

Accelerating NetApp's SnapMirror Over the WAN

- Overcome performance slow down on the WAN
- Real-time SnapMirror sync on shared links
- Truly enable the highest availability and the fastest recovery for remote offices

Compass enhances SnapMirror with:

- More than 80% reduction in traffic
- Better than 85% reduction in transfer times
- QoS for real-time sync on shared links
- Reliable performance monitoring
- Flexible deployment options
- Transparency to simplify infrastructure integration
- Less than 9 month ROI

The Mandate

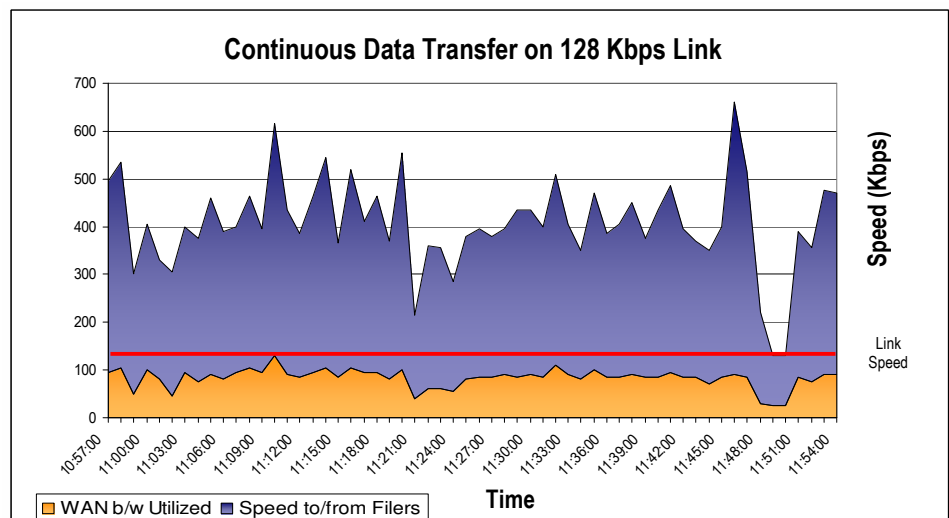
As global businesses continue to invest in Information Age technology, the business becomes increasingly reliant on its data. Despite unforeseen natural or even technical disasters, the business demands instant access to mission-critical data. Without access to the data, business is all but paralyzed and grinds to a halt. Fortunately, NetApp's SnapMirror software provides a simple, flexible, and cost-effective solution for disaster recovery replication and global data distribution.

The Challenge

As data replication is conducted to remote locations, the hostile environment of the WAN works against performance. For example, the high costs of these networks may make it cost prohibitive to maintain

a dedicated network for data replication. However, enabling SnapMirror's "sync" option to allow realtime synchronization may mean that other business-critical applications are stepped on in the name of data replication – not acceptable in the bandwidth constrained WAN environment.

Next, even though SnapMirror will save significant bandwidth by only transferring updated or modified blocks from files or data, sometimes even that subset of data can be significant and overwhelm the WAN's available resources. Even worse, many WAN Optimization solutions that rely heavily on caching technology will have no benefit here as all of the traffic will be new (no chance for caching to help performance). This could leave networks in desperate circumstances.



The Solution

Fortunately, when combined with Expand's Compass platform, the performance hindering WAN can be made to behave like the LAN. Using advanced predictive compression algorithms that are lossless, Compass is able to reduce SnapMirror's traffic footprint on the WAN – even when all of the traffic is from SnapMirror's bandwidth saving features. In fact, on average, in a mix of filer traffic, Compass will accelerate traffic by more than 300% and often reduces the transfer times by more than 85%. This means that efficient data distribution can reach new levels.

Instant access to mission-critical data, from any location or during a disaster, means that data must be replicated in real-time. With Compass' QoS, realtime synchronization can occur over WAN links shared by other applications without hindering their performance (or allowing their use of the network to impair SnapMirror performance).

Compass' QoS makes sure that the network understands what is important to the business, ensuring the right traffic gets the right amount of bandwidth at the right time.

Some WANs are particularly malicious with their performance robbing latency. In fact, some of these links are even difficult to fully utilize. However, with Compass' SCPS-based TCP acceleration, full utilization is possible and latency-caused slows downs become a thing of the past.

Completing the added Compass value, full SnapMirror performance monitoring is built in, allowing for accountability and planning, and especially useful in disaster recovery scenarios.

Combined with a SnapMirror solution, Expand's Compass platform ensures that data distribution and disaster recovery activity for remote offices can truly be simple, flexible, and cost effective. Working together, the highest availability and the fastest disaster recovery are a reality over the WAN.