iTernity

AUVA General accident insurance

NEW ARCHIVE STORAGE CUTS COSTS BY 60%

WANTED: MORE FLEXIBILITY, EFFICIENCY AND SECURITY FOR THE STORAGE INFRASTRUCTURE

„Thanks to iCAS FS, we were able to reduce our storage costs by 60%. The TCO benefits come mainly from iTernity's software-defined architecture and the managed services approach"

Christian Zellermayer,
Deputy Head of Department, Information and Communication Technology at AUVA

AUVA – GENERAL ACCIDENT INSURANCE

Industry:

Insurance / Healthcare

Situation:

At AUVA, the general accident insurance company of Austria, data volumes from imaging procedures are increasing rapidly. This data must be stored with high availability and in accordance with strict regulations and security standards. Due to the replacement of the archive storage in use, AUVA was looking for a more flexible and efficient solution with a clear focus on ransomware protection.

Challenges:

- Storage and protection of sensitive patient data according to strict regulations.
- High costs of the existing archive storage
- Limited connection of applications due to proprietary APIs
- Management and administration of the archive should be outsourced

Solution:

iTernity iCAS FS storage platform

Image page 1: AUVA headquarters (source: AUVA). Page 2: AUVA's services include prevention, accident treatment, rehabilitation and compensation for workplace accidents.

THE SUCCESS AT A GLANCE

✓ Cost savings in data storage & management of 60% compared to the archive storage used so far.

✓ No effort for AUVA with the storage platform: administration, monitoring, updates & operation are provided by iTernity

✓ WORM storage, ransomware protection and failover guarantee data security, integrity and availability

✓ Handling data growth with the iTernity iCAS FS scale-out storage platform

✓ Independence from proprietary APIs and hardware systems thanks to open interfaces and a software-defined architecture

THE ARCHIVE STORAGE END-OF-LIFE AS AN OPPORTUNITY

How can we secure our medical data against loss and manipulation, manage data growth, and save costs and time in the process?

This was the question on the minds of AUVA, the Austrian General Accident Insurance, when the previously used archive solution was discontinued. However, the IT managers at AUVA saw the end-of-life of the existing archiving system as a clear opportunity to design their IT infrastructure to be more flexible, secure and efficient.

Every Austrian knows AUVA. As a statutory accident insurance company, AUVA serves around 4.6 million insured members. Its services include prevention, accident treatment, rehabilitation and compensation for accidents at work. AUVA is therefore not a classic insurance company - under the motto „Everything from a single source", it provides the best possible treatment for its insured and always takes a holistic view.

For AUVA's IT, handling data is a sensitive process because it involves critical health information. This data must be specially protected, may not be changed or manipulated, and must be stored according to strict regulations. In addition, due to the acute nature of the treatment, rapid access to archival data is elemental and high availability is critical to patient care.

To complicate matters, data volumes are growing rapidly and are a lucrative target for ransomware attacks. Three key questions therefore arose for AUVA:

Key data: AUVA

- Statutory accident insurance
- Prevention, accident treatment, rehabilitation, compensation
- 4.6 million insured persons
- 5,700 employees

- How can data from imaging procedures - such as X-ray images and medical findings - be stored in a long-term, highly available and secure manner?
- How can the discontinued archiving system be replaced and the dependency be broken?
- How can efficiency, scalability, flexibility and time to manage be optimized?

DATA GROWTH, TIME TO MANAGE AND SECURITY

Christian Zellermayer is deputy department head for information and communications technology and responsible for coordinating AUVA's data centers. If he reads IT reports in the newspaper today, they usually revolve around ransomware attacks, skills shortage and data growth, suggesting that the role of an IT manager in today's world is not an easy one. Christian Zellermayer sums up the situation like this:

„Today, it is extremely difficult to plan IT infrastructures and storage requirements. At AUVA, we currently have a doubling of backup and archive data every three years - and this situation will continue to worsen in the future."

