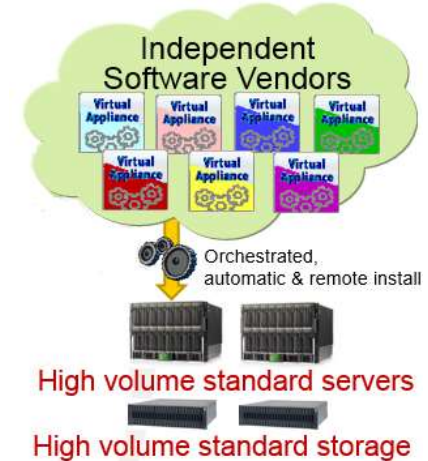# Anuta NCX - NFV Support

Why NFV (Network Functions Virtualization)

- Accelerated Time-to-Market

- Reductions in OpEX and CapEX

- Elasticity

- Resilience, speed and agility

- Applicable to any data plane packet processing and control plane function

- Standard virtualization technology and commodity hardware used

- Resource optimization

NFV Challenges

- Service Models
- Service Design

Service Definition

- Multi-vendor
- On-Demand
- Capacity and Network Awareness

Service Orchestration

- Scaling based on
  - Network
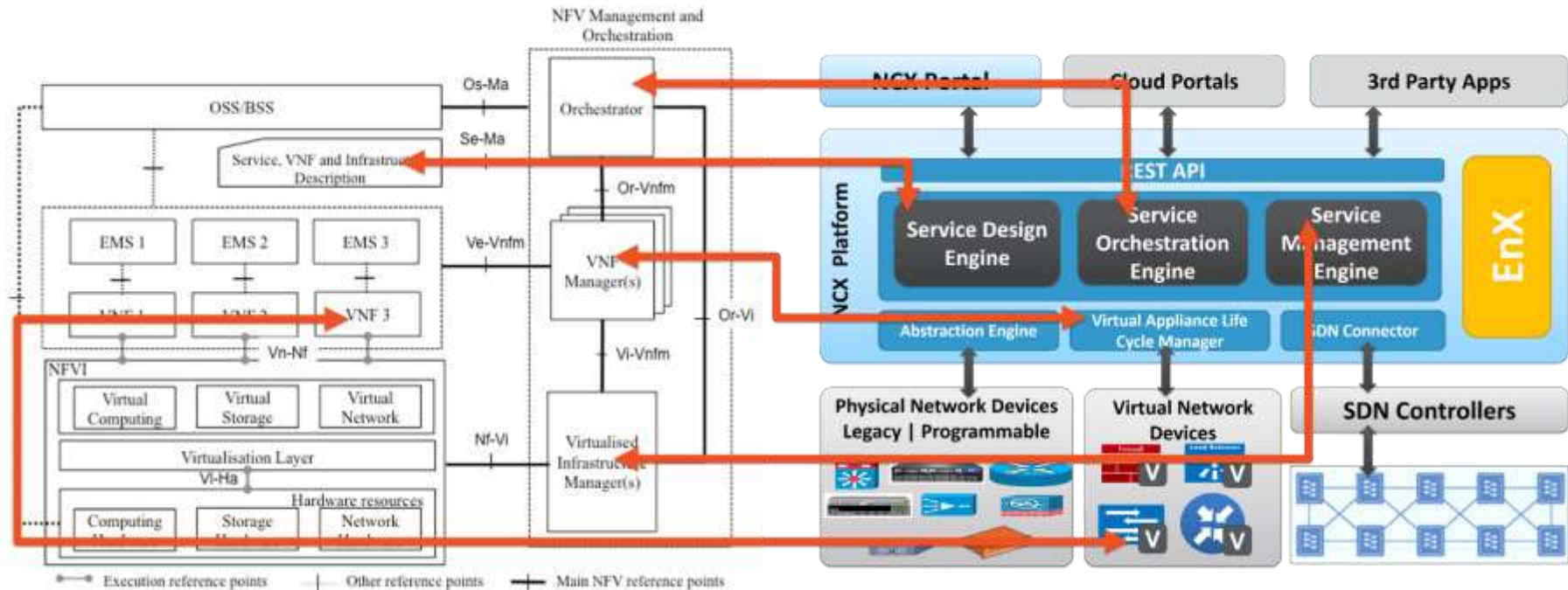 - Service
  - End-User action

Dynamic Loads

- Image Management
- License Management
- Placement
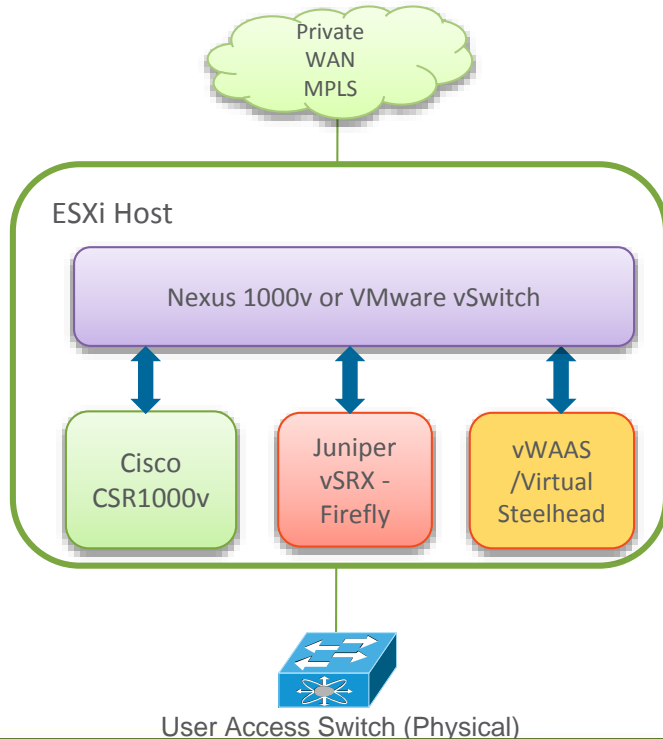- Hybrid Architectures

