EQUINIX, DATALINK AND NETAPP CASE STUDY

Multicloud Disaster Recovery as a Service Solution

Nonprofit medical association reduced its risk, while increasing processing power 5X, by leveraging an Equinix, NetApp and Datalink Disaster Recovery as a Service solution

"We now have a significantly more resilient and robust disaster recovery infrastructure with five times more computing power, ultra-fast storage and unparalleled interconnection to multiple clouds at a nominal incremental cost."

- Vice President and Chief Information Officer, Nonprofit Medical Association

Business Results

- Decreased recovery time for mission-critical apps from 72 to less than 8 hours

- Reduced full snapshot capture and recovery from 12 to 2 hours via faster data processing

- Improved storage optimization by 2.5X and reduced data snapshot and clone creation times by more than 200X by deploying higher-performance NetApp storage arrays with data compression/deduplication

- Increased compute power by 5X with minimal incremental investment

- Reduced physical footprint and overall management overhead by deploying an integrated high-performance compute, storage and multicloud DR infrastructure

Executive overview

A nonprofit medical association that supports more than 125,000 members with timely news, information and resources was looking to move its IT disaster recovery (DR) site geographically far away from its production data center so that a local natural disaster wouldn't take out both sites. It also wanted a more robust, resilient and cloud-friendly vendor-neutral data center location for its new DR infrastructure.

The association turned to partners Datalink, an Insight Company, and NetApp, who recommended a DR solution on the Equinix global colocation and interconnection data center platform. As a result, the association gained a new high-performance, secure and highly-available multicloud Disaster Recovery as a Service (DRSaaS) infrastructure to reliably deliver services to members.

Business challenges

The association's legacy DR site was located within 20 miles of its primary data center and lacked the up-to-date IT equipment and capacity needed to handle a full failure caused by either system or environmental hazards. To eliminate the immediate risk, the association needed to re-architect its DR platform at a location further away from its primary site and build a modern DR infrastructure to handle any failure, as well as to better ensure data security and privacy. Longer-term, the association wanted to leverage the DR site to share the increasing development, test and production processing workloads of its primary data center. To support its long-term goals, the association was looking to utilize virtualization and cloud technologies with higher-performing system and storage solutions.

> "Our customer realized the improved performance that can only be achieved by placing your storage right next to multiple clouds. They reduced the time required to do a full snapshot and restore by 6X and decreased their disaster recovery time for mission-critical applications by 9X."

- Steve Blackwood, Account Executive, NetApp

Solution

The association moved its DR infrastructure into an Equinix International Business Exchange™ (IBX®) data center in Silicon Valley. This immediately gave it the distance it needed from its corporate headquarters. By re-architecting for a digital edge with an interconnection-first strategy, the organization optimized multicloud connectivity and boosted performance. It also provided a mature data center with industry-leading reliability, resiliency and accessibility to the greatest number of its technology providers.

Datalink led the planning, design and deployment of the compute, storage and multicloud infrastructure with an interconnection-first approach deployed on Platform Equinix™, which enabled the association to utilize newer, higher-performing and more cost-efficient system, storage, interconnection and cloud technologies. A hybrid cloud-based DR infrastructure removes the overhead and maintenance costs associated with keeping redundant systems running in the event of a failure by putting compute resources in the cloud, while keeping storage local for more immediate access and greater data security/privacy.

The association leveraged NetApp Private Storage for Cloud, FlexPod Converged Infrastructure and A300 All Flash Storage Array 75 - 90 terabyte data repository. The multicloud interconnection was delivered via the Equinix Cloud Exchange™, which provides remote connections between the compute/storage DRaaS infrastructure and the Amazon Web Services (AWS) and Microsoft Azure/Office 365 cloud platforms for faster, more scalable and cost-effective hybrid/multicloud connectivity. Since this infrastructure was located within the same location as the Equinix Cloud Exchange and connected via a dedicated high-speed fiber cross connect, the highest levels of security, control and performance could be provided.

