ERICSSON

NON-CLUE INTEROPERABILITY

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WHAT IS NON-CLUE?

”A device that has not implemented, or does not want to use, the CLUE protocol.”

PURPOSE

- In order for providers to prepare communication between CLUE enabled devices and non-CLUE devices, they need to know:
  - What type of initial Offer they can expect from a CLUE enabled device
  - What type of initial Offer they can expect a CLUE enabled device to understand

- Even when communicating with a non-CLUE device, a CLUE enabled device should be able to provide a good, high-quality, video experience.
  - Must support the negotiating of critical information elements using SDP (or SIP), as CLUE cannot be used.

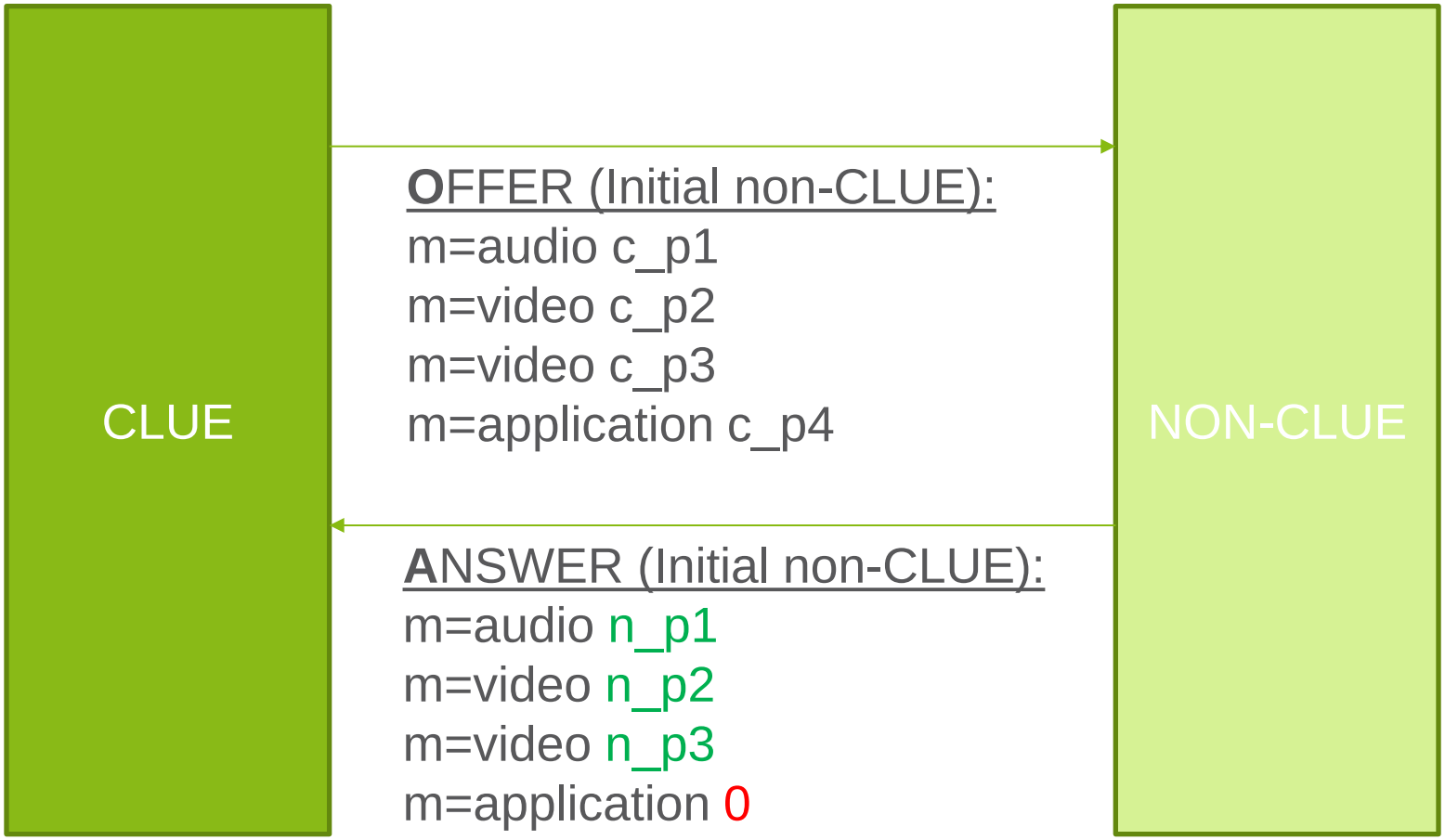
APPROACH

- Define different media “building blocks”, each with different purpose and capabilities
- Usage of each building block is OPTIONAL
  - A CLUE enabled device chooses among the building blocks when sending an initial Offer
    - No matter whether answerer is CLUE enabled or not
  - A non-CLUE device is expected to choose among the building blocks when sending an initial Offer towards a CLUE enabled device
- Does not prevent from offering additional media

