





**Converged Networks and Mobility** 

# Exploring Multi-Access Edge Compute in Converging Access Networks

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## Cloud-Native Virtualization: Overview





#### Containerized

- Applications separated into manageable and functional components
- Packaged individually with all their dependencies



## Dynamically orchestrated

- Kubernetes (k8s) is an open-source system
- Automating deployment, scaling, and management of containerized applications



#### Microservices

- Continuous delivery of single-purpose services
- Opposite of traditional monolithic software, which consists of tightly integrated modules that ship infrequently and must scale as a single unit

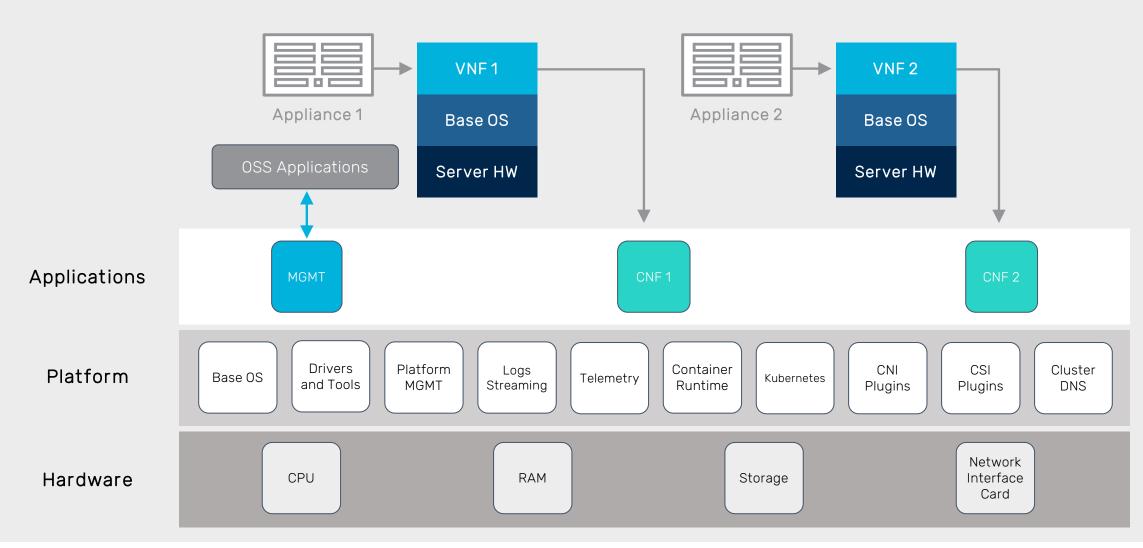


## COTS equipment

- Leverage COTS servers and COTS switches
- Ride the wave of economies of scale without the need to develop or deploy custom hardware

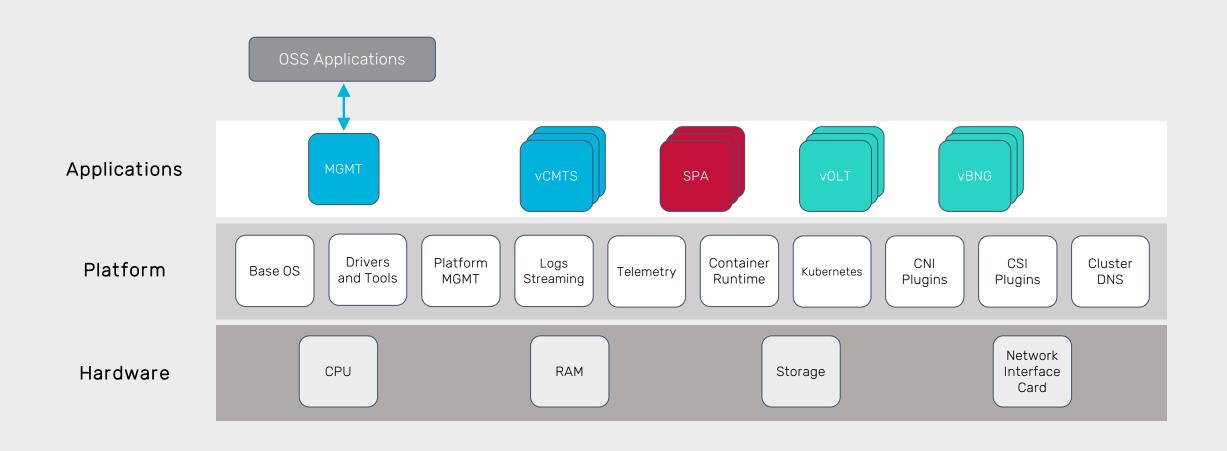
# Network Virtualization and Convergence: Historical View