Data growth is closely related to costs, workforce planning and IT security. More data requires more storage and new systems. These need to be managed, updated and secured. This in turn requires IT specialists, time and money. More systems and resources often mean increased complexity and additional gateways for cyber attacks.

At AUVA, another aspect was added to these challenges: the dependency on the existing proprietary archive solution, also referred to as ‚vendor lock-in'. Proprietary systems contrast with open source solutions and tie companies down through the use of specific interfaces and hardware. For AUVA, this made it difficult to connect additional business applications, caused high costs and limited flexibility.

THE GOAL: SECURITY FOR THE FUTURE

However, it takes more than that to get Christian Zellermayer off his guard. Christian Zellermayer manages AUVA's data centers with calmness and clear vision, which was also evident in the definition of goals for the new archive and storage solution. He summarizes it like this:

> *„We have used the challenging initial situation as an opportunity to design our infrastructure to be more flexible, independent, secure and cost-effective."*

The tendered archive and storage solution had to fulfill the following aspects:

- Scale-out architecture

- Fulfillment of all legal requirements, e.g., from GDPR (General Data Protection Regulation) and NISG (Network and Information System Security Act)

- Open interfaces and use of cost-effective standard hardware

- High availability and geo-redundancy

- Administration and monitoring by the vendor, without effort for AUVA

- Strict analysis with regard to IT security and ransomware protection

REQUIREMENTS FULFILLED, COSTS REDUCED

> *„Thanks to iCAS FS, we were able to reduce our storage costs by 60%. The TCO benefits come mainly from iTernity's software-defined architecture and the managed services approach."*

The costs of the archive storage were an important aspect for Christian Zellermayer, but the key factor for the decision in favor of the iCAS FS storage platform was the overall solution:

Compliance with legal requirements

With iCAS FS, AUVA meets all requirements for storing sensitive health data. Thanks to WORM storage (Write Once Read Many) and retention management, data cannot be changed, manipulated or deleted once it has been written. This capability has also been independently audited and certified by KPMG.

Scale-out

As a scale-out cluster, iCAS FS counteracts data growth that is difficult to calculate. The software-defined solution is built on cost-effective x86 servers and can be easily expanded by adding cluster nodes. Performance can be increased in the same way.

High availability

For Christian Zellermayer and AUVA, the archiving system is a central building block of IT:

> *„iCAS FS is a highly critical system for us. The archive is elementary for the daily work and the operation of our accident hospitals."*

Uninterrupted and high-performance access to archive data is a must. High availability is ensured by iCAS FS thanks to transparent read/write failover and an active-active cluster. All nodes simultaneously perform the same services and stand in for each other in the event of a failure.

In addition, AUVA stores archive data at multiple sites, providing geo-redundancy and protection against natural disasters and data loss. iCAS FS replicates data synchronously by default, but can extend a single cluster to remote data centers. In this case, iCAS FS intelligently switches between synchronous and asynchronous replication.

Time and personnel expenditure

For AUVA, availability is closely related to the management of the archiving system. The clear premise here is that the effort for the company's own IT should be minimized. The reason is simple for Zellermayer:

> *„It doesn't make sense to assign at least two employees to the system. We are well positioned in our IT department. Why should we do the administration when the manufacturer can do it much better?"*

Thus, the responsibility of the archive storage lies with iTernity. Whether implementation, monitoring, troubleshooting, configuration changes or administration – AUVA's IT has very little contact with iCAS FS. The system is operated as a managed service by iTernity and runs smoothly in the background for AUVA.

Flexibility

The openness of the storage system was an important aspect for AUVA, as the flexibility was limited with the previously used solution. iCAS FS fulfills this on the one hand through open interfaces. Thus, data sources such as PACS, ERP and DMS can be easily connected via S3, NFS or SMB. Future changes of business applications and data migrations are simplified. On the other hand, iCAS FS is software-defined and thus decouples storage and archive intelligence from hardware. This creates future security and protects investments in applications, hardware and services.

