PHARMACEUTICAL RETAILER DIS-CHEM HYPER-SPEEDS PERFORMANCE WITH HITACHI HYPER-CONVERGED VSAN SOLUTION

INDUSTRY
RETAIL / PHARMACEUTICAL

LOCATION
JOHANNESBURG, SOUTH AFRICA

KEY CHALLENGES
• Merging two IT environments
• Legacy solutions with no virtualization
• No centralised storage

SOLUTION
A 'data centre-in-a-box' environment integrating compute, networking, storage and virtualisation. It is hyper-converged environment supported by a virtual SAN that enables hybrid storage.

BUSINESS BENEFITS
• Improved accessibility to vendors
• Scalability to accommodate business growth
• Reduced and simplified management

Retail pharmacy giant Dis-Chem has doubled in size since 2010, and following an acquisition that fuelled this growth, the company set out to transform the courier side of it's distribution business. To support their growing business, Dis-Chem looked to develop an agile datacentre environment that could help it transition to an enterprise ready and dynamic ecosystem.

Dis-Chem is a leading pharmacy group in South Africa. Started in 1978 as a family business, it has over 130 stores and two partner stores in Namibia. In addition to pharmaceutical products and services, its retail pharmacies sell personal care, beauty, healthcare, nutrition and baby care products as well as confectionary, dry grocery, household and other ancillary products.

The Challenge
Following a major acquisition, and a need to scale to accommodate growth in its courier business, the Dis-Chem IT team realised that in order to merge the technology environment of two business environments, it would require a complete overhaul. Its technology landscape was made up of a mix of its own virtualized VMware environment and an aging legacy environment it inherited; made up of an extensive physical hardware footprint without virtualization, that could simply not scale to the volumes of the parent company.

"After bringing the two environments together we had some virtualisation (with VMware), but we had no centralised storage. The environment was fairly primitive with just a few hosts running VMware and multiple old NAS storage devices. We just weren't comfortable with bringing these mission critical systems together in our datacentre, to solve this, we needed another host and to introduce proper storage in the environment," stated Lee Engelbrecht, Technical Manager at Dis-Chem.

"IT looked at all the available technologies and decided on a fresh approach. We wanted the quickest and most effective solution that could get our production systems up and running and support the three business critical solutions we house on a dedicated hardware environment, with software to support it."

Dis-Chem's ultimate goal was to embrace an enterprise ready, dynamic IT environment, or it would run the risk of delays in provisioning as well as being able to meet the resource requests from its courier business.

The Solution
After meeting with business partner First Technology and vendor partner Hitachi Vantara, the teams agreed on two options for Dis-Chem. Option one: buy three multiple hosts with internal storage. Option Two: proceed piece-by-piece with a hyper-converged solution that would move the new business and its legacy systems side by side onto virtual servers.

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LEE ENGELBRECHT
TECHNICAL MANAGER
DIS-CHEM

VMWARE FOOTPRINT

• VMware licenses for vSphere ROBO, vSAN ROBO, vCenter Server

• Hitachi Vantara hyper-converged infrastructure solution with hybrid storage

• Two Hitachi Unified Compute Platform HC 240 systems(4 nodes)

• SQL Database Application

• 2x E5 2650 (10 Core)

• 400Gb SSD Cache

• 3x1.2TB SASA 10k vSAN datastore

PARTNER

• Hitachi Vantara

HITACHI
Inspire the Next

"After deciding we wanted to follow a hyper-converged route, it became purely a numbers game. We needed 8TB of storage and 4 compute nodes to facilitate it. It all came down to speed of deployment, capacity and ultimately future scalability," said Engelbrecht.

"Ultimately we are a retail business and we have to keep our eye on the ball. Our job is to keep the business going and our datacentre is here to host the production system for our vendors, it is the premise upon which the business is run, so it can't go down and it can't fail."

Dis-Chem now has a 'data centre-in-a-box' environment made up of two Hitachi Unified Compute Platform HC systems, powered by VMware vSAN. This enables the company to deliver integrated compute, networking, storage and virtualisation in a highly-scalable, hyper-converged infrastructure. In short, it is a hyper-converged environment supported by a virtual SAN that supports hybrid storage and is replicated in its disaster recovery site 15km away.

Business Results & Benefits

"The performance of the environment is astronomically good, we immediately experienced high availability of the environment and there were virtually no headaches in the deployment. Furthermore, the performance between the old and the new can't even be compared. The migration ran smoothly and the developers working in the environment are over the moon with the speed at which everything runs," added Engelbrecht.

With the two mirrored environments, between its head office and its disaster recovery site, Dis-Chem is assured of high availability and total protection against data loss. Previously, when the company experienced periods of greater demand, it needed to add temporary physical servers to cope with the load on the datacentre. Now, it is able to spin up virtual machines as and when required, answering the business needs without additional hardware.

The installation of the hyper-converged VMware vSAN environment was completed by Hitachi Vantara team and First Technology within a day. It now it takes Dis-Chem two minutes to set up an operating system on a virtual server, where previously it took up to 48 minutes. The datacentre team is also able to ensure better availability of its business critical database with VMware vSAN.

With a completely virtualised storage environment it is also able to respond quickly to spikes in infrastructure demands and better manage the associated costs. "From a business side we haven't had any downtime or seen a host fail, so we haven't had to put the recovery environment to the test. We may not be experiencing the benefits in that sense – but we are living them every day."

According to Engelbrecht, the IT department is now able to keep pace with the company's changing business needs, without fear of the environment falling over or not being able to meet demands. It now also has a streamlined and seamless storage environment, compared to the myriad environments it previously had to support in silos.

Looking Ahead

"We are in the process of scaling the environment to three very big virtual and hyper-converged machines to support our courier business. We need the solution to scale as we grow our courier footprint in the future. The fact that the Hitachi Unified Compute Platform HC integrates natively with VMware vSAN, means it is easy for us to scale this up as we need," concluded Engelbrecht.

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