                      The application/sql Media Type

Abstract

   This document registers the application/sql media type to be used for
   the Structured Query Language (SQL).

Status of This Memo

   This document is not an Internet Standards Track specification; it is
   published for informational purposes.

   This document is a product of the Internet Engineering Task Force
   (IETF). It represents the consensus of the IETF community. It has
   received public review and has been approved for publication by the
   Internet Engineering Steering Group (IESG). Not all documents
   approved by the IESG are a candidate for any level of Internet
   Standard; see Section 2 of RFC 5741.

   Information about the current status of this document, any errata,
   and how to provide feedback on it may be obtained at
   http://www.rfc-editor.org/info/rfc6922.

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1. Introduction

   The Structured Query Language (SQL) has been in use for over 30 years
   with various types of database technologies. However, there is no
   current media type registered for SQL. Therefore, this document
   seeks to formally register the application/sql media type to be used
   for SQL with IANA.

2. 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 [RFC2119] when they
   appear in ALL CAPS. These words may also appear in this document in
   lowercase as English prose, absent of the normative meanings
   mentioned above.

3. Media Type Registration Application

   This section provides the media type registration application for
   this media type (see [RFC6838], Section 5.6)

   Type name: application

   Subtype name: sql

   Required parameters: N/A

   Optional parameters:

      "charset" -- indicates the character set to be used. When not
      specified, a default value MUST NOT be assumed without inspection
      of the content.

      Implementors should be aware that SQL may carry character set
      information in-band. In such cases, the "charset" parameter MUST
      NOT be used in order to avoid conflict. In cases where no
      character set information is supplied in-band, and the character

set is known, implementors SHOULD use the "charset" parameter. If
no in-band or out-of-band character set information is available,
implementors MUST NOT specify the "charset" parameter.

Encoding considerations:

If the "charset" parameter is used, the corresponding 7-bit,
8-bit, or binary encoding may be used. If the "charset" parameter
is not used, binary encoding may be required.

Security considerations:

Being that SQL is a full-fledged programming language and may
include embedded source code for other programming languages,
there is a risk of it being used to transfer malware, viruses, and
other malicious payloads. Implementors and users are encouraged
only to exchange SQL files among trusted parties and utilize all
available security measures, such as restricted access, virus
scanners, etc., to minimize risk.

Implementors should be aware that guessing character sets,
encodings, and possible conflicts between in-band and out-of-band
character set information may lead to the similar security issues
as described above.

Implementors should also be aware that SQL does not provide or
guarantee any sort of confidentiality and integrity checking, and
SQL files can expose account information or private information
about database structure and contents. It is therefore important
for applications to provide confidentiality and protection against
modification by malicious third parties while in transit.

Interoperability considerations:

While a single standard exists ([ISO.9075.2011]), vendor
implementations of the standard vary significantly. Implementors
and users should make sure that the exchanged SQL files match to
the specific database/tool and version that they are using.

Published specification:

The most recent specification of SQL is available in
[ISO.9075.2011].

Applications that use this media type:

Databases and related tools

      Fragment identifier considerations: N/A

      Additional information:

         Deprecated alias names for this type: N/A

         Magic number(s): N/A

         File extension(s): sql

         Macintosh File Type Code(s): N/A

      Person & email address to contact for further information:

         Yakov Shafranovich <ietf@shaftek.org>

      Intended usage: COMMON

      Restrictions on usage: N/A

      Author: IESG

      Change controller: IESG

      Provisional registration? (standards tree only): N/A

4. IANA Considerations

      IANA has registered "application/sql" in the standards tree of the
      "Application Media Types" registry, using the application provided in
      Section 3 of this document.

5. Security Considerations

      See the Security Considerations item in the registration template in
      Section 3, above.

6. Acknowledgments

      To LTS, thanks for everything.

      The author would also like to thank all of the folks at
      xml.resource.org for providing many of the tools used for preparing
      RFCs and Internet-Drafts.

      A word of thanks to all IETF members who provided feedback on this
      document.

7. Normative References

   [ISO.9075.2011] International Organization for Standardization,
                    "ISO/IEC 9075:2011, Information Technology -
                    Database Languages - Structured Query Language
                    (SQL)", 2011.

   [RFC2119]   Bradner, S., "Key words for use in RFCs to Indicate
                    Requirement Levels", BCP 14, RFC 2119, March 1997.

   [RFC6838]   Freed, N., Klensin, J., and T. Hansen, "Media Type
                    Specifications and Registration Procedures", BCP 13,
                    RFC 6838, January 2013.

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