



CORD COSMOS

VS

COSMOS

Trellis SONA

신상호

SKT NIC 기술원, ONOS Amassador


@ ONOS/CORD 개발자 미팅

'16. 10. 25


SK telecom




CORD: Central Office Re-architected as Datacenter



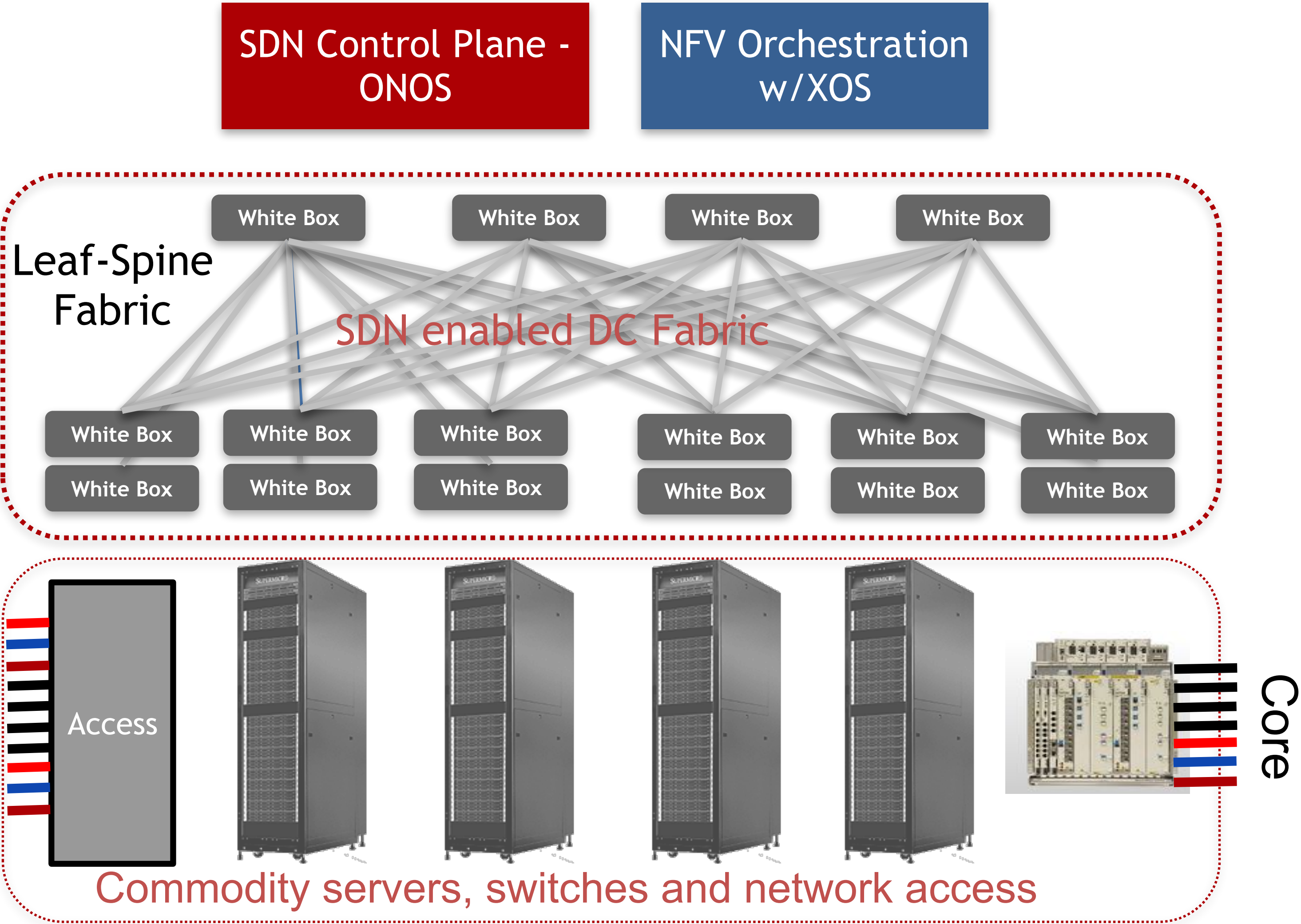
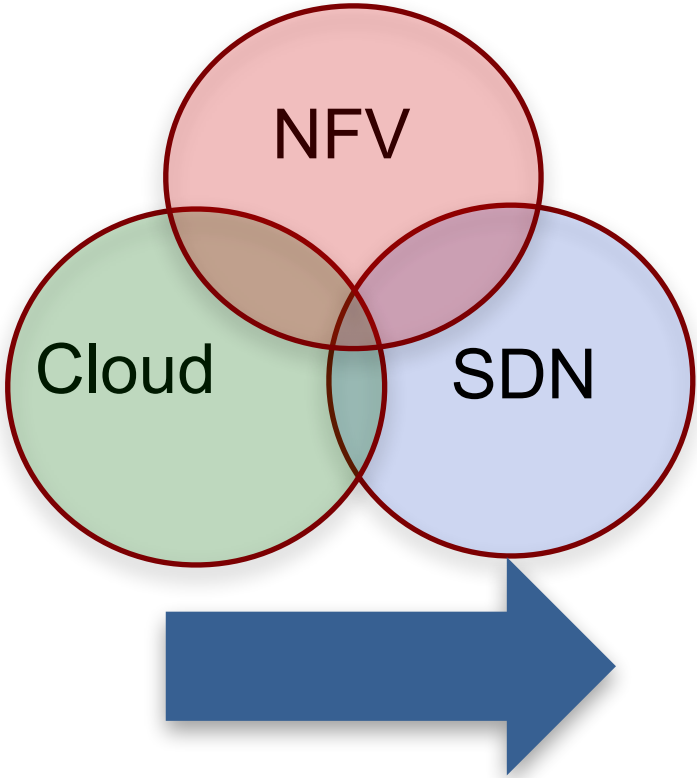
Large number of COs



