

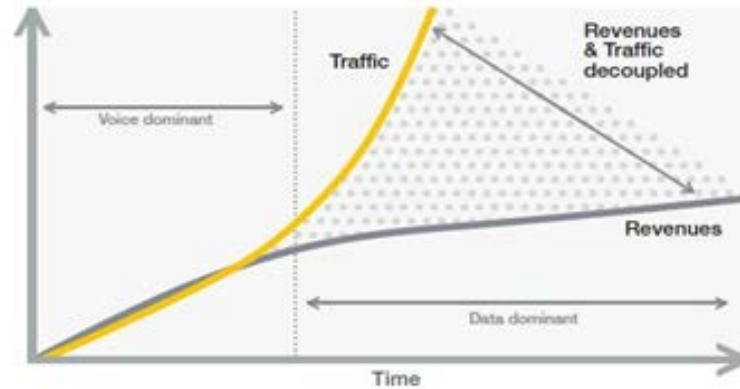


# IEEE Conference

*Test and Monitoring in Virtual Networks*

# Building the Network Cloud.....Drivers are clear

- **Reduce CapEx:**
- **Reduce OpEX:**
- **Deliver Agility and Flexibility:.**
- **Enable Innovation:**

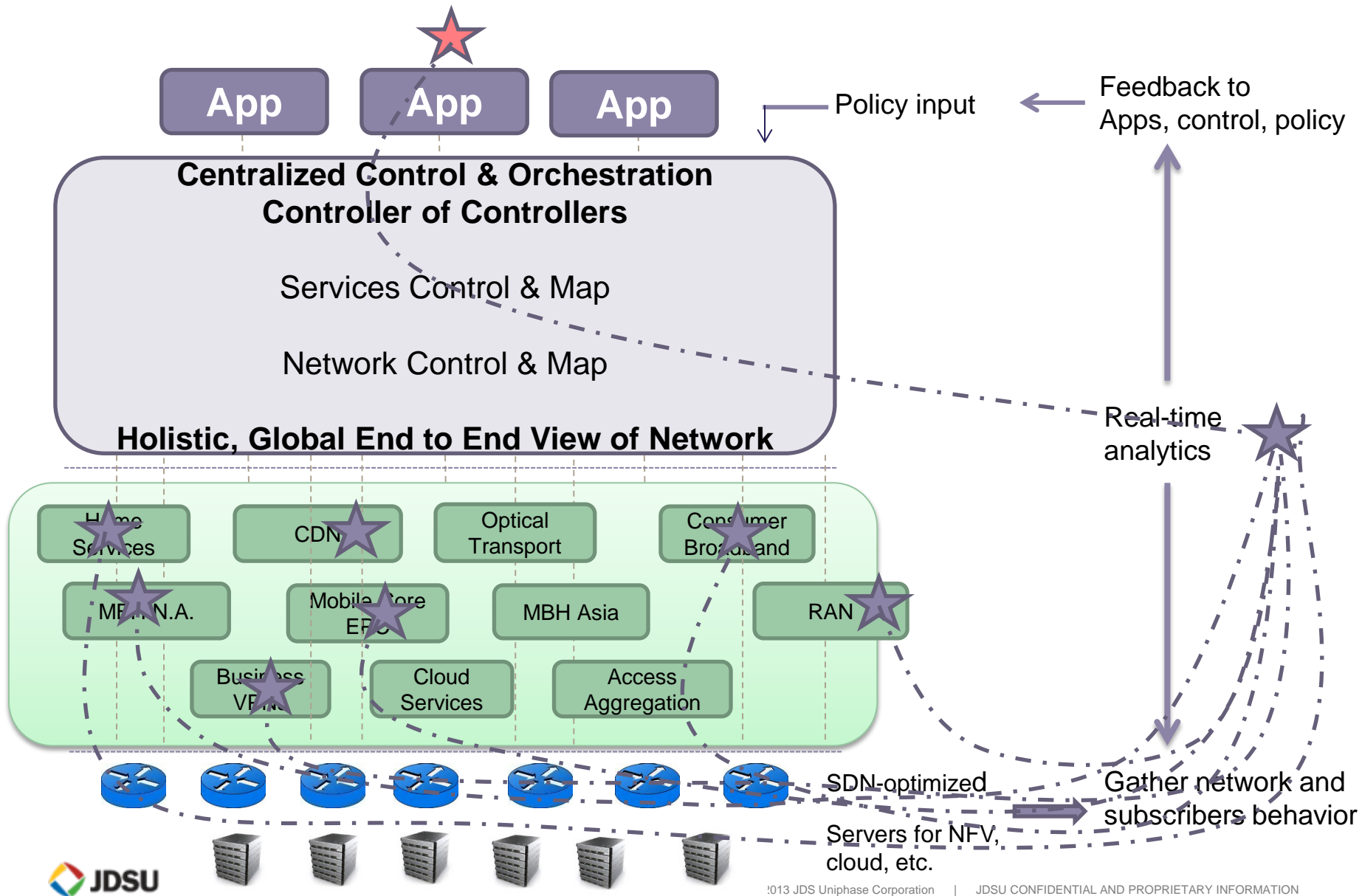


# A few Challenges...

- Evolving Technology
  - Network Orchestration
