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The "about" URI Scheme
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Abstract

This document specifies the "about" URI scheme, that is widely used by Web browsers and some other applications to designate access to their internal resources, such as settings, application information, hidden built-in functionality, and so on.

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1. Introduction

This document specifies the "about" Uniform Resource Identifier (URI) scheme, that is currently widely used by Web browsers and some other applications to designate access to their internal resources, such as settings, application information, so called "Easter eggs" (i.e. hidden feature or joke in an application), and so on.

The concept of "about" URIs has been formed at the times when the applications did not have the "friendly" user interface, in order to provide an access to the aforementioned resources via typing the URIs in the address bar. Even though the user interface of current Internet-targeted software effectively rescinds the issue, and "about" URIs can be thought to be a rudimentary phenomenon, they are still supported by a variety of Web browsers and are not going to cease to exist.

As use of "about" URIs has been quiet long-lasting, and the URIs have been used without any proper registration and absent any proper specification, the necessity for the the latter two actions arises. The purpose of this document is to provide a stable specification for "about" URI scheme and correspondingly register it in the IANA registry. Along, several provisions for handling the "about" URIs are set.

Please consult RFC 3986 [RFC3986] for definition of generic URIs

syntax and RFC 4395 [RFC4395] for description of registration process for new URI schemes.

1.1. 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 RFC 2119 [RFC2119].

2. URI Scheme Specification

2.1. URI Scheme Syntax

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

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

In terms of RFC 3986, <about-token> part corresponds to <hier-part>, and <about-query> to the query component of URI.

2.2. URI Scheme Semantics

Generally speaking, the resource a particular "about" URI resolves to is denoted by <about-token> part of the URI, and <about-query> specifies additional information concerning its handling and/or the information that should be returned in the resource a URI is resolved to.

However, it is impossible to specify binding between all the possible tokens and the semantics of "about" URIs that would contain such tokens, which this document does not attempt to do. Therefore, any application resolving an "about" URI MAY choose the resource it is resolved to at its own discretion, with the exception of those defined below as 'special-purpose "about" URIs'. They MAY use internal redirection to accomplish this (for instance, Opera redirects all "about" URIs except "about:blank" to its internal "opera" URIs).

2.2.1. Special-Purpose "about" URIs

A small, though expandable, range of <about-token>s are reserved for special purposes ("special-purpose tokens").

A special-purpose URI is an "about" URI that has a special-purpose token as its <about-token> part. Such URIs MUST be handled in strict accordance with the rules defined in the special-purpose token registry (see Section 4.2). The registered entry MAY also define additional provisions for handling of the <about-query> part. If no such provisions are defined, the query part has no meaning, and MUST be ignored.

This document defines one special-purpose token: "blank". The URI "about:blank" MUST resolve to a blank page, as seen by the end user. There is no additional handling of the query component in "about:blank" URIs.

Additional special-purpose tokens can be defined by registering an registry created in Section 4.2. Special-purpose "about" URIs are intended to be uncommon, and new ones should be defined only when there is a need to strongly connect a particular <about-token> with a particular function in all applications.

2.3. Encoding Considerations

"about" URIs are subject to encoding rules defined in RFC 3986 [RFC3986]. "about" IRIs [RFC3987] are not permitted.

3. Security Considerations

Generic security considerations for URIs are discussed in Section 7 of RFC 3986 [RFC3986]. However, many of those provisions hardly apply to "about" URI scheme, as they are mainly scoped to schemes used in the Internet, not internally.

"about" URIs may sometimes refer to a sensitive information, such as user passwords stored in a cache, or parameter that, if changed, may affect user's data. The application should therefore ensure that user's data is in the safety, and no threats are imposed by "about" URIs.

