GEBR. PFEIFFER SE

# DREAM TEAM FOR DIGITAL PROCESSES AND AUDIT SECURITY

## HOW DMS AND ARCHIVE SYSTEM SIMPLIFY AND SECURE THE WORK AT GEBR. PFEIFFER

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Thomas Lozano, IT Project Manager at Gebr. Pfeiffer SE

# GEBR. PFEIFFER

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**Industry:**
Mechanical engineering

**Background**:
Parallel to the introduction of the DMS and the digitalization of the company processes, the question of audit-proof storage of business-critical documents arose at Gebr. Pfeiffer. This needed to fit into the existing infrastructure and to ensure long-term data integrity and availability without IT effort.

**Challenge**:

- Audit-proof archiving
- Fulfillment of legal requirements and the obligation to provide evidence for product liability issues
- Smooth interaction between DMS and archive
- Proven and flexible system for future-proofing and risk minimization.

**Solution**:
Optimal Systems enaio®
iTernity iCAS

*Gebr. Pfeiffer SE is a manufacturer of plant and machinery for cement processing, and for more than 150 years has been a pioneer in the development of modern mill technologies for grinding, classifying, drying, slaking, and calcination.*

## SUCCESS AT A GLANCE

- Audit-proof process to meet legal requirements and minimize risk
- Smooth interaction of the document management system with the audit-proof archive
- Flexible, software-based solution facilitates data migration and adaptation to future changes and requirements
- Minimal effort in the IT department for the administration of the long-term archive

## DIGITALIZATION IN MEDIUM-SIZED COMPANIES

"Progress is our tradition." Gebrüder Pfeiffer SE sums up the classic pledge of medium-sized businesses. The family-run company is a manufacturer of machines for cement processing and, with its highly specialized products, is oriented to the global market.

The development of IT at the plant and machine builder headquartered in Kaiserslautern is also geared to progressive digitalization, as is the case with numerous medium-sized companies. Starting with special in-house developments, Gebr. Pfeiffer has modernized its IT infrastructure, introduced new systems, and digitalized its processes in recent years. Thus, in addition to the ERP system from proALPHA, the document management system Enaio® from Optimal Systems has established itself as a permanent fixture in the company. Parallel to the DMS project, the search for a suitable audit-proof long-term archive was on the agenda, as Thomas Lozano, IT Project Manager and manager responsible for long-term archiving at Gebr. Pfeiffer, recalls:

> *"As a mechanical engineering company with custom manufacturing, we have an incredible amount of technical business documents which need to be processed and backed up for the long term. This initially led to the need for a high-performance document management system, and the logical next step was to add an audit-proof archive."*

With over 500 employees, Gebr. Pfeiffer develops a broad portfolio of machines for grinding, classifying, drying, slaking, and calcining cement, granulated slag, coal, lime, gypsum, and clay. These machines are very durable, which also means that the safety, integrity, and availability of the company's data are geared for the long term, as Lozano explains:

> *"We develop machines for the world market, which are in operation for 30 to 40 years or more. That's where project knowledge has to be available, even after many years, without the documents having been deleted, changed, or tampered with."*

## THE INITIAL SITUATION

Legal and regulatory requirements, unbridled data growth, technological progress, and growing cost pressure are driving forces and major challenges for the IT department at Gebr Pfeiffer. The legal regulations are further supplemented by internal and industry-specific requirements, which increases the complexity of the list of demands on long-term data archiving.

The most pressing issue for Gebr. Pfeiffer was the audit-proof storage of business e-mails and

technical documents, such as drawings, documentation, and operating instructions. The goal of the long-term archive could be broken down into three areas:

- **Compliance with regulatory requirements**
  The audit-proof archive should ensure compliance with legal requirements for commercial documents and product liability issues (ProdHaftG, AO, GoBD, DSGVO, etc.).
- **Risk minimization**
  Should there be a need to provide evidence in court, for example, the stored documents must be "watertight". The archive is therefore also used for self-protection and risk minimization.
- **Availability and data protection**
  Business-critical data may not get lost, changed, or manipulated. The archive therefore also plays an important role at Gebr. Pfeiffer in the area of long-term availability and data protection.