  - Standards development
  - OSS/BSS Catalog Integration
- Infrastructure Reliability and Performance.
  - Noisy Neighbors
  - Infrastructure Performance
  - SW acceleration adoption



# Infonetics SDN/NFV/NV Architectural Road Map – 2020....and ....



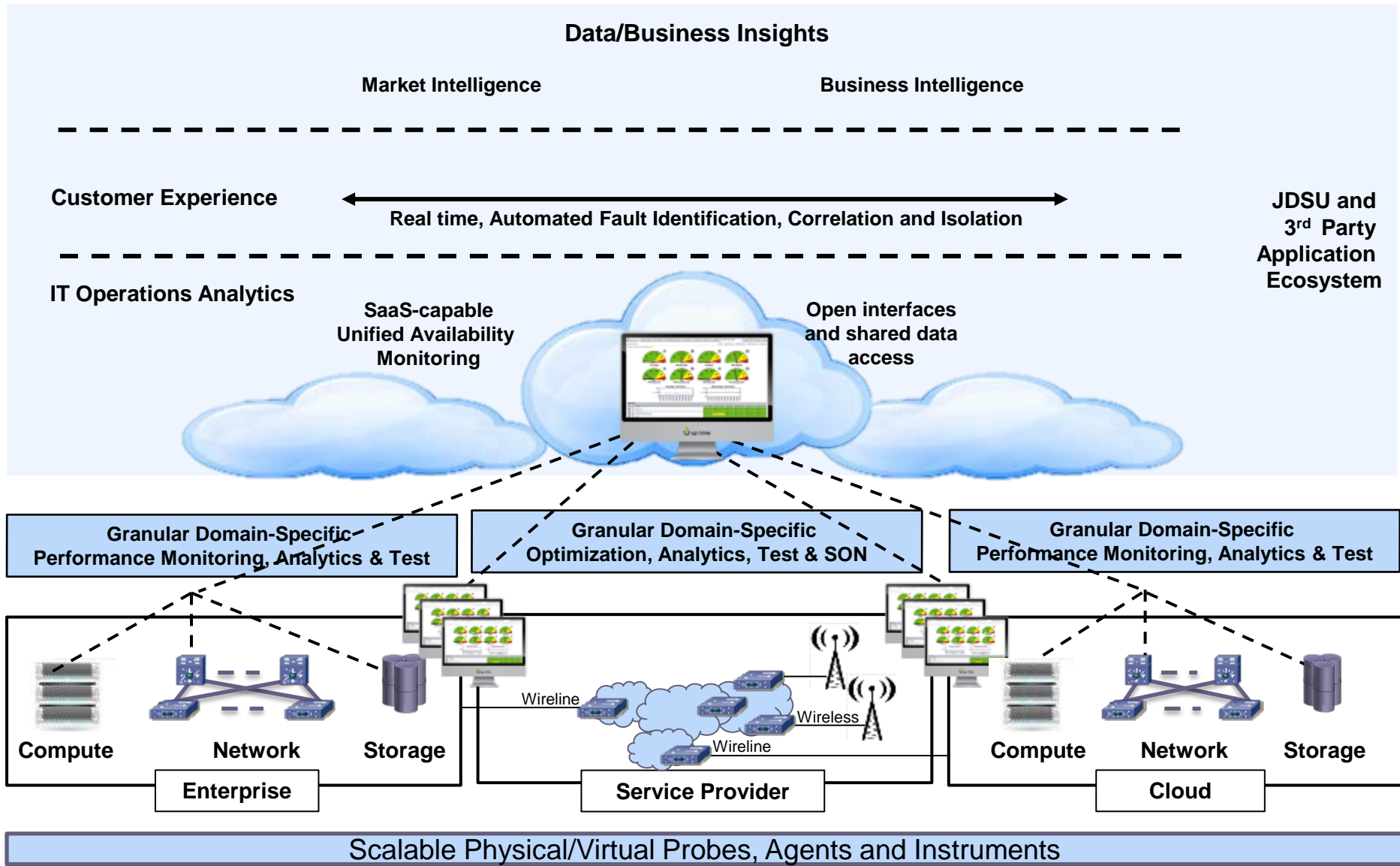
# Test and Assurance MUST evolve in a Virtualized, Software Defined World

