

Introduction from Session Chair

Multimedia and Telecommunications Track Session: P2P Content Distribution and Internet Telephony

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Multimedia communication has moved beyond the stage of transmitting audio and video over data communications links. Two clear trends can be observed, viz. communication is becoming more specific (e.g. a certain type of communications such as video on demand or telephony has to be supported), and new mechanisms to distribute content (such as peer-to-peer communication technologies) are now being researched. This shows that multimedia communication has reached a certain degree of maturity. It is becoming an intrinsic part of many systems and not individual, isolated aspects are the main focus, rather the work is carried out in a specific context. Content (as representative of the multimedia theme) on the one hand is part of this; the technologies (such as peer-to-peer and Voice over IP) are part of the other group of environmental parameters.

This session introduces three papers in this area. The first paper, "Design of a Distributed P2P-based Content Management Middleware" by David Hausheer and Burkhard Stiller, introduces a middleware that has been

designed considering the specific requirements of content management.

The second paper, entitled "Distributed Replica Placement Algorithms for Peer-to-Peer Content Distribution Networks" by Tim Wauters, Jan Coppens, Thijs Lambrecht, Bart Dhoedt, Piet Demeester addresses an interesting problem in the context of peer-to-peer communication and content distribution, viz. the improvement of the availability of specific content objects in a peer-to-peer infrastructure.

The last paper is dealing with a specific multimedia communication topic, i.e. Internet telephony. In particular it addresses the problem of delay that can seriously inhibit the communication if it is uncontrolled or becomes too large. The paper is called "Sicsophone: A Low-Delay Internet Telephony Tool" and was authored by Olof Hagsand, Ian Marsh and Kjell Hanson.

This session discusses interesting and diverse topics and is dealing with challenging state-of-the-art issues regarding multimedia communication technology.