



## Success Story

Enterprise Linux Servers

# NWK

Seeking to boost the flexibility and reliability of its mainframe environment, agricultural service provider NWK chose to migrate its entire z/VSE mainframe workload to SUSE® Linux Enterprise Server for System z. The company is using one IFL on its new IBM zEnterprise 114 server, improving processing speeds by more than 70 percent compared with the old platform and gaining a stable, reliable platform for running its most important financial applications and business systems.



### Overview

NWK Limited is a leading agricultural service provider, operating in the North Western Province of South Africa since 1909. The organization provides both independent farmers and large-scale producers with a variety of products and services, as well as expert advice and financing. NWK employs more than 2,000 people and reported revenue of more than \$200 million in 2012. The company's activities include retail trading, grain storage and marketing, the production of day-old broilers, feed production, transport and food processing.

### Challenge

With an extensive network of operational outlets and subsidiaries, ensuring the continued growth and profitability of NWK's operating segments requires tight control over business systems and financial processes. To achieve this, the company has custom-developed a broad suite of financial applications for managing a full

spectrum of processes from credit control to general ledger.

For the past 18 years, NWK has trusted in the reliability and stability of the IBM mainframe platform to support these vital business systems. The company previously ran all of its applications under the IBM z/VSE operating system, but a growing need for greater flexibility and support prompted the IT team to consider alternative options.

### Solution

Linux quickly emerged as the front runner in NWK's search for a new operating system, its flexibility giving the company considerable scope for embracing a more open infrastructure model.

After evaluating the different distributions of Linux available on the mainframe, NWK chose to deploy SUSE Linux Enterprise Server for IBM System z—a decision that was strongly guided by the platform's reliability and the close collaboration between SUSE and IBM.

**“Running SUSE Linux Enterprise Server for System z gave us the best of both worlds—the openness of Linux combined with the support and expertise of SUSE and IBM.”**

EDDIE LEIGHTON  
Technology Manager  
NWK

“We were very encouraged by the amount of research and development that has gone into optimizing SUSE Linux Enterprise Server for use on IBM System z over the last 13 years,” says Eddie Leighton, Technology Manager at NWK. “Running SUSE Linux Enterprise Server for System z gave us the best of both worlds—the openness of Linux combined with the support and expertise of SUSE and IBM.”



### NWK at a glance:

*A leading supplier of agricultural products and services, NWK has been operating in the North West Province of South Africa for more than 100 years*

#### ■ Industry and Location

Agriculture, Lichtenburg, South Africa

#### ■ Products and Services

SUSE Linux Enterprise Server for System z

#### ■ Results

- + *Improves processing speeds and reduces database backup window by more than five times*
- + *Offers strong reliability for key financial applications and business systems*
- + *Supports a more open and flexible infrastructure model*

**“The IBM z114 is a fantastic server and SUSE Linux Enterprise Server for System z really helps us to get the most out of it. The solution has met all of our requirements in terms of performance and stability.”**

**EDDIE LEIGHTON**  
*Technology Manager*  
NWK

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NWK migrated all of its z/VSE workload to SUSE Linux Enterprise Server on an IBM zEnterprise 114 (z114), connected to an IBM Storwize V7000 storage system and IBM System Storage TS3310 tape library. The company hosts a second z114 and supporting storage systems at a secondary data center for backup and disaster recovery purposes. It has activated one Integrated Facility for Linux (IFL) processor with 32GB of RAM on its main production server.

“We have been running SUSE Linux Enterprise Server on the z114 for a few months now and everything has been operating very smoothly,” says Leighton. “We support around 450 users on one IFL with an average CPU usage of 60 to 70 percent, and so far performance has been excellent, even when running at 100 percent utilization.”

## Results

The z114 running SUSE Linux Enterprise Server for System z offers 600 MIPS versus the 172 MIPS of NWK’s previous mainframe, which translates into significantly faster processing for a number of key tasks.

“Our response times have come down considerably with SUSE Linux Enterprise Server for System z,” says Leighton. “For example, it previously took us around two and a half hours to back up our main production database alone. Now, the total backup window for all nine of our databases, including our data warehouse, is about two hours.

“In the past, we would use virtual tape backup systems on z/VSE. Now we write directly to disk on SUSE Linux Enterprise Server for System z, which is at least 100 percent faster.”

SUSE Linux Enterprise Server provides NWK with solid performance, and a reliable platform for running its most important workloads.

“The IBM z114 is a fantastic server and SUSE Linux Enterprise Server for System z really helps us to get the most out of it,” says Leighton. “The solution has met all of our requirements in terms of performance and stability, and has allowed us to establish a more flexible computing infrastructure here at NWK.”



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