



“This phase will also include the migration of some of our most important data and custom-built applications—applications which enable us to track and trace the raw materials used in our feeds,” said Van den Hout. “These days, we have to be absolutely meticulous in our record-keeping. We have to be able to demonstrate exactly where our materials originate, how they have been transported, and where they have been stored. Fortunately, our tests to date have shown that our Red Hat environment gives us incredible platform stability. We’re confident there won’t be any major issues.”

RED HAT ENTERPRISE LINUX REDUCES SUPPORT OVERHEAD

Denkavit’s primary objective was to build a standardized, easy-to-manage system that maintained all current functionality, safeguarded the continuity of all processes, and ensured a flexible future-proof IT environment. The company’s calculations also show that its Red Hat Enterprise Linux solution will—overall—be less expensive by a factor of four than some of the other solutions that were under consideration. “Thanks to our existing know-how in the UNIX world, we haven’t had to do much training to get ourselves up to speed in the Linux environment,” remarks Van den Hout.

The real benefits of the standardized ERP solution and Intel-based Red Hat platform will finally be seen when the international offices are brought online in 2007. In preparation for the roll-out, the Denkavit team is finalizing architectural details that will provide 100% redundancy and ensure continuous availability of the system.

“This project looks set to deliver the standardization we want, and will also better align the business processes of our sister offices. In addition, we will gain IT-support efficiencies across the business, saving on labor and travel costs,” said Van den Hout.

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THE FUTURE

Denkavit’s goal is to have a completely web-based system that links its business processes to those of its many suppliers, customers, and partners. Once the system is complete, the company expects an extremely high volume of transactions, making Red Hat Enterprise Linux critical to the future of the business.

“Red Hat provides rock-solid stability, lower costs, and enhanced ease-of-use for our most business-critical systems,” said Van den Hout. “It also puts us right on the bleeding edge of technology—we’re skipping a whole generation of IT developments and migrating directly from an ASCII environment to an open, web-enabled infrastructure.”

CASE STUDY

RED HAT HELPS DENKAVIT WITH WEB APPLICATIONS

In the European market, the Denkavit Groep is among the largest producers of feeds for animals during the first phase of the rearing period. It has offices in the Netherlands, Germany, Italy, and France, and exports products to more than forty countries worldwide. Denkavit’s laboratories develop and test innovations that impact the entire animal feed industry. They are also involved in the creation of organizations like the Dutch government-funded Veal Sector Quality Guarantee Foundation.

In 2002, Denkavit took stock of its aging IT systems and processes and determined what functionality was needed. Any new system had to be built around Intel hardware, use standardized, proprietary software, and support web applications. These critical requirements would—in the long term—benefit all European branches and partners.

needed a system with more flexibility to deal with regulatory and legislative changes. Van den Hout explains, “If there were changes to the tax regime, for example, the old system simply didn’t enable us to react quickly enough for the business. With no standard modules available, we had to program everything ourselves.”

INCREASING SUPPORT CHALLENGES

Denkavit’s 2002 study showed that 90 percent of the company’s IT systems and processes were custom-built solutions, programmed in Rally and Cobol and running on HP Alpha servers. Although the system’s performance was considered adequate in 2002, providing quality support was becoming increasingly difficult.

Frank van den Hout, systems and network administrator at Denkavit Nederland, explains, “Although the application environment as a whole worked fine, it was all held together with some pretty complex links and scripting. As a result, we were becoming overly dependent on the small number of people we could find who actually had the skills and the training to keep things running—skills that were simply not available in the Dutch job market.” The difficulty finding skilled staff was one of the main drivers behind Denkavit’s decision to use a standardized, proprietary ERP system. But the company also

FAST FACTS

Industry: Food manufacturing

Geography: Netherlands, Germany, Italy, France

Challenge: To replace an outdated custom-built system with a standard Intel-based IT environment using proprietary software. Providing all functionality required for the highly specialized animal feeds market.

Solution: First European implementation of Oracle® EnterpriseOne on Red Hat® Enterprise Linux®.

Platform: Red Hat Enterprise Linux AS

Hardware: HP® DL380 and DL580 multi-way Intel® Xeon-based servers

Benefits:

- Simplified management of a standards-based solution
- Migration to a single integrated ERP system for all European branches
- Ended dependency on IT staff



CHOOSING THE RIGHT PLATFORM

The first step of the selection process for the new system was to outline the functional specifications. The team knew it wanted a standard, proprietary ERP application, but also wanted to customize the solution. "We had to be able to 'turn the dials' ourselves," says Van den Hout. "It was really important that we could make changes to the system that would allow us to build a competitive edge—as a company, we work very hard to maintain our leadership position in this sector." After a number of corporate presentations and an intensive evaluation session, Denkavit opted for Oracle's new EnterpriseOne ERP suite. The decision was made largely because the suite could be heavily customized. Having chosen the product suite, the Denkavit team then had to choose a standard platform on which to run all of its systems—a question which proved far more difficult than expected. Initially the options were limited to IBM® AS/400, UNIX®, and Microsoft® solutions.

"Choosing Red Hat Enterprise Linux on Intel provided our organization with the flexibility to make significant modifications at the OS level. It gives us full control over aspects like processor priority and performance."

At first, Linux was out of the question. Van den Hout admits, "Our calculations were based on an IBM AS/400 environment in combination with DB2, an HP solution based on HP-UX and a UDB-database, and a complete Microsoft Windows Enterprise Server-based environment." None of these solutions provided the right combination of manageability and cost. Denkavit decided to include a fourth alternative based on Red Hat Enterprise Linux.

"The proposals we received for UNIX and Windows environments were just not right for us in terms of functionality and cost," says Van den Hout. "The UNIX solution would have given us a lot of flexibility, but was too costly. The Windows solution did not give us the performance or flexibility we were looking for, but was less expensive. But to be honest, cost was not the be-all and end-all for us—we had to have the right price/performance ratio."

The right solution was a combination of Red Hat Enterprise Linux AS, a UDB database, and Oracle EnterpriseOne, running on four multiway Intel Xeon-powered HP Servers—three HP DL380 servers and one DL580 server. "Choosing Red Hat Enterprise Linux on Intel provided our organization with the flexibility to make significant modifications at the OS level. It gives us full control over aspects like processor priority and performance. Red Hat's OS conveniently splits out processes, while also optimizing compute time for some of our more 'exotic' processes, greatly enhancing performance."

SMOOTH MIGRATION

Migrating all of the company's systems from an ASCII-based environment to a Red Hat Enterprise Linux solution with a full web interface constituted a major transition for Denkavit. The company opted for a phased roll-out. The fifteen-user Denkavit Ingredients division had the honor of being the first unit migrated to the Red Hat environment. Van den Hout explains, "This was a complete rebuild of our systems, and to make matters more complex, it was the first ever roll-out of Oracle EnterpriseOne on Red Hat Enterprise Linux worldwide. We wanted to take things cautiously and start small."

The caution turned out to be unnecessary. Initially a one-month trial period was planned, but after a week the results were so positive that Denkavit decided to migrate the entire business to the new system. "The migration to the Red Hat environment went very smoothly—better than we had expected," says Van den Hout. "We outsourced a number of aspects, but the combination of our in-house UNIX expertise (we use SCO UNIX for the processes at our factory) and Red Hat's ease-of-use made for a quick and easy migration."

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The next phase of the project will include rolling out the new system to the remainder of the Dutch organization, then moving on to the German, Italian, and French offices in early 2007. The Dutch migration will be completed in October 2006.