

To Protect and Serve

Colorado Department of Corrections

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The Colorado Department of Corrections moved to Novell Open Enterprise Server running SUSE Linux Enterprise for increased performance and reliability. Automating endpoint management with Novell ZENworks helped the department reduce IT travel time and costs by 60 percent.

> Overview

The Colorado Department of Corrections protects the public through effective management of criminal offenders in controlled environments which are efficient, safe, humane and appropriately secure. With 6,500 employees across 40 locations, the department has more computer users than any other state department in Colorado.

> Challenge

The Colorado Department of Corrections was running out of power in its data center and needed to comply with the governor's green initiatives. Moving to a Linux environment would allow the department to use virtualization and extend the lifecycle of its existing hardware.

The department was also experiencing performance issues with its e-mail servers that were running on aging hardware. The department wanted to increase the number of post offices to improve reliability, without having to invest in additional hardware.

> Solution

After completing a cost-benefit analysis of Microsoft Windows, UNIX and Linux, the Colorado Department of Corrections selected Novell Open Enterprise Server and SUSE Linux Enterprise Server for its data center.

"Our research showed no cost benefit of moving to a Windows or UNIX-based platform," said John Jubic, End User Solutions Manager at the Colorado Department of Corrections. "We saw demonstrations of what a Linux environment could do for us and knew that Novell Open Enterprise Server was the best fit."

Migrating to Novell Open Enterprise Server and SUSE Linux Enterprise Server on IBM BladeCenter servers has significantly improved the department's network performance. Leveraging Xen virtualization, which ships with SUSE Linux Enterprise Server, the IT staff can easily create new virtual server environments on existing machines.

"We were really struggling to keep up with user demand – we were simply running out of circuits and space in our data center," said Kevin Williams, IT Professional III at the Colorado Department of Corrections. "By leveraging Xen virtualization, we can easily add new servers and meet the demands of our users without having to purchase additional hardware."

The department has seen a dramatic performance improvement running Novell GroupWise on SUSE Linux Enterprise Server. Using Xen virtualization, the IT staff doubled the number of post offices without increasing its number of physical servers. If necessary, the IT staff can restart a post office and bring it online immediately with no user disruption. The department also used BlackBerry Enterprise Server to support its 1,000 mobile users.

"We are enjoying unprecedented performance with Novell GroupWise running on SUSE Linux Enterprise Server," said Jubic. "We have had no recent support calls related to Novell GroupWise performance when we used to get a few dozen a month. We would need a lot more hardware and staff to run any other e-mail application."

Novell ZENworks allows a small IT staff to centrally manage desktops efficiently, regardless of location. The department has standardized desktops across the state and can now remotely deliver new applications in a matter of hours.

"The technical support we get from Novell is excellent. Our Premium Support Engineer is truly a member of our team and provides invaluable guidance and expertise. We don't have a lot of budget for training, so having enterprise-level support is critical for us."

With the remote control features of Novell ZENworks, the helpdesk can troubleshoot any desktop and if necessary, re-image a machine in just 15 minutes without having to drive a few hours to another site. As a result, the department has transformed helpdesk support from 70 percent on-site to 70 percent off-site.

"We're no longer required to have IT administrators at each of our locations, but now any administrator across the state can be a resource for helpdesk calls," said Williams. "It's now a team effort and has helped us cope with recent staff reductions."

Using Novell ZENworks Linux Management, the IT staff can automatically patch and update its servers. In the past, the IT staff would have to manually update servers which could take an entire weekend. Now a single administrator can update all servers from a central location in one evening and often without having to reboot machines.

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> Results

Since upgrading to Novell Open Enterprise Server and SUSE Linux Enterprise Server, the Colorado Department of Corrections has greatly improved its network performance. Using Xen virtualization, the department has added 14 virtual servers without having to increase its

number of physical servers. Virtualization has also allowed the department to make more efficient use of the power in its data center.

Novell ZENworks has reduced IT travel time and costs by 60 percent and Novell ZENworks Linux Management has reduced server administration time by 75 percent.

"User dissatisfaction was reaching a breaking point before implementing our Novell solutions," said Jubic. "We now have a high-performing environment with zero downtime and are able to keep up with the demands of our users, despite minimal resources and limited budget."

Company at a glance:

State correctional department in Colorado

Industry:

Government

Location:

United States

Products and Services:

- Novell Open Enterprise Server
- SUSE Linux Enterprise Server with built-in Xen virtualization
- Novell GroupWise
- Novell ZENworks
- Novell ZENworks Linux Management 