ABN AMRO Bank N.V. continues its virtualization journey and embraces the software-defined datacenter

Virtualization-first IT policy across the entire organization expands marketplace competitiveness and positions the Bank for growth

Virtualization: Phase One

ABN AMRO’s IT Management team embarked on their virtualization journey in 2011 when a merger with Fortis Bank Nederland required the IT environments to be merged. Working with VMware®, the Bank adopted VMware vSphere® as their virtualization solution. The result was a more resilient environment that supported the application needs of the new combined entity, reduced hardware requirements by 85 percent and enabled faster provision of resources to business teams.

Concurrently the Bank implemented a robust disaster recovery solution that complies with strict Monetary Authority of Singapore (MAS) rules, based on VMware’s® vCenter® Site Recovery Manager™.

By the end of the IT merger project, now considered the first phase of their virtualization journey, the Bank had saved almost USD 800,000 (EUR 600,000) on physical infrastructure and licenses.

With newfound agility, the Bank’s business units are able to respond to changes in market conditions by introducing new products and services much faster than their competitors.

The success of phase one convinced the Bank that expanding IT virtualization could amplify the benefits across the rest of the organization. The next step, phase two, was to adopt VMware’s vCloud® Suite to fully virtualize the compute, network and storage infrastructure and automate the control and management of the virtualized datacenter.

Virtualization: Phase Two

Implementing a virtual datacenter allowed the Bank to plan and execute projects that in the past would have required extensive investment in physical infrastructure and associated software licenses. With a virtualized datacenter in place, the Bank saved an additional USD 100,000 per year in datacenter space and USD 250,000 in infrastructure maintenance. Resources can now be diverted in to business innovation instead of IT maintenance.

Dirk Sibiet, Country Technology Officer observed, “The savings we have experienced through deployment of the vCloud Suite are being invested in technology projects that will contribute to increased efficiency of our user base. We have several projects in our pipeline, such as a virtual DMZ, a BYOD plan, and others which can now be executed quickly due to the added capacity that a fully virtualized platform provides us.”

The Bank’s employees, especially Relationship Managers who are constantly on the move meeting their private banking customers, need instant access to their files and applications hosted on the Bank’s network. To do so, the Bank is deploying a virtual demilitarized zone (DMZ) via VMware vCloud® Networking and Security™ to allow all users to access the Bank’s applications and network eliminating the need to connect through a slow VPN concentrator.

Daniel Teo, Chief Operating Officer observes, “I.T. is part of our core business strategy and it needs to be forward looking, innovative and most importantly client-centric.” Consequently, any infrastructure improvements that contribute to employee efficiency will ultimately deliver a better banking experience for ABN AMRO clients.
“We have come a long way in our virtualization journey with VMware. When we began four years ago we were supporting 16 virtualized applications. Today we have more than 80 virtualized applications in our environment which run on about 300 virtual machines hosted across 30 hosts.”

Dirk Sibiet,
Country Technology Officer ABN AMRO Bank N.V. Singapore & ABN AMRO Private Banking Asia and Middle East

“Our Relationship Managers are now able to have more relevant conversations with their clients. They can now access the information and tools they need when they are on the road, and use it to help our clients better understand their financial situation and opportunities,” comments Hans-Peter Borgh, Chief Commercial Officer.

Tasking virtualization beyond the datacenter, the Bank deployed a virtual desktop environment through VMware View®, enabling travelling users secure access to their desktops from any device. Sibiet explains, “At the moment our VPN concentrator is located in Europe. So let’s say if our Relationship Managers are having a meeting in a Starbucks in Kuala Lumpur, it makes no sense that they need to go over the Internet to Europe and then come back via our global network to access their files here in Singapore. With the DMZ in place, users will be able to connect natively and securely to the environment here in Singapore, through application level VPN, which also means they can use any device they want, without impeding its functionality.”

With a secure virtual desktop infrastructure in place, the Bank is now piloting a Bring Your Own Device (BYOD) project to promote a better work-life balance for its employees. “In the past, I regularly came in to the office over the weekend to finish work as it was the only option available in terms of accessing the files and information I needed. Today, with my virtual desktop available to me on my iPad, I can finish my work anytime, anywhere, and this has made life more efficient and pleasant for me,” explains Borgh.

The Bank has successfully extended the benefits of virtualization to its contractors, especially its offshore development center in Mumbai run by Tata Consultancy Services. Previously, users had to log into the Bank environment through a very lengthy process taking 20-25 minutes on average and severely impacting productivity. “By providing all our developers in the offshore team with access to our virtual desktop infrastructure through the DMZ, we’ve seen a significant productivity improvement. This adds up, and it ultimately means that we are now getting the performance of four to five additional resources for the same price we were paying before,” explains Sibiet.

ABN AMRO Bank worked closely with VMware Professional Services team during the vCloud Suite rollout. Sibiet says, “We worked very closely with the Professional Services team at VMware. I found the professionalism, knowledge and dedication of their people to be fantastic. It showed me that, yes they are a dedicated vendor, but they are also part of my team because they will go that extra mile to ensure we achieve what we initially set out to.”

Virtualization: Looking forward

ABN AMRO has adopted an aggressive ‘virtualization first’ approach to deploying new business solutions. Datacenter and desktop virtualization is now a core element of the Bank’s growth plans. Today, ABN AMRO Bank N.V. Singapore’s IT infrastructure is about 95 percent virtualized, and the company has adopted a service-based architecture to bring new and improved services to their clients faster. The IT department also has a very clear picture of what a datacenter of the future should look like. They believe that it should be robust, policy-compliant and that any application that can be virtualized should be. Significantly, the implementation of the vCloud Suite will help the Bank meet next level security requirements as set out by their regulators. The Bank needs to maintain policy compliance with regulations that have been set out in the Technology Risk Management Guidelines (TRM 4) by the Monetary Authority of Singapore by June 2014. With a virtual datacenter in place, enabling rapid testing, prototyping and provisioning, the cost and effort required to pass strict audit provisions has been significantly reduced.

For the Bank’s staff, a broader mobile office solution is being planned. For example, the combination of the virtual DMZ and desktop virtualization solutions will allow the bank to offer video-on-demand. “We want to equip our travelling Relationship Managers with the ability to link up via video conferencing with subject matter experts in the office, to have access to the latest and best market information that will aid their discussions with clients. We envision a future without any barriers to relevant information for our employees on the road,” says Sibiet.
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“We have come a long way in our virtualization journey with VMware. When we began four years ago we were supporting 16 virtualized applications. Today we have more than 80 virtualized applications in our environment which run on about 300 virtual machines hosted across 30 hosts,” says Sibiet. Some of these applications include Marginman, SIS, TOP, POST, Qlikview and Dynamics. “As a bank we are now convinced that our strategy of moving towards a virtual datacenter is actually enabling our business to be more efficient and profitable, resulting with the business growing at a faster pace, as we are now able to deliver solutions to market quicker,” he concludes.

Virtualization Journey: Critical Milestones

- **2011**: Multiple Disparate Systems
- **Early 2012**: Virtualization of Foundational Architecture
- **Late 2012**: Workflow & Applications fully virtualized
- **2013**: 95% of all applications virtualized
- **Early 2014**: Service-based delivery: Anytime, Anywhere, Any device

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