Network Working Group J. Holsten

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The 'about' URI scheme draft-holsten-about-uri-scheme-04

Abstract

A URI using the "about:" scheme, henceforth referred to as an "about" URI, is designed to be used internally by applications for almost any desired purpose.

Editorial Note (To be removed by RFC Editor)

Discussion of this draft should take place on the URI Review mailing list (uri-review@ietf.org).

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1. Introduction

An "about" URI is designed to be used internally by applications for almost any desired purpose. Such URIs have commonly been used by web browsers for providing access to built-in functionality, such as application information, preferences, settings, or "easter eggs".

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. URI Syntax

The general syntax of an "about" URI is defined below using ABNF $[\mbox{RFC5234}]$:

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abouturi = "about:" segment [ "?" query ]
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where "segment" and "query" are defined in [RFC3986].

4. Encoding Considerations

Because many characters are not permitted with this syntax, the "segment" and "query" elements may contain characters from the Unicode Character Set [UCS] as suggested by URI [RFC3986], by first encoding those characters as octets to the UTF-8 character encoding [RFC3629]; then only those octets that do not correspond to characters in the unreserved set should be percent-encoded.

By using UTF-8 encoding, there are no known compatibility issues with mapping Internationalized Resource Identifiers to "about" URIs according to [RFC3987]. Since "about" URIs do not use domain names, "ireg-name" conversion is unnecessary.

5. Resolving "about" URIs

A reserved "about" URI is one that is defined by a specification for a specific purpose, which MAY also be defined to be resolvable.

An unreserved "about" URI is any other "about" URI that is not defined by a specification for a specific purpose, but which may be recognized by an application.

An unrecognized "about" URI is an "about" URI that is not recognized by an application.

5.1. Reserved "about" URIs

Other specifications MAY reserve "about" URIs. Applications attempting to resolve reserved "about" URIs that are not defined to be resolvable, MAY treat such URIs as being unreserved.

5.1.1. about:blank

The "about" URI with the segment equal to "blank" and no query component is reserved by this specification. i.e. "about:blank". Applications resolving the URI "about:blank" MUST return a resource of zero length, containing no data, with the media type "text/html" and the character encoding "UTF-8".

Note: If a query component is provided with "about:blank", such as "about:blank?" or "about:blank?foo", then the URI is not considered to be reserved by this specification.

5.2. Unreserved "about" URIs

Applications MAY resolve any unreserved "about" URI to any resource, either internal or external, or redirect to an alternative URI.

Note: As "about" URIs are designed to be internal to each application, there is no expectation of any unreserved URI returning the same resource among different applications. However, it is worth noting that some conventions have arisen for providing particular functionality via common "about" URIs.

<u>5.3</u>. Unrecognized "about" URIs

Applications SHOULD resolve unrecognized "about" URIs in the same way as "about:blank".

5.4. Examples

The following examples illustrate some known URIs supported by existing applications. They are not guaranteed to be resolvable by every application.

about:config Commonly provides access to application preferences and settings

about:cache Commonly provides access to information about resources stored in the browsers cache. Current Mozilla Firefox implementations also accept a query string to specify a specific device to show more information about. e.g. about: cache?device=offline provides details about the offline cache.

about:plugins Commonly provides access to information about installed plugins

about:mozilla An easter egg supported by Mozilla showing a passage from the fictional Book of Mozilla

Applications are also permitted to redirect such URIs. For example, Opera redirects all "about" URIs, with the exception of "about:blank", to the equivalent URI using their internal "opera:" scheme. e.g. "about:config" redirects to "opera:config".

This is not an exhaustive list. Many more are supported by numerous applications. For more examples, consult Wikipedia's entry on the "about: URI Scheme" [wikiabout].

6. Normalization

"about" URIs use the standard URI normalization rules [RFC3986], specifically Simple String Comparison, Case Normalization, and Percent-Encoding Normalization. For example, "about:blank", "about:blan%6B" and "about:blan%6b" are equivalent, though the percent-encoded forms are discouraged. Due to the structure of "about" URIs, some normalizations do not apply, specifically Syntax-Based Normalization, Scheme-Based Normalization, and Protocol-Based Normalization. For example, "about:blank" is not equivalent to "about:BLANK", "about:blank?" or "about:blank:", each may represent a different resource. Similarly, "about:blank%3F" is not equivalent to "about:blank?".

7. Security Considerations

Implementations of the scheme SHOULD NOT modify data when processing "about" resource identifiers. Applications SHOULD NOT use "about"

URIs to access or erase files or other sensitive information.

"about" URIs MAY identify resources that reveal sensitive information. Applications SHOULD ensure appropriate restrictions are in place to protect such information from access or modification by untrusted sources.

8. IANA Considerations

This specification requests the IANA provisionally register the "about" URI scheme as specified in this document and summarized in the following template, per [RFC4395]:

URI scheme name: about

Status: Provisional

URI scheme syntax: See <u>Section 3</u>

URI scheme semantics: See <u>Section 1</u>

Encoding considerations: Percent-encoding is allowed in "segment" and "query" components. Internationalization is handled by IRI processing. See <u>Section 4</u>.

Intended usage: See <u>Section 1</u>

Applications and/or protocols that use this URI scheme name: Any applications that use URIs as identifiers for private resources, such as web browsers.

Interoperability considerations: Applications are only required to support "about:blank", and may choose to interpret other "about" URIs differently.

Security considerations: See <u>Section 7</u>

Relevant publications: None

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9. Acknowledgements

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10. References

10.1. Normative References

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10.2. Informative References

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