BERLINER STADTREINIGUNG RELIES ON MOBILE WORK – FOR A CLEAN AND GREEN CAPITAL CITY

COMPANY
BERLINER STADTREINIGUNG (BSR)

WEBSITE
WWW.BSR.DE

INDUSTRY
PUBLIC SECTOR

HEADQUARTERS
BERLIN, GERMANY

CHALLENGES

- Increasing requirements of employees for workplace flexibility
- High administration costs due to hardware failures and migration projects
- Improvement of IT security
- Reduction of the ecological footprint
- Media disruption on the explanation of unemptied rubbish bins

SOLUTION
In order to achieve a more flexible and mobile working environment for office workplaces and the street cleaning and waste disposal teams, Berliner Stadtreinigung opted for VMware solutions.

Many cities are undergoing tremendous changes. The city of the future is supposed to be quiet, clean and green and create a pleasant lifestyle for its inhabitants. In Berlin, a metropolis of superlatives, the Berlin Senate launched a smart city initiative back in April 2015, and such change is a challenge. There are more bridges there than in Venice, with a road network of over 5,400 kilometres covering an area which could easily fit Munich, Stuttgart and Frankfurt combined. The Berliner Stadtreinigung (BSR), Berlin's municipal sanitation operations, contributes to turning Berlin into a Smart City. Every day, the company is tasked with not only keeping roads, bridges and paths clean, but also disposing of the waste of the approximately 3.7 million inhabitants environment-friendly. A logistical and organisational masterpiece, for which appropriate infrastructure must also be created behind the scenes, for example within their IT department. In order to make employees' jobs easier and thus increase their contribution to urban cleanliness, it is important to keep their IT systems up-to-date and achieve a mobile and flexible workspace in their offices and on the streets of Berlin.

The Berliner Stadtreinigung is the largest municipal waste management company in Europe and, as a public agency, fulfils statutory tasks on behalf of the City of Berlin. BSR's core business comprises waste management, recycling, street cleaning and winter road clearance services. BSR stands in all business unites for sustainability as well as for safe, environmental and efficient service. Good performance, low fees and customer orientation as well as ecological and social responsibility are part of the strategy of the sustainably operating company and its approximately 5,400 employees.

The challenge

Providing new technologies that make employees work easier is one of the central tasks of the IT department within BSR's Organisational and Information Technologies business unit. Within the context of the "IT workplace in 2020" model and the cultural changes at BSR, which included mobile working, home office and above all the desire

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RONALD SCHEER
ORGANISATIONAL AND INFORMATION
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BERLINER STADTREINIGUNG

RESULTS
• Flexible access to company data and personal desktops from different locations as well as fast login and logoff at all workplaces
• Reduction of administration costs
• Improvement of IT security and maintainance of availability
• Reduction of the ecological footprint
• Simple and secure transfer of BSR apps to employees' mobile devices

VMWARE FOOTPRINT
• Workspace ONE, powered by AirWatch technology
• VMware Horizon 7
• VMware vSAN 6.5
• VMware App Volumes

for seamless working, the IT managers decided to provide innovative workplaces to their employees.

Especially, logon and logoff at the 2,000 office workplaces often took a very long time due to central, server-stored profiles. "We therefore decided to equip our colleagues at all 32 locations and all workspaces with solutions that allow access to corporate data anywhere, at any time," explains Ronald Scheer, Organisation and Information Technology, client-server operation at Berliner Stadtreinigung. In addition, the high administration effort due to hardware downtimes and migration projects should be reduced, standards and general availability should be adhered to. Ronald Scheer and his team set themselves the goal of increasing IT security and reducing the ecological footprint of Berliner Stadtreinigung through new solutions – and without having to accept major cost increases.

In addition to the new solutions for office workers, waste collectors should also be equipped with modern technologies. Previously, they were faced with the challenge of not being able to empty inaccessible garbage bins and having to note that on hand written notes. After the tour, the notes were handed over to customer service with pictures taken separately via mobile phone. The service had to manually transfer the information into the SAP system, tremendous amount of manual work. With the help of mobile devices and a special app, which each team has on their tour around the city, the protracted process was to be abolished. Customers should be able to find out in real time why certain bins were not emptied. Previously, this was only possible with a huge delay in the case of complaints.

