



OPTORO CASE STUDY

Private Cloud Solutions Saved 50% in Cost



ORGANIZATIONAL PROFILE

Optoro is the world's leading reverse logistics platform, offering a superior end-to-end reverse logistics solution that helps retailers process, manage, and sell their returned and excess inventory.

With the growth of e-commerce, the amount of returned and excess goods retailers have to handle has increased exponentially. Optoro's software platform helps retailers optimize the management of returned and excess inventory in a more efficient and cost-effective way, maximizing recovery value, enabling consumers to get great deals, and reducing environmental waste.

Rather than discarding these overstocked or returned goods, as is traditionally done, Optoro helps retailers find solutions to maximize the utility of these goods, including return to stock, return to vendor, remarketing, donation, or recycling. Founded in 2010, Optoro has seen phenomenal growth, and has therefore seen a steady rise in data infrastructure needs.

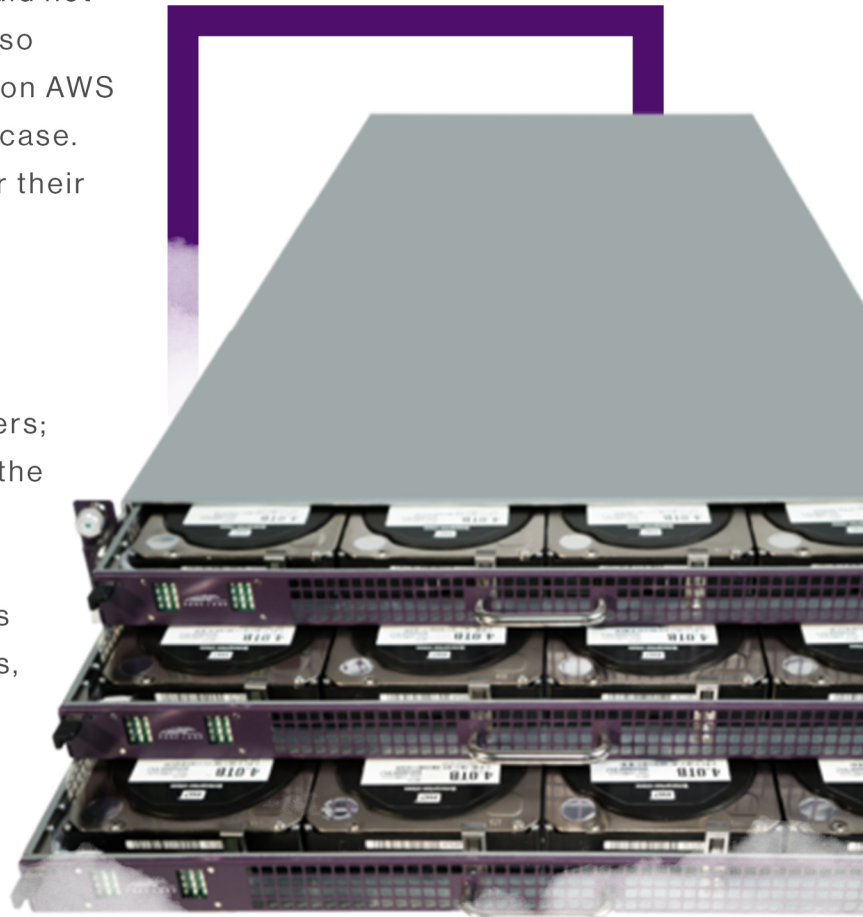


CHALLENGE

Optoro had relied on Amazon Web Services (AWS) since 2010 to drive its IT resources and applications. However, with company growth, this has meant an ever-increasing bill which no longer made sense for a company that anticipated growth to continue. In-house analysis determined that with average cloud cost estimations rising 2% monthly, moving to their own servers would reduce costs by a significant amount, even accounting for buying reserved instances (RIs) where a 40% overall discount could be had by committing to a long term plan with high upfront payments to Amazon.

In addition, Optoro spent 20 – 25% on disk space and IO, and the available RIs could not cover for that at scale. This analysis also assumed performance would be equal on AWS and in-house servers, which is not the case. AWS meant Optoro had no control over their hardware, which meant no control of performance or disk speeds.

Relying on the cloud also meant the associated impact from co-located users; Optoro often found itself the victim of the “noisy neighbor” effect, where another co-located AWS client monopolized resources which slowed down Optoro’s server performance. In these instances, there were few options other than to wait it out or completely restart and try to get on another cloud server.





SOLUTION

Optoro worked with PSSC Labs to completely build a self-hosted infrastructure from the ground up. PSSC Labs strongly promotes flexibility and maintainability are always at the core of any infrastructure deployment. Utilizing the CloudOOP 12000 Enterprise Big Data server platform connected via a 10 GigE network backbone, Optoro immediately gained performance benefits they did not expect. Much of the performance benefits can be attributed to using only Flash SSD hard drives from Micron® and the latest Intel® Xeon® E5-2600 series processors.

PSSC Labs also worked extensively with Optoro to customize the solution so that they could continue running on an API infrastructure with a Joyent Triton platform. Unlike other providers, PSSC Labs provided the flexibility and knowledge needed to deliver Optoro with hardware that maximized performance without upselling of unnecessary upgrades. PSSC Labs delivered a complete solution with all necessary rack, power connection and out of band management tightly integrated into a simple-to-deploy datacenter environment.

PSSC Labs took additional steps to pre-configure the operating system, drive configuration and network settings saving value time from deployment to production. Optoro is able to migrate applications onto any new server or purpose existing servers very easily. Always conscious of staying within budget, PSSC Labs was able to use its connection with component manufacturers to help obtain steep discounts on parts that Optoro would not have gotten on their own.

Finally, PSSC Labs provides ongoing services to support any issues that may arise. This includes hardware and software support that helps limit any monthly expenditures Optoro might otherwise absorb. Providing the absolute lowest total cost of ownership platform is really what separates PSSC Labs from other manufacturers.

IMPACT

Migrating from AWS was but part of Oporto's growing pains. However, upon the completion of the migration, Oporto saw an immediate increase in the consistency and stability of performance as well as increase to storage capacity compared to AWS. The new self-hosted solution immediately halved Oporto's costs, including the integrated power costs required for expanding datacenter capabilities, with total savings now measuring a whopping 66%.

Private infrastructure has also resulted in better visibility, with a clearer breakdown of usage for proper reporting and monitoring, a luxury they did not have on AWS. Running containers enabled Oporto to more readily leverage the performance of a bare metal machine that are no longer trying to pack containers into the virtual machines they had running on the cloud. Performance has increased across the boards, with some areas -- database servers in particular -- seeing nearly 6x improvements. The change has made an initially hesitant board very pleased with the migration to a self-hosted structure.





About PSSC Labs

For technology powered visionaries with a passion for challenging the status quo, PSSC Labs is the answer for hand-crafted HPC and Big Data computing solutions that deliver relentless performance with the absolute lowest total cost of ownership.




We are true innovators offering high performance computing solutions to solve the world's most demanding problems.

For 25+ years organizations of all sizes and from a variety of sectors rely on PSSC Labs' computing systems. We are proud to support many departments within the United States government, Fortune 500 companies as well as small & medium businesses.

All products are designed and built at the company's headquarters in Lake Forest, California.

Contact Us:



-  www.pssclabs.com
-  4sales@pssclabs.com
-  (949) 380-7288

-  20432 NORTH SEA CIRCLE
LAKE FOREST, CA 92630