INTERNATIONAL STANDARD

ISO/IEC 8632-4

Second edition
1992-10-01

AMENDMENT 2
1995-08-01

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

Part 4: Clear text encoding

AMENDMENT 2: Application structuring extensions

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

Partie 4: Codage en clair des textes

AMENDEMENT 2: Extensions de structure d'application

Reference number
ISO/IEC 8632-4:1992/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.

Amendment 2 to International Standard ISO/IEC 8632-4 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 24, *Computer graphics and image processing*.

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

Part 4: Clear text encoding

AMENDMENT 2: Application structuring extensions

Pages ii-iii

Add the following to Contents:

5.4.4 Abbreviations

Add the following abbreviations to Subclause 5.4.4, pages 13-14:

After "APPLICATION" add:

"APPLICATION STRUCTURE APS"

After "DEVICE" add:

"DIRECTORY DIR"

5.4.5 The derived element names

Add the following to Subclause 5.4.5, pages 14-18:

After "END TILE ARRAY" add:

"BEGIN APPLICATION STRUCTURE BEGAPS
BEGIN APPLICATION STRUCTURE BODY BEGAPSBODY
END APPLICATION STRUCTURE ENDAPS"

After "SYMBOL LIBRARY LIST" add:

"PICTURE DIRECTORY PICDIR"

After "GEOMETRIC PATTERN DEFINITION" add:

"APPLICATION STRUCTURE DIRECTORY APSDIR"

After "SEGMENT PICK PRIORITY" add:

"APPLICATION STRUCTURE ATTRIBUTE APSATTR"

6.1 Encoding delimiter elements

Add the following encodings at the end of list, page 20:

"BEGIN APPLICATION STRUCTURE ::= BEGAPS
<SOFTSEP>
<SF:APSID>
<SEP>
<SF:APSTYPE>
<SEP>
<STLIST|APS>
<TERM>

BEGIN APPLICATION STRUCTURE BODY ::= BEGAPSBODY<TERM>

END APPLICATION STRUCTURE ::= ENDAPS<TERM>"

6.2 Encoding metafile descriptor elements

Change the production of METAFILE VERSION, page 20, to read:

"METAFILE VERSION ::= MFVERSION
<SOFTSEP>
<I:VERSION>
{1=Version 1, 2=Version 2,
3=Version 3, 4=Version 4}
<TERM>"

Change the 2nd sentence of the paragraph following the production of METAFILE ELEMENT LIST, page 23, to read:

"In addition, the words DRAWINGPLUS, DRAWINGSET, VERSION2, EXTPRIM, VERSION2GKSM, VERSION3, and VERSION4 may be used in this string."

Add the following encodings and notes at the end of the list, page 27:

"PICTURE DIRECTORY ::= PICDIR
<SOFTSEP>
<UI8 | UI16 | UI32>
<<SEP><PICDIRTRIPLE>>+
<TERM>

PICDIRTRIPLE ::= <SF:PICID>
<SEP>
<I:PICLOCATION>
<SEP>
<I:APSDIRLOCATION>

NOTES

7 The first (enumerated) parameter selects the location data type ([ldt]) for the subsequent PICLOCATION and APSDIRLOCATION parameters. These are integer-bound parameters, and the [ldt] selects one of three unsigned integer precisions. The values of PICLOCATION are the offsets measured in characters from the first character of the metafile to the first character of the associated BEGIN PICTURE element. The values of APSDIRLOCATION are the offsets measured in characters from the start of the metafile to the first character of the APPLICATION STRUCTURE DIRECTORY element of the associated picture. For the purpose of measuring offsets, a character is a generic unit as defined in Subclause 4.1. For string parameters, a character represents a single byte, regardless of the ISO 2022 coding environment in effect for the string parameter (See 4.7.3.2 ISO/IEC 8632-1:1992).

8 Editing of clear-text encoded Version 4 metafiles may invalidate PICLOCATION and APSDIRLOCATION values. If so, these values must be recomputed. Also, translation of clear text metafiles between computing environments may invalidate PICLOCATION and APSDIRLOCATION values as different environments represent line endings differenly."

6.3 Encoding picture descriptor elements

Add the following encodings at the end of list, page 31:

"APPLICATION STRUCTURE DIRECTORY ::= APSDIR
<SOFTSEP>
<UI8 | UI16 | UI32>
<<SEP><APSDIRPAIR>>+

```
                                        <TERM>

APSDIRPAIR                      ::= <SF:APSID>
                                    <SEP>
                                    <I:APSLOCATION>
```

NOTES

9 The first (enumerated) parameter selects the location data type ([ldt]) for the subsequent APSLOCATION parameter. This is an integer-bound parameter, and the [ldt] selects one of three unsigned integer precisions. The values of APSLOCATION are the offsets measured in characters from the first character of the BEGIN PICTURE element containing the APS to the first character of the associated BEGIN APPLICATION STRUCTURE element.

10 Editing of clear text encoded Version 4 metafiles may invalidate APSLOCATION values. If so, these values must be recomputed."

6.3 Encoding attribute elements

Change the 2nd (last) sentence of Note 1 which immediately follows the production of PATTERN SIZE, page 45, to read:

"In Version 3 and Version 4 metafiles it may be expressed in any of the 4 modes which can be selected with INTERIOR STYLE SPECIFICATION MODE."

Add the following Subclause 6.10 after Subclause 6.9, page 52:

"**6.8 Encoding application structure descriptor elements**

```
APPLICATION STRUCTURE ATTRIBUTE     ::= APSATTR
                                        <SOFTSEP>
                                        <SF:APSATTRTYPE>
                                        <SEP>
                                        <SDR:DATARECORD>
                                    <TERM>"
```