Evolved over 40-50 years

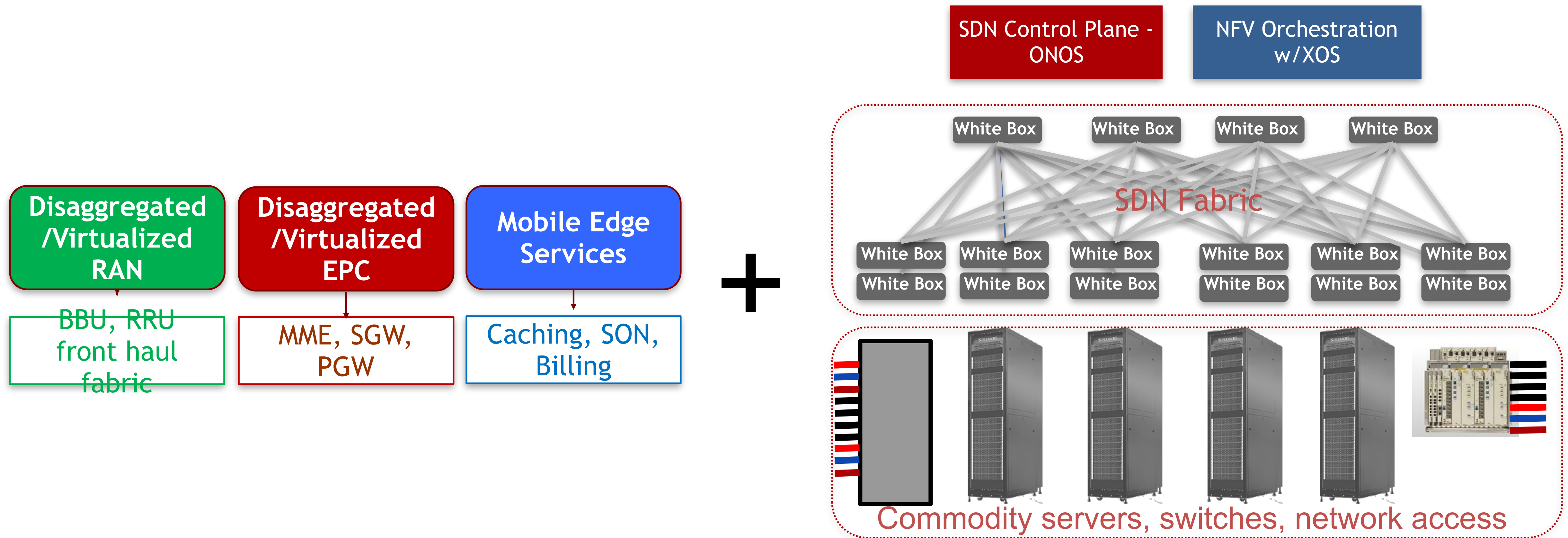


300+ Types of equipment
Huge source of CAPEX/OPEX



Ref: CORD official introduction slides

M-CORD = Best of Mobile + CORD



Cloud-Agile
Service
Customization

