



## Grade A flexibility for Singapore school

To deliver the technology capabilities its faculty, staff and students need now and in the future, Nexus International School chose the unmatched flexibility of Dell EMC PowerFlex software-defined storage.



Education

Singapore

## Business needs

Building a new, state-of-the-art campus, Nexus International School needed an IT infrastructure it could use to support a variety of platforms and solutions for learners, administrative and business users, and security needs, and even create innovative connected virtual environments—with exceptional performance, availability and flexibility.

## Solutions at a glance

- [Dell EMC PowerFlex](#)
- [Dell EMC PowerProtect DD](#)
- [Dell EMC PowerVault](#)
- [Dell EMC RecoverPoint for Virtual Machines](#)
- [VMware vSphere, vCenter Server and vRealize Suite](#)

## Business results

- Extreme flexibility to keep pace with changing school needs.
- Ability to quickly deploy and maintain without taking systems down.
- Continuous availability for IT predictability and peace of mind.

# 31:1

backup data-reduction ratio.



# < 1ms

latency for superior responsiveness.



Nexus International School is highly regarded in Singapore—with approximately 1,000 learners representing more than 50 nationalities, ranging from age three to 18. To easily integrate learning systems and tools and enhance creativity, Nexus has embedded technology into every aspect of the learning process.

In early 2020, Nexus moved into a new, state-of-the-art campus. This gave the administration, staff and faculty an opportunity to create their dream school. The results are innovative learning spaces, breathtaking extracurricular facilities, uplifting art and music studios, and more.

“One of the benefits of starting fresh is building an IT infrastructure that will serve the school well into the future,” says Judy Cooper, principal of Nexus International School. “Whether it’s the latest mobile technology, resources for our learning spaces or data needed for feedback to learners, Dell EMC PowerFlex provides the resilience and flexibility to easily expand and support whatever services we’ll need to add in the coming years.”

## No sleepless nights

PowerFlex software-defined storage supports the school’s entire IT infrastructure—from on-site and cloud-based learning platforms, administrative SQL databases and management information systems to Milestone video security and surveillance, virtual networking and even Minecraft Education servers teachers use to create environments that keep everyone connected virtually.

For Nexus, a key challenge was to make certain its IT infrastructure remains resilient and reliable. “If our systems fail and we lose data, we’d lose years of vital information—from historical student records to grades,” explains David Lee, director of IT at Nexus International School. “The day-to-day life of the school would come to a standstill. The self-healing nature of PowerFlex—where if you lose a disk the system basically rebuilds itself—ensures we don’t have sleepless nights and our infrastructure isn’t compromised.”

Nexus uses PowerFlex with hyperconverged nodes that combine storage and compute resources into a single layer for easier management, deploying the eight nodes across two data centers on the campus. The hybrid nodes are useful for storage tiering—with a flash pool for the most demanding applications and hard-disk storage for less critical needs.

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*“Using PowerFlex with VMware, we can move workloads as needed without taking an entire system down. In an environment in which the only constant is change, PowerFlex simply works.”*

David Lee  
Director of IT, Nexus International School

## Appealing agility

The transformational agility and the massive performance and availability of PowerFlex also enabled Nexus to seamlessly transition from in-classroom to at-home learning during the COVID-19 lockdown.

“Provisioning was quick and uncomplicated with PowerFlex remaining invisible to the end user at all times,” Lee recalls. “Plus, when maintenance is required, we can move workloads as needed without taking an entire system down. In an environment in which the only constant is change, PowerFlex simply works.”

In addition, Nexus requires frequent syncing of data among the various systems. When the school recently shifted to a new external busing provider, Nexus was able to get on the road quickly because routes and other information were already in the PowerFlex system.

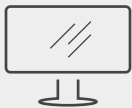
## Depending on Dell Technologies

Nexus relies on a wide array of Dell Technologies solutions to ensure that students make the grade:

- **Dell EMC PowerProtect DD and Dell EMC RecoverPoint for Virtual Machines**—These ensure reliable data protection and recovery, while delivering a data-reduction ratio of 31:1, or 98%.
- **Dell EMC PowerVault**—This versatile storage is ideal for storing the school’s video security and surveillance data.
- **VMware**—Nexus relies on VMware and vCenter Server and the vRealize Suite to create and manage a large pool of compute and storage resources to tap into as needed.

“Partnering with Dell Technologies means that we can count on reliable, well-made systems and devices—so our faculty can focus on the learning,” remarks Cooper.

Adds Lee, “We’re got a long-standing relationship with Dell Technologies. They’re innovative and reliable, and their support is excellent. System availability is always a concern, and that’s why we chose PowerFlex.”



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