Swiss Bank Chooses Nutanix Enterprise Cloud Platform to Improve Performance of MS SQL, VMware Server, and VDI Workloads

# Banca Popolare di Sondrio (SUISSE) SA Invests in Nutanix



# **CHALLENGE**

BPS (SUISSE) SA has been providing high quality banking services to individuals and companies across Europe. Andrea D'Ermo is the Head of Service Management at BPS (SUISSE) SA. He and his team of three technology professionals are responsible for managing the bank's central IT systems, service desk, internal security systems, MS Windows, MS SQL, VMware ESXi, and VMware Horizon environments. "We support all of the infrastructure for 300 internal banking end users, including software and hardware selection, software upgrades, licenses, management, asset inventories, and much more," he explained.

BPS (SUISSE) SA's IT team was getting ready for an infrastructure refresh in December of 2014. The bank had been using a traditional 3-tier infrastructure solution for its internal services and applications, with separate storage, server, and networking systems. "The previous environment was quite complex," D'Ermo admitted. "Our services were based on multiple technologies, managed by different IT specialists. Our first goal for the upgrade was to improve the user experience on our VMware Horizon virtual desktops, and to increase the performance of our large MS SQL farm. Our other objective was to implement a simpler solution that would make it easier to manage and scale the environment."

#### **SOLUTION**

BPS (SUISSE) SA considered two different approaches for the refresh project. The first option was to continue on with its standard approach to IT infrastructure, purchasing newer servers, networking, and storage systems. The other approach was to adopt a more advanced, hyperconverged infrastructure. After evaluating the options, D'Ermo made the decision to test the highly recommended Nutanix Enterprise Cloud solution. "We immediately loved the main philosophy of Nutanix because it appeared to be very easy to manage, super performing, and it offered high availability—both locally and remotely—all in one hyperconverged system."

Nutanix Italy provided a brief presentation on the hyperconverged technology for D'Ermo and his team, followed by a more in-depth presentation for the rest of the bank's IT specialists and management staff. "Our biggest concern at the beginning was the cost of buying two sets of infrastructure for our separate VMware and MS SQL upgrade projects," admitted Alessandro Widmer, Senior System Engineer. "But when we realized that the proposed systems could provide enough capacity and performance to run both of these environments, we decided to merge the separate VDI and SQL farm projects together. That brought the Nutanix solution well within our budgetary guidelines."

Another issue faced with the investment in the hyperconverged technology, was that the bank's network and storage teams didn't immediately see the benefits of having network, storage, and computing power all in one system. "For us, that was the most difficult part—changing their mentality from standard infrastructure to new infrastructure," D'Ermo shared. "But once we presented our analysis and showed them a demo of the Nutanix solution in action, they were quickly convinced it was the perfect choice for our needs." BPS (SUISSE) SA purchased six Nutanix Enterprise Cloud systems in 2015. The IT team has now migrated all of the bank's mission-critical MS Windows, SQL, and VMware workloads over to the new systems.

"We were looking for a technological solution to underpin our IT strategy that would mainly be built around reducing processing times while also guaranteeing us greater reliability, stability, and scalability. With Nutanix, we have found the perfect mix that has allowed us to optimise our internal processes and increase quality and availability when delivering our services."

- Andrea D'Ermo, Head of Service Management, Banca Popolare di Sondrio (SUISSE) SA



#### **RESULTS**

#### **Higher Performance**

Before upgrading to the Nutanix solution, the bank's internal users had been complaining of poor performance with their VMware Horizon virtual desktops. "Our old infrastructure was very slow," admitted Luca Guglielmin, Senior System Engineer at Banca Popolare. "It took several minutes for the virtual machines to boot each morning. After switching to Nutanix, the time to log into the desktops dropped from 2-3 minutes to 40 seconds. This has enabled our internal VDI users to be much more productive."

"The Nutanix systems are very fast," added D'Ermo. "Our internal business analysts are now able to perform faster queries on our MS SQL database. We've been receiving a lot of good feedback from our end users related to the increased speed of the databases and desktops since migrating to the Nutanix solution."

