

## K-8 School District Improves Communications with Parents and Staff

Saratoga Union School District replaced its PBX systems with Cisco Unified Communications Manager Express to improve communications.

EXECUTIVE SUMMARY
<p><b>Saratoga Union School District</b></p> <ul style="list-style-type: none"> <li>• K-12 Education</li> <li>• Saratoga, California</li> <li>• 2400 students, 275 staff</li> </ul>
<p><b>BUSINESS CHALLENGE</b></p> <ul style="list-style-type: none"> <li>• Ensure reliable communications among staff and parents</li> <li>• Reduce total cost of ownership</li> </ul>
<p><b>NETWORK SOLUTION</b></p> <ul style="list-style-type: none"> <li>• Replaced PBX systems with Cisco Unified Communications Manager Express</li> <li>• Adopted Cisco Unity Express for unified messaging</li> </ul>
<p><b>BUSINESS RESULTS</b></p> <ul style="list-style-type: none"> <li>• Simplified and enhanced communications with staff and parents</li> <li>• Eliminated US\$8000 annually for moves, adds, and changes</li> </ul>

### Business Challenge

Located in California’s Silicon Valley, the Saratoga Union School District has 2400 students in a middle school and three elementary schools. The district is committed to excellent communication among its 275-member staff and with the community, and recognizes that the phone and voicemail systems play important roles in achieving that goal.

Previously, each school and the district office had its own private branch exchange (PBX) system. When one of the aging systems began to fail, the district needed to act quickly. Replacing the PBX would cost US\$20,000, which was not in the budget, and the other PBX systems were likely to fail soon. “Families move to our district for our top-notch schools,” says Lane Weiss, superintendent. “Therefore, reliability was a top priority because families expect easy

access to teachers and district personnel.” The district took the opportunity to think about other improvements that it wanted in a new voice system. “An important requirement was the ability to perform telephone moves, adds, and changes ourselves, and to eliminate the US\$8000 that we paid annually for service fees,” says Howard Lorenz, director of IT for the district. Changes are frequent in school environments, especially at the beginning of the year, when teachers are shifted among classrooms.

Weiss had previously served in a district that had adopted IP telephony. “IP telephony seemed like a good match for our district, as well, because our internal IT resources would be able to support the voice network with the same skills that they used for the data network,” he says. “To reduce costs, we wanted to rely more on our internal expertise and less on third parties.”

### Network Solution

The Saratoga Union School District engaged AMS.NET, a Cisco® Silver Certified Partner and 2006 Cisco top commercial voice partner for the western region, to deploy a Cisco Unified Communications solution for IP telephony and voicemail. With unified communications, voice traffic travels over the Cisco network foundation, which AMS.NET had deployed previously. To adopt unified communications, the district replaced its older Cisco routers with Cisco Integrated Services Routers, which include Cisco Unified Communications Manager Express and Cisco Unity Express for voicemail. The only other capital expense was for the Cisco Unified IP Phones in offices and classrooms. Teachers use

the Cisco Unified IP Phones to talk with parents and call the office in an emergency.

“For budgetary reasons, we decided to adopt Cisco Unified Communications in phases rather than in all sites at once,” says Steve Cunningham, director of customer listening for Cisco and a volunteer for the project. “We needed a design that would enable the old PBX system and the new Cisco Unified Communications solution to co-exist until we found the budget for all sites.” Therefore, before embarking on the implementation, Lorenz and Cunningham set up Cisco routers with Cisco Unified Communications Manager Express in their homes, using Cisco Unified IP Phones for their calls to the district as well as personal calls until they felt comfortable with the various options.

**“If a parent leaves me a voicemail that affects multiple staff members, I can now forward it to their mailboxes along with my own introduction. The communication is more accurate, and I save myself the time to compose an e-mail summarizing the issues.”**

—Lane Weiss, Superintendent, Saratoga Union School District

To minimize installation costs, AMS.NET worked with the district’s IT staff during the deployment in the first two sites so that the district could handle the other deployments on its own. “Saratoga Union School District did not want us to disappear into the wiring closet and then emerge later with a fully functioning system,” says Tom Vasconi, public sector account manager for AMS.NET. “Instead, we took a collaborative approach so that the district could learn how the Cisco Unified Communications system worked.” Some residents in the school district work at nearby Cisco headquarters, and volunteered to assist AMS.NET with the IP phone installation and setup. The deployment began in spring of 2006, with one school and the district office, and was completed two months later when the district received funding for the final site. “Throughout the entire project, AMS.NET listened to our needs and budget constraints and worked with us,” says Lorenz.

