BROCADE SERVERIRON ADX AND MICROSOFT EXCHANGE 2010 SOLUTION

IP NETWORK

Optimizing Application Availability, Performance, and Security

HIGHLIGHTS

- Features hardware-based Brocade ServerIron ADX Series ADCs that support key Microsoft Exchange 2010 features, providing "client affinity," scalability, high availability, and security
- Balances the traffic load across servers (physical or virtual) for optimal resource utilization, maximum throughput, and the fastest client response time
- Provides nearly four times the SSL transaction offload performance (20,000 SSL TPS) at 30 percent less cost than competing products
- Delivers up to 9.4 Gbps of Layer 7 throughput—more than double the throughput of competing products
- Offers scalable chassis options of 16 1 Gigabit Ethernet (GbE) ports, two 10 GbE ports, 48 1 GbE ports, or 16 10 GbE ports
- Enables seamless integration of IPv6 traffic (client and application) with existing IPv4 traffic in the data center

In today's dynamic enterprises, communications (such as e-mail) have become mission critical, requiring highly scalable, reliable, and secure delivery of messaging services. Any unexpected downtime can severely impact revenue and productivity across the entire enterprise, as well as its customers and suppliers.

To address the needs of mission-critical enterprise communications, Brocade® and Microsoft have partnered to develop a solution that optimizes application availability, performance, and security while decreasing application Total Cost of Ownership (TCO).

PROVEN SOLUTION, PROVEN RESULTS

The flexibility and simplified high availability of Microsoft Exchange Server 2010 come from innovations to the core Exchange Server 2010 platform, enhancing performance, scalability, and reliability, while reducing TCO.

However, organizations seeking to deploy new features, such as Database Aggregation Groups (DAGs) for mailbox protection and Client Access Server (CAS) for scalability of client access, require an integrated hardware-based load balancing solution.

Brocade ServerIron® ADX Series Application Delivery Controllers (ADCs) provide a validated solution for improving application performance with Exchange Server 2010. By jointly working through all phases of solution development—including lab setup at the Microsoft Enterprise Engineering Center (EEC)—Brocade and Microsoft have validated the functionality and performance of the ServerIron ADX Series and Microsoft Exchange Server in large-scale environments.

IMPROVED UPTIME, OPTIMIZED PERFORMANCE

Microsoft Exchange Server 2010 deployments can leverage ServerIron ADX load balancing technologies for higher performance, client affinity, scalability, availability, and security. The ServerIron ADX optimizes traffic distribution to all available Exchange CAS by evaluating server availability, load, and response time against preconfigured performance metrics when selecting a server for incoming client connections.

In addition, the ServerIron ADX enhances business continuity by performing health checks to ensure that traffic is not forwarded to a physical server that has failed or is unresponsive—and by mirroring end-user transactions across a redundant ServerIron ADX network. In addition, the ServerIron ADX provides unique IPv6/IPv4 translation services that simplify integration of IPv6 traffic with legacy clients and applications using IPv4, enabling "no cost" migration to IPv6 traffic in the data center. This approach helps improve uptime and performance for mission-critical communications applications.

BROCADE SERVERIRON ADX NETWORKING ARCHITECTURE

Working with Exchange Server 2010, the ServerIron ADX provides:

- **Session persistence:** This capability enables the forwarding of client requests to the same server for the duration of a session.
- **Content Switching Rules (CSW):** Layer 7 switching allows the ServerIron ADX to make forwarding decisions about HTTP traffic using information in a URL, cookie, or SSL session ID.
- **SSL proxy:** In full SSL proxy mode, the ServerIron ADX maintains encrypted data channels with the client and the server. This mode provides additional security without incurring SSL hardware acceleration costs on the server. SSL proxy provides visibility to application traffic for Layer 7 processing and security.
- **Health monitoring:** This capability tracks the state of the server and helps determine its ability to process connections in the server farm.
- **End-user access control:** This capability provides Access Control Lists (ACLs) to protect the client-to-server traffic from worms and intruders, which attack vulnerable open server ports not being used by the application.
- **SYN attack protection:** This feature protects the Exchange CAS from SYN attacks, which can exhaust server resources by opening a vast number of partial TCP connections.
- **IPv6/IPv4 translation:** Brocade is the only vendor to meet all U.S. Department of Defense (DoD)-level requirements for IPv6/IPv4 translation in the data center.

Together, the validated Brocade ServerIron ADX and Microsoft Exchange Server 2010 solution deliver the proven functionality and performance to meet today's mission-critical enterprise communications requirements.

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 about Brocade validated solutions with Microsoft technologies, visit www.brocade.com/microsoft.

ABOUT BROCADE

Brocade networking solutions help the world's leading organizations transition smoothly to a virtualized world where applications and information reside anywhere. These Ethernet, storage, and converged networking offerings are designed for unmatched simplicity, non-stop networking, optimized applications, and investment protection. Learn more at www.brocade.com.

ABOUT MICROSOFT

Founded in 1975, Microsoft is the worldwide leader in software, services, and solutions that help people and businesses realize their full potential. Learn more at www.microsoft.com.

Microsoft
One Microsoft Way
Redmond, WA 98052-6399
www.microsoft.com

Corporate Headquarters
San Jose, CA USA
T: +1-408-333-8000
info@brocade.com

European Headquarters
Geneva, Switzerland
T: +41-22-799-56-40
emea-info@brocade.com

Asia Pacific Headquarters
Singapore
T: +65-6538-4700
apac-info@brocade.com

© 2010 Brocade Communications Systems, Inc. All Rights Reserved. 09/10 GA-SB-1529-00

Brocade, the B-wing symbol, BigIron, DCFM, DCX, Fabric OS, FastIron, IronView, NetIron, SAN Health, ServerIron, TurboIron, and Wingspan are registered trademarks, and Brocade Assurance, Brocade NET Health, Brocade One, Extraordinary Networks, MyBrocade, and VCS are trademarks of Brocade Communications Systems, Inc., in the United States and/or in other countries. Other brands, products, or service names mentioned are or may be trademarks or service marks of their respective owners.

Notice: This document is for informational purposes only and does not set forth any warranty, expressed or implied, concerning any equipment, equipment feature, or service offered or to be offered by Brocade. Brocade reserves the right to make changes to this document at any time, without notice, and assumes no responsibility for its use. This informational document describes features that may not be currently available. Contact a Brocade sales office for information on feature and product availability. Export of technical data contained in this document may require an export license from the United States government.

BROCADE