VNF Lifecycle Management
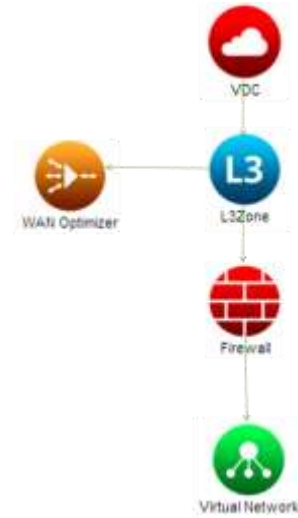
Anuta NFV Support

NCX Virtual Appliance Life Cycle Management

Virtual CPE

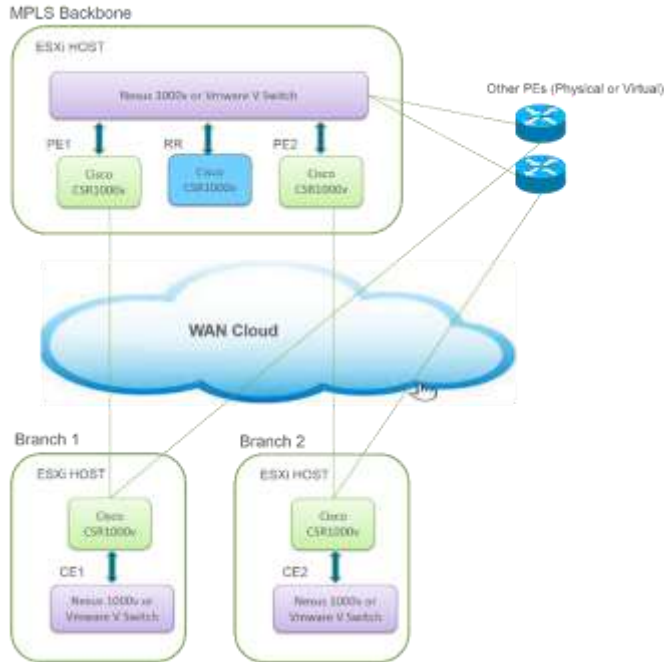| Physical Topology	Logical Topology	Use cases
		- Support for CPE Functions - L3 Termination - DMVPN, L3 VPN, FlexVPN - Zone based Firewall - Wan Optimization - Web Security - Vendors Supported - Cisco CSR 1000V - Juniper Firefly Perimeter, Firefly Host - Riverbed Virtual Steelhead - Checkpoint VSG

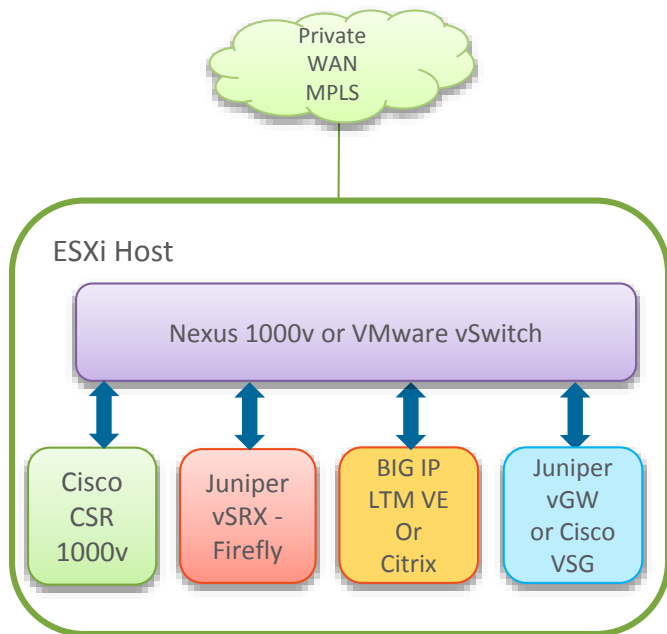# Virtual MPLS Backbone and Edge

Physical Topology	Logical Topology	Use cases
		• Support for Virtual • PEs • CEs • Route Reflectors • Vendors Supported • Cisco CSR 1000V

Virtual Data Center

Physical Topology	Logical Topology	Use cases

Use cases:

- Support for Virtual
  - Router
  - Firewall
  - Load Balancer
  - WAN optimization
  - Switch

- Vendors Supported
  - Cisco CSR 1000V
  - F5 LTM VE
  - F5 GTM VE
  - Citrix NetScaler
  - Radware ADC-VX

NCX Solution Benefits

- Orchestration across Physical and Virtual Appliances
- Virtual Appliance Life Cycle Management
- Orchestration across Branch, Campus, Data Center & Carrier Networks
- Multi-vendor VNF Support
- OPEX Reduction, Improved Customer Satisfaction
- Complete Analytics for the Network