



SDN/NFV Use Cases

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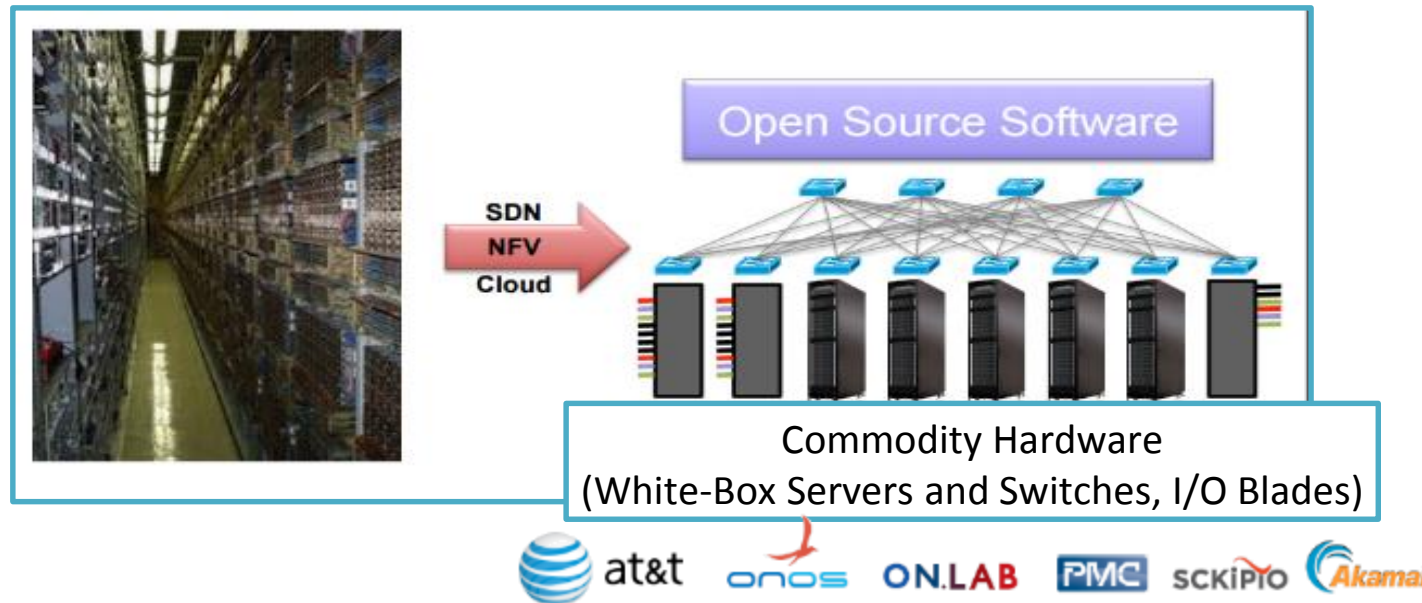
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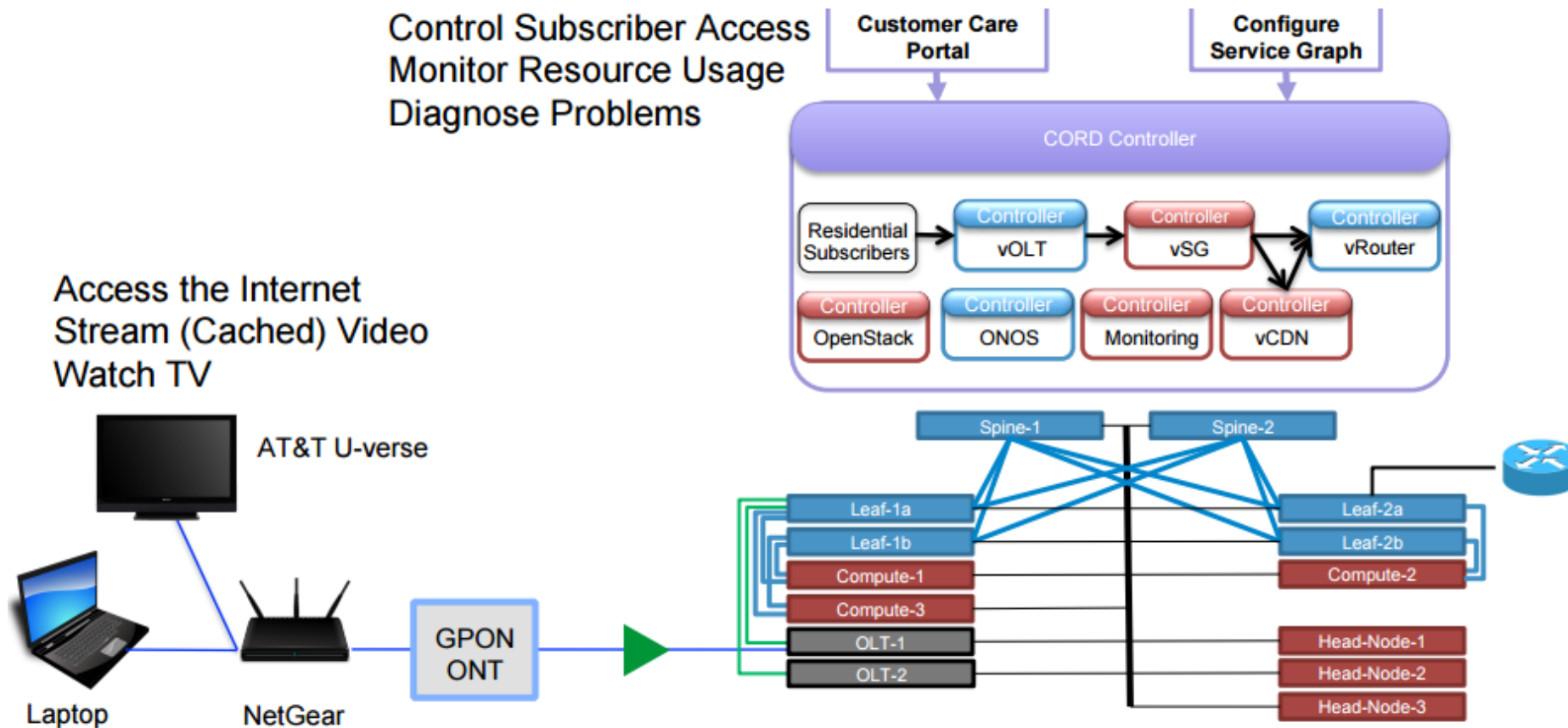
❖ ONOS CORD (Central Office Re-architected as a Datacenter)

