End Device and Network Adaptation of WaveVideo Streams

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Abstract— Increasing heterogeneity in terms of network and device capabilities, as well as user specific QoS profiles require media adaptation in potentially all nodes of a transmission path. Consequently, there is a need for a comprehensive end-to-end resource management to provide predictable QoS to future wireless multimedia systems.

We propose syntactical and semantical filter algorithms to provide end-to-end adaptation of layered WaveVideo streams to be integrated with the MASA QoS framework, which features QoS management and negotiation facilities.

We introduce syntactical and semantical filters, which can operate at the sender, in inner network nodes, and at the receiver side. By evaluation studies we demonstrate the effectiveness of our approach.

Keywords— **Quality of Service, Video Adaptation, Video Streaming, Video Filtering, Java, JMF, WaveVideo.**

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