

Interactive Connectivity Establishment (ICE) bis

draft-ietf-mmusic-rfc5245bis-01
draft-ietf-mmusic-ice-sip-sdp-02

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Ari Keränen

ari.keranen@ericsson.com

Updates since bis-00

- Fix to the aggressive nomination bug
 - Secure traffic on different pair than what controlled agent thinks is in use: switch to that
 - No security: SHOULD keep on sending checks; exact number up to implementation
- Username fragment issue; new text:
 - ice-ufrag MUST NOT be longer than 32 characters when sending; MUST accept up to 256 characters when receiving

Connectivity Check Pacing

- Need to update; the choice needs to be measurement-driven
 - Do we have new information?

Connectivity Check Pacing Negotiation

- New SDP attribute for pacing value
 - `a=ice-pacing:30`
- Both endpoints propose value; lower out of the two is used
- If no value is offered, use RFC5245 values

(no-)need-to-understand ice-options

- Currently: ignore unknown ICE options, but **MUST NOT** do aggressive ICE then
- Proposal
 - `a=ice-options-optional:bar`
 - Do aggressive even if not understood
- And/or “fail if not understood”
 - `a=ice-options-required:foo`
 - Overlap with SIP “Requires” header?

SDP syntax for extensions

- `extension-att-name` and `extension-att-value` defined in RFC5245 for extending candidate attribute
- Both are byte-strings
 - Can now include e.g., non-visible characters; any use case for such?
- Proposal
 - `extension-att-name` = token
 - `extension-att-value` = VCHAR

TURN candidates & privacy

- For privacy, one may want to use only relayed candidates (hide host address)
- The “related address” for relayed candidates reveals host address
- Proposal
 - If needed, use “::” or “0.0.0.0” and port 9 for related address
 - Similar to Trickle ICE

Multiple ICE agents

- Problems (including)
 - One agent starving others
 - Circumventing pacing restrictions
- Proposal: shared context and timer
 - Within application (e.g., browser)
 - Agents get turns in round-robin fashion
 - Reduce number of check re-transmission allowed for each agent?
 - See draft-thomson-mmusic-ice-webrtc-01
- ICE-bis or separate doc?

Can/will semantics of ice-options

- What ice-options tag “foo” means
 - I can do foo (“you choose”)
 - I will do foo (“regardless of if you can/will”)
- Proposal
 - Clarify that new options tags must define the semantics
 - Extra IANA registry field?

Updated Offer with SIP

- When ICE is finished, send new SDP offer/answer with the selected candidates?
 - Currently: only if different from default (i.e., the one in SDP m- and c-lines)
- Proposal: configurable with default yes
 - More consistent behavior for middle boxes
 - Done almost always anyway
 - However, issues with 3rd Party Call Control and fax (draft-elwell-ice-updated-offer)

Offer/Answer terminology

- ICE-bis no longer bound to SDP o/a
- Proposal
 - “ICE offer” & “ICE answer”
 - Clarify in the terminology that it is not (necessarily) the same as SDP o/a