

Greater flexibility and user comfort with a digital workplace

Spital Uster opens up new possibilities with digital workspace

Flexible access to apps from any device

Uster Hospital is the networked and efficient diagnostic and therapy center of the Zurich Oberland and the Glatt Valley. With a well-trained team of doctors, therapists, and nurses as well as a modern infrastructure, the facility provides primary healthcare to 172,000 people. More than 60,000 inpatients and outpatients are treated, cared for, and attended to every year. In addition, every year, up to 900 infants see the light of day in Uster hospital. With around 1,300 employees, the hospital is the largest employer in the city of Uster today.

Doctors, nurses, and administrators use a variety of IT applications to perform their daily tasks - from the central hospital information system to specialized physiotherapy applications. "Today, digital technologies help us optimize workflows and improve the quality of patient care in many areas," says Oliver Ernst, Head of IT at Uster Hospital. "Our goal as an IT department is to support every employee in their everyday lives as much as possible, so they can focus on their work with patients."

Challenge: Secure and fast access to the digital workplace

However, the digitization of work processes has been increasingly thwarted by the existing IT environment. "Our existing fat client infrastructure was already outdated and could no longer keep up with new requirements," explains Martin Hossli, Deputy IT Manager at Uster Hospital. Many PCs did not provide sufficient performance for the latest applications, long login and logout times delayed switching between different devices, and IT access from outside the hospital was very limited.

Uster Hospital, therefore, sought a strategy for the modernization of the approximately 800 IT workplaces. The goal was to combine flexible access options for users with the least amount of administrative effort. "First, we favored a classic VDI solution and planned to provide our users with personalized virtual desktops through the data center," says Oliver Ernst. "However, in the course of the tender, Bechtle Steffen presented a solution concept that was better suited to our requirements."



Industry
Healthcare

Location
Switzerland

Citrix products

- Citrix Application Delivery Management
- Citrix Gateway
- Citrix Virtual Apps & Desktops

Key Benefits

- 20 users can work simultaneously on a server cartridge and integrated graphics processors ensure that graphics-intensive applications are executed with high performance
- Power consumption per workstation is minimal
- IT complexity is reduced because it's not necessary to manage a virtualization layer or separate storage for the desktops and applications
- A user's digital workplace is now mobile, so doctors and nurses are no longer bound to a specific computer

The IT service provider advised Hospital Uster to implement a Hosted Desktop Infrastructure (HDI) based on Citrix Virtual Apps and Desktops and HPE Moonshot. All components for the central deployment of desktops and applications are integrated into this solution architecture in a turnkey all-in-one system. HPE Moonshot offers space for 45 hot-pluggable server cartridges with quad-core processors and SSD flash memory in a compact 4.3U form factor enclosure. These share the redundant switches, fan modules, and power supplies of the chassis.

High user density and low administration effort

Unlike a classic VDI infrastructure, the workloads in the Moonshot architecture run directly on bare-metal hardware. This offers great advantages for user density, performance, and energy requirements. With Citrix Virtual Apps and Desktops, around 20 users are currently working simultaneously on a server cartridge. Integrated graphics processors ensure that graphics-intensive applications are executed with high performance. The power consumption per workstation is minimal: The Moonshot architecture is characterized by high energy efficiency - and on the client side, classic PCs can be replaced by economical thin clients.

At the same time, IT complexity is reduced because it's not necessary to manage a virtualization layer or separate storage for the desktops and applications. Citrix infrastructure components, such as provisioning services and license servers, are also integrated directly into the Moonshot architecture.

"The solution concept inspired us right away," says Martin Hossli. "Before making a final decision, however, we wanted to gain initial hands-on experience." Uster Hospital, therefore, migrated a complete care unit and users from other departments to the HDI infrastructure, allowing users to work with the solution for two full months.

