Analyzing Poor Voice Quality
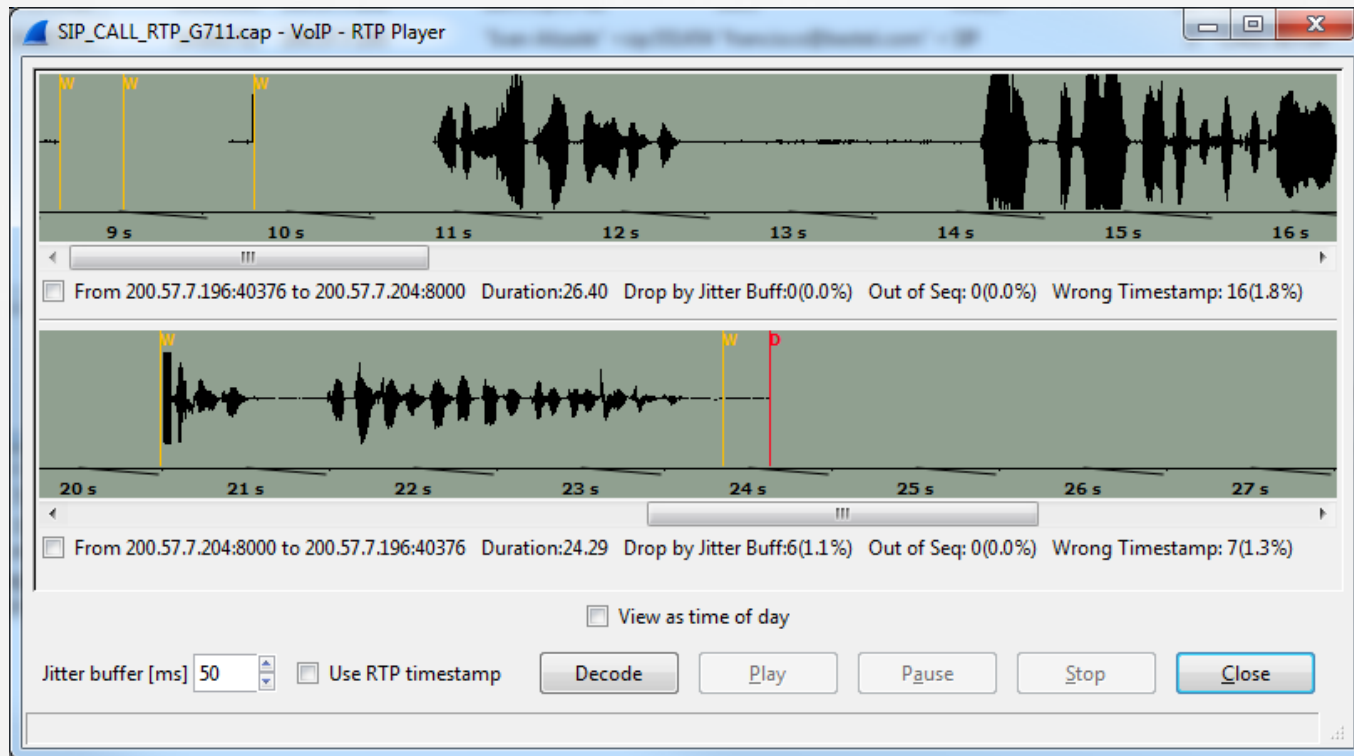
Analyzing Poor Voice Quality

» ## What constitutes poor quality?

» ## How can Wireshark help?

- Analyze the flow of calls

» ## Wireshark tools

- View quality in the player
- Analyze response time in the packets list or Flow Graph
- Use the Expert

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» Wireshark can help locate problems in a VOIP network

» Using Flow Graph

- Do we have packets that are being retransmitted?

» RTP stream analysis

- View out-of-order packets
- View cancelled packets

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Wireshark: RTP Stream Analysis

| Forward Direction | Reversed Direction |

Analysing stream from 200.57.7.204 port 8000 to 200.57.7.196 port 40376   SSRC = 0xD2BD4E3E

Packet	Sequence	Delta(ms)	Filtered Jitter(ms)	Skew(ms)	IP BW(kbps)	Marker	Status
3831	533	0.17	7.41	317.66	81.60		[Ok]
3472	433	35.92	7.04	273.13	14.40		[Ok]
3836	534	19.83	6.95	317.83	81.60		[Ok]
3441	425	1008.29	6.92	270.27	1.60		[Ok]
3396	424	0.17	6.83	278.55	81.60		[Ok]
3807	527	0.17	6.81	317.72	83.20		[Ok]
3840	535	23.44	6.73	314.39	81.60		[Ok]
3444	426	16.83	6.69	273.44	3.20		[Ok]

Max delta = 5843.74 ms at packet no. 2195
Max jitter = 7.41 ms. Mean jitter = 2.60 ms.
Max skew = 319.29 ms.
Total RTP packets = 548   (expected 548)   Lost RTP packets = 0 (0.00%)   Sequence errors = 0
Duration 24.12 s (153 ms clock drift, corresponding to 8051 Hz (+0.64%)

| Save payload... | Save as CSV... | Refresh | Jump to | Graph | Player | Next non-Ok | Close |

Questions?