Conroe schools reduce IT complexity with thin clients, storage



Conroe Independent School District

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Scott Barrett, Ph.D.Assistant Superintendent for TechnologyConroe Independent School District



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Conroe Independent School District (CISD) serves more than 41,000 students on 47 campuses in a 350-square-mile area north of Houston, Texas. Thanks to a growing local economy and popular planned communities in the area, the district expects to add 13,000 students over the next six years.

Keeping up with the increase in student population is a challenge. So is meeting the district's 2007 goal of improving an "academically acceptable" rating to "exemplary." HP technology in the classroom and in district and school offices plays a role in helping CISD meet both goals.

When the district chose HP to provide servers, storage, thin clients and desktops, Scott Barrett, Ph.D., assistant superintendent for technology, knew he had the right ally to help reduce IT costs and complexity and make it easier to implement change across the district. Barrett already knew about the reliability of HP printers, the district's primary choice for a number of years.

Thin clients and Altiris software play big role

Now, with one of the state's largest school district installations of HP thin clients, Barrett believes CISD has a big advantage in overall computing reliability and manageability. The district has thin clients on 44 of 47 campuses. "HP has a very good thin client product, the t5700, with Altiris Deployment Solution built in and Windows XP embedded. We're rolling out Altiris to manage all of our computers, so it's a very good fit.

"Our schools really appreciate what the HP thin clients have done for them," says Barrett, noting that the reliability of HP thin clients has meant more focus on instruction and less on technology.

"At Conroe High School we took a computer lab with 30 older PCs, a third of which wouldn't work or which we

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couldn't print from, and replaced them with HP thin clients. Previously, the lab required a full-time instructional aide, and teachers didn't want to take their classes there. Now the lab is booked all the time, and the aide is assigned elsewhere in the building."

HP thin client features that CISD didn't have in its previous thin client standard include built-in sound and the ability to add USB devices. "Of course, with no moving parts, the HP thin clients are very reliable," Barrett adds.

HP Compaq Business Desktops also play a key role at CISD, with nearly 2,300 installed. The units offer trouble-free performance for users who require more processing power and graphics capabilities. HP Compaq Business Notebooks with mobile, wireless carts give CISD a computer lab that can travel to where students need it.

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Barrett and his technical staff are just as sold on the district's new HP ProLiant DL380 and DL580 servers, the majority of which are used as terminal servers. "We've had very good reliability with HP," Barrett says. "One of our network guys who had just configured one of the new ProLiant servers told me it was the best machine he'd ever worked on."

New world opens up

Improved hardware quality and reliability are just part of the HP advantage, Barrett says. "When we went with HP and Value Added Reseller Micro System Enterprises (MSE), a whole new world opened up. It was a very pleasant surprise working with a VAR. MSE has been very responsive. Their service, response time, technical skills and technical consulting bring a lot to the table."

Recently, MSE installed HP business critical servers and storage. The combination of a high-performance HP 9000 series server running HP-UX 11i along with a virtualized HP StorageWorks SAN prepares CISD to handle forecasted growth. The SAN is based on the Enterprise Virtual Array 5000 (EVA5000) and EVA3000, with total storage capacity of more than 12TB. Used to store electronic mail and student portfolios, the SAN can be expanded easily by adding disk space or storage devices. HP StorageWorks MSL tape libraries are used to back up data offline to ensure the restoration of data, in case of disaster.

"HP offered a very integrated storage solution," says Barrett. "It was an excellent solution for the Unix side."

As the need for printing has increased at CISD, the district has increased its number of networked HP LaserJet printers. The district has a mix of black-and-white and color HP LaserJet printers, ranging from the 8000 series for high-speed printing to the 4000 series for general use in pods.

CISD, meanwhile, is evaluating the abilities of the HP Tablet PCs and HP iPAQ Pocket PCs to help district employees be more productive on the road. Barrett has high hopes and a sky-is-the-limit technology wish list.

"I'm waiting for the day when HP can put a computer in my watch, project holograms from my tie tack and power it all with fluorescent lighting. That will really be something."

Challenge

Solution

Results

- Improve ability of district to handle continued growth and meet ongoing needs for reliable, secure computing
- HP 9000 Series Server (model rp7420-16)
- HP ProLiant DL380 and DL580 servers
- HP StorageWorks Enterprise Virtual Arrays, EVA5000 and EVA3000
- HP StorageWorks Ultrium 460 Tape Drive
- HP Thin Clients t5700
- HP Compaq Business Desktop dc5000 Small Form Factor
- HP Compaq Business Notebook nc6110 with Mobile Wireless Classroom cart
- HP LaserJet Printers

- Greater student, teacher and administrator productivity due to improved hardware reliability
- Improved ability to quickly deploy new software and upgrades
- More secure network due to streamlined deployment of security upgrades/fixes
- Reduced IT staff travel time resources, thanks to Altiris software suite

Software

- HP UX Enterprise OE
- HP OpenView GlancePlus
- HP StorageWorks Business Copy Virtual Array
- HP StorageWorks Secure Path
- HP OpenView Storage Operations Manager
- HP OpenView Storage Data Protector
- Altiris Deployment Solution
- eTrust

HP Services

- Optimized Start-up
- Install/Start-up
- Support Plus

At a glance

• Organization: Conroe ISD

• Location: Conroe, Texas

• Employees: 5,149

• URL: www.conroe.isd.tenet.edu

• Phone: 936.709.7600

Partner at a glance

• Organization: Micro System Enterprises

• Founded: 1986

Location: Houston, TexasURL: www.mseng.com

• Phone: 281.983.9955

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