Dynamic radio
resource
optimization

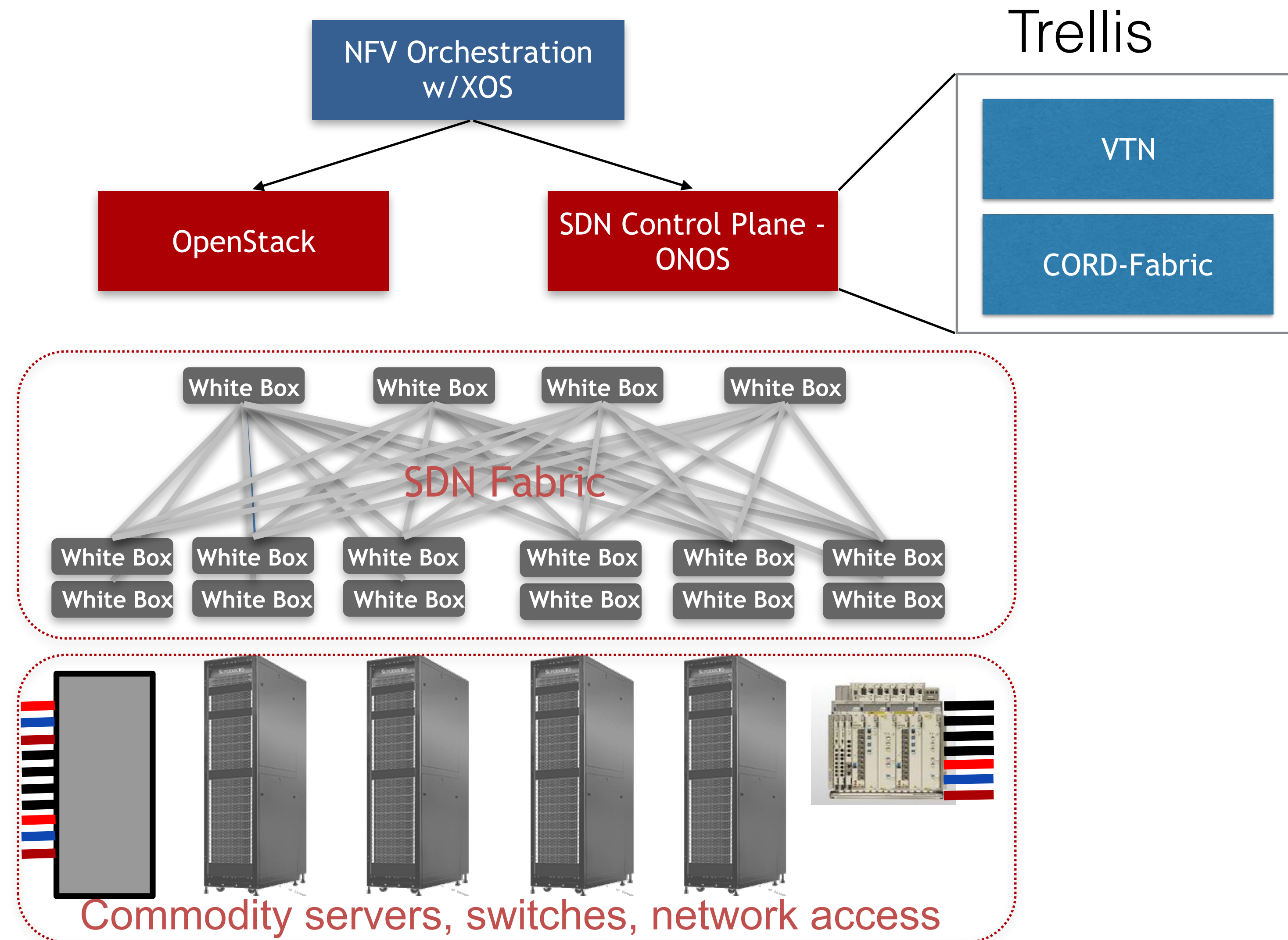
Open
Control
Interfaces

Network
Slicing

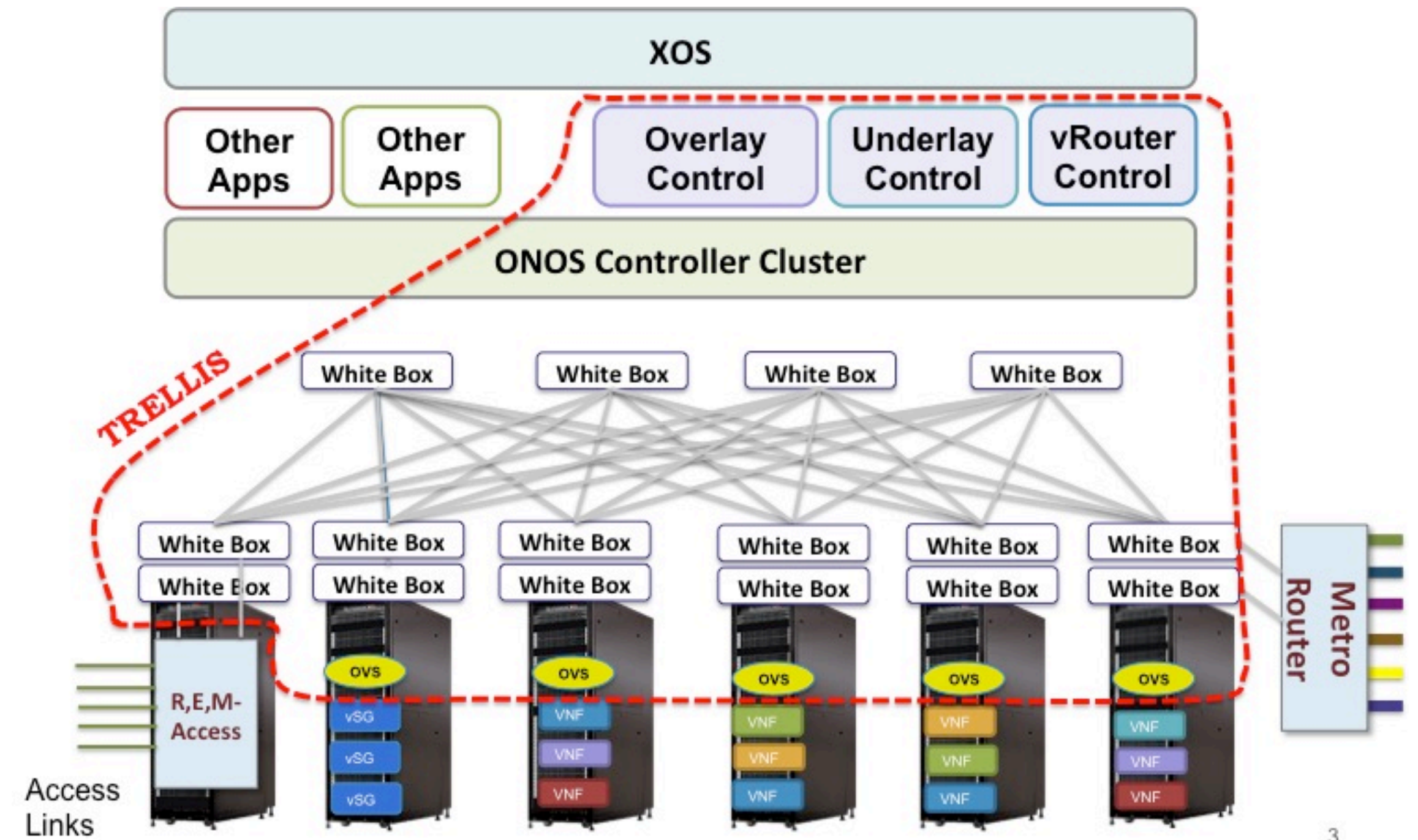
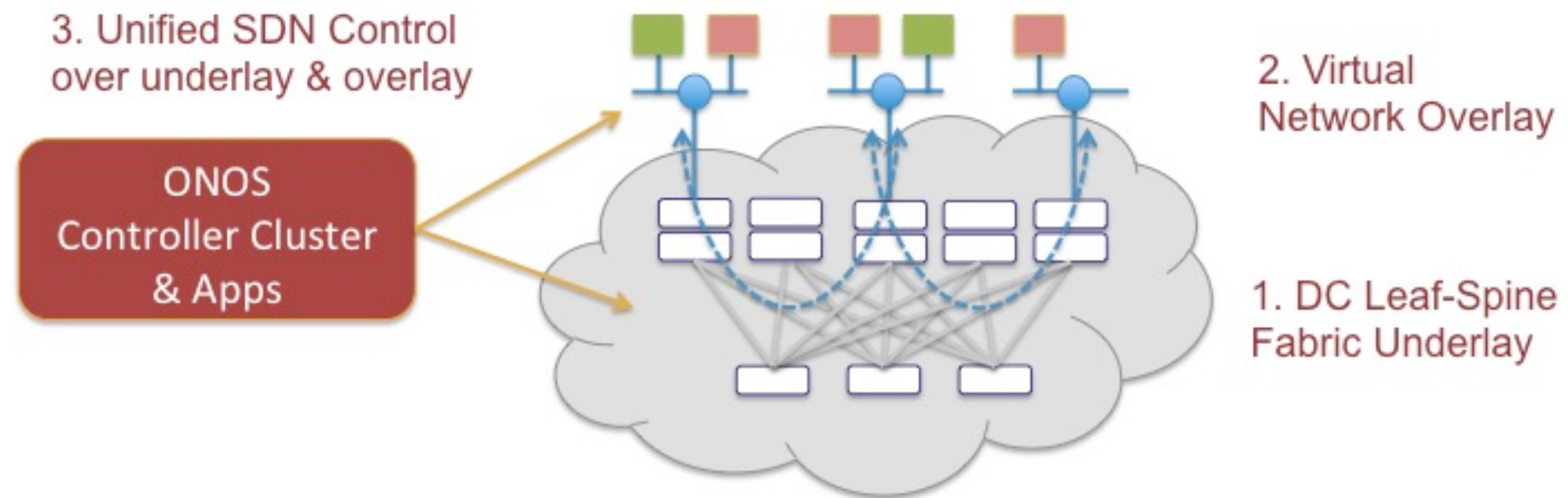
Programmable
Data Plane

