Dolphin

8x8, Inc hits performance targets with Dolphin Express

Overview

The Challenge

With the continued growth of VoIP, 8x8 needed to upgrade the performance and capacity of their subscriber call flow in order to meet their current and future needs, as well as to be able to implement new call features. Real time performance was critical to reduce the response time to users. In addition, this solution had to be accomplished in an environment that provided great performance, reliability, and availability.

The Solution

8x8 implemented a new cluster environment consisting of Dolphin Express, MySQL cluster and Dell Poweredge servers. The solution included four Poweredge Servers, Dolphin's D352 interconnect cards and MySQL Cluster. The Dolphin products provided an extremely low latency high performance interconnect to lower response time and improve throughput.

The Benefits

Overall performance increased significantly from their Gigabit Ethernet solution. 8x8 was now able to hit their performance targets with the new system. The system provided both increased capacity and reduced the overall response time for their customers. They were also able to implement new call flow features.

8x8, Inc. (NASDAQ: EGHT) offers voice and video internet-based telephony services for business and residential customers. As a telecom provider, real time performance to their customers is a critical aspect of their business. Their Packet8 hosted communications solutions enhance the value and functionality of existing high speed Internet connections by delivering advanced communications features and digital quality phone service at a fraction of the cost of legacy, copper wire alternatives. So, cost and performance were critical considerations when choosing the next platform for their VoIP system. "When looking at upgrading our system we had to consider the overall investment costs as well as performance, scalability and reliability" said Raghu Rengarajan - Director, Network Operations at 8x8. "We choose MySQL cluster as the platform for our solution. Dolphin's interconnect was recommended as the best solution for MySQL cluster."

The goal was to improve the performance of their subscriber call flow. The subscriber call flow includes services

such as call forwarding, follow me/ find me, subscriber information and settings, as well as other advanced features. The availability and performance of these services were critical to providing 8x8 customers with the best user experience.

With the continued growth of 8x8, MySQL Cluster met their expanding database needs. 8x8 tested Dolphin's solution against an existing Gigabit Ethernet solution. "We saw a significant performance improvement with the Dolphin Solution vs Gigabit Ethernet," commented Raghu. "The overall solution of MySQL and the Dell severs benefited from the addition of the Dolphin interconnect. We increased the system capacity and it directly contributed to

our overall performance"

Dolphin's solution provided 8x8 with a platform which was both reliable and scalable. Dolphin Express is an interconnect solution designed to support database applications. Dolphin provides a complete solution including both software and hardware. Dolphin's Sockets API is designed for low latency applications such as 8x8's VoIP application. It takes advantage of the low latency aspects of Dolphin's hardware to provide superior application performance.

MySQL database applications have seen significant performance improvements with the addition of the Dolphin Express solution. Dolphin's combination of hardware and software enables companies to implement Dolphin's solution without changes to their application software, while taking advantage of the improved performance. "Our business is growing and in our effort to exceed our customer's quality expectations, we need the highest performance available," said Rengarajan. "We are very excited about the significant performance improvements we have seen by implementing Dolphin

Express. The low latency performance characteristics of Dolphin Express create an ideal platform for 8x8's continued growth."

VoIP Architecture

Ethernet Network

Dolphin Express

db node

db node

db node

db node

MySQL Cluster Nodes