

Universitaire Ziekenhuizen (UZ) Leuven

Storing, Managing, and Protecting Tens of Thousands of Emails Every Day with Solution from Symantec

With one million emails sent and received every month, and a helpdesk overwhelmed with more and more email support enquiries, it was time for Universitaire Ziekenhuizen (UZ) Leuven to re-evaluate its email and content archiving strategy. This leading Belgian University Hospital Group standardized on Veritas Enterprise Vault™ to create a comprehensive, effective email retention and management platform. More than 3,000 users are benefiting from a centralized Microsoft Exchange email archiving framework, geared to increasing efficiency and streamlining management.

“Enterprise Vault delivers everything we could ask for in an email archiving solution. Compression and single-instancing means we can efficiently reduce the storage volumes and maximize the investment in our NetApp storage infrastructure.”

Reinoud Reynders

IT Manager Infrastructure
and Operations
UZ Leuven

Integrated healthcare services

With almost 2,000 beds, 540,000 nursing days and more than 7,500 employees, the University Hospital Group UZ Leuven is one of the largest services centers for healthcare in Belgium. These hospitals offer integrated services which are available permanently in all fields of medicine and the prevention, diagnosis, treatment, and rehabilitation of patients.

The hospital has four separate campuses, three of which are connected with each other by means of a Gigabit network and can be considered as a single IT site. UZ Leuven has a network of more than 5,000 PCs, 1,000 network printers, several hundred Microsoft Windows and Linux servers on Dell hardware, and some Sun Solaris Servers. Half of these servers are virtualized using VMware, with the remainder running Intel virtualization technology. The storage is provided by Network Appliance and currently holds 200 terabytes of raw data, which covers critical applications such as digital radiology—Picture Archiving and Communications System (PACS).

Early adopter of new and emerging technologies

University hospitals are generally early adopters of new and emerging technologies and UZ Leuven is no exception to this rule. The hospital’s employees have been able to use the functionality of its existing email system, but as email traffic and mailboxes have continued to grow, the hospital was gradually becoming bogged down by this information overload.

“However, it’s basically a consumer software package. With about one million emails each month, we were reaching the limitations of the program,”

Company Profile

Part of the University Hospital Group, UZ Leuven is one of the largest services centers for healthcare in Belgium, with almost 2,000 beds, 540,000 nursing days, and more than 7,500 employees.

Industry

Healthcare

Solution

Email Management

One of the largest hospitals in Europe, UZ Leuven is using Veritas Enterprise Vault to store, manage, and protect tens of thousands of emails every day.

“For us it was quite clear from the outset that we wanted to have dedicated archiving software. We didn’t want to bother our users with quotas and other unfriendly rules and regulations.”

Reinoud Reynders

IT Manager Infrastructure and Operations
UZ Leuven

says Reinoud Reynders, IT manager, infrastructure and operations at UZ Leuven. On average, every user encountered a corrupted mailbox about three times a year. The users were willing to live with the inconvenience; however, with 6,000 users, this was occupying about 15 percent of our internal helpdesk’s capacity.”

Given that UZ Leuven has a Microsoft Windows environment and was already using Microsoft Outlook for the diary application, it was evident that Microsoft Exchange would eventually become the email platform of choice. With the implementation of the SnapDrive and SnapManager technology from Network Appliance, it became possible to make backups and carry out in-time restores on the system very quickly. This cleared the road for the migration to Exchange and there was also a need for archiving software. “Archiving was an intrinsic part of our Exchange strategy,” says Reynders. “If we kept the size of the Exchange database within limits, it would remain fast and reliable, especially if we were faced with a virus attack.”

He continues, “We didn’t want to bother our users with quotas and other unfriendly rules and regulations either. In addition, it was important that the size of the Exchange database would not grow too large, in order to ensure the correct functioning and easy repairs to the database in the event of it becoming corrupt.”

Full text search functionality

For the selection of the archiving software, the hospital investigated four criteria: the system needed to be capable of archiving emails for thousands of mailboxes, transparent for the end-user, offer a “full-text” search feature, and support existing installed hardware.