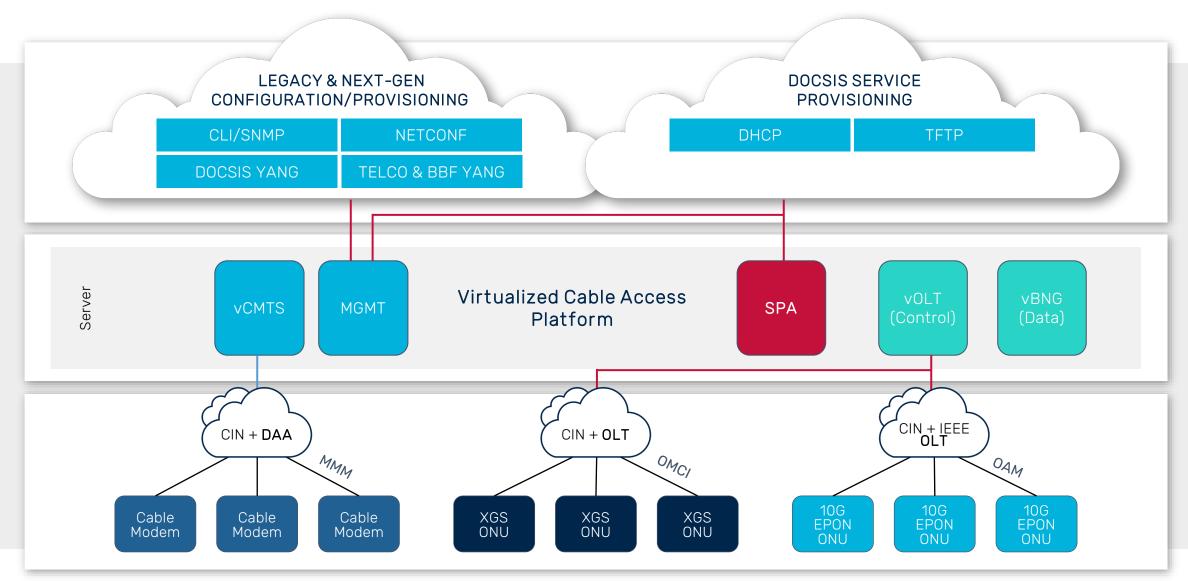
# Network Convergence on Virtualized Cable Access Platform





