THREE KEY VALUES OF CONSOLIDATED INFRASTRUCTURE MANAGEMENT

Solution Brief

VERTIV™

BENEFITS

Highly Efficient Remote Management with the UMG

Dataport is a full-service IT service provider for public authorities in Germany. The company needed an efficient way to remotely manage two data centers located in Hamburg and Norderstedt from its company headquarters in Altenholz.

A key part of the plan included the Avocent Universal Management Gateway 4000. The introduction of the UMG has yielded multiple benefits.

- Servers that once had to be physically configured elsewhere and then moved to the data center are now delivered directly to the location and remotely configured.

- Service technicians do not need to travel to the data center when a problem occurs. Using the UMG's out-of-band access capability, problems can be resolved remotely.

- The UMG has reduced the need for multiple devices, such as KVM switches and console servers, saving rack space, requiring fewer cables and streamlining infrastructure administration.

- The out-of-band management capability enables Dataport to manage the large data center with the same number of personnel as before.

dataport

How Avocent Universal Management Gateway Helps Data Centers Become More Efficient, Secure and Flexible

As more companies rely on software applications to run their business, IT's job has become increasingly complex. Data centers are mazes of servers, storage devices, environmental control systems, networking and power equipment. Add in the fact that most IT organizations purchase equipment from multiple vendors and the complexity of managing and monitoring all these assets becomes exponentially greater.

This complexity can impede IT efficiency and increase risk. Efficiency is compromised when administrators must use multiple, vendor-specific tools to manage all the devices and maintenance, such as firmware updates, must be done device by device. Risk grows because IT staff must often enter the data center to complete tasks, increasing the chances of errors and mishaps that create unexpected downtime. Reputable studies have concluded that as much as 75% of downtime in a data center is the result of human error.

Overcoming the pitfalls of highly complex data centers requires three key capabilities:

- Simplifying processes for managing heterogeneous devices to increase efficiency.

- Improving the physical and logical security of the data center to reduce risk and downtime.

- Increasing IT flexibility to keep up with the rapidly growing needs of the business.

Simplifying Data Center Management with the Avocent Universal Management Gateway

The Avocent Universal Management Gateway (UMG) offers an effective solution to meet these needs. As a converged access and control appliance, the UMG combines the functions of digital KVM, serial console, service processor, rack PDU and environmental sensor management in a single interface. Using the UMG, IT administrators can remotely monitor and manage hundreds — even thousands — of heterogeneous assets from a single console. This unique single-pane-of-glass capability can substantially increase the productivity of data center administrators, improve the security of the infrastructure and increase the IT organization's ability to respond to change.

VERTIV

Consolidated Asset Management Increases Efficiency

The UMG's consolidated management capability is designed for both in-band and out-of-band access, providing a single solution for managing a data center under both normal and emergency conditions. Leveraging the UMG's ability to manage up to 1024 devices through IP or in a physical tiered switch configuration, IT organizations can eliminate multiple legacy management consoles to free up rack space as well as simplify the administrator experience. For remote, centralized out-of-band access, IT can physically attach up to 40 devices to a single UMG, which can reside on a separate, isolated network. This means that IT needs far fewer LAN or network ports for out-of-band access.

Using UMG's consolidated view, administrators can monitor and maintain the health of all the devices in the data center. Some of the key capabilities offered by the UMG include:

- Auto-discovery that leverages built-in service processor profiles to automatically discover new processors, connect to them and populate new systems in its database.

- Bulk updating, such as a patch for a specific manufacturer's service processors. The UMG automatically disseminates the patch, doing away with the need to make changes server by server.

- Platform event monitoring across multiple service processors. The UMG can monitor and report on the system event logs and integrated management logs for each server.

- Version recognition and automated firmware upgrades.

- User-defined automated alerts when environmental conditions exceed thresholds.

Remote Management Enhances Data Center Security

The UMG is designed to enhance both the physical and logical security of the data center. Remote centralized access reduces the need to enter the data center, helping IT physically isolate equipment. In addition, the UMG can lower the risk of unauthorized intrusion because it can reside on an isolated network where it functions as the central switch for all devices. This physical segmentation and port isolation for single-tenant and multi-tenant environments ensures devices are no longer directly accessible from the network.

The UMG's consolidated management capability also helps IT improve security policy compliance. The appliance provides built-in integration with industry-standard security frameworks to eliminate the need for separate sets of credentials to access each device. For instance, the complexity of configuring hundreds of service processors via each vendor's interface can lead to shortcuts that increase vulnerability, such as not changing default passwords or failing to set up robust access controls. Using the UMG's LDAP/Active Directory interface, IT administrators set up authentication and authorization controls only once for all of the service processors. This greatly simplifies access while facilitating compliance with password and user access policies.

Vendor-Agnostic Solution Increases Business Flexibility

As data centers grow, the need for flexibility becomes ever more important. Any solution for consolidated management must be capable of quickly adjusting to support more devices from multiple vendors. The UMG is designed to provide exactly this level of flexibility. As a vendor-agnostic solution, the appliance enables real-time access and control to data center devices regardless of manufacturer. In addition, the UMG offers an excellent path for evolution towards comprehensive Data Center Infrastructure Management (DCIM). By providing a single, complete solution to administer complex, heterogeneous IT infrastructures, the Avocent Universal Management Gateway delivers the ideal solution to help IT organizations achieve higher levels of performance, security and business flexibility.

VertivCo.com | **Vertiv Headquarters,** 1050 Dearborn Drive, Columbus, OH, 43085, USA