- Providing real time, end-to-end Network, Service, and Application Assurance.
- SW-Agent Based.....
  - Client agents
  - NE-based Test Agents
  - Passive Agents
- Delivering new services with new business models
- Open and tightly coupled with controllers
- Supporting virtualized and non-virtualized environments



***From “reactive monitoring” to “Proactive Test, Assurance and Analytics”***

# End-to-End Vision



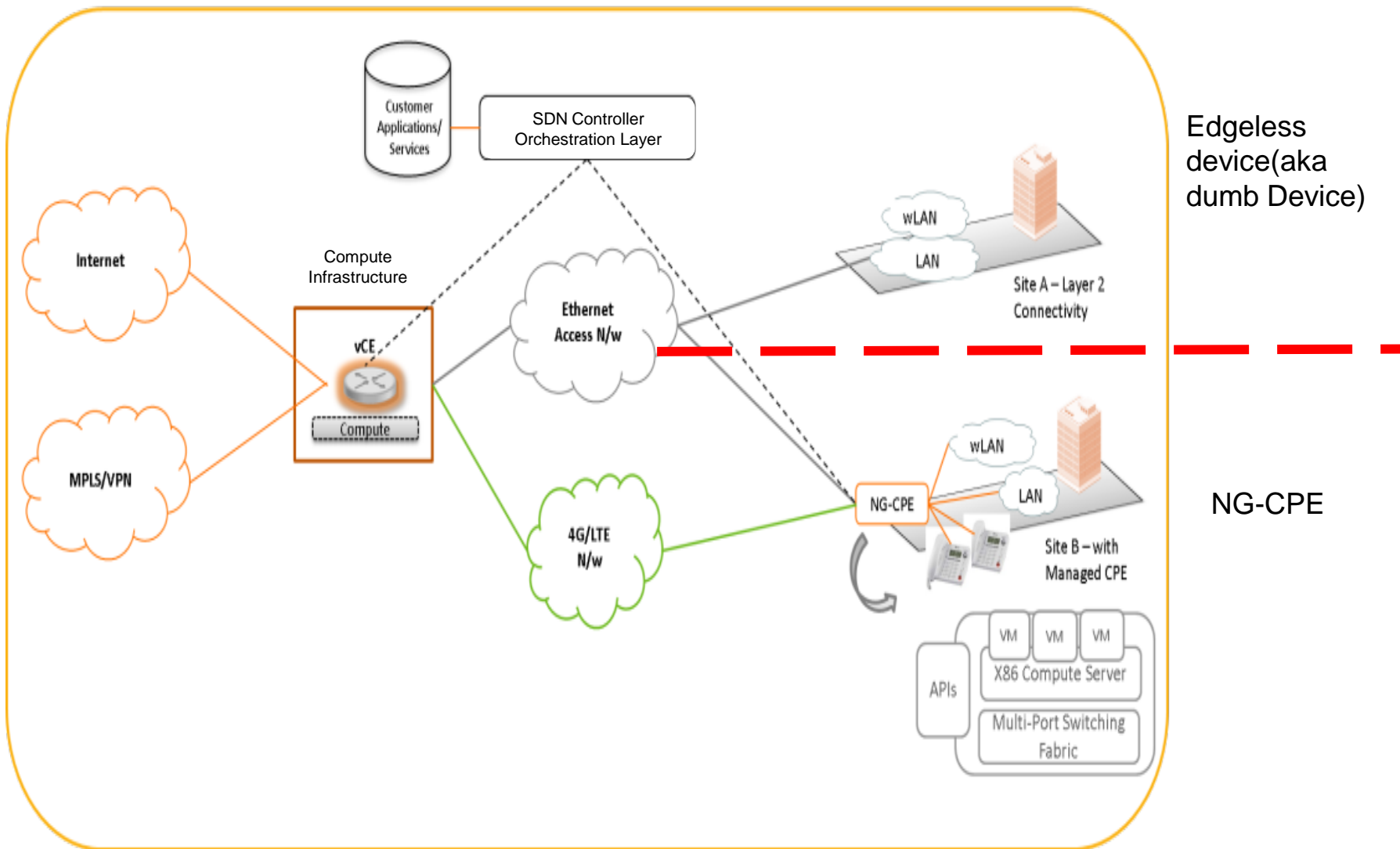


