

Grindrod reaps the benefits of virtualised infrastructure platform

Grindrod

industry:

Transport and Logistics

country:

South Africa

business challenge:

Complex and fast-paced business needed an agile, secure and reliable technology platform to support about 1,600 users executing the Group's international business

solution:

Virtualised and consolidated IT infrastructure offering additional functionality that supports the organisation's massive data volumes and speed of daily transactions

services:

- Procurement services for servers
- Planning, deployment and integration services for VMware virtualisation technologies
- Manage services for the new operating platform

results:

- Grindrod saves R500,000 every year in annual support and maintenance
- Solution is resilient, reliable and offers enhanced uptime that handles Grindrod's high levels of network traffic with ease
- Scaleable solution will grow with the business and accelerate cost benefits in line with growth

Executive Summary

The Grindrod Group is an international shipping, freight and logistics company **that moves cargo around the world.**

Its complex and fast-paced business needed an agile, secure and reliable technology platform to support the sheer volume and speed of its daily transactions. Dimension Data standardised Grindrod's infrastructure, replacing separate networks in the various subsidiaries with a single shared infrastructure that leverages the power of virtualisation to consolidate, standardise and improve the quality of service to users.

Client Overview

The Grindrod Group is a world class shipping and freight logistics operation with its head office in Durban. It is listed on the Johannesburg Securities Exchange, where its shares are quoted in the Transport sector. Grindrod maintains a strong operating presence at each of South Africa's major ports, as well as in Johannesburg, Mozambique, Angola and Namibia, and offices in London, Spain, Singapore and Dubai. The Grindrod Group controls about 50 subsidiaries, all operating in the logistics field eg shipping, transport, perishables etc. All these companies work independently of each other and have different management teams – but together, they comprise the Group.

Overall, the Group employs 5,000 skilled and dedicated people across its holdings and subsidiaries, and controls assets in excess of R7 billion. It generates revenues of over R12 billion every year, with an annual profit of over R1 billion. Its business is conducted in four major areas: shipping, freight services, bulk product trading, and financial (through Grindrod Bank, previously Marriott Corporate Property Bank).

Business Challenge

The shipping business is a unique playing field, unlike any other industry.

Beyond the mechanics of moving goods around the world, it deals with the diverse demands of insurance, volume, logistics, international customs law and treaties, and incredible volumes of correspondence and communication that form the basis of everyday transactions and the normal flow of business.

In common with other shipping and logistics operators, Grindrod fields exceptionally high levels of email volume. Emails are critical to its business – for quotes, enquiries, confirmations, instructions and all the myriad details involved in co-ordinating the mass movement of goods across borders, oceans, territories and time zones.

“The overall intent of our solution is to **leverage the benefits** of advanced technology, high availability and a secure, agile infrastructure, at a **lesser cost.**”

Grindrod processes an average of three million emails every month, distributed across an active email user base of about 1,600 people. Multiply this across a business that never closes – Grindrod has offices in Singapore, Dubai, London and many other of the world’s transport hubs – and you have a 24 hour business receiving a relentless torrent of email around the clock – all of it essential to its operations. If the email server were to fail on any given business day, Grindrod would face the loss of an unquantifiable but substantial amount of business.

Grindrod needed to replace its current email servers and related infrastructure, which was slow, unreliable, and struggled to handle the sheer volumes of email and other network traffic it processed daily.

Its difficulties were compounded by the fact that the 50 companies in the Group acted independently of each other. Each had its own IT infrastructure and its own management team and processes, which impacted on reliability and cohesion within the Group. The challenge was to modernise and standardise the infrastructure across all the Group, not only upgrading systems for one, but improving the infrastructure for all. A new infrastructure would operate as a technology platform from which to execute in faster, more dynamic and efficient ways than ever before. Dimension Data was Grindrod’s technology partner for this journey.

Solution Delivered

The overall intent of our solution is to leverage the benefits of advanced technology, high availability and a secure, agile infrastructure, at a lesser cost – ie, delivering greater functionality at a greatly reduced outlay. In addition to the design and build of the new infrastructure, Dimension Data will be managing the entire outsourced support and maintenance of the new operating platform for Grindrod.

Each company within the Grindrod Group had its own IT infrastructure, and acted independently in terms of management teams, systems and processes – each forming separate technology islands. Our challenge was to research, design and build a single standard infrastructure for all users across the Group. We recommended a virtualised infrastructure. All applications would be consolidated onto a single hardware structure, and shared across the Group.

