Broadcom clears path for improved global collaboration and innovation with faster, streamlined exchange of product design and corporate data.

Accelerated data sharing across global enterprises

As Broadcom’s global operation expanded rapidly, engineers were clogging networks with large data transfers, degrading network performance. The leading enterprise technology provider turned to Dell EMC networking and storage to significantly speed data transfer and replication while improving network utilization.

Business needs

Solutions at a glance

- Dell EMC Isilon
- Dell EMC SyncIQ
- Dell EMC Connectrix

Business results

- 42% reduction in replication time
- Better information sharing and collaboration across global teams
- 73.2% faster data transfer with improved network utilization
- Increased user productivity
- Fast, non-disruptive exchange of 10 terabyte data loads during normal business hours
- In-flight data secure and protected without performance degradation

“With Dell EMC Connectrix B-Series extension switches, we’ve cleared the path toward more innovation and collaboration while speeding time-to-market of new products at Broadcom.”

Andy Nallappan
Vice President and CIO, Broadcom, Inc.
Fast, efficient sharing of information is critical to global enterprises’ ability to drive innovation and collaboration. Broadcom, Inc. knows this well as one of the world’s leading providers of semiconductor and infrastructure software solutions that streamline and speed data sharing across networks, applications and systems.

Despite this strategic focus, Broadcom was running into challenges of its own with data sharing as its global operation expanded rapidly, especially with the acquisitions of Brocade and CA Technologies. As a result, the company’s staff and number of product lines and locations were increasing, and network-attached storage (NAS) was growing 10 percent a year.

To address these challenges, Broadcom determined that Dell EMC storage technologies and Connectrix B-Series networking would significantly streamline and accelerate transmission of business-critical data across its far-flung enterprise.

Today, Broadcom stores engineering, manufacturing and corporate data on 40 petabytes of Dell EMC Isilon scale-out network-attached storage. For long-distance, high-speed storage replication across nine data centers in North America, Europe and Asia, Broadcom depends on Dell EMC Isilon SyncIQ software and Dell EMC Connectrix extension switches.

**Lightening the load while speeding replication**

Broadcom’s engineering teams move an average of 10 terabytes of data across data centers often located up to thousands of miles apart. Once jobs are completed, the engineers copy the results.

Andy Nallappan, vice president and CIO of Broadcom, says, “Before, engineers sending large amounts of data would saturate bandwidth and degrade performance for users across the network. With Dell EMC Connectrix extension switches and Isilon storage, engineers can share data much faster and collaborate more easily. Plus, productivity for users overall has gone way up.”

In addition, Broadcom IT uses Dell EMC technologies to simplify and accelerate data migrations in support of ongoing IT infrastructure consolidation.

**Clearing the path for improved collaboration**

To speed replication traffic between the Bangalore, India, and Las Vegas data centers, Broadcom implemented the Connectrix extension switches, a far simpler and more cost-effective approach than deploying a dedicated low-latency network for file delivery.

The results were impressive. Not only did adding the Connectrix extension switches to the Isilon deployment reduce replication times by 42 percent, but there was also a 72.2 percent increase in data transfer rates due to protocol optimization, compression and bandwidth control.

“With more efficient network utilization and faster replication speeds enabled by Connectrix, our engineering, product and corporate teams can freely move data across the network during normal business hours regardless of time zone,” states Nallappan.

Connectrix extension switches also incorporate hardware-based encryption, which ensures all in-flight data is secure and protected from threats without a performance penalty.

Nallappan reflects, “Dell EMC has generated a positive impact on our business because we can better meet our stringent SLAs and keep release schedules on track. With Dell EMC Connectrix extension switches, we’ve cleared the path toward more innovation and collaboration while speeding time-to-market of new products at Broadcom.”