## **Use Case – Examples**

*Service Chain Testing, Monitoring, and Troubleshooting*

# Example of Two Architectures – Same purpose

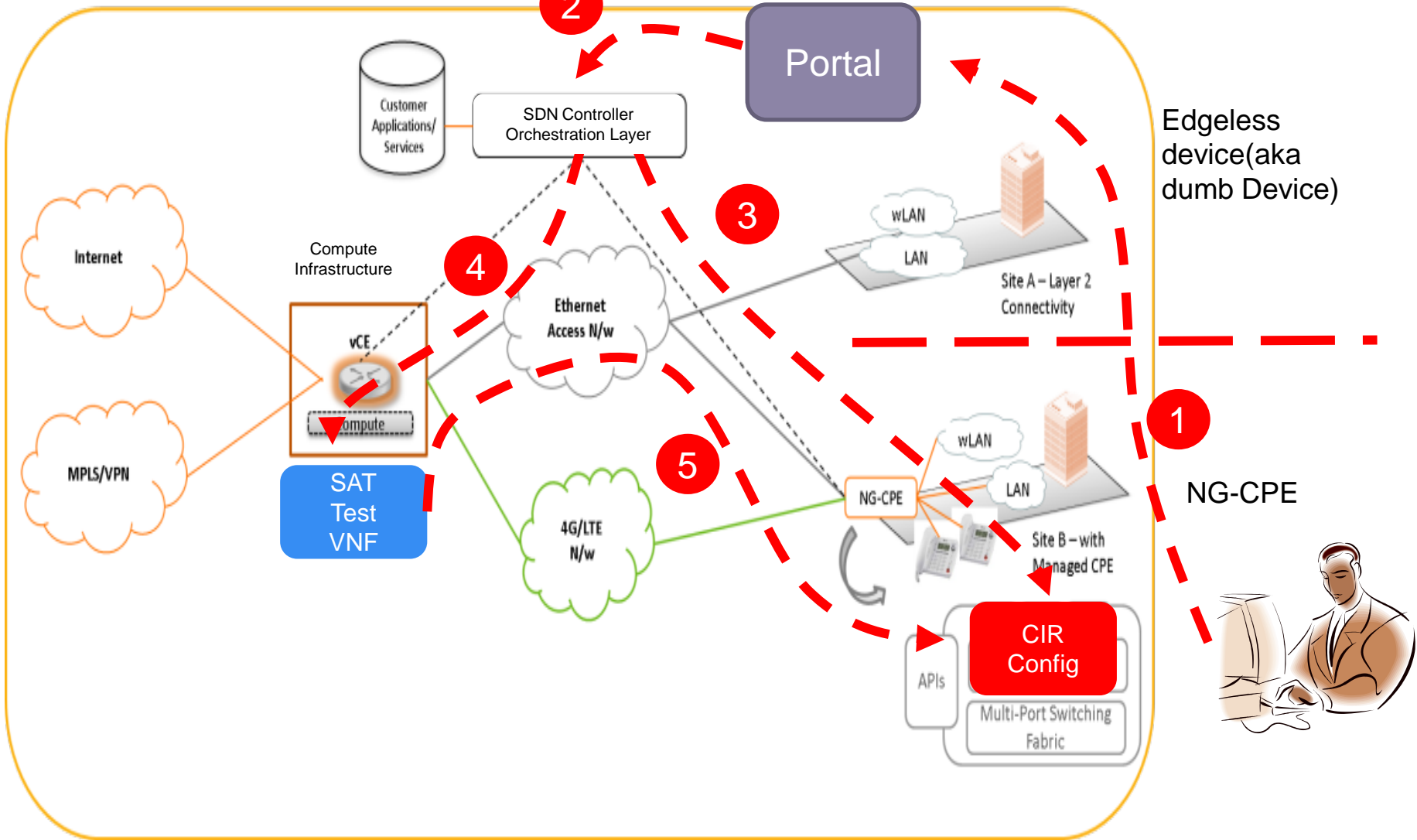
