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Information technology — High efficiency coding and media delivery in heterogeneous environments —

Part 12: Image File Format

*Technologies de l'information — Codage à haute efficacité et livraison
des médias dans des environnements hétérogènes —*

Partie 12: Format de fichier d'image



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ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword	vi
Introduction	vii
1 Scope	1
2 Normative references	1
3 Terms, definitions and abbreviated terms	1
3.1 Terms and definitions	1
3.2 Abbreviated terms	5
4 Overview	5
5 General requirements	7
5.1 General requirements on files	7
5.2 General requirements on readers	7
5.3 Multi-purpose files	7
5.4 Other boxes	7
6 Single image and image collection	7
6.1 General	7
6.2 Derivation from the ISO base media file format	8
6.3 Derivation of an output image of an image item	8
6.4 Roles of images	9
6.4.1 General	9
6.4.2 Hidden images	9
6.4.3 Cover image	9
6.4.4 Thumbnail images	9
6.4.5 Auxiliary images	9
6.4.6 Master images	9
6.4.7 Pre-derived coded images	10
6.4.8 Multi-layer images	10
6.5 Image properties	10
6.5.1 General	10
6.5.2 Decoder configuration and initialization	11
6.5.3 Image spatial extents	11
6.5.4 Pixel aspect ratio	12
6.5.5 Colour information	12
6.5.6 Pixel information	13
6.5.7 Relative location	13
6.5.8 Image properties for auxiliary images	14
6.5.9 Clean aperture	15
6.5.10 Image rotation	15
6.5.11 Layer selection	16
6.5.12 Image mirroring	16
6.6 Derived images and derived image items	17
6.6.1 General	17
6.6.2 Derived image types and derived image item types	17
6.7 Image metadata	19
6.8 Relating an untimed item to a timed sequence	20
6.8.1 'equiv' entity group	20
6.8.2 'equiv' sample group	20
7 Image sequences	21
7.1 General	21
7.2 Derivation from the ISO base media file format	21
7.2.1 Track Header box	21
7.2.2 Handler type	22
7.2.3 Coding Constraints box	22

7.3	Presentation of an image sequence track.....	23
7.4	Sample groups.....	23
7.4.1	Direct reference samples list.....	23
7.5	Other tracks.....	25
7.5.1	General.....	25
7.5.2	Thumbnail image sequence track.....	25
7.5.3	Auxiliary image sequence track.....	25
8	Metadata support.....	26
8.1	General.....	26
8.2	Metadata for image items.....	26
8.3	Metadata for image sequence tracks.....	26
8.4	Integrity checks.....	26
8.4.1	General.....	26
8.4.2	Syntax.....	27
8.4.3	Semantics.....	27
9	Extensions to the ISO base media file format.....	28
9.1	General.....	28
9.2	ItemInfoEntry.....	28
9.3	Item Properties Box.....	28
9.3.1	Definition.....	28
9.3.2	Syntax.....	29
9.3.3	Semantics.....	29
9.4	Entity grouping.....	30
9.4.1	General.....	30
9.4.2	Groups List box.....	30
9.4.3	Entity to Group box.....	30
9.5	Additional track references.....	31
9.6	Repeating edits.....	31
9.6.1	Definition.....	31
9.6.2	Syntax.....	32
9.6.3	Semantics.....	32
9.7	Sample-to-item sample grouping.....	32
9.7.1	Definition.....	32
9.7.2	Syntax.....	33
9.7.3	Semantics.....	33
10	Image File Format brands.....	33
10.1	General.....	33
10.2	Image and image collection brands.....	34
10.2.1	'mif1' structural brand.....	34
10.3	Image sequence brands.....	35
10.3.1	'msf1' structural brand.....	35
	Annex A (normative) Storage of externally specified metadata.....	37
	Annex B (normative) HEVC Image File Format.....	39
	Annex C (normative) High efficiency image file MIME type registration.....	51
	Annex D (normative) High efficiency image sequence file MIME type registration.....	54
	Annex E (normative) AVC in the Image File Format.....	56
	Annex F (normative) Advanced coding image MIME type registration.....	61
	Annex G (normative) Advanced coding sequence MIME type registration.....	63
	Annex H (normative) JPEG in the Image File Format.....	64
	Annex I (informative) Guidelines for specifying storage of image coding formats.....	67
	Annex J (informative) Examples of image collections.....	68

Annex K (informative) Guidelines for progressive refinement	70
Bibliography	72

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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The committee responsible for this document is ISO/IEC JTC 1, *Information technology, SC 29, Coding of audio, picture, multimedia and hypermedia information*.

A list of all parts in the ISO/IEC 23008 series can be found on the ISO website.

Introduction

The Image File Format is designed to enable the interchange of images and image sequences, as well as their associated metadata. It forms part of a family of specifications that are box-structured and is built using tools defined in the ISO base media file format. This document specifies both structural brands that can be used with any codec and brands specific to High Efficiency Video Coding (HEVC). The file format specified in this document is referred to as the High Efficiency Image File Format (HEIF). When the requirements of the HEVC-specific brands are obeyed, the file format can be referred to as the HEVC Image File Format.

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Information technology — High efficiency coding and media delivery in heterogeneous environments —

Part 12: Image File Format

1 Scope

The formats defined in this document enable the interchange, editing, and display of images, as well as the carriage of metadata associated with those images.

The Image File Format builds on tools defined in ISO/IEC 14496-12 to define an interoperable storage format for a single image, a collection of images, and sequences of images.

This document specifies brands for the storage of images and image sequences conforming to High Efficiency Video Coding (HEVC).

NOTE The storage of HEVC video sequences is out of scope and is handled by ISO/IEC 14496-15.

This format defines normative structures used to contain metadata, how to link that metadata to the images, and defines how metadata of certain forms is carried.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 10918-1:1994, *Information technology Digital compression and coding of continuous-tone still images — Part 1: Requirements and guidelines*

ISO/IEC 14496-10, *Information technology — Coding of audio-visual objects — Part 10: Advanced Video Coding*

ISO/IEC 14496-12:2015, *Information technology — Coding of audio-visual objects — Part 12: ISO base media file format*

ISO/IEC 14496-15, *Information technology — Coding of audio-visual objects — Part 15: Carriage of network abstraction layer (NAL) unit structured video in the ISO base media file format*

ISO/IEC 23008-2:2015, *Information technology — High efficiency coding and media delivery in heterogeneous environments — Part 2: High efficiency video coding*