

Untangling some SDP/CLUE interactions

Rob Hansen

SDP/CLUE independence

- Some changes (such as adding a stream) may involve both SDP and CLUE changes
- With multiple channels, changes are no longer atomic
- How to ensure best behaviour at all stages of a change?

Suggestion: Channels independent

- SDP and CLUE channels are independent – either can change freely
- Far end must only act on **intersection** of channel information

Suggestion: Channels independent

- SDP and CLUE channels are independent – either can change freely
- Far end must only act on **intersection** of channel information
- No need for complex state machines to define valid transitions
- SDP changes by middle box no longer risk an invalid state

Split of SDP/CLUE information

SDP as envelope

SDP

CLUE channel

Captures
Capture Scenes
Simultaneous Transmission Sets
Encodings
Encoder Group Constraints
Receiver selection of Capture encodings

- Simple division of new information
- Not compatible with other approaches to negotiating multiple streams

Media negotiation in SDP

SDP

Encodings

Encoder Group Constraints

Receiver selection of encodings

CLUE channel

Captures

Capture Scenes

Simultaneous Transmission Sets

Receiver selection of captures

- Can use common multi-stream SDP syntax
- SDP defines media streams, CLUE defines specific *content* of those streams