ECMAScript Media Types Updates
draft-ietf-dispatch-javascript-mjs-03

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 [1].

The most recent (often, unpublished) draft is at https://github.com/bmeck/I-D/tree/master/javascript-mjs [2].

Recent changes are listed at https://github.com/bmeck/I-D/commits/master/javascript-mjs [3].

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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. **IANA Considerations**

The media type registrations herein are divided into two major categories: the sole media type "text/javascript" which is now in common usage, and all of the media types that are obsolete.

For both categories, 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.

3.1. **Common Javascript Media Types**

3.1.1. **text/javascript**

Type name: text

Subtype name: javascript

Required parameters: none
Optional parameters: charset, see section 4.1 of [RFC4329].

goal, declares the goal symbol in the Syntactic Grammars of [ECMA-262] to be used while parsing. This parameter is case insensitive.

Encoding considerations: Encoding is host dependent with differences in byte order marks, the charset parameter, and text preprocessing.

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 when missing the goal parameter.

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>

3.2. Historic Javascript Media Types

The following media types are added or updated for historical purposes. All herein have an intended usage of OBSOLETE, and are not expected to be in use with modern implementations.
3.2.1.  application/ecmascript

Type name:  application

Subtype name:  ecmascript

Required parameters:  none

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

goal, declares the goal symbol in the Syntactic Grammars of [ECMA-262] to be used while parsing. This parameter is case insensitive.

Encoding considerations:  Encoding is host dependent with differences in byte order marks, the charset parameter, and text preprocessing.

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 when missing the goal parameter.

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):  .es, .mjs

  Macintosh File Type Code(s):  TEXT

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

Intended usage:  OBSOLETE

Restrictions on usage:  This media type is obsolete; current implementations should use text/javascript as the only javascript/ECMAScript media type. The file extension .mjs must be parsed using the Module grammar of [ECMA-262]

Author:  See Author's Address section.
3.2.2. application/javascript

Type name: application
Subtype name: javascript
Required parameters: none
Optional parameters: charset, see section 4.1 of [RFC4329].

encoding, declares the goal symbol in the Syntactic Grammars of
[ECMA-262] to be used while parsing. This parameter is case
insensitive.

Encoding considerations: Encoding is host dependent with differences
in byte order marks, the charset parameter, and text
preprocessing.

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 when missing the goal parameter.

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: OBSOLETE

Restrictions on usage: This media type is obsolete; current
implementations should use text/javascript as the only javascript/
ECMAScript media type. The file extension .mjs must be parsed
using the Module grammar of [ECMA-262]
3.2.3. application/x-ecmascript

Type name: application

Subtype name: x-ecmascript

Required parameters: none

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

goal, declares the goal symbol in the Syntactic Grammars of [ECMA-262] to be used while parsing. This parameter is case insensitive.

Encoding considerations: Encoding is host dependent with differences in byte order marks, the charset parameter, and text preprocessing.

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 when missing the goal parameter.

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): .es, .mjs

Macintosh File Type Code(s): TEXT

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

Intended usage: OBSOLETE

Restrictions on usage: This media type is obsolete; current implementations should use text/javascript as the only javascript/
ECMAScript media type. 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>

3.2.4. application/x-javascript

Type name: application

Subtype name: x-javascript

Required parameters: none

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

goal, declares the goal symbol in the Syntactic Grammars of [ECMA-262] to be used while parsing. This parameter is case insensitive.

Encoding considerations: Encoding is host dependent with differences in byte order marks, the charset parameter, and text preprocessing.

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 when missing the goal parameter.

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: OBSOLETE
Restrictions on usage: This media type is obsolete; current implementations should use text/javascript as the only javascript/ECMAScript media type. 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>

3.2.5.  text/ecmascript

Type name: text

Subtype name: ecmascript

Required parameters: none

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

    goal, declares the goal symbol in the Syntactic Grammars of [ECMA-262] to be used while parsing. This parameter is case insensitive.

Encoding considerations: Encoding is host dependent with differences in byte order marks, the charset parameter, and text preprocessing.

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 when missing the goal parameter.

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): .es, .mjs

    Macintosh File Type Code(s): TEXT

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

Restrictions on usage: This media type is obsolete; current implementations should use text/javascript as the only javascript/ECMAScript media type. 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>

3.2.6. text/javascript1.0

Type name: text

Subtype name: javascript1.0

Required parameters: none

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

goal, declares the goal symbol in the Syntactic Grammars of [ECMA-262] to be used while parsing. This parameter is case insensitive.

Encoding considerations: Encoding is host dependent with differences in byte order marks, the charset parameter, and text preprocessing.

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 when missing the goal parameter.

