



ComputerLand Leverages Cisco's HyperFlex to Boost San Benito County's Network Performance

San Benito County Office of Education

Headquarters:
Central California

Industry: Education

ComputerLand Customer:
Since 1995

Visit: www.sbcoe.org

"Our network performance wasn't where it needed to be to meet the current and future needs of the county," explained Roy F. Sims, Director of Technology, San Benito County Office of Education. "So we reached out to our strategic partners at ComputerLand to help us build an IT environment that met today's needs and could scale to meet tomorrow's."

CUSTOMER PROFILE:

The San Benito County Office of Education (SBCOE) is a public agency operating a variety of programs for children, youth, and families. It also supports the county with academic, business, consulting, and vocational services. The organization provides the IT and networking needs for all schools in San Benito County and also serves as a facilitator between other governmental and support agencies.

CHALLENGE:

Power the Future Needs of the County, and the Population it Supports, With an Adaptive, Enterprise-Class Infrastructure

The growing county population and the need for up-to-date educational resources created increasing demands on the county's aging data center – taxing it beyond its current capacity. The SBCOE needed a new infrastructure that could be managed from one single point, while accommodating today's technology and addressing the needs of a multi-site campus with secure, reliable performance.

The challenge was complex. SBCOE's new IT system needed to be scalable and responsive to changing capacity levels while deploying applications to a broad audience across all educational platforms. The solution also had to manage large amounts of data and provide a secure, dependable backup and data recovery system.

SOLUTION:

HyperFlex, an Enterprise-Level Hyperconverged Environment With Single-Point Management

Understanding Client Needs

ComputerLand deployed a systematic, solution-based approach to gain a thorough understanding of the customer's business objectives and their IT environment. This included an assessment of their current systems, including physical server details, workloads, networking design, physical space limitations, and power supply sources. It was also important to minimize any potential downtime, migration, and power issues to ensure a smooth transition to the new solution.

“Our strategic partners at ComputerLand helped us analyze our current IT environment and create a plan to consolidate our data center with Cisco HyperFlex. The installation was seamless and the new technology has enabled our organization to provide the right amount of capacity and backup, as well as improve our overall network performance.”

Roy F. Sims, Director of Technology, San Benito County Office of Education



Selecting a Hyperconverged Solution

After comparing different solutions, ComputerLand selected the Cisco HyperFlex because of its ability to centrally manage computing, storage, and networking functions from one single point. With this hyperconverged solution in place, ComputerLand consolidated SBCOE’s data center into three servers and two Cisco Fabric Interconnect Switches.

In the new hyperconverged environment, all three of the county’s servers were virtualized, enabling them to share the same resource.

This allowed SBCOE to maximize the output of each server, leverage flexibility, and shift network demands between servers to improve performance and delivery for all users on the network.

HyperFlex Delivers Best-In-Class Performance

Single-Point Management

Using software defined storage (SDS), IT administrators are able to manage the system from a centralized point, no matter how many servers are involved, making it easier and faster to scale to new or changing network demands.

Powerful and Flexible Connectivity

The Fabric Interconnect Switch connects all the servers on the system to facilitate computing, storage, and networking for anyone connected to the system. All configurations and deployments are initiated from this fabric, which is interconnected through one centralized operations management point.

Improved Performance

Applications, operating systems, and virtual desktops can be easily and quickly deployed through the Fabric Interconnect Switch for faster startups, reduced complexity, predictable latency, and improved productivity.

Resource Optimization

Because the same servers are used for many different tasks, there’s a better use of hardware and more efficient distribution of data. IT resources can be re-deployed to work on other high-priority projects.

Backup and Disaster Recovery

In the event of a server failure, data can easily be retrieved from the other virtualized servers, without interruption, downtime, or the risk of lost data.

RESULTS:

Lower Costs, and Future-Ready

- **Faster Application Deployment**
- **Decreased Application Response Time** – with the new 10G network
- **Reduced Cooling Costs** – With a more efficient IT solution in place, servers were more reliable and ran cooler. As a result temperatures in the server room were reduced from 80 to 73 degrees, resulting in HVAC cost savings
- **Reduced Physical Space Needs** – Less room was required to house the Cisco equipment, so space could be re-allocated for other purposes
- **Improved Productivity** – High storage bandwidth and I/O operations per second (IOPS) improved network response time for all users



“ComputerLand understands what it means to enable their clients to drive new business and expand opportunities with the IT infrastructure and service they provide. This project was a great example of that. The company helped us build a new IT environment, improve our applications, and reduce IT costs.”

Roy F. Sims, Director of Technology, San Benito County Office of Education

About ComputerLand of Silicon Valley

ComputerLand of Silicon Valley is a leading provider of comprehensive technology solutions with a focus on enabling clients to achieve their business goals through advanced technology solutions. We provide reliable, personalized service while controlling costs and mitigating risk in the forefront. For more information about ComputerLand, visit www.cland.com

CONCLUSION:

The Cisco HyperFlex solution modernized SBCOE’s data storage, computing, and networking platform, equipping them with better technology to power the future needs of the county, its school systems, and the students and teachers it supports. The hyperconverged infrastructure,

the platform’s architecture, and the software-defined storage approach provided a high-performance, enterprise-class data management solution that helped the county reduce costs, improve productivity, and deliver an adaptive IT infrastructure that met the needs of today, as well as those of tomorrow.

Products & Services

Cisco HyperFlex
(HX-SP220M4SE1-1A)

Cisco Fabric Interconnect
(UCS-HX-FI96P)

Eaton Rack With UPS and Remote Monitoring PDU
(EMI104-10)

Cisco ASA Firewall With FirePOWER
(ASA5516-FPWR-K9)

For more information about the Cisco HyperFlex platform, visit cisco.com/go/hyperflex.