BROCADE AND EMC SOLUTIONS

DATA CENTER

Providing Protection and Resiliency in EMC VFCache Environments

HIGHLIGHTS

- Reduces latency and increases throughput for mainstream mission-critical applications
- Enables transparency from application to storage
- Fabrics provide high availability and resilient network design
- Data protection is key in transactional and big data environments
- Provides a non-blocked and non-oversubscribed network architecture
- Increases scalability through any-to-any storage and server connectivity

As new emerging data center technology keeps evolving, network architects want to continue to provide performance, protection, and resiliency in the storage area network (SAN). The days of having application and storage residing on a single compute node are gone. Returning to a direct attached or local storage architecture does not provide the protection and resiliency required by enterprise customers.

Today it is commonplace for a single compute node to have many virtualized applications, all with different performance, data protection, and resiliency attributes. Certain high-performance workloads that are gated primarily by latency and smaller datasets benefit from having the storage closer to the compute node, to minimize latency and maximize throughput. By combining intelligent software with server-based PCIe Flash technology, EMC's new VFCache meets that requirement and dramatically improves performance. VFCache Flash takes advantage of breakthrough performance technology while insuring the protection of data—the lifeblood of business operations—making VFCache viable even for mainstream mission-critical applications. The one thing that does not change is that network architects want continuing protection, resiliency, and availability for the ongoing changes within the application, compute, and storage blocks.

BE PROTECTED WITH BROCADE AND EMC

Brocade® and EMC® share a strong history of providing efficient, highly resilient solutions to help solve data center challenges. Given this foundation, Brocade and EMC have aligned to deliver a seamless fabric-based solution with EMC VFCache products, which enable transparent connections from compute node to storage, with no impact to applications. This highly reliable solution provides Tier 1 applications, servers, and storage enterprise protection and availability within the storage area network. Brocade Fibre Channel Fabrics offer a proven technology that delivers robust availability, performance, protection, and resiliency—a natural choice for the deployment of EMC VFCache and FAST storage tiering technology.

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The need for shared storage continues to grow with the rollout of server virtualization, as well as new Flash capabilities from EMC. Fabrics have proven to provide higher data availability for business continuance through a resilient network design. Also, Fibre Channel has introduced a set of higher-level services for scaling reliable and highly available fabrics. Fabric routing protocols, policy-based routing, hardware-based trunking, Virtual Fabrics, fabric security, and fault isolation are all built on a foundation of stable transport. New fabric-based application services for storage and server virtualization and data protection are further enhancing the simplification and automation of storage administration. Collectively, Fibre Channel standards and standards-compliant products are optimized to deliver maximum performance and maximum availability of storage data.

Implementing a comprehensive data protection strategy begins with building a firm foundation with the SAN. EMC's VFCache, with its FAST technology, has both the internal and external mechanisms for data redundancy and data integrity within the compute and storage blocks. Data protection is crucial within transactional and big data environments. Brocade and EMC leverage proven technology services for shared storage. Brocade SANs have built-in services such as In-Order-Delivery, reliability, policy-based routing, trunking, and high availability.

Brocade and EMC offer the most widely deployed storage solutions in the world, protecting applications and data in the most demanding customer environments. EMC VFCache and EMC Connectrix products from Brocade have undergone the most stringent E-Lab™ qualification processes and are fully supported by both companies.

LEARN MORE

Brocade partners with companies of all sizes to deliver innovative solutions that help organizations maximize the value of their most critical information. To learn more, visit www.brocade.com/alliance.

ABOUT BROCADE

From enterprise data centers to the service provider core, Brocade develops extraordinary networking solutions that connect the world's most important information. Delivered directly and through global partners, these solutions help today's data-intensive organizations operate more efficiently and maximize the business value of their data. Learn more at www.brocade.com.

ABOUT EMC

EMC Corporation is the world's leading developer and provider of information infrastructure technology and solutions that enable organizations of all sizes to transform the way they compete and create value from their information. Information about EMC's products and services can be found at www.EMC.com.

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