



## Architecting an agile IT environment

With an aging IT infrastructure and data storage growing 20 percent annually, Southern California Institute of Architecture needed a more flexible way to respond to university requirements



Education | U.S.

### Business needs

To fulfill its mission of reimagining architectural design, the highly regarded Southern California Institute of Architecture (SCI-Arc) must continually innovate—requiring agility and performance supported by the latest computing resources, networking and data storage to serve its 500, in addition to faculty and staff.

### Solutions at a glance

- [Dell EMC VxRail](#)
- [Dell EMC Data Protection Suite](#)
- [Dell EMC Cloud Disaster Recovery](#)
- [Dell EMC Data Domain](#)
- [VMware vSphere and vSAN](#)

### Business results

- Ensures quick and reliable delivery of needed services
- Lets SCI-Arc keep pace with 20% annual growth in data storage
- Enables 10-second reboots after updates and maintenance
- Easily accommodates growth through additional nodes
- 80% faster backup—90% of servers take less than 1 hour

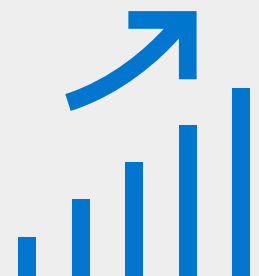
95%

of IT environment runs on VxRail



20%

annual data growth



SCI-Arc ranks among the top 10 architecture and design schools in the nation across a variety of programs and focus areas. Housed in a distinctive quarter-mile-long building in the Arts District of Los Angeles, the university's 80 faculty members—most of them practicing architects—provide approximately 500 students with a uniquely inspiring environment in which to study and prepare for professional careers.

SCI-Arc's data storage demands had been increasing by more than 20 percent per year, driven by the need to deliver an increasing array of services to students, faculty and staff. In addition, the school needed storage to back up media-rich student projects—with their large design, animation and video files. Unfortunately, the university was reaching end of life for its existing IT infrastructure.

"We had maxed out our data storage capacity and couldn't support any new VMs," says Peter Kekich, network systems administrator for SCI-Arc. "This made it virtually impossible to implement new services to respond to our growing needs."

## Modernizing its data center

As a long-time Dell user, SCI-Arc turned to the Dell EMC VxRail hyperconverged infrastructure (HCI) appliance to transform its data center. VxRail provides exceptional agility, scalability and management simplicity—and is the only fully integrated, preconfigured and tested HCI appliance powered by VMware vSAN storage virtualization software.

The university moved around 40 virtual machines (VMs) onto its four-node VxRail. This enabled SCI-Arc to retire 90 percent of its physical servers—reducing costs and enhancing performance and reliability. The virtualized environment supports a wide range of applications and workloads including the university's institutional enterprise resource planning (ERP) solution, student and admin file servers, scheduling and help desk programs, SCI-Arc Upload—which currently holds 6 terabytes of critical student work— and more.

"Dell EMC VxRail offers a night-and-day difference in our ability to deliver new services and ensure that people have all the tools they need," says Vic Jabrassian, chief information officer, SCI-Arc.

"Our database administrator loves the performance," Kekich adds. "When our ERP needs an update or maintenance, it takes 10 seconds to reboot compared to 5 minutes in the past. It's also much quicker and easier to fire up a VM to launch a new service or push out software updates to our staff and computer labs."

*"Dell EMC VxRail offers a night-and-day difference in our ability to deliver new services and ensure that people have all the tools they need."*

Vic Jabrassian  
Chief Information Officer  
SCI-Arc


ERP reboots  
take mere  
**Seconds**



*“When our ERP needs an update or maintenance, it takes 10 seconds to reboot compared to 5 minutes in the past.”*

Peter Kekich  
Network Systems Administrator  
SCI-Arc

80%  
improvement  
in backup times



## Accommodating growth and avoiding downtime

Non-disruptive scaling will allow SCI-Arc to cost-effectively keep pace with the university’s expanding needs.

“VxRail provides a completely different way of managing growth,” remarks Kekich. “Right now, we can easily double or triple our VMs without boosting capacity. But if we ever need more compute resources or data storage, we can just add a node and configure it in a few clicks with VxRail Manager.”

Although SCI-Arc has never experienced any outages with VxRail, the generous capacity also ensures that if one of the four nodes were to fail, critical workloads would continue to run without any downtime.

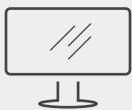
## Improved management and backup

SCI-Arc got the VxRail fully up and running within two days—including installing the physical hardware and cabling, configuring the switches, running patches and implementing services. Migrating the university’s VMs took about another week.

The system’s management simplicity has also reduced the time the IT team spends on routine maintenance, providing more time for innovating new services—such as the three applications SCI-Arc has in beta at present.

In addition to depending on VxRail, SCI-Arc relies on the Dell EMC Data Protection Suite, Dell EMC Cloud Disaster Recovery and Dell EMC Data Domain appliances for backup and recovery.

“With VxRail, we’ve seen about an 80 percent improvement in our backup times,” comments Jabrassian. “We’re able to back up 90 percent of our servers in less than an hour, where it used to take the entire night. The performance is amazing.”



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