SUCCESS STORY

akquinet AG

EXECUTIVE SUMMARY

Challenge
Due to the steady growth of akquinet the capacity management indicated that the existing network would soon reach its limit. To further meet the requirements in terms of stability, reliability and extensibility, the network needed to be modernized.

Solution
• 16 Brocade VDX 6710 Switches
• 2 Brocade VDX 6720 Switches

Results
• Maximum network stability as well as reduction of downtime with Brocade Fabric technology
• Reduced administrative work for akquinet employees
• Increased throughput rate

Brocade Ethernet Fabrics Bring akquinet up to Full Speed

With its headquarters in Hamburg and 500 employees nationwide, akquinet is an IT company with a portfolio that includes consulting services, implementation services and data center services on behalf of a wide customer range. Particularly in the areas of social economy, public sector and logistics akquinet has many years of industry know-how and certified solutions. All system engineers work according to a standardized company quality management system in order to ensure a smooth operation of the IT. Since akquinet supports the employment of staff with disabilities, 40 percent of all employees working in the outsourcing data centers in Hamburg, Norderstedt and Itzehoe are people with disabilities.

Growth Is Also Challenging the IT Service Provider
Specialized in IT solutions, particularly ERP systems like SAP, Java and Microsoft, the company faced a major challenge in November 2012: due to its steady growth, the maximum utilization of the network switching and routing infrastructure in its data center in Hamburg had been reached. Especially akquinet’s expansion and the construction of new data centers meant a risk to the future of the internationally operating company.

The aim was to build a new, future-proof and stable infrastructure platform that had to meet future network requirements. For akquinet it was crucial to combine all data centers, without having failures in one data center affecting the functionality of all the others. Furthermore, bandwidth
WHY BROCADE

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— Michael Ankelin, Head of Competence-Center Network Operations and Network Security at akquinet

Bottlenecks had to be avoided by hardware-specific characteristics. Thus, in order to guarantee maximum stability and reliability, a redundant environment had to be set up.

It's all About the “Technique”: Brocade Fabric Technology Convinces

In the past, akquinet used the Spanning Tree Protocol, which turned out to be a point of failure for the business. It was clear that the existing network concept had to be reconsidered resulting in a complete overhaul of the IT infrastructure. akquinet was looking for a partner who would support the IT-provider in implementing a new network. After a long evaluation phase and having taken other providers into consideration—such as Cisco, Juniper, Dell, HP and Arista—the company decided in favor of a mixed environment with two vendors. In particular akquinet “In the course of several workshops Brocade system integrators provided us with a special training on the new VDX platform”, explains Michael Ankelin, Head of Competence Center Network Operations and Network Security akquinet AG. “My team is now perfectly trained and acquainted with the new technology and Brocade enabled us to make updates on our own, thanks to the simplicity and automation of the platform.”

Brocade VDX switches are now being used on the access and aggregation layers. Brocade fabric technology allowing multiple VDX switches to run as one logical switch was the crucial factor; also resulting in replacing the long used Spanning Tree Protocol. Reliability is increased by full intermeshing of the individual switches, wherein all paths can be used equally. Also, vLAG (Virtual Link Aggregation Group) is a key reason why akquinet has chosen the Brocade. Bandwidth can be added both to other network infrastructure components as well as to devices such as servers by adding more connections. Outages, for example due to hardware malfunction on the switching level, are eliminated since the redundant connections can be terminated on any switch of the Brocade VDX fabric.

The VDX platform features high port density of 10 Gigabit Ethernet (GbE) connections as well as access ports and buffers. The Brocade fabric can easily and redundantly be connected to Cisco Nexus switches used on the core level, by using vLAG technology.

With Ethernet Fabrics up to Full Speed

akquinet had to undergo a general overhaul of their IT in order to meet their business needs. Due to its steady growth, the limits for network utilization had already been reached in 2012. Also the risk of IT breakdowns and significant damages for akquinet's core business as IT provider increased. To ensure continuous business success in an ambitiously growing environment, network infrastructure had to be scaled up. The new networking solution allowed akquinet to achieve maximum operating stability and scalability with minimum downtime, as well as lower administrative workload for the employees. In addition, longevity of the products in operation and an ongoing development of the applied operating software and the product portfolio were required.
With the Logical Cluster-Mode and all features being active the overhaul of the akquinet network has already paid off. All requirements set by the company—stability, reliability and expandability—have been met. From a technological perspective the Brocade VDX platform has resulted in customized benefits.

“We are excited about the functionality of Brocade’s Ethernet fabric solution. Especially the stability offers us great advantages, particularly in terms of IT failure prevention”, emphasizes Ankelin. “Even if several connections between the switches drop out, IT operation will never be affected. Our aim, maximum stability within the Fabric, is now achieved.”

Moreover, devices from other vendors can easily be connected via vLAG to the Ethernet Fabric. The possibility to keep an eye on the total cost of ownership (TCO) as well as to expand the IT environment based on a flexible pay-as-you-grow principle pushes akquinet’s business success.

Not only akquinet but also its customers benefit from a maximum level of stability and significantly easier administration. Another benefit for the network engineers is the elimination of the Spanning Tree Protocol as well as redundant connections of devices. The company also benefits from an increased throughput rate so that users are not running the risk of a bandwidth bottleneck as Capacity Management is now able to react in time.

Future Proof: akquinet is Brocade Elite Partner

The cooperation with Brocade throughout the planning and implementation phase has convinced akquinet to continue working with the networking expert. Recently, similar network solutions have been used in other akquinet customer environments. The IT provider is looking forward to future developments and opportunities, which the Brocade VDX platform provides regarding product portfolio as well as functionality. akquinet also implemented other product features such as an active Cluster-Mode, a Brocade MLXe router for IP transit uplinks and ICX switches for the campus environment. Furthermore akquinet is considering the set-up of a separate Brocade Fabric environment.

Because of this successful collaboration, akquinet decided to offer its network staff the corresponding certifications. Hence, akquinet is not only a customer but a trustworthy Brocade elite partner.

For more information, visit www.brocade.com.