4. IANA Considerations

4.1. URI Scheme Registration

IANA is asked to register the "about" URI scheme in the "URI Schemes" registry defined in Section 5.4 of RFC 4395 [RFC4395]:

URI scheme name: about

Status: Permanent

URI scheme syntax: see Section 2.1 of RFC xxxx

URI scheme semantics: see Section 2.2 of RFC xxxx

URI scheme encoding considerations: see Section 2.3 of RFC xxxx

Applications/protocols that use the scheme: "about" URIs are predominantly used by Web browsers, although they may be used by other applications.

Security considerations: see Section 3 of RFC xxxx

Contact: IETF Applications Area Directors <app-ads@tools.ietf.org>

Author/Change controller: IESG <iesg@ietf.org> (on behalf of the IETF)

References: see Section 5 of RFC xxxx

[RFC Editor: Please replace xxxx with assigned RFC number]

4.2. A Registry for Registered Tokens

IANA is asked to set up a new registry entitled "'about' URI Special Purpose Tokens" following the guidelines below.

The registry entries consist of 3 fields: Special-Purpose Token, Description and Reference. The Special-Purpose Token field MUST conform to <about-token> production defined in Section 2.1. The initial registry consists of one entry:

Special-Purpose Token	Description	Reference
blank	Used in "about" URIs to refer to blank page.	RFC xxxx

The registration procedures for this registry are "First Come First Served", described in RFC 5226 [RFC5226], with supporting documentation meeting the requirements below. The registrant of the token MUST provide the following registration template, which will be made available on IANA web site:

[[for the WG discussion: I, as the WG participant, am convinced that we do need Specification Required here. This is a burden, but this (and the expert) will give us a warranty that the registered token is

really useful and is really part of some serious project, probably standardization effort. I'd like this also would be discussed in the WG, and the WG would change its mind. (Moreover, as I don't expect the registrations to be very often, this won't take a great deal of experts' time.)]]

- o Registered Token: The desired special-purpose token to be used in "about" URIs.

- o Intended usage: A short description of how "about" URIs with the registered token must be handled; especially, what they must be resolved to, if resolvable.

- o Handling query component: It should be mentioned whether there are some provisions on handling query components in the "about" URIs with the registered token.

- o Contact/Change controller: An individual or an organization which (1) should be contacted for more details, and (2) is authorized to change the registration.

- o Specification. This provides documentation at a level that could be used to create a compliant, interoperable implementation of the registered "about" URI. The reference to a full specification MUST be provided here, and there should be a reasonable expectation that the documentation will remain available. IANA will consult with the IESG or its specified delegate if there is doubt about whether the specification is adequate for the purpose.

The following is a template for "blank" token:

- o Registered Token: blank
- o Intended usage: The <about:blank> URI must resolve to a blank page.
- o Handling query component: No special provisions.
- o Contact/Change controller: IESG <iesg@ietf.org> (on behalf of IETF).
- o Specification: This document.

5. References

5.1. Normative References

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997.

[RFC3986] Berners-Lee, T., Fielding, R., and L. Masinter, "Uniform Resource Identifier (URI): Generic Syntax", STD 66,

RFC 3986, January 2005.

[RFC5226] Narten, T. and H. Alvestrand, "Guidelines for Writing an IANA Considerations Section in RFCs", BCP 26, RFC 5226, May 2008.

[RFC5234] Crocker, D., Ed., and P. Overell, "Augmented BNF for Syntax Specifications: ABNF", STD 68, RFC 5234, January 2008.

5.2. Informative References

[RFC3987] Duerst, M. and M. Suignard, "Internationalized Resource Identifiers (IRIs)", RFC 3987, January 2005.

[RFC4395] Hansen, T., Hardie, T., and L. Masinter, "Guidelines and Registration Procedures for New URI Schemes", BCP 35, RFC 4395, February 2006.

Appendix A. Acknowledgments

This document has been formed from the draft initially authored by, additionally to Lachlan Hunt, the editor of the current one, Joseph Holsten. Additionally, the contributions of Frank Ellermann and Alexey Melnikov are gratefully acknowledged. Barry Leiba deserves a special credit for providing a great amount of text which has been used in this document.

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