

# Silent Cubes Success Story

Project: Schwarzach Hospital  
Solution: AGFA IMPAX

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Christian Mühlthaler, IT Manager, Schwarzach Hospital

## Schwarzach Hospital entrusts its patient data storage to FAST LTA hard disk-based archiving solution



Storage solution Silent Cubes and PACS AGFA IMPAX ensure revision-safe and economical long-term storage of permanent medical data

With 510 beds and total assets of 110 million Euro (data according to 2008 annual report), the Kardinal

Schwarzenberg Hospital in Schwarzach is the second largest hospital in the Austrian province of Salzburg. In 2008, its more than 1200 staff members admitted an approximate 30,000 patients and provided out-patient care on a further 65,000 cases. A clinical care center of this size is thoroughly dependent on highly-secure and high quality digital archiving and documenting of its medical data. To backup its extensive patient data, the Schwarzach Hospital chose an archiving solution from FAST LTA AG, the Munich specialists for digital long-term data storage. Together with AGFA's PACS system IMPAX, the hard disk-based storage solution Silent Cubes represent the ideal hardware/software combination.

Up to this point, the hospital had been compressing its radiology data and buffering it to a SAN (Storage Area Network), later saving it permanently with a DVD jukebox. It didn't take many years to accrue a perplexing and forbidding archive of hundreds and hundreds of DVDs. The system was also becoming increasingly prone to errors caused by mechanical wear. The average life of a jukebox would have necessitated migrating all the data to a follow-up system every four to five years – this process, too, being complicated, prone to errors and expensive. Besides for the archiving system not being sufficiently scalable, the SAN memory costs would have been too high for long-term archiving purposes.

### Identifying the most suitable archiving system

The hospital thus began an early, systematic evaluation of suitable long-term storage systems. A glowing report by the Barmherzige Brüder network of clinics (Austria's "Brothers Hospitallers") on their collaboration with FAST LTA brought the hospital's attention to the Munich-based specialists and their innovative hard disk technology. Soon thereafter, an IT team from Schwarzach visited the storage experts' booth at the conhIT healthcare congress. The FAST LTA team's presentation and range of services offered was more than enough to convince the Schwarzach delegation to invite FAST LTA to submit an offer on installing their archiving solution. Quickly making the short list,

the Munich company prevailed over four other well-known vendors and was awarded the contract. “We were very pleasantly surprised to receive such an innovative and yet user-friendly archiving system at such a low price. Even the system vendor technicians we consulted prior to making our purchase decision, who painstakingly put the solution through all its paces, immediately steered us to the FAST LTA system. We have never regretted our decision. From Day One, the solution and the entire project went off without a hitch, thanks to the professional and friendly FAST LTA team,” beams Christian Mühlthaler, IT Manager for Schwarzach Hospital on the hospital’s decision.

The requirements placed on the new archiving system were very high. It had to be able to guarantee the hospital’s medical data would be stored for up to 30 years without change. Also important was for the solution to be readily scalable and expandable and be suitable as a central memory for different applications. It needed to be able to handle an annual data growth rate trend of 2 TB – and steadily rising – and still ensure acceptable access times to the long-term memory. The hospital also expected easy migration of its data in addition to redundant data management – a distributed backup of data at multiple sites so that the hospital’s data would also be fully protected against any conceivable misfortunes such as fire or water damage. The FAST LTA storage system fulfilled all these requirements and went on to distinguish itself even further with its excellent price/performance ratio.

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## System phase-in and rollout

Installation of the FAST LTA hard disk storage solution began in late 2008 with the LTA system. After migrating the legacy data (6TB) from the DVD jukebox to the new storage system, live operation then followed. In light of a previous service contract set to expire, AGFA IMPAX was implemented at the same time as new PACS system. The second step of the project then followed in mid-2009 with the data migration to the LTA follow-up system, FAST LTA’s ultra-secure and energy-saving Silent Cubes, and by September of that same year, the entire long-term archiving system was on-line. The hospital purchased a total of four modular storage cubes. On-site installation was carried out by a team of FAST LTA technicians; the solution was implemented in just a few hours. “The team could not have been better prepared, they clarified all the important questions long in advance, and they all knew exactly what each one had to do. The teamwork between our IT staff and that from FAST LTA ran like clockwork – not one of the approximately 200 doctors and other staff users who access data here even realized the change-over was actually underway. And since the system is so user-intuitive and low maintenance, absolutely no training was even necessary. The whole process could not have run any smoother,” relates IT Manager Mühlthaler on the ease of implementation. Using the Silent Cubes solution has meanwhile tripled the hospital’s archiving speed. FAST LTA has also announced further performance increases soon to come.

While the primary storage task for the Silent Cubes is the hospital’s radiology data, the system has also reformed the storing of all other patient data. All this information, previously tracked on paper, is gradually being scanned and now likewise stored in digital form on the storage cubes. Once completed, more than 1200 staff members will then be able to access all the archived data. The hospital signed a 24/7 support and service contract with FAST LTA and thus enjoys a full “All-Round/No-Worry” support/service package.

Featuring quadruple redundancy, the Cubes also prevent batch error data loss by utilizing hard disks from three different manufacturers within one storage unit. A special WORM controller meanwhile protects the contents of all the hard disks against deliberate or inadvertent deletion and/or change down to the very lowest hardware level. Nevertheless, the FAST LTA Service Center always has the very latest status information on each Silent Cube from the routine reports generated by the early warning system. The support package guarantees the hospital that any potential problem will be rectified on-site by a FAST LTA technician – without any disruption to system operations nor loss of any data.

“Many hospitals are now struggling with cuts to health sector IT budgets while at the same time, there’s an explosion in the amount of long-term data needing to be stored in revision-safe and legally-compliant archives. Solving this headache for physicians and hospitals was actually the main impetus behind our developing the Silent Cubes solution; this was its original, intended use, what started this whole revolution in data storage. This fact was not lost on the Schwarzach Hospital management and thus we can now take pride in yet another successful project. The working partnership we experienced with the entire hospital team was a textbook case of an ideal client-service provider relationship,” adds Reiner Bielmeier, FAST LTA Business Manager, in providing a final evaluation of the overall project.



Further information about the Silent Cubes long-term storage solution can be found at [www.silentcubes.com](http://www.silentcubes.com)

### About Silent Cubes

Silent Cubes are revolutionizing the highly-secure and cost-effective storage of long-term data. Not only are they revision-safe as well as energy-efficient, their simple and modular structure enables problem-free scaling into the petabyte realm, high availability and easy replication, allowing their full use at multiple locations. Further features distinguishing the multi-certified storage cubes include quadruple redundancy and preventing data loss due to batch errors by using hard disks from three different manufacturers within one storage unit. Our proprietary WORM controller additionally protects the contents of all the hard disks against deliberate or inadvertent deletion and/or change down to the very lowest hardware level.