Security

Ransomware attacks, insider attacks, data loss – the dangers force AUVA to take special protective measures due to the sensitivity of the health data. These are already integrated into the architecture of the archive storage. iCAS FS is based on a hardened Linux system and does not provide administrator access for AUVA. This minimizes the attack surface for threats from outside and inside.

In addition, the data is stored immutably according to the WORM principle and thus cannot be deleted or manipulated. The iTernity Managed Service ensures that the system is always up to date, as updates and security patches are applied directly by iTernity.

Support

Fast response times, in-depth knowledge and personal contact persons were another advantage for Christian Zellermayer when looking for a solution:

> „We received very close and competent support right from the start. With our requirements, we were heard at iTernity. The implementation was also completed quickly and unspectacularly."

At the same time, iTernity was not an unknown provider. AUVA had been using a solution for archiving electronic invoices from the ERP with satisfaction for several years. In addition, the manufacturer and solution had been recommended several times by other reference customers and IT partners.

LOOKING TO THE FUTURE

New applications, new legal requirements, new risks - the IT world never stands still. As a result, AUVA regularly faces projects involving data storage and archiving.

One trend is the focus of AUVA's future orientation. Accident treatment and rehabilitation are to be more closely linked and offered under the umbrella of a clinic. The storage infrastructure and the linking of PACS and radiology systems also play an important role in this.

UNLIMITED SCALABILITY FOR LITIMTED IT BUDGETS

iCAS FS is a scale-out platform for archive, backup and business critical data of all kinds.
The software-defined storage platform scales without limits starting at 40 TB,
and impresses with low TCO, great ease of use and high flexibility.

53% cost savings compared to public cloud storage and you retain the control of your data
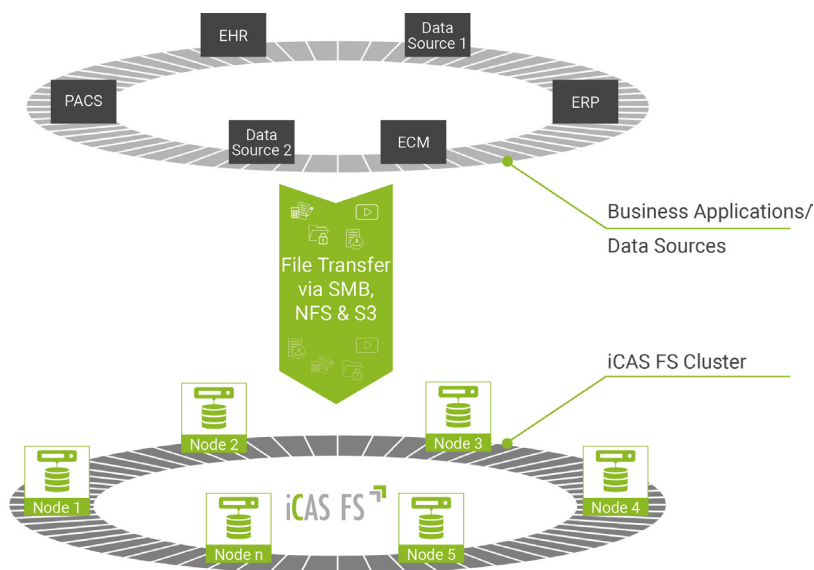
Start small, scale without limits from one node and 40 TB in one software-defined platform

The advantages of public cloud storage in your own data center: high flexibility, easy scalability, little effort

Auto-managed system: zero-touch operation and managed services with monitoring of the complete system

iCAS FS enables future-proof data storage and compliance at a low total cost of ownership. The platform is ideal for storing and protecting data from multiple applications and sources and enables audit-proof archiving, ransomware-proof backup storage, and relieves your primary storage.

The software-defined architecture is built on standard hardware and a Linux operating system. Thanks to WORM storage, S3 Object Lock, retention management, encryption and audit trail, compliance and security are top priority, which has also been confirmed by KPMG.

WOULD YOU LIKE TO LEARN MORE?

Arrange a demo or discuss your requirements with us:
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