

# Langs Building Supplies Demolishes IT Infrastructure Costs by 53% with Nutanix

## Company Background

Langs Building Supplies, based in Stapylton, Queensland in Australia, is a supplier of timber and hardware products and a fabricator of roof trusses, wall frames, floor systems as well as operating a door and aluminium windows joinery for the construction industry. Langs is privately owned and has about 250 employees.

## Virtualize Everything

The server, storage and desktop infrastructure at Langs Building Supplies was overdue for a technology refresh. Matthew Day, IT Manager, wanted to shift away from applications running on dedicated servers to a shared infrastructure with high resource utilization. "Instead of being 90% idle, we wanted an infrastructure that is 70% utilized," he said. "Virtualization was the best way to consolidate our servers. But then I started thinking, can I also do that with desktops?"

The new infrastructure needed to scale with the business and be simple to manage, converged, highly reliable and powerful enough to support both business-critical applications and desktops. "We wanted it to be a well thought out plan, based on how we wanted to operate in the next 3 to 5 years," said Day. Virtual desktops needed to serve all user requirements and offer remote access. At Langs, roughly 75% are "task users" that access the ERP system and perform tasks like data entry, document handling and email; 15% are "design users" that engineer products using 3D CAD with heavy graphics processing; and 10% are power users that run 2 or 3 concurrent ERP sessions and utilize some graphics processing.

## Nutanix Truly Converged

After weighing a full gamut of solutions from HP, 3PAR, Nimble Storage, Dell, IBM, Oracle, Fusion-io, they selected the Nutanix Virtual Computing Platform as well as VMware Horizon View for desktop virtualization. Nutanix's patented architecture is a true convergence of storage and compute. "Nutanix is all together one solution. I don't have to think about storage or server architecture or middleware," said Day. "Other companies just offered cut-down racks with a SAN at the bottom."

The Nutanix system is also easy to manage and offers built-in high availability, including automatic failover in case of a node failover. It delivers high IOPS performance – essential for VDI – by moving hot data into PCIe flash storage for ultra-fast access.

The company installed three Nutanix nodes from the NX-3000 and NX-7000 Series, taking advantage of the ability to mix and match different models. Nvidia GPU GRID cards were installed in the NX-7000 nodes as a shareable resource for the design and power users.

The system's resiliency was immediately apparent when it lost power during a massive storm. "Over 100 VMs were running, and the whole thing was back up and running in 20 minutes. It's a very resilient solution," said Day. "The whole engagement with Nutanix, from the very first meeting to the proof of concept, was fantastic. Nutanix bent over backwards to support us."

“In terms of IT infrastructure, I can stand up a new site in less than a day with Nutanix. I'd challenge anyone to do that with traditional technologies.”

- Matthew Day,  
IT Manager, Langs Building Supplies



### Industry

Building Construction

### Business Needs

Virtualized server and storage infrastructure to host business-critical applications and virtual desktops for all task, power and design users.

### Solution

- Nutanix NX-3000 and NX-7000 Series
- VMware Horizon View

### Benefits

- Virtual desktop performance fast enough for 3D CAD users
- 96% reduction in power costs
- 83% reduction in rack space
- 53% lower TCO than alternative solutions
- Save 350,000 AUD in 5 years on staffing
- Better security and availability with linear scalability



NUTANIX



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## 53% Lower TCO

The Virtual Computing Platform now hosts all business-critical applications, including ERP, SQL Servers, web servers, content filtering, human resources, payroll and VMware Horizon View. All task, power and design users access Windows desktops running in Horizon View, mostly with thin clients. A branch office 100 km away from the main site in Stapylton accesses desktops over a wide-area network.

According to Day, the TCO of the Nutanix system is 53% less than traditional infrastructure. The system is so easy to manage that it was able to reallocate one FTE, saving 350,000 AUD over 5 years. Power consumption for IT infrastructure fell from 54 to 8 amps with the Nutanix solution. For the overall solution, with the end-user workstations factored in, total power costs fell 96%. Rack space fell by 83% from 3 full racks to a half rack. These massive reductions made it affordable to move the equipment into a professionally managed datacenter with much better physical security and availability.

Desktop remote access has improved worker productivity. “Just this week a key user went on maternity leave, but because of this solution, she can work at home and access the environment as if she’s here. This has been a massive boost to our productivity and retaining good staff,” said Day. Remote access also enables the company to hire engineering contractors from other locations in Australia or abroad, which has improved turnaround time for quotations. If a request comes in late in the day, a contractor in a different geolocated timezone can pick the job up and have it ready by the next morning.

## So Much Easier from Here


With the Virtual Computing Platform, Langs Building Supplies is ready for the future. The company has started development on a new site in Caloundra that will double the user count. “In terms of IT infrastructure, I can stand up a new site in less than a day with Nutanix. I’d challenge anyone to do that with traditional technologies,” said Day.

When Nutanix hardware needs to be refreshed down the line, it can be done non-disruptively, one node at a time, by simply swapping out hardware. “I don’t have to rebuild anything. With a SAN, I would have to migrate. But with Nutanix, the cluster will do it for me,” said Day.

“I’ve been in IT now for 18 years. This was probably the most straightward implementation I have ever had of a new technology. It’s been really great,” he said.

### About Nutanix

Nutanix provides datacenter infrastructure solutions that are hyper-efficient, massively scalable and elegantly simple. The award-winning Nutanix Virtual Computing Platform has disrupted the market by seamlessly and natively converging compute and storage in a single appliance. Headquartered in San Jose, Calif. with offices and authorized solution providers throughout the world, Nutanix is privately held and backed by top-tier VC firms. For more information, visit [www.nutanix.com](http://www.nutanix.com).

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