## **High Availability and Disaster Recovery**

The Nutanix solution is designed to be highly available and has built-in backup and replication features. Banca Popolare di Sondrio deployed Nutanix across two datacenters. The first cluster of Nutanix nodes was installed at the bank's primary site and the others at a secondary, disaster recovery (DR) center, with Nutanix's built-in data replication between sites. "In addition to having a second cluster for high availability at our DR site, we also have high availability at our primary site," explained Emanuele Trentini, Senior System Engineer. "If one of the three nodes goes down in our primary center, we don't need to migrate everything to the secondary site—we can stay alive at the main datacenter and our people can continue to work normally without any interruptions. Nutanix has enabled us to more easily meet our service level agreements and improve our disaster recovery capabilities."

## Simpler Management and Easier Upgrades

"Our previous infrastructure consisted of network components, storage systems, and servers from three different vendors," Widmer explained. "As a result, we were spending a lot of time managing the disparate environment. With Nutanix, we now have just one system to manage and control, enabling our IT team to be much more efficient. I've spent less than a week managing the Nutanix systems over the past year. It really doesn't take a lot of time to manage hyperconverged IT infrastructure."

"It will also be much faster to upgrade our environment going forward," added D'Ermo. "We currently have 60 to 80 virtual desktops running on our Nutanix systems. Within the next two years, we plan to double that number to over 150 virtual desktops. We'll need to scale up the hyperconverged infrastructure, but not all of the separate storage, servers, and CPU hardware anymore. Due to the fact that we now have everything in one system, we also won't have to coordinate the upgrades with our networking and storage teams anymore. We can do everything ourselves without involving the other IT groups. That's saving us a lot of time as well."

## **NEXT STEPS**

Nutanix is enabling BPS (SUISSE) SA to take advantage of cloud-like economics where infrastructure grows incrementally with business needs, vs requiring large upfront capital expenditures. "Our bank is growing very rapidly, and it is placing a lot of pressure on our IT infrastructure," D'Ermo said. "20% of our desktops are currently on Nutanix, and we expect that number to reach 50% in less than three years. The Nutanix systems are providing the high performance and easy manageability we need to keep pace with that growth. We are very happy that we chose the Nutanix hyperconverged infrastructure—it is enabling us to continue to provide excellent service to our many banking clients across Europe."



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#### Company

Banca Popolare di Sondrio (SUISSE) SA is a Swiss bank that offers a wide range of banking, financial, and insurance services to individuals and companies across Europe. A representative office was opened in Lugano in 1991. Four years later, it evolved into Banca Popolare di Sondrio (SUISSE) SA, a bank governed by Swiss law and wholly owned by its parent company. This proved to be a good move: Banca Popolare di Sondrio (SUISSE) SA grew rapidly and now boasts 21 offices including agencies, branches and sub-branches in Switzerland and abroad. The bank now pursues a broad. and diverse range of activities, covering all sectors with equal expertise and care, marketing itself as a universal bank and operating according to the BPS Group's philosophy: as a bank that makes its clients top priority.

### Industry

Financial services

#### **Business Needs**

Existing 3-tier solution was difficult to manage and scale. Inadequate performance for virtual desktops and SQL databases drove the need for an infrastructure refresh.

#### Solution

- Nutanix Enterprise Cloud Platform
- Nutanix Prism management solution
- > VMware ESXi and VMware Horizon

## Benefits

- Improved VDI end user experience and cut login times in half
- Accelerated MS SQL performance and reduced guery times
- Simplified server, storage, and network management
- Increased IT efficiency by eliminating the need to interface with separate network and storage teams
- Reduced datacenter footprint from 7U to 2

Nutanix makes infrastructure invisible, elevating IT to focus on the applications and services that power their business. The Nutanix enterprise cloud platform leverages web-scale engineering and consumer-grade design to natively converge compute, virtualization and storage into a resilient, software-defined solution with rich machine intelligence. The result is predictable performance, cloud-like infrastructure consumption, robust security, and seamless application mobility for a broad range of enterprise applications. Learn more at www.nutanix.com or follow us on Twitter@nutanix.

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