A background image showing three business professionals in a meeting. A woman with glasses is on the left, looking at a laptop. Two men are on the right, one pointing at the screen. The scene is overlaid with a semi-transparent white box containing text. The background is a blurred cityscape.

DELOITTE

DELOITTE CONSOLIDATES
ARCHIVING WITH ICAS
ON HPE CI

INTEGRATED ARCHIVING SOLUTION MEETS DATA
RETENTION REQUIREMENTS WHILE BOOSTING
PERFORMANCE AND COST SAVINGS

*"iCAS on HPE is a great example of a technology investment that pays real dividends.
It is enabling IT to support the business by ensuring compliance while maximizing performance
and efficiency in the data center."*

Marco Rijpert, Chief Technology Officer for Deloitte Netherlands



DELOITTE

Organization:

Deloitte Netherlands
 • Number of employees: 6,100
 • Annual revenue: € 968 Mio.
 (FY 2018/19)

Industry:

Accounting & Consulting

Background:

In 2011 Deloitte replaced its storage installed base. With this transition to a new platform, Deloitte also wanted to implement a new compliant archiving solution which would also simplify and improve reliability and performance.

Challenges:

Fulfillment of compliance requirement and retention policies; replacement of the outdated legacy archive solution

Solution:

iTernity iCAS, HPE ProLiant Servers, HPE 3PAR Storage, Sharepoint, Lync & Exchange, SAP, Deloitte Audit

THE SUCCESS AT A GLANCE:

- ✓ Improved performance of retrieving content from archive over 85%
- ✓ Reduced data center footprint by 16 square meters and reduced power consumption by a factor of eight
- ✓ Saved nearly one FTE by eliminating time spent resolving problems with archive
- ✓ Improved archive uptime from 95% to 99.99%
- ✓ Ensured compliance with government requirements for data retention
- ✓ Improved end user productivity with archive response times under one second, compared to one minute before
- ✓ Reduced monthly operating expense by €12.000; Recouped investment within one year of implementation

FULFILLMENT OF COMPLIANCE REQUIREMENTS AND RETENTION POLICIES

Deloitte Netherlands is part of the global Deloitte brand under which tens of thousands of dedicated professionals in independent firms throughout the world collaborate to provide audit, consulting, financial advisory, risk management, and tax services to selected clients. These firms are members of Deloitte Touche Tohmatsu Limited (DTTL), a UK private company limited by guarantee. Each member firm provides services in a particular geographic area and is subject to the laws and professional regulations of the particular country or countries in which it operates.

More than half of Deloitte's business is focused on accountancy, which spans administrative organization and internal auditing, financial accounting, and research, as well as corporate analysis, corporate succession, and remuneration. The firm also offers comprehensive tax advice and strategic business consulting. As a firm handling financial data and private client information, compliance with government regulations is of paramount importance. In the Netherlands, the law requires that Deloitte's documents, databases and content from its internal audit system all be retained for a minimum of seven years and, in some cases, much longer. In the past, Deloitte Netherlands relied on optical disk libraries to archive this information, but as these systems aged they began suffering frequent problems.

The legacy archive solution was part of a larger storage infrastructure comprised of 14 HPE EVA Storage systems. To move files from the EVA Storage to optical disks, Deloitte used an internally developed Open Text archive server and EMC DiskXtender software. One of the problems with this approach is that it was not used as a true archive. Instead, actively used email files were being stored on the optical disks, which resulted in very heavy use of the disk library. As the disks filled up they often stopped working, and even during normal operation they were very slow.

Charlie Bos, storage manager for Deloitte Netherlands, explains,

"The poor reliability of the optical disks became too much of a risk to the firm. It disrupted productivity for our business users and increased the possibility of non-compliance, which would be very costly. It also required IT to spend many hours fighting fires and working with the various vendors to resolve technical issues. We needed to simplify our archive solution while improving performance and reliability."

CONSOLIDATING ARCHIVE ON A SINGLE, INTEGRATED PLATFORM

Deloitte Netherlands issued a request for proposal (RFP) to the major storage vendors, including HPE. A key requirement was that both enterprise storage and archiving be provided on a single platform. The firm also required replication for backup and disaster recovery. Existing compliance certification was a major prerequisite. After carefully evaluating the offerings presented by each vendor, Deloitte Netherlands selected HPE for their high available, non-complex and easy to manage Converged Infrastructure solution in combination with AllianceONE Partner iTernity's iCAS on an HPE Converged Infrastructure. The iCAS software runs on HPE ProLiant DL980 servers in a virtualized Microsoft Windows Server operating environment.

