

Internet Engineering Task Force  
Internet Draft  
[draft-thomas-mime-osp-token-00.txt](#)  
April 5, 1999  
Expires October 5, 1999

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## **The application/osp-token MIME type**

### **STATUS OF THIS MEMO**

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### **1. Abstract**

The Open Settlement Protocol (OSP)[[1](#)], an open standard from the European Telecommunications Standards Institute, specifies a means by which IP telephony equipment in one administrative domain may request access to IP telephony equipment (including, but not limited to: Gateways, Gatekeepers, Border Elements, etc.) in another administrative domain. OSP grants such access by returning authorization tokens, which must then be passed to the destination IP telephony gateway during call signaling. In order to support access control via OSP, IP telephony signaling protocols must be capable of carrying these authorization tokens in an interoperable way. This memo defines just such a method for protocols, such as the Session Initiation Protocol[2], that can support carriage of MIME types during call signaling. This memo conforms to the requirements for MIME type registration defined in [RFC 2048](#)[3].

### **2. Registration Information**

MIME media type name: application

MIME subtype name: osp-token



Required parameters: none

Optional parameters:

osp-token-format: a value of "asn.1" indicates the token contents use the ASN.1 format defined in Annex D, section D.2.1 of the OSP specification; a value of "xml" indicates the token contents use the XML format defined in Annex D, section D.2.2 of the OSP specification. In the absence of any value for this parameter, the token contents shall use the XML format of D.2.2.

osp-token-version: a character string indicating the earliest revision of the OSP specification to which the token contents conform. In the absence of any value for this parameter, the token contents shall conform to version "1.4.2" of the OSP specification.

Encoding considerations:

OSP tokens are normally carried as binary data by the call signaling protocol. Call signaling protocols which cannot reliably transfer binary data may use alternate encodings such as base-64[4], in which case standard MIME content-encoding parameters may indicate the particular encoding.

Security considerations:

OSP tokens are intended to provide access control to resources of other administrative domains, and, as such, are inherently designed to address security concerns. For that reason, OSP tokens are digitally signed and, optionally, encrypted, as defined in the OSP specification.

Interoperability considerations:

The means and/or algorithms by which a receiving system determines whether or not an OSP token is valid are a local matter. However, at a minimum, receiving systems should verify the digital signature of the token, and they should ensure that any call details included in the token contents (e.g. called number, calling number, etc.) are appropriate for the contemplated call.

Published specification:

"Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON); Inter-domain pricing, authorization, and usage exchange". Technical Specification 101 321. European Telecommunications Standards Institute. Version 1.4.2, December 1998. [[1](#)]

Applications which use this media type:

IP telephony call signaling protocols that use MIME types to convey additional information during call setup.

Additional information:

Magic number(s): none

File extension(s): none

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Macintosh File Type Code(s): none

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Intended usage: COMMON

Author/Change controller: European Telecommunications Standards  
Institute (<http://www.etsi.org>)

### **3. References**

- [1] European Telecommunications Standards Institute.  
"Telecommunications and Internet Protocol Harmonization Over  
Networks (TIPHON); Inter-domain pricing, authorization, and  
usage exchange". Technical Specification 101 321 version 1.4.2,  
December 1998.
- [2] M. Handley, H. Schulzrinne, E. Schooler, and J. Rosenberg. "SIP:  
Session Initiation Protocol". [RFC 2543](#), March 1999.
- [3] N. Freed, J. Klensin, and J. Postel. "Multipurpose Internet Mail  
Extensions (MIME) Part Four: Registration Procedures". [RFC 2048](#),  
November 1996.
- [4] N. Freed and N. Borenstein. "Multipurpose Internet Mail  
Extensions (MIME) Part One: Format of Internet Message Bodies".  
[RFC 2045](#), November 1996.

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