



SCHUBERG PHILIS

Schuberg Philis accelerates application deployment using network virtualization

CHALLENGE

Schuberg Philis constantly strives to improve its own infrastructure and processes to guarantee its clients 100% functional uptime for their mission-critical applications. This is why the company looks to deploy new environments centrally using software APIs. Doing so means that the network no longer constitutes a bottleneck.

SOLUTION

VMware NSX-based network virtualization allows Schuberg Philis to model VMs and networks quickly and to deploy applications extremely rapidly. The automatic provisioning process is configured to support complete environments including networks, VM, applications, and interfaces.

RESULTS

Schuberg Philis can model VMs and networks quickly and easily and deploy applications extremely rapidly. An additional benefit is being able to include security in the process. Because everything's automated and managed centrally, the entire process is transparent and auditable. Doing so brings continuous deployment a step closer. Clients can now access all the benefits of the cloud, for example its flexibility, within a certified environment with all the necessary, built-in security, controls, and checks and balances.

IT outsourcing company Schuberg Philis strives for total transparency in all its dealings with clients. It also provides its clients with 100% functional uptime for their mission-critical applications, taking full responsibility for their application landscapes and providing end-to-end ICT supply chain support including any third-party interfaces. Its clients include financial services providers, retailers, and power companies. Schuberg Philis constantly strives to optimize its own infrastructure and processes in order to provide its clients with optimal flexibility, availability, and performance. Several years ago, the company started adopting network virtualization methods.

Schuberg Philis provides some of its services from within the cloud. Although the benefits of cloud computing are widely appreciated, migrating services to the cloud is not necessarily an obvious step for all of its clients. Edwin Beekman (Network Engineer, Schuberg Philis) explains why: "Clients operating in highly regulated industries are generally wary of shared or public clouds. They're not willing to share their infrastructure with others. Another major consideration is control over the location of their data. At the same time, they want to take advantage of capacity on demand and rapid application deployment." Schuberg Philis offers these clients their own shared private cloud to meet their particular requirements. "We guarantee our clients rapid test, development, and production environment availability, as well as their own well-segregated stack. We also provide extensive control and administrative features, safeguarding quality and allowing clear, real-time monitoring."

Bottlenecks

Schuberg Philis uses network virtualization to improve application deployment management and to make this process faster and more flexible. Beekman continues: "Network configuration and activation form bottlenecks when deploying applications. We have to set up all sorts of things, like firewalls, cabling, and VLANs, together with a network engineer. This doesn't fit with our goal to deploy environments centrally using software APIs. The network itself was an additional exception."

Network Virtualization

While seeking a solution to this challenge, Schuberg Philis stumbled upon a company called Nicira (since acquired by VMware). Beekman continues: "Their solution – now called VMware NSX – makes network virtualization possible. Using NSX, we can automatically set up virtualized, fully functional, software-driven networks. You can compare this to a VM for servers. Nowadays, we can model networks via an API that takes into account security and load balancing. This is how we eliminated the last remaining bottleneck to achieving rapid delivery. We can even deploy switches and firewalls using scripts. The process is fully automated and therefore totally predictable. Human intervention is no longer required, reducing the likelihood of human error."

VMWARE CASE STUDY

"Setting up a new server is no longer a matter of rigging up networks, configuring machines, and patching cables. We can model VMs and networks quickly and easily and deploy application landscapes extremely rapidly. This process used to take several weeks, while it now takes only eighteen minutes or so. This is a huge timesaving!"

Edwin Beekman (Network Engineer,
Schuberg Philis)

VMWARE IN PRACTICE

Deployment environment

- Arista switches
- HP servers
- NetApp storage
- CloudStack
- Chef
- GitHub
- Jenkins
- VMware NSX

VMware NSX is compatible with all hypervisors and integrates fully with cloud management platforms. This provides additional benefits to Schuberg Philis given that the company aims to remain supplier independent and to use open source technology whenever possible.

Rapid Automatic Deployment

The benefits of this approach for clients are self-evident, according to Funs Kessen (Cloud Architect): "Setting up a new server is no longer a matter of rigging up networks, configuring machines, and patching cables. We can model VMs and networks quickly and easily and deploy application landscapes extremely rapidly. This process used to take several weeks, while it now takes only eighteen minutes or so. This is a huge timesaving! An additional benefit is being able to include security in the process. Because everything's automated and managed centrally, the entire process is transparent and auditable."

Hitting the Ground Running

The network no longer constitutes a bottleneck when deploying new applications and environments, as Kessen explains: "We now direct our focus on the application, rather than on the infrastructure. This allows our clients to respond more rapidly to business demands. Clients aren't interested in what's under the hood - they just want to be able to deploy applications or set up environments quickly and easily. We've demonstrated this time and again in practice. Recently, we deployed an entire environment for a new client on the very same day that we signed the contract with them. They hit the ground running with brand-new development and test environments. That's incredibly fast! Nowadays, copying a client's entire existing environment and getting it up and running at a different location is simply a matter of pressing a button. Our automatic provisioning process provides everything - networks, VMs, applications, and interfaces. Using Chef, our configuration management tool, we can even create 'cookbooks' with recipes for automated application deployment."

Continuous Deployment

Network virtualization is bringing continuous deployment a step closer for Schuberg Philis. Kessen explains: "Fast, faster, the fastest! VMs used to have a long lifecycle. Once up and running, they were kept operational for as long as possible. This is no longer necessary, now that setups are so quick and easy. VMs don't need to be modified if a new software version is released. It's quicker to just create a new VM. By fully automating this process, we can provide our clients all the benefits of the cloud, for example its flexibility, within a certified environment with all the necessary, built-in security, controls, and checks and balances."

