DATAPORT

A Case Study by Vertiv™







ABOUT THE COMPANY

Dataport is a full-service IT service provider for public authorities in Bremen, Hamburg, Saxony-Anhalt, and Schleswig-Holstein as well as for tax offices in Mecklenburg-West Pomerania and Lower Saxony. The company develops, maintains, and hosts systems that support a number of the local and regional government authorities' requirements. In addition to the company headquarters in Altenholz, Dataport also runs branches in Hamburg, Rostock, Bremen, Lüneburg, Magdeburg, and Halle. The company's current headcount totals 2,500 employees.

www.dataport.de

The Challenge

To enable Dataport to continue reliably meeting the IT needs of government authorities in northern Germany in the future, the company commissioned the construction and operation of two data centers in Hamburg and Norderstedt back in 2011. Located at two sites, the new twin data center should also ensure the requisite system stability and redundancy.

This decision presented Dataport with a major challenge: the data center had to remain operational during the moving phase of the project. At the same time, Dataport wanted to improve the efficiency of remote infrastructure administration in the new data center – with the aim of operating a future-proof data center that can be controlled remotely from the company headquarters. So Rainer Dechow, System Administrator at Dataport, called on the expertise of Vertiv. "We needed a concept that ensured smooth running during the moving phase and a suitable solution for more efficient remote infrastructure management. Vertiv was just the right partner for this because it was able to solve both issues," said Rainer Dechow, summarizing his reasons for entering the cooperation.

The Solution

To ensure that the data center move went off without a glitch, Vertiv's first step was to draft a comprehensive operation concept and the new administration structures in the data center. "We placed our trust in Vertiv's expertise, especially for the moving phase. Being able to guarantee availability during the move was absolutely critical for us. What's more, we wanted the move to be completed as quickly and smoothly as possible. Good project management is the key to this," explained Rainer Dechow.

Dataport has been using the Avocent® DSView™ Management Software from Vertiv, which creates a single administration access point for the entire infrastructure. As part of the planned move, Dataport expanded the system to include the Avocent Universal Management Gateway (UMG) 4000.

The UMG now assumes the function of several appliances in the racks and renders the use of dedicated KVM switches, serial console servers, and service processor management systems redundant. The integration of the UMG into the Avocent DSView Management Software enables remote administration, console management, and – most importantly – central user management for the administration. This saves money, increases operational stability, and also improves the overall efficiency of the two data center sites. Further advantages of the management system include a standardized user interface for managing servers, storage, and network components from different manufacturers as well as controlling them centrally to improve efficiency and response times.



The new, mirrored data center not only boasts greater capacity, it also has a different structure. As a result, the appliance systems were redesigned. The decision in favor of the Avocent UMG was an easy one: it not only facilitates a perfect, standardized IT infrastructure management system, but also offers additional technical possibilities. "One decisive factor was that the Avocent UMG 4000 features a great number of ports," explained Rainer Dechow, System Administrator at Dataport. "In total, an Avocent UMG 4000 can physically connect and manage 40 IT devices by cable (via their service processor, KVM, or serial interface) or logically connect and manage 512 servers."

Rainer Dechow and one of his colleagues ordered two UMGs in advance so that they could familiarize themselves with the devices. "We just considered it as a new type of appliance. We didn't have a proper test phase. We were already convinced by our own experience with products from Vertiv in the past. So we knew that introducing the Avocent UMG 4000 was the right solution to meet our requirements," explained Rainer Dechow.

The Results

"The decision in favor of Vertiv and the introduction of the Avocent UMG 4000 was the right move for us," declared Rainer Dechow. "Installing new servers in particular is now much more efficient." When purchasing new servers, Dataport used to have the hardware delivered to its branch in Hamburg, where the servers were installed according to specific rules and then taken to the data center and installed and connected on site. "Since we introduced the Avocent UMG, we can have the devices delivered directly to the data center, where they are installed, connected, and then remotely configured using DSView and the virtual media function of the UMG," stated Rainer Dechow.

Another important aspect was the time factor. When failures occurred in the data center, a service technician used to have

to go there to fix the problem on site. With the Avocent UMG 4000, it is possible to implement out-of-band access. "I work with my team in Hamburg. The new data center is about 20 km from where I work. When failures occur now, we have remote access to rectify the problem quickly," said Rainer Dechow, drawing a positive conclusion. Furthermore, it is possible to connected all systems using the various interfaces (KVM, serial, and service processors), as these are all activated via the appliance. The advantage for the data center operator is obvious: it means that only one single appliance is needed and fewer devices like console servers or KVM switches are required. This saves on height units in the racks, means that fewer cables have to be laid, and the administration of the infrastructure is considerably more streamlined.

The new Dataport data center is a co-location data center, which means that the system space rented by Dataport is equipped with the infrastructure, including the racks. Dataport orders the hardware it requires from the manufacturers with which it holds framework agreements. This is no problem for the Avocent UMG 4000. The appliance manages the devices independent of the manufacturer – this is particularly important if you want to purchase the best hardware available at any time. This ensures that the data center operator retains the required flexibility and investment security.

The increasing level of data center virtualization can also be seen at Dataport. There are now fewer physical components in the data center than there used to be and more virtual servers. Thanks to the increasing level of virtualization and out-of-band management made possible by the Avocent UMG 4000, Dataport is able to manage a larger data center with the same number of personnel as before.

"Vertiv was the right partner for us to implement our out-ofband management project, which was completed within just three months. And with the data center in operation throughout!" said Rainer Dechow, expressing his praise.