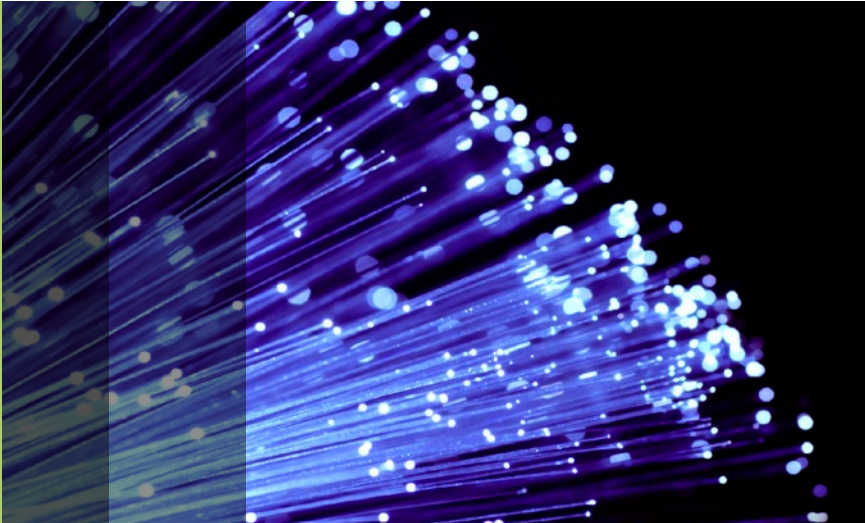


Wisconsin Independent Network and Airstream Communications



Founded in 1997, Wisconsin Independent Network (WIN) provides wholesale network transport services on its 2500-mile fiber optic network throughout the upper Midwest. Airstream Communications, also founded in 1997, provides underlying internet connectivity and support services through twenty independent telephone companies, including providing over 200,000 email accounts. Both operations share two data centers and are part of a privately-held limited liability company called Communications Management Group (CMG), owned by thirty-one Wisconsin-based independent telephone companies. WIN, Airstream, and CMG are headquartered in Eau Claire, Wisconsin.

Challenge

WIN wanted to streamline its data center by managing multiple and varying types of data and applications on a single platform. They needed a dependable, high-performance production platform for their network to securely transmit and store sensitive data.

The company wanted to expand its offering to clients by adding secure data backup services, in addition to needing to implement a disaster recovery solution to protect data and reduce disruption. WIN and Airstream Communications were looking for a way to meet these challenges with a cost-effective, energy-efficient solution that could help reduce power and cooling costs in their two shared data centers. They were using 10TB of clustered NetApp 3050 to handle file, email, and web storage, but found that the costs involved with expanding and replication on this system were unacceptable.

We needed a dependable, high performance platform since we were deploying it in the active production environment.

The Pillar Axiom seemed a natural fit due to its application uptime and performance.

Russell Berg, Director of Product Development, WIN

Solution

The Pillar Axiom® 500 storage system was selected as the platform to efficiently manage data and applications in the companies' shared primary and secondary data centers. The system accommodates multiple applications and data types (block and file) with varying priorities, and its Application-Aware storage™ architecture, combined with predefined or customized profiles, allows DBAs to assign different levels of performance and priority to each application and data set.

Airstream and WIN worked with North American Systems International, a value-added reseller headquartered in the Midwest that specializes in implementing storage and DR solutions. After hosting a variety of online demos showcasing the capabilities and advantage of Pillar's Axiom storage solution, WIN's IT staff came to North American Systems Bloomington headquarters to see a live Pillar Axiom demo. At North American Systems computer lab, they were able to see first-hand how they could consolidate SAN & NAS onto a single platform, and manage it from a single GUI, with the Pillar Axiom storage system. They were also impressed about how easily snapshots and incremental change can be administered without additional complexity or licensing costs.

