Playout Controller for Real Time Speech/Audio applications

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Abstract
This paper investigates the current problems found with real time speech/audio applications over the packet networks (principally Internet Protocol networks), and, based on existing architecture and set of codecs, describes possible solutions.

The authors describe how Playout Controller module functions, and its structure enables perceived quality improvements and to be a viable solution to the problem of packet loss and jitter.

Playout Controller module comprises and combines functions of advanced jitter buffering and packet loss concealment, which enables it to quickly and with high resolution adapt to changing network conditions and to ensure high speech quality with minimal buffer latency.

Numerous conducted tests and comparison experiments (where some of them will be included in the paper) show that usage of Playout Controller gives substantial total delay savings and perceived quality improvements.