Deep
Observability

CORD SW & HW Infra

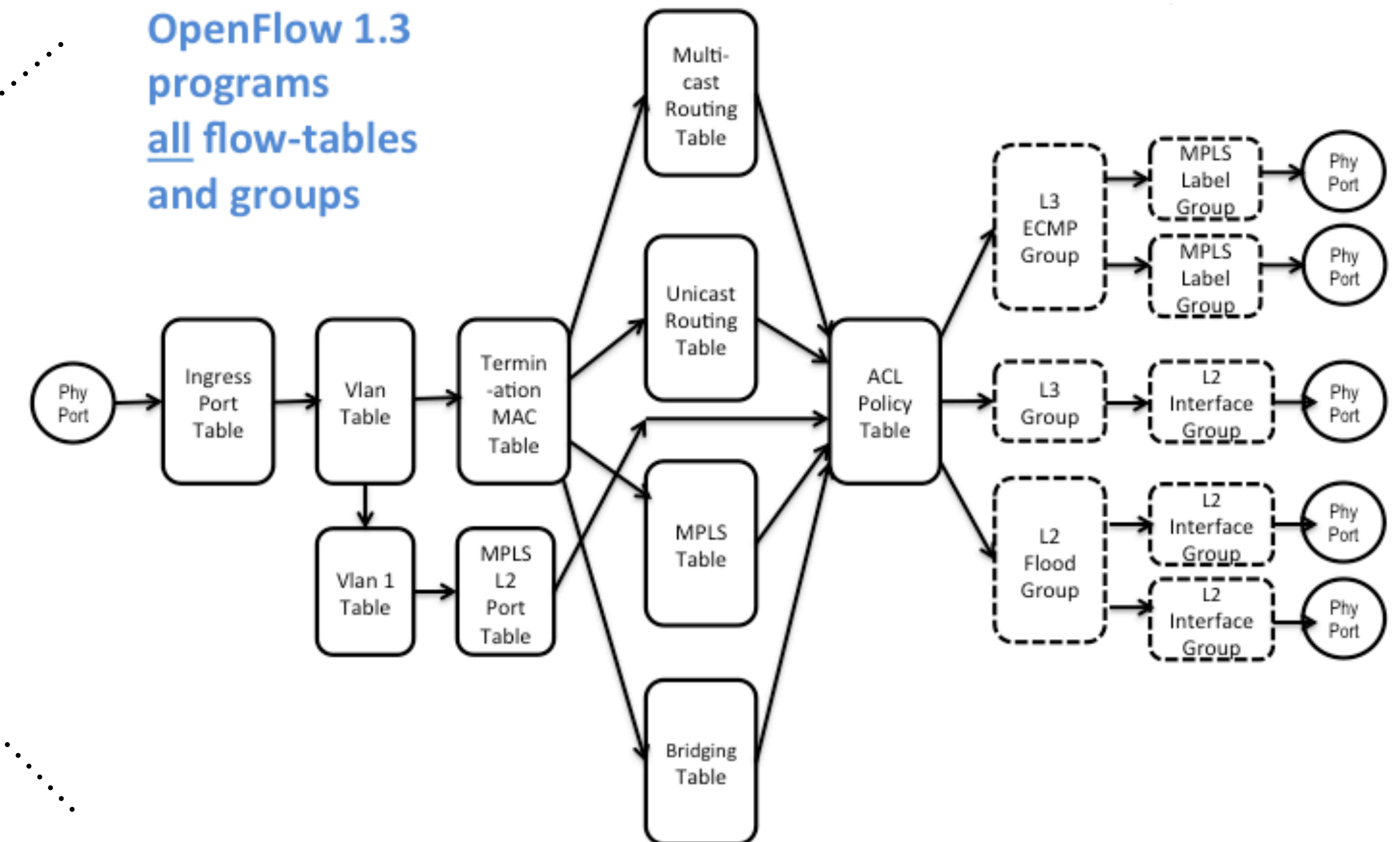
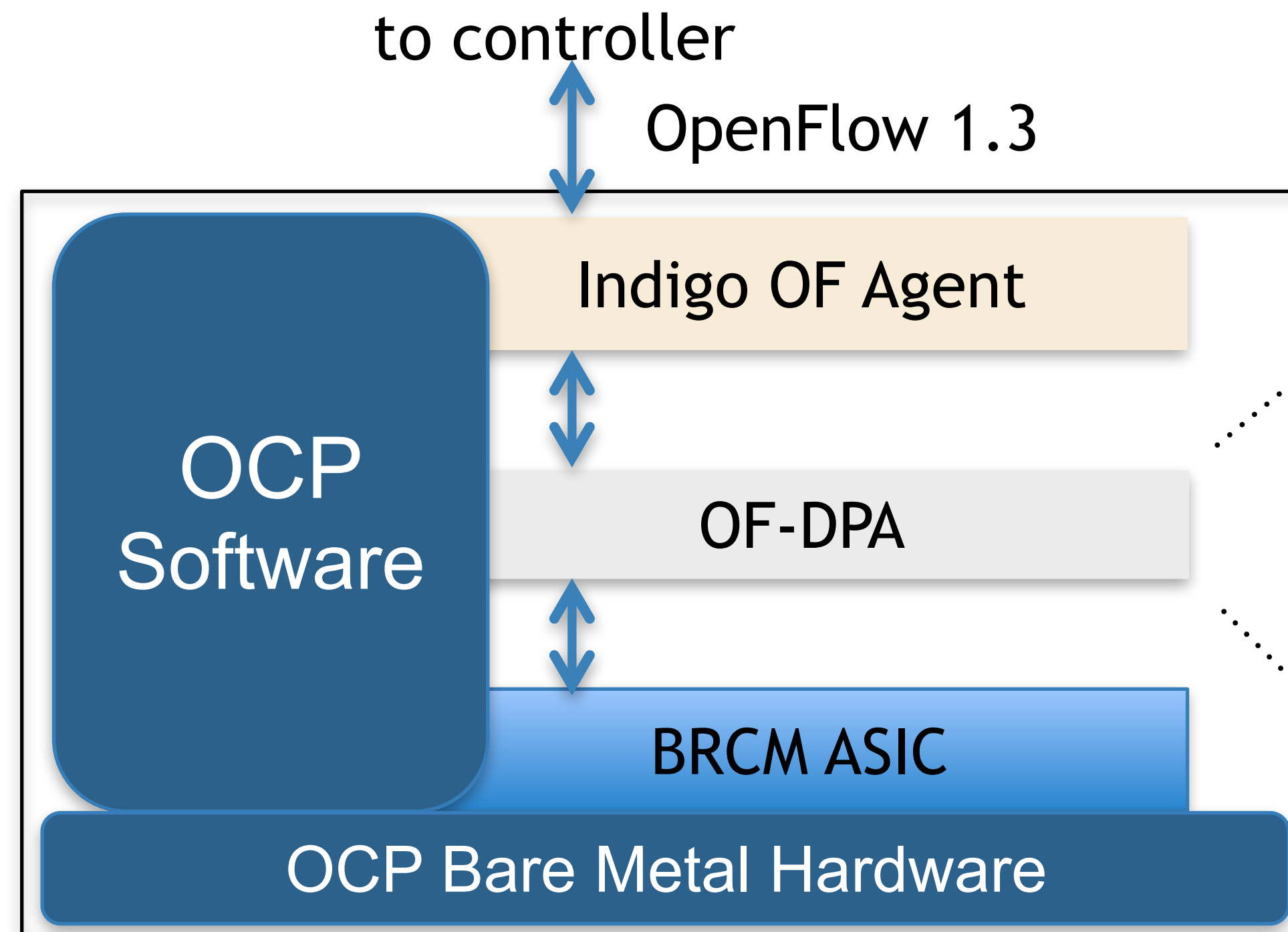


