

Australian Standard™

**Information technology—Coding of
audio-visual objects**

Part 12: ISO base media file format

This Australian Standard was prepared by Committee IT-029, Coded Representation of Picture, Audio and Multimedia/Hypermedia Information. It was approved on behalf of the Council of Standards Australia on 27 October 2004. This Standard was published on 25 November 2004.

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audio-visual objects**

Part 12: ISO base media file format

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PREFACE

This Standard was prepared by the Standards Australia Committee IT-029, Coded Representation of Picture, Audio and Multimedia/Hypermedia Information.

This Standard is identical with, and has been reproduced from, ISO/IEC 14496-12:2004, *Information technology—Coding of audio-visual objects—Part 12: ISO base media file format*.

The objective of this Standard is to provide multimedia developers with information regarding the implementation and use, local or via a network or other stream delivery mechanism, of the ISO base media file format of the MPEG-4 object-oriented audio-visual coding series.

The terms ‘normative’ and ‘informative’ are used to define the application of the annexes to which they apply. A normative annex is an integral part of a standard, whereas an informative annex is only for information and guidance.

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<i>Reference to International Standard</i>		<i>Australian Standard/New Zealand Standard</i>	
ISO/IEC		AS/NZS	
14496	Information technology—Coding of audio-visual objects	14496	Information technology—Coding of audio-visual objects
14496-1	Part 1: Systems	14496.1	Part 1: Systems
ISO/IEC		AS	
15444-1	Information technology—JPEG 2000 image coding system—Core coding system	15444.1	Information technology—JPEG 2000 image coding system—Core coding system

Only referenced documents that have been adopted as Australian or Australian/New Zealand Standards have been listed.

CONTENTS

Page

Introduction	
1 Scope.....	1
2 Normative references	1
3 Terms and definitions	1
4 Object-structured File Organization.....	2
4.1 File Structure	2
4.2 Object Structure	3
4.3 File Type Box.....	4
5 Design Considerations	5
5.1 Usage.....	5
5.1.1 Interchange	5
5.1.2 Content Creation	5
5.1.3 Preparation for streaming	6
5.1.4 Local presentation	6
5.1.5 Streamed presentation	6
5.2 Design principles	7
6 ISO Base Media File organization	7
6.1 Presentation structure.....	7
6.1.1 File Structure	7
6.1.2 Object Structure	8
6.1.3 Meta Data and Media Data.....	8
6.1.4 Track Identifiers	8
6.2 Metadata Structure (Objects).....	8
6.2.1 Box.....	8
6.2.2 Data Types and fields	8
6.2.3 Box Order.....	9
7 Streaming Support.....	12
7.1 Handling of Streaming protocols	12
7.2 Protocol 'hint' tracks	12
7.3 Hint Track Format	13
8 Box Definitions.....	13
8.1 Movie Box.....	13
8.2 Media Data Box	14
8.3 Movie Header Box.....	14
8.4 Track Box.....	15
8.5 Track Header Box.....	16
8.6 Track Reference Box	17
8.7 Media Box	18
8.8 Media Header Box	18
8.9 Handler Reference Box.....	19
8.10 Media Information Box	20
8.11 Media Information Header Boxes	20
8.11.2 Video Media Header Box	20
8.11.3 Sound Media Header Box.....	21
8.11.4 Hint Media Header Box	21
8.11.5 Null Media Header Box	21
8.12 Data Information Box.....	22

