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 | Description                      | Reference |
| Token           |                                  |          |
+-----------------+----------------------------------+----------+
| blank           | Used in "about" URIs to refer to | RFC xxxx |
|                 | blank page.                      |          |
+-----------------+----------------------------------+----------+
```

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:

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

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