- Key idea
 - To concentrate distributed central offices to a re-architected datacenter
- Goal
 - To construct cost-effective network by reducing CAPEX/OPEX
 - Fast & flexible service provisioning
- Building blocks
 - Commodity hardware
 - ONOS, OpenStack, XOS, vOLT, vSG, vRouter, vG.Fast, ...



❖ ONOS CORD (Central Office Re-architected as a Datacenter)

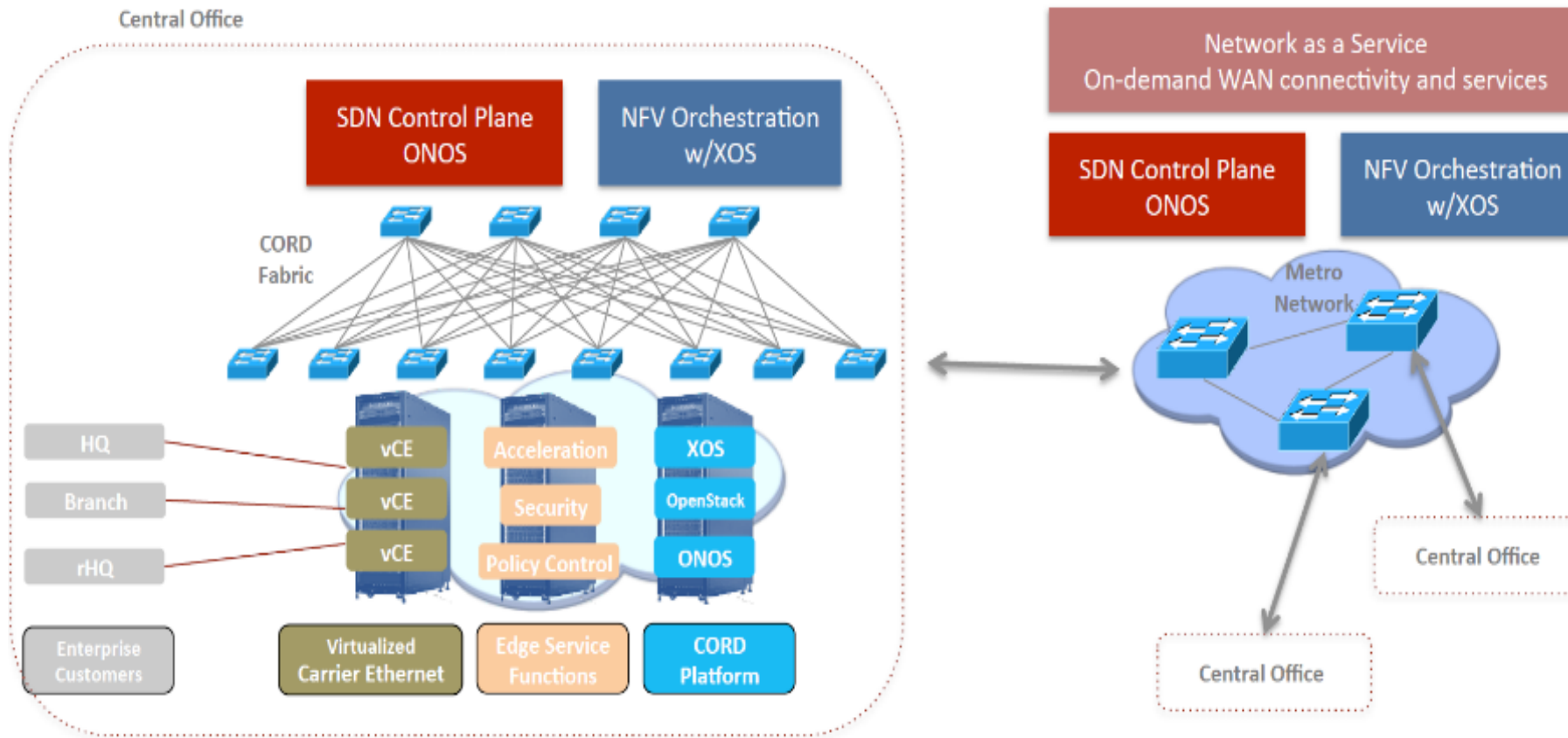
- R-CORD: Residential CORD



Source: <http://opencord.org>

❖ ONOS CORD (Central Office Re-architected as a Datacenter)

