

Long-term IT Security in the Healthcare Sector

,Gesundheitsholding Werra-Meißner GmbH' relies on secure storage systems from FAST LTA





The Werra-Meißner Clinic: a Regional Healthcare Provider

With its hospitals in Witzenhausen and Eschwege, Klinikum Werra-Meißner provides basic and standard medical care in the Werra-Meißner region and beyond. As a municipal hospital with more than 500 beds, the facility employs over 1,200 staff at both locations and treats around 20,000 inpatients and 40,000 outpatients every year. The hospital is also an academic teaching hospital of the University Medical Center Göttingen and the UMCH Campus Hamburg.

The history of the two hospitals goes back a long way: the first hospital in Eschwege was established around 170 years ago, while the hospital in Witzenhausen was opened on June 23, 1845. In November 2010, the two facilities merged to form Klinikum Werra-Meißner GmbH, which also marked the starting point for IT modernization.



Klinikum Werra-Meißner Akademisches Lehrkrankenhaus der Universitätsmedizin Göttingen und des UMCH Campus Hamburg







Challenges in the IT Infrastructure of a Hospital

As a healthcare facility with extensive documentation obligations and strict data protection requirements, the IT department at Gesundheitsholding Werra-Meißner GmbH (GHWM) faces particular challenges. Patient data must be archived in an audit-proof manner, but must also be available quickly. In addition, backup solutions must be implemented to enable rapid recovery in the event of an emergency.

Michael Günther, Head of IT at GHWM, describes the special situation in the healthcare sector: "As a hospital, we can hardly afford to purchase new IT systems every three years. You can easily be talking about sums of around 100,000 euros and more." This statement illustrates why longevity and reliability are particularly important for IT investments in the healthcare sector.

The Introduction of FAST LTA Solutions

» Silent Cubes für die revisionssichere Archivierung

GHWM introduced the Silent Cubes from FAST LTA back in 2010. These were mainly used for archiving the document archive (in particular Medico from CGM). Their use was later expanded to include the PACS system (Infinitt) for storing medical imaging and an email archive (REDDOXX).

The Silent Cubes have a redundant design and run in parallel in both GHWM data centers, which ensures a high level of reliability. One particular advantage is the reliability provided by the use of different hard disks. "*If individual disks fail, there have never been any problems*" emphasizes Günther in the interview.

» Silent Bricks as Modern Backup Solution

Around 2016, GHWM expanded its IT infrastructure with the introduction of Silent Bricks from FAST LTA. These replaced an earlier tape-based backup solution and are used in combination with the Veeam backup software for VMware environments.

With Silent Bricks, GHWM relies on a 3-2-1 backup concept, whereby individual Silent Bricks are regularly stored as mobile media in a fireproof vault (Air Gap). This is seen as sufficient protection, making a second location for the bricks superfluous. *"I don't actually see any disadvantage in the solution or the need for a second location, because we have the data available online, then on the silent bricks that we outsource. In terms of recovery time, I have a clear advantage over tapes," explains the IT manager.*

Experience and Advantages in Long-term Use

Exceptional Durability and Reliability

A key praise for the FAST LTA solutions is their durability and reliability. "*The longevity is very important*," emphasizes Günther. After around 15 years in use with the Silent Cubes and almost ten years with the Silent Bricks, there have been no problems worth mentioning so far, according to the IT manager.

This longevity is of great importance for a hospital from a cost perspective, as frequent new investments can be avoided. In contrast to software-as-a-service models, whose costs tend to rise quickly, FAST LTA solutions offer a stable and predictable investment.

Scalability and Flexible Expandability

An important selection criterion for both systems was the possibility of simple expansion. Thanks to their modular concept with independent storage modules, both solutions can be easily expanded at any time. This flexibility allows GHWM to keep pace with the growing volume of data without having to purchase new systems straight away.

Integration and Smooth Operation

The implementation and operation of the FAST LTA solutions went largely smoothly. The Silent Cubes were integrated via CGM with Medico and Infinitt, the Silent Bricks with Veeam for VMware. The cooperation with CGM is described as competent and smooth, although the Silent Brick introduction initially required GHWM to make its own adjustments. This was due to the large volumes of backup data and the resulting long runtimes. However, the system has been stable since the adjustments were made.