Users appreciate the flexible access options

The joint solution from Citrix and HPE was also convincing in the productive test. The biggest added value from the user's point of view: Their digital workplace is now mobile and no longer bound to a specific computer. Doctors and nurses can log in with HP Thin Clients or any other device using the Citrix Workspace App and have immediate access to their user desktop with all of their applications. Cumbersome login processes are eliminated because a non-contact authentication solution based on Imprivata OneSign has been integrated. Users can easily log into each workstation with their employee badge and do not have to repeatedly enter username and password.

As a result, quick user changes are possible on shared computers. The solution also eliminates the need to close and re-open applications: The user session always remains open on the Citrix servers and follows the user to any location. "The follow-me concept was very well received by our users, as it saves valuable time," says Oliver Ernst. "Even the closest printers are automatically assigned to the user when changing workplaces."

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Martin Hossli
Deputy IT Manager
Uster Hospital

The test users were also very satisfied with the performance of the centrally provided applications. Even high-resolution images and videos could be displayed very well at every workstation - thanks to the high-performance Citrix HDX protocol and the integrated graphics processors of the Moonshot solution.

Fast application delivery for all workstations

The seven-person IT team at Uster Hospital was able to get an idea of the simple administration of the solution during the test run. "We only maintain one vDisk in the data center, which contains all of our users' applications and is delivered through Citrix Provisioning Services. Therefore, we only have to install software updates once and can make them accessible at the push of a button on all workstations," says Martin Hossli.

Access to the applications is controlled by AppLocker and Microsoft Group policies. With Microsoft App-V, the application packages are then assigned to the respective user sessions. IT has full control over which applications run in which versions and on which workstation. The Citrix Director also provides IT staff a complete view of the health of the infrastructure and makes it easier to identify and resolve any issues in user sessions.

The administration of the Moonshot hardware in the data center is also very simple. Server cartridges and other components can be easily exchanged during operation. Extensions are possible at any time when the capacities of the solution reach their capacity. For example, Uster Hospital can install additional server cartridges to centrally provide dedicated desktops for users with special requirements.

Roll-out in several phases

After the positive experiences of the test operation, Uster Hospital decided to roll-out the new workspace concept nationwide. Together with partner Bechtle Steffen, two Moonshot systems were installed in the two server rooms to ensure the highest possible availability. Step by step, the individual departments have switched to the new infrastructure - starting with the care units that benefit the most from the flexible workplace concept.

"Right from the start, we tried to bring the users along in this transformation phase, for example by organizing 'walk-in' events," reports Oliver Ernst. "The employees were able to try out the new workplaces, and we demonstrated to the employees, amongst other things, how they can immediately switch from one workstation to another with their badge."

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Mobile work - without compromising on safety

The IT department also got a lot of support from hospital management during the project, who welcomed the fact that not only were flexible access possibilities created but uniform standards for security and data protection as well. For example, there are no more “collective accounts” on shared computer stations today. Each user logs in daily with their personal badge at their workplace - and the session is automatically locked after a few minutes, when they leave it again.

The remote access to internal IT is also comprehensively secured. For example, Citrix Gateway allows doctors on-call to access their user workspace from home. The Citrix solution encrypts all communication and prevents patient data from being printed or stored locally in the home office.

When using mobile devices, there are also no compromises in terms of data security. While some hospital staff use iPads and iPhones to access their emails, appointments, and applications, the IT organization manages these devices with Citrix Endpoint Management, ensuring that users can only install shared apps. Applications such as the client email Citrix Secure Mail also run in protected containers on the mobile device - strictly separate from the user’s private apps.

The IT managers are therefore well positioned for future challenges: “The work world in the hospital will become even more digital and even more mobile in the future,” says Martin Hossli. “With the combination of Citrix and HPE Moonshot, we can provide all users with flexible, location-independent workstations - and efficiently manage them with our small IT team.”

“We are very satisfied with the results of the strategy so far,” adds Oliver Ernst. “It was certainly decisive for our success that our partner Bechtle Steffen contributed a great deal of know-how and provided us with comprehensive support in planning and implementation.”

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Martin Hossli
Deputy IT Manager
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