                IANA Registry for RTCWeb Constrainable Properties
                  draft-burnett-rtcweb-constraints-registry-05

Abstract

   Specifications in W3C's Media Capture Task Force and WebRTC Working
   Group have need of a registry in which to maintain a list of
   constrainable properties for HTML media and other constrainable
   objects. This document defines this registry.

Status of This Memo

   This Internet-Draft is submitted in full conformance with the
   provisions of BCP 78 and BCP 79.

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   time. It is inappropriate to use Internet-Drafts as reference
   material or to cite them other than as "work in progress."

   This Internet-Draft will expire on August 18, 2014.

Table of Contents

1. Introduction

   There is currently one W3C specification (Media Capture and Streams
   [W3C.WD-mediacapture-streams-20130903]) that has need of a registry
   in which to represent constrainable properties, and it is expected
   that others will as well. The specification makes use of a data
   structure representing a list of constraints on the HTML media or
   media connection to be established. Additionally, the specification
   defines methods that are used to query the web browser about its
   capabilities. The returned data structure specifies the browser's
   capabilities in terms of constraints that it can satisfy. The data
   structures and their use are defined as the Constrainable interface
   in the aforementioned specification. This document specifies the
   registry used to define individual constrainable property names,
   their allowed values, and their meanings.

2. Requirements Language

   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].

3. IANA Considerations

   This document defines a registry "RTCWeb Constrainable Properties"
   for use by W3C specifications needing to indicate constrainable
   properties on HTML Media and other constrainable objects, both as
   used by web application authors to indicate preferences and as used
   by web browsers to indicate constrainable properties they can
   satisfy.

3.1. RTCWeb Constrainable Properties

IANA SHALL create a new name space of "RTCWeb Constrainable
Properties". All maintenance within and additions to the contents of
this name space MUST be according to the "Specification Required with
Expert Review" registration policy as defined in RFC5226 [RFC5226].
The registry is initially empty. The registry is defined in the
remainder of this section.

Each registry entry consists of a Name and a Reference (or list of
references).

An RTCWeb Constrainable Property Name MUST satisfy the following ABNF
[RFC5234] specification:

```
rtcweb-constrainable-property = constrainable-property-name
constrainable-property-name   = %x41-5A 0*constraint-char
constraint-char               = ALPHA / DIGIT
```

RTCWeb Constrainable Property Names are case-sensitive.

A registration request MUST include the following information:

o The RTCWeb Constrainable Property Name to be registered

o Name and Email address of a contact person for the registration

o Organization or individuals having the change control

o Reference(s) to the specification(s) defining the property

3.1.1. Designated Expert Instructions

RTCWeb Constrainable Property Names are of unlimited length according
to the syntax. However, it is RECOMMENDED that they be no longer
than 80 characters in total. This is to keep them reasonable for
humans to read and use. It is RECOMMENDED that Names use camel case,
i.e., when a Name consists of multiple words, the first character of
each word SHOULD be an uppercase character, with all others being
lowercase.

The references MUST define the following for each RTCWeb
Constrainable Property:

allowed values

The references MUST define the allowed values for the property,
for example an enumerated list of values or a range of
integers.

object(s)
The references MUST define the object or objects for which the
properties apply, for example a MediaStreamTrack.

The RTCWeb Constrainable Property MUST be well enough defined in the
given references that it is understandable by implementors and
application developers that will use the constraint. The property
SHOULD NOT duplicate a condition that can be achieved using
properties already defined in the registry. The property name SHOULD
be appropriate and specific enough for the property.

4. Security Considerations

Since the constrainable properties envisioned for this registry are
fairly generic in nature, it is not expected that the mere existence
of this registry will introduce any particular security issues. Any
specification defining one or more new properties SHOULD address any
specific security issues that might be introduced by the properties
or their constrainable values.

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.

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

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

5.2. Informative References

[W3C.WD-mediacapture-streams-20130903]
            Burnett, D., Bergkvist, A., Jennings, C., and A.
            Narayanan, "Media Capture and Streams", World Wide Web
            Consortium WD WD-mediacapture-streams-20130903, September
            2013, <http://www.w3.org/TR/2013/
            WD-mediacapture-streams-20130903/>.

Appendix A. Acknowledgements

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