INTERNATIONAL STANDARD ISO/IEC 14496-18:2004
TECHNICAL CORRIGENDUM 1

Published 2007-02-01

Information technology — Coding of audio-visual objects —

Part 18:
Font compression and streaming

TECHNICAL CORRIGENDUM 1

Technologies de l'information — Codage des objets audiovisuels —

Partie 18: Compression et transmission de polices de caractères

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to ISO/IEC 14496-18:2004 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information.*

ICS 35.040

Ref. No. ISO/IEC 14496-18:2004/Cor.1:2007(E)

Published in Switzerland

In subclause 4.2.4.7, replace the first 20 lines of Table 9 with the following:

0	2	0	8	N/A	0	N/A	+
1					0		–
2					256		+
3					256		–
4					512		+
5					512		–
6					768		+
7					768		–
8					1024		+
9					1024		–
10	2	8	0	0	N/A	+	N/A
11				0		–	
12				256		+	
13				256		–	
14				512		+	
15				512		–	
16				768		+	
17				768		–	
18				1024		+	
19				1024		–	

In subclause 5.2.1, replace the text of the first paragraph:

A font data access unit conveys data for one single font, or a subset thereof. Two access unit formats are specified, discriminated by the DecoderSpecificInfo for the font data stream (see subclause 5.4). Only one of these access unit formats can be selected for a given font data stream.

with the following text:

A font data access unit conveys data for one single font, or a subset thereof. Fonts may support a wide variety of different languages and may have a large number of glyphs. While there are some fonts that support, for example, full Latin character set, there are other fonts that support only English alphabet, which can be considered a subset of Latin characters.

When a font is used for text rendering, only a limited number of glyphs can be utilized, and the transmission of the whole font may not be necessary. In order to reduce the amount of data sent, and to improve the efficiency of the font data streams, fonts can be reduced in size (subsetted) by keeping only those glyphs that are utilized in a particular text fragment, and the additional required general font information. Therefore, the font subsets are complete, self-sufficient and fully functional fonts containing a limited number of glyphs. A font subset shall be conformant to the fontFormat specified in the header of the access unit. When the value of fontFormat is 0x01, 0x02 or 0x03, the content of fontData shall be conformant to OpenType specification, containing, at least, all required tables specified by the OpenType specification.

Two access unit formats are specified, discriminated by the DecoderSpecificInfo for the font data stream (see subclause 5.4). Only one of these access unit formats can be selected for a given font data stream.

In subclause 5.2.1, replace the text of the second and third paragraphs:

The basic access unit format permits to convey font data without any header information. The `DecoderSpecificInfo` provides the identification of the font and, possibly, the subset thereof that is conveyed. The content of subsequent basic access units in such a font data stream shall replace the font or font subset data of previous basic access units.

The enhanced access unit format provides a self-contained format where an access unit header contains all necessary information about the font data conveyed in this access unit.

with the following text:

The basic access unit format permits to convey font data without any header information. The `DecoderSpecificInfo` provides the identification of the font and, possibly, the subset thereof that is conveyed. The content of subsequent basic access units in such a font data stream shall replace the font or font subset data of previous basic access units with the same `fontName` and `fontSubsetID` (if applicable).

The enhanced access unit format provides a self-contained format where an access unit header contains all necessary information about the font data conveyed in this access unit. The content of subsequent enhanced access unit replaces or complements the font or font subset of the previous basic or enhanced access unit with the same `fontName` and `fontSubsetID`, based on the `fontSubsetExtensionFlag`, as described in subclause 5.2.3.This functionality allows incremental updates of font data and efficient font streaming implementations.

In subclause 5.2.3, replace the current description of:

`fontSubsetExtensionFlag` – if set to one indicates that the font data in this access unit is an extension of the previously sent font subset with the same `fontName` and `fontSubsetID`. Otherwise the font subset replaces any previous font subset with the same `fontName` and `fontSubsetID`.

with the following text:

`fontSubsetExtensionFlag` – if set, indicates that the font data in this access unit is an extension of the previously sent font subset with the same `fontName` and `fontSubsetID`. The data presented in the current access unit extends the previously sent font subset data, i.e. a new font subset provides additional glyphs that complement previously sent font subset with the same font name and font subset ID. These two subsets can either be merged in the decoder, or can be used concurrently as two different font subsets of the same original font. If `fontSubsetExtensionFlag` is not set, the font subset replaces any previous font subset with the same `fontName` and `fontSubsetID`.

In Annex A "Patent Statements", replace the table containing company names with the following:

Company
Apple Computer
Microsoft Corporation
Monotype Imaging Inc.