Crèdit Andorrà is a global financial and private banking firm with operations in Spain, Luxembourg, Switzerland, the United States, Mexico, Panama, Chile, Peru and Uruguay. They have been in business since 1949, offering retail and private banking, wealth management, and other financial services such as insurance products and financial planning.

Along with their integration and development partner, Tècniques d’Avantguarda (TdA), Crèdit Andorrà deployed Nuage Networks Virtualized Network Services (VNS) across Europe and Latin America to connect branch sites to datacenters, as well as regional data centers to the main datacenters in Andorra. VNS is a Software Defined WAN (SD-WAN) solution that automates many of the IT networking tasks for remote site deployment and management, simplifying operations and accelerating networking services and connectivity between sites.

**Business benefits**

**Accelerated service delivery to support new sites, branches and projects with minimal to no operational overhead.**

Nuage Networks VNS eliminates the requirement for Crèdit Andorrà to send trained technicians to set-up and provision new branch networking services. Networking tasks are automated through centralized policy templates and automated configurations of networking devices and VPN connections.

**Improved network security policy enforcement, centralized controls, reduced risk.**

As a financial services firm, Crèdit Andorrà needs to adhere to strict security policy controls and industry security standards. Nuage Networks VNS is a PCI DSS-compliant solution, and provides IPSec secure VPN communications between sites. Control for branch network policies are also retained centrally, not by remote technicians, helping to ensure oversight and compliance while reducing security risks. VNS also helps implement secure multi-tenancy, with separation of operations between regions, branches and businesses to address compliance initiatives.
The challenge
As a global financial services company, Crèdit Andorrà would have to send networking specialists to each site whenever they have a new investment project abroad. The technicians would take weeks to configure the branch-side equipment (the Customer Premises Equipment, or CPE), connect to local service providers, provision network and security policies and provide connectivity back to the corporate datacenter. Frequently, these would not be permanent retail branch sites, but temporary projects at remote locations, requiring technicians to also terminate the site VPN connection.

For the duration of the site connectivity, local network and security policy implementation was dependent on the team of local experts, which introduced compliance and security loopholes and risks if they could not configure the right access policies all the time. And while operating multiple lines of financial service business in various regions, strict security guidelines needed to be put in place to ensure separation of network and business activity.

Crèdit Andorrà is also using multiple network connectivity technologies throughout their WAN network. They use MPLS VPN between the main datacenters and more permanent locations. They also use broadband Internet from local providers in smaller and more temporary regional sites. Policy-based automation and security enforcement must be managed consistently across all types of WAN access links and technologies, and a flexible set of CPE options.

The solution
During 2016 Informàtica Crèdit Andorrà, in partnership with TdA, has been working to deliver a number of key IT projects such as this one with Nuage Networks, which have transformed the way in which Crèdit Andorrà runs its core processes.

Nuage Networks VNS is the leading SD-WAN platform to bring Software Defined Networking (SDN) principles and policy-based automation to WAN connectivity. Having evolved from telco-grade network operating system technology used in some of the world’s most scalable routers, VNS uses many of the same principles as the current Crèdit Andorrà MPLS cloud infrastructure. It unifies the management and provisioning of virtual networks regardless of the underlying network technology, allowing seamless integration of MPLS and broadband Internet-connected sites.

Nuage Networks VNS provides a broad spectrum of network and services automation that can accelerate IT processes as well as increasing the efficiency of the WAN. It even touches security and other application delivery services, besides the network links, to fully address application requirements and provide better service to end users. Using VNS, Crèdit Andorrà is able to maintain complete policy control of all sites and all regions from a centrally managed set of policies that are automatically deployed to remote equipment to maintain proper configurations and enforcement. This reduces the complexity and control at the remote site dramatically, accelerates the time to complete set-up and updates and removes many compliance risks.

Policies within the Nuage Networks VNS solution are maintained in hierarchical policy templates that are ideal for multi-tenant environments. Policies can be implemented at the corporate level, or down to specific regions or sites. This capability, along with role-based access controls, allows the corporation to delegate only necessary authority and capabilities to any local device or regional team, while maintaining complete security controls. The multi-tenant network, using VNS, effectively implements virtual, logically-isolated network overlays consistent with VRF network functionality for multi-tenant VPNs. The virtual networks also prevent the sharing of routing information between tenant networks, allowing overlapping IP spaces for greater operational flexibility. The configuration, management and provisioning of these virtual network connections, with specific policies for each tenant, region and site are completely maintained through the VNS controller, in virtually error-free fashion.
The remote site WAN gateway appliance, the CPE, which is configured from the central policy controller, can be virtualized software on commodity hardware, or pre-configured dedicated appliances suitable for the scale, duration and service requirements of the site. This provides the most cost-effective and agile solution, while allowing sites to be up and running in hours or days rather than weeks. Nuage Networks manages network and security policies throughout the WAN network to accelerate service delivery and reduce operating overhead at the remote sites.