Produban's hybrid cloud scales to support global business

Produban is Grupo Santander's technology company which specializes in the continuous design and operation of IT infrastructures, offering an integral service to its clients. Within Grupo Santander, Banco Santander, S.A. is one of the largest banks in the Eurozone and one of the largest banks globally by market value.

Business benefits

Cloud-based support for Produban's global activities
Produban's global footprint includes 10 datacenters, to support all the businesses of Grupo Santander. Given this global reach Produban needed a dynamic and secure environment capable of supporting its overall business activities.

Hybrid cloud federates diverse networks
Produban chose to build a hybrid cloud that extends to all its global datacenters, which also required a federation of networks between these locations.

Access to new strategic initiatives
Inherent in its new hybrid cloud infrastructure, Produban adopted advanced IT capabilities such as:

- BGP-based network federation between data centers
- Delivery of IT-as-a-Service
- Use of 'Big Data' tools
- Adoption of enterprise open source
- Expansion of cyber-security
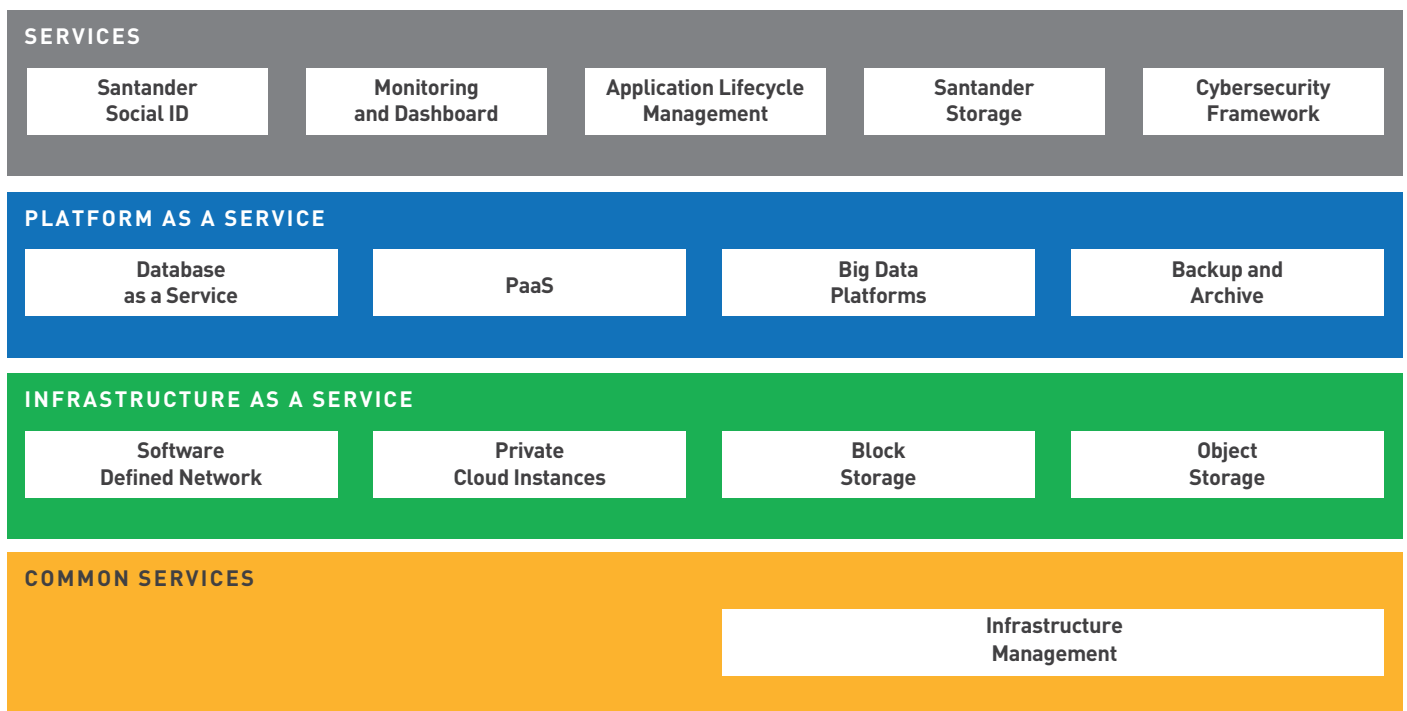
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From Nokia

The challenge

Produban needed to build a scalable global cloud with a networking infrastructure to deliver worldwide digital banking services for its customers. To meet these requirements, Produban looked at suppliers around the world to find a solution that would fit its exacting requirements.