vCE and Managed NG-CPE Solution



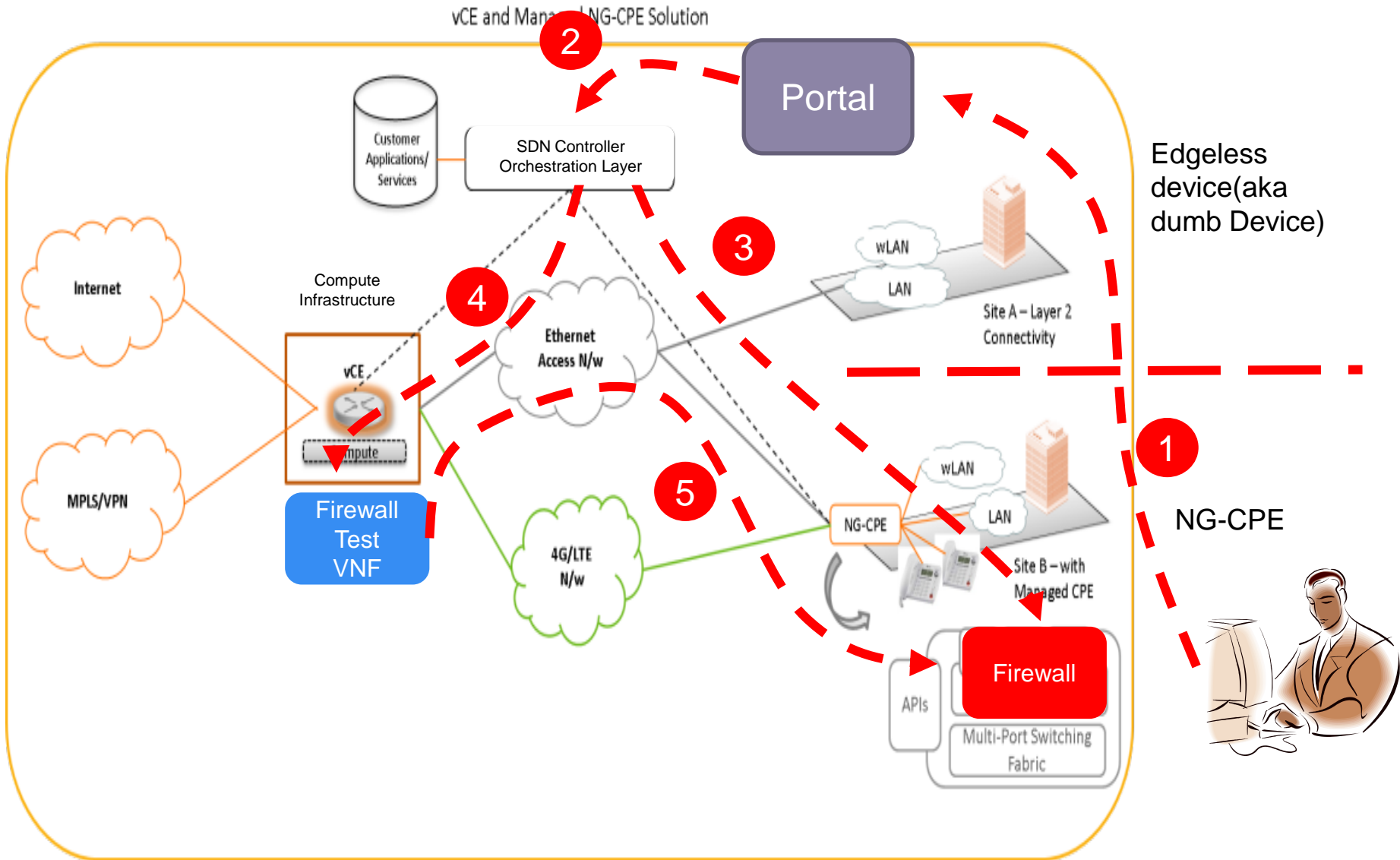


# Bandwidth on Demand for NG-CPE

vCE and Managed NG-CPE Solution

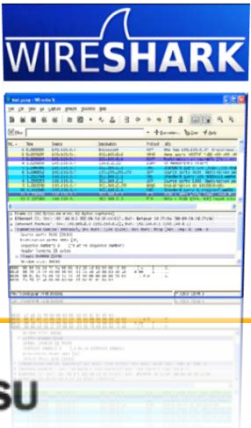
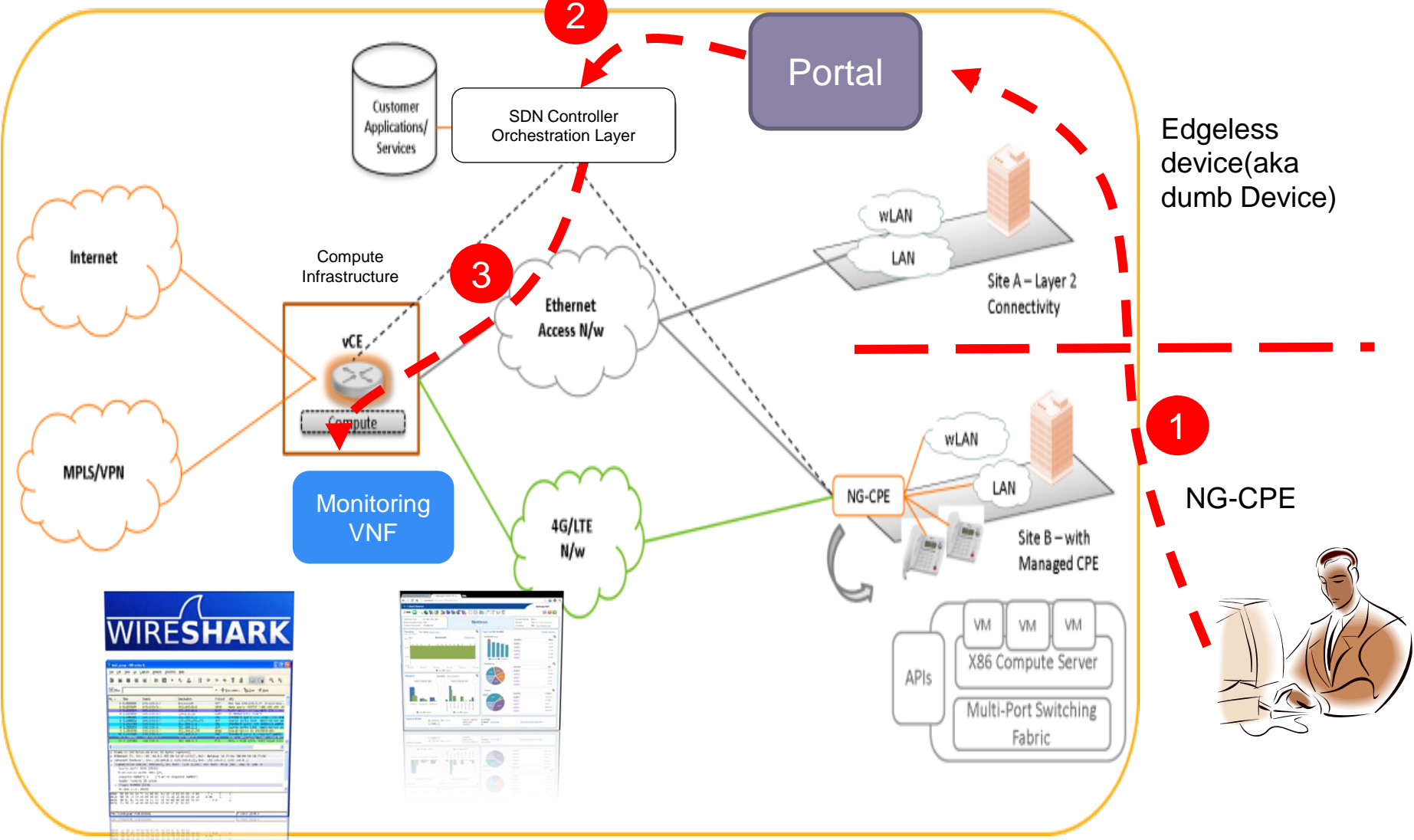


