

# ICEbis: Clarifications

draft-ietf-ice-rfc5245bis

IETF#97

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*“There are probably only two  
persons in the world that  
understand this.”*

# (3) PRUNING OF PEER REF CANDS (1/2)

- **WHAT'S THE ISSUE?**

- Text (5.1.3.3) specifies that “base replacement”\* procedure only applies to server reflexive candidates
- An updated check list might contain peer reflexive candidates
  - Peer reflexive candidates will not be pruned, since they won't match another pair

*\*“For each pair **where the local candidate is server reflexive**, the server reflexive **candidate MUST be replaced by its base**. Once this has been done, the agent **MUST** prune the list. This is done by removing a pair if its local and remote candidates are identical to the local and remote candidates of a pair higher up on the priority list.”*

## (4) PRUNING OF PEER REF CANDS (2/2)

- **HOW TO SOLVE IT?**

- **ALT #1:** Specify that “base replacement” procedure also applies to peer reflexive candidates

- **ALT #2:** General statement that “base replacement” procedures to ALL candidates (no matter type)

- Local candidate is always replaced by base, no matter the candidate type

# (5) EMIL'S ISSUE

- WHAT'S THE ISSUE?

- CHECK LIST INTERACTION WHEN UNFREEZING

- Prevent complete check lists from being unfrozen at once

- Make sure each candidate pair eventually gets unfrozen

- “Emil's table”

# (6) AGGRESSIVE LEFTOVERS

- WHAT'S THE ISSUE?

- Some text still need to be modified due to the removal of aggressive nomination
- Pull request created by Bernard A
  - <https://github.com/ice-wg/rfc5245bis/pull/20>

# (7) CHECK LIST TYPES DEFINITIONS

- **WHAT'S THE ISSUE?**

- Spec currently defines the following check list types: active, frozen

- **Active:** at least one cand pair state is “waiting”

- **Frozen:** all cand pairs are frozen

- What if no cand pair state is “waiting”, but one or more states are “in-progress”? Isn't the check list still “active”?

# (8) SENDING FROM LOCAL CAND v BASE

- **WHAT'S THE ISSUE?**
  - Text says that connectivity checks are sent from local candidate.
  - Aren't the checks sent from the base?
    - Eventhough, after pruning, it's the same

# (9) FIRST MEDIA STREAM

- **WHAT'S THE ISSUE?**
  - Text talks about “first media stream”
  - No guidance on what “first” means
    - Does it matter which media stream is “first”?
    - Does the first media stream need to have specific characteristics?

# (10) ORDER OF CONNECTIVITY CHECKS

- **WHAT'S THE ISSUE?**

- Text (5.1.3.4) saying that connectivity checks are sent in priority order

*“Waiting: A check has not been performed for this pair, and can be performed **as soon as it is the highest-priority** Waiting pair on the check list.”*

- Triggered checks are sent first
  - No relation between triggered checks and priority

# (11) UNFREEZING OF PAIR

- **WHAT'S THE ISSUE?**

- Text (5.1.3.4) saying that pairs are unfrozen when some other check succeeds

*“Frozen: A check for this pair hasn't been performed, and it can't yet be performed **until some other check succeeds**, allowing this pair to unfreeze and move into the Waiting state..”*

- Pairs can be unfrozen also due to other reasons:
  - Timer expires and there are no pairs in Waiting state (5.1.4)

# (12) UNFREEZING OF CHECK LIST

- **WHAT'S THE ISSUE?**

- Text (6.1.2.4.3) saying that once all pairs in a check list are in Failed or Succeeded state, other check lists are unfrozen
- What if there are still other active check lists?
- Shouldn't frozen lists be unfrozen when **ALL** other check lists are done?

## (13) NEXT STEPS

- Implement clarifications
- Submit new version of draft-5245bis
- WGLC