	<i>Page</i>	
8.13	Data Reference Box.....	22
8.14	Sample Table Box.....	23
8.15	Time to Sample Boxes	23
8.15.2	Decoding Time to Sample Box.....	24
8.15.3	Composition Time to Sample Box.....	25
8.16	Sample Description Box.....	26
8.17	Sample Size Boxes.....	28
8.17.2	Sample Size Box.....	29
8.17.3	Compact Sample Size Box	29
8.18	Sample To Chunk Box	29
8.19	Chunk Offset Box	30
8.20	Sync Sample Box	31
8.21	Shadow Sync Sample Box	31
8.22	Degradation Priority Box	32
8.23	Padding Bits Box.....	33
8.24	Free Space Box.....	33
8.25	Edit Box	34
8.26	Edit List Box.....	34
8.27	User Data Box	35
8.28	Copyright Box.....	36
8.29	Movie Extends Box.....	36
8.30	Movie Extends Header Box	36
8.31	Track Extends Box	37
8.32	Movie Fragment Box	38
8.33	Movie Fragment Header Box.....	38
8.34	Track Fragment Box.....	38
8.35	Track Fragment Header Box	39
8.36	Track Fragment Run Box.....	40
8.37	Movie Fragment Random Access Box.....	41
8.38	Track Fragment Random Access Box.....	41
8.39	Movie Fragment Random Access Offset Box	42
9	Extensibility	43
9.1	Objects	43
9.2	Storage formats	43
9.3	Derived File formats	44
10	RTP Hint Track Format	44
10.1	Introduction.....	44
10.2	Sample Description Format.....	45
10.3	Sample Format.....	45
10.3.1	Packet Entry format	46
10.3.2	Constructor format.....	46
10.4	SDP Information	48
10.4.1	Movie SDP information	48
10.4.2	Track SDP information.....	48
10.5	Statistical Information.....	48
Annex A (informative) Overview and introduction		50
A.1	Section C Overview.....	50
A.2	Core Concepts	50
A.3	Physical structure of the media	50
A.4	Temporal structure of the media	51
A.5	Interleave.....	51
A.6	Composition.....	51
A.7	Random access	52
A.8	Fragmented movie files	52
Annex B (informative) Patent statements.....		54
Bibliography.....		55

INTRODUCTION

The ISO Base Media File Format is designed to contain timed media information for a presentation in a flexible, extensible format that facilitates interchange, management, editing, and presentation of the media. This presentation may be 'local' to the system containing the presentation, or may be via a network or other stream delivery mechanism.

The file structure is object-oriented; a file can be decomposed into constituent objects very simply, and the structure of the objects inferred directly from their type.

The file format is designed to be independent of any particular network protocol while enabling efficient support for them in general.

The ISO Base Media File Format is a base format for media file formats.

It is intended that the ISO Base Media File Format shall be jointly maintained by WG1 and WG11. Consequently, a subdivision of work created ISO/IEC 15444-12 and ISO/IEC 14496-12 in order to document the ISO Base Media File Format and to facilitate the joint maintenance.

This technically identical text is published as ISO/IEC 14496-12 for MPEG-4, and as ISO/IEC 15444-12 for JPEG 2000, and reference to this specification should be made accordingly. The recommendation is to reference one, for example ISO/IEC 14496-12, and append to the reference a parenthetical comment identifying the other, for example "(technically identical to ISO/IEC 15444-12)".

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AUSTRALIAN STANDARD

Information technology — Coding of audio-visual objects —

Part 12:

ISO base media file format

1 Scope

This International Standard specifies the ISO base media file format, which is a general format forming the basis for a number of other more specific file formats. This format contains the timing, structure and media information for timed sequences of media data, such as audio/visual presentations.

This part of ISO/IEC 14496 is applicable to MPEG-4, but its technical content is identical to that of ISO/IEC 15444-12, which is applicable to JPEG 2000.

2 Normative references

The following referenced documents are indispensable for the application 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 639-2:1998, *Codes for the representation of names of languages — Part 2: Alpha-3 code*

ISO/IEC 11578:1996, *Information technology — Open Systems Interconnection — Remote Procedure Call (RPC)*

ISO/IEC 14496-1:2001, *Information technology — Coding of audio-visual objects — Part 1: Systems¹⁾*

ITU-T Rec.T.800 | ISO/IEC 15444-1, *Information technology — JPEG 2000 image coding system: Core coding system*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

Box

An object-oriented building block defined by a unique type identifier and length (called 'atom' in some specifications, including the first definition of MP4).

3.2

Chunk

A contiguous set of samples for one track.

3.3

Container Box

A box whose sole purpose is to contain and group a set of related boxes.

1) Refer, in particular, to Clause 14, Syntactic Description Language (SDL).