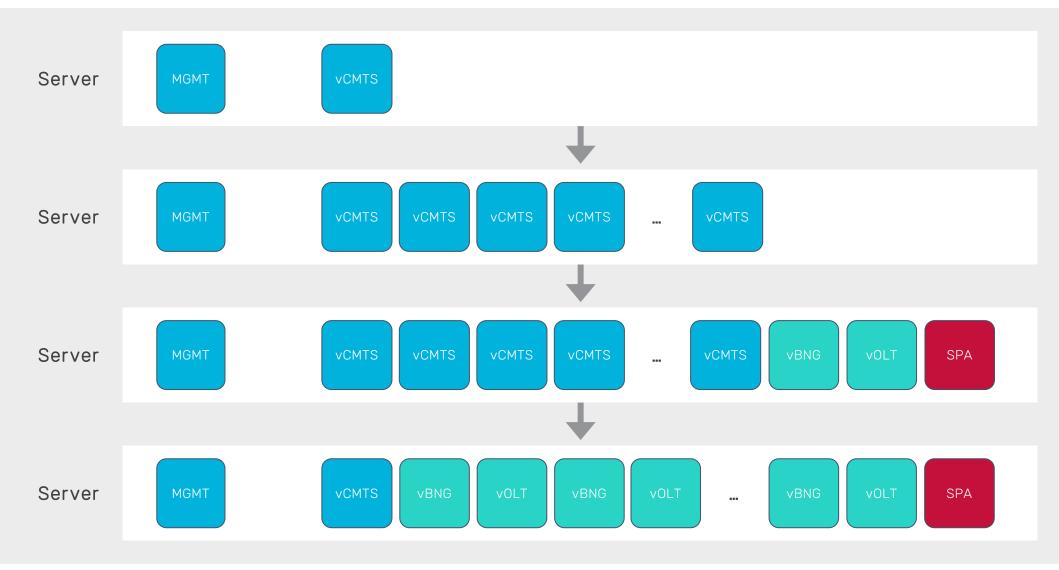
## Uniform Provisioning For Any Access





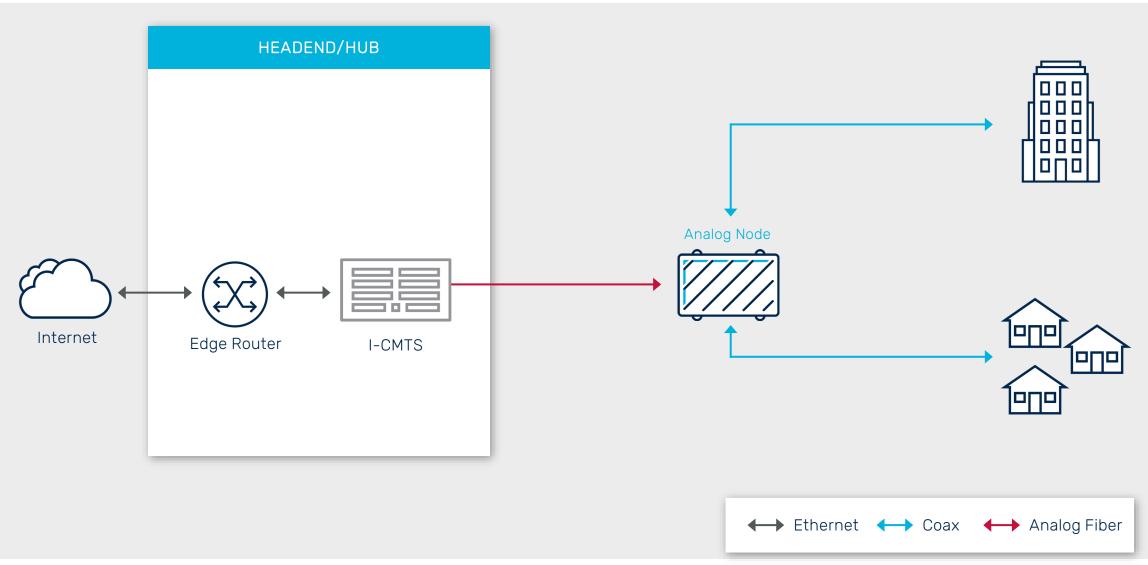
## Workloads Horizontal Scaling





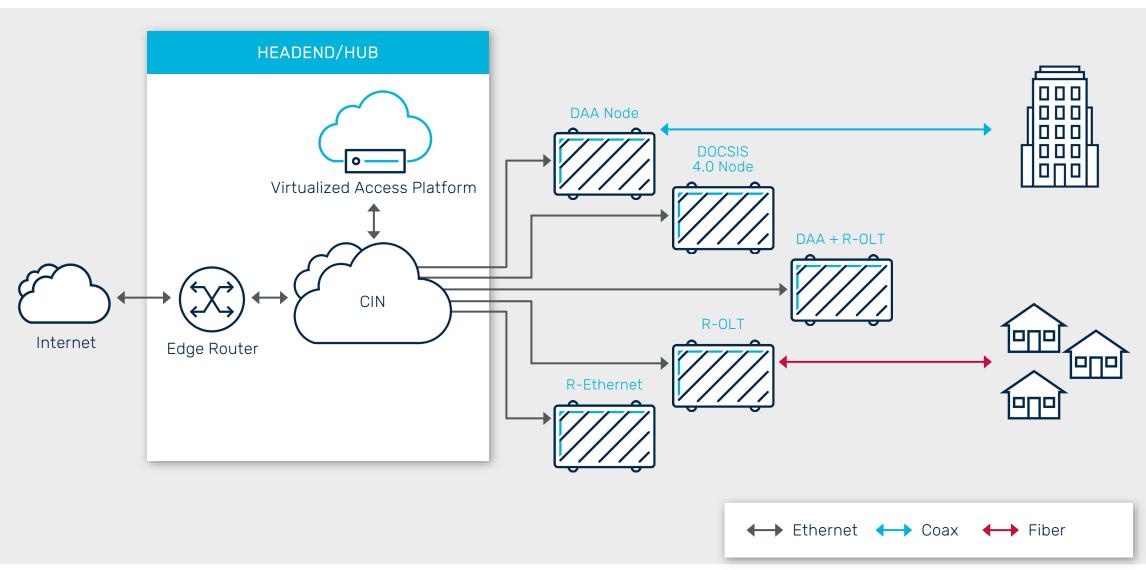
# Legacy DOCSIS Network





## Converged Multi-services Cable Network





# Telemetry and Logs Streaming in Converged Virtualized Networks