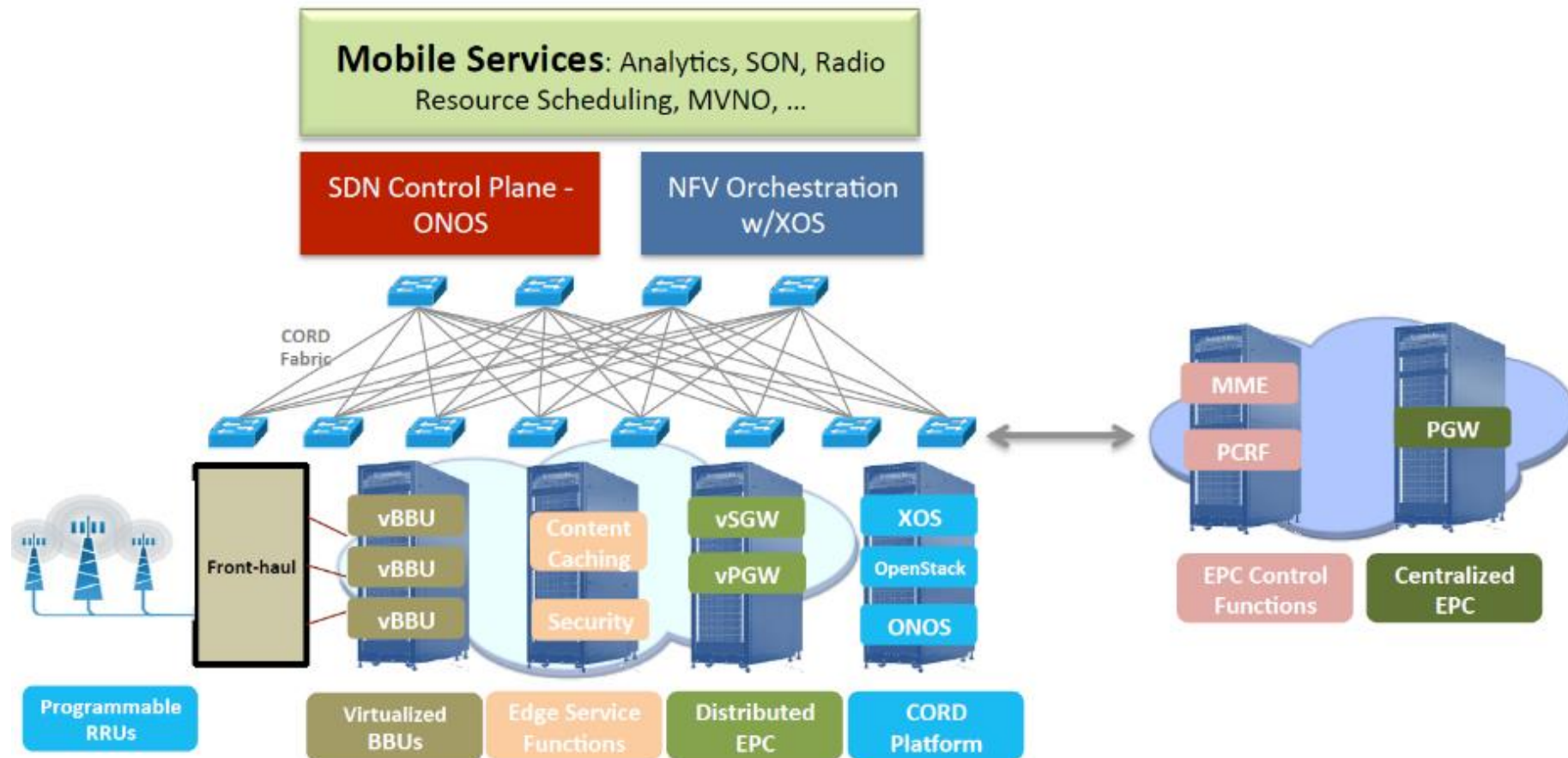
▪ E-CORD: Enterprise CORD



Source: <http://opencord.org>

