

Introduction from Session Chair

Multimedia and Telecommunications Track Session: Content Delivery

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Technologies for content delivery over large-scale networks supporting the distribution of audio and video streams are broadly investigated at present. Various approaches have been suggested such as, e.g., batching and patching techniques, seeking the optimal trade-off between multicast and unicast communication. A clear trend towards personalized and on-demand multimedia services further increases the challenge to find appropriate solutions providing high performance and throughput on the one hand as well as low latencies on the other hand. Such divergent requirements can only be met if new mechanisms for content delivery are developed that take advantage of the intelligence and resources being present within and at the edges of the network. Recent investigation in peer-to-peer and overlay networks brought up new communication mechanisms that are highly scalable and efficient. These approaches particularly make use of functionality and resources provided by the end-users which are located at the edges of the Internet.

All papers introduced in this session go into this direction. The first paper, entitled “An Implementation of an overlay network architecture scheme for streaming media distribution” by Ch. Z. Patrikakis, Y. Despotopoulos, A. M. Rompotis, N. Minogiannis, A. L. Lambiris and A. D. Salis uses end-clients as relaying nodes in an overlay network infrastructure for the distribution of video streams.

The second paper is about “Providing Interactive Video On Demand Services in Distributed Architectures” and is written by B. Oazzaz, R. Suppi, A. Ripoll, F. Cores, P. Hernández and E. Luque. It presents the design of an interactive VoD proxy server combining multicast and unicast channels with the prefetching technique that makes use of client buffering.

The third paper, called “A New Asynchronous Hybrid Mechanism for Video on Demand” by Ramesh Yerraballi, Xiaoru Zhao and Jasmin Kanabar proposes a new strategy introducing the property of asynchronicity to satisfy requests at peak loads by accordingly compromising on latency.