Pivot (3)





PIVOT3 CASE STUDY

New Data Center

SOLUTION

Hybrid Flash Arrays

INDUSTRY

Financial Services

PROJECT HIGHLIGHTS

- Replaced an aging SAN with an efficient, high-performance hybrid solution that prioritizes Memberfacing services
- Aligned workload performance to business priorities with easy-toapply, policy-based prioritization
- Integrated PCIe-flash closest to RAM and CPU on each storage processor for lowest latency performance
- Implemented a 95% virtualized SAN environment running VMware 6.0 in multiple data centers
- Achieved an 82% reduction in latency for mission-critical systems
- Realized 6 times faster VMware backup performance
- Attained a 32% faster core backup window
- Responsive Pivot3 support team quickly resolved small implementation issues

Consumers Credit Union

Putting Members First with a Faster, More Responsive Data Center

About the Customer

Consumers Credit Union, headquartered in Lake County, Illinois, has provided unparalleled financial services to Members since 1930. The credit union offers a complete menu of products and services, including checking, debit and credit cards, vehicle loans, consumer loans, savings, money market, commercial lending and certificates of deposit, along with a complete range of mortgage products. Membership is open to everyone, regardless of whom you are or where you live. This is uniquely different from most credit unions, where membership is restricted by geography, employment or similar criteria. Member-owned, Consumers Credit Union has nine branches located in the Lake and Cook County areas. www.myconsumers.org

The Challenge

Over the past several years, Consumers Credit Union's customer base has expanded by close to 40%, and the demands of an increasingly digital business put mounting pressure on Consumers Credit Union to upgrade its data center technology. "Our data center was well overdue for an overhaul," explained Chris Visocnik, director of information technology at Consumers Credit Union. As with most credit unions, financial institutions and other businesses with Member-facing services and rising data volumes, performance, scalability and ease of use are crucial. Consumers Credit Union required a high performance solution that would accommodate increasing Member growth and still provide the ease of use the credit union had come to expect.

Consumers Credit Union has 83,000 Members who need to access financial information at branches during business hours and online 24/7. As a Member-first financial institution, the credit union needed a storage solution that allowed it to prioritize applications and ensure that IT operations did not negatively impact the customer experience. "Member interfaces, online services, transactions with tellers and any service that directly impacts our Member experience is our highest priority," said Visocnik. "We had to design a faster, more responsive data center."

The credit union's IT department is charged with assuring optimal performance of its core systems, teller access to interface with customers at branch locations, as well as online and mobile banking. IT is also responsible for maintaining a substantial volume of daily back-office data operations and monitoring. "In the credit union world, there's a crazy amount of scheduled jobs that happen at night. We move data from here to there and crunch numbers continuously," said Visocnik.

The company's previous SAN managed more than 400TB of data and was utilized as the main production SAN. The array was no longer able to keep up with the credit union's 24/7





CUSTOMER TESTIMONIAL

"The Pivot3 solution provided more than four times the amount of PCIe-attached flash within our budget as competing vendors. Pivot3 performance metrics made a big difference when backing up our systems after hours."

 Chris Visocnik, Director of IT, Consumers Credit Union demands. As a result, the performance of online banking and mobile banking started suffering during nightly backup windows. "Our main production SAN was bottoming out during night-time backups and slowing Member-facing services," said Visocnik. "That level of service wasn't acceptable to us. We knew it was time to find a new system that would meet our performance requirements and increase the level of responsiveness for our Members."

"Storage is the foundation and bedrock of performance in the data center, and it was the primary bottleneck in our environment. Storage performance was the key factor we were focusing on with our purchase" said Visocnik. As a result, the credit union focused on vendors offering robust, performance-focused storage solutions.

The company's budget and performance matrix pointed to a hybrid solution, due to a hybrid's ability to optimize dollars per GB and dollars per IOPS.

Consumers Credit Union reached out to three highly regarded hybrid storage vendors to explore new options, including their previous vendor. Pivot3 had big shoes to fill, especially since Visocnik had sold storage for a couple of years on the side.

The Solution

Consumers Credit Union purchased two Pivot3 N5-500 Hybrid Flash Arrays with the intention of implementing one each at its production data center and disaster recovery site. Due to double-digit growth, the credit union deployed both N5-500 Hybrid Flash Arrays at its production data center and purchased an additional N5-300 Hybrid Flash Array and Performance Pack to handle its disaster recovery initiatives.

Pivot3's solution supplied Consumers Credit Union with impressive raw performance. With 5.2TB of PCIe-attached flash, Pivot3 offered more than four times the amount of flash as competitors with better economics that respected the company's budget parameters.

Not all data is created equal. Unlike other storage arrays that treat all data the same, Pivot3's advanced storage Quality of Service (QoS) governs performance targets, I/O prioritization and data placement, enabling Consumers Credit Union to meet the demands of its Member-facing operations.

With Pivot3's QoS, Consumers Credit Union is able to designate that all Member-facing services take priority, while operations such as backup and data movement have lower priority. The IT team controls what applications are guaranteed performance and what operations run in the background when Member demand is high.

The Results

Pivot3's innovative PCIe-based hybrid flash arrays with advanced storage QoS has boosted Consumer Credit Union's IT system performance and dramatically improved backup windows, allowing them to achieve an 82% reduction in latency for mission-critical systems and attain a 32% faster core backup window.

Over the last year, all of the credit union's after-hours processing has improved dramatically according to Visocnik. "We've seen enormous performance improvements, including a huge reduction in latency for core and VMware backups. VM backups that used to take well over six hours now take just 45 minutes to complete."

Moving a large virtual machine with storage vMotion, a process that used to take days, now happens in hours. "The majority of our VMs take under 10 minutes to move," confirmed Visocnik, "with some of the smaller ones taking mere seconds."





CUSTOMER TESTIMONIAL

"We experienced an acceleration of all our after-hours data management processes. The Pivot3 storage made the difference."

-Chris Visocnik, Director of IT, Consumers Credit Union Gone are slow wait times for Members logging in remotely during evening hours. The Pivot3 solution reduced latency of Member-facing services, even if Members decided to bank online at 2 a.m.

"We appreciate Pivot3's ease of use and intuitive user interface," Visocnik added. "Our Pivot3 support team was on the ball from day one to quickly resolve any small issues that arose during implementation. Fixes that require firmware updates were rolled out in a matter of weeks, which is almost unheard of. We are extremely satisfied with our Pivot3 solution."

About Pivot3

Pivot3 delivers smarter infrastructure solutions that provide maximum resource utilization, deliver sustained business operations and guaranteed application performance. Today, Pivot3 has more than 2,000 customers and 16,000 successful hyperconverged deployments in 53 countries in mission- and business-critical infrastructures such as healthcare, government, finance, transportation, education, gaming, entertainment, retail and video surveillance.