Idaho's largest school district strengthens cyber resiliency

West Ada School District had been using Veeam to protect its valuable student, teacher, and administrative data. By moving to Cohesity, the district increased cyber resiliency by using Cohesity's immutable backups. Using Cohesity data deduplication technology, the district lowered infrastructure costs and achieved a 33x data reduction ratio. And finally, the ability to choose between per-user and capacity-based pricing is enabling the district to have a choice in data protection plans.

The Challenge

The West Ada School District relied on a Veeam data protection solution to back up hundreds of virtual servers and numerous physical devices. "Veeam is a relatively simple data management solution," said Loren Cornell, Systems Engineer for the West Ada School District. "But it doesn't provide a way to create immutable backups. Having a clean copy of our data from Cohesity that can't be altered is essential if we ever need to recover from any natural disasters, system failures, ransomware, or other cyberthreats."

In order to obtain an unmodifiable backup copy of all data and applications with the Veeam solution, the district's IT team had to perform time-consuming, manual offline backups each month. "We would spin up our dedicated backup server, move a copy of all applications and data over to that server, and then spin that server down when the process finished," Cornell explained. "It was a fairly straightforward exercise, but the backup took almost 12 hours and had to be completed during our monthly maintenance window. Going forward, we wanted to find an easier and safer way to protect our essential applications and data."

The Solution

The West Ada School District purchased its first four-node Cohesity cluster in 2021 and installed it at the district's main data center in Meridian, Idaho. The district added a second Cohesity appliance the following year and placed it at a separate site in Idaho for disaster recovery. The IT team is now able to perform daily backups of all critical data applications and retain monthly copies of all workloads for at least six months without the added labor hours.

In addition to purchasing the second Cohesity appliance for DR, the West Ada School District signed up for Cohesity FortKnox to protect 10 TB of the district's most critical data. Cohesity FortKnox is a SaaS cyber vaulting solution that improves cyber resiliency with an immutable copy of data in a Cohesity-managed cloud vault via a virtual air-gap. Part of the Cohesity Cloud Services (CCS) portfolio, FortKnox provides an additional layer of protection against ransomware and other cybersecurity threats. "We are currently backing up all on-site tier 1 systems and data to FortKnox to establish an extra virtual air-gapped cloud backup, should a situation arise where both of our on-site appliances are simultaneously affected," explained Cornell.

The West Ada School District initially signed up for Cohesity's capacity-based pricing option, covering 50 TB of the district's Microsoft cloud data. "Initially, we began with a fixed amount of data as we were still refining our backup requirements," said Cornell. "The pricing model enabled us to pay solely for the specific data we wanted to back up, which suited our needs perfectly during that period. However, halfway through the school year, we opted to transition to Cohesity's per-user licensing, which provided the advantage of unlimited backups. We allocated user licenses to our 5,000 teachers and administrative staff. It's valuable that Cohesity offers the flexibility to choose between per-user and capacity-based pricing to align with our changing demands."

The Results

The Cohesity solution has enabled the West Ada School District to greatly strengthen data security. By deploying Cohesity, the district has gained the ability to reduce data recovery time and increase cyber resilience with immutable backups. "Our organization has always been concerned with data security," said Cornell. "However, our level of alertness heightened significantly when a series of cyberattacks occurred nearby last year. As a result of those local breaches in Idaho, our IT team re-evaluated some of our security strategies. We organized our systems into tier 1, tier 2, and tier 3

priority levels, and then determined how fast we could get each level back online and available for our end users. Cohesity has now become a key pillar of our security arsenal." The district was also able to speed up the offline backup process using Cohesity.

West Ada School district was also able to cut its storage infrastructure footprint using Cohesity's deduplication and compression functionality. Cohesity leverages a unique, variable-length data deduplication technology that spans an entire cluster, resulting in significant savings across the entire storage footprint. By using Cohesity, the district achieved an impressive deduplication ratio of 32.8:1. This feature allows the district to optimize infrastructure costs by using deduplication across multiple workloads. With Cohesity, the district has increased cyber resilience by reducing their Recovery Time Objective (RTO).

Earlier this year, West Ada District purchased Cohesity SiteContinuity, a solution that helps simplify DR through automated orchestration—in case any outage or disaster ever occurs. This provides schools with near-instant access to all of its data with near-zero data loss. "With Cohesity SiteContinuity, we can fail over all of our servers to the DR site if our main operation center goes down," explained Cornell. "Our plan is to test failover at least once per year, probably in the summertime when staff and students are not around. Cohesity SiteContinuity offers a much faster and easier way to do DR than other manual options."

"The main reason we purchased Cohesity was for the added security it gives us with the immutable backups," said Keven Denton, Deputy CTO. "We are happy with the Cohesity data protection solution. It is providing us with greater cyber resiliency and the peace of mind that comes from knowing everything's adequately protected and easily recoverable in an emergency."

Key Benefits

- Increased cyber resiliency using Cohesity's immutable backup copies and FortKnox

- The ability to recover quickly from attacks or outages in the future

- A savings of 12 hours of backup time by eliminating need for offline backups

- A 33x reduction ratio on stored data, lowering data protection infrastructure costs

- The flexibility to choose between per-user or capacity-based licensing