Trellis



Underlay (CORD-Fabric)

Leaf/Spine Switch Software Stack



OCP: Open Compute Project

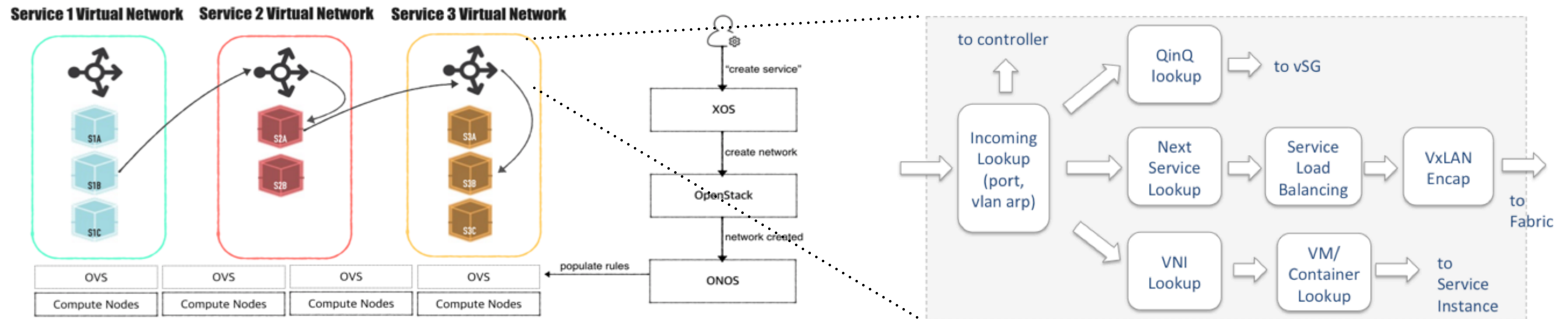
BRCM: Broadcom Merchant Silicon ASICs

OF-DPA: OpenFlow Datapath

Abstraction

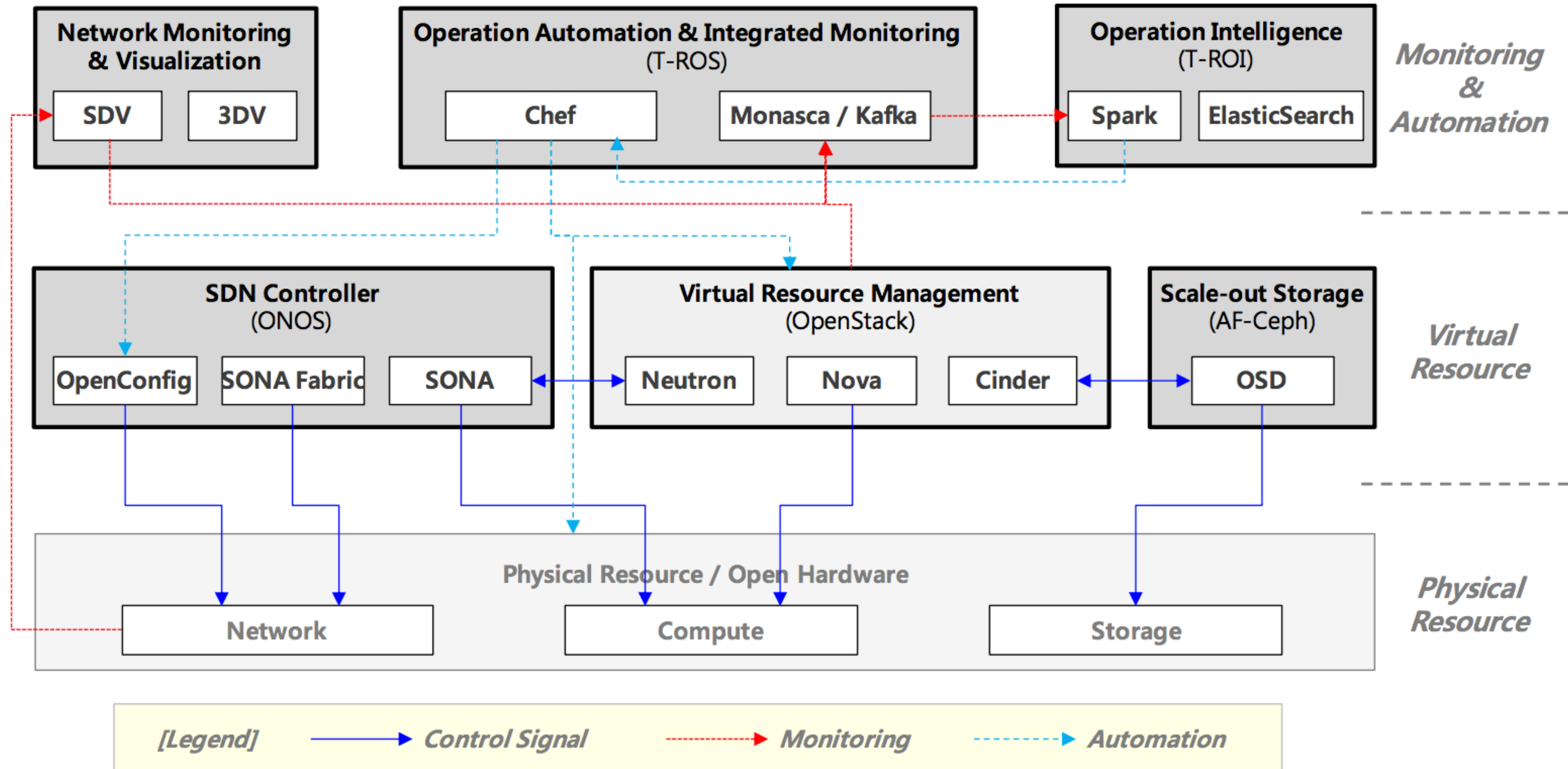
<https://wiki.opencord.org/display/CORD/Underlay+Fabric>

Overlay (VTN)