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: OBSOLETE

Restrictions on usage: This media type is obsolete; current implementations should use text/javascript as the only javascript/ECMAScript media type. 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>

3.2.7. text/javascript1.1

Type name: text

Subtype name: javascript1.1

Required parameters: none

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

    goal, declares the goal symbol in the Syntactic Grammars of [ECMA-262] to be used while parsing. This parameter is case insensitive.

Encoding considerations: Encoding is host dependent with differences in byte order marks, the charset parameter, and text preprocessing.

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 when missing the goal parameter.

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: OBSOLETE

Restrictions on usage: This media type is obsolete; current implementations should use text/javascript as the only javascript/ECMAScript media type. 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>

3.2.8. text/javascript1.2

Type name: text

Subtype name: javascript1.2

Required parameters: none

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

    goal, declares the goal symbol in the Syntactic Grammars of [ECMA-262] to be used while parsing. This parameter is case insensitive.

Encoding considerations: Encoding is host dependent with differences in byte order marks, the charset parameter, and text preprocessing.

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 when missing the goal parameter.

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: OBSOLETE

Restrictions on usage: This media type is obsolete; current implementations should use text/javascript as the only javascript/ECMAscript media type. 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>

3.2.9. text/javascript1.3

Type name: text

Subtype name: javascript1.3

Required parameters: none

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

    goal, declares the goal symbol in the Syntactic Grammars of [ECMA-262] to be used while parsing. This parameter is case insensitive.

Encoding considerations: Encoding is host dependent with differences in byte order marks, the charset parameter, and text preprocessing.

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 when missing the goal parameter.

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: OBSOLETE

Restrictions on usage: This media type is obsolete; current implementations should use text/javascript as the only javascript/ECMAscript media type. 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>

3.2.10. text/javascript1.4

Type name: text

Subtype name: javascript1.4

Required parameters: none

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

   goal, declares the goal symbol in the Syntactic Grammars of
   [ECMA-262] to be used while parsing. This parameter is case
   insensitive.

Encoding considerations: Encoding is host dependent with differences in byte order marks, the charset parameter, and text preprocessing.

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 when missing the goal parameter.

Published specification: [[RFCXXXX]]

Applications which use this media type: Script interpreters as discussed in [RFC4329].
3.2.11.  text/javascript1.5

Type name:  text

Subtype name:  javascript1.5

Required parameters:  none

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

goal, declares the goal symbol in the Syntactic Grammars of
[ECMA-262] to be used while parsing.  This parameter is case
insensitive.

Encoding considerations:  Encoding is host dependent with differences
in byte order marks, the charset parameter, and text
preprocessing.

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 when missing the goal parameter.

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: OBSOLETE

Restrictions on usage: This media type is obsolete; current implementations should use text/javascript as the only javascript/ECMAScript media type. 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>

3.2.12. text/jscript

Type name: text

Subtype name: jscript

Required parameters: none

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

goal, declares the goal symbol in the Syntactic Grammars of [ECMA-262] to be used while parsing. This parameter is case insensitive.

Encoding considerations: Encoding is host dependent with differences in byte order marks, the charset parameter, and text preprocessing.

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 when missing the goal parameter.
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:  OBSOLETE

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>

3.2.13.  text/livescript

Type name:  text

Subtype name:  livescript

Required parameters:  none

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

  goal, declares the goal symbol in the Syntactic Grammars of [ECMA-262] to be used while parsing.  This parameter is case insensitive.

Encoding considerations:  Encoding is host dependent with differences in byte order marks, the charset parameter, and text preprocessing.

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 when missing the goal parameter.
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: OBSOLETE

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>

3.2.14. text/x-ecmascript

Type name: text

Subtype name: x-ecmascript

Required parameters: none

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

    goal, declares the goal symbol in the Syntactic Grammars of [ECMA-262] to be used while parsing. This parameter is case insensitive.

Encoding considerations: Encoding is host dependent with differences in byte order marks, the charset parameter, and text preprocessing.

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 when missing the goal parameter.
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):  .es, .mjs

  Macintosh File Type Code(s):  TEXT

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

Intended usage:  OBSOLETE

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>

3.2.15.  text/x-javascript

Type name:  text

Subtype name:  x-javascript

Required parameters:  none

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

  goal, declares the goal symbol in the Syntactic Grammars of [ECMA-262] to be used while parsing. This parameter is case insensitive.

Encoding considerations:  Encoding is host dependent with differences in byte order marks, the charset parameter, and text preprocessing.

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 when missing the goal parameter.
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: OBSOLETE

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. References

4.1. Normative References


4.2. Informative References


4.3. URIs


Appendix A. Acknowledgements

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Authors' Addresses

Myles Borins
Google

Email: mylesborins@google.com

Mathias Bynens
Google

Email: mths@google.com

Matthew A. Miller
Mozilla

Email: linuxwolf+ietf@outer-planes.net

Bradley Farias

Email: bradley.meck@gmail.com