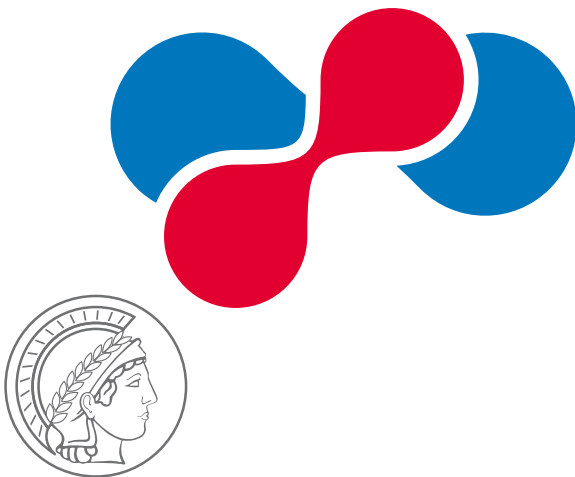


Case Study

PoINT Storage Manager Max Planck Institute

**Max-Planck-Institut
für Herz- und Lungenforschung
W.G. Kerckhoff-Institut**



The Max Planck Institute for Heart and Lung Research (MPI) has permanently retained terabytes of measurement data using online storage. This includes data that is only rarely accessed. The MPI holds petabytes of data overall. In order to reduce the costs associated with

maintaining such large volumes, the institute chose to use the PoINT Storage Manager software, which enables long-term preservation, transparent read access and multiple media formats.

The challenge

- Relieve primary storage, reduce costs
- Audit-compliant archiving for research data
- Media in multiple formats

The solution - PoINT Storage Manager

- Long-term preservation and HSM
- Transparent read access
- Migration with no downtime

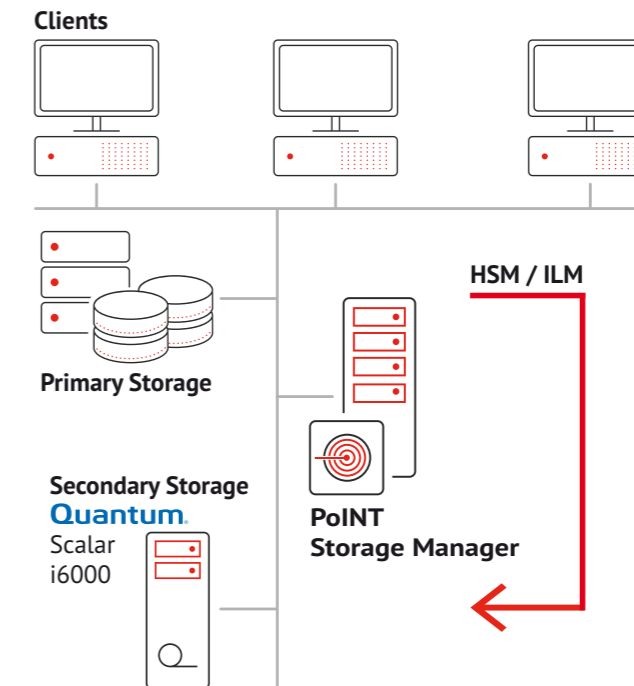
The benefits

- Optimal storage system usage
- Save time, reduce costs
- Fast, intuitive administration

About MPI

The Max Planck Institute for Heart and Lung Research in Bad Nauheim is one of the world's leading research institutions in the field of cardiovascular research. The scientists of MPI are studying the molecular and cellular processes of embryonic organ development, as well as the mechanisms

underlying the development of cardiovascular diseases. The institute has about 350 employees. The working atmosphere is international. About half of the scientific staff that includes a large number of junior researchers come from abroad.



Before adopting the PoINT Storage Manager (PSM) software, the Max Planck Institute for Heart and Lung Research (MPI) primarily stored measurement data (with file sizes measured in gigabytes or terabytes) on hard drive-based systems. This included rarely-used data, which increased costs significantly. In order to minimise these costs, the MPI looked for a hierarchical solution: the PoINT Storage Manager.

The PoINT Storage Manager is responsible for the long term archival of research data, including transparent read access via so-called "stubs". When an archived file is opened, it does not need to be transferred back to primary storage but is made available on a cache storage inside the PoINT system. As a result, the PSM relieves the load on the primary system, which enables full backups within the MPI's desired time windows. The PSM optimally meets the MPI's needs, since data needs to be held audit-compliant and long-term in a format where it can still be retrieved when needed.

The institute has now used the PSM for several years. It has allowed the institute's IT staff to overcome challenges with extensive storage requirements. "We see this mature software as a long-term, future-proof solution which offers flexibility despite rising volumes of data," said Prof. Dr. Mario Looso, Head of the IT and Bioinformatics Facility. "We are very pleased with

both the product and the service we received. PoINT meets all of our requirements in full."

The IT staff also wanted to use multiple media formats, storing data on hard drive systems (NFTS/HFS+) and LTO tapes (LTFS). To enable this, the PoINT software reliably migrated the existing systems to a new environment avoiding any downtime. The combination of multiple media formats and the manufacturer independence offered by the PSM grants the institute a wide range of options for expansion and permits quick reactions to internal and external changes such as rising volumes of data.

"Following a test phase in which we tested the software under every scenario we could think of, we were convinced by its wide range of functionality and ease of use thanks to its clear, intuitive GUI. Other advantages included the PSM's clear and easy-to-understand archiving and HSM rules, which can be modified and expanded as required. Moreover, the PoINT product allows us to quickly and elegantly restore data," said Prof. Dr. Looso.

In short, long-term preservation and transparent HSM provided by PoINT Storage Manager enable audit-compliant storage of all research data for the Max Planck Institute while also making optimal use of storage systems and reducing costs.

The project was implemented by Cristie Data, an independent service provider and long-term PoINT partner which acted as a consultant to Max Planck Institute.

About Cristie

In 1969, Cristie was founded in Stroud, England. 1994 the Cristie Electronics GmbH was founded in Germany. Since then, the company has been working on storage, backup and disaster recovery solutions. The more than 150,000 installations around the world reinforce their commitment. In 2000, the company was renamed to Cristie Data Products GmbH. Already at the beginning of the 2000s Cristie started to provide solutions as cloud or managed services for their customers. Due to the changes and extensions of the portfolio, the company was renamed to Cristie Data GmbH in 2016. The new name reflects the wide range of solutions and services of the company. With all their solutions and services, Cristie creates sustainable value added for customers and partners.

About PoINT

PoINT Software & Systems GmbH specializes in developing software products and system solutions for storing, managing and archiving data. Its storage and data management solutions allow simple, efficient integration and a wide range of storage technologies to meet each business' individual requirements and specific workflow.

Additional information and a trial version of the software are available at www.point.de.