# Firewall for NG-CPE

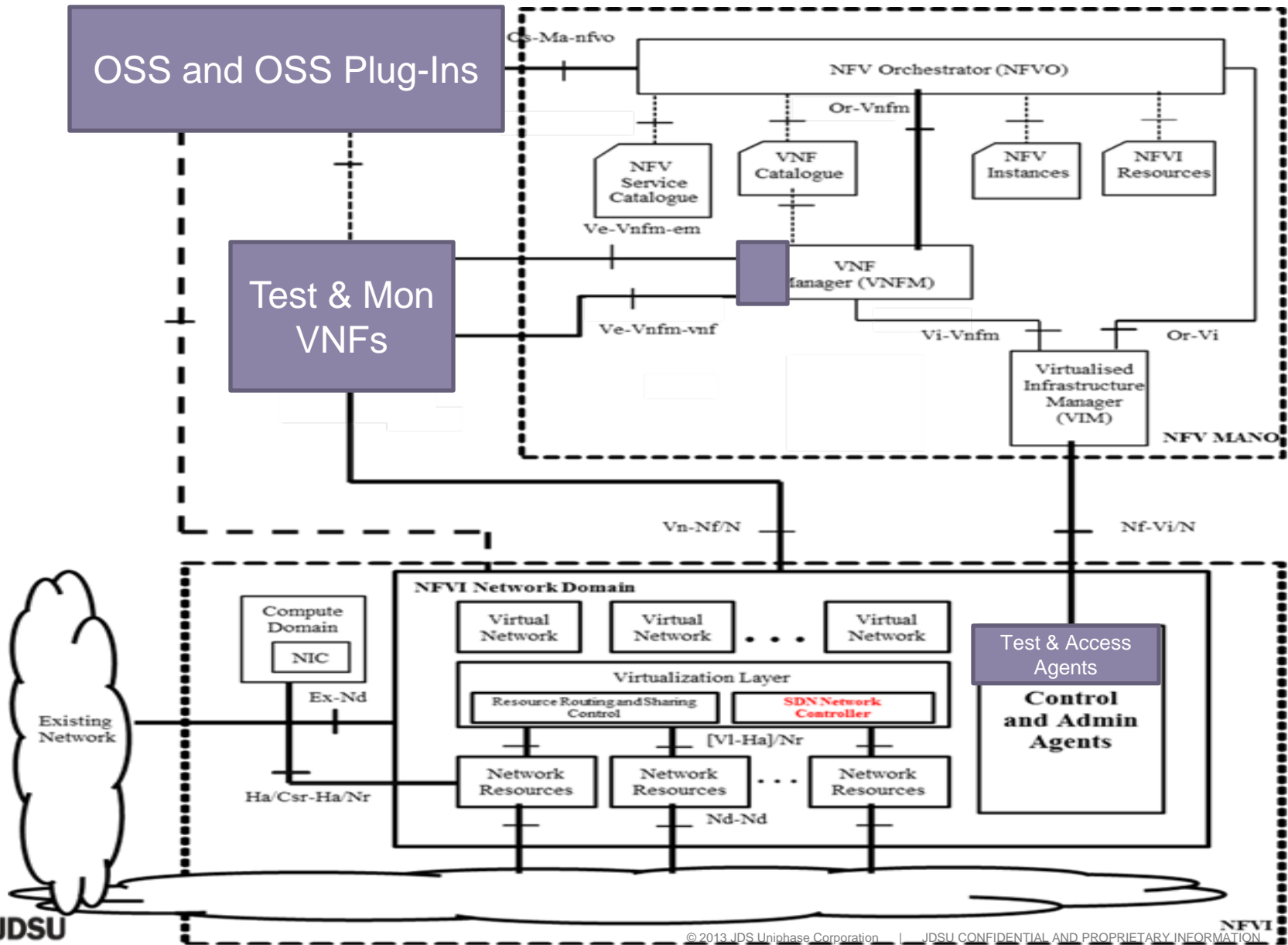


# Wireshark VNF

vCE and Managed NG-CPE Solution



# Fit in ETSI Architecture



# End Goal

Core IP Network or MSC

Metro Network

Access Network

Premises Network

Deliver real-time, end-to-end network service and application visibility to enable service providers, enterprises, and cloud operators to:

- Provide critical business insight
- Build end-user loyalty
- Bridge to new, virtualized architectures