The hospital had a short list of solutions for evaluation. Veritas Enterprise Vault software from Symantec scored well in all of the areas Reynders and his team investigated. The Symantec solution also fulfilled the secondary criteria—offline use of the system and the journaling functionality.

Reynders continues, “At the time of the selection, journaling was not a burning issue in Europe, whereas it was in the United States. In spite of this, we did choose to pay attention to this feature of the system. Looking back, and witnessing now the growing compliance legislation in Europe, it was definitely a sensible choice.”

During the first phase of the migration to Exchange, Enterprise Vault was deployed to 1,500 email accounts. This has subsequently grown to a total of 4,500 accounts, spanning four hospital sites. The email and content archiving software solution supports each and every one of the emails sent and received by the hospital, with the exception of confidential patient medical records, which are managed using a separate system.

Flexible email archiving framework

The system provides a flexible email archiving framework, while simultaneously reducing UZ Leuven’s NetApp storage costs. Reynders’ team manages email content using automated, policy-controlled archiving to online stores. As a result, all 4,500 users benefit from fast, transparent retention and seamless retrieval of information.

“Enterprise Vault delivers everything we could ask for in an email archiving solution,” says Reynders. “Compression and single-instancing means we can efficiently reduce the storage volumes and maximize the

investment in our NetApp storage infrastructure. We can flexibly store archived content and index it for rapid and targeted retrieval. Plus we have eliminated the issue of PST files, quotas, and message size restrictions.”

One of the key advantages of Enterprise Vault has been the reduced burden on the help desk. In the past, 15 percent of all calls received by the help desk related to email issues. Using the Symantec solutions, this has now dropped to less than one percent. “Email used to be the third major reason staff contacted the help desk. This has now fallen to only the fifteenth reason they contact us,” he says.

Veritas Enterprise Vault has also been configured to provide the hospital users with a local vault stored on their PC hard drive. When a disconnected user tries to access an archived item via a shortcut, this item is retrieved from the local vault, ensuring that they have access to important content wherever they are located. At the same time the user’s email is still archived to the corporate archive, so it is not vulnerable to loss or damage.

The hospital also has to deal with a few hundred laboratory employees and nurses who check their email directly through a Web client. Enterprise Vault also provides a solution for these employees because the archiving software supports Web clients. This means the system is transparent for all users and this was also one of the hospital’s main selection criteria. ■

SOLUTION AT A GLANCE

Business Drivers

- Take control over the explosive growth of vital email and attachments
- Facilitate regulatory and legislative compliance requirements
- Create a cost-effective approach to efficiently and effectively manage email storage

Technology Challenges

- Provide a scalable solution that would support the NetApp NearStore storage infrastructure
- Provide indexing and retrieval functionality required for compliance
- Provide transparent archiving for end users
- Ensure complete integration with Microsoft Exchange environment

Solution

- Flexible, software-based email archiving

Symantec Products

- Veritas Enterprise Vault™ with Offline Vault Option

Technology Environment

- Network of more than 5,000 PCs and 1,000 network printers
- Several hundred Microsoft Windows and Linux servers on Dell hardware, and some Sun Solaris servers
- Half of these servers virtualized using VMware; the remainder with Intel
- NetApp NearStore storage system, currently with 200 terabytes of raw data
- Critical applications such as Picture Archiving and Communications System (PACS) digital radiology file

BUSINESS VALUE AND TECHNICAL BENEFITS

Effectiveness for Users

- Eliminated quotas and message size restrictions
- Gave users a mailbox of virtually unlimited size while simultaneously controlled message store growth
- Quick and easy search and retrieval of messages for users
- Offline Vault provides laptop access to archived email even when not connected to the corporate network

Operational Efficiency

- Reduced the volume of email-related help desk enquiries from 15 percent of all enquiries received to less than one percent
- Eliminated existing PST files

Cost Savings

- Reduced cost of message retrieval, recovery, and administration
- Reduces cost and time associated with migration to Microsoft Exchange 2003

Compliance and Legal Protection

- Full compliance with regulatory or legal retention requirements
- Enhanced protection of intellectual property
- Rapid discovery of content based on defined policies enabled