                    The application/xv+xml Media Type

Status of This Memo

Copyright Notice

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/>.

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, xhvml, 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/xhtml+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

Full Copyright Statement

Intellectual Property

Acknowledgement