Quantum_®



DXi-Series Technology

BlackBridge Expands Data Management Business with Quantum Technology

When leading geospatial pioneer BlackBridge wanted to expand its business to offer customers backup, disaster recovery, and retention services, the company turned to Quantum and its family of deduplication and replication solutions to provide fast, secure Canadian-based data protection services.

It seemed natural for Alberta-based BlackBridge Networks to expand its business by providing managed backup and DR protection services to its customers. This global company is a world leader in the geospatial imagery business, with its own constellation of polar orbiting satellites that has captured more than 5 billion square kilometers of imagery. In addition to owning the satellites, BlackBridge manages a significant portion of the data the satellites gather for customers and partners. That means securing the data in the company's Canadian locations, retaining it, and providing access to it on behalf of BlackBridge's partners.

HOLDING DATA FOREVER

The requirements of BlackBridge customers are daunting, to say the least.

"We are required by some of our customers to retain the data literally forever," explains Danial Thomas, Senior Director of Sales at BlackBridge. "The Canadian government, for example, requires that we hold all Canadian geospatial data that we capture in perpetuity. This provides them with an archive of imagery that could be used for environmental impact studies, policy impact study, and potentially even artwork. That sets a very high standard for data protection."

That kind of requirement, coupled with the amount of data being generated, meant that BlackBridge became a leader in secure data management practices and infrastructure. Cloud services were added in the last few years as a way to facilitate more efficient data storage and access across geographies. As experts in data management, BlackBridge then decided it could offer an important service to other organizations as well.

"We realized that if we could meet our own requirements, then the infrastructure and the services we had in place would be very interesting to other companies in our industry, and also to other industries with significant amounts of data to manage—industries like media and entertainment or scientific research," explains Scott Soenen, CTO at Blackbridge.

STRATUS EXPANDS BACKUP AND DR SERVICES

The company began by offering data management and hosted services for companies in specialized industries with very high volumes of data, much of it image archives. With that business in place, BlackBridge decided to take the next step and offer general backup, retention, and DR services by launching its own cloud-based protection service, called BlackBridge Stratus®. However, to make handling backup and remote DR as effective and economical as possible, BlackBridge realized it needed additional technology, so the company looked for a partner with expertise in deduplication and replication.

"We thought of Quantum immediately," said Thomas. "We knew them because of their 30-year history in the storage industry, and knew the quality of their products and services because we had been a long-time customer of Quantum tape systems for our archives. Deduplication was a critical technology for what we wanted to do, and we knew Quantum was a pioneer in that technology and had an extremely powerful set of deduplication solutions."



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Scott Soenen

CTO, BlackBridge

SOLUTION OVERVIEW

- Quantum DXi® deduplication and replication technology
- BlackBridge Stratus Remote Backup and DR Service

KEY BENEFITS

- Deduplication enables colocation services in Tier III Data Centers
- Replication provides off-site storage of data over WANs, reducing the amount of data to be transmitted
- Disk storage of data provides rapid recovery for business continuity
- Range of product offerings, including object storage, enables creation of highly scalable archives

QUANTUM DEDUPLICATION REDEFINES REMOTE DATA PROTECTION

Working with Quantum's deduplication allowed BlackBridge to offer a different approach to remote backup and DR.

"The key aspect for our service is providing organizations with a way to solve their off-site backup and retention needs using a model that provides maximum flexibility, minimizes capital investment, and simplifies ongoing management," explains Thomas.

BlackBridge already had Tier III-class data centers to give users confidence in the integrity of their cloud infrastructure, and they offered a geographically distributed solution that was located completely inside Canada—an important consideration for several customers.

"Moving backup data over networks takes up too much bandwidth and makes remote data protection too expensive," explains Soenen, "but Quantum's deduplication technology solved that problem. By marrying our data center facilities with Quantum's DXi platform, including DXi software and appliances, we were able to create a managed service to allow customers to back up their core data and their critical data to an offsite secure location."

In the new Stratus model, organizations back up data locally to a Quantum DXi disk system, either physical or virtual. The DXi deduplicates the data, reducing its volume by up to a factor of twenty or more, and holds it for short-term recovery. For DR and redundancy purposes, the reduced data is replicated to BlackBridge's data centers, where the data is retained remotely. Because the replicated data is deduplicated, bandwidth requirements—and storage costs—are dramatically reduced.

Recovery is simple with the Stratus model as well. If there is a local disaster, hardware failure, or data loss at the primary site, systems and files can either be recovered back over the network or customers can utilize BlackBridge's cloud computing

infrastructure to rapidly create a new environment, restoring operations quickly and painlessly. Data security is ensured by government-grade, end-to-end encryption; data can be encrypted locally, during replication, and at the destination.

STRATUS SERVICE OFFERS SUBSCRIPTION-BASED DATA PROTECTION

"Stratus offers companies of all sizes a subscription-based, cloud-enabled model that allows them to scale their data protection needs economically as their data grows," says Thomas. "It makes secure remote backup and DR practical for companies that in the past could not afford the required up-front hardware costs and the ongoing management overhead. With Stratus, companies license capacity on a monthly basis and can quickly increase or decrease capacity as data demands change."

As data volumes for its customers continue to expand, BlackBridge is considering a new Quantum technology as a next step—LattusTM object storage. Object storage provides distributed, highly resilient archives that scale economically to a massive level—up to hundreds of petabytes—by spreading data across many low-cost disk nodes. Built-in redundancy, self-healing algorithms, and automatic geographic distribution provide data integrity and allow the system to scale easily without interrupting user access to data.

"As volumes of data increase, we like having the option of migrating to a massively scalable, diskbased archive system based on object storage from Quantum," explains Soenen.

"One of the biggest advantages of working with Quantum...has been the recognition of Quantum as an industry leader, particularly around backup and data archive. Whenever I talk to potential customers... everyone understands the solid technology behind Quantum, and everyone recognizes the Quantum name."

"Deduplication was a critical technology for what we wanted to do, and we knew Quantum was a pioneer in that technology and had an extremely powerful set of deduplication solutions."

Danial Thomas

Senior Director Sales, BlackBridge Networks

ABOUT BLACKBRIDGE NETWORKS

BlackBridge is a privately owned Canadian corporation providing a unique set of data center services, with a focus on supporting IT and business continuity strategies. Their core differentiator is the combination of reliable world-class facilities in low-risk locations, with a very high standard for customer service. Their team has been recognized for their attention to detail, quality of service, and ability to provide remote support quickly and effectively. The BlackBridge portfolio of services includes Replication and Backup, Cloud Services, Colocation, and Network.

BlackBridge Networks is part of the BlackBridge Group, world leaders in geospatial imagery with business partners in over 70 countries.
BlackBridge has been enabling land use decisions for over a decade through support of earth observation satellite missions and management of multi-petabyte data sets. To learn more about BlackBridge, visit: www.blackbridge.com.





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