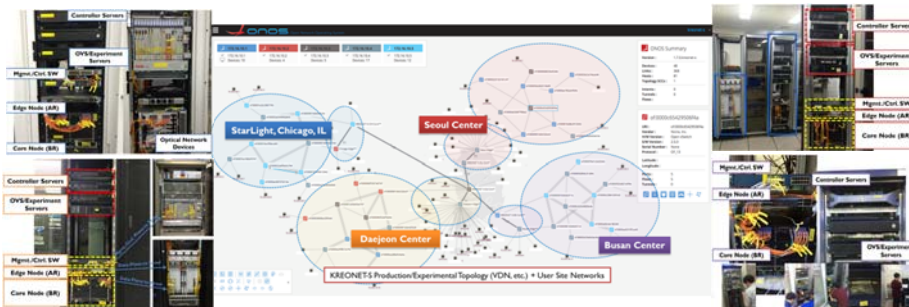


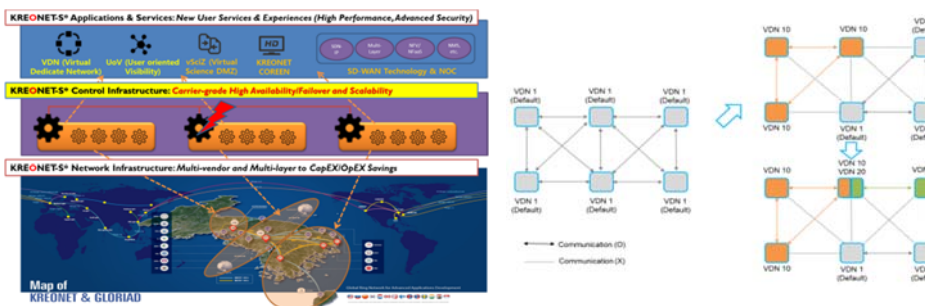
Softwarization of KREONET Infrastructure based on Software-defined Networking

- **KREONET-S: First production SD-WAN services for KREONET users**
 - Deterministic network performance and QoS guarantees for up to 100Gbps data transfer
 - User-oriented dynamic & flexible networks for time-to-research & time-to-collaboration
 - Very reliable and security-guaranteed networks for global collaborative researches
- **International and Domestic Deployment of KREONET-S Infrastructure on KREONET**
 - 5-Node ONOS Cluster: Open Source based Distributed Control Platform
 - Domestic Network Centers: Daejeon, Seoul, Busan
 - International Network Center: Chicago, IL, collocated at StarLight Facility



Virtual Dedicate Network Applications (VDN) Development

- Virtual Private & Bandwidth-guaranteed Networks (1Gbps – 100Gbps)
- Exclusive Data Transmission on Isolated VDN Environments
- Reactive Forwarding Network and Application/Configurations Recovery
- User Group-oriented Network Visibility : VDN/E2E Topology and Operational Attributes
- User Authentication and Authorization based on Different User Types (Super/Root/General)
- GUI/CLI/REST APIs for VDN Creation, Update, and Deletion w/ Information Retrieval



Architecture and Functionalities of VDN/UoV System

