application/importmap+json MIME Type Registration

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Abstract

Media type registration for JSON import map definitions that control the behavior of JavaScript imports.

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1. Introduction

This memo defines a media type Section 4.1 for application/importmap+json.

1.1. Terminology

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in BCP 14 [RFC2119] [RFC8174] when, and only when, they appear in all capitals, as shown here.

2. Example

An example application.importmap, following the import maps specification (https://wicg.github.io/import-maps/) can be written:

```json
{
   "imports": {
      "pkg": "/lib/pkg/main.js"
   }
}
```

This would support the following workflow in browsers:

```html
<script type="importmap" src="/application.importmap"></script>
<script type="module">
   // loads /lib/pkg/main.js
   import pkg from 'pkg';
</script>
```
3. Security Considerations

The following security considerations apply when using application/importmap+json: Control of the import map should be considered to be a form of execution-level application control. This is because import maps have the ability to direct which module resolutions are to be provided for all module import specifiers in a given JavaScript environment, including for example the ability to map arbitrary import specifiers into data: URLs. Integration with existing policy systems, such as CORS and CSP, can be used to mitigate and restrict unwanted target URLs from being executed. The import maps specification states that only those import maps served to browsers with the 'application/importmap+json' MIME type will be executed allowing for server-level control of import map deployment to mitigate unintended usage in browsers.

4. IANA Considerations

This document defines a single action for IANA:

4.1. The application/importmap+json Media Type

The application/importmap+json Media Type is defined as follows:

Type name: application

Subtype name: importmap+json

Required parameters: none

Optional parameters: none

Encoding considerations: 8bit (always UTF-8)

Security considerations: discussed in Section 3 of [RFCXXXX].

Interoperability considerations: none

Published specification: https://wicg.github.io/import-maps/
Applications that use this media type: This is primarily a browser-specific media type but may also be adopted in other JavaScript environments.

Fragment identifier considerations: N/A

Additional information:

- Deprecated alias names for this type: N/A
- Magic number(s): none
- File extension(s): .importmap
- Macintosh file type code(s): Same as for application/json

Person & email address to contact for further information: WICG
Mailing List <public-wicg@w3.org> or at import maps GitHub repository https://github.com/WICG/import-maps

Intended usage: COMMON

Restrictions on usage: No restrictions apply.

Author: See the Authors’ Addresses section of [RFCXXXX]

Change controller: WHATWG

Provisional registration? yes

5. Acknowledgements

Thanks to Domenic Denicola for their work in specifying import maps and the browser integration of JavaScript modules.
6. Normative References


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