Internet Engineering Task Force (IETF)

Request for Comments: 7762 Category: Informational

ISSN: 2070-1721

M. West Google, Inc January 2016

Initial Assignment for the Content Security Policy Directives Registry

Abstract

This document establishes an Internet Assigned Number Authority (IANA) registry for Content Security Policy directives and populates that registry with the directives defined in the Content Security Policy Level 2 specification.

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/rfc7762.

Copyright Notice

Copyright (c) 2016 IETF Trust and the persons identified as the document authors. All rights reserved.

This document is subject to BCP 78 and the IETF Trust's Legal Provisions Relating to IETF Documents (http://trustee.ietf.org/license-info) in effect on the date of publication of this document. Please review these documents carefully, as they describe your rights and restrictions with respect to this document. Code Components extracted from this document must include Simplified BSD License text as described in Section 4.e of the Trust Legal Provisions and are provided without warranty as described in the Simplified BSD License.

Table of Contents

1.	Int	roduction	n.																				2
2.	Terr	minology																					2
3.	Use	of the I	Regi	stry																			2
4.	IAN	A Conside	erat:	ions	١.																		3
4.	.1.	Content	Seci	urit	у І	201	lic	У	Di	re	ect	iv	res	F	Reg	gis	str	Υ					3
4.	.2.	Registra	atio	n Po	lio	СУ	fo	r	Cc	nt	er	ıt	Se	cu	ıri	t _y	<i>r</i> I	0]	ic	ЗУ			
		Directiv	ves																				4
5.	Seci	arity Con	nsid	erat	ioi	ns																	4
6.	Ref	erences																					5
6.	.1.	Normativ	ve Re	efer	end	ces	3																5
6.	.2.	Informat	tive	Ref	ere	enc	ces	3															5
Ackr	nowle	edgements	з.																				5
		. Address																					

1. Introduction

The Content Security Policy (CSP) specification [CSP] defines a mechanism that web developers can use to control the resources that a particular page can fetch or execute, as well as a number of additional security-relevant policy decisions.

The policy language specified in that document consists of an extensible set of "directives", each of which controls a specific resource type or policy decision. This specification establishes a registry to ensure that extensions to CSP are listed and standardized.

2. Terminology

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].

3. Use of the Registry

Content Security Policy directives must be documented in a readily available public specification in order to be registered by IANA. This documentation MUST fully explain the syntax, intended usage, and semantics of the directive. The intent of this requirement is to assure interoperable independent implementations, and to prevent accidental namespace collisions between implementations of dissimilar features.

Documents defining new Content Security Policy directives MUST register them with IANA, as described in Section 3. The IANA

West Informational [Page 2]

registration policy for such parameters is "Specification Required" [RFC5226] and is further discussed in Section 3.2.

4. IANA Considerations

This specification creates a new top-level IANA registry named "Content Security Policy Directives".

4.1. Content Security Policy Directives Registry

New Content Security Policy directives, and updates to existing directives, MUST be registered with IANA.

When registering a new Content Security Policy directive, the following information MUST be provided:

o The directive's name, an ASCII string conforming to the "directive-name" rule specified in Section 4.1 of [CSP]. The ABNF [RFC5234] is as follows:

```
directive-name = 1*( ALPHA / DIGIT / "-" )
```

o A reference to the readily available public specification defining the new directive's syntax, usage, and semantics.

The following table contains the initial values for this registry:

Directive Name	Reference
base-uri	[CSP]
child-src	[CSP]
connect-src	[CSP]
default-src	[CSP]
font-src	[CSP]
form-action	[CSP]
frame-ancestors	[CSP]
frame-src	[CSP]
img-src	[CSP]
media-src	[CSP]
object-src	[CSP]
plugin-types	[CSP]
report-uri	[CSP]
sandbox	[CSP]
script-src	[CSP]
style-src	[CSP]

West Informational [Page 3]

4.2. Registration Policy for Content Security Policy Directives

The registration policy for Content Security Policy directives is "Specification Required" [RFC5226], which uses a designated expert to review the specification.

When appointing an Expert (or Experts), the IESG SHOULD draw from the W3C's security community, coordinating through the liaison.

The designated expert, when deliberating on whether to include a new directive in the registry, SHOULD consider the following criteria. This is not an exhaustive list, but representative of the issues to consider when rendering a decision:

- o Content Security Policy is a restrictive feature, which allows web developers to deny themselves access to resources and APIs that would otherwise be available. Deploying Content Security Policy is, therefore, a strict reduction in risk. The expert SHOULD carefully consider whether proposed directives would violate this property.
- o Granular directives are valuable, but the expert SHOULD strive to strike a reasonable balance between providing developers with all the knobs and switches possible and providing only those with known security implications.

5. Security Considerations

The registry in this document does not in itself have security implications. The directives specified, however, certainly do. The documents referenced when registering new directives MUST contain detailed security and privacy considerations sections, and SHOULD contain usage information that informs web developers as to the directive's expected implementation.

West Informational [Page 4]

6. References

6.1. Normative References

- [CSP] West, M., Barth, A., and D. Veditz, "Content Security Policy Level 2", July 2015, https://www.w3.org/TR/CSP2.
- [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.

6.2. Informative References

[RFC5341] Jennings, C. and V. Gurbani, "The Internet Assigned Number Authority (IANA) tel Uniform Resource Identifier (URI) Parameter Registry", RFC 5341, DOI 10.17487/RFC5341, September 2008, http://www.rfc-editor.org/info/rfc5341.

Acknowledgements

Much of this document's structure comes from [RFC5341]. Thank you to Cullen Jennings and Vijay K. Gurbani for giving me a reasonable template to work within and to Barry Leiba for his helpful commentary and suggestions.

Author's Address

Mike West Google, Inc

Email: mkwst@google.com
URI: https://mikewest.org/

West Informational [Page 5]