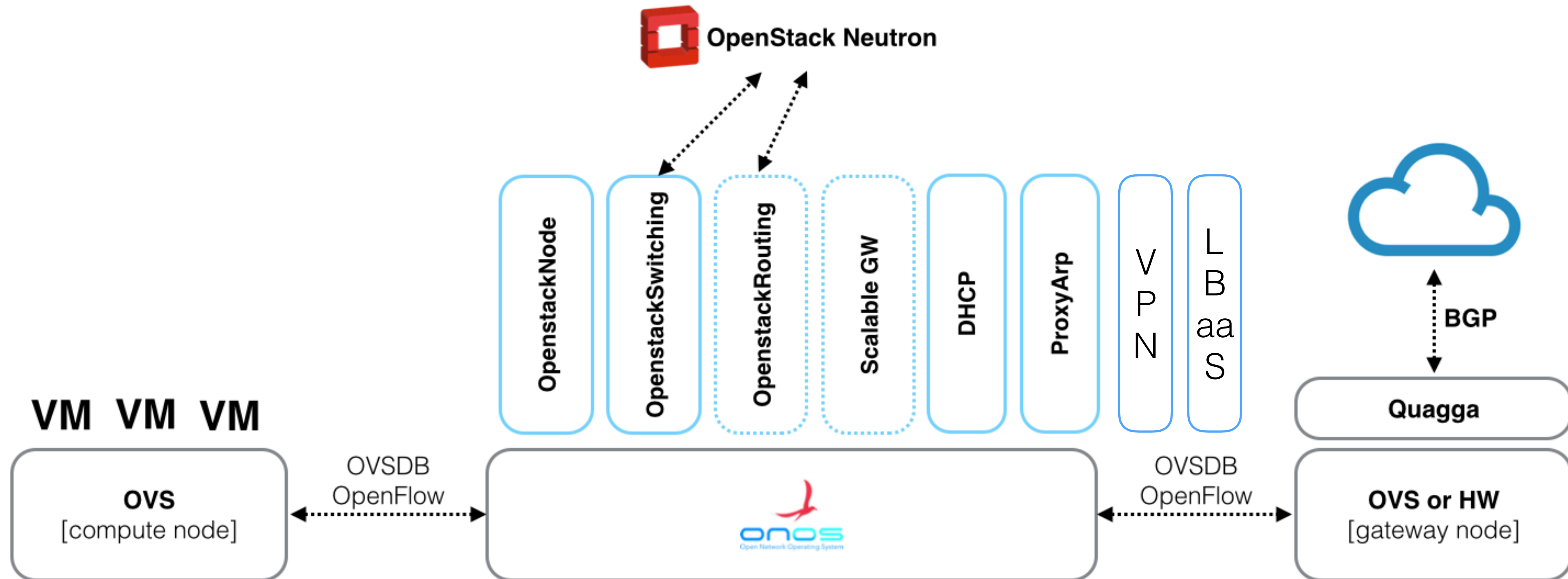


COSMOS

Composable Open Scalable Mobile-Oriented System

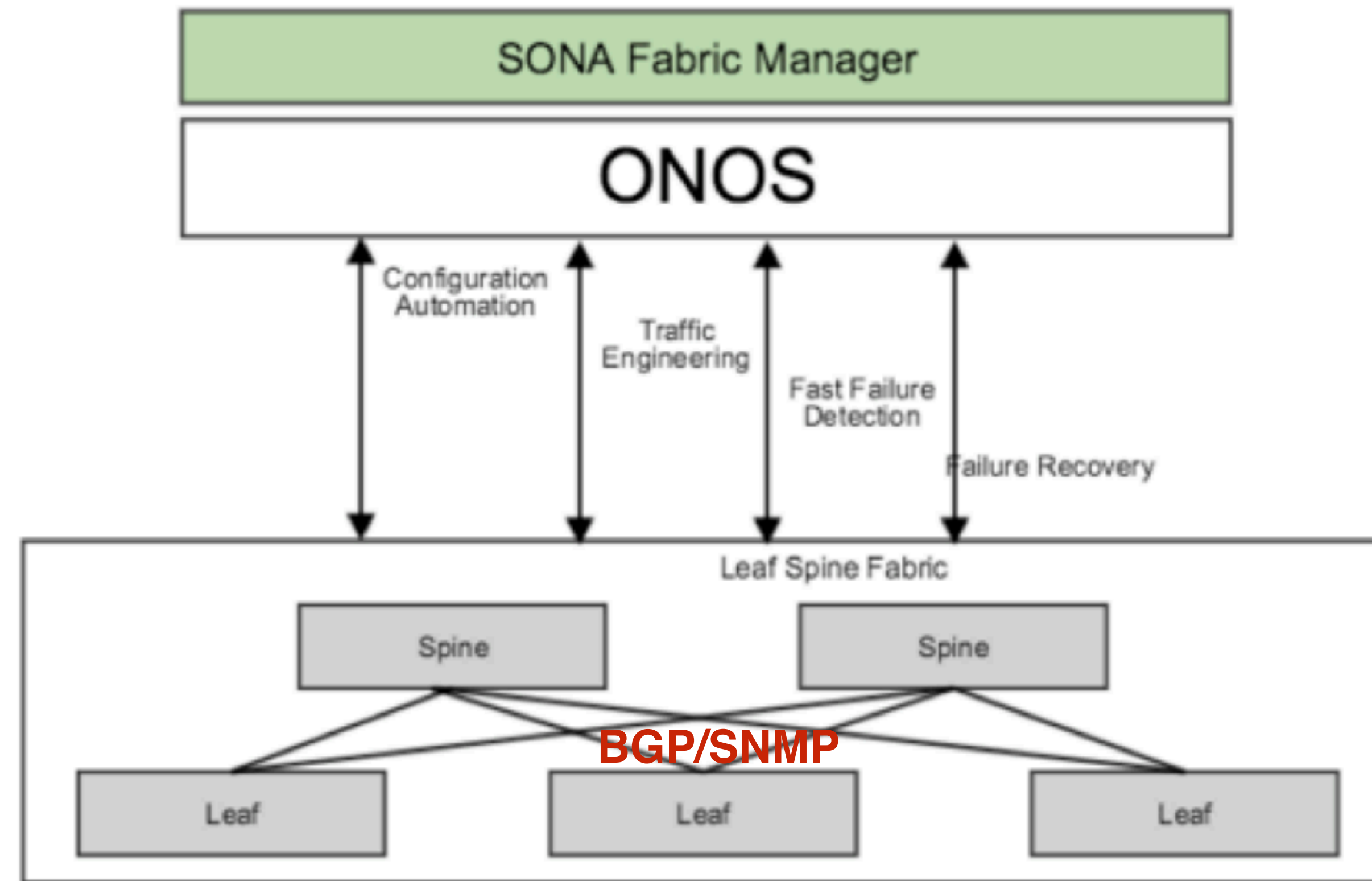