The goals and requirements for the audit-proof archive were defined proactively by IT, as it clearly sees itself in the role of process optimizer at Gebr. Pfeiffer, as Thomas Lozano emphasizes:

> *"At Gebr. Pfeiffer, the IT and Organization department is very close to the specialist departments, has a global company overview, and is thus the driver for technical innovation and process optimization."*

## REQUIREMENTS FOR DMS AND ARCHIVE

Since 2014, Gebr. Pfeiffer has been using the enaio® document management system from Optimal Systems company-wide - including branches in India, China, Brazil, USA, Egypt, and Malaysia. Consequently, one of the most important requirements for the audit-proof archive was the smooth interaction of the two systems.

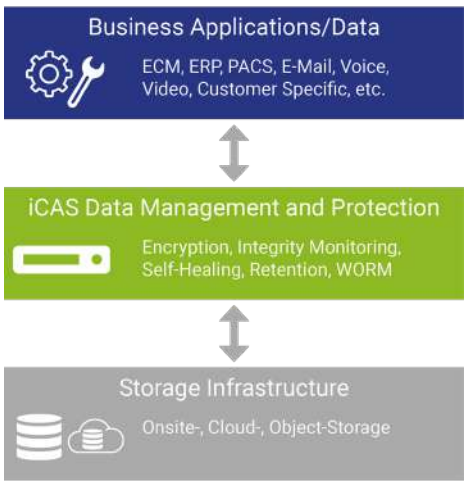
> *"It was important for us to know that the archive solution had been on the market for some time, that it had proven itself, and had been positively evaluated by other companies. A tested and validated connection to enaio was mandatory."*

Due to the good cooperation with Optimal Systems, Gebr. Pfeiffer obtained a recommendation from the DMS partner as to which archiving solution could best fit into the existing set-up. As Optimal Systems and iTernity have a long-standing partnership which has resulted in numerous joint customer projects, the iTernity iCAS middleware quickly emerged as the solution of choice.

The detailed analysis of iCAS accelerated the selection process, as the overall package of software,

integration, and long-term alignment left no needs unmet. Thomas Lozano recalls:

> *"In the selection process, we quickly saw that iCAS is a proven and technologically mature archive system. The same was true for iTernity as a company, which became apparent during the initial discussions."*




As a software-based solution, iCAS connects business applications (DMS, ECM, and numerous other systems) to the storage infrastructure, while being independent of both. The software solution runs on Windows Server and can be operated physically as well as virtually. iCAS is based on standard hardware, can be used with on-premise, object, or cloud storage solutions and provides compliance, data integrity protection, and WORM storage (Write Once Read Many). Due to its software-based architecture, iCAS offers great flexibility and security even with regard to the future and to unexpected developments at Gebr. Pfeiffer.

## THE INTERACTION OF ENAIO® AND ICAS

In lay-terms, DMS and archive are often used as synonyms. In detail, however, there are important differences in terms of objectives and working methods. In an archive, data is stored which must be kept for a certain period of time - immutable and audit-proof. The DMS also serves as a filing system, in addition to many other tasks, but is primarily for ongoing business activities. This is also an important aspect for Thomas Lozano:

> *"We deliberately do not regard the DMS as an archive system, since we work actively in it and the documents go through different life cycles. With the archive, on the other hand, the focus is on audit security, immutability, and compliance with regulatory requirements. In my view, DMS and archive only develop their full potential when they work together."*

At Gebr. Pfeiffer, enaio® is the "control unit" responsible for managing, providing, and storing data and documents. iCAS, on the other hand, serves as a "secure home" for the data from the DMS, which fulfills all existing demands for long-term digital archiving.

