

## The application/xv+xml Media Type

### Status of This Memo

This memo provides information for the Internet community. It does not specify an Internet standard of any kind. Distribution of this memo is unlimited.

### Copyright Notice

Copyright (C) The Internet Society (2006).

### 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.

## Author's Address

Gerald McCobb  
International Business Machines Corporation  
8051 Congress Ave.  
Boca Raton, FL 33487  
USA

Phone: +1 561 862 2109  
EMail: [mccobb@us.ibm.com](mailto:mccobb@us.ibm.com)

## Full Copyright Statement

Copyright (C) The Internet Society (2006).

This document is subject to the rights, licenses and restrictions contained in BCP 78, and except as set forth therein, the authors retain all their rights.

This document and the information contained herein are provided on an "AS IS" basis and THE CONTRIBUTOR, THE ORGANIZATION HE/SHE REPRESENTS OR IS SPONSORED BY (IF ANY), THE INTERNET SOCIETY AND THE INTERNET ENGINEERING TASK FORCE DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

## Intellectual Property

The IETF takes no position regarding the validity or scope of any Intellectual Property Rights or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; nor does it represent that it has made any independent effort to identify any such rights. Information on the procedures with respect to rights in RFC documents can be found in BCP 78 and BCP 79.

Copies of IPR disclosures made to the IETF Secretariat and any assurances of licenses to be made available, or the result of an attempt made to obtain a general license or permission for the use of such proprietary rights by implementers or users of this specification can be obtained from the IETF on-line IPR repository at <http://www.ietf.org/ipr>.

The IETF invites any interested party to bring to its attention any copyrights, patents or patent applications, or other proprietary rights that may cover technology that may be required to implement this standard. Please address the information to the IETF at [ietf-ipr@ietf.org](mailto:ietf-ipr@ietf.org).

## Acknowledgement

Funding for the RFC Editor function is provided by the IETF Administrative Support Activity (IASA).