SONA



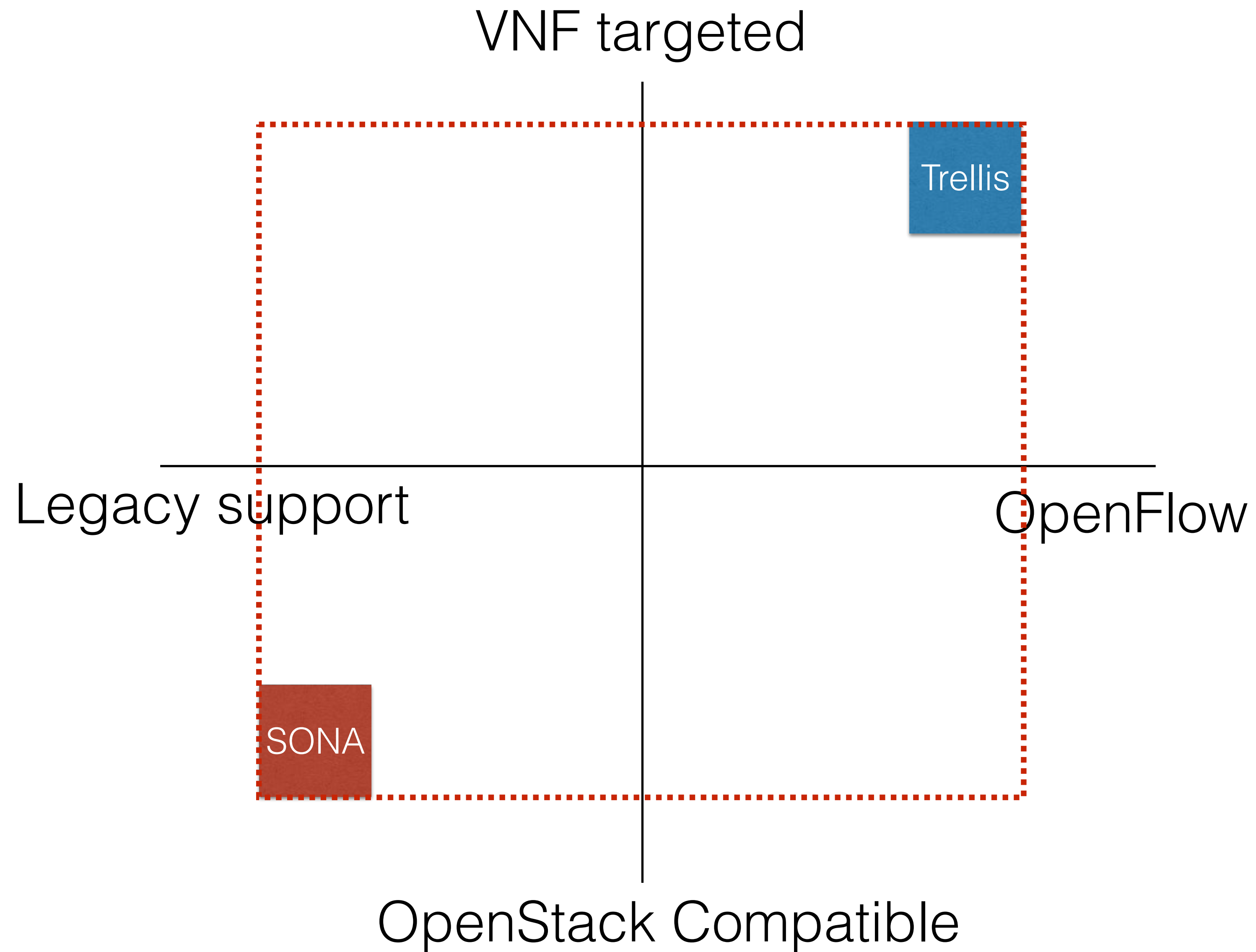
<https://wiki.onosproject.org/display/ONOS15/SONA+Architecture>

