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Registries for Web Authentication (WebAuthn)

Abstract

   This specification defines IANA registries for W3C Web Authentication
   (WebAuthn) attestation statement format identifiers and extension
   identifiers.

Status of This Memo

   This document is not an Internet Standards Track specification; it is
   published for informational purposes.

   This document is a product of the Internet Engineering Task Force
   (IETF). It represents the consensus of the IETF community. It has
   received public review and has been approved for publication by the
   Internet Engineering Steering Group (IESG). Not all documents
   approved by the IESG are candidates for any level of Internet
   Standard; see Section 2 of RFC 7841.

   Information about the current status of this document, any errata,
   and how to provide feedback on it may be obtained at
   https://www.rfc-editor.org/info/rfc8809.

Table of Contents

1. Introduction

    This specification establishes IANA registries for W3C Web
    Authentication [WebAuthn] attestation statement format identifiers
    and extension identifiers. The initial values for these registries
    are in the IANA Considerations section of the [WebAuthn]
    specification.

1.1. Requirements Notation and Conventions

    The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT",
    "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY", and
    "OPTIONAL" in this document are to be interpreted as described in BCP
    14 [RFC2119] [RFC8174] when, and only when, they appear in all
    capitals, as shown here.

2. IANA Considerations

    This specification establishes two registries:

    *   the "WebAuthn Attestation Statement Format Identifiers" registry
        (see Section 2.1)

    *   the "WebAuthn Extension Identifiers" registry (see Section 2.2)

    Any additional processes established by the expert(s) after the
    publication of this document will be recorded on the registry web
    page at the discretion of the expert(s).

2.1. WebAuthn Attestation Statement Format Identifiers Registry

    WebAuthn attestation statement format identifiers are strings whose
    semantic, syntactic, and string-matching criteria are specified in
    the "Attestation Statement Format Identifiers"
    (https://www.w3.org/TR/2019/REC-webauthn-1-20190304/#sctn-attstn-fmt-
    ids) section of [WebAuthn], along with the concepts of attestation
    and attestation statement formats.

    Registered attestation statement format identifiers are those that
    have been added to the registry by following the procedure in
    Section 2.1.1.

    Each attestation statement format identifier added to this registry
    MUST be unique amongst the set of registered attestation statement
    format identifiers.

    Registered attestation statement format identifiers MUST be a maximum
    of 32 octets in length and MUST consist only of printable ASCII
    [RFC20] characters, excluding backslash and double quote, i.e., VCHAR
    as defined in [RFC5234] but without %x22 and %x5c. Attestation
    statement format identifiers are case sensitive and may not match
    other registered identifiers in a case-insensitive manner unless the
    designated experts determine that there is a compelling reason to
    allow an exception.

2.1.1. Registering Attestation Statement Format Identifiers

    WebAuthn attestation statement format identifiers are registered
    using the Specification Required policy (see Section 4.6 of
    [RFC8126]).

    The "WebAuthn Attestation Statement Format Identifiers" registry is
    located at <https://www.iana.org/assignments/webauthn>. Registration
    requests can be made by following the instructions located there or
    by sending an email to the webauthn-reg-review@ietf.org mailing list.

    Registration requests consist of at least the following information:

    WebAuthn Attestation Statement Format Identifier:
       An identifier meeting the requirements given in Section 2.1.

Description:
   A relatively short description of the attestation format.

Specification Document(s):
   Reference to the document or documents that specify the
   attestation statement format.

Change Controller:
   For Standards Track RFCs, list "IETF". For others, give the name
   of the responsible party. Other details (e.g., postal address,
   email address, home page URI) may also be included.

Notes:
   [optional]

Registrations MUST reference a freely available, stable
specification, e.g., as described in Section 4.6 of [RFC8126]. This
specification MUST include security and privacy considerations
relevant to the attestation statement format.

Note that WebAuthn attestation statement format identifiers can be
registered by third parties (including the expert(s) themselves), if
the expert(s) determines that an unregistered attestation statement
format is widely deployed and not likely to be registered in a timely
manner otherwise. Such registrations still are subject to the
requirements defined, including the need to reference a
specification.

