INTERNATIONAL STANDARD

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AMENDMENT 1
2008-10-01

Information technology — Multimedia framework (MPEG-21) —

Part 9: File Format

AMENDMENT 1: MIME type registration

Technologies de l'information — Cadre multimédia (MPEG-21) —

Partie 9: Format de fichier

AMENDEMENT 1: Enregistrement de type MIME

Reference number
ISO/IEC 21000-9:2005/Amd.1:2008(E)

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Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

Amendment 1 to ISO/IEC 21000-9:2005 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

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Information technology — Multimedia framework (MPEG-21) —

Part 9:
File Format

AMENDMENT 1: MIME type registration

After Annex C add the following new annex:

Annex D
(normative)

MIME type registration

MIME media type name: application

MIME subtype name: mp21

Required parameters: none

Optional parameters: none

Encoding considerations: base64 is generally preferred; files are binary and should be transmitted without CR/LF conversion, 7-bit stripping, etc. Note that although files conforming to ISO/IEC 21000-2 are textual XML the mp21 file which contains it is binary.

Security considerations: It is possible to inject non-compliant MPEG streams (Audio, Video, and Systems) in the MP21 file to overload the receiver/decoder's buffers. This might compromise the functionality of the receiver or even crash it.

An MP21 file supports the storage of stream types, including commands that are executed on the terminal such as Digital Item Methods based on ECMASCRIPT for which also bindings to Java(TM) and C++ exists. It is possible to use one or more of the above in a manner non-compliant to MPEG to crash the receiver or temporarily make it unavailable.

Authentication mechanisms can be used to validate of the sender and the data to prevent security problems due to non-compliant malignant MP21 files.

Interoperability considerations: A number of interoperating implementations exist within the ISO/IEC 21000 community, and that community has reference software for reading and writing the file format.

Published specification: ISO/IEC 21000-9:2005

Applications which use this media type: Multimedia

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Additional information:

Magic number(s): none

File extension(s): m21 and mp21 are both declared at http://www.fileinfo.net and http://filext.com/.

Macintosh File Type Code(s): mp21 is registered with Apple.

Person & email address to contact for further information: David Singer, singer@apple.com

Intended usage: COMMON

Author/Change controller: David Singer, ISO/IEC 21000 file format chair

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