SONA Fabric



Ref: SONA Fabric Project Kickoff slides

Trellis vs SONA



CORD-Trellis vs COSMOS-SONA

CORD

COSMOS

Trellis

SONA

VTN

SONA

CORD-Fabric

SONA-Fabric

White Box

White Box

White Box

White Box

SDN Fabric

White Box

White Box

White Box

White Box

White Box

White Box

White Box

White Box

White Box

White Box

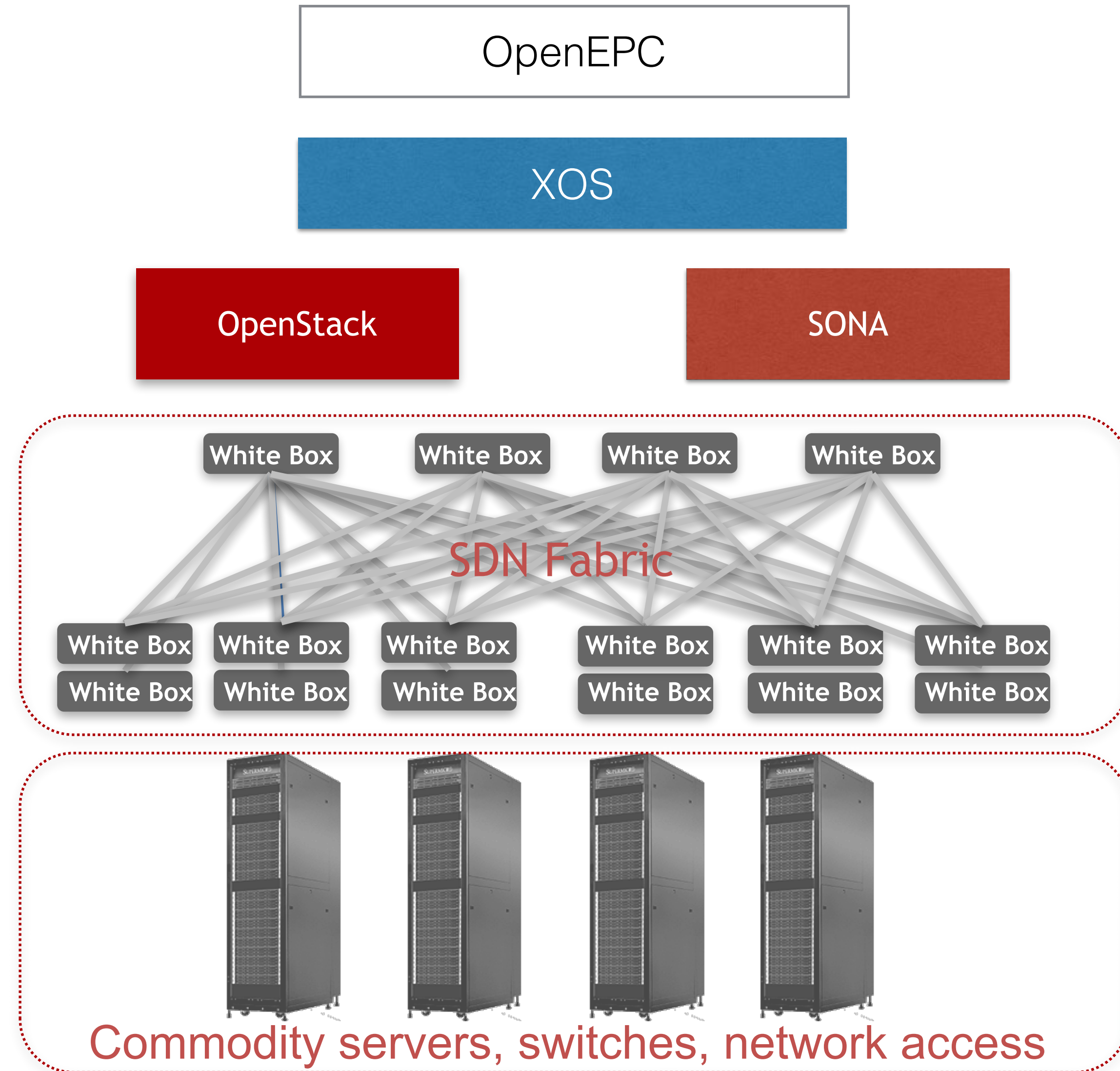
White Box

White Box



Commodity servers, switches, network access

M-CORD PoC



Thank you ...