



Multiple Packetization Time in SDP Problem statement, Requirements, BCP Solution

draft-garcia-mmusic-multiple-ptimes-problem-03.txt

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Problem

- SDP defines the ptime/maxptime
 - common parameter for all media formats in m-line
 - not possible to specify this in f(codec)

```
m=audio 49170 RTP/AVP 0 4 8
a=ptime:30
a=maxptime:60
```

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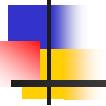
Changes in version 03

- Move of different sections to appendix:
 - Related RFCs for ptime
 - Ad-hoc solutions for multiple ptime
 - Some background info
- Some small editorial changes

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BCP Solution

- keep ptime/maxptime on media level
- No new parameters in the SDP
- Easy algorithm to determine ptime/maxptime
 - Differentiate between codec related and codec independent parameters
 - Rules for SDP parameter indications
 - Rules for packetization time for media transmission

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Sources for ptime/maxptime

- Static
 - Default or manually defined values in the end-device.
- Dynamic
 - Defined by the network architecture.
- Indicated
 - Proposed value from the receiving side (from SDP)

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Algorithm - parameters

- **Codec independent** parameters
 - p vector with all provided ptime values
static, dynamic, indicated
 - mp vector with all provided maxptime values
- **Codec dependent** parameters
 - fc frame size codec related
 - mc maxptime codec related
 $f(\text{codec, frame size, frame datarate, MTU})$

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Algorithm - method

- packetization time for media transmission
 $pt = f(p, mp, fc, mc)$
- Take min. value of "mp" and "mc"
- Take max. value of "p"
- Normalize in function of the codec frame size.

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Examples

s	p	d	i	mp		fc	mc	pt
s	d	i	s	d	i			
	20			60	30	100		30
	20			20	30	100	0	
	30			30	30	100		30
	60			80	30	100		60
	20			60	20	100		20
	60			80	20	100		60
	70			200	20	100		60
	120			60	20	100		60
	120			200	10	100		100
	40	50	20	200	10	100		50
	40	50	20	40	50	20		20
	120	40		150	200	100		100
	90	40	20	150	200	100		90
				10	10			10
				30	20	0		
				30	80			30
	60			30	80			60

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Next steps

- Is there interest in this method?
- Add use cases based on real-life problems and indicate how this BCP can solve different interworking issues