AMS.NET followed best practices for voice security, including setting up a separate virtual LAN (VLAN) for voice. In addition, AMS.NET set up the network so that voice traffic always receives priority over data and video. If a teacher downloads a large video file, for instance, voice takes precedence, and voice quality is unaffected.

The district ran the old PBX system and new Cisco Unified Communications system in parallel for several days. During the transition, teachers had two phones in their classrooms: a traditional phone as well as a Cisco Unified IP Phone. When the district was satisfied that the new communications system worked as expected, the old PBXs were decommissioned. “The transition proceeded very smoothly,” says Weiss. “We adopted IP telephony without having to change phone numbers or operational procedures for teachers and staff.”

### **Business Results**

The district has achieved its goal for high-quality, reliable voice and voicemail systems that help the district function smoothly and foster open communication between teachers and parents. “Each site’s voice system and voicemail operates independently, on its own highly reliable Cisco router,” says Cunningham. “Therefore, even if one site experiences an outage during a storm, voice communications can continue without interruption in the other sites.”

Operating expenses have decreased. “When teachers move to new classrooms, we hire new staff, or teachers change their names, I can use a Web-based interface to make the change to the voice and voicemail systems in less than five minutes, and without paying a service provider,” says Lorenz. The US\$8000 in annual savings can be used to keep the network up to date, according to

<b>PRODUCT LIST</b>
<p><b>Routing and Switching</b></p> <ul style="list-style-type: none"> <li>• Cisco 2800 Series Integrated Services Routers</li> <li>• Cisco Catalyst Switches Broadband Cable</li> </ul> <p><b>Voice and Unified Communications</b></p> <ul style="list-style-type: none"> <li>• Cisco Unified Communications Manager Express</li> <li>• Cisco Unity Express</li> <li>• Cisco Unified IP Phones</li> </ul>

Ellen Tipton, chief business officer. Maintenance costs are lower as well. Rather than paying for separate maintenance contracts for network equipment and a PBX, the district has a single Cisco SMARTnet contract for its routers, which are used for unified communications as well as data.

The ability to forward voicemails saves time and can avoid misunderstandings. “If a parent leaves me a voicemail that affects multiple staff members, I can now forward it to their mailboxes along with my own introduction,” says Weiss. The communication is more accurate, and I save myself the time to compose an e-mail summarizing the issues.”

The Cisco Unified Communications solution also provides other time-saving features that increase staff productivity, such as four-digit dialing anywhere in the district. “I frequently call principals and other staff members in different schools, and the Cisco solution enables me to call any site directly, without having to navigate through menus,” says Weiss. Staff members also appreciate the caller ID feature and the ability to personalize their phones—for example, by changing the number of rings before a call is transferred to voicemail.

Each school now has the flexibility to answer calls according to its preference. “One of our schools wants all calls to be answered by a person, and another prefers that calls go through the Cisco Unity Express Automated Attendant, which prompts callers to enter an extension,” says Tipton. The Saratoga Educational Foundation, which operates out of the district office, uses the Automated Attendant feature as a bulletin board for community members. Lorenz has also set up unique dial plans to meet individual schools’ needs, such as forwarding unanswered calls to other extensions in the same hunt group. “This feature helps us be more responsive to the community by answering more calls directly instead of sending them to voicemail,” says Weiss.

### Next Steps

The district is considering using Cisco Unified Video Advantage to conduct some of its staff meetings with video telephony instead of requiring staff to drive to the district office. Another plan is to provide certain staff with Cisco Unified Wireless IP Phones or Cisco Unified Personal Communicator on their laptops. “Our principals mingle with students during recess, and we want to make sure they are always reachable when they are within range of our wireless network,” says Lorenz. The district is also evaluating unified messaging, which will help staff be more responsive to parents and district personnel by letting them access voice, e-mail, and fax messages from a single inbox.

Lorenz concludes, “For our district, the biggest advantage of Cisco Unified Communications is that we can manage it using internal resources. Even without formal training on voice systems, I can use the intuitive management interface to satisfy each school’s unique requests for call handling.”

**Americas Headquarters**

Cisco Systems, Inc.  
170 West Tasman Drive  
San Jose, CA 95134-1706  
USA  
www.cisco.com  
Tel: 408 526-4000  
800 553-NETS (6387)  
Fax: 408 527-0883

**Asia Pacific Headquarters**

Cisco Systems, Inc.  
168 Robinson Road  
#28-01 Capital Tower  
Singapore 068912  
www.cisco.com  
Tel: +65 6317 7777  
Fax: +65 6317 7799

**Europe Headquarters**

Cisco Systems International BV  
Haarlerbergpark  
Haarlerbergweg 13-19  
1101 CH Amsterdam  
The Netherlands  
www-europe.cisco.com  
Tel: +31 0 800 020 0791  
Fax: +31 0 20 357 1100

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