

Real-time Facsimile (T.38) - image/t38  
MIME Sub-type Registration

Status of this Memo

This document specifies an Internet standards track protocol for the Internet community, and requests discussion and suggestions for improvements. Please refer to the current edition of the "Internet Official Protocol Standards" (STD 1) for the standardization state and status of this protocol. Distribution of this memo is unlimited.

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Abstract

This document describes the registration of the MIME sub-type image/t38. The encoding is defined by ITU Recommendation T.38 and is intended for use as an Session Description Protocol (SDP) media descriptor.

1. Conventions used in this document

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in BCP 14, RFC 2119 [REQ].

2. Overview

This document describes the registration of the MIME sub-type image/t38. The encoding is defined by [T.38] and is intended for use as an SDP media descriptor.

3. T.38 Definition

ITU-T Recommendation T.38 [T.38] describes the technical features necessary to transfer facsimile documents in real-time between two standard Group 3 facsimile terminals over the Internet or other networks using IP protocols. The Recommendation allows the use of either TCP or UDP depending on the service environment.

ITU-T Recommendation T.38 [T.38] Annex D describes system level requirements and procedures for internet aware facsimile implementations and internet aware facsimile gateways conforming to ITU-T T.38 to establish calls with other ITU-T T.38 implementations using the procedures defined in IETF RFC 2543 [SIP-99] and IETF RFC 2327 [SDP].

Note that ITU-T T.38 Recommendation T.38 (04/02) [T.38] is an aggregation of the original ITU-T Recommendation T.38 (06/98) [T.38-98] and all of the subsequent Amendments and Corrigendum including [T.38D-00]. While [T.38] and [T.38D-00] describe SIP procedures per [SIP-99], the procedures can also be applied to the revised Session Initiation Protocol specification [SIP].

### 3.1 image/t38 Usage

Annex D of [T.38] describes that the image/t38 media type is intended to indicate a T.38 media stream in SDP.

This media type registration is not intended for email usage.

## 4. IANA Registration

To: ietf-types@iana.org  
Subject: Registration of Standard MIME media type image/t38

MIME media type name: image

MIME subtype name: t38

Required parameters: none

Optional parameters: none

Encoding considerations: Binary

Security considerations:

This content denotes a facsimile bit stream that may or may not be encrypted.

Interoperability considerations :

This MIME media subtype is intended to be used as a parameter by SDP in SIP call setup for T.38 as described in ITU-T Rec. T.38 Annex D. Any use of this media type by email applications is not defined and as a result is not guaranteed to interoperate with a T.38 stream.

Published specification:

ITU-T Recommendation T.38, 'Procedures for real-time Group 3 facsimile communication over IP networks', April 2002.

A copy of the T.38 specifications can be found at:

<http://www.itu.int/rec/recommendation.asp?type=folders&lang=e&parent=T-REC-T.38>

Applications which use this media type:

Real-time facsimile (fax)

Additional information:

Magic number(s):  
    II (little-endian):  
    MM (big-endian):  
File extension(s): .T38  
Macintosh File Type Code(s): T38

Person & email address to contact for further information:

Glenn W. Parsons  
gparsons@nortelnetworks.com

Intended usage: COMMON

Change controller: Glenn Parsons

## 5. Security Considerations

Security considerations for this media type are discussed in the MIME type registration that appears in section 4.

## 6. References

- [REQ] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997.
- [MIME4] Freed, N. and N. Borenstein, "Multipurpose Internet Mail Extensions (MIME) Part Four: Registration Procedures", BCP 13, RFC 2048, November 1996.

- [SDP] Handley, M. and V. Jacobson, "SDP: Session Description Protocol", RFC 2327, April 1998.
- [SIP] Rosenberg, J., Schulzrinne, H., Camarillo, G., Johnston, A., Peterson, J., Sparks, R., Handley, M. and E. Schooler, "SIP: Session Initiation Protocol", RFC 3261, June 2002.
- [SIP-99] Handley, M., Schulzrinne, H., Schooler, E. and J. Rosenberg, "SIP: Session Initiation Protocol", RFC 2543, March 1999.
- [T.38] ITU-T Recommendation T.38, 'Procedures for real-time Group 3 facsimile communication over IP networks', April 2002.
- [T.38-98] ITU-T Recommendation T.38, 'Procedures for real-time Group 3 facsimile communication over IP networks', June 1998.
- [T.38D-00] ITU-T Recommendation T.38 Amendment 2 Annex D, 'SIP/SDP Call Establishment Procedures', February 2000.

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