

# Preface

This book constitutes the refereed proceedings of the Second IFIP-TC6 Networking Conference, Networking 2002. Networking 2002 was sponsored by the IFIP Working Groups 6.2, 6.3, and 6.8. For this reason the conference was structured into three tracks: i) Networking Technologies, Services, and Protocols, ii) Performance of Computer and Communication Networks, and iii) Mobile and Wireless Communications.

This year the conference received 314 submissions coming from 42 countries from all five continents Africa (4), Asia (84), America (63), Europe (158), and Oceania (5). This represents a 50% increase in submissions over the first conference, thus indicating that Networking is becoming a reference conference for worldwide researchers in the networking community.

With so many papers to choose from, the job of the Technical Program Committee, to provide a conference program of the highest technical excellence, was both challenging and time consuming. From the 314 submissions, we finally selected 82 full papers for presentation during the conference technical sessions.

To give young researchers and researchers from emerging countries the opportunity to present their work and to receive useful feedback from participants, we decided to include two poster sessions during the technical program. Thirty-one short papers were selected for presentation during the poster sessions.

The conference technical program was split into three days, and included, in addition to the 82 refereed contributions, 5 invited papers from top-level researchers in the networking community.

The technical program also included a panel session, and three invited talks from worldwide leaders – Imrich Chlamtac “Managing Optical Networks in the Optical Domain”, Randy Katz “The Post-PC Era: It’s All About Service”, and Gerald Maguire “Personal Computing and Communication”. The panel session, organized by Andrew T. Campbell (Columbia University), was entitled “Post 9-11 Networking Challenge” and is devoted to the discussion on how to cope with the vulnerabilities of communications systems revealed by the World Trade Center attack on September 11.

This conference would not have been possible without the enthusiastic and hard work of a number of colleagues. First of all, I would like to thank the three track chairs – Andrew T. Campbell, Guy Omidyar, and Moshe Zukerman – for their valuable contribution in setting up the very high quality conference program. A special thanks to the TPC members, and all the referees, for their invaluable

help in reviewing the papers for Networking 2002. Finally, I would like to thank all the authors that submitted their papers to this conference for their interest and time.

March 2002

Marco Conti

## Message from the General Chairs

Networking 2002 was organized by the Italian National Research Council (CNR) and Telecom Italia and was sponsored by the IFIP working groups WG 6.2 (Network and Internetwork Architectures), WG 6.3 (Performance of Communication Systems), and WG 6.8 (Wireless Communications). The program of the conference spanned on five days and included the main conference (three days), two tutorial days, and one day of thematic workshops.

The organization of such a complex event required a major effort and we wish to express our sincere appreciation to all the executive committee members for their excellent work.

We would like to express our special appreciation to the main conference technical program chair Marco Conti and to the special track chairs: Andrew T. Campbell, Moshe Zukerman, Guy Omidyar. The overall high quality of the conference technical sessions is the result of a complex evaluation process that they handled in an excellent way.

Special thanks goes to Giuseppe Anastasi and Stefano Basagni for the organization of an original and interesting tutorial program. The conference considered tutorials an important cultural event, and encouraged in several ways, the participation of young researchers in these tutorials. We decided to have a single, modest fee to provide access to all. The tutorial program included nine half-day tutorials organized in three parallel sessions.

Networking 2002 also decided to stimulate thematic events covering hot research topics in the networking field. Three thematic workshops were held: Web Engineering, Peer-to-Peer Computing, and IP over WDM. Hence our third word of thanks goes to the chairs of the thematic workshops: Fabio Panzieri, Ludmilla Cherkasova (Workshop on Web Engineering), Gianpaolo Cugola, Gian Pietro Picco (Workshop on Peer-to-Peer Computing), and Giancarlo Prati, Piero Castoldi (Workshop on IP over WDM).

We are also indebted to our supporters. First of all, CNR not only allowed Enrico Gregori and Marco Conti to dedicate considerable time to the organization of this event, but also financially supported the event through the sponsorship by the CNUCE and IIT institutes. A special thanks to Telecom Italia for joining us in the organization of this event. We are also indebted to our corporate sponsors (Cassa di Risparmio di Pisa, Compaq, Microsoft, and Softech) whose help removed much of the financial uncertainty, involved in the organization of such an event, and who also provided interesting suggestions for the program.

Our last word of gratitude goes to the Web manager Alessandro Urpi and the Web designer Patrizia Andronico. Alessandro created a very fancy and efficient system for the handling of electronic submissions. This system greatly facilitated the paper reviewing process, as well as the preparation of the proceedings. Patrizia was responsible for designing the Networking 2002 Web site that played an important role in the success of the event.

March 2002

Enrico Gregori  
Ioannis Stavrakakis

### Organizers



### Sponsoring Institutions



# Organization

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### Special Track Chair for Performance of Computer and Communication Networks:

Moshe Zukerman, University of Melbourne, Australia

### Special Track Chair for Mobile and Wireless Communications:

Guy Omidyar, National University of Singapore

### Tutorial Program Co-chairs:

Giuseppe Anastasi, University of Pisa, Italy

Stefano Basagni, Northeastern University, USA

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#### Workshop 1 — *Web Engineering*

Fabio Panzieri, Università di Bologna, Italy

Ludmilla Cherkasova, Hewlett Packard Labs, USA

#### Workshop 2 — *Peer to Peer Computing*

Gian Pietro Picco, Politecnico di Milano, Italy

Gianpaolo Cugola, Politecnico di Milano, Italy

#### Workshop 3 — *IP over WDM*

Giancarlo Prati, Scuola Superiore S. Anna, Italy

Piero Castoldi, Scuola Superiore S. Anna, Italy

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