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Part 15: Carriage of web resources in ISOBMFF

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Partie 15: Transport de ressources web au format ISOBMFF

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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.

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 document 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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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

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A list of all parts in the ISO/IEC 23001 series can be found on the ISO website.

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Introduction

ISO/IEC 14496-12 specifies a format for the storage of timed resources such as media streams as well as of resources for which no timed stream structure exists, or when the timed stream structure does not need to be exposed.

This document specifies the use of ISO/IEC 14496-12 tools for the storage and delivery of web data. The specified storage is designed to enable enriching audio/video content, as well as audio-only content, with synchronized, animated, interactive web data, including overlays.

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Information technology — MPEG systems technologies —

Part 15:
Carriage of web resources in ISOBMFF

1 Scope

This document specifies how the format defined in ISO/IEC 14496-12 can be used to store web resources (HTML, JavaScript, CSS, etc.) and defines brands to identify files conforming to this document. It also specifies hypothetical processing for how these files can be consumed by web browsers.

The specified storage enables the delivery of synchronized media and web resources as supported by ISO/IEC 14496-12: file download, progressive file download, streaming, broadcast, etc.

This document also defines how to signal required web capabilities to process the files. This is done in a way that web profiles defined by other organizations can be signalled in a dedicated box, e.g. the MIME Box, similarly to how it is done in ISO/IEC 14496-30.

This document does not define any profiles for web data, only their carriage.

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 14496-12, *Information technology — Coding of audio-visual objects — Part 12: ISO Base Media file format*

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 14496-12 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1.1
media player
entity capable of parsing an ISOBMFF file and processing the content of its items and tracks

3.1.2
timed web resource
web resource that has a timing structure exposed in the file format for the purpose of time-driven processing such as seeking or synchronization with other tracks

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