Marvell Adapter of Choice for Critical Business System
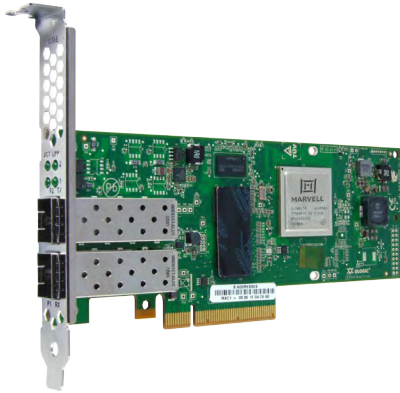
Adapters from Marvell Deliver the Most Comprehensive and Robust Business Continuity Solution

Five-Pronged Approach to Enabling Greater Business Continuity

- Reduced qualification complexity in heterogeneous data center environments
- Increased data center design flexibility and reduced inventory/spares
- Higher scalability for business-critical systems
- Highest availability and fault tolerant solutions
- Reduced recovery time/faster backups

INDUSTRY TRENDS

Business managers have to be ready for planned and unexpected interruptions to their business operations. Minimizing downtime is a critical element for business continuity and financial stability. The need to preserve data and application availability remains the highest priority for IT managers and business organizations. In a virtualized IT world, where many virtual machines (VMs) are running workloads on fewer physical servers, high availability is even more important than ever. The increasing adoption of virtualization on servers in the data center requires new approaches to protecting applications that are running inside VMs and has become an essential element of business continuity planning. Organizations implement high-availability solutions for many reasons, including minimizing planned downtime for maintenance and upgrades, enabling rapid recovery from unplanned downtime, and meeting compliance requirements that ensure continued end-user access to important business applications.

THE CHALLENGE

Data center infrastructures are typically a combination of heterogeneous servers and storage. Figure 1 shows the various types of deployment models. Backup in such an environment can be complex, requiring backups for a variety of systems using traditional network-enabled backup software and the duplication of tapes, which then need to be moved off-site for disaster recovery protection. Supporting today's growing enterprise business with uninterrupted services, especially during a disaster, is extremely difficult. Legacy storage systems have a hard time meeting growing storage needs and disaster recovery requirements. If your company is unable to meet recovery time objectives, your business could be without systems for several days. Using legacy equipment, a best recovery point objective may be as long as 24 hours, which means your business might lose an entire day's work. Managing interruptions to routine processes can have a major impact on an organization and lead to lost customers and revenue.

MARVELL'S FIVE-PRONGED APPROACH TO ENABLING GREATER BUSINESS CONTINUITY

Reduced Qualification Complexity in Heterogeneous Data Center Environments

To meet the needs of the industry, Marvell™ has developed an approach to ensuring business continuity that enables the highest levels of interoperability and reliability, whether your infrastructure is discrete, virtualized, or a cloud deployment (see Figure 2). Marvell offers a broad range of Marvell® products that support heterogeneous environments across hardware (rack servers, blade servers, and storage) and software. Marvell products come in all form factors, supporting any operating system and all hypervisors and protocols.

Increased Data Center Design Flexibility and Reduced Inventory/Spares

Marvell adapters deliver industry-leading 10Gbps networking performance, full hardware offload for FCoE and iSCSI protocol processing, and concurrent support for three protocols—NIC, FCoE, and iSCSI. Marvell brings enterprise-class Ethernet with key features, such as VLAN segregation and multi-vendor teaming (link aggregation and fail over), enabling deployment flexibility.

Higher Scalability for Business Critical Systems

In a link aggregation configuration, Marvell adapters deliver up to 27 percent higher throughput as workloads increase and up to 49 percent higher throughput efficiency (Mbps/CPU utilization) compared to the Emulex® adapter.

Highest Availability and Fault Tolerant Solutions

Marvell delivers I/O sub-systems, such as switch independent and switch dependent load balancing, Failsafe Mode, and NIC Partitioning, which are designed to deliver the highest availability and maximum fault tolerance benefits, helping your business maintain continuity and uptime.

Reduced Recovery Time/Faster Backups

Marvell adapters from Marvell deliver faster backup, recovery, and access times. Marvell QLogic 8Gb Fibre Channel Adapters complete the restoration
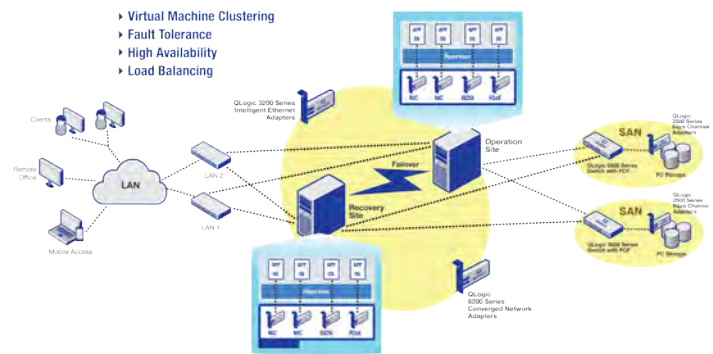of Oracle databases, taking 51 percent less time than comparable Emulex adapters.[1]

DISCRETE   VIRTUAL   CLOUD

Figure 1. Deployment Models

1   Competitive Brief – Adapter of Choice for Oracle Environments

Figure 2. Virtualization Solution

CUSTOMER BENEFITS

Marvell products are optimized from end-to-end, from adapter to fabric, and from edge to core. The IOPS and throughput of the Marvell adapters are best-in-class and provide unprecedented levels of performance, superior scalability, and enhanced reliability that exceed the requirements for next-generation data centers. High-performance storage networking products from Marvell ensure the broadest interoperability and design and implementation flexibility, enabling your business and data center administrator to focus on larger issues, thus meeting higher service level agreements (SLAs) for higher uptime and business continuity. IT professionals continue to rely on Marvell technology to consolidate infrastructure, maintain the highest levels of business uptime, and reduce total cost of ownership.
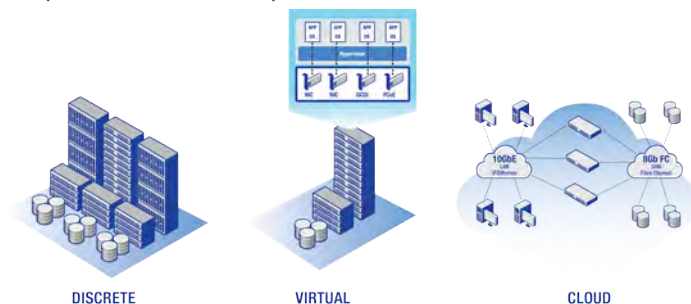
ABOUT MARVELL

To deliver the data infrastructure technology that connects the world, we're building solutions on the most powerful foundation: our partnerships with our customers. Trusted by the world's leading technology companies for 25 years, we move, store, process and secure the world's data with semiconductor solutions designed for our customers' current needs and future ambitions. Through a process of deep collaboration and transparency, we're ultimately changing the way tomorrow's enterprise, cloud, automotive, and carrier architectures transform—for the better.

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