MELBOURNE SHOWGROUNDS

Premier venue makes security a priority with high-performance storage

ESSENTIALS

Industry

Events and venues

Company Size

50–100 employees

Business Challenges

- Capture consistently high-resolution surveillance video for security operations
- Deploy a flexible foundation for increasing surveillance and storage needs
- Meet growing legal compliance requirements for safety

Results

- Proactively manage security by capturing and storing high volumes of high-resolution surveillance video
- Strong, flexible storage environment can manage rapidly increasing data volumes without compromising performance

HISTORIC VENUE PROTECTS VISITORS' SAFETY WITH FLEXIBLE STORAGE

Melbourne Showgrounds is one of Victoria, Australia's premier venues. Managed by the Royal Agricultural Society of Victoria, the location is the site for the organisation's flagship annual event, the Royal Melbourne Show, attended by around 500,000 people each year. The venue also hosts indoor and outdoor events such as conferences, concerts, and exhibitions throughout the year. Melbourne Showgrounds places the safety of its visitors at the historic site as a strategic priority.

"Proactive, responsive security keeps patrons safe and ensures that when incidents such as theft or assault occur, authorities can deal swiftly with them. It is crucial that we put appropriate deterrent measures in place," explains Michael Medved, IT Manager at Melbourne Showgrounds.

Throughout the 19-hectare venue, there are 90 high-definition (HD) cameras installed with Milestone Systems surveillance software. Up to 15 new HD surveillance cameras are installed each year, leading to an ongoing and rapid increase in data volumes.

As a result of this increase, Melbourne Showgrounds complemented its existing EMC® VNX® environment with EMC Isilon® scale-out storage. The VNX environment plays a key role in the surveillance system and is used for the storage of short-term footage (single hours), after which footage is archived to EMC Isilon.

The flexible, high-performing Isilon storage supports security operations with the consistent recording of HD video. As new security threats emerge, the organisation's infrastructure is now equipped to cope with new technologies and data demands. Ongoing regulatory requirements for the capture and storage of events data are also met easily.

"Storage performance improvements with EMC Isilon are inspiring other operations areas to think about the way technology can support innovation and other business activities," says Medved.

ENVIRONMENT

Melbourne Showgrounds initially stored its closed-circuit television (CCTV) footage in a direct-attached storage environment, and later upgraded to a storage area network environment based on EMC VNX. The company relied on long-term strategic partner, Intellect IT, to address the issue of exponentially increasing data storage needs. Intellect IT evaluated available options in the market that would be a strategically aligned investment for the organisation. After evaluation, the preferred solution proposed by Intellect IT was based on EMC Isilon scale-out network-attached storage.

REDEFINE

"It has been a natural progression. We are now ready to invest in the foundation we need for our current and future surveillance needs," says Medved.

Intellect IT deployed a single cluster for Melbourne Showgrounds, comprised of three EMC Isilon X-Series nodes providing 190 terabytes of storage capacity, and the flexibility to add capacity within minutes as needed. "I love the modular concept. We can easily add another rack of hard drives to EMC Isilon and we're ready to go." says Medved.

Intellect IT continues to provide regular infrastructure advice to the organisation, and Medved says the guidance is invaluable.

Max Soukhomlinov, Director, Intellect IT, says, "We recommended the EMC Isilon solution because it was the right combination of performance and capacity for Melbourne Showgrounds. It allocates storage cost-effectively while ensuring that new and archived data is readily accessible."

PATRONS PROTECTED BY HIGH-QUALITY SURVEILLANCE

Prior to deploying Isilon, Melbourne Showgrounds had to downscale camera resolutions to 360p, a frame rate of 8 frames per second. The majority of HD cameras installed with Milestone Systems surveillance software have a resolution of 720p, a frame rate of 20 frames per second. For low-visibility areas, camera resolution is increased to 1080p because more granular detail is needed.

Although decreasing the image resolution rate on all cameras might have reduced storage needs, Medved explains that the organisation was not prepared to compromise image quality. "Our security team has to review thousands of hours of footage to determine where and when incidents take place, and gather the footage to meet regulatory requirements. With EMC Isilon, we have high-performance storage that supports HD video. It is easier for our security team to accurately review footage such as people's faces, license plate numbers, and other movements," he says.

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EVOLVING SECURITY NEEDS SUPPORTED BY FLEXIBLE STORAGE

The Royal Melbourne Show generates around 100 terabytes of surveillance video even before incidents are processed. Other events held at the venue can generate data over several weeks. All footage is held for a predefined duration, and each incident creates several datasets. The sheer volume of surveillance video generated and the number of incidents captured for each event meant that prior to deploying the Isilon solution, the IT team was always trying to create new storage spaces.

Medved says, "We are increasing surveillance all the time, and this places a huge load on our network. With Isilon, all footage—current and archived—is stored in one repository, and when we need more capacity, we just add another module. This flexibility means we never have to worry about losing data or compromising security performance."

COMPLIANCE OBLIGATIONS ARE EASILY MET

Melbourne Showgrounds has a reputation for hosting family friendly events. The success of its business relies on its reputation as a reliable and trustworthy venue for family events by meeting strict government requirements for surveillance and safety. For example, if children are involved in a security incident, the organisation must hold the incident data for 21 years. For other incidents, the standard archiving timeframe is seven years.

"The EMC Isilon solution helps us to comply with our legal obligations, which is critical to running our family and general public events," says Medved.

HISTORICAL DOCUMENTS SHARED WITH A NEW GENERATION

The positive impact of EMC Isilon on security operations has resounded throughout the organisation, and now various departments at Melbourne Showgrounds are interested in ways the technology can enhance other workflows. A project to digitalize historical records, such as books, catalogs, and schedules, is in the pipeline.

"We've got Royal Melbourne Show records that date back to the early 1900s. With EMC Isilon forming the backbone of our storage, we can create an online museum for future generations," says Medved.

The organisation plans to scan the documents into its system and offer members the chance to look up their ancestors' records in competitions entered, and find out what their placing was.

"Isilon is very much a 'plug and play' solution. Its flexibility and performance is helping to open our eyes to other possibilities and maximizing the benefits of the storage infrastructure we now have in place," says Medved.

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