Both primary enterprise storage and data archive are provided by HPE XP P9500 Storage. Two XP P9500 systems are deployed in Deloitte's twin Amsterdam data centers. The storage is also replicated to a third XP P9500 system located 75 kilometers away in Rotterdam. The XP P9500 systems support over 1.5 PB of which a certain percentage of the data is being replicated.

The iCAS software has replication built in, and it continually monitors the archive process across both paths in Amsterdam, as well as the link to Rotterdam. If iCAS detects any logical errors, the software is self-healing to ensure uninterrupted archiving to maintain compliance and mitigate any risks to Deloitte and its clients. In addition, iCAS has compliance certification and employs write once, read many (WORM) technology to ensure that once data is archived it can never be modified. And iCAS also prevents information from being deleted via the application before the specified retention period has expired.

Marco Rijpert, chief technology officer for Deloitte Netherlands, says,

"Ensuring compliance is one of our highest priorities and the iCAS solution running on HPE technologies provided the ideal solution to meet our needs. It provides us with one central archive for the full range of our applications and offers simplicity, reliability, performance and economy that other vendors could not match."

DELIVERING >85% HIGHER PERFORMANCE

Since implementing iCAS on HPE, Deloitte has realized a significant performance improvement for accessing files from the archive. Before with the optical disks, response times were typically about one minute. Now, thanks to powerful HPE ProLiant DL980 servers and high-speed 2.5-inch storage drives, response times are under one second.

Giacomo Van der Gaag, storage consultant for Deloitte, comments,

"Performance is at least 85% faster. We had only six optical disk drives so if there were many requests, jobs would queue up and cause extensive delays. We no longer experience that problem. Response from the archive is nearly instantaneous. It's probably faster than a lot of companies' primary storage."

CONSERVING DATA CENTER SPACE AND RESOURCES

By consolidating on the HPE Converged Infrastructure, Deloitte has also recovered space in its data center and lowered power usage significantly. By replacing 14 EVA Storage systems and four optical disk libraries with multi-tiered XP P9500 Storage, Deloitte has reduced its data center footprint by approximately 16 square meters. The firm also eliminated two servers that managed the optical libraries and consolidated another four servers onto HPE ProLiant DL980 servers.

"Power consumption went down by a factor of eight, which saves us about €3,500 per month," reports Bos. "It's a very efficient solution. We actually gained capacity and a third site for disaster recovery while saving space and money."

SIMPLIFYING IT ADMINISTRATION

Deloitte's IT organization has also benefited greatly from the iCAS on HPE solution. Having a single, integrated platform simplifies the skill set required to manage the systems. Instead of learning three or four different devices, staff only needs to learn one. This also makes troubleshooting much easier and resolving issues faster with one call to a single vendor. IT also saves a tremendous amount of time due to improved reliability of the systems. Before, the optical drives were down so often that they required nearly constant attention.

"In the past, we needed to spend at least eight hours per week just putting out fires and dealing with problems on the optical disks," says Van der Gaag. "Now we don't have to do anything. The system is extremely reliable, which has allowed us to save nearly one FTE from the time savings."

In fact, because of all the mechanical problems associated with the optical disk libraries, uptime of the previous archive was barely 95%. Now, uptime is better than 99.99%. Bos remarks, "Between the time spent dealing with the old archive and the repair costs, the savings have essentially paid for the new solution just one year from implementation."

Rijpert adds,

"iCAS on HPE is a great example of a technology investment that pays real dividends. It is enabling IT to support the business by ensuring compliance while maximizing performance and efficiency in the data center."

EIGHT YEARS LATER

So how is the situation 8-years after the implementation? Deloitte is still a satisfied iCAS user. Several technology changes had to be realized: besides the server migration from windows server 2008 R2 (physical) to windows server 2016 (virtual), the HPE ProLiant DL980 servers have been replaced by HPE ProLiant DL580, without a data migration.

Another smooth transition was the storage migration from the HPE XP P9500 Storage to the HPE 3PAR 8450 platform. This seamless migration was made possible thanks to the patented Content Storage Container (CSC) technology of iCAS, migrating the data in a compliant manner without any file tampering and any disruption to the daily business.

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 GmbH
VISIONARY
ARCHIVING

iTernity is a leading vendor for archiving software that allows you to protect your business data - hardware independent, long-term and secure!

We work quality-conscious. We are flexible. We search for future-proof solutions. We are fair and trusted. We are iTernity. Come closer, discover more about our company, about state-of-the-art data management, and about Software-Defined Archiving!

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