
BROADBAND COMMUNICATIONS

Convergence of Network Technologies

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- working conferences.

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PREFACE

Today, networking technologies evolve towards a quite heterogeneous scenario where many different technologies co-exist as, e.g., LAN/MAN, PSTN/ISDN, PSDN/Internet, Fixed/Mobile/Satellite, Cable/Fibre/HFC/XDSL, WDM/SDH/ATM etc. This diversity reflects various driving forces resulting out of new services and applications, technological developments, the tremendous growths of the internet and mobile communications and, last but not least, from the competitive environment. While diverging technologies basically characterize the physical and link layers, in the network layer a unifying trend towards IP based (IP: Internet Protocol) protocols is clearly visible. These trends open up a new dimension of questions how these different technologies interoperate or how they complement each other. Is there a convergence towards a unifying concept and what final architecture will result out of it? The outcome of these developments depends on a number of criteria, such as quality of service (QoS), flexibility with respect to new services and applications, scalability, security, manageability and so forth.

Broadband Communications '99 reflects the current state of the art precisely; its scope spans from switch technologies, protocols, performance modeling, traffic control to convergence questions, quality of service, pricing and management. BC '99, the fifth Conference on Broadband Communications supported by Working Group 6.2 of the Technical Committee 6 of IFIP, continues the topics of the previous conferences which were held in Estoril/Portugal in 1992, Paris/France in 1994, Montreal/Canada in 1996, and Stuttgart/Germany in 1998.

The conference theme of BC '99 "Convergence of Network Technologies" has been chosen to reflect exactly the transient phase of the current development. The organizers of BC '99 are thankful to all authors who have contributed by their submitted papers. From a total of 106 submissions about 50 % of papers have been chosen for publication and presentation. The work of the Scientific and Organizing Committees and of a large number of reviewers is greatly appreciated. Special thanks are due to IFIP WG 6.2 for the support, to the Invited and Tutorial Speakers and to the Sponsors of BC '99; without their support and co-operation BC '99 would not have been made possible.

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