The solution
In order to create a new desktop solution, BSR began to develop a concept and to gather proposals from a variety of providers. "The decision for virtual desktops, and VMware's Workspace ONE integrated platform, including the VMware Horizon 7 desktop solution in particular, was a very quick one. We have been working with VMware since 2006 and have already implemented their server virtualisation solutions. In addition, we have been using the VMware AirWatch mobile device management solution. During our feasibility study, VMware once again won us over, which is why we chose Horizon, vSAN and App Volumes," explains Ronald Scheer. The pilot project was started immediately upon approval of the proof of concept, with 80 zero clients and subsequent user feedback collection. "Feedback on the pilot project was consistently positive. For this reason, we set ourselves the goal of rolling out a total of

1,700 virtual desktops by the mid of 2018," says Ronald Scheer.

BSR launched a large-scale campaign in order to further increase employee acceptance. The concept and the advantages of virtual workstations were explained on flyers and in short videos. "We were able to inspire the majority of our employees within a very short period of time. However, the existing environment was not prepared for such a huge employee demand, which is why we then had to obtain further approval from the board and create waiting lists," says Ronald Scheer. Due to the great success and based on the realisation that a virtual desktop solution is not more expensive for BSR than an alternative solution, the board decided to expand the concept.

Additionally mobile working should be implemented on the street as well: Therefore the staff on the collecting routes are equipeed with mobile devices and an app, which has been specially developed for BSR. "The challenge was to be able to transfer our specially developed app to the mobile devices of the collection teams reliably and safely. Because of our shared history, but also because Workpace ONE, powered by AirWatch technology supports, both iOS and Android devices, we also chose VMware for this technology requirement," explains Ronald Scheer. The app has been in practice on a total of twenty Android devices since the end of 2016. "In the future, we have a goal of 280 collection teams equipped with one mobile device including our app."

The result

Both the virtualisation of the desktops and the new app on the mobile devices are being well received by the employees of BSR and are helpful, as Ronald Scheer points out: "In terms of virtual desktops, both users and IT administrators appreciate the fact that it is much faster to log on and off from a wide variety of mobile devices." Employees can also log on to workplaces in different BSR offices and access the whole desktop functions. The virtual desktops run much better than the previous solution – App Volumes was one of the key features. In addition, the goal of reducing administration effort was achieved: "Our IT administrators can now focus on more important tasks, as hardware failures have been significantly reduced and the migration effort minimized," explains Ronald Scheer. At the same time the high availability could be maintained and IT security increased at low cost.

"We invested around 800,000 euros in our 1,200 virtual desktops. As a waste management company, it is particularly important to us that we have also been able to reduce our ecological footprint and thus contribute to green IT. Now we have to find a solution for audio

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and video communication, because the technical requirements are missing on the virtual desktops so far," says Ronald Scheer.

A further added value for employees in waste collection is provided by a BSR app, which can be securely transferred using AirWatch to the mobile devices of the collection employees. "Thanks to the app on our mobile devices, on one hand we can see all loading points that have to be visited on one day. On the other hand, it is possible to take photos of bins that cannot be collected, save them together with a note and transfer them directly to the SAP system," Ronald Scheer points out. Older messages for loading points shall also be displayed in the future – if a specific case has already been documented in the app by another driver, this can be seen immediatly. This will make it possible to provide citizens with much better information as to why a bin has not been emptied.

A glimpse into the future

"Both projects with VMware represent an enormous digitisation push for Berlin's city cleaning company and have contributed to making workplaces more flexible," concludes Ronald Scheer. This brings BSR a huge step closer to its declared goal – to bring its IT up to date and to enable mobile working – whether in the office or on the road. In order to ensure that all activities continue to run smoothly, the managers at BSR plan to work on another project together with VMware in the future: "We placed our trust with regard to desktop virtualization in VMware vSAN 6.5, because it runs trouble-free, is cost-effective and has a high performance at the same time. That's why we want to find out, if we could virtualize our servers based on this solution as well," Ronald Scheer concludes.