

Preface

The Second International Working Conference on Active Networks – IWAN2000

We are very happy to present the proceedings of “The Second International Working Conference on Active Networks – IWAN2000”. The proceedings contain the technical program for IWAN2000, which will be held on 16–18 October 2000 in Tokyo, Japan.

The increasing demand for highly sophisticated functionalities of networks makes the research on active networks, which aims to make network nodes programmable and intelligent, more and more important. IWAN2000 is the second workshop in this new area and is the best opportunity for experts in this new area to communicate.

The first conference on active networks, IWAN’99, was held in Berlin in July 1999 with 30 highly informative papers. We also selected 30 papers this year. The topics discussed in IWAN’99 covered a wide research area in active networks from architecture to applications. Though IWAN2000 covers an essentially similar area, a wider range of topics on applications, such as multicast control, QoS management, and Mobile IP, increases the productivity of the conference greatly. Still, we received so many submissions on architecture and basic issues, the increase of submissions on new applications represents the fact that the research on active networks has begun to focus on practical issues.

We would like to thank all the authors who submitted their work and deeply regret that we could not select many more papers for this conference. Presentation time is limited in a 3-day conference. As we had so many submissions, I, as the program committee chair of IWAN2000, had colleagues to serve as part of the review to encourage process. I was able to get an outstanding group, and each of them read and reviewed an incredible number of papers, which resulted in a successful conference program. I deeply appreciate all their efforts.

We hope the readers will find these proceedings helpful in their future research. Also, we hope that IWAN will continue to be the center of the international community on active networks, and contribute to the research progress of this new area in realizing future generation network architecture.

August 2000

Hiroshi Yasuda

IWAN2000

Message from the Conference General Chairs

On behalf of the IWAN international committee, welcome to the second International Working Conference on Active Networks, IWAN2000.

Internet technologies continue to enhance the infrastructure of the emerging information society. The new developments increasingly affect both our personal lives and our work. In order to support this rapidly expanding infrastructure, various technologies are evolving. High speed data transfer systems such as wavelength division multiplexing (WDM) equipment and faster IP routers are the key solutions for the increasing quantitative demands. Active networks are the key solution for providing the required quality. By making network nodes programmable and intelligent, one can realize networks with highly sophisticated functionality.

There is an increasing demand to find common denominators for what this functionality should be in the medium- and long-term perspectives and to find the best practice for its realization.

It is our great pleasure to organize IWAN2000 in Tokyo. We hope to provide a forum for the international exchange of ideas and results for this important domain, continuing the discussions we had at IWAN99 in Berlin and to offer the opportunity for evaluating this emerging technology.

The positive comments we received during the organizing phase confirm our belief in the importance of active networks and the success of this IWAN conference. We would like to thank the many volunteers, committee members, authors, reviewers, invited speakers, and sponsors for their enthusiastic contributions.

October 2000

Radu Popescu-Zeletin
Masanori Kataoka

Organization

IWAN2000 is organized by the IWAN International Committee (chaired by M. Kataoka) and sponsored by IFIP in cooperation with Information Processing Society of Japan and the Institute of Electronics, Information, and Communication Engineers, Japan. IEEE Communications Society also co-sponsors this conference technically.

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