2.1.2. Registration Request Processing

As noted in Section 2.1.1, WebAuthn attestation statement format
identifiers are registered using the Specification Required policy.

The expert(s) will clearly identify any issues that cause a
registration to be refused, such as an incompletely specified
attestation format.

When a request is approved, the expert(s) will inform IANA, and the
registration will be processed. The IESG is the arbiter of any
objection.

2.1.3. Initial Values in the WebAuthn Attestation Statement Format
        Identifiers Registry

The initial values for the "WebAuthn Attestation Statement Format
Identifiers" registry have been populated with the values listed in
the "WebAuthn Attestation Statement Format Identifier Registrations"
(https://www.w3.org/TR/2019/REC-webauthn-1-20190304/#sctn-att-fmt-
reg) section of [WebAuthn]. Also, the Change Controller entry for
each of those registrations is:

Change Controller:
   W3C Web Authentication Working Group (public-webauthn@w3.org)

2.2. WebAuthn Extension Identifiers Registry

WebAuthn extension identifiers are strings whose semantic, syntactic,
and string-matching criteria are specified in the "Extension
Identifiers" (https://www.w3.org/TR/2019/REC-webauthn-1-
20190304/#sctn-extension-id) section of [WebAuthn].

Registered extension identifiers are those that have been added to
the registry by following the procedure in Section 2.2.1.

Each extension identifier added to this registry MUST be unique
amongst the set of registered extension identifiers.

Registered extension identifiers MUST be a maximum of 32 octets in
length and MUST consist only of printable ASCII characters, excluding
backslash and double quote, i.e., VCHAR as defined in [RFC5234] but

without %x22 and %x5c. Extension identifiers are case sensitive and
may not match other registered identifiers in a case-insensitive
manner unless the designated experts determine that there is a
compelling reason to allow an exception.

2.2.1. Registering Extension Identifiers

WebAuthn extension identifiers are registered using the Specification
Required policy (see Section 4.6 of [RFC8126]).

The "WebAuthn Extension Identifiers" registry is located at
<https://www.iana.org/assignments/webauthn>. Registration requests
can be made by following the instructions located there or by sending
an email to the webauthn-reg-review@ietf.org mailing list.

Registration requests consist of at least the following information:

WebAuthn Extension Identifier:
   An identifier meeting the requirements given in Section 2.2.

Description:
   A relatively short description of the extension.

Specification Document(s):
   Reference to the document or documents that specify the extension.

Change Controller:
   For Standards Track RFCs, list "IETF". For others, give the name
   of the responsible party. Other details (e.g., postal address,
   email address, home page URI) may also be included.

Notes:
   [optional]

Registrations MUST reference a freely available, stable
specification, e.g., as described in Section 4.6 of [RFC8126]. This
specification MUST include security and privacy considerations
relevant to the extension.

Note that WebAuthn extensions can be registered by third parties
(including the expert(s) themselves), if the expert(s) determines
that an unregistered extension is widely deployed and not likely to
be registered in a timely manner otherwise. Such registrations still
are subject to the requirements defined, including the need to
reference a specification.

2.2.2. Registration Request Processing

As noted in Section 2.2.1, WebAuthn extension identifiers are
registered using the Specification Required policy.

The expert(s) will clearly identify any issues that cause a
registration to be refused, such as an incompletely specified
extension.

When a request is approved, the expert(s) will inform IANA, and the
registration will be processed. The IESG is the arbiter of any
objection.

2.2.3. Initial Values in the WebAuthn Extension Identifiers Registry

The initial values for the "WebAuthn Extension Identifiers" registry
have been populated with the values listed in the "WebAuthn Extension
Identifier Registrations" (https://www.w3.org/TR/2019/REC-webauthn-1-
20190304/#sctn-extensions-reg) section of [WebAuthn]. Also, the
Change Controller entry for each of those registrations is:

Change Controller:
   W3C Web Authentication Working Group (public-webauthn@w3.org)

3. Security Considerations

See [WebAuthn] for relevant security considerations.

4. Normative References

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