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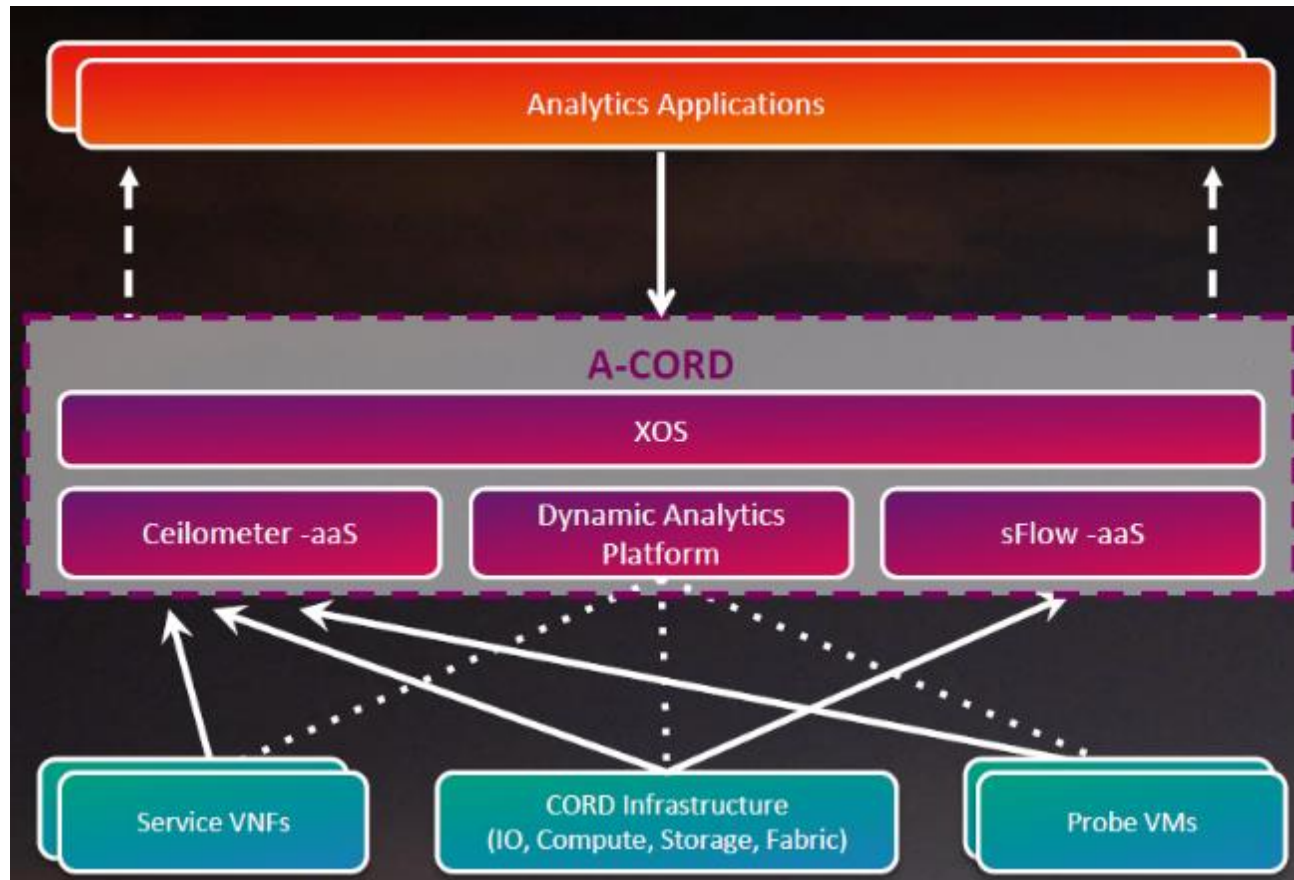
- M-CORD: **Mobile CORD**



