

EL SEGUNDO UNIFIED SCHOOL DISTRICT MAKING THE MOVE TO THE VPLS CLOUD

BACKGROUND

The El Segundo Unified School District (ESUSD) located in El Segundo, CA is dedicated to providing students and the community with an optimum learning environment that prepares educated, productive, compassionate citizens to meet the challenges of a global society in the 21st Century. ESUSD's Information Technology department enables the District's mission by providing students and teachers with the opportunities to use interactive technology to communicate, collaborate, analyze and enhance their understanding of information and increase student engagement in the classroom. The District prides itself on being a leader in the educational technology sector. The District was early to adopt the 1-to-1 initiative, giving students dedicated tablets for their studies. Additionally, the District has been on the forefront of the adoption of online systems to increase operational efficiencies for faculty and staff.

CHALLENGES

ESUSD's onsite data center was located at the District Office in a portion of the facility originally designed for storage. Over the years, the facility was prone to frequent power outages. These outages would require staff to hastily shut down critical applications and led to frequent downtime of these critical applications for teachers and students. IT Staff would frequently have to come onsite on nights and weekends to address power related concerns, taxing the small IT department and burdening the District with costly overtime expenses.

The data center was being cooled with wall mounted air conditioning units not meant for data center purposes. This made keeping computer equipment at the optimal temperature and humidity level a challenge. There was direct external access to the data center protected only by a small deadbolt. This opened the possibility to theft of costly information systems, but importantly, confidential student information.

The District solicited proposals to build a new onsite data center to solve these challenges. Capital expense estimates for this project ranged from \$700,000 to \$1.1 million to build a facility appropriate for the District's needs. Costly storage, server and networking equipment would add significantly to this total. Costs to power the equipment onsite tallied approximately \$30,000 per year, plus there would be significant ongoing operational costs to manage the systems. Even after such expenditures, issues caused by local power outages would not be resolved and could only be alleviated with the purchase of expensive battery backup systems. Finally, a new onsite data center would consume some of the limited space at the District Office that could be better used for students and faculty.

SOLUTION

VPLS Solutions solved these challenges by moving the District's critical student and teacher applications from the District Office to VPLS's Cloud. The VPLS Cloud allows the District to scale up and scale down storage, compute and connectivity requirements, without the cost to procure additional hardware, or the time to implement new systems. With a flagship facility in El Segundo, VPLS's Tier 3+ data center offers redundant UPS power, ensuring uptime for systems and applications. Additionally, the facility's multiple power backup systems includes Hitec rotary style UPS systems ensuring continuous power during intermittent power outages, plus diesel generated power backup systems capable of powering the data centers indefinitely.

The District has connectivity to the data center via redundant dark fiber rings from the District Office to the data center. With negligible latency, the District is able to access critical applications from the VPLS Cloud as if they were still hosted onsite. With dedicated firewalls in place, and additional security services implemented, the District's data is safe at both rest and in transit. Finally, VPLS has layered on value-added services, like Denial-of-Service functionality, to improve uptime and the District's overall security posture. VPLS can also offer the District additional geographic redundancy through replication of data to VPLS's data centers in Phoenix, AZ and Ashburn, VA.

RESULTS

Through a partnership with VPLS, the District has solved their technology and operational challenges at a significantly decreased cost to building an onsite data center. District staff no longer have to worry about managing and maintaining legacy storage and systems and can focus on meeting the needs of students. The District has experienced a considerable improvement in uptime and is no longer subject to service interruptions due to power outages.

According to Danny Gauna, Executive Director of Information Technology at the District, the best benefit of migrating to the VPLS cloud is "the great feeling from cabinet, leadership, and staff that knowing that our Internet, servers, and storage are protected and reliable again. We no longer have to worry about the hardware infrastructure necessary to support the computing environment; we are able to focus on supporting the teachers and students."

CONTACT US

VPLS Solutions is a premier technology solutions provider and systems integrator, and the solutions provider arm of the VPLS Group of Companies. VPLS Solutions is not your typical technology reseller. We own and manage our own large, private, carrier-grade network and operate nine geographically diverse data centers. Our 20+ years of carrier heritage make us the perfect partner for your public, private or hybrid cloud needs, and your most complex network and data center challenges. VPLS specializes in K-12 and public sector. We are also a full-service Managed Services Provider and offer Backup and Disaster Recovery services.

Please contact sales@vplssolutions.com today to learn more about our Cloud services. We look forward to partnering with you.

