Editor's Message to Special Issue on Network Services and Distributed Processing

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Now having passed 45 years since the origin of the Internet called ARPANET was born, network technologies, especially the Internet, have been made a surprizing growth that has dramatically changed the world. In contrast to a few decades ago when the Internet was recognized by a small number of specialists, people at present use e-mails, blogs, SNS and so on with their own smartphones, use the technical terms "networks" or "packets" in their usual life, and regard the Internet as one of the most important social infrastructures such as gas, water, and electric supply. Moreover, even the term *IoT* (*the Internet of Things*) has appeared, meaning that everything is connected through the Internet. Even after experienced the big growth mentioned above, network technologies presently are still growing in several practical areas such as network protocols and mechanisms itselves, computer cooperation techniques via networks, the technologies to provide new services, etc. Specifically, due to the widespread of high-speed mobile communication environment such as LTE and Wi-Fi, mobile devices and the variation of services on them are currently dynamically changing. Furthermore, due to the development of Peer-to-Peer (P2P) techniques, a new type of computer cooperation models that is different from the traditional client-server systems, is emerging which vast amount of information is distributed efficiently and economically over a large number of computers connected to the worldwide Internet. This change is leading to the trend of cloud computing that enables us to utilize computer resources including both hardware and software on demand, over which we presently are possible to develop their own ICT systems easier than past and to benefit from worldwide data resources so called "big data."

Based on this background, we planned a special issue entitled "Network Services and Distributed Processing" in 2014.

This special issue solicited submissions about not only research on the existing distributed processing and network, but also embryonic research, research across boundaries in the application field, technical research for new service provision, research for collateralizing safety, and research of new fundamental technology. Mainly the committee members from Special Interest Group on Distributed Processing System (IPSJ SIG-DPS) formed the editorial committee of the special issue as below. The Editorial Committee received 30 submitted papers and accepted 14 papers among many high-quality submissions (46.7% acceptance rate). Papers from wide variety of research area that related to "Network Services and Distributed Processing" were submitted. The accepted papers include 3 paper related to "Wireless/Mobile Networks," 4 papers to "Peer-to-Peer Systems," 4 papers to "Cloud Computing," and 3 papers to "Application System and Services." Every accepted paper treats important research issue that is essential for the future network services. I hope that the special issue will further promote researches and technologies in this area. Lastly, I would like to thank Dr. Takuya Yoshihiro, Editorial Board, and other Editorial Committee members for their enthusiastic contribution to the entire planning and reviewing processes.

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