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AMENDMENT 2
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Information technology — Computer graphics — Metafile for the storage and transfer of picture description information —

Part 3:
Binary encoding

AMENDMENT 2: Application structuring extensions

Technologies de l'information — Infographie — Métafichier de stockage et de transfert des informations de description d'images —

Partie 3: Codage binaire

AMENDEMENT 2: Extensions de structure d'application

Reference number
ISO/IEC 8632-3:1992/Amd.2:1995(E)

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.

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Information technology - Computer graphics - Metafile for the storage and transfer of picture description information

Part 3: Binary encoding

AMENDMENT 2: Application structuring extensions

Pages ii-iii

Add the following to Contents:

"7.11 Application structure descriptor elements"

7.1 Method of presentation

Change the 1st sentence and Table 2, page 18, to read:

"The elements are grouped according to their class; there are 9 classes.

Table 2 - List of element class codes

Class	Type of Elements
0	Delimiter Elements
1	Metafile Descriptor elements
2	Picture Descriptor elements
3	Control elements
4	Graphical Primitive elements
5	Attribute elements
6	Escape elements
7	External elements
8	Segment Control and Segment Attribute elements
9	Application Structure Descriptor elements
10-15	Reserved for future standardization

"

7.2 Delimiter elements

Add the following entries at the end of Table 3, page 19:

"

BEGIN APPLICATION STRUCTURE	21	SF,SF,E	2BS+BE	SR,SR,{0,1}
BEGIN APPLICATION STRUCTURE BODY	22	n/a	0	n/a
END APPLICATION STRUCTURE	23	n/a	0	n/a

"

Add the following descriptions to the list, page 20:

"21 BEGIN APPLICATION STRUCTURE:has two parameters

P1: (string fixed)application structure identifier
P2: (string fixed)application structure type
P3: (enumerated)inheritance flag:valid values are
0 STATE LIST
1 APPLICATION STRUCTURE

22 BEGIN APPLICATION STRUCTURE BODY:has no parameters

23 END APPLICATION STRUCTURE:has no parameters"

7.3 Metafile descriptor elements

Add the following to the end of Table 4, page 21:

"

PICTURE DIRECTORY	24	E,n(SF,2[ldt])	BE+n(BS+2B[ldt])	{0,1,2}, (SR,[ldt]R,[ldt]R)

"

Change the Description of METAFILE VERSION in the list, page 21, to read:

"1 METAFILE VERSION:has 1 parameter:

P1: (integer) metafile version number: valid values are 1,2,3,4"

Change the Description of METAFILE ELEMENTS LIST in the list, page 23, to read:

"11 METAFILE ELEMENTS LIST: has 2 parameters:

P1: (integer) number of elements specified
P2: (index-pair array) List of metafile elements in this metafile. Each element is represented by two values: the first is its element class code (as in table 2) and the second is its element id code (as in table 3 to table 10). These codes are listed in annex C. The shorthand pseudeo-elements are represented by

drawing set:	(-1,0)
drawing-plus-control-set	(-1,1)
version-2 set	(-1,2)
extended-primitives set	(-1,3)
version-2-gksm set	(-1,4)
version-3 set	(-1,5)
version-4 set	(-1,6)"

Add the following descriptions to the end of the list, page 27:

"24 PICTURE DIRECTORY:has 2 parameters:

P1: (enumerated) location data type selector: valid values are

0 UI8
1 UI16
2 UI32

P2: list of 3-tuples consisting of:
Picture Identifier (string fixed)
Picture Location ([ldt]) offset, in octets, from the beginning of the metafile
Application Structure Directory Location ([ldt]) offset, in octets, from the beginning of the metafile

Note: [ldt] designates UI8, UI16, UI32 as selected by location data type selector parameter. The values of picture-location are the offsets in octets from the beginning of the metafile to the start of the associated BEGIN PICTURE element. The values of Application Structure Directory Location are the offsets in octets from the start of the metafile to the start of the APPLICATION STRUCTURE DIRECTORY element of the associated picture."

7.4 Picture descriptor elements

Add the following entry to the end of Table 5, page 28:

"

APPLICATION STRUCTURE DIRECTORY	24	E,n(SF,[ldt])	BE+n(BS+B[ldt])	{0,1,2}, (SR,[ldt]R,[ldt]R)

"

Add the following descriptions to the end of the list, page 32:

"20 APPLICATION STRUCTURE DIRECTORY:has 2 parameters

P1: (enumerated) location data type selector: valid values are

0 UI8
1 UI16
2 UI32

P2: list of pairs consisting of:
Application Structure Identifier (string fixed)
Application Structure Location ([ldt]) offsets, in octets, from the beginning of the picture containing the APS

NOTE - [ldt] designates UI8, UI16, UI32 as selected by location data type selector parameter. The values of Application Structure Location are the offsets in octets from the beginning of the BEGIN PICTURE element to the start of the associated BEGIN APPLICATION STRUCTURE element."

Add the new Subclause after Subclause 7.10, page 57:

"7.11 Application structure descriptor elements

Table 12 - Encoding of application structure descriptor elements

Element Class 9	Element Id	Paramenter Type	Parameter List Length	Parameter Range
APPLICATION STRUCTURE ATTRIBUTE	1	SF, SDR	BS+BS	SR, SR

Additional description of the elements in Table 12:

Code Description

1 APPLICATION STRUCTURE ATTRIBUTE:has 2 parameters

P1: (string fixed) application structure attribute type
P2: (structured data record) data record "

9 Conformance

Change the first sentence of the 2nd paragraph as follows, page 59:

"Inclusion of non-graphical data in the metafile should be accomplished with the APPLICATION DATA element or with the APPLICATION STRUCTURE ATTRIBUTE element."

Annex C

Add the following elements to the end of the list of delimiter elements, page 67:

"0	21	BEGIN APPLICATION STRUCTURE
0	22	BEGIN APPLICATION STRUCTURE BODY
0	23	END APPLICATION STRUCTURE"

Add the following element to the end of the list of metafile descriptor elements, page 68:

"1	24	PICTURE DIRECTORY"

Add the following element to the end of the list of picture descriptor elements, page 68:

"2	20	APPLICATION STRUCTURE DIRECTORY"

Add the following element class after Segment Elements: Class 8, page 71:

"Application Structure Descriptor Elements: Class 9

Class	Element Code	Element Name
9	1	APPLICATION STRUCTURE ATTRIBUTE"

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