

NETWORK AND SERVICE MANAGEMENT



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This is the 26th issue of the series on Network and Service Management, which until now was published twice a year, in January and July. From now on, submissions will follow a rolling schedule and new issues will be published when enough articles get 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 of the network and service management community was the IEEE/IFIP Conference on Network and Service Management (CNSM 2018), which took place 5–9 November in Rome, Italy. During the meeting in Rome, the technical program of the first key event in 2019, the IFIP/IEEE International Symposium on Integrated Network Management (IM 2019), was finalized. IM 2019 will take place in Washington DC, USA, 8–12 April and will focus on intelligent management for the next wave of cyber and social networks. Another important forthcoming event is the IEEE Conference on Network Softwarization (NetSoft 2019), which will take place in Paris, France, 24–28 June. Finally, the 15th edition of the IEEE/IFIP Conference on Network and Service Management (CNSM 2019) will take place 21–25 October in Halifax, Canada.

We again experienced excellent interest for the 26th issue with 21 submissions in total. For all submissions in scope of our series, we obtained at least three independent reviews. We finally selected four articles, resulting in an acceptance rate of 19.0 percent. The acceptance rate of all the previous issues has ranged between 14 percent and 25 percent, making this series a highly competitive place to publish.

The first article, “FENDE: Marketplace-based Distribution, Execution, and Lifecycle Management of VNFs” by Bondan, Franco, Marcuzzo, Venancio, Dos Santos, Pfitscher, Scheid, Stiller, De Turck, Duarte Jr, Schaeffer-Filho, Raniery, and Granville, proposes FENDE, a marketplace and ecosystem reference architecture for the distribution and execution of

Virtualized Network Functions (VNFs) and the composition of service function chains.

The second article, “Design and Deployment of an Open Management and Orchestration Platform for Multi-site NFV Experimentation” by Nogales, Vidal, Garcia-Reinoso, Lopez, Rodriguez, and Azcorra, presents the design and deployment of the NFV MANO 5TONIC platform, which enables experimentation with novel Network Function Virtualization (NFV) products and services.

The third article, “5G RAN Slicing for Verticals: Enablers and Challenges” by Elayoubi, Sana, Altman, and Galindo Serrano, investigates slicing in 5G radio access networks, presenting how 5G new radio features can be used for slicing implementations, providing typical configurations for different slice types and paying special attention to the resource allocation problem between slices that share the same spectrum band.

Finally, the fourth article, “LISP-MSX: Decentralized Interconnection of Independent LISP Mapping Systems” by Boucadair, Jacquenet, Phung, and Secci, presents LISP-MSX, a novel solution for the interconnection of locator/identifier separation mapping systems, which allows complete mapping system technology independence and decentralized interconnection, guaranteeing faster mapping resolution.

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 articles to this series and the reviewers for their valuable feedback and comments on the articles.

BIOGRAPHIES

GEORGE PAVLOU (g.pavlou@ucl.ac.uk), IEEE Fellow, is Professor of Communication Networks at the Dept. of Electronic Engineering, University College London, UK, 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 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 the Internet Engineering Task Force (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.