FAST LTA

Customer Case Study | Silent Cubes | Immutable Archive of Patient Data

How Sana Kliniken stores patient images immutably for up to thirty years and retrieves them quickly

Within the hospital network, X-ray images, medical reports and other data must remain available for many years. Sana Kliniken Berlin Brandenburg began using two replicated Silent Cubes for its JiveX image archive in 2012. Invoices from SAP and data from medical practices were added later; healthcare professionals could access previous images from the patient record with a single click.

When a patient returns, the data must still be available

Sana Kliniken Berlin Brandenburg stores medical images and reports for several hospitals and healthcare locations. In 2012, data from the JiveX image management system needed to be archived for periods of up to thirty years. At the same time, doctors needed to be able to access this information when a patient returned for treatment years later. The storage therefore had to protect finalised archive records while remaining usable in daily healthcare processes.

The IT centre at Klinikum Lichtenberg forms the hub of the network. Before data is transferred to the long-term archive, it remains on NAS storage for 30 to 60 days as a disk-based backup. Data subject to retention periods of ten to thirty years is then transferred to Silent Cubes. The patient record contains a reference to previous examinations; healthcare professionals can retrieve the images and findings through this reference.

The experience?

“It just works.”

Matthias Barowsky, Head of the Berlin Brandenburg IT Management Centre at Sana IT Services



Photos: Sana Kliniken Berlin-Brandenburg, 2016

COMEX

Connecting multiple data sources to the same archive

Sana started in July 2012 with two replicated Silent Cubes, each providing 16 TB of net capacity. From January 2014, invoices were also archived through a direct connection from SAP. Later, data from the information systems of more than sixty medical practices was added to the archive. The solution therefore covered more than radiology alone.

The Silent Cubes protect stored data against deletion or overwriting. According to Matthias Barowsky, Head of the Berlin Brandenburg IT Management Centre at Sana IT Services, his staff could manage the systems easily. Two additional Cubes, each with 16 TB of net capacity, were added. By 2016, the replicated configuration therefore consisted of two installations, each providing 32 TB of net capacity.

An archive that fits into daily workflows

Sana could connect new data sources without having to establish a separate long-term archive for each type of data. For healthcare professionals, access to previous images remained part of the patient record. For the IT team, what mattered was that the storage operated reliably and that expansion required little effort, according to Barowsky.

Between 2012 and 2016, the system evolved from an image archive into a broader clinical and administrative archive. Connecting additional outpatient systems was still planned at the time. The retention period of up to thirty years was an archiving requirement.