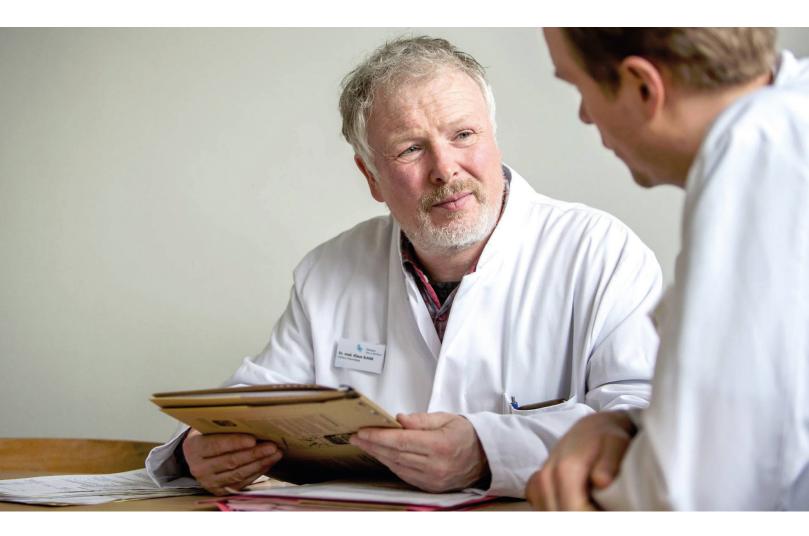
Günther describes the combination of Silent Bricks and Veeam as a "well-rounded concept" that works well together and is convincing in practice.

IT Security and Regulatory Requirements

Compliance with Current and Future Standards

Although GHWM is not currently a classic KRITIS hospital (no more than 30,000 inpatient cases), IT security is becoming increasingly important due to the NIS2 directive, which will also affect smaller hospitals in the future. *"KRITIS will soon no longer play a role, because NIS2 will also turn hospitals like us into a type of KRITIS hospital. We also have to meet various conditions in terms of IT security,*" explains Günther.

In this context, the revision security and WORM (Write Once Read Many) sealing of the Silent Cubes are cited as inherent advantages in terms of archiving and security. This is particularly important as patient data must be stored securely and unalterably over long periods of time.





Future Plans and Further Development

GHWM is already looking at successor products for the almost 10-year-old Silent Bricks, as the current systems will have been in use for ten years by the end of 2026. "We are already thinking about a successor system at the same time. And we might actually tackle this early enough so that we know what the costs will be," explains the Head of IT.

It is expected that the future Silent Brick Pro system based on NVMe will bring performance benefits, particularly with regard to the current long backup runtimes. "For a new purchase, I assume that we will be able to save a lot of time thanks to the flash architecture," says Günther.

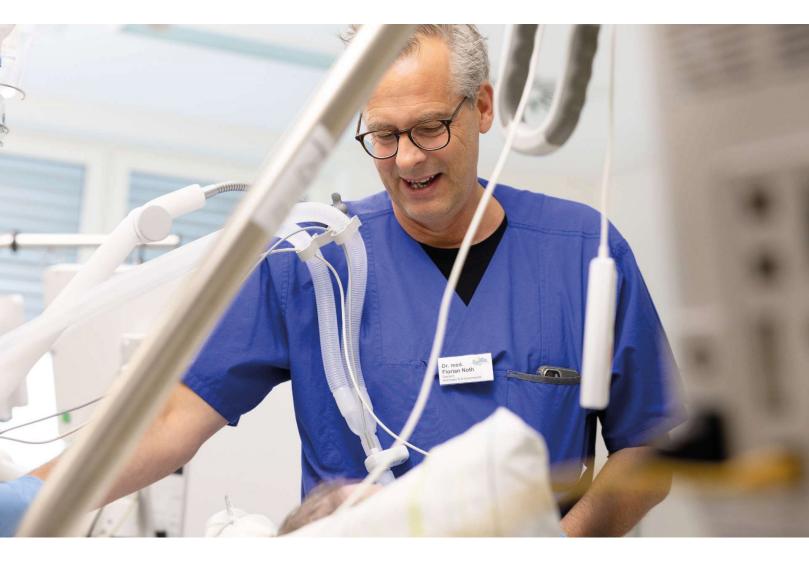


Preference for German and

European manufacturers

Although it was not such a strong criterion when the cubes were first introduced, the origin (German or European) is becoming increasingly important for Mr. Günther. The reasons for this are concerns about data protection and possible government access in the case of solutions from the USA, as well as the cost trend.

"For me personally, it matters more and more whether a manufacturer is European. Everything that comes from the USA must now be viewed critically, whether because of the costs or because of data protection," says Günther, explaining his attitude. If there were good alternatives, the decision would be made in favor of a German or European manufacturer.



Conclusion A Reliable Basis for Digital Healthcare

After more than ten years of experience with FAST LTA solutions, Gesundheitsholding Werra-Meißner draws a positive conclusion. The combination of longevity, reliability, scalability and cost-effectiveness has proven itself in practice and forms a solid foundation for the hospital's IT infrastructure.

Especially in times of increasing demands on IT security in the healthcare sector and growing data volumes due to the digitalization of medicine, the chosen solutions are proving to be a forward-looking investment. GHWM will continue to rely on the evolution of its proven IT infrastructure in the future in order to provide optimum support for medical care in the Werra-Meißner region.



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