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Networked Group Communication

First International COST264 Workshop, NGC'99
Pisa, Italy, November 17-20, 1999
Proceedings

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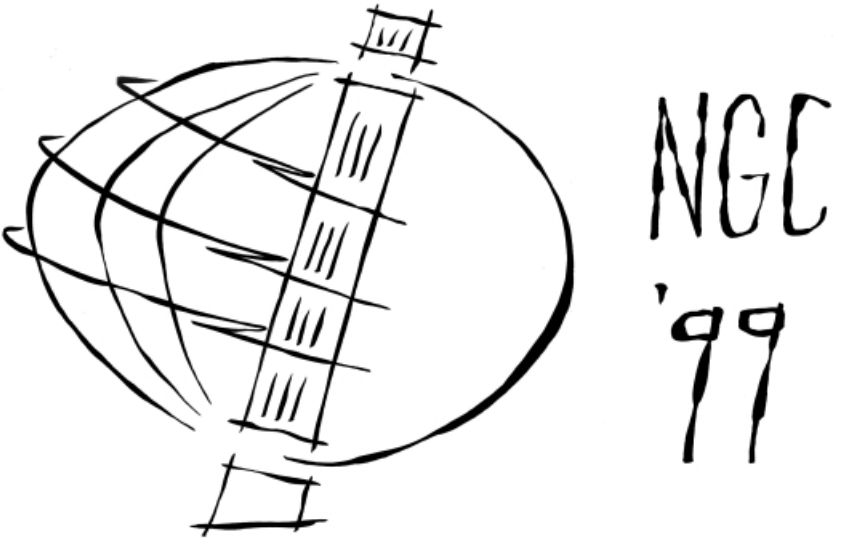
Preface

Enabling group communication is one of the major challenges for the future Internet. Various issues ranging from services and applications to protocols and infrastructure have to be addressed. Moreover, they need to be studied from various angles and therefore involve skills in multiple areas.

COST264 was created to contribute to this international effort towards group communication and related technologies. The European COST framework is ideal for establishing a new community of interest, providing an open forum for ideas, and also supporting young researchers in the field. The COST264 action, officially started in late 1998, aims at leveraging the European research in this area and creating intensive interaction at the international level. To this purpose, COST264 decided to organize an annual technical workshop, the "International Workshop on Networked Group Communication". NGC'99 in Pisa is the first event of the series.



Despite this being the first workshop and despite the very short time between the Call for Papers and the deadline for submissions, and the other conflicting and more established events, the Call for Papers of NGC'99 was highly successful: we received 49 papers, of which 18 were selected to compose the basis of the technical program. We hope you will enjoy our paper selection, which is the

core of these proceedings, and addresses important issues in the research and development of networked group communication.

In addition to refereed contributions, we scheduled two keynote speakers (Christophe Diot and Steve Deering), and four invited talks by Ken Birman (Cornell), Bob Briscoe (BT), Radia Perlman (SUN), Tony Speakman (CISCO). Because one of the goals of COST264 is to disseminate information, we decided to include two poster sessions in the program, to give young researchers an opportunity to present their work and receive useful feedback from the participants.

Finally, the workshop was preceded by a day dedicated to tutorials. We had a total of three half-day tutorials:

- Mostafa Ammar and Don Towsley on Principles of Multicast Protocols and Services;
- Mark Handley on The Near-Term Future of IP Multicast
- Radia Perlman on Network and Multicast Security

This event would have been not possible without the enthusiastic contribution and hard work of a number of individuals and institutions. On behalf of COST264 and all participants to the workshop we would like to thank for their contribution:

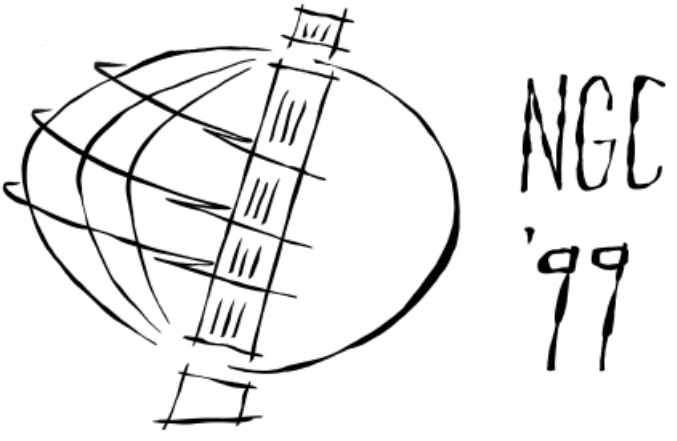
- the program committee members, the reviewers, and all authors who submitted their work to the workshop, and made it possible to have a very high-level technical program;
- the tutorial lecturers and the invited speakers, who put their knowledge and expertise to the service of the workshop;
- the supporting institutions: Scuola Superiore S. Anna, which hosted the meeting; the Istituto di Applicazioni Telematiche (IAT/CNR) which took care of the secretariat; and the Università di Pisa, which gave technical, financial, and human support to the organization of the workshop.
- the industrial sponsors: Cisco, Microsoft Research, Motorola Labs (in alphabetical order), who are fully aware of the importance of this topic.

A special thanks goes to Jon Crowcroft and Christophe Diot, whose help and expertise was fundamental during the organization of this workshop.

We hope that this workshop will be the first of a successful series, and we are looking forward to a fruitful technical interaction in the delightful city of Pisa.

October 1999 Luigi Rizzo, Serge Fdida

Organization



NGC'99 – the First International Workshop on Networked Group Communication – is organized by action COST264, in cooperation with the Istituto per le Applicazioni Telematiche (IAT), Università di Pisa, and Scuola Superiore S. Anna.

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