The DR architecture supports recovery on high-performance, dedicated NetApp storage with flexible cloud compute resources. The multicloud design allows for application failover between cloud platforms. The resulting solution combines the best of both worlds: private, dedicated storage for keeping data more readily available and secure on-premises with NetApp storage, along with on-demand cloud compute power when needed for testing or in the event of a disaster. This new site is the first of a multiphase process for building out the association's IT capabilities. It provides a foundational platform that will eventually support the association's application development/testing environment and add capacity for burst traffic to supplement or backup its production environment.

"This will give our developers an 'easy button' to create their own virtual environment on the fly to do development and testing with multiple clouds without losing control of our data," said the association's VP and CIO.

About Datalink

Datalink, an Insight company, is a complete IT services and solutions provider that helps companies transform their technology, operations and service delivery to meet business challenges.

For more information, visit Datalink.com

About NetApp

Leading associations worldwide count on NetApp for software, systems and services to manage and store data. We help customers capitalize on the value of their data in the hybrid cloud through our Data Fabric strategy, data management expertise, portfolio and ecosystem.

For more information, visit Netapp.com

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Value realized

The association wanted to mitigate its overall disaster recovery risks and get its DR site up and running as fast as possible. All the association's critical technology partners were already established within the Equinix Silicon Valley IBX data center, which was one of the primary reasons the association decided to go with Equinix. This made it easier for Equinix, Datalink, NetApp and other partners to attend planning and deployment meetings with the association and get the project up and running with fewer risks.

Greater performance and operational efficiency—The DRaaS infrastructure enabled the association to retain ownership and control of its data, while also strategically locating it next to the flexible compute capabilities of multiple clouds and other technology partners. This provided a higher-performing, more flexible and responsive DR environment. Even with just half of the compute and storage infrastructure being provisioned, the association realized a remarkable 5X performance increase for less than a $30,000 incremental annual spend.

Faster, more reliable backup and recovery—NetApp Private Storage for Cloud high-performance data management solution enabled the association to increase its storage optimization by 2.5X and reduced data snapshot and clone creation times by more than 200X. It also leveraged the proximity and dedicated high-speed fiber cross connections to move data workloads between multiple clouds without sacrificing security or performance. As a result, the association reduced the time required to complete a full snapshot and restore process from the primary site to the DR site—from 12 hours to less than 2 hours—with the same amount of data going clear across the country.

> "Bringing our nonprofit customer to Equinix gave them a truly best-of-breed data center and interconnection platform to build a more high-performance, scalable, resilient and cost-effective DR infrastructure. It also provided them with the ability to elevate their operational IT model to a more forward-looking productive model that they can better leverage to support their members."
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> - Tim LeMunyon, Senior Account Executive, Datalink

Key take-aways

Its new multi-vendor DR infrastructure has allowed the association to be much more flexible and nimble in defining innovative ways to service its members. In the past it was extremely limited by its legacy DR infrastructure; whereas, now if the IT organization finds itself in a DR situation, it can expect to reduce the time it takes to recover mission-critical applications from 72 hours to less than 8 hours.

"We've gone from a limited physical environment to a more infinite virtual environment that enables the art of the possible," said the association's CIO.

Today, the association's disaster recovery operations are being completely managed by Datalink Managed Services, allowing it to be more productive and innovative in driving new business.

About Equinix

Equinix, Inc. (Nasdaq: EQIX) connects the world's leading businesses to their customers, employees and partners inside the most interconnected data centers. In 44 markets across five continents, Equinix is where companies come together to realize new opportunities and accelerate their business, IT and cloud strategies.

In a digital economy where enterprise business models are increasingly interdependent, interconnection is essential to success. Equinix operates the only global interconnection platform, sparking new opportunities that are only possible when companies come together.

Learn more at Equinix.com

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