Network Working Group
Internet-Draft
Updates: 5245 (if approved)
Intended status: Standards Track
Expires: November 13, 2011

M. Westerlund
Ericsson
C. Perkins
University of Glasgow

May 12, 2011

# IANA Registry for Interactive Connectivity Establishment (ICE) Options
## draft-ietf-mmusic-ice-options-registry-02

Abstract

It has been identified that Interactive Connectivity Establishment (ICE) RFC5245 is missing a registry for ICE options. This document defines this missing IANA registry and updates RFC5245.

Status of this Memo

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

Internet-Drafts are working documents of the Internet Engineering Task Force (IETF). Note that other groups may also distribute working documents as Internet-Drafts. The list of current Internet-Drafts is at http://datatracker.ietf.org/drafts/current/.

Internet-Drafts are draft documents valid for a maximum of six months and may be updated, replaced, or obsoleted by other documents at any 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 November 13, 2011.

Copyright Notice

Copyright (c) 2011 IETF Trust and the persons identified as the document authors. All rights reserved.

This document is subject to BCP 78 and the IETF Trust's Legal Provisions Relating to IETF Documents (http://trustee.ietf.org/license-info) in effect on the date of publication of this document. Please review these documents carefully, as they describe your rights and restrictions with respect to this document. Code Components extracted from this document must include Simplified BSD License text as described in Section 4.e of the Trust Legal Provisions and are provided without warranty as described in the Simplified BSD License.

Table of Contents

1. Introduction . . . . . 3
2. Requirements Language . . . . . 3
3. IANA Considerations . . . . . 3
3.1. ICE Options . . . . . 3
4. Security Considerations . . . . . 4
5. Acknowledgements . . . . . 4
6. References . . . . . 4
6.1. Normative References . . . . . 4
6.2. Informative References . . . . . 5
Authors' Addresses . . . . . 5

## 1. Introduction

"Interactive Connectivity Establishment (ICE): A Protocol for Network Address Translator (NAT) Traversal for Offer/Answer" [RFC5245] defines a concept of ICE Options. However, the ICE RFC fails to create an IANA registry for ICE options. As one ICE option is under specification in [I-D.ietf-avtcore-ecn-for-rtp], there is now a 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 endpoints to negotiate extension support. RFC 5245 defines one method of signalling these ICE options, using SDP with Offer/Answer [RFC3264].

This document updates the ICE specification [RFC5245] to define the "Interactive Connectivity Establishment (ICE) Options" registry.

## 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 "Interactive Connectivity Establishment (ICE) Options" 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 [RFC5234] syntax for "ice-option-tag" as specified in [RFC5245]. This syntax is reproduced 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 in the "Interactive Connectivity Establishment (ICE) Options" registry is done using the Specification Required policy as defined in "Guidelines for Writing an IANA Considerations Section in RFCs" [RFC5226].

A registration request MUST include the following information:

- The ICE option identifier to be registered
- Name, Email and Address of contact person for the registration
- Organization or individuals having the change control
- Short description of the ICE extension to which the option relates
- Reference(s) to the specification defining the ICE option and the related extensions

This document registers no ICE option.

## 4. Security Considerations

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

## 5. Acknowledgements

The authors would like to thank the people having reviewed the draft and provided feedback, Flemming Andreasen, Mykyta Yevstifeyev, Amanda Baber and Brian Carpenter.

## 6. References

### 6.1. Normative References

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997.

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

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

[RFC5245] Rosenberg, J., "Interactive Connectivity Establishment (ICE): A Protocol for Network Address Translator (NAT) Traversal for Offer/Answer Protocols", RFC 5245, April 2010.

## 6.2. Informative References

[I-D.ietf-avtcore-ecn-for-rtp] Westerlund, M., Johansson, I., Perkins, C., and K. Carlberg, "Explicit Congestion Notification (ECN) for RTP over UDP", draft-ietf-avtcore-ecn-for-rtp-01 (work in progress), March 2011.

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

## Authors' Addresses

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