

The application/xv+xml Media Type

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Abstract

This document describes the registration of the MIME sub-type application/xv+xml. This sub-type is intended for use as a media descriptor for XHTML+Voice multimodal language documents.

1. Introduction

XHTML+Voice is a member of the XHTML family of document types, as specified by XHTML Modularization [4]. XHTML+Voice extends XHTML 1.1 [5] with a modularized subset of VoiceXML 2.0 [9], XML Events [7], and a few extensions to both XHTML and VoiceXML 2.0. XHTML 1.1, VoiceXML 2.0, and XML Events are W3C Recommendations.

The language integration defined by XHTML+Voice supports all modules defined by XHTML Modularization and adds voice interaction to XHTML elements in order to enable multimodal applications. The defined document type for XHTML+Voice is XHTML Host language document type conformant.

XHTML+Voice 1.2 [8] is maintained by the VoiceXML Forum, at URI location [<http://www.voicexml.org/specs/multimodal/x+v/12/>](http://www.voicexml.org/specs/multimodal/x+v/12/).

1.1. application/xv+xml Usage

The application/xv+xml media type is intended to be a media descriptor for XHTML+Voice multimodal documents. It is used to inform applications that additional markup for running a voice browser component and activating handlers for DOM Level 2 events [6] via XML Events [7] can be processed.

This media type registration is not intended for e-mail usage.

2. IANA Registration

To: ietf-types@iana.org
Subject: Registration of MIME media type
application/xv+xml

MIME media type name: application

MIME subtype name: xv+xml

Required parameters: none

Optional parameters:

charset: has the same semantics as the charset parameter of the "application/xml" media type specified in [1].

Encoding considerations:

XHTML+Voice has the same media type encoding considerations specified in Section 3.2 of [1].

Security considerations:

XHTML+Voice is an extension of XHTML and has the same security issues as XHTML. These include interpreting anchors and forms in XHTML documents, and scripting languages and other dynamic interactive capabilities. See Section 7 of [2].

In addition, the scripting language can be accessed by both the XHTML and the VoiceXML 2.0 markup embedded in the XHTML+Voice document. See Section 1.3.1.5 of [8].

XML-Events [7] allows an author to attach a handler to any node in the document. The handler that is activated in response to a specified event may be either a voice dialog or a script that can be in either the same or an external document.

Interoperability considerations:

Because XHTML+Voice is built upon W3C standard recommendations, it is designed to be interoperable across a wide range of platforms and client devices. Because the extensions to XHTML are identified by their namespaces, all browsers that have namespace support can run an XHTML+Voice document as an XHTML document without voice interaction.

Published specification:

The latest published version of XHTML+Voice is [8].

Applications which use this media type:

XHTML+Voice documents are intended to be deployed on the World Wide Web and rendered by multimodal browsers that support the visual and voice modes of interaction. Because XHTML+Voice is an application of XML, authors can expect XHTML+Voice user agents to be conformant XML 1.0 [3] processors. See section 2 of [2].

Additional information:

Magic number(s): There is no single string that is always present.

File extension(s): mxml, xhvm1, xvml, xvm

Macintosh File Type Code(s): TEXT

Person & e-mail address to contact for further information:

Gerald McCobb
mccobb@us.ibm.com

Intended usage: LIMITED USE

Author/Change controller: Gerald McCobb

Further information:

3. Fragment Identifiers

See Section 3 of [2]. Following [2], fragment identifiers for XHTML+Voice documents designate the element with the corresponding ID attribute value (see [3], Section 3.3.1).

While XHTML+Voice adds new ID attributes with fragment identifier namespaces that are not in the same namespace as XHTML, uniqueness of the ID attribute values is preserved within the document. See sections 1.3.1 and 5.3 of [8].

4. Recognizing XHTML+Voice files

Because XHTML+Voice is XML, an XHTML+Voice document (optionally) starts with an XML declaration that begins with "<?xml" and has a DOCTYPE declaration "<!DOCTYPE html". XHTML+Voice 1.2 has the following DOCTYPE declaration:

```
<!DOCTYPE html PUBLIC "-//VoiceXML Forum//DTD XHTML+Voice 1.2//EN"
"http://www.voicexml.org/specs/multimodal/x+v/12/dtd/xhtml1+voice12.dtd">
```

Because XHTML+Voice is in the XHTML family of languages, the root element of an XHTML+Voice document is 'html', and '<html' can be found near the top of the document.

5. Security Considerations

Security considerations for this media type are discussed in the MIME type registration that appears in Section 2.

6. IANA Considerations

As described in Section 2, this document specifies the registration of a MIME type for XHTML+Voice documents according to [1].

7. Normative References

- [1] Murata, M., St. Laurent, S., and D. Kohn, "XML Media Types", RFC 3023, January 2001.
- [2] Baker, M. and P. Stark, "The 'application/xhtml+xml' Media Type", RFC 3236, January 2002.
- [3] Bray, T. and others, "Extensible Markup Language (XML) 1.0", W3C Recommendation, <http://www.w3.org/TR/REC-xml>, February 2004.
- [4] Dooley, S. and others, "Modularization of XHTML", W3C Recommendation, <http://www.w3.org/TR/xhtml-modularization>, April 2001.
- [5] Altheim, M. and S. McCarron, "XHTML 1.1 - Module-based XHTML", W3C Recommendation, <http://www.w3.org/TR/xhtml11/>, May 2001.
- [6] Pixley, T., "Document Object Model Level 2 Events Specification", W3C Recommendation, <http://www.w3.org/TR/DOM-Level-2-Events/>, November 2000.
- [7] Pemberton, S., Raman, T., and S. McCarron, "XML Events - An events syntax for XML", W3C Recommendation, <http://www.w3.org/TR/xml-events/>, January 2002.
- [8] Axelsson, J. and others, "XHTML+Voice Profile 1.2", <http://www.voicexml.org/specs/multimodal/x+v/12/>, March 2004.
- [9] McGlashan, S. and others, "Voice Extensible Markup Language (VoiceXML)", W3C Recommendation, <http://www.w3.org/TR/voicexml20/>, March 2004.

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