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The "hxxp" URI Scheme draft-salgado-hxxp-00

Abstract

This document describes the "hxxp" URI scheme, which is widely used by the security community to obfuscate an http or https URI to avoid being accidentaly interpreted and loaded by a web browser or any user agent.

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1. Introduction

This document describes the "hxxp" URI scheme, which is widely used by the security community to obfuscate an http or https URI to avoid being accidentaly interpreted an loaded by a web browser or an embedded user agent. This scheme is used in case the resource is dangerous and there is security risks on being loaded by an application.

The purpose of this registration is to document its use, block any registration of this scheme in the future, explicitly recommend to web application developers to never act with this URI scheme in any way, and provide a safe method for the security community to share malicious information. This scheme MUST NOT be treated as an http or https scheme and MUST NOT be identified as a web resource. Its consumption is only for humans and documentation, and should be handled with caution by security professionals.

1.1. Requirements Language

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 RFC 2119 [RFC2119].

2. URI Scheme Specification

2.1. URI Scheme Syntax

The "hxxp" URI syntactically conforms to the <hxxp-uri> rule below, expressed using the Augmented Backus-Naur Form (ABNF) [RFC5234]:

```
hxxp-uri = "hxxp:" hxxp-token [ hxxp-query ] [ hxxp-fragment ]
hxxp-token = *pchar
hxxp-query = "?" query
hxxp-fragment = "#" fragment
pchar = <as specified in RFC 3986, Appendix A>
query = <as specified in RFC 3986, Appendix A>
fragment = <as specified in RFC 3986, Appendix A>
```

2.2. URI Scheme Semantics

The resource that is referenced by a particular "hxxp" URI is NOT meant to be interpreted or parsed in any way for applications or any automated means. The resource MUST be interpreted and consumed by human security professionals.

2.3. Encoding Considerations

"hxxp" URIs are subject to encoding rules as defined in $\overline{\text{RFC 3986}}$ [RFC3986].

3. Acknowledgements

This document was made by his author in its entirety, so there're no acknowledgements yet.

4. IANA Considerations

4.1. URI Scheme Registration

URI scheme name: hxxp

Status: Permanent

Applications/protocols that use the scheme: "hxxp" URIs are forbidden to be used by applications.

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References: See <u>Section 6</u> of this document.

Security Considerations

As stated in the Introduction, the "hxxp" scheme is forbidden to be used or interpreted by applications. This scheme MUST be consumed only by humans.

Application developers are encouraged to forbid "hxxp" scheme URIs inside HTML anchors or tags.

6. References

6.1. Normative References

- [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.
- [RFC3986] Berners-Lee, T., Fielding, R., and L. Masinter, "Uniform
 Resource Identifier (URI): Generic Syntax", STD 66,
 RFC 3986, DOI 10.17487/RFC3986, January 2005,
 <http://www.rfc-editor.org/info/rfc3986>.
- [RFC5234] Crocker, D., Ed. and P. Overell, "Augmented BNF for Syntax Specifications: ABNF", STD 68, RFC 5234, DOI 10.17487/RFC5234, January 2008, http://www.rfc-editor.org/info/rfc5234.

6.2. Informative References

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