



Application Centric Network Orchestration Framework: "ODENOS"

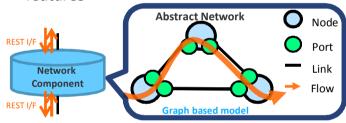
■ Background

- Increasing demand from OTT and service However, heterogeneous nature of WAN, providers to use telecom-carrier WAN with fine-grained control to meet their application needs
- SDN can help slice WAN and delegate its control to OTT and service providers
- such as multiple administrative domains, multiple technologies (packet and optical) and vendor dependencies, makes it really hard to apply SDN

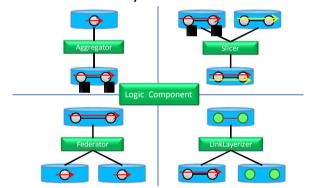
■ ODENOS: Object-oriented Network Orchestrator



- Network Component
 - Graph-based Model: Powerful Network Abstraction
 - Network is abstracted as a graph of node, port, link and flow.
 - Extensible to express the physical device features

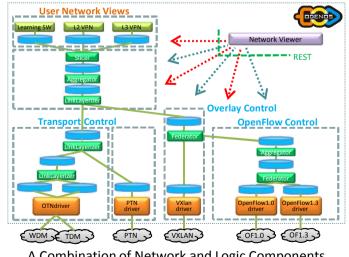


- Logic Component
- Work on abstract network objects to provide unified control over them
- E.g. Typical 4 logic: Aggregator, Federator Slicer and LinkLayerizer



■ Demo

- Multiple slices created on top of a multilayer, multi-domain and multi-vendor SDN
- Network viewer visualizes the correlation between layers
- Multi-view operation both of network users (e.g. OTT) and operator



A Combination of Network and Logic Components



Network Viewer for Operator