Data required to be WORM compliant (Write once, read many – non-alterable format) has been an expensive and difficult proposition for many organizations to manage in the past because it has required a separate disk system appliance with middleware or even separate media to manage like optical platters. With a simple software suite addition from Pillar, Secure WORMfs licensing will allow



WIN to sell an added value service in addition to hosted DR and business continuance to all their banking, broker, (SEC-17a-4) hospital (HIPAA), publicly traded (SOx), manufacturing (OSHA, FDA), and government or government contractors (DOD 5015.2) customers as well as anyone who has the need according to their industry's rules and regulations to maintain certain fixed content data in a non-alterable format. WIN can provide secure fixed content storage for their customers remotely on a hybrid NAS repository exposed over NFS/CIFS. Applications/user/CSS can assign retention times to file/object level. The applications/user can't update/delete/rename/modify protected files until the originally chosen retention date from the client has passed. A digital fingerprint is stored with each file/record to provide proof of un-alterability – helping considerably drive down costs for their clients' e-discovery for corporate litigation – a cost that averages 70% of all corporate legal discovery fees today. The system scales to 4 Billion objects per instance and utilizes extensible XML Meta-Data and API for custom integration if necessary. Secure WORMfs is enabled and certified for simplified backup and DR with seamless integration with their customers email archiving & Electronic Content Management (ECM) solutions as well.

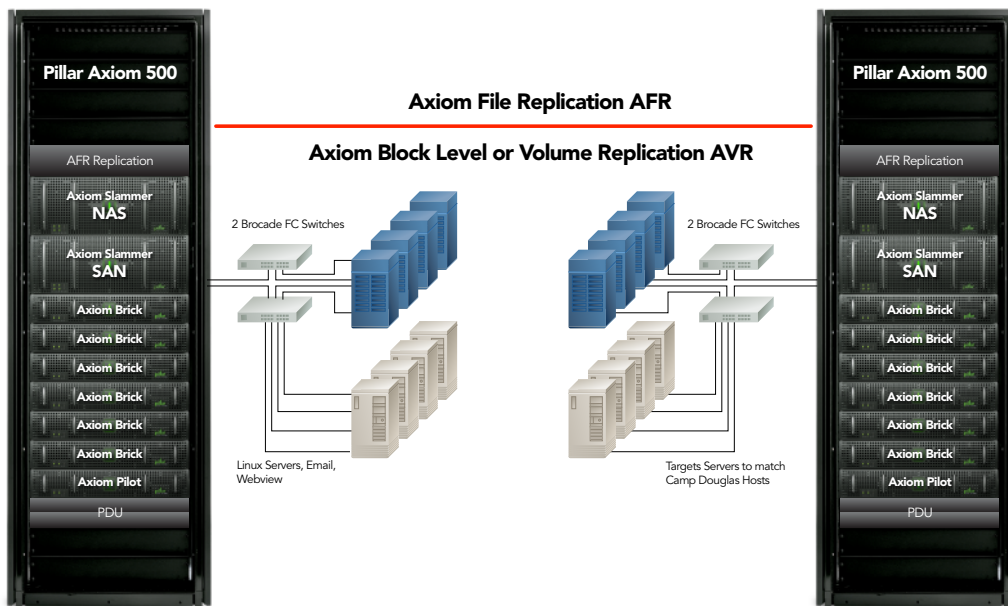
Thin provisioning will allow WIN to more accurately forecast storage growth as well as offset disk system growth into the future saving many thousands of dollars over buying hard capacity and having customers oversubscribe from their true needs. Pillar is the only vendor that delivers an Application-Aware storage solution with thin provisioning and true quality

of service that is configured at LUN or file system creation – not as a separate process. Working in tandem with Pillar's native Quality of Service (QoS) this delivers capacity utilization guaranteed as much as 80% with no contention issues or two times the industry average, all while driving down solution complexity, simplifying management, and reducing acquisition and operation costs by 50% vs what they would have paid with a legacy network storage system. With WIN utilizing Pillar's complete quality of service functionality and our distributed RAID technology, they can also grow and scale and serve thousands of clients with varying capacity and performance needs all the while delivering them all the level of service they expect without any contention from a single consolidated platform solution.

