
FOREWORD

Special Section on Networking Technologies for Cloud Services

Cloud services have emerged from the advances made in virtualization and distributed computing technologies as well as the rapid deployment of broadband communication infrastructures. Cloud services have brought about a paradigm shift in the ownership of ICT resources. Several types of cloud services have been developed and utilized for personal and business users as an effective way of reducing the cost of ICT investment. Cloud services were initially driven by IT vendors in the U.S. Telecom carriers have started to play an important role in cloud services through their exploration of new business markets. In many countries, vigorous research and development of cloud systems are undertaken for creating new values and solving a number of social issues.

The objective of this special section is to further accelerate research and development of fundamental and advanced networking technologies to realize and support cloud services. We received 15 submissions: 1 letter, 12 papers, and 2 invited papers from the EU and Asian countries. Each submission was carefully reviewed by one guest associate editor and two experts. The special section contains 2 invited and 3 general papers. They cover important technical contributions in a number of fields including, dynamic resource management in clouds, network virtualization technology, evaluation of power consumption in DCNs, distributed clustering under high node mobility, and multipath routing algorithms for cloud services.

The editorial committee believes that this special section is valuable and rewarding, and encourages further research, development, and deployment activities. On behalf of the editorial committee, I would like to express our sincere appreciation to all the authors for submitting their papers, and reviewers for their great efforts and contributions.

Special Section Editorial Committee Members

Guest Editors: Hiroyuki Ohsaki (Osaka University), Takeshi Ihara (NTT Docomo)

Guest Associate Editors: Masaki Aida (Tokyo Metropolitan University), Norihito Fujita (NEC), Akiya Inoue (Chiba Institute of Technology), Masugi Inoue (NICT), Kenji Ishida (Hiroshima City University), Kenji Kawahara (Kyushu Institute of Technology), Ryoichi Kawahara (NTT), Ryutaro Kawamura (NTT), Tatsuya Mori (NTT), Masahide Nakamura (Kobe University), Hidenori Nakazato (Waseda University), Takashi Okuda (Aichi Prefectural University), Yuji Sekiya (The University of Tokyo), Shigeo Shioda (Chiba University), Takuo Suganuma (Tohoku University)

Hikaru Suzuki, Guest Editor-in-Chief

Hikaru Suzuki (*Senior Member*) received an M.E. degree in Industrial and Management System Engineering from Waseda University, Japan, in 1988. In April 1988, he joined Switching System Laboratory, NTT, Japan. In July 2009, he moved to NTT Communications Corporation. He occupied the position of vice-chair of the IEICE Technical Committee on Information Networks from May 2008 to May 2010, and the chair from May 2010 to May 2012. He has contributed to the development of a range of network services such as PHS, 3G-mobile, Free-Phone, and NGN. His research interests include information network services and operations. He is a member of IEEE.

