

## Inside the customer's network: With flexibility and security



*"Besides the savings it affords us in terms of hardware and energy, by using VMware View we can also benefit from one other really important advantage: Virtual desktops enable us to take over responsibility for the administrative activities of new customers much quicker than before. This gives us a crucial edge in the fiercely competitive outsourcing market."*

— Ludger Demming, virtualization team leader at Atos Germany

### KEY HIGHLIGHTS

#### Challenge

- Flexible desktop configurations for outsourced IT workstations
- Strict adherence to the customer's safety regulations

#### Solution

- Central VMware View environment with multi-client capability for all customers
- Individual, independently administrated employee desktops directly within customer networks
- Access via the VMware View Portal

## Atos

With VMware View, Atos saves itself over 1,000 desktop PCs and increases flexibility in terms of offshoring

Atos is a leading international provider of IT services. The company offers a full range of advisory and other related services to do with information technology, with its main areas of expertise being consulting, system integration, outsourcing and hightech transactional services. Atos has an annual turnover of five billion euros and employs 48,000 people in 40 countries. The incorporated company is listed on the Euronext Premier Marché.

Atos operates the entire IT landscape for a large number of major customers all over the world. The Managed Operations division is responsible for running the infrastructure, while the Consulting and System Integration division is primarily concerned with advisory and application integration services.

The staff in this division manage and develop heterogeneous application landscapes, created from SAP environments, customer-specific applications or different types of web applications for a variety of customers. One of the steps which Atos has taken to ensure it remains competitive in the long term has been to develop an offshoring strategy for German-speaking countries.

### Data security despite offshoring

The challenges here are many and varied: Atos developers and administrators working on developing and managing applications for a variety of customers in many different locations need to be integrated into the company networks of the customers in question. However, not only the various security and software usage policies of the customers have to be taken into account, but also the strict regulatory provisions regarding data security, particularly in German-speaking countries.

Competing with these requirements is the need of the administrators and developers to keep their working environment as flexible as possible. The demands made of desktop workstations are just as varied as the application landscapes of different customers and usually require individual configurations to be set up for every single Atos employee.

In practice, this meant that the administrators and developers working in the Consulting and System Integration division had a separate physical PC under their desks for each customer they were looking after. Two to three PCs per member of staff was the norm and five was by no means out of the ordinary. This hardware had to be purchased and maintained, which time and again led to high investment and administration costs. In addition, the power consumed by the equipment, which was actually only used for a fraction of each working day, was pushing the company's energy use through the roof. For Atos, which feels a strong obligation to achieve sustainability and CO<sub>2</sub> neutrality, this was hardly a desirable state of affairs.

## VMWARE VIRTUAL INFRASTRUCTURE AT WORK

### VMware in action

- VMware View with View Connection Server
- Transmission via PoP and RDP
- VMware vSphere 4.1

### IT infrastructure

- Heterogeneous client landscape, Windows XP and 7, Linux
- ESXi hosts for client VMs and Connection Server
- DL servers from HP

*“In our view, VMware not only offers the very best virtualization solutions on a technical level, they are also the most cost-effective solutions in the long term. Despite the complexity of our initial problem, we were able to implement a solution which meets all our customers’ requirements in full.”*

— Ludger Demming, virtualization team leader  
Atos Germany

## Complete flexibility for administrators and developers

A solution based on Citrix terminal servers is indeed suitable for workstations with clearly defined, stable requirement profiles, but it proved too rigid for many administration and development tasks. A problem encountered frequently in this regard was the fact that applications can only be configured statically, i.e., users do not have the opportunity to modify applications without (negatively) affecting other users.

This was why the virtualization team for Germany and Austria, headed up by Ludger Demming, launched a project to use virtual desktops for individual customers right back at the end of 2008. Initially, the plan was to switch over 150 workstations.

In order to fully utilize all the potential savings offered by desktop virtualization in this specific case, the aim was to create a central VMware View environment with multi-client capability for managing all Atos customers. But first things first: The top priority was security. “It had to be made impossible to access one customer network from another,” explains Ludger Demming. “For example, an administrator should not be able to copy data from one customer to another via the desktop.” However, having been a global IT partner to VMware for many years, Atos had the necessary know-how to overcome this complex challenge.

Furthermore, the Atos virtualization team had to get a range of different parties around the table in order to find a solution which was able to reflect what were sometimes very different customer policies regarding virtual desktops. This was achieved using an architecture in which every customer is connected via a dedicated virtual switch, which in turn is connected to the customer’s LAN via a physical network interface. Access to clients on the Atos side is facilitated by the VMware View Connection Server, which runs on a separate virtual machine. The client users identify themselves using Active Directory and, if the corresponding authorizations have been granted, the enabled guest systems are displayed.

## Virtual VMware View desktops directly within the customer network

The solution implemented with VMware View meets these requirements 100%. Access to the customer network is totally transparent and separate for each customer. Wherever the customer’s network infrastructure allows, the high-performance PCoIP protocol, which adapts to the bandwidth automatically, is used for transmission purposes. The virtual machines for the customer are located behind his firewall. So Atos staff work with the VMware View clients directly within the customer networks, just like every employee working on-site at the customer premises. The administrators and developers access their individually adapted, customer-specific desktops from the various different locations via a single portal.

“We have been able to follow all our customers’ guidelines in terms of permitted system and application software and security. And yet our technical staff still have control over their desktops, within the framework of these specifications,” says Ludger Demming. “If a machine should ever become ‘messed up’ beyond repair, the portal enables us to quickly provide a fresh image with the customer-specific basic configurations.”

The success of the project, which started off involving selected customers and only a limited number of staff, meant that, by the end of 2010, the 150 employees who were originally intended to have virtual desktops at Atos had already grown to 500.

The experience gained from this project allowed the virtualization team to refine a process which ensures that, when new customers join the company, the requirements which must be met before Atos can take over administrator responsibility are fulfilled quickly.

### Results

- A saving of over 1,200 desktop PCs
- Better energy use and lower administration costs
- Complete flexibility in customer networks for administrators and developers working offshore
- Faster processes when taking over from new customers