

# SILVER PEAK'S MERCY MISSION SAVES HEALTH ORGANISATION

*Mercy Health meets RPO, saves on bandwidth charges with NetApp SnapMirror and Silver Peak*



Deployment of Silver Peak's software-based wide area network (WAN) optimisation solution has saved Mercy Health from making a huge investment in hardware and additional bandwidth.

IT Operations Manager Mohamed Elalfy estimates that a hardware-based WAN optimisation solution would have cost about three times more than Silver Peak's software-based solution over a four-year timespan, factoring in initial purchase cost, hardware renewal and network management overheads.

A recent deployment of NetApp Storage for replication and backups between five major sites in Central Queensland had left Mercy Health in a dilemma. With up to 10 terabytes (TB) of data in its head data centre, and another 10 TB spread between four smaller sites, the not-for-profit organisation faced the prospect of replicating data to its Brisbane storage facility at speeds it could not afford.

Based at Rockhampton, Mercy Health delivers a wide range of health services to rural and central Queensland. The organisation had invested in NetApp Storage infrastructure to overcome compliance issues,

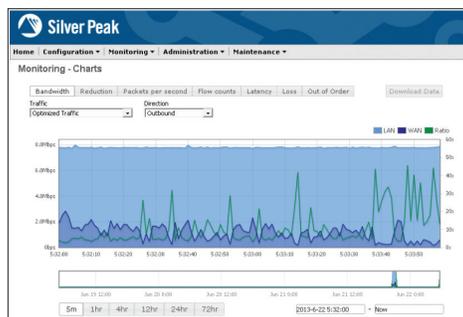


Figure 1: Silver Peak let Mercy Health send 85 percent less data between sites.

but found they could not achieve backup and replication targets.

With an almost entirely virtualised infrastructure, the five data centres scattered across Central Queensland replicate to the storage architecture in Brisbane. After testing the newly deployed NetApp solution, Elalfy estimated the organisation would need a link of up to 100 Mbps to achieve targets.

“Our major challenge was replicating data from our main data centres to Brisbane. From Central Queensland it is very difficult to maintain a good WAN connection,” said Elalfy.

The maximum available link from Rockhampton is around 50 Mbps, which would have cost Mercy Health up to \$60,000 a year. Elalfy and his team had to achieve replication to Brisbane on a 12 Mbps link out of Rockhampton, 6 Mbps from Mackay & Bundaberg and 2 Mbps from Gladstone.

A hardware-based WAN optimisation vendor claimed its solution would allow Mercy Health to achieve its replication objectives, but Elalfy soon found that this was not the case. Silver Peak partner FLEXdata suggested that he try a virtual solution, as Silver Peak's VX software solutions are tailored for backup and replication.

“Our target was a four-hour RPO. Once we finished the installation we realised that WAN optimisation would help us a lot, so we tested several hardware solutions. Some of them worked OK, but proved to be very expensive for our needs. Silver Peak offered us the optimisation we required, with the substantial benefits of it being a virtual appliance,” said Elalfy.

Customer: MERCY HEALTH

## Business Challenges

- Health service provider to rural and central Queensland.
- Unable to meet compliance requirements for data protection.

## Network Background

- Five major sites in Central Queensland connected by an MPLS network.
- Data centre in Brisbane with sites in Rockhampton, Mackay, Bundaberg, and Gladstone.
- NetApp Storage for replication and backup.
- 10 TB of data in the data centre, and another 10 TB spread between four smaller sites.

## Silver Peak Results

- Exceeded four-hour RPO target, meeting one-hour RPO.
- One-third of the price of hardware-based WAN optimization.
- Avoided up to \$60,000 –a-year in upgraded line charges.
- 80 to 85 percent reduction of SnapMirror traffic.
- 12 Mbps performs like a 100 Mbps and peaks at 300 Mbps
- Mercy Health's best IT investment in terms of price, installation time and flexibility.

Troy Coker from FLEXdata said: “Many integrators are still selling off-site storage solutions without properly considering how the replication will be achieved. There was a very large flow of data coming into the Brisbane site over relatively little bandwidth.”

Mercy Health runs NetApp SnapMirror to transfer data to the Brisbane centre. Since deploying Silver Peak’s VX software the organisation is exceeding its initial targets. Elalfy now achieves an RPO of one hour, rather than the four originally budgeted.

He said: “We are achieving between 80 and 85 percent reduction between our LAN and WAN pipes. In terms of throughput, the 12 Mbps link from Rockhampton is now easily performing like a 100 Mbps link. Some peaks even go up to 300 Mbps. The results are exceptionally impressive.”

Elalfy calculates cost projections over a four-year period for all IT investments at Mercy Health, and Silver Peak came out on top of his list in price, installation time and flexibility.

“Since Silver Peak licensing is only based on the WAN pipe size, it doesn’t restrict me from adding memory, CPU or disk resources to Silver Peak’s virtual appliance therefore, using the same license I can always achieve higher optimization results” said Elalfy. “Since it is a virtual solution, it is very easy to install and use and we can make changes without altering management processes. All we needed to do was put Silver Peak between the storage app and the gateway.

He adds: “Because we outsource our network management and monitoring, Silver Peak has saved on hardware costs too. In contrast, a hardware-based WAN optimisation solution would have cost about three times more over four years, factoring in initial purchase cost, hardware renewal and ongoing network management overheads.”

Silver Peak’s Sales Director, Brian Grant, observed: “We have seen a virtual explosion of clients like Mercy achieving a better outcome using our software at a fraction of the cost of hardware appliances. Being able to resolve network replication, capacity or application issues in a few hours, as opposed to weeks or months for hardware roll-outs or bandwidth upgrades, is also highly compelling.”

At Mercy Health, Silver Peak also adds de-duplication benefits on top of NetApp’s volume based block level de-duplication. Elalfy explains: “When we run Silver Peak across multiple storage volumes we get cross-volume de-duplication at byte-level. This is another area where Silver Peak’s solution is exceptionally good.”

In allowing Mercy Health to exceed its backup and replication targets, Silver Peak’s virtual WAN optimisation software solution has the organisation well placed to expand and adapt its storage infrastructure in the future.

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