

## Safety and modular growth

### Bechtle puts its trust in Rittal's flexible data centre infrastructure

More and more medium size companies realise that IT directly influences business success. Associated with this is a significant expenditure for installation and operation. What would be more prudent than to entrust the hardware and operation to specialists best suited for the job? Bechtle AG operates a service data centre in Switzerland which is equipped with high-end hardware as well as the most modern infrastructure solutions by Rittal. This creates the highest level of security and performance for the customers – guaranteed.

Bechtle is operating one of the most modern data centres for outsourcing services not far from the commercial centre of Switzerland near Zurich. "Demand motivated us to create a service computer centre in the open countryside so to speak for those customers who consider maintaining IT in their own facility too expensive or too involved", states Thomas Willenegger, regional director of the Bechtle Swiss IT system houses.

#### The infrastructure is as important as the servers

Pascal Zeindler, director of the Bechtle IT / data centre: "We know that the servers are only highly available if the operational conditions are right. This was the reason why we looked at Rittal's continuous infrastructure solution RimatriX5. This concept convinced us because the individual modules of rack, power supply, climate control, security and monitoring are very well adapted to each other. In addition, it was decisive for us that the modular Rittal solution allows us to expand the data centre successively. This argument is highly significant from a cost and performance perspective. Otherwise, Bechtle would have had to make investments at the start of the operation of the new data centre in particular – at still less than full capacity – which can only be used at a later stage. The new data centre's full capacity will be reached in about three years. We are scaling servers and infrastructure accordingly."

#### No IT without power

Miniaturisation and increasing performance of the hardware components require modern energy management concepts. The Rittal solution combines redundancy, scalability and availability in one system. Individual components can be retrofitted during running operation. The basis of the power supply at Bechtle is formed by so-called Power Distribution Racks (PDR). The server racks are redundantly supplied with power via Power Distribution Modules (PDM) from here. Intelligent power distributions take over the distribution in the racks by Power System Modules (PSM). These socket modules allow redundant power supply within the rack. Depending on the installation direction on the power link, which is hidden in the rack shock-hazard-protected, a direct or uninterrupted power supply (UPS) is contacted. Pascal Zeindler: "The Rittal UPS concept also convinced us. If we need more power, we just fit another module into the relevant UPS rack during current operation."

#### Heat dissipation on demand

The greatest part of the collected output in the server rack is converted to heat in the end. And this has to be dissipated safely. The existing false floor cooling at Bechtle provides cooling to the lower performance components. For higher cooling requirements, a so-called Liquid Cooling Package (LCP) by Rittal is used instead of a side panel of a server rack. This creates a closed system consisting of server rack and water-cooled heat exchanger. Up to 30 kW dissipated power per rack is dispersed very efficiently.

#### Centralised monitoring

Permanent monitoring is a must where so many systems are operated for customers. Bechtle therefore also uses the Rittal monitoring system CMC-TC. It collects all relevant environmental parameters at the administrator.

#### Result

"Choosing Rittal as premium brand for the data computer centre infrastructure paid off", Mike Fruet, managing director of the Bechtle IT system house in Zurich summarises. "We are expanding the system as needed and not only servers but also the power supply, racks and climate control."

**Components:** Rack, LCP, UPS, PDR, PSM, CMC-TC