



Aramex Shortens Replication Times with Silver Peak-Dell EqualLogic

Leading global logistics and transportation company attracts new customers by accelerating data replication with Silver Peak-Dell EqualLogic.

Mature companies need mature data recovery solutions. Just ask Aramex, a leading global logistics and transportation company. As the company approached its \$1 billion annual revenue mark, updating the company's 24 hour- Recovery Point Objective (RPO) became imperative for chief technology officer Samer Awajan. In addition to increased internal expectations for tighter disaster recovery procedures, shorter data center failover times would appeal to prospective customers demanding higher levels of business continuity.

Off-site data replication was the answer and Dell EqualLogic the logical choice. EqualLogic is a leading replication solution and Dell and Aramex already had a 10-year relationship. Testing, though, soon proved off-site replication to be impossible –Aramex engineers cancelled replication of 500 GB when it failed to complete after four days.

Aramex began looking for a solution and turned to Silver Peak, a Dell preferred partner. By combining Silver Peak's replication acceleration solution with Dell EqualLogic, Aramex improved off-site replication throughput by up to 50x, completing Dell EqualLogic replication in 48 hours, while also accelerating other

applications sharing the wide area network (WAN).

"I didn't know what to expect at the beginning, but the results quickly impressed me" says Awajan, "Our replication rates improved substantially and the overall acceleration for other applications sharing the network was impressive."

And as a virtual solution, Silver Peak fit perfectly into Aramex's data center strategy. "Being virtual was a major deal-maker for us." says Awajan, "It lowered our costs, simplified installation, and improved our agility."

Replication Drives the Bottom Line

Aramex is a leading transportation and logistics company with more than 350 offices spread across 60 countries. Four of Aramex's data centers, located in Asia, Europe and the Middle East, host the organization's key applications, which include shipment tracking, billing, and productivity applications, such as Exchange, SharePoint, and Lync. Data is stored on Dell EqualLogic PS6000s in each data center, which are linked by at least 50 Mbps Internet VPN connections.

Customer: Aramex

Business Challenges

- Improve data replication for better business continuity.
- Appeal to new customers wanting stringent disaster recovery policies.

Network Background

- Four data centers spread across Asia, Europe and Middle East.
- Dell EqualLogic PS6000s used for storage at each location.
- Replicated 300 GB/month of Microsoft SQL data across 50 Mbps WAN.
- Unable to complete Dell EqualLogic offsite data replication (500 GB) after four days.

Silver Peak Results

- Reduced RPO of critical data from 24 hours to 15 minutes.
- Completed Dell EqualLogic replication in less than half the time and nearly half the bandwidth.
- Microsoft SQL replication consumes 70% less bandwidth.
- 50x peak increase in certain payload transfer times.
- Downloaded and deployed replication software in under a day.
- Able to attract new customers with strict business continuity requirements.

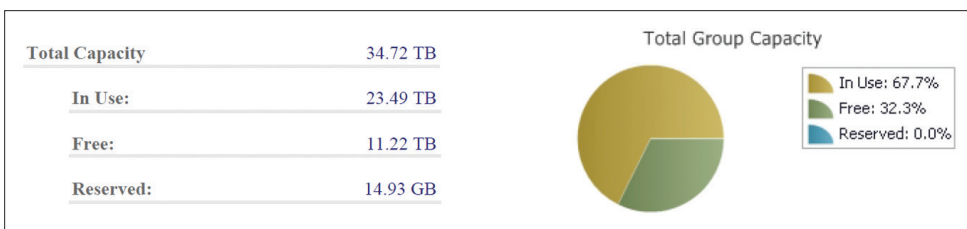


Figure 1: Aramex has terabytes of data at its locations

As a growing enterprise, Aramex needed to adhere to higher service and continuity levels. Some of the existing RPOs of up to 24 hours were simply insufficient to meet certain customer expectations who needed always-available logistics services. “There was a whole class of enterprise customers who would not consider our services simply because we were unable to fail-over between data centers within acceptable times,” says Awajan.

Shortening those RPOs to 15 minutes was crucial, but proved impossible with Aramex’s current tape backup procedures. Off-site data replication was the right approach, but preliminary testing proved that to also be

impossible with their existing WAN. Aramex was unable to replicate 500 GB, in four days across the company’s 50 Mbps VPN. To make matters worse, the company could only allocate a fraction of that bandwidth to EqualLogic replication, with the remainder needed for other critical applications, including passing thousands of transactional updates each minute.

The culprit undermining replication? The Internet. “While EqualLogic was extremely efficient at replication, a round trip time (RTT) of up to 250ms existed between our data centers, which severely limited replication throughput,” says Awajan.

As a Dell preferred partner, the Silver Peak solution complements Dell EqualLogic by addressing the underlying network latency, capacity and quality issues that can hamper off-site replication performance.

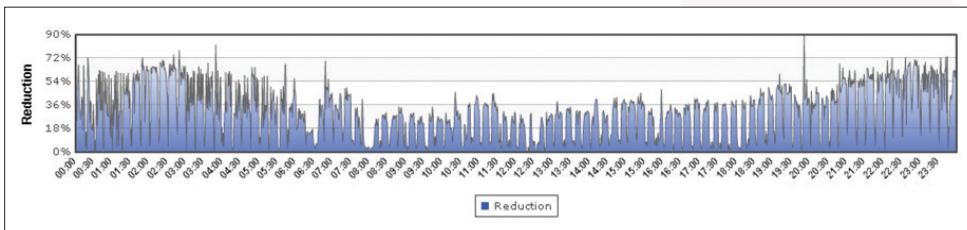


Figure 2: Silver Peak replication acceleration reduced the amount of data transferred across the VPN by as much as 90 percent.

