Network Working Group B. Farias

Internet-Draft

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ECMAScript Media Types Updates draft-bfarias-javascript-mjs-01

Abstract

This document proposes updates to the ECMAScript media types, superseding the existing registrations for "application/javascript" and "text/javascript" by adding an additional extension and removing usage warnings. This document updates RFC4329, "Scripting Media Types".

Note to Readers

The issues list for this draft can be found at https://github.com/bmeck/I-D/labels/javascript-mjs.

The most recent (often, unpublished) draft is at https://github.com/bmeck/I-D/tree/master/javascript-mjs.

Recent changes are listed at https://github.com/bmeck/I-D/commits/master/javascript-mjs.

Status of This Memo

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1. Introduction

This document updates the existing media types for the ECMAScript programming language. It supersedes the media types registrations in [RFC4329] for "application/javascript" and "text/javascript".

2. Background

In order to formalize support for modular programs [ECMA-262] now defines two top-level goal symbols for the ECMAScript grammar. This means that (in the absence of additional information) there are two possible interpretations for any given ECMAScript Source Text. The TC39 standards body for ECMAScript has determined that media types are outside of their scope of work [TC39-MIME-ISSUE].

It is not possible to fully determine if a Source Text of ECMAScript is meant to be parsed in the Module or Script grammar goals based upon content alone. Therefore, scripting environments must use out of band information in order to determine what goal a Source Text

should be treated as. To this end some scripting environments have chosen to adopt a new file extension of .mjs for determining the goal of a given Source Text.

3. Notational Conventions

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].

4. Registration

The ECMAScript media types are to be updated to point to a non-vendor specific standard undated specification of ECMAScript. In addition, a new file extension of .mjs is to be added to the list of file extensions with the restriction that it must correspond to the Module grammar of [ECMA-262]. Finally, the [HTML] specification is using text/javascript as the default media type of ECMAScript when preparing script tags; therefore, text/javascript has been moved intended usage from OBSOLETE to COMMON.

4.1. text/javascript

Type name: text

Subtype name: javascript

Required parameters: none

Optional parameters: charset, see section 4.1 of [RFC4329].

Encoding considerations: The same as the considerations in <u>section</u> 3.1 of [RFC3023].

Security considerations: See section 5 of [RFC4329].

Interoperability considerations: See notes in various sections of [RFC4329]. This media type does not specify the grammar of [ECMA-262] used.

Published specification: [[RFCXXXX]]

Applications which use this media type: Script interpreters as discussed in [RFC4329].

Additional information:

Magic number(s): n/a

```
File extension(s): .js, .mjs
      Macintosh File Type Code(s): TEXT
   Person & email address to contact for further information: See
      Author's Address section.
   Intended usage: COMMON
   Restrictions on usage: The file extension .mjs must be parsed using
      the Module grammar of [ECMA-262]
   Author: See Author's Address section.
   Change controller: IESG <iesg@ietf.org>
4.2. application/javascript
   Type name: application
   Subtype name: javascript
   Required parameters: none
   Optional parameters: charset, see section 4.1 of [RFC4329].
   Encoding considerations: The same as the considerations in section
      3.2 of [RFC3023].
   Security considerations: See <a href="section-5">section 5</a> of <a href="section-5">[RFC4329]</a>.
   Interoperability considerations: See notes in various sections of
      [RFC4329]. This media type does not specify the grammar of
      [<u>ECMA-262</u>] used.
   Published specification: [[RFCXXXX]]
   Applications which use this media type: Script interpreters as
      discussed in [RFC4329].
   Additional information:
      Magic number(s): n/a
      File extension(s): .js, .mjs
      Macintosh File Type Code(s): TEXT
```

Person & email address to contact for further information: See Author's Address section.

Intended usage: COMMON

Restrictions on usage: The file extension .mjs must be parsed using the Module grammar of [ECMA-262]

Author: See Author's Address section.

Change controller: IESG <iesg@ietf.org>.

5. References

5.1. Normative References

[ECMA-262]

Ecma International, "Standard ECMA-262: ECMAScript Language Specification", August 2017, http://www.ecma-international.org/publications/standards/Ecma-262.htm.

- [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate
 Requirement Levels", BCP 14, RFC 2119,
 DOI 10.17487/RFC2119, March 1997,
 http://www.rfc-editor.org/info/rfc2119.

5.2. Informative References

[HTML] WHATWG, "HTML Living Standard", August 2017, https://html.spec.whatwg.org/multipage/scripting.html#prepare-a-script.

[TC39-MIME-ISSUE]

TC39, "Add `application/javascript+module` mime to remove ambiguity5", August 2017, https://web.archive.org/web/201 70814193912/https://github.com/tc39/ecma262/issues/322>.

<u>Appendix A</u>. Acknowledgements

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