



IEEE NFV SDN 2026

Nov. 2-4, 2026, Tokyo, Japan

Conference Topics

The IEEE NFV-SDN conference invites researchers worldwide to share ideas influencing the evolution and operation of Network Virtualization, including SDN technologies. Topics include but are not limited to:

Architectures, Infrastructure, and Elements

- Emerging advances in network architecture, including Network Slicing
- Advances in the design of forwarding elements
- Optimization of virtualized infrastructures, including HW acceleration
- Heterogeneous server platforms and detailed element-level CPU/GPU/FPGA mapping of network functions
- SDN/CNF/NFV in recent and novel architecture paradigms
- Architectural design aspects toward Next-Generation wireless networks
- Virtualization Technologies for Edge/Fog Computing
- Microservice-based and agent-based SDN/NFV
- SDN/NFV in 6G three-dimensional networking
- Energy-efficiency driven architectures
- New network programmability paradigms

NFV, CNF, and SDN Operations

- Protocols for virtual network orchestration
- Dynamic license management, autonomic, machine learning, monitoring, resiliency, fault management, and self-healing
- Network security and isolation impacts of virtualization technologies
- SDN/NFV orchestration and operations in 6G network and cloud continuum

AI/ML in cloud native networks

- AI/ML techniques and network softwarization
- AI/ML network automation
- AI/ML applications for SDN and NFV
- AI/ML enabled SDN/NFV deployments
- Design and performance evaluation of AI/ML in softwarized networks

Softwarized Radio Access Networks and O-RAN

- O-RAN Specifications and Standards
- Softwarization in Radio Access Networks (RAN)
- Challenges and Solutions in O-RAN Deployment
- Integration of AI/ML in O-RAN
- Network Slicing in O-RAN
- O-RAN and 5G Network Performance
- Security Considerations in O-RAN
- Future Trends in Softwarized RAN

Performance Analysis and Optimization

- Costs of migration of application containers and workloads
- Experience building network virtualization testbeds
- Data/control plane performance, interoperability, and scalability studies
- Resource dimensioning and optimization
- Design for modularity, scalability, high availability, and interoperability
- SDN/NFV new KPIs and trade-offs in 6G architecture

Results and Evaluations in Application Scenarios

- Comparative studies on different virtualization technologies
- Usage scenarios such as SD-WAN, IoT or Smart Grid
- Use of virtualization technologies
- Advances in future communication infrastructure enabled by SDN, CNF, and NFV, including fixed and wireless access, public, private and hybrid clouds
- Social and regulatory impacts
- Operational experience in operational networks
- Standardization efforts for NFV/SDN

CALL FOR PAPERS

Network virtualization has transformed how our infrastructures are connected, built, and operated. Network services often rely on the disaggregation and reconstitution of Network Functions through Network Function Virtualization or NFV. When combined with dynamic and automated network configuration concepts, or Software Defined Networks (SDN), advantages of overall improved performance, reduced vendor lock-in, more rapid adoption of new features, and increased operational efficiency are realized.

The 2026 IEEE NFV-SDN conference is an important forum for the ongoing exchange of the latest ideas, developments, and results amongst ecosystem partners in both academia and industry focusing on 6G deployment initiatives in worldwide. The conference fosters knowledge sharing and discussion on new approaches and works addressing gaps and improvements in virtualized enabled architectures, algorithms, and operational frameworks for virtualized network functions and infrastructures.

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IMPORTANT DATES

Submission deadline: EXTENDED June 30, 2026

Notification of acceptance: August 30, 2026

Final papers due: September 30, 2026

<http://www.ieee-nfvsdn.org/>

IEEE ComSoc
IEEE Communications Society

CONFERENCE INFORMATION

The 12th IEEE Conference on Network Functions Virtualization and Software-Defined Networking (IEEE NFV-SDN 2026) Conference will take place in the beautiful and fascinating city of Tokyo, Japan. The conference is an important forum for the ongoing exchange of the latest ideas, developments, and results amongst ecosystem partners in both academia and industry. The conference fosters knowledge sharing and discussion on new approaches and works addressing gaps and improvements in virtualized-enabled architectures, algorithms, and operational frameworks for virtualized network functions and infrastructures.

We look forward to meeting you all in the beautiful Tokyo!



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TPC Co-Chairs:

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SUBMISSION GUIDELINES

Prospective authors are invited to submit original full technical or fast-track papers for publication in the IEEE NFV-SDN 2026 Conference Proceedings and presentations in the technical sessions. We solicit submission of high-quality full papers reporting original and novel research results on all the above topics. Papers must be written in English, unpublished, and not submitted elsewhere. Full papers must be formatted as the standard IEEE double-column conference template.

FULL TECHNICAL PAPERS should have a maximum paper length of six (6) printed pages (10-point font), including figures, without incurring additional page charges (maximum one additional page with over length page charge of USD100 if accepted). Papers exceeding 7 pages will not be accepted at EDAS. For information on submissions, please visit <http://www.ieee-nfvdsn.org/>

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Virtualization & Software
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