

## IEEE HPSR 2015: THE 16TH IEEE INTERNATIONAL CONFERENCE ON HIGH PERFORMANCE SWITCHING AND ROUTING

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The dynamicity of modern communication networks relies on the switching and routing infrastructure. The Cloud, the Internet of Things, the Big Data, the mobile data communications, the 4k video all demand an even more dynamic network provided by high performance switching and routing infrastructure.

The next annual IEEE HPSR conference will be highlighted by the presentations of leading communications experts addressing the latest worldwide advancements in topics of software defined networks (SDN), network function virtualization (NFV) and clouds; the convergence of fixed and mobile access with excessive offloading from mobile to Wi-Fi networks; handling the various traffic, quality, fairness and availability requirements; deploying large data centers and enhancing their switching capabilities; provisioning content delivery networks; achieving energy efficiency of switching and routing equipment. These are only a few of the topics that have demanded switching and routing capabilities that are more intelligent, more efficient, and more reliable than ever before.

The IEEE HPSR 2015 conference will host technical and business presentations highlighting the entire range of switching and routing technologies, including

- Architectures of high-performance switches and routers
- High-speed packet processors
- Address lookup algorithms
- Packet classification, scheduling, and dropping
- Switching, bridging, and routing protocols
- Latency and buffer control
- Multicasting and anycasting
- Low latency and reliable routing for industrial Internet
- Security issues in industrial Internet
- Internet of Things (IoT)
- Big Data driven networks
- P2P routing
- Routing in wireless, mobile and sensor networks
- Optical switching and routing (including spectrum elastic networks)
- Switching, bridging, and routing in data centers and clouds
- Software defined networking / network function virtualization (SDN/NFV)



- Open-source routing, Open Network Control Architecture
- Data placement and migration
- Multiprocessor networks
- Network control and management
- Pricing, accounting, and charging
- QoS/QoE and scalability of switching, bridging, and routing
- Traffic characterization and engineering

- Power-aware switching, bridging, and routing protocols
- Interface selection and traffic routing in 5G FMC offloading
- Routing and switching for 5G core networks
- Protection switching and routing, restoration, availability

HPSR 2015 will include tutorials on latest advances in switching and routing in both the core and the converged fixed-mobile fronthaul/backhaul part of the 5G mobile network. As major trends the following themes are highlighted: spectrum elastic optical core networks; software defined architectures with virtualized network functions; mobile to Wi-Fi offload; the impact of IoT and BigData onto Switching and Routing infrastructure. Tutorial proposals are expected at <http://www.ieee-hpsr.org>.

For the first time a special Demonstration Session will be organised at the HPSR where new switching architectures, new routing and resource control approaches and softwares, and other HPSR relevant concepts can be demonstrated. The Demonstration Presenters will have an Exhibition Booth for the demonstration. The authors of demos are invited to submit their proposals along with their demo requirements. For more information, visit <http://www.ieee-hpsr.org>.

HPSR 2015 will include numerous Invited talks as well as presentations from industry players—vendors and operators as well as research institutions—to present their results and share their views on latest developments.

HPSR 2015 will also host panels discussing latest advances on various aspects of switching and routing along with the impact of new Internet paradigms onto switching and routing.

For more information on IEEE HPSR 2015 including speaking, demonstration and tutorial opportunities, registration information, and conference updates, please visit

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