Award-Winning Film Studio Harnesses IT for Production Boost



A Vertiv Case Study



Critical Needs

Movies are getting bigger and bigger, yet many don't realise that the industry owes a lot of its recent disruption to high-performance computing. Behind all the special effects and set designs of a blockbuster is the demand for compute-intensive applications and latency-free computing power.

The fast-in, fast-out IT infrastructure required to support these short-cycle projects has become a major consideration for the industry's ambitions and ultra-high-definition production formats.

It's an exponentially data-hungry business, and against this backdrop production teams are often spread across four corners of the globe, with no bandwidth for slow data communications and rendering delays.

Directly moving data from the production warehouse to the cloud can create an abundance of latency issues, leading many to put the idea of performing at the "edge" into practice.

One such production company, which recently moved its headquarters to Australia, needed a modular solution that could be deployed at speed and power its high-density project at the edge.

The Situation

Blockbuster locations doubling for anywhere in the world are driving huge demand in Australia, coupled with the country's flattened COVID-19 curve. The international spotlight is firmly on Australia and this has seen the film industry experience a threefold increase on 2019 levels.

Case Summary

Country: Australia Vertiv Solutions: Liebert® APM, Liebert® CRV





Liebert® CRV

Liebert® APM

For this industry leading production company, there was a timely need for critical digital infrastructure for a major blockbuster film. From announcement to release, these kinds of production projects are often two-year cycles. When the deal is signed, pre-production begins almost immediately, leaving little time to prepare for the unique compute requirements of the project.

"Digital is no longer a nice-to-have – production companies need to scale-up their data centres to enable critical processes and compete in an expanding market," said Daniel Sargent, Head of Sales for Natural Power Solutions, who worked closely with the production company throughout the process.

Award-Winning Film Studio Harnesses IT for Production Boost

A Vertiv Case Study



The Solution

NPS has been a trusted Vertiv partner for several years now, working with some of Australia's leading companies for their IT solutions. With modularity in mind, Vertiv and NPS have designed and built a prefabricated modular (PFM) data centre coupled with a Vertiv[™] Liebert[®] CRV row cooling unit and Vertiv[™] Liebert[®] APM uninterruptible power supply (UPS), to support a high-specification digital stage, fitted with floor-to-ceiling LED screens and computer-generated imagery (CGI) capabilities.

Housed in a Sydney football-pitch-sized production warehouse, the full turn-key solution needed to be as quiet as possible to avoid disrupting the shoot, or the talent.

"We couldn't risk the moving parts of the data centre disrupting filming on the digital stage," said Sargent. "While we designed the project agnostically, Vertiv had a unique ability to meet this make-or-break requirement – audio levels reach just 80 decibels inside the data centre, and 60 decibels outside."

Given the short-cycle nature of the project, price sensitivity was also a significant factor in the design process. The film company needed a low-cost and scalable solution that could run a full IT load with redundancy that accounts for failure and maintenance.

The Outcome

Managed on schedule within just three weeks, the data centre not only met the specific noise requirements, but delivered a total cooling capacity of 24.4 kilowatts, keeping output at 19 degrees Celsius. Additionally, the Vertiv[™] Liebert[®] APM UPS helped deliver a 94 per cent efficiency in double conversion.

"The modular, non-containerised design is fit for purpose and can moved and used to power and process huge volumes of production data at the film company's next project – wherever it might be," said Bhargav Kumar Bhatt, National Mechanical and Electrical Channel Manager A/NZ at Vertiv.



"The benefit of edge computing is that it allows organisations to manage, store and draw value from data right where it's needed. Instead of transmitting film assets – including IoT sensors, footage, and audio – back and forth to a city-located colocation data centre, the data collected from the digital stage can be processed instantly and more efficiently at the site via a 'sense-infer-react' loop of visibility and control."

Vertiv.com | Asia Pacific

© 2021 Vertiv Group Corp. All rights reserved. VertivTM and the Vertiv logo are trademarks or registered trademarks of Vertiv Group Corp. All other names and logos referred to are trade names, trademarks or registered trademarks of their respective owners. While every precaution has been taken to ensure accuracy and completeness here, Vertiv Group Corp. assumes no responsibility, and disclaims all liability, for damages resulting from use of this information or for any errors or omissions. Specifications, rebates and other promotional off eras are subject to change at Vertiv's sole discretion upon notice.