                    The application/ogg Media Type

Status of this Memo

Copyright Notice

Abstract

   The Ogg Bitstream Format aims at becoming a general, freely-available
   standard for transporting multimedia content across computing
   platforms and networks. The intention of this document is to define
   the MIME media type application/ogg to refer to this kind of content
   when transported across the Internet. It is the intention of the Ogg
   Bitstream Format developers that it be usable without intellectual
   property concerns.

Conventions used in this Document

   The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT",
   "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this
   document are to be interpreted as described in RFC 2119 [2].

1. The Ogg Bitstream Format

   The Ogg Bitstream format has been developed as a part of a larger
   project aimed at creating a set of components for the coding and
   decoding of multimedia content (codecs) which are to be freely
   available and freely re-implementable both in software and in
   hardware for the computing community at large, including the Internet
   community.

   Raw packets from these codecs may be used directly by transport
   mechanisms that provide their own framing and packet-separation
   mechanisms (such as UDP datagrams).

One such framing and content-separation mechanism is the real-time
transport protocol (RTP). RTP allows the streaming of synchronous
lossy data for broadcasting and similar purposes. If this function
is desired then a separate RTP wrapping mechanism should be used. A
wrapping mechanism is currently under development.

For stream based storage (such as files) and transport (such as TCP
streams or pipes), Ogg codecs use the Ogg Bitstream Format to provide
framing/sync, sync recapture after error, landmarks during seeking,
and enough information to properly separate data back into packets at
the original packet boundaries without relying on decoding to find
packet boundaries. The application/ogg MIME type refers to this kind
of bitstreams, when no further knowledge of the bitstream content
exists.

The bitstream format in itself is documented in [1].

2. Registration Information

   To: ietf-types@iana.org

   Subject: Registration of MIME media type application/ogg

   MIME media type name: application

   MIME subtype name: ogg

   Required parameters: none

   Optional parameters: none

   Encoding Considerations:

   The Ogg bitstream format is binary data, and must be encoded for
   non-binary transport; the Base64 encoding is suitable for Email.
   Binary encoding could also be used.

   Security Considerations:

   As the Ogg bitstream file is a container format and only a carrier of
   content (such as Vorbis audio) with a very rigid definition (see
   [1]), this format in itself is not more vulnerable than any other
   content framing mechanism. The main security consideration for the
   receiving application is to ensure that manipulated packages can not
   cause buffer overflows and the like. It is possible to encapsulate
   even executable content in the bitstream, so for such uses additional
   security considerations must be taken.

Ogg bitstream files are not signed or encrypted using any applicable encryption schemes. External security mechanisms must be added if content confidentiality and authenticity is to be achieved.

Interoperability considerations:

The Ogg bitstream format has proved to be widely implementable across different computing platforms. A broadly portable reference implementation is available under a BSD license.

The Ogg bitstream format is not patented and can be implemented by third parties without patent considerations.

Published specification:

See [1].

Applications which use this media type:

Any application that implements the specification will be able to encode or decode Ogg bitstream files. Specifically, the format is supposed to be used by subcodecs that implement, for example, Vorbis audio.

Additional information:

Magic number(s):

In Ogg bitstream files, the first four bytes are 0x4f 0x67 0x67 0x53 corresponding to the string "OggS".

File extension: .ogg

Macintosh File Type Code(s): OggS

Object Identifier(s) or OID(s): none

Person & email address to contact for further information:

Questions about this proposal should be directed to Linus Walleij <triad@df.lth.se>. Technical questions about the Ogg bitstream standard may be asked on the mailing lists for the developer community. <http://www.xiph.org/archives/>

Intended usage: COMMON

   Author/Change controller:

   This document was written by Linus Walleij <triad@df.lth.se>.
   Changes to this document will either be handled by him, a
   representative of the Xiph.org, or the associated development
   communities.

   The Ogg bitstream format is controlled by the Xiph.org and the
   respective development communities.

3. Security Considerations

   Security considerations are discussed in the security considerations
   clause of the MIME registration in section 2.

4. Normative References

   [1] Pfeiffer, S., "The Ogg encapsulation format version 0", RFC
        3533, May 2003.

   [2] Bradner, S., "Key words for use in RFCs to Indicate Requirement
        Levels", BCP 14, RFC 2119, March 1997.

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7. Full Copyright Statement

Acknowledgement