Municipality of Drimmelen

As part of its relocation to a new building, the IT team at the Municipality of Drimmelen decided to replace its aging servers with a more compact and flexible infrastructure. Running SUSE® Linux Enterprise Server with Xen* virtualisation enabled the team to consolidate from nine physical servers to just three—and reduce operational costs by 30 percent.

Overview

Drimmelen is a municipality in the southern Netherlands with 26,626 inhabitants, most of whom live in the towns of Made, Terheijden and Lage Zwaluwe. The municipal government employs 250 people, and has a wide range of responsibilities including land management, urban development, transport, employment and welfare, environmental issues, and education.

Challenge

The IT team at the Municipality of Drimmelen was planning to move to a new building, and decided to update its server infrastructure as part of the move.

"We had nine physical servers, all of which were several years old," said Mario Olislagers, System Manager at the Municipality of Drimmelen. "To avoid wasting space at the new office, we began to think about how we could consolidate to a smaller number of more compact machines. We also wanted to improve business continuity by ensuring that hardware faults would not affect the availability of our applications."

A related issue was storage. Each of the existing servers stored data on its own internal disks, which made backup processes complicated and unreliable. Moreover, with on-board storage, a hardware failure in one of the servers might do more than just cause downtime for applications—it might also lead to the loss of important data.

Solution

The municipality's nine servers were running a variety of operating systems, so consolidating them would require a highly flexible infrastructure.

"In consultation with our trusted partner, NetEyes, it quickly became clear that Xen virtualisation was an attractive option for us," said Olislagers. "Xen is an open source technology, so it is considerably more cost-effective than most of the other products on the market. The Xen community also has close links to Novell, so we knew it would provide good compatibility with our existing Novell infrastructure, as well as supporting Windows environments."

After planning the new architecture, the IT team moved into its new office and worked with NetEyes to install three new servers, running SUSE Linux Enterprise Server with built-in Xen virtualisation. On top of this virtualisation layer are nine virtual servers, variously running SUSE Linux Enterprise Server, Novell® Open Enterprise Server and Microsoft* Windows* Server. The municipality also introduced a storage area network (SAN).

Municipality of Drimmelen at a glance:

Municipal government for the town of Made and the Drimmelen area

- **Industry:**
  Government
- **Location:**
  Netherlands
- **Products and Services:**
  SUSE Linux Enterprise Server with built-in Xen virtualisation
- **Results:**
  - *Consolidated servers with Xen virtualisation to save space and reduce power and cooling costs*
  - *Reduced operational costs by 30 percent*
  - *Raised availability to nearly 100 percent*

"Aside from the faster server provisioning, SUSE Linux Enterprise Server with Xen virtualisation has also delivered a noticeable increase in overall system performance."

Mario Olislagers
System Manager
Municipality of Drimmelen

"We estimate that SUSE Linux Enterprise Server with built-in Xen virtualisation has reduced our ongoing IT costs by around 30 percent."

Mario Olislagers
System Manager
Municipality of Drimmelen

www.novell.com

"Setting up the Xen environment was relatively simple; all-in-all it was no more than 14 days' work," said Olislagers. "We also met the budgetary requirements, so it was a very successful project overall. The quality of service from NetEyes was, as usual, excellent—and we now have a full support contract with them."

To provide additional resilience, the virtualised SUSE Linux Enterprise Server instances are clustered across the three machines using SUSE Linux Enterprise High Availability Storage Infrastructure. Even if one of the physical machines suffers a hardware fault, the other two will keep the applications running. As a result, users can count on the availability of the applications they need, and productivity is improved.

"Another major improvement is server provisioning," said Olislagers. "Previously, if we wanted to create a new test or development system, we needed to buy a new server—which was expensive—and set it up manually—which took at least four hours. Now we can create a new virtual server in a matter of minutes."

Results

The Municipality of Drimmelen has only recently gone live with its virtualised server architecture, and IT staff are still getting used to the system, but the team has already noticed a number of improvements.

"Aside from the faster server provisioning, SUSE Linux Enterprise Server with Xen virtualisation has also delivered a noticeable increase in overall system performance," said Olislagers. "As we gain experience with the new architecture, we expect to see further improvements in productivity and reductions in maintenance workload."

Another key benefit is cost-efficiency. Fewer, more energy-efficient servers require less power and air conditioning, so the municipality has reduced its electricity costs. Equally, the ability to add virtual servers without purchasing new hardware will help the IT department make more effective use of its budget.

"We estimate that SUSE Linux Enterprise Server with built-in Xen virtualisation has reduced our ongoing IT costs by around 30 percent," said Olislagers. "Moreover, the improved resilience of the new environment will save us even more money by boosting the availability of applications and improving employee productivity across the organisation. We are now achieving almost 100 percent availability, which is a considerable improvement over the old infrastructure."

With a more responsive, flexible and reliable infrastructure, the Municipality of Drimmelen will be able to deliver a more effective service to its citizens.

For More Information:
To read more customer success stories, visit: www.novell.com/success

Contact your local Novell Solutions Provider, or call Novell at:

France
+33 1 55 62 50 00

Germany
+49 211 56 31 0

Italy
+39 02 360 46 335

Netherlands
+31 10 286 44 44

Poland
+48 22 537 5000

Russia
+7 495 697 1914

Spain
+34 91 640 25 00

Sweden
+46 8 477 41 00

Switzerland
+41 43 456 23 00

South Africa
+27 11 322 8300

United Kingdom
+44 1344 724 000

Novell, Inc.
404 Wyman Street
Waltham, MA 02451 USA

NET EYES — VISIE OP IT —

Novell