subset may be used to implement the encoding.

For certain elements, the CGM defines value ranges as being reserved for registration. The values and their meanings will be defined using the established procedures (see part 1, 4.11.)

0.5 Status of annexes

The annexes do not form an integral part of this part of ISO 8632 but are included for information only.