

## Medical Data Management: PresSTORE in the Operating Room

At Hannover Medical School (MHH), children's cardiac surgeries are documented with digital video technology to improve not only education and training, but also preparation and evaluation of operations. Their solution for the entire data management: PresSTORE.

The pediatric cardiac surgery is one of the most challenging areas of surgery. With their own specific disturbances and abnormalities, children aren't simply miniature people suffering the same diseases adults do.

Hanover Medical School, especially its pediatric cardiac surgery, is leading the way in Europe. Since children's cardiac surgeries are highly complex and quite uncommon procedures, MHH records those operations with a sterile video camera to document various procedures for training and professional development.

The use of digital video technology helps to present complex structures in detail, enabling students and physicians to study even unusual surgeries and diagnostic findings. With the live recordings of operations tutorial videos are produced. They have a length of 10 to 15 minutes and are used both for education and preparation of surgeries.

In the meantime, the department of pediatric cardiac surgery has an extensive archive with videos of surgical procedures. As a result, the institution's IT faces new challenges caused by the



explosion of data, IT is facing new challenges. The video files entail an enormous data volume requiring review, structuring and management. For this reason, MHH looked for an uncomplicated backup and archive solution fit for the future which could administer a data volume of several terabytes.

### PresSTORE: Decision for a cross-platform solution

PresSTORE was shortlisted because of its modular structure. For Thomas Breymann M.D., head of pediatric cardiac surgery, the cross platform functionality, with which all data can be archived and administered using a neutral format, was an important criterion. "At MHH we use the operating systems MAC OS X, Linux and Windows. With PresSTORE we can smoothly restore all video files on all platforms." Other crucial factors leading to a decision in favor of PresSTORE were the good scalability, the support for tape libraries and the integrative management via web browser.

### Easier retrieval with media preview

Since 2006, PresSTORE Backup and Archive are in use. Extensible individual description fields for metadata facilitate retrieval in the archive. The media preview created automatically allows for visual searching in the video archive. The hardware for PresSTORE, two Apple Xserve and one Xserve RAID system for 15 clients, was installed by Cancom. The software in the main being self-explanatory, it can also be used by employees with little IT knowledge after short practice.

### KEY FACTS:

Customer:



Clinic for Cardiac,  
Thoracic, Transplant and  
Vascular Surgery (THG),  
Pediatric Cardiac Surgery

Industry:  
Medicine

Products:  
PresSTORE Backup  
PresSTORE Archive

System Integrator:  
Cancom, Hannover

Result:  
„We are highly pleased with PresSTORE, which is in large part due to the exceptionally high quality of support.“

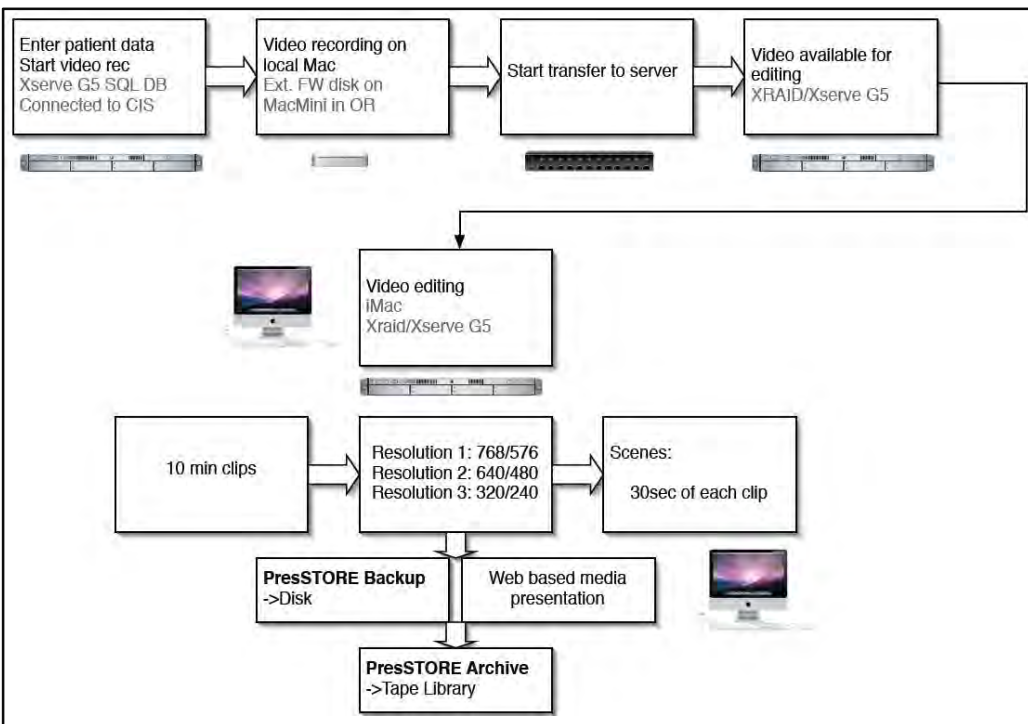
Thomas Breymann M.D.,  
head of pediatric cardiac surgery

Once a month a full backup according to the father-son-grandson-principle is executed and kept in three cycles. Every night, the databases, the application server and system board are backed up incrementally. For that purpose, the sybase ASE enterprise database of PresSTORE is stopped for backup via scripts. In addition, the data is mirrored at the second RAID and stored supplementary on tape. Altogether, the

data volume of one full backup comprehends about 5 terabytes.

**Elaborate strategy as basis of data management**

MHH is a good example how to implement a sophisticated backup and archive solution in the field of medicine. Precondition is a strategy for long-term archiving and the expected future data volume including migrations and disaster recovery scenarios.



Configuration

**About MHH**

The Hannover Medical School (MHH), founded in 1965, is one of the world's leading university medical centers with outstanding success in interdisciplinary collaboration both within the MHH and with

extramural scientific institutions. Its pediatric cardiac surgery is a leading institution in Europe.

>> [www.mhh.de](http://www.mhh.de)

**About Archiware**

Archiware develops, sells and supports a new generation of Internet-ready applications for media and asset management, including integrated backup, synchronize and archive solutions. Based on an Internet data management platform, PresSTORE

allows archiving, backup and distribution of data. With more than 1200 installations, PresSTORE is one the most successful data management systems, especially in the prepress industry, where it is strongly represented.

>> [www.archiware.com](http://www.archiware.com)