The application/smil Media Type

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Abstract

This document specifies the Media Type for version 1 and version 2 of the Synchronized Multimedia Integration Language (SMIL 1.0 and SMIL 2.0). SMIL allows integrating a set of independent multimedia objects into a synchronized multimedia presentation.

1. Introduction

The World Wide Web Consortium has issued specifications which define version 1 [1] and version 2 [2] of the Synchronized Multimedia Integration Language (SMIL). This memo provides information about the application/smil Media Type.

The definition is based on the RFC3023 defining the use of the "application/xml" media type [3]. Before using the "application/smil" media type, implementors must thus be familiar with [3].

RFC 3023 recommends use of the suffix "+xml" for mediatypes that are

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based on XML. This document does not follow this recommendation, since the mediatype "application/smil" is already in widespread use, and its definition predates RFC3023 by about two years. This does not preclude future registration of "application/smil+xml", should the need arise.

2. Synchronized Multimedia Integration Language

SMIL allows integrating a set of independent multimedia objects into a synchronized multimedia presentation. Using SMIL, an author can

- 1.describe the temporal behavior of the presentation
- 2.describe the layout of the presentation on a screen
- 3.associate hyperlinks with media objects
- 4.define conditional content inclusion/exclusion based on system/network properties

3. Registration Information

To: ietf-types@iana.org

Subject: Registration of MIME media type application/smil

MIME media type name: application

MIME subtype name: smil

Required parameters: none

Optional parameters: charset

All of the considerations described in RFC3023 also apply to the SMIL media type.

Encoding considerations:

All of the considerations described in $\underline{\mathsf{RFC3023}}$ also apply to the SMIL media type.

Security considerations:

SMIL documents contain a construct that allows "infinite loops". This is indispensable for a multimedia format. However, SMIL clients should foresee provisions such as a "stop" button that lets users interrupt such an "infinite loop".

As with HTML, SMIL documents contain links to other media (images, sounds, videos, text, ...) and those links are typically followed automatically by software, resulting in the transfer of files without the explicit request of the user for each one. The

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security considerations of each linked file are those of the individual registered types.

The SMIL language contains "switch" elements. SMIL provides no mechanism that assures the media objects contained in a "switch" element provide equivalent information. An author, knowing that one SMIL player will display one alternative of a "switch" and another will display a different part, can put different information in the two parts. While there are legitimate use cases for this, this also gives rise to a security consideration: The author can fool viewers into thinking that the same information was displayed when in fact it was not.

In addition, all of the security considerations of ${\tt RFC3023}$ also apply to SMTL.

Interoperability considerations:

SMIL documents contain links to other media objects. The SMIL player must be able to decode the media types of these media in order to display the whole document. To increase interoperability, SMIL has provisions for including alternate versions of a media object in a document.

Published specification: see [1] and [2]

Applications which use this media type:

SMIL players and editors

Additional information:

Semantics of fragment identifiers in URIs: The SMIL media type allows to append a fragment identifier to a URI pointing to a SMIL resource (e.g. http://www.example.com/test.smil#foo). The semantics of fragment identifiers for SMIL resources are defined in [1].

Magic number(s): none

All of the considerations described in $\underline{\text{RFC3023}}$ also apply to the SMIL media type.

File extension(s): .smil, .smi, .sml

NOTE: On the Windows operating system and the Macintosh platform, the ".smi" extension is used by other formats. To avoid conflicts, it is thus strongly recommended to use the extension ".smil" for storing

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SMIL files on these platforms.

Macintosh File Type Code(s): "TEXT", ".SMI", "SMIL", "PNRM" Object Identifier(s) or OID(s): none

Person & email address to contact for further information:

The author of this memo.

Intended usage: COMMON

Author/Change controller:

The SMIL 1.0 and SMIL 2.0 specifications are a work product of the World Wide Web Consortium's SYMM Working Group.

The W3C has change control over the SMIL 1.0 specification.

5. References

- [1] "Synchronized Multimedia Integration Language (SMIL) 1.0 Specification", W3C Recommendation REC-smil-19980615, http://www.w3.org/TR/1998/REC-smil/, July 1998.
- [2] "Synchronized Multimedia Integration Language (SMIL) 2.0 Specification", W3C Proposed Recommendation http://www.w3.org/TR/smil20/ June 2001.
- [3] M. Murata, S. St.Laurent, D. Kohn E. "XML Media Types", RFC 3023, UC Irvine IBM Tokyo Research Laboratory, simonstl.com, Skymoon Ventures,

January 2001.

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