

NETWORK AND SERVICE MANAGEMENT



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This is the 27th issue of the Series on Network and Service Management, which until last year was published twice a year, in January and July. From this year on, submissions follow a rolling schedule, and new issues are published when enough articles are accepted, in line with the new *IEEE Communications Magazine* policy for all Series. This Series provides articles on the latest developments in this area, highlighting recent research achievements and providing insight into both theoretical and practical issues related to the evolution of network and service management. The Series provides a forum for the publication of both academic and industrial research, addressing the state of the art, theory, and practice in this discipline.

The most recent notable event in the network and service management community was the IEEE/IFIP Integrated Management Symposium (IM 2019, <https://im2019.ieee-im.org/>), which took place on April 8–12 in Washington, DC. During IM 2019, the prestigious Dan Stokesburry Award, which is awarded for particularly distinguished technical contributions to the growth of the field, was given to Dr. Olivier Festor, Director of Telecom Nancy, France. Another important community event was the IEEE Conference on Network Softwarization (NETSOFT 2019, <https://netsoft2019.ieee-netsoft.org/>), which took place in Paris, France, on June 25–29. The next event of the community will be the IEEE/IFIP Conference on Network and Service Management (CNSM 2019, <http://www.cnsm-conf.org/2019/>), which will take place in Halifax, Canada, on October 21–25. The preparations for the IEEE/IFIP Network Operations and Management Symposium (NOMS 2020, <https://noms2020.ieee-noms.org/>) have also started, which will take place in Budapest, Hungary, on April 20–24, 2020.

We again experienced excellent interest for the 27th issue with 18 submissions in total. For all submissions in the scope of our Series, we obtained at least three independent reviews. We finally selected three articles, resulting in an acceptance rate of 16.7 percent. The acceptance rate of all the previous issues has ranged between 14 and 25 percent, making this Series a highly competitive place to publish.

The first article, “Network-Programmable Operational Flow Profiling” by Clemm and Chunduri, proposes a new approach for obtaining detailed behavioral and performance-related insights at the level of packets and flows, allowing operational flow profiles to be programmed from the network edge without requiring heavy analytics and data collection frameworks.

The second article, “Mobile Edge Vertical Computing over 5G Network Sliced Infrastructures: An Insight on Integration Approaches and Open Issues” by Bruschi, Bolla, Davoli, Zafeiropoulos, and Gouvas, provides insight on the possible architectural approaches to integrate vertical applications in 5G, providing an outlook on the state of the art in cloud application design and mobile edge computing (MEC)/network functions virtualization (NFV).

Finally, the third article, “SDN@Play: Software-Defined Multicasting in Enterprise WLANs” by Coronado, Garriga, Villalon, Garrido, Goratti, and Riggio, presents a centralized approach to manage multicast flows based on software-defined networking principles, also reporting on a proof-of-concept implementation that can be used in different networking scenarios.

We hope that readers of this issue find the articles informative, and we will endeavor to continue with similar issues in the future. We would finally like to thank all the authors who submitted papers to this Series and the reviewers for their valuable feedback and comments.

BIOGRAPHIES

GEORGE PAVLOU [F] (g.pavlou@ucl.ac.uk), is a professor of communication networks in the Department of Electronic Engineering, University College London, United Kingdom, where he coordinates networks and services research activities. His research interests focus on networking and network management, including traffic engineering, content-based networking, autonomic management, and software-based networks. He has been instrumental in a number of research projects that produced significant results with real-world uptake and has contributed to standardization activities in ISO, ITU-T, and the IETF.

JÜRGEN SCHÖNWÄLDER (j.schoenwaelder@jacobs-universiy.de) is a professor of computer science at Jacobs University Bremen, Germany. His research interests include network management and measurement, network security, embedded systems, and distributed data processing. He is an active member of IETF, where he has co-authored more than 40 network management related specifications and standards. He has contributed in various roles to the organization of IEEE and IFIP sponsored academic conferences and journals.