The system solves WIN's challenges by allowing them to consolidate all of their applications and data sets on a single platform while maintaining reliable performance and uptime. Airstream's needs are met as well, as the Pillar Axiom is the logical choice for a secure, reliable backup and disaster-recovery system. The configuration includes remote replication capabilities, as well as planned space for backup and archive data. In addition, it has AxiomONE SnapFS, SnapLUN, VOLCopy, and Local and Remote File and Block-Level Volume Replication software to accommodate seamless backups, restores, and remote disaster recovery and failover without requiring any downtime.

Camp Douglas, WI

Eau Claire, WI



The deployment included two Pillar Axiom 500 storage systems, each with both SAN and NAS Slammers (four active storage processors and 12GB mirrored cache each), over 26TB of raw capacity per system, and dedicated switched FC backplane and redundant power distribution units. The system allows for end-to-end full redundancy, high-availability access to applications and data, and significant room to scale capacity while maintaining performance.

The companies originally used a NetApp 3050 to store customer information, but is now standardizing on the Axiom in order to initiate the secure data backup service at both data center sites. “The Pillar Axiom seemed a natural fit due to its application uptime and performance,” said Russell Berg, Director of Product Development for WIN. “We were looking to customize this platform to provide not only the current services we offer, but also recovery and data backup services for enterprise and residential customers as well.”

With the Axiom, all the companies’ applications and data sets – block, file, WORM, and VTL – are addressed on a single platform instead of the disparate systems they had to use before. The data demands of all tiers of their data – from business-critical databases to archive – are addressed without contention and with dynamic assignment of priority. With this system, the company can implement robust data protection scenarios with local and remote embedded replication and CDP point-in-time recovery technology.

Because the new solution was deployed in the companies’ production environments with 24/7 operation, the selected equipment had to be a flawlessly dependable, high-performance platform that could be up and running with minimal interruption. With the Axiom deployment, the companies are maintaining true grid system redundancy and virtualization for their entire data environment without requiring expensive and disruptive product family upgrades.

“The WIN data center is truly revolutionary in its architecture and the services it provides its customers,” said Bob Maness, Vice President of Marketing, Pillar Data Systems. “With Pillar’s support, WIN and Airstream can offer an even more enhanced customer experience, allowing them to receive secured information and to further grow as a business. We’re thrilled to be a part of their team.”

An important part of any solution is that it must be manageable. By consolidating on the Pillar Axiom, data management is greatly simplified – going from managing multiple and varying platforms to managing a single system. The Axiom is easy to use, manage, and maintain with the best-in-class AxiomONE Storage Services Manager program that features an intuitive GUI, simple capacity planning features, and a Maintenance Wizard.

Results

The results of this deployment have exceeded the companies’ expectations and have had a positive impact on business and IT operational success. The consolidation of resources greatly simplified their IT environment, making it easy to manage while reducing power and cooling costs. At the same time they were able to increase performance for their customers, and have found it easy to manage growth by simply adding new Bricks to their system, which adds RAID controllers for virtualization management and back end processing power.

The Application-Aware Pillar Axiom storage system has allowed WIN and Airstream to address all their internal and external customer data needs without forcing them to choose just one or two ways to address them. Their Axiom supports SAN (FC and iSCSI) and NAS (CIFS, NFS) front end connectivity, and FC and SATA disk pools to allocate data across on the back end. With a system that is this flexible, they are able to easily meet any data demands their customers can bring now or in the future. This flexibility brings increased customer satisfaction while driving down internal costs and optimizing their business profitability.

Pillar Data Systems® designs and builds cost-effective networked storage solutions with the highest utilization rates in the industry. The Pillar Axiom® is the first truly Application-Aware storage™ system, enabling multiple tiers of storage on a single platform – each with a unique level of service. The result is a storage platform that consolidates assets, modularly scales capacity, and reduces management complexity. It’s an entirely new class of storage. www.pillardata.com

