			TOC
Network Working Group	M. Westerlund		
Internet-Draft	Ericsson		
Updates: 5245 (if approved)	C. Perkins		
Intended status: Standards Track	University of Glasgow		
Expires: May 23, 2011	November 19, 2010		

IANA Registry for Interactive Connectivity Establishment (ICE) Options
draft-westerlund-mmusic-ice-options-registry-01

Abstract

It has been identified that Interactive Connectivity Establishment (ICE) is missing a registry for ICE options. This document defines this missing IANA registry.

Status of this Memo

Copyright Notice

Table of Contents

---

1. Introduction   [TOC](#)

["Interactive Connectivity Establishment (ICE): A Protocol for Network Address Translator (NAT) Traversal for Offer/Answer" (Rosenberg, J., "Interactive Connectivity Establishment (ICE): A Protocol for Network Address Translator (NAT) Traversal for Offer/Answer Protocols," April 2010.)](#) [RFC5245] defines a concept of ICE Options. However, the ICE RFC fails to create an IANA registry for ICE options. As there has come into existence at least one ICE option, there is need to create the registry.
RFC 5245 says: "ICE provides for extensibility by allowing an offer or answer to contain a series of tokens that identify the ICE extensions used by that agent. If an agent supports an ICE extension, it MUST include the token defined for that extension in the ice-options attribute."
Thus, as future extensions are defined, these ICE options needs to be registered with IANA to ensure non-conflicting identification. The ICE options identifiers are used in signalling between the ICE end-points to negotiate extension support. RFC 5245 defines one method of signaling these ICE options, using [SDP with Offer/Answer (Rosenberg, J. and H. Schulzrinne, "An Offer/Answer Model with Session Description Protocol (SDP)," June 2002.)](#) [RFC3264].

---

2. Requirements Language   [TOC](#)

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 (Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels," March 1997.)](#) [RFC2119].

3. IANA Considerations

This document defines a registry for ICE options that can be used in SDP "ice-options" attribute or other signalling parameters carrying the ICE options.

3.1. ICE Options

An ICE option identifier MUST fulfill the ABNF (Crocker, D. and P. Overell, "Augmented BNF for Syntax Specifications: ABNF," January 2008.) [RFC5234] syntax for "ice-option-tag" as specified in [RFC5245] (Rosenberg, J., "Interactive Connectivity Establishment (ICE): A Protocol for Network Address Translator (NAT) Traversal for Offer/Answer Protocols," April 2010.). This syntax is reproduce here for simplicity, but the authoritative definition is in the ICE RFC:

```
ice-option-tag        = 1*ice-char
ice-char              = ALPHA / DIGIT / "+" / "/"
```

ICE options are of unlimited length by the syntax, however they are recommended to be no longer than 20 characters. This is to reduce message sizes and allow for efficient parsing.
Registration of an ICE option is done using the Specification Required policy as defined in "Guidelines for Writing an IANA Considerations Section in RFCs" (Narten, T. and H. Alvestrand, "Guidelines for Writing an IANA Considerations Section in RFCs," May 2008.) [RFC5226].
A registration request MUST include the following information:

*Name of contact person for the registration

*Email and Address of the Contact person

*Organization or individuals having the change control

*The ICE option identifier

*Short description of the ICE extension

*Reference(s) to the specification defining the ICE option and the related extensions

4. Security Considerations [TOC]

As this document defines an IANA registry for an already existing concept there are no new security considerations.

---

5. Acknowledgements [TOC]

---

6. References [TOC]

6.1. Normative References [TOC]

[RFC2119]	Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels," BCP 14, RFC 2119, March 1997 (TXT, HTML, XML).
[RFC5226]	Narten, T. and H. Alvestrand, "Guidelines for Writing an IANA Considerations Section in RFCs," BCP 26, RFC 5226, May 2008 (TXT).
[RFC5234]	Crocker, D. and P. Overell, "Augmented BNF for Syntax Specifications: ABNF," STD 68, RFC 5234, January 2008 (TXT).
[RFC5245]	Rosenberg, J., "Interactive Connectivity Establishment (ICE): A Protocol for Network Address Translator (NAT) Traversal for Offer/Answer Protocols," RFC 5245, April 2010 (TXT).

6.2. Informative References [TOC]

[RFC3264]	Rosenberg, J. and H. Schulzrinne, "An Offer/Answer Model with Session Description Protocol (SDP)," RFC 3264, June 2002 (TXT).

Authors' Addresses [TOC]

	Magnus Westerlund
	Ericsson

	Farogatan 6
	SE-164 80 Kista
	Sweden
Phone:	+46 10 714 82 87
Email:	magnus.westerlund@ericsson.com
	Colin Perkins
	University of Glasgow
	School of Computing Science
	Glasgow G12 8QQ
	United Kingdom
Email:	csp@csperkins.org