School District Deploys Virtualized Solutions for Enhanced Learning

Aledo Independent School District installs Unified Computing System to meet budget cuts and expand service offerings.

Executive Summary

Aledo Independent School District
- **Industry:** K–12 Education
- **Location:** Aledo, Texas
- **School County Size:** 500 employees; 4654 enrolled students

CHALLENGE
- Support campus expansion while reducing operational costs
- Leverage desktop virtualization solutions to sustain district growth
- Operate with limited number of IT staff

SOLUTION
- Refresh existing data center to support expanding campus population
- Update network foundation to accommodate virtual desktops
- Optimize staffing resources by operating with no additional manpower

RESULTS
- Allowed school district to meet IT needs with reduced operating budget
- Reduced cabling and data center clutter to free space and consolidate industrial resources
- Improved ability to diagnose server and network issues faster and more effectively

Challenge

Aledo Independent School District (ISD), based in Aledo, Texas, educates a student population that currently exceeds 4600 learners and is projected to expand rapidly over the next decade. The district has nearly 500 teachers and administrative staff spread across nine schools. Like many school districts across Texas, Aledo ISD faced significant cuts within its operating budget in 2009. Moreover, technology–funding restrictions were introduced by the state, forcing Aledo ISD's IT department to bear the brunt of these reductions. So when Aledo ISD's high school computers were due for a refresh before the fall semester, the district's IT department believed the time was right to make a move to a faster, leaner, and less costly network.

In addition to the required computer refresh, a recently built campus had to be outfitted with new computers. However, due to the state budget cuts, the IT department could not afford additional technical staff to support the project. Aledo ISD knew that it had to find a way to provide an effective solution for the new campus and increase learning opportunities for students with fewer IT staff and less money.

Aledo ISD explored virtualization solutions to support its expansion and funding cuts. The immediate challenge was finding the right platform to deliver virtual desktop capabilities, which would consolidate physical servers and afford growth on a new campus. Aledo ISD's virtual vision included using VMware View for desktop and server virtualization, but it still needed to identify a solution to grow the campus without a large expenditure.

Brooks Moore, manager of technology services for Aledo ISD's IT department, engaged Cisco for server and network solutions support at the district's ninth–grade building 500 yards away from the new campus. Brooks's experience was so positive that he immediately turned to Cisco to address the desktop refresh and new campus requirements that Aledo ISD needed to meet.

Solution

Aledo ISD had previously used another supplier's servers. When the time came for a formal presentation, the Cisco Unified Computing System™ (UCS™) Series B solution, a converged data center platform, far outweighed what Aledo ISD had seen or used in the past. The Cisco® UCS solution was expandable in the precise ways applicable to Aledo ISD, and the price was the most competitive. "Simply put, for our needs and our goals, the competitor's technology was not advanced enough. Cisco provided a solution that was way ahead," says Moore.

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Aledo Independent School District

Aledo ISD's decision to go with the Cisco UCS B Series solution was heavily influenced by its need to streamline day-to-day server management and transform the education experience for K-12 students. Because Cisco UCS offered integrated system management, the IT department could utilize the new virtual network as a platform for their overall infrastructure. The expanded, collaborative technology would also allow students to share information without borders or barriers. "By adopting UCS, Aledo ISD chose to invest in a long-term technology solution to meet both current goals and future initiatives," says Moore.

The Cisco UCS solution also offered a range of benefits and cost savings for the IT department as well as the potential to realize the virtual vision for the school district. "In choosing UCS, we were not only able to make an initial expenditure that fit within our new operating budget, but the platform also allowed us room for expansion in the future without breaking the bank," says Moore. In that way, UCS offered to transform Aledo ISD's education offerings, helping them to better serve their community with an integrated technology architecture.

During the first quarter of 2009, Brooks and his team got Cisco involved in detailed planning to design the implementation of UCS. Aledo ISD purchased UCS in August, and the system was installed before the end of August 2009. This fast installation allowed Aledo ISD to start deploying virtual desktops before the start of the fall semester, driving operational excellence before students arrived for their first class.

Before installation was complete, the IT department was impressed and pleased with UCS. The solution was easy to learn, which eliminated training for the IT department and allowed them to focus on meeting their goals for virtualization. "The UCS product is honestly tailor-made for virtualization," says Moore. "In addition to providing minimal downtime, UCS most importantly delivers stellar performance, which really is second to none."

Results

The Cisco UCS management interface gave Aledo ISD a one-stop shop for diagnosing issues and making configuration changes. After installing the platform, the IT department was able to operate more efficiently with a leaner workforce, optimizing staff productivity and increasing output. And because the virtual servers and desktops were now running on UCS, Brooks and his teammates spent less time browsing the data center for stand-alone servers, boosting their overall capacity.

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Product List

NETWORK MANAGEMENT
· Cisco UCS Series B 210 Servers

With UCS, the IT department was able to diagnose issues much more quickly when they arose, reducing the time required to remedy server issues and eliminating call backlog for the help desk. In addition, the ease of maintenance for UCS allowed the IT staff to focus on emergency issues and real-time requests instead of dealing with a large volume of updates and server fixes. In this way, UCS alleviated long-standing service strains, allowing new methods for extending the reach and quality of education services.

The reduction of cabling in a data center was also a significant benefit for Aledo ISD. Data center ports are typically costly; correspondingly, the fewer network ports on a switch, the better for operational savings. Being able to completely eliminate network ports has allowed the IT department to retain funds for other initiatives such as virtual desktop deployments, an area where Moore and his staff want to concentrate in the future.

"Future growth on campus has suddenly become possible, and affordable, now that we're running our platform through a virtual solution rather than a standalone server," says Moore. "By installing UCS, we are now able to handle more students on campus, more data on our servers and can operate effectively with a minimal amount of staff."

Next Steps

The majority of Aledo ISD's computers are physical desktops, and the IT department knows several other refreshes will arise in the near future. Once those desktops come up for refresh, Aledo ISD is likely to move forward Cisco UCS. The platform not only fits within the school district's virtual vision, but allows Aledo ISD to expand their virtual desktop numbers while saving time and money. "UCS has full confidence from Aledo," says Brooks. "We're excited to keep moving forward with a solution that makes our job a whole lot easier."

For More Information

To find out more about Cisco Unified Computing System, go to:
http://cisco.com/go/ucs