

Payload

Offer/Answer Considerations for G.723 Annex A and G.729 Annex B

(draft-muthu-payload-offer-answer-g723-g729-00)

March 27, 2012

IETF-83, Paris, France

Authors: Muthu A M. Perumal, R Parthasarathi

Agenda

- Problem Description
- Solution Considerations
- Next Steps

Problem Description

- RFC4856 defines the following codec parameters, but misses to specify their offer/answer considerations
 - annexa parameter of G723
 - annexb parameter for G729, G729D and G729E
- RFC3264 requires SDP extensions that define new fntp parameters to specify their proper interpretation in offer/answer
- If the annexb (or annexa) parameter does not match in the offer and answer then behavior is not well defined

Problem Description

- Implementations generally consider the Annex B (or Annex A) flavor as incompatible with the non-Annex B (or non-Annex A) flavor of the same codec
- Undesirable user experience
 - Call failure when no other common codec to use
 - Undesirable codec matched

Problem Description

Offer with G279 and no annexb parameter:

```
v=0
o=alice 2890844526 2890844526 IN IP4 host.atlanta.example.com
s=
c=IN IP4 host.atlanta.example.com
t=0 0
m=audio 49170 RTP/AVP 18
a=rtpmap:18 G729/8000
```

Answer with G729 annexb=no:

```
v=0
o=bob 1890844326 1890844326 IN IP4 host.bangalore.example.com
s=
c=IN IP4 host.bangalore.example.com
t=0 0
m=audio 19140 RTP/AVP 18
a=rtpmap:18 G729/8000
a=fmtp:18 annexb=no
```

End result : Call failure

Expectation: Least common denominator (i.e G.729) be used

Solution Considerations

- Declarative or negotiated?
 - Permit the answer to contain "yes" (explicitly or by default) when the offer contained "no" and specify that this still means Annex A or Annex B is not to be used
- OR
- REQUIRE that the answer contain "no" if the offer contained "no" and forbid the answer from explicitly containing "yes" when the offer contained "no", but allow the answer to implicitly contain "yes" (via the default) and treat it as "no"

Next Steps

- Is there a problem?
- Is Payload the right WG for addressing this problem?
- Add a milestone in the WG for addressing this problem?
- Ask for more review?