

Update on Candidate Address Selection for Interactive Connectivity Establishment (ICE)

draft-keranen-mmusic-ice-address-selection-00

A. Keränen, J. Arkko

IETF 83, Paris, France

March 26th, 2012

Ari Keränen

ari.keranen@ericsson.com

Background

- Only little guidance in RFC5245 (ICE) on how to handle different kind of IPv6 addresses
 - Link-local addresses, ULAs, etc.
 - DISCUSS in the IESG review of the ICE TCP draft (but not a TCP-specific problem -> new draft)
- Not all combinations make sense as candidate address pairs
 - Example: link-local with global

Proposal for IPv6 candidates

- Use revised RFC 3484 rules for priorities
- MUST NOT use the deprecated IPv4-compatible IPv6 addresses or IPv6 site-local unicast addresses
- Candidates from link-local addresses MUST be combined only with other link-local candidates
 - Same with ULAs
- IPv4-mapped IPv6 addresses MUST NOT be included in the offered candidates unless the application using ICE does not support IPv4

Proposal for IPv4 and IPv6

- Addresses from a loopback interface **MUST NOT** be included in the candidate addresses
- Local relayed candidates **MUST NOT** be combined with remote host candidates from IPv4 private address or IPv6 link-local addresses or ULAs

Negotiation

- Both endpoints should use same method for matching and prioritizing
- New ICE SDP option tag: rfcXXXX-candidates
- If both endpoints don't support this extension: SHOULD NOT use the new rules

Next steps

- Makes sense?
- Something missing?
- Reviews & comments