CLUE Signaling
History

-00  31-jan  basic outline, no significant content
-01  4-feb   two call flows added by Roberta
-02  18-feb  numerous proposals added.
        (Developed by Paul, Lennard, Christian.)
CLUE Signaling
Status

• Just a proposal
• Very incomplete
• What’s there hasn’t had much discussion
• Looking for contributions
• Hope this structure can help “divide and conquer” – allow more focused contributions
• Need volunteers to review, comment, elaborate.
CLUE Signaling
Open Issues

- Versioning & Version negotiation
- Option & Extension mechanism
- Payload of ADV, CFG, ERROR messages
- CLUE msg acknowledgement mechanism
- Channel mgmt & lifetime
- Coordination of CLUE and SDP
- Use Cases are ahead of document
- Legacy interop
- CLUE over RTCWEB
CLUE Signaling
Versioning & Version negotiation

• What versioning strategy to take?
  – Declare version – other side take it or leave it
  – Declare version range – other side chooses
  – Major/Minor version?

• Where to convey and negotiate
  – In the CLUE channel?
  – In the SIP/SDP?

• Scope of version
  – SIP session
  – Lifetime of CLUE channel
  – Until renegotiated
  – Per CLUE-message
CLUE Signaling
Option & Extension mechanism

- Are options and extensions different?
- Do extensions require a new version?
- Should we follow a “ignore what you don’t understand” policy?
- Must options/extensions be negotiated before use?
CLUE Signaling
Payload of ADV, CFG, ERROR messages

• Upcoming data model will have building block types for use in constructing messages.
• We need to define the actual messages
  – As part of signaling doc?
• Must decide
  – is one clue msg per SCTP msg is ok?
  – OR, do we want to pack our messages?
  – How much detail do we want in ERROR messages?
CLUE Signaling
msg acknowledgement mechanism

• Which messages require an ACK?
• Explicit or implicit ACK?
  – e.g. CONFIG as implicit ACK of ADVERTISEMENT
• How long to wait for an ACK?
• What to do if ACK doesn’t arrive?
• What to do while awaiting ACK?
CLUE Signaling
Channel mgmt & lifetime

• What to do before channel established, and after channel is closed?
• How to establish the channel?
• How to initialize the channel?
• If/how to recover from errors on the channel
CLUE Signaling
Coordination of CLUE and SDP

• Relative ordering & dependency of messages
  – draft-hansen-clue-sdp-interaction-01 suggests very loose dependencies

• Association of capture-encodings to SDP m= lines

• Mechanism for capture encoding multiplexing

• How to negotiate which capture-encodings are multiplexed
CLUE Signaling
Use Cases

• Use cases currently in doc aren’t aligned with other content in doc
• Will need to be updated as we make decisions
CLUE Signaling
Legacy interop

• Still just a place holder
CLUE Signaling
CLUE over RTCWEB

• Still just a placeholder
• First need to establish what we wish an RTCWEB client to be able to do with CLUE
CLUE Signaling
Next Steps

• Review what's there now
  – Additions & restructuring
  – Alternatives

• Volunteers to work on sections and issues