We commenced with a basic cost analysis that revealed the cost benefits of rolling out a single standardised infrastructure for all companies in the Group. Projections estimated that it would cost R4.2 million for each organisation to build an upgraded technology platform for itself. Deploying a single shared infrastructure would save the Group R1.7 million in capital expenditure. This consolidated infrastructure would also be R500,000 cheaper to support and maintain every year than the previous system of separate infrastructures serving individual businesses. Group IT understood the value of what we proposed, as they used a consolidated and shared infrastructure themselves, but we had to prove the value and outcomes to the rest of the business. We helped demonstrate and drive the education process internally so that there was buy-in from the internal user base, and users understood the breadth, scope and benefits of the solution we proposed.

The ultimate design was premised on a VCE strategy, deploying VMware virtualisation technologies on the servers to create a virtualised data centre running on an ethernet network with EMC² unified storage. The consolidation of the physical servers using the VMware technology allows us to consolidate multiple physical servers onto fewer virtual servers, generating huge efficiencies in power, cooling and management costs. The entire infrastructure, comprising the hardware, VMware, virtual machines, Windows[®] and all other critical applications, is outsourced to Dimension Data. Grindrod logs calls with us, and we take care of all provisioning, change control and other support and maintenance functions to ensure that their system runs like a well-oiled machine.

Although the basis is a standard solution, the components were all customised for Grindrod because there are no reference points for building the kind of infrastructure that supports their pattern of use. The system runs Blackberry on top of the applications, as well as financial applications such as Hyperion and SAP.

The core design is also intuitive in that it delivers a unique quality of service. The different divisions and companies within the Group expect different levels of service, and our highly customised system can deliver service and functionality per requirement and per division.

How We Delivered

To demonstrate the cost and related value of the overall solution, we looked at each application and built a costing model for each application and business unit, giving a complete matrix and demonstrating cost efficiencies. We also worked with Grindrod's internal IT team to drive the value and functionality messaging around virtualisation and educate the internal user base about its benefits and strengths.

Once the solution was accepted, we delivered step by step according to our world class Primer methodology.

Primer is Dimension Data's proprietary delivery methodology, which documents and details every technology implementation to a "T" to ensure textbook execution. Primer is conducted according to industry leading standards. It is ITIL-aligned and uses industry best practices as standard operating process to ensure that our clients receive the best and most sophisticated deployment and that their solutions are deployed according to global standards.

Primer also helps us deliver to schedule and this deployment was no exception – not only did we complete the implementation ahead of schedule, but we were able to assist with an unexpected emergency when a piece of existing equipment failed. We rolled out an emergency deployment from Thursday to Sunday, and by Monday morning the transition to the new equipment had been effected – seamlessly and with minimum disruption to Grindrod's business.

Dimension Data's superior procurement skills mean that we are able to ship equipment with expertise and speed and this helped us accelerate the deployment and deliver according to plan – a pleasing synergy with Grindrod's own logistics expertise.

"Grindrod has a relationship with Dimension Data that goes beyond a pure supplier arrangement – they understand our business and what our needs are, and are solution- rather than margin-focused when it comes to providing solutions."

Cliff McCormick, Group IT Manager at Grindrod Limited

Value Derived

Dimension Data's solution is modern, efficient, secure and reliable, equipping this complex and thriving business with the technology it needs to continue to execute its business with speed and precision, and capitalise on the opportunities the market presents. In cost terms, the solution has delivered immediate value. Not only was it approximately R1.7 million less to build and to implement than the alternative of building separate, stand-alone solutions for the different business units and organisations within the Group, but annual management and support costs are reduced by about R500,000 each year.

Grindrod had stressed to us how critical reliable uptime was to their competitiveness, and this was one of the primary goals of our solution. Uptime is better, there is better quality of service, service delivery and performance are enhanced, and so the end user experience is greatly enriched and people are better equipped to do their jobs.

The solution is designed to be scalable and adaptable. Grindrod is a thriving business, and as its growth continues, its technology platform is designed with an inbuilt capacity to keep pace. As the business grows, they will be able to add on applications and users as needed, and the cost benefits already experienced will increase proportionately with the added use made of the infrastructure.

The demands placed on Grindrod's internal IT resources have also been lessened. With the workload of routine maintenance tasks – for instance, monitoring screens – reduced and outsourced to us, these IT professionals are freed up to do what they do best, focusing on high end tasks like development, improvement and innovation.

Greater resilience and reliability mean that Grindrod is superbly equipped to be agile and quick to market, executing on decisions quickly and effectively and improving its competitiveness and service levels. It now uses high end technology that is cost effective and a great long term tool that will serve the business well into the future.

After a long sales cycle in which we forged great relationships with the people at Grindrod, we are incredibly excited to be part of their success story as they compete in a dynamic and fast-paced market.

Everyone's commitment to the project is what makes it work so well, and it has been a privilege to work with Grindrod's leadership as they pursue their business vision.