To support the requirements of Banco Santander, Produban also needed a hybrid cloud solution that adhered to strict security requirements. Underlying the global hybrid cloud is a highly standardized and distributed infrastructure of compute, storage and switching.

Other critical requirements of this global hybrid cloud included:

- A routing stack that can scale to hundreds of networks, enabling full reachability between any host in Produban's datacenters
- Complete federation of networks between global datacenters based on BGP, to ensure global reachability for all workloads
- Ability to drive IT intelligence and control to overlay platforms, for networking, compute and storage
- Implementation of Red Hat OpenShift Enterprise to support dev-ops requirements
- Use of Red Hat Ceph Storage to enable a dynamic overlay of storage functions
- A true hybrid cloud, which allows the migration of workloads between cloud clusters, and a global scalability based on true distributed Layer 3 routing capabilities

FIGURE 1. Produban hybrid cloud services

SERVICES				
Santander Social ID	Monitoring and Dashboard	Application Lifecycle Management	Santander Storage	Cybersecurity Framework

PLATFORM AS A SERVICE			
Database as a Service	PaaS	Big Data Platforms	Backup and Archive

INFRASTRUCTURE AS A SERVICE			
Software Defined Network	Private Cloud Instances	Block Storage	Object Storage

COMMON SERVICES
Infrastructure Management

About Nuage Networks

Nuage Networks (www.nuagenetworks.net) brings a unique combination of groundbreaking technologies and unmatched networking expertise to the enterprise and telecommunications industries. The Silicon Valley-based business has applied radically new thinking to the problem of delivering massively scalable and highly programmable SDN solutions within and across the datacenter and out to the wide area network with the security and availability required by business-critical environments. Nuage Networks, backed by the rapidly growing IP/Optical Networks business of Nokia, has the pedigree to serve the needs of the world's biggest clouds. The cloud has made promises – the mission of Nuage Networks is to help you realize them.

Learn more about Nuage Networks and Red Hat SDN-based hybrid cloud solutions at www.nuagenetworks.net/partners/red-hat.

Produban solution

Prior to its hybrid cloud build, Produban's infrastructure included Red Hat Enterprise Linux for its operating systems and Red Hat Enterprise Virtualization as its traditional scale-up virtualization platform. As part of its hybrid cloud build, which extends to redundant datacenters in five global regions, Produban is now using the Nuage Networks Virtualized Services Platform (VSP) to provide a software-based overlay network for Produban's cloud infrastructure. Nuage Networks VSP will be deployed in Produban datacenters globally, to interconnect infrastructure and DevOps clouds. Nuage Networks VSP will also federate all of these networks together, based on a highly robust and scalable routing stack that includes BGP for global reach.

The Produban hybrid cloud is being built with multiple Red Hat solutions, including Red Hat® Enterprise Linux® OpenStack® Platform and Red Hat CloudForms. Knowing that it needed a solution that would interoperate with this infrastructure, Produban chose the Nuage Networks VSP SDN solution to be part of its hybrid cloud. In addition, the Nuage Networks VSP platform's routing stack is designed to meet global scale and reliability requirements that Produban needs to support its customers' requirements within a financial services business environment.

Across all accounts, Nuage Networks and Red Hat actively collaborate on the joint development of their respective products, ensuring they meet customers' requirements for interoperability. As Produban builds it global hybrid cloud, Nuage Networks and Red Hat will provide solutions to enable its requirements for an open hybrid cloud that includes core infrastructure (IaaS), DevOps (PaaS), and multi-cloud management, all built on an underlying virtualized network.

FIGURE 2. Nuage Networks and Red Hat hybrid cloud infrastructure