

PLNU Takes Data Protection into the Future with Backup as a Service

20%
cost savings
vs. snapshots

3
distinct data
sources protected

30 minutes
restores
per server

Challenge

Point Loma Nazarene University (PLNU) has never faced ransomware, but numerous peer institutions have and PLNU knows it's only a matter of time before it's their turn.

Founded in 1902, **Point Loma Nazarene University (PLNU)** has been providing faith-based education for nearly 120 years. A liberal arts school offering more than 60 areas of study, an athletic training program and a current student body of over 3,000, PLNU is responsible for safeguarding a collection of incredibly sensitive student and faculty data. And while they have yet to face a data recovery from a cyber-attack, they know it will likely happen eventually.

"Ransomware is a major concern for us," said Joe Alcorn, PLNU's Manager of Infrastructure and Architecture. "We're bound by some aspects of HIPAA. We're definitely bound by FERPA guidelines, as well as all of the different PII and PHI regulations from all the states that all of our students live and are bound by."

Fortunately for Point Loma Nazarene, their increasing concern over ransomware is not founded on experience, as they have so far avoided such attacks. Instead, their concern is based on what they've seen happen to schools and other organizations across the nation. "We're seeing city governments, state governments, hospital chains, public service organizations all get hit and hit horribly," Alcorn said. "How do we make sure that we're not going to be the low-hanging fruit? How do we make sure that we have a good backup of all our data somewhere where if we do get attacked, we can still come back from it?"



INDUSTRY

Education

USE CASE

Ransomware Protection, IT Modernization, AWS Backup

BENEFITS

Faster Easier Data Restores, Single Pane for Unified Backup Management, Lower Total Cost of Ownership, Air Gapped Backup Storage

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Joe Alcorn
Infrastructure Manager, PLNU

Objectives

One of the big issues Alcorn faced was that they were doing backups that were limited, and they weren't truly doing them offsite.

PLNU was using a quantum tape library and doing a rolling monthly backup of all their critical infrastructure as a copy onto tape, which Alcorn believed gave them a bit of an air gap. However, it was still being stored on-prem and was only a small section of their infrastructure. Everything else was likewise being backed up, accessible through the same infrastructure. And that was a critical fail point. "Essentially," Alcorn said, "if we get owned there, we get owned everywhere."

Then, facing pending deadlines on some of their hardware in the summer of 2020, Alcorn and his team knew they had to buy a massive amount of storage and were contemplating a jump to a new cloud solution. They had been using Veeam to do backup management in AWS, but Alcorn wasn't happy with having multiple panes of glass to manage the system. "I don't like the fact that I've got these two panes of glass, and they operate very differently for the same target goal here," he said. "It's just painful."

So, the search for a more simplified, cloud-based data protection solution began. Here is what PLNU wanted:

- Quick and efficient recovery in the event of a ransomware attack or other data crisis
- To contain or even lower the cost of backing up their data
- To move their critical data off premise and into the cloud
- A true air gap between their production data and the data that is backed up

Solution

Alcorn and his team had seen the Clumio booth at the AWS re:Invent 2019 conference and decided to reach out as part of their search for a new data protection solution.

After talking to Clumio, they arranged for a POC. And that's when Alcorn's aha moment happened. As he was continuing to conduct his planned DR tests with his current backup system, Alcorn decided to test the Clumio backup restores at the same time. "We thought maybe we had gotten our data recovery to an acceptable place," Alcorn said. "The Clumio results really opened our eyes to some serious gaps in our plan, in our infrastructure, and in our configuration."

"While one of our biggest concerns going in was budget, we certainly had hoped to find a solution that provided more than just an economical solution," Alcorn said. "We quickly realized that Clumio fit all of the categories we were hoping for and more. We wouldn't be settling."



Disaster Recovery

Before they brought Clumio on, Alcorn and his team had been running disaster recovery tests to see how exposed they were. The tests did not go well. "It was horrible the first few times," Alcorn admitted. "When we did our first DR test, we realized our network was not in good shape to survive a total outage of our main data center. I think we budgeted 10 hours for the DR test, and I was here from Friday night until midday on Sunday, and most of that time was spent recovering from the DR test."

Right off the bat, though, it was clear that Clumio significantly improved PLNU's data recovery. When a server recently went down and they had to do an actual DR restore, Alcorn was more than pleased with the results. "I found the most recent backup and started the restore to a separate VM," Alcorn said. "Before Clumio, we were looking at six to eight hours to do a restore. A lot of our VMs are in the 100 to 150 gig range, and now we are getting some restores in 30 to 45 minutes."

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Eliminate Complexity

Not only are restores easier and quicker, but managing the entire system is now much simpler. Gone is the concern of having to view multiple screens to keep an eye on everything. It can all be done now with a single pane of glass for both on-prem backup and AWS backups. "That was the single best feature for me right there. The second thing that I liked the most was the pure simplicity of standing it up," Alcorn said. "With Clumio, it's all SaaS-based and you deploy headless, lightweight appliances. I instantly saw my management overhead from my team on backups go way down."

Support Beyond Expectations

Alcorn also found a level of customer support he just didn't expect, starting with the proactive emails Clumio sends when they discover an issue in the system. With Veeam, Alcorn had to have someone spend significant amounts of time every single morning examining the infrastructure, examining the backup jobs, figuring out which errors were repaired, and which ones weren't. Now, he gets a daily report and if anything has gone wrong, he gets an email from Clumio's support team.

As an example of Clumio's stellar customer support, Alcorn cites a situation where Clumio emailed him to say the system was having issues from a rare bug as PLNU was having snapshots done on their VMs on-prem. "I'm sitting here going, 'Okay, they identified the bug for me, they told me what was happening and how it was happening. I guess it's up to me to go and fix this,'" Alcorn said. "Then Clumio told me they were putting a change into the software that will avoid this bug. What company does that? How much more night and day can we get here? It's amazing."

Results

With Clumio on board, PLNU is already seeing more than 20 percent cost savings for managing back vs. having to write and manage their own scripts for AWS. And that number will likely get even better as Clumio takes an increasingly larger role.

One of the things Clumio allowed Alcorn to do was to give his CIO a glimpse into the future. Knowing the CIO always had an eye on new technology, Alcorn was able to tell him that not only would Clumio save Point Loma Nazarene University money year over year, but it was a platform that could eventually provide some of the technological tools the CIO had been dreaming about.

Another key benefit is Clumio's ability to easily protect multiple data sources. Already Clumio is handling three distinct data

sources, with more anticipated in the future. "The fact that we can unify our backup and retention policies across all of the various different technologies that we use is amazing. I am keenly looking out for the next thing that Clumio adds to the platform," Alcorn said. "There's a few things in there that we're really curious about because we have Salesforce here and we use the full Google Workspace. We are not in a huge rush, but we would love to look at that one day with Clumio."

As Point Loma Nazarene University continues to look at and adopt the latest technology, it will be looking for Clumio to help them on that journey. "This is a company that we can look at partnering with for a long time," Alcorn said.

About Point Loma Nazarene University (PLNU)

PLNU is a Christian liberal arts institution established in 1902 by Phineas Bresee, the primary founder of the Church of the Nazarene. Accredited by the WASC Senior College and University Commission (WSCUC), PLNU is in the NCAA Division II with 11 athletics teams to cheer on. As a faith-based liberal arts university, PLNU is committed to shaping students' academic, personal, and spiritual growth.

Learn more about PLNU at www.pointloma.edu