The 'about' URI Scheme
draft-ietf-appsawg-about-uri-scheme-00

Abstract

   This document defines 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 = segment
about-query = "?" query
segment     = <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. Therefore any application MAY resolve an 'about' URI to any
desired resource, and MAY redirect such URIs. Several exceptions are
defined, though; they are named "special-purpose 'about' URIs" and
MUST be handled in strict accordance with provisions set in Section
2.2.1.

2.2.1. Special-Purpose 'about' URIs

A small, though expandable, range of <about-token>s are reserved for
use in special-purpose 'about' URIs, abbreviated "SPU" (special-
purpose URI). Such tokens are named "special-purpose 'about' URI
tokens", and abbreviated "SPT" (special-purpose token).

An SPU is an 'about' URI containing one of the registered SPTs as the
<about-token> part. An SPU MUST be handled in strict accordance with
the rules defined for SPT contained therein. The SPT specification
MAY define additional provisions on handling of <about-query> part in
the corresponding SPU; by default, it MUST be ignored for the purpose
of handling SPU.

SPU MAY be defined to be unresolvable. This means that an
application MUST NOT resolve it in some particular resource. Such
SPUs may be used as placeholders, or in some other way.

One pre-defined SPT is specified: the "blank" SPT. The URI
<about:blank> MUST resolve to a blank page; this page need not
necessarily contain no data, it should rather represent blank page.
There is no additional handling of query component in <about:blank>
URIs: both <about:blank> and <about:blank?foo> shall resolve into the
blank page.

Additional SPTs may be defined via adding the entry in the registry
created by this document. Please note that defining an SPT should
only be used as a last resort approach, when a strict limitation on
handling 'about' URI with such SPT is necessary.

2.2.2. Unrecognized 'about' URIs

Naturally, an application will support only a particular range of
'about' URIs; also, some applications will support 'about' URIs that
are not supported by an other one. This document specifies the rules
for handling unrecognized 'about' URIs.

An unrecognized 'about' URIs as a URI that may not be recognized by
an application. (Correspondingly, such categorization is per-
application, not per-fact.) An unrecognized 'about' URI SHOULD be
handled as the <about:blank> URI, although other behavior is
possible.

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 update the register the 'about' URI scheme using the following template, per [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: IESG <iesg@ietf.org>

   Author/Change controller: IETF <ietf@ietf.org>

   References: see Section 5 of RFC xxxx

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

4.2. A Registry for SPTs

IANA is asked to set up a new registry entitled "'about' URIs SPTs" following the guidelines below.

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

```
+----------+----------------------------------------+----------+
| SPT      | Description                            | Reference |
+----------+----------------------------------------+----------+
| blank    | Used in 'about' URIs referring to a    | RFC xxxx  |
|          | blank page.                            |           |
+----------+----------------------------------------+----------+
```

The registration policy for new entries is "Specification Required", as defined in RFC 5226 [RFC5226]. Additionally, the following template MUST be provided by the registrant:

o SPT: 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 Resolvable: "Yes" if resolvable (i.e. can be resolved to a particular resource) or "No" if unresolvable (see Section 2.2.1).

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 Published specifications: A reference to the published specification for the registered token.

The following is a template for "blank" SPT:

o SPT: blank
o Intended usage: The <about:blank> URI must resolve to a blank page.
o Resolvable: Yes.
o Handling query component: No special provisions.
o Contact/Change controller: IESG <iesg@ietf.org> (on behalf of IETF).
o Published specifications: 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 <TBD> are gratefully
   acknowledged.

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