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Brocade CMO

Brocade CMO John McHugh describes the company's strategic technology vision and the Brocade One strategy.

Simplifying the Transition to a Virtualized World

Brocade networking solutions provide a reliable, high-performance foundation for a wide range of virtualization, cloud computing, and network convergence initiatives.

EXECUTIVE SUMMARY

As a leader in the networking industry, Brocade understands the key operational challenges of today's complex IT environments. While other vendors are delivering solutions notable by their limitations, Brocade is enabling greater choice and flexibility through technology innovation and its strategic partnerships.

Brocade has also recognized that three industry trends—virtualization, cloud computing, and convergence—are driving new requirements throughout the data center and across the entire network. As a result, it has developed the Brocade One™ strategy to help organizations simplify their network infrastructure and achieve the full benefits of these three major trends.

THE BROCADE ONE STRATEGY

- » Unmatched simplicity through innovation
- » Investment protection through open architectures and greater choice
- » Higher performance through application optimization
- » Non-stop networking operations through higher resiliency and reliability

EXPERTISE IN NETWORK CONVERGENCE

Today, most data centers have two distinct types of networks. One is the storage network built for reliability, guaranteed data integrity, and non-blocking performance. The other is the data network, whose characteristics include affordable performance and ubiquitous deployment. Although some vendors have indicated that converging these two types of networks into a common architecture is a relatively simple and straightforward undertaking, Brocade understands the realities behind this type of effort.

For instance, this level of convergence can present significant challenges in terms of network design and management. It also requires specialized expertise for multiprotocol design and extensive multivendor, multinetwork testing. That's because the products that support convergence, such as the Brocade® 8000 Fibre Channel over Ethernet (FCoE) switch, must be members of both the storage network *and* the data network.

With the acquisition of Foundry Networks, Brocade has a unique perspective of where Ethernet (data) and Fibre Channel (storage) networking technologies excel and where they have limitations. In many cases, there are compelling reasons for convergence based on network simplification and cost savings—but seamless integration with existing infrastructure is critical for success.

Today, Brocade is the only vendor that provides a comprehensive converged networking solution in all form factors (including fixed switch, modular, and top-of-rack solutions). As a result, organizations have greater flexibility to choose how and when it makes sense to converge their networks based on their unique business requirements.

SIMPLIFIED VIRTUALIZATION

Another key trend that is accelerating throughout most organizations is virtualization, which provides an excellent way to increase resource capacity without necessarily increasing capital and operating expenses. The ability to increase capacity is especially critical as the amount of information being generated and stored continues to skyrocket.

As organizations implement virtualization to maximize capacity and resource utilization, they place unprecedented demands on their network infrastructures. Supporting a virtualized data center requires a highly scalable, high-performance network that can optimize application performance.

To meet these requirements, Brocade provides high-density, high-performance networking solutions, breakthrough technologies for simplifying virtualized environments, and support for all major hypervisors. For example, Brocade Virtual Access Layer (VAL) is a logical layer between the network and server virtualization hypervisors that helps ensure a consistent interface and services for virtual machines connected to the network. In addition, innovative Brocade VCS™ technology, now delivered on Brocade VDX™ switches, simplifies virtualization by flattening the access and aggregation layers of data center networks.

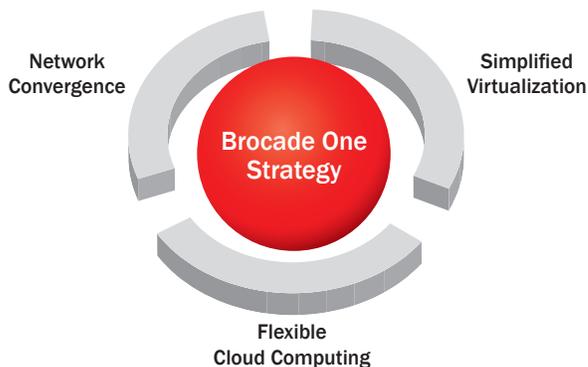
FLEXIBLE CLOUD DELIVERY MODELS

The third key industry trend is that today's network end points have become much more intelligent—and increasingly remote, distributed, and mobile. This type of distributed network model, where virtualized information and applications can reside anywhere within the infrastructure, is known as “the cloud.” Enabled by virtualization, the cloud model provides greater flexibility in delivering applications and services to scale capacity, provide disaster recovery, and much more—without requiring large capital expenditures.

As organizations increasingly distribute compute power and information storage throughout the cloud, they are essentially distributing their data center capabilities across *the entire network*. That means the entire network must be capable of providing the proven reliability and performance characteristics of the data center. With over a decade of expertise in supporting mission-critical data centers, Brocade is uniquely qualified to extend the robust capabilities of the data center to the rest of the network.

BROCADE ONE STRATEGY

As organizations embrace these trends, they must find new ways to simplify their existing network infrastructures. Today, Brocade can help them transition smoothly to a highly virtualized, services-on-demand infrastructure with the industry's most comprehensive strategy to enable this new world. The key to this approach is the Brocade One strategy that combines the vision, technology innovation, open solutions, and strategic partnerships that enable this networking transformation (see Figure 1).



This approach is designed to reduce complexity, enable new levels of reliability and flexibility across the entire network, and introduce breakthrough technologies while protecting existing investments. As the name implies, this is a unified strategy for delivering applications and data from anywhere in the cloud through one management domain and one vision throughout the entire network.

SUMMARY

In a world where applications, information, and the users who access them are increasingly mobile, the entire network must take on the proven characteristics the data center. Today, Brocade is extending its unmatched data center expertise throughout the entire network with a unified strategy that enables the true promise of network convergence, virtualization, and cloud computing.

The Brocade One strategy is an open, flexible approach to networking that integrates breakthrough technologies from Brocade and its partners to provide organizations with greater choice and more options for deploying best-in-class solutions.

To learn more, visit www.brocade.com/brocadeone.

The Brocade One strategy helps organizations dramatically simplify their network infrastructures.

Figure 1.

The Brocade One strategy enables organizations to benefit from the latest advancements in the industry.

In a world where the entire network is the data center, the entire network must be as reliable as the data center.

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