ISAAC REGIONAL COUNCIL

A Vertiv Case Study

VERTIV™

Case Summary

Location: Australia

Vertiv Solution:

- Liebert® ITA
- Knürr E-Series Racks
- Liebert® CRV 35 kW
- ASCO® 7000 Series Closed Transition Switch
- TVSS
- Trellis Express
- PDU
- Generators

Critical Needs:

The Council's current data center was no longer suitable to handle the customer's increasing capacity demands. It wanted to transfer its critical IT equipment into a more secure facility, and thus the Council opted to have a standalone modular data center instead which could be deployable in a short period of time and would be situated within the Council's head office located in a secure facility. The Council turned to Vertiv for a complete modular data center solution.

Situation

In 2012 and 2013 Isaac Regional Council experienced steady growth in its number of employees and that, coupled with major IT initiatives to automate and streamline transaction processing, put increasing pressure on existing IT infrastructure: the two racks in its primary data centre were full and there was no room for expansion; business applications were running on hardware which fell short of developers recommendations; lack of capacity was leading to unplanned system outages which in turn hurt business productivity. As a result, in early 2014 Council decided to invest in a new data centre and in consultation with Resolute Information Technology sat down to design a data centre which would alleviate current issues and cater for expected growth.

At the same time, it was decided to relocate the primary data centre from Clermont in the far west of the region to Moranbah, Isaac's most populous town and home to 60% of its IT users.

Outcome

After evaluating a number of options with Resolute Information Technology, Isaac opted for a standalone structure designed and built by Vertiv. Vertiv's close relationship with Resolute ensured that communication between the customer and the supplier was open and clear and that design specifications were accurately understood.

The 10.65m x 3.46m x 2.7m building uses a metal-framed, double-skinned, insulated Colorbond construction designed specifically to take the weight of specialist data room equipment. The fire retardant insulation provides a two hour fire protection rating.

Inside, the data centre includes a small vestibule which is used for storage and which protects the IT equipment from dust and water which could get into the data room if there was direct access from outside. The vestibule also houses the fire suppression and alarm system.

The data room houses four server racks, two air conditioning units and one rack of monitoring equipment, which gives the Council's IT manager remote access to the building's critical equipment for intelligent and proactive maintenance preventing any system breakdowns.

The building was constructed and fitted out in Brisbane then transported 1,000km to site where it was commissioned, connected to the backup generator and handed over to Isaac within four days. The whole process, from placing the order to handover took just four months.

Robert Linsdell, Managing Director of Vertiv Australia and New Zealand says "Gathering a group of specialist data centre engineers to remote locations can be costly. The advantage of the modular data centre is that Vertiv install and commission all the electrical infrastructure, switchboards, cabling, pipe work in offsite in Brisbane. This means no air conditioning technicians are required to go on site, we only needed one engineer to commission the generator on site".

The flexible design has allowed for future growth which was previously prohibitive due to space constraints within the small data room at the sub-branch. The design also allows for future increases in compute power without increasing heat.

Isaac Regional Council Chief Information Officer Robert Kane said, *"Council now has modern primary data centre with its own backup power generator and fire suppression system and enough capacity to cater for future growth."*

"Since installation, Council has seen real benefits from the new environment. Downtime resulting from system outages has dropped by around 40% with fewer power interruptions, and a far more stable provision of services to both internal and external customers".

The new data centre has been so successful in improving service levels and business continuity that when Council decided to invest in a disaster recovery site, it was an easy decision to go back to Vertiv for a solution.

Kane says the Council can now plan future projects with confidence that their underlying IT infrastructure is stable, flexible and scalable.

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