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Information technology — JPEG XR image coding system —

Part 2: Image coding specification

AMENDMENT 1: Media type specification

Technologies de l'information — Système de codage d'image JPEG XR —

Partie 2: Spécification de codage d'image

AMENDEMENT 1: Spécification de type média

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This document was prepared by Technical Committee ISO/IEC JTC 1, *Information technology*, SC 29, *Coding of audio, picture, multimedia and hypermedia information* in collaboration with ITU-T. A technically aligned twin text is published as ITU-T T.832.

Information technology — JPEG XR image coding system —

Part 2:
Image coding specification

AMENDMENT 1: Media type specification

Introduction

Replace paragraph 12 with the following:

The main body of this document specifies the syntax and semantics of JPEG XR coded images and the associated decoding process that produces an output image from a coded image. Annex A specifies a tag-based file storage format for storage and interchange of such coded images. Annex B specifies profiles and levels, which determine conformance requirements for classes of encoders and decoders. Aspects of colour imagery representations and colour management are discussed in Annex C. The typical expected encoding process is described in Annex D. Annex E contains a media type specification for images encoded according to the tag-based format specified in Annex A for use in various Internet protocols. Annex F lists patent rights notifications. Annexes A, B, and E are an integral part of this document and contain normative specifications.

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Change the label for the old Annex E (Patent Rights) to Annex F.

Add a new Annex E before the newly labelled Annex F:

Annex E
(normative)
Media type specification

E.1 General

This annex is a media type specification for images encoded according to the tag-based format specified in Annex A for use in various Internet protocols, according to the scheme defined in IETF RFC 6838. Recent Internet protocols have been carefully designed to be easily extensible in certain areas, and many such protocols are capable of carrying arbitrary labelled content. The mechanism used to label such content is a media type, consisting of a top-level type, a subtype, and in some instances, optional parameters. This annex specifies such a content labelling scheme for JPEG XR coded images, to correspond with a registration in the Internet Assigned Numbers Authority (IANA) central registry.

E.2 Media type specification template information

Media type name: image

Subtype name: jxr

Required parameters: none

Optional parameters: none

Encoding considerations: Files are binary and should be transmitted in a suitable encoding without CR/LF conversion, 7-bit stripping, etc.; base64 is a suitable encoding.

Security considerations: The conveyed coded image files use a structure that can store image data, metadata corresponding to this image data, and other user-defined data. It should be noted that selected metadata fields may encompass information partly intended to protect the image against unauthorized use or distribution. In this case the intention may be that alteration or removal of the data in the fields would be treated as an offence. Metadata fields may also contain information about the source of the image content. The data files have an extensible structure, so that it is theoretically possible that metadata fields could be defined in the future and could be used to induce particular actions on the part of the recipient, thus presenting additional security risks. However, this type of capability is currently not supported in the current referenced specifications.

Interoperability considerations: JPEG XR coded image files can conform to one of several profiles and levels of capabilities (as specified in Annex B of this document); not all of which may be supported by a receiving decoder. As a result, implementations may attempt to decode and display an encoded JPEG XR image only to determine that the image cannot be rendered either partially or in full.

Published specification:

(this document) Rec. ITU-T T.832 | ISO/IEC 29199-2 (in force) Information technology — JPEG XR image coding system — Image coding specification

Applications that use this media type: Imaging, fax, messaging, and multi-media.

Fragment identifier considerations: N/A

Additional information:

Deprecated alias names for this type: N/A

Magic number(s):

As specified in Annex A of this document, the data begins with a FILE_HEADER( ) data structure, which begins with a FIXED_FILE_HEADER_II_2BYTES field equal to 0x4949, followed by a FIXED_FILE_HEADER_0XBC_BYTE field equal to 0xBC, followed by a FILE_VERSION_ID, which is equal to 1 for the current version of this document (with other values reserved for future use, as modified in additional parts or amendments, by ITU-T | ISO/IEC).

Within the payload data, JPEG XR IMAGE_HEADER( ) data structures begin with a GDI_SIGNATURE, which is a 64-bit syntax element that has the value 0x574D50484F544F00 that corresponds to “WMPHOTO” using the UTF-8 character set encoding specified in Annex D of ISO/IEC 10646, followed by a byte equal to 0.

File extension(s): jxr

Person and email address to contact for further information:

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Intended usage: COMMON

Restrictions on usage: N/A

