

NFV and uCPE: Platform for Innovation

Conventional network architectures rely on dedicated proprietary appliances to provide access to services and applications. The adoption of cloud services has created a requirement for more robust and direct connectivity. The new model for enterprise IT is hybrid and dynamic, and this includes the network.

A software-centric model utilizing NFV and uCPE reduces the hardware footprint in remote branches while also accelerating service dynamics and provisioning. It also provides a pathway to “branch-in-a-box” and a platform for development of tomorrow’s applications.

What is Network Functions Virtualization?

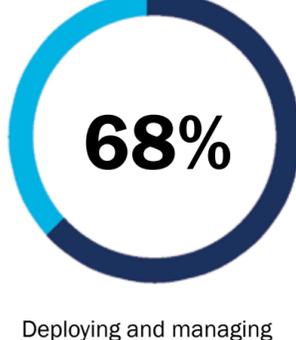
The virtualization of network functions so that they can be deployed as software on industry-standard server platforms.

What is Universal Customer Premises Equipment?

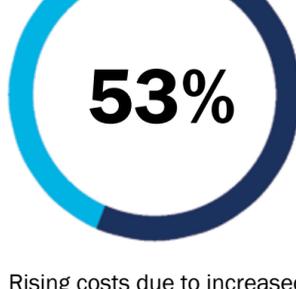
A server platform located at the network edge that supports the deployment of multiple virtual network functions.

WAN Challenges

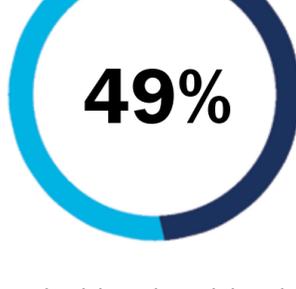
As organizations continue to adopt cloud, big data and analytics, mobility, and social applications, they are finding that conventional WAN models have significant drawbacks.



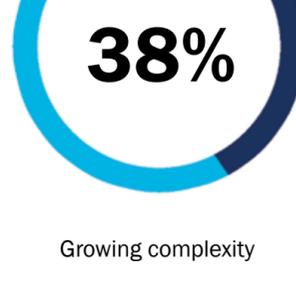
Deploying and managing branch location devices



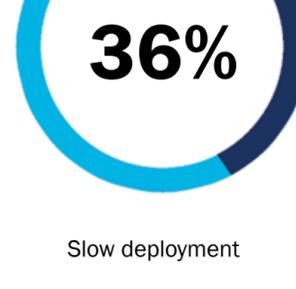
Rising costs due to increased traffic over MPLS networks



Security risks at branch locations



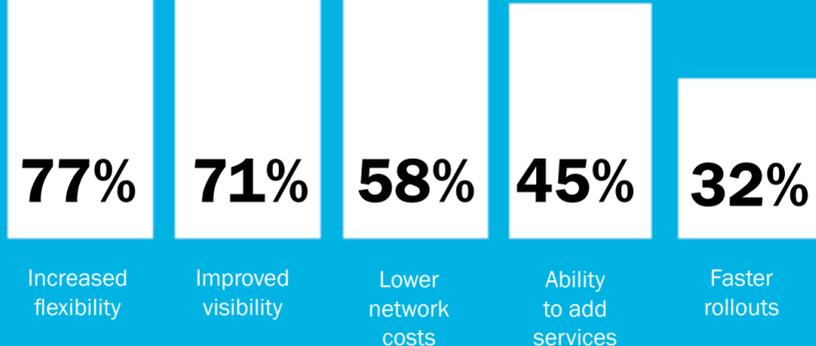
Growing complexity



Slow deployment

Source: Dimensional Research

NFV Benefits



Source: Ovum



INCREASE BRANCH SERVICE ELASTICITY

Standardize your branch networking hardware with COTS x86 platforms to separate traditional network functions from dedicated proprietary hardware.



INCREASE NETWORK AUTOMATION

Deploy a ubiquitous networking platform in a validated reference architecture to all sites to host virtual network functions in validated service chains.



OPTIMIZE VALUE OF ENTERPRISE NETWORKING SOFTWARE AGREEMENTS

Streamline your network software feature requirements across all location types instead of overpaying for a hardware and software combination to get a desired feature or performance.



REDUCE TECHNICIAN SITE VISITS

Leverage cloud-based orchestration to manage any combination of virtualized network functions without risk of compromising remote access.



PLACE CONTAINERS AND SERVICES AT THE EDGE

Integrate low-latency compute resources at the edge to enhance the value of the network and deliver faster services from the cloud.

Pivot's Solution

To accelerate NFV deployments with uCPE, Pivot has teamed with Intel to offer customers the Intel Select Solution for NFV platforms. Intel Select Solutions are verified hardware and software stacks that are optimized for specific software workloads.

Pivot's Intel-approved solution is based on a rigorously tested WAN edge architecture that includes the following:

- Dell VEP (Virtual Edge Platform) hardware
- Adva Ensemble Connector hypervisor
- Intel chipsets and acceleration

Solution Overview

