New Revision of the Interactive Connectivity Establishment (ICE)

> IETF 85, Atlanta November 6th, 2012 Ari Keränen

Background

- ICE [RFC5245] is today widely used as a NAT traversal solution

 SIP, P2PSIP, HIP, XMPP/Jingle, RTCWEB, etc.
- Underspecified features / small errors discovered after publication of the RFC
- New features and algorithm enhancements being proposed

Poll Result

"Create a revision of ICE (obsoleting RFC 5245), but only addressing bug fixing and opening hooks to extensions, with the idea that extensions won't need to violate 5245bis. Additionally, document each extension in a separate RFC. Extensions will depend and refer to the 5245bis draft."

Proposed Updates/Extensions

- Media level ice-options SDP attribute [draft-petithuguenin-mmusic-ice-attributes-level-04]
- Update on Candidate Address Selection for ICE [draft-keranen-mmusic-ice-address-selection-02]
- ICE Updated Offer Problematic [draft-elwell-mmusic-ice-updated-offer-02]
- Smaller minimum Ta (currently 500ms) for non-RTP traffic

Proposed Updates/Extensions

- Mobility with ICE [draft-wing-mmusic-ice-mobility-02]
- Happy Eyeballs Extension for ICE
 [draft-reddy-mmusic-ice-happy-eyeballs-00]
- Trickle ICE: Incremental Provisioning of Candidates for the ICE [draft-rescorla-mmusic-ice-trickle]

(Main) Open Issues

What goes to the main spec and what to extension documents?

- And/or what do we just forget about

- Split SDP from the main spec?
 Many usages of ICE don't use SDP
- Backward compatibility

– ice-option(s) to signal bis-conformance (enough)?

Next Steps

- draft-ice-bis-00 (coming after the meeting)
 Possibly ice-sdp-00 too
- Gather all updates and extensions
 - Ensure that ice-bis fixes all known bugs and enables extensions
 - Something missing?