Research Promotion Council of Kei-han-na Info-Communication Open Laboratory

Interoperability Working Group

iPOP2021 Interoperability Working GroupVII

Projects

PJ31: Ethernet over OTN Technology

- 400Gigabit Ethernet -LANPHY Transmission Technology etc…

PJ32: Multi-Technology Transport Network Control Technology

- Multi Layer/ Multi Domain Network Control Technology
- SDTN (Software Defined Transport Network) etc…

Chair : Naoaki YAMANAKA (Keio University)

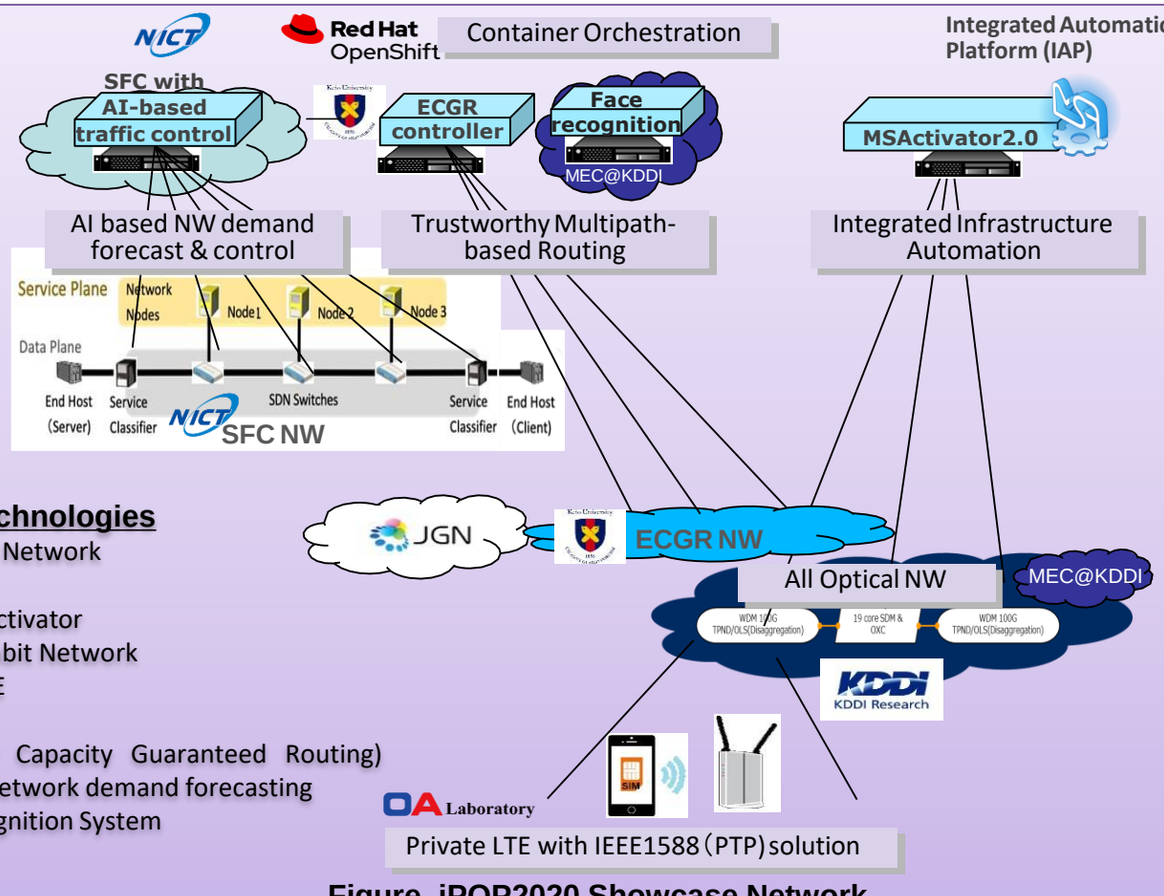
Vice chairs :
Hirotaka YOSHIOKA (NTT)
Satoru OKAMOTO (Keio University)
Masatoshi SUZUKI (KDDI Research)

Members : Keio University, NTT, KDDI Research, Anritsu, Fujitsu, HITACHI, Mitsubishi Electric, NEC, NICT

Testing/ Demonstration

■ ***"End-to-End Management of All Optical Disaggregated Network and Applications with Cloud Native Environment" at iPOP2020-Showcase. (PJ32)***

◆ ***The experiments of iPOP2020-Showcase focused on the features of end-to-end management on a cloud-nativeuser/network applications provided on the network infrastructure using optical and wirelessusing containers on multi-cloud environment.***



Key Technologies

- All Optical Network
- OpenShift
- OpenMSActivator
- Japan Gigabit Network
- Private LTE
- ECGR (Expected Capacity Guaranteed Routing)
- AI based network demand forecasting
- Face Recognition System

Figure iPOP2020 Showcase Network.

Publications

- Shinya Nakamura, Kohei Shiomoto, Hyde Sugiyama, Yusuke Hirota, Noboru Yoshikane, Kentaro Sugawara, Masatake Miyabe, Tomotaka Eguchi, Satoru Okamoto, Masaki Murakami, Takahiro Hirayama, Ikuo Sato, Thomas Roux, ``First Demonstration of End-to-End Network Slicing with Transport Network Coordination and Edge Cloud Applications in 5G Era," 24th OptoElectronics and Communications Conference/International Conference on Photonics In Switching and Computing (OECC/PSC 2019), No. PDP-4, July 2019.
- M. Shiraiwa, N. Yoshikane, S. Xu, T. Tsuritani, N. Miyata, T. Mori, M. Miyabe, T. Katagiri, S. Yoshida, M. Tanaka, T. Hayashi, H. Sugiyama, I. Satou, M. Mikuni, S. Okamoto, N. Yamanaka, B. Jeong, Y. Awaji, N. Wada, "Experimental Demonstration of Disaggregated Emergency Optical System for Quick Disaster Recovery," IEEE/ OSA Journal of Lightwave Technology (Invited), August 2018.
- M. Shiraiwa, N. Yoshikane, S. Xu, T. Tsuritani, N. Miyata, T. Mori, M. Miyabe, T. Katagiri, S. Yoshida, M. Tanaka, T. Hayashi, H. Sugiyama, I. Satou, M. Mikuni, S. Okamoto, N. Yamanaka, Y. Awaji, and N. Wada, "First Experimental Demonstration of Disaggregated Emergency Optical System for Quick Disaster Recovery," in Proc. Optical Fiber Communication Conference (OFC2018), San Diego, CA, USA, Th2A.29, March 2018.

YouTube

*Our demo movies are available on the **Kei-han-na OpenLab YouTube channel**.*