For Gebr. Pfeiffer, it was necessary and made sense from several aspects to introduce an archive

storage system in addition to the DMS:

- The audit-proof archive iCAS serves to comply with legal, industry-specific, and internal requirements (e.g. DSGVO, GoBD, AO, product liability).
- For audits and evidential purposes in court, data must be verifiably stored in an immutable way. It is not enough to simply *not* delete data from the DMS.
- A modern archiving system such as iCAS takes on additional tasks to maintain data integrity and protection, e.g. replication, automatic integrity checks, encryption, WORM storage, and retention management.
- By using iCAS, Gebr. Pfeiffer spares the performance of enaio® and the primary storage, as Thomas Lozano also emphasizes:

> *"With iCAS we relieve and complement our DMS. Through clearly defined archiving processes, we optimize the performance of enaio and our storage infrastructure."*

Thus, a set of rules was established in enaio® which divides the documents into different life stages. After a 14-day grace period, the documents are archived immutably with iCAS and saved to storage. iCAS replicates the data to two separate storage destinations. This has the advantage that Gebr. Pfeiffer can use the "self-healing" function.

Self-healing in iCAS enables continuous monitoring and assurance of data integrity. The data is archived synchronously on two storage targets. Each data record is assigned a content-related hash value (checksum), which is stored as an archive object together with all important additional information. During the self-healing process, consistency and integrity are checked on all storage paths. Damaged or invalid archive objects are identified using the hash value and automatically repaired - by replacing the damaged data set with the valid one. Thus, logical or technical errors in one storage target cannot affect the replicated second storage target.

## RESULTS AND OUTLOOK

The goal of an archiving system is to ensure long-term availability and data integrity - without any effort on the part of IT and invisibly in the background. For Thomas Lozano, this "noise-free operation" is also the most important outcome after implementing the archive, because "iCAS just runs, the system is absolutely reliable and does its job without being noticeable."

In addition to the fulfillment of regulatory requirements and the additional protection of the documents from enaio®, iCAS stands out for its robustness: For the IT team led by Thomas Lozano, the archive incurs hardly any effort; even migrations to new server systems do not pose a challenge, but run in the background during operation.

> *"For me as an archive project manager, it is the perfect product: iCAS is easy to maintain and runs absolutely reliably. Since implementation, I can't recall any situation worth mentioning in which our IT needed to do some hands-on work."*

Another advantage for Gebr. Pfeiffer is the resulting flexibility. Firstly, this concerns the open interfaces and the simple connection of different storage solutions. Additionally, the machine builder can easily scale with the combination of enaio® and iCAS, and is thus prepared for future changes. Lozano sees the challenge of the future primarily in data growth:

> *"We are already feeling rapid data growth at the moment, but we expect stronger growth in the next few years. Already in the selection process of DMS and archive it was important for us that we are well set up for the future. iTernity and Optimal Systems have always supported us competently and have proactively set the right course for future developments."*

The motto of Gebr. Pfeiffer SE is "Long-term development is more important than short-term success." The machine builder has consistently implemented this motto in its archive project and looks back with satisfaction on the development and partnership which has been built up:

> *"Our collaboration with iTernity is truly a partnership between equals. When we as a medium-sized company are faced with special challenges, we are listened to and a joint solution is found."*

# DATA ARCHIVING MADE SIMPLE

iCAS is a flexible middleware for retention management & WORM storage. The solution integrates perfectly into heterogeneous infrastructure landscapes. While you take care of your core business, iCAS reliably protects the integrity and availability of your data in the background.

### HARDWARE INDEPENDENT

The archive intelligence is tied to the software-layer, not to the hardware

### COMPLIANT

iCAS assures regulatory and compliance requirements

### FLEXIBLE

Middleware between your business application and the storage infrastructure

### TAMPER-PROOF

iCAS provides WORM storage, encryption and retention management

# THE CENTRAL PLATFORM FOR YOUR DATA MANAGEMENT


iCAS protects data integrity and availability, even if the underlying storage technology and hardware changes in the future. As a software-defined solution, iCAS lays the foundation for audit-proof data archiving and protects your investments in hardware, software and services.

iCAS adapts to your IT infrastructure and adds compliance, data integrity protection and WORM storage (Write Once Read Many) to your existing systems.

iTernity

# WE TAKE YOUR DATA SECURELY INTO THE FUTURE

We protect your business-critical data. The trust you place in us is our motivation and an investment in the future. The result: more security, less effort, no worries.

Our DNA is archiving, our mission the long-term availability and integrity of all types of corporate data. Our focus is on your challenges, whether data protection, cost pressure, data growth, cyber attacks, lack of time, or complexity –
we take your data securely into the future.

## CONTACT OUR EXPERTS

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