The Silver Peak Advantage

Aramex investigated various alternatives to address their replication headaches, choosing Silver Peak’s Velocity solution for replication acceleration. As a Dell preferred partner, the Silver Peak solution complements Dell EqualLogic by addressing the underlying network latency, capacity and quality issues that can hamper off-site replication performance.

Silver Peak’s replication acceleration solution is built on the company’s Virtual Acceleration Open Architecture (VXOA), which uses real-time optimization techniques to maximize replication performance over distance. Specific VXOA capabilities include:

- **Increasing replication** throughput by minimizing packet re-transmissions due to congestion and poor network quality.
- **Maximizing available bandwidth** for replication through byte-level deduplication and compression
- **Replication over longer distances** by overcoming transport latency

The emphasis on virtualization with data center-class performance won over Awajan and his team, leading them to deploy Silver Peak’s replication acceleration solution in three of their data centers. The combined Silver Peak / Dell solution showed immediate benefits. Microsoft SQL replication completed in 70 percent less

bandwidth and where as previously Dell EqualLogic replication could not complete in four days across 50 Mbps, Aramex found it could now routinely complete replication in as little as 30 Mbps of WAN bandwidth. In addition, the actual time it took to complete replication cycles was dramatically improved with Silver Peak and Dell. On average, Aramex saw a 10x increase in replication throughput, with peaks of 50x. “The performance improvement was shocking, especially coming from a virtual platform,” said Awajan.

As virtual software, Silver Peak’s replication acceleration was also easy to deploy. The software can be downloaded and deployed in an hour. “We can implement acceleration in our main data center, train our personnel, try different scenarios, and once ready we just vMotion the Silver Peak solution to the remote data center,” says Awajan. There are no shipping costs, delivery delays, or difficult remote training that have been incurred with installing a hardware appliance.

Aramex did consider alternative suppliers, but none met their requirements. Some solutions emphasized physical appliances, which raised concerns about the vendor’s

licensing models and virtualization strategies. Other solutions emphasized client-server protocols, which did not address Aramex’s need for a data center solution.

“Silver Peak’s approach was simpler,” commented Samer “The VX software optimized or accelerated all protocols out-of-the-box and gave us practically an unlimited number of sessions making pricing very intuitive and capacity planning simple. Adding more bandwidth to the appliance is simply a matter of downloading a licensing key from their marketplace; there are no costly or complicated hardware upgrades.”

Silver Peak: The Solution for Replication Acceleration

Thousands of leading companies from Google to Comcast to Aramex have turned to Silver Peak for replication acceleration. By increasing replication throughput, even over the Internet, Silver Peak replication acceleration saves time, money and helps customers meet even the most stringent data replication objectives.

For more information, please contact your local Silver Peak representative or visit our website at www.silver-peak.com.

“We can implement acceleration in our main data center, train our personnel, try different scenarios, and once ready we just vMotion the Silver Peak solution to the remote data center”

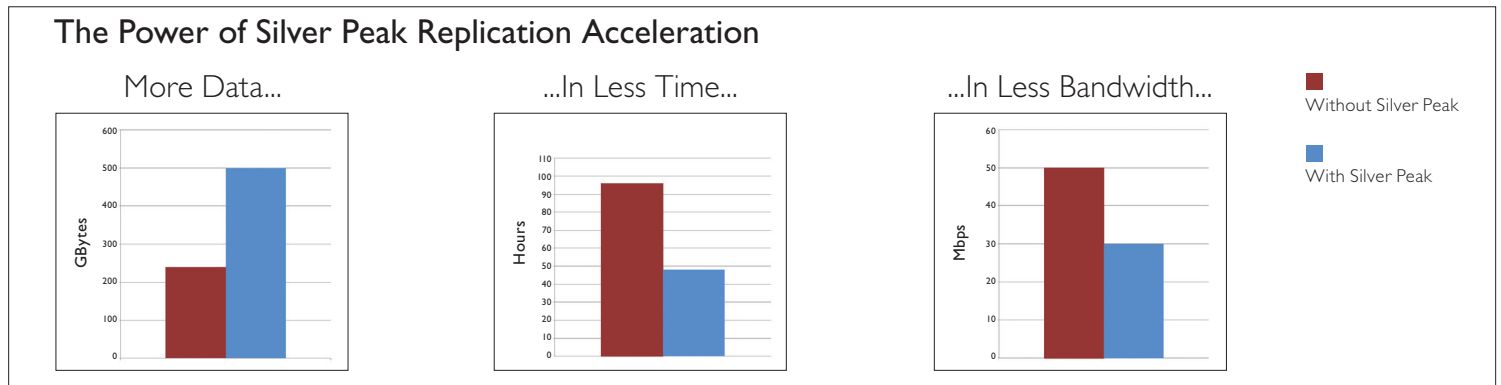


Figure 3: With Silver Peak replication acceleration and Dell EqualLogic, Aramex replicated more than twice the data in half the time and bandwidth.