

An orange square with a black banner inside containing the word "Connectivity" in white text.

Connectivity

Reducing network costs while improving performance



Meet today's business challenges with a hybrid infrastructure using software defined network (SDN) virtualization. You benefit from faster software development times and can use standard networking hardware, while enjoying management and security enhancements.

The growing use of cloud and Internet services is overwhelming traditional networks such as MPLS, which were designed for a different age. Their purpose was primarily to provide access to the corporate data center and carry inter-office traffic. Now faced with this new business imperative, legacy networks are struggling to cope, and the efficiency and productivity gains they provided are evaporating.

Network virtualization offers a new way of building and managing networks for the digital age. Technologies such as software defined networking (SDN), network functions virtualization (NFV) and network virtualization (NV) together help create a flexible software-based network. This maximizes return on investment and reduces costs, while laying the foundation for digital transformation.

Historically, networks were built using appliances with dedicated hardware. Organizations looking for new functionality depended on vendors and their product roadmaps. SDN and NFV makes this whole process much quicker and easier by decoupling the software from the hardware.

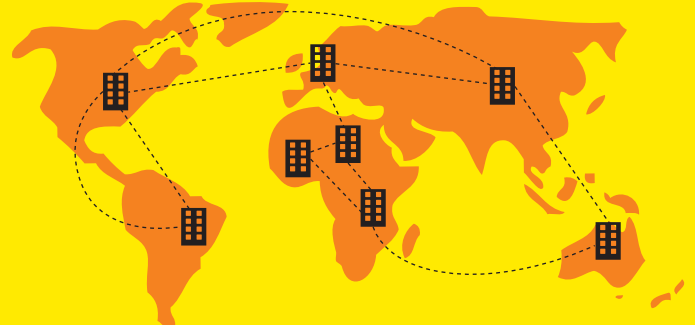
SDN and NFV allow organizations to design, deploy and manage flexible and scalable networks. New sites can be connected to the corporate network remotely in seconds. Software-based functions can be added on demand, for example cloud-based security or application performance management.

These virtual networks provide significantly more agility. When combined with the cloud, you can create applications, services and business models to build new revenue streams, while reducing network total cost of ownership (TCO) and vendor lock-in risks.

Central activation of network functionality in bandwidth-challenged areas

A global financial service company required reliable connectivity within and between its branches around the world. It was experiencing significant challenges in Africa procuring reliable bandwidth for its offices. Internet connectivity was unreliable and performance fluctuated significantly. To successfully access its cloud applications and corporate network from those offices it was necessary to import large quantities of specialized networking equipment. This was both expensive and a logistical headache, because specialized IT equipment incurs high import duties and is frequently delayed in customs.

The SDN and NFV approach proposed by Orange solves both the cost and time issues, allowing the organization to use a commodity hardware in each branch, and making it possible for Orange to provide hardware for virtualized functions if desired. Using virtualized functions, the company could then activate multiple networks remotely, on-demand, in a matter of minutes. In addition, it could add new network functionality and update security settings centrally from its head office, as required, with no new hardware or on-site IT personnel required.

The logo for Orange, consisting of the word "orange" in white lowercase letters on a solid orange square background.

orange™

**Business
Services**



The beauty of SDN is that it pulls together multiple compute, storage and processing functions onto low cost, off-the-shelf equipment that reduces capital expenditure. In an SDN/NFV deployment Orange, for example, would be providing the Universal Customer Premises Equipment (uCPE).

In addition, virtualization enables many manual network configuration tasks to be automated, further reducing operating costs. This cuts out the need to physically visit switches and branch office sites, which is expensive and time consuming.

As well as reducing network costs, SDN and NFV offer key benefits that can boost an organization's bottom line – these include faster response times and increased agility which can ultimately improve data operations dramatically across the board.

Case 2:

Cost-effective connectivity for retail concessions

A cosmetics company was having connectivity issues with its retail concessions in department stores. Staff required access to central files for customer information and product updates, while the company needed to upgrade and configure software in existing concessions and in new ones as they came on board. However, it was not possible to get standard network connectivity due to the stores' firewalls and security policies.

The company opted to use Orange Business Services Easy Go Network which enables it to instantly provision virtual network functions (VNF) for the concessions with full digital self-service ordering, customer care and reporting functions via an intuitive portal.

Easy Go Network has enabled the company to quickly and affordably add additional sites and virtualized services in less than five minutes. The company has full visibility of network usage and one-click security policy enforcement for all sites. Employees in the department store concessions are now connected to their tools and can readily engage with customers.

What should your uCPE deliver?

It is increasingly being deployed by organizations to cut back on costs.

A uCPE replaces the multiple boxes that may be deployed on a customer site such as firewalls and routers with a single one. This reduces hardware costs, simplifies maintenance and allows new services to be added without on-site installation.

It provides a manageable platform on which hosted service providers can quickly deploy or change VNFs. They include self-installation capabilities and centralized management, which provides remote zero-touch provisioning.

It is important you choose a uCPE that can:

- Deliver strong compute and network capacity
- Run a full suite of VNFs and be compatible with leading NFV management and global orchestration options
- Be upgraded and support changing application performance requirements to futureproof your roadmap

Choose a hybrid network from Orange Business Services.

For further tips on network security and cloud application performance management, please visit:

www.orange-business.com/en/connectivity-hybrid



**Business
Services**