TCN DATA HOTELS

A Vertiv Case Study



TCN



ABOUT THE COMPANY

TCN Data Hotels runs two data centres in the north of the Netherlands, each with a capacity of approximately 50 megawatts (MW). The company has been in the data centre and colocation market since 2001 and has developed long lasting relationships with national and international clients. Not only does TCN manage its own data centres, but it also shares its knowledge and experience by developing facilities for third parties, ranging from 1 MW to over 100 MW.

www.tcndatahotels.com

Background

In recent years, the demand for state-of-the-art data centres has increased by more than five hundred percent and the market is still growing. TCN Data Hotels taps into this market using its extensive knowledge of data centre design and business management. This results in extremely reliable data centres with optimised total cost of ownership. TCN Data Hotel Groningen is the only provider in the Netherlands to reach 99.9999 availability in the past eighteen years. The TCN Data Hotels teams provide security, services and support 24 hours a day, 7 days a week. By providing internal training programs and allowing staff to grow alongside the company, TCN ensures the highest levels of expertise and commitment.

TCN Data Hotels sets itself apart through low costs, economies of scale, energy efficiency, high availability, a secure and dedicated environment and good physical and virtual accessibility, anywhere, anytime.

The Situation

For eighteen years, TCN Data Hotels has been fully satisfied with the Vertiv UPS systems providing its uninterruptible power supply. An uninterruptible power supply is vital in order to be able to offer customers the best service possible. "We serve a wide range of clients, mainly government organisations, educational bodies and internet businesses," says Kees Loer, who is responsible for engineering at TCN Data Hotels. "There's a reason why we call ourselves a 'data hotel'. Our clients rent the space and we provide fireproofing, electricity and cooling." TCN Data Hotels raises the bar for uptime as it is the only company in the Netherlands to achieve six-nines availability in the past eighteen years. In all these years Vertiv UPS systems have never let TCN down. "But after almost two decades it was time to start thinking about replacing them," says Loer. "The principle of the UPS hasn't changed much in that time, but of course we could benefit from the latest developments in technology."

The Solution

TCN Data Hotels opened a tender to replace their UPS systems and invited various suppliers to submit bids. Loer explains: "Reliability, excellent service and support, knowledge of what we do and energy efficiency were important criteria for us. In principle, these factors were more important than the cost. Reliability is essentially our core business because that's what we deliver to our customers. All our equipment must, therefore, be of the highest quality so that we can guarantee the best availability for our clients."

After thorough market research, TCN Data Hotels chose Vertiv Liebert® EXL S1 systems. These UPS stood out for their transformer-free topology with up to 97 percent efficiency in double conversion mode. They are extremely compact and also grant reduced installation costs. Lower cooling requirements and a variety of other factors allow clients to optimise the PUE of their data centres by using these systems.





Loer comments: "We were convinced of the quality and reliability of these systems also because we saw how they performed during stress tests at the Customer Experience Centre in Bologna, Italy. Moreover, they are incredibly efficient even at partial load, which is the most common situation in a data centre. Energy efficiency is important for us as, after all, every kilowatt counts." For Loer, the compact size of the UPS is also an advantage, as the new system is smaller than the old one, meaning that there is no need to make any major changes to the data centre and additional floor space is now available. The replacement will take place in phases, with the first aisle being replaced in 2017 and the others to follow. TCN Data Hotels teams are working closely with Vertiv to completely replace the system without any downtime.

The Results

Loer expects that the new UPS system will allow TCN Data Hotels to further improve energy efficiency. "We've been working on this for several years, and we will continue to do so. We're now well-prepared for the future as the new systems offer state-of-the-art technology, which is beneficial for reliability and availability. The smaller footprint of the Liebert EXL S1 system is also an advantage. The systems fit into the space we already have and we only need to make a few changes to the existing cabling."

Case Summary

Location: Groningen, the Netherlands

Vertiv solution:

• Liebert® EXL S1 UPS systems

Critical needs:

 Reliable and cost-efficient UPS system to ensure high availability of critical infrastructure for colocation customers.

Results:

- Future-proof UPS environment
- Increased cost effectiveness and energy efficiency
- Smaller UPS footprint