Source: <http://opencord.org>

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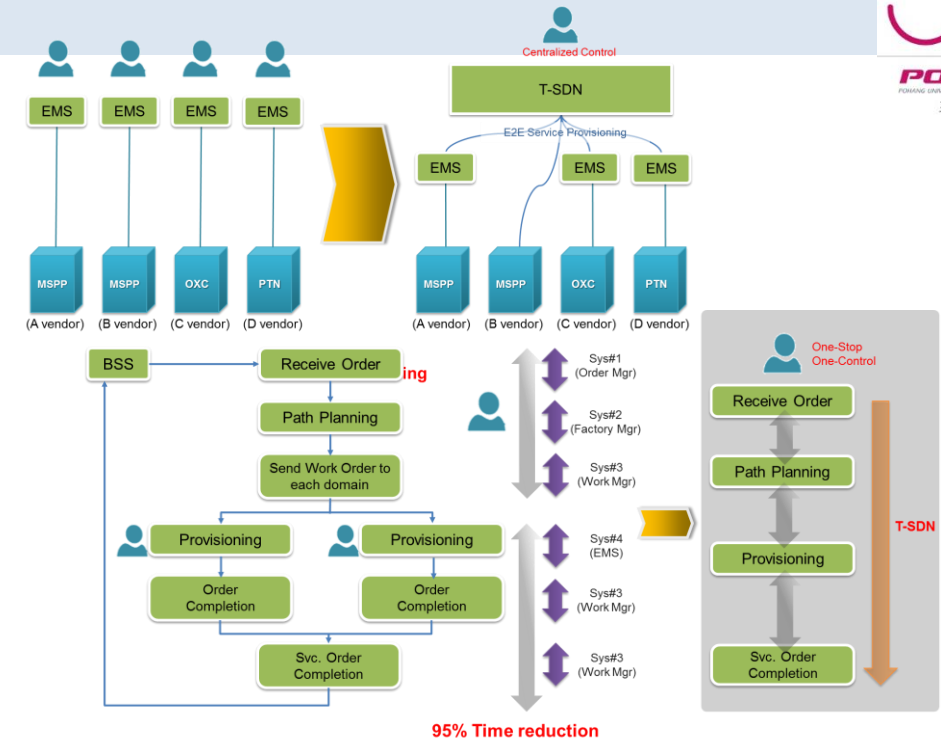
▪ A-CORD: Analytics CORD



Source: <http://opencord.org>

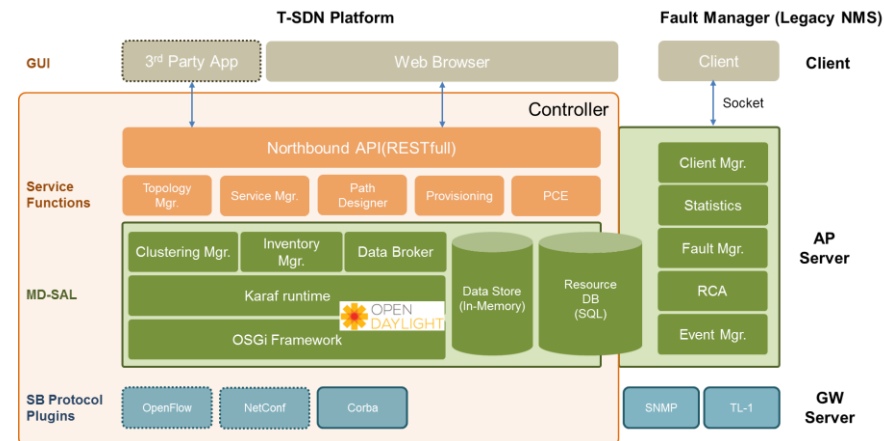
❖ Transport SDN – KT

- **[Challenge 1]** Complex transport network environment having multi-vendor/domain/layer devices
- **[Solution 1]** Centralize device control and PCE over multi-vendor devices
- **[Challenge 2]** OPEX increase by segmented operations
- **[Solution 2]** Simplify and automate provisioning processes



❖ KT's T-SDN Platform

- Adopt OpenDaylight SDN controller
- Integrated w/ legacy transport NMS
- Yang-model-based in-memory data store for fast path computation



Source: "Carrier/WAN SDN: Commercially Deployed Transport SDN Platform in Action", KT