

Toggle Networks Leverages iSCSI Storage for Customer Backups in a Disaster Recovery Environment

Toggle Networks is a Calgary-based managed services provider (MSP) offering businesses a full range of hosted backup and disaster recovery (DR) services as well as co-location facilities. Toggle's customers are representative of a growing number of businesses outsourcing their data protection needs for cost savings, ease of management and conservation of IT resources. With its services, Toggle protects data during natural disasters or everyday network failures, while maintaining data accessibility during unforeseen interruptions. As an MSP, the company's success depends on its ability to back up its customers' mission-critical data and keep it available around the clock. As such, powerful, reliable and cost-effective storage solutions are critical elements of the company's infrastructure.

The Challenge: Evaluating iSCSI and Fibre Channel for a Hosted DR Environment

In Toggle Networks' data center, the systems providing storage and other services to customers consist primarily of HP servers running VMware, while a separate set of servers for internal office functions feature Dell and Compaq hardware running Windows Server 2003. Direct attached storage had served as the company's primary storage method, but Toggle needed to implement a more robust, high-capacity storage system for backup copies of customer data. One of their primary considerations was whether to go with Fibre Channel or iSCSI storage.

"After evaluating both technologies, we saw iSCSI as the future of storage for many reasons," said Scott Muhlbeier, Business Development Manager, Toggle Networks. "A primary reason is cost; Fibre Channel is very expensive to implement, as well as time-consuming and difficult to manage. Although Fibre Channel offers faster transfer speeds, we also found it to be 50-60% more expensive than iSCSI during our cost comparison analysis. As a managed services provider, the cost of technologies we implement gets passed on to our clients. Businesses utilize MSPs to decrease their IT costs, so in this scenario, iSCSI was clearly the best choice. A disaster recovery environment, as opposed to a transactional environment, is not about speed. Data accessibility is what's important. And iSCSI does that job very well."

"The time it takes to learn new software is always one of the biggest hiccups companies have, but the learning curve was very short with iStor's software."

— Scott Muhlbeier, Toggle Networks

The Solution: iStor's integraStor™ iS325 iSCSI Storage System

Toggle Networks implemented the integraStor iS325 iSCSI storage system from Irvine, California-based iStor networks in its co-location facility. The system featured 9.5 TB of total capacity and could be configured for either 8 ports of 1 GbE or 1 port of 10GbE host connectivity. Volume virtualization with online capacity expansion, RAID level migration, and auto rebuild of spare drives

Toggle Networks was so pleased with the performance of its iS325 that it recently added a second iS325 system to replicate data from the first unit. "We acquired a second iS325 for redundancy, so we can have two copies of data in case one fails. That provides even more value and peace of mind for our customers."

— Scott Muhlbeier, Toggle Networks

were additional features. The iS325's IP-based graphical user interface (GUI) enabled the creation, management, expansion and monitoring of storage pools, volumes and RAID.



iStor Networks, Inc.®

“Our number one determining factor in acquiring the iS325 was total cost of ownership,” said Muhlbeier. “From a management standpoint, we determined the cost and man hours required to deploy, install and manage the system, and associated factors such as electrical costs, etc. The iS325 brought prices down for us, which translates into savings for our clients. At the end of the day, that results in more sales for us.”

The system’s user-friendly interface, and ease of setup and troubleshooting were also benefits for Toggle Networks. “The time it takes to learn new software is always one of the biggest hiccups companies have, but the learning curve was very short with iStor’s software,” continued Muhlbeier.

The iS325 was put to the test when the company experienced a major power outage at its data center. “The breaker blew, yet we were able to power everything back on and be up and running within three hours,” continues Muhlbeier. “We can’t afford downtime because it costs us massive amounts of time and money. As part of our services, our DR customers can log into a triple password-protected site and view their backup history in real time. If our systems are down, their backups aren’t running and we run the risk of losing valuable data.”

Toggle Networks was so pleased with the performance of its iS325 that it recently added a second iS325 system to replicate data from the first unit. “We acquired a second iS325 for redundancy, so we can have two copies of data in case one fails,” explains Muhlbeier. “That provides even more value and peace of mind for our customers.”

The Benefits: iSCSI Delivers Compelling TCO

iStor’s integraStor iS325 array provided Toggle Networks with a powerful storage solution for storing backup copies of customer data. Benefits to the organization included:

- Reduced total cost of ownership (TCO) that factored in acquisition, deployment and management costs, man hours and associated costs
- A reliable, cost-effective storage solution for a disaster recovery environment serving the mission-critical data protection needs of its business customers
- The ability to pass cost savings onto its customer base, giving the company a competitive edge in the marketplace and enabling it to gain additional customers

“Our experience with iStor has been excellent, backed by a highly knowledgeable and responsive support team. The iS325 represents a very successful IT implementation for us, delivering a compelling TCO argument that any IT professional or business executive can appreciate.”
— Scott Muhlbeier, Toggle Networks

“Online backups are where the future is headed,” concludes Muhlbeier. “We definitely intend to keep iSCSI as the basis of our storage infrastructure, as it is ideally suited for both local and offsite backups. Our experience with iStor has been excellent, backed by a highly knowledgeable and responsive support team. The iS325 represents a very successful IT implementation, delivering a compelling TCO argument that any IT professional or business executive can appreciate.”

About iStor

iStor Networks, Inc. is an innovative technology leader that provides leading edge network storage solutions that are scalable, flexible, and high performing. iStor has professional storage solutions for small to medium business enterprise environments that are recognized for bringing leading edge iSCSI technology to the marketplace, setting new standards for cost effectiveness, world class performance, and ease of use. iSCSI IP-based Storage Area Networks (SAN) represent the fastest growing segment of the storage industry and iStor is uniquely positioned to provide the next generation of network storage technology to the marketplace.

The iStor integraStor family of products addresses customers’ broad range of business-critical needs for flexibility, affordability, and high performance iSCSI Storage. The cost-effective iStor iSCSI storage includes entry level SATA appliances and scalable storage supporting SATA/SAS tiered storage for high availability primary storage applications.

integraStor technology is built on the foundation of a purpose-built ASIC designed for high performance and low energy consumption and complemented by a comprehensive storage management firmware stack featuring volume virtualization. Volume virtualization brings compelling features to the data center, including online capacity expansion, RAID level migration, free space defragmentation, read-only volumes, and ACL security on the volume levels, in addition to efficiently managing user data stored on the media.