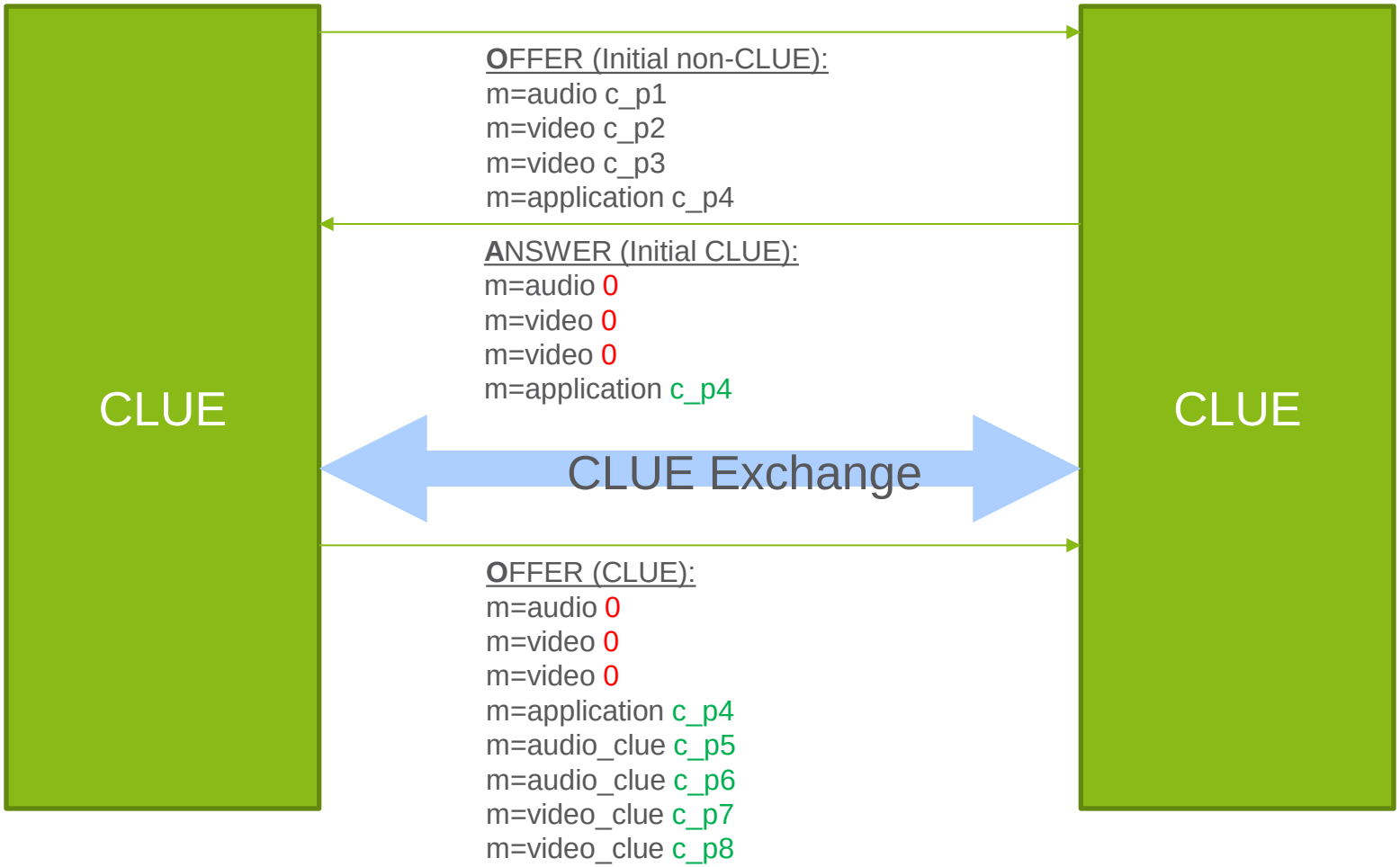
NON-CLUE MEDIA TABLE

MEDIA CONTENT	SDP MEDIA TYPE	PROPERTIES
Main audio (nonCLUE audio)	m=audio	- Bi-directional
Main video (nonCLUE video)	m=video	- Bi-directional - RTP/AVFP - RTCP - Full Intra Request (FIR) - Codec-Control Messages (CCM) - Temporary Maximum Media Bit-rate Request (TMMBR) - Temporary Maximum Media Bit-rate Notification (TMMBN)
Presentation/slide sharing video	m=video a=content:slides	Low frame rate & high resolution
CLUE Data Channel	m=application	

EX: CLUE-NONCLUE



EX: CLUE-CLUE


CLUE
CLUE
OFFER (Initial non-CLUE):
m=audio c_p1
m=video c_p2
m=video c_p3
m=application c_p4
ANSWER (Initial CLUE):
m=audio 0
m=video 0
m=video 0
m=application c_p4
CLUE Exchange
OFFER (CLUE):
m=audio 0
m=video 0
m=video 0
m=application c_p4
m=audio_clue c_p5
m=audio_clue c_p6
m=video_clue c_p7
m=video_clue